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

Preliminary Engineering Report

Segment 4: State Road 400 (SR 400)/Interstate 4 (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), Florida

June 2, 2017

HNTB Corporation
610 Crescent Executive Court
Suite 400
Lake Mary, FL 32746

PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation

ETDM Number: N/A
Financial Management Number: 432100-1-22-01
Federal-Aid Project Number: 0041-227-I

This preliminary engineering report contains detailed engineering information that fulfills the purpose and need for State Road 400 (SR 400)/Interstate 4 (I-4), from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472, PD&E study.

6 / 14 / 2017
Date

ROBERT M. DENNEY
LICENSE
No. 58593
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Professional Engineer

Notes to Reviewer:
The typical section package is to be submitted under separate cover for the entire I-4 (SR 400) Beyond the Ultimate corridor.

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1.0 Summary of Project

The Florida Department of Transportation (FDOT) is conducting an update/reevaluation of 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 [Financial Project Number (FPN) 201210 (December 1998)] and from CR 532 (Polk/Osceola County Line) to West of SR 528 (Beachline Expressway) [FPN 242526 and 242483 (December 1999)] and Final Environmental Impact Statement (FEIS) for I-4 from SR 528 (Beachline Expressway) to SR 472 [FPN 242486, 242592 and 242703 (August 2002, Record of Decision Pending)].

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, which began construction in early 2015, is reconstruction to include new express lanes, of the section of I-4 that extends from west of SR 435 (Kirkman Road) to east of SR 434. For analysis purposes, the current I-4 BtU PD&E study 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 1/2 Mile East of SR 472 - Volusia County (79110)
- 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)

Since no Record of Decision has been issued by the Federal Highway Administration (FHWA) for Segments 2, 3 and 4, the current PD&E BtU study for these three segments will update the original PD&E study. This preliminary engineering report was prepared for Segment 4 of the SR 400 (I-4) BtU PD&E Reevaluation Study and contains detailed engineering information that fulfills the purpose and need for the SR 400)/I-4, from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472, PD&E study.

The purpose of this preliminary engineering report is to document design changes in support of the PD&E update for the I-4 BtU Segment 4 portion of the FEIS for I-4 from SR 528 (Beachline Expressway) to SR 472 FPN 242486-1, 242592-1 and 242703-1, August 2002, Record of Decision pending). This update includes environmental and engineering analysis of the original design concept, which showed six general use lanes (GULs) and two high occupancy vehicles (HOV) lanes (6+2), to the current proposed design, which includes six GULs and four express lanes (EL) operating under a variable price toll plan (6+4). Other changes being reanalyzed include stormwater management, access plan and interchange configurations.

1.1 Commitments

To minimize impacts of this project on the environment, FDOT is committed to the following mitigation measures for impacts resulting from the Recommended Alternative.

1. Displacements and Relocations - FDOT will carry out a relocation assistance program in accordance with The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, for Federal and Federally Assisted Programs (23 CFR and 49 CFR, Part 24, Sections 334.048, 339.09 and 421.55, Florida Statutes Rule 14-66, Florida Administrative Code).

2. Cultural Resources - FDOT commits to documenting any structures that reach historic age prior to project completion as part of a supplemental CRAS. FDOT commits to avoidance of the eligible Lake Monroe Outlet Midden Site (8VO00053). The staging of construction equipment, materials, or vehicles will be prohibited during the project. The limits of the archaeological midden will be identified on all project plans to ensure compliance. The Lake Monroe Outlet Midden Site extends adjacent to and beneath I-4 from Lake Monroe to approximately 0.45 miles north; the northern and southern edges of the site boundary will be demarcated in the field in proximity to the Interstate to further ensure avoidance.

3. Wildlife and Habitat – The utilization of the following specific wildlife and habitat commitments and mitigation measures for unavoidable impacts are recommended to minimize the overall impacts to wildlife from this project:
    a. As required by FDOT Standard Specifications, the construction equipment staging areas for storage of oils, greases, fuel, road bed material and equipment maintenance will be sited in previously disturbed areas not adjacent to any streams, wetlands, or surface water bodies. The staging areas will be surveyed for listed species prior to their use. Also as required by FDOT Standard Specifications, if protected species are identified unexpectedly within the construction area during construction, coordination will be initiated with the appropriate resource agencies to avoid or mitigate impacts.

b. Eastern indigo snake habitat has been identified within the project limits. Utilize the US Fish and Wildlife Service (USFWS) Standard Protection Measures for the Eastern Indigo Snake, at the US Fish and Wildlife Service Link: http://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm

c. During permitting, all potential gopher tortoise habitat that could be impacted by the project will be systematically surveyed according to the current guidelines published by the Florida Fish and Wildlife Conservation Commission (FFWCC). If gopher tortoise burrows are found, all practicable design measures will be employed to avoid impacts to the burrows. For burrows which cannot be avoided, a permit will be obtained from FFWCC for relocation of gopher tortoises and commensals, and relocation will be performed at a time as close as practicable to the start of construction activities at the site of the burrows.

d. During permitting, FDOT will coordinate with the permitting agencies to quantify and provide compensation for any unavoidable impacts to wood stork suitable foraging habitat (SFH). Mitigation for these impacts will be provided within the service area of a USFWS-approved wetland mitigation bank that provides an amount of habitat and foraging function equivalent to that of the impacted SFH in accordance with *the Corps of Engineers and U.S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in Central and North Peninsular Florida*.

e. During permitting, FDOT will re-survey for listed species to ensure no changes have occurred since the completion of the PD&E Study.

f. FDOT has incorporated the findings from the Biological Opinion from USFWS addressing impacts to listed species for the project, including:

- Providing compensatory mitigation to offset the 4.68 acres of impacts to occupied scrub-jay habitat in Segment 4 at a ratio of 2:1 to the Nature Conservancy Umbrella Plan mitigation fund.
- Including a construction commitment to prevent clearing and grubbing within the areas of occupied scrub-jay habitat during nesting season (March 1 – June 30) to avoid any potential harm to individual birds should they be present. These areas will be identified on the project exhibits in the ESBA and EIS Update and will be identified on the design plans.
- Unauthorized take of Florida-scrub-jays associated with the proposed activities should be immediately reported by notifying the Jacksonville Ecological Services Field Office at (904) 731-3336. If a dead Florida scrub-jay is found in the project area, the specimen should be thoroughly soaked in water and frozen for later analysis of cause of death.

4. Wetlands – The following commitments are proposed to ensure that the project does not result in adverse impacts to wetland communities and the functions they provide:
    a. 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.
    b. 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, as appropriate. Where feasible, the FDOT is committed to minimize direct, secondary and temporary impacts.
    c. During the development of the final design, a Quality Enhancement Strategies (QES) plan 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.

5. Essential Fish Habitat (EFH) - The following commitments are a result of the coordination with National Marine Fisheries Service (NMFS) to address the proposed 38.4 acres of impacts in Lake Monroe and the DeBary Bayou for areas classified as EFH.
    a. To offset impacts to EFH, FDOT commits to constructing an approximately 100-foot long bridge in each direction along I-4 in the area of Lake Monroe and the DeBary Bayou to provide for the enhancement of tidal wetlands.
    b. As a condition of the coordination, FDOT commits to a monitoring program that allows resource agencies to assess performance standards and the need for corrective actions if the anticipated connectivity is not achieved.

6. Contamination - Project commitments to address potential contamination sites include:
    a. FDOT commits to conducting Level II Contamination Screenings on all Medium and High Risk Rated sites before establishing a final determination. This will include investigating previous PD&E Studies and Design Projects covering the project area and its surroundings.
    b. All bridges and other structures which will require possible demolition or retrofit should be tested for asbestos containing materials, lead-based paint, or any other hazardous materials prior to construction.
    c. Should any parcels containing medical facilities, doctor offices, hospitals, or drug stores be acquired, they should be tested for asbestos, lead-based paint, x-ray equipment, lead-lined walls, chemicals, and pharmaceuticals prior to demolition.

7. Noise – FDOT is committed to the construction of feasible and reasonable noise abatement measures at Riverside Drive Apartments and Kettering Road as shown on the Noise Maps contingent upon the following conditions:
    a. Cost analysis indicates that the cost of the noise barriers will not exceed the cost-reasonable criterion.
    b. Community input supporting types, heights and locations of noise barriers is provided to the District Office.
    c. Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

8. Section 4(f) - FDOT commits to avoidance of any Section 4(f) resources along the I-4 BtU corridor. The staging of construction equipment, materials, or vehicles will be prohibited within these areas during the project.

9. Padgett Creek Bridge – The US Coast Guard (USCG) issued an Advanced Approval Letter for the bridge crossing over Padgett Creek stating that the replacement of the bridge would not require a USCG permit. To comply with the conditions of this letter, FDOT commits to:
    a. Comply with all applicable federal, state, and local laws and regulations.
    b. The lowest portion of the bridge over the waterway must clear the 100-year flood height and should match or exceed the lowest portion of the existing to-be-replaced I-4 Bridge.
    c. Upon completion of construction, provide to the local US Coast Guard Bridge Office in Miami, a set of "as-built" drawings which include the horizontal and vertical clearance of the bridge across the waterway.
    d. When the bridge is no longer used for transportation purposes, it must be removed in its entirety and FDOT must notify the USCG that the waterway has been cleared.
    e. If construction of the bridge is not commenced by March 22, 2019, an updated "Bridge Project Questionnaire" must be submitted to the USCG Bridge Office for reconsideration.

10. Trails, Sidewalks, and Bicycle Lanes - FDOT commits that during the construction of the project, connectivity to trails, sidewalks and bicycle lanes will be maintained.

1.2 Recommendations

The FDOT recommends improvements to the ten (10) mile segment of I-4 which extends from east of US 17-92 to east of SR 472 in Volusia County. This recommendation was developed based on engineering and environmental analysis conducted as part of the PD&E Update/Re-evaluation studies, community input and coordination with local governments and other agencies.

The recommended improvements, as shown in the Concept Plans in Appendix A and described in detail in Chapter 6 of this report, provide for six general purpose lanes and four express lanes throughout the project limits, interchange modifications, grade-separated ramps, ramp-to-ramp auxiliary lanes, intersection modifications and/or other improvements. As a result of the Public Hearing, environmental and engineering analyses and interagency coordination, the Recommended Alternative is recommended for Location Design Concept Acceptance by the FHWA.

Typical Section

The recommended mainline typical section for I-4 Segment 4 will have a total of ten dedicated lanes (6 general use lanes + 4 express lanes), a 44' transit corridor in the median and a design speed of 70 miles per hour (mph) within a minimum 300-foot right-of-way.

Interchanges

The recommended alternative for I-4 Segment 4 provides grade separations and/or interchanges at seven locations:

- Padgett Creek (I-4 overpass),
- Dirksen Drive (Partial Cloverleaf Interchange),
- Enterprise Road (overpass),
- Saxon Boulevard (Partial Cloverleaf Interchange),
- Rhode Island Avenue (Partial Interchange with direct connects to I-4 Westbound ELs and from I-4 Eastbound ELs),
- Graves Avenue (overpass) and
- SR 472 (Diverging Diamond Interchange)

Two new park and ride lots are proposed as part of the I-4 Segment 4 recommended alternative. One will be located on the south side of Dirksen Drive, approximately 1,050 feet west of I-4 to replace the existing park and ride lot on the east side of the Interstate that will be eliminated with the construction of the new I-4 eastbound free flow right turn off-ramp. Another park and ride lot is proposed to be constructed on the west side of Normandy Boulevard, approximately 500 feet south of Rhode Island Avenue.

Bridges

A total of fifteen bridge structures are required for the recommended alternative for I-4 Segment 4; the majority are multiple span structures. Nine existing bridges will be replaced and one existing bridge will remain along the corridor. Three new bridges are proposed to be constructed; two at the ditch crossing between the St. Johns River and Padgett Creek and one at the new Rhode Island Avenue partial interchange. The two bridges for I-4 eastbound and I-4 westbound over US 17-92/St. Johns River will be widened to accommodate the new express lanes.

Drainage

Stormwater management for the recommended alternative for I-4 Segment 4 will involve collection of runoff by storm sewer systems or roadside ditches and routing to existing or proposed stormwater ponds. There are a total of 22 basins within the project limits which will require 31 existing or proposed ponds, one stormwater vault and one swale to achieve water quality treatment and attenuation of project runoff. Additionally, two floodplain compensation ponds are proposed to compensate for floodplain impacts.

1.3 Description of Proposed Action

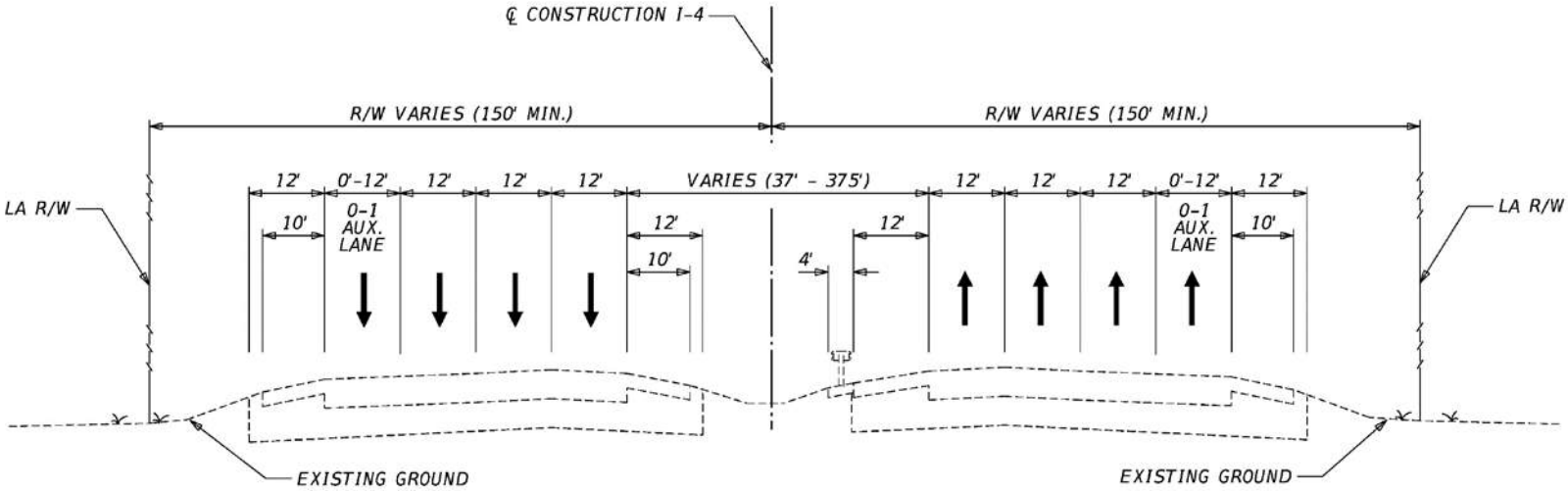
FDOT is proposing to reconstruct and widen I-4 as part of the I-4 BtU concept. This involves the build-out of I-4 to its ultimate condition through Central Florida, including segments in Polk, Osceola, Orange, Seminole and Volusia Counties. The concept design proposes the addition of two new express lanes in each direction, resulting in a total of ten dedicated lanes. The project limits for the segment analyzed in this report are within an approximate ten (10) mile segment of I-4 which extends from east of US 17-92 to east of SR 472, from Milepost 0.086 to 10.227 in Volusia County (herein referred to as I-4, Segment 4) 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 Segment 4. The study area in this section from east of US 17-92 to east of SR 472 includes the interchanges at Dirksen Drive/Debary Avenue, Saxon Boulevard and SR 472/Howland Boulevard. A new interchange with I-4 providing direct access only to the express lanes is proposed to be constructed at Rhode Island Avenue, about halfway between Saxon Boulevard and SR 472, with the Rhode Island Avenue extension.

The proposed improvements to I-4 include widening the existing six lane divided urban interstate to a ten lane divided highway. The existing typical section for the I-4 mainline consists of three 12-foot travel lanes in each direction. The outside and inside shoulders are 12 feet wide with 10 feet paved. The median width varies from 37 feet to 375 feet and the existing right-of-way (ROW) varies from 300-feet to 630-feet. The typical section in the proposed condition will have three 12-foot general use travel lanes with a 10-foot inside and 12-foot outside shoulder and two 12-foot express lanes with a 4-foot inside and 10-foot outside shoulder, in each direction. A barrier wall between adjacent 10-foot shoulders will separate the express lanes from the general use lanes. A 44’ transit corridor will be provided in the median for the entire length of Segment 4 and, auxiliary lanes in both the eastbound and westbound directions will be provided in some areas. The I-4 existing and proposed typical sections are shown in Figure 1.2.

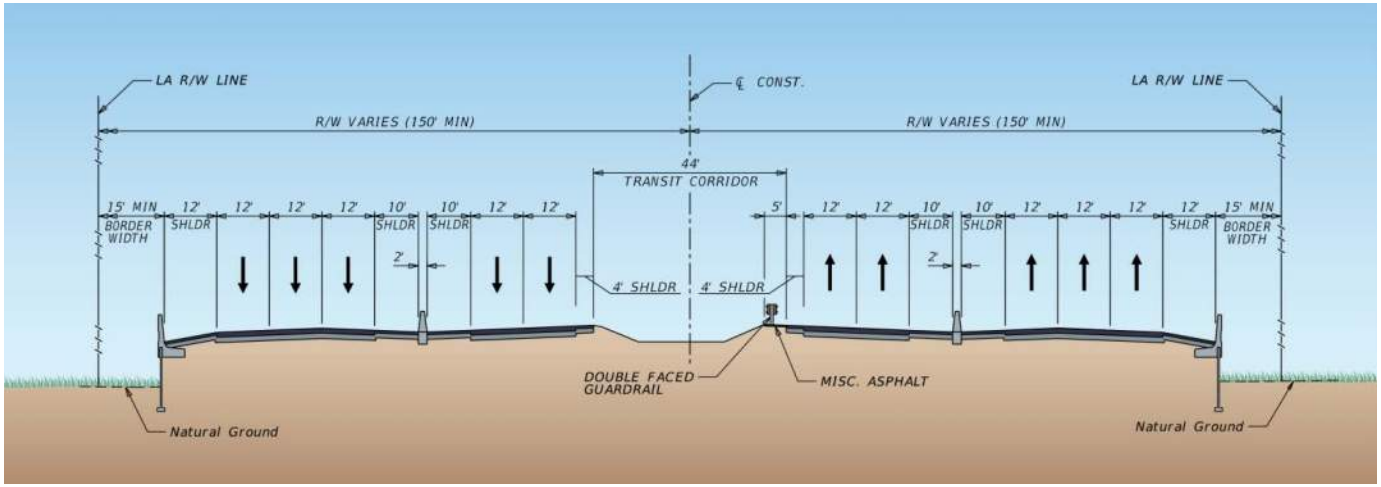
1.4 Purpose and Need

The proposed improvements to I-4 include widening the existing six lane divided urban interstate to a ten 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

Figure 1.1 – Project Location Map



I-4 Segment 4 Existing Typical Section



I-4 Segment 4 Proposed Typical Section

Figure 1.2 – Existing and Proposed Typical Sections

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 counties in Central Florida, traversing many cities including Lakeland, 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 and I-75 in the Tampa Bay area, 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) in Central Florida and I-95 on the east coast.

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, Universal Studios, Sea World, the International Drive Resort Area and downtown Orlando. Since I-4 is the only north-south 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. Additionally, 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. Table 1.1 and Table 1.2 respectively, provide a summary of the population and employment growth projections for counties surrounding the I-4 corridor. 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.

Table 1.1: Population Projections for Counties in the I-4 Corridor

	April 1, 2013	2020	2030	2040
Flagler	97,843	124,863	160,705	191,861
Hillsborough	1,276,410	1,445,344	1,666,187	1,845,013
Lake	303,317	355,935	425,221	479,928
Orange	1,202,978	1,394,814	1,641,173	1,840,695
Osceola	288,361	360,478	452,651	532,472
Polk	613,950	691,355	794,061	883,393
Seminole	431,074	465,128	508,329	541,133
Sumter	105,104	138,220	181,846	219,396
Volusia	498,978	529,447	566,999	595,077
Total	4,818,015	5,505,584	6,397,172	7,128,968

Source: Florida Demographic Estimating Conference, February 2014 and the University of Florida, Bureau of Economic and Business Research, Florida Population Studies, Bulletin 168, April 2014

Table 1.2: Employment Projections for Workforce Regions in the I-4 Corridor

	2014	2022	% Growth
Workforce Region	**Total, All Occupations**		
Flagler & Volusia Counties	200,541	224,127	11.8
Hillsborough County	699,877	789,163	12.8
Polk County	228,559	252,300	10.4
Lake, Orange, Osceola, Seminole and Sumter Counties	1,224,998	1,404,357	14.6

Source: Florida Department of Economic Opportunity

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 PD&E update involves revising the original design concept showing 6 GULs + 2 HOV lanes, as recommended in the FEIS for I-4 from SR 528 to SR 472 (FPN No. 242486, 242592 & 242703, August 2002, Record of Decision Pending), to the current proposed design of 6 GUL + 4 EL. 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 HOV Lanes. The original I-4 PD&E Studies involved physical separation between the general use lanes and the HOV lanes on I -4, with demand management in the HOV lanes. The original demand management strategy was to control the use of the lanes by

requiring a minimum number of occupants per vehicle to maintain an acceptable level of service (Level of Service D). This update 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 Central Florida 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.

2.0 Existing Conditions

The existing conditions within the I-4 study corridor were evaluated by reviewing existing plans and documents, coordination with regulatory agencies and performing field investigations. The following sections provide detailed descriptions of existing roadway characteristics, traffic and bridge features, drainage, soils and other physical features and traffic and crash data within the project study area.

2.1 Roadway Classification

I-4 is classified by FDOT as an Urban Interstate and Strategic Intermodal System (SIS) corridor throughout the limits of Segment 4. I-4 is a designated evacuation route by the Florida Division of Emergency Management.

2.2 Typical Section

The existing typical section for the I-4 mainline consists of three 12-foot travel lanes in each direction. The outside and inside shoulders are 12 feet wide with 10 feet paved. A guardrail is provided on the inside shoulder of the eastbound and westbound lanes in varying locations throughout the segment limits. The roadways are separated by a center grass median which varies in width from 37 feet to 375 feet. The median width is 160 feet from the beginning of the segment limits at the St. Johns River Bridge to the eastern end of the St. Johns River Bridge, 37 feet from the eastern end of the St. Johns River Bridge to east of Enterprise Road, a variable median ranging from 37 feet to 375 feet from east of Enterprise Road to west of Saxon Boulevard and 40 feet from west of Saxon Boulevard to the end of the segment limits, east of SR 472. The existing ROW varies from 300-feet to 630-feet. The existing I-4 typical section was previously shown in Figure 1.2. Table 2.1 provides a summary of the existing median widths and auxiliary lanes along the I-4, Segment 4 section.

Table 2.1: Existing Median Widths and Auxiliary Lanes

Station From	Station To	Median Width	Number of Eastbound Auxiliary Lanes	Number of Westbound Auxiliary Lanes
2583+00.00	2620+00.00	160 feet	0	0
2620+00.00	2834+60.45	37 feet	0-1	0-1
2834+60.45	2900+05.00	Varies (37-375 feet)	0-1	0
2900+05.00	3118+46.00	40 feet	0-1	0-1

2.3 Right-of-Way

The existing right-of-way is typically 300-feet and expands to 630-feet at the bifurcation area between Enterprise Road and Saxon Boulevard. The Concept Plans for this project, included in Appendix A, show the existing right-of-way along the corridor.

2.4 Existing Property Lines and Land Use

The existing property lines for parcels within the project study area were available from the Volusia County GIS database and are shown on the Concept Plans in Appendix A. Parcels affected by the proposed improvements are identified on the Concept Plans. The proposed improvements to the 10-mile I-4, Segment 4 corridor lie within Volusia County, with portions of the segment adjacent to or within the city limits of Debary, Deltona, Orange City and DeLand, as shown in Figure 2.1. The existing land use map, shown in Figure 2.2 was created using information from FDOT 2012 parcel tax data records compiled by the Florida Geographic Data Library (FGDL). The existing land use along the I-4, Segment 4 corridor varies with a mixture of uses. The southern end of the corridor is characterized by a large portion of conservation area along both sides of I-4. This area is owned by the SJRWMD and is classified as public/semi-public land. The middle portion of the corridor consists largely of residential land use interspersed with a few undeveloped, non-residential parcels, parcels designated as "other" land use and some acreage not zoned for agriculture. The remainder of the corridor, which comprises the northern section of the corridor limits, consists of a variety of land uses including residential, agricultural and retail/office use, along with several undeveloped nonresidential parcels.

The future land use map, shown in Figure 2.3 was created using FGDL future land use data from the adopted comprehensive plan amendments for each municipality within the project's limits. Future land use along the I-4, Segment 4 corridor is similar to the existing land use in this area. The southern end of the corridor will remain as conservation area along both sides of I-4. The middle portion of the corridor consists largely of low and medium density residential land use interspersed with several commercial parcels and some mixed-use parcels. The northern section of the corridor consists primarily of mixed use parcels along with some low and medium density residential and commercial land uses.

2.5 Horizontal Alignment

The alignment on I-4 is typical of most interstate highways, with long tangent sections connecting long, gradual curves and/or deflection angles not requiring horizontal curves. There is one horizontal curve within the limits of Segment 4 located west of Dirksen Drive at Station 3137+35.20 (PI Station from existing FDOT plans) with a degree of curvature of 1°00'00" and existing superelevation of 0.025 ft/ft which corresponds to an equivalent design speed of 55 mph (FDOT PPM Table 2.9.1). According to the as-built FDOT construction plans from 1990 and 2000, the existing pavement cross slope within the project limits has a downward slope of 0.02 ft/ft towards the outside (except in the superelevated sections of roadway). The curve to the west of Dirksen Drive does not meet current design criteria for a 70-mph design speed. The superelevation rate, e, and radius for this curve are equivalent to a 55-mph design speed. The posted speed limit for Segment 4 is 65 mph to the west of Saxon Boulevard and 70 mph to the east of Saxon Boulevard.

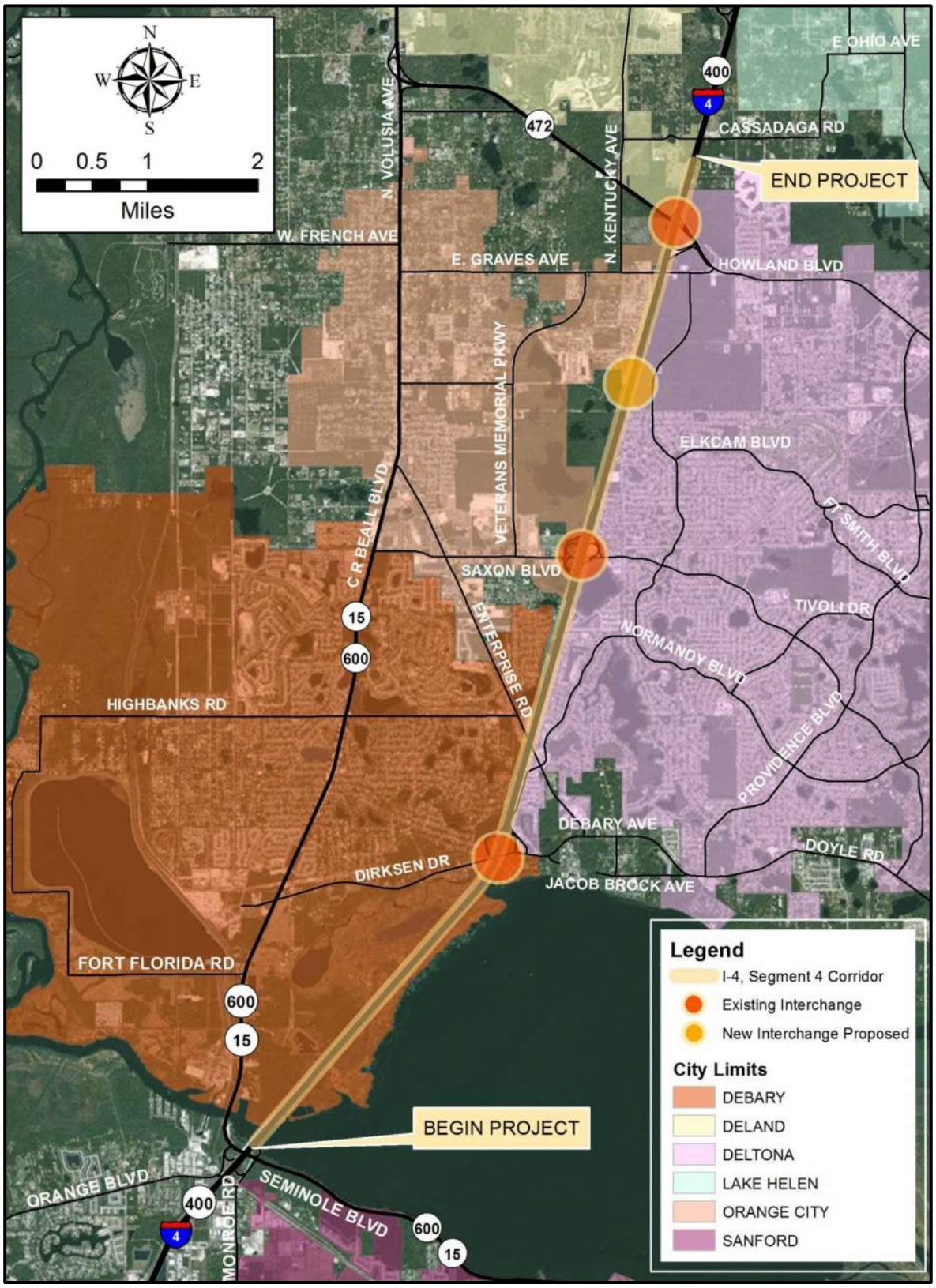


Figure 2.1 – Existing City Limits

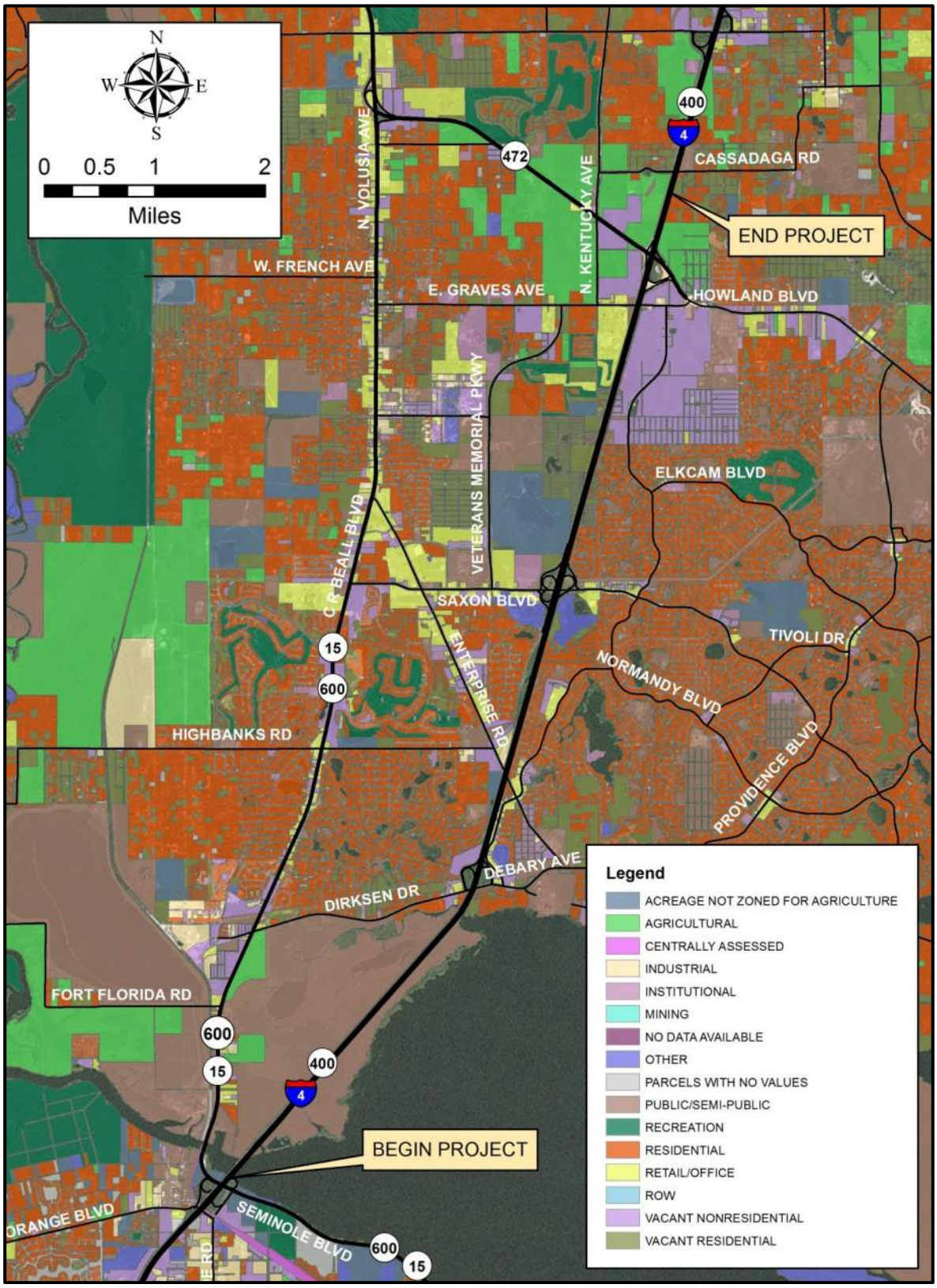


Figure 2.2 – Existing Land Use

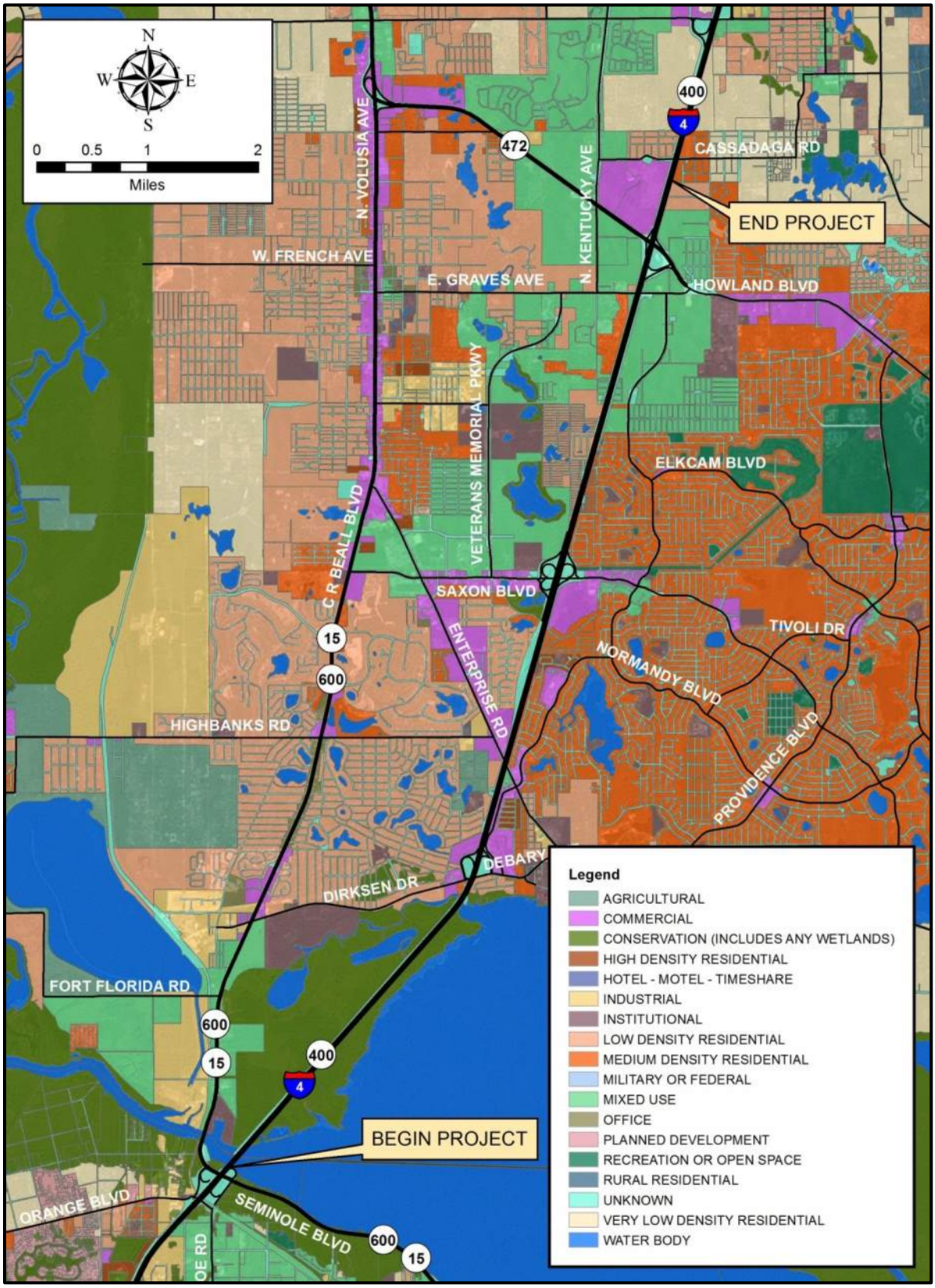


Figure 2.3 – Future Land Use

2.6 Vertical Alignment

Table 2.2 summarizes the vertical alignment of I-4 within the corridor study limits and the design speed associated with each curve based on current design criteria. Of the 21 vertical curves in Segment 4, six of the curves do not meet the current requirements for 70 mph design speed for length of curve or curve constant, K. Reference location stationing is included on the Concept Plans included in Appendix A.

Table 2.2: Existing I-4 Vertical Alignment

PVI Stationing	Location	At Inter-Change (Y/N)	Crest or Sag Curve	Grade In (%)	Grade Out (%)	Existing Curve Length (ft)	Existing K-Value	Equivalent Design Speed
2581+49	Lake Monroe	Y	Crest	2.040	-2.1802	2180	516.6	70
2610+96		N	Sag	-2.180	0.000	4500	2064.0	70
2748+66	Padgett Creek	Y	Sag	0.000	3.000	500	166.7	60
2764+43	Dirksen Drive	Y	Crest	3.000	-3.000	1500	250.0	55
2775+50		N	Sag	-3.000	0.000	500	166.7	60
2787+50		N	Sag	0.000	0.610	400	655.7	70
2822+50	Enterprise Road	Y	Crest	0.61	-0.059	400	597.9	70
2839+50		N	Sag	-0.059	0.056	400	3478.3	70
2857+50		N	Crest	0.056	-0.233	400	1384.1	70
2887+50		N	Crest	-0.233	-1.000	400	521.5	70
2904+50		N	Sag	-1.000	0.765	400	226.6	70
2924+50		N	Crest	0.765	-0.371	400	352.1	60
2941+50		N	Sag	-0.371	0.294	400	601.5	70
2958+50		N	Crest	0.294	-0.441	400	544.2	70
2975+50		N	Sag	-0.441	0.786	400	326.0	70
2996+50		N	Crest	0.786	0.153	400	631.9	70
3011+50		N	Sag	0.153	1.882	400	231.3	70
3033+50		N	Crest	1.882	-1.155	1000	329.3	60
3055+50	Graves Road	Y	Sag	-1.155	0.268	400	281.1	70
3080+50	SR 472	Y	Crest	0.268	-0.583	600	705.1	70
3109+50		N	Sag	-0.583	-0.238	400	1159.4	70

2.7 Pedestrian and Bicycle Facilities

I-4 is a limited access interstate facility that accordingly prohibits bicycle and pedestrian traffic. Pedestrian and bicycle facility information for each of the interchanges along Segment 4 is provided in the following sections.

I-4 and Dirksen Drive/Debary Avenue Interchange

Segment 2B of the Volusia County Spring to Spring trail, in the vicinity of the Dirksen Drive/Debary Avenue interchange, is a 0.9-mile segment which extends from Mansion Drive to Deltona Boulevard. The paved trail is an 8- to 12-foot wide multi-use trail designed for both bicycles and pedestrians. The Spring to Spring trail will be continuous for over 26 miles from Green Springs Park to DeLeon Springs State Park once all of the segments have been constructed by the end of 2017. There are no trail heads located within Segment 2B of the Spring to Spring trail. There are no other pedestrian or bicycle facilities such as sidewalks and bike lanes at this interchange.

I-4 and Saxon Boulevard Interchange

Currently, there is a sidewalk on both the northern and southern sides of Saxon Boulevard but no bike lanes along the roadway, east and west of I-4. This configuration is consistent throughout the approximate 1.2-mile study limit along Saxon Boulevard and is consistent with the typical section of the current reconstruction of Saxon Boulevard to the west of I-4.

I-4 and SR 472 Interchange

The existing interchange at SR 472 has a sidewalk on the north side of SR 472 along the westbound lanes. The westbound bridge over I-4 has a sidewalk to allow pedestrians to cross I-4. There are currently no bike lanes along SR 472.

Coast to Coast Connector (C2C)

The Coast to Coast Connector (C2C) trail, part of the Florida Greenways and Trails System Plan, is a multi-use trail that extends 275 miles across Central Florida, between the Gulf of Mexico and the Atlantic Ocean. Although the Connector is 75% complete, several gaps exist along the route. An effort to close the current gaps in the trail is currently under way and one of the gaps remaining in the trail is the crossing of the St. Johns River between Seminole and Volusia County. The crossing is planned to occur at the current sites of Lake Monroe Wayside Park in Seminole County and the Spring to Spring Trail at Lake Monroe Park in Volusia County. The I-4 BtU project will include provisions to accommodate the multi-use trail at the St. Johns River crossing, closing this gap in the Coast to Coast Connector.

2.8 Lighting

There is no existing lighting along the I-4, Segment 4 mainline except for conventional lighting poles at the following locations surrounding the Saxon Boulevard interchange:

- Both directions - MP 5.880 to MP 6.920 (1 Mile)
- Westbound - MP 5.585 to MP 5.880 (0.3 Mile)

2.9 Existing Traffic

Existing (2011) traffic information including volume counts, geometry, signal timing plans and other pertinent data was collected as part of the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472* (March 2017). The data from this report was utilized to perform operational analyses and evaluate existing conditions.

2.9.1 Traffic Volumes

Existing traffic volume data consists of year 2011 AM and PM peak hour counts compiled from FDOT's Florida Traffic Information (FTI) database, Florida's Turnpike Enterprise, County count programs, other agencies and field data collection. The existing (year 2011) traffic counts for the I-4 Segment 4 study corridor were obtained from the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472* (March 2017) and are depicted in Figure 2.4 through Figure 2.6.

2.9.2 Intersection Geometry and Signalization

There are three existing interchanges within the limits of I-4 Segment 4. The interchange configurations were depicted in Figure 2.4 through Figure 2.6 and are described in detail in the following sections.

<u>I-4 and Dirksen Drive/Debary Avenue Interchange</u>

The I-4 interchange at Dirksen Drive/Debary Avenue is a two-quadrant, partial cloverleaf interchange with loop ramps in the northwest and northeast quadrants. The northwest quadrant loop ramp is a single lane on-ramp from Dirksen Drive/Debary Avenue to westbound I-4; the westbound right turns from Dirksen Drive/Debary Avenue must yield to the eastbound left turns entering the ramp. The outer connector ramp in the northwest quadrant is a single lane off-ramp from I-4 westbound which flares to two lanes at the signalized ramp terminal on Dirksen Drive/Debary Avenue, located approximately 220 feet west of the Interstate. The northeast quadrant loop ramp is a single lane off-ramp from eastbound I-4 to Dirksen Drive/Debary Avenue which flares to three lanes at the signalized ramp terminal on Dirksen Drive/Debary Avenue, located approximately 900 feet east of the Interstate. The outer connector ramp in the northeast quadrant is a single lane on-ramp to I-4 eastbound; the westbound right turns from Dirksen Drive/Debary Avenue must yield to the eastbound left turns entering the ramp.

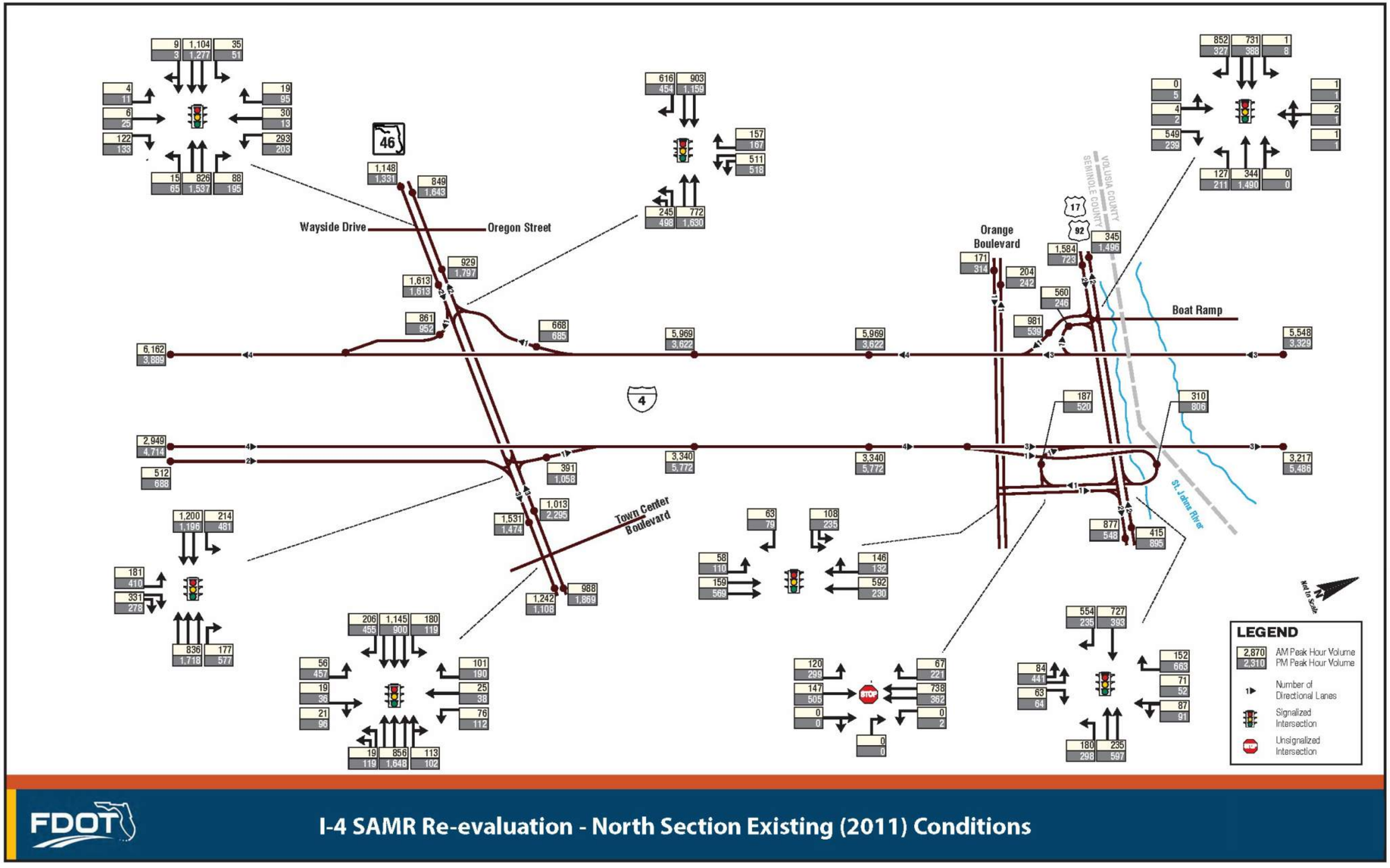


Figure 2.4 - Existing (Year 2011) Traffic Volumes (Sheet 1 of 3)

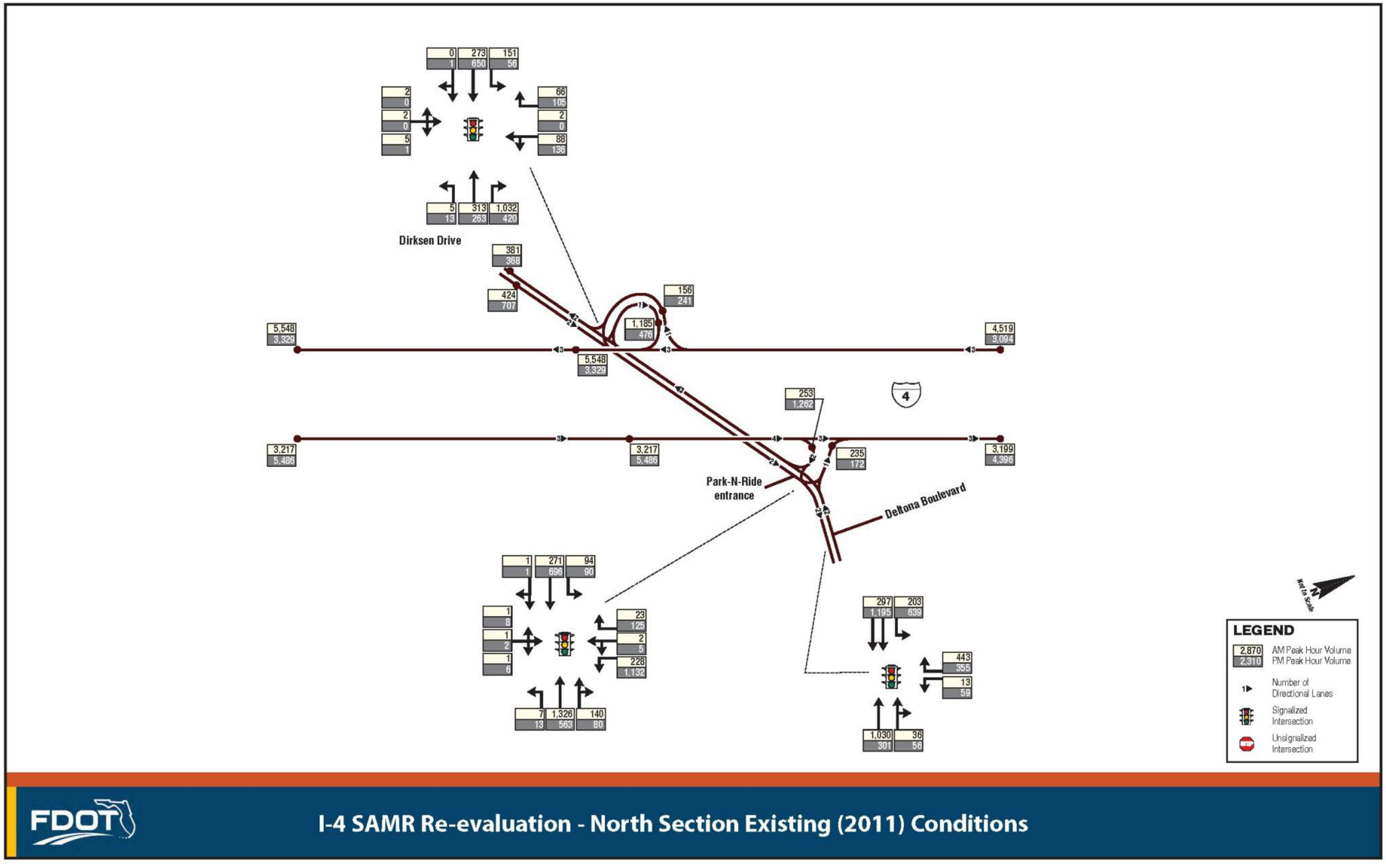


Figure 2.5 - Existing (Year 2011) Traffic Volumes (Sheet 2 of 3)

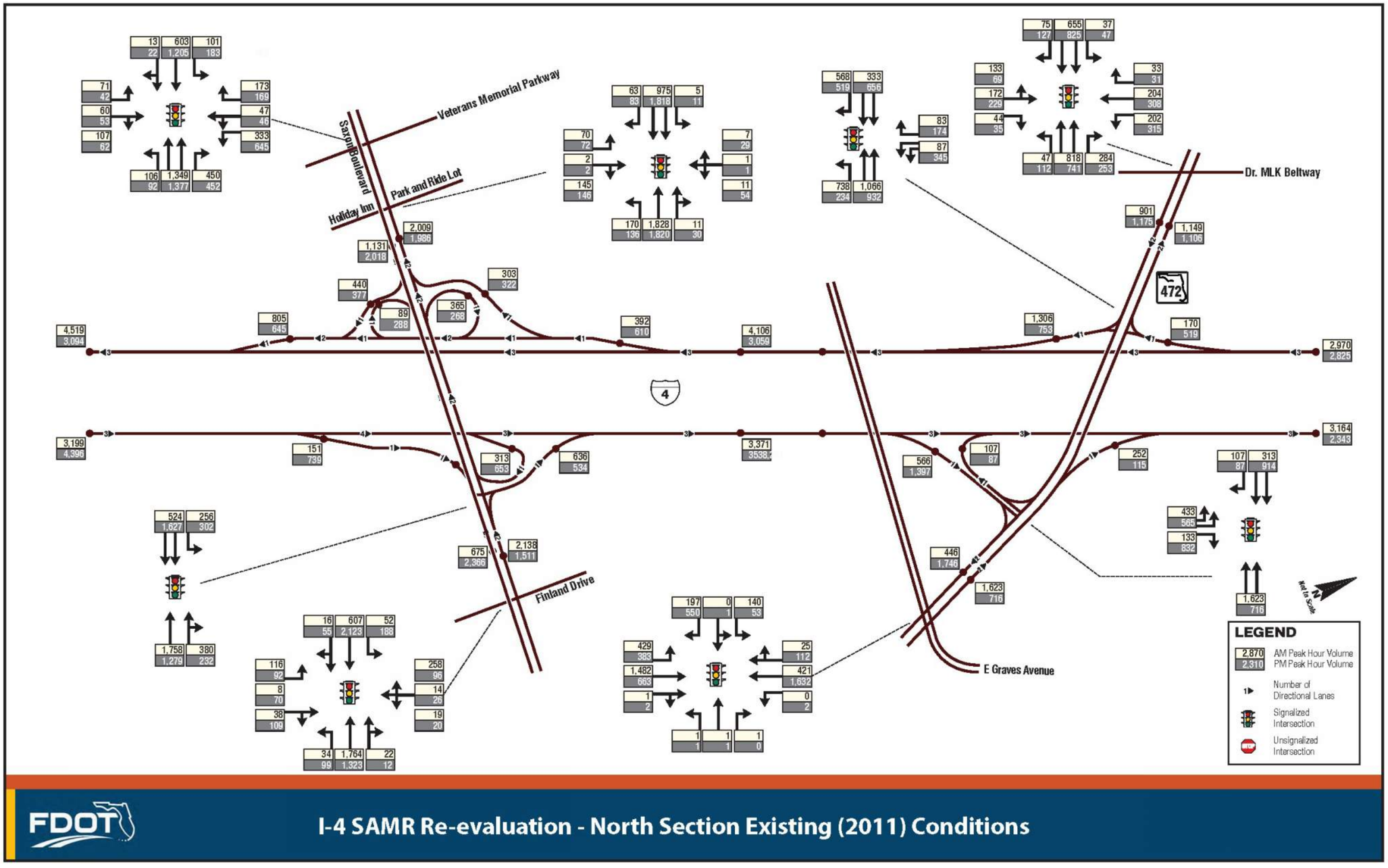


Figure 2.6 - Existing (Year 2011) Traffic Volumes (Sheet 3 of 3)

I-4 and Saxon Boulevard Interchange

The I-4 interchange at Saxon Boulevard is a partial cloverleaf interchange with loop ramps in the northwest, northeast and southwest quadrants. An approximate one-mile long collector-distributor (C-D) road runs parallel to the I-4 westbound lanes and connects to each of the ramps on the west side of I-4 providing access to and from I-4 westbound. The northwest quadrant loop ramp is a single lane on-ramp from westbound Saxon Boulevard to I-4 westbound accessed via the C-D road. The outer connector ramp in the northwest quadrant is a single lane off-ramp from the C-D road, which is stop-controlled at its terminal on Saxon Boulevard located approximately 650 feet west of the Interstate. A raised median island along Saxon Boulevard restricts vehicles exiting the ramp to right turns only at the ramp terminal. The northeast quadrant loop ramp is a single lane off-ramp from I-4 eastbound to westbound Saxon Boulevard. The outer connector ramp in the northeast quadrant is a single lane on-ramp from Saxon Boulevard to I-4 eastbound located approximately 850 feet east of the Interstate. The eastbound left turn movements from Saxon Boulevard to the I-4 eastbound ramp are under signal control and the westbound right turn movements are under yield control. The southwest quadrant loop ramp is a single lane off-ramp from I-4 westbound C-D road to eastbound Saxon Boulevard. The outer connector ramp in the southwest quadrant, located approximately 850 feet west of the Interstate, is a single lane on-ramp from eastbound Saxon Boulevard to the I-4 westbound C-D road. The southeast quadrant has a single lane off-ramp from I-4 eastbound to eastbound Saxon Boulevard.

I-4 and SR 472 Interchange

The I-4 interchange at SR 472 is a partial cloverleaf interchange with a single loop ramp in the southeast quadrant. The I-4 westbound off-ramp at SR 472 is a one-lane ramp in the northwest quadrant which flares to three lanes within 300 feet of the exit; it forms a signalized intersection with dual left turn lanes onto westbound SR 472 and a single right turn lane onto eastbound SR 472. The same traffic signal controls the westbound SR 472 left turn movements entering the single lane on-ramp in the southwest quadrant of the interchange. Traffic from the west enters I-4 westbound using an exclusive right turn lane which merges with the westbound left turns from SR 472 onto the single lane on-ramp in the southwest quadrant. All of the I-4 westbound movements occur at the signalized ramp terminal located within 300 feet west of the Interstate. I-4 eastbound can be accessed from SR 472 eastbound via a single lane loop on-ramp in the southeast quadrant. The entrance to the loop ramp is located approximately 1,250 feet east of the Interstate. I-4 eastbound can be accessed from SR 472 westbound via a single lane on-ramp in the northeast quadrant. Traffic exits I-4 eastbound via a single lane off-ramp in the southeast quadrant, which flares to three lanes as it approaches the signalized ramp terminal at SR 472/Howland Boulevard. A large channelizing island separates the dual left lanes from the right turn lane at the signalized ramp terminal.

2.9.3 Traffic Operational Analyses

Existing conditions operational analyses were performed for the I-4 mainline and study area intersections using the latest version of microsimulation software (VISSIM, Version 7.0). Link and node evaluation was performed to estimate Level of Service based on Highway Capacity Manual metrics for the I-4 mainline and study intersections. The intersection analysis indicates that the Debary Drive and Deltona Boulevard intersection operates at LOS E in the AM peak hour. The link evaluation of freeway segments indicates that all segments operate with average speeds greater than 60 mph in both directions within I-4 Segment 4. The results of the existing conditions operational analyses for I-4 Segment 4 are summarized in Table 2.3 and Table 2.4. Detailed outputs from the software programs are provided in *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472* (March 2017).

Table 2.3: Existing (2011) AM and PM Peak Hour Intersection Operational Analysis

Primary Road	Secondary Road	Existing AM		Existing PM	
		Delay (sec)	LOS	Delay (sec)	LOS
Dirksen Dr/ Debary Ave	I-4 WB off Ramp	8.8	A	6.1	A
	I-4 EB off Ramp	12.6	B	24.6	C
Debary Ave	Deltona Blvd	64.6	E	6.9	A
Saxon Blvd	Veterans Memorial Pkwy	18.7	B	22.4	C
	Holiday Inn	8.7	A	10.6	B
	I-4 EB off Ramp	7.5	A	5.7	A
	Finland Dr	14.0	B	17.9	B
SR 472	MLK Jr Beltway	28.2	C	33.9	C
	I-4 WB off Ramp	49.2	D	17.2	B
	I-4 EB off Ramp	18.6	B	14.3	B
	Graves Ave	12.6	B	13.9	B

Intersection operating at or below LOS E.

Table 2.4: I-4 Mainline Freeway Link/Segment Operational Analysis

Location	Average Speed (mph)	
	AM Peak Hour	PM Peak Hour
I-4 Segment 3 Eastbound		
I-4 EB West of Dirksen Dr	66.2	67.2
I-4 EB at Dirksen Dr	66.2	68.7
I-4 EB East of Dirksen Dr	65.6	67.9
I-4 EB West of Saxon Blvd	66.0	68.2
I-4 EB East of Saxon Blvd	62.8	69.5

Table 2.4: I-4 Mainline Freeway Link/Segment Operational Analysis

Location	Average Speed (mph)	
	AM Peak Hour	PM Peak Hour
I-4 EB West of SR 472	66.4	69.0
I-4 EB between SR 472 and Orange Camp Rd	66.5	69.7
I-4 Segment 3 Westbound		
I-4 WB East of Saxon Blvd	63.5	63.3

2.10 Design and Posted Speed

The design speed for I-4 is 70 miles per hour (MPH). The posted speed limit along Segment 4 is 65 MPH from the beginning of the segment to west of Saxon Boulevard, and 70 MPH from west of Saxon Boulevard to the end of the segment limits.

2.11 Railroad

There are no at grade rail/highway crossings within the project limits. An abandoned rail corridor runs parallel to Dirksen Drive and the section that was within the FDOT right-of-way has been purchased by FDOT. Currently, a multi-use trail is being constructed along the abandoned corridor and will pass underneath I-4 at the Dirksen Drive interchange.

2.12 Pavement Conditions

Pavement condition surveys for the I-4 PD&E study area are conducted by FDOT and are rated on a scale of zero to 10, with a rating of six or less considered critical. The pavement surface and base conditions on I-4 throughout the study area were rated as "good" to "very good" based on high pavement survey ratings between 7.4 and 8.1. Table 2.5 provides the existing pavement condition ratings for 2013 and forecasted 2018 ratings for I-4, Segment 4.

Table 2.5: Pavement Conditions I-4 - Segment 4

Begin MP	End MP	Side	Crack Rating 2013	Ride Rating 2013	Rut Rating 2013	Crack Rating 2018	Ride Rating 2018	Rut Rating 2018
0.503	5.482	L	9.0	8.2	10.0	8.0	7.9	9.0
0.503	5.886	R	8.0	8.0	9.0	7.0	7.7	8.0
5.482	9.871	L	9.0	7.9	10.0	8.0	7.7	10.0
5.886	10.212	R	9.0	8.0	10.0	7.5	7.7	10.0
10.212	14.32	R	8.0	7.7	10.0	6.5	7.4	10.0
9.871	14.865	L	9.0	8.3	10.0	8.0	8.1	10.0
Source: Florida Department of Transportation, *All System Pavement Condition Forecast* (2013 Ratings)								

2.13 Drainage and Hydrology

Existing drainage characteristics in the study area were determined by reviewing FDOT construction plans, the Straight Line Diagrams of Road Inventory, St. Johns River Water Management District (SJRWMD) drainage and permitting files, United States Geological Survey (USGS) Quadrangle Maps, Geographic Information System (GIS) maps, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Field reviews were also conducted along the corridor. The study area lies within the jurisdiction of SJRWMD.

2.13.1 Existing Drainage Patterns

The project is separated into twenty-four (24) basins in the existing condition, which includes the pond sites and the full roadway right-of-way. There are fifteen (15) ponds and several treatment swales that were constructed for treatment and attenuation of runoff. The stormwater runoff from the roadway is collected by roadside ditches and cross drains that either discharge to an existing pond or treatment swale for treatment and attenuation, or discharge directly to the outfall untreated. None of the outfalls are considered an Outstanding Florida Water (OFW.

The first four basins (Basins 400 – 403) are from the St. Johns River Bridge to north of Dirksen Drive. The basins include two existing ponds and several existing dry treatment swales that were constructed for treatment and attenuation. The first existing pond (Basin 400) is located within the coastal plain of Lake Monroe and was sized for both floodplain compensation and the ultimate condition. The second existing pond (Basins 402 and 403) is located within the infield area at the Dirksen Interchange and was designed for interim improvements only. The treatment swales are located south of Padgett Creek within the coastal plain of Lake Monroe. All of these basins ultimately discharge to the St. Johns River and are the only open basins within the project.

There are six basins (Basins 405 – 408D1), from north of Dirksen Drive through the Saxon Boulevard Interchange, that ultimately discharge to Trout Lake, which is land-locked. The basins include five existing ponds and several existing dry treatment swales that were constructed for treatment and attenuation. The dry treatment swales are located within the bifurcated area south of Saxon Boulevard. Two of the existing ponds (Basin 405) are located within the southwest infield area of the Saxon Boulevard Interchange and they serve as wetland mitigation sites as well. Two of the other existing ponds are located within the northwest (Basin 406) and northeast (Basin 407) infield areas of the interchange. The final existing pond (Basin 408) is located east of the interchange and receives runoff from the I-4 ramps and a large portion of Saxon Boulevard. The remaining runoff from Saxon Boulevard that does not discharge into the existing pond flows directly to Trout Lake.

The next five basins (Basins 409 – 413) are from north of Saxon Boulevard to the SR 472 Interchange and are all closed. The basins include seven existing ponds that were constructed for treatment and attenuation. The first existing pond (Basin 409) is located east of I-4 between the Saxon Boulevard Interchange and the SR 472 Interchange and discharges to Lake Mallard. Four of the existing ponds

(Basins 410, 411 and 413) are located on the east side of I-4 at the SR 472 Interchange and they discharge into a series of depressional areas east of I-4. Two of the existing ponds (Basin 412) are located on the west side of I-4 at the SR 472 Interchange and they discharge into a series of depressional areas west of I-4.

The final I-4 mainline basin (Basin 414) starts at SR 472 and continues north to 3,955 feet outside of the project limits and includes an existing pond which is also located outside of the project limits. The existing pond was designed for the ultimate condition and as a closed basin with no outfall.

There are four basins (Basins 415-418) along SR 472 west of I-4 and at the intersection of Kentucky Avenue/ Martin Luther King Jr. Beltway and SR 472. Existing Pond 418 is located along Martin Luther King Jr. Beltway just north of SR 472. The existing pond was designed as a closed basin with no outfall. Ponds 416 and 417 were permitted but never built.

There are three basins (Basins A-C) along Rhode Island Avenue from Veterans Memorial Parkway eastward to Normandy Blvd. and one basin (Basin D) along Normandy Blvd. just north and south of the Rhode Island / Normandy Blvd. intersection. There is an existing pond (Basin D) along Normandy Blvd. and was designed as a closed basin with no outfall. Ponds A, B and C along Rhode Island Avenue were permitted but never built. Additional information on existing drainage patterns is presented in the *Pond Siting Report (August 2016).*

2.13.2 Cross Culverts

There are three existing cross drains within the study area. The Permitted Plans show the existing culvert at Station 2904+29 as a 36 inch concrete pipe, whereas the Straight Line Diagram of Road Inventory shows it as a 24 inch pipe. It was field verified that the existing culvert is a 36" pipe. Table 2.6 presents the existing cross culvert data obtained from the original I-4 construction plans pertinent to the project study area. In addition to the cross drains, there are several other drainage structures to convey onsite drainage, such as ditch bottom inlets, roadside swales and driveway culverts. Additional information is presented in the *Location Hydraulic Report (August 2016)* prepared for this study.

Table 2.6: Existing Cross Drains

Milepost	Station	Description from Original Construction Plans						
		Count	Span (in)	Rise (in)	Type	Length (ft)	Elevation (ft NAVD)	
							Left	Right
6.169	2904+29.00	1	36	36	RCP	342	18.88	18.74
6.960	2946+25.00	1	36	36	SCP	210	27.10	26.02
7.556	2988+72.86	1	36	36	SCP	237	28.24	20.33
Abbreviations: RCP – Reinforced Concrete Pipe, SCP – Steel Casing Pipe								

2.14 Existing Bridges

Within Segment 4 of the I-4 study corridor, there are six existing bridge structures which cross I-4 and six existing mainline bridge structures which carry I-4 over local roads or waterways. The existing bridges are listed in Table 2.7 and depicted graphically in Figure 2.7**.**

2.14.1 Type of Structure

Mainline Bridges - The superstructures of the existing mainline I-4 bridges consist of a cast-in-place concrete deck carried by AASHTO prestressed precast concrete girders. Table 2.7 summarizes the span lengths, deck widths, shoulder/lane widths and superstructure types.

Overpass Bridges - The superstructures for the bridges over I-4 consist of a cast-in-place concrete deck carried by AASHTO prestressed precast concrete girders.

2.14.2 Current Conditions and Year of Construction

Table 2.8 provides a description of the existing bridges within the I-4 study corridor. This information was obtained from existing plans and the most recent bridge inspection reports. The sufficiency rating is derived from a formula that evaluates factors that are indicative of the structure's ability to remain in service. A rating of 100 percent represents an entirely sufficient bridge and a rating of zero percent represents an entirely deficient bridge. Table 2.8 also includes data on the year of original construction and when the bridges were widened or replaced. This data was obtained from the most recent bridge inspection reports or approximated from the dates of the existing plans. The mainline facilities carrying I-4 over Padgett Creek and Dirksen Drive were originally constructed in 1959, then later widened. Similarly, the facility carrying SR 472 EB over I-4 was constructed in 1959 with no further reconstruction.

Table 2.7: Existing Bridge Structures

Facility	Bridge No.	No. of Spans	Bridge Length (ft)	MAX Span Length (ft)	Deck Width (ft)	Lane/ Shoulder Widths (ft)	Superstructure Type
I-4 WB over US-17-92 – St. Johns River	790196	20	2,566.3	142.33	58.0 - 70.0	12' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over US-17-92 – St. Johns River	790197	20	2,566.3	142.33	58.0 - 70.0	12' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 WB over Padgett Creek	790941	3	152.1	56.9	66.9	6' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam

Table 2.7: Existing Bridge Structures

Facility	Bridge No.	No. of Spans	Bridge Length (ft)	MAX Span Length (ft)	Deck Width (ft)	Lane/ Shoulder Widths (ft)	Superstructure Type
I-4 EB over Padgett Creek	790099	3	151.9	56.8	59.1	10’ shldr, 3 lanes @ 12’, 10’ shldr	AASHTO Concr. Beam
I-4 WB over Dirksen Drive	790042	5	328.3	73.77	66.9	6’ shldr, 4 lanes @ 12’, 10’ shldr	AASHTO Concr. Beam
I-4 EB over Dirksen Drive	790100	5	328.3	73.77	58.9	10’ shldr, 3 lanes @ 12’, 10’ shldr	AASHTO Concr. Beam
Enterprise Road over I-4	790191	2	299.4	149.7	76.8	5’ sidewalk, 4’ shldr, 2 lanes @ 12’, 12’ median, 2 lanes @ 12’, 4’ shldr	AASHTO Concr. Beam
Saxon Blvd. WB over I-4	790166	3	257.5	99.8	66.5	5’ sidewalk, 10’ shldr, 12’ lane, 14’ lane, 12’ lane, 22’ raised median	AASHTO Concr. Beam
Saxon Blvd. EB over I-4	790167	3	257.5	99.8	66.5	22’ raised median, 12’ lane, 14’ lane, 12’ lane, 10’ shldr 5’ sidewalk	AASHTO Concr. Beam
Graves Ave. over I-4	790218	2	286	143	59.0	5’ sidewalk, 10’ shldr, 2 lanes @ 12’, 10’ shldr	AASHTO Concr. Beam
SR 472 WB over I-4	790190	4	214.5	70.9	56.8	5’ sidewalk, 8’ shldr, 3 lanes @ 12’, 4’ shldr	AASHTO Concr. Beam

Table 2.7: Existing Bridge Structures

Facility	Bridge No.	No. of Spans	Bridge Length (ft)	MAX Span Length (ft)	Deck Width (ft)	Lane/ Shoulder Widths (ft)	Superstructure Type
SR 472 EB over I-4	790053	4	218	72	46.0	8’ shldr, 2 lanes @ 12’, 8’ shldr	AASHTO Concr. Beam

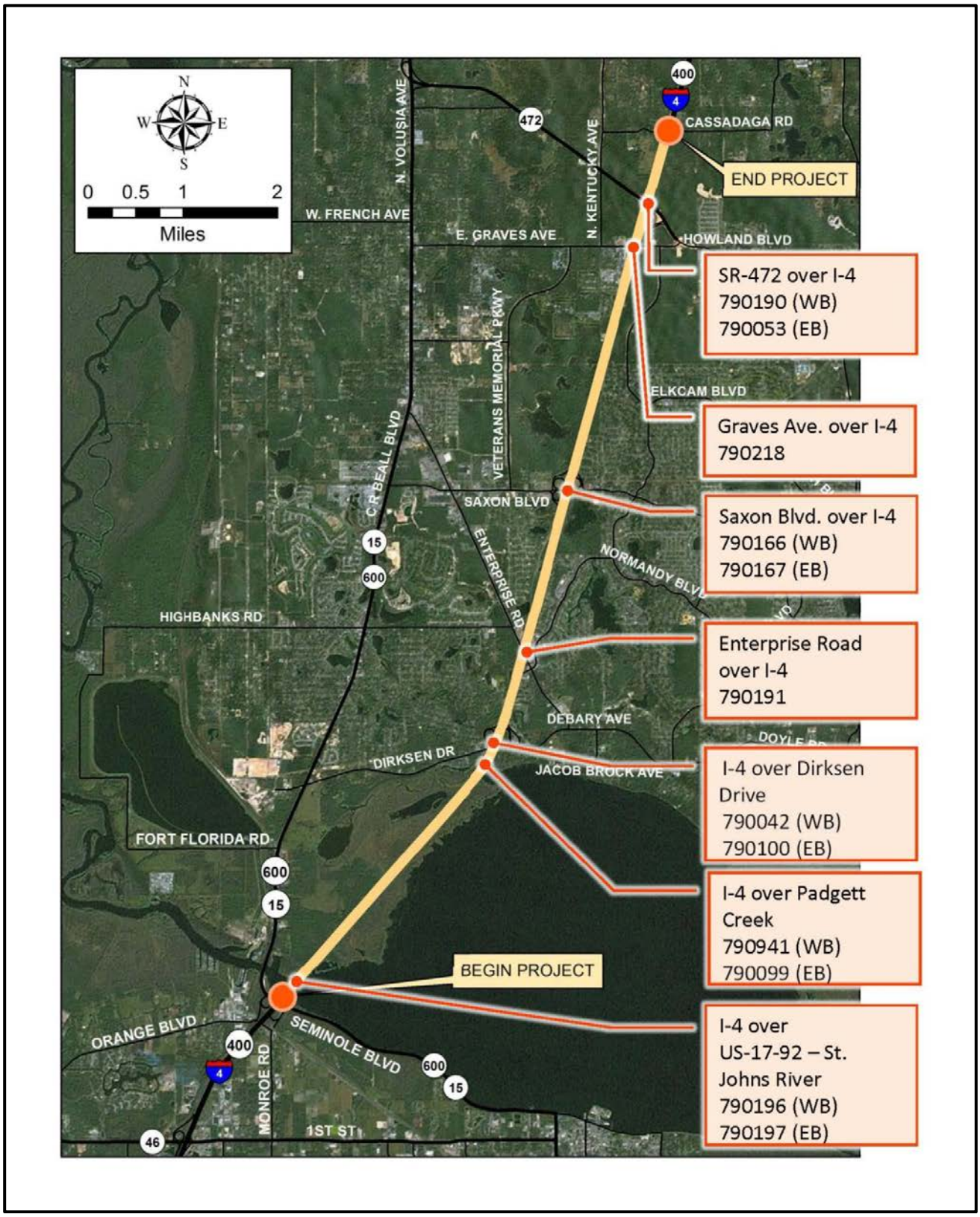


Figure 2.7 – Existing Bridge Locations

Table 2.8: Current Structure Condition and Year of Construction

Facility	Bridge No.	Sufficiency Rating	Overall NBI Rating[1]				Year Built[2]	Year Replaced/ Widened[2]
			Deck	Superstr.	Substr.	Channel		
I-4 WB over US-17-92 – St. Johns River	790196	93.2	7	7	7	8	2002	N/A
I-4 EB over US-17-92 – St. Johns River	790197	93.2	8	7	6	9	2003	N/A
I-4 WB over Padgett Creek	790941	89.3	6	7	7	8	1959	2005
I-4 EB over Padgett Creek	790099	89.3	6	7	7	8	1959	2005
I-4 WB over Dirksen Drive	790042	92.0	7	7	7	N/A	1959	2004
I-4 EB over Dirksen Drive	790100	87.2	7	7	7	N/A	1959	2004
Enterprise Road over I-4	790191	97.5	7	8	8	N/A	2005	N/A
Saxon Blvd. WB over I-4	790166	98.0	7	7	7	N/A	1993	N/A
Saxon Blvd. EB over I-4	790167	99.0	7	7	7	N/A	1994	N/A
Graves Ave. over I-4	790218	93.9	7	8	8	N/A	2006	N/A
SR 472 WB over I-4	790190	96.1	7	8	8	N/A	2000	N/A
SR 472 EB over I-4	790053	94.1	7	7	7	N/A	1959	N/A

[1] National Bridge Inventory (NBI) Rating: 9- Excellent; 8- Very Good; 7- Good; 6- Satisfactory; 5 – Fair
[2] Construction and widening years obtained from Bridge Inspection Reports or Plans.

None of the mainline facilities are classified as "functionally obsolete" or "structurally deficient." The bridges carrying I-4 WB over Padgett Creek and Dirksen Drive have a structural sufficiency rating below 90. Likewise, the bridge carrying I-4 EB over Padgett Creek has a structural sufficiency rating below 90. All other facilities have a structural sufficiency rating above 90.

2.14.3 Horizontal and Vertical Alignments of Structures

Existing vertical clearances less than 16.5 feet are undesirable over the Interstate. The facilities carrying SR 472 over the mainline do not meet the minimum vertical clearance threshold while all

other over the mainline provide adequate vertical clearance. Table 2.9 presents the pier locations and horizontal clearances for each of the bridges. Table 2.10 summarizes the vertical curve data at each location. Table 2.11 provides the vertical clearance information at each structure.

Table 2.9: Horizontal Clearances at Bridges

Facility	Bridge No.	Horizontal Clearance to Substructure
I-4 WB over US-17-92 – St. Johns River	790196	6.7' US 17-92 to Pier 2
I-4 EB over US-17-92 – St. Johns River	790197	6.7' US 17-92 to Pier 2
I-4 WB over Padgett Creek	790941	N/A
I-4 EB over Padgett Creek	790099	N/A
I-4 WB over Dirksen Drive	790042	N/A
I-4 EB over Dirksen Drive	790100	N/A
Enterprise Road over I-4	790191	16' to Pier 2
Saxon Blvd. WB over I-4	790166	14' to Pier 2
Saxon Blvd. EB over I-4	790167	14' to Pier 2
Graves Ave. over I-4	790218	13.25' to Retaining Wall 2
SR 472 WB over I-4	790190	10' to Pier 1
SR 472 EB over I-4	790053	10' to Pier 1

Table 2.10: Vertical Curve Data at Bridges

Facility	Bridge No.	Vertical Curve Length (ft)	Vertical Curve Grade In/Grade Out
I-4 WB over US-17-92 – St. Johns River	790196	2,180	+2.0396%/-2.1802%
I-4 EB over US-17-92 – St. Johns River	790197	2,180	+2.0396%/-2.1802%
I-4 WB over Padgett Creek	790941	N/A	+3%/+3%
I-4 EB over Padgett Creek	790099	N/A	+3%/+3%
I-4 WB over Dirksen Drive	790042	1,500	+0.44%/-0.88%
I-4 EB over Dirksen Drive	790100	1,500	+0.44%/-0.88%
Enterprise Road over I-4	790191	910	+1.21%/-1.27%
Saxon Blvd. WB over I-4	790166	N/A	-0.83%/-0.83%
Saxon Blvd. EB over I-4	790167	N/A	-0.83%/-0.83%
Graves Ave. over I-4	790218	1,000	+1.43%/-1.43%
SR 472 WB over I-4	790190	800	+1.09%/-0.52%
SR 472 EB over I-4	790053	650	+1.34%/-1.34%

Table 2.11: Vertical Clearances at Bridges

Location	Bridge No.	Vertical Clearance (ft)
I-4 WB over US-17-92 – St. Johns River	790196	21.2 to US-17-92
I-4 EB over US-17-92 – St. Johns River	790197	22.8 to US-17-92
I-4 WB over Padgett Creek	790941	19.4
I-4 EB over Padgett Creek	790099	19.4

Table 2.11: Vertical Clearances at Bridges

Location	Bridge No.	Vertical Clearance (ft)
I-4 WB over Dirksen Drive	790042	22
I-4 EB over Dirksen Drive	790100	22
Enterprise Road over I-4	790191	16.7
Saxon Blvd. WB over I-4	790166	17.4
Saxon Blvd. EB over I-4	790167	17.4
Graves Ave. over I-4	790218	17.77
SR 472 WB over I-4	790190	15.57
SR 472 EB over I-4	790053	15.69

2.14.4 Span Arrangement

The existing span arrangement (number and length of spans) of the bridges within the project limits was listed in Table 2.7.

2.14.5 Historical Significance

Existing bridges in Segment 4 of the I-4 study corridor carry no historical significance. Thus, this section is not applicable to this project.

2.14.6 Channel Dimensions

I-4 crosses over the St. Johns River just north of the begin project limits. Table 2.12 summarizes the channel dimensions for I-4 EB and I-4 WB over the St. Johns River.

Table 2.12: Channel Dimensions

Location	Bridge No.	Vertical Clearance (ft) [1]	Horizontal Clearance (ft) [2]
I-4 WB Over St. Johns River	790196	45.0	112.7
I-4 EB Over St. Johns River	790197	45.0	112.7

[1] Vertical clearance is measured from the lowest point under the bridge (including lighting, utilities, etc.) to the Near High Water (NHW) elevation
[2] Horizontal clearance is measured between the inside faces of the existing fender system

2.14.7 Bridge Openings

Since the I-4 widening project does not involve any moveable bridges that fall within the study limits, this section is not applicable to this project.

2.14.8 Ship Impact Data

Table 2.13 summarizes the design ship impact forces for I-4 Eastbound and I-4 Westbound over the St. Johns River.

Table 2.13: Ship Impact Data

Pier	Equivalent Static Force (Kips)	
	TRANSVERSE	LONGITUDINAL
2 to 4 & 5 EB	N/A	N/A
5 WB	300	260
6	1,000	500
7	2,000	1,000
8	2,000	1,000
9	2,600	1,300
10	2,600	1,300
11	2,600	1,300
12	2,600	1,300
14	2,600	1,300
15 EB	1,500	750
15 WB	300	260
16 TO 20	N/A	N/A

2.15 Crash Data

The five-year crash data, between 2008 and 2012, was analyzed for the I-4 segment between east of US 17-92 and east of SR 472. The crash data was downloaded from the FDOT Crash Analysis Reporting System (CARS) system. The crash data includes data for the I-4 mainline as well as the ramp terminals. The five-year crash data analysis showed that there were 680 crashes within this approximate 10-mile segment of I-4 in the last five years. Out of those 680 crashes, there were fifteen (15) fatal crashes, 367 injury crashes and 298 property damage only crashes. Table 2.14 shows the summary of crashes by severity within the study area. Figure 2.8 shows the crash distribution by severity along the I-4, Segment 4 mainline.

Table 2.14: I-4 Segment 4 Crash Severity Summary

Crash Severity	2008	2009	2010	2011	2012	Total
Fatal	5	2	1	5	2	15
Injury	70	86	76	74	61	367
Property Damage Only	58	66	72	45	57	298
Total	133	154	149	124	120	680

During the five-year study period, of the crashes that were classified as specific crash events, the highest were rear end collisions (160 crashes, 24%), hitting guardrail collisions (82 crashes, 12%) and angle collisions (67 crashes, 10%). The highest numbers of contributing causes were careless driving (291 crashes, 43%) followed by improper lane change (91 crashes, 13%). Table 2.15 provides a summary of the types of crashes within the study area and Table 2.16 provides a summary of contributing causes.

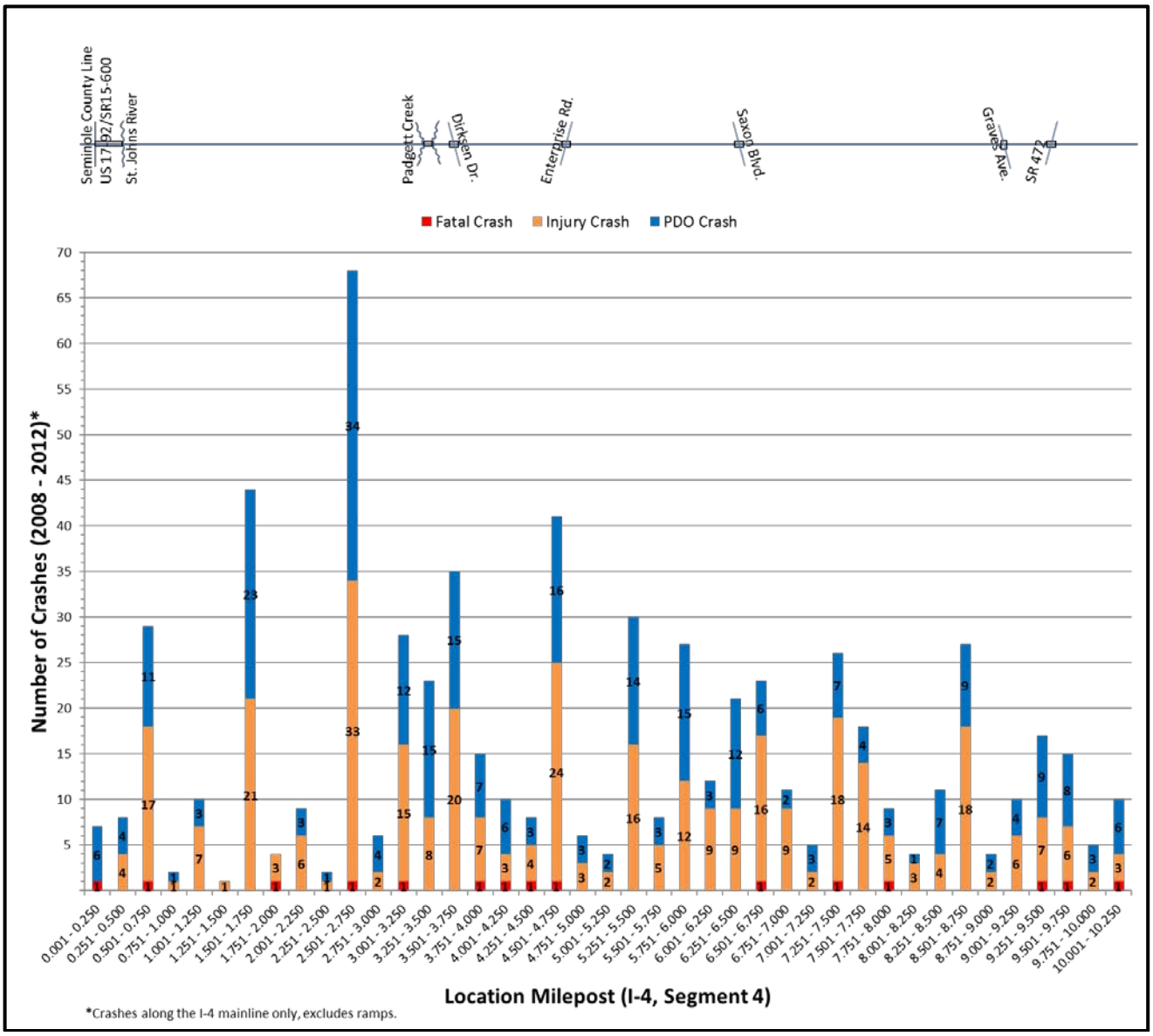


Figure 2.8 – Crash Distribution along I-4, Segment 4 Corridor

Rear end collisions represent nearly 24% of the total crashes occurring along the I-4, Segment 4 study corridor for the five-year period analyzed. Approximately 56% (89 crashes) of the rear end collisions occurred during "clear" weather conditions, nearly 72% (115 crashes) occurred on dry roadway surface and approximately 53% (84 crashes) occurred during daylight lighting conditions. The data indicates that the high occurrence of rear end collisions may be due to peak periods of heavy congestion along the corridor.

Table 2.15: I-4 Segment 4 Crash Event Summary

Harmful Event	2008	2009	2010	2011	2012	Total
All Other	15	12	15	13	15	70
Angle	10	20	17	13	7	67
Animal	-	1	1	-	-	2
Cargo Loss or Shift	4	2	6	1	1	14
Collision with Motor Vehicle on Road	4	6	8	10	18	46
Head-On	1	-	1	2	1	5
Hit Concrete Barrier Wall	1	3	1	-	3	8
Hit Fence	3	2	3	-	2	10
Hit Guardrail	17	15	22	16	12	82
Hit Sign/Sign Post	2	2	2	-	2	8
Hit Tree/Shrub	3	3	1	3	-	10
Hit Utility Pole	1	-	-	1	-	2
Moveable Object	1	-	2	-	-	3
Other Fixed Object	-	-	-	-	1	1
Overturned	9	9	7	8	6	39
Parked Car	4	1	2	1	1	9
Pedestrian	1	2	-	1	-	4
Ran into Ditch/Culvert	-	4	2	1	-	7
Ran Off Rd Into Water	-	1	-	-	-	1
Rear End	25	43	38	27	27	160
Sideswipe	24	23	16	-	-	63
Trac/Trail Jackknifed	-	1	-	-	1	2
Unknown/Not Coded	8	4	5	27	23	67
Total	133	154	149	124	120	680

Table 2.16: I-4 Segment 4 Contributing Cause Summary

Crash Contributing Cause	2008	2009	2010	2011	2012	Total
Alcohol-Under Influence	3	1	-	-	-	4
Alcohol/Drugs-Under Influence	-	2	1	-	-	3
All Other	10	16	24	13	31	94
Careless Driving	52	73	67	53	46	291
Disregarded Other Traffic Control	1	-	-	-	-	1
Driver Distraction	1	1	1	-	-	3
Driving Wrong Side/Way	-	-	1	-	-	1
Exceeded Safe Speed Limit	2	2	3	6	2	15
Exceeded Stated Safe Speed Limit	1	-	-	-	-	1
Failed to Maintain Equipment	3	3	-	-	-	6
Fleeing Police	1	1	-	-	-	2
Followed Too Closely	1	-	-	2	-	3
Failed to Yield Right of Way	-	1	2	7	5	15

Table 2.16: I-4 Segment 4 Contributing Cause Summary

Crash Contributing Cause	2008	2009	2010	2011	2012	Total
Improper Backing	-	1	-	-	-	1
Improper Lane Change	31	36	24	-	-	91
Improper Load	3	1	6	-	-	10
Improper Passing	1	1	-	-	-	2
No Improper Driving	20	14	18	15	13	80
Obstructing Traffic	1	-	-	-	-	1
Unknown/Not Coded	2	1	2	28	23	56
Total	133	154	149	124	120	680

As part of the crash data analysis, the FDOT District 5 High Crash Roadway Segments list was reviewed. Within I-4, Segment 4, the sections identified as high crash segments are shown in Table 2.17. The actual crash rates on these segments were greater than the average district wide crash rate for urban interstate facility type. The segment of I-4 in Volusia County between MP 2.400 and MP 2.800 (immediately west of Padgett Creek) appears on the list for three of the five years of data analyzed. Over 41% of the crashes occurring in this high crash segment during the 5-year crash analysis period occurred during dark lighting conditions. There is no existing lighting along the I-4 mainline within the Segment 4 corridor except at the Saxon Boulevard interchange. A *Lighting Justification Report* (June 2014) which addresses roadway lighting criteria and recommends continuous roadway lighting for I-4, Segment 4 has been prepared as part of this PD&E reevaluation study.

Table 2.17: I-4 Segment 4 High Crash Segment Summary

Year	County	Begin MP	End MP	Total # Crashes	ADT	Crash Rate	Average District Wide Crash Rate (Urban Interstate)
2008	Volusia	2.400	2.800	19	118,500	1.098	0.417
2009	Volusia	2.400	2.800	19	107,500	1.210	0.477
	Volusia	5.200	5.600	16	94,664	1.157	
2010	Volusia	3.500	3.700	10	95,369	1.436	0.519
2011	Volusia	3.700	3.900	9	93,629	1.316	0.458
	Volusia	4.500	4.600	8	93,629	2.340	
2012	Volusia	2.500	2.600	9	106,500	2.315	0.497

2.16 Utilities

The utilities located within the right-of-way were identified through the use of existing plans and by contacting all of the utility companies identified via the Sunshine State One call system. Table 2.18 provides a list of the utility companies and contact information. Table 2.19 provides approximate locations of the major utilities that are within the project corridor. The easements by utility type and owner are shown in the Concept Plans (Appendix A).

Table 2.18: Utility Contact Information

Utility	Contact Name	Address	Phone	E-Mail
AT&T Corporation	Greg Jacobson	6015 Benjamin Rd Suite 306 Lake Mary, FL 32746	(813) 342-0512	gtjacobson@att.com
AT&T Florida	Natasha Roberson	900 North Nova Rd Daytona Beach, FL 32117	(386) 252-0662	nr321r@att.com
BrightHouse Networks	Randall Bounds	211 St. Joe Plaza Palm Coast, FL 32164	(386) 527-6836	randall.bounds@mybrighthouse.com
CenturyLink	Jeff Griffin	33 North Main St Winter Garden, FL 34787	(407) 814-5344	jeff.w.griffin@centurylink.com
City of Deltona	Cindy Bono	255 Enterprise Rd. Deltona, FL 32725	(386) 878-8994	cbono@deltonafl.gov
Comcast Communications	Cesar Rivera	4305 Vineland Rd. Suite G-2 Orlando, FL 32811	(407) 849-3611	cesar_rivera@cable.comcast.com
Duke Energy-Distribution	Sharon Dear	3300 Exchange Place NP4A Lake Mary, FL 32746	(407) 942-9421	sharon.dear@duke-energy.com
Duke Energy-Transmission	Donald Carey	20525 Amberfield Dr. Suite 201 Land O'Lakes, FL 34638	(813) 389-3610	dcarey@ucsinc.com

Table 2.18: Utility Contact Information

Utility	Contact Name	Address	Phone	E-Mail
Florida Gas Transmission	Joseph Sanchez	2405 Lucien Way Suite 200 Maitland, FL 32751	(407) 838-7171	joseph.e.sanchez@energytransfer.com
Florida Power & Light	Robert Helfer	5910 E Highway 100 Palm Coast, FL 32164	(386) 586-6432	robert.helfer@fpl.com
Florida Power & Light Overhead Transmission	Peter Washio	700 Universe Boulevard TS4/JW Juno Beach, FL 33408	(561) 904-3693	Peter.h.washio@fpl.com
Florida Power & Light Underground Transmission	Seyed Hajassadollah	158 McArthur Causeway Miami Beach, FL 33408	(305) 228-5290	Seyed.hajassadollah@fpl.com
Florida Public Utilities	Dan Scribben	450 South Highway 17-92 Debary, FL 32713	(386) 668-9319	dscribben@fpuc.com
Orange City Utilities	Cheryl Bredbenner	205 E. Graves Ave Orange City, FL 32763	(386) 775-5449	cbredbenner@ourorangecity.com
Seminole County Utilities	James Monahan	500 W. Lake Mary Blvd. Suite 200 Sanford, FL 32773	(407) 665-2021	jmonahan02@seminolecountyfl.gov
Sunesys	Patricia Hector	185 Titus Ave Warrington, PA 18976	(267) 927-2083	
TW Telecom	Sean Moss	485 North Keller Rd. Suite 551 Maitland, FL 32751	(407) 215-6895	sean.moss@twtelecom.com
Verizon	John McNeil	210 Recker Highway Auburndale, FL 33823	(862) 965-6438	john.mcneil@verizon.com
Volusia County Utilities	Scott Mays	123 West Indiana Ave Deland, FL 32720	(386) 943-7027 ext. 12076	smays@volusia.org

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	AT&T	48 PR Aerial Fiber Optic Cable	From 1050-ft east of intersection of Enterprise Rd & Saxon Blvd east to 290-ft west of intersection of Medical Center Dr. & Saxon Blvd	North side of road
Communications	AT&T	48 PR Aerial Fiber Optic Cable	From 330-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd east on Saxon Blvd to intersection of I-4 southbound ramp to Saxon Blvd & Saxon Blvd	North side of road
Communications	AT&T	48 PR Aerial Fiber Optic Cable	Crossing of Saxon Blvd 440-ft east of intersection of Saxon Blvd ramp to I-4 northbound & Saxon Blvd	N/A
Communications	AT&T	25-600 PR Underground Fiber Optic Cable	From end of project limits on Dirksen Dr. east to intersection of Dirksen Dr. and I-4 southbound ramp to Dirksen Dr.	North side of road
Communications	AT&T	900 PR Underground Fiber Optic Cable	From intersection of N Rd & Debary Ave. east to end of project limits	South side of road
Communications	AT&T	900 PR Underground Fiber Optic Cable	Crossing at intersection of N Rd. & Debary Ave	West side of intersection
Communications	AT&T	600 PR Underground Fiber Optic Cable	Crossing at intersection of Palm Rd & Dirksen Dr.	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	AT&T	600 PR Underground Fiber Optic Cable	Crossing at intersection of Sunrise Blvd & Dirksen Dr.	East side of intersection
Communications	AT&T	600 PR Underground Fiber Optic Cable	From intersection of Palm Rd & Dirksen Drive to intersection of Deltona Blvd & Debary Ave.	South side of road
Communications	AT&T	300 PR Underground Fiber Optic Cable	From intersection of Deltona Rd & Debary Ave east to intersection of Maple Ave & Debary Ave	South side of road
Communications	AT&T	300 PR Underground Fiber Optic Cable	From intersection of N Rd & Dirksen Dr. east to end of project limits	North side of road
Communications	AT&T	200 PR Underground Fiber Optic Cable	From intersection of Maple Ave & Debary Ave east to 1370-ft east of intersection of entrance to utility plant entrance & Debary Ave.	South side of road
Communications	AT&T	100 PR Underground Fiber Optic Cable	From intersection of entrance to utility plant entrance to intersection of N Rd & Debary Ave.	South side of road
Communications	AT&T	100 PR Underground Fiber Optic Cable	Crossing at intersection of Enterprise Rd & Dirksen Rd	East side of intersection
Communications	AT&T	100 PR Underground Fiber Optic Cable	From intersection of Enterprise Rd & Debary Ave east to intersection N Rd and Debary Ave	North side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	AT&T	50 PR Underground Fiber Optic Cable	Crossing at intersection of N Rd. & Debary Ave.	East side of intersection
Communications	AT&T	48 PR Underground Fiber Optic Cable	Crossing at intersection of Enterprise Rd & Saxon Blvd	West side of intersection
Communications	AT&T	48 PR Underground Fiber Optic Cable	From intersection of to 1050-ft east of Enterprise Rd & Saxon Blvd	North side of road
Communications	AT&T	48 PR Underground Fiber Optic Cable	From 290-ft west of intersection of Medical Center Dr. east to 330-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd	North side of road
Communications	AT&T	48 PR Underground Fiber Optic Cable	From intersection of I-4 southbound ramp to Saxon Blvd & Saxon Blvd east to intersection of Saxon Blvd ramp I-4 northbound & Saxon Blvd	North side of road
Communications	AT&T	Unknown Size Underground Fiber Optic Cable	Crossing at intersection of I-4 southbound ramp to Dirksen Dr. & Dirksen Dr.	West side of intersection
Communications	AT&T Corporation	6.5" Underground Fiber Optic	From Station 10+00 on Saxon Blvd to intersection of Veterans Memorial Pkwy & Saxon Blvd	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	AT&T Corporation	6.5" Underground Fiber Optic	Crossing at intersection of Veterans Memorial Pkwy & Saxon Blvd	East side of intersection
Communications	AT&T Corporation	6.5" Underground Fiber Optic	Crossing at intersection of N. Kentucky Ave & SR 472	East side of intersection
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	From intersection of Enterprise Rd & Saxon Blvd to 500-ft west of intersection of Veterans Memorial Pkwy & Saxon Blvd	South side of road
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	Crossing of Saxon Blvd, 150-ft west of intersection of Medical Center Rd & Saxon Blvd	N/A
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	From 150-ft west of intersection of Medical Center Dr. & Saxon Blvd to 660-ft west of intersection of I-4 west bound ramp to Saxon Blvd	North side of road
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	Crossing of Saxon Blvd, 670-ft west of intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd	N/A
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	Crossing at intersection of Wolf Pack Run & SR 472	West side of intersection
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	From intersection of Wolf Pack Run & SR 472 east to station 134+00 on SR 472	North side of road
Communications	BrightHouse Networks	Unknown Size Aerial Fiber Optic	Crossing of Saxon Blvd, at intersection of Red Fox Run & Saxon Blvd	East side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From 130-ft west of intersection of Palm Rd & Dirksen Dr. to intersection of Dirksen Dr. ramp to I-4 east bound & Dirksen Dr.	North side of road
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From 150-ft west of intersection of Palm Rd & Dirksen Dr. to intersection of I-4 west bound ramp to Dirksen Dr. & Dirksen Dr.	South side of road
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	Crossing at intersection of I-4 west bound ramp to Dirksen Dr. & Dirksen Dr.	West side of intersection
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From 1730-ft south to 1000-ft north of Enterprise Rd on I-4 Corridor	West side of road
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	Crossing at intersection of Veterans Memorial Pkwy & Saxon Blvd	East side of intersection
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From 430-ft west of intersection of I-4 west bound ramp to SR 472 east to station 134+00 on SR 472	North side of road
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From intersection of E. Graves Ave to intersection of Forest Edge Dr. & SR 472	South side of road
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	Crossing at intersection of Forest Edge Dr. & Saxon Blvd	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Enterprise Rd & Saxon Blvd to intersection of I4 west bound ramp to Saxon Blvd & Saxon Blvd	North side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Enterprise Rd & Saxon Blvd to intersection of Medical Center Dr. & Saxon Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Broward Ave & Saxon Blvd	South side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Broward Ave & Saxon Blvd	East side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Broward Ave & Saxon Blvd to 660-ft west of intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd	South side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd to intersection of W. Apache Circle & Saxon Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing 350-ft west of intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd	N/A
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From 350-ft west to intersection of intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing 120-ft west of intersection of W. Apache Circle & Saxon Blvd	N/A
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of N. Normandy Blvd & Saxon Blvd	West side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of N. Normandy Blvd & Saxon Blvd to intersection of Falmouth Ave & Saxon Blvd	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing of Saxon Blvd, 200-ft west of intersection of Falmouth Ave & Saxon Blvd	N/A
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Trinidad Ave & Saxon Blvd	West side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Trinidad Ave & Saxon Blvd to 200-ft east of intersection of Templewood Ave & Saxon Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Boxham Ave & Saxon Blvd	East side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From 1840-ft west of intersection to intersection of N. Kentucky Ave & SR 472	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From 1000-ft west to 380-ft west of intersection of N. Kentucky Ave & SR 472	North side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing 380-ft west of intersection of N. Kentucky Ave & SR 472	N/A
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of N. Kentucky Ave & SR 472	North side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of N. Kentucky Ave & SR 472	East side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From 520-ft west of to intersection of N. Edge Dr. & Howland Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Forest Edge Dr. & Howland Blvd to station 134+00 on Howland Blvd	North side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Forest Edge Dr. & Howland Blvd to 420-ft west of intersection of Wolf Pack Run & Howland Blvd	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing of Howland Blvd, 420-ft west of intersection of Wolf Pack Run & Howland Blvd	N/A
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Wolf Pack Run & Howland Blvd	East side of intersection
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of to 270-ft east of Wolf Pack Run & Howland Blvd intersection	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of Roseapple Ave & Howland Blvd east to station 134+00 on Howland Blvd	South side of road
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of Red Fox Run & Howland Blvd	East side of intersection
Communications	FPL Fibernet	Unknown Size Underground Fiber Optic	Crossing of the I-4 Corridor, 460-ft east of Saxon, I-4 Overpass	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Communications	FPL Fibernet	Unknown Size Underground Fiber Optic	Crossing at the intersection of Enterprise Rd and Saxon Blvd	East side of intersection
Communications	Sunesys	Unknown Size Underground Fiber Optic	I-4 crossing south side of Enterprise Rd overpass	South side of overpass
Communications	Sunesys	Unknown Size Underground Fiber Optic	From intersection of E. Graves Ave to intersection of Forest Edge Dr. & SR 472	South side of road
Communications	Sunesys	Unknown Size Underground Fiber Optic	Crossing at intersection of Forest Edge Dr. & Saxon Blvd	West side of intersection
Communications	Sunesys	Unknown Size Aerial Fiber Optic	From intersection of Forest Edge Dr. & Saxon Blvd. to intersection of Wolf Pack Run & Saxon Blvd	North side of road
Communications	Sunesys	Unknown Size Aerial Fiber Optic	Crossing at intersection of Wolf Pack Run & Saxon Blvd	West side of intersection
Communications	Sunesys	2-2" Underground Fiber Optic	Crossing I-4 Corridor at Graves Ave overpass	North side of overpass
Communications	TW Telecom	Underground Fiber Optic Cable	From intersection of Medical Center Dr. & Saxon Blvd to intersection of Veterans Memorial Pkwy & Saxon Blvd	North side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From station 10+00 on Dirksen Dr. east to intersection of I-4 westbound ramp to Dirksen Dr. & Dirksen Dr.	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Palm Rd & Dirksen Dr.	East side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Dirksen Dr. 320-ft west of intersection of Palm Rd & Dirksen Dr.	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From Dirksen Dr. I-4 Overpass east to intersection of Lakefront Ct. & Debary Ave	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of I-4 eastbound ramp to Dirksen Dr. & Dirksen Dr.	North side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Two Crossings 210-ft west of intersection of Lakefront Ct & Debary Ave	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Debary Ave 220-ft west of intersection of Enterprise Rd & Debary Ave	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor at Enterprise Rd, I-4 overpass	East side of overpass
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor 2140-ft west of Saxon Blvd, I-4 overpass	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor at Graves Ave, I-4 overpass	North side of overpass

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From Graves Ave, I-4 Overpass east 1260-ft on I-4 Corridor	West side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Enterprise Rd & Saxon Blvd	North side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Enterprise Rd & Saxon Blvd	East side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Boxham Ave & Saxon Blvd	East side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing 110-ft west of intersection of Veterans Memorial Pkwy & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From intersection of Treadgill Pl. & Saxon Blvd east to 410-ft west of intersection of I-4 westbound ramp to Saxon Blvd & Saxon Blvd	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of W. Finland Dr. & Saxon Blvd	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of W. Finland Dr. & Saxon Blvd	South side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from intersection to 170-ft east of W. Finland Dr. & Saxon Blvd	Diagonally across road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from 170-ft east to 360-ft east of intersection of W. Finland Dr. & Saxon Blvd	Diagonally across road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 140-ft west to 270-ft east of intersection of W. Apache Cir. & Saxon Blvd	South side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from 165-ft west of to intersection of Diane Terrace & Saxon Blvd	Diagonally across road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 260-ft west of intersection of Exotic Terrace & Saxon Blvd east to station 134+50 on Saxon Blvd	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of N. Normandy Blvd & Saxon Blvd	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd 120-ft east of intersection of N. Normandy Blvd & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd 120-ft west of intersection of Falmouth Ave & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd 210-ft west of intersection of Bamboo Ct. & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Bamboo Ct. & Saxon Blvd	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Trinidad Ave & Saxon Blvd	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd 150-ft east of intersection of Templewood Ave & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From station 10+00 on SR 472 east to 1070-ft west of intersection of I-4 westbound ramp to SR 472 & SR 472	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of SR 472 1130-ft west of intersection of Martin Luther King Jr. Beltway & SR 472	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Martin Luther King Jr. Beltway & SR 472	East side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Forest Edge Dr. & Howland Blvd	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From intersection of Forest Edge Dr. & Howland Blvd east to station 134+00 on Howland Blvd	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Howland Blvd, 500-ft west of intersection of Wolf Pack Run & Howland Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Wolf Pack Run & Howland Blvd	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Howland Blvd 300-ft west of intersection of Wolf Pack Run & Howland Blvd	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Dirksen Dr. 750-ft east of intersection of Mansion Blvd & Dirksen Dr.	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Mansion Blvd & Dirksen Dr.	West side of intersection
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Dirksen Dr. 1100-ft east of intersection of Clara Vista St & Dirksen Dr.	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Clara Vista St & Dirksen Dr.	West side of intersection
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Debary Ave 330-ft east of intersection of Deltona Blvd & Debary Ave	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Debary Ave 250-ft east of intersection of Deltona Blvd & Debary Ave	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Lakefront Ct & Debary Ave	Diagonally across intersection
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	From 220-ft west of to intersection of Enterprise Rd & Debary Ave on Debary Ave	North side of road
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing 850-ft west of intersection of N. Rd & Debary Ave	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Debary Ave 90-ft west of intersection of N. Rd & Debary Ave	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Main St & Debary Ave	East side of intersection
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	From 850-ft west to 650-ft east of intersection of N. Rd & Debary Ave	South side of road
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Saxon Blvd 730-ft west of intersection of W. Finland Dr. & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Roseapple Ave & Howland Blvd	West to center of intersection
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing at intersection of Red Fox Run & Howland Blvd	East side of intersection
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Dirksen Dr. 160-ft east of intersection of Mansion Blvd & Dirksen Dr.	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing at intersection of Deltona Blvd & Debary Ave	East side of intersection
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Debary Ave 430-ft east of intersection of Main St & Debary Ave	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Debary Ave 580-ft east of intersection of Main St & Debary Ave	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Debary Ave 210-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Saxon Blvd 330-ft east of intersection of Enterprise Rd & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Saxon Blvd 1220-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Saxon Blvd 660-ft west of intersection of I-4 westbound ramp to Saxon	N/A
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing at intersection of Forest Edge Dr. & SR 472	North side of intersection
Electricity	Duke Energy Distribution	120 V Aerial Electric	Crossing of Howland Blvd 170-ft west of intersection of Red Fox Run & Howland Blvd	N/A
Electricity	Duke Energy Distribution	Unknown Size Aerial Electric	Crossing at intersection of Sunrise Blvd & Dirksen Dr.	East side of intersection
Electricity	Duke Energy Distribution	Unknown Size Aerial Electric	Crossing of Saxon Blvd 210-ft east of intersection of Tiffin Ave & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of I-4 Corridor at Dirksen Dr., I-4 Underpass	North side of underpass
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of Saxon Blvd from intersection of Enterprise Rd & Saxon Blvd to 260-ft east of intersection	Diagonally across road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of Saxon Blvd 520-ft west of intersection of I-4 westbound ramp to Saxon Blvd & Saxon Blvd	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 520-ft west of to 360-ft west of intersection of I-4 westbound ramp to Saxon Blvd & Saxon Blvd	South side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of Dirksen Dr. at intersection of I-4 westbound ramp to Dirksen Dr. & Dirksen Dr.	East side of intersection
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Crossing of Debary Ave, 850-ft west of intersection of Enterprise Rd & Debary Ave	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Crossing of Debary Ave, 800-ft west of intersection of Enterprise Rd & Debary Ave	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Three crossings of Debary Ave, 650-ft west of intersection of Enterprise Rd & Debary Ave	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Two crossings of Debary Ave, 250-ft west of intersection of Enterprise Rd & Debary Ave	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 330-ft east of intersection of Enterprise Rd & Saxon Blvd east on Saxon Blvd to 760-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd	North side of road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From intersection of Enterprise Rd & Saxon Blvd east to intersection of Veterans Memorial Pkwy & Saxon Blvd	North side of road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From intersection of I-4 westbound to Saxon Blvd westbound & Saxon Blvd east to intersection of W. Finland Dr. & Saxon Blvd	North side of road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from intersection to 400-ft east of W. Finland Dr. & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from 150-ft west of intersection of W. Apache Circle & Saxon Blvd to intersection of Diane Terrace & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From intersection of Diane Terrace & Saxon Blvd east on Saxon Blvd to 130-ft east of intersection of Exotic Terrace & Saxon Blvd	North side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, 130-ft east of intersection of Exotic Terrace & Saxon Blvd east to intersection of N. Normandy Blvd & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from intersection to 450-ft east of intersection of N. Normandy Blvd & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from 390-ft west to 230-ft west of intersection of Falmouth Ave & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal Crossing of Saxon Blvd, from 230-ft east to 490-ft east of intersection of Falmouth Ave & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 620-ft west of intersection of Trinidad Ave & Saxon Blvd east on Saxon Blvd to 160-ft east of intersection of Templewood Ave & Saxon Blvd	North side of road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal Crossing of Saxon Blvd, 400-ft west of to 40-ft east of intersection of Fruitland Ave & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 500-ft west of to intersection of Forest Edge Dr. & SR 472	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal Crossing of Howland Blvd from intersection to 400-ft east of intersection of Forest Edge Dr. & Saxon Blvd	Diagonal across road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Crossing of Howland Blvd, 800-ft west of intersection of Red Fox Run & Howland Blvd	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 800-ft west of to 530-ft west of intersection of Red Fox Run & Howland Blvd	South side of road
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Two Crossings of I-4 Corridor, Enterprise Rd, I-4 Corridor Overpass	East side of overpass
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Six crossing of I-4 Corridor, between 320-ft east and 550-ft east of Debary Ave, I-4 Corridor underpass	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Crossing of I-4 Corridor, 6850-ft west of SR 472, I-4 overpass	N/A
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 6850-ft west of SR 472, I-4 overpass east on I-4 to Graves Ave, I-4 Corridor overpass	East side of road
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Two crossings at intersection of Enterprise Rd & Saxon Blvd	East side of intersection
Electricity	Florida Power and Light	230 KV Aerial Electric	Two Crossings of I-4 Corridor, 350-ft north of the Saxon Blvd, I-4 Overpass	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing at the intersection of Wolf Pack Run and Howland Blvd	East side of the intersection.
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing of I-4 Corridor, 700-ft north of the Saxon Blvd, I-4 Overpass	N/A
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	From Seminole/Volusia County Line east for 6790-ft on I-4	East side of road, attached to bridge over Lake Monroe
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing of I-4 1590-ft east of Seminole/Volusia County Line	N/A
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing of I-4 6790-ft east of Seminole/Volusia County Line	N/A
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	From 6790-ft east of Seminole/Volusia County Line east to Dirksen Dr., I-4 underpass	West side of road, attached to Padgett Creek Bridge
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing of I-4 at Dirksen Dr., I-4 underpass	Center of underpass, attached to bridge
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing at the intersection of Dirksen Dr. & I-4 eastbound ramp to Dirksen Dr.	Diagonal across intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	From intersection of Debary Ave ramp to I-4 east bound & Debar Ave east along ramp for 1400-ft (end of ramp to I-4)	East side of road
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	From Dirksen Dr. I-4 underpass east on I-4 to SR 472, I-4 overpass	East side of road
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing at SR 472, I-4 overpass	East side of overpass, attached to bridge
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing of I-4 eastbound ramp to Saxon Blvd & I-4 overpass	N/A
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	Crossing of I-4, 4010-ft west of Saxon Blvd, I-4 overpass	N/A
Intelligent Transportation System	Florida Department of Transportation	Intelligent Transportation System Cable	From 4680-ft west of to 4010-ft west of Saxon Blvd, I-4 overpass on I-4	West side of road
Natural Gas	Florida Gas Transmission	8.625" Natural Gas Main	From 175-ft west of intersection of Marsh Landing Cir. & Dirksen Dr. to intersection of Palm Rd & Dirksen Dr.	North side of road
Natural Gas	Florida Gas Transmission	8.625" Natural Gas Main Out of Service	From 140-ft west of intersection of Palm Rd. & Dirksen Dr. east to station 134+50 on Debary Ave.	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Natural Gas	Florida Gas Transmission	6.625" Natural Gas Main	Crossing at intersection of Broward Ave & Saxon Blvd	East side of intersection
Natural Gas	Florida Gas Transmission	6.625" Natural Gas Main	Crossing at intersection of Palm Rd & Dirksen Dr.	North side of intersection
Natural Gas	Florida Public Utilities	6" Natural Gas Main	From intersection of Enterprise Rd & Saxon Blvd to intersection of Treadgill Pl. & Saxon Blvd	North side of road
Natural Gas	Florida Public Utilities	6" Natural Gas Main	From intersection of Palm Rd & Dirksen Dr. to intersection of Deltona Blvd & Debary Ave	North side of road
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of Enterprise Rd & Saxon Blvd	East side of intersection
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of Boxham Ave & Saxon Blvd	N/A
Natural Gas	Florida Public Utilities	1.25" Natural Gas Main	From intersection of Boxham Ave. & Saxon Blvd to 150-ft west of intersection of Treadgill Pl & Saxon Blvd	South side of road
Natural Gas	Florida Public Utilities	1.25" Natural Gas Main	Crossing at intersection of Palm Rd & Dirksen Dr.	East side of intersection
Water	City of Deltona	Unknown Size Water Main	From 190-ft west to 260-ft east of intersection of Sunrise Blvd & Dirksen Dr.	North side of road
Water	City of Deltona	Unknown Size Water Main	Crossing of Dirksen Dr., 260-ft east of intersection of Sunrise Blvd & Dirksen Dr.	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Water	City of Deltona	Unknown Size Water Main	From intersection of Debary Ave ramp to I-4 east bound & Debary Ave east for 190-ft	South side of road
Water	City of Deltona	Unknown Size Water Main	Crossing of Debary Ave, 190-ft east of intersection of Debary Ave ramp to I-4 east bound & Debary Ave	N/A
Water	City of Deltona	Unknown Size Water Main	From 330-ft west to intersection of Deltona Blvd & Debary Ave.	North side of road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Debary Ave & Deltona Blvd	North side of intersection
Water	City of Deltona	Unknown Size Water Main	From intersection of Deltona Blvd & Debary Ave to intersection of Welcome Center Dr. & Debary Ave	North side of road
Water	City of Deltona	Unknown Size Water Main	Crossing of Debary Ave, 160-ft west of intersection of World Center Dr. & Debary Ave	N/A
Water	City of Deltona	Unknown Size Water Main	From 160-ft west of intersection of Welcome Center Dr. & Debary Ave east to station 134+50 on Debary Ave	South side of road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Lakefront Dr. & Debary Ave	South side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Enterprise Rd & Debary Ave	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Main St & Debary Ave	South side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of W. Finland Dr. & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	From 730-ft west to 410-ft west of intersection of W. Finland Dr. & Saxon Blvd	North side of road
Water	City of Deltona	Unknown Size Water Main	From intersection to 200-ft east of intersection of W. Finland Dr. & Saxon Blvd	North side of road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of W. Finland Dr. & Saxon Blvd	North side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of W. Apache Cir & Saxon Blvd	North side of intersection
Water	City of Deltona	Unknown Size Water Main	From intersection of W. Apache Cir & Saxon Blvd to 310-ft west of intersection of N. Normandy Blvd & Saxon Blvd	North side or road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Diane Terrace & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of N. Normandy Blvd & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of N. Normandy Blvd & Saxon Blvd	North side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Water	City of Deltona	Unknown Size Water Main	From intersection of N. Normandy Blvd & Saxon Blvd to intersection of Bamboo Ct & Saxon Blvd	North side of road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Falmouth Ave & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Bamboo Ct & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Bamboo Ct & Saxon Blvd	West side of intersection
Water	City of Deltona	Unknown Size Water Main	From intersection of Bamboo Ct & Saxon Blvd to 150-ft east of intersection of Templewood Ave & Saxon Blvd	South side of road
Water	City of Deltona	Unknown Size Water Main	Crossing at intersection of Trinidad Ave & Saxon Blvd	West side of intersection
Water	Volusia County	14" Reclaim Water Main	Crossing at intersection of Wolf Pack Run & Howland Blvd	East side of intersection
Water	Volusia County	14" Reclaim Water Main	From intersection of Wolf Pack Run & Howland Blvd to intersection of Roseapple Ave & Howland Blvd	North side of road
Water	Volusia County	12" Reclaim Water Main	Crossing of I-4 Corridor, 6570-ft south of SR 472, I-4 overpass	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Water	Volusia County	16" Water Main	Crossing at intersection of Martin Luther King Jr. Beltway & SR 472	West side of intersection
Water	Volusia County	16" Water Main	From intersection of Martin Luther King Jr. Beltway to intersection of E. Graves Ave & Howland Blvd	South side of road
Water	Volusia County	16" Water Main	From 300-ft west of intersection of Forest Edge Dr. & Howland Blvd east to intersection of Wolf Pack Run & Howland Blvd	South side of road
Water	Volusia County	12" Water Main	Crossing at intersection of E. Graves Ave & Howland Blvd	West side of intersection
Water	Volusia County	12" Water Main	Crossing 390-ft east of intersection of Martin Luther King Jr. Beltway & SR 472	N/A
Water	Volusia County	12" Water Main	Crossing 1060-ft east of intersection of Martin Luther King Jr. Beltway & SR 472	N/A
Water	Volusia County	12" Water Main	From intersection of Wolf Pack Run & Howland Blvd to intersection of Roseapple Ave & Howland Blvd	South side of road
Water	Volusia County	12" Water Main	From intersection of Wolf Pack Run & Howland Blvd east to station 134+00 on Howland Blvd	South side of road

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Water	Volusia County	12" Water Main	Crossing at intersection of Roseapple Ave & Howland Blvd	West side of intersection
Water	Volusia County	10" Water Main	From intersection of Boxham Ave & Saxon Blvd to 300-ft west of intersection of west bound Saxon Blvd ramp to I-4 West Bound & Saxon Blvd	South side of road
Water	Volusia County	10" Water Main	Crossing at intersection of Broward Ave & Saxon Blvd	South side of intersection
Water	Volusia County	10" Water Main	From intersection of Forest Edge Dr. & Howland Blvd to intersection of Wolf Pack Run & Howland Blvd	South side of intersection
Water	Volusia County	10" Water Main	Crossing at intersection of Forest Edge Dr. & Howland Blvd	East side of intersection
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	Crossing 290-ft east of intersection of Sunrise Blvd & Dirksen Dr.	N/A
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	From 290-ft east to 420-ft east of intersection of Sunrise Blvd & Dirksen Dr.	North side of road
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	From intersection of Debary Ave ramp to I-4 east bound & Debary Ave east for 190-ft	South side of road
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	Crossing of Debary Ave, 190-ft east of intersection of Debary Ave ramp to I-4 east bound & Debary Ave	N/A

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	From 340-ft east of intersection of Enterprise Rd & Debary Ave east to station 134+50 on Debary Ave	North side of road
Wastewater/ Stormwater	City of Deltona	Unknown Size Sanitary Main	Crossing at intersection of Main St. & Debary Ave	West side of road
Wastewater/ Stormwater	Volusia County	10" Force Main	Crossing at intersection of Roseapple Ave & Howland Blvd	North-center of intersection
Wastewater/ Stormwater	Volusia County	10" Force Main	Crossing 200-ft east of intersection of Roseapple Ave & Howland Blvd	N/A
Wastewater/ Stormwater	Volusia County	8" Force Main	Crossing of I-4 Corridor at Graves Ave & I-4 Overpass	South side of overpass
Wastewater/ Stormwater	Volusia County	8" Force Main	From 630-ft west to 220-ft west of intersection of Broward Ave & Saxon Blvd	South side of road
Wastewater/ Stormwater	Volusia County	8" Force Main	From intersection to 440-ft east of intersection to Veterans Memorial Pkwy & Saxon Blvd	South side of road
Wastewater/ Stormwater	Volusia County	8" Force Main	Crossing at intersection of E. Graves Ave & Howland Blvd	West side of intersection
Wastewater/ Stormwater	Volusia County	6" Force Main	Crossing at intersection of Wolf Pack Run & Howland Blvd	West side of intersection

Table 2.19: Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side
Wastewater/ Stormwater	Volusia County	6" Force Main	From 220-ft east of intersection Wolf Pack Run & Howland Blvd east to station 134+00 on Howland Blvd	North side of road
Wastewater/ Stormwater	Volusia County	6" Force Main	Crossing at intersection of Red Fox Run & Howland Blvd	South-center of intersection
Wastewater/ Stormwater	Volusia County	Force Main of Varying Size	From intersection of Martin Luther King Jr. Beltway east to station 134+00 on Howland Blvd	North side of road

2.17 Soils

A preliminary geotechnical review was conducted to evaluate stormwater management in the project corridor study area. Soils data from the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) and the United States Geological Society (USGS) Quadrangle Map was reviewed within the limits of the proposed improvements in Volusia County to determine soil and groundwater conditions along the I-4, Segment 4 corridor. The predominant types of soils found in the study area and their corresponding properties are summarized in Table 2.20. The corresponding soils map is illustrated in Figure 2.9. Soil boring information, permeability test results and detailed soil survey information can be found in the *Report of Preliminary Geotechnical Engineering Investigation for Ponds – Segment 4 (December 2015)* completed for this project.

Table 2.20: Soil Types

Soil Name	Depth (in)	Soil Description	AASHTO Soil Classification	Seasonal High Groundwater Depth (ft)	Hydrologic Group
Astatula fine sand, 0 to 8 percent slopes	0 - 95	Fine sand	A-3	> 6.0	A
Astatula fine sand, 8 to 17 percent slopes	0 - 80	Fine sand	A-3	> 6.0	A

Table 2.20: Soil Types

Soil Name	Depth (in)	Soil Description	AASHTO Soil Classification	Seasonal High Groundwater Depth (ft)	Hydrologic Group
Bluff sandy clay loam	0 - 14 14 – 68 68 - 99	Sandy clay loam Sandy clay loam, sandy clay Clay, sandy clay	A-6, A-7 A-7, A-6 A-7, A-6	0.0 - 0.5	D
Cassia fine sand	0 - 28 28 – 36 36 - 80	Fine sand Sand, fine sand, loamy sand Sand, fine sand	A-3 A-2-4, A-3 A-3	1.5 - 3.5	C
Immokalee sand	0 - 34 34 - 43 43 - 85	Fine sand, sand Fine sand, sand Fine sand, sand	A-3 A-2-4, A-3 A-3	0.0 - 0.5	B/D
Orsino fine sand, 0 to 5 percent slopes	0 - 30 30 - 80	Fine sand Sand, fine sand	A-3 A-3	3.5 - 5.0	A
Paola fine sand, 0 to 8 percent slopes	0 - 26 26 - 80	Fine sand, sand Sand, fine sand	A-3 A-3	> 6.0	A
Pomona fine sand, depressional	0 - 53 53 – 61 61 - 70	Sand, fine sand Fine sandy loam, sandy clay loam Sand	A-2-4, A-3 A-2, A-4, A-6 A-4, A-6, A-2	+2.0 - 0.0	B/D
Quartzipsamments, gently sloping	0 - 80	Fine sand	A-3	> 6.0	A
Smyrna fine sand	0 - 17 17 – 27 27 - 80	Fine sand Sand, fine sand, loamy fine sand Sand, fine sand	A-2-4, A-3 A-2-4, A-3 A-3	0.0 - 1.0	A/D
Tavares fine sand, 0 to 5 percent slopes	0 - 80	Fine sand	A-3	3.5 - 6.0	A
Wabasso fine sand	0 - 24 24 - 35 35 - 39 39 - 80	Fine sand, sand Fine sand, loamy fine sand, sand Fine sand, sand Sandy clay loam, fine sandy loam, sandy loam	A-3 A-2-4, A-3 A-3 A-2-4, A-2-6	0.0 - 1.0	B/D

Figure 2.9 – Soils Map

2.18 Sociocultural Conditions

Sociocultural Effects (SCE) Evaluation is the process of determining and evaluating the effects a transportation action may have on a community and the quality of life of the citizenry. A community is defined as a geographic, manmade or natural boundary comprised of people and places which may share similar social, cultural, economic, political or other characteristics. This section of the report identifies community features and characteristics surrounding the project corridor, including a data inventory of existing community facilities that will be used in the subsequent SCE evaluation.

2.18.1 Study Area

The SCE study area was determined by evaluating project plans, land use maps, local government comprehensive plans and other relevant resources. Segment 4 is located in Volusia County which is within the U.S. Census designated Deltona-Daytona Beach-Ormond Beach Metropolitan Statistical Area. In this metro area, the corridor lies primarily within U.S. postal zip codes 32713 in DeBary, 32725 in Deltona, and 32763 in Orange City. At the northern end of the project area, a small portion of the segment is adjacent to postal zip codes 32724 in DeLand and 32744 in Lake Helen.

2.18.2 Social Demographics

Volusia County is the 11th most populous County in the State of Florida. With a 2012 population estimate of 497,145, the County represents 2.6% percent of the total State population. Volusia County population grew by 0.5% between 2010 and 2012 with a population increase of approximately 2,500 from 494,593 to 497,145. Over the ten-year period from 2000-2010, the County population increased by 11.6% from 443,343 in 2000 to 494,593 in 2010. The population projection for Volusia County for the year 2040 is approximately 590,000, an increase of 19% over a 28-year period.

Demographic statistics specific to the area surrounding the I-4, Segment 4 corridor were obtained from the U.S. Census Bureau's American Community Survey (ACS). The U.S. Census Bureau has developed Zip Code Tabulation Areas (ZCTAs) to represent U.S. Postal Service (USPS) zip code service areas. Since USPS zip codes can cross state, county, census tract and census block boundaries, the Bureau has developed the ZCTAs to provide a correlation between postal zip codes and census bureau geographic boundaries. The socioeconomic demographic data for Volusia County and the ZCTAs in the study area is summarized in Table 2.21.

2.18.3 Economics

The total employment in Volusia County for 2012 was approximately 170,000. The employment is projected to increase by 1.7% per year, with an estimated employment of 195,000 in 2020. The top employment industries in Volusia County for 2012 were: Education & Health Services (19.1%),

Table 2.21: Community Demographics

Community Characteristic	Volusia County	ZCTA 32713	ZCTA 32725	ZCTA 32763	ZCTA 32724	ZCTA 32744
Total Population	494,593	19,491	44,905	21,263	31,826	3,588
% White	82.5	90.5	77.9	87.9	83.0	88.8
% Black or African American	10.5	4.0	9.6	5.2	8.5	7.3
% Other	7.0	5.5	12.5	6.9	8.5	3.9
% Hispanic or Latino (Of Any Race)	11.2	9.2	30.6	15.1	12.6	4.2
% 65 Years and Over	21.1	22.5	15.6	22.0	20.9	18.8
% High School Graduate or Higher	87.5	90.7	83.8	87.6	86.0	88.7
% Bachelor's Degree or Higher	20.8	26.3	15.6	14.8	25.0	17.9
% Speak English Less Than "Very Well"	4.4	1.5	9.5	4.8	5.8	0.9
% Employed (Age 16 And Over)	50.1	52.6	52.9	49.5	49.4	58.8
% Unemployed	5.2	4.2	5.8	5.7	4.3	6.7
Commuting to Work						
% Car, Truck, Or Van -- Drove Alone	82.3	85.1	84.1	78.7	83.9	78.6
% Car, Truck, Or Van – Carpooled	7.8	6.1	8.4	13.0	7.6	6.5
% Public Transportation (Excluding Taxicab)	1.0	0.0	0.6	0.4	0.3	0.0
Mean Travel Time to Work (Minutes)	25.1	29.2	31.2	26.0	27.0	30.4
Average Household Size	2.44	2.43	2.77	2.31	2.53	2.56
Average Family Size	3.05	2.86	3.25	3.10	3.16	2.90
Median Household Income (Dollars)	44,169	58,463	47,564	37,959	45,003	56,772
Mean Household Income (Dollars)	58,334	68,604	55,121	47,042	59,856	58,414
Per Capita Income (Dollars)	24,536	29,396	20,969	20,958	24,143	24,164
Income Below the Poverty Level						
% All People	15.0	4.4	12.0	18.9	18.9	9.3
% 65 Years and Over	8.3	5.5	8.3	13.5	8.5	8.1
% Under 18 Years	23.4	3.3	18.1	30.0	34.6	14.5

Trade, Transportation & Utilities (17.6%), Leisure & Hospitality (12.8%), Government (12.4%) and Professional & Business Services (10.1%).

2.18.4 Community Facilities and Services

Existing community resources within the I-4, Segment 4 project study area were identified as part of the sociocultural analysis. Present day communities in this area are primarily comprised of residential developments with some supporting shopping and entertainment facilities. Table 2.22 provides a list and Figure 2.10 and Figure 2.11 illustrate the locations of existing community facilities and services in the I-4, Segment 4 study area which serve the residential population in this region.

Table 2.22: Community Facilities and Services

Community Facility/Service	Address	Location	
		Within 500 feet of I-4	Within ½ mile of I-4
School/College/Daycare Facilities			
La Petite Academy - Deltona	698 Deltona Blvd, Deltona	✓	
The Reading Edge Academy	2975 Enterprise Rd, DeBary		✓
Learning Bridge Academy	2411 E. Graves Ave, Orange City		✓
Health/Safety Facilities			
Volusia County Sheriff's Office - Civil Office	1200 Deltona Blvd, Suite 44, Deltona		✓
Deltona Fire Department & Rescue Station #62	320 Diamond St, Deltona		✓
Religious Facilities			
Debary Congregation Jehovah's	201 Toms Rd, DeBary		✓
Deltona Alliance Church	921 Deltona Blvd, Deltona		✓
One Kingdom Fellowship	777 Deltona Blvd, Deltona	✓	
Liv It Church	885 South CR Beall Blvd, DeBary		✓
Deliverance Centre of Life	517 Deltona Boulevard, Deltona	✓	
Dunamis Community & Outreach Ministries	1079 Matanzas St, Lake Helen		✓
Parks/Recreation			
Lake Monroe Wayside Park	4150 U.S. 17/92, Sanford		✓
Central Florida Zoo and Botanical Gardens	3755 Seminole Blvd, Sanford		✓
Lake Monroe Park	975 U.S. 17/92, DeBary		✓
Orange City Golf Club LLC	1715 Monastery Rd, Orange City		✓
Government Facilities			
US Post Office	944 Deltona Blvd, Deltona		✓
Other Community Facilities			
V Music Academy	634 Deltona Blvd, Deltona	✓	
Studio 13 Dance Academy	1200 Deltona Blvd, Deltona	✓	
Deltona Memorial Funeral Home	1295 Saxon Blvd, Orange City		✓

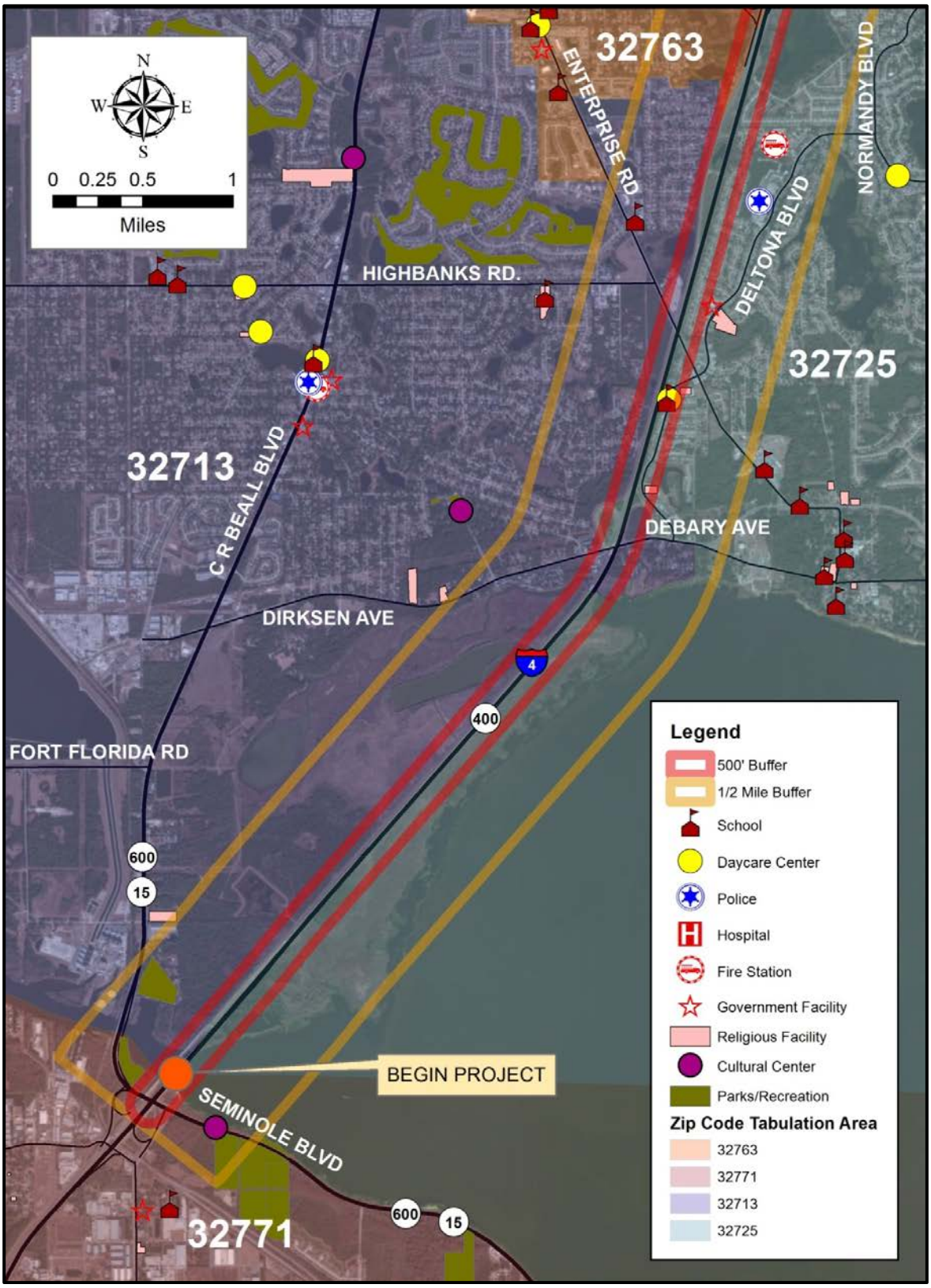


Figure 2.10 – Community Facilities and Services (Map 1 of 2)

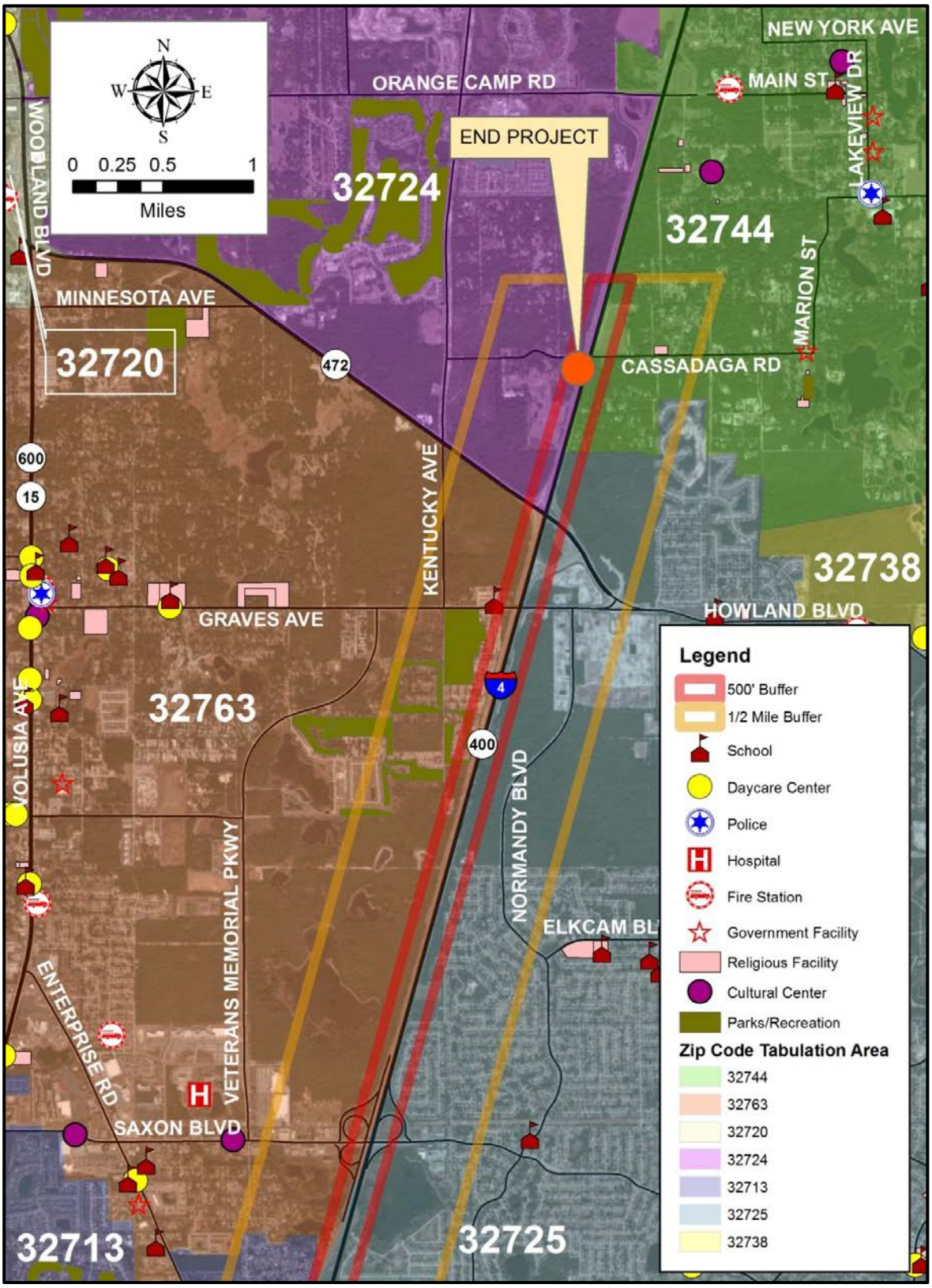


Figure 2.11 – Community Facilities and Services (Map 2 of 2)

3.0 Planning Phase/Corridor Analysis

The current PD&E study is an update to the previously approved PD&E study for I-4 from SR 528 to SR 472 (EIS), FM No.: 242486-1-22-01, 242592-1-22-01 and 242703-1-22-01. The original project followed a multi-level screening process which involved preliminary evaluations of the I-4 corridor with respect to constructability, design speeds and type of physical separation between the special use (HOV in the original design concept and express lanes in the current design concept) and general use lanes. The preliminary evaluations were reviewed with FDOT, and the corridor was analyzed with the following project goals:

- Use the existing infrastructure to the maximum extent possible
- Evaluate a barrier-separated facility
- Refine concept plans to minimize traffic disruptions during construction
- Minimize construction costs and right-of-way requirements
- Avoid and/or minimize impacts especially for wetlands, floodplains, Section 4(f) properties and Section 106 properties

Since the proposed project is a widening project, no alternative alignments were evaluated.

4.0 Design Criteria and Standards

The I-4 BtU PD&E Reevaluation Study incorporates project elements with various design requirements. Table 4.1 presents the roadway design criteria established for each design element. The design criteria and standards are based on design parameters in accordance with *A Policy on Geometric Design of Highway and Streets* (AASHTO 2004), *Roadway Plans Preparation Manual (PPM), Volumes I and II* (FDOT, January 2015), and *Roadway and Traffic Design Standards* (FDOT, 2015).

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard	Source(s)
Design Vehicle	WB-62FL	PPM, Pg. 1-19
Design Year	2040	FDOT Scope of Services
Design Speed Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	 70 mph 50 mph 30 mph (25 mph min as per AASHTO)	FDOT PPM, Table 1.9.1 and 2011 AASHTO, Page 10-89
Median Width I-4	64 ft. without barrier 26 ft. minimum with barrier	FDOT PPM, Table 2.2.1
Maximum Degree of Curve Mainline I-4 / Express Lanes Direct Connection Ramp Loop Ramp	 3°00' 8°15' 24°45'	FDOT PPM, Table 2.8.3 (e MAX – 0.10)
Length of Horizontal Curves Mainline I-4 / Express Lanes Ramps	 Desirable: 30(V)[1] Minimum: 15(V)[1] Desirable: 15(V)[1] Minimum: 400 ft.	FDOT PPM, Table 2.8.2a
Minimum Stopping Sight Distance Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	 820 ft. 425 ft. 200 ft.	FDOT PPM, Table 2.7.1
Decision Sight Distance Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	 1,445 ft. 910 ft. 490 ft	2011 AASHTO, Exhibit 3-3, Page 3-7
Maximum Shoulder "Roll-Over" Maximum Lane “Roll-Over”	7% 4%	FDOT Roadway & Traffic Design Standard Index No. 510, 2011 AASHTO pg. 4-5

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard	Source(s)
Superelevation Transition		FDOT PPM, Page 2-53
Tangent	80% desirable, 50% minimum	
Curve	20% desirable, 50% maximum	
Maximum Superelevation		
Mainline I-4 / Express Lanes	10%	
Ramps	10%	
On- and Off-Ramp Design		FDOT Roadway & Traffic Design Standard Index No 525
Diamond On-Ramps	Taper Design with 50:1 (1200 ft)	
Diamond Off-Ramps	Taper Design with 3° to 5°	
Loop Ramp	(Parallel Design: 1,200' Accel + 300' Taper and 800' Decel + 300' Taper – District Preference)	
Maximum Profile Grade		FDOT PPM, Table 2.6.1
Mainline I-4 Express Lanes	3%	
Diamond Ramp	5%	
Loop Ramp	7%	
Maximum Change in Grade without Vertical Curve		FDOT PPM, Table 2.6.2
Mainline I-4 / Express Lanes	0.20%	
Diamond Ramp	0.60%	
Loop Ramp	1.00%	
Crest Vertical Curve		FDOT PPM, Table 2.8.5
Mainline I-4 / Express Lanes (Open Highway)	K=506, min. length 1,000ft.	
Mainline I-4 / Express Lanes (w/interchange)	K=506, min. length 1,800 ft.	
Diamond Ramp	K=136, min. length 300 ft.	
Loop Ramp	K=31, min. length 3V[1]	
Sag Vertical Curve		FDOT PPM, Table 2.8.6
Mainline I-4 / Express Lanes	K=206, min. length 800 ft.	
Diamond Ramp	K=96, min. length 200 ft.	
Loop Ramp	K=37, min. length 3V[1]	
Minimum Vertical Clearance		FDOT PPM, Tables 2.10.1 and 2.10.2
Bridges over I-4	16'-6"[2]	
I-4 Bridges over Cross Roads	16'-6"[2]	
Pedestrian Facilities over Rdwy	17'-6"[2]	
Overhead Signs	17'-6"[2]	
Roadway over Railroad	23'-6"[3]	

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard		Source(s)
Lane Widths			
Mainline I-4	12 ft. – Tangent		FDOT PPM, Tables 2.1.1, 2.1.2 and 2.1.3
One-Lane Ramp	15 ft. – Tangent		
Two-Lane Ramp	24 ft. – Tangent		
Lane Drop Taper			2011 AASHTO, Page 3-143
Mainline I-4 / Express Lanes	70:1 Desirable		
Shoulder Width – Roadway – Inside (or Left)	Total	Paved	FDOT PPM, Table 2.3.1
Mainline I-4	12 ft.	10 ft.	
One-Lane Ramp	6 ft.	2 ft.	
Two-Lane Ramp	8 ft.	4 ft.	
Two-Lane Express Lane	6 ft.	6 ft.	
Shoulder Width – Roadway – Outside (or Right)	Total	Paved	FDOT PPM, Table 2.3.1
Mainline I-4	12 ft.	10 ft.	
Mainline with Auxiliary Lane	12 ft.	10 ft.	
One-Lane Ramp	6 ft.	4 ft.	
Two-Lane Ramp	12 ft.	10 ft.	
Two-Lane Express Lane	10 ft.	10 ft.	
Typical Roadway Cross Section Slopes			
Roadways:			FDOT PPM, Figure 2.1.1 and Table 2.3.1
2 Lanes in Same Direction	0.02		
Addition Lane in Same Direction	0.03		
Shoulders:			FDOT PPM, Figure 2.1.1 and Table 2.3.1
Inside Shoulder	0.05 (0.06 for 4 or more lanes)		
Outside Shoulder	0.06		
Recoverable Terrain (min. from edge of travel way)			FDOT PPM Table 2.11.11
Mainline I-4 / Express Lanes (> 55mph)	36 ft.		
Auxiliary Lane (> 55mph)	24 ft.		
One-Lane Ramp (50 mph)	14 ft.		
Two-Lane Ramp (50 mph)	24 ft.		
Loop Ramp (30 mph)	18 ft.		
Shoulder Width – Bridge Structures – Inside			FDOT PPM, Figure 2.0.1
Mainline I-4	10 ft.		
One-Lane Ramp	6 ft.		
Two-Lane Ramp	6 ft.		

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard	Source(s)
Shoulder Width – Bridge Structures – Outside		
Mainline I-4	10 ft.	FDOT PPM, Figure 2.0.1
Auxiliary Lanes	10 ft.	
One-Lane Ramp	6 ft.	
Two-Lane Ramp	10 ft.	
Border Width[4]	94 ft.	FDOT PPM, Table 2.5.3

Notes:
[1] Where V = design speed of the roadway.
[2] Includes 6" allowance for resurfacing.
[3] Includes Rail Resurfacing (Track Raised): 12' for conventional railroads.
[4] Measured from outside edge of travel way to right-of-way.

5.0 Alternatives Analysis

The original I-4 PD&E Study titled *Interstate 4 (SR 400) Project Development and Environmental Study - Section 2 (August 2002),* was performed to address access, safety and capacity improvements. The reevaluation described herein adheres to the project development process by examining the various concepts considered for this project. The alternatives analysis will focus primarily on the interchanges and pond sites. The mainline typical section will be consistent with the approved typical section that is being implemented in the I-4 Ultimate Section from SR 435 (Kirkman Road) to SR 434, which will begin construction in early 2015. The alternatives for the interchanges include no modifications to the existing interchange geometry (No Build), Transportation System Management and Operations (TSMO), and Study (Build) Alternatives. The following sections describe each of the proposed alternatives in greater detail and the advantages and disadvantages of each.

5.1 No Project (No-Build) Alternative

The No-Build Alternative assumes no changes to the transportation facilities within the project corridor beyond currently planned and programmed projects already committed within Metro Plan Orlando's *2030 Long Range Transportation Plan* and the *Fiscal Year 2013/14 to 2017/18 Transportation Improvement Program*. The No-Build Alternative forms the basis of the comparative analysis for each of the viable Study Alternatives.

The benefits of the No-Build Alternative are the absence of construction-related and short-term operational impacts associated with the Build Alternatives. However, long-term benefits accrued from serving future traffic demands will not be realized with this alternative. Operating conditions are anticipated to worsen with time, while further increasing delays and congestion. Specifically, the No-Build Alternative will offer no benefits to address existing or future traffic congestion anticipated on I-4. Distinct advantages and disadvantages associated with the No-Build Alternative are as follows.

Advantages:

- No impedance to traffic flow during construction,
- No expenditure of funds for design, right-of-way acquisition, or construction,
- No impact to the adjacent natural, social, physical and cultural environments and
- No disruption to existing/future land uses due to construction-related activities.

Disadvantages:

- Increase in traffic congestion and road user costs, unacceptable level of service and an increase in accidents associated with increases in travel times (due to excessive delays) and traffic volumes,
- Increase in maintenance costs due to roadway and structure deterioration,

- Increase in carbon monoxide levels and other air pollutants caused by an increase in traffic congestion,
- Increase in emergency service response time in addition to an increase in evacuation time during weather emergencies as a result of heavy congestion,
- Increase in delays to evacuation procedures throughout the state and
- Increase in safety-related accidents due to heavy congestion

The No-Build Alternative shall remain a viable alternative through the study. The final selection of an alternative will not be made until all impacts are considered and responses to the public hearing comments have been evaluated.

5.2 Transportation System Management and Operations (TSMO)

Transportation System Management and Operations (TSMO) Alternatives are defined as low capital cost transportation improvements designed to maximize the utilization and efficiency of the existing transportation system through improved system management. The various forms of TSM activities include:

- Traffic signal improvements,
- Intersection/interchange improvements,
- Widening of parallel arterials,
- Ridesharing programs,
- Reversible flow roadway systems,
- Transit,
- ITS and
- Ramp-to-ramp auxiliary lanes.

Although the implementation of TSMO strategies would aid in localized operations of the existing roadway, the projected traffic volumes for the design year 2040 require I-4 to be widened to provide the additional capacity necessary to maintain or improve the existing and future levels of service. Therefore, the TSMO Alternative is not considered a viable alternative and no further evaluation of the TSMO Alternative will be conducted during this study.

5.3 Multi-Modal Alternatives

The project study area including arterial streets crossing I-4 is served by different modes of travel, both motorized and non-motorized. Increased connectivity for bicycle, pedestrian, and transit users is an objective of the project.

5.3.1 Transit

The I-4, Segment 4 corridor has several transit opportunities available to the community. Phase one of the SunRail commuter rail line began operations in May 2014. The Phase one line extends from

DeBary in the North, through downtown Orlando and terminates at Sand Lake Road in the South. Approximately 1.5 miles north of the I-4 Segment 4 corridor begin project limits, a SunRail station with parking facilities exists along US 17-92 in DeBary. Currently, commuter rail service is provided at the stations every 30 minutes during peak hours and every 2 hours during non-peak periods on weekdays. Future expansion plans near the I-4, Segment 4 corridor include extension of the commuter rail service to the North, between DeBary and DeLand. Connectivity to other transit opportunities such as the existing Amtrak operations in Winter Park and Sanford, Volusia County's public transportation system (Votran) and Orlando's LYNX bus system is another feature of SunRail.

Bus transit options in this corridor include the LYNX bus service along I-4 (I-4 Express/Route 200 - Volusia County/Downtown Orlando/I-4) and Votran bus routes along Saxon Boulevard (Route 23 – Orange City/ Deltona) and Enterprise Road (Routes 21/22 – Deltona). There are two Park and Ride lots in the vicinity of I-4 within the project limits: the Debary Avenue Park and Ride lot, and the Saxon Boulevard Park and Ride lot, which is also the northern terminus of Link 200.

5.3.2 Bicycles and Pedestrians

There are no designated bicycle lanes currently on the cross streets within Segment 4. Pedestrian accommodations exist along Enterprise Road, Saxon Boulevard, Graves Road and SR 472. A trail is currently under construction along Dirksen Drive and crosses under I-4 at the interchange. Bicycle routes identified on the Volusia Transportation Planning Organization (TPO) Volusia County Bicycling Map include an on-road route on Dirksen Drive/Debary Avenue, east and west of I-4, a side path along the south side of Saxon Boulevard, west of I-4 and an on-road route along Graves Avenue, east and west of I-4. The current plans for Rhode Island Avenue show an eight-foot-wide sidewalk along the south side of the roadway. The proposed build alternatives will include additional bicycle and/or pedestrian accommodations at Dirksen Drive, Enterprise Road, Saxon Boulevard, Rhode Island Avenue and SR 472.

5.4 Build Alternatives

The build alternative for the I-4 mainline involves widening from the existing 6-lane to the proposed 10-lane section with four, tolled express lanes and a 44-foot transit corridor in the median. Access to and from the express lanes will be provided through direct access ramps at major interchanges or slip ramp connections between interchanges. Slip ramps provide access between the general use lanes and the express lanes, direct access ramps provide access between the crossroads at the major interchanges and the express lanes and dual access ramps provide both access between GULs and ELs and major crossroads and ELs. The build alternative will provide two slip ramps and one direct access ramp along I-4 Segment 4, as shown in Figure 5.1. Detailed analysis on the development of express lanes access points and tolling concepts, is provided in the supplemental report *Concept of Operations SR 400 (I-4) from West of SR 25/US 27 to East of SR 472 (June 2016)* prepared for this project.

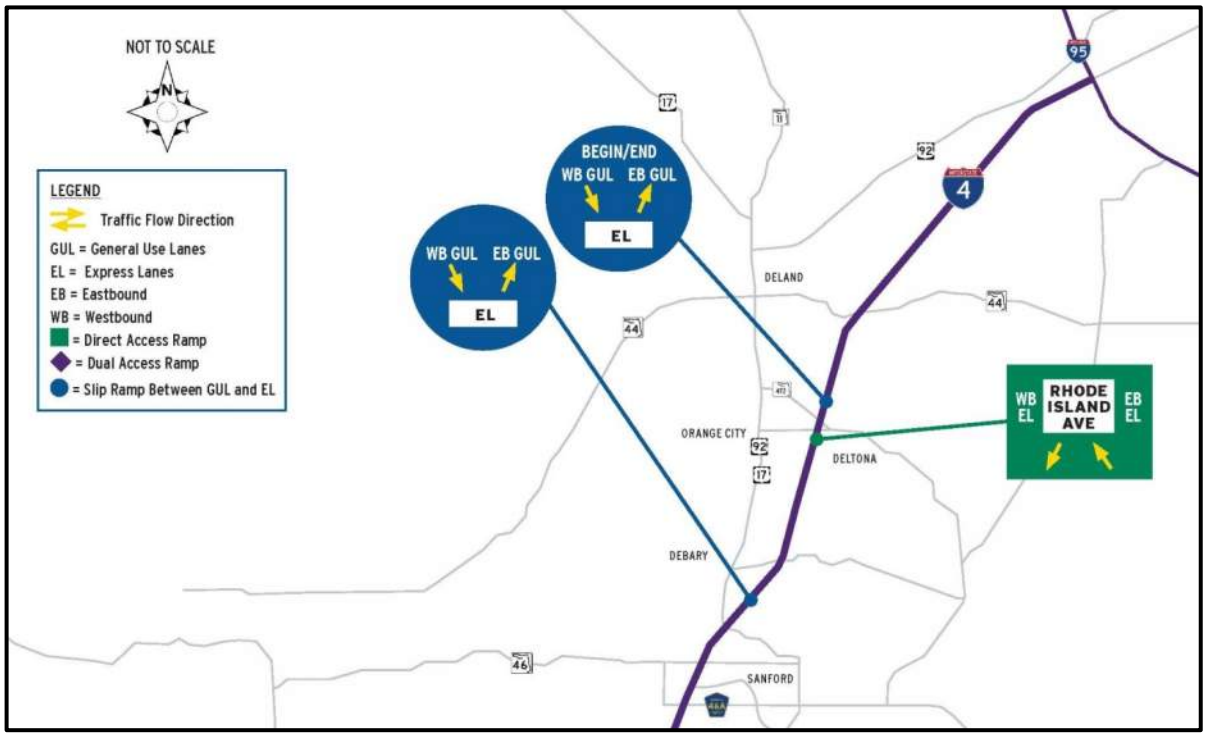


Figure 5.1 – I-4 Segment 4 Proposed Express Lane Access Points

As outlined previously, the project objective is to improve operations on I-4, which includes developing and evaluating viable interchange alternatives to enhance the ability of the roadways to meet anticipated traffic demands, improve safety, and serve existing and future land uses along the I-4 corridor. The alternatives analysis will focus primarily on the interchanges and pond sites, since the mainline typical section (three general use lanes and two express lanes in each direction) will be consistent with the approved typical section that is being implemented for the I-4 Ultimate section from SR 435 (Kirkman Road) to SR 434.

Build alternatives were evaluated for the Dirksen Drive, Saxon Boulevard, proposed Rhode Island Avenue extension and SR 472 interchanges. In general, the mainline typical section will be consistent throughout Segment 4 and will have six 12-foot general use travel lanes (3 in each direction with 10-foot inside and 12-foot outside shoulders) and four 12-foot express lanes (2 in each direction with 4-foot inside and 10-foot outside shoulders). Auxiliary lanes will be provided in some locations in both the eastbound and westbound directions. The proposed mainline typical section was previously shown in Figure 1.2. The complete typical section package for this project including all five segments of the I-4 BtU corridor is being submitted under separate cover. As part of the evaluation of Segment 4, additional typical section alternatives were considered for the north/east segments of the I-4 BtU corridor, including reversible traffic lane alternatives:

- 6 GUL + 2 EL Alternative - Six general use lanes and two express lanes (one in each direction), no reversible lanes,
- 6 GUL +3 EL Alternative - Six general use lanes and three express lanes (one in each direction with a center reversible "zipper" lane); and
- 6 GUL + 4 EL & 6 GUL + 2 EL - Six general use lanes and four express lanes from east of SR 434 (Begin Project Station 2043+71.32) to the slip ramps west of Dirksen Drive (Station 2710+01.89) and six general use lanes and two express lanes from west of Dirksen Drive to east of SR 472 (End Project Station 3118+46.00).

Detailed analysis of the typical section alternatives evaluated for I-4 Segment 4 are provided in the supplemental report titled *Reversible Express Lanes Evaluation - Segment 3 (1 Mile East of SR 434 to East of US 17/92) in Seminole County and Segment 4 (East of SR 15/600-US 17-92 to 1/2 mile East of SR 472) in Volusia County (November 2014);* a copy of this report is provided in Appendix B.

5.4.1 Design Speed

The design speed of I-4 (general use lanes and express lanes) is 70 mph. The design speed of Dirksen Drive is unavailable, but the posted speed is 35 mph. The design speed of Enterprise Road, Saxon Boulevard and Graves Road is 45 mph. The design speed of SR 472 is 50 mph and the design speed of the proposed Rhode Island Avenue extension is 40 mph.

5.4.2 Roadway Alternatives

An extension to Rhode Island Avenue is being proposed as part of the SR 400 (I-4) PD&E reevaluation project. The limits of improvement are from the existing east terminus of Rhode Island Avenue at Veterans Memorial Parkway in Orange City, extending eastward approximately 1¼ miles to Normandy Boulevard in Deltona. The current proposed extension follows the same alignment proposed in plans that were previously completed by Volusia County in 2009. The County has purchased right-of-way for the previously proposed alignment; any additional parcels will be acquired under the I-4 Beyond the Ultimate project. The proposed Rhode Island Avenue typical section consists of a four-lane urban roadway divided by a 22-foot landscape median, with two 12-foot travel lanes and a 4-foot bike lane in each direction. Eight-foot wide sidewalks, which will be separated from the bike lane by a landscape buffer, will be provided on both sides of the roadway. A direct connect interchange is proposed at I-4 which will provide direct access from the I-4 eastbound express lanes to Rhode Island Avenue and from Rhode Island Avenue to the I-4 westbound express lanes. The Rhode Island Avenue extension and interchange improvements are intended to increase connectivity in this region by providing access between I-4 and US 17-92 (S. Volusia Avenue) to the west and Normandy Boulevard to the east.

5.4.3 Interchange Alternatives

Interchange alternatives were developed for the I-4 Segment 4 corridor based on preliminary geometric design, structural analysis, traffic operations, drainage considerations and utility, right-of-way and environmental impacts. The following sections describe each of the interchange alternatives considered; Concept Plans are provided in Appendix A.

Dirksen Drive/Debary Avenue Interchange Alternatives

Two alternatives are being considered for the Dirksen Drive/Debary Avenue interchange. Alternative 1, shown on pages 29-32 of the Concept Plans included in Appendix A, would leave the overall existing horizontal geometry as it is, in a partial cloverleaf configuration with loop ramps in the northwest and northeast quadrants. The existing 1-lane I-4 eastbound exit ramp will continue to connect to the I-4 general use lanes. The existing 1-lane eastbound on-ramp will continue to connect to the I-4 general use lanes. The existing 1-lane I-4 westbound exit ramp will continue to connect to the I-4 general use lanes. The existing 1-lane westbound on-ramp will continue to connect to the I-4 general use lanes. The proposed Concept Plans for Dirksen Drive/Debary Avenue include changing the vertical geometry by lowering the height of the interstate over the roadway because there is no longer a railroad corridor along the roadway and the additional height is no longer needed. This alternative requires reconstruction of the bridge carrying Dirksen Drive/Debary Avenue over I-4. No additional right-of-way will need to be purchased to construct this alternative.

Alternative 2, shown on pages 33-36 of the Concept Plans included in Appendix A, would maintain the existing I-4 westbound on and off-ramps as they are today. The I-4 eastbound on ramp would also be maintained as it is today. The I-4 eastbound loop off-ramp would be modified such that motorists can only turn right at the ramp terminus and head westbound on Dirksen Drive. A new 1-lane exit ramp is proposed in the southeast quadrant which will provide access to eastbound Dirksen Drive from the I-4 eastbound general use lanes. This alternative will impact the park and ride lot that is currently located just east of the interchange. A new park and ride lot is proposed on a vacant parcel located on the west side of the interchange. The vertical geometry will be adjusted similar to Alternative 1. Additional right-of-way will need to be purchased to construct this alternative.

The build alternative identified in the original PD&E study/FEIS *(I-4 PD&E Study – Section 2, Final Environmental Impact Statement FEIS, August 2002*) for the Dirksen Drive/Debary Avenue interchange proposed maintaining the existing interchange concept with widening of the I-4 eastbound exit ramp to two lanes.

Saxon Boulevard Interchange Alternatives

Two interchange concepts and four roadway widening alignment alternatives were evaluated for Saxon Boulevard.

Alternative 1, shown on pages 37-40 of the Concept Plans included in Appendix A, would leave the overall existing geometry as it is, in a partial cloverleaf configuration with loop ramps in the

northwest, northeast and southwest quadrants. The existing single lane off-ramp from eastbound I-4 to eastbound Saxon Boulevard will continue to connect to the general use lanes and will be extended along Saxon Boulevard to Finland Drive in order to provide a greater weaving distance for traffic exiting the interstate. The lane will become an exclusive right turn lane at the intersection of Saxon Boulevard and Finland Drive. The existing single lane off-ramp from eastbound I-4 to westbound Saxon Boulevard will continue to connect to the general use lanes. The existing single lane I-4 eastbound on-ramp will continue to connect to the general use lanes. The existing I-4 westbound C-D road will continue to have the same configuration and connect the I-4 westbound general use lanes to the C-D road. The C-D road will continue to provide access to the single lane westbound Saxon Boulevard outer connector off-ramp, the single lane westbound Saxon Boulevard inner loop on-ramp, the single lane eastbound Saxon Boulevard inner loop off-ramp and the single lane eastbound Saxon Boulevard to I-4 westbound outer connector on-ramp. The C-D road will connect back to the I-4 general use lanes with a two lane on-ramp. Pedestrian access will continue to be maintained on both sides of the Saxon Boulevard Bridge. Additional right-of-way will need to be purchased to construct this alternative. The additional right-of-way will be needed at the I-4 eastbound off-ramp to eastbound Saxon Boulevard extension.

Alternative 2, shown on pages 41-44 of the Concept Plans included in Appendix A, would change the configuration of the interchange to a single point diamond interchange (SPDI). The SPDI design would provide access from I-4 to Saxon Boulevard at a single intersection. A new single lane off-ramp and a new single lane on-ramp will be constructed at the I-4 eastbound general use lanes. A new single lane off-ramp and a new 2-lane on-ramp will be constructed at the I-4 westbound general use lanes. The C-D road will not be necessary and will be eliminated at this interchange. Saxon Boulevard will be widened through the interchange to match the proposed section of Saxon Boulevard to the west of I-4 that is currently under construction. Pedestrian access will be maintained on both sides of Saxon Boulevard. No additional right-of-way will need to be purchased to construct this alternative.

Alternative 3, shown on pages 45-50 of the Concept Plans included in Appendix A, would include the interchange improvements as described in Alternative 1, and will widen Saxon Boulevard from four through lanes to six through lanes from the park and ride lot, west of I-4 to Normandy Boulevard, east of I-4. The alignment of the roadway would be shifted to the north by 12 feet, or one lane width. The original southern edge of the roadway would remain the same and the northern edge of the roadway will move by 24 feet. The center turn lane will be eliminated and a traffic separator will be placed in the roadway to restrict left turn movements. Section 0 discusses in more detail the changes in access management along Saxon Boulevard. Additional right-of-way will be needed on the north and south sides of the roadway to accommodate the additional roadway width to the north and the additional pond sites on both the north and south sides of the roadway.

Alternative 4, shown on pages 51-56 of the Concept Plans included in Appendix A, is similar to Alternative 3 except that the widening of Saxon Boulevard would occur on both sides of the roadway. One additional lane would be added to each side of the roadway and proposed ponds will be located along both sides of the roadway. The alignment of Saxon Boulevard would remain unchanged. Additional right-of-way will be needed on the north and south sides of the roadway to accommodate the additional roadway width and proposed pond sites. Alternative 4 also incorporates the changes to the existing interchange as described in Alternative 1.

Alternative 5, shown on pages 57-62 of the Concept Plans included in Appendix A, is similar to Alternative 3 except that the widening of the roadway would occur on the south side of the roadway. The original northern edge of the roadway would remain the same and the southern edge of the roadway will move by 24 feet, while the ponds will be added to the southern side of the roadway. Additional right-of-way will be needed only on the south side of Saxon Boulevard to accommodate the additional roadway width and proposed pond sites.

Alternative 6, shown on pages 63-68 of the Concept Plans included in Appendix A, is similar to Alternative 5 with the widening of the roadway occurring on the south side of the road. The existing loop ramps and outer connector ramps in the northwest and southwest quadrants will remain, providing connections to and from the I-4 westbound general use lanes. The existing single-lane eastbound off ramp in the southeast quadrant and the I-4 eastbound loop off ramp in the northeast quadrant will be modified due to proposed ponds in both quadrants. Both eastbound ramps are single-lane off ramps that will flare to two lanes and align at a single signalized intersection with Saxon Boulevard. The free-flow right turn from the I-4 eastbound loop ramp will be eliminated. Additional right-of-way will be needed: in the southeast quadrant for the new off ramp and floodplain compensation pond, along the south side of Saxon Boulevard to accommodate the additional roadway width and along the north side for proposed ponds. Alternatives 3, 4, 5 and 6 will also maintain the existing pedestrian access along both sides of the roadway.

The build alternative identified in the original PD&E study/FEIS *(I-4 PD&E Study – Section 2, Final Environmental Impact Statement FEIS, August 2002*) for the Saxon Boulevard interchange proposed maintaining the existing full access partial cloverleaf interchange concept with minor ramp gore modifications and reconstruction to consolidate the two I-4 eastbound exit ramps to a single off-ramp.

<u>Rhode Island Avenue Interchange Alternative</u>

A new direct access interchange to the I-4 express lanes, shown on pages 69-77 of the Concept Plans included in Appendix A, is being considered for the future Rhode Island Avenue extension that will also provide a connection between Veterans Memorial Parkway and Normandy Boulevard. Direct access to the express lanes will be provided from a single intersection on the Rhode Island Avenue Bridge. A single lane off-ramp will connect the I-4 eastbound express lanes to Rhode Island Avenue

and a single lane on-ramp will provide direct access from Rhode Island Avenue to the I-4 westbound express lanes. A new park and ride facility will be added along Normandy Boulevard to the south of Rhode Island Avenue. To date, Volusia County has purchased a majority of the parcels required to accommodate the future roadway and interchange. The remaining parcels still need to be purchased in order to build the roadway. Additional right-of-way will also need to be purchased along Normandy Boulevard to accommodate the additional lanes needed for turning movements.

SR 472 Interchange Alternatives

Five interchange concepts are being evaluated for the SR 472 interchange. Alternative 1, shown on pages 78-81 of the Concept Plans included in Appendix A, is a partial cloverleaf interchange with loop ramps in the northwest and southeast quadrants. The existing single lane I-4 eastbound off-ramp will continue to connect from the I-4 general use lanes to SR 472. The existing single lane loop on-ramp will continue to connect eastbound SR 472 to the I-4 eastbound general use lanes. The existing single lane on-ramp will continue to connect westbound SR 472 to the I-4 eastbound general use lanes. A new single lane off-ramp will be constructed to provide access from the I-4 westbound general use lanes to SR 472. A new single lane loop on-ramp will be constructed to provide access from westbound SR 472 to the I-4 westbound general use lanes. A new single lane ramp will be constructed to provide access from SR 472 eastbound to the I-4 westbound general use lanes. Pedestrian access will be maintained along the northern side of SR 472 and an additional sidewalk will be added to the south side of the eastbound bridge. Additional right-of-way will need to be purchased in order to construct the new loop on-ramp and the new off-ramp to/from the I-4 westbound general use lanes. Additional right-of-way will also be needed to build the new on-ramp from westbound SR 472 to the I-4 eastbound general use lanes.

Alternative 2, shown on pages 82-86 of the Concept Plans included in Appendix A, involves changing the configuration of the interchange to a SPDI which incorporates all of the ramp movements into a single intersection. This results in a larger structure to accommodate the interchange but reduces the number of signalized intersections for the interchange. The SPDI will eliminate the two signalized intersections on SR 472 and consolidate them into a single intersection on a newly constructed SR 472 bridge over I-4. A new 2-lane off-ramp and a new single lane on-ramp will be constructed at the I-4 eastbound general use lanes. A new 2-lane off-ramp and a new single lane on-ramp will be constructed at the I-4 westbound general use lanes. The roadway along SR 472 will be modified to allow for new turn lanes onto the ramps and the existing two bridges will be removed and replaced with a single bridge. Pedestrian access will be maintained along the north side of SR 472 only. Additional right-of-way will need to be purchased in order to construct the new on-ramp from SR 472 to the general use lanes and the new off-ramp from the I-4 westbound general use lanes to SR 472.

Alternative 3, shown on pages 87-90 of the Concept Plans included in Appendix A, leaves the interchange as it is but adds a second left turn lane along SR 472 for westbound traffic turning onto

the on-ramp to the I-4 westbound general use lanes. The existing single lane off-ramp from I-4 eastbound to SR 472 will continue to connect to the general use lanes. The existing single lane loop on-ramp from SR 472 eastbound to I-4 eastbound will continue to connect to the general use lanes. The existing single lane on-ramp from SR 472 westbound to I-4 eastbound will continue to connect to the general use lanes. The existing single lane off-ramp from I-4 westbound to SR 472 will continue to connect to the general use lanes. The existing single lane on-ramp from SR 472 eastbound to I-4 westbound will continue to connect to the general use lanes. Additional right-of-way will need to be purchased in order to construct this alternative. The additional right-of-way is required to accommodate the on-ramp from westbound SR 472 to the I-4 eastbound general use lanes and for the off-ramp from the I-4 westbound general use lanes to SR 472.

Alternative 4, shown on pages 91-97 of the Concept Plans included in Appendix A, is a SPDI similar to Alternative 2 but incorporates dedicated U-turn lanes along SR 472. The existing left turn and through movements are proposed to be eliminated from northbound Kentucky Avenue at SR 472 and southbound Graves Avenue at SR 472. In order to better accommodate the heavier volumes at these intersections, the left turn and through movement phases have been removed from the signal cycles resulting in more green time for the other heavier movements. Northbound traffic from Kentucky Avenue will be restricted to right turn only onto eastbound SR 472 and southbound traffic from Graves Avenue will be restricted to right turn only onto westbound SR 472. The U-turn lanes are proposed along SR 472 to accommodate the left/through movements eliminated from the signals; the U-turn traffic will be yield-controlled. An additional southbound auxiliary lane will be added along SR 472 from the interchange to Graves Avenue. Additional right-of-way will be required for this interchange.

Alternative 5, shown on pages 98-112 of the Concept Plans included in Appendix A, is a diverging diamond interchange (DDI). A DDI is designed so that each direction of the crossing roadway traffic is split and then crosses over itself. The traffic will temporarily drive on the left-hand side of the roadway and then cross back over on the other side of the interchange. In order to avoid wrong way movements through this type of interchange, the opposite directions of the roadway are intersected at an angle that is large enough to appear to the driver as if they are making a through movement and that the other side of the roadway is an intersecting street. This design changes the terminals of the interchange from three phase cycles to two phase cycles as the left turn movements from the roadway are now free flow movements. For this interchange, the I-4 off-ramp movements are signalized due to high volumes and short weaving distance available. The right turn movements onto I-4 are also signal controlled due to the high volume of left hand movements and short merging distances available. Bike lanes have been provided along SR 472 through the interchange. Improvements to the Kentucky Avenue and Graves Avenue intersections with SR 472 are also incorporated into this alternative. The improvements to the intersections are in the form of additional turn lanes and additional through lanes at the intersections to improve traffic flow. Dual

left turn lanes as well as two through lanes will be provided for all legs of the SR 472 and Kentucky Avenue intersection. A right turn lane will be added, providing dual right lanes from northbound Kentucky Avenue onto eastbound SR 472. A dedicated right turn lane will be added at eastbound SR 472 to southbound Graves Avenue and an additional left turn lane, resulting in dual left lanes, will be provided for westbound SR 472 to southbound Graves Avenue traffic. Additional right-of-way will be required along Graves Avenue, Kentucky Avenue, SR 472 and along I-4 for this interchange concept.

The build alternative identified in the original PD&E study/FEIS *(I-4 PD&E Study – Section 2, Final Environmental Impact Statement FEIS, August 2002*) for the SR 472 Boulevard interchange proposed maintaining the existing interchange concept with minor modifications to the ramp gore areas on I-4 and addition of dual left turn lanes for the SR 472 westbound to I-4 westbound entrance ramp.

5.4.4 St. Johns River Multi-Use Bridge Alternatives

The Coast to Coast Connector gap is proposed to be completed as part of the I-4 BtU project. The current gap exists between the Spring to Spring trail in Volusia County and the Seminole Wekiva/Cross Seminole trails in Seminole County. The gap is planned to be closed by completing the planned Rinehart Trail in Seminole County and connecting the trails by a bridge over the St. Johns River. There are four alternatives being considered for the trail bridge over the river:

- **Alternative 1** – Multi-Use path along the Centerline of I-4, supported by additional substructure elements retrofitted to the existing piers
- **Alternative 2** – Multi-Use path along the eastern side of I-4, carried by new structural system retrofitted the existing bridge piers
- **Alternative 3 –** New multi-use cable stay bridge to the east of and parallel to the existing US 17-92 bridge over the St. Johns River
- **Alternative 4** – Additional interior widening and shifting of eastbound (EB) I-4, allowing placement of multi-use pathway on eastern-most side of existing bridge deck

The first alternative proposes a bridge that begins in the median of I-4 under the St. Johns River bridge and ramps up to the bridge level and crosses the river between the express lanes along the modified bridge. The second alternative proposes a trail bridge that is attached to the east side of the St. Johns River bridge and is accessed by ramps at each end that are placed outside of the bridge. The third alternative proposes a new stand-alone trail bridge that would run parallel to US 17-92 and crosses the St. Johns River to the east of US 17-92. The fourth alternative proposes shifting of I-4 Eastbound toward the median of I-4 and utilizing the existing bridge deck along the Eastern-most side of the bridge to carry multi-use traffic. The current pier taken from an old bridge across the river would need to be relocated in order to construct this option.

Alternatives 2 and 3 were deemed cost-prohibitive at the time of the analysis and were therefore removed from consideration. Alternative 1 was feasible, but it does not preserve a future transit corridor and was eliminated from consideration. Alternative 4 was deemed feasible for providing a

multi-use pathway across the St. Johns River. Detailed analysis and recommendations based on the four alternatives considered are provided in the supplemental report, *St. Johns River Multi-Use Bridge Concept Report Segments 3 & 4: Seminole & Volusia Counties, Florida (November 2014)*, prepared for the I-4 BtU project.

Subsequent to the development of the four alternatives for the St. Johns River Multi-Use bridge, the FDOT has recommended an alternative for the multi-use trail that will follow the US 17-92 alignment. In the vicinity of the I-4 and US 17-92 interchange, the multi-use trail will run parallel to and east of Monroe Road between Orange Boulevard and the existing US 17-92 alignment. At the newly proposed roundabout at the Monroe Road and existing US 17-92 alignment intersection, the trail will cross the east leg of the roundabout. The trail will run east-west, on the north side of the existing US 17-92 alignment and to the west, it will go under I-4. West of the interchange, the trail continues westward crossing the north leg of the proposed roundabout at Lake Monroe Wayside Park, then turning to a north-south alignment along the east side of the proposed US 17-92 re-alignment, and subsequently crossing Lake Monroe. The recommended alternative for the multi-use trail is shown on the design Concept Plans for the I-4 and US 17-92 interchange which is part of I-4 Segment 3 of the BtU corridor; refer to the *Preliminary Engineering Report Segment 3: State Road 400 (SR 400)/Interstate 4 (I-4) from One Mile East of SR 434 to East of SR 15-600/US 17-92 (August 2016).*

5.5 Design Traffic

Development of project traffic for I-4 and surrounding arterials within the study limits of Segment 4 was based on the procedures outlined in the *Methodology Letter of Understanding (MLOU) (October 2014 Update)* that is provided as an Appendix to the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472 (March 2017*) prepared for this project.

5.5.1 Future Traffic Volumes

Travel demand modeling using the Central Florida Regional Planning Model (CFRPM version 5.01) was utilized to forecast Directional Design Hour Volumes (DDHV) for the I-4 Segment 4 project. The future traffic forecasts were determined for 2020 (opening year), 2030 (interim year) and 2040 (design years) for two build alternatives: Original Build and Modified Build. The Original Build Alternative refers to the preferred interchange alternatives identified in the original I-4 SAMR dated April 2000 and approved by FHWA in June 2000, with a subsequent update in 2003. The Modified Build alternative refers to the current I-4 SAMR Reevaluation and constitutes revised improvement concepts, which account for changing conditions over time. These changes include variation in traffic characteristics, modifications to express lane access points and other traffic and design considerations which led to the current proposed build alternatives.

5.5.2 Design Traffic Factors

The traffic volume outputs generated by the model represent Peak Season Weekday Average Daily Traffic (PSWADT). A Model Output Conversion Factor (MOCF) was used to convert the PSWADT to Average Annual Daily Traffic (AADT). A MOCF of 0.97 for I-4 and 0.94 for arterial streets in Volusia County was used for this study, according to the MLOU. DDHV for I-4 Segment 4 were produced by applying K and D factors to the AADT projections from the CFRPM model. The FDOT standard "K" and "D" factors were generally used to develop the DDHVs for I-4 Segment 4.

K Factor

The K factor is used to convert the 24-hour AADT estimate to an hourly volume (DHV-Design Hour Volume). It is the ratio of the AADT that occurs during the design hour for the design year. Standard K-factors have been adopted by FDOT based on area and facility type with consideration to typical peak periods of the day. The K-factor used in the analysis for I-4 Segment 4 traffic for the Interstate's general use lanes and arterials was 9.0. Based upon input from FDOT and Florida's Turnpike Enterprise, a K factor of 9.7% was used for the express lanes.

D-Factor

The Directional Distribution (D) is the percentage of total, two-way design traffic traveling in the peak direction. The D-factor used in the analysis for I-4 Segment 4 traffic was 54.30 for the Interstate and 62.50 for arterials in Volusia County.

T Factor

The percentage of trucks (T) using a roadway is the most critical factor in pavement design. The T factor used in traffic analysis for I-4 Segment 4 traffic was 2.8% for the AM and PM peak hours.

5.5.3 Intersection/Interchange Traffic Volumes

Traffic volumes for intersections and interchanges within the I-4 Segment 4 corridor were developed for both Original Build and Modified Build conditions based on the procedures outlined in the *Methodology Letter of Understanding (October 2014 Update).* The CFRPM model was used to develop the existing, 2020 and 2030 forecasts. Year 2040 forecasts were developed by determining a growth rate from 2030 to 2035 (forecast year of the model) and using that growth rate to extrapolate volumes from 2030 to 2040.

Year 2040 peak hour volumes were adjusted to reflect existing traffic patterns while ensuring 2040 volumes are higher than existing traffic counts. Volumes were also adjusted based on reasonable growth rates for localized movements, current land-use patterns and future projected developments and population growth rate for Seminole and Volusia Counties. Traffic volumes for the Modified Build scenario were developed based on the Original Build volumes. The redistribution of traffic between the Original Build and Modified Build was performed based on the current proposed interchange and freeway configurations. The resulting design year 2040 DDHVs for I-4 Segment 4,

for the Modified Build scenario which is pertinent to the current reevaluation study, are shown in Figure 5.2 through Figure 5.3.

5.5.4 Intersection Operational Analysis

As part of the development of interchange alternatives for I-4 Segment 4, traffic operational analyses were completed for the intersections within or near the proposed interchange improvements for No-Build and Build alternatives. Some alternatives were removed from further consideration due to roadway geometric design constraints, operational deficiencies, inter-agency coordination indicating other preferences and/or being cost-prohibitive, and no further traffic analysis was completed. Peak hour operational analysis of intersections/interchanges was completed using Synchro or VISSIM-version 5.4 software.

Dirksen Drive Interchange

Two alternatives were considered for the Dirksen Drive interchange traffic operations evaluation:

- No-Build - Existing + Four lanes on Dirksen Drive, west of the interchange
- Alternative 1 – Free Flow Ramp at I-4 eastbound ramp terminus. This alternative includes the following additional improvements at the adjacent intersections:
    - a free flow right lane onto the westbound on-ramp (requires 2 receiving lanes before merging to 1 in order to maintain free flow movement with opposing eastbound lefts) with a 3rd continuous westbound lane between the ramp terminals,
    - dual eastbound left turns at the Deltona Boulevard intersection and
    - dual southbound right turn lanes on Deltona Boulevard.

Review of the two alternatives was conducted for the Dirksen Drive interchange for the analysis year 2040. Based on the operational analysis, Alternative 1 provides better operational performance, ultimately improving mobility throughout the Dirksen Drive corridor. The results of the peak hour intersection operational analyses for Dirksen Drive are summarized in Table 5.1.

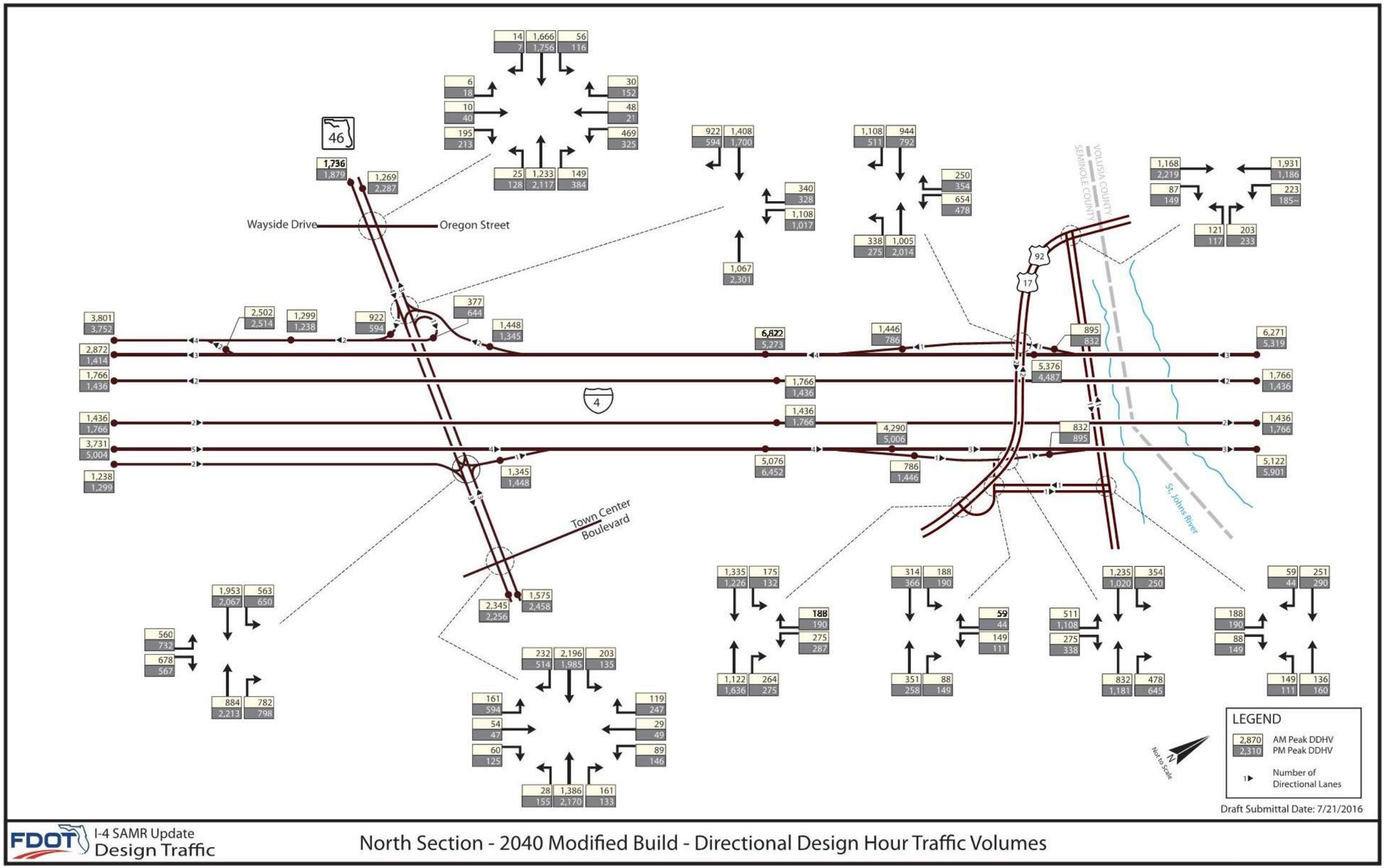


Figure 5.2 – Segment 4: 2040 Build Directional Design Hour Traffic Volumes (Sheet 1 of 3)

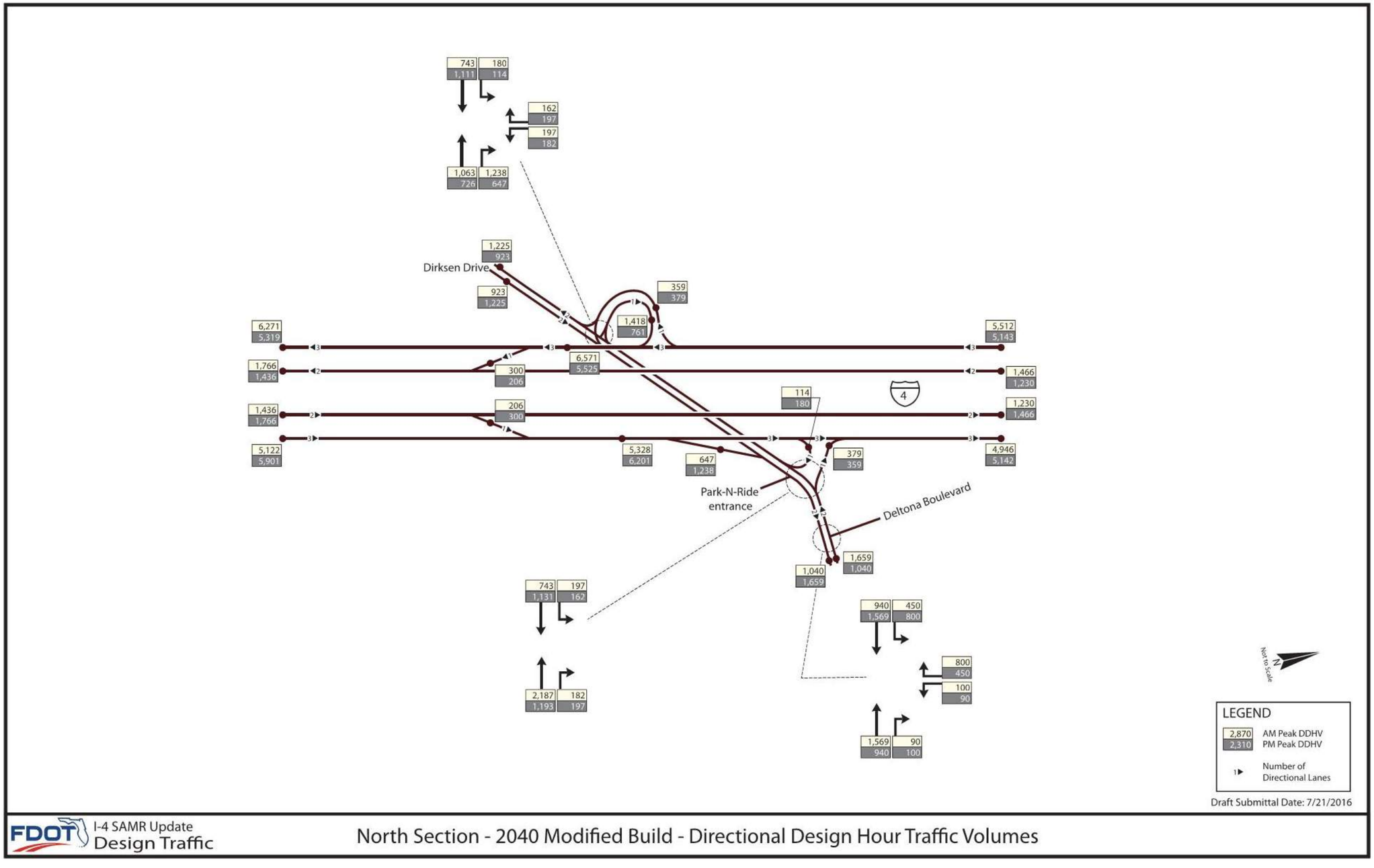


Figure 5.3 – Segment 4: 2040 Build Directional Design Hour Traffic Volumes (Sheet 2 of 3)

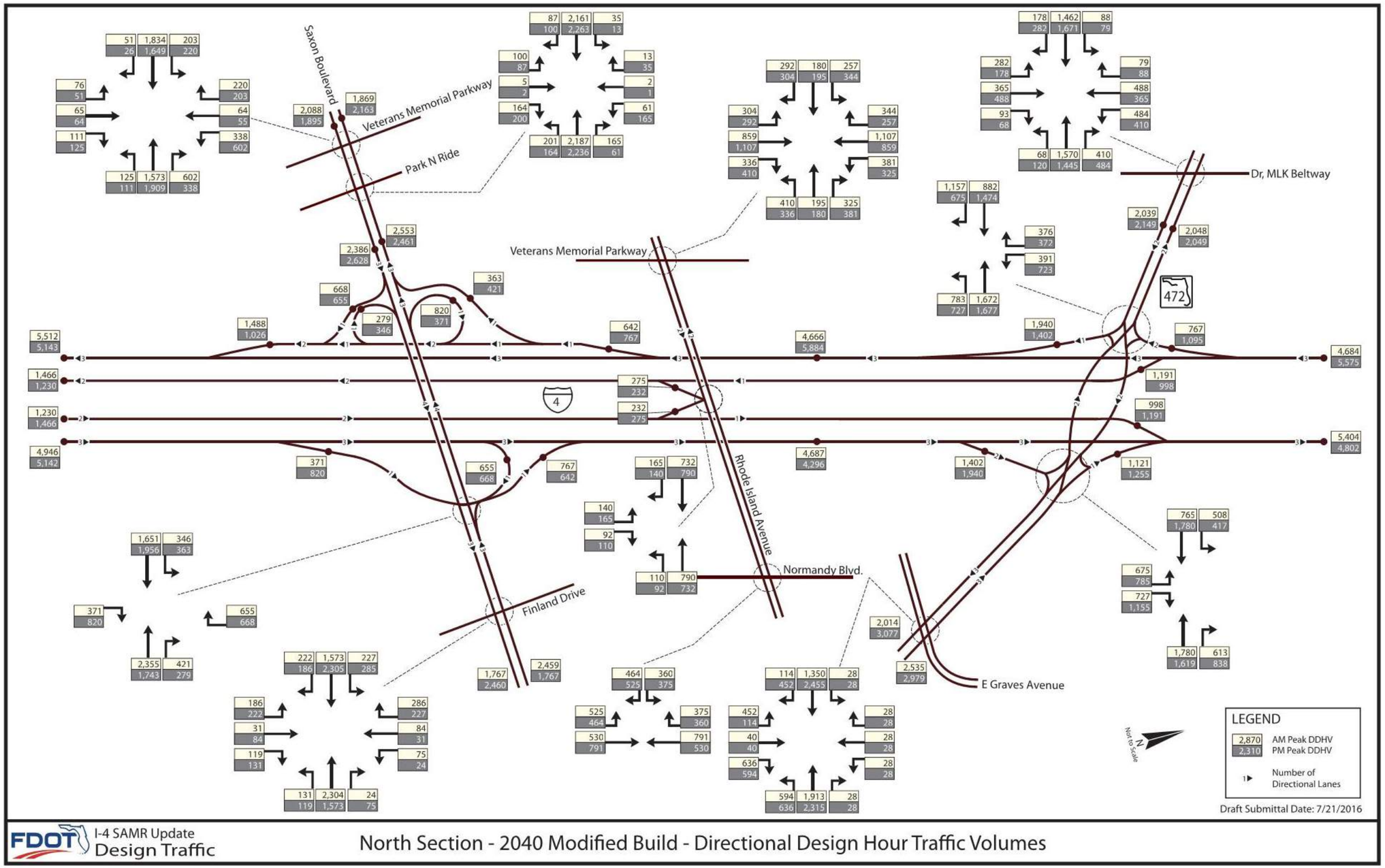


Figure 5.4 – Segment 4: 2040 Build Directional Design Hour Traffic Volumes (Sheet 3 of 3)

Table 5.1: Average Delay and Level of Service (LOS) - Dirksen Drive Intersections

	No Build AM		Alternative 1 AM	
Intersection	Delay	LOS	Delay	LOS
I-4 WB Ramps/Dirksen Drive	14.0	B	13.1	B
I-4 EB Ramps/Dirksen Drive	36.1	D	2.8	A
Deltona Boulevard/Dirksen Drive	140.3	F	19.3	B
	No Build PM		**Alternative 1 PM**	
Intersection	Delay	LOS	Delay	LOS
I-4 WB Ramps/Dirksen Drive	14.5	B	10.7	B
I-4 EB Ramps/Dirksen Drive	60.6	E	2.3	A
Deltona Boulevard /Dirksen Drive	86.2	F	18.2	B

Intersection operating at or below LOS E.

Saxon Boulevard Interchange

Six alternatives were considered for the Saxon Boulevard interchange traffic operations evaluation:

- Alternative 1 – No-Build
- Alternative 2 – Single Point Diamond Interchange
- Alternative 3 – Saxon Boulevard six lane Widening (Left alignment)
- Alternative 4 – Saxon Boulevard six lane Widening (Center alignment)
- Alternative 5 – Saxon Boulevard six lane Widening (Right alignment)
- Alternative 6 – Saxon Boulevard six lane Widening (Right alignment w/I4 EB off-ramps to Saxon Boulevard aligned)

Alternative 3, 4 and 5 are geometric variations of the same alternative; therefore, for the purpose of operational analysis, these alternatives were treated as one. Peak-hour intersection analysis was conducted for the PM peak hour as this dictates operational conditions at the interchange. Intersection Delay and LOS was determined for the Saxon Boulevard interchange and adjacent intersections for the analysis year 2040.

Based on the operational analyses, Alternatives 3, 4, 5 and 6 perform better than the No-Build Alternative. However, Alternative 6 provides additional safety benefits, as it brings ramp movements from I-4 to east and west of Saxon Boulevard to a signal control and ultimately avoids weaving between I-4 eastbound off-ramp to Saxon Boulevard westbound and Saxon Boulevard westbound to I-4 westbound on ramp movements. The results of the peak hour intersection operational analyses for Saxon Boulevard are summarized in Table 5.2.

Table 5.2: Average Delay and Level of Service (LOS) – Saxon Boulevard Intersections

PM Peak Hour Analysis	Alt. 1		Alt. 2		Alt. 3/4/5		Alt. 6	
Saxon Boulevard Intersection with	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Veterans Memorial Parkway	94.2	F	-	-	95.0	F	99.6	F
Park and Ride Lot	17.5	B	-	-	16.2	B	18.6	B
I-4 EB Ramps	7.1	A	271	F	6.8	A	19.1	B
Finland Drive	125.1	F	-	-	27.9	C	28.9	C
Normandy Boulevard	92.7	F	-	-	39.4	D	40.2	D
Intersection operating at or below LOS E.								

SR 472 Interchange

Six alternatives were considered for the SR 472 interchange traffic operations evaluation:

- Alternative 1 – No-Build
- Alternative 2 – Partial Cloverleaf with Loop Ramps
- Alternative 3 – Single Point Diamond Interchange (SPDI)
- Alternative 4 – Westbound Double Left Turns
- Alternative 5 – Single Point Diamond Interchange (SPDI) with U-turns
- Alternative 6 – Diverging Diamond Interchange (DDI)

Peak hour operational analysis using VISSIM (ver. 5.4) microsimulation software was completed along the SR 472 corridor. The results of the No-Build operational analysis indicated that the interchange was failing at the adjacent intersections beyond the ramp terminals, therefore Alternatives 2 and 4, which do not significantly alter geometry at the interchange, were removed from further consideration. Additionally, FDOT has indicated a preference to avoid U-turns on State roads; therefore, Alternative 5 was also dismissed. Interchange operations analyses for Alternatives 3 and 6, in addition to the No-Build Alternative was completed; the results are summarized in Table 5.3. Based on the results of the traffic operational analyses, both the SPDI and DDI interchange alternatives provide improved performance over the No-Build alternative, with the DDI providing enhanced operations during the AM Peak Hour.

Table 5.3: Average Delay and Level of Service (LOS) – SR 472 Intersections

SR 472 Intersection with	No-Build		Alt. 3		Alt. 6	
	Delay	LOS	Delay	LOS	Delay	LOS
AM Peak Hour						
MLK Jr. Beltway/N. Kentucky Ave.	173.1	F	46.3	D	39.3	D
I-4 WB Ramps	36.4	D	29.9	C	16.0	B
I-4 EB Ramps	15.4	B	29.9	C	16.8	B
Graves Avenue	82.8	F	35.6	D	35.2	D

Table 5.3: Average Delay and Level of Service (LOS) – SR 472 Intersections

SR 472 Intersection with	No-Build		Alt. 3		Alt. 6	
PM Peak Hour						
MLK Jr. Beltway/N. Kentucky Ave.	284.6	F	42.9	D	39.9	D
I-4 WB Ramps	168.0	D	31.6	C	23.3	C
I-4 EB Ramps	158.5	B	31.6	C	21.7	C
Graves Avenue	61.8	F	39.5	D	36.9	D
Intersection operating at or below LOS E.						

5.5.5 Intersection Improvements

Intersection improvements within Segment 4, based on the traffic operations analyses, are proposed at or adjacent to the interchanges at Dirksen Drive, Saxon Boulevard and SR 472 and shown on the Concept Plans. Additionally, new direct access connections to and from the express lanes are proposed at the location of the future Rhode Island Avenue alignment. The Concept Plans for the proposed intersection concepts can be found in Appendix A.

5.6 Environmental Impacts

5.6.1 Floodplains and Regulatory Floodways

The Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) for Volusia County. According to FEMA Map Nos. 12127C0730G, 12127C0735H, 12127C0620H and 12127C0610H, large portions of the roadway and several ponds lie within the 100-year floodplain. Based on the FEMA floodplain lines, the roadway widening within the Lake Monroe Floodplain will impact the floodplain on both sides of the roadway and are located in Zone AE of the floodplain with an elevation of 9 feet NAVD. The roadway impacts the floodplain for a total of 55.75 acre-feet. The westbound impacts occur from Station 2634+00 to Station 2752+00 and the eastbound impacts occur from Station 2640+00 to Station 2752+00. Compensation for impacts to these two basins will be provided in Pond 400, for a total of 64.58 acre-feet of compensation.

Based on FEMA floodplain lines, a small portion of the widening will impact the Gasline Lake Floodplain. The floodplain at Gasline Lake is classified as Zone A. Based on available contours, the elevation for the floodplain is approximately 40 feet NAVD. The westbound portion of the shoulder will impact the Lake Gasline floodplain from Station 2842+20 to Station 2848+20 for a total of 2.41 acre-feet of impacts. A floodplain compensation pond (FPC 403) has been added adjacent to Lake Gasline to compensate for the fill to the floodplain from Station 2847+00 to 2849+00. Additional right-of-way will be required for floodplain compensation pond FPC 403 with an acquisition of one parcel.

Based on the FEMA floodplain lines, the eastbound ramp to Saxon Boulevard impacts the Trout Lake Floodplain. The floodplain at Trout Lake is classified as Zone AE with an elevation of 24.25 feet NAVD, according to permit application No. 42-127-3037AN. The proposed ramp impacts the floodplain for a total of 6.85 acre-feet. Compensation for impacts will be provided in Floodplain Compensation Pond FPC 407, for a total of 7.04 acre-feet of compensation. Pond FPC 407 will be located within the proposed eastbound infield ramp to Saxon Boulevard. Additional right-of-way will be required for the proposed ramp.

Based on the FEMA FIRM map, the roadway right-of-way is located within the 100-year floodplain of Goose Lake and Trout Lake at Station 2905+00. An existing culvert hydraulically connects the two lakes. Goose Lake lies within Zone A and Trout Lake lies within Zone AE with an elevation of 26 NAVD. The ramps and ponds within the southwest quadrant of the Saxon Boulevard Interchange are located within this floodplain. Previously, SR 400 (I-4) was widened from four lanes to six lanes and compensation was provided in the existing ponds. Additional pavement and fill is not proposed within this area; therefore, no floodplain impacts are anticipated.

A portion of proposed right-of-way along Rhode Island Avenue lies within the 100-year floodplain from Station 26+82 to Station 32+18. The floodplain is classified as Zone A and has a determined elevation of 17.86 NAVD (Permit No. 111974-1). Compensation for Rhode Island Avenue is provided in a compensation pond that is adjacent to Pond A. The floodplain pond lies within the existing Volusia County right-of-way. The FEMA Flood Insurance Rate Map for the project is shown in Figure 5.5. Detailed floodplain impacts and compensation calculations are provided in the *Pond Siting Report (August 2016)* prepared for this project.

5.6.2 Wetlands

The jurisdictional extent of onsite wetlands and other surface water systems within the project corridor were evaluated through the 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 (DOQ) maps, U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps and soil survey maps. 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 Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region and the State of Florida's Delineation of the Landward Extent of Wetlands and Surface Waters* (Chapter 62-340, Florida Administrative Code). Wetlands and surface waters observed were classified using the FDOT Florida Land Use, Cover and Forms Classification System (FLUCFCS) and the USFWS classification system as described in their *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, et. al, 1979).

For this study, jurisdictional systems were identified from west to east and were classified 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, ditches or swales, associated with the existing drainage conditions of I-4. Detailed analysis and descriptions of existing wetlands and other surface waters are provided in the *Wetland Evaluation Report (WER) Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 (July 2016)*.

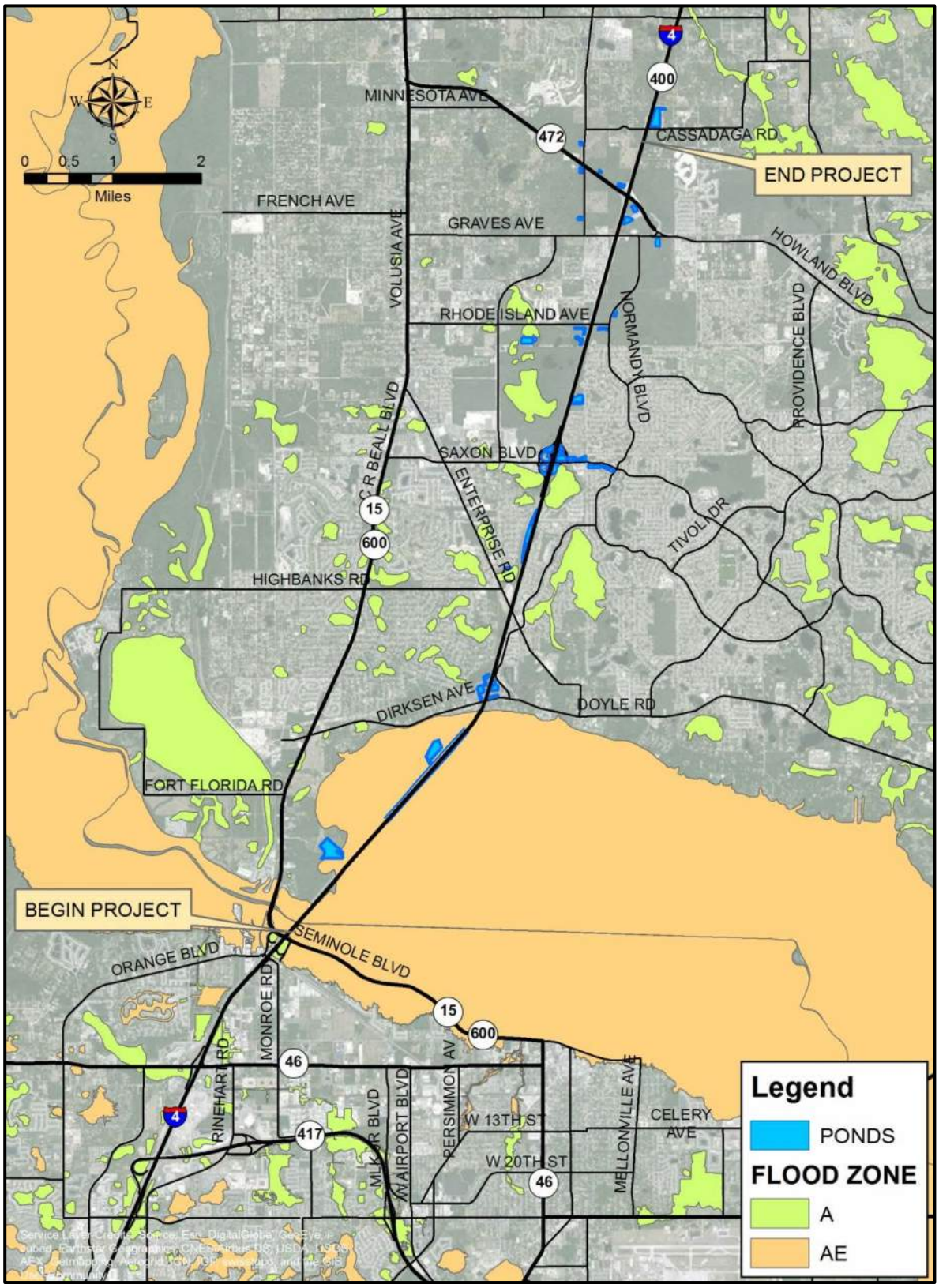


Figure 5.5 – FEMA Flood Insurance Map

Preliminary estimates suggest that 68.61 acres of wetland communities (quality ranging from low to moderate) and 45.24 acres of jurisdictional other surface waters will be impacted by the proposed I-4 improvements and Rhode Island Avenue extension. Estimates are based on field assessment of jurisdictional limits and preliminary plan preparation for design. The wetland and surface water impact areas are depicted in Figure 5.6 through Figure 5.21; Table 5.4 provides a summary of impacts and the quality of each system.

Impact acreages will be further refined as detailed construction plans are developed during the permitting phase of the project. 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 level of mitigation for impacts will be based on the final impact acreages, the nature of disturbance (temporary or permanent) and the overall quality of the systems.

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 to the proposed stormwater management pond locations and the widening of the I-4 ROW. A mitigation plan that 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 any other mitigation options that satisfy state and federal requirements. Currently, mitigation banking opportunities are available within the region.

It is anticipated that improvements for I-4 Segment 4 may result in adverse secondary and cumulative impacts in meeting the intent of 33 CFR Section 320.4 and 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. Current design improvements suggest that secondary impacts could range between 60 acres (75 feet into a wetland system) to 88 acres (100 feet into a wetland system). 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 St. Johns River (Canaveral Marshes to Wekiva) and St. Johns River (Wekiva to Walaka) 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. A secondary and cumulative impacts for I-4 Segment 4 improvements will be refined during the permitting phase in determining the exact mitigation needed in offsetting adverse impacts.

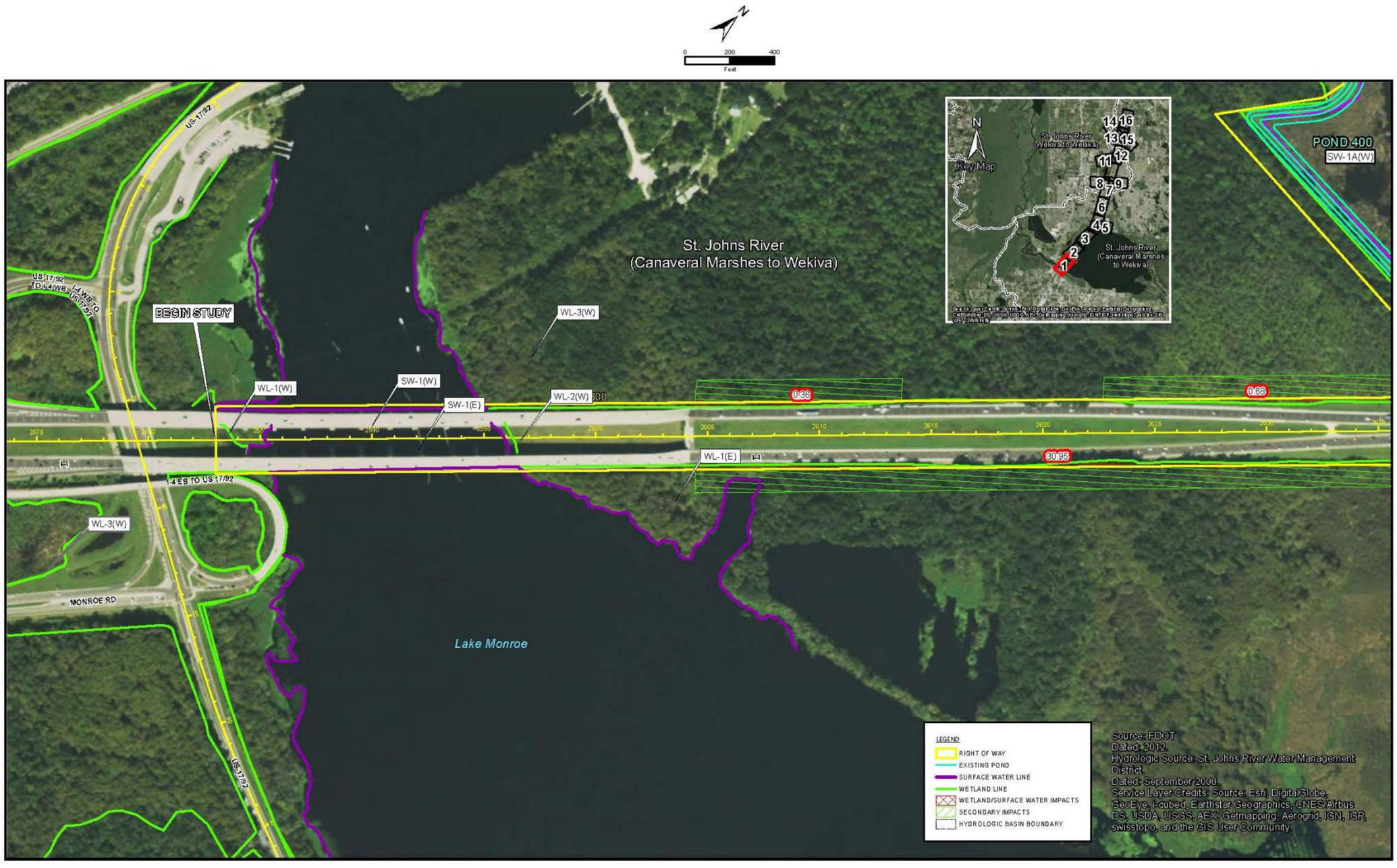


Figure 5.6 – Surface Water and Wetland Impacts Map (Sheet 1 of 16)

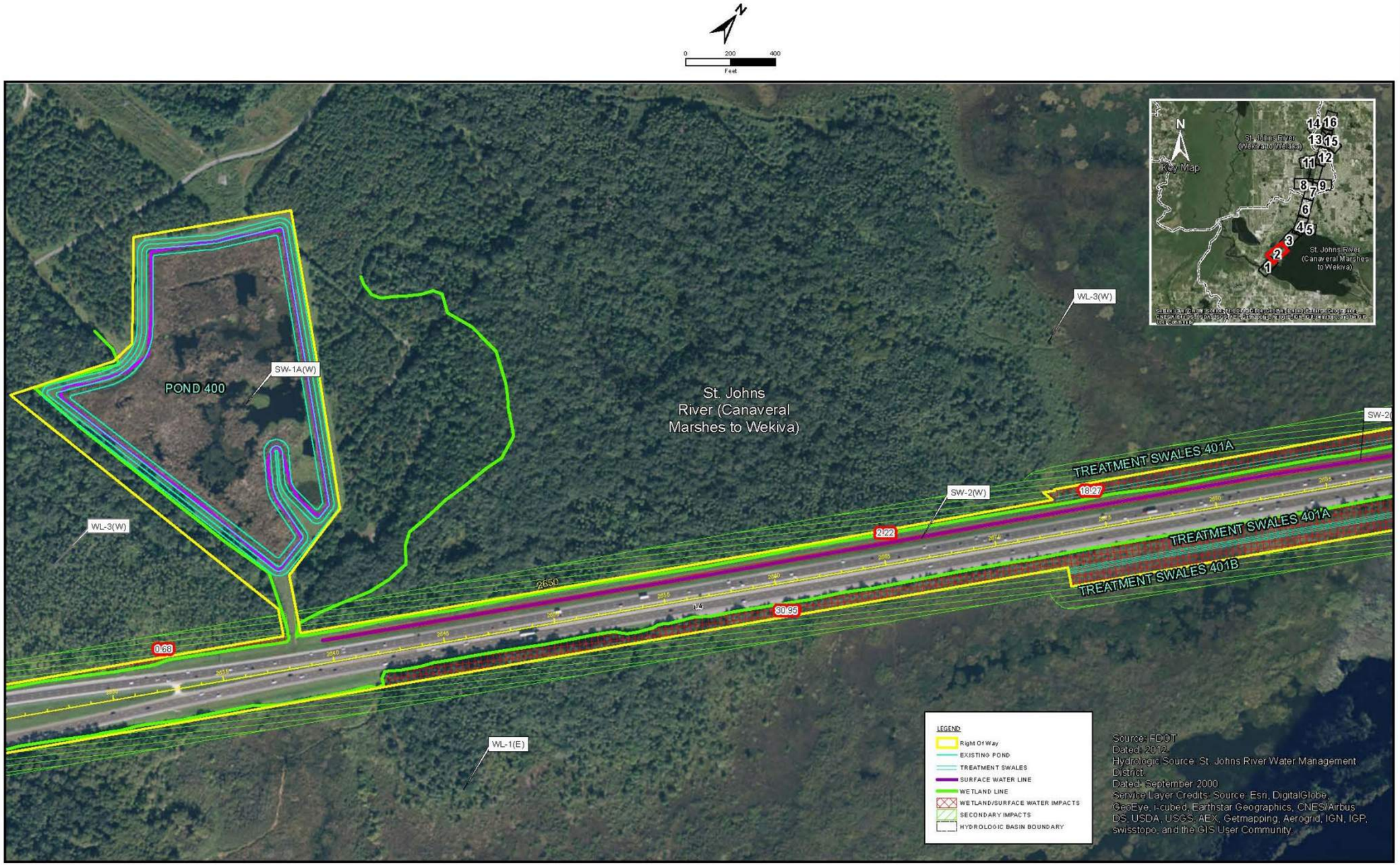


Figure 5.7 – Surface Water and Wetland Impacts Map (Sheet 2 of 16)

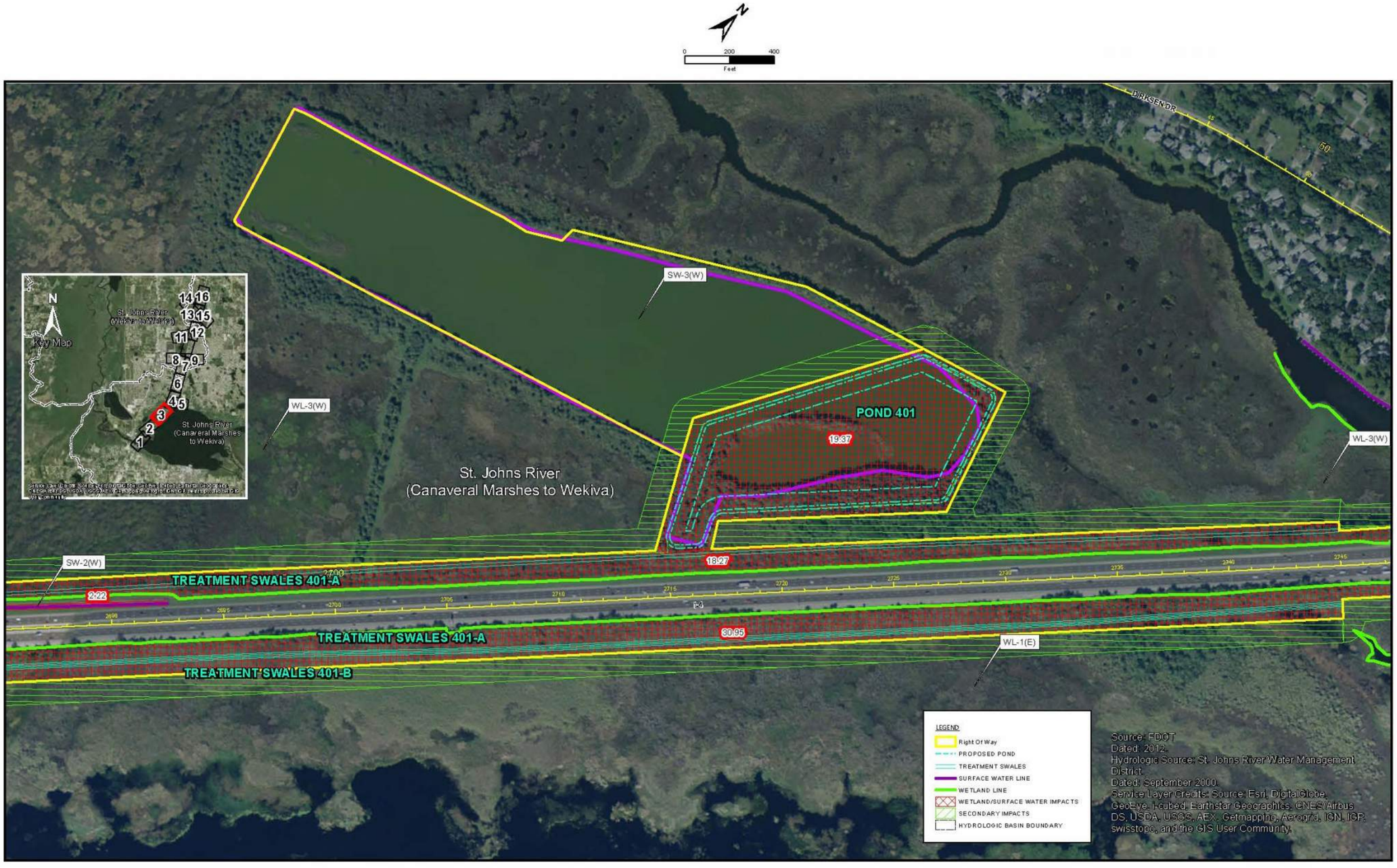


Figure 5.8 – Surface Water and Wetland Impacts Map (Sheet 3 of 16)

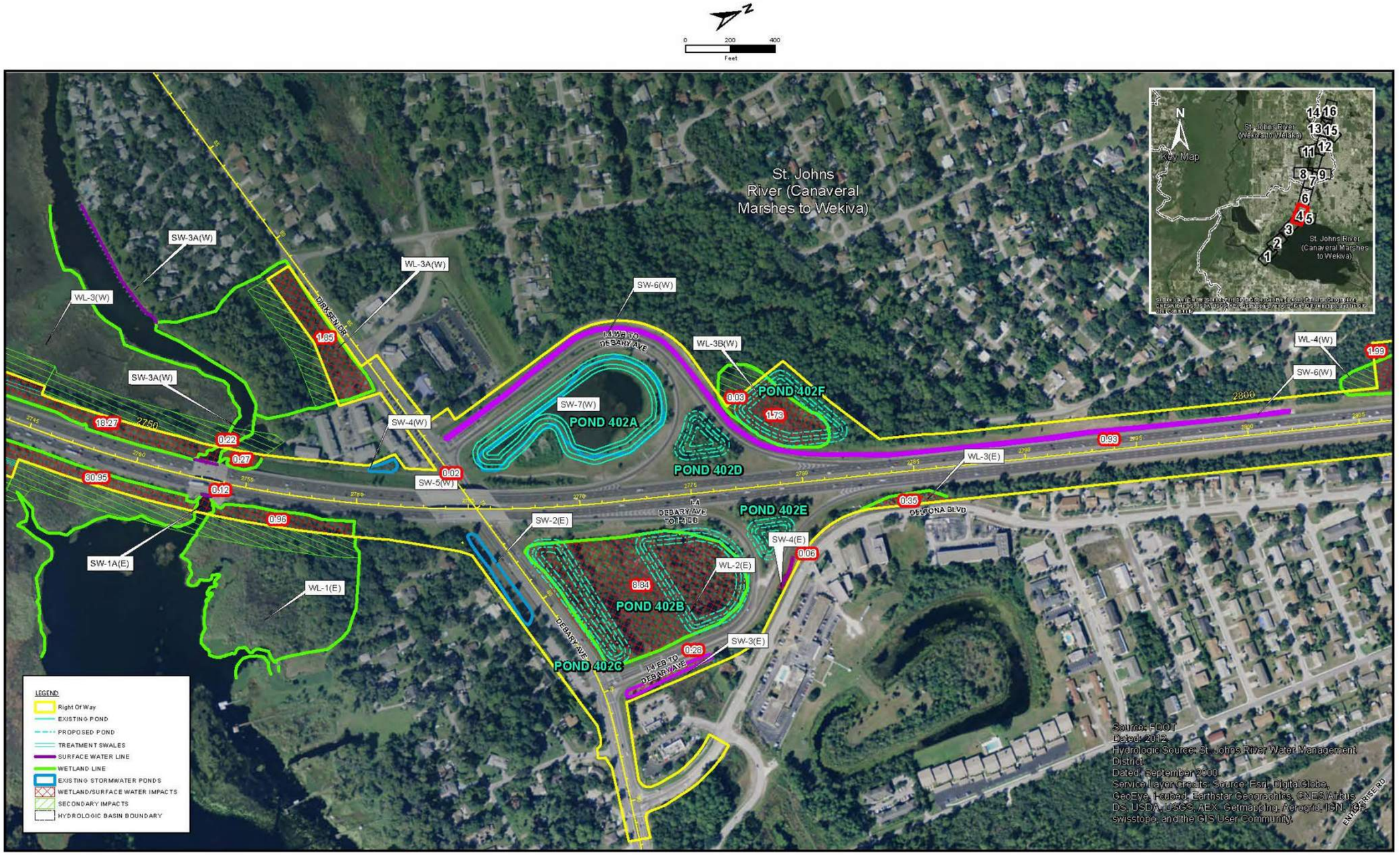


Figure 5.9 – Surface Water and Wetland Impacts Map (Sheet 4 of 16)

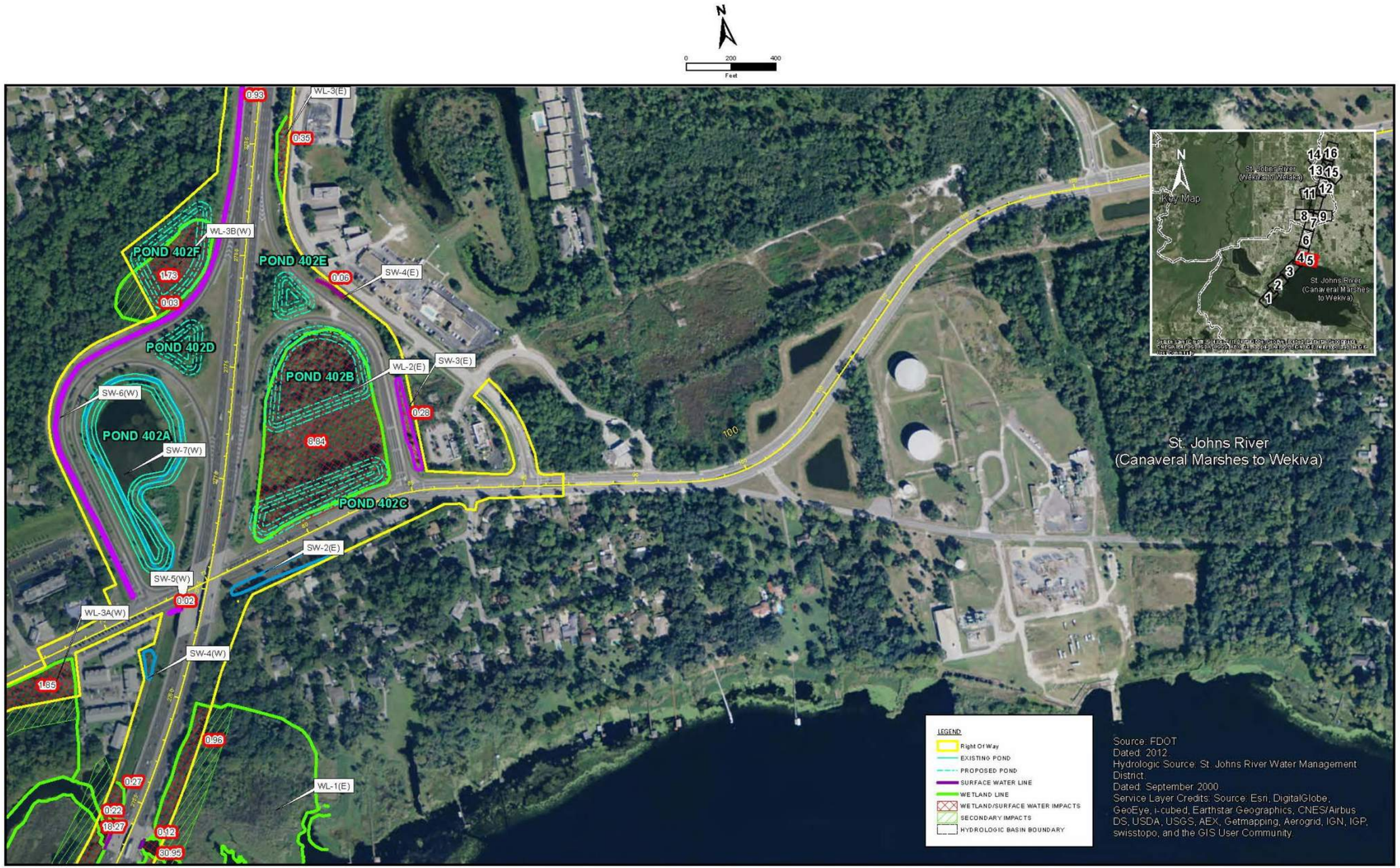


Figure 5.10 – Surface Water and Wetland Impacts Map (Sheet 5 of 16)

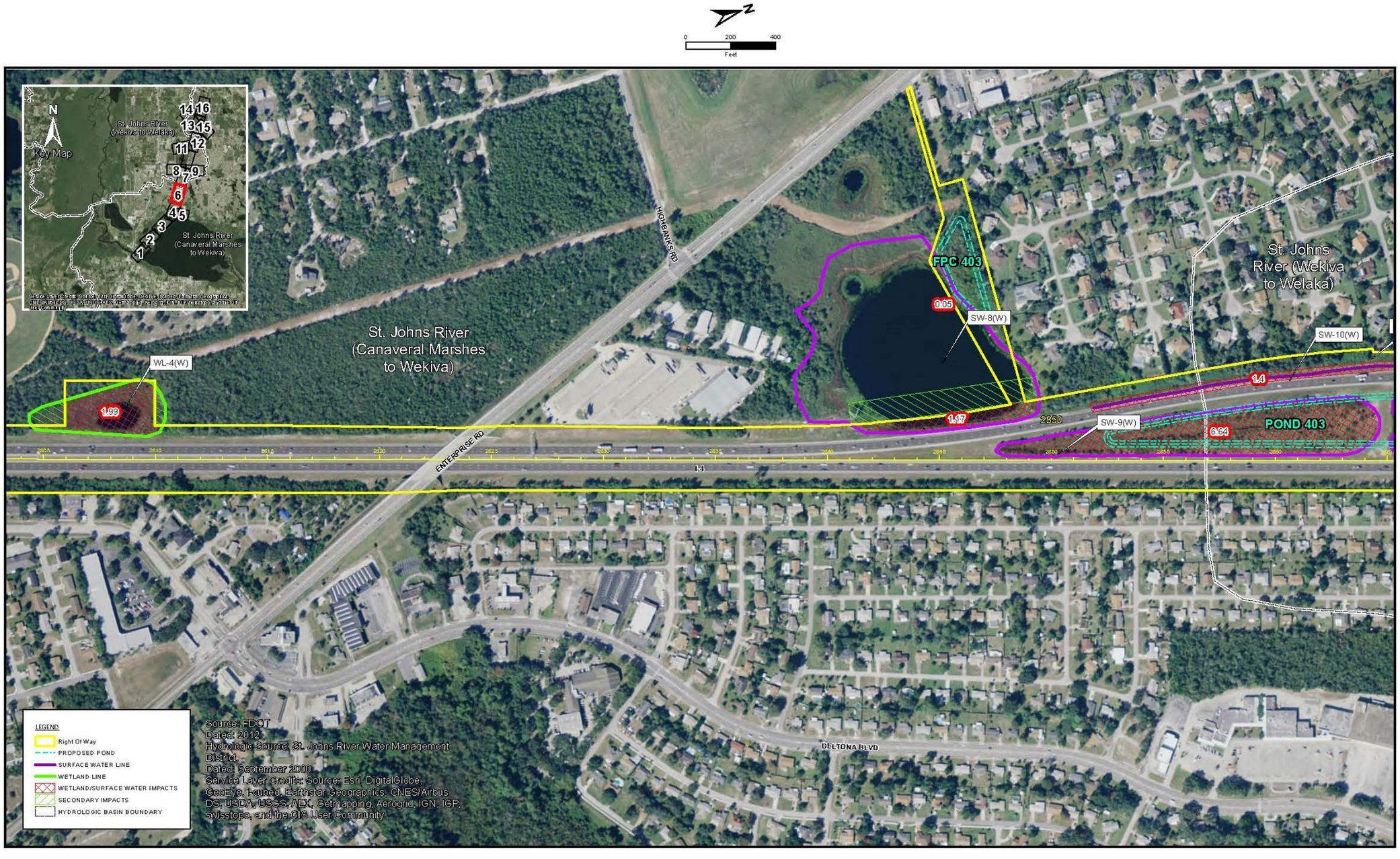


Figure 5.11 – Surface Water and Wetland Impacts Map (Sheet 6 of 16)

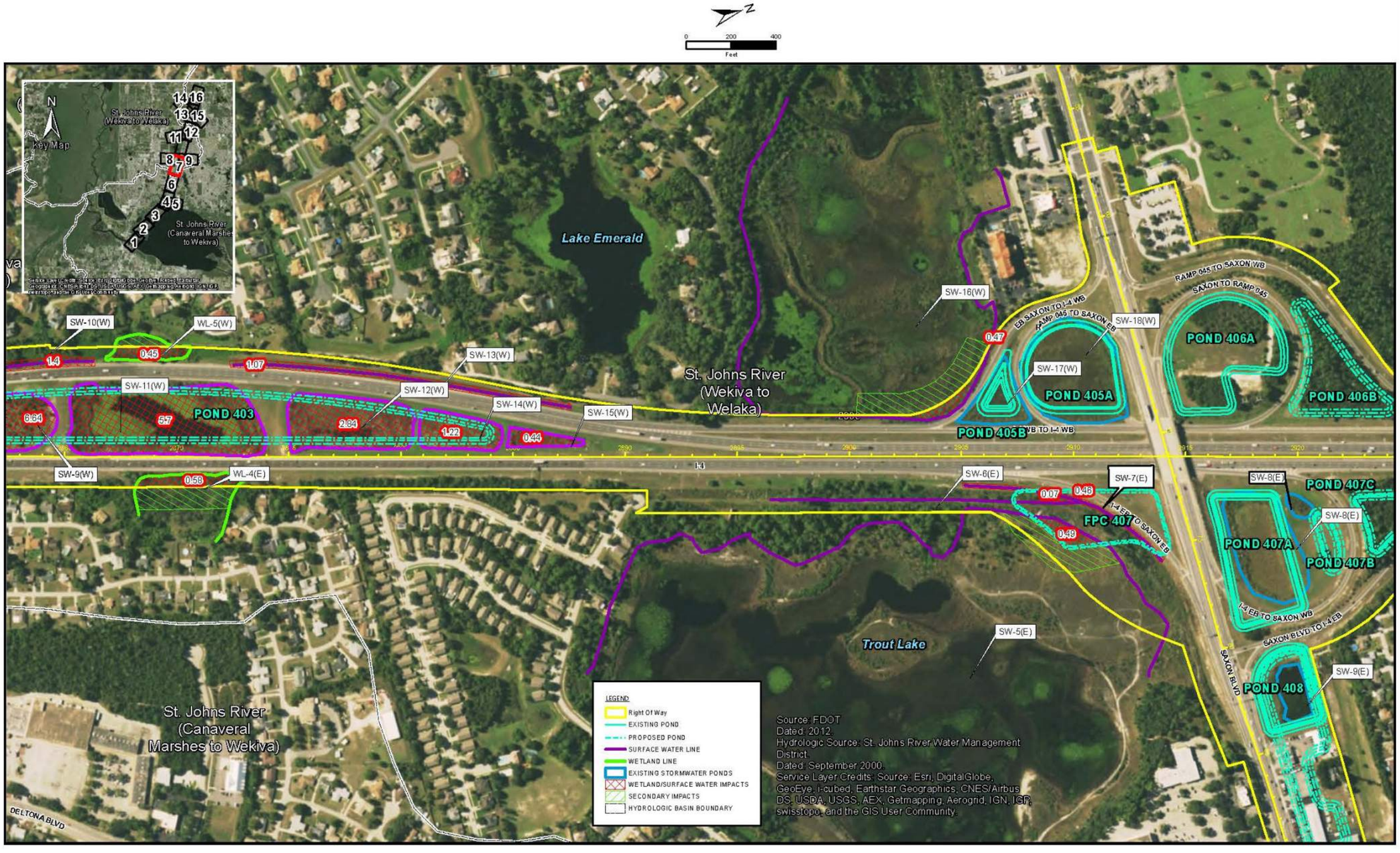


Figure 5.12 – Surface Water and Wetland Impacts Map (Sheet 7 of 16)

Figure 5.13 – Surface Water and Wetland Impacts Map (Sheet 8 of 16)

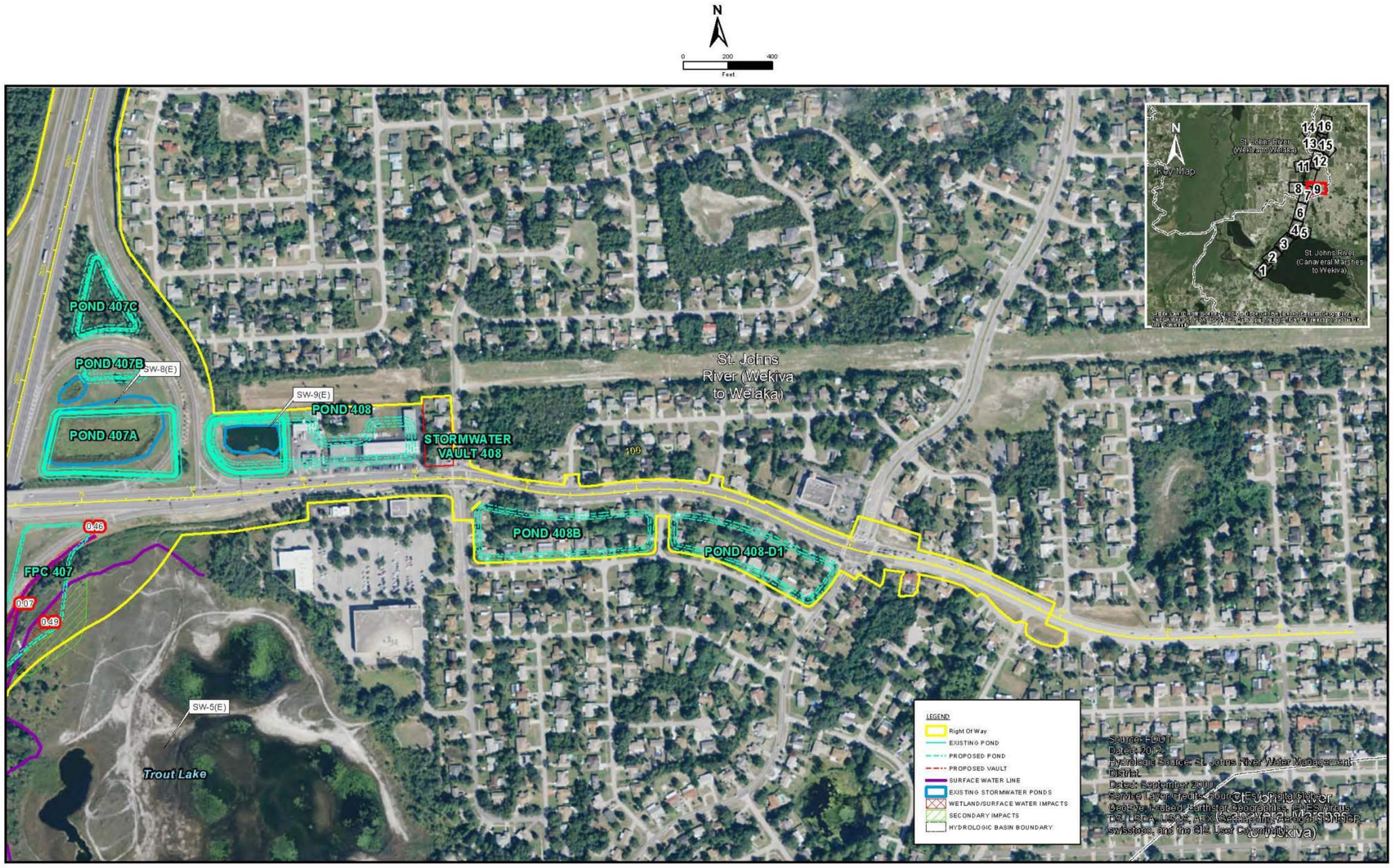


Figure 5.14 – Surface Water and Wetland Impacts Map (Sheet 9 of 16)

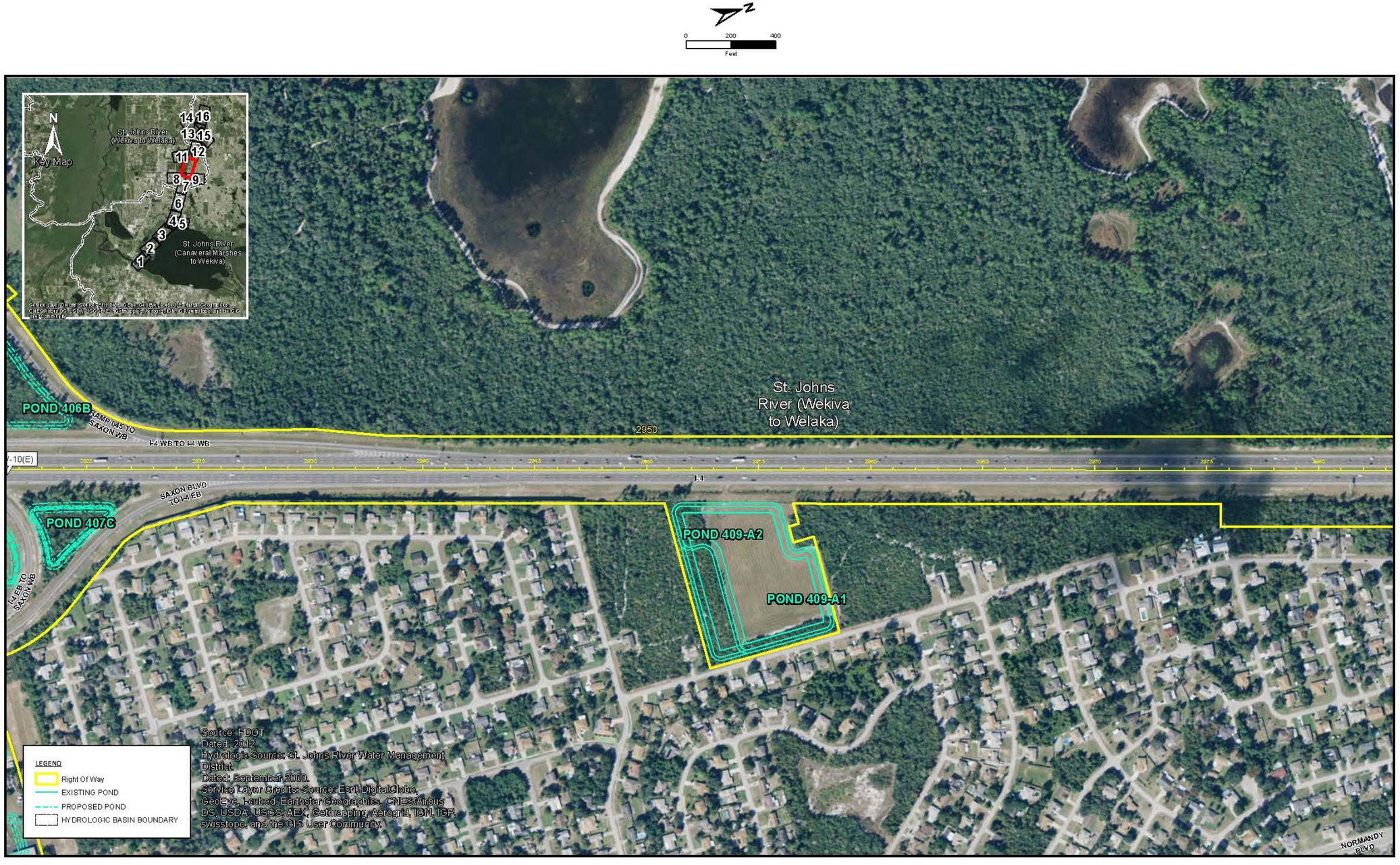


Figure 5.15 – Surface Water and Wetland Impacts Map (Sheet 10 of 16)

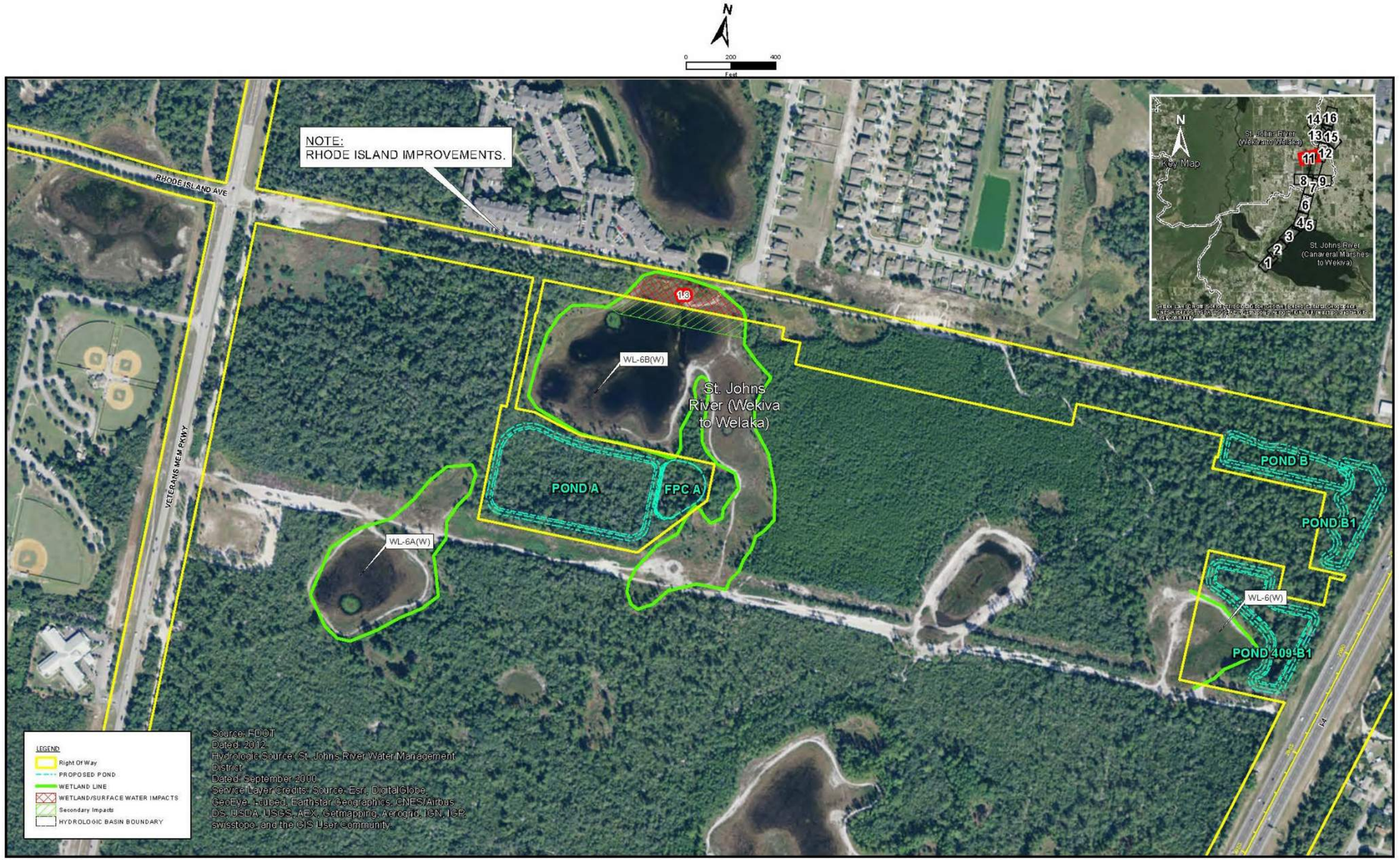


Figure 5.16 – Surface Water and Wetland Impacts Map (Sheet 11 of 16)

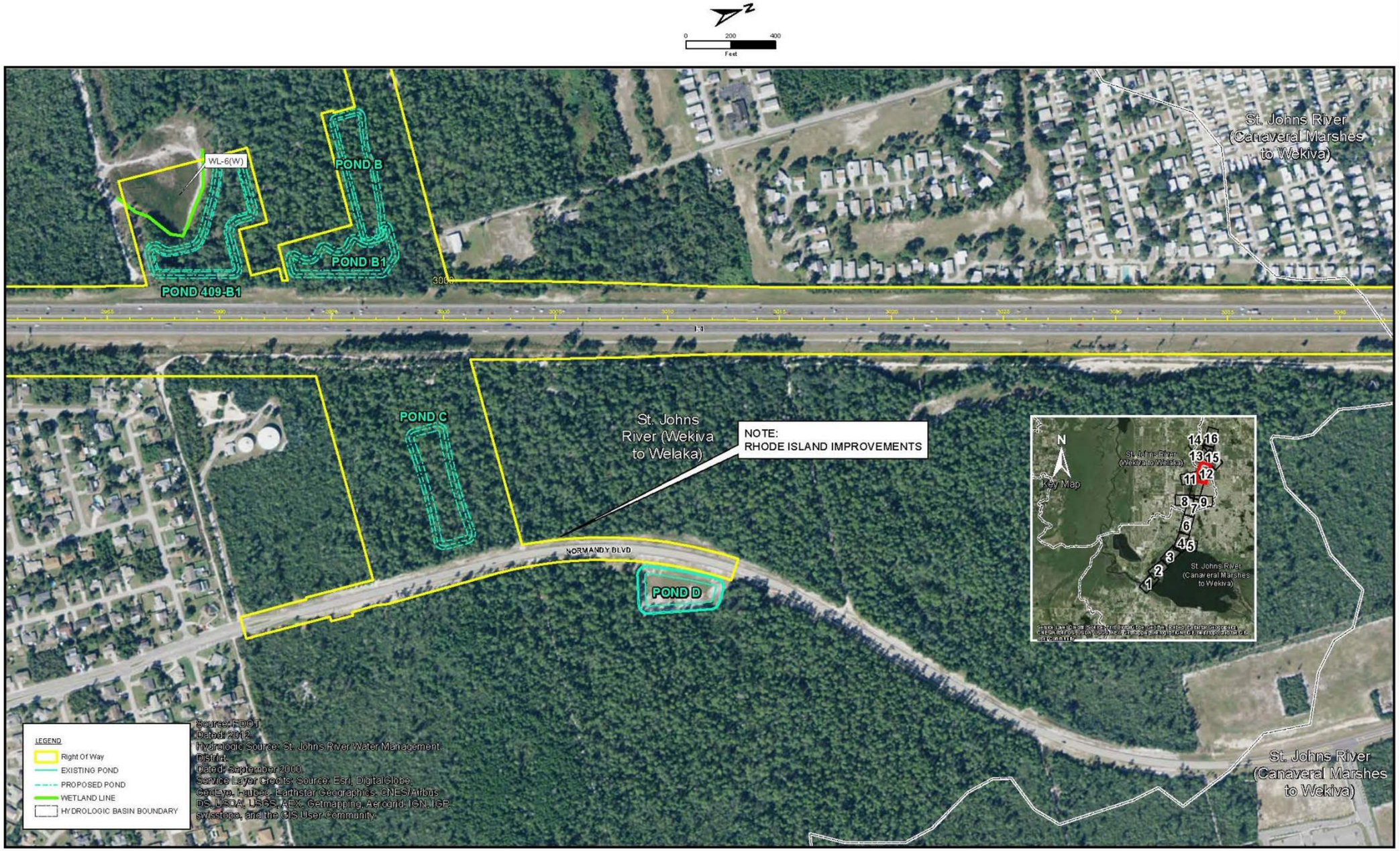


Figure 5.17 – Surface Water and Wetland Impacts Map (Sheet 12 of 16)

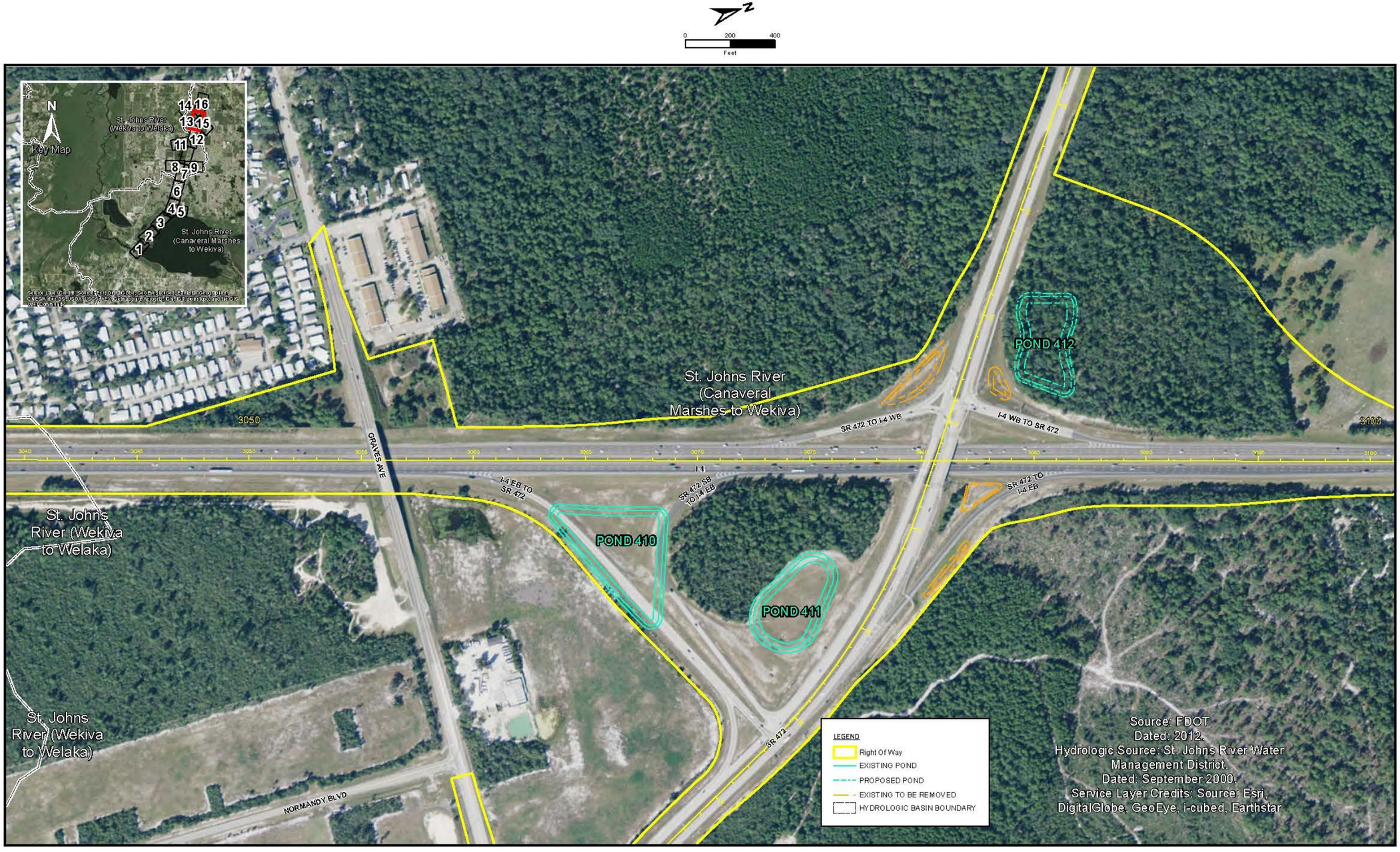


Figure 5.18 – Surface Water and Wetland Impacts Map (Sheet 13 of 16)

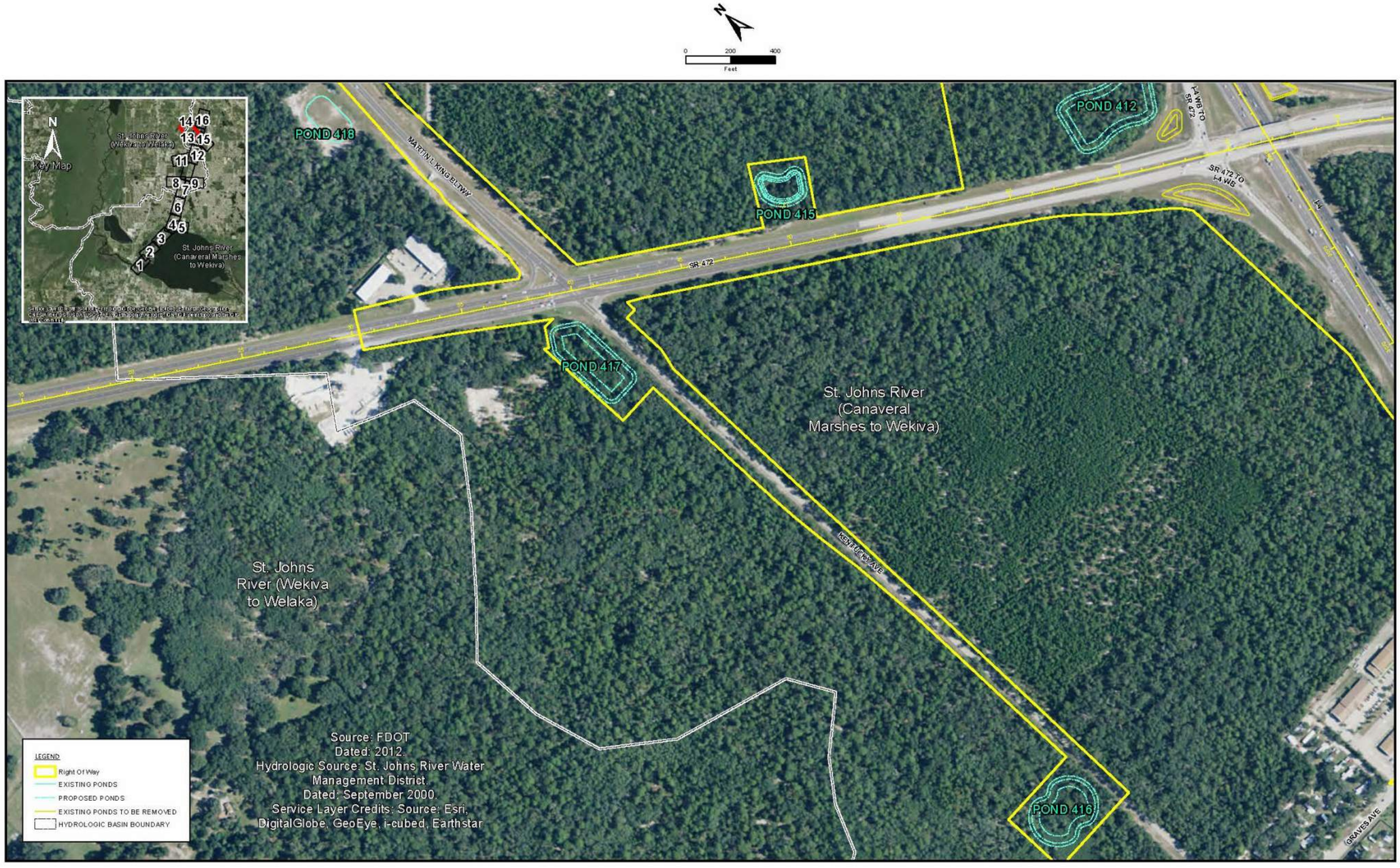


Figure 5.19 – Surface Water and Wetland Impacts Map (Sheet 14 of 16)

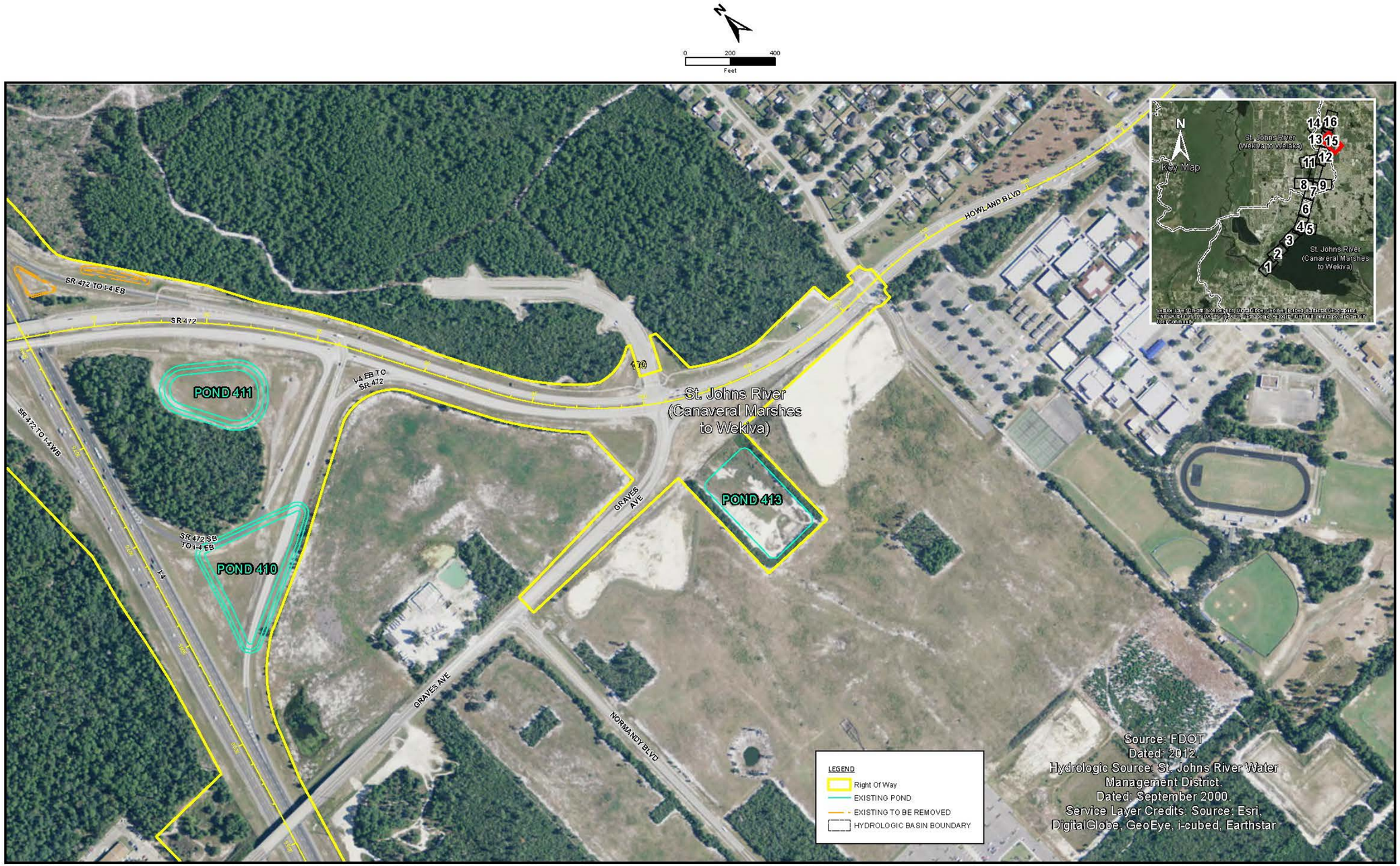


Figure 5.20 – Surface Water and Wetland Impacts Map (Sheet 15 of 16)

Figure 5.21 – Surface Water and Wetland Impacts Map (Sheet 16 of 16)

Table 5.4: Summary of Proposed Impacts to Jurisdictional Wetlands or Other Surface Waters

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirements (Y, N, N/A)**
Wetlands					
WL-1(E)	6150	31.91	31.91	Moderate	Y
WL-2(E)	6170	8.84	8.84	Low	Y
WL-3(E)	6170	0.35	0.35	Low	N
WL-4(E)	6180	0.58	0.58	Low	Y
WL-1(W)	6410	0.00	0.00	Moderate	N/A
WL-2(W)	6170	0.00	0.00	Low	N/A
WL-3(W)	6150	19.58	19.58	Moderate	Y
WL-3A(W)	6170	1.85	1.85	Low	Y
WL-3B(W)	6180	1.76	1.76	Low	Y
WL-4(W)	6410	1.99	1.99	Low	Y
WL-5(W)	6180	0.45	0.45	Low	Y
WL-6(W)	6430	0.00	0.00	Low	N/A
WL-6A(W)	6430	0.00	0.00	Moderate	N/A
WL-6B(W)	6430	1.30	1.30	Moderate	Y
Subtotal Area		**68.61**			
Subtotal Impact			**68.61**		
Other Surface Waters (Lakes, Upland-Cut Ditches and Swales, Reservoirs)					
SW-1(E)	5210	1.39	0.00	Moderate	N/A
SW-1A(E)	5210	0.12	0.12	Moderate	Y
SW-3(E)	5130	0.28	0.28	Low	N
SW-4(E)	5130	0.06	0.06	Low	N
SW-5(E)	5230	0.49	0.49	Moderate	Y
SW-6(E)	5130	0.07	0.07	Low	N
SW-7(E)	5130	0.46	0.46	Low	N
SW-1(W)	5210	0.00	0.00	Moderate	N/A
SW-2(W)	5130	2.22	2.22	Low	N
SW-3(W)	5330	56.46	19.37	Moderate	Y
SW-3A(W)	5210	0.22	0.22	Moderate	Y
SW-5(W)	5130	0.02	0.02	Low	N
SW-6(W)	5130	0.93	0.93	Low	N
SW-8(W)	5230	1.22	1.22	Moderate	Y
SW-9(W)	5340	6.64	6.64	Low	Y
SW-10(W)	5130	1.4	1.4	Low	N
SW-11(W)	5340	5.70	5.70	Low	Y
SW-12(W)	5340	2.84	2.84	Low	Y
SW-13(W)	5130	1.07	1.07	Low	N
SW-14(W)	5340	1.22	1.22	Low	Y

Table 5.4: Summary of Proposed Impacts to Jurisdictional Wetlands or Other Surface Waters

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirements (Y, N, N/A)**
SW-15(W)	5340	0.44	0.44	Low	Y
SW-16(W)	5230	0.47	0.47	Moderate	Y
Subtotal Area		**83.72**			
Subtotal Impact			**45.24**		
Project Total		**152.33**	**113.85**		

*Low= UMAM Score between 0 and 0.49 Moderate= UMAM Score between 0.50 and 0.79 High= UMAM Score of 0.80 or better.
**Y = Jurisdictional/Mitigation Required N = Jurisdictional/No Mitigation Required N/A = No Impacts Anticipated

5.6.3 Wildlife and Habitat

Potential environmental impacts include identifying impacts to wildlife and natural habitat within the proposed corridor. A supplemental *Endangered Species Biological Assessment (July 2016)* was prepared following guidelines presented in the PD&E Manual, Part 2, Chapter 27 (FDOT, 10/1/91) to identify wildlife species of known or potential occurrence and natural habitat types along the I-4 Segment 4 project corridor and to document potential project-related impacts. Particular attention was given to species that have been provided regulatory protection such as federal or state listed endangered, threatened, or otherwise sensitive species, as well as suitable habitat for those species.

The study area for the project corridor included all potential pond sites, the existing right-of-way of I-4 and a buffer of 500 feet beyond the boundary of the current right-of-way. The methodology used to conduct the wildlife assessment included research of existing records and review of literature published by the Florida Natural Areas Inventory (FNAI), the Florida Committee on Rare and Endangered Plants and Animals (FCREPA), the Florida Fish and Wildlife Conservation Commission (FFWCC), the U.S. Fish and Wildlife Service (USFWS) and other relevant scientific publications. Based on these sources, 68 species of animals and 64 species of plants have been identified as potentially occurring within Volusia County, though suitable habitat may not be available for all of the species along the project corridor. Of these species, 7 are federally listed animals, 4 are federally listed plants, 26 are state listed animals and 55 are state listed plants. During the field investigation, individuals or evidence of at least 40 different mammal, bird and reptile species were identified along the project corridor. Of those species, the following species appear on protected species lists developed by the USFWS, the FFWCC, FNAI or FCREPA: Florida scrub-jay, Southern bald eagle, wood stork, little blue heron, gopher tortoise, Florida sandhill crane, Florida black bear, osprey and American swallow-tailed kite.

Additional wildlife species observed during the field investigations included:

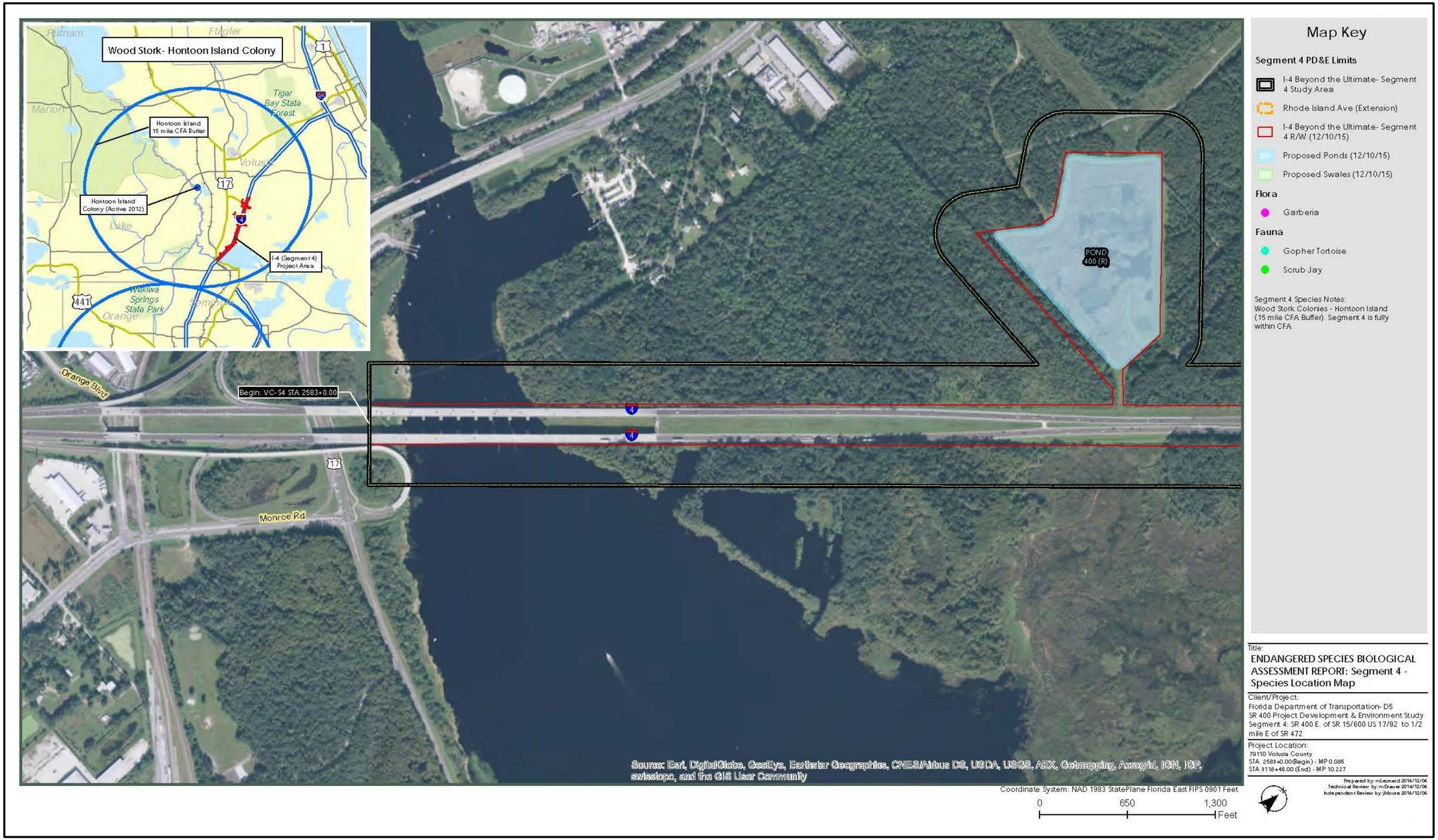
- red-winged blackbird
- anhinga
- green anole
- Cuban brown anole
- great blue heron
- cattle egret
- red-shouldered hawk
- green heron
- turkey vulture
- six-lined racerunner
- black racer
- rock dove
- American crow
- black vulture
- armadillo
- opossum
- catbird
- American coot
- common gallinule
- pocket gopher
- river otter
- wild turkey
- cormorant
- raccoon
- Florida cooter
- grackle
- gray squirrel
- barred owl
- feral pig

Numerous other wildlife and plant species, many of which are protected, have the potential to occur in Volusia County. Although evidence of the occurrence of those species was not observed during field inspections of the existing right-of-way or proposed pond sites, suitable habitat exists in those areas. The listed species identified during the field investigation along the project corridor are shown in Figure 5.22 through Figure 5.30. Details of the field surveys including species identification, soils and land use types, habitat locations and potential impacts to federal or state-listed species and other sensitive species are included in the. *Endangered Species Biological Assessment (July 2016)* prepared for this project.

Wildlife and plant surveys were conducted in potential impact areas such as proposed pond site areas and the existing right-of-way that contain habitat for one or more listed species. The following sections describe those species with the potential to occur within the study limits and potentially be impacted by the project.

Federally Listed Species

Informal Consultation for federally listed species was completed with USFWS and documented in February 2016, in which the USFWS concurred with the proposed effects determinations described in this report. All federally listed species within I-4 Segment 4 with the exception of the Florida scrub-jay were granted either “No Effect” or “May Affect, But not Likely to Adversely Affect.” Formal Consultation to address a “May Affect” determination and corresponding mitigation measures for the Florida scrub-jay was completed and is documented in the Biological Opinion dated July 5, 2016 which is included as part of the supplemental *Endangered Species Biological Assessment (July 2016)* prepared for this project.



Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+0.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDreuer 2014/12/04
Independent Review by: jMoore 2014/12/04

Figure 5.22 – Listed Species Observations Map (Sheet 1 of 9)

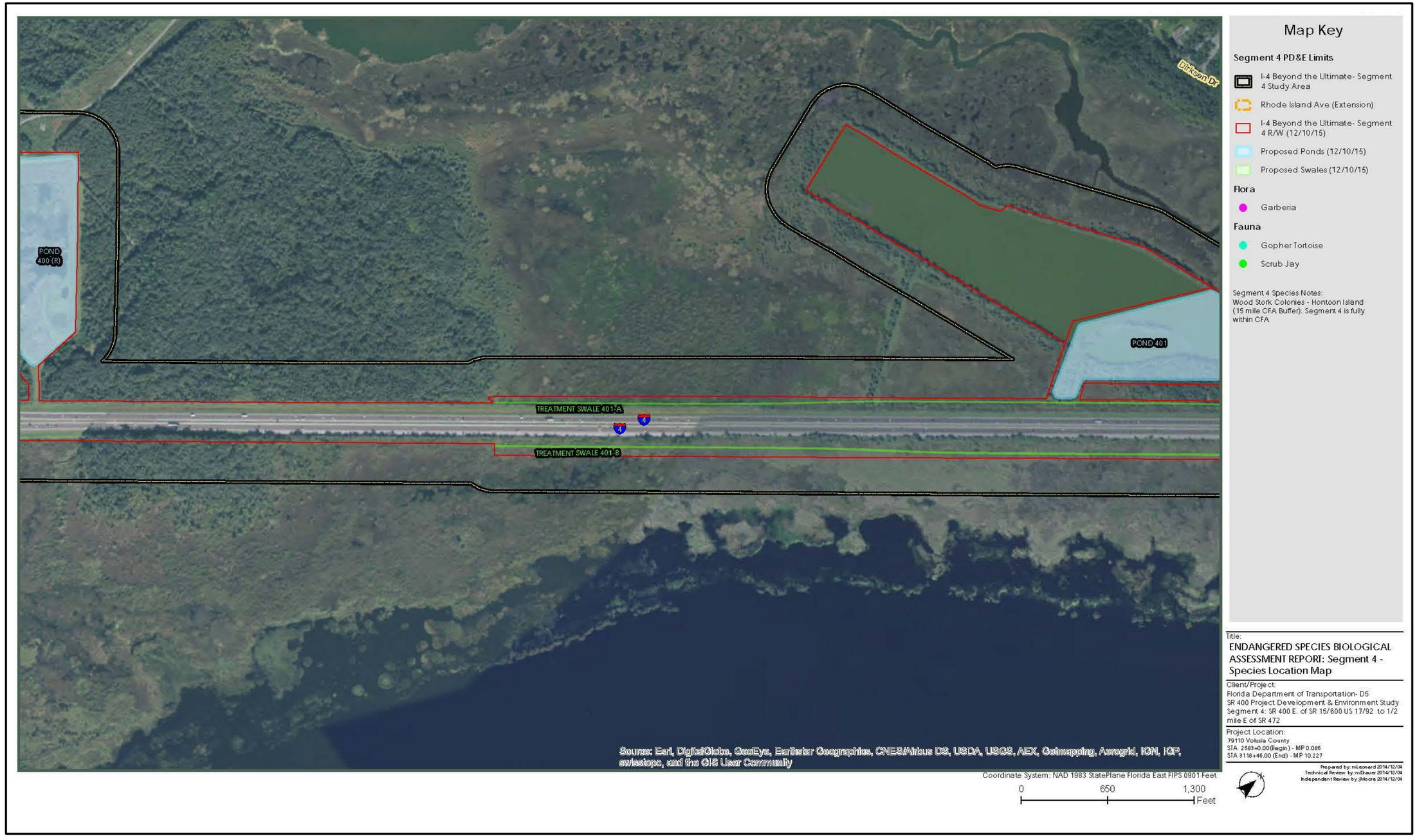
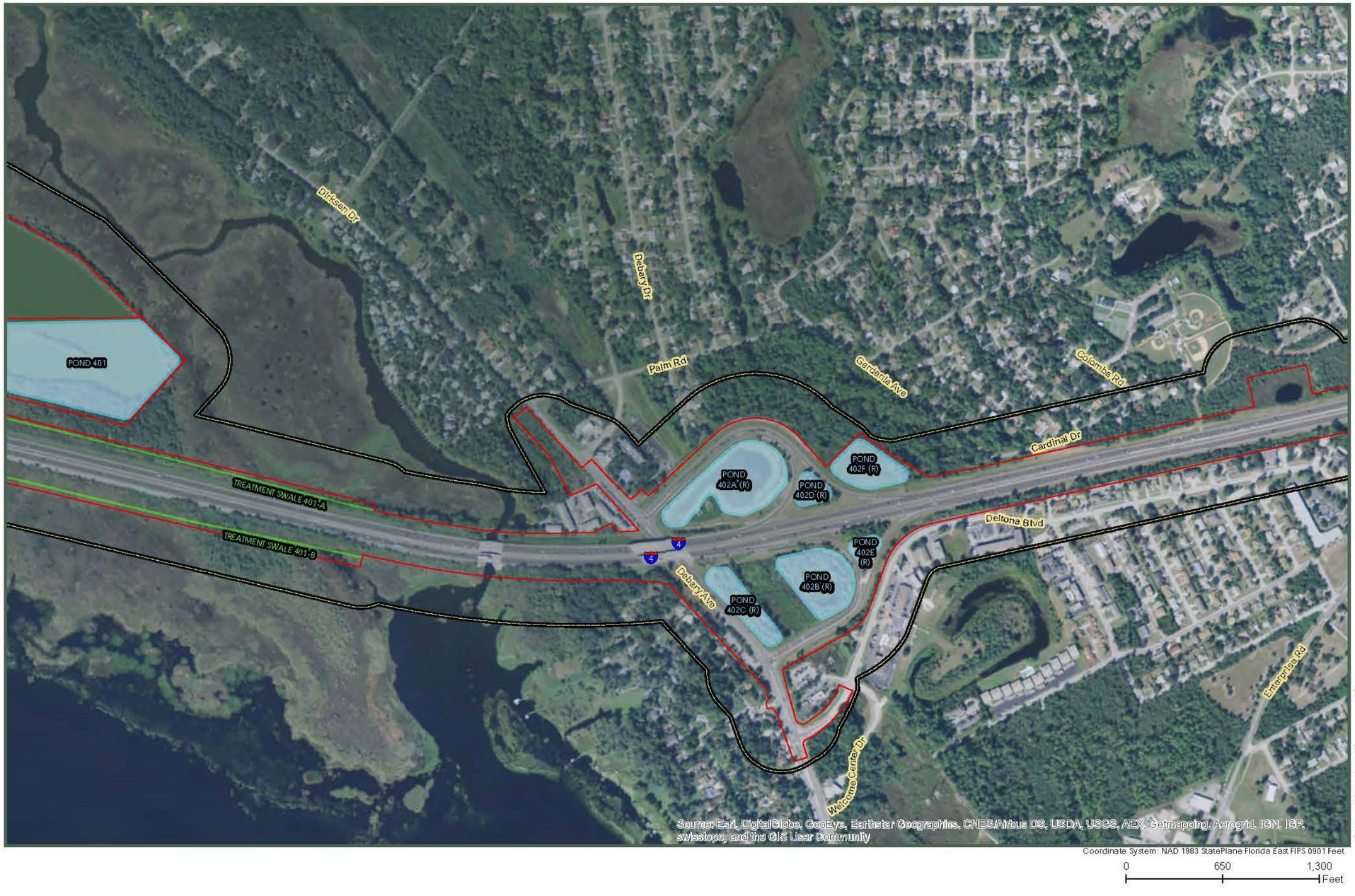


Figure 5.23 – Listed Species Observations Map (Sheet 2 of 9)



Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+00.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDreuer 2014/12/04
Independent Review by: jMoore 2014/12/04

Figure 5.24 – Listed Species Observations Map (Sheet 3 of 9)

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+00.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDreier 2014/12/04
Independent Review by: jMoore 2014/12/04

Figure 5.25 – Listed Species Observations Map (Sheet 4 of 9)

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+00.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDeere 2014/12/04
Independent Review by: jhMoore 2014/12/04

Figure 5.26 – Listed Species Observations Map (Sheet 5 of 9)

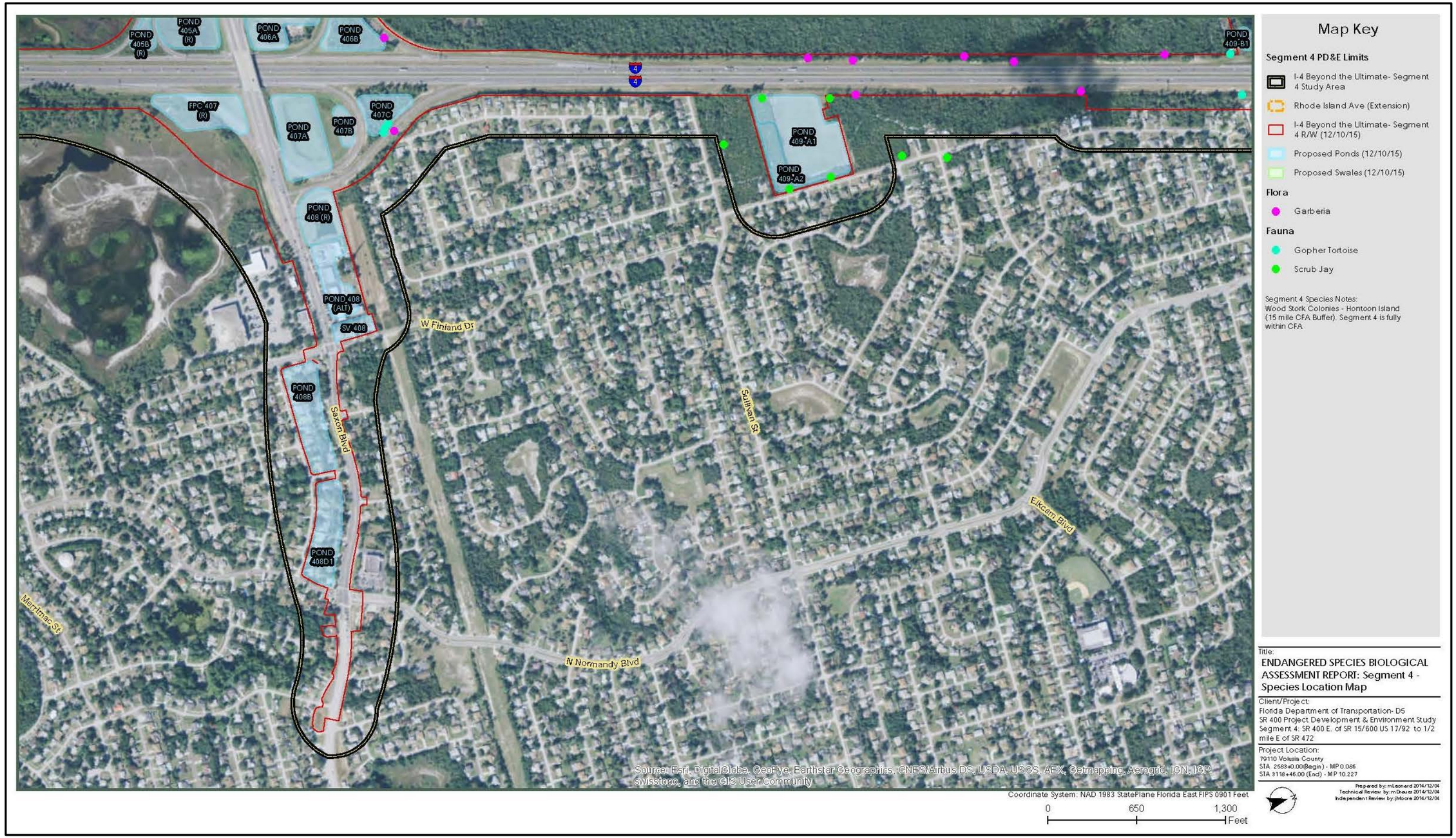


Figure 5.27 – Listed Species Observations Map (Sheet 6 of 9)

Figure 5.28 – Listed Species Observations Map (Sheet 7 of 9)

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+00.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDrauer 2014/12/04
Independent Review by: jMoore 2014/12/04

Figure 5.29 – Listed Species Observations Map (Sheet 8 of 9)

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate- Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate- Segment 4 R/W (12/10/15)
- Proposed Ponds (12/10/15)
- Proposed Swales (12/10/15)

Flora

- Garberia

Fauna

- Gopher Tortoise
- Scrub Jay

Segment 4 Species Notes:
Wood Stork Colonies - Hontoon Island (15 mile CFA Buffer). Segment 4 is fully within CFA

Title:
ENDANGERED SPECIES BIOLOGICAL ASSESSMENT REPORT: Segment 4 - Species Location Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+00.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2014/12/04
Technical Review by: mDreuer 2014/12/04
Independent Review by: jMoore 2014/12/04

Figure 5.30 – Listed Species Observations Map (Sheet 9 of 9)

Reptiles

Eastern Indigo Snake – The eastern indigo snake, listed by both the FFWCC and the USFWS as Threatened, is a habitat generalist, using a variety of habitats from mangrove swamps to xeric uplands. These snakes are cold-sensitive and require gopher tortoise burrows, other animal holes, or stumps for protection during winter months. These snakes require large tracts of natural, undisturbed habitat, and prefer to forage in and around wetlands for their preferred prey – other snakes. Numerous burrows were located within the project area and the potential for indigo snakes is moderate, though no indigo snakes were observed during field studies and the closest documented sighting is located approximately 4 miles to the northwest (2008 sighting near Blue Springs State Park). If an eastern indigo snake is observed during construction, the contractor will be required to cease any operation that might cause harm to the snake. If the eastern indigo snake does not move away from the construction area, both the FFWCC and USFWS will be contacted for further guidance. An effects determination was made by utilizing the USFWS Programmatic Key for the Eastern Indigo Snake (January 2010, updated August 2013). In accordance with the key, the project will implement the Standard Protection Measures for the Eastern Indigo Snake (USFWS, 2013), but may impact more than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) and likely has more than 25 active and inactive gopher tortoise burrows. Therefore, the project would receive a may affect determination under the key. The FDOT will make the commitment to have permits conditioned such that all active and inactive gopher tortoise burrows will be evacuated prior to site manipulation in the vicinity of the burrow, and would then qualify for a may affect, not likely to adversely affect determination.

Avian

Snail kite – The snail kite is listed as Endangered by both the USFWS and the FFWCC. This non-migratory, medium-sized raptor utilizes large open freshwater marsh habitats and lakes with shallow water. Nests are usually located in a low tree or shrub at the water's edge. The main staple of their diet is the apple snail, lending to their name. The project does occur within the USFWS consultation area for the snail kite though no observations have been documented within or near the project corridor. Adequate nesting and foraging habitat are located adjacent to the project area, but none of it occurs within the proposed right-of-way or pond site areas. Therefore, this project will have no effect on the snail kite.

Florida Scrub-Jay – The Florida scrub-jay, listed as Threatened by both the FFWCC and USFWS, is an endemic species found in Florida scrub habitats. This gregarious jay is a habitat specialist and typically lives in scrub and scrubby flatwoods habitats. Suitable habitat includes xeric oak scrub, along with scrubby pine flatwoods, sand pine scrub and any other type of habitat containing scrub oaks. During the initial PD&E field work in 1996-1998, numerous stations were sampled for the presence of scrub-jays at the interchanges at Saxon Boulevard and SR 472, and along both sides of I-4 between the interchanges. Cursory surveys for scrub-jays were conducted in September of

2013 to evaluate the presence of this species. During these surveys, at least four scrub-jays were observed responding to a call-back recording north of Saxon Boulevard adjacent to I-4 eastbound, and two more responded when the call was played in the northeastern quadrant of the interchange at SR 472. Two scrub-jays were observed at Pond Site 409 A1/A2 as well. A full five-day scrub-jay survey was conducted in October of 2014 to ascertain the population size and potential home range of scrub-jays within the project corridor. Additional design work after the completion of the survey necessitated a supplemental survey of four additional pond sites in April 2015. Based on the results of the 2014 formal survey, scrub-jays were observed at 11 of the 101 stations, as previously shown in Figure 5.22 through Figure 5.30. Scrub-jays were also observed at 4 more stations (out of the additional 18 stations surveyed) during the 2015 supplemental survey. These scrub-jays comprise five (5) separate families of which four (4) intersect with the existing or proposed FDOT right-of-way for the project. The remaining scrub-jays observed are either outside the right-of-way or were single incidental observations. The potential impacts for the recommended alternative as proposed would be: Family 1 at the westbound off-ramp from I-4 to Saxon Boulevard would have 0.90 acres of occupied territory impacted, Family 2 along eastbound I-4 at Pond Site 409 A1/A2 would have 1.22 acres of occupied territory impacted and Family 3 along I-4 eastbound at Pond Site 409 A1/A2 would have 2.56 acres of occupied territory impacted. Based upon the results of this survey, the project is anticipated to impact a total of 4.68 acres of occupied Florida Scrub-jay territory within the existing and/or proposed FDOT right-of-way and proposed recommended pond sites. Detailed analysis is provided in the supplemental report, Florida Scrub-jay Survey Technical Memorandum, prepared for FDOT. The proposed widening and stormwater ponds will have a direct impact on scrub-jays or scrub-jay habitat, and therefore, this project may affect the Florida scrub-jay. Mitigation to offset impacts to scrub-jay habitat will be provided via a contribution to The Nature Conservancy fund for West Volusia County Meta-population at a 2:1 ratio in accordance with the USFWS Florida Scrub-Jay Umbrella Habitat Conservation Plan. The Biological Opinion issued by USFWS in July 2016 provides the authorization for the impact to 4.68 acres of occupied Florida scrub-jay territory provided there is mitigation contribution to The Nature Conservancy Managed Funds for Public Lands to offset the impacts.

Red-Cockaded Woodpecker – This species is listed as Endangered by the USFWS and Threatened by the FFWCC. The colonial red-cockaded woodpecker (RCW) is a habitat specialist, requiring stands of over-mature pine that have contracted the red-heart disease. RCW's require diseased trees for cavity building, which they use for nest and roost cavities. Preferred pine stands need to have a fairly open canopy, with a sparse subcanopy to allow easy flight. RCWs must also have ample foraging habitat consisting of younger pines surrounding the cavity trees. No suitable nesting habitat was observed in the impact area within the project limits. The project occurs within the designated USFWS consultation area, though is not documented as having any nesting birds recorded within the project vicinity. The previous PD&E Study (May 2000) indicated that no

suitable habitat or any documented RCW sightings within the proposed right-of-way or pond sites had occurred. Additionally, no suitable habitat for nesting or foraging was identified within the vicinity of the project during field surveys. Therefore, this project will have no effect on the red-cockaded woodpecker.

Wood Stork – This species, now listed as Threatened by the USFWS, is the only true species of stork nesting in the United States. This reclassification does not change any conservation or protection measures for the wood stork under the Endangered Species Act (ESA), rather it recognizes the recovery and the positive impact that conservation efforts have had on breeding populations of storks. Feeding areas for wood storks include marshes, pools, or ditches in which fish congregate. This species typically nests in mixed woodlands comprised of such overstory species as cypress, gum and southern willow; pond apple and mangrove swamps may also be utilized for nesting. According to the USFWS data, the project is located within the 15-mile Core Foraging Area (CFA) of one wood stork colony (Hontoon Island Colony) as shown previously in Figure 5.22 through Figure 5.30. Foraging areas within the study area include drainage features, small water bodies, stormwater ponds, and the wetlands and shoreline associated with Lake Monroe and the St. Johns River. Utilizing the *Corps of Engineers and U. S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in Central and North Peninsular Florida* (2008), the project is not within 2,500 feet of an active colony site, will likely impact Suitable Foraging Habitat (SFH) of greater than 0.5 acres and is located within the CFA of one wood stork colony (*Hontoon Island*). The estimated direct impacts to wetlands include approximately 58.88 acres of jurisdictional wetland systems and 44.66 acres of other surface waters. FDOT commits to provide SFH compensation within the Service Area of a Service-approved wetland mitigation bank(s) within the CFA, and the project is not contrary to the Service's *Habitat Management Guidelines for the Wood Stork in the Southeast Region* and in accordance with the Clean Water Act section 404(b)(1) guidelines. There are six currently permitted mitigation banks that include the project corridor within the bank service area that have credits available to offset impacts to SFH. FDOT will coordinate with the permitting agencies during the permitting phase of the project on compensatory mitigation and minimization of impacts to suitable foraging habitat. These actions should result in no net loss of foraging habitat; therefore, the project may affect, but is not likely to adversely affect the wood stork.

Southern Bald Eagle – The southern bald eagle was delisted from both the US Endangered Species Act and FFWCC imperiled list, though it is still protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS issued the National Bald Eagle Management Guidelines in May 2007 while Florida adopted a Bald Eagle Management Plan (BEMP) in April 2008, written closely to follow the federal guidelines. The BEMP provides guidelines and recommendations to help people avoid violating state and federal eagle laws. The BEMP also outlines strategies to maintain the Florida population of bald eagles at or above current levels.

The BEMP goal is to, "maintain a stable or increasing population of eagles in Florida in perpetuity." Bald eagles almost always nest in the tops of living or dead tall trees along or very near lakes and rivers; these water bodies provide fish, typically their preferred food. Bald eagles generally avoid areas with extensive human activity, so management guidelines must be considered before any construction can be initiated within 660 feet of an active southern bald eagle nest. A juvenile bald eagle was observed flying over I-4 at the northern end of the St. Johns River Bridge. Four bald eagles' nests are recorded to be in the general vicinity (within 1 mile) of the project corridor (SE061, VO014, VO073, and VO012). However, none of these nests are located within 660 feet of the proposed right-of-way or any of the proposed pond sites. For that reason, the project will have no effect on the southern bald eagle.

Mammals

Florida Manatee - This species is listed as Threatened by both the USFWS and the FFWCC and has designated critical habitat along the St. Johns River and within the western and northern shores of Lake Monroe. Florida manatees are found in freshwater, brackish, and marine environments. Typical coastal and inland habitats include coastal tidal rivers and streams, mangrove swamps, salt marshes, freshwater springs, and vegetated bottoms. As herbivores, manatees feed on the wide range of aquatic vegetation that these habitats provide. Shallow seagrass beds, with ready access to deep channels, are generally preferred feeding areas in coastal and riverine habitats (Smith 1993). Manatees use springs and freshwater runoff sites for drinking water; secluded canals, creeks, embayments, and lagoons for resting, cavorting, mating, calving and nurturing their young; and open waterways and channels as travel corridors. Manatees occupy different habitats during various times of the year, with a focus on warm water sites during winter. Manatees have also adapted to changing ecosystems in Florida. Industrial warm water discharges and deep-dredged areas are used as wintering sites, stormwater/freshwater discharges provide manatees with drinking water. The impacts proposed along the roadway at Lake Monroe will not directly impact the lake but rather the wetlands adjacent which are largely inaccessible to the manatee, and therefore, according to the Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida (April 2013), this project may affect, but is not likely to adversely affect the Florida manatee.

Federally Listed Plant Species

A review of agency databases and a field review of the project corridor indicate that there have been few reported occurrences of federally listed plant species within the proposed project area. USFWS currently shows that two (2) federally listed species have been demonstrated to have the potential to occur within Volusia County, the Okeechobee gourd and Rugel's pawpaw. Information from the previous PD&E Study (May 2000) indicated that one listed plant was observed in this segment. Vegetation surveys conducted in 1997 by project scientists identified pigeon wings in some scrubby areas outside of the right-of-way at the Saxon Boulevard interchange and SR 472 interchange. This

plant is not listed as occurring within Volusia County according to current information provided on the USFWS website. A follow up protected plant field survey covering the area of proposed right-of-way widening and pond sites was conducted in May 2013 by project botanists and other biologists. No federally listed plant species were identified within the proposed widening impact area or pond sites during the field investigations. No direct or indirect impacts to federally listed plant species are likely to occur; thus, this project may affect, but is not likely to adversely affect federally listed plant species.

State Listed Species

Mammals

Sherman's Fox Squirrel – The Sherman's fox squirrel, listed by the FFWCC as a Species of Special Concern, is the largest of the three fox squirrel subspecies that occur in Florida. They have large ranges that can span over 80 acres. Optimum habitat for this subspecies is predominantly longleaf pine-turkey oak sandhills, although they are also reported to occur in mesic forested areas, as well. Some potential habitat is present within the project area, although Sherman's fox squirrels were not observed during the site investigations for this project. The amount of potential habitat for this species impacted by the project will be minimal. Therefore, the proposed project is not likely to adversely affect the Sherman's fox squirrel.

Florida Black Bear – The Florida black bear is a very wide-ranging species formerly listed as Threatened by the FFWCC. Preferred habitat of the black bear includes dense forest, both upland and wetland, but the bear is often encountered in other areas during its seasonal movements. The bear was removed from the list in August 2012 after the approval of the Florida Black Bear Management Plan. The plan was implemented to set a strategy in place to address challenges in bear management, to manage for a sustainable bear population state-wide, and reduce human-bear conflicts. Going forward, FFWCC will continue to engage with landowners and regulating agencies to guide future land use to be compatible with the objectives of the Bear Management Plan. The plan divides the state into seven Bear Management Units (BMU's) which support the seven sub-populations of bear across the state. The project occurs within the Central BMU, which includes Alachua, Bradford, Brevard, Clay, Flagler, Lake, Marion, Orange, Putnam, Seminole, St. Johns, Sumter, and Volusia counties and contains the Ocala/St. Johns subpopulation, named after the Ocala National Forest and St. Johns River watershed. The Central BMU is the only BMU with a subpopulation estimated at 1,000 bears (the highest in the state), which is one of the criteria that determine a species risk for extinction. Black bears are common in Volusia County, especially to the north of the project corridor where bear kills on the I-4 have been recorded. As no further fragmentation of bear habitat is proposed, the project is not likely to adversely affect the Florida black bear.

Reptiles

Florida Pine Snake – This snake, listed as Threatened by the FFWCC, is another tortoise burrow commensal organism, utilizing both tortoise burrows and the tunnels of pocket gophers for feeding and shelter. Preferred habitat of the pine snake is xeric uplands, and to a lesser extent, flatwoods and other mesic uplands. Some habitat is available within the project, especially where gopher tortoise burrows and pocket gopher mounds were observed (see Figure 5.22 through Figure 5.30). Both the pocket gophers and the pine snakes live nearly their whole lives underground and are very hard to observe directly. Earth work in suitable habitat may impact subterranean pine snakes. With the relocation of commensal organisms from gopher tortoise burrows if impacted, the project is not likely to adversely affect the Florida pine snake.

Gopher Tortoise – The occurrence of this species, listed as Threatened by the FFWCC and as a Candidate species by USFWS, is a key factor in the determination of habitat suitability for certain other listed species because of the large number of other animals that use tortoise burrows for one or more of their life requisites. While it is common to find gopher tortoise burrows in most types of upland communities, the preferred habitats include xeric uplands and disturbed, ruderal areas.

Approximately 30 burrows were observed along the corridor within the right-of-way and proposed potential ponds sites during a preliminary survey. It is likely that impacts to these areas cannot be avoided; therefore, relocation of the tortoises and their commensals will be necessary. A conservation permit should be applied for from the FFWCC, and the relocation of any burrows to be impacted should be carried out within 30 days of construction (see Figure 5.22 through Figure 5.30). As FDOT will make the commitment to relocate all potentially impacted gopher tortoise burrows, the project may affect, but is not likely to adversely affect the gopher tortoise.

Short-tailed snake – The short-tailed snake, listed as Threatened by the FFWCC, belongs to a monotypic genus that is endemic to Florida. Rarely seen due to its earth-burrowing tendencies, it is restricted to xeric uplands, primarily longleaf pine-turkey oak sandhills and sand pine scrub, for its habitat requirements. Herpetologist Paul Moler (FFWCC-retired) reports short-tailed snakes occur in a wider range of ecosystems than indicated in the scant literature on the species, and may be found where prey (small snakes) and loose soils occur in North-Central Florida. Suitable habitat (sand pine scrub) is not present on this project, nor was any of these snakes observed during any field surveys. Due to the lack of xeric habitat, it is anticipated that this project will have no effect on the short-tailed snake.

Avian

Florida Sandhill Crane – This non-migratory subspecies, listed as Threatened by the FFWCC, can often be seen foraging in improved pastures, open fields and along the roadside. Sandhill cranes nest in freshwater marshes and feed in adjacent fields and pastures. Adequate nesting habitat is found within the freshwater marshes located adjacent to the project corridor, and foraging habitat was

found within the project limits. Sandhill cranes were observed flying over the project area several times during multiple surveying events, and were observed foraging at Pond Site 406A. No evidence of nests was observed within the project area. The proposed project is not likely to adversely affect the sandhill crane.

Southeastern American Kestrel – This resident subspecies of the kestrel, listed as Threatened by the FFWCC, can be distinguished from its cousin, *F. s. sparverius*, a winter migrant, by its smaller size. The Southeastern kestrel requires three components for optimal habitat: large, open fields for foraging, snags for nesting, and snags, fence lines or telephone poles as perching sites from which to hunt. No kestrels were observed along the project corridor, nor within any pond sites or along the portion of the project to be widened. No areas within the project corridor meet this definition for optimal habitat. Therefore, this project is not likely to adversely affect this species.

Least tern – Historically, least terns nested on sandy beaches and lakeshores, but presently, they nest almost exclusively on man-made substrates such as spoil islands and gravel rooftops. This small tern, listed as Threatened by the FFWCC, is still fairly common in localized areas. However, none have been reported in the project study area. Prime nesting areas are minimal, so this species has only a low possibility of occurring along the project corridor, therefore the proposed project will have no effect on the least tern.

Wading Birds – Wading bird rookeries were not observed and are not known to occur within or adjacent to the study area. Potential foraging habitat for the little blue heron, roseate spoonbill, reddish egret and tri-colored heron, all classified as Threatened by the FFWCC, occurs within the limits of the study area. Both little blue heron and white ibis were observed during field surveys. No wetlands providing critical foraging or nesting habitat for these avian species will be impacted by the proposed project and indirect impacts to wading birds are not anticipated. Therefore, the proposed project is not likely to adversely affect the wading bird population in the region.

State Listed Plant Species

A review of available information revealed that 55 state listed plant species have the potential to occur within the habitats located within the project area in Volusia County. One state listed plant species was observed during the field assessment of project area or during the previous PD&E Study (May 2000). Vegetation surveys conducted in 1997 identified Garberia within scrubby areas north of Saxon Boulevard. This plant is locally common in this area and was identified during listed plant surveys conducted in May 2013 and is identified on the Species Location Maps (see Figure 5.22 through Figure 5.30). Therefore, the proposed project is not likely to adversely affect state listed plant species.

Other Sensitive Species

Migratory Birds

The Migratory Bird Conservation Commission was established on February 18, 1929 by the passage of the Migratory Bird Conservation Act. It was created and authorized to consider and approve any areas of land and/or water recommended by the Secretary of the Interior for purchase or rental by the U.S. Fish and Wildlife Service under the Act. In 1989, the Commission acquired the additional responsibility to approve project funding under the North American Wetland Conservation Act. This Act provides for Federal funding to encourage partnerships to protect, enhance, restore, and manage wetland and other habitats for migratory birds and other fish and wildlife to carry out the North American Waterfowl Management Plan. Waterfowl are the most prominent and economically important group of migratory birds of the North American Continent. National Migratory Bird Areas in Florida include Arthur R. Marshall, Caloosahatchee, Cedar Key, Chassahowitzka, Egmont Key, Great White Heron, Hobe Sound, J.N. Ding Darling, Lake Woodruff, Matlacha Pass, Merritt Island, Okeefenokee, Pine Island, Pinellas, St. Marks, and St. Vincent. None of these National Migratory Bird Areas are located within a one-mile radius of the project corridor. If the project results in direct impacts to wetland habitat or surface water features (i.e. roadside ditches) that could be utilized by migratory birds, there may be implications regarding these species. Impacts to wetlands will be mitigated for at approved mitigation sites within the affected watershed and will offset any potential impacts to migratory birds from this project.

Essential Fish Habitat (EFH)

As part of this PD&E evaluation, the *Essential Fish Habitat Technical Memorandum, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (April 2016)* was prepared to establish a baseline level assessment of the existing marine resources within the proposed project area. It was determined by staff at the National Marine Fisheries Service (NMFS) that Lake Monroe and the St. Johns River are EFH for white shrimp. The EFH Assessment is intended to satisfy consultation requirements for the NMFS and other review agencies. The project proposes to expand the current six-lane configuration to the ultimate ten-lane design which will impact areas on both sides of the highway at Lake Monroe and the St. Johns River. The expansion of the travel lanes and the addition of treatment swales are anticipated to impact both EFH and non-EFH wetlands along the corridor. Wetland areas associated with Lake Monroe and the St. Johns River that are adjacent to the roadway and that fall within 3.5’ and 5.0’ contours are classified as EFH. Impacts were quantified by utilizing EFH mapped layers produced during the field investigations with the proposed roadway and drainage design provided during the study. The project will impact approximately 33.36 acres of herbaceous wetlands and 5.03 acres of forested wetlands associated with Lake Monroe and the St. Johns River, and additional non-EFH wetlands in other areas. In consultation with FDOT, the best option for mitigation to offset potential EFH impacts would be to utilize bridges to provide additional access to the wetlands west of the existing

I-4 roadway at Lake Monroe. As a result, the project design includes a 100-foot bridge in each direction, between the St. Johns River and Padgett Creek. The project will be evaluated for unavoidable impacts during permitting, and the amount of compensatory mitigation required to offset these impacts will be determined at that time. NMFS concurred with the analysis and provided approval of the design and authorization of the proposed impacts in June 2016, with the provision that FDOT would commit to a monitoring program to assess tidal exchange at the bridge locations and allow resource agencies to assess performance standards and provide a basis for corrective actions if necessary.

5.6.4 Archaeological and Historical Resources

Archaeological and historical resources within the I-4 Segment 4 corridor were documented in the *Technical Memorandum: Cultural Resource Assessment Survey of Proposed Improvements to Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92 (Seminole/ Volusia County Line) to ½ Mile East of SR 472 (CRAS) (December 2015).* The CRAS was conducted to comply with Section 106 of the National Historic Preservation Act (as amended) and its implementing regulation 36 CFR Part 800 (Protection of Historic Properties). All work was performed in accordance with Part 2, Chapter 12, of the Florida Department of Transportation (FDOT) PD&E Manual (revised January 1999) and the Cultural Resource Management Handbook (revised November 2004) and is consistent with the Florida Division of Historical Resources (FDHR) recommendations for such projects as stipulated in the FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The CRAS study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code.

The CRAS serves as an addendum to two previous reports (ACI 1997; ACI and Janus Research 1999). The regional prehistory and history of the current project area are consistent with those described in the previous reports and are not repeated here. The purpose of the survey is to update the previous I-4 corridor studies, which involves locating, identifying, and bounding archaeological resources within proposed pond locations and updating the inventory of historic structures and potential districts within the project Area of Potential Effect (APE). Previously undocumented resources identified in the APE were assessed for their potential for listing in the National Register of Historic Places (NRHP). The APE is defined as the area within which the roadway improvements and subsequent maintenance may have physical, visual, audible, or atmospheric effects on historic properties. The APE as defined for this project includes the existing ROW along I-4 and was extended to the back or side property lines of parcels adjacent to the corridor, limited to a distance of no more than 100 meters (330 feet) from the proposed ROW. The APE also includes the proposed pond footprints plus a 100-foot buffer. Archaeological survey was conducted within the proposed pond footprints, and the architectural study included the entire APE.

Field investigations consisted of pedestrian surface inspection and the excavation of 120 shovel tests within the footprint of the proposed ponds and 46 shovel tests within the Rhode Island Avenue Extension. No artifacts were recovered from any of the shovel tests, and no archaeological sites or occurrences were identified. No further archaeological survey is recommended for the proposed ponds or proposed road extension corridor. Table 5.5 provides a summary of the results of the archaeological field investigations.

Table 5.5: Results of Phase I Archaeological Survey of Proposed Ponds for I-4 Segment 4 APE

Pond	Acreage	Number of Shovel Tests	Comment/Condition	Results
400	27.27	-	Existing pond – no modification	No archaeological sites or cultural material
401	16.52	-	Existing pond – no modification	No archaeological sites or cultural material
402A	5.82	-	Existing pond – no modification	No archaeological sites or cultural material
402B	3.71	12	New/proposed pond	No archaeological sites or cultural material
402C	2.09	13	New/proposed pond	No archaeological sites or cultural material
402D	0.82	3	New/proposed pond	No archaeological sites or cultural material
402E	0.64	4	New/proposed pond	No archaeological sites or cultural material
402F	2.40	-	New/proposed pond	No archaeological sites or cultural material
403	14.10	22	New/proposed pond	No archaeological sites or cultural material
FPC 403	1.32	-	New/proposed pond	No archaeological sites or cultural material
405A	3.65	-	Expanding and regrading existing pond	No archaeological sites or cultural material
405B	0.74	-	Expanding and regrading existing pond	No archaeological sites or cultural material
406A	4.90	-	Expanding and regrading existing pond	No archaeological sites or cultural material
406B	2.93	5	New/proposed pond	No archaeological sites or cultural material
FPC 407	3.42	10	New/proposed pond	No archaeological sites or cultural material

Table 5.5: Results of Phase I Archaeological Survey of Proposed Ponds for I-4 Segment 4 APE

Pond	Acreage	Number of Shovel Tests	Comment/Condition	Results
407A	4.49	-	Expanding and regrading existing pond	No archaeological sites or cultural material
407B	0.70	2	Expanding and regrading existing pond	No archaeological sites or cultural material
407C	1.66	4	New/proposed pond	No archaeological sites or cultural material
408	2.38	-	Expanding and regrading existing pond	No archaeological sites or cultural material
408-D1	3.22	-	New/proposed pond – area fully developed	No archaeological sites or cultural material
408B	3.74	2	New/proposed pond – area heavily developed	No archaeological sites or cultural material
408-Alt	4.74	1	New/proposed pond– area fully developed	No archaeological sites or cultural material
SSV 408	0.87	-	New/proposed pond– area fully developed	No archaeological sites or cultural material
A	6.55	9	New/proposed pond	No archaeological sites or cultural material
FPC Pond A	0.92	-	New/proposed pond	No archaeological sites or cultural material
B	1.89	4	New/proposed pond	No archaeological sites or cultural material
B1	1.75	2	New/proposed pond	No archaeological sites or cultural material
C	2.20	4	New/proposed pond	No archaeological sites or cultural material
D	1.57	-	Existing pond – No modification	No archaeological sites or cultural material
409-A1	6.73	-	Expanding and regrading existing pond	No archaeological sites or cultural material
409-A2	8.16	3	Expanding and regrading existing pond	No archaeological sites or cultural material
409-B1	3.02	7	New/proposed pond	No archaeological sites or cultural material
410	3.82	-	Existing pond – no modification	No archaeological sites or cultural material
411	2.80	-	Existing pond – no modification	No archaeological sites or cultural material

Table 5.5: Results of Phase I Archaeological Survey of Proposed Ponds for I-4 Segment 4 APE

Pond	Acreage	Number of Shovel Tests	Comment/Condition	Results
412	2.44	3	New/proposed pond	No archaeological sites or cultural material
413	2.77	-	Existing pond – no modification	No archaeological sites or cultural material
414	14.53	-	Existing pond – no modification	No archaeological sites or cultural material
415	0.71	2	New/proposed pond	No archaeological sites or cultural material
416	1.61	4	New/proposed pond	No archaeological sites or cultural material
417	1.72	4	New/proposed pond	No archaeological sites or cultural material
418	1.24	-	Expanding and regrading existing pond	No archaeological sites or cultural material
Total	175.64	120		

SSV- Stormwater Storage Vault

The architectural survey resulted in the identification of 23 historic resources constructed during or before 1970, located within the I-4 Segment 4 APE. The Atlantic Coast, St. Johns & Indian River Railway (8VO08914), later the Enterprise Branch of the former Florida East Coast Railway, was previously recorded, and the remaining 22 resources are newly recorded. None of the 23 resources display sufficient integrity to meet the minimum criteria for listing in the NRHP. Additionally, the Florida Master Site File (FMSF) has three previous structures (8VO04667, 8VO04669, and 8VO04670) plotted within the APE, but according to the FMSF resource form maps, all three are plotted incorrectly and exist outside of the current APE. During the architectural history survey conducted as part of this project, it was discovered that two of the three structures (8VO04667 and 8VO04670) have been demolished. Table 5.6 provides a summary of the results of the architectural survey and Figure 5.31 through Figure 5.33 illustrate the locations of the historic resources.

Table 5.6: Historic Resources Recorded within the I-4 Segment 4 APE

FMSF No.	Original/ Update	Address	Architectural Style	Build Date	NRHP Status
8VO08914	Update	Atlantic Coast, St. Johns& Indian River (ACSJ&IR) Railway	Railroad	1885	Not eligible
8VO09411	Original	Orange City RV Resort Resource Group	Resource Group	ca. 1969	Not eligible
8VO09412	Original	280 Dirksen Drive	Masonry Vernacular	ca. 1954	Not eligible

Table 5.6: Historic Resources Recorded within the I-4 Segment 4 APE

FMSF No.	Original/ Update	Address	Architectural Style	Build Date	NRHP Status
8VO09413	Original	278 Dirksen Drive	Masonry Vernacular	ca. 1953	Not eligible
8VO09414	Original	276 Dirksen Drive	Masonry Vernacular	ca. 1963	Not eligible
8VO09415	Original	354 Lake Crescent Drive	Ranch (Compact)	ca. 1964	Not eligible
8VO09416	Original	300 Lake Shore Drive	Ranch (Plain)	ca. 1964	Not eligible
8VO09417	Original	355 Debary Avenue	Ranch (Plain)	ca. 1961	Not eligible
8VO09418	Original	105 Cardinal Drive	Ranch (Plain)	ca. 1955	Not eligible
8VO09419	Original	103 Cardinal Drive	Ranch (Plain)	ca. 1955	Not eligible
8VO09420	Original	1136 W. Embassy Drive	Ranch (Plain)	ca. 1967	Not eligible
8VO09421	Original	1150 W. Embassy Drive	Ranch (Plain)	ca. 1964	Not eligible
8VO09422	Original	1166 W. Embassy Drive	Masonry Vernacular	ca. 1966	Not eligible
8VO09423	Original	1174 W. Embassy Drive	Ranch (Bungalow)	ca. 1965	Not eligible
8VO09424	Original	1184 W. Embassy Drive	Ranch (Plain)	ca. 1966	Not eligible
8VO09425	Original	1324 W. Evans Circle	Ranch (Duplex)	ca. 1964	Not eligible
8VO09426	Original	RV Resort Recreation Building (2300 Graves Avenue)	Masonry Vernacular	ca. 1969	Not eligible
8VO09427	Original	981 Cassadaga Road	Ranch (Plain)	ca. 1959	Not eligible
8VO09435	Original	1924 Saxon Boulevard	Masonry Vernacular	ca. 1967	Not eligible
8VO09452	Original	344 Lake Crescent Drive	Ranch (Compact)	ca. 1962	Not eligible
8VO09453	Original	248 Dirksen Drive	Masonry Vernacular	ca. 1962	Not eligible
8VO09459	Original	253 Mansion Boulevard	Ranch (Contemporary)	ca. 1961	Not eligible
8VO09675	Original	790 Deltona Boulevard	Masonry Vernacular	ca. 1970	Not eligible

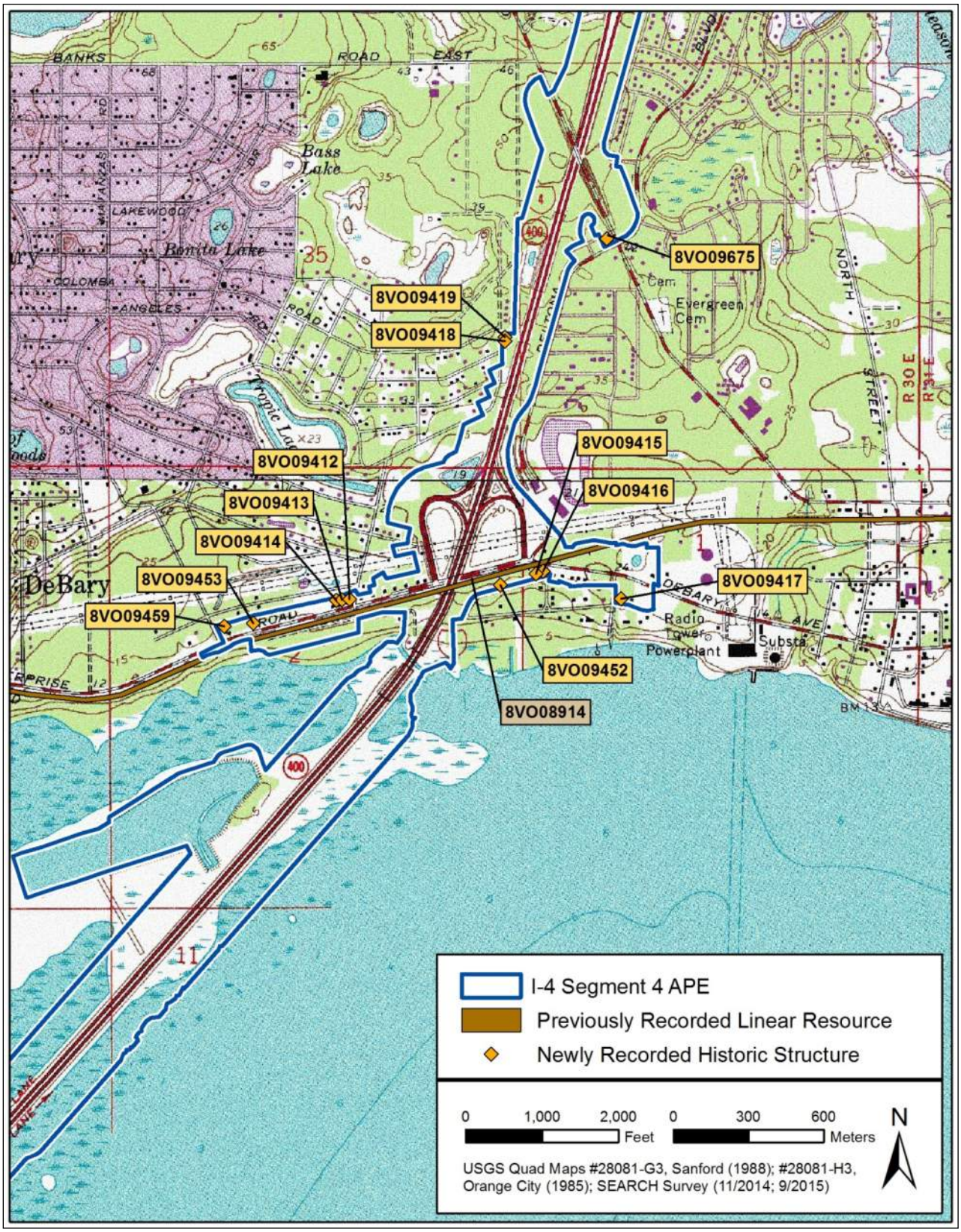


Figure 5.31 –Recorded Historic Resources within I-4 Segment 4 APE (Sheet 1 of 3)

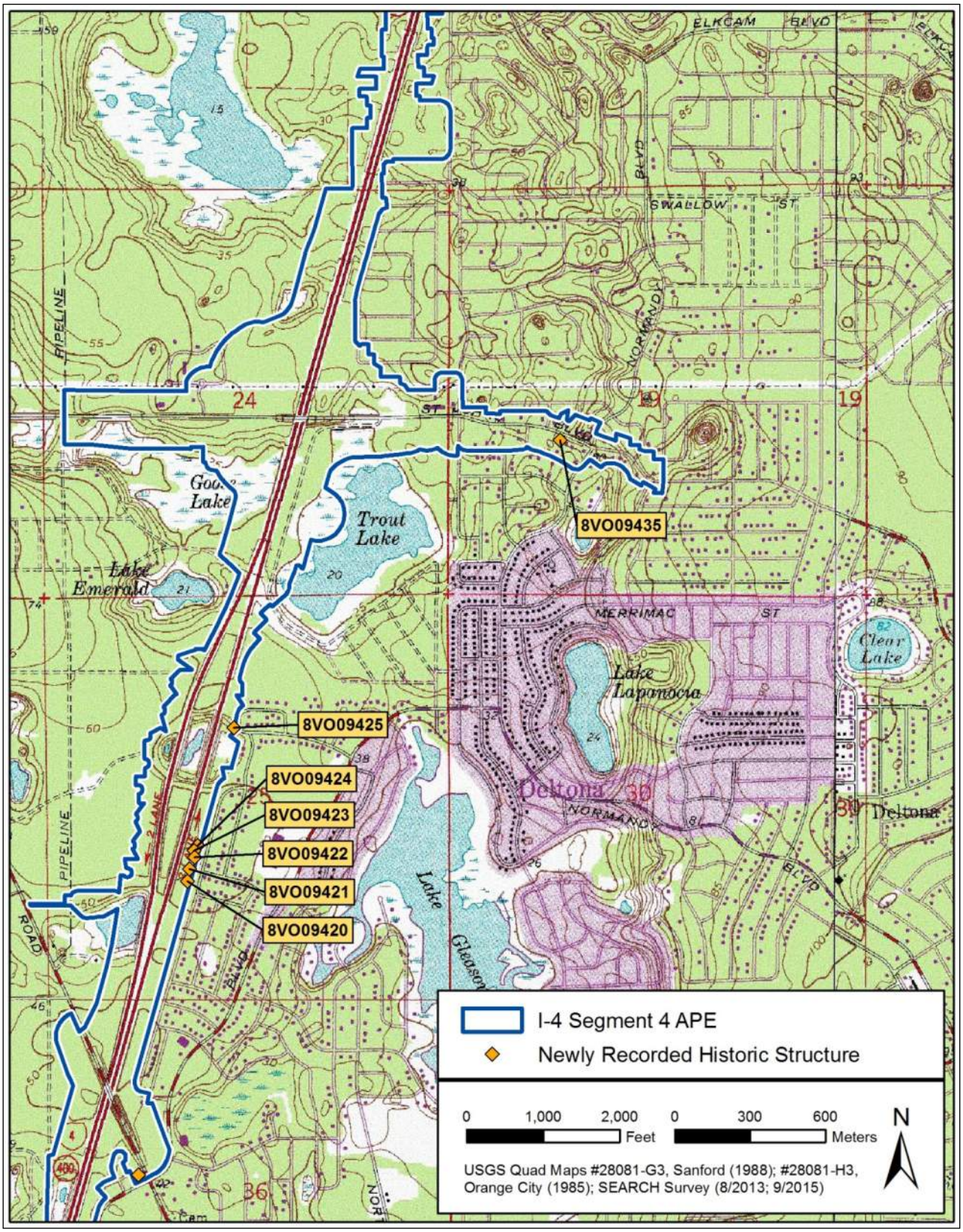


Figure 5.32 – Recorded Historic Resources within I-4 Segment 4 APE (Sheet 2 of 3)

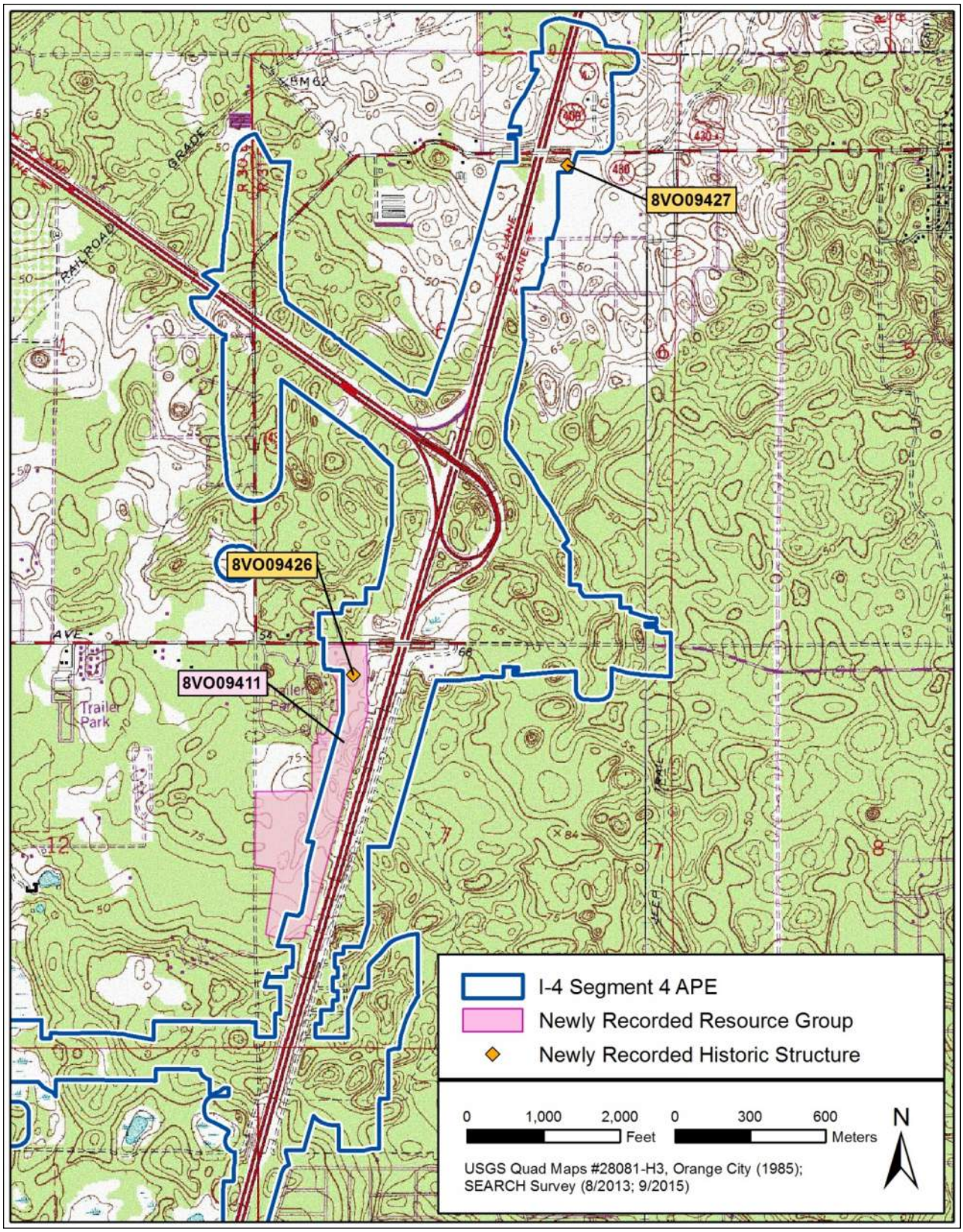


Figure 5.33 – Recorded Historic Resources within I-4 Segment 4 APE (Sheet 3 of 3)

In addition to the aforementioned historic resources constructed during or before 1970, the Volusia County Property Appraiser's records were examined, which indicated that 27 structures are located with the APE that date from 1971 to 1974. Depending on the progression of the project (i.e., how much time elapses between the current study and the eventual design/construction of the project), it may become necessary to inventory and assess these resources. Detailed evaluation of the cultural resources within the study area, including survey methodology, previously recorded resources and FMSF documentation are provided in the supplementary report, *Technical Memorandum: Cultural Resource Assessment Survey of Proposed Improvements to Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92 (Seminole/ Volusia County Line) to ½ Mile East of SR 472 (December 2015),* prepared for this project.

5.6.5 Contamination

A *Contamination Screening Evaluation Report (CSER) (July 2016)* has been completed for the I-4 Segment 4 corridor including proposed pond sites. The purpose of the CSER is to determine the likelihood of petroleum or other hazardous substance impacts to the existing right-of-way or to properties proposed for acquisition. The CSER, completed in accordance with Chapter 22 (January 17, 2008 revision) of the FDOT PD&E Manual and Federal Highway Administration's (FHWA) Technical Advisory T6640.8A (October 30, 1987) contains results from a physical site investigation of the project corridor, a limited investigation of properties along the corridor adjacent to the ROW as viewed from areas of public access, a review of Florida Department of Environmental Protection (FDEP) files, Volusia County records and available environmental databases.

As part of the CSER, a review of the Florida Department of Environmental Protection (FDEP) Oculus Database was conducted to determine locations of contaminated sites followed by visual inspection of the corridor including pond sites and properties adjacent to and within ½ mile of the roadway. Known contamination sites and properties with potential contamination were identified and assigned a risk rating based on the degree of concern for potential contamination problems. A total of 133 sites within the study area were identified as being potential handlers of hazardous materials or having some type of involvement with potential contamination. Of these sites, none had a high risk rating and eight had a medium risk rating; the remaining 125 sites identified received a no risk or low risk rating. It is recommended that any excavation, demolition or dewatering activities within or adjacent to any of the identified medium risk sites should require soil and groundwater testing before construction. The 133 identified sites/properties within 1/2 mile of the existing I-4 right-of-way and the proposed pond sites along with their corresponding risk rating are shown on Figure 5.34 through Figure 5.38.

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate-Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate-Segment 4 R/W (12/10/15)

Proposed Ponds

- Low Risk Ponds 12/10/15
- Medium Risk Ponds 12/10/15
- Treatment Swales (12/10/15)

Site Risk Rating

- NO
- LOW
- MEDIUM
- Gas Pipeline (Florida Gas Transmission Company)
- DeBary Brownfiled Area (#BF6414010)

Pond Notes:
(R) = Recommended; (ALT) = Alternative

Title:
CONTAMINATION SCREENING EVALUATION REPORT: Segment 4 - Contamination Sites Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+0.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 1/6/2016
Technical Review by: mDrauer 1/6/2016
Independent Review by: jMoore 1/6/2016

Figure 5.34 – Potential Contamination Sites (Sheet 1 of 5)

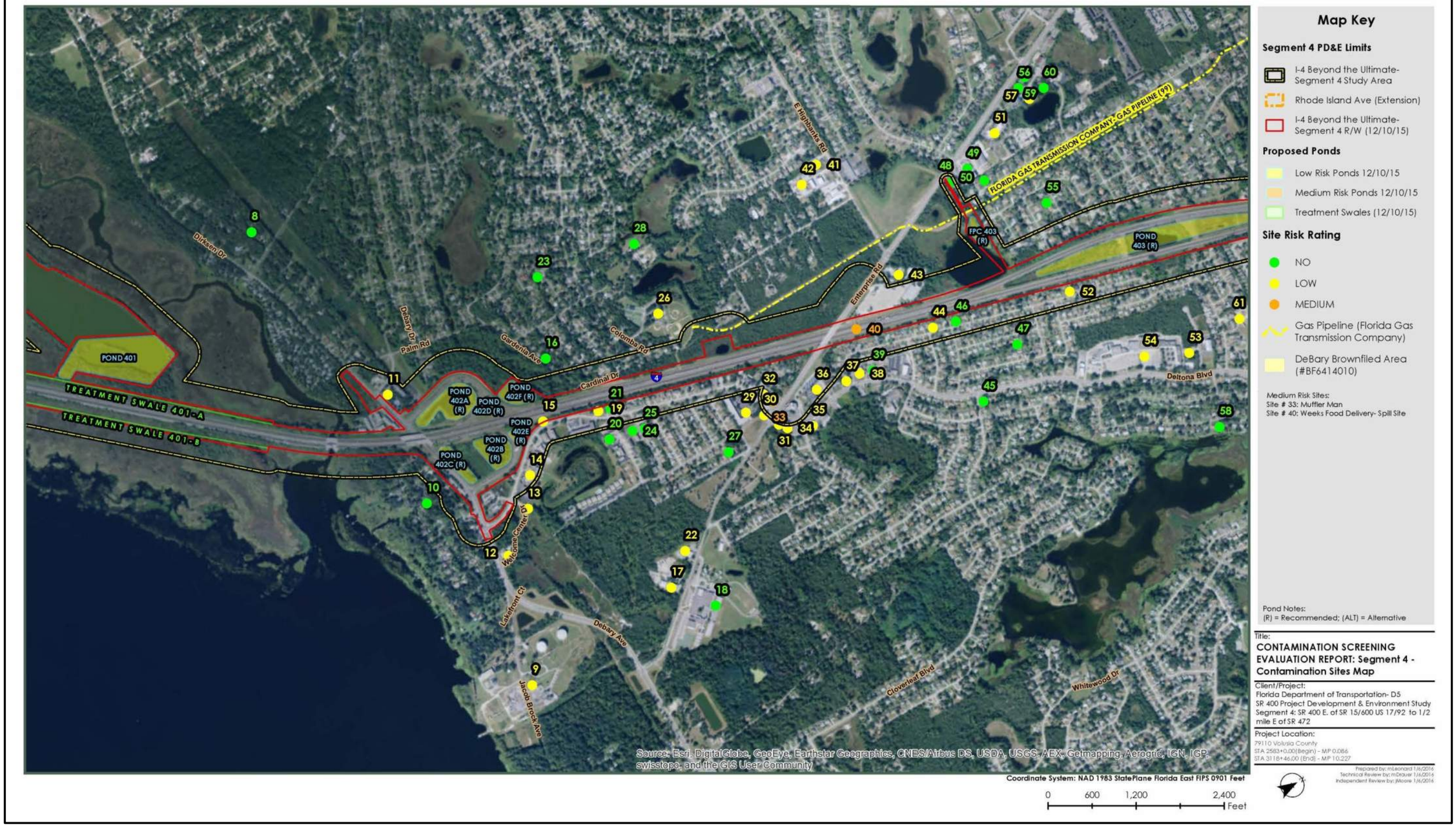


Figure 5.35 – Potential Contamination Sites (Sheet 2 of 5)

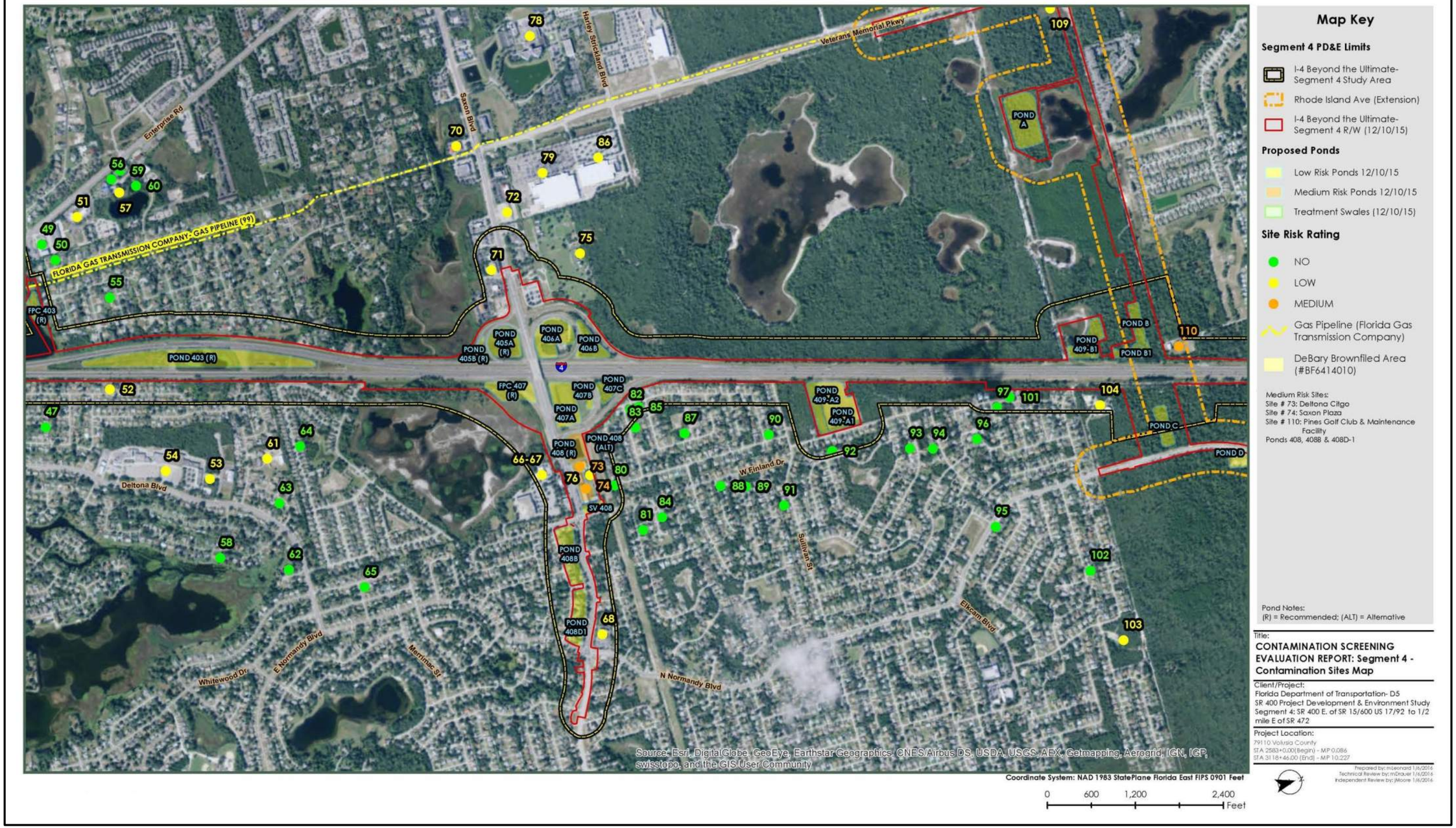


Figure 5.36 – Potential Contamination Sites (Sheet 3 of 5)

Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate-Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate-Segment 4 R/W (12/10/15)

Proposed Ponds

- Low Risk Ponds 12/10/15
- Medium Risk Ponds 12/10/15
- Treatment Swales (12/10/15)

Site Risk Rating

- NO
- LOW
- MEDIUM
- Gas Pipeline (Florida Gas Transmission Company)
- DeBary Brownfiled Area (#BF6414010)

Medium Risk Sites:
Site # 105: Vacant Wooded Parcels
Site # 110: Pines Golf Club & Maintenance Facility
Pond 417

Pond Notes:
(R) = Recommended; (ALT) = Alternative

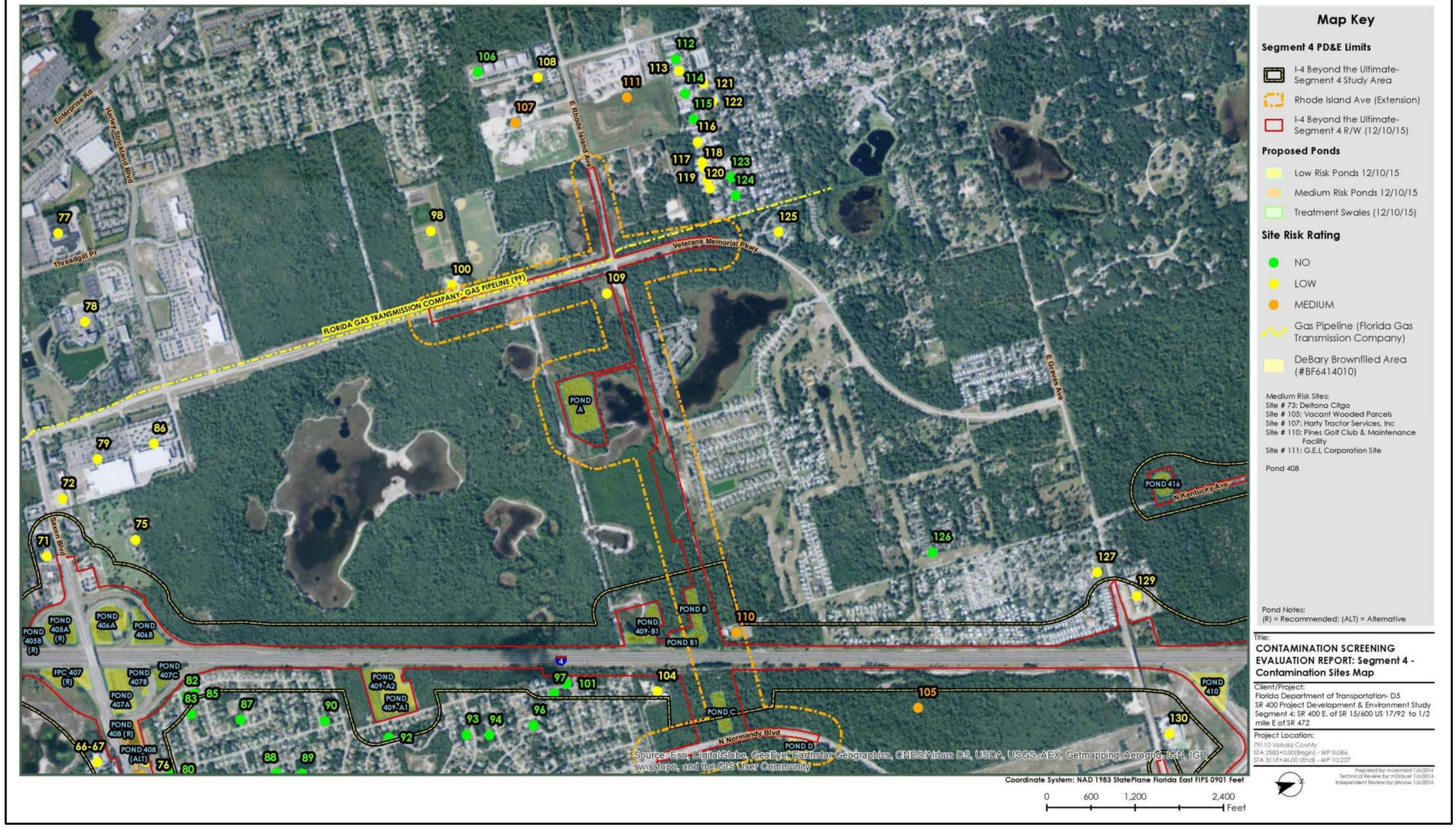
Title:
CONTAMINATION SCREENING EVALUATION REPORT: Segment 4 - Contamination Sites Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+0.00(Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 1/6/2016
Technical Review by: mDrauer 1/6/2016
Independent Review by: jMoore 1/6/2016

Figure 5.37 – Potential Contamination Sites (Sheet 4 of 5)



Map Key

Segment 4 PD&E Limits

- I-4 Beyond the Ultimate-Segment 4 Study Area
- Rhode Island Ave (Extension)
- I-4 Beyond the Ultimate-Segment 4 R/W (12/10/15)

Proposed Ponds

- Low Risk Ponds 12/10/15
- Medium Risk Ponds 12/10/15
- Treatment Swales (12/10/15)

Site Risk Rating

- NO
- LOW
- MEDIUM
- Gas Pipeline (Florida Gas Transmission Company)
- DeBary Brownfiled Area (#BF6414010)

Medium Risk Sites:
Site # 73: Deltona Citgo
Site # 105: Vacant Wooded Parcels
Site # 107: Harty Tractor Services, Inc
Site # 110: Pines Golf Club & Maintenance Facility
Site # 111: G.E.L Corporation Site

Pond 408

Pond Notes:
(R) = Recommended; (ALT) = Alternative

Title:
CONTAMINATION SCREENING EVALUATION REPORT: Segment 4 - Contamination Sites Map

Client/Project:
Florida Department of Transportation- D5
SR 400 Project Development & Environment Study
Segment 4: SR 400 E. of SR 15/600 US 17/92 to 1/2 mile E of SR 472

Project Location:
79110 Volusia County
STA 2583+0.00 (Begin) - MP 0.086
STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 1/6/2016
Technical Review by: mDrauer 1/6/2016
Independent Review by: jMoore 1/6/2016

Figure 5.38 – Potential Contamination Sites (Sheet 5 of 5)

A total of 42 potential stormwater management facilities, including preferred and non-preferred alternatives, were evaluated for their potential to have contamination present or affecting the site. Of these pond sites, none had a high risk rating and six had a medium risk rating including Pond Sites 408, 408 (Alternative), Stormwater Vault 408, 408B, 408D1 and 417. These ratings were based on observed conditions at the pond sites which have the potential to be sources of contamination. The remaining 36 pond sites reviewed received a low risk rating. It is recommended that any excavation, demolition or dewatering activities within or adjacent to any of the identified medium risk pond sites should require soil, groundwater, and hazardous material testing before construction. Some Level II testing by others is currently being conducted on the identified medium risk sites and may provide additional information on these sites.

Based on historic aerials, land use in the area before the construction of I-4 consisted of natural lands with some pastures and citrus groves. Potential contamination impacts from these activities include ethylene dibromide and pesticide/herbicide/fertilizer contamination from the citrus groves, and arsenic contamination from railroad right-of-ways or potential cattle dips associated with the pastures. However, the existence, exact location and severity of these potential sources of contamination are mostly unknown. All bridges and other structures which will require possible demolition or retrofit should be tested for asbestos containing materials, lead-based paint or any other hazardous materials prior to construction. Should any parcels containing medical facilities, doctor offices, hospitals or drug stores be acquired, they should be tested for asbestos, lead-based paint, x-ray equipment, lead-lined walls, chemicals and pharmaceuticals prior to demolition.

5.6.6 Noise

As part of this PD&E Reevaluation, the *Noise Study Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)* was completed based on the procedures established in Part 2, Chapter 17, "Noise," of the FDOT PD&E Manual. The noise study was prepared to determine if noise levels will be likely to increase, if noise-sensitive receivers are (or will be) within the project area and, if noise impacts will occur. If future design year noise levels at noise sensitive receptors approach, meet or exceed the Noise Abatement Criteria established by the Federal Highway Administration (FHWA) in 23 CFR 772 or increase 15 dB(A) over existing noise levels as a direct result of the transportation improvement project, noise abatement must be considered. The FHWA's Traffic Noise Modeling (TNM) Version 2.5 computer program was used to determine if noise abatement was warranted and if so, considered reasonable and feasible for any noise-sensitive sites. Feasibility deals with engineering considerations such as the ability to construct a barrier using standard construction techniques and methods to provide a reduction of at least 5 dBA to an impacted receptor site. Reasonableness factors include the achievement of the noise reduction design goal (7 dBA for at least one receptor per FDOT criteria), cost effectiveness of the noise abatement measure and consideration of the viewpoints of the benefited property owners and residents. A benefited receptor is defined as a noise sensitive site

that will obtain a minimum of 5 dBA of noise reduction as a result of a specific noise abatement measure whether or not it is predicted as having a noise impact.

The Segment 4 project was divided into geographic noise sensitive areas to facilitate the analysis of traffic related noise impacts. Eight noise sensitive areas that have the potential to be impacted by the project were identified. Based upon the analysis conducted, two noise barriers are recommended for further consideration and public input for I-4 Segment 4. For Noise Sensitive Area (NSA) A (located on the west side of I-4, north and south of Dirksen Drive) a 14-foot tall, 898-foot long shoulder mounted barrier for Benefited Receiver Area (BRA) A1 provides the best noise abatement and meets the requirements as reasonable and feasible. For NSA C (located at Kettering Road on the east side of I-4 between Enterprise Road and just north of Haversham Road) a 16-foot tall, 1,266-foot long ground mounted barrier for BRA C3, provides the best noise abatement and meets the requirements as reasonable and feasible. The existing barriers BRA C1/C2, BRA F1 and BRA G will all provide sufficient abatement and meet the requirements as reasonable and feasible for the proposed project. The noise sensitive areas and benefited receiver areas are shown on the noise barrier analysis maps in Figure 5.39 and Figure 5.47.

Construction activities for any of the proposed improvements will have temporary noise impacts for those residents and travelers within the immediate vicinity of the project. Noise and vibration impacts will be caused by heavy equipment movement and construction activities such as pile driving and vibratory compaction. Noise control measures should be implemented according to the FDOT's Standard Specifications for Road and Bridge Construction to minimize or eliminate some potential construction noise and vibration impacts. Section 335, F.S., exempts FDOT from compliance with local ordinances. FDOT policy is to follow the requirement of local ordinances to the extent that is reasonable. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist will investigate additional methods of controlling these impacts.

5.6.7 Air Quality

The proposed project was reviewed for air quality impacts consistent with the guidance provided by the Federal Highway Administration (FHWA). Seminole and Volusia Counties are currently areas that are designated as being *attainment* for the following air pollutants: *ozone, nitrogen dioxide, particulate matter (2.5 microns in size and 10 microns in size), sulfur dioxide, carbon monoxide, and lead.*

The project was subjected to a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology and traffic. The FDOT's screening model, CO Florida 2012 (released March 12, 2012), uses the latest United States Environmental Protection Agency (USEPA) – approved software (*MOVES 2010a and CAL3QHC2*) to

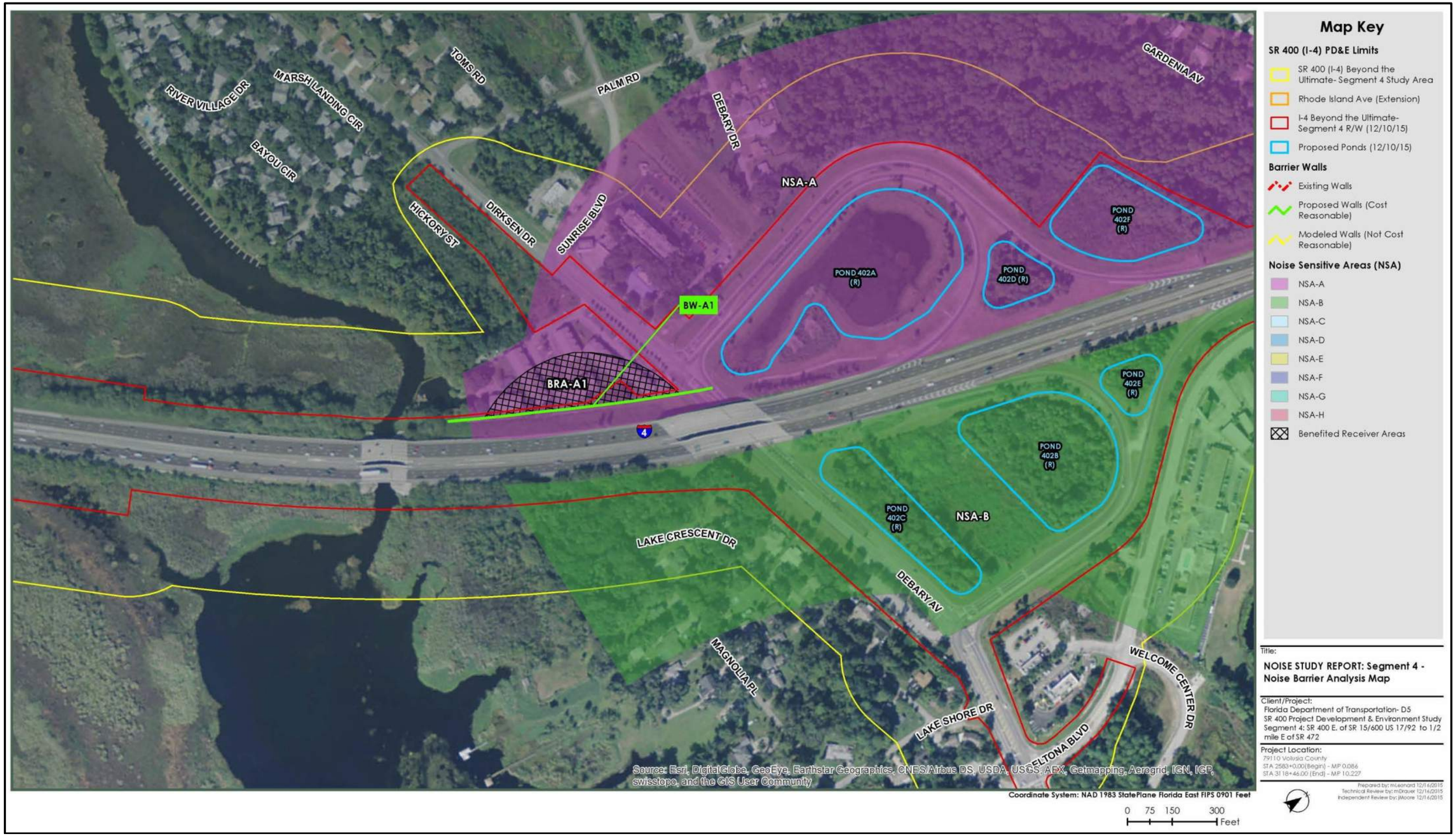


Figure 5.39 – Noise Barrier Analysis Map (Sheet 1 of 9)

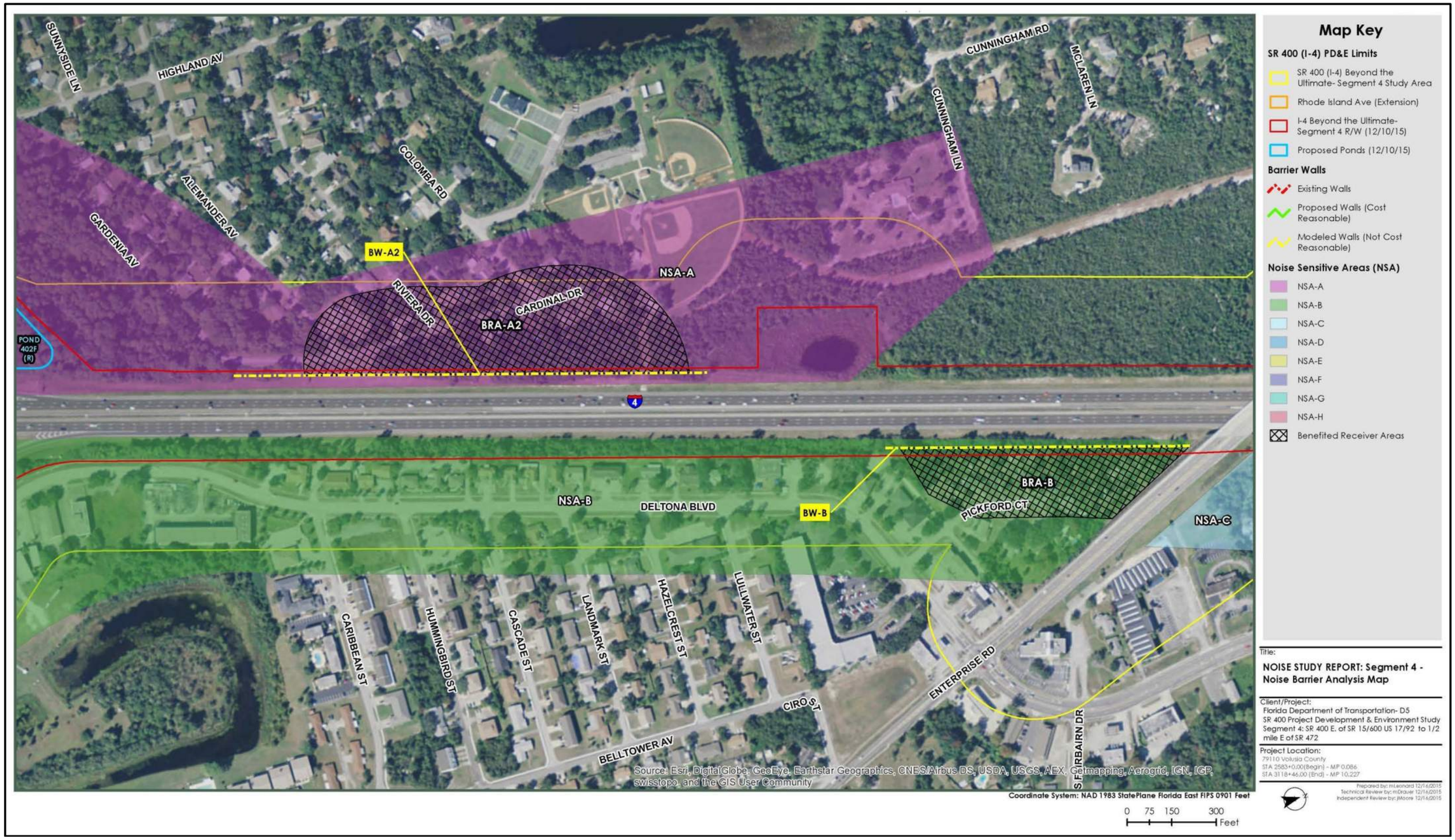


Figure 5.40 – Noise Barrier Analysis Map (Sheet 2 of 9)

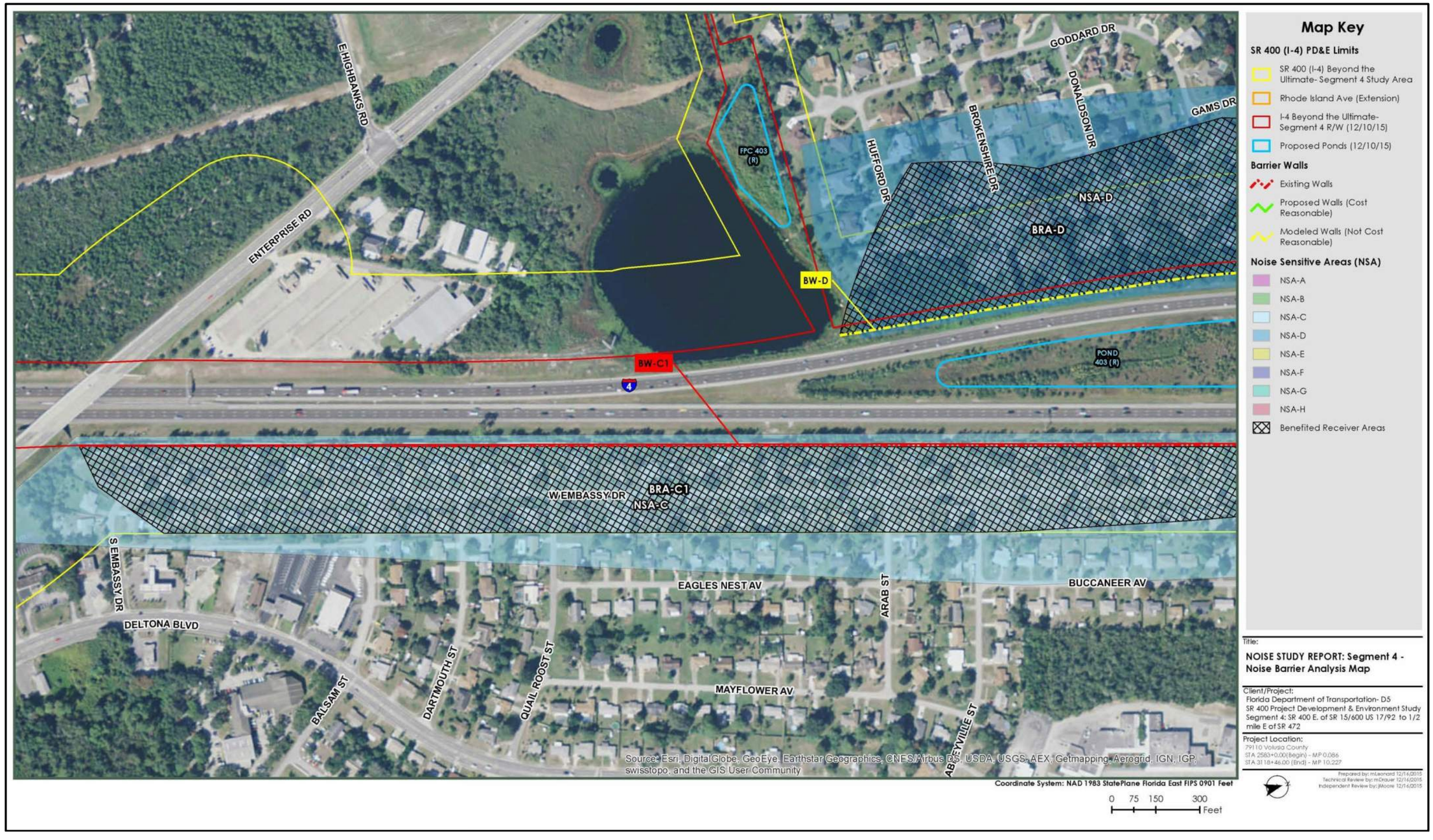


Figure 5.41 – Noise Barrier Analysis Map (Sheet 3 of 9)

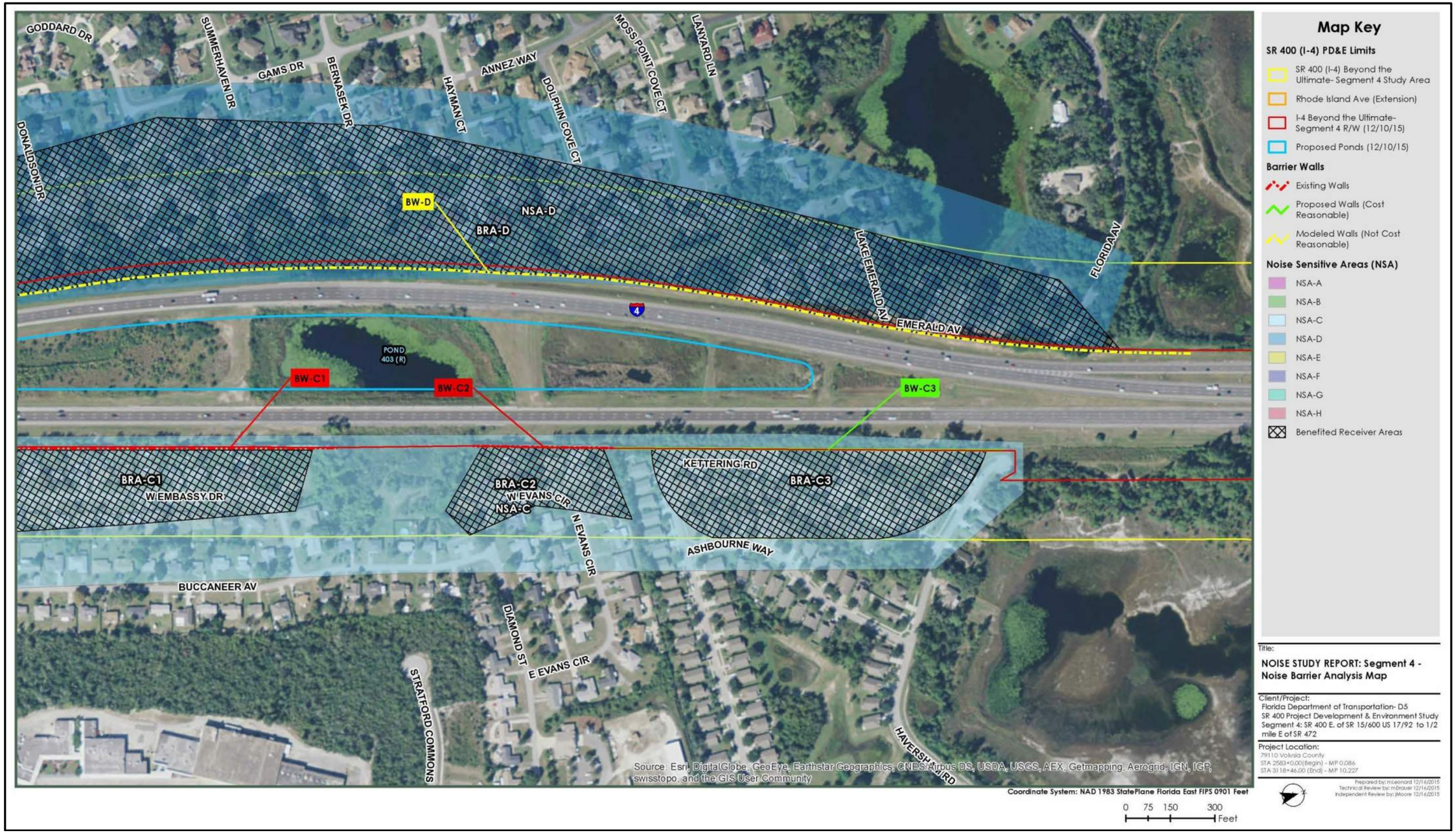


Figure 5.42 – Noise Barrier Analysis Map (Sheet 4 of 9)

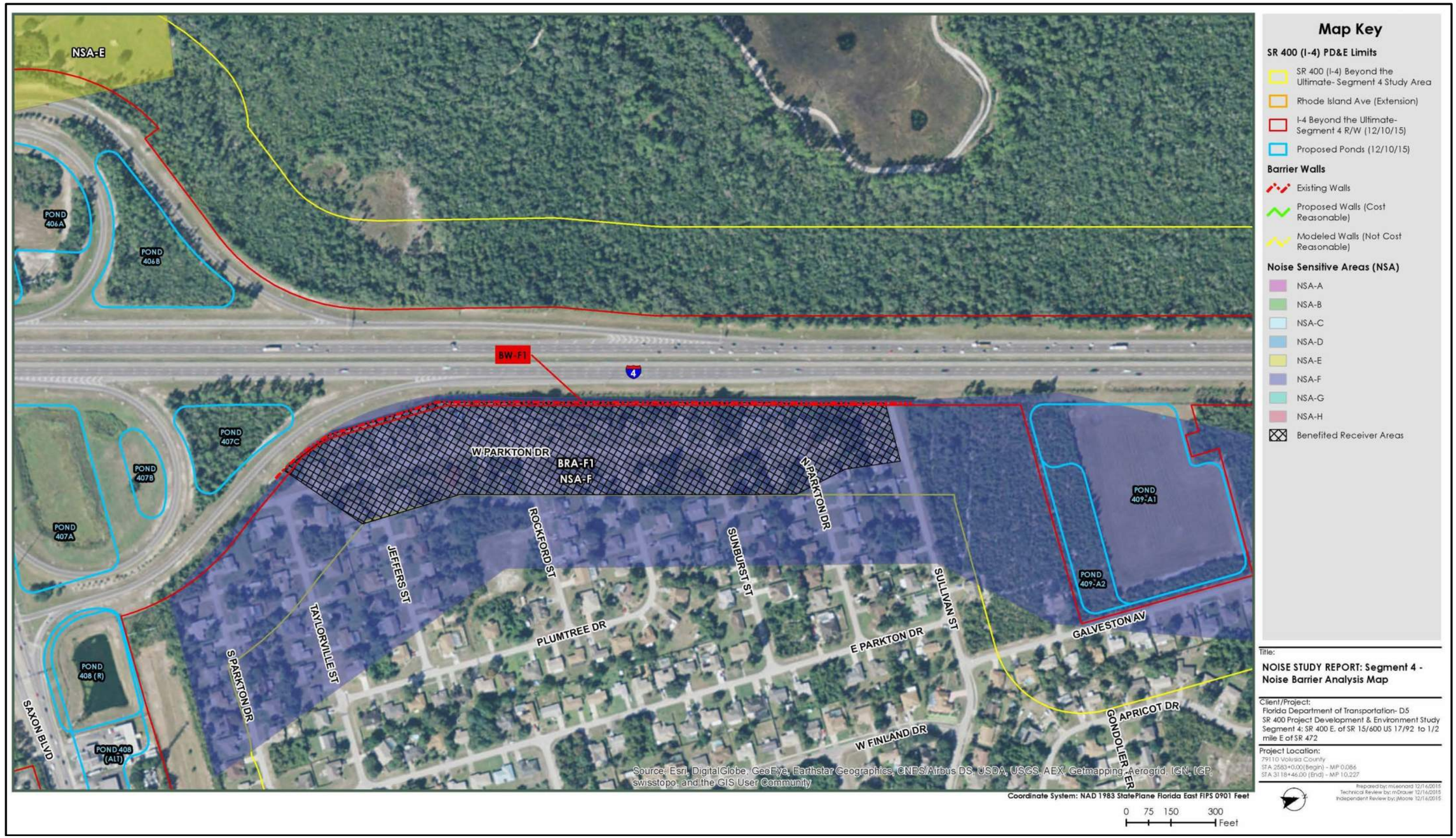


Figure 5.43 – Noise Barrier Analysis Map (Sheet 5 of 9)

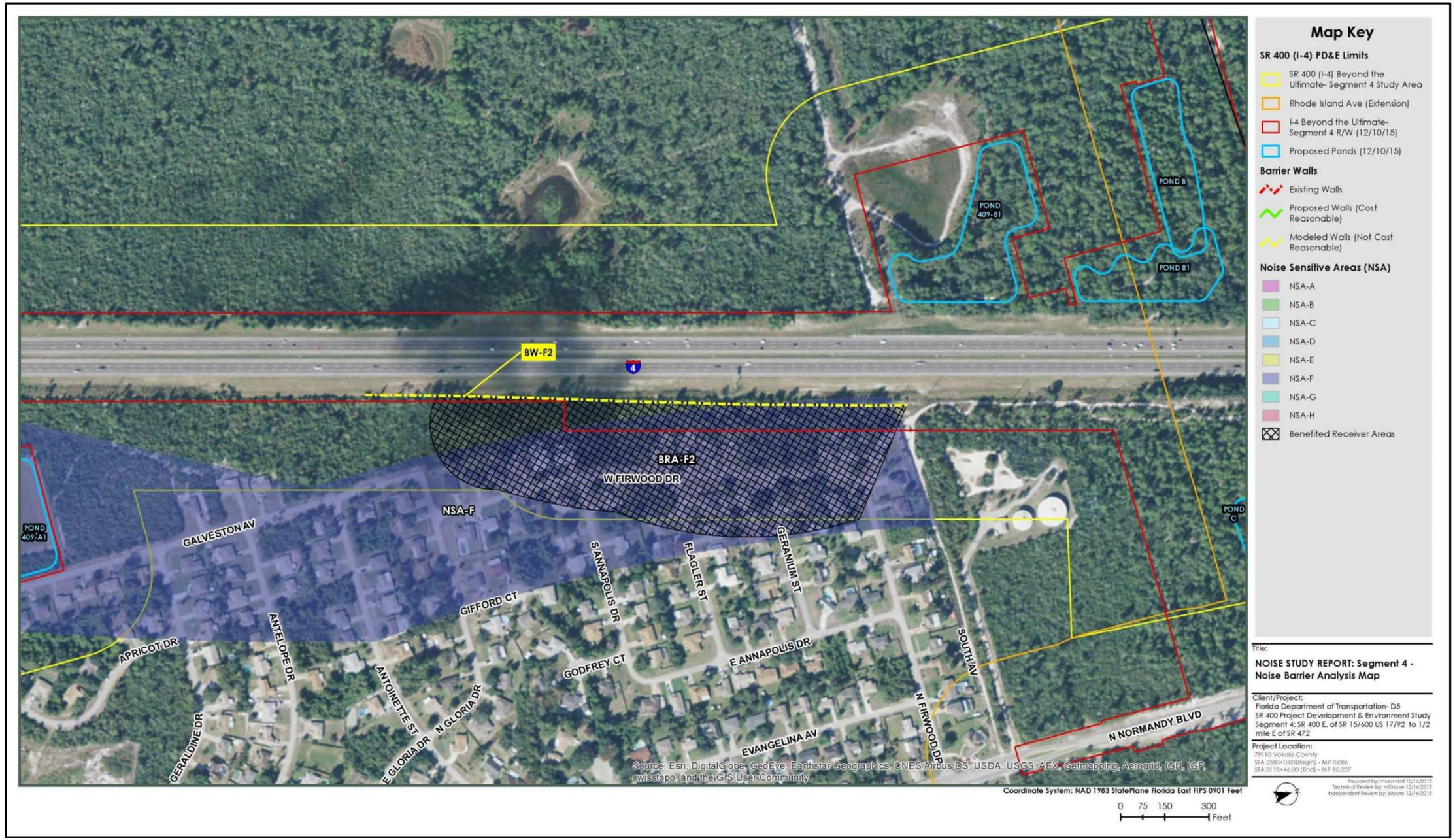


Figure 5.44 – Noise Barrier Analysis Map (Sheet 6 of 9)

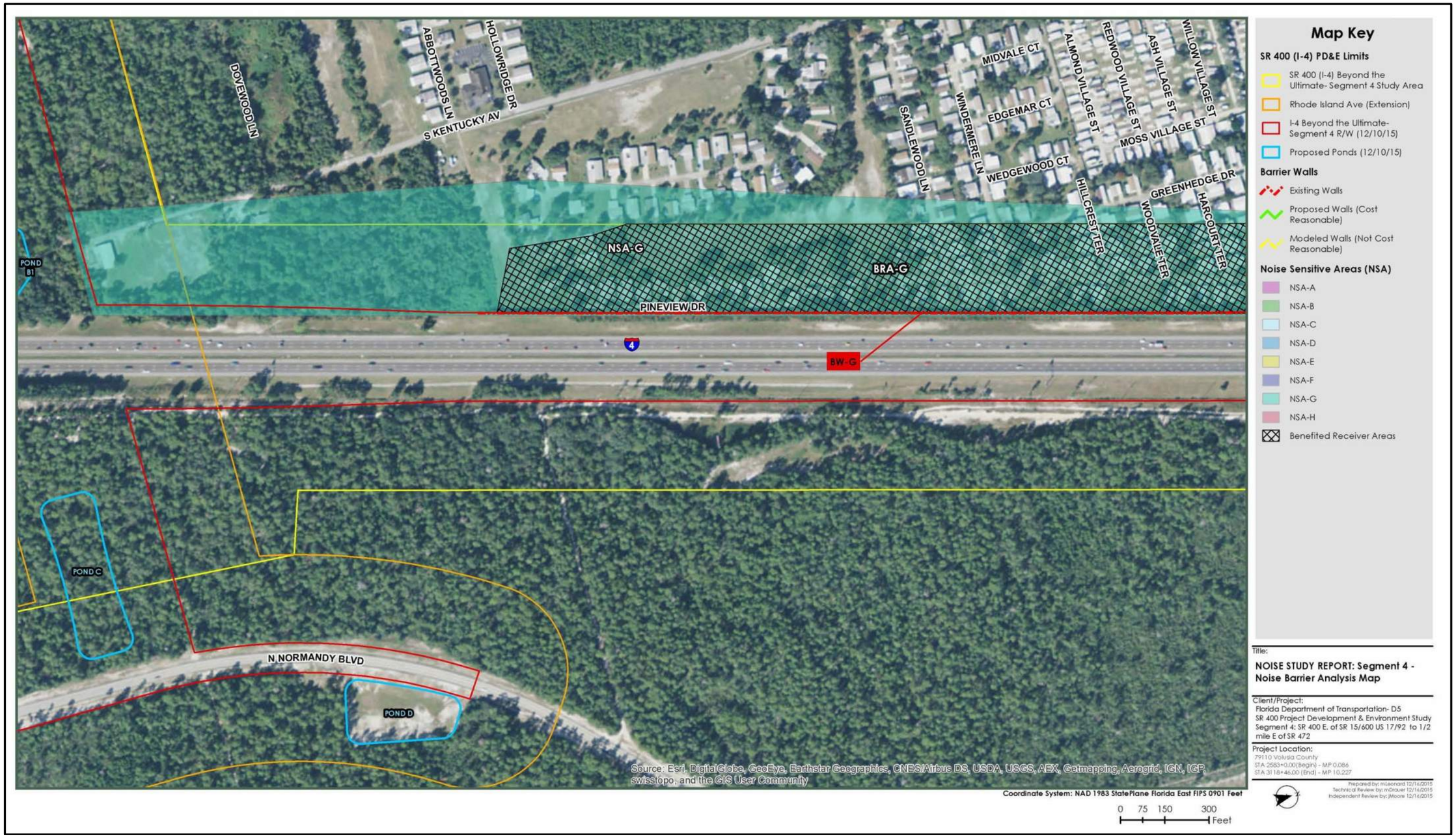


Figure 5.45 – Noise Barrier Analysis Map (Sheet 7 of 9)

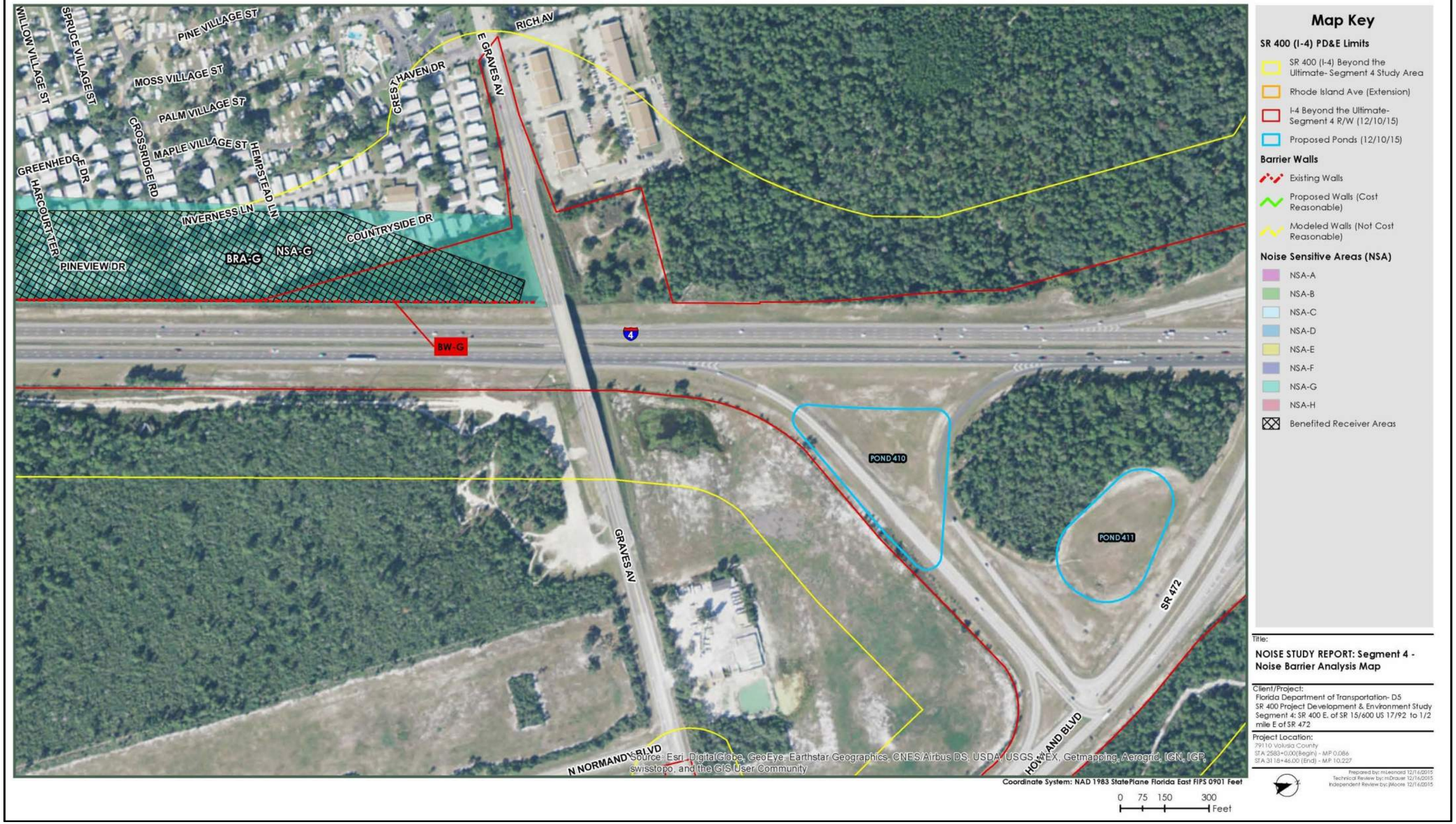


Figure 5.46 – Noise Barrier Analysis Map (Sheet 8 of 9)

Figure 5.47 – Noise Barrier Analysis Map (Sheet 9 of 9)

produce estimates of one-hour and eight-hour CO at default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the one-hour and eight-hour *National Ambient Air Quality Standards (NAAQS)* for CO that are 35 parts per million (ppm) and 9 parts per million (ppm), respectively.

The roadway intersection forecast to have the highest total approach traffic volume (for both the Build and No-Build scenarios) is the intersection of the western I-4 ramps at SR 472. However, this intersection is located in a mostly natural wooded area and is not near any CO reception sites. Although the intersection of the eastern I-4 ramps at Debary Avenue is not projected to have the highest total approach traffic volume for this project segment (for both the Build and No-Build scenarios), it was selected as the intersection to analyze based on its proximity to CO reception sites and relatively high volume of vehicles per hour (vph). The Build and No-Build scenarios for the opening year (2020) and the design year (2040) were evaluated (for design hour volumes).

Estimates of CO were predicted for the default receptors which are located 10 feet to 150 feet from the edge of the roadway. Based on the results from the screening model, the highest project-related CO one-hour and eight-hour levels are not predicted to meet or exceed the one-hour or eight-hour *NAAQS* for this pollutant for either the Build or No-Build alternatives. As such, the project "passes" the screening model.

The project is located in an area which is designated attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project. Detailed data and analysis are provided in the supplemental report: *Air Quality Analysis Technical Memorandum, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016).*

5.7 Public Involvement Program

A comprehensive Public Involvement Program (PIP) was initiated as part of this PD&E Study. This program is in compliance with Part 1, Chapter 11 of the FDOT PD&E Manual which details various federal, state and local regulations including Section 339.155, Florida Statutes; Council of Environmental Quality (CEQ) Regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) and 23 Code of Federal Regulations (CFR) 771.

The public involvement program for I-4, Segment 4 included the publication of newsletters, meetings with government agencies, community outreach meetings, an Alternatives Public Workshop and a formal Public Hearing. A project website, www.i4express.com, was also developed to disseminate updated information about the project and allow the public to communicate with the project team and/or provide comments.

Alternatives Public Workshop

The Alternatives Public Workshop was held on Thursday, April 24, 2014 from 5:30 p.m. to 7:30 p.m. at Deltona City Hall located at 2345 Providence Boulevard, Deltona, Florida 32725. An invitational letter was mailed to property owners located within at least 300 feet on either side of the current project corridor, public officials, organizations and individuals interested in the project. The Alternatives Public Workshop was held in an open house format with project display boards and an automated presentation which gave an overview of the proposed project, including a summary of the engineering and environmental considerations in development of the proposed alternatives. FDOT staff and project team members were available to provide information and address comments as needed. Fifty-two (52) citizens and seventeen (17) project team members signed in at the public meeting. Projects team attendees included the FDOT Project Manager, Right-of-Way and Environmental Management Office (EMO) staff and the project consultants. Public comment forms were made available to attendees; four written comments were received during or after the meeting. These comments consisted of keeping the transit envelope, having rail access at the interchange of I-4 and SR 472, indicating a preference for interchange alternatives and concern about the distance between a home and I-4 travel lanes. No opposition against the project was received during the meeting.

Stakeholder Meetings

Several additional meetings, which included presentations describing the proposed project and PD&E study, were held to discuss the proposed improvements:

- River to Sea TPO on September 25, 2013 - The Consultant Project Manager for FDOT gave a presentation on the I-4 BtU Managed Lanes project and an update on the PD&E Study. Information was provided on: consideration of zipper lanes along I-4 from SR 434 to SR 472 (Segments 3 & 4 of the I-4 BtU corridor), public involvement for the project, development of preferred alternatives and review of access points in the surrounding roadway network. Discussion ensued following the presentation and included the following topics: widening of local roads (such as Saxon Boulevard), impacts of SunRail on the I-4 BtU project, transit corridor through Volusia County and electric power grid corridor. FDOT stated that various options were being evaluated and considerations as part of the study include: funding for improvements that would be required to local roadways as a result of FDOT actions, SunRail passenger use and impacts on I-4 widening, preservation of the transit corridor through I-4 Segments and possible elimination of the electrical power grid corridor.
- City of DeBary City Council Meeting on May 7, 2014 - A presentation, which provided an update on the plans to widen I-4, was made by the FDOT District 5 Director of Transportation Development.
- River to Sea TPO on May 28, 2014 - The FDOT District 5 Director of Transportation Development provided information on the I-4 BtU PD&E Study. It was identified that while a

transit envelope was preserved in the I-4 Corridor from SR 472 to Daytona Beach, none was provided south of SR 472 towards Orlando. The Volusia County Council requested that the transit envelope be continued from SR 472 to the County line and FDOT committed to doing so. The FDOT Project Manager for I-4 BtU gave a presentation on the I-4 managed use lanes project. Following the presentation, discussion ensued regarding the options for the corridor including preservation of a transit envelope through the Volusia County portion of the I-4 BtU corridor. Additional discussion included commentary on public involvement throughout the process, the value of the transit corridor with respect to connectivity through Orlando and coordination between FDOT and local public agencies. FDOT staff responded to TPO Board questions with additional information provided on: Alternatives Analysis for transit corridor options connecting Daytona Beach to SunRail, the impact of preserving the transit envelope including replacement of the SR 472 bridge to fit the transit corridor, providing local agencies with the presentations made at the TPO Board meeting and continued public involvement efforts by FDOT to keep the public updated on the project.

- River to Sea TPO on November 26, 2014 - The FDOT District 5 Director of Transportation Development provided information on the I-4 BtU Managed Lanes Project. Specific topics presented to the TPO Board were: widening of Saxon Boulevard to six lanes, evaluation of a park and ride lot as part of the Rhode Island Avenue extension and a DDI as the preferred alternative for the SR 472 interchange. The TPO Board was also presented alternatives including cost and right-of-way impacts for the I-4 Managed Lanes Project which included: with and without a transit corridor and the terminal point and number of express lanes (one or two express lanes between Dirksen Drive and Rhode Island Avenue). Discussion ensued regarding the need for managed lanes through Volusia County and preservation of transit corridor without connectivity to surrounding areas. A motion was carried unanimously to review and approve a resolution in the January 2015 TPO Board meeting to maintain the transit envelope in the I-4 Corridor.

Public Hearing

A formal public hearing was conducted on November 16, 2016 to seek input on the Recommended Alternative. The hearing provided an overview of the Recommended Alternative and impacts, the study schedule and summary of the remaining steps in the study process. The hearing was held at Deltona City Hall, 2345 Providence Boulevard, Deltona, FL 32725. The draft environmental and engineering reports were available for public review from September 14, 2016 through November 26, 2016 on the project website (www.i4express.com) and at the Deltona Regional Library, located at 2150 Eustace Avenue, Deltona, FL 32725.

A half-hour open house preceded the formal portion of the hearing. The public was given the opportunity to ask questions and provide comments to the Florida Department of Transportation

(FDOT) representatives in a one-on-one setting. A court reporter was present to receive oral comments from the public; written comments were also accepted. The Recommended Alternative for the overall I-4 corridor and each interchange was displayed on aerial photography of the study area. A matrix with potential environmental impacts and cost estimates was presented. An audiovisual presentation describing the engineering and environmental components of the Recommended Alternative was given. After the presentation, the public was given an opportunity to offer oral comments to the hearing moderator.

Per Chapter 11 of the PD&E Manual, all property owners within at least 300 feet of either side of the centerline of the Recommended Alternative were notified of the hearing by newsletter. One hundred and one (101) citizens and twenty (20) project team members signed in at the public hearing. Project team attendees included the FDOT PD&E and Design Project Managers and staff from FDOT Public Information, Right-of-way and Environmental Management Offices. One public comment form was received at the hearing. Seven additional email comments were received via email during the 10-day comment period following the hearing. Five public comments were provided during the oral comment period of the hearing. The public comments from the hearing are summarized as follows:

Written Comments

- A resident of the Summerhaven Subdivision expressed concerned about not having a sound barrier along the interstate to buffer their home.
- City of DeLand expressed a concern about the current concept showing developable lands being utilized for stormwater retention around the SR 472 interchange. The City indicated they previously had a Development of Regional Impact (DRI) in place for the area and requested FDOT consider an alternate design to minimize the impacts to developable lands surrounding the interchange.
- A property owner requested an opportunity to discuss with FDOT realignment of the eastbound exit ramp to SR 472 and the proposed location of pond 413 on their property.
- A resident of the Summerhaven Subdivision (who also spoke during the oral comment period of the hearing) reiterated their disappointment that a sound barrier was not found to be cost feasible for the subdivision. He also provided a petition with 171 signatures from residents of Summerhaven and The Landings subdivisions, requesting a sound barrier be constructed between I-4 and their subdivisions.
- A citizen questioned why toll lanes are proposed instead of widening without tolls.
- A citizen requested a schedule/timeline for the project.
- A resident expressed concern for decreased property values due to increased noise from the interstate.
- A resident of DeBary Bayou expressed concern for the increased noise levels and requested suggestions for reducing noise levels at her home.

Oral Comments

- A resident of the Summerhaven Subdivision expressed disappointment that the sound barrier is warranted for the subdivision, however is cost prohibitive by approximately $7,000 per receptor. He asked that it be reevaluated and requested FDOT staff discuss the sound barriers with the homeowner's association.
- A resident of the Summerhaven Subdivision expressed concern for not having a sound barrier and commented the noise study peak hour times analyzed were not during the noisiest times of the day.
- A citizen commented about the presentation which showed that three families were impacted, but stated that his building that has twelve (12) units is impacted.
- A citizen questioned if FDOT was sure they wouldn't buy his home. He wants to make improvements and also asked if FDOT will compensate for those improvements if they later decide to purchase is home.
- A resident of Blue Side Condos expressed a concern of property values and impacts to HOA funds due to the proposed improvements impacting several units within a couple of buildings. He also expressed a concern for the close proximity of the sound barrier to their building.

Post Public Hearing Coordination and Decisions

No written comments were received during the 10-day post-hearing comment period. The oral comments from the public hearing were either directly addressed by project team members during the public hearing or through follow-up letter/email responses provided by the FDOT Project Manager. The public involvement documentation for I-4 Segment 4, including official public hearing transcripts and public input comments with responses, are provided in Appendix C of this report.

5.8 Value Engineering (VE)

Value Engineering (VE) for the proposed improvements was conducted after the alternatives public workshop meeting in 2014. The VE study was held June 2-6, 2014; the VE team consisted of representatives from the FDOT D5 office in the Traffic Operations, Roadway Design, Right-of-Way, Construction, Structures, Geotechnical, Maintenance, Project Management and Drainage departments. The VE team reviewed the preliminary concept plans and made recommendations based on overall value added to the project. The VE team made ten recommendations that would result in cost savings or added value to the project as follows.

- The VE team recommended using concrete pavement for the express lanes. This recommendation was accepted and will be considered for the construction of the express lanes.
- The VE team recommended constructing a box culvert under the new I-4 off-ramp (that connects I-4 eastbound to eastbound Debary Avenue) to provide connectivity of the existing

"Spring-to-Spring" multi-use trail instead of a bridge as proposed by the study team. The study team accepted using a concrete box culvert at the location of the new ramp.

- Three alternative alignments for Saxon Boulevard were presented to the VE team. The three alternatives, as described previously, presented one alignment that shifted the roadway to the north, one that shifted the roadway to the south, and one that kept the existing alignment. The VE team recommended shifting the alignment to the south side of Saxon Boulevard in order to avoid several transmission poles that are in the area. The study team accepted the recommendation and expanded the cross section of Saxon Boulevard while shifting the alignment to the south avoiding any new right-of-way needs on the northern side of the Saxon Boulevard and minimizing the number of transmission pole relocations along the roadway. The new alignment and cross section will extend from the current improvements to the west of I-4 to Normandy Boulevard where the new alignment will tie in to the existing alignment and cross section.
- The VE team recommended constructing a DDI or SPDI at the SR 472 interchange. The recommendation was intended to improve the overall function of the interchange over the other alternatives including the existing interchange. The two recommended alternatives were evaluated at this interchange and the DDI was found to perform better with lower overall delay and queue lengths. The DDI is presented as the preferred alternative in this report.
- The initial plans for the Rhode Island Avenue Extension indicated that only a portion of the roadway would be built to the full cross section. The remaining part of the extension would be a two lane cross section that was aligned to the south of the ultimate centerline while the future expansion of Rhode Island Avenue to its full cross section would occur to the north of the center line. The VE team recommended that the proposed construction along Rhode Island Avenue consist of constructing the outer most lanes in each direction of travel leaving the future expansion of the roadway to occur to the inside. Due to the short length of the proposed Rhode Island Avenue extension it was decided that the full cross section would be constructed throughout the entire length invalidating this recommendation.
- The VE team also recommended that the Rhode Island Avenue extension be constructed with the median and future construction to occur on the north side instead of to the outside. This recommendation conflicted with the previous recommendation and was invalidated when it was determined that the full cross section of the extension be constructed for the entire length of the roadway.
- The VE team recommended that the proposed transit corridor within the median of I-4 throughout Volusia County be eliminated. The recommendation cites that the logical transit corridor from Daytona to DeLand would not overlap the portion of I-4 that is within the project limits. Additionally, since there is no transit corridor planned within the median of I-4 in Seminole County, there is no connection to the south of the St. Johns River. Preserving the

transit corridor also requires realigning the curve located near the Dirksen Drive interchange which will require the acquisition of several buildings located adjacent to the current right-of-way. This recommendation was not accepted because the transit corridor has been requested to be included as a high priority by Volusia County officials.

- The VE team recommended that a transit corridor be preserved along SR 472 from I-4 to the future SunRail extension. This recommendation was accepted by the study team. FDOT is committed to maintaining sufficient room along the SR 472 corridor until such time that a final decision has been reached as to where rail will be located in Volusia County.
- In addition to the recommended interchange modifications at SR 472, the VE team also recommended adding an additional ramp that would connect the eastbound off-ramp directly to Graves avenue at the current intersection of Normandy Boulevard and Graves Road. This recommendation was evaluated and found to provide little improvement from an operations standpoint; therefore, the recommendation was not accepted.
- The VE team recommended that the park and ride facility, currently located at the intersection of Debary Avenue and the I-4 eastbound off-ramp, be relocated to a vacant lot to the west of the Riverside Condominiums. This relocation is necessary because the preferred alternative interchange proposes to add a ramp that will require the removal of the existing park and ride lot. This recommendation was accepted and incorporated into the study. FDOT is also performing a study to determine the current usage of the park and ride lot at this location, due to the recent implementation of SunRail, to help determine the size needed for the lot.

The VE study recommendations and dispositions are an integral part of the engineering design process. As the project proceeds through various phases of preliminary design, the design concepts are modified to reflect all aspects of engineering and environmental analyses. As such, some of the dispositions previously stated may have been modified during design and development of the Concept Plans.

5.9 Comparative Evaluation

The proposed improvements follow the existing alignment of I-4 and the typical section for the I-4 BtU corridor will be consistent with the I-4 Ultimate mainline typical section (three general use lanes and two express lanes in each direction). Thus, the alternatives analysis focused on the interchange design.

5.9.1 Evaluation Criteria

Each of the viable alternatives was evaluated based on several criteria, including: traffic operations, right-of-way impacts, natural and physical environment, social impacts, engineering design considerations and estimated project construction costs. The preferred/recommended alternatives

were based on the results of the engineering and environmental analysis and input from the public involvement program. The following provides a description of the evaluation criteria.

Community Impacts/Relocations

Community impacts anticipated from the proposed improvements may include adverse effects on neighborhoods and community cohesion. Potential relocations of residences and businesses that will be directly impacted are identified and quantified.

Environmental Impacts

Environmental impacts include identifying and quantifying, through literature research, field surveys and investigations, the archeological, historical and contamination sites impacted, as well as endangered species impacts. A cultural resources survey was conducted to identify historic sites in the study corridor and archaeological resources within proposed pond locations. The architectural study further assesses historic sites for their potential for listing in the NRHP. The contamination screening evaluation was completed to identify the number, location and risk potential of known or potential hazardous waste sites along the corridor. The *Endangered Species Biological Assessment (July 2016)* was completed to document the potential occurrence of natural habitats and wildlife within the proposed project corridor and recommend actions to avoid and/or minimize impacts to the greatest practicable extend.

Additional environmental impacts include identifying noise sensitive areas, wetlands and floodplain impacts along the project corridor. The noise study report evaluates future design traffic to determine if noise-sensitive receivers are within the project area, if noise levels are likely to increase and if noise impacts are anticipated to occur. Noise abatement measures are evaluated based on the analysis. Encroachment into existing wetlands or floodplains may result from the proposed improvements. The wetlands evaluation report identifies existing wetlands and surface water communities based on the USFWS Classification and functionality. Impacts due to the proposed construction and improvements are addressed by the use of mitigation banks and/or other mitigation options that satisfy state and federal requirements. Impacts to the 100-year floodplain from the proposed improvements will be mitigated by floodplain compensation ponds.

Project Costs

Project costs include construction and right-of-way costs. Construction cost estimates include roadway, structures, retaining walls, utility relocation, drainage improvements, maintenance of traffic and engineering design cost and construction engineering and inspection at 12% of total construction cost. Additionally, the project costs include right-of-way costs (to be provided by FDOT) for additional right-of-way necessary for each alternative to accommodate roadway and interchange improvements and stormwater management. Right-of-Way costs also include residential and business relocations.

Public Involvement

A comprehensive public involvement program (PIP), as described in Section 5.7 of this report, including a series of meetings, workshops and other outreach activities was initiated as part of the I-4 BtU PD&E Reevaluation Study. As part of the PIP, an Alternatives Public Workshop was held on Thursday, April 24, 2014 to present project information, to property owners, public officials, organizations and individuals interested in the project. The workshop was intended to provide details on the proposed design concepts and receive input from the public.

5.9.2 Evaluation Matrix

A summary of the estimated impacts resulting from the comparative evaluation of the alternatives considered is provided in Table 5.7. The table illustrates impacts from the proposed improvements to the I-4 mainline for the build alternative and comparatively shows any additional impacts from the various interchange alternative options.

5.9.3 Recommended Alternative

The FDOT District 5 has selected the recommended alternative based on analyses of potential environmental impacts, projected traffic operations, right-of-way acquisitions, estimated project costs, value engineering study and other engineering considerations. The following alternatives were selected as the recommended alternative to be presented at the Public Hearing:

- I-4 Mainline Build Alternative (Roadway reconstruction to include six general use lanes and four express lanes with 44’ transit corridor in the median)
- Dirksen Drive Alternative 2 (New proposed I-4 EB off-ramp with free-flow right movement to EB Dirksen Drive)
- Saxon Boulevard Alternative 6 (6-lane Widening, Right alignment w/I-4 EB off-ramps to Saxon Blvd. in northeast and southeast quadrants aligned)
- Rhode Island Avenue Build Alternative (Construct 4-lane, divided roadway between Veterans Memorial Parkway and Normandy Boulevard)
- Rhode Island Avenue Interchange (New proposed direct access interchange for ELs)
- SR 472 Alternative 5 (Diverging Diamond Interchange)

Table 5.7: Alternatives Evaluation Matrix

Summary of Impacts[1]	No-Build	*I-4 Mainline*	Dirksen Drive		Saxon Boulevard						Rhode Island Avenue	SR 472				
			Alt. 1 Base Interchange	***Alt. 2 EB Free-flow Right Turn Lane***	Alt. 1 Base Interchange	Alt. 2 SPDI	Alt. 3 6-lane Widening (Left alignment)	Alt. 4 6-lane Widening (Center alignment)	Alt. 5 6-lane Widening (Right alignment)	***Alt. 6 6-lane Widening (Right alignment w/I4 EB off-ramps to Saxon Blvd. aligned)***	***Alt. 1 Base Interchange***	Alt. 1 Loop Ramp	Alt. 2 SPDI	Alt. 3 WB Double Left Turn Lanes	Alt. 4 SPDI with U-Turns	***Alt. 5 Diverging Diamond Interchange (DDI)***
Roadway ROW Area to be acquired (Acres)	0	***3.82***	0.00	***2.23***	0.07	0.55	1.76	1.75	2.07	***11.70***	***11.05***	27.85	2.92	0.35	2.92	***3.78***
Pond ROW Area to be acquired (Acres)[2]	0	***18.80***	n/a	***3.12***	n/a	n/a	11.64	11.64	11.64	***0.91***	***6.25***	n/a	n/a	n/a	n/a	***10.70***
Impacted Noise Sensitive Sites	0	***399***	0	***0***	0	0	0	0	0	***0***	***0***	0	0	0	0	***0***
Wetland Impacts (Acres)	0	***54.51 (low and moderate quality wetlands)***	12.80	***12.80***	0	0	0	0	0	***0***	***1.30***	0	0	0	0	***0***
Floodplain Impacts (ac-ft)	0	***58.16***	0	***0***	0	0	0	0	0	***6.85***	***5.99***		0	0	0	***0***
Potential Contamination Sites[4]	0	***Sites:*** ***6-No Risk*** ***17-Low risk*** ***5-Medium risk*** ***Ponds:*** ***36-Low risk*** ***6-Medium risk: 408, 408 (Alt), 408B, SSV, 408D1 and 417***	Sites: 3-Low	***Sites:*** ***3-Low***	Sites: 5-Low 2-Medium	Sites: 5-Low 2-Medium	Sites: 5-Low 2-Medium	Sites: 5-Low 2-Medium	Sites: 5-Low 2-Medium	***Sites:*** ***5-Low*** ***2-Medium***	***Sites:*** ***1-Low*** ***1-Medium*** ***Ponds:*** ***6-Low:*** ***A, B, B1, C, D and 409B1***	Sites: 3-Low	Sites: 3-Low	Sites: 3-Low	Sites: 3-Low	***Sites:*** ***3-Low***
Section 4(f)	0	***0***	0	***0***	0	0	0	0	0	***0***	***0***	0	0	0	0	***0***

Table 5.7: Alternatives Evaluation Matrix

Summary of Impacts[1]	No-Build	*I-4 Mainline*	Dirksen Drive		Saxon Boulevard						Rhode Island Avenue	SR 472				
			Alt. 1 Base Interchange	***Alt. 2 EB Free-flow Right Turn Lane***	Alt. 1 Base Interchange	Alt. 2 SPDI	Alt. 3 6-lane Widening (Left alignment)	Alt. 4 6-lane Widening (Center alignment)	Alt. 5 6-lane Widening (Right alignment)	***Alt. 6 6-lane Widening (Right alignment w/I4 EB off-ramps to Saxon Blvd. aligned)***	***Alt. 1 Base Interchange***	Alt. 1 Loop Ramp	Alt. 2 SPDI	Alt. 3 WB Double Left Turn Lanes	Alt. 4 SPDI with U-Turns	***Alt. 5 Diverging Diamond Interchange (DDI)***
Potential Historic Sites[3]	0	***23; None are NRHP eligible***	0	***0***	0	0	0	0	0	***0***	***0***	0	0	0	0	***0***
Potential to Improve Traffic Operations	Low	***High***	Low	***High***	Low	Medium	High	High	High	***High***	***High[5]***	Low	Medium	Low	Medium	***High***
Pedestrian Accommodations	Yes	***n/a***	Yes	***Yes***	Yes	Yes	Yes	Yes	Yes	***Yes***	***Yes***	Yes	Yes	Yes	Yes	***Yes***
Bicycle Accommodations	No	***n/a***	Yes	***Yes***	No	No	No	No	No	***No***	***Yes***	Yes	Yes	Yes	Yes	***Yes***
Parcels Impacted	0	***49***	1	***15***	3	7	63	63	50	***34***	***8***	9	11	8	11	***21***
Potential Relocations	0	***12***	0	***1***	0	1	37	37	45	***28***	***0***	0	0	0	0	***0***
Constructability	n/a	***High***	High	***High***	High	Medium	High	High	High	***High***	***High***	High	Medium	High	Medium	***Medium***
Bridges (Area, SF)	0	***285,558***	0	***1,088***	44,998	47,398	45,227	45,227	44,565	***44,565***	***39,860***	31,182	61,392	38,231	61,392	***39,732***
Construction Cost[6]	None	***$275.0M***	$0.35M	***$2.9M***	$23.9M	$25.5M	$24.1M	$24.3M	$25.7M	***$26.3M***	***$72.5M***	$12.9M	$28.1M	$14.9M	$34.0M	***$28.8M***

Notes: This document is a working draft; data provided is a work in progress and may be updated or replaced.
Abbreviations: Alt.- Alternative, EB- eastbound, SPDI- Single-Point Diamond Interchange, DDI- Diverging Diamond Interchange, ROW– Right-of-Way, ac-ft– acre-feet, SSV- Stormwater Storage Vault, SF- square feet.
Alt. # - designates the preferred/recommended alternative.
[1]Table illustrates impacts from the proposed improvements to I-4 mainline for the build alternative and comparatively shows any additional impacts from the various interchange alternative options.
[2]Based on recommended pond sites as determined in the *Pond Siting Report, Segment 4 (August 2016)*.
[3]Historic resources constructed during or before 1970 within the APE (Area of Potential Effect) which includes areas 330' from proposed ROW and pond footprints plus 100' buffer.
[4]Within 1/2 mile of Roadway ROW
[5]New proposed interchange will provide greater connectivity within the local region.
[6]Construction costs are preliminary as determined by the Engineer's Estimate included in Appendix E; shown in millions of dollars.

6.0 Design Details of Recommended Alternative

The Concept Plans for this project, included in Appendix A, are provided for all of the alternatives discussed in Section 5.4 of this report. The preferred/recommended build alternatives have been identified to meet the purpose and need for the I-4 BtU corridor. The following sections provide design concept details and further analysis specific to the preferred alternative.

6.1 Typical Section

The proposed typical section for Segment 4 includes six general use lanes and four express lanes (6+4 Alternative) for the majority of the corridor and was previously shown in Figure 1.2; the portion of Segment 4 from west of Rhode Island Avenue to east of SR 472 will have one express lane in each direction. The typical section package for the entire I-4 BtU corridor is being submitted under separate cover. The typical section provides a design speed of 70 mph; other features of the typical section include:

- 12-foot outside shoulders;
- 10-foot paved (general use lanes and express lanes) outside shoulders;
- 10-foot inside shoulders for the general use lanes;
- 4-foot paved inside shoulders for express lanes (where applicable);
- A 2-foot-wide barrier wall between the general use and express lanes.

Detailed analysis of the typical section alternatives evaluated for I-4 Segment 4 are provided in the supplemental report titled *Reversible Express Lanes Evaluation - Segment 3 (1 Mile East of SR 434 to East of US 17/92) in Seminole County and Segment 4 (East of SR 15/600-US 17-92 to 1/2 mile East of SR 472) in Volusia County (November 2014)* provided in Appendix B.

6.2 Alignment

Horizontal Alignment: There is only one horizontal curve within Segment 4. The horizontal curve is a one-degree curve located west of Dirksen Drive and it will need to be adjusted to meet the current design speed standards for degree of curvature and superelevation. The preliminary Concept Plans and baseline data submitted with this report illustrate in detail the proposed horizontal alignment and can be found in Appendix A. Further discussion of the horizontal curve within Segment 4 can be found in Section 2.5.

Vertical Alignment: The proposed improvements require significant vertical alignment modifications to meet established criteria for the vertical alignment as outlined in Section 4.0 of this report. A listing of the known vertical curves and their design speeds can be found in Section 2.6. The existing vertical alignment will be modified near the Dirksen Drive interchange. The existing I-4 bridge over Dirksen Drive has a vertical clearance of approximately twenty-two feet and zero inches and was built to accommodate a former rail line parallel to Dirksen Drive. This rail line has since been abandoned and removed and most of the land has been sold to other owners making it no longer a

vertical clearance constraint. The vertical clearance for the proposed bridge at this location has been reduced to sixteen feet and 6 inches, which will allow the interstate to be lowered in this area.

6.3 Right-of-Way Requirements

The proposed improvements to I-4 Segment 4 will follow the existing alignment and will require right-of-way for the roadway improvements (including mainline, interchange alternatives, crossroad improvements and park and ride facility), stormwater management facilities and floodplain compensation sites.

The right-of-way acquisition required for the roadway improvements for the preferred alternatives includes 116 parcels totaling approximately 33 acres, as shown in Table 6.1. The right-of-way acquisition required for stormwater facilities and floodplain compensation, based on the recommendations in the *Pond Siting Report (August 2016)* includes 24 parcels totaling approximately 40 acres as summarized in Table 6.2. Some parcels may be impacted by both pond and roadway improvement acquisitions. The Concept Plans included in Appendix A depict the right-of-way acquisitions for the recommended alternative.

Table 6.1: Right-of-Way Acquisition for Roadway

Roadway Alternative	Parcel ID[1]	Size[2] (Acres)
Dirksen Drive Alternative 2	02-19-30-01-00-0010	0.012
Dirksen Drive Alternative 2	02-19-30-01-00-0020	0.029
Dirksen Drive Alternative 2	02-19-30-01-00-0030	0.074
Dirksen Drive Alternative 2	02-19-30-01-00-0040	0.101
Dirksen Drive Alternative 2	02-19-30-01-00-0140	0.040
Dirksen Drive Alternative 2	02-19-30-00-00-0260[3]	1.975
Dirksen Drive Alternative 2	02-19-30-01-00-0050	0.002
I-4 Mainline	02-19-30-00-00-0220	1.740
I-4 Mainline	02-19-30-00-00-0042	0.045
I-4 Mainline	25-18-30-00-00-0052	0.002
I-4 Mainline	13-18-30-01-00-0002	0.001
I-4 Mainline	13-18-30-01-00-0950	0.000
I-4 Mainline	18-18-31-00-00-0060	0.070
I-4 Mainline	13-18-30-00-00-0010	0.009
I-4 Mainline	02-19-30-00-00-0002	0.000
I-4 Mainline	Parcel ID not available	0.011
I-4 Mainline	34-18-30-52-00-0001	0.366
I-4 Mainline	23-18-30-01-14-0017	0.028
I-4 Mainline	07-18-31-05-09-0030	0.015
I-4 Mainline	07-18-31-05-08-0040	0.012
I-4 Mainline	07-18-31-05-07-0040	0.007
I-4 Mainline	07-18-31-05-06-0050	0.000
I-4 Mainline	06-18-31-04-00-0600	0.028

Table 6.1: Right-of-Way Acquisition for Roadway

Roadway Alternative	Parcel ID[1]	Size[2] (Acres)
I-4 Mainline	06-18-31-04-00-0590	0.204
I-4 Mainline	06-18-31-04-00-0510	0.033
I-4 Mainline	25-18-30-08-00-0080	0.000
I-4 Mainline	23-18-30-05-00-0140	0.001
I-4 Mainline	Parcel ID not available	0.105
I-4 Mainline	Parcel ID not available	0.008
I-4 Mainline	Parcel ID not available	0.097
I-4 Mainline	Parcel ID not available	0.016
I-4 Mainline	13-18-30-01-00-0630	0.006
I-4 Mainline	Parcel ID not available	0.010
I-4 Mainline	Parcel ID not available	0.006
I-4 Mainline	34-18-30-52-00-A060	0.036
I-4 Mainline	34-18-30-52-00-A090	0.036
I-4 Mainline	34-18-30-52-00-A080	0.036
I-4 Mainline	34-18-30-52-00-A070	0.036
I-4 Mainline	34-18-30-52-00-B160	0.036
I-4 Mainline	34-18-30-52-00-B080	0.036
I-4 Mainline	34-18-30-52-00-C060	0.036
I-4 Mainline	34-18-30-52-00-C050	0.036
I-4 Mainline	34-18-30-52-00-C120	0.036
I-4 Mainline	34-18-30-52-00-C110	0.036
I-4 Mainline	34-18-30-52-00-D010	0.051
I-4 Mainline	34-18-30-52-00-A050	0.036
I-4 Mainline	34-18-30-52-00-A040	0.036
I-4 Mainline	34-18-30-52-00-A030	0.036
I-4 Mainline	34-18-30-52-00-A020	0.036
I-4 Mainline	34-18-30-52-00-A010	0.036
I-4 Mainline	34-18-30-52-00-A120	0.036
I-4 Mainline	34-18-30-52-00-A110	0.036
I-4 Mainline	34-18-30-52-00-A100	0.036
I-4 Mainline	34-18-30-52-00-C030	0.036
I-4 Mainline	34-18-30-52-00-C040	0.036
I-4 Mainline	34-18-30-52-00-C020	0.036
I-4 Mainline	34-18-30-52-00-C100	0.036
I-4 Mainline	34-18-30-52-00-C090	0.036
I-4 Mainline	34-18-30-52-00-C010	0.036
I-4 Mainline	34-18-30-52-00-C070	0.036
I-4 Mainline	34-18-30-52-00-C080	0.036
Rhode Island Avenue	18-18-31-00-00-0033	6.848
Rhode Island Avenue	13-18-30-02-01-0100	0.701

Table 6.1: Right-of-Way Acquisition for Roadway

Roadway Alternative	Parcel ID[1]	Size[2] (Acres)
Rhode Island Avenue	13-18-30-02-01-0100	0.817
Rhode Island Avenue	13-18-30-02-01-0100	2.103
Rhode Island Avenue	13-18-30-02-01-0100	0.583
Saxon Boulevard Alternative 6	24-18-30-02-00-0010	0.221
Saxon Boulevard Alternative 6	24-18-30-02-00-0020	0.051
Saxon Boulevard Alternative 6	24-18-30-02-00-0030	0.123
Saxon Boulevard Alternative 6	Parcel ID not available	1.824
Saxon Boulevard Alternative 6	23-18-30-01-20-0010	4.176
Saxon Boulevard Alternative 6	30-18-31-03-25-0450	0.012
Saxon Boulevard Alternative 6	30-18-31-03-25-0440	0.210
Saxon Boulevard Alternative 6	30-18-31-03-25-0430	0.220
Saxon Boulevard Alternative 6	30-18-31-03-25-0420	0.224
Saxon Boulevard Alternative 6	30-18-31-03-25-0410	0.196
Saxon Boulevard Alternative 6	30-18-31-03-37-0170	0.243
Saxon Boulevard Alternative 6	30-18-31-03-37-0160	0.203
Saxon Boulevard Alternative 6	30-18-31-03-37-0150	0.237
Saxon Boulevard Alternative 6	30-18-31-03-37-0140	0.242
Saxon Boulevard Alternative 6	30-18-31-03-37-0130	0.233
Saxon Boulevard Alternative 6	30-18-31-03-37-0120	0.235
Saxon Boulevard Alternative 6	30-18-31-03-37-0110	0.235
Saxon Boulevard Alternative 6	30-18-31-03-37-0100	0.235
Saxon Boulevard Alternative 6	30-18-31-03-37-0090	0.298
Saxon Boulevard Alternative 6	30-18-31-03-36-0200	0.470
Saxon Boulevard Alternative 6	30-18-31-03-36-0190	0.222
Saxon Boulevard Alternative 6	30-18-31-03-36-0180	0.227
Saxon Boulevard Alternative 6	30-18-31-03-36-0170	0.211
Saxon Boulevard Alternative 6	30-18-31-03-36-0160	0.211
Saxon Boulevard Alternative 6	30-18-31-03-36-0150	0.211
Saxon Boulevard Alternative 6	30-18-31-03-36-0140	0.211
Saxon Boulevard Alternative 6	30-18-31-03-36-0130	0.247
Saxon Boulevard Alternative 6	30-18-31-03-36-0120	0.266
Saxon Boulevard Alternative 6	Parcel ID not available	0.008
Saxon Boulevard Alternative 6	30-18-31-03-25-0460	0.001
SR 472 Alternative 5	06-18-31-00-00-0130	0.918
SR 472 Alternative 5	06-18-31-00-00-0150	0.854
SR 472 Alternative 5	06-18-31-04-00-0542	0.223
SR 472 Alternative 5	06-18-31-04-00-0430	0.112
SR 472 Alternative 5	Parcel ID not available	0.053
SR 472 Alternative 5	06-18-31-00-00-0132	0.230
SR 472 Alternative 5	01-18-30-02-06-0130	0.017

Table 6.1: Right-of-Way Acquisition for Roadway

Roadway Alternative	Parcel ID[1]	Size[2] (Acres)
SR 472 Alternative 5	01-18-30-02-06-0180	0.015
SR 472 Alternative 5	01-18-30-02-06-0200	0.018
SR 472 Alternative 5	01-18-30-02-09-0240	0.004
SR 472 Alternative 5	01-18-30-02-09-0210	0.007
SR 472 Alternative 5	06-18-31-04-00-0180	0.017
SR 472 Alternative 5	01-18-30-00-00-0030	0.042
SR 472 Alternative 5	01-18-30-00-00-0250	0.833
SR 472 Alternative 5	01-18-30-02-10-0130	0.032
SR 472 Alternative 5	01-18-30-02-10-0180	0.028
SR 472 Alternative 5	01-18-30-02-10-0200	0.021
SR 472 Alternative 5	01-18-30-02-08-0160	0.243
SR 472 Alternative 5	01-18-30-02-07-0160	0.067
SR 472 Alternative 5	01-18-30-02-07-0200	0.042
	Total right-of-way required:	**32.583**

[1]Parcel ID not available- County or other municipality-owned. [2]Area proposed for take. [3]For park and ride facility.

Table 6.2: Right-of-Way Acquisition for Stormwater Facilities and Floodplain Compensation

Pond Designation	Parcel ID	Size (Acres)
Treatment Swale 401-B	02-19-30-00-00-0002	12.64
402F	02-19-30-00-00-0042	3.12
Vault 408	30-18-31-03-66-0160	0.22
	30-18-31-03-66-0150	0.23
	30-18-31-03-66-0140	0.23
	30-18-31-03-66-0130	0.23
409-A1	13-18-30-03-09-0190	0.20
	13-18-30-03-19-0210	0.23
	13-18-30-03-17-0210	0.05
	Volusia County	0.36
409-B1	13-18-30-02-25-0010	0.80
	Volusia County	0.22
412	06-18-31-00-00-0130	4.20
415	06-18-31-04-00-0170	1.59
416	01-18-30-00-00-0030	2.75
417	01-18-30-00-00-0250	1.33
	01-18-30-02-10-0130	0.71
	01-18-30-02-10-0180	0.06
	01-18-30-02-10-0200	0.06
B1	18-18-31-00-00-0060	0.50
	13-18-30-00-00-0010	2.33

Table 6.2: Right-of-Way Acquisition for Stormwater Facilities and Floodplain Compensation

Pond Designation	Parcel ID	Size (Acres)
	Volusia County	0.09
C	18-18-31-00-00-0033	3.33
Subtotal right-of-way required:		**35.48**
Floodplain Compensation Pond Designation	**Parcel ID**	**Size (Acres)**
403	25-18-30-00-00-0055	4.30
Subtotal right-of-way required:		**4.30**
Total right-of-way required:		**39.78**

6.4 Relocations

Right-of-Way acquisition for the proposed improvements associated with I-4 Segment 4 involves partial or complete purchase of parcels within the project study area which may result in displacement of residential and/or non-residential land uses. In order to minimize the unavoidable effects of right-of-way acquisition and displacement of people, FDOT will carry out a Right-of-Way and Relocation Program in accordance with state statutes and federal regulations. This includes advance notification to property owners of impending acquisitions, fair market value payment for property rights and financial assistance to relocated individuals or businesses. The recommended alternative for I-4 Segment 4 is anticipated to impact 41 parcels which are developed/occupied and may require full or partial acquisitions, involving potential relocation of 40 residences (approximately 6.3 acres) and one commercial/business property (approximately 0.5 acre), as shown in Table 6.3. Additional information pertaining to the displaced properties including resources available to facilitate relocation and socio-economic impacts to the surrounding neighborhoods are identified in the *Conceptual Stage Relocation Plan SR 400 (I-4) Segment 4: East of SR 15-600/US 17-92 to East of SR 472 (January 2017)* prepared for this project.

Table 6.3: Potential Relocations

Parcel ID	Location	Parcel Size (Acres)	Proposed ROW Acquisition (Acres)
3418305200A060	313 Dirksen Dr., A6 Debary, FL 32713	0.036	0.036
3418305200A090	313 Dirksen Dr., A9 Debary, FL 32713	0.036	0.036
3418305200A080	313 Dirksen Dr., A8 Debary, FL 32713	0.036	0.036
3418305200A070	313 Dirksen Dr., A7 Debary, FL 32713	0.036	0.036
3418305200A050	313 Dirksen Dr., A5 Debary, FL 32713	0.036	0.036
3418305200A040	313 Dirksen Dr., A4 Debary, FL 32713	0.036	0.036
3418305200A030	314 Dirksen Dr., A3 Debary, FL 32713	0.036	0.036

Table 6.3: Potential Relocations

Parcel ID	Location	Parcel Size (Acres)	Proposed ROW Acquisition (Acres)
3418305200A020	315 Dirksen Dr., A2 Debary, FL 32713	0.036	0.036
3418305200A010	316 Dirksen Dr., A1 Debary, FL 32713	0.036	0.036
3418305200A120	317 Dirksen Dr., A12 Debary, FL 32713	0.036	0.036
3418305200A110	318 Dirksen Dr., A11 Debary, FL 32713	0.036	0.036
3418305200A100	319 Dirksen Dr., A10 Debary, FL 32713	0.036	0.036
02193001000040	334 Lake Crescent Dr., Debary, FL 32713	0.390	0.101
30183103250450	1860 Saxon Blvd., Deltona, FL 32725	0.217	0.012
30183103250440	1866 Saxon Blvd., Deltona, FL 32725	0.210	0.210
30183103250430	1872 Saxon Blvd., Deltona, FL 32725	0.220	0.220
30183103250420	1878 Saxon Blvd., Deltona, FL 32725	0.224	0.224
30183103250410	1689 N Normandy Blvd., Deltona, FL 32725	0.196	0.196
30183103370170	1668 N Normandy Blvd., Deltona, FL 32725	0.243	0.243
30183103370160	1906 Saxon Blvd., Deltona, FL 32725	0.203	0.203
30183103370150	1912 Saxon Blvd., Deltona, FL 32725	0.237	0.237
30183103370140	1918 Saxon Blvd., Deltona, FL 32725	0.242	0.242
30183103370130	1924 Saxon Blvd., Deltona, FL 32725	0.233	0.233
30183103370120	1930 Saxon Blvd., Deltona, FL 32725	0.235	0.235
30183103370110	1936 Saxon Blvd., Deltona, FL 32725	0.235	0.235
30183103370100	1942 Saxon Blvd., Deltona, FL 32725	0.235	0.235
30183103370090	1948 Saxon Blvd., Deltona, FL 32725	0.298	0.298
30183103360200*	1698 Diane Ter., Deltona, FL 32725	0.470	0.470
30183103360190	1970 Saxon Blvd., Deltona, FL 32725	0.222	0.222
30183103360180	1976 Saxon Blvd., Deltona, FL 32725	0.227	0.227
30183103360170	1982 Saxon Blvd., Deltona, FL 32725	0.211	0.211
30183103360160	1988 Saxon Blvd., Deltona, FL 32725	0.211	0.211
30183103360150	1994 Saxon Blvd., Deltona, FL 32725	0.211	0.211
30183103360140	2000 Saxon Blvd., Deltona, FL 32725	0.211	0.211
30183103360130	2006 Saxon Blvd., Deltona, FL 32725	0.247	0.247
30183103360120	1695 W Finland Dr., Deltona, FL 32725	0.266	0.266
-	Saxon Boulevard Volusia County	-	0.008
30183103660160	1700 W Finland Dr., Deltona, FL 32725	0.224	0.224
30183103660150	1710 W Finland Dr., Deltona, FL 32725	0.230	0.230
30183103660140	1720 W Finland Dr., Deltona, FL 32725	0.230	0.230

Table 6.3: Potential Relocations

Parcel ID	Location	Parcel Size (Acres)	Proposed ROW Acquisition (Acres)
30183103660130	1730 W Finland Dr., Deltona, FL 32725	0.230	0.230
*commercial/business	**Total:**	**7.243**	**6.758**

6.5 Design Exceptions and Variations

From time to time, it may be necessary to deviate from the standard criteria used in the design process. If deemed necessary, two specific deviations may occur: (1) Design Exception or (2) Design Variation. A Design Exception is required when the design criteria applied falls below the minimums established by AASHTO. A Design Variation is required when design criteria applied falls below FDOT established criteria and the deviation is not covered by the Design Exception. Table 6.4 summarizes fourteen (14) design elements and specifies whether AASHTO or FDOT design criteria are satisfied, or if a design exception/variation is required for the specific design element for the proposed improvements. The proposed improvements will require new construction; therefore, as indicated in Table 6.4, no design exceptions are anticipated. A design variation is anticipated for the median shoulder widths in the express lanes and general use lanes. The proposed median shoulder widths for the express lanes and general use lanes are four feet and ten feet respectively. These shoulder widths are consistent with the minimum required by AASHTO and will not require a design exception. A border width of 94 feet for freeways and interchange ramps is required by FDOT; however, in order to minimize impacts to adjacent properties and reduce right-of-way acquisition costs, a 15-foot border width has been used throughout the project limits. When necessary, standard concrete barrier wall will be placed at the edges of the outside shoulders. This will provide protection for motorists from objects that do not meet clear zone requirements and maintain the appropriate border width. The barrier wall will also be placed on top of any necessary retaining walls to provide protection from any drop offs.

Table 6.4: Design Exceptions and Variations

Design Element	Design Exception < AASHTO	Design Variation < FDOT and > AASHTO
1. Design Speed	S	S
2. Lane Width	S	S
3. Shoulder Width	S	NS
4. Bridge Width	S	S
5. Structural Capacity	S	S
6. Vertical Clearance	S	S
7. Grade	S	S

Table 6.4: Design Exceptions and Variations

Design Element	Design Exception < AASHTO	Design Variation < FDOT and > AASHTO
8. Cross Slope	S	S
9. Superelevation	S	S
10. Horizontal Alignment	S	S
11. Vertical Alignment	S	S
12. Stopping Sight Distance	S	S
13. Horizontal Clearance	S	S
14. Border Width	N/A	NS
Note: S = Satisfied, NS = Not Satisfied, N/A = Not Applicable		

6.6 Drainage

This project will make many improvements to the water quality along the roadway corridor. The stormwater runoff from both the new and existing impervious areas will be treated in existing and proposed stormwater facilities. The stormwater runoff will be collected by storm sewer systems and roadside ditches. The water quality treatment and attenuation will be achieved through the expansion and construction of offsite ponds, treatment swales and a stormwater vault, some of which will require acquisition of additional right-of-way.

The stormwater will be routed to existing and proposed stormwater ponds. There are a total of twenty-two (22) basins within the project limits. In areas with poor soils and high water table, only wet detention ponds were considered. The ponds were sized based on the assumption that most of the offsite runoff would be drained through separate systems. For a majority of the ponds, the location of where the proposed basins begin and end is the same as the existing condition. The location of the outfall in the proposed condition is the same as the existing. None of the basins discharge to an OFW. The following is a summary of the findings documented in the *Location Hydraulic Report* (*August 2016*) and the *Pond Siting Report (August 2016)*. These documents contain more detailed information regarding the drainage along the project corridor.

6.6.1 Proposed Drainage Patterns

There are four basins (Basins 400 – 403) within the project that ultimately discharge to the St. Johns River. The first basin has one pond (Pond 400), which is an existing pond that does not need to be expanded and regraded. Pond 400 will continue to provide floodplain compensation. Basin 401 will have dry treatment swales (Treatment Swale 401-B) east of I-4 along a majority of the basin to provide treatment. Treatment Swale 401-B requires 12.64 acres of additional right-of-way. Pond 400 and Treatment Swales 401-B discharge to Class III waters and provide treatment volume equivalent to requirements for discharge into OFW, in order to provide compensating treatment for areas that are not captured and brought to the pond and swales. Basin 402 requires one existing

pond and five proposed ponds for treatment and attenuation of the runoff. All of the ponds for Basin 402 are located within the infield areas of the Dirksen Drive Interchange, with the exception of Pond 402F. Pond 402F will require 3.12 acres of additional right-of-way. Basin 403 has one pond (Pond 403), which is located within the bifurcated area. Basin 404 has been combined with basin 403 in the proposed condition to accommodate for the I-4 Ultimate conditions. These are the only open basins within the project. No additional right-of-way is required for any of the remaining recommended ponds and treatment swales.

There are four basins (Basins 405 – 408A) within the project that ultimately discharge to Trout Lake, which is land-locked. Basin 405 has two existing ponds (Ponds 405A and 405B) which provide treatment and attenuation for the westbound portion of I-4. The ponds will have to be reduced in size to provide adequate clearance for the roadway. Ponds 405A and 405B will continue to serve as wetland mitigation sites as well. Basin 406 has two ponds (Ponds 406A and 406B) that provide treatment and attenuation for Saxon Boulevard and I-4. Pond 406A is an existing pond that needs to be regraded and expanded; whereas, Pond 406B is a new pond.

Basin 407 and Basin 408 have been combined to accommodate for portions of Saxon Boulevard and I-4 improvements (Basin 407-408). Basin 408A has a proposed vault that will accommodate the runoff for the remaining portion of the Saxon Boulevard improvements. Basin 407-408 has three existing ponds (Pond 407, 407A and 408) that will be expanded and regraded with one proposed pond (Pond 407C). The expansion of Pond 408 will not require additional right-of-way. Vault 408, located east of Pond 408 and north of Saxon Boulevard, is a proposed alternative that will accommodate the runoff from Saxon Boulevard and will require acquisition of four parcels. The vault will function as a temporary underground storage area for roadway runoff. Once the vault reaches its design capacity, a pump and a force main system will direct the excess runoff to an existing City of Deltona wastewater treatment plant for treatment and irrigation reuse. This will be a joint undertaking between FDOT and the City of Deltona.

There is one basin (Basin 409) within the project that discharges to Lake Mallard, which is land-locked. The basin was separated into two for the recommended pond alternatives. Pond 409-A1 is an existing pond that needs to be regraded and expanded within the existing right-of-way. Pond 409-B1 is needed for treatment and attenuation and is located west of I-4, within existing right-of-way.

There are three basins (Basins 410, 411 and 413) within the project that discharge into a series of depressional areas east of I-4, which are land-locked. Basin 410 requires one pond (Pond 410) for treatment and attenuation. Pond 410 is an existing pond that needs to be regraded and expanded. The amount of runoff for Basin 411 only requires one pond (Pond 411), which is an existing pond that needs to be expanded and regraded. Basin 413 includes one existing pond that does not need

to be expanded or regraded. No additional right-of-way is required for any of the recommended ponds.

There is one basin (Basin 412) within the project that discharges into a series of depressional areas west of I-4, which is land-locked. The two existing ponds will be removed in the proposed condition due to the widening. Basin 412 requires one pond for treatment and attenuation. Pond 412 is located just west of the northwest quadrant of the I-4 and SR 472 interchange. Additional right-of-way for the pond is needed.

Basin 414 starts at SR 472 and continues north to 3,955 feet outside of the project limits. The runoff for Basin 414 necessitates the need for one pond (Pond 414). Pond 414 is an existing pond that is also located outside of the project limits. Pond 414 was designed for the ultimate condition; therefore, regrading and expansion is not needed. The pond discharges to a series of depressional areas east and west of I-4, which are considered land-locked. The pond was designed as a closed basin with no outfall. Additional information on proposed drainage patterns is presented in the *Pond Siting Report (August 2016).*

There are four basins (Basins 415-418) along SR 472 west of I-4 and at the intersection of Kentucky Avenue/Martin Luther King Jr. Beltway and SR 472. Existing Pond 418 will need to be expanded and regraded within the existing right-of-way. Pond 416 requires one pond for treatment and attenuation and 417 requires one pond for treatment and attenuation. Both ponds require additional right-of-way.

There are three basins (Basins A-C) along Rhode Island Avenue from Veterans Memorial Parkway eastward to Normandy Boulevard and one basin (Basin D) along Normandy Boulevard just north and south of the Rhode Island/Normandy Boulevard intersection. There is an existing pond (Basin D) along Normandy Blvd. and was designed as a closed basin with no outfall. Regrading and expansion is not needed for the pond. Basins A, B and C along Rhode Island Avenue require one pond per basin for treatment and attenuation. All three ponds require additional right-of-way.

The *Pond Siting Report (August 2016)* evaluated the alternatives and identified the recommended pond sites. Table 6.5 lists the recommended pond alternatives and pond construction costs for I-4 Segment 4. The overall drainage maps for the project are shown in Figure 6.1 through Figure 6.4.

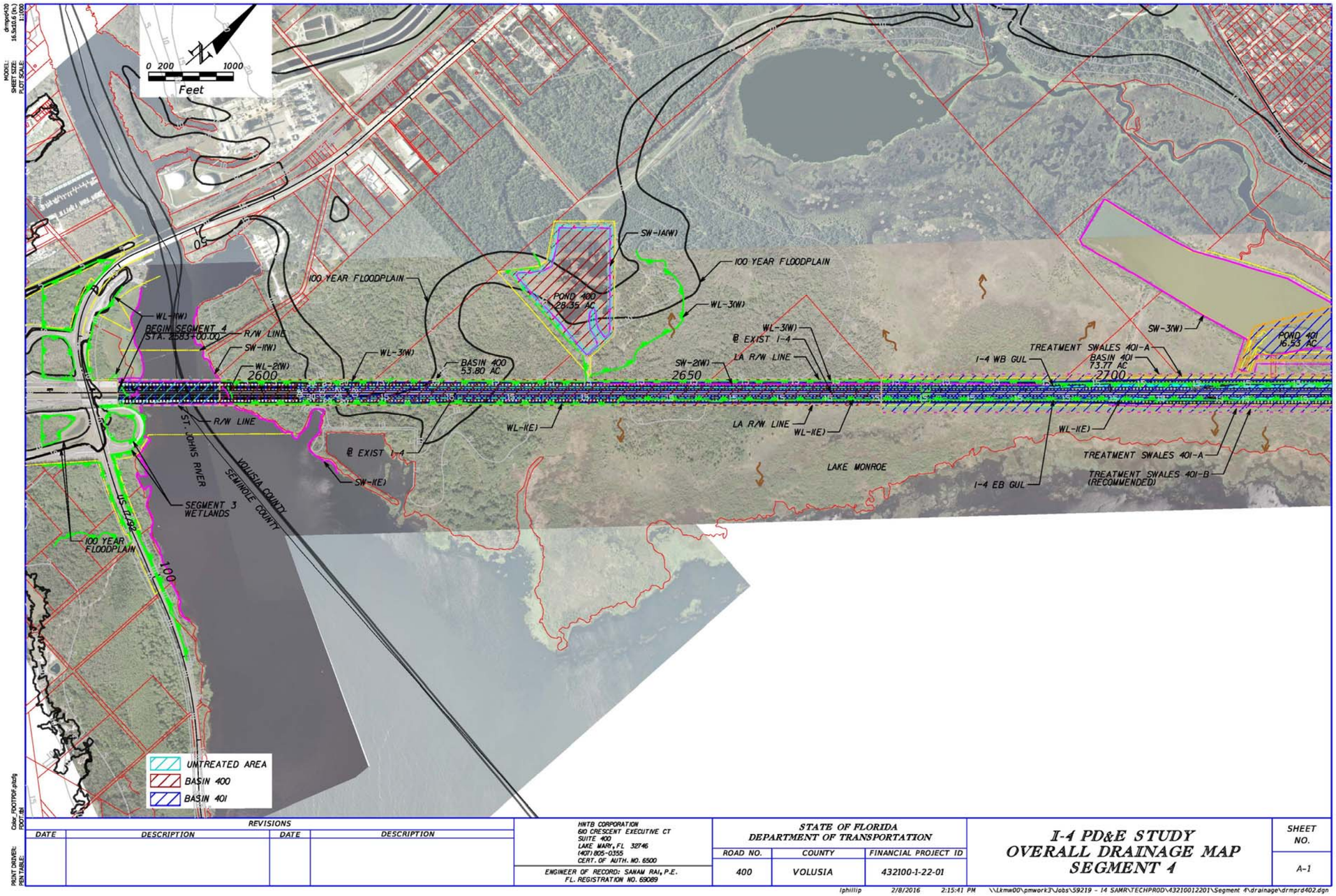
Table 6.5: Summary of Recommended Pond and FPC Sites

Recommended Pond Alternative	Total Pond Cost*
Pond 400	$0
Swale 401-B	$2,136,769
Pond 402A	$1,619
Pond 402B	$997,430
Pond 402C	$609,810
Pond 402D	$105,002
Pond 402E	$126,126

Table 6.5: Summary of Recommended Pond and FPC Sites

Recommended Pond Alternative	Total Pond Cost*
Pond 402F	$1,198,747
Pond 403	$4,188,643
Pond 405A	$38,726
Pond 405B	$55,563
Pond 406A	$200,346
Pond 406B	$341,648
Pond 407A	$217,219
Pond 407B	$191,486
Pond 407C	$474,966
Pond 408	$82,219
Stormwater Storage Vault 408	$6,190,965
Pond 409-A1	$621,048
Pond 409-B1	$398,642
Pond A & FPC A	$883,205
Pond B1	$292,865
Pond C	$1,092,464
Pond D	$0
Pond 410	$220,079
Pond 411	$29,142
Pond 412	$741,015
Pond 413	$0
Pond 414	$3,929
Pond 415	$785,609
Pond 416	$357,325
Pond 417	$650,058
Pond 418	$43,316
FPC 403	$1,652,932
FPC 407	$ 446,265
Total =	**$21,186,535**

*Total pond cost, as determined in the *Pond Siting Report Segment 4 (August 2016)*, includes stormwater management facility construction costs, costs associated with wetland impacts and parcel acquisition costs. When there are no proposed changes, the pond cost is $0.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: SANAM RAI, P.E.
FL. REGISTRATION NO. 69089

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
OVERALL DRAINAGE MAP
SEGMENT 4

SHEET NO. A-1

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Figure 6.1 – Overall Drainage Map (Sheet 1 of 4)

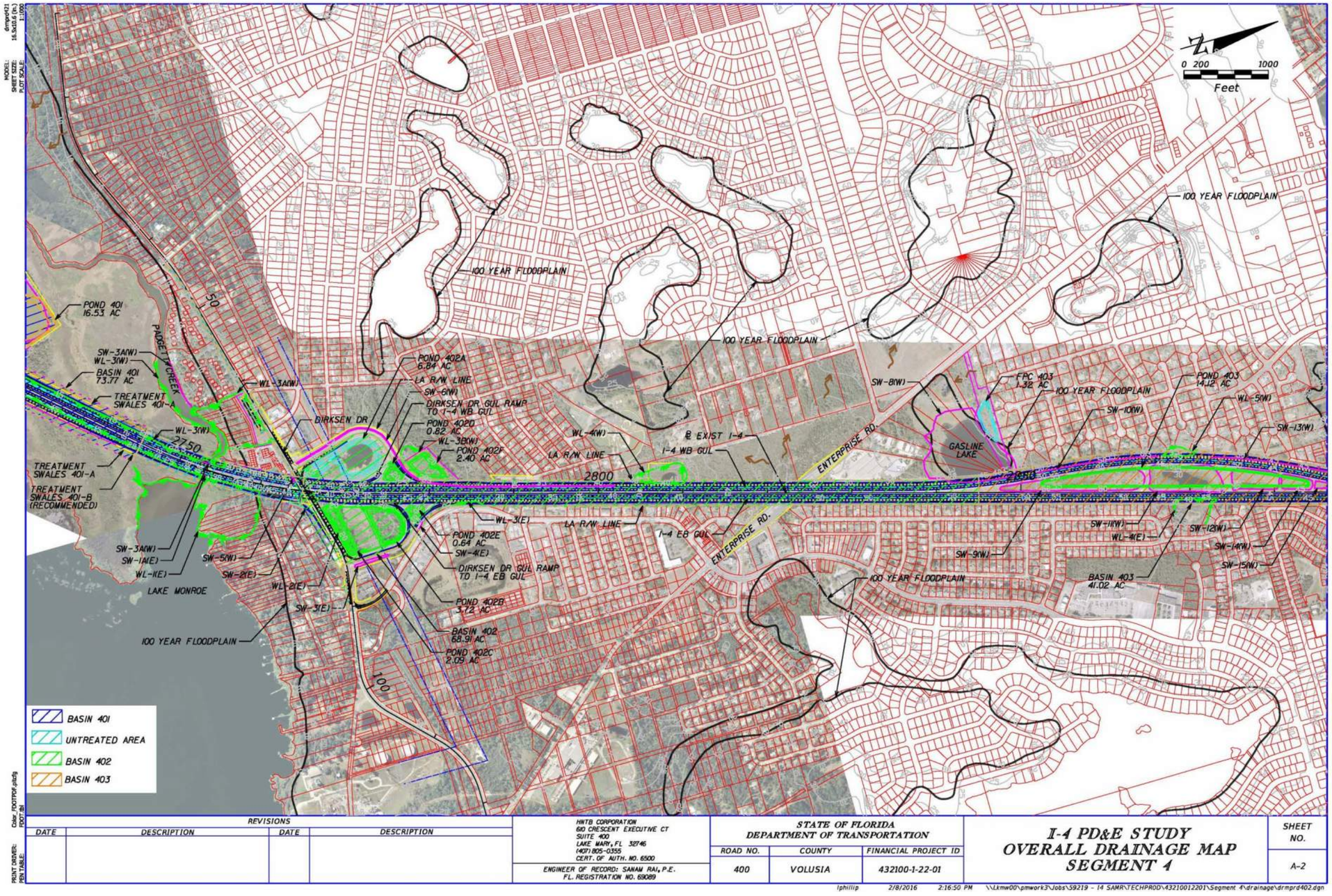


Figure 6.2 – Overall Drainage Map (Sheet 2 of 4)

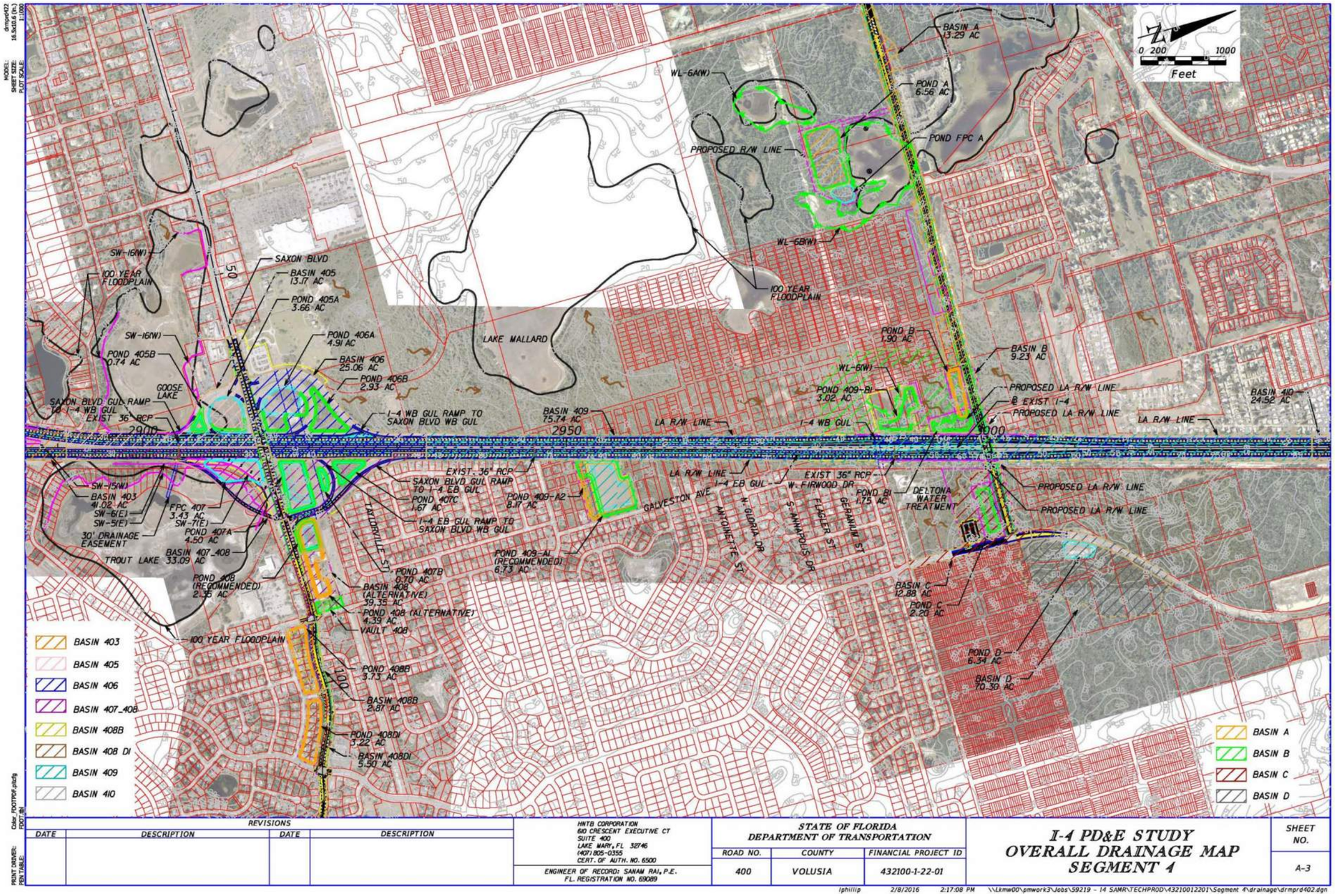


Figure 6.3 – Overall Drainage Map (Sheet 3 of 4)

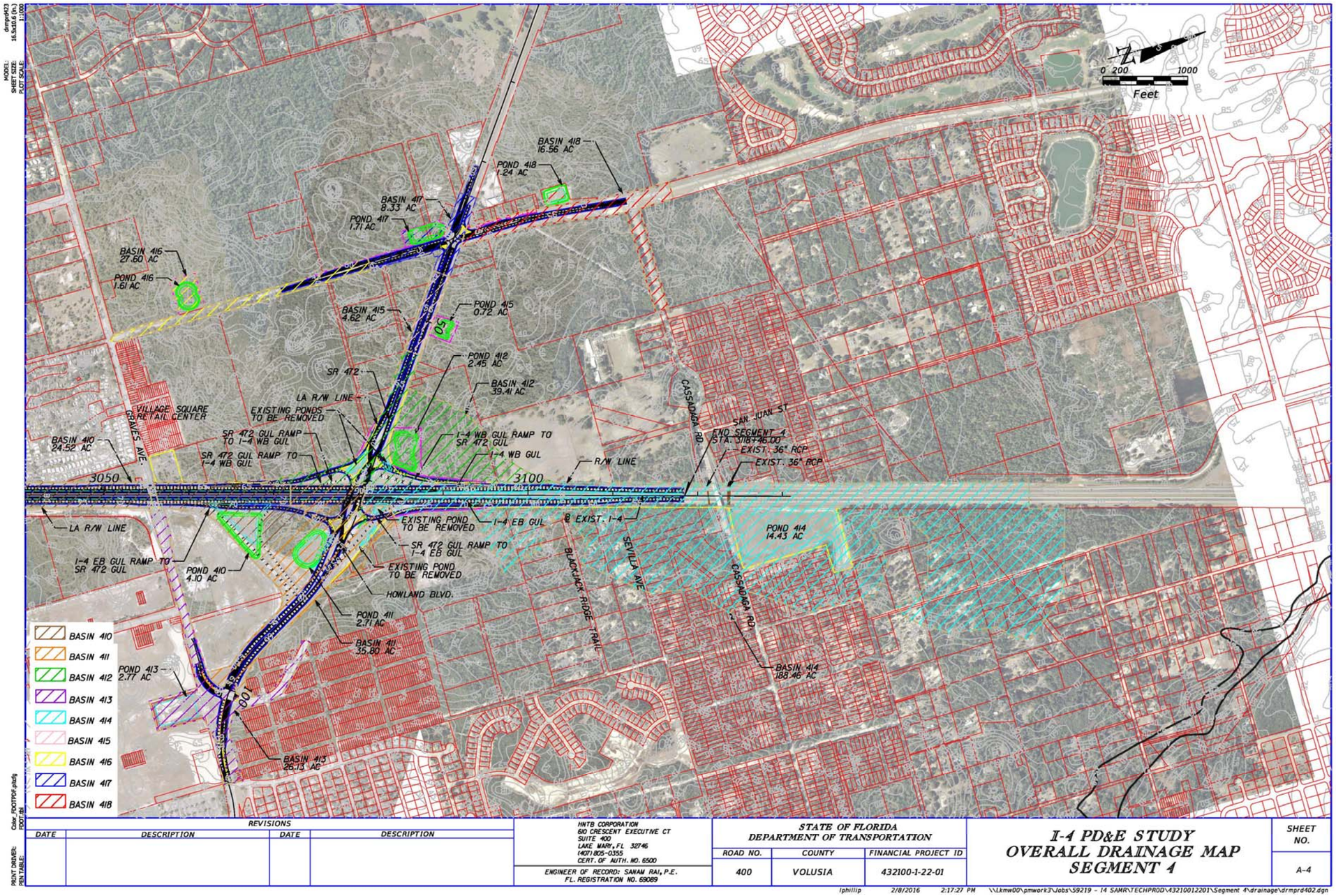


Figure 6.4 – Overall Drainage Map (Sheet 4 of 4)

6.6.2 Cross Drains

The upstream portion of the existing culvert, located at Station 2904+29 (Milepost 6.169) is located within Zone A of the 100-year floodplain. Through hydraulic analysis, it was determined that the cross drain will require a fifteen (15) foot extension downstream of the pipe to maintain a 36-foot clearance. There is no change to the upstream invert of the pipe since there is no change to the existing ramp. The culvert at Station 2946+25 (Milepost 6.960) flows east to west and will require an east and west extension totaling 37 feet. The culvert at Station 2988+72.86 (Milepost 7.556) flows east to west and will require only a sixteen (16) foot extension to the west because there is enough clearance to the east of I-4. Through hydraulic analysis, it was determined that all three cross drains will remain the same size and slope. Table 6.6 presents the proposed cross culvert data. Additional information is presented in the *Location Hydraulic Report (August 2016)* prepared for this study.

Table 6.6: Proposed Cross Drains

			Description from Original Construction Plans					
Milepost	Station	Count	Span (in)	Rise (in)	Type	Length (ft)	Elevation (ft NAVD)	
							Left	Right
6.169	2904+29	1	36	36	RCP	357	18.88	18.73
6.960	2946+25	1	36	36	SCP	247	27.15	26.00
7.556	2988+72.86	1	36	36	SCP	253	28.24	19.80

Abbreviations: RCP – Reinforced Concrete Pipe, SCP – Steel Casing Pipe

6.7 Traffic Operational Analysis

Traffic operational analyses of the Recommended Build Alternative (referred to as Modified Build in the current I-4 SAMR Reevaluation) were completed. The operational analyses included Highway Capacity Analysis using Highway Capacity Software (HCS) 2010 for freeway, weave and ramp operations along the Interstate and Synchro software for arterial intersection operations. Additionally, microsimulation analyses were performed using VISSIM software to analyze the I-4 general and special use lanes and the study area intersections. Detailed analyses, including model runs and computer outputs are provided in *Appendix I [I-4 Systems Access Management Report Re-evaluation North Section - Operational Analysis (August 25, 2016)]* of the supplemental report, *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472 (March 2017)*, prepared for this project; the following sections provide a summary of the traffic operations analyses for the recommended alternative.

Basic Freeway Operations

The results of the operational analyses of the basic freeway segments, as shown in Table 6.7, indicated that the majority of segments (general purpose lanes) would operate at LOS D or better while only three segments within I-4 Segment 4 (eastbound and westbound) would operate at LOS E during either the AM or PM peak hour for the projected 2040 traffic volumes.

Intersection Operations

The results of the operational analyses, as shown in Table 6.8, indicated that the majority of study intersections within the project area are projected to operate at LOS D or better during the AM and PM peak hours for the projected 2040 traffic volumes. Four of the 16 intersections would operate at LOS E or worse during the PM peak hour.

6.8 Bridge Analysis

An analysis of the existing bridge conditions and proposed improvements for each bridge structure was conducted as part of this PD&E study. There are twelve existing bridge structures and three proposed bridge structures along the mainline in Segment 4 of the I-4 BtU. As part of this study, each bridge was evaluated to determine if widening or replacement of the bridges is required or if the bridge may remain in place. Where practical, widening or retrofitting the existing structure is recommended. However, due to the proposed roadway geometrics and alignment, there are several structures which will require replacement. The proposed improvements are summarized in Table 6.9. Vertical clearance requirements are based on minimum vertical clearance to the rail of a future transit corridor. Detailed bridge analysis for structures carrying I-4 over St. Johns River is provided in the *SR 400(I-4) Over US 17-92 and St. Johns River Structural Evaluation Study (September 2014)* prepared as part of this PD&E reevaluation.

6.9 Conceptual Signing Plan

A conceptual signing plan for the preferred alternatives was developed for the I-4 BtU improvements. A critical aspect in development of the signing concepts is distinguishing between the general use and special use (express) lanes. This is achieved by employing the designated sign panel colors to distinguish between the two lane facility types. The conceptual signing plan includes static and dynamic message signs (DMS) which show entry access points from general use to express lanes, as well as vehicle eligibility restrictions and toll pricing amounts. The conceptual signing plan for Segment 4 is provided in Appendix D.

Table 6.7: Basic Freeway Operational Analysis Results – Build 2040

Roadway/Segment		2040 AM Peak Hour			2040 PM Peak Hour		
		Avg Speed (mph)	Density (pc/mi/ln)	LOS	Avg Speed (mph)	Density (pc/mi/ln)	LOS
I-4 Basic Freeway Eastbound							
On Ramp from US 17-92	On Ramp from EL south of Dirksen Dr	65.6	27.7	D	60.8	34.4	D
On Ramp from EL south of Dirksen Dr	Dirksen Dr EB Off Ramp	66.3	28.5	D	59.1	37.2	E
Dirksen Dr EB Off Ramp	Dirksen Dr WB Off Ramp	67.6	24.6	C	66.4	26.5	D
Dirksen Dr WB Off Ramp	On Ramp from Dirksen Dr	68.0	23.8	C	67.2	25.2	C
On Ramp from Dirksen Dr	Saxon Blvd EB Off Ramp	66.5	26.4	D	65.5	27.8	D
Saxon Blvd EB Off Ramp	Saxon Blvd WB Off Ramp	67.9	23.9	C	68.7	22.3	C
Saxon Blvd WB Off Ramp	On Ramp from Saxon Blvd	69.6	20.0	C	69.9	18.5	C
On Ramp from Saxon Blvd	SR 472 Off Ramp	67.5	24.6	C	68.8	22.1	C
SR 472 Off Ramp	EL Eastern Terminus	70.0	16.6	B	70.0	11.9	B
EL Eastern Terminus	On Ramp from SR 472	74.8	15.2	B	75.0	12.6	B
On Ramp from SR 472	Orange Camp Rd Off Ramp	64.1	29.9	D	67.1	25.4	C
Orange Camp Rd Off Ramp	On Ramp from Orange Camp Rd	66.7	26.0	D	69.4	20.6	C
On Ramp from Orange Camp Rd	Study Terminus	66.7	28.0	D	71.6	21.7	C
I-4 Basic Freeway Westbound							
Study Terminus	Orange Camp Rd Off Ramp	72.1	21.0	C	65.5	29.4	D
Orange Camp Rd Off Ramp	On Ramp from Orange Camp Rd	73.4	18.9	C	68.0	26.4	D
On Ramp from Orange Camp Rd	SR 472 Off Ramp	70.2	23.7	C	64.5	30.7	D
SR 472 Off Ramp	Begin EL	75.0	13.9	B	74.6	16.0	B
Begin EL	On Ramp from SR 472	70.0	13.8	B	70.0	17.6	B
On Ramp from SR 472	Saxon Blvd Off Ramp	70.3	23.5	C	69.1	25.1	C
Saxon Blvd Off Ramp	On Ramp from Saxon Blvd	73.0	19.5	C	72.7	20.1	C
On Ramp from Saxon Blvd	Dirksen Dr Off Ramp	64.9	30.1	D	67.5	27.0	D
Dirksen Dr Off Ramp	On Ramp from Dirksen Dr	67.4	27.1	D	69.8	24.2	C
On Ramp from Dirksen Dr	Off Ramp to EL south of Dirksen Dr	55.4	42.0	E	64.8	30.2	D
Off Ramp to EL south of Dirksen Dr	US 17-92 Off Ramp	57.9	38.4	E	64.6	29.2	D
I-4 EL Eastbound							
Off Ramp to I-4 south of Dirksen Dr	Rhode Island Ave Off Ramp	75.0	8.7	A	75.0	10.4	A
Rhode Island Ave Off Ramp	EL Eastern Terminus	75.0	7.1	A	75.0	8.4	A
I-4 EL Westbound							
EL Eastern Terminus	Rhode Island Ave On Ramp	75.0	8.4	A	75.0	7.1	A
Rhode Island Ave On Ramp	On Ramp from I-4 south of Dirksen Dr	75.0	10.4	A	75.0	8.7	A

Segments operating at LOS E.

Table 6.8: Intersection Operational Analysis Results

Primary Road	Secondary Road	2040 AM Peak Hour		2040 PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Dirksen Dr	WB Ramps	34.3	C	9.3	A
	EB Ramps	11.1	B	1.9	A
	Deltona Blvd	51.7	D	18.0	B
Saxon Blvd	Veterans Memorial Pkwy	47.4	D	67.5	E
	Park and Ride Lot	15.6	B	24.0	C
	EB Ramps	16.4	B	22.4	C
	Finland Dr	48.4	D	29.8	C
Rhode Island Ave	Veterans Memorial Pkwy	185.3	F	222.2	F
	EL Ramps	15.7	B	19.9	B
	Normandy Blvd	51.4	D	41.1	D
SR 472	MLK Beltway	53.7	D	31.2	C
	WB Ramps	32.6	C	69.9	E
	EB Ramps	18.1	B	74.4	E
	Graves Ave	36.2	D	45.4	D
Orange Camp Rd	WB Ramps	14.6	B	12.0	B
	EB Ramps	16.8	B	14.5	B

Intersections operating at LOS E or worse.

Table 6.9: Proposed Bridge Improvements

Facility	Bridge No.	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.)	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 WB over US-17-92/St. Johns River	790196	Widen	2566.3	105	21.2	9	Prestressed Concrete Beams	20	142	Widening without foundation retrofit within the St. Johns River limits.
I-4 EB over US-17-92/St. Johns River	790197	Widen	2566.3	105	22.8	9	Prestressed Concrete Beams	20	142	Widening without foundation retrofit within the St. Johns River limits.
I-4 EB GUL & EL Over Ditch	New Bridge	New Bridge	100	98	6	5	Prestressed Concrete Beams	1	100	Minimum vertical clearance established from MHW elevation.
I-4 WB GUL & EL Over Ditch	New Bridge	New Bridge	100	98	6	5	Prestressed Concrete Beams	1	100	Minimum vertical clearance established from MHW elevation.
I-4 WB over Padgett Creek	790941	Replace	152	106	19.4	4	Prestressed Concrete Beams	3	56	Original construction date of 1959 with widening in 2005. Replace to match existing span length.
I-4 EB over Padgett Creek	790099	Replace	152	118	19.4	4	Prestressed Concrete Beams	3	56	Original construction date of 1959 with widening in 2005. Replace to match existing span length.
I-4 WB over Dirksen Drive	790042	Replace	138	106	16.5	4	Prestressed Concrete Beams	2	81	Requires replacement for proposed vertical alignment.
I-4 EB over Dirksen Drive	790100	Replace	138	106	16.5	4	Prestressed Concrete Beams	2	81	Requires replacement for proposed vertical alignment.
Enterprise Road over I-4	790191	Replace	417	77	21	8.2	Prestressed Concrete Beams	3	182	Inadequate existing span lengths for proposed roadway section of I-4.
Saxon Boulevard EB over I-4	790167	Replace	332	68	21	7.3	Prestressed Concrete Beams	3	162	Inadequate existing span lengths for proposed roadway section of I-4.
Saxon Boulevard WB over I-4	790166	Replace	332	68	21	7.3	Prestressed Concrete Beams	3	162	Inadequate existing span lengths for proposed roadway section of I-4.
Rhode Island Avenue (Not Existing Currently)	New Bridge	New Bridge	456	108	21	6	Prestressed Concrete Beams	3	155	Bridge to be constructed with EL ramp tie-in along Southern coping.
Graves Avenue over I-4	790218	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SR-472 EB over I-4	790053	Replace	303	64	21	6	Prestressed Concrete Beams	3	135	New bridge for proposed interchange configuration.
SR-472 WB over I-4	790190	Replace	304	71	21	6	Prestressed Concrete Beams	3	135	New bridge for proposed interchange configuration.

6.10 Utilities

Numerous utility companies have utilities located within the project corridor, as previously identified in Section 2.16 of this report. Utility impacts were carefully evaluated when considering the proposed stormwater pond locations. The location of overhead utilities, existing power poles and access issues were also evaluated to minimize impacts. However, smaller gas lines and other buried utilities may involve relocation.

Most utility companies have the capability to adjust their services without causing major inconveniences to the customers. As a result, mitigation measures, to the maximum extent feasible, will include the following:

- Maintaining utility connections in temporary locations;
- Minimizing the time without service;
- Installing alternative or new service before disconnecting the existing service; and
- Allowing service disruption only during periods of non-usage or minimum usage.

A *Utility Impact Report (April 2016)* has been prepared and submitted under separate cover. Table 6.10 provides a summary of potential utility impacts associated with the proposed improvements for the recommended alternative in the I-4 Segment 4 corridor. Exact locations of existing utilities will be determined in the final design of the proposed improvements. Coordination with the known utility companies during the final design phase will assist in minimizing relocation adjustments and disruptions of service to the public.

6.11 Lighting

Based on the AASHTO Roadway Lighting warrant criteria and as determined in the *Lighting Justification Report (June 2014)* for Segment 4, Continuous Freeway Lighting is recommended along all of Segment 4. FDOT has projects programmed to add lighting at the interchanges at US 17-92 (435053-1) and at Dirksen Drive, Orange Camp Road and SR 472 (435056-1); these improvement projects are funded for construction with lettings in 2017.

6.12 Section 4(f) Lands

In accordance with Section 4(f) of the Department of Transportation (DOT) Act of 1966 [Title 49, USC, Section 1653(f)] amended and codified in Title 49, USC, Section 303, the project was evaluated for potential Section 4(f) resources. Section 4(f) resources consist of publicly owned parks, recreation areas, wildlife refuges and public and private historic and archaeological sites. Two Section 4(f) properties adjacent to the project were identified (Gemini Springs Park and Lake Monroe Park). The project is not anticipated to impact these properties. There will be no change in access, visual impacts, noise, or other from the project. Indirect Section 4(f) impacts were not found along this segment of I-4.

Table 6.10: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset / Side	Begin Station	End Station	Relocation Required
Communications	AT&T Corporation	6.5" Underground Fiber Optic	Crossing at intersection of N. Kentucky Ave & SR 472	East side of intersection	39+69	41+43	Yes, adjust to run parallel to road.
Communications	AT&T	48 PR Aerial Fiber Optic Cable	From 330-ft east of intersection of Veterans Memorial Pkwy & Saxon Blvd east on Saxon Blvd to intersection of I-4 westbound ramp to Saxon Blvd & Saxon Blvd	North side of road	43+40	59+38	Yes, relocation of poles required
Communications	AT&T	48 PR Aerial Fiber Optic Cable	Crossing of Saxon Blvd 440-ft east of intersection of Saxon Blvd ramp to I-4 eastbound & Saxon Blvd	N/A	84+56	85+04	Yes, relocation of poles required
Communications	BrightHouse Networks	Unknown Size Underground Fiber Optic	From 1730-ft south to 1000-ft north of Enterprise Rd on I-4 Corridor	West side of road	2806+00	2833+28	Yes, adjust to run parallel to road.
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of I-4 west bound ramp to Saxon Blvd & Saxon Blvd to intersection of W. Apache Circle & Saxon Blvd	South side of road	62+71	95+91	Yes, adjust to run parallel to road.
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	Crossing at intersection of N. Normandy Blvd & Saxon Blvd	West side of intersection	109+96	110+03	Yes, extend across proposed Saxon Blvd.
Communications	CenturyLink	Underground Fiber Optic/Copper Cable of Varying Strand Count	From intersection of N. Normandy Blvd & Saxon Blvd to intersection of Falmouth Ave & Saxon Blvd	South side of road	110+94	116+48	Yes, adjust to run parallel to road.
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of I-4 eastbound ramp to Dirksen Dr. & Dirksen Dr.	North side of intersection	83+95	85+65	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From Graves Ave, I-4 Overpass east 1260-ft on I-4 Corridor	West side of road	3056+13	3068+69	Yes, adjust to run parallel to road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of W. Finland Dr. & Saxon Blvd	West side of intersection	91+58	91+63	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of W. Finland Dr. & Saxon Blvd	South side of intersection	91+58	92+37	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from intersection to 170-ft east of W. Finland Dr. & Saxon Blvd	Diagonally across road	92+37	93+65	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from 170-ft east to 360-ft east of intersection of W. Finland Dr. & Saxon Blvd	Diagonally across road	93+65	95+74	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 140-ft west to 270-ft east of intersection of W. Apache Cir. & Saxon Blvd	South side of road	95+75	99+56	Yes, relocation of poles required

Table 6.10: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset / Side	Begin Station	End Station	Relocation Required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd from 165-ft west of to intersection of Diane Terrace & Saxon Blvd	Diagonally across road	99+56	100+92	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of Saxon Blvd 120-ft east of intersection of N. Normandy Blvd & Saxon Blvd	N/A	111+76	111+79	Yes, relocation of poles required
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Saxon Blvd 730-ft west of intersection of W. Finland Dr. & Saxon Blvd	N/A	84+58	85+07	Yes, relocation of poles required
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 1490-ft west of to 990-ft west of SR 472 overpass, along I-4 corridor	West side of road	3064+20	3069+00	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of Dirksen Dr. at intersection of I-4 westbound ramp to Dirksen Dr. & Dirksen Dr.	East side of intersection	72+78	73+65	Yes, relocation of line parallel to I-4 Corridor
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from intersection to 400-ft east of W. Finland Dr. & Saxon Blvd	Diagonal across road	91+62	95+75	Yes, relocation of poles required
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from 150-ft west of intersection of W. Apache Circle & Saxon Blvd to intersection of Diane Terrace & Saxon Blvd	Diagonal across road	95+75	100+92	Yes, relocation of poles required
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, 130-ft east of intersection of Exotic Terrace & Saxon Blvd east to intersection of N. Normandy Blvd & Saxon Blvd	Diagonal across road	104+64	109+81	Yes, relocation of poles required
Electricity	Duke Energy Transmission	115 KV Aerial Electric	Diagonal crossing of Saxon Blvd, from intersection to 450-ft east of intersection of N. Normandy Blvd & Saxon Blvd	Diagonal across road	109+81	114+74	Yes, relocation of poles required
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 500-ft west of to intersection of Forest Edge Dr. & SR 472	South side of road	105+45	111+18	Yes, relocation of poles required
Electricity	Duke Energy Transmission	115 KV Aerial Electric	From 6850-ft west of SR 472, I-4 overpass east on I-4 to Graves Ave, I-4 Corridor overpass	East side of road	2987+90	3055+94	Yes, adjust to run parallel to road.
Wastewater/ Storm Water	Volusia County	Force Main of Varying Size	From intersection of Martin Luther King Jr. Bellway east to station 134+00 on Howland Blvd	North side of road	40+04	134+00	Yes, adjust to run parallel to road.
Water	City of Deltona	Unknown Size Water Main	From intersection of N. Normandy Blvd & Saxon Blvd to intersection of Bamboo Ct & Saxon Blvd	North side of road	111+37	126+57	Yes, relocate to run parallel to road
Water	Volusia County	16" Water Main	From intersection of Martin Luther King Jr. Bellway to intersection of E. Graves Ave & Howland Blvd	South side of road	37+96	99+99	Yes, adjust to run parallel to the road.

6.13 Production Schedule

The PD&E update for I-4 Segment 4 is scheduled to be completed Summer of 2017. The preliminary design began in July of 2015. The segment is projected to be procured as a Design-Build contract, however it is not funded for construction.

6.14 Project Cost Estimates

The total estimated cost of construction including Maintenance of Traffic (MOT), mobilization costs and contingency is $456.3 Million, based on the Long Range Estimates (LRE). Estimated Engineering Design and Construction Engineering and Inspection (CEI) costs are expected to be an additional 8% each of the total construction cost, resulting in a total estimated cost of $529.3 Million as shown in Table 6.11. The complete LRE for Segment 4 is included in Appendix E.

Table 6.11: I-4 Segment 4 Project Cost Estimate

Cost Component	Estimated Cost (LRE)
LRE	$327,811,054
MOT (10%)	$32,781,105
Mobilization (10%)	$36,059,216
Project Unknowns (15%)	$59,497,706
Project Non-Bid Subtotal	$150,000
Construction Subtotal	**$456,299,081**
Design (8%)	$36,503,927
CEI (8%)	$36,503,927
Total Estimated Project Cost	**$529,306,934**

6.15 Access Management

Access management is the practice of controlling vehicular access to a roadway in order to increase roadway efficiency and improve travel safety by reducing the number of traffic conflicts encountered by roadway users. The State Highway System Access Management Act (F.S. 335.18) mandates the implementation of access management standards based on the Access Management Classification System developed in Administrative Rule 14-97. I-4 has been identified as Access Management Class 1 under this system. The proposed improvements will not modify the existing interchange spacing.

The recommended alternative for Dirksen Drive adds another lane at the new I-4 eastbound to Dirksen Drive eastbound ramp tie-in along the right-hand side of the eastbound lanes. This new lane is dropped at the Lakeshore Drive intersection, approximately 1,100 feet east of the off-ramp, as a right turn only lane that does not continue through to the other side of the intersection. The existing park and ride facility which is accessed by a driveway approximately 900 feet east of the Interstate will be relocated.

The widening alternatives for Saxon Boulevard will affect the access management in two ways. The first way is by restricting left turn movements by replacing the existing two-way left turn lane (TWLTL) with a continuous traffic separator. This will ensure that all left turn movements will be restricted to median openings or controlled intersections. The second way is by eliminating all exclusive right turn lanes. The roadway widening will add an additional outside lane on each side of the roadway which will be a shared through/right turn lane for all accesses adjacent to the roadway.

SR 472 is currently a Class 3 Access Management roadway between I-4 and US 17-92. The proposed improvements in Alternative 1 will create a directional median opening approximately 1,200 feet west of the Interstate.

7.0 Supplemental Technical Reports

A series of supporting documents including technical reports and memorandums were prepared as part of the PD&E study for this project. Information from these reports was used to evaluate and develop the alternatives and design recommendations in this PER. These documents are listed here for reference.

1. *Air Quality Analysis Technical Memorandum, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)*

2. *Concept of Operations - SR 400 (I-4) from West of SR 25/US 27 to East of SR 472 (June 2016)*

3. *Conceptual Stage Relocation Plan SR 400 (I-4) Segment 4: East of SR 15-600/US 17-92 to East of SR 472 (January 2017)*

4. *Contamination Screening Evaluation Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)*

5. *Endangered Species Biological Assessment, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)*

6. *Essential Fish Habitat Technical Memorandum, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (April 2016)*

7. E*valuation and Assessment of the I-4 Ultimate and Beyond the Ultimate 2002 FEIS and RODs (2002 and 2005) [May 2017]*

8. *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project North Section – from East of SR 434 to East of SR 472 (March 2017)*

9. *Lighting Justification Report - Segments 3 & 4 East of SR 434 to East of SR 472 (June 2014)*

10. *Location Hydraulic Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (August 2016)*

11. *Noise Study Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)*

12. *Pavement Type Selection Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2014)*

13. *Pond Siting Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (August 2016)*

14. *Report of Preliminary Geotechnical Engineering Investigation for Ponds, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (December 2015)*

15. *Reversible Express Lanes Evaluation - Segment 3 (1 Mile East of SR 434 to East of US 17/92) in Seminole County and Segment 4 (East of SR 15/600-US 17-92 to 1/2 mile East of SR 472) in Volusia County (November 2014)*

16. *SR 400(I-4) Over US 17-92 and St. Johns River Structural Evaluation Study (September 2014)*

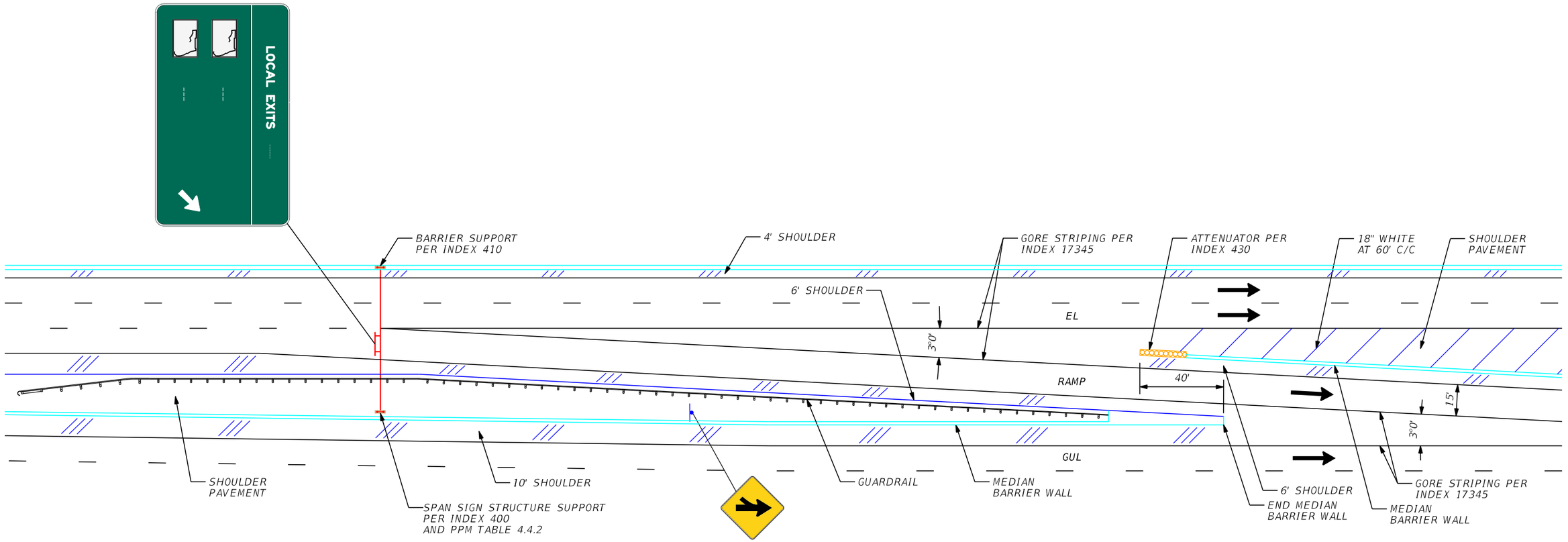
17. *St. Johns River Multi-Use Bridge Concept Report - Segments 3 & 4: Seminole & Volusia Counties, Florida (November 2014)*

18. *Technical Memorandum: Cultural Resource Assessment Survey of Proposed Improvements to Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (December 2015)*

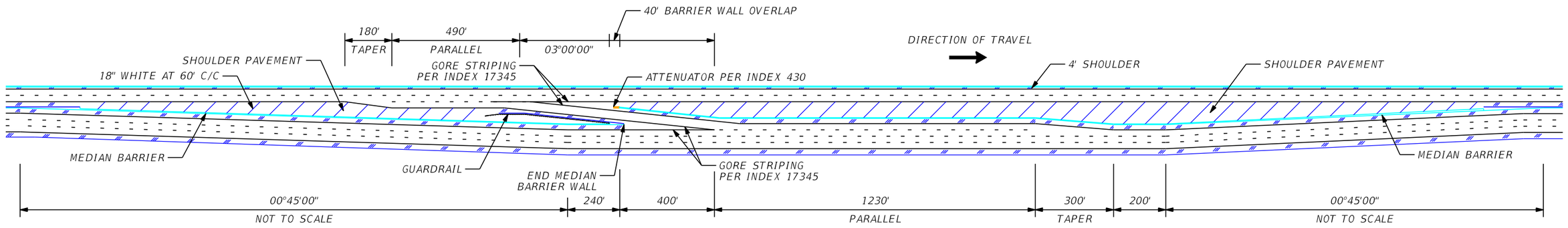
19. *Utility Impact Report Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 (April 2016)*

20. *Wetland Evaluation Report, Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92) to ½ Mile East of SR 472 (July 2016)*

Appendix A - **Concept Plans**



SLIP RAMP DETAIL EGRESS FROM EXPRESS LANES



SLIP RAMP DETAIL EGRESS FROM EXPRESS LANES

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 1

A-1

MODEL:
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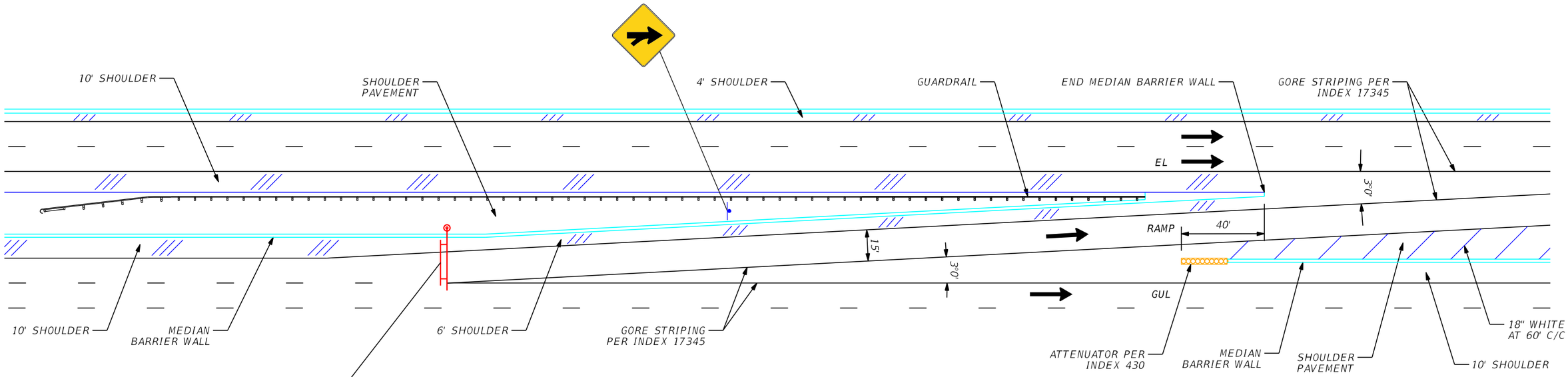
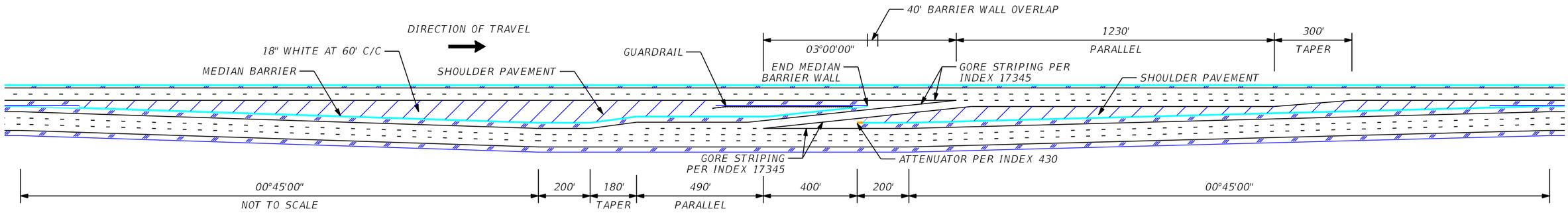


SLIP RAMP DETAIL INGRESS TO EXPRESS LANES



SLIP RAMP DETAIL INGRESS TO EXPRESS LANES

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 2

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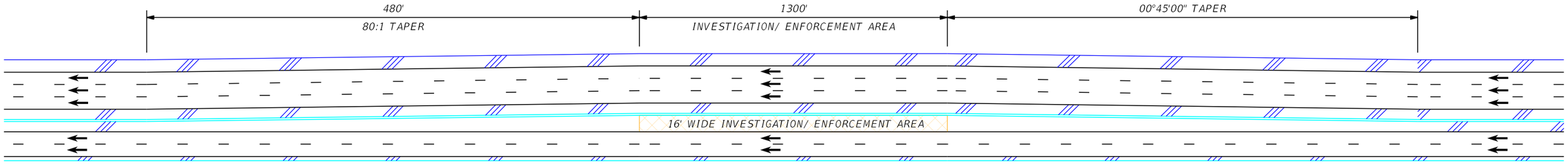
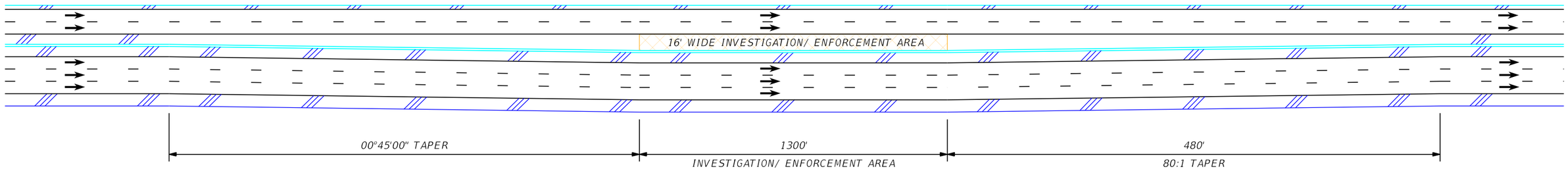
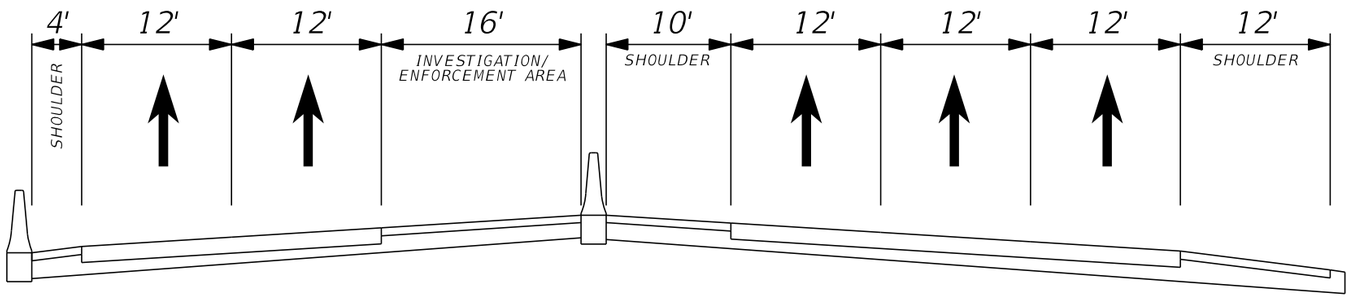


WESTBOUND INVESTIGATION/ ENFORCEMENT AREA DETAILS



EASTBOUND INVESTIGATION/ ENFORCEMENT AREA DETAILS



INVESTIGATION/ ENFORCEMENT AREA TYPICAL SECTION

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PEN TABLE: FDOT_GrayExtdImg.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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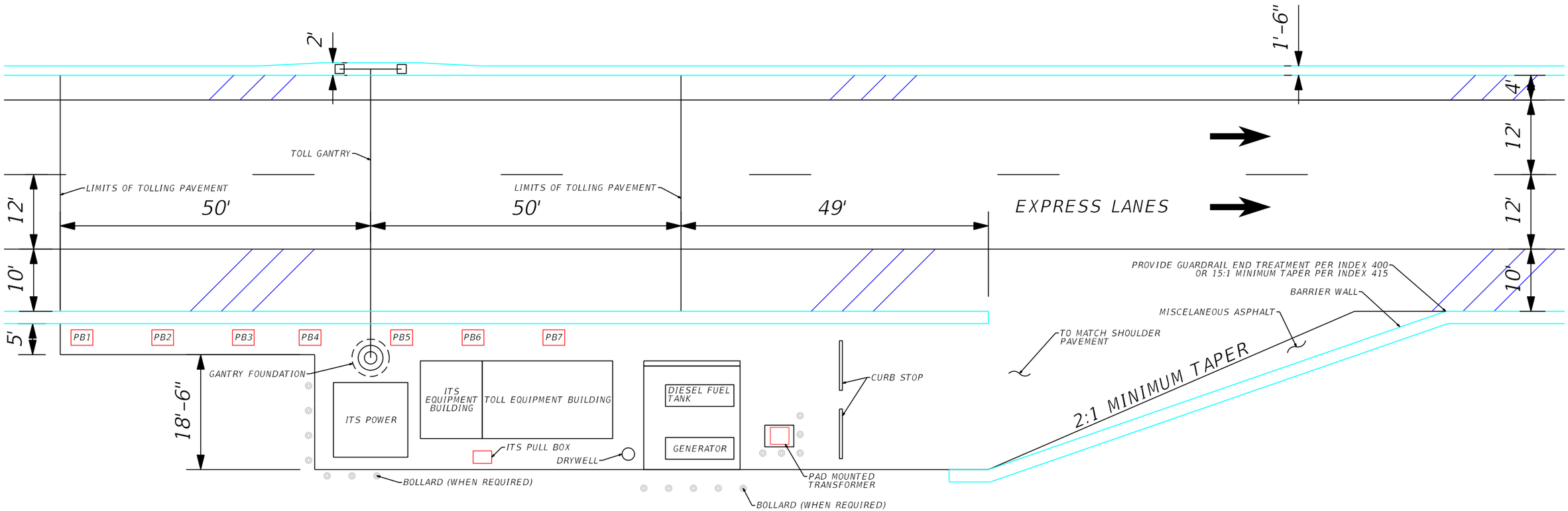
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 3

amourad 11/8/2016 10:16:22 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\SlipRampDetail.DGN



TYPICAL TOLL EQUIPMENT SITE BETWEEN ROADWAYS

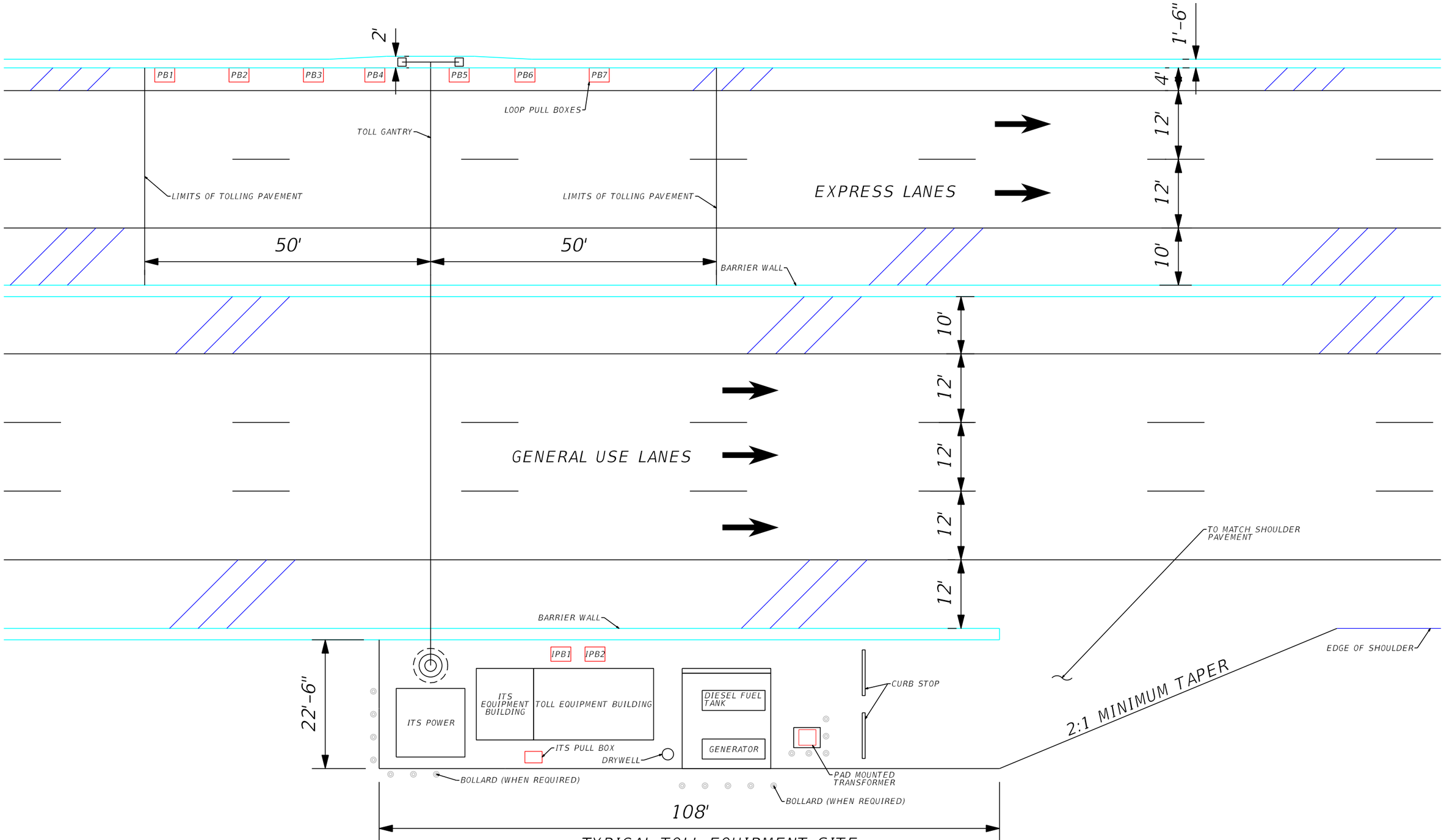
HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 4



TYPICAL TOLL EQUIPMENT SITE
ON OUTSIDE OF ROADWAY
(EXTENDED GANTRY)

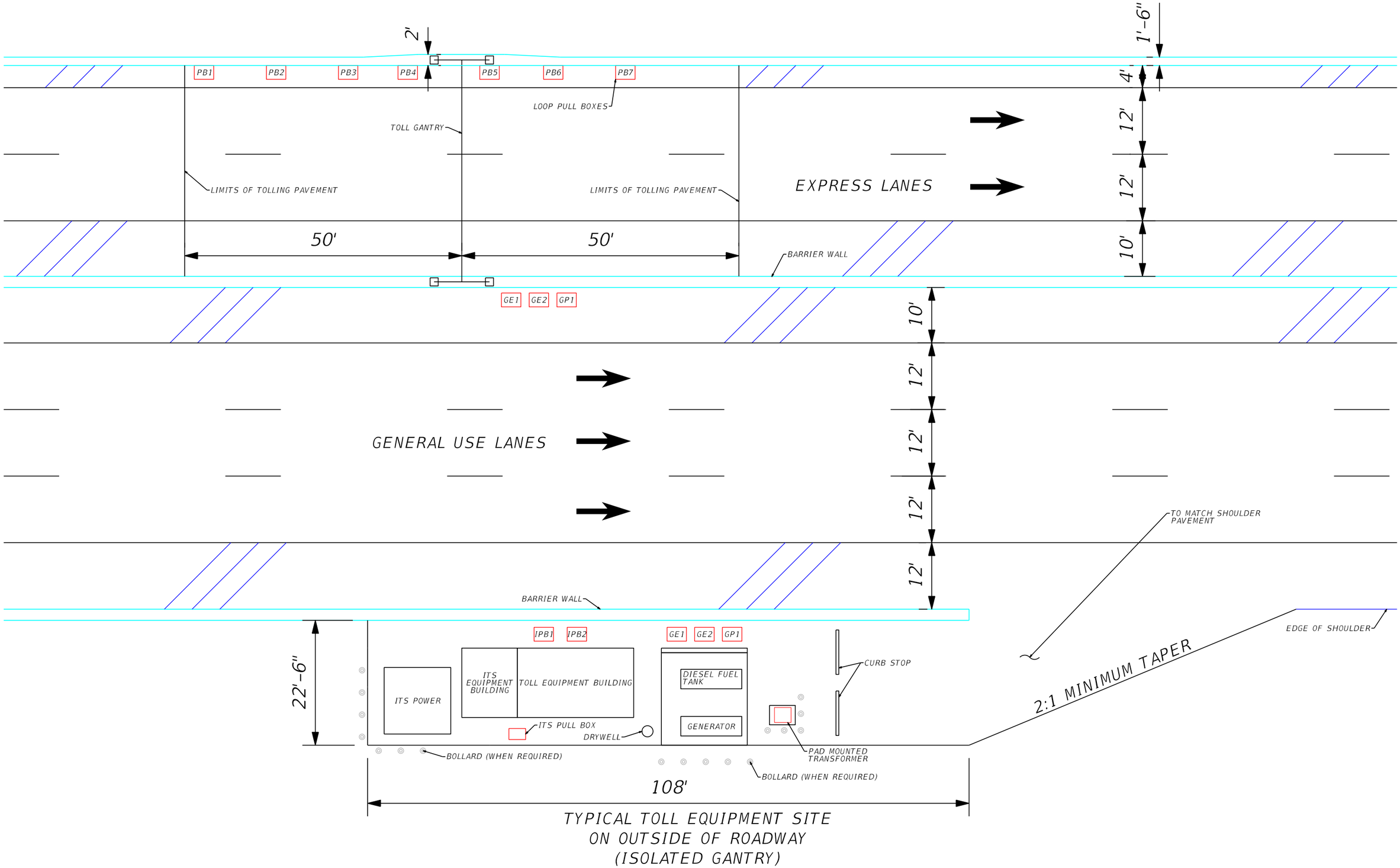
HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 5



TYPICAL TOLL EQUIPMENT SITE ON OUTSIDE OF ROADWAY (ISOLATED GANTRY)

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

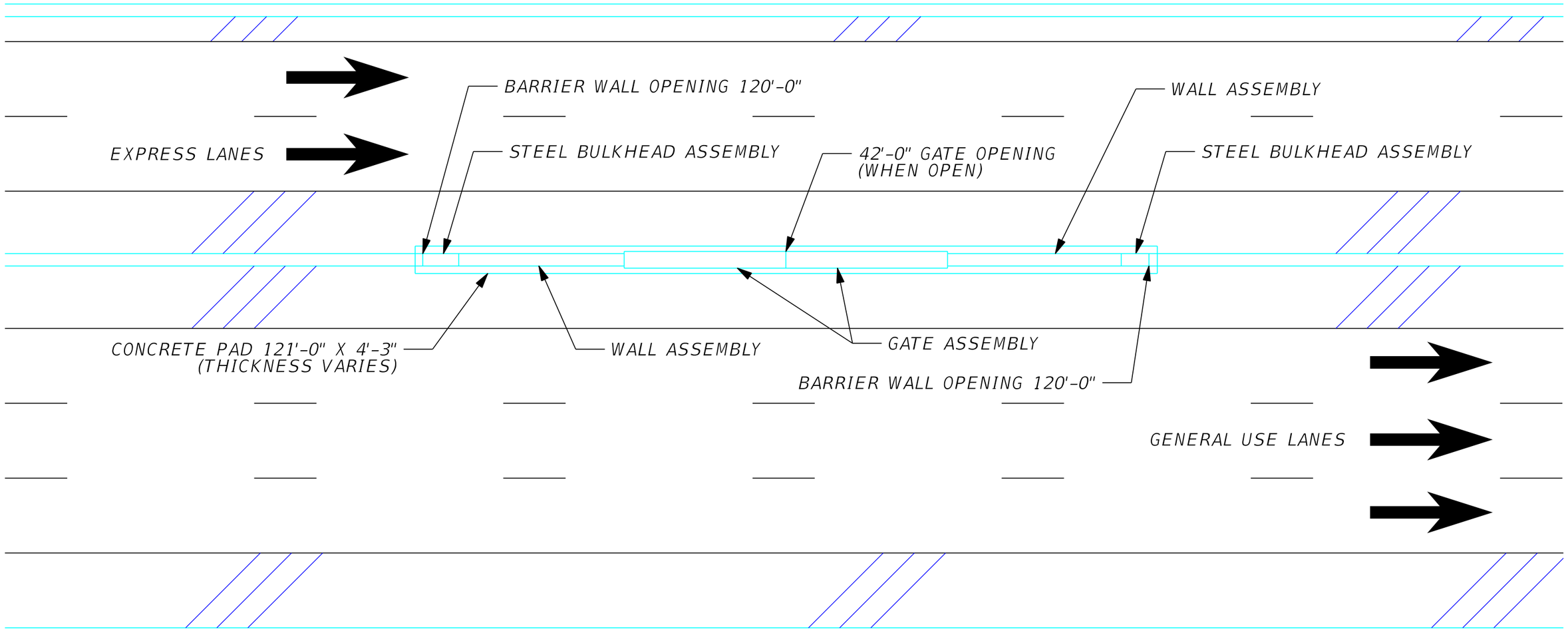
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 6

MODEL:
SHEET SIZE: mts
PLOT SCALE: 16.5x10.6 (in.) 1:200.004



TYPICAL EMERGENCY ACCESS GATE DETAILS

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SEGMENT 4

SHEET NO. 7

PRINT DRIVER: Color_FDOTPDF.pltcfg
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MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

SEGMENT 3 WETLAND
100 YEAR FLOODPLAIN
100 YEAR FLOODPLAIN
SEGMENT 3 WETLAND
LA
WL-I(W)
BEGIN SEGMENT 4
STA. 2583+00.00
WL-I(W)
SW-I(W)
WL-3(W)
PERPETUAL R/W EASEMENT
ST. JOHNS RIVER
VOLUSIA COUNTY
SEMINOLE COUNTY
0 50 200
Feet
70
US 17/92
75
80
85
2570
2575
2580
2585
2590
2595
I-4 WB CUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB CUL
℄ EXIST I-4
SW-I(E)
SEGMENT 3 WETLAND
SEGMENT 3 WETLANDS
100 YEAR FLOODPLAIN
100 YEAR FLOODPLAIN
PERPETUAL R/W EASEMENT
SW-I(E)
MATCHLINE STA. 2596+00.00

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **8**

amourad 11/8/2016 10:16:41 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2596+00.00

MATCHLINE STA. 2626+00.00

100 YEAR FLOODPLAIN

100 YEAR FLOODPLAIN

0 50 200
Feet

83

100 YEAR FLOODPLAIN

LA R/W LINE

WL-2(W)

WL-3(W)

I-4 WB CUL

I-4 WB EXPRESS LANES

2600

2605

2610

2615

2620

2625

I-4 EB EXPRESS LANES

I-4 EB CUL

WL-I(E)

℄ EXIST I-4

LA R/W LINE

WL-I(E)

SW-I(E)

100 YEAR FLOODPLAIN

I

LAKE MONROE

PERPETUAL R/W EASEMENT

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 9

amourad 11/8/2016 10:17:06 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2626+00.00

MATCHLINE STA. 2656+00.00

100 YEAR FLOODPLAIN

POND 400
(RECOMMENDED)

SW-1A(W)

WL-3(W)

100 YEAR FLOODPLAIN

83

WL-3(W)

84

85

0 50 200
Feet

WL-3(W)

LA R/W LINE

SW-2(W)

WL-3(W)

I-4 WB GUL

2630 2635 2640 I-4 WB EXPRESS LANES 2645 2650 2655

I-4 EB EXPRESS LANES

I-4 EB GUL

WL-1(E)

℄ EXIST I-4

LA R/W LINE

WL-1(E)

1

EXISTING LA R/W	GENERAL USE LANES	
PROPOSED LA R/W	EXPRESS LANES	
EXISTING R/W	EXISTING BRIDGE	
PROPOSED FDOT R/W	PROPOSED BRIDGE	
PARCEL LINES	BARRIER WALL	
	TRANSIT CORRIDOR	

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **10**

amourad 11/8/2016 10:17:31 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2656+00.00

MATCHLINE STA. 2686+00.00

293

85

0 50 200
Feet

PARCEL ID: 10-19-30-00-00-0010
AREA TAKEN: 98,758 SF

PROPOSED LA R/W LINE

WL-3(W)

LA R/W LINE

TREATMENT SWALES ALTERNATE 401-A

SW-2(W)

I-4 WB GUL

2660 2665 2670 I-4 WB EXPRESS LANES 2675 2680 2685

I-4 EB EXPRESS LANES

I-4 EB GUL

WL-1(E)

@ EXIST I-4

LA

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 550,606 SF
(FDOT OWNED)

TREATMENT SWALES ALTERNATE 401-A

TREATMENT SWALES 401-B
(RECOMMENDED)

11

LAKE MONROE

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		
	TRANSIT CORRIDOR	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 11

amourad 11/8/2016 10:17:42 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2686+00.00

MATCHLINE STA. 2716+00.00

0 50 200
Feet

85

86

87

SW-3(W)

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 236,027 SF

PARCEL ID: 10-19-30-00-00-0010
AREA TAKEN: 98,758 SF

PARCEL ID: 11-19-30-00-00-0010
AREA TAKEN: 59,037 SF

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 152,326 SF

PROPOSED LA R/W LINE

LA R/W LINE

WL-3(W)

SW-2(W)

TREATMENT SWALES ALTERNATE 401-A

I-4 WB GUL

2690 2695 2700 2705 I-4 WB EXPRESS LANES 2710 2715

I-4 EB EXPRESS LANES

I-4 EB GUL

WL-1(E)

℄ EXIST I-4

LA R/W LINE

TREATMENT SWALES ALTERNATE 401-A

TREATMENT SWALES 401-B (RECOMMENDED)

1

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 550,606 SF
(FDOT OWNED)

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 75,792 SF

LAKE MONROE

EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	
		TRANSIT CORRIDOR	

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 12

amourad 11/8/2016 10:17:49 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2716+00.00

POND 401 (ALTERNATE)

SW-3(W)

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 152,326 SF

87

1

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 2,421 SF

LA R/W LINE

WL-3(W)

PROPOSED LA R/W LINE

TREATMENT SWALES ALTERNATE 401-A

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 152,326 SF

I-4 WB GUL

2720 I-4 WB EXPRESS LANES 2725 2730 2735 2740 2745

I-4 EB EXPRESS LANES

I-4 EB GUL

E EXIST I-4

WL-I(E)

LA R/W LINE

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 75,792 SF

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 550,606 SF
(FDOT OWNED)

TREATMENT SWALES ALTERNATE 401-A

TREATMENT SWALES 401-B
(RECOMMENDED)

LAKE MONROE

SW-3A(W)

PADGET CREEK

WL-3(W)

0 50 200
Feet

MATCHLINE STA. 2746+00.00

Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 13

amourad 11/8/2016 10:17:58 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd06a
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

0 50 200
Feet

SW-3(W)

POND 401
(ALTERNATE)

SW-3(W)

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 152,326 SF

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 236,027 SF

87

87

87

I

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 2,421 SF

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 152,326 SF

PROPOSED LA R/W LINE

PARC
AREA

LA R/W LINE

WL-3(W)

TREATMENT SWALES ALTERNATE 401-A

I-4 WB GUL

2710 2715 2720 I-4 WB EXPRESS LANES 2725 2730 2735 2

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

WL-1(E)

LA R/W LINE

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 550,606 SF
(FDOT OWNED)

TREATMENT SWALES ALTERNATE 401-A

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 75,792 SF

TREATMENT SWALES 401-B
(RECOMMENDED)

I

Color_FDOTPDF.pltcfg
FDOT_text-qkvw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 14

amourad 11/8/2016 10:18:07 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

RIVER OAKS
100 YEAR FLOODPLAIN
PARCEL ID: 02-19-30-00-00-0260
AREA TAKEN: 86,041 SF
SW-3A(W)
BURGER KING
PROPOSED PARK AND RIDE
65
WL-3A(W)
331
KANGAROO GAS STATION
HAMPTON INN
SW-6(W)
LA R/W LINE
WL-3(W)
PADGETT CREEK
LA R/W LINE
87
PARCEL ID: 34-18-30-52-00-0001
AREA TAKEN: 11,922 SF
BEGIN SHOULDER CONCRETE BARRIER WALL, F SHAPED, WITH 14' NOISE WALL
STA. 2754+09.09
PARCELS 90-1 TO 90-18
AREA TAKEN: 28,512 SF
89
PARCEL ID: PADGETT CREEK
AREA TAKEN: 478 SF
90-15 TO 90-18
90-13 TO 90-14
PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 10 SF
90-1 TO 90-12
90
WL-3(W)
SW-3A(W)
LA R/W LINE
RIVERSIDE
90-19
PARCEL ID: 34-18-30-52-00-0001
AREA TAKEN: 2,889 SF
END SHOULDER CONCRETE BARRIER WALL, F SHAPED, WITH 14' NOISE WALL
STA. 2763+31.20
IHOP
DIRKSEN DR
70
POND 402A (RECOMMENDED)
POND 402D (RECOMMENDED)
DIRKSEN DR RAMP TO I-4 WB GUL
SW-5(W)
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
WL-1(E)
LA R/W LINE
1
EXIST I-4
SW-1A(E)
323
WL-1(E)
100 YEAR FLOODPLAIN
92
LAKE MONROE
WL-1(E)
93
94
95
96
411
PARCEL ID: 20-19-30-01-00-0010
AREA TAKEN: 529 SF
PARCEL ID: 02-19-30-01-00-0020
AREA TAKEN: 1,243 SF
PARCEL ID: 02-19-30-01-00-0030
AREA TAKEN: 3,221 SF
PARCEL ID: 02-19-30-01-00-0040
AREA TAKEN: 4,411 SF
PARCEL ID: 02-19-30-01-00-0050
AREA TAKEN: 71 SF
SPRING TO SPRING TRAIL
(CURRENTLY UNDER CONSTRUCTION)
WL-2(E)
I-4 EB GUL RAMP TO DIRKSEN DRIVE
POND 402B (RECOMMENDED)
POND 402C (RECOMMENDED)
80
260 FT. DUKE ENERGY EASEMENT
LA R/W LINE
85
SW-3(E)
(ALTERNATE 2 SHOWN)
2750
2755
2760
2765
2770
2775
0 50 200
Feet
MATCHLINE STA. 2746+00.00
MATCHLINE STA. 2776+00.00

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 15

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MATCHLINE STA. 2776+00.00

MATCHLINE STA. 2806+00.00

BILL KELLER PARK

N

0 50 200

Feet

100 YEAR FLOODPLAIN

WL-3B(W)

PARCEL ID: 02-19-30-00-00-0042
AREA TAKEN: 136,948 SF

POND 402D

I-4 WB GUL RAMP TO DIRKSEN DRIVE

2

POND 402F (RECOMMENDED)

GARDENIA AVE

ALEMANDER AVE

RIVIERA DR

COLOMBA RD

CARDINAL DR

WL-4(W)

3

LA R/W LINE

PARCEL ID: 02-19-30-00-00-0042
AREA TAKEN: 1,979 SF

SW-6(W)

102 103 104 105 294 295

I-4 WB GUL

2780 2785 2790 2795 I-4 WB EXPRESS LANES 2800 2805

I-4 EB EXPRESS LANES

I-4 EB GUL

WL-3(E)

97 98 99 100 101 106 107 108 109 110 111 112 113 114 115

271

284

℄ EXIST I-4

LA R/W LINE

POND 402E (RECOMMENDED)

DIRKSEN RD RAMP TO I-4 EB GUL

DELTONA BLVD

NATIONWIDE CENTER

DELTONA SQUARE

SW-4(E)

EAGLES LANDING

WL-2(E)

I-4 EB GUL RAMP TO DIRKSEN DRIVE

POND 402B

DELTONA BLVD

BEST WESTERN

CARIBBEAN ST

LANDMARK ST

HAZELCREST ST

LULLWATER ST

(ALTERNATE I SHOWN)

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 16

amourad 11/8/2016 10:18:20 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2806+00.00

MATCHLINE STA. 2836+00.00

0 50 200
Feet

100 YEAR FLOODPLAIN

LA R/W LINE

WL-4(W)

ENTERPRISE RD.

VOLUSIA RENTAL

UNCLE BOB'S SELF STORAGE

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2810 2815 2820 2825 2830 2835

℄ EXIST I-4

LA PETITE ACADEMY

DELTONA FOUNTAINS MEDICAL CLINIC

MUFFLER MAN

JUSTIN SQUARE

FIRST SOUTHERN BANK

SUNTRUST

S. EMBASSY DR

W. EMBASSY DR

DARTMOUTH ST

SUNOCO GAS STATION

HERITAGE GOLD & DIAMOND EXCHANGE

SPACE COAST CREDIT UNION

US POST OFFICE

DELTONA BLVD

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 17

amourad 11/8/2016 10:18:27 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2836+00.00

MATCHLINE STA. 2866+00.00

100 YEAR FLOODPLAIN

PARCEL ID: 25-18-30-00-00-0055
AREA TAKEN: 187,267 SF

FPC 403
(RECOMMENDED)

SW-8(W)

SW-9(W)

SW-10(W)

SW-11(W)

LA R/W LINE

PARCEL ID: 25-18-30-00-00-0052
AREA TAKEN: 69 SF

GASLINE LAKE

POND 403
(RECOMMENDED)

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST I-4

HUFFORD DR

BROKENSHIRE DR

DONALDSON DR

DDARD DR

ERHAVEN DR

0 50 200
Feet

W. EMBASSY DR

EAGLES NEST AVE

DARTMOUTH ST

QUAIL ROOST ST

ARAB ST

ABBEVILLE ST

BUCCANEER AVE

2840 2845 2850 2855 2860 2865

5 6 7 8 9 10 11 12 13

142 143 144 145 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179

296 297 298 299 300 301 302 272 27

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 18

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MODEL: planrd10a
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

0 50 200
Feet

100 YEAR FLOODPLAIN

PARCEL ID: 25-18-30-00-00-0055
AREA TAKEN: 187,267 SF

FPC 403
(RECOMMENDED)

SW-8(W)

SW-9(W)

SW-10(W)

PARCEL ID: 25-18-30-00-00-0052
AREA TAKEN: 69 SF

POND 403
(RECOMMENDED)

GASLINE LAKE

VOLUSIA RENTAL

CLE BOB'S SELF STORAGE

HUFFORD DR

BROKENSHIRE DR

DONALDSON DR

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

2835 2840 2845 2850 2855 2860

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 19

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MODEL: planrd11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2866+00.00

MATCHLINE STA. 2896+00.00

BERNASEK DR
HAYMAN CT
DOLPHIN COVE CT
MOSS POINT COVE CT
LANYARD LN
100 YEAR FLOODPLAIN
LAKE EMERALD
N
0 50 200
Feet
PARCEL ID: 23-18-30-05-00-0140
AREA TAKEN: 26 SF
PARCEL ID: EMERALD AVENUE
AREA TAKEN: 4,584 SF
PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 345 SF
PARCEL ID: 23-18-30-01-14-0017
AREA TAKEN: 1,215 SF
FLORIDA AVE
303
274
275
276
277
278
279
280
281
304
305
307
309
310
312
313
315
316
318
188
189
283
282
WL-5(W)
SW-10(W)
SW-13(W)
LA R/W LINE
I-4 WB GUL
I-4 WB EXPRESS LANES
SW-14(W)
EMERALD AVE
SW-15(W)
SW-16(W)
SW-11(W)
SW-12(W)
POND 403
(RECOMMENDED)
℄ EXIST I-4
2870
2875
2880
2885
2890
2895
I-4 EB EXPRESS LANES
I-4 EB GUL
WL-4(E)
179
180
181
182
183
184
185
186
187
LA R/W LINE
KETTERING RD
TIE-IN TO EXISTING NOISE WALL
BEGIN 16' CONCRETE NOISE WALL
STA. 2877+73.64
END 16' CONCRETE NOISE WALL
STA. 2890+39.11
COUNTY R/W LINE
W. EVANS CIR
ASHBOURNE WAY
HAVERSHAM RD
BUCCANEER AVE
KETTERING RD
SW-5(E)
TROUT LAKE
100 YEAR FLOODPLAIN

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 20

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MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2896+00.00

MATCHLINE STA. 2926+00.00

HOLIDAY INN EXPRESS

189

GOOSE LAKE

100 YEAR FLOODPLAIN

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 345 SF

LA R/W LINE

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 702 SF

SW-16(W)

319

283

SAXON BLVD RAMP TO I-4 WB GUL

EXIST. 36" RCP

POND 405A (RECOMMENDED)

POND 405B (RECOMMENDED)

I-4 WB GUL RAMP TO SAXON BLVD EB

SAXON BLVD

65

70

75

80

145 FT. FPL EASEMENT

R/W LINE

0 50 200
Feet

POND 406A (RECOMMENDED)

LA R/W LINE

14

SAXON BLVD WB RAMP TO I-4 WB GUL

POND 406B (RECOMMENDED)

I-4 WB GUL RAMP TO WB SAXON BLVD

2900 2905 2910 2915 2920 2925

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

SW-6(E)

285

COUNTY R/W LINE

SW-5(E)

30 FT. DRAINAGE EASEMENT

100 YEAR FLOODPLAIN

I-4 EB GUL RAMP TO SAXON BLVD EB

TROUT LAKE

SW-7(E)

285

FPC 407 (RECOMMENDED)

410

LA R/W LINE

410

410

PARCEL ID: 23-18-30-01-20-0010
AREA TAKEN: 181,894 SF

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 79,454 SF

I-4 EB GUL RAMP TO SAXON BLVD WB

POND 407A (RECOMMENDED)

POND 407B (RECOMMENDED)

POND 407C (RECOMMENDED)

SAXON BLVD RAMP TO I-4 EB GUL

LA R/W LINE

POND 408 (RECOMMENDED)

(ALTERNATE 5 SHOWN)

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

Color_FDOTPDF.ctb
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
21

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MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2926+00.00

MATCHLINE STA. 2956+00.00

LAKE MALLARD

100 YEAR FLOODPLAIN

0 50 200
Feet

I-4 WB GUL RAMP TO SAXON BLVD

LA R/W LINE

EXIST. 36" RCP

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2930 2935 2940 2945 2950 2955

E EXIST I-4

LA R/W LINE

SAXON BLVD RAMP TO I-4 EB GUL

W. PARKTON DR

SULLIVAN ST

PARCEL ID: 13-18-30-03-09-0190
AREA TAKEN: 8,653 SF

PARCEL ID: 13-18-30-03-19-0210
AREA TAKEN: 10,089 SF

PARCEL ID: UNKNOWN (CITY OF DELTONA)
AREA TAKEN: 15,780 SF

PARCEL ID: 13-18-30-03-19-0190
AREA TAKEN: 4,541 SF

POND 407C

JEFFERS ST

ROCKFORD ST

PALMTREE DR

N. PARKTON DR

TAYLORVILLE ST

E. PARKTON DR

POND 409-A1 (RECOMMENDED)

POND 409-A2 (ALTERNATE)

PARCEL ID: 13-18-30-03-19-0010
AREA TAKEN: 44,966 SF

PARCEL ID: UNKNOWN (CITY OF DELTONA)
AREA TAKEN: 30,328 SF

GALVESTON AVE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qbw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 22

amourad 11/8/2016 10:19:00 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2956+00.00

MATCHLINE STA. 2986+00.00

0 50 200
Feet

371

WL-6(W)

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 337 SF

PARCEL ID: 13-18-30-01-00-0630
AREA TAKEN: 254 SF

PARCEL ID: 13-18-30-01-00-0002
AREA TAKEN: 62 SF

PARCEL ID: 13-18-30-01-00-0950
AREA TAKEN: 5 SF

53 54 55 56 57 58 59 320 LA R/W LINE 60 61 62 63 64 65 66 67 68 69 70 286 321 71 322

I-4 WB GUL

2960 I-4 WB EXPRESS LANES 2965 2970 2975 2980 2985

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

208 209 329 210 211 212 213 214 215 216 217 218 219 LA R/W LINE 220 288 COUNTY R/W LINE

208 PARCEL ID: 13-18-30-03-17-0210
AREA TAKEN: 2,340 SF

POND 409-AI
(RECOMMENDED)

GALVESTON AVE

ANTELOPE DR

ANTOINETTE ST

N. GLORIA DR

GIFFORD CT

S. ANNAPOLIS DR

W. FIRWOOD DR

FLAGLER ST

GERANIUM ST

E. ANNAPOLIS DR

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 23

amourad 11/8/2016 10:19:05 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2986+00.00

MATCHLINE STA. 3016+00.00

PARCEL ID: 13-18-30-02-25-0010
AREA TAKEN: 34,997 SF

PARCEL ID: UNKNOWN (VOLUSIA CO.)
AREA TAKEN: 9,515 SF

PARCEL ID: UNKNOWN (VOLUSIA CO.)
AREA TAKEN: 9,291 SF

PARCEL ID: 13-18-30-00-00-0010
AREA TAKEN: 107,975 SF

PARCEL ID: 13-18-30-00-00-0010
AREA TAKEN: 101,369 SF

PARCEL ID: 18-18-31-00-00-0060
AREA TAKEN: 21,595 SF

PARCEL ID: 18-18-31-00-00-0060
AREA TAKEN: 3,033 SF

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 4,089 SF

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 523 SF

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 298,315 SF

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 145,206 SF

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 5,033 SF

PARCEL ID: 07-18-31-05-09-0030
AREA TAKEN: 687 SF

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 213 SF

PARCEL ID: 07-18-31-05-08-0040
AREA TAKEN: 535 SF

PARCEL ID: 07-18-31-05-07-0040
AREA TAKEN: 306 SF

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 49 SF

PARCEL ID: 07-18-31-05-06-0050
AREA TAKEN: 3 SF

PROPOSED LA R/W LINE

POND B
(ALTERNATE)

POND B1
(RECOMMENDED)

POND 409-B1
(RECOMMENDED)

POND C
(RECOMMENDED)

WL-6(W)

DELTONA WATER TREATMENT

50 FT. FPL EASEMENT

EXIST. 36" RCP

COUNTY R/W LINE

LA R/W LINE

I-4 EB EXPRESS LANES RAMP
TO RHODE ISLAND AVE

RHODE ISLAND AVE RAMP
TO I-4 WB EXPRESS LANES

@ EXIST I-4

NORMANDY BLVD
PARK AND RIDE

RHODE ISLAND

ABBOTTWOODS LN

S. KENTUCKY AVE

HOLLOWRIDGE DR

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2990 2995 3000 3005 3010 3015

60 65 70 75

0 50 200
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 24

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

MATCHLINE STA. 3016+00.00

MATCHLINE STA. 3046+00.00

S. KENTUCKY AVE
PINEVIEW DR
EDGEMAR CT
SANDLEWOOD LN
WINDERMERE LN
WEDGEWOOD DR
ALMOND VILLAGE ST
REDWOOD VILLAGE ST
ASH VILLAGE ST
MOSS VILLAGE ST
PALM VILLAGE ST
MAPLE AVE
CROSSRIDGE RD
GREENHEDGE DR
HARCOURT TER
INVERNESS LN
COUNTRYSIDE DR
245
PINEVIEW DR
LA R/W LINE
PINEVIEW DR

0 50 200
Feet

I=4 WB GUL
3020
3025
3030
I-4 WB EXPRESS LANES
3035
3040
3045
I-4 EB EXPRESS LANES
I-4 EB GUL
℄ EXIST I-4
COUNTY R/W LINE
LA R/W LINE
242
246
247

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 25

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

amourad 11/8/2016 10:19:18 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MAPLE AVE
COUNTRYSIDE DR
INVERNESS LN
COUNTRYSIDE DR
RICH AVE
VILLAGE SQUARE RETAIL CENTER
GRAVES AVE.
245
248
249
250
251
253
254
264
COUNTY R/W LINE
LA R/W LINE
COUNTY R/W LINE
PARCEL ID: 06-18-31-04-00-0510
AREA TAKEN: 1,432 SF
PARCEL ID: 06-18-31-04-00-0590
AREA TAKEN: 8,905 SF
PARCEL ID: 06-18-31-04-00-0600
AREA TAKEN: 1,277 SF
SR 472 RAMP TO I-4 WB GUL
0 50 200
Feet
I-4 WB GUL
3050
I-4 WB EXPRESS LANES
3055
3060
3065
3070
3075
I-4 EB EXPRESS LANES
I-4 EB GUL
LA R/W LINE
COUNTY R/W LINE
GRAVES AVE.
COUNTY R/W LINE
℄ EXIST I-4
I-4 EB GUL RAMP TO SR 472 GUL
POND 410 (RECOMMENDED)
POND 411 (RECOMMENDED)
247
252

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 26

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl
amourad 11/8/2016 10:19:26 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

PARCEL ID: 06-18-31-00-00-0132
AREA TAKEN: 10,014 SF

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 2,329 SF

PARCEL ID: 06-18-31-04-00-0430
AREA TAKEN: 4,868 SF

LA R/W LINE

EXISTING POND
TO BE REMOVED

SR 472 RAMP TO
I-4 WB GUL

SR 472

POND 42
(RECOMMENDED)

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 182,982 SF

EXISTING POND TO BE REMOVED

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 39,998 SF

I-4 WB GUL RAMP
TO SR 472

LA R/W LINE

0 50 200
Feet

MATCHLINE STA. 3076+00.00

MATCHLINE STA. 3106+00.00

I-4 WB GUL

3080 3085 3090 3095 3100 3105

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

LA R/W LINE

PARCEL ID: 06-18-31-04-00-0180
AREA TAKEN: 754 SF

EXISTING POND TO BE REMOVED

SR 472 RAMP TO
I-4 EB GUL

PARCEL ID: 06-18-31-00-00-0150
AREA TAKEN: 37,195 SF

PENNLAND BLVD.

BLACKJACK RIDGE TRAIL

EXISTING POND TO BE REMOVED

(ALTERNATE 5 SHOWN)

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 27

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkbw.tbl

amourad 11/8/2016 10:19:34 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3106+00.00

SAN JUAN ST

CASSADAGA RD.

SEVILLA AVE

CASSADAGA RD.

POND 414

74 75 76 77 78 79 80 81 82 257 258 259 260 261 262

LA R/W LINE

END SEGMENT 4
STA. 3118+46.00

I-4 WB GUL

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXIST. 36" RCP

EXIST. 36" RCP

3110 3115 3120 3125 3130

0 50 200
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
28

A-28

Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:19:42 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-PREFERRED.dgn

MODEL: Default
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:300

0 75 300
Feet

I-4 WB GUL RAMP TO DIRKSEN DRIVE
POND 402 C
POND 402 D
POND 402 A
DIRKSEN DR RAMP TO I-4 WB GUL
POND 402E
I-4 EB GUL RAMP TO DIRKSEN DRIVE
POND 402B
250 FT. ELEC. EASEMENT
POND 402G
SPRING TRAIL (UNDER CONSTRUCTION)
SPRING TO SPRING TRAIL (CURRENTLY UNDER CONSTRUCTION)
DIRKSEN RD RAMP TO I-4 EB GUL
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
2785
2780
2775
2770
2765
2760
LA R/W LINE
Ø EXIST I-4
DELTONA SQUARE
NATIONWIDE CENTER
EAGLES LANDING
BEST WESTERN
DELTONA BLVD
HAMPTON INN
IHOP
BURGER KING
KANGAROO GAS STATION
DIRKSEN DR
RIVERSIDE
RIVER OAKS
55
60
65
70
75
80
85
90
95
258
92
93
94
95
96
98
99

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

PRINT DRIVER: Cdot_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 1
SEGMENT 4

SHEET NO. 29

amourad 11/8/2016 10:20:06 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402.dgn

MODEL: DIRKSEN-DEBARY-01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

TOMS RD.

PALM RD.

BEGIN PD&E STUDY LIMIT
STA 60+00.00

BURGER KING

SUNRISE BLVD.

EXIST R/W LINE

HAMPTION INN

MOBIL GAS STATION

0 20 100
Feet

55

60

65

DIRKSEN DR.

℄ EXIST DIRKSEN DR.

12' ASPHALT TRAIL
VOLUSIA COUNTY

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

EXIST. R/W LINE

12' ASPHALT TRAIL
VOLUSIA COUNTY

RIVER VILLAGE DR.

RIVER OAKS

331

90

Color_FDOTPDF.pltcfg
FDOT_text-cglow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 1 (1 OF 3)
SEGMENT 4

SHEET NO. **30**

amourad 11/8/2016 10:20:15 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 4\roadway\planrd402.dgn

MODEL: DIRKSEN-DEBARY-02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 68+00.00

MATCHLINE STA. 83+00.00

LA R/W LINE

260' DUKE ENERGY EASEMENT

HAMPTON INN

IHOP

EXIST. R/W LINE

POND 402A

I-4 WB GUL

I-4 WB EXPRESS LANES

℄ EXIST I-4

270

N

0 20 100
Feet

POND 402C

70

℄ EXIST DIRKSEN DR.

DIRKSEN DR.

75

80

265

8' CONCRETE MUTI-USE TRAIL
VOLUSIA COUNTY

90

90-19

90-15 TO
90-18

90-13 TO
90-14

LA R/W LINE

90-1 TO
90-12

2760

12' CONCRETE MUTI-USE TRAIL
VOLUSIA COUNTY

I-4 EB GUL

I-4 EB EXPRESS LANES

96

95

94

93

LA R/W LINE

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

EXIST. R/W LINE

EXIST. R/W LINE

8' CONCRETE MUTI-USE TRAIL
VOLUSIA COUNTY

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 1 (2 OF 3)
SEGMENT 4

SHEET NO. 31

A-31

Color_FDOTPDF.pltcfg
FDOT_text-gkw.tbl
PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:20:22 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402.dgn

MODEL: DIRKSEN-DEBARY-03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

LA R/W LINE

260' DUKE ENERGY

POND 402C

WAFFLE HOUSE

MCDONALDS

DELTONA BLVD.

PROPOSED 5' SIDEWALK

EXISTING FIRE HYDRANT

PEDESTRIAN CONNECTION TO ADJACENT RIGHT-OF-WAY PER ADA

CONNECT TO EXISTING 24" RCP STORM SEWER STUB

CONNECT TO EXISTING 8" PVC WATER MAIN

CONNECT TO EXISTING 8" PVC SANITARY LATERAL

PROPOSED SITE LIGHT POLE (TYP)

PROPOSED 30' INGRESS/EGRESS AND DRAINAGE EASEMENT

8' LANDSCAPE BUFFER

10' BUILDING SETBACK

RACETRAC MARKET 5,838 SQ. FT. FFE = 20.66' (NAVD88)

CANOPY

57 SQ FT CANOPY MOUNTED LOGO SIGN

FUEL PUMP (TYP)

PROPOSED CONNECTION TO EXISTING DRIVEWAY LOCATED IN JOINT ACCESS EASEMENT

EXISTING DUMPSTER ENCROACHES ON SUBJECT PROPERTY

KANGAROO GAS STATION

WELCOME CENTER DR.

EXIST. R/W LINE

END PD&E STUDY LIMIT
STA 95+00.00

N

0 20 100
Feet

85

DIRKSEN DR.

90

95

℄ EXIST DEBARY AVE.

268

8' CONCRETE MUTIUSE TRAIL
VOLUSIA COUNTY

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

8' CONCRETE MUTIUSE TRAIL
VOLUSIA COUNTY

EXIST. R/W LINE

LAKE SHORE DR.

MAPLE AVE.

MATCHLINE STA. 83+00.00

MATCHLINE STA. 98+00.00

Color_FDOTPDF.pltcfg
FDOT_text-qkvw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

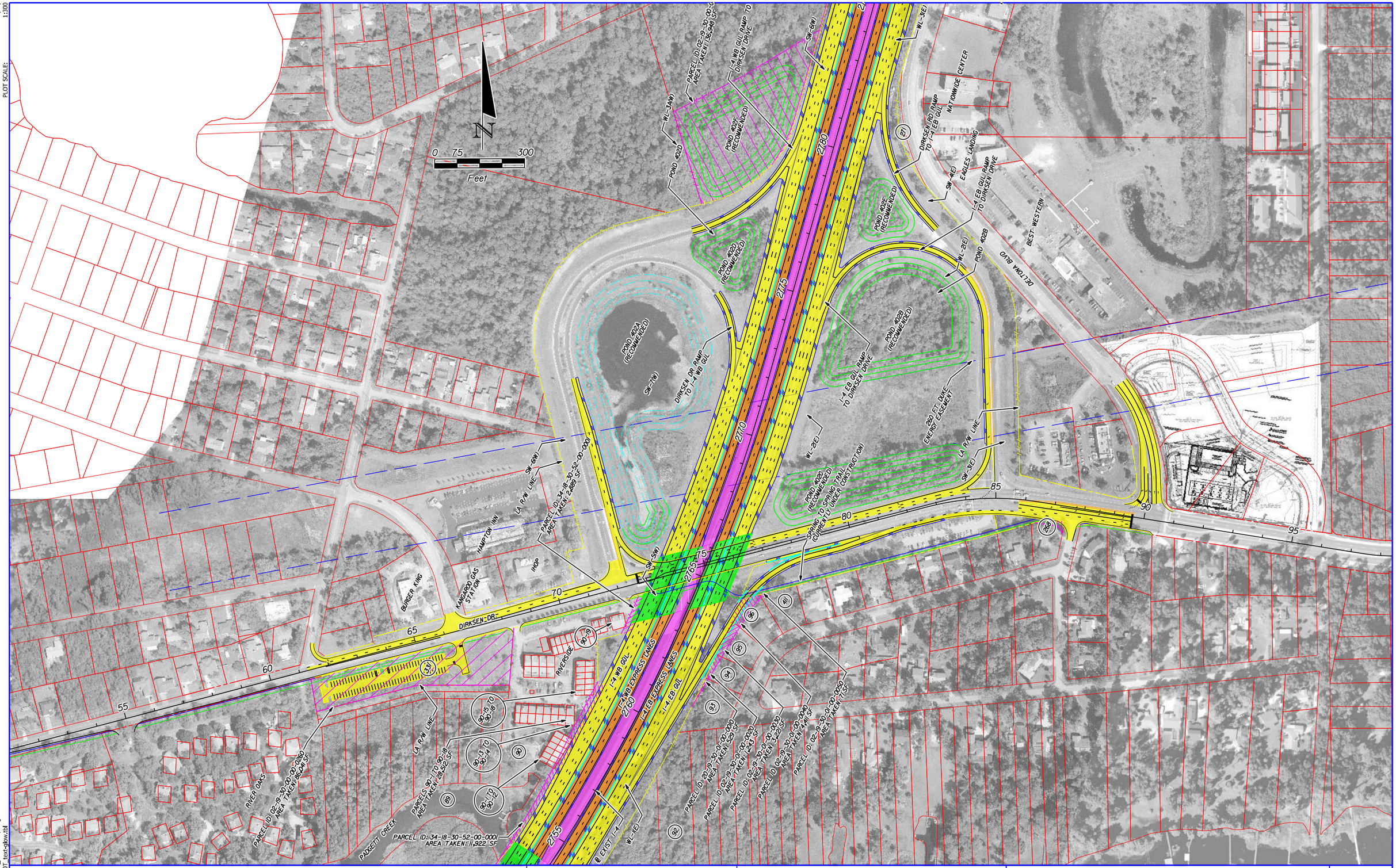
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 1 (3 OF 3)
SEGMENT 4

SHEET NO. **32**

amourad 11/8/2016 10:20:27 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402.dgn

MODEL: Default
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:300



Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 2 (RECOMMENDED ALTERNATIVE) SEGMENT 4

SHEET NO.
33

amourad 11/8/2016 10:20:52 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402 - DIRK RAMP.dgn

MODEL: DIRKSEN-DEBARY-01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

TOMS RD.

PALM RD.

BEGIN PD&E STUDY LIMIT
STA 60+00.00

BURGER KING

SUNRISE BLVD.

HAMPTON INN

MOBIL GAS STATION

EXIST R/W LINE

0 20 100
Feet

55

60

65

DIRKSEN DR.

℄ EXIST DIRKSEN DR.

12' ASPHALT TRAIL
VOLUSIA COUNTY

RIVER VILLAGE DR.

RIVER OAKS

PARCEL ID: 06-18-31-04-00-0542
AREA TAKEN: 86,041 SF

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

EXIST. R/W LINE

12' ASPHALT TRAIL
VOLUSIA COUNTY

PROPOSED PARK AND RIDE LOT

331

90-13 TO
90-14

89

Color_FDOTPDF.pltcfg
FDOT_text-gdiw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT 2 (1 OF 3)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 34

amourad 11/8/2016 10:20:58 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402 - DIRK RAMP.dgn

MODEL: DIRKSEN-DEBARY-02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 68+00.00

MATCHLINE STA. 83+00.00

LA R/W LINE

260' DUKE ENERGY EASEMENT

POND 402A (RECOMMENDED)

I-4 WB GUL

℄ EXIST I-4

I-4 WB EXPRESS LANES

HAMPTON INN

IHOP

EXIST. R/W LINE

POND 402C (RECOMMENDED)

N

0 20 100
Feet

70

75

80

DIRKSEN DR

PARCEL ID: 34-18-30-52-00-0001
AREA TAKEN: 2,889 SF

℄ EXIST DIRKSEN DR.

8' CONCRETE MUTI-USE TRAIL
VOLUSIA COUNTY

RIVERSIDE

90

90-19

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

EXIST. R/W LINE

EXIST. R/W LINE

PARCEL ID: 02-19-30-01-00-0050
AREA TAKEN: 71 SF

8' CONCRETE MUTI-USE TRAIL
VOLUSIA COUNTY

PARCEL ID: 34-18-30-52-00-0001
AREA TAKEN: 11,922 SF

PARCEL ID: 02-19-30-01-00-0040
AREA TAKEN: 4,411 SF

91

90-13 TO 90-14

90-15 TO 90-18

I-4 EB GUL

92

I-4 EB EXPRESS LANES

PARCEL ID: 02-19-30-01-00-0030
AREA TAKEN: 3,221 SF

94

I-4 EB GUL RAMP TO DIRKSEN DR EB

PARCEL ID: 02-19-30-01-00-0020
AREA TAKEN: 1,243 SF

LA R/W LINE

LA R/W LINE

90-1 TO 90-12

PARCEL ID: 02-19-30-01-00-0010
AREA TAKEN: 529 SF

93

2765

2760

Color_FDOTPDF.pltcfg
FDOT_text-xglow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT. 2 (2 OF 3)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 35

amourad 11/8/2016 10:21:04 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 4\roadway\planrd402 - DIRK RAMP.dgn

MODEL: DIRKSEN-DEBARY-03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

I-4 EB RAMP TO DIRKSEN DR WB

LA R/W LINE

260' DUKE ENERGY

MCDONALDS

WAFFLE HOUSE

POND 402C (RECOMMENDED)

DELTONA BLVD.

PROPOSED 8' SIDEWALK

EXISTING FIRE HYDRANT

PEDESTRIAN CONNECTION TO ADJACENT RIGHT-OF-WAY PER ADA

CONNECT TO EXISTING 24" RCP STORM SEWER STUB

CONNECT TO EXISTING 8" PVC WATER MAIN

CONNECT TO EXISTING 8" PVC SANITARY LATERAL

PROPOSED SITE LIGHT POLE (TYP)

PROPOSED 30' INGRESS/EGRESS AND DRAINAGE EASEMENT

8' LANDSCAPE BUFFER
30' BUILDING SETBACK

RACETRAC MARKET
5,838 SQ. FT.
FFE = 20.50' (NAVD88)

CANOPY

57 SQ FT CANOPY MOUNTED LOGO SIGN

FUEL PUMP (TYP)

PROPOSED CONNECTION TO EXISTING DRIVEWAY LOCATED IN JOINT ACCESS EASEMENT

EXISTING DUMPSTER ENCROACHES ON SUBJECT PROPERTY

KANGAROO GAS STATION

WELCOME CENTER DR.

N

0 20 100
Feet

EXIST. R/W LINE

END PD&E STUDY LIMIT
STA 95+00.00

85

90

95

DIRKSEN DR.

℄ EXIST DEBARY AVE.

268

PARCEL ID: 02-19-30-01-00-0140
AREA TAKEN: 1,737 SF

8' CONCRETE MUTIUSE TRAIL
VOLUSIA COUNTY

SPRING TO SPRING TRAIL
CONSTRUCTION STARTED
JANUARY 2014

8' CONCRETE MUTIUSE TRAIL
VOLUSIA COUNTY

EXIST. R/W LINE

LAKE SHORE DR.

MAPLE AVE.

MATCHLINE STA. 83+00.00

MATCHLINE STA. 98+00.00

Color_FDOTPDF.ptc
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

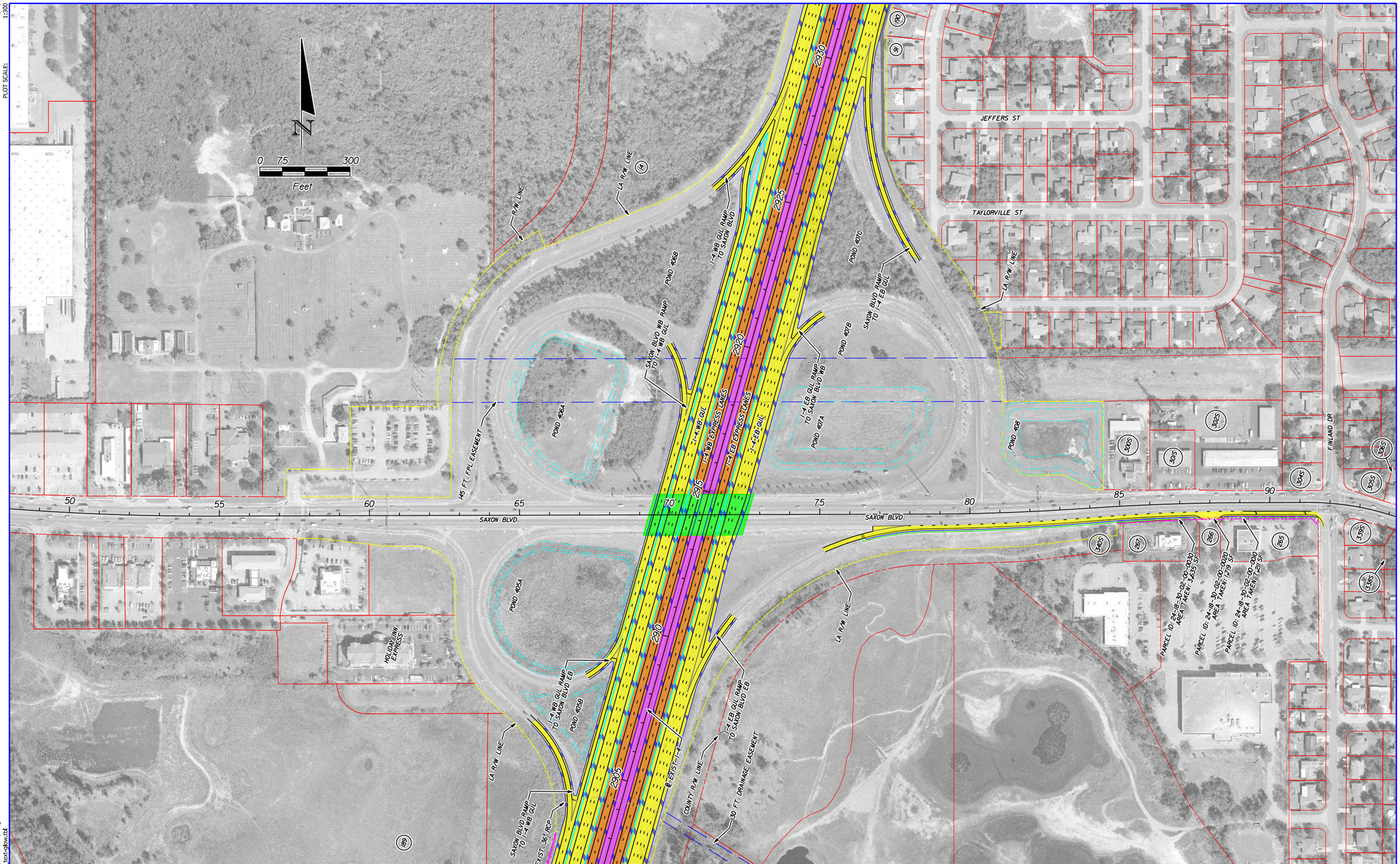
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
DIRKSEN DR. ALT. 2 (3 OF 3)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 36

amourad 11/8/2016 10:21:10 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd402 - DIRK RAMP.dgn

MODEL:
SHEET SIZE: Default
PLOT SCALE: 16.5x10.6 (in.) 1:300



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

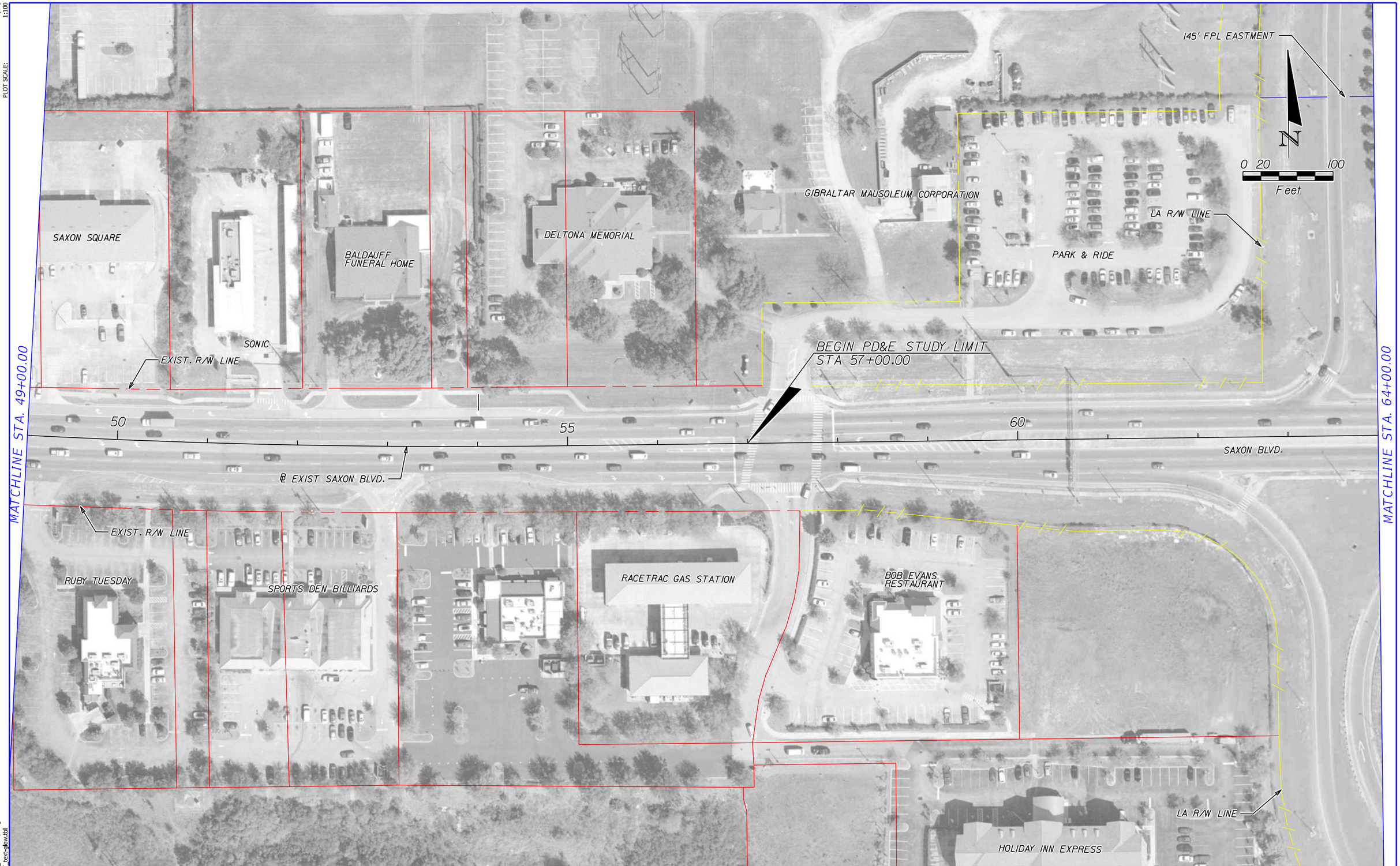
I-4 PD&E STUDY
SAXON BLVD. ALT 1
SEGMENT 4

SHEET NO. **37**

amourad 11/8/2016 10:21:32 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403.dgn

SAXON-04
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:



Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

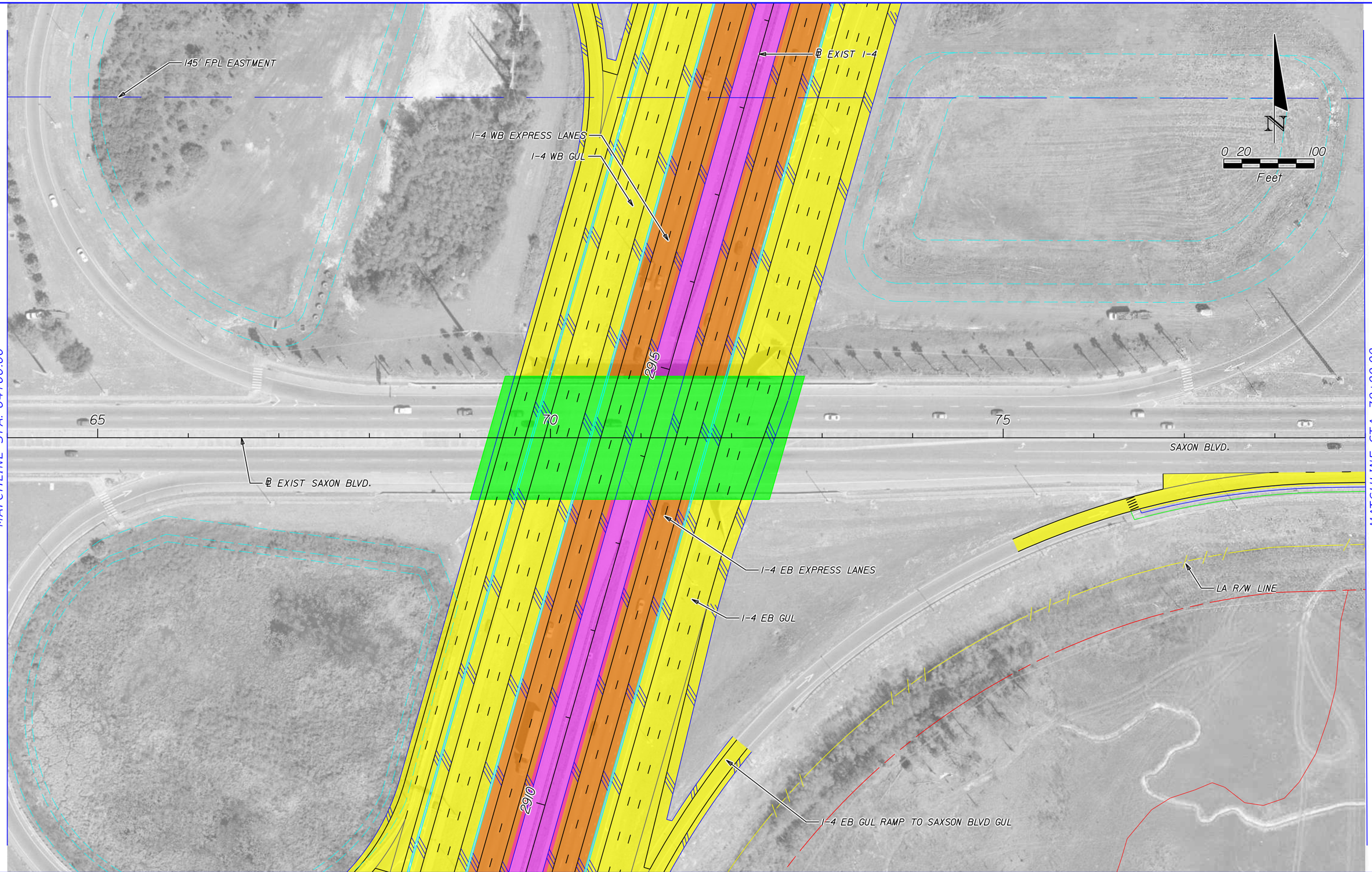
I-4 PD&E STUDY
SAXON BLVD. ALT 1 (1 OF 3)
SEGMENT 4

SHEET NO.
38

amourad 11/8/2016 10:21:37 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403.dgn

SAXON-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:



Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 1 (2 OF 3)
SEGMENT 4

SHEET NO. 39

amourad 11/8/2016 10:21:43 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd403.dgn

SAXON-06
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

LA R/W LINE

302S

301S

300S

CHEVRON GAS STATION

END PD&E STUDY LIMIT
STA 92+00.00

SAXON PLAZA

304S

305S

EXIST. R/W LINE

N

0 20 100
Feet

80

85

90

SAXON BLVD.

B_EXIST-SAXON-BLVD.

EXIST. R/W LINE

PROPOSED R/W LINE

WENDYS

RADIOLOGY ASSOCIATES

265

PARCEL ID: 24-18-30-02-00-0010
AREA TAKEN: 2,342 SF

340S

267

266

339S

342S

LA R/W LINE

PARCEL ID: 24-18-30-02-00-0030
AREA TAKEN: 167 SF

PARCEL ID: 24-18-30-02-00-0020
AREA TAKEN: 491 SF

343S

FAMILY DOLLAR

PUBLIX SUPER MARKET

W FINLAND DR.

344S

Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 1 (3 OF 3)
SEGMENT 4

SHEET NO.
40

amourad 11/8/2016 10:21:46 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403.dgn

MODEL: Default
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:300

0 75 300
Feet

JEFFERS ST
TAYLORVILLE ST
FINLAND DR
SAXON BLVD
SAXON BLVD

LA R/W LINE
I-4 WB GUL RAMP TO SAXON BLVD
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 WB GUL
I-4 EB GUL
SAXON BLVD RAMP TO I-4 EB GUL
45 FT. FPL EASEMENT
POND 405A
POND 407B
POND 407A
POND 408
SAXON BLVD RAMP TO I-4 WB GUL
HOLIDAY INN EXPRESS
POND 405B
I-4 EB GUL RAMP TO SAXON BLVD
EXIST. 36" RCP
@ EXIST. I-4
50 FT. DRAINAGE EASEMENT

2930 2925 2920 2915 2910 2905

50 55 60 65 70 75 80 85 90

3005 3015 3025 3035 3045 3055 3395 3405 3425 3435 3445

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qbw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

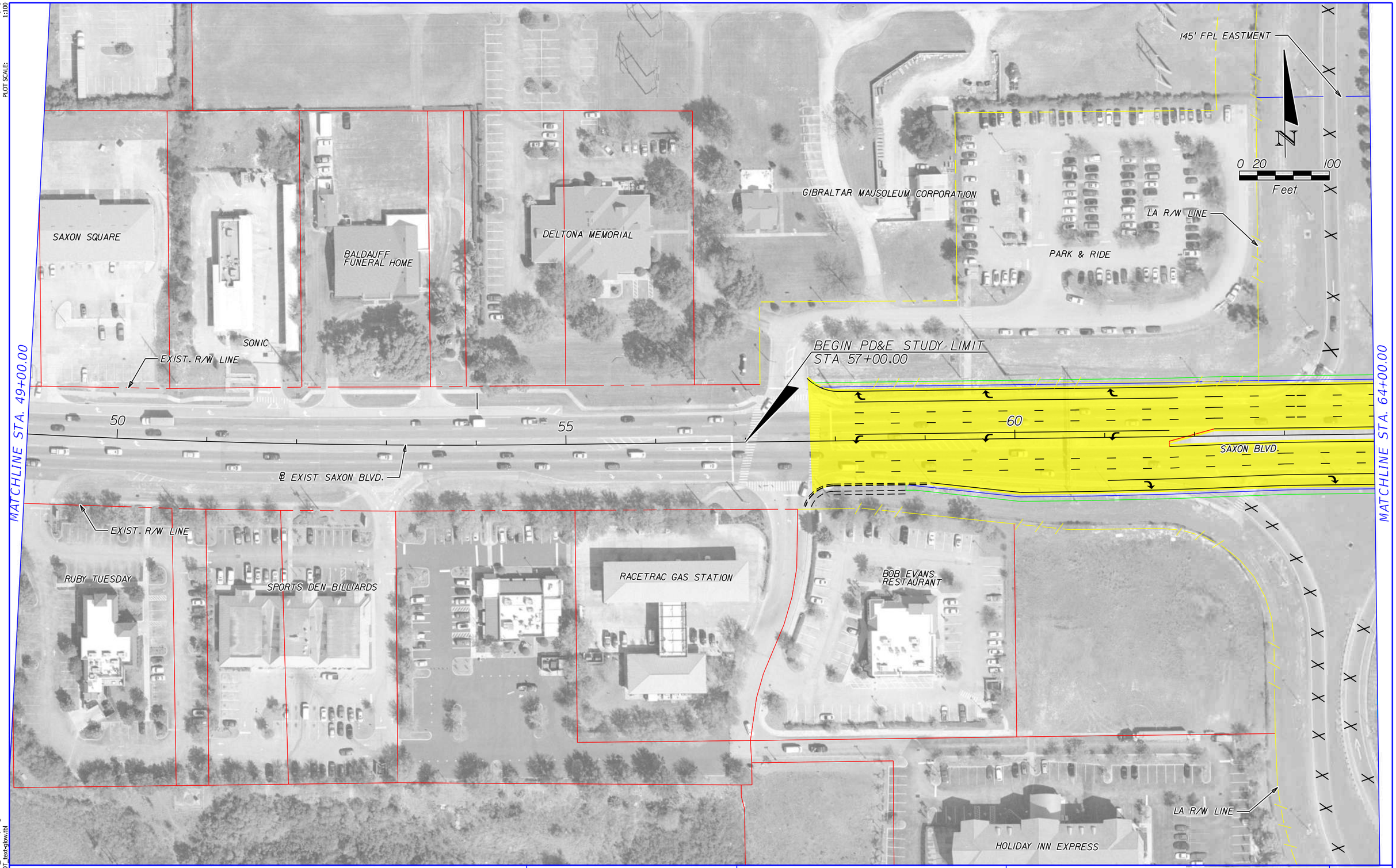
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 2
SEGMENT 4

SHEET NO. 41

amourad 11/8/2016 10:22:06 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SPUI.dgn

MODEL: SAXON-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



Color_FDOTPDF.ptc/g
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 2 (1 OF 3)
SEGMENT 4

SHEET NO. 42

amourad 11/8/2016 10:22:09 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SPUI.dgn

SAXON-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 64+00.00

MATCHLINE STA. 79+00.00

℄ EXIST I-4

145' FPL EASTMENT

I-4 WB EXPRESS LANES

I-4 WB GUL

I-4 WB GUL RAMP TO SAXON BLVD

SAXON BLVD RAMP TO I-4 EB GUL

N

0 20 100

Feet

295

290

65

70

75

SAXON BLVD.

℄ EXIST SAXON BLVD.

I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

SAXON BLVD RAMP TO I-4 WB GUL

I-4 EB GUL RAMP TO SAXON BLVD

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 2 (2 OF 3)
SEGMENT 4

SHEET NO. 43

amourad 11/8/2016 10:22:14 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd403-SPUI.dgn

SAXON-06
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

LA R/W LINE

302S

301S

300S

CHEVRON GAS STATION

SAXON PLAZA

END PD&E STUDY LIMIT
STA 92+00.00

304S

305S

EXIST. R/W LINE

85

90

80

SAXON BLVD.

℄ EXIST. SAXON BLVD.

N

0 20 100
Feet

EXIST. R/W LINE

340S

WENDYS

267

266

RADIOLOGY ASSOCIATES

265

339S

342S

343S

344S

LA R/W LINE

FAMILY DOLLAR

PUBLIX SUPER MARKET

W FINLAND DR.

Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

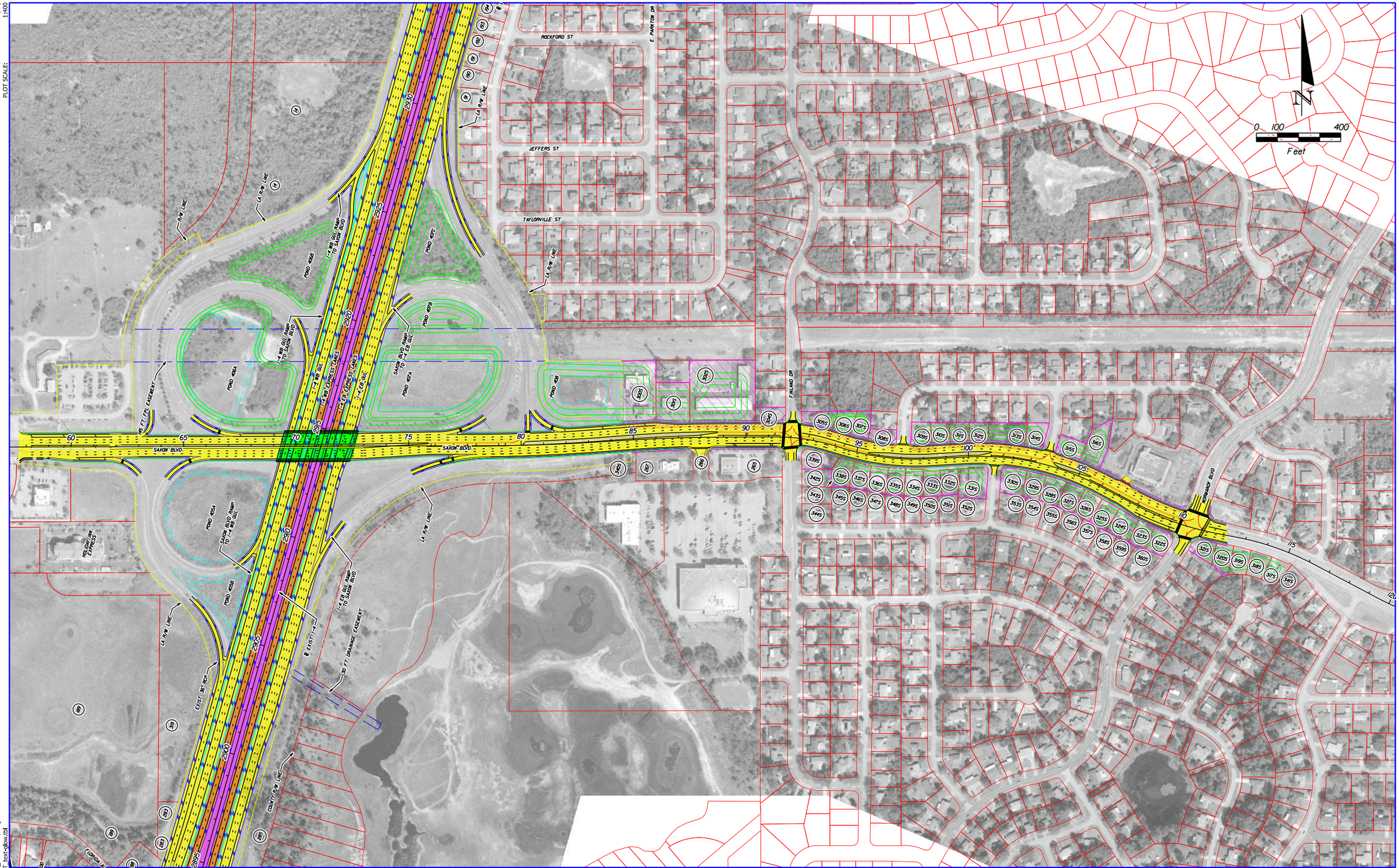
I-4 PD&E STUDY
SAXON BLVD. ALT 2 (3 OF 3)
SEGMENT 1

SHEET NO.
44

amourad 11/8/2016 10:22:19 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SPUI.dgn

Default
16.5x10.6 (in.)
1:400

MODEL:
SHEET SIZE:
PLOT SCALE:



Color_FDOTPDF.ctb
FDOT_text-blow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

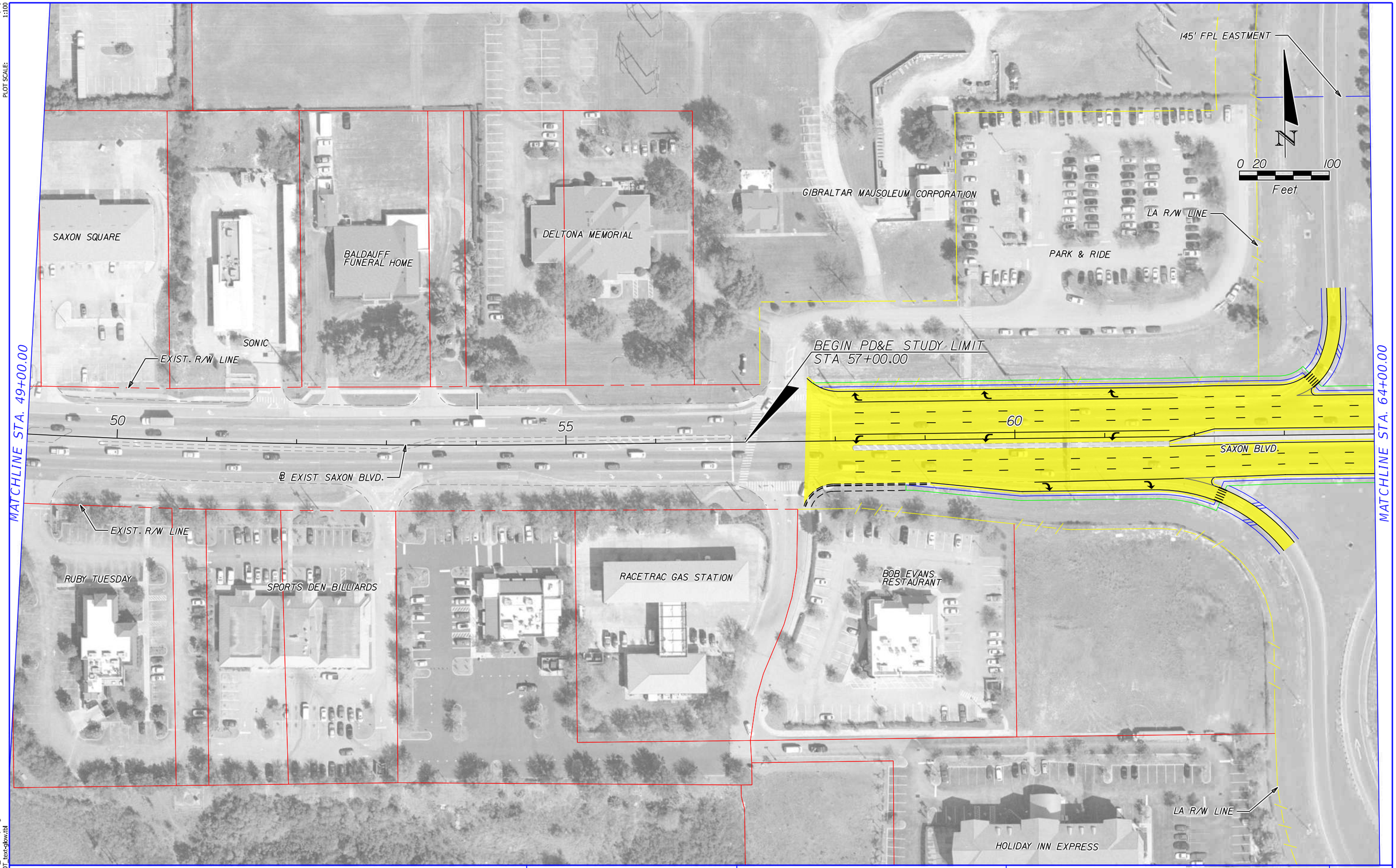
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3
SEGMENT 4

SHEET NO.
45

amourad 11/8/2016 10:22:37 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

MODEL:
SHEET SIZE: SAXON-04 16.5x10.6 (in.)
PLOT SCALE: 1:100



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3 (1 OF 5)
SEGMENT 4

SHEET NO. 46

Color_FDOTPDF.ctb
FDOT_text-plow.tbl
PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:22:45 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

SAXON-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 64+00.00

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

℄ EXIST I-4

POND 406A

I-4 WB EXPRESS LANES

I-4 WB GUL

I-4 WB C/D

POND 407A

N

0 20 100

Feet

295

65

70

75

SAXON_BLVD.

℄ EXIST SAXON BLVD.

POND 405A

I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

290

I-4 EB GUL RAMP TO SAXSON BLVD GUL

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3 (2 OF 5)
SEGMENT 4

SHEET NO. 47

Color_FDOTPDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:22:51 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

SAXON-06
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

LA R/W LINE

PARCEL ID: 23-18-30-01-12-0080
AREA TAKEN: 45,795 SF

PARCEL ID: 23-18-30-01-12-0091
AREA TAKEN: 29,705 SF

PARCEL ID: 23-18-30-01-12-0090
AREA TAKEN: 87,552 SF

PROPOSED R/W LINE

POND 408

302S

301S

300S

CHEVRON GAS STATION

SAXON PLAZA

N

0 20 100
Feet

PARCEL ID: 30-18-31-03-66-0160
AREA TAKEN: 12,382 SF

PARCEL ID: 30-18-31-03-40-0300
AREA TAKEN: 12,879 SF

304S

305S

EXIST. R/W LINE

85

90

80

SAXON BLVD.

℄ EXIST. SAXON BLVD.

EXIST. R/W LINE

PROPOSED R/W LINE

WENDYS

RADIOLOGY ASSOCIATES

340S

267

266

265

339S

LA R/W LINE

PARCEL ID: 24-18-30-02-00-0030
AREA TAKEN: 666 SF

PARCEL ID: 24-18-30-02-00-0010
AREA TAKEN: 2,988 SF

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 14 SF

PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 11,509 SF

FAMILY DOLLAR

PUBLIX SUPER MARKET

W FINLAND DR.

MATCHLINE STA. 94+00.00

Color_FDOTPDF.pltcfg
FDOT_text-qblw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3 (3 OF 5)
SEGMENT 4

SHEET NO. **48**

amourad 11/8/2016 10:22:57 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

MATCHLINE STA. 94+00.00

MATCHLINE STA. 109+00.00

PARCEL ID: 30-18-31-03-39-0070
AREA TAKEN: 11,377 SF

PARCEL ID: 30-18-31-03-39-0060
AREA TAKEN: 9,339 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-39-0050
AREA TAKEN: 9,573 SF

PARCEL ID: 30-18-31-03-39-0040
AREA TAKEN: 8,870 SF

PARCEL ID: 30-18-31-03-39-0020
AREA TAKEN: 18,577 SF

PARCEL ID: 30-18-31-03-39-0010
AREA TAKEN: 11,219 SF

PARCEL ID: 30-18-31-03-38-0070
AREA TAKEN: 12,431 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-38-0060
AREA TAKEN: 19,943 SF

PARCEL ID: 30-18-31-03-40-0290
AREA TAKEN: 9,969 SF

PARCEL ID: 30-18-31-03-40-0280
AREA TAKEN: 10,692 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-40-0270
AREA TAKEN: 9,053 SF

WAPACHE CIR.

EXOTIC TERRACE

DIANE TERRACE

POND 408A

POND 408B

POND 408C

POND 408D1

POND 408D2

POND 408E

WALGREENS

0 20 100
Feet

100

105

95

EXIST SAXON BLVD.

306S 307S 308S 309S 310S 311S 312S 313S 314S 315S 316S

330S 329S 328S 327S 326S 325S 324S 323S

331S 332S 333S 334S 335S 336S 337S 338S

PARCEL ID: 30-18-31-03-37-0090
AREA TAKEN: 12,807 SF

PARCEL ID: 30-18-31-03-37-0100
AREA TAKEN: 9,777 SF

PARCEL ID: 30-18-31-03-37-0110
AREA TAKEN: 10,540 SF

PARCEL ID: 30-18-31-03-36-0200
AREA TAKEN: 16,834 SF

PARCEL ID: 30-18-31-03-37-0120
AREA TAKEN: 9,699 SF

PARCEL ID: 30-18-31-03-36-0190
AREA TAKEN: 9,120 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-36-0180
AREA TAKEN: 8,990 SF

PARCEL ID: 30-18-31-03-37-0130
AREA TAKEN: 9,820 SF

PARCEL ID: 30-18-31-03-36-0170
AREA TAKEN: 10,056 SF

PARCEL ID: 30-18-31-03-37-0140
AREA TAKEN: 9,941 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-36-0160
AREA TAKEN: 9,670 SF

PARCEL ID: 30-18-31-03-37-0150
AREA TAKEN: 12,031 SF

PARCEL ID: 30-18-31-03-36-0150
AREA TAKEN: 9,374 SF

PARCEL ID: 30-18-31-03-37-0160
AREA TAKEN: 8,939 SF

PARCEL ID: 30-18-31-03-36-0140
AREA TAKEN: 8,967 SF

PARCEL ID: 30-18-31-03-36-0130
AREA TAKEN: 10,962 SF

Color_FDOTPDF.pltcfg
FDOT_text-plow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3 (4 OF 5)
SEGMENT 4

SHEET NO.
49

amourad 11/8/2016 10:23:04 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

MODEL: SAXON-08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 109+00.00

℄ EXIST SAXON BLVD.

110

115

120

END PD&E STUDY LIMIT
STA 120+00.00

TIFFIN AVE.

N

0 20 100
Feet

POND 408F

321S

322S

319S

320S

318S

317S

341S

PARCEL ID: 30-18-31-03-25-0460
AREA TAKEN: 9,427 SF

PARCEL ID: 30-18-31-03-25-0450
AREA TAKEN: 9,439 SF

PARCEL ID: 30-18-31-03-25-0440
AREA TAKEN: 9,140 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-25-0430
AREA TAKEN: 9,592 SF

PARCEL ID: 30-18-31-03-25-0420
AREA TAKEN: 9,758 SF

PARCEL ID: 30-18-31-03-25-0410
AREA TAKEN: 8,516 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-37-0170
AREA TAKEN: 10,528 SF

N NORMANDY BLVD.

FALMOUTH AVE.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

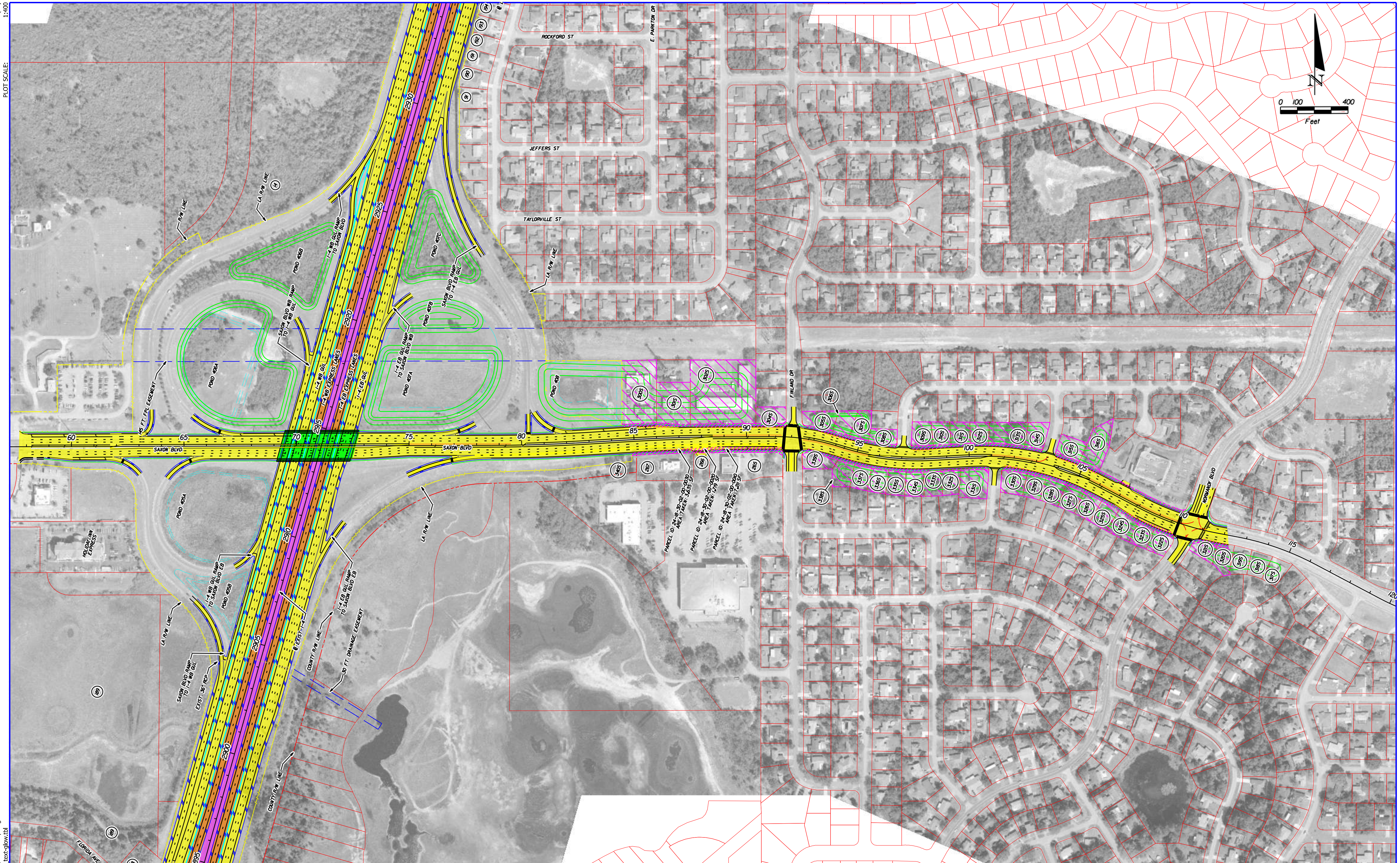
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 3 (5 OF 5)
SEGMENT 4

SHEET NO. **50**

amourad 11/8/2016 10:23:11 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-LEFT.dgn

MODEL: Default
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:400



EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	
		TRANSIT CORRIDOR	

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

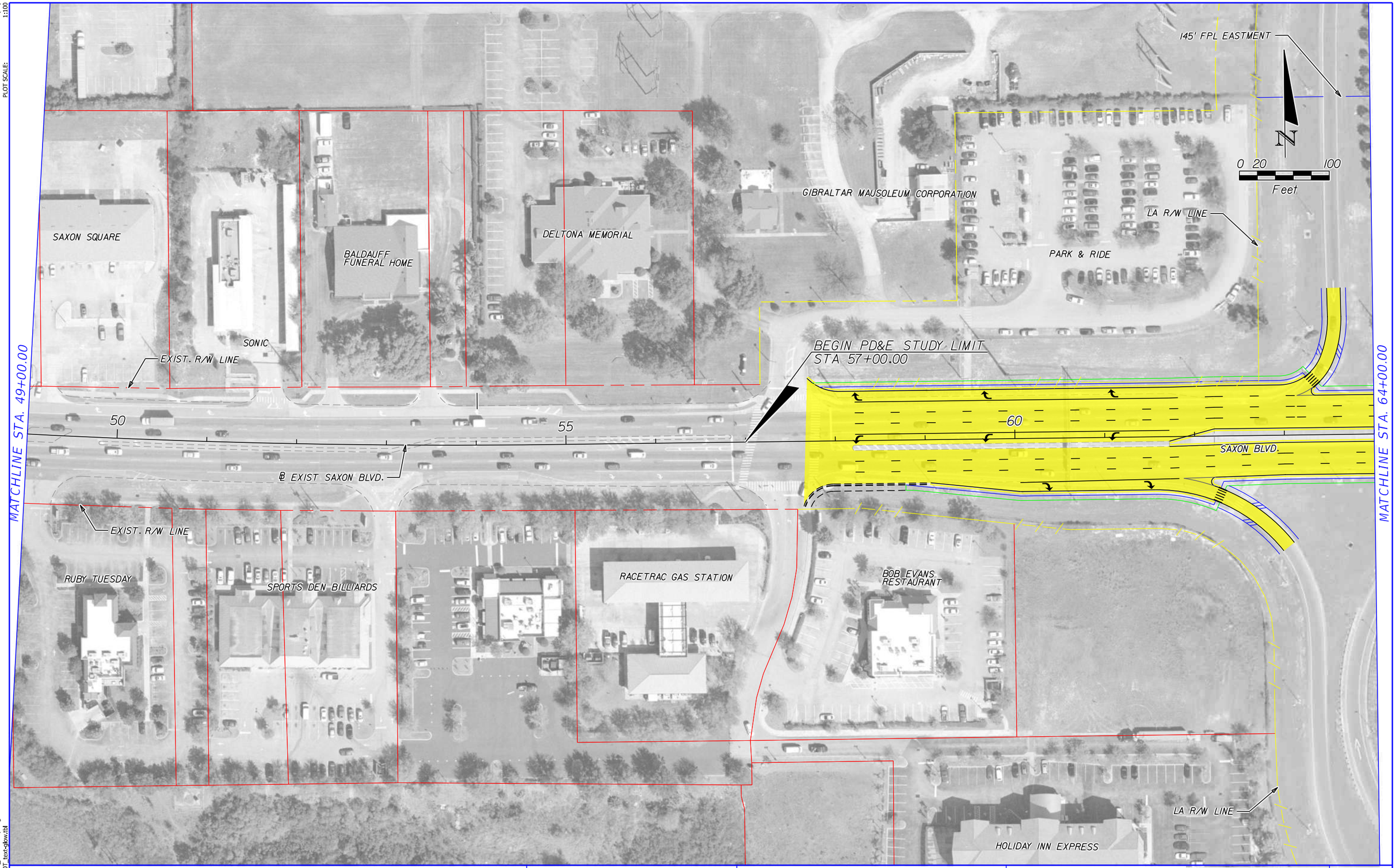
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 4
SEGMENT 4

SHEET NO.
51

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl
amourad 11/8/2016 10:23:30 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-CENTER.dgn

MODEL:
SHEET SIZE: SAXON-04
PLOT SCALE: 16.5x10.6 (in.) 1:100



Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

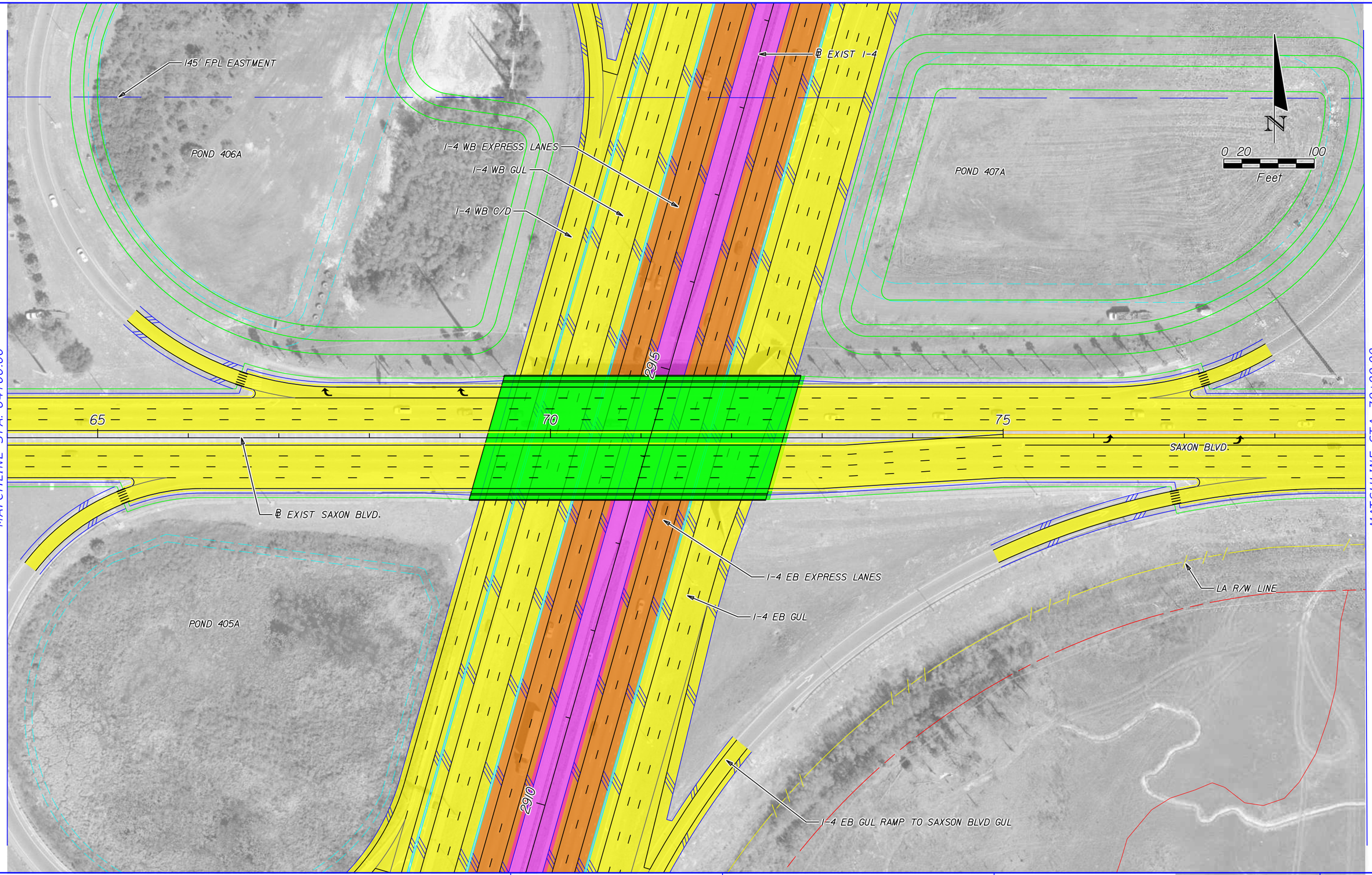
I-4 PD&E STUDY
SAXON BLVD. ALT 4 (1 OF 5)
SEGMENT 4

SHEET NO. 52

amourad 11/8/2016 10:23:34 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-CENTER.dgn

SAXON-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:



Color FDOTPDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 4 (2 OF 5)
SEGMENT 4

SHEET NO. 53

amourad 11/8/2016 10:23:39 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\plan\rd403-SAXON-CENTER.dgn

SAXON-06
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

LA R/W LINE

PARCEL ID: 23-18-30-01-12-0080
AREA TAKEN: 45,795 SF

PARCEL ID: 23-18-30-01-12-0091
AREA TAKEN: 29,705 SF

PARCEL ID: 23-18-30-01-12-0090
AREA TAKEN: 87,552 SF

PROPOSED R/W LINE

POND 408

300S

301S

302S

CHEVRON GAS STATION

SAXON PLAZA

N

0 20 100
Feet

PARCEL ID: 30-18-31-03-66-0160
AREA TAKEN: 12,382 SF

PARCEL ID: 30-18-31-03-40-0300
AREA TAKEN: 12,879 SF

304S

305S

EXIST. R/W LINE

80

85

90

SAXON-BLVD.

℄ EXIST SAXON BLVD.

EXIST. R/W LINE

PROPOSED R/W LINE

WENDYS

RADIOLOGY ASSOCIATES

265

339S

340S

267

266

LA R/W LINE

PARCEL ID: 24-18-30-02-00-0030
AREA TAKEN: 3,635 SF

PARCEL ID: 24-18-30-02-00-0020
AREA TAKEN: 1,719 SF

PARCEL ID: 24-18-30-02-00-0010
AREA TAKEN: 7,211 SF

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 254 SF

PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 11,509 SF

FAMILY DOLLAR

PUBLIX SUPER MARKET

W FINLAND DR.

MATCHLINE STA. 94+00.00

Color_FDOTPDF.pltcfg
FDOT_text-gdiow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

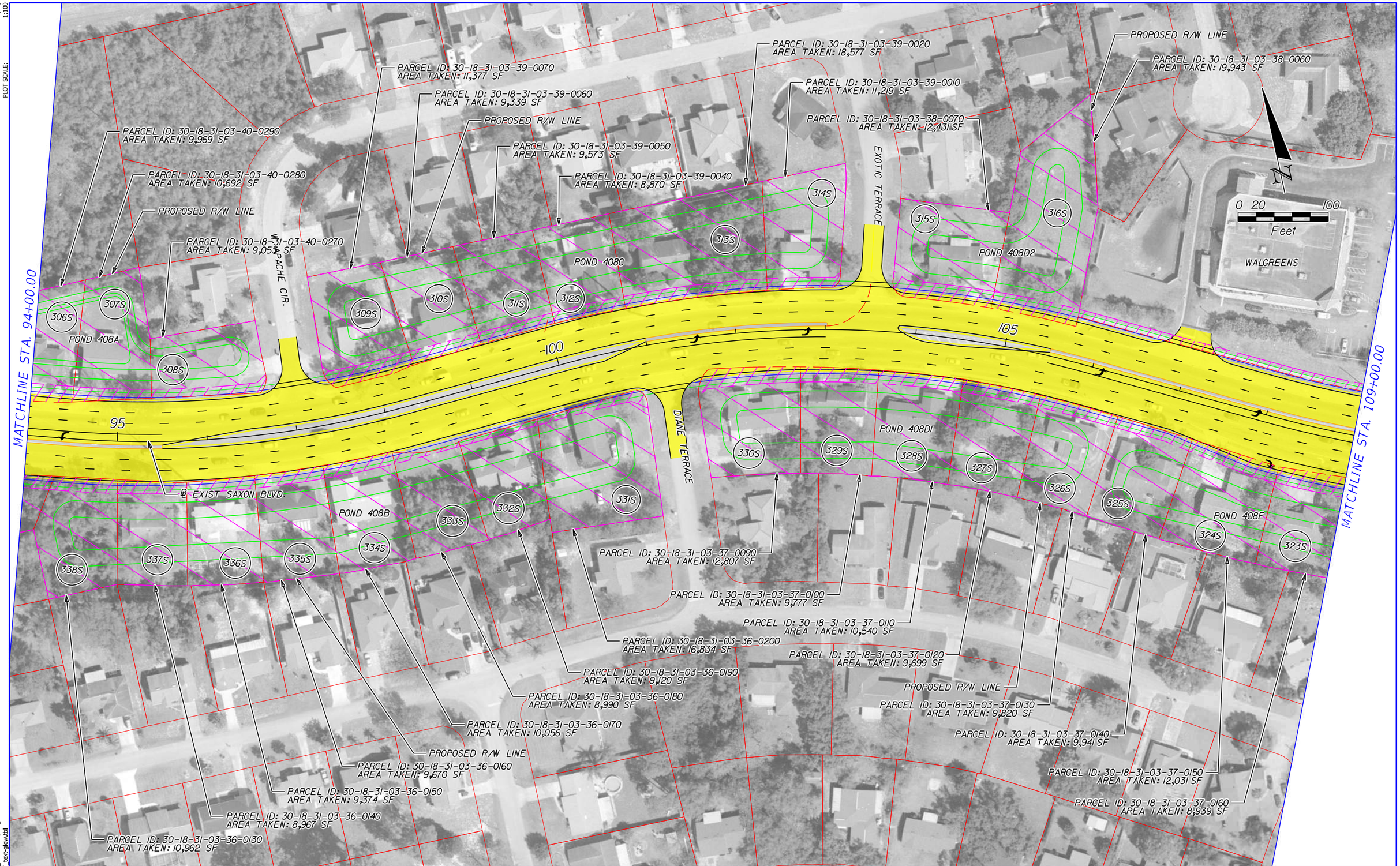
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 4 (3 OF 5)
SEGMENT 4

SHEET NO. **54**

amourad 11/8/2016 10:23:43 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-CENTER.dgn



Color_FDOTPDF.pltcfg
FDOT_text-cglow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 4 (4 OF 5)
SEGMENT 4

SHEET NO.
55

amourad 11/8/2016 10:23:48 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-CENTER.dgn

MODEL: SAXON-08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 109+00.00

℄ EXIST SAXON BLVD.

115

110

TIFFIN AVE.

N

0 20 100
Feet

END PD&E STUDY LIMIT
STA 120+00.00

120

POND 408F

321S

318S

317S

319S

320S

322S

34IS

PARCEL ID: 30-18-31-03-25-0460
AREA TAKEN: 9,427 SF

PARCEL ID: 30-18-31-03-25-0450
AREA TAKEN: 9,439 SF

PARCEL ID: 30-18-31-03-25-0440
AREA TAKEN: 9,140 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-25-0430
AREA TAKEN: 9,592 SF

PARCEL ID: 30-18-31-03-25-0420
AREA TAKEN: 9,758 SF

PARCEL ID: 30-18-31-03-25-0410
AREA TAKEN: 8,516 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-37-0170
AREA TAKEN: 10,528 SF

N. NORMANDY BLVD.

FALMOUTH AVE.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

Color_FDOTPDF.pltctg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

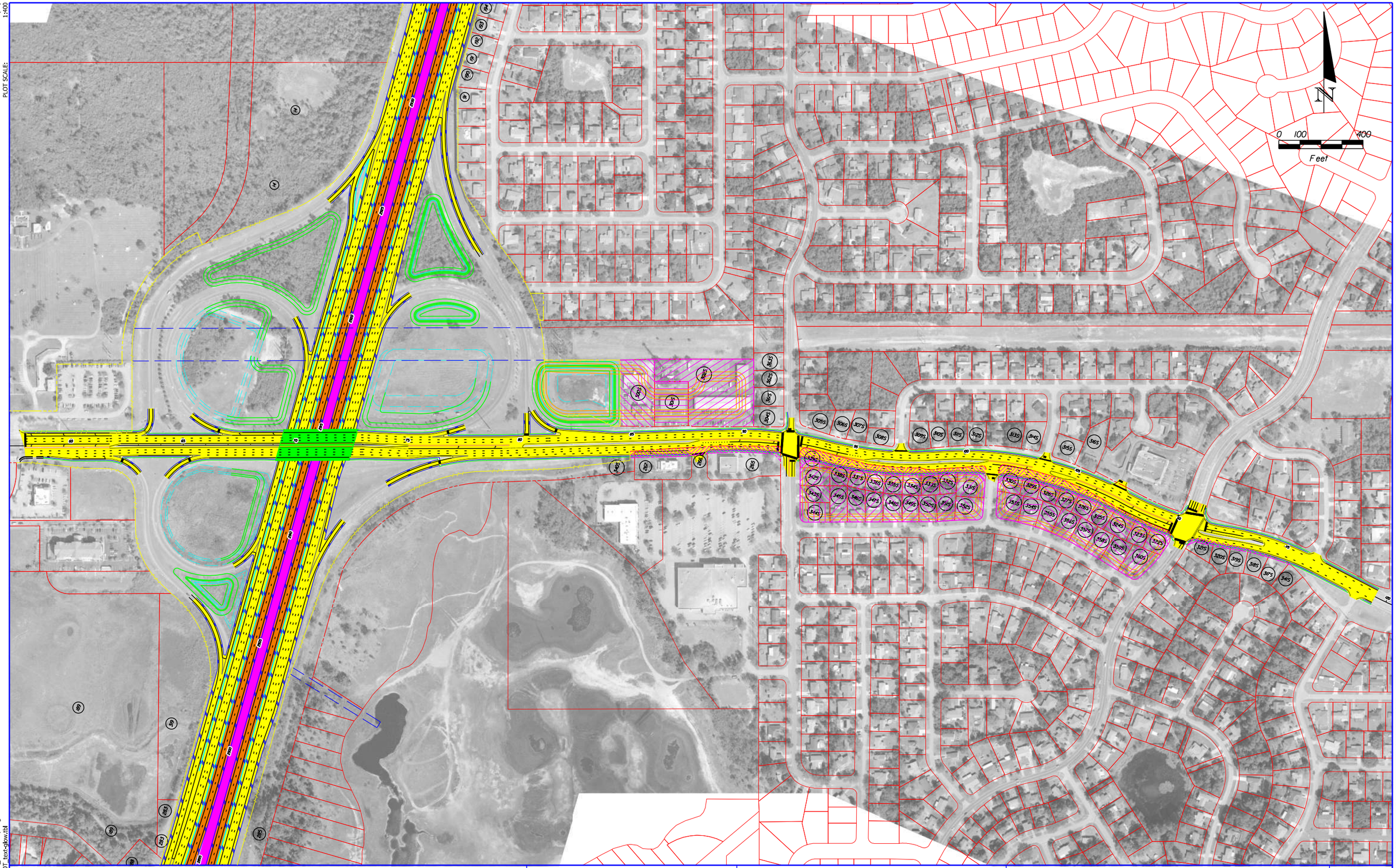
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 4 (5 OF 5)
SEGMENT 4

SHEET NO. **56**

amourad 11/8/2016 10:23:52 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd403-SAXON-CENTER.dgn

MODEL: Default
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:400



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-xlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

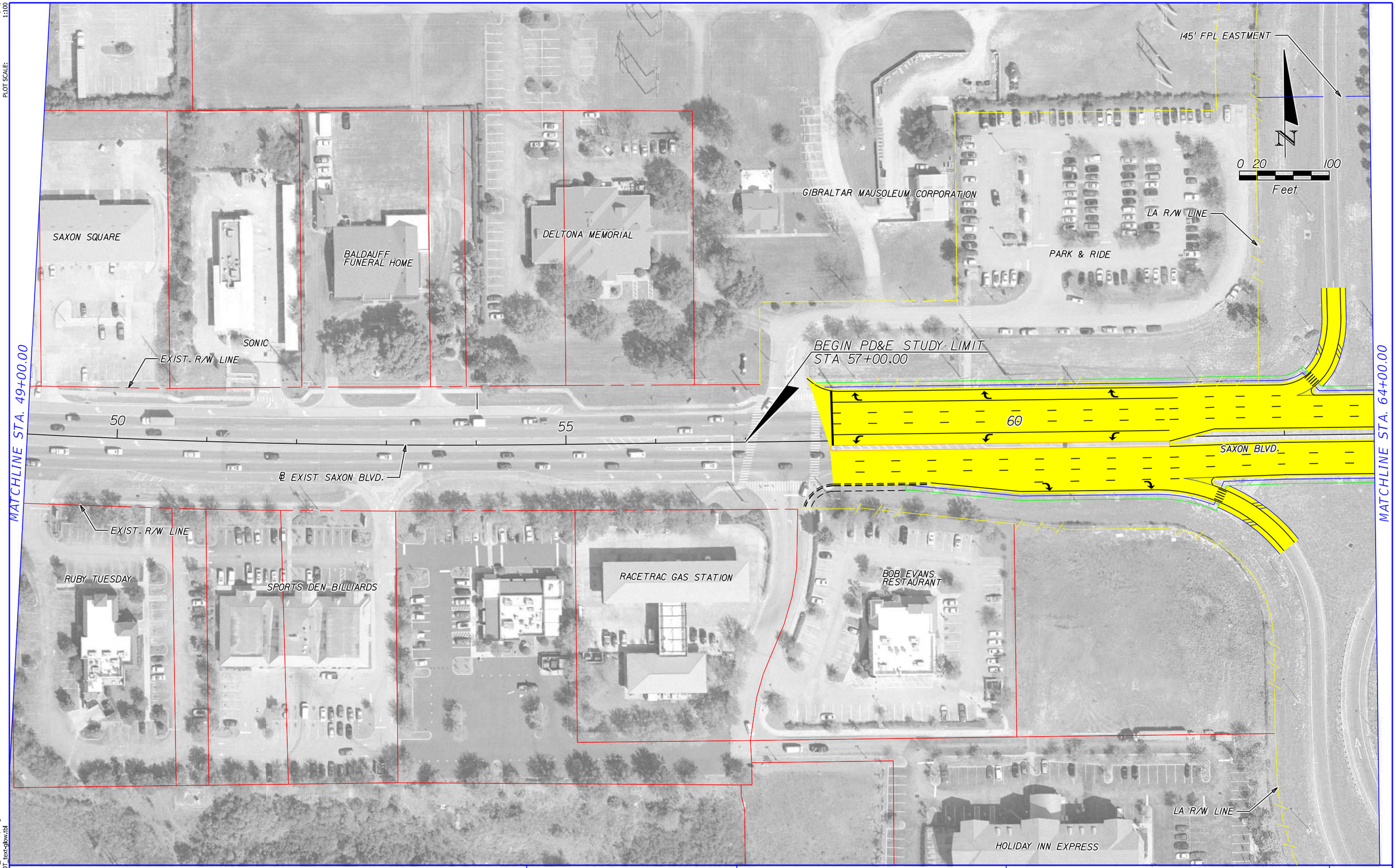
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5
SEGMENT 4

SHEET NO. **57**

amourad 11/8/2016 10:24:08 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL:
SHEET SIZE: SAXON-04
PLOT SCALE: 16.5x10.6 (in.) 1:100



Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5 (1 OF 5)
SEGMENT 4

SHEET NO. 58

amourad 11/8/2016 10:24:19 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL: SAXON-05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 64+00.00

MATCHLINE STA. 79+00.00

℄ EXIST I-4

145' FPL EASTMENT

I-4 WB EXPRESS LANES

I-4 WB GUL

POND 406A

POND 407A

N

0 20 100

Feet

295

65

70

75

SAXON BLVD.

℄ EXIST SAXON BLVD.

POND 405A

I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

290

I-4 EB GUL RAMP TO SAXSON BLVD GUL

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5 (2 OF 5)
SEGMENT 4

SHEET NO. 59

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

amourad 11/8/2016 10:24:26 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL: SAXON-06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

145' FPL EASTMENT
LA R/W LINE
PARCEL ID: 23-18-30-01-12-0080
AREA TAKEN: 41,072 SF
PARCEL ID: 23-18-30-01-12-0091
AREA TAKEN: 28,156 SF
PARCEL ID: 23-18-30-01-12-0090
AREA TAKEN: 101,561 SF
PROPOSED R/W LINE
POND 408
300S
301S
302S
363S
362S
361S
304S
305S
POND 408 (ALTERNATE)
CHEVRON GAS STATION
SAXON PLAZA
EXIST. R/W LINE
N
0 20 100
Feet
MATCHLINE STA. 79+00.00
80
85
90
SAXON BLVD.
@ EXIST SAXON BLVD.
MATCHLINE STA. 94+00.00
339S
340S
267
266
265
WENDYS
RADIOLOGY ASSOCIATES
PROPOSED R/W LINE
EXIST. R/W LINE
LA R/W LINE
PARCEL ID: 24-18-30-02-00-0010
AREA TAKEN: 10,282 SF
PARCEL ID: 24-18-30-02-00-0020
AREA TAKEN: 2,692 SF
PARCEL ID: 24-18-30-02-00-0030
AREA TAKEN: 8,508 SF
PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 8,779 SF
PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 2,730 SF
PARCEL ID: 30-18-31-03-36-0110
AREA TAKEN: 10,400 SF
PARCEL ID: 30-18-31-03-36-0100
AREA TAKEN: 9,941 SF
PARCEL ID: 30-18-31-03-36-0090
AREA TAKEN: 11,518 SF
PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 608 SF
FAMILY DOLLAR
PUBLIX SUPER MARKET
342S
343S
344S
W FINLAND DR.

Color_FDOTPDF.pltcfg
FDOT_text-qblw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5 (3 OF 5)
SEGMENT 4

SHEET NO. 60

amourad 11/8/2016 10:24:33 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL:
SHEET SIZE: SAXON-07
PLOT SCALE: 16.5x10.6 (in.) 1:100

PARCEL ID	AREA TAKEN (SF)	PARCEL ID	AREA TAKEN (SF)
322S	7,953	335S	6,922
322S	2,875	335S	2,748
323S	7,296	336S	6,563
323S	1,643	336S	2,811
324S	9,774	337S	5,827
324S	2,257	337S	3,140
325S	7,682	338S	6,804
325S	2,259	338S	3,788
326S	6,945	343S	9,941
326S	2,875	344S	11,518
327S	6,265	345S	12,527
327S	3,434	346S	12,060
328S	6,335	347S	10,698
328S	4,205	348S	10,525
329S	5,602	349S	8,837
329S	4,175	350S	9,380
330S	6,490	351S	10,009
330S	6,317	352S	12,626
331S	12,181	353S	13,103
331S	4,653	354S	10,019
332S	6,727	355S	10,110
332S	2,393	356S	10,930
333S	6,994	357S	9,715
333S	1,996	358S	10,330
334S	7,324	359S	12,072
334S	2,732	360S	16,062

MATCHLINE STA. 94+00.00

MATCHLINE STA. 109+00.00

W. APACHE CIR.

EXOTIC TERRACE

DIANE TERRACE

POND 408B (ALTERNATE)

POND 408DI (ALTERNATE)

WALGREENS

95

100

105

℄ EXIST SAXON BLVD.

0 20 100
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5 (4 OF 5)
SEGMENT 4

SHEET NO. 61

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

amourad 11/8/2016 10:24:40 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL: SAXON-08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 109+00.00

℄ EXIST SAXON BLVD.

110

115

120

END PD&E STUDY LIMIT
STA 120+00.00

TIFFIN AVE.

N

0 20 100
Feet

322S
321S
320S
319S
318S
317S
341S

PROPOSED R/W LINE

N. NORMANDY BLVD.

PARCEL ID: 30-18-31-03-37-0070
AREA TAKEN: 2,875 SF

PARCEL ID: 30-18-31-03-37-0070
AREA TAKEN: 7,953 SF

PARCEL ID: 30-18-31-03-37-0010
AREA TAKEN: 16,062 SF

PARCEL ID: 30-18-31-03-25-0410
AREA TAKEN: 2,164 SF

PARCEL ID: 30-18-31-03-25-0420
AREA TAKEN: 1,616 SF

PARCEL ID: 30-18-31-03-25-0430
AREA TAKEN: 1,384 SF

PROPOSED R/W LINE

PARCEL ID: 30-18-31-03-25-0440
AREA TAKEN: 1,051 SF

PARCEL ID: 30-18-31-03-25-0450
AREA TAKEN: 532 SF

PARCEL ID: 30-18-31-03-25-0460
AREA TAKEN: 33 SF

FALMOUTH AVE.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

PRINT DRIVER: C:\dot_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

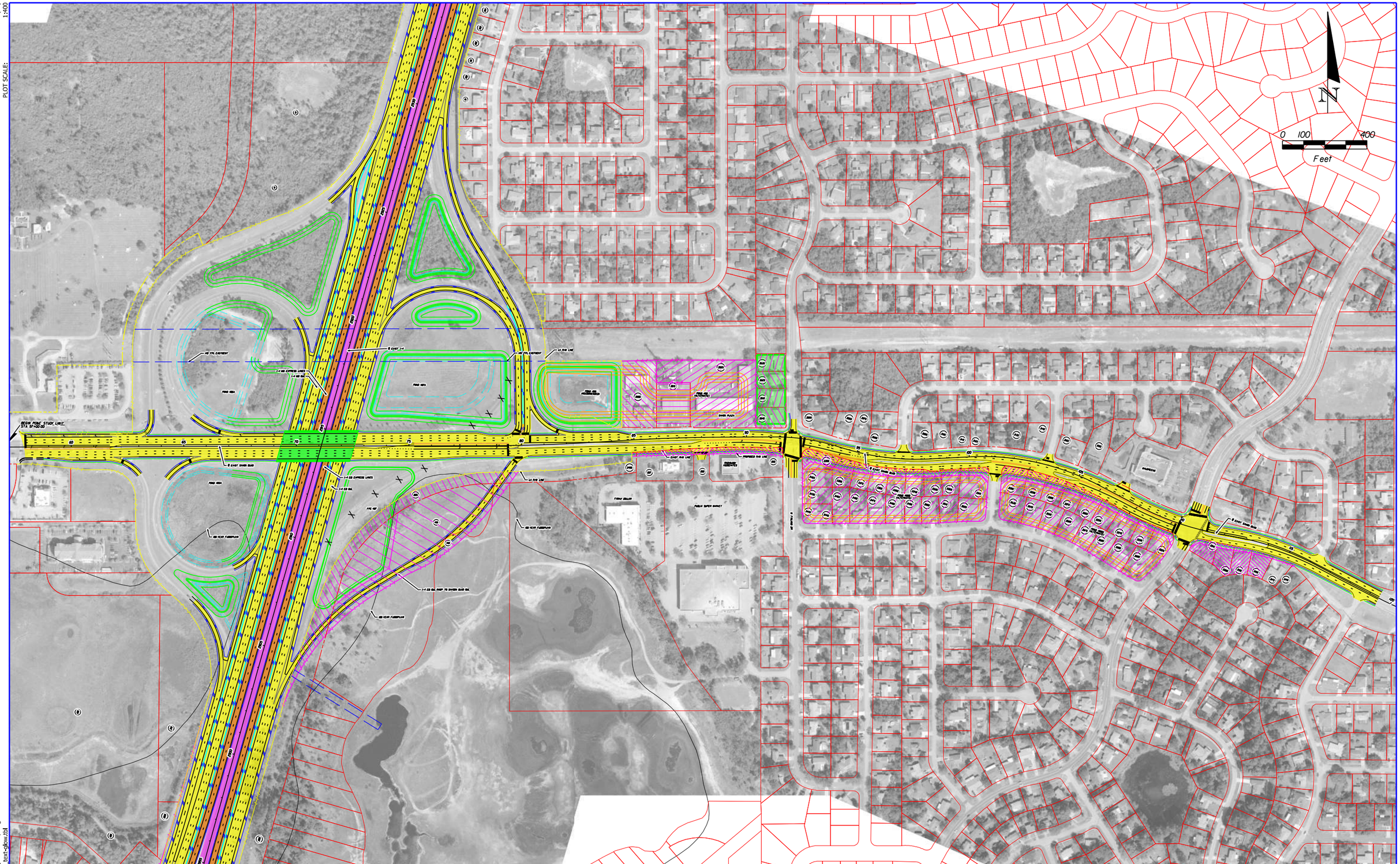
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 5 (5 OF 5)
SEGMENT 4

SHEET NO. 62

amourad 11/8/2016 10:24:46 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-RIGHT.dgn

MODEL:
SHEET SIZE: Default
PLOT SCALE: 16.5x10.6 (in.) 1:400



Color_FDOTPDF.pltcfg
FDOT_text-qkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

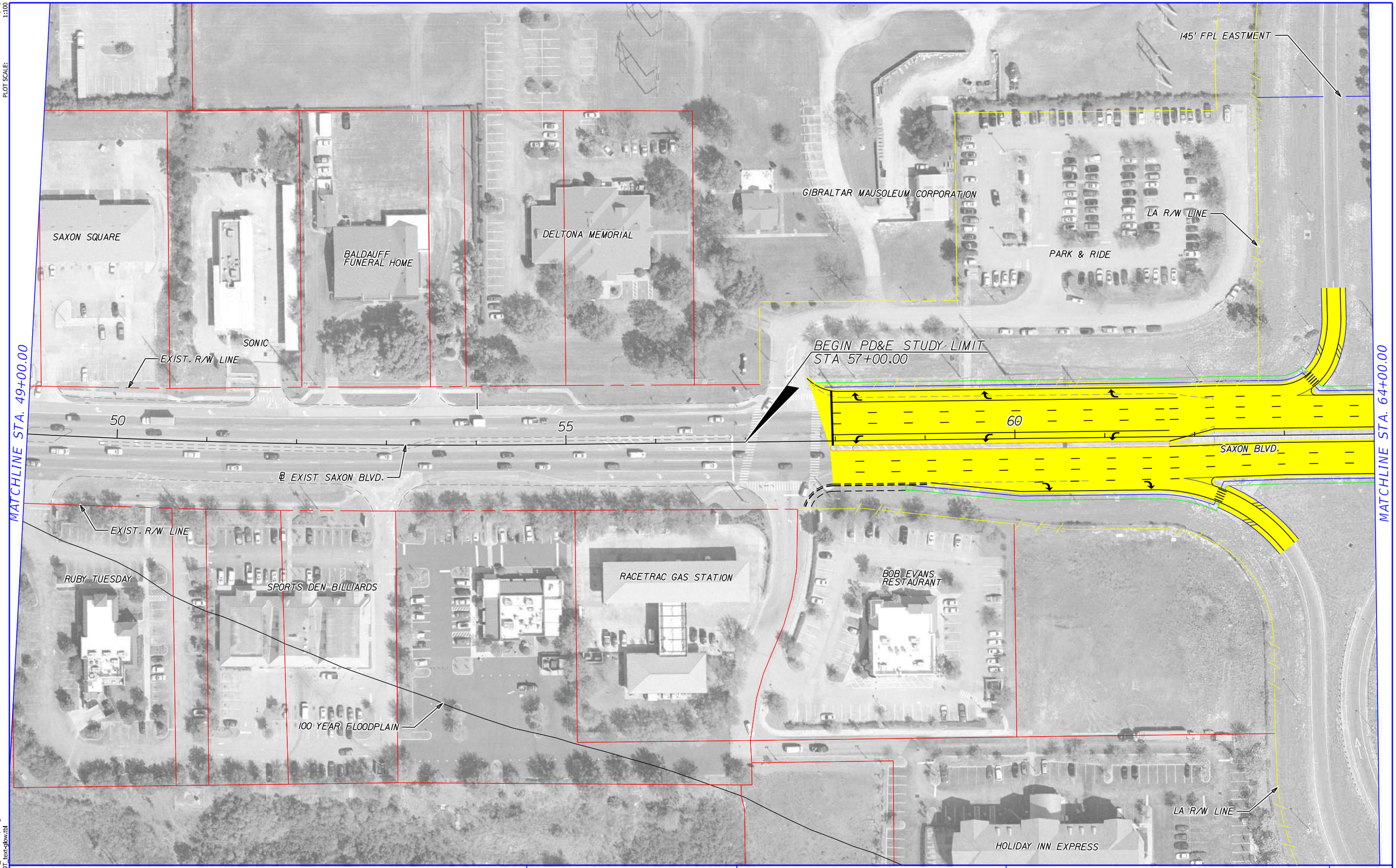
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **63**

amourad 11/8/2016 10:25:06 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-ALT-7.dgn

MODEL:
SHEET SIZE: SAXON-01
PLOT SCALE: 16.5x10.6 (in.) 1:100



Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6 (1 OF 5)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 64

amourad 11/8/2016 10:25:13 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\plandr403-SAXON-ALT-7.dgn

SAXON-02
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 64+00.00

MATCHLINE STA. 79+00.00

145' FPL EASTMENT

℄ EXIST I-4

I-4 WB EXPRESS LANES

I-4 WB GUL

POND 406A

POND 407A

65

70

75

295

SAXON BLVD.

℄ EXIST SAXON BLVD.

PARCEL ID: UNKOWN (VOLUSIA COUNTY)
AREA TAKEN: 79,454 SF

I-4 EB EXPRESS LANES

PARCEL ID: 23-18-30-01-20-00I0
AREA TAKEN: 181,894 SF

I-4 EB GUL

POND 405A

285

410

FPC 407

100 YEAR FLOODPLAIN

290

Color_FDOTPDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6 (2 OF 5)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
65

amourad 11/8/2016 10:25:19 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-ALT-7.dgn

SAXON-03
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 79+00.00

MATCHLINE STA. 94+00.00

145' FPL EASTMENT

LA R/W LINE

PARCEL ID: 23-18-30-01-12-0080
AREA TAKEN: 41,072 SF

PARCEL ID: 23-18-30-01-12-0091
AREA TAKEN: 28,156 SF

PARCEL ID: 23-18-30-01-12-0090
AREA TAKEN: 101,561 SF

PROPOSED R/W LINE

STORMWATER STORAGE VAULT
(RECOMMENDED)

310' x 125' x 6'
STORMWATER STORAGE
VAULT

PARCEL ID: 30-18-31-03-66-0130
AREA TAKEN: 10,00 SF

PARCEL ID: 30-18-31-03-66-0140
AREA TAKEN: 10,000 SF

PARCEL ID: 30-18-31-03-66-0150
AREA TAKEN: 10,000 SF

PARCEL ID: 30-18-31-03-66-0160
AREA TAKEN: 9,750 SF

POND 408
(RECOMMENDED)

POND 408
(ALTERNATE)

CHEVRON GAS STATION

SAXON PLAZA

EXIST. R/W LINE

363S

362S

361S

304S

305S

302S

301S

300S

80

85

90

SAXON-BLVD.

@ EXIST SAXON BLVD.

EXIST. R/W LINE

PROPOSED R/W LINE

WENDYS

RADIOLOGY
ASSOCIATES

265

266

267

340S

339S

342S

343S

344S

LA R/W LINE

PARCEL ID: 24-18-30-02-00-0020
AREA TAKEN: 2,215 SF

PARCEL ID: 24-18-30-02-00-0030
AREA TAKEN: 5,377 SF

PARCEL ID: 24-18-30-02-00-0010
AREA TAKEN: 9,642 SF

PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 11,583 SF

PARCEL ID: 30-18-31-03-36-0120
AREA TAKEN: 2,730 SF

PARCEL ID: 30-18-31-03-36-0110
AREA TAKEN: 10,400 SF

PARCEL ID: 30-18-31-03-36-0100
AREA TAKEN: 9,941 SF

PARCEL ID: 30-18-31-03-36-0090
AREA TAKEN: 11,518 SF

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 347 SF

FAMILY DOLLAR

PUBLIX SUPER MARKET

W FINLAND DR.

100 YEAR FLOODPLAIN

Color_FDOTPDF.pltcfg
FDOT_text-gdiow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6 (3 OF 5)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **66**

amourad 11/8/2016 10:25:24 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd403-SAXON-ALT-7.dgn

MODEL:
SHEET SIZE: SAXON-04
PLOT SCALE: 16.5x10.6 (in.) 1:100

PARCEL ID	AREA TAKEN (SF)
322S	7,953
322S	2,875
323S	7,296
323S	1,643
324S	9,774
324S	2,257
325S	7,682
325S	2,259
326S	6,945
326S	2,875
327S	6,265
327S	3,434
328S	6,335
328S	4,205
329S	5,602
329S	4,175
330S	6,490
330S	6,317
331S	12,181
331S	4,653
332S	6,727
332S	2,393
333S	6,994
333S	1,996
334S	7,324
334S	2,732

PARCEL ID	AREA TAKEN (SF)
335S	6,922
335S	2,748
336S	6,563
336S	2,811
337S	5,827
337S	3,140
338S	6,804
338S	3,788
343S	9,941
344S	11,518
345S	12,527
346S	12,060
347S	10,698
348S	10,525
349S	8,837
350S	9,380
351S	10,009
352S	12,626
353S	13,103
354S	10,019
355S	10,110
356S	10,930
357S	9,715
358S	10,330
359S	12,072
360S	16,062

MATCHLINE STA. 94+00.00

MATCHLINE STA. 109+00.00

W. APACHE CIR.

DIANE TERRACE

EXOTIC TERRACE

WALGREENS

POND 408B (ALTERNATE)

POND 408D (ALTERNATE)

95

100

105

E. EXIST. SAXON BLVD.

306S 307S 308S 309S 310S 311S 312S 314S 315S 316S 323S 324S 325S 326S 327S 328S 329S 330S 331S 332S 333S 334S 335S 336S 337S 338S 344S 345S 346S 347S 348S 349S 350S 351S 352S 353S 354S 355S 356S 357S 358S 359S 360S

Color_FDOTPDF.pltcfg
FDOT_text-qlow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6 (4 OF 5)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **67**

amourad 11/8/2016 10:25:30 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd403-SAXON-ALT-7.dgn

MODEL: SAXON-05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 109+00.00

℄ EXIST SAXON BLVD.

110

115

120

END PD&E STUDY LIMIT
STA 120+00.00

TIFFIN AVE.

FALMOUTH AVE.

N. NORMANDY BLVD.

PROPOSED R/W LINE

PROPOSED R/W LINE

321S

322S

319S

320S

318S

317S

341S

PARCEL ID: 30-18-31-03-25-0460
AREA TAKEN: 33 SF

PARCEL ID: 30-18-31-03-25-0450
AREA TAKEN: 532 SF

PARCEL ID: 30-18-31-03-25-0440
AREA TAKEN: 9,140 SF

PARCEL ID: 30-18-31-03-25-0430
AREA TAKEN: 9,592 SF

PARCEL ID: 30-18-31-03-25-0420
AREA TAKEN: 9,758 SF

PARCEL ID: 30-18-31-03-25-0410
AREA TAKEN: 8,516 SF

PARCEL ID: 30-18-31-03-37-0070
AREA TAKEN: 10,605 SF

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SAXON BLVD. ALT 6 (5 OF 5)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

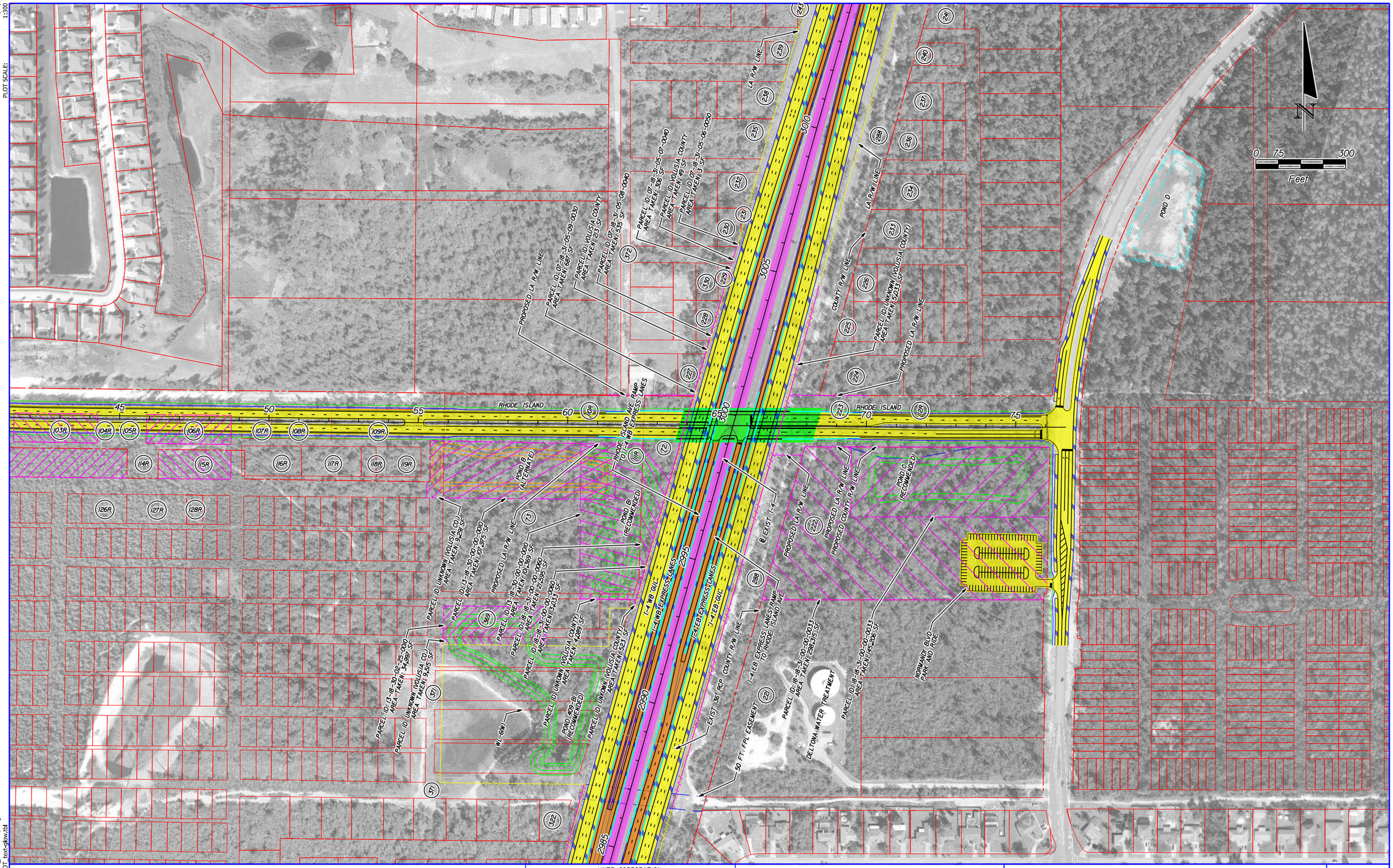
SHEET NO. 68

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

amourad 11/8/2016 10:25:36 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\432100122001\Segment 4\roadway\planrd403-SAXON-ALT-7.dgn

Default
16.5x10.6 (in.)
1:300

MODEL:
SHEET SIZE:
PLOT SCALE:



Color_FDOTPDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

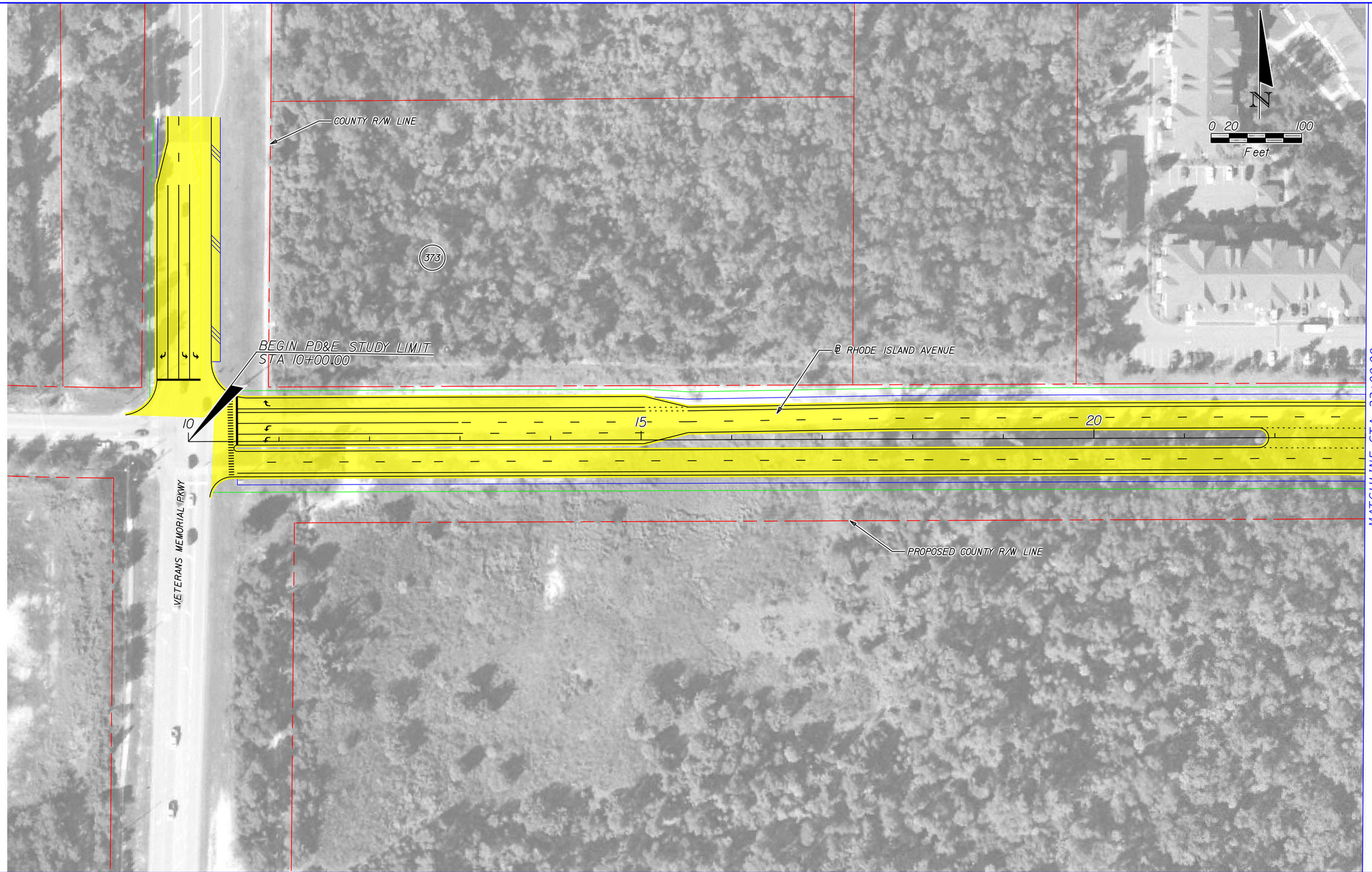
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (RECOMMENDED ALTERNATIVE) SEGMENT 4

SHEET NO. **69**

amourad 11/8/2016 10:25:53 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



Color_FDOTPDF.pltcfg
FDOT_text-sjkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (1 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **70**

amourad 11/8/2016 10:26:00 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 23+00.00

MATCHLINE STA. 38+00.00

℄ RHODE ISLAND AVENUE

25 30 35

N

0 20 100
Feet

I0IR

PROPOSED COUNTY R/W LINE

WL-6B(W)

I13R

PARCEL ID: 13-18-30-02-01-0100
AREA TAKEN: 91,607 SF

PARCELS NOT ACQUIRED
BY VOLUSIA COUNTY

WL-6B(W)

411

PROPOSED ACCESS TO POND A

MATCHLINE SHEET 3

Color_FDOTPDF.pltcfg
FDOT_text-qbkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (2 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 71

amourad 11/8/2016 10:26:04 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd02A
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE SHEET 2

412

PRPOSED COUNTY POND BOUNDARY

WL-6A(W)

POND A
(RECOMMENDED)

FPC A
(RECOMMENDED)

WL-6B(W)

N

0 20 100
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
	TRANSIT CORRIDOR		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (3 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 72

amourad 11/8/2016 10:26:07 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 38+00.00

MATCHLINE STA. 53+00.00

N

0 20 100
Feet

PROPOSED COUNTY R/W LINE

PARCELS NOT ACQUIRED BY VOLUSIA COUNTY

℄ RHODE ISLAND AVENUE

40 45 50

102R 103R 104R 105R 106R 107R 108R

PARCEL ID: 13-18-30-02-01-0100
AREA TAKEN: 30,536 SF

113R 114R 115R 116R 117R

PARCEL ID: 13-18-30-02-01-0100
AREA TAKEN: 35,573 SF

PARCEL ID: 13-18-30-02-01-0100
AREA TAKEN: 91,607 SF

PARCELS NOT ACQUIRED BY VOLUSIA COUNTY

PARCELS NOT ACQUIRED BY VOLUSIA COUNTY

PARCEL ID: 13-18-30-02-01-0100
AREA TAKEN: 25,397 SF

121R 122R 123R 126R 127R 128R

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (4 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 73

amourad 11/8/2016 10:26:10 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\432100I2201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

0 20 100
Feet

PARCEL ID: 07-18-31-05-07-0040
AREA TAKEN: 306 SF

PARCEL ID: 07-18-31-05-08-0040
AREA TAKEN: 535 SF

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 213 SF

PARCEL ID: 07-18-31-05-09-0030
AREA TAKEN: 687 SF

PROPOSED LA R/W LINE

END PROPOSED LA R/W

℄ RHODE ISLAND AVENUE

END PROPOSED LA R/W

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

MATCHLINE STA. 53+00.00

MATCHLINE STA. 68+00.00

372 330 229 228 227 110R 109R 118R 119R 111R 72 73

55 60 65 3000

POND B
(ALTERNATE)

POND B1
(RECOMMENDED)

PARCEL ID: UNKNOWN (VOLUSIA CO.)
AREA TAKEN: 9,291 SF

PROPOSED R/W LINE

PARCEL ID: 13-18-30-00-00-0010
AREA TAKEN: 107,975 SF

PARCEL ID: 18-18-31-00-00-0060
AREA TAKEN: 21,595 SF

PARCEL ID: 18-18-31-00-00-0060
AREA TAKEN: 3,033 SF

PARCEL ID: 13-18-30-00-00-0010
AREA TAKEN: 101,369 SF

PROPOSED LA R/W LINE

I-4 EB EXPRESS LANES RAMP
TO RHODE ISLAND AVE

℄ EXIST I-4

RHODE ISLAND AVE RAMP
TO I-4 WB EXPRESS LANES

PROPOSED LA R/W LINE

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 298,315 SF

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 5,033 SF

COUNTY R/W LINE

2995

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (5 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 74

Color_FDOTPDF.pltcfg
FDOT_text-gdiw.tbl
PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:26:15 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122001\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL:
SHEET SIZE: planrd05
PLOT SCALE: 16.5x10.6 (in.) 1:100

MATCHLINE NORMANDY 2

226

COUNTY R/W LINE

225

PARCEL ID: UNKNOWN (VOLUSIA COUNTY)
AREA TAKEN: 5,033 SF

PROPOSED LA R/W LINE

224

℄ RHODE ISLAND AVENUE

END PROPOSED LA R/W

NORMANDY BLVD

END PD&E STUDY LIMIT
STA 76+67.88

N

0 20 100
Feet

MATCHLINE STA. 68+00.00

223

70

112R

75

END PROPOSED LA R/W

POND C
(RECOMMENDED)

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 145,206 SF

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 298,315 SF

222

MATCHLINE NORMANDY 1

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkvw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (6 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 75

amourad 11/8/2016 10:26:20 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd05A
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

PARCEL ID: 18-18-31-00-00-0033
AREA TAKEN: 298,315 SF

NORMANDY BLVD
PARK AND RIDE

NORMANDY BLVD

COUNTY R/W LINE

MATCHLINE NORMANDY 1

N

0 20 100
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qbw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (7 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
76

amourad 11/8/2016 10:26:24 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn

MODEL: planrd05B
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE NORMANDY 2

242

N

0 20 100
Feet

NORMANDY BLVD

COUNTY R/W LINE

POND D

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

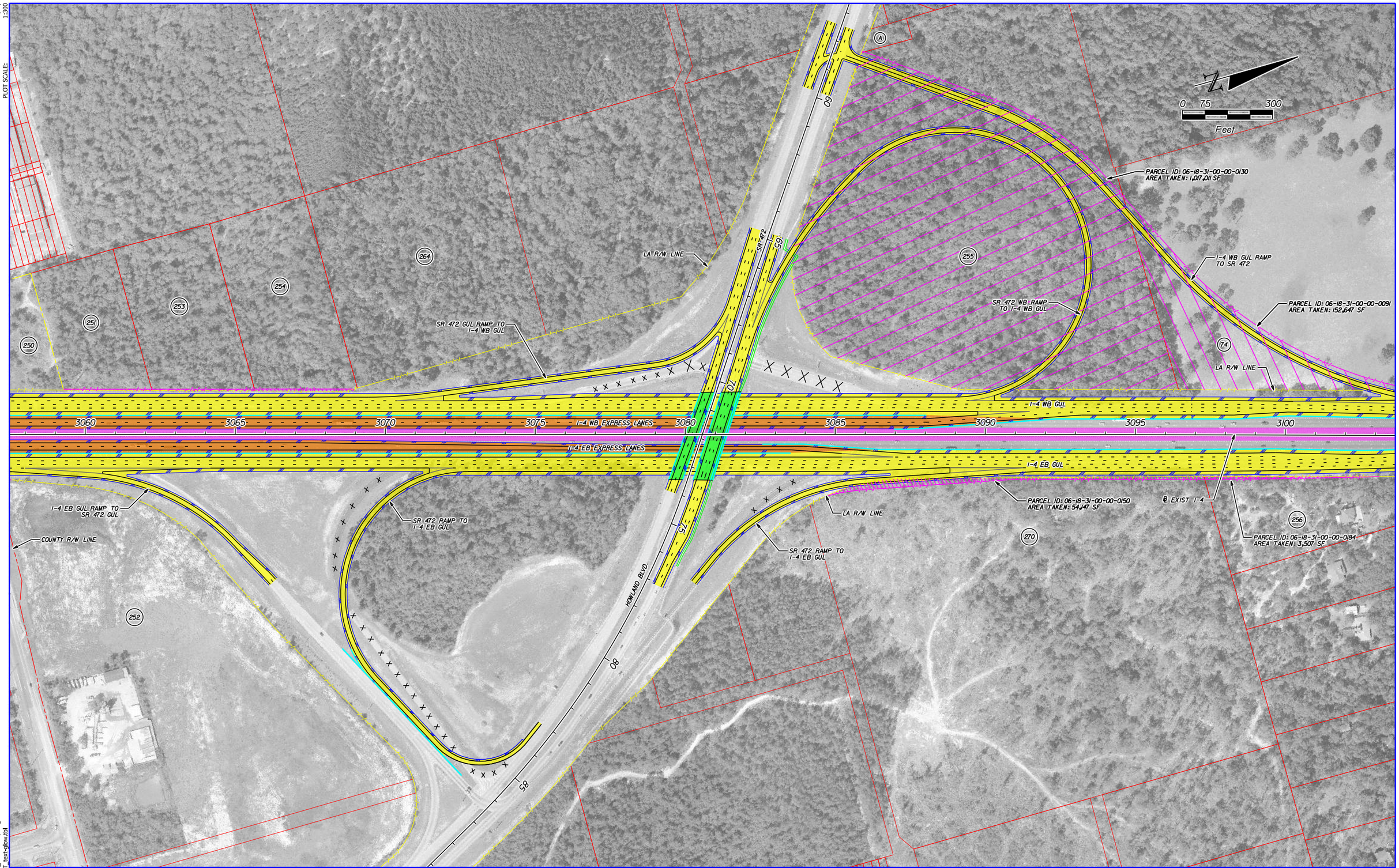
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
RHODE ISLAND AVENUE (8 OF 8)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **77**

amourad 11/8/2016 10:26:29 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd405-RHODE ISLAND.dgn



Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 1
SEGMENT 4

SHEET NO.
78

amourad 11/8/2016 10:26:49 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404.dgn

MODEL: SR472-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

SR 472 WB RAMP
TO I-4 WB GUL

I-4 WB GUL RAMP
TO SR 472

LA R/W LINE

BEGIN PD&E STUDY LIMIT
STA 55+00.00

℄ EXIST SR 472

LA R/W LINE

0 20 100
Feet

MATCHLINE STA. 66+00.00

Color_FDOTPDF.pltcfg
FDOT_text-qblw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 1 (1 OF 3)
SEGMENT 4

SHEET NO. **79**

amourad 11/8/2016 10:26:58 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404.dgn

SR472-I05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

255

LA R/W LINE

℄ EXIST I-4

SR 472 WB RAMP
TO I-4 EB GUL

370

0 20 100
Feet

S085

S080

70

75

80

SR 472

SR 472

℄ EXIST SR 472

I-4 WB EXPRESS LANES

I-4 WB GUL

LA R/W LINE

SR 472 RAMP
TO I-4 WB GUL

360

I-4 EB EXPRESS LANES

I-4 EB GUL

MATCHLINE STA. 66+00.00

MATCHLINE STA. 81+00.00

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

Color_FDOTPDF.pltcfg
FDOT_text-qblow.tbl

PRINT DRIVER:
PEN TABLE:

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 1 (2 OF 3)
SEGMENT 4

SHEET NO.
80

amourad 11/8/2016 10:27:05 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404.dgn

MODEL: SR472-06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

LA R/W LINE

BEGIN PD&E STUDY LIMIT
STA 90+00.00

0 20 100
Feet

85

90

95

℄ EXIST SR 472

℄ EXIST HOWLAND BLVD.

LA R/W LINE

MATCHLINE STA. 81+00.00

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 1 (3 OF 3)
SEGMENT 4

SHEET NO. **81**

amourad 11/8/2016 10:27:10 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404.dgn

Default
16.5x10.6 (in.)
1:300

MODEL:
SHEET SIZE:
PLOT SCALE:

0 75 300
Feet

SR 472
I-4
LA R/W LINE
SR 472 RAMP TO I-4 WB GUL
I-4 WB GUL RAMP TO SR 472
PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 31,782 SF
PARCEL ID: 06-18-31-00-00-0091
AREA TAKEN: 3,345 SF
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
3060 3065 3070 3075 3080 3085 3090 3095 3100
@ EXIST I-4
POND 410A
I-4 EB GUL RAMP TO SR 472
LA R/W LINE
SR 472 RAMP TO I-4 EB GUL
PARCEL ID: 06-18-31-00-00-0150
AREA TAKEN: 54,147 SF
PARCEL ID: 06-18-31-00-00-0184
AREA TAKEN: 6,366 SF
COUNTY R/W LINE
HOWLAND BLVD
251 252 253 254 255 256 264 270 360 361 362 370 74

Color_FDOTPDF.ctcfg
FDOT_text-gkw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

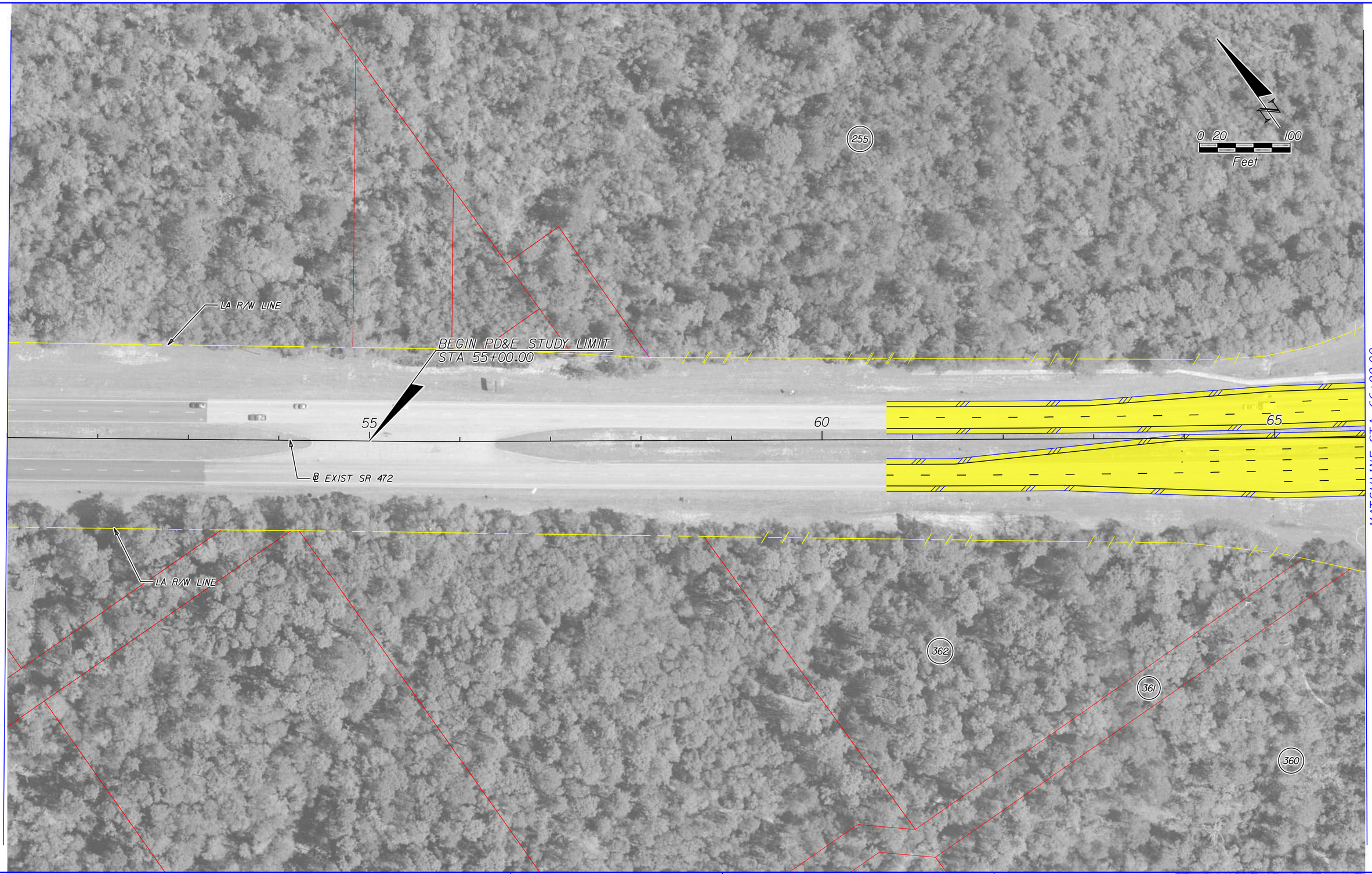
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 2
SEGMENT 4

SHEET NO.
82

amourad 11/8/2016 10:27:30 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPUI.dgn

MODEL: SR472-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 2 (1 OF 4)
SEGMENT 4

SHEET NO. **83**

amourad 11/8/2016 10:27:36 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-SPUI.dgn

SR472-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

255

I-4 WB GUL RAMP
TO SR 472

LA R/W LINE

℄ EXIST SR 472

SR 472

70

75

SR 472

80

℄ EXIST I-4

LA R/W LINE

SR 472 RAMP
TO I-4 EB GUL

0 20 100
Feet

MATCHLINE STA. 66+00.00

MATCHLINE STA. 81+00.00

I-4 EB EXPRESS LANES

I-4 EB GUL

I-4 EB GUL RAMP
TO SR 472

SR 472 RAMP
TO I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 WB GUL

360

Color_FDOTPDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

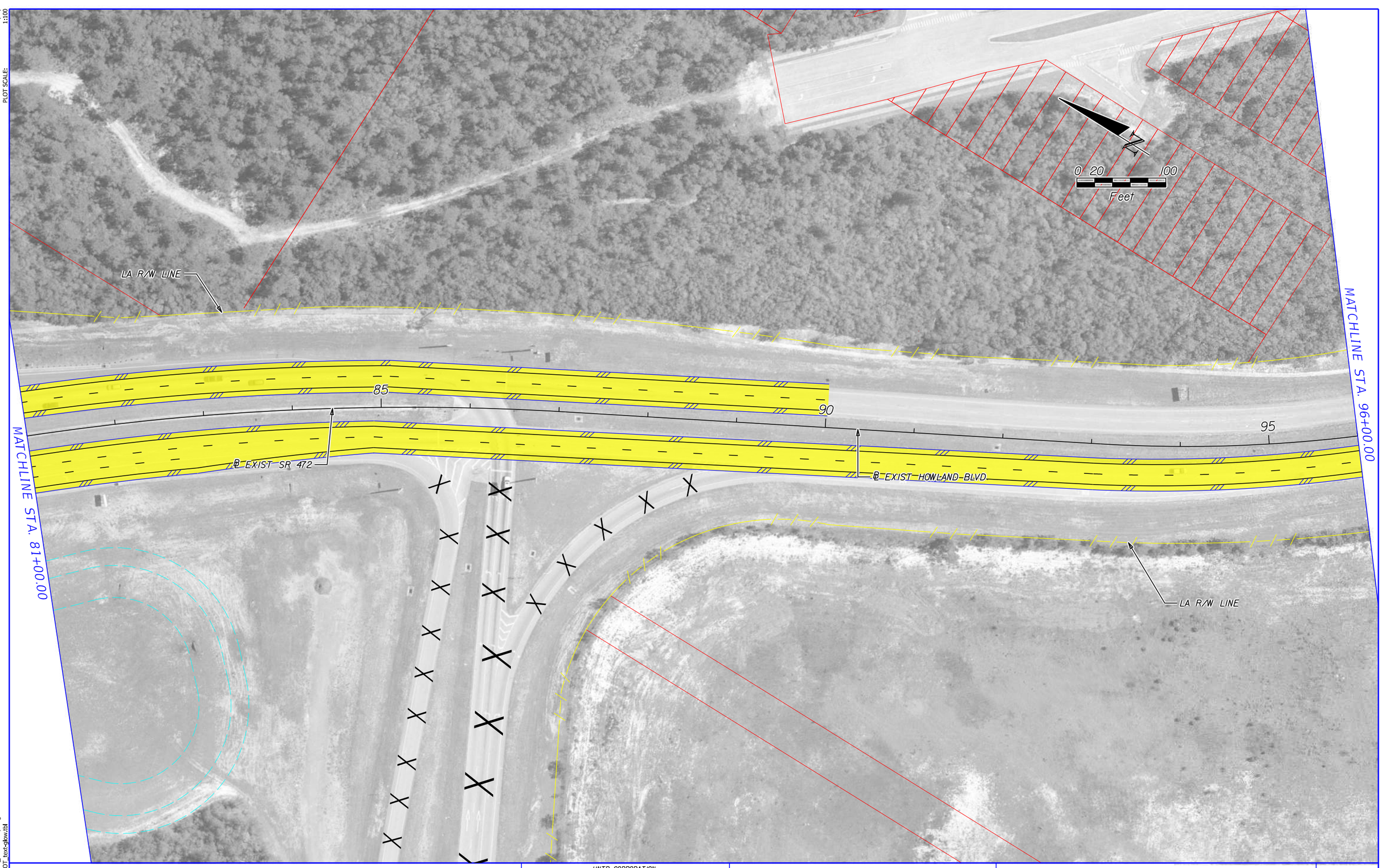
I-4 PD&E STUDY
SR 472 ALT 2 (2 OF 4)
SEGMENT 4

SHEET NO.
84

amourad 11/8/2016 10:27:42 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPUI.dgn

SR472-06
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 2 (3 OF 4)
SEGMENT 4

SHEET NO. **85**

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qblow.tbl

amourad 11/8/2016 10:27:47 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-SPUI.dgn

MODEL: SR472-07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

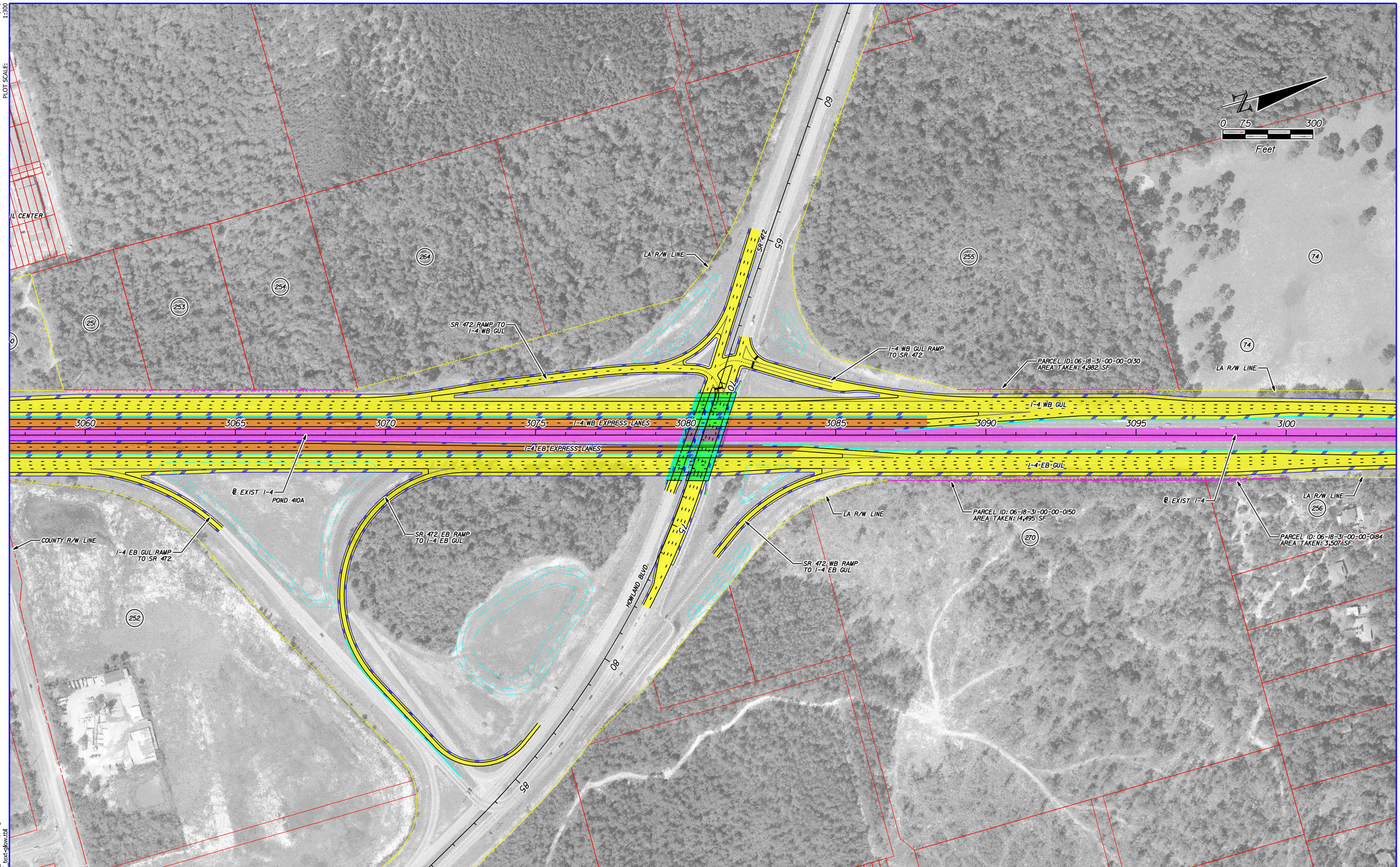
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 2 (4 OF 4)
SEGMENT 4

SHEET NO. **86**

amourad 11/8/2016 10:27:50 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPUI.dgn



Color_FDOTPDF.pltcfg
FDOT_text-cgllow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

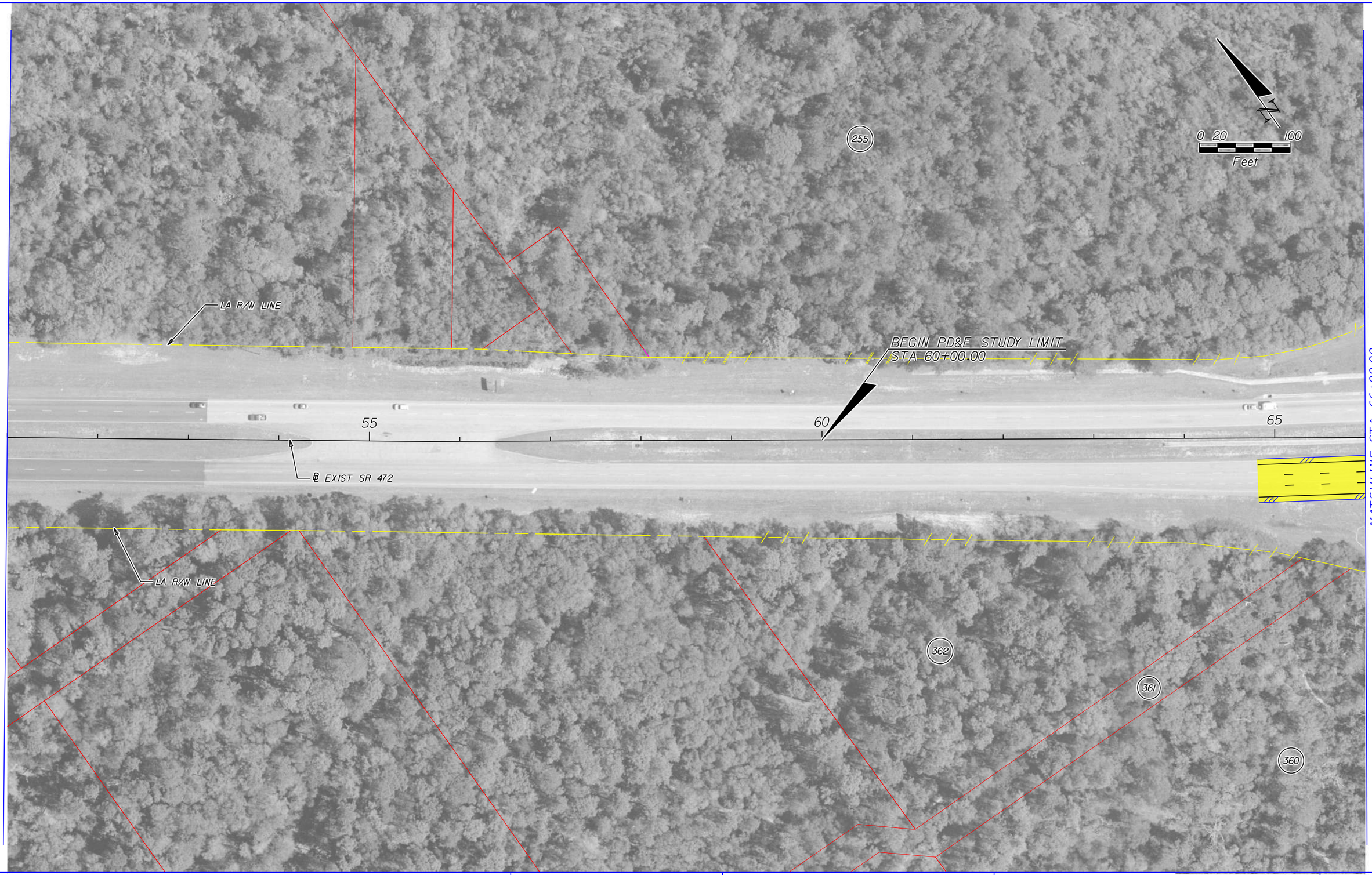
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 3
SEGMENT 1

SHEET NO.
87

amourad 11/8/2016 10:28:09 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-472-DBL LEFT.dgn

MODEL: SR472-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 3 (1 OF 3)
SEGMENT 4

SHEET NO. **88**

amourad 11/8/2016 10:28:17 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-472-DBL LEFT.dgn

MODEL: SR472-05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 66+00.00

MATCHLINE STA. 81+00.00

255

360

SR 472

SR 472

70

75

80

2085

2080

℄ EXIST SR 472

℄ EXIST I-4

I-4 WB GUL RAMP TO SR 472

SR 472 RAMP TO I-4 EB GUL

LA R/W LINE

LA R/W LINE

LA R/W LINE

SR 472 RAMP TO I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 WB GUL

I-4 EB EXPRESS LANES

I-4 EB GUL

0 20 100
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 3 (2 OF 3)
SEGMENT 4

SHEET NO. 89

amourad 11/8/2016 10:28:24 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-472-DBL LEFT.dgn

MODEL: SR472-06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 81+00.00

LA R/W LINE

END PD&E STUDY LIMIT
STA 88+00.00

85

90

95

℄ EXIST SR-472

℄ EXIST HOWLAND BLVD.

SR 472 EB RAMP
TO I-4 EB GUL

LA R/W LINE

0 20 100
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 3 (3 OF 3)
SEGMENT 4

SHEET NO. **90**

amourad 11/8/2016 10:28:31 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-472-DBL LEFT.dgn

Default
16.5x10.6 (in.)
1:300

MODEL:
SHEET SIZE:
PLOT SCALE:

0 75 300
Feet

L CENTER

LA R/W LINE

SR 472 RAMP TO
I-4 WB GUL

I-4 WB GUL RAMP
TO SR 472

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 31,782 SF

PARCEL ID: 06-18-31-00-00-0091
AREA TAKEN: 3,345 SF

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

@ EXIST I-4

I-4 EB GUL RAMP
TO SR 472

COUNTY R/W LINE

LA R/W LINE

SR 472 RAMP TO
I-4 EB GUL

PARCEL ID: 06-18-31-00-00-0150
AREA TAKEN: 54,147 SF

@ EXIST I-4

LA R/W LINE

PARCEL ID: 06-18-31-00-00-0184
AREA TAKEN: 6,366 SF

HOWLAND BLVD

SR 472

Color_FDOTPDF.pltcfg
FDOT_text-gkw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4
SEGMENT 4

SHEET NO.
91

amourad 11/8/2016 10:28:46 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

MODEL: SR472-01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4 (1 OF 6)
SEGMENT 4

SHEET NO. **92**

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-xglow.tbl

amourad 11/8/2016 10:28:53 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

SR472-02
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 36+00.00

MATCHLINE STA. 51+00.00

407V

406V

MARTIN LUTHER KING JR BELTWAY

367

366

40

45

50

WB SR 472

EB SR 472

℄ EXIST SR 472

LA R/W LINE

LA R/W LINE

N

0 20 100

Feet

405V

404V

403V

402V

368

N. KENTUCKY AVE.

Color_FDOTPDF.ptcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4 (2 OF 6)
SEGMENT 4

SHEET NO.
93

amourad 11/8/2016 10:29:01 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

MODEL: SR472-03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 51+00.00

MATCHLINE STA. 66+00.00

LA R/W LINE

WB SR-472

EB SR 472

℄ EXIST SR 472

LA R/W LINE

POND 412

255

362

361

360

55

60

65

0 20 100
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4 (3 OF 6)
SEGMENT 4

SHEET NO. **94**

amourad 11/8/2016 10:29:06 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

MODEL: SR472-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

255

5085

360

LA R/W LINE

SR 472 RAMP
TO I-4 EB GUL

I-4 WB GUL RAMP
TO SR 472

℄ EXIST I-4

LA R/W LINE

0 20 100
Feet

75

70

SR 472

5085

80

SR 472

MATCHLINE STA. 66+00.00

MATCHLINE STA. 81+00.00

℄ EXIST SR 472

I-4 WB GUL

LA R/W LINE

360

SR 472 RAMP
TO I-4 WB GUL

WB I-4 GENERAL USE LANES

WB I-4 EXPRESS LANES

EB I-4 EXPRESS LANES

EB I-4 GENERAL USE LANES

I-4 EB GUL RAMP
TO SR 472

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4 (4 OF 6)
SEGMENT 4

SHEET NO. 95

amourad 11/8/2016 10:29:11 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

SR472-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 4 (5 OF 6)
SEGMENT 4

SHEET NO. **96**

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkow.tbl

amourad 11/8/2016 10:29:16 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

MODEL: SR472-06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 96+00.00

LA R/W LINE

100

105

110

0 20 100
Feet

N

END PD&E STUDY LIMIT
STA 110+00.00

WB SR 472

EB SR 472

℄ EXIST HOWLAND BLVD.

E GRAVES AVE

LA R/W LINE

359

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 4 (6 OF 6)
SEGMENT 4

SHEET NO. 97

amourad 11/8/2016 10:29:21 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-SPDI-U-TURN.dgn

MATCHLINE 1

0 75 300
Feet

PARCEL ID: 06-18-31-00-00-0132
AREA TAKEN: 10,014 SF

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 2,329 SF

PARCEL ID: 06-18-31-04-00-0430
AREA TAKEN: 4,868 SF

LA R/W LINE

EXISTING POND
TO BE REMOVED

SR 472 RAMP TO
I-4 WB GUL

SR 472

POND 412
(RECOMMENDED)

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 182,982 SF

EXISTING POND TO BE REMOVED

PARCEL ID: 06-18-31-04-00-0510
AREA TAKEN: 1,432 SF

PARCEL ID: 06-18-31-04-00-0590
AREA TAKEN: 8,905 SF

PARCEL ID: 06-18-31-04-00-0600
AREA TAKEN: 1,277 SF

SR 472 RAMP TO
I-4 WB GUL

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 39,998 SF

I-4 WB GUL RAMP
TO SR 472

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

@ EXIST I-4

I-4 EB GUL RAMP TO
SR 472 GUL

POND 410
(RECOMMENDED)

POND 411
(RECOMMENDED)

TOMOKA BLVD

LA R/W LINE

PARCEL ID: 06-18-31-04-00-0180
AREA TAKEN: 754 SF

EXISTING POND TO BE REMOVED

SR 472 RAMP TO
I-4 EB GUL

PARCEL ID: 06-18-31-00-00-0150
AREA TAKEN: 37,195 SF

@ EXIST I-4

LA R/W LINE

COUNTY R/W LINE

EXISTING POND TO BE REMOVED

MATCHLINE 2

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

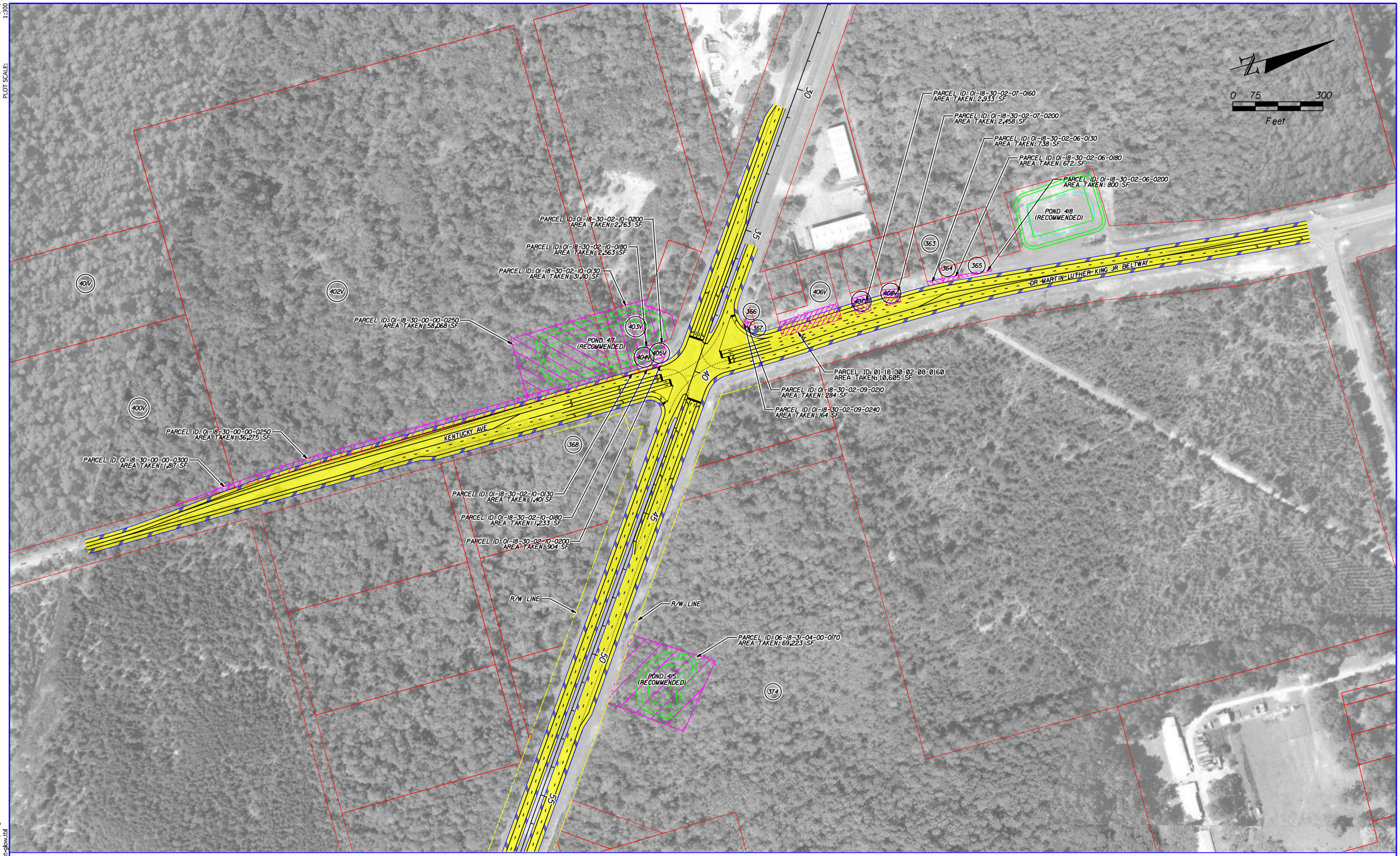
I-4 PD&E STUDY
SR 472 ALT 5
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
98

Color_FDOTPDF.pltcfg
FDOT_text-cgllow.tbl
PRINT DRIVER:
PEN TABLE:
amourad 11/8/2016 10:29:40 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

Default-2
16.5x10.6 (in.)
1:300

MODEL:
SHEET SIZE:
PLOT SCALE:



MATCHLINE 1

Color_FDOTPDF.pltcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
99

amourad 11/8/2016 10:29:44 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-DDI.dgn

MODEL: Default-3
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:300

MATCHLINE 2

PARCEL ID: 06-18-31-04-00-0542
AREA TAKEN: 9,704 SF

LA R/W LINE

LA R/W LINE

GRAVES AVE

359

SR 472

POND 413
(RECOMMENDED)

FOREST EDGE DR

N

0 75 300
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
	TRANSIT CORRIDOR		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 100

A-100

amourad 11/8/2016 10:29:51 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL:
SHEET SIZE: SR472-01 16.5x10.6 (in.)
PLOT SCALE: 1:100

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-gdlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5 (1 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **101**

A-101

amourad 11/8/2016 10:30:20 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

SR472-02
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE MLK 2

407V

PARCEL ID: 01-18-30-02-07-0160
AREA TAKEN: 2,933 SF

MARTIN-LUTHER-KING-JR-BELTWAY

406V

PARCEL ID: 01-18-30-02-08-0160
AREA TAKEN: 10,605 SF

PROPOSED R/W

PARCEL ID: 01-18-30-02-09-0210
AREA TAKEN: 284 SF

PARCEL ID: 01-18-30-02-09-0240
AREA TAKEN: 164 SF

367

366

PARCEL ID: 06-18-31-04-00-0170
AREA TAKEN: 69,223 SF

0 20 100
Feet

POND 45
(RECOMMENDED)

LA R/W LINE

MATCHLINE STA. 36+00.00

40

45

50

WB SR 472

EB SR-472

℄ EXIST SR 472

MATCHLINE STA. 51+00.00

PARCEL ID: 01-18-30-02-10-0200
AREA TAKEN: 904 SF

PARCEL ID: 01-18-30-02-10-0180
AREA TAKEN: 1,233 SF

PARCEL ID: 01-18-30-02-10-0130
AREA TAKEN: 1,401 SF

LA R/W LINE

PARCEL ID: 01-18-30-02-10-0200
AREA TAKEN: 2,763 SF

405V

404V

PARCEL ID: 01-18-30-02-10-0180
AREA TAKEN: 2,563 SF

368

403V

R/W LINE

N. KENTUCKY AVE.

PARCEL ID: 01-18-30-02-10-0130
AREA TAKEN: 31,110 SF

PARCEL ID: 01-18-30-00-00-0250
AREA TAKEN: 36,275 SF

POND 417
(RECOMMENDED)

R/W LINE

PARCEL ID: 01-18-30-00-00-0250
AREA TAKEN: 58,068 SF

402V

MATCHLINE KENTUCKY 1

Color_FDOTPDF.pltcfg
FDOT_text-xlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5 (2 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
102

A-102

amourad 11/8/2016 10:30:24 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

SR472-03
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 51+00.00

MATCHLINE STA. 66+00.00

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 182,982 SF

255

0 20 100
Feet

POND 412
(RECOMMENDED)

LA R/W LINE

WB SR-472

55 60 65

EB SR-472

℄ EXIST SR 472

LA R/W LINE

PARCEL ID: 02-19-30-00-00-0260
AREA TAKEN: 6,913 SF

362

PARCEL ID: VOLUSIA COUNTY
AREA TAKEN: 1,241 SF

361

PARCEL ID: 06-18-31-04-00-0430
AREA TAKEN: 1,290 SF

360

Color_FDOTPDF.pltcfg
FDOT_text-xglow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5 (3 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
103

amourad 11/8/2016 10:30:28 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

PARCEL ID: 06-18-31-04-00-0180
AREA TAKEN: 754 SF

370

LA R/W LINE

EXISTING POND TO BE REMOVED

SR 472 RAMP
TO I-4 EB GUL

℄ EXIST I-4

255

POND 42
(RECOMMENDED)

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 129,928 SF

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 50,890 SF

I-4 WB GUL RAMP
TO SR 472

LA R/W LINE

EXISTING POND
TO BE REMOVED

2085

2080

0 20 100
Feet

70

75

80

EB SR 472

WB SR 472

MATCHLINE STA. 66+00.00

MATCHLINE STA. 81+00.00

℄ EXIST SR 472

LA R/W LINE

PARCEL ID: 06-18-31-04-00-0430
AREA TAKEN: 1,290 SF

EXISTING POND TO BE REMOVED

360

SR 472 RAMP
TO I-4 WB GUL

WB I-4 GENERAL USE LANES

WB I-4 EXPRESS LANES

EB I-4 EXPRESS LANES

EB I-4 GENERAL USE LANES

POND 411

I-4 EB GUL RAMP
TO SR 472

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT 5 (4 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
104

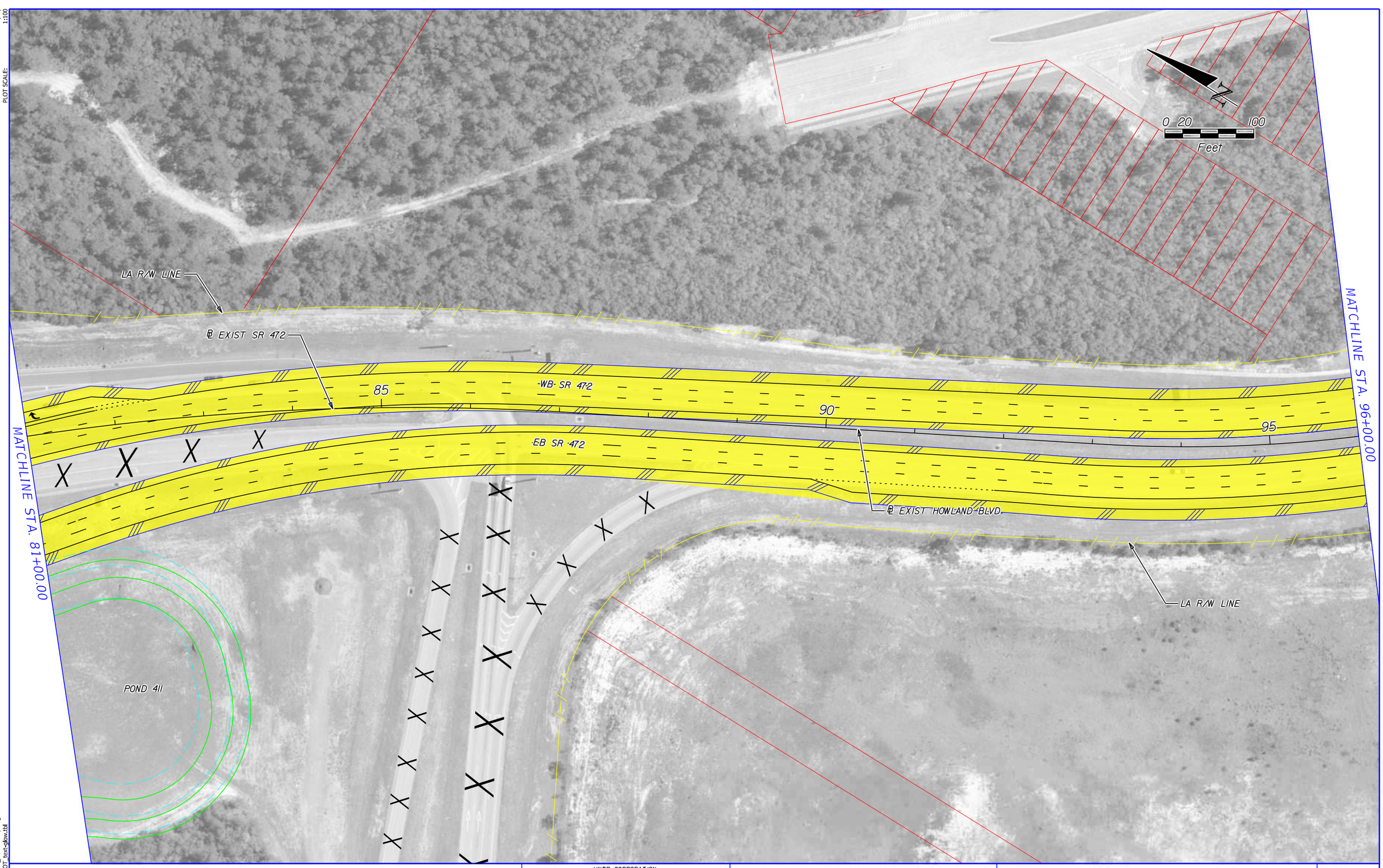
A-104

Color_FDOTPDF.ptcfg
FDOT_text-gkw.tbl
PRINT DRIVER:
PEN TABLE:

amourad 11/8/2016 10:30:31 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

SR472-05
16.5x10.6 (in.)
1:100

MODEL:
SHEET SIZE:
PLOT SCALE:



Color_FDOTPDF.pltcfg
FDOT_text-gkw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (5 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO.
105

A-105

amourad 11/8/2016 10:30:34 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE STA. 96+00.00

MATCHLINE STA. 111+00.00

MATCHLINE GRAVES 1

LA R/W LINE

LA R/W LINE

℄ EXIST HOWLAND BLVD.

E GRAVES AVE.

100

105

110

359

POND 413

N

0 20 100
Feet

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

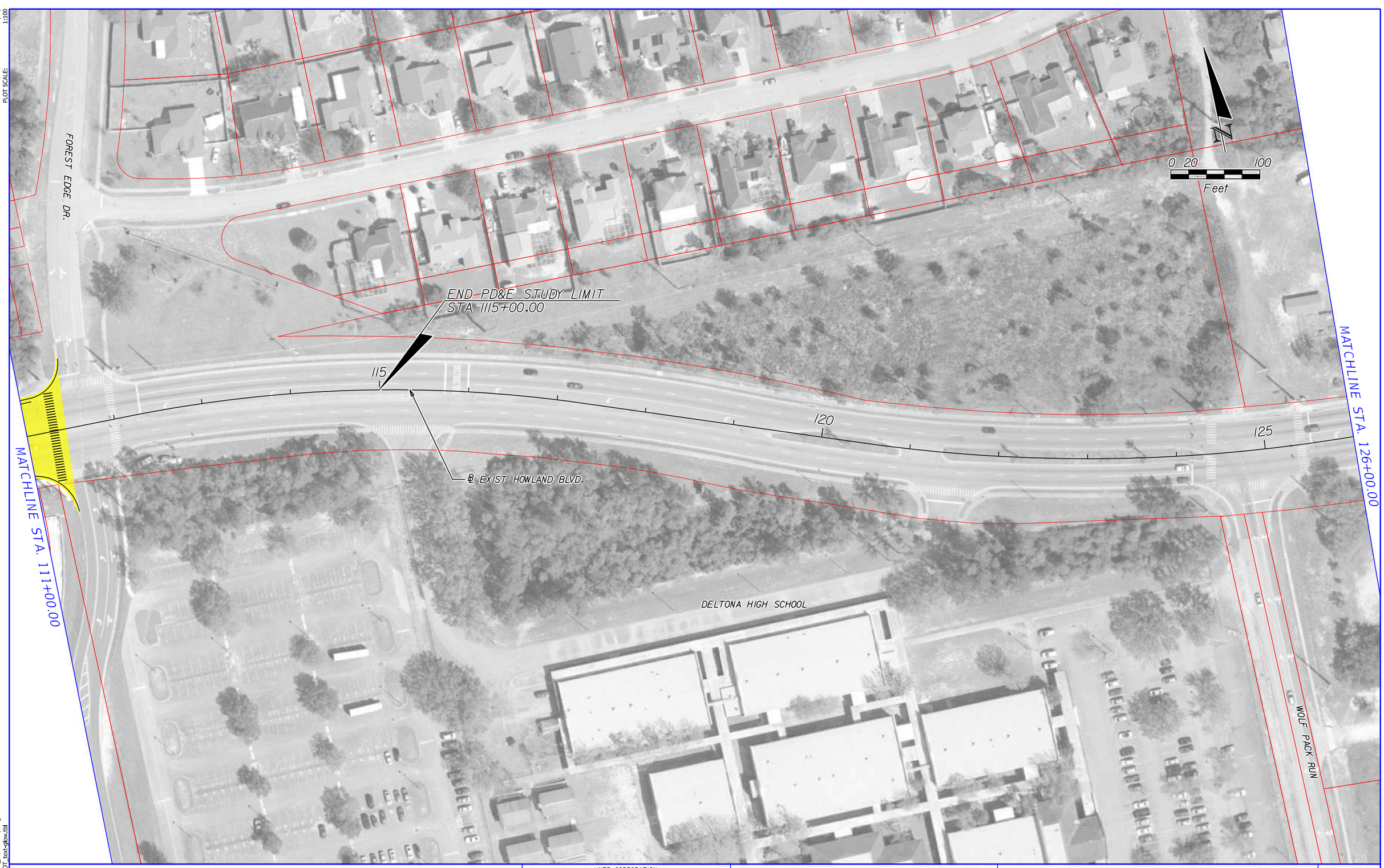
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (6 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **106**

amourad 11/8/2016 10:30:37 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL:
SHEET SIZE: SR472-07 16.5x10.6 (in.)
PLOT SCALE: 1:100



PRINT DRIVER: C:\dot_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
	TRANSIT CORRIDOR		

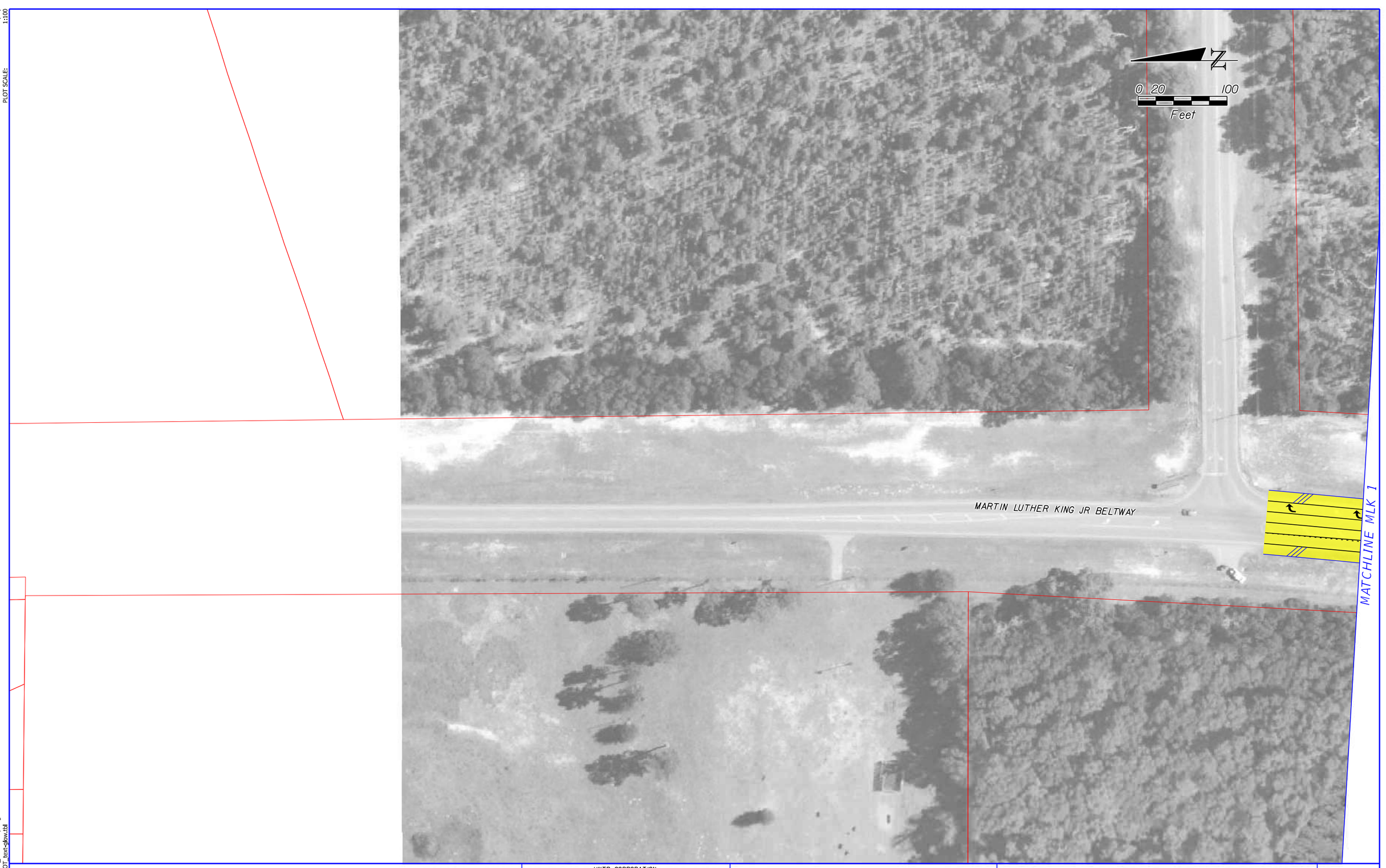
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (7 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **107**

amourad 11/8/2016 10:30:40 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

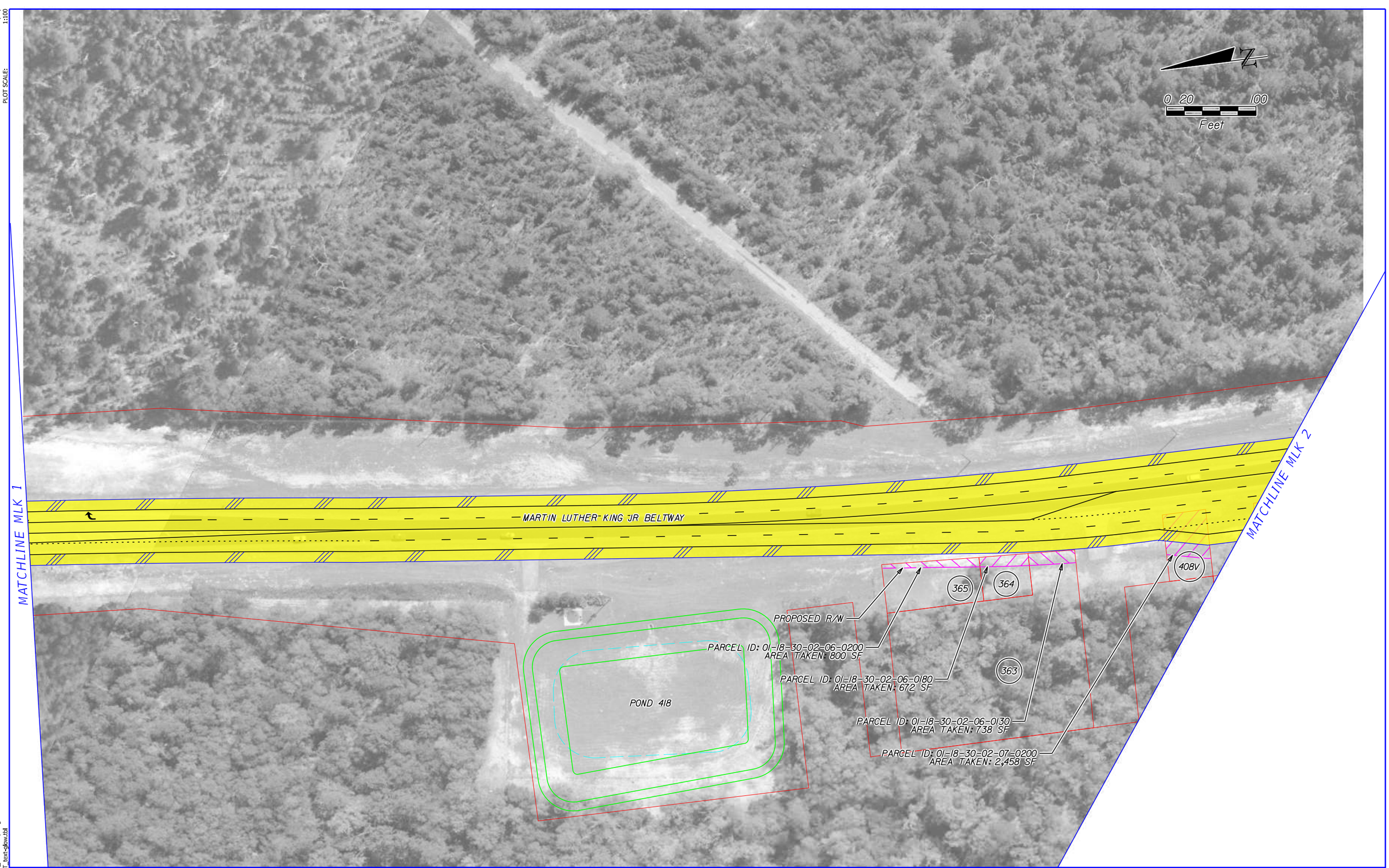
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (8 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **108**

amourad 11/8/2016 10:30:43 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100



PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-sglow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (9 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **109**

amourad 11/8/2016 10:30:47 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE KENTUCKY 1

MATCHLINE KENTUCKY 2

N. KENTUCKY AVE.

PROPOSED R/W LINE

PARCEL ID: 01-18-30-00-00-0250
AREA TAKEN: 36,275 SF

PARCEL ID: 01-18-30-00-00-0030
AREA TAKEN: 1,817 SF

PARCEL ID: 01-18-30-00-00-0250
AREA TAKEN: 58,068 SF

402V

400V

0 20 100
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL
TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (10 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 110

A-110

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

amourad 11/8/2016 10:30:50 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL: SR472-11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:100

MATCHLINE KENTUCKY 2

0 20 100
Feet

N. KENTUCKY AVE.

400V

PROPOSED R/W

PARCEL ID: 01-18-30-00-00-0030
AREA TAKEN: 133,786 SF

POND 416
(RECOMMENDED)

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (11 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. 111

A-111

amourad 11/8/2016 10:30:54 AM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

MODEL:
SHEET SIZE: SR472-12 16.5x10.6 (in.)
PLOT SCALE: 1:100

Color_FDOTPDF.pltcfg
FDOT_text-qkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL
	TRANSIT CORRIDOR

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
SR 472 ALT. 5 (12 OF 12)
(RECOMMENDED ALTERNATIVE)
SEGMENT 4

SHEET NO. **112**

amourad 11/8/2016 10:30:58 AM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd404-DDI.dgn

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Appendix B - **Reversible Express Lanes Evaluation**

FDOT

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

Reversible Express Lanes Evaluation

Segment 3 (1 Mile East of SR 434 to East of US 17/92) in Seminole County and Segment 4 (East of SR 15/600-US 17/92 to 1/2 mile East of SR 472) in Volusia County, Florida

November 24, 2014

HNTB Corporation
610 Crescent Executive Court
Suite 400
Lake Mary, FL 32746

4 EXPRESS

Reversible Express Lanes Evaluation

SR 400 (I-4) Project Development and Environment (PD&E) Study

Segment 3 (1 Mile East of SR 434 to East of US 17/92) in Seminole County and Segment 4 (East of SR 15/600-US 17/92 to 1/2 mile East of SR 472) in Volusia County, Florida

Contract Number:
Financial ID Number: 432100-1-22-01
Federal Aid Project Number: 0041 227 1

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Prepared by:
HNTB CORPORATION
610 Crescent Executive Ct., Suite 400
Lake Mary, Florida 32746
(407) 805-0355

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is proposing to reconstruct and widen I-4 as part of the I-4 Beyond the Ultimate (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 within the median of I-4, resulting in the reconstruction of the existing six-lane divided urban interstate to a ten-lane divided highway.

As part of the SR 400 (I-4) Project Development and Environment (PD&E) Study, HNTB has prepared this Reversible Lanes Evaluation Report for I-4, Segments 3 and 4 (East of SR 434 to East of SR 472) in Seminole and Volusia Counties; a project location map is provided in Figure 1. The purpose of this report is to evaluate the feasibility of implementing reversible lane use within the express lanes of I-4, Segments 3 and 4 to alleviate congestion in the peak direction of traffic flow during morning and afternoon peak periods.

1.1 Background

The SR 400 (I-4) PD&E Study is a reevaluation project which addresses the revision from the original design concept showing two High Occupancy Vehicle (HOV) lanes, as recommended in the Environmental Impact Statement (EIS) for I-4 from SR 528 to SR 472 (Record of Decision Pending), to the current proposed design concept of four Express Lanes. The Express Lanes are tolled lanes and will extend the full length of the project. The original I-4 PD&E Studies involved physical separation between the general use lanes and the HOV lanes on I -4, with demand management in the HOV lanes. The original demand management strategy was to control the use of the lanes by requiring a minimum number of occupants per vehicle to maintain an acceptable level of service (Level of Service D). This PD&E update addresses revising the demand management tool from 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 in between the shoulders. A variable price tolling plan is proposed for the express lanes. The tolls will vary by time of day and day of week (dynamic tolling) 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 will be completed in conjunction with this effort.

1.2 Project Description and Location

The overall SR 400 (I-4) BtU PD&E project limits include a total of approximately 41 miles of roadway improvements divided into two sections east and west of the I-4 Ultimate project. The approximate limits of improvement for the west section are from west of SR 25/US 27 in Polk County to west of SR 435 (Kirkman Road) in Orange County and for the east section, from east of SR 434 in Seminole County to east of SR 472 in Volusia County. The majority of the proposed improvements (37.4 miles) are within District 5 and a small

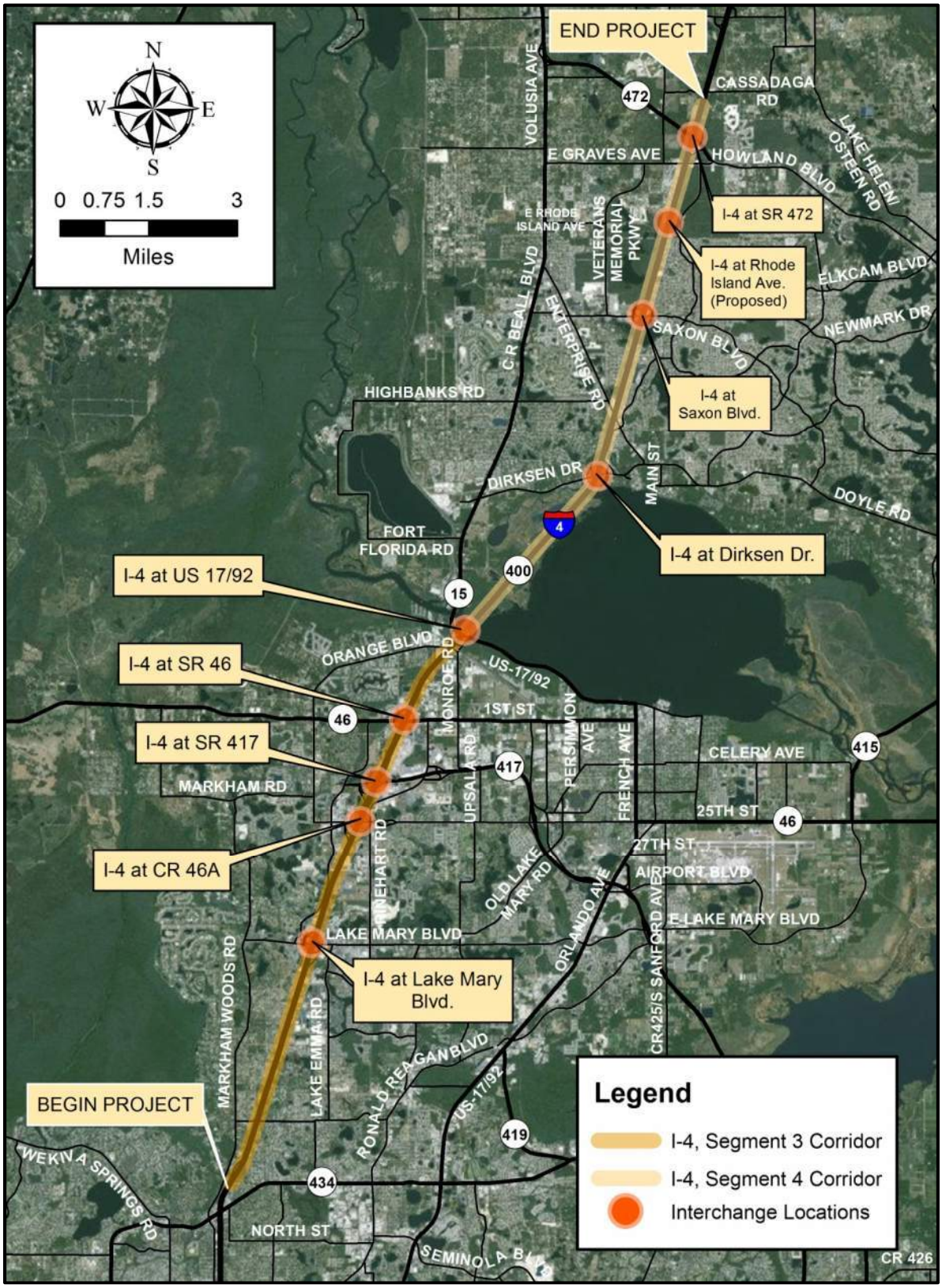

Figure 1 - Project Location Map

segment (3.2 miles) is within District 1. For purposes of documentation of the SR 400 (I-4) PD&E study, the east and west sections are further subdivided into segments as shown in Table 1.

Table 1 - SR 400 (I-4) PD&E Segment Limits

SR 400 (I-4) PD&E West Section	
Segment 1	West of CR 532 (Polk/Osceola County Line) to west of SR 528 (Beachline Expressway) in Osceola County (92130) and Orange County (75280) - 13.5 miles
Segment 2	West of SR 528 (Beachline Expressway) to west of SR 435 (Kirkman Road) in Orange County (75280) - 3.6 miles
Segment 5	West of SR 25-US 27 to west of CR 532 (Polk/Osceola County Line) in Polk County (16320) - 3.2 miles
SR 400 (I-4) PD&E East Section	
Segment 3	East of SR 434 to east of SR 15-600/ US 17-92 (Seminole/Volusia County Line) in Seminole County (77160) - 10.2 miles
Segment 4	East of SR 15-600/ US 17-92 (Seminole/Volusia County Line) to east of SR 472 in Volusia County (79110) - 10.1 miles

2.0 PURPOSE AND NEED

The proposed improvements to I-4 include widening the existing six lane divided urban interstate to a ten 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 is classified as an Urban Interstate and Strategic Intermodal System (SIS) corridor by FDOT and a designated evacuation route by the Florida Division of Emergency Management throughout the limits of the project. As a critical component of Florida's SIS, I-4 links seaports, rail, airports and other intermodal facilities. In the north/east section of the I-4 BtU corridor, this significance is evidenced through connectivity provided by major junctions with SR 417 (Seminole Expressway) and I-95.

The need for a reversible lanes analysis is based on the specific physical and traffic characteristics unique to Segments 3 and 4 of the I-4 BtU Corridor. Reversible traffic lanes allow for additional capacity in the predominant direction of traffic flow during peak congestion periods while minimizing the total number of lanes along the corridor. The ability to "borrow" capacity from the off-peak direction of traffic helps to reduce overall congestion and minimize the impacts to the surrounding environment.

Existing and future land use and environmental and traffic characteristics in the north/east segment of the I-4 BtU Corridor were evaluated. A review of land use maps indicates that the predominant land use surrounding Segments 3 and 4 is comprised of residential parcels interspersed with some commercial parcels and other uses. Parcels closer to the interstate comprise the majority of non-residential land uses in the study area. While the west/south segment of the I-4 BtU Corridor experiences larger traffic volumes and unique peaking periods associated with tourist traffic demand and shift-work trips, the north/east segment has an overall lower traffic volume and follows more traditional traffic patterns, such as commuter trips (home-based work), home-based shopping or home-based other trip types. With the Central Business District (CBD) area located in downtown Orlando (within the I-4 Ultimate section), traffic along the north/east segments of I-4 generally follows a pattern of influx into the downtown area in the morning peak period and outflow to the residential areas located in the northern part of the corridor during the afternoon peak period. This results in Segments 3 and 4 having more variation in the distribution (larger directional imbalance) of traffic along the interstate, when compared to the remainder of the I-4 BtU Corridor.

Approximately 1/3 of the south portion of Segment 4 is environmentally sensitive, public land owned by the St. Johns River Water Management District. This is the area between the Seminole and Volusia County line which is connected by the St. Johns River Veterans Memorial Bridge. Minimizing impacts such as wetlands, water quality, flooding issues and overall cost due to the widening of the St. Johns River Veterans Memorial Bridge were other factors in considering the reversible lanes alternatives for this portion of the I-4 BtU Corridor.

3.0 TRAFFIC VOLUMES

3.1 Existing Traffic

Existing traffic volumes were evaluated within the I-4 Segments 3 and 4 corridor to determine the existing directional distribution of traffic. Continuous hourly count data reports are available through the FDOT Florida Traffic Online (2013) database. Traffic data from two telemetered traffic monitoring sites (TTMS) within Segment 3 and Segment 4 was evaluated. TTMS locations record and transmit traffic data every day of the year and are used for adjusting short-time traffic counts to Annual Average Daily Traffic (AADT). The two TTMS locations used in this analysis are: Site 770343 on SR 400/I-4, 1.6 miles east of SR 434 in Seminole County and Site 799906 on SR 400/I-4, 169 feet east of Enterprise Road in Volusia County. Both sites provide traffic count data that includes directional AADT, hourly continuous counts and vehicle classification. The AADT in 2013 was 134,302 for Site 770343 and 96,379 for Site 799906. Based on Table 1 ("Generalized Annual Average Daily Volumes for Florida's Urbanized Areas") of the 2012 *FDOT Quality/Level of Service Handbook*, the capacity to maintain a Level of Service (LOS) D or better for an uninterrupted flow freeway facility with 3 lanes in each direction is 111,800 vehicles per day. The TTMS data indicates that Segment 3 operates at LOS E and Segment 4 operates at LOS D for the existing daily volumes. The data also shows that for a typical weekday, traffic imbalances exist between eastbound and westbound flows, with the larger directional splits occurring during the morning peak periods. The peak directions of travel are consistent with commuter-based, rush hour flow patterns, with traffic traveling inbound to employment/activity centers (central business district - CBD) in the morning peak hour and outbound to suburban residential areas in the afternoon peak hour. The directional splits are in the range of 67/33% - 69/31% for westbound traffic in the morning peak period and 55/45% - 57/43% for eastbound traffic in the afternoon peak period. In general when the directional split is near 60/40%, consideration may be given to reversible flow operations. It should be noted, although there are distinct peaking periods when traffic is more directional, the splits are not as significant throughout the remainder of the day. Figure 2 and Figure 3 show the existing hourly counts and peak period directional distribution splits for two counts stations within I-4 Segments 3 and 4. The existing traffic data is provided in Appendix A.

3.2 Future 2040 Traffic

Future traffic volumes for the I-4 corridor were developed as part of the *I-4 SAMR Update - Design Traffic Tech Memo January 2013 (updated July 2014)* document. The design traffic memo described the methodology and traffic factors used to develop the opening year 2020, interim year 2030 and design year 2040 traffic volumes for the entire I-4 corridor for both no build and build conditions. The traffic factors used in the *I-4 SAMR Update* were developed using the methodologies specified in the FDOT Project Traffic Forecasting Handbook (January, 2012). The K factor is the ratio of the AADT that occurs during the design hour for the design year and is used to convert the 24-hour AADT estimate to an hourly volume (DHV-Design Hour Volume). Standard

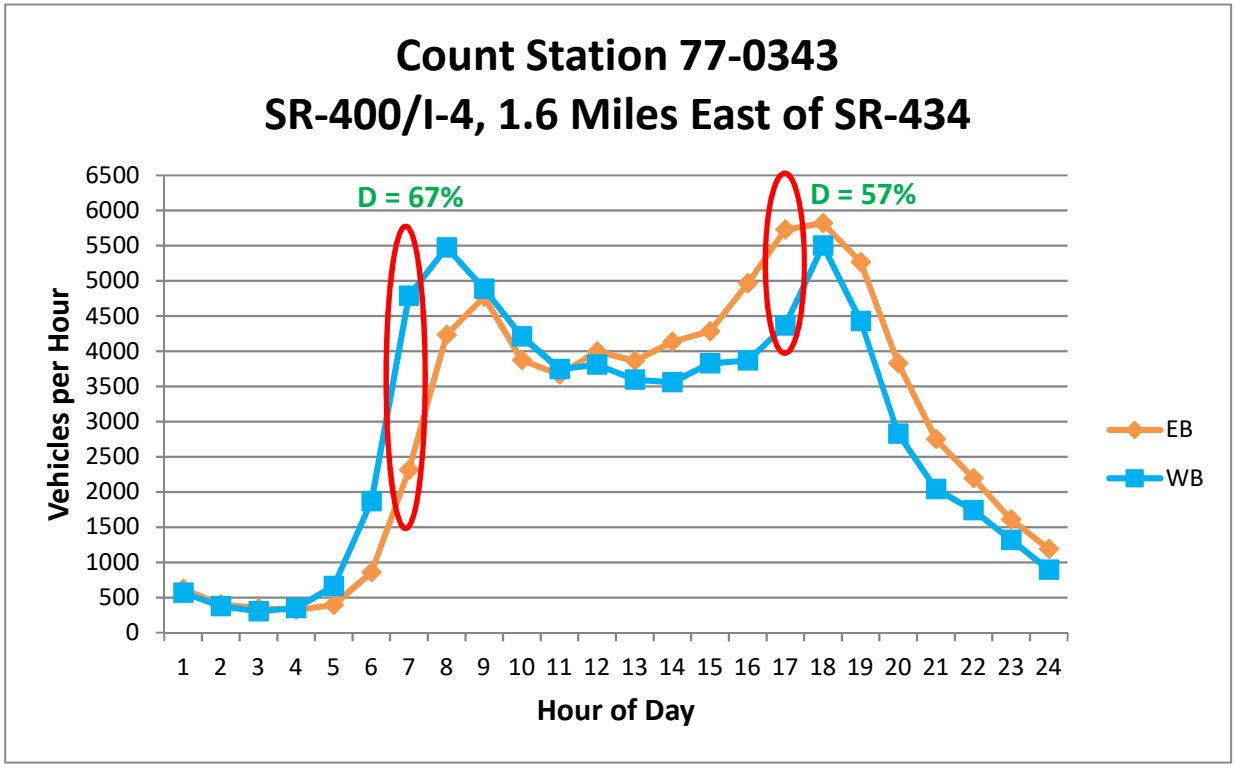

Figure 2 - Existing 24 Hour Traffic Volumes (I-4 Segment 3, Seminole County)

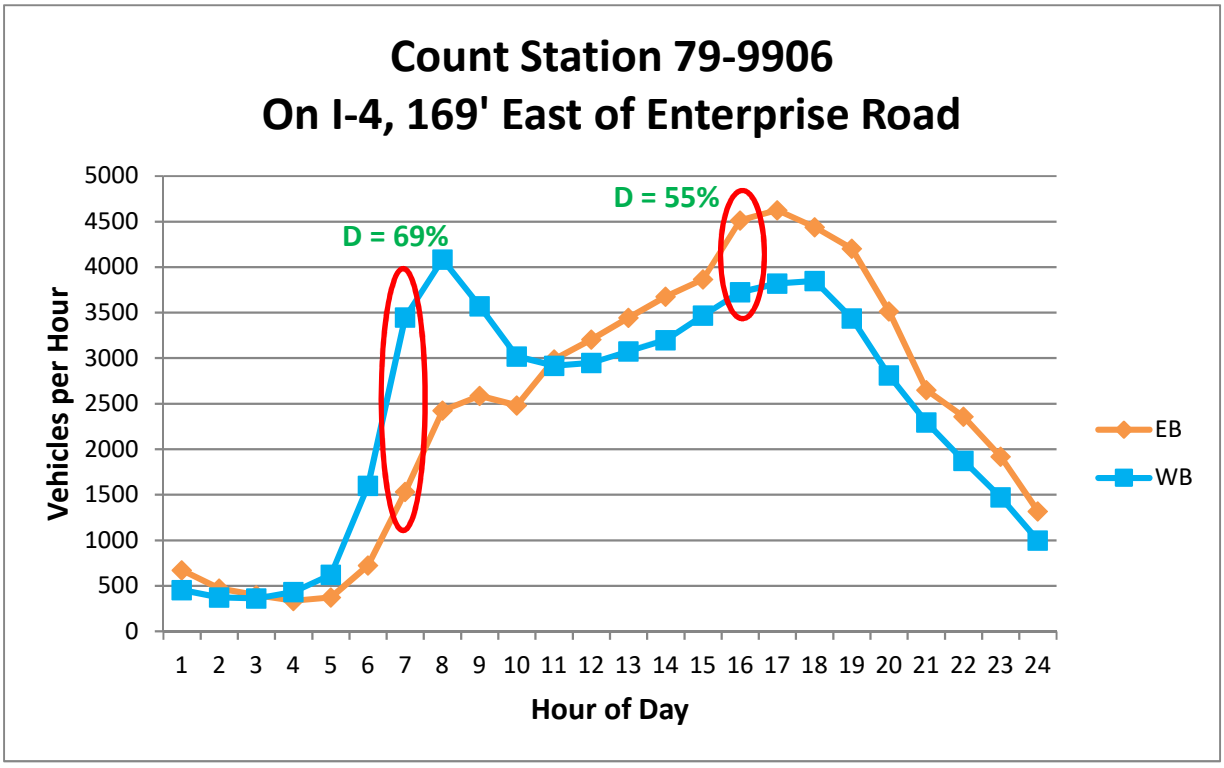

Figure 3 - Existing 24 Hour Traffic Volumes (I-4 Segment 4, Volusia County)

K-factors have been adopted by FDOT based on area and facility type with consideration to typical peak periods of the day and were used in the *I-4 SAMR Update*.

The Directional Distribution (D) is used to determine the Directional Design Hour Volume (DDHV). It is the percentage of total, two-way design traffic traveling in the peak direction. The methodology used to develop the D factor for this project is described in detail in the *I-4 SAMR Update - Technical Memorandum #1: D Factor Development for East-North Section (July 2012).* In summary, the D-Factor was determined after evaluation of: data from numerous traffic count stations over a 20 year period, future land use information and recommended range of D-Factors in the FDOT Project Traffic Forecasting Handbook (2012). Table 2 provides a summary of the traffic factors used in the analysis for I-4, Segments 3 and 4.

Table 2 – Traffic Factors for I-4, Segments 3 and 4

I-4, Segments 3 and 4	
K-Factor	**9.0**
D-Factor	**54.30**

Subsequent updates to the *I-4 SAMR Update - Design Traffic Tech Memo January 2013* report included revisions in the number and locations of access points between the express lanes and general use lanes (slip ramps) and at the study interchanges (direct connects). For the purposes of this report, only the 2040 design year traffic for build conditions was evaluated. Figure 4 and Figure 5 show the projected directional design hourly volumes (DDHV) on the express lanes for the AM and PM peak hours, respectively. For this eastern section of I-4, the peak direction is projected to be westbound in the AM peak hour and eastbound during the PM peak hour for future 2040 conditions. Figure 4 summarizes the estimated directional distribution of traffic in the express lanes; the highest traffic split is 57% in the predominant direction of traffic flow (westbound in the AM and eastbound in the PM) and 43% in the opposing direction.

Based on Table 7 ("Generalized Peak hour Directional Volumes for Florida's Urbanized Areas") of the 2012 *FDOT Quality/Level of Service Handbook*, the capacity to maintain a Level of Service (LOS) D or better for an uninterrupted flow freeway facility with 3 lanes in each direction is 5,500 vehicles per hour. An adjustment value of +1,000 vehicles per hour is used if an auxiliary lane is provided. Using the same table from the FDOT Q/LOS Handbook, the capacity for a single lane was estimated to be 1,630 vehicles to maintain LOS D or better. Table 3 shows the resulting LOS for the general use and express lanes for the projected 2040 traffic volumes based on the Q/LOS tables. Based on the information in Table 3, two express lanes are necessary to achieve LOS D or better in the peak direction of travel between west of SR 434 and the slip ramps west of Lake Mary Boulevard and between the slip ramps west of CR 46A and the slip ramps west of Dirksen Drive.

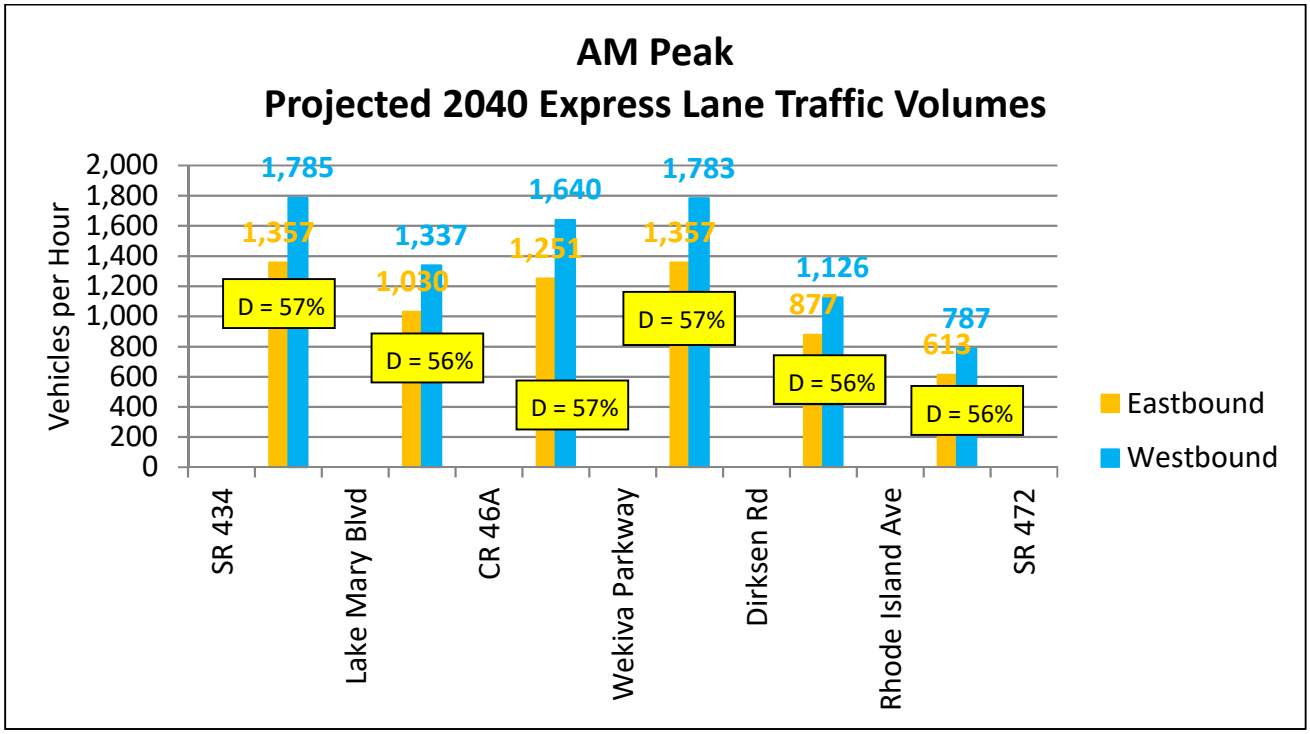

Figure 4 - Projected 2040 Express Lane Traffic Volumes (AM Peak)

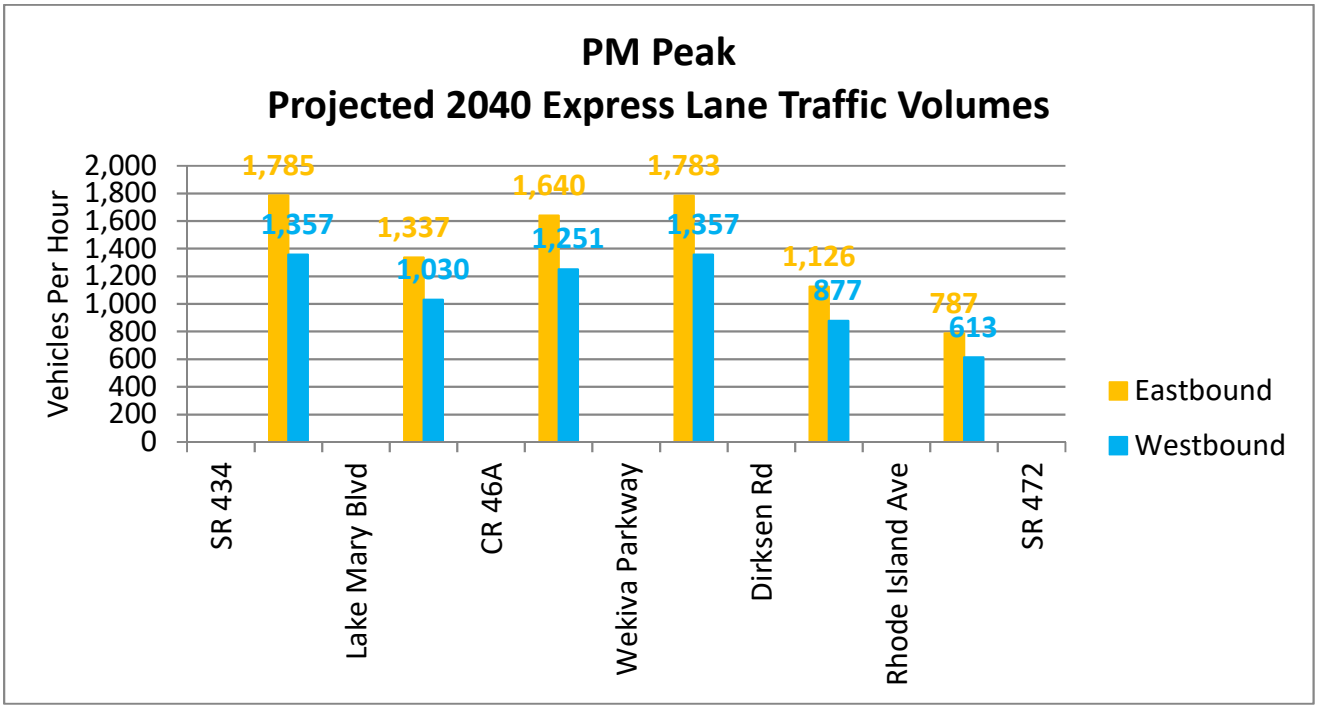

Figure 5 - Projected 2040 Express Lane Traffic Volumes (PM Peak)

Table 3 - Projected 2040 DDHV and LOS for I-4, Segments 3 and 4

	Peak Direction of Travel						
	General Use			Express			
	DDHV	Lanes	LOS	DDHV	Lanes	LOS	Total
West of SR 434	6,502	3	F	1,890	1	F	8,392
SR 434 to Slip Ramps	6,766	3	F	1,890	1	F	8,656
Slip Ramps to Lake Mary Blvd	7,209	3	F	1,447	1	D	8,656
Lake Mary Blvd to Slip Ramps	6,327	3+Aux	D	1,447	1	D	7,774
Slip Ramps to CR 46A	6,030	3+Aux	D	1,744	1	E	7,774
CR 46A to Wekiva Pkwy	4,349	3	C	1,744	1	E	6,093
Wekiva Pkwy to SR 46	4,832	3	D	1,961	1	F	6,793
SR 46 to US 17-92	6,811	3+Aux	E	1,961	1	F	8,772
US 17-92 to Slip Ramps	6,464	3	F	1,961	1	F	8,425
Slip Ramps to Dirksen Dr	7,240	3	F	1,185	1	C	8,425
Dirksen Dr to Saxon Blvd	6,224	3	F	1,185	1	C	7,409
Saxon Blvd to Rhode Island Ave	4,993	3	D	1,185	1	C	6,178
Rhode Island Ave to SR 472	4,993	3	D	829	1	B	5,823
East of SR 472	5,491	3	D	-			5,491
	Off-Peak Direction of Travel						
	General Use			Express			
	DDHV	Lanes	LOS	DDHV	Lanes	LOS	Total
West of SR 434	5,772	3	E	1,431	1	D	7,203
SR 434 to Slip Ramps	6,019	3	E	1,431	1	D	7,450
Slip Ramps to Lake Mary Blvd	6,308	3	F	1,142	1	C	7,450
Lake Mary Blvd to Slip Ramps	5,531	3+Aux	C	1,142	1	C	6,673
Slip Ramps to CR 46A	5,336	3+Aux	C	1,337	1	D	6,673
CR 46A to Wekiva Pkwy	4,349	3	C	1,337	1	D	5,686
Wekiva Pkwy to SR 46	4,418	3	C	1,530	1	D	5,948
SR 46 to US 17-92	5,763	3+Aux	D	1,530	1	D	7,293
US 17-92 to Slip Ramps	5,579	3	E	1,530	1	D	7,109
Slip Ramps to Dirksen Dr	6,336	3	F	773	1	C	7,109
Dirksen Dr to Saxon Blvd	5,409	3	D	773	1	C	6,182
Saxon Blvd to Rhode Island Ave	4,327	3	C	773	1	C	5,100
Rhode Island Ave to SR 472	4,327	3	C	541	1	B	4,868
East of SR 472	5,001	3	D	-			5,001

Represents segments within the corridor that are anticipated to operate below LOS D.

4.0 ALTERNATIVES EVALUATED (TYPICAL SECTIONS)

To address the projected operating deficiencies as previously identified in Table 3, four alternative typical sections were considered as part of the reversible lane feasibility analysis for Segments 3 and 4. All of the proposed typical section concepts were developed for a design speed of 70 mph and include six general use lanes. Additionally, up to three auxiliary lanes between ramp locations will be provided in some areas in both the eastbound and westbound directions. The number of express lanes varies for each alternative considered. The following sections describe each alternative in more detail.

4.1 Alternative 1 – 6 GUL + 4 EL[1] (No Reversible Lanes)

The proposed typical section for Alternative 1 will include three 12-foot general use lanes, two 12-foot express lanes, up to three 12-foot auxiliary lanes and a 12-foot outside shoulder in each direction. The general use lanes will also have a 12-foot inside shoulder and the express lanes will have a 6-foot inside shoulder and 10-foot outside shoulder. A permanent barrier wall in between adjacent shoulders will separate the express lanes from the general use lanes. The typical section for Alternative 1, shown in Figure 6, will require a minimum of 300 feet of right of way with 82 feet of proposed pavement width to accommodate the four express lanes. The total roadway footprint width is 236 feet for this alternative. The preliminary roadway alignment for this alternative is shown on the design concept plans included in Appendix B.

4.2 Alternative 2 - 6 GUL + 2 EL (No Reversible Lanes)

The proposed typical section for Alternative 2 will include three 12-foot general use lanes, one 12-foot express lane and up to three 12-foot auxiliary lanes in each direction. The general use lanes will have 12-foot inside and outside shoulders and the express lane will have a 6-foot inside shoulder and 10-foot outside shoulder. A permanent barrier wall in between adjacent 10- and 12-foot shoulders will separate the express lanes from the general use lanes. The typical section for Alternative 2, shown in Figure 7, will require a minimum of 300 feet of right of way with 58 feet of proposed pavement width to accommodate the two express lanes. The total roadway footprint width is 212 feet for this alternative. The preliminary roadway alignment for this alternative is shown on the design concept plans included in Appendix C.

4.3 Alternative 3 - 6 GUL + 3 EL (with Reversible "Zipper" Lane)

A reversible "Zipper" lane can be employed by utilizing a moveable barrier system which can reconfigure a highway by providing additional travel lanes in the peak direction of traffic flow while maintaining positive physical barrier separation between opposing traffic flows. The typical section configuration for this alternative contains two, 14-foot lanes in the center median. A moveable median barrier (MMB) will be stored in one of the two 14-foot lanes. The "Zipper" lane is created by using a barrier transfer machine (BTM) to move the median barrier from the storage position to the new zipper lane position to create a full traffic

[1] GUL- General Use Lanes (or general purpose lanes), EL – Express Lanes

Figure 6 - Typical Section – 6 GUL + 4 EL (No Reversible Lanes)

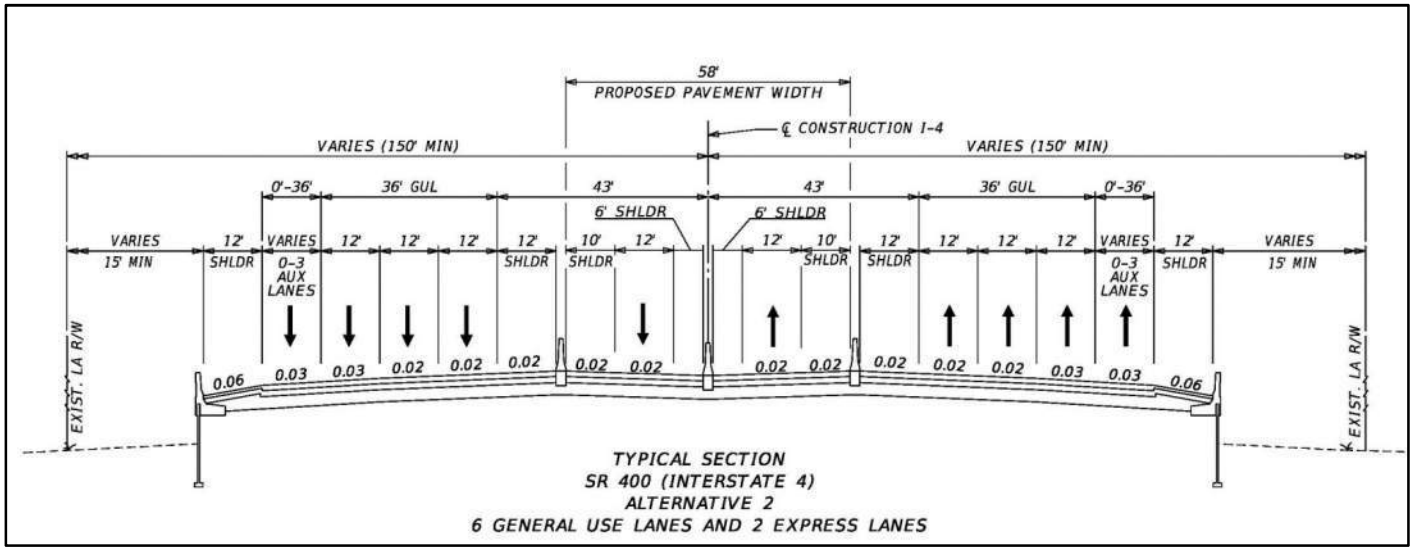

Figure 7 - Typical Section – 6 GUL + 2 EL (No Reversible Lanes)

lane with shoulder area in the peak direction of travel. The proposed typical section for Alternative 3 will include three 12-foot general use lanes, up to three 12-foot auxiliary lanes and 12-foot inside and outside shoulders in each direction. The center section will accommodate one 14-foot express lane and one 12-foot express lane with a 10-foot outside shoulder and a 6-foot inside shoulder in the peak direction of travel and a single 12-foot express lane with 6-foot inside shoulder and 10'foot outside shoulder in the off-peak direction. The 6-foot inside shoulders will be separated by a two-foot movable barrier with slots. Additionally, a permanent barrier wall in between adjacent 10- and 12-foot shoulders will separate the express lanes from the general use lanes. The typical section for Alternative 3, shown in Figure 8, will require a minimum of 300 feet of right of way with 72 feet of proposed pavement width to accommodate the three express lanes. The total roadway footprint width is 226 feet for this alternative. The preliminary roadway alignment for this alternative is shown on the design concept plans included in Appendix D.

4.4 Alternative 4 - 6 GUL + 4 EL & 6 GUL + 2 EL (No Reversible Lanes)

Alternative 4 is a hybrid of alternatives 1 and 2. The proposed typical section for Alternative 4 will have the same cross section as described in Alternative 1 (6 GUL + 4 EL) for the segment east of SR 434 (Begin Project Station 2043+71.32) to the slip ramps west of Dirksen Drive (Station 2710+01.89). From west of Dirksen Drive to east of SR 472 (End Project Station 3118+46.00), the roadway cross section will be the same as described in Alternative 2 (6 GUL + 2 EL). A minimum of 300 feet of right of way will be required with 82 feet of proposed pavement width to accommodate the four express lanes and 58 feet of proposed pavement width to accommodate the two express lanes. The total roadway footprint width is 236 feet for the 4 EL section and 212 feet for the 2 EL section.

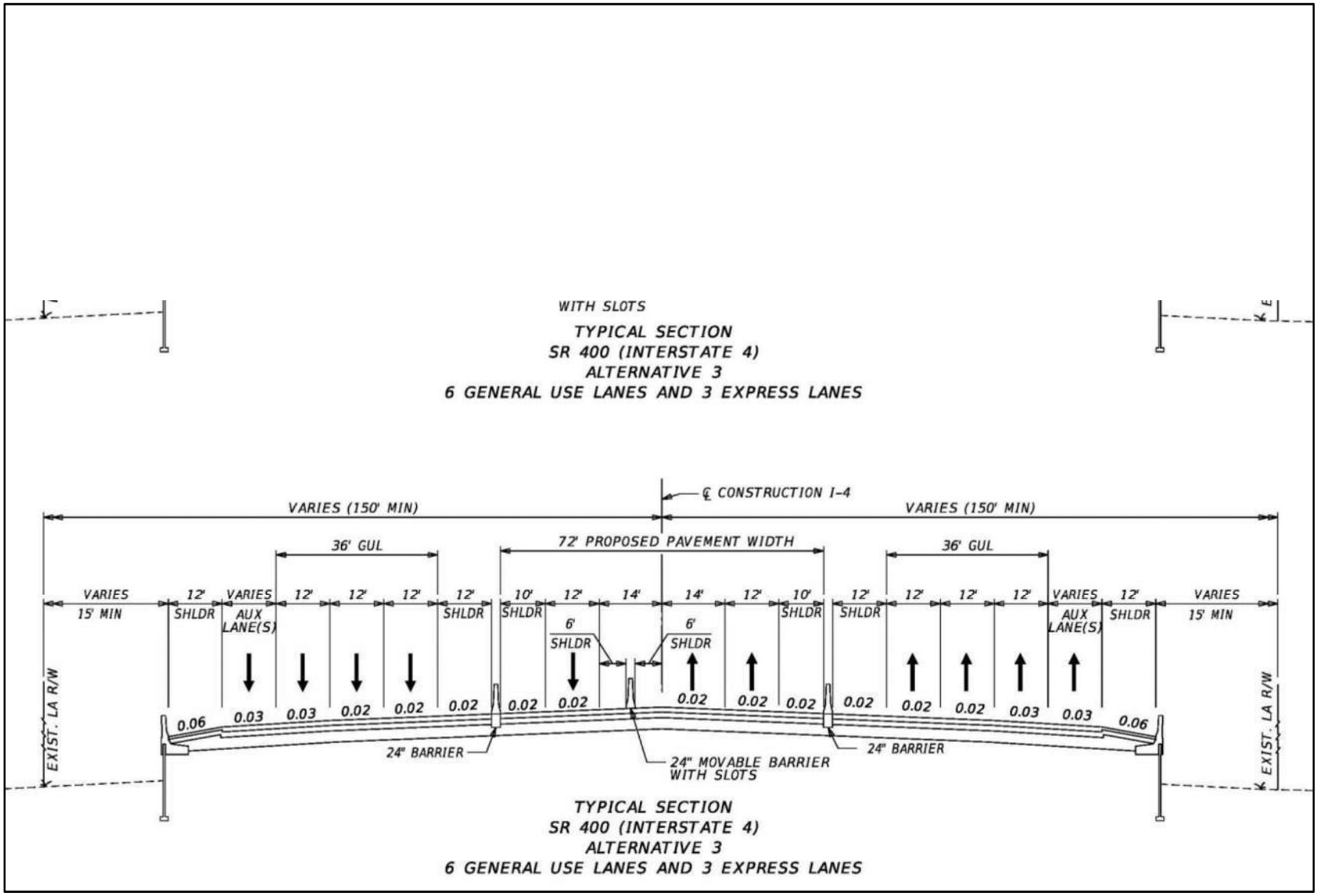

Figure 8 - Typical Section – 6 GUL + 3 EL (Zipper Lanes)

5.0 Operations and Maintenance Plan

The operations and maintenance plan is used to identify key elements to effectively manage the special use express lanes and accommodate safe and efficient travel on the interstate. Additional technology, equipment and manpower will be required to ensure safe operations during transition to reversible lane flow configuration. These include additional traffic operations staff as well as additional structures, signage, markings, traffic control features and elements comprising the moveable barrier system. Physical components may include: in-pavement lighting, resistance devices/barrier gates, closed circuit TVs, DMS/VMS/CMS and other ITS, tolling gantries, electronic toll readers, fixed and moveable barriers and barrier transfer machines (BTM).

5.1 Express Lanes Access Points

Access to/from the express lanes will be provided through slip ramps connecting to the general use lanes or direct access ramps at some interchange locations. Four slip ramp connections and two direct access ramps are proposed along the I-4 Segments 3 and 4 corridor, as shown in the access plan provided in Figure 9. Figure 10 is a schematic which shows the lane configuration and transition areas for access between the general purpose and express lanes. As shown in Figure 10, proposed access between the general use and express lanes will be provided by parallel-type entrance and exit ramps. In the parallel-type exit (from the general use lanes to the express lanes entrance ramp and from the express lanes to the general use lanes entrance ramp), a 15:1 (180') taper is followed by a 490' added deceleration lane that is parallel to the travel lanes. The deceleration lane connects to the exit or entrance ramp at a $3^{o}00'00"$ deflection angle. A 40' overlap of the barrier walls is provided to prevent merge/diverge maneuvers within the ramp area. Following the entrance or exit ramp, a 1230' parallel acceleration lane and a 300' taper for merging into the express or general use lanes are provided.

The typical section and traffic flow operations described previously in Alternative 1 (6 GUL + 4 EL - No Reversible Lanes) for I-4, Segments 3 and 4 are consistent with those that will be implemented for the I-4 Ultimate section from west of SR 435 (Kirkman Road) to East of SR 434. Conceptual signing plans to illustrate the traffic operations were developed for Alternative 1 and Alternative 3 and are included in Appendix E and F. The signing plan for Alternatives 2 and 4 will be the same as for Alternative 1.

5.2 Moveable Median Barrier (MMB) system

Alternative 3 identified the use of a reversible "zipper" lane system in the express lanes. A reversible lane can be employed by utilizing Movable Barrier Technology (MBT) which can reconfigure a highway by providing additional travel lanes in the peak direction of traffic flow while maintaining positive physical barrier separation between opposing traffic flows. The moveable barrier position will be changed by time of day to provide the desired number of lanes in the peak and off peak directions. A BTM with autoguidance

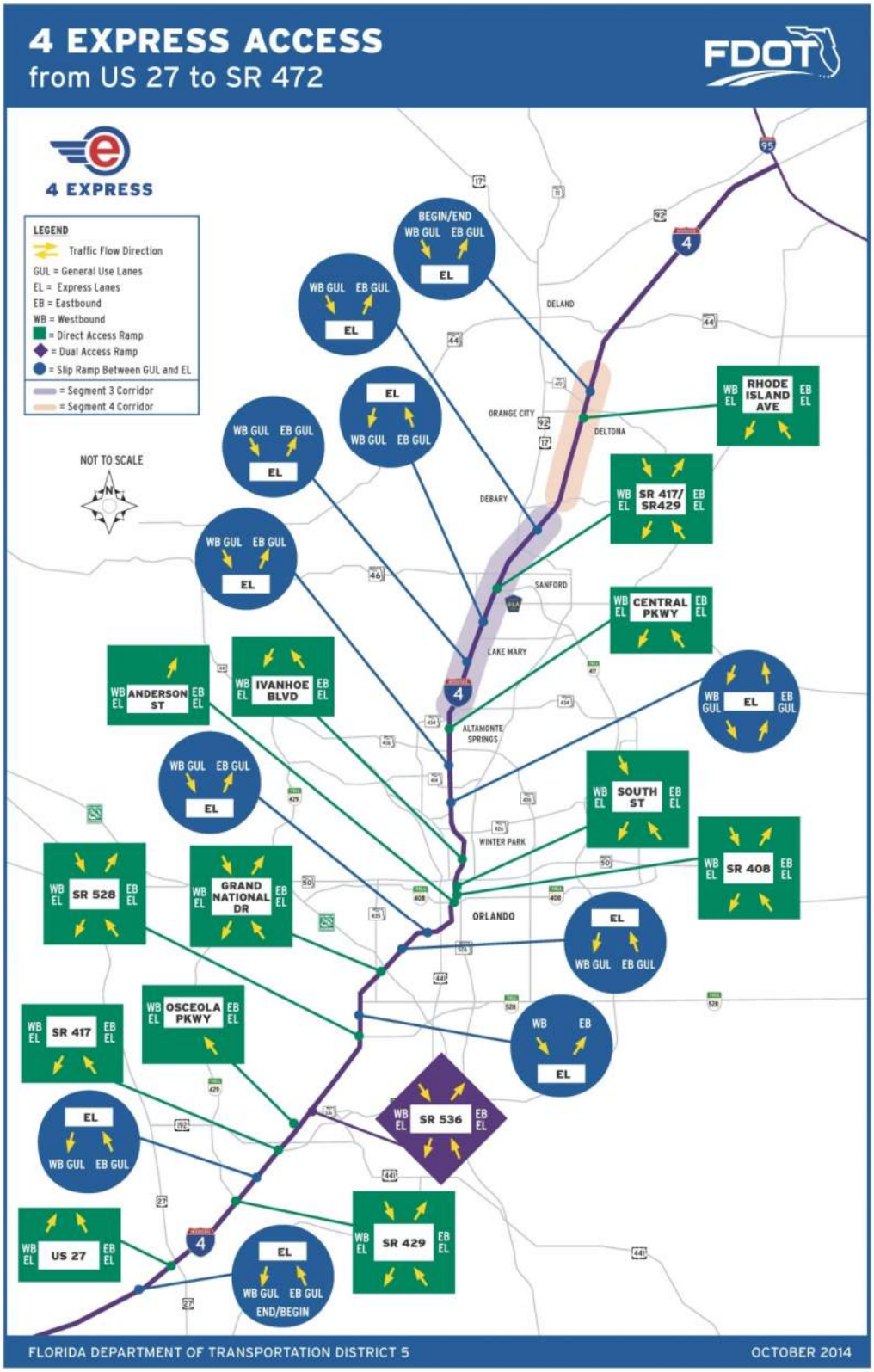

Figure 9 – Proposed Express Lane Access

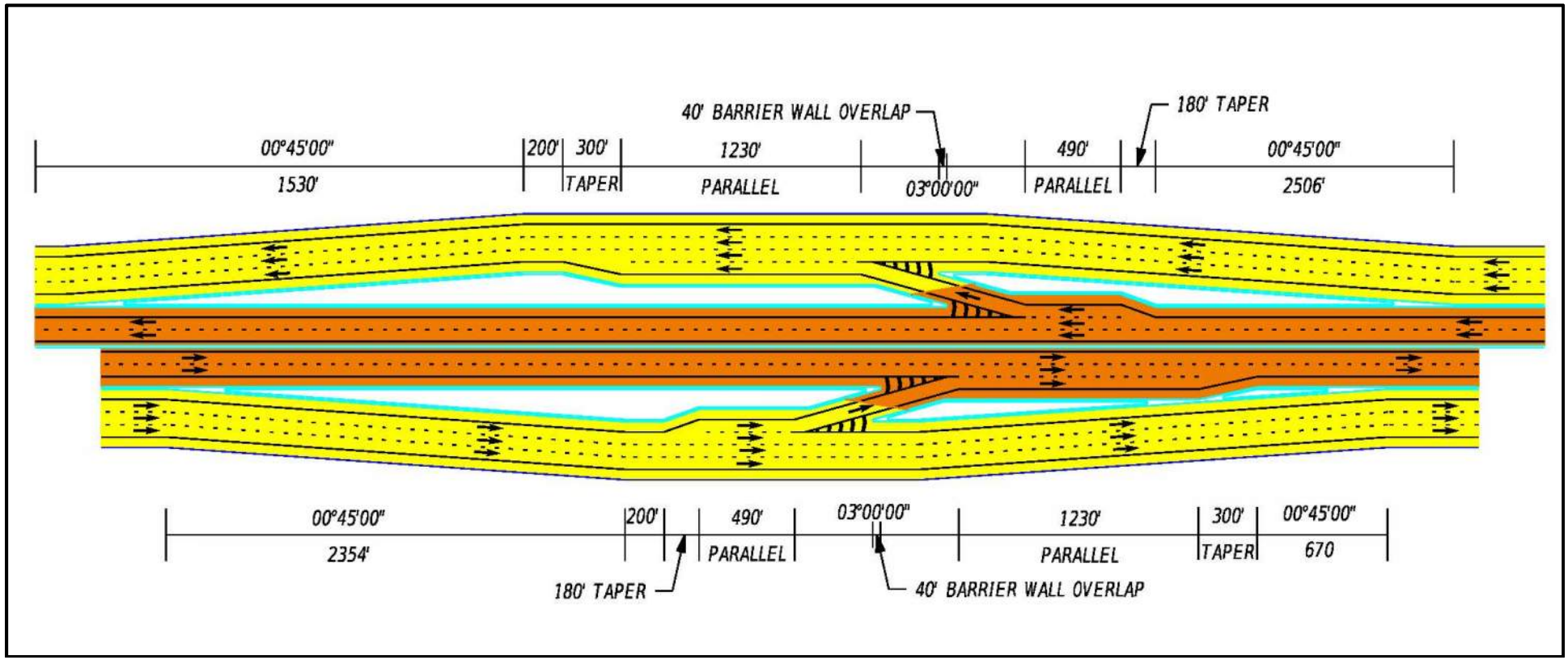

Figure 10 – Proposed Slip Ramp Access Schematic

technology is used to transition the MMB system between lanes to provide an extra travel lane in the peak direction of travel during the rush hours. In the proposed 6 GUL + 3 EL configuration, the three express lanes will occupy the center of the roadway cross section. The BTMs lift the barrier, passing it through a conveyor wheel system located in the undercarriage and transfer the barrier laterally from 8- to 24 feet, to place it in the new position, as illustrated in Figure 11. The system operates at a speed of 10 mph, transferring one mile of barrier up to two lane widths in six minutes. For the proposed corridor length of 19.7 miles, the total transfer time would take approximately 2 hours. The MMB system will allow for two lanes inbound (westbound) and one lane outbound (eastbound) during the morning peak periods and reverse operations in the afternoon peak periods (one lane inbound and two lanes outbound). For this analysis, The Road Zipper System®[2] line of products was used to evaluate operations and maintenance. The barrier is constructed of one-meter reinforced concrete sections that are pinned together to form a continuous barrier wall. Figure 12 and Figure 13 show the lane transition from the I-4 Ultimate section (6 GUL + 4 EL – No Reversible Lanes), which extends from west of SR 435 (Kirkman Road) to East of SR 434, to the proposed I-4 Segments 3 and 4 reversible section (6 GUL + 3 EL with Reversible "Zipper" Lane). These figures show the typical traffic control plan to be used during the barrier transfer time, when the direction of travel in the reversible center lane is being changed. Overhead Lane-use Control Signals (LCS) as part of the Variable Message Sign (VMS) system will indicate whether the center reversible lane is open or closed to traffic, providing guidance to motorists using the express lanes. A conceptual signing plan was also developed for Alternative 3 (6 GUL + 3 EL – with Reversible "Zipper" Lane) and is included in Appendix F.

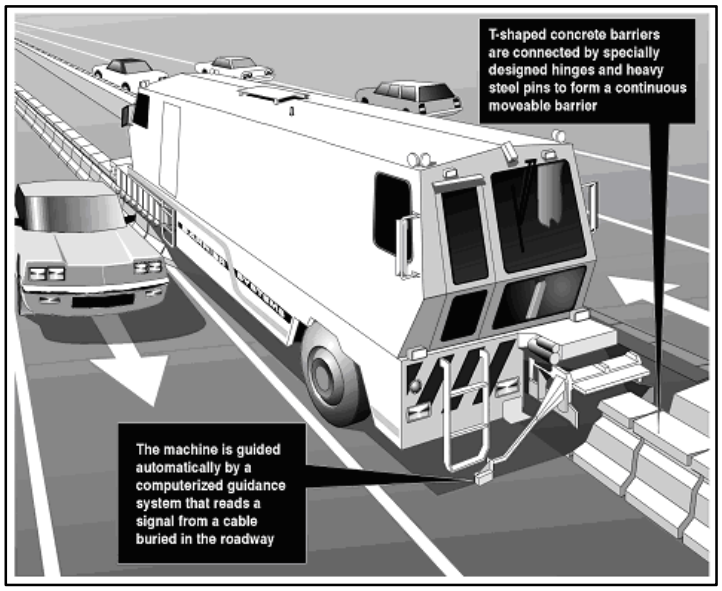

Figure 11 – Moveable Barrier Technology[3]

[2] The Road Zipper System (formerly known as Quickchange Moveable Barrier or QMB) is a registered trademark of Lindsay Corporation.

[3] Freeway Management and Operations Handbook, Chapter 8 Managed Lanes. FHWA, 2 Dec. 2013, Web. 26 Aug. 2014. < http://ops.fhwa.dot.gov/freewaymgmt/publications/frwy_mgmt_handbook/chapter8_02.htm>.

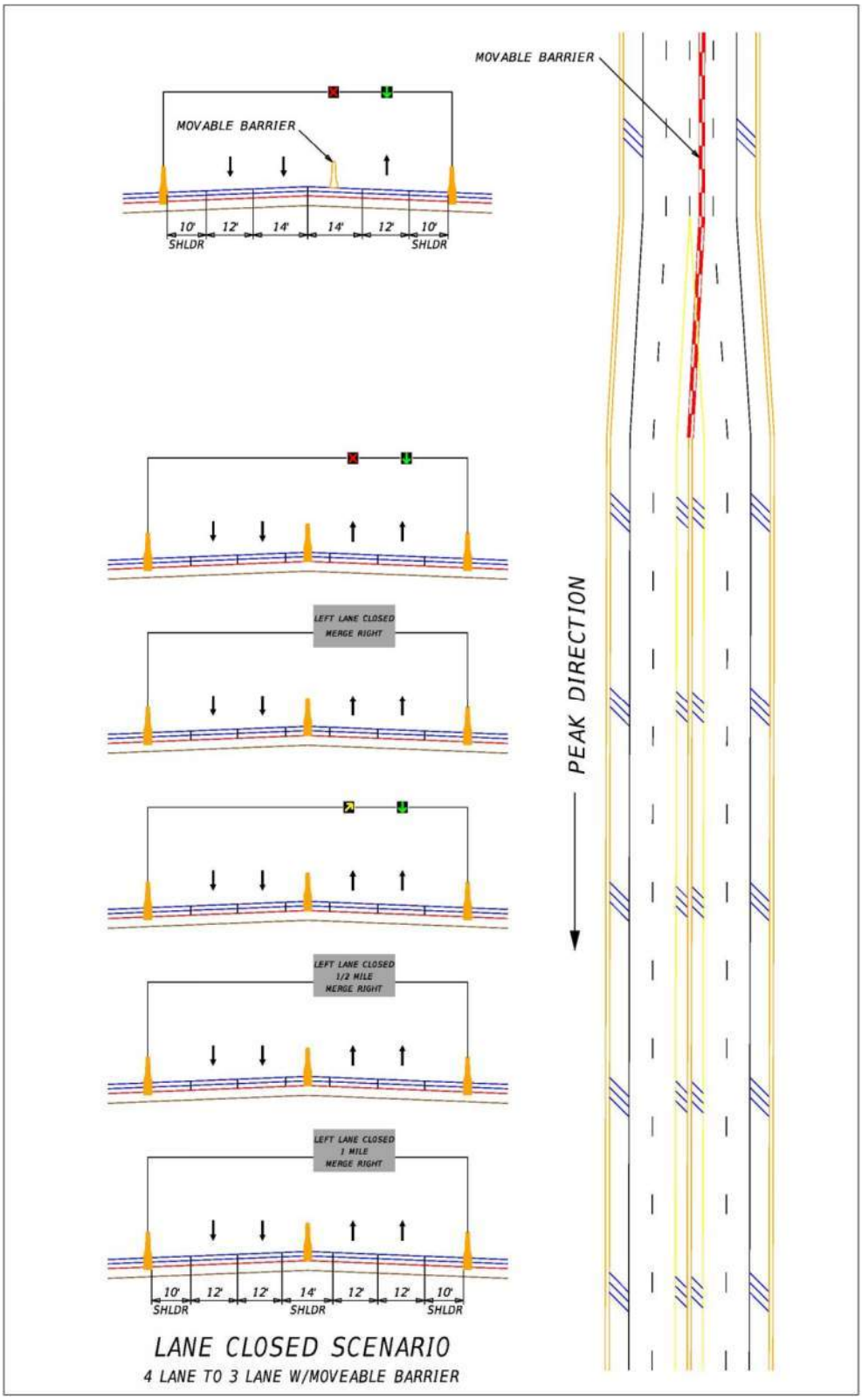

Figure 12 – Reversible Express Lane Transition (4 to 3 lanes – Lane Closed Scenario)

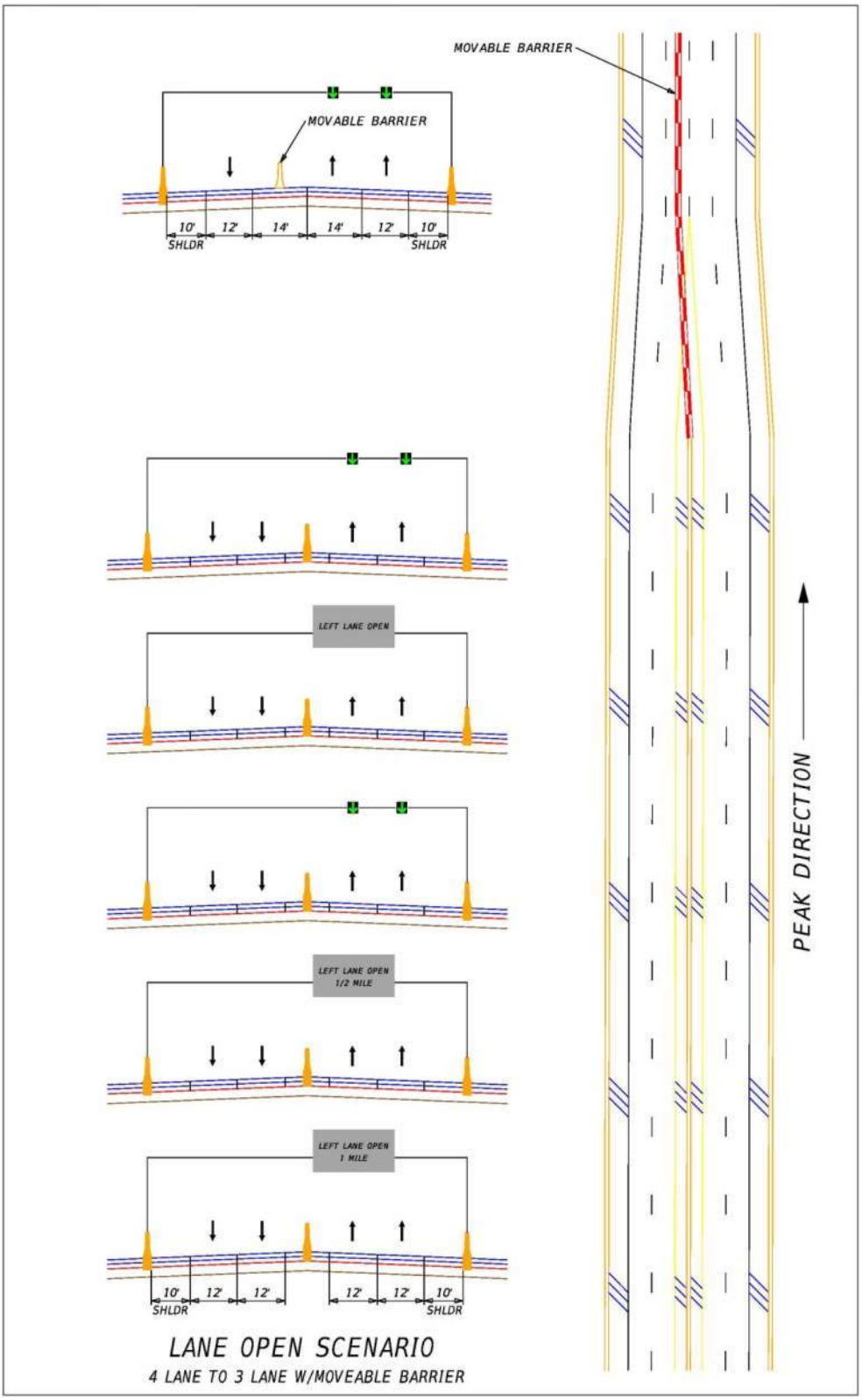

Figure 13 – Reversible Express Lane Transition (4 to 3 lanes – Lane Open Scenario)

6.0 Tolling Operations

Tolling strategies and related operations are currently under development in a supplemental report, *I-4 Express Lanes Concept of Operations for I-4 from US 27 to SR 472.* The following is a description of the general aspects of the proposed tolling approach for the I-4 express lanes.

As indicated in the FDOT *Statewide Action Plan to Guide Express Toll Lane Implementation*, managed lane toll rates are to be set to meet project financial objectives and maximize vehicle throughput on a facility. Thus, tolling operations for the I-4 express corridor will be based on a demand management strategy using congestion pricing. A variable toll rate plan (dynamic tolling) will be implemented throughout the day based on real-time traffic demand on the freeway. The dynamic tolling scheme gives users the option of choosing the express lanes for a more reliable trip (travel time and speed). Toll rates will be higher during peak periods of high traffic volume demand and lower during non-peak periods of low demand, in order to maintain acceptable levels of service and speeds close to free-flow conditions 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. Toll prices will be displayed on full matrix dynamic message signs (DMS) or static signs with embedded DMS prior to the express lanes entry points. In accordance with FDOT policy, High Occupancy Vehicles (HOV) and transit vehicles will not be exempt from the toll. Access will be provided through slip ramps connecting to the general use lanes or direct access ramps at some interchange locations.

Motor vehicles having greater than two axles (including vehicles towing a trailer) will not be permitted to use the express lanes. Bus transit vehicles, which will not be exempt from tolls, will be permitted. The proposed hours of operation for the express lanes are 24 hours/day, 7 days per week. Trip based tolling will be used with each trip consisting of three or fewer exits per trip (a trip consists of no more than three segments). With the trip-based tolling strategy, tolls are locked in at the beginning of a trip, which would encourage longer trips on the system. Dynamic Message Signs (DMS) will be located prior to the trip to indicate the different toll amounts for each exit/segment within a single trip. A single toll plaza per segment is proposed. At entry points into the express lanes where a toll plaza does not exist, vehicle entries will be logged by Automatic Vehicle Identification (AVI) equipment for tolling purposes. Due to the nature of the destinations along I-4 and the length of the system, the trip segments are not the same in the eastbound and westbound directions. The proposed eastbound and westbound trip-based toll segments are illustrated in Figure 14 and Figure 15, respectively. This may result in construction of separate toll gantries for the eastbound and westbound directions. With the reversible lane configuration, toll gantries for opposing directions would need to be combined (one gantry structure spanning across both directions of travel). With the dynamic tolling scheme, tolls are adjusted based on traffic volume and speed of vehicles thus, the toll rates may be different at the decision point before entry and the actual gantry location. One of the drawbacks due to the reversible lane configuration is that a single gantry location has the potential to create inaccurate tolling amounts as vehicle travel speeds could change between the entry access point and the actual gantry location.

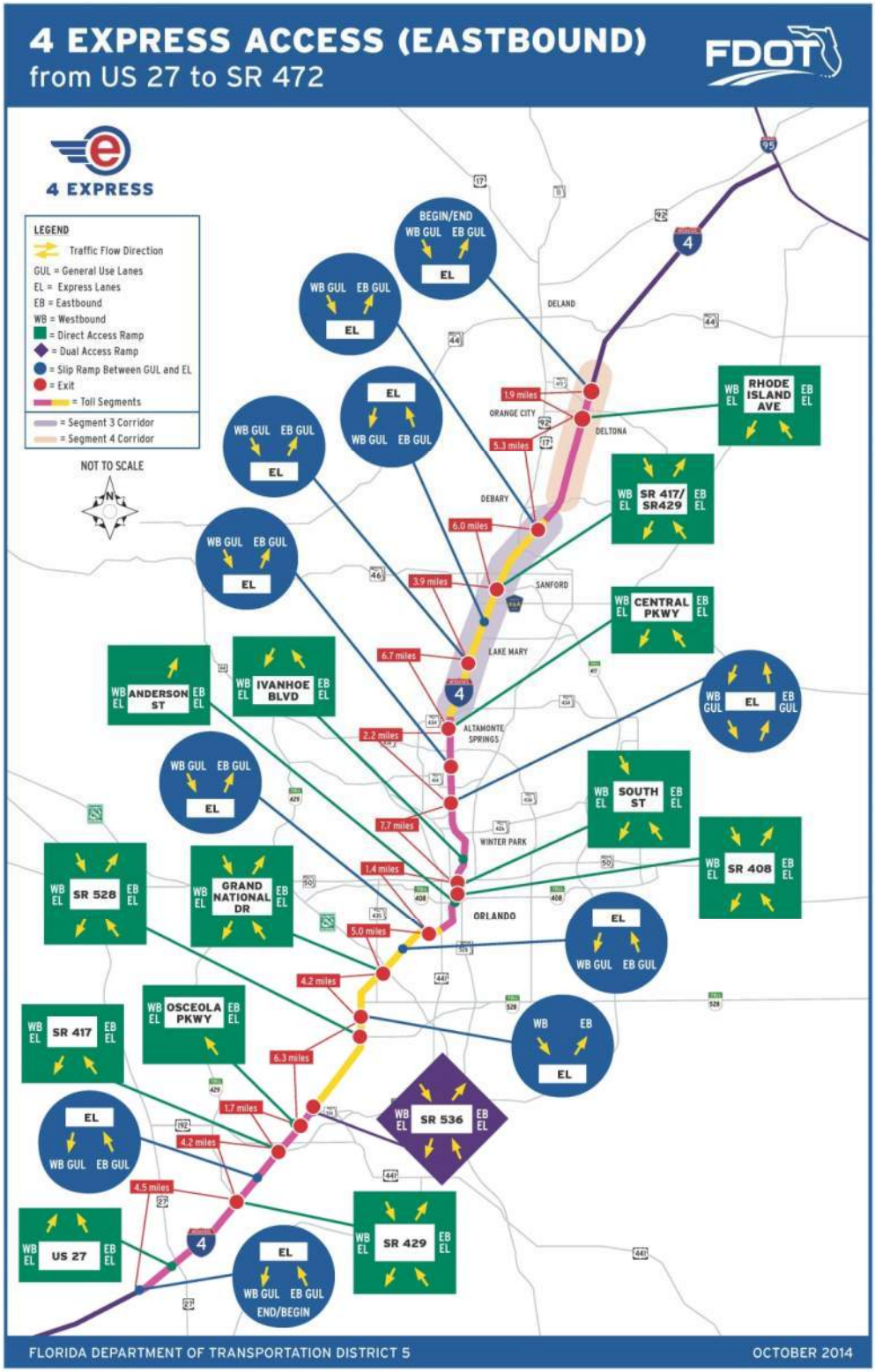

Figure 14 – Proposed Eastbound Toll Segments

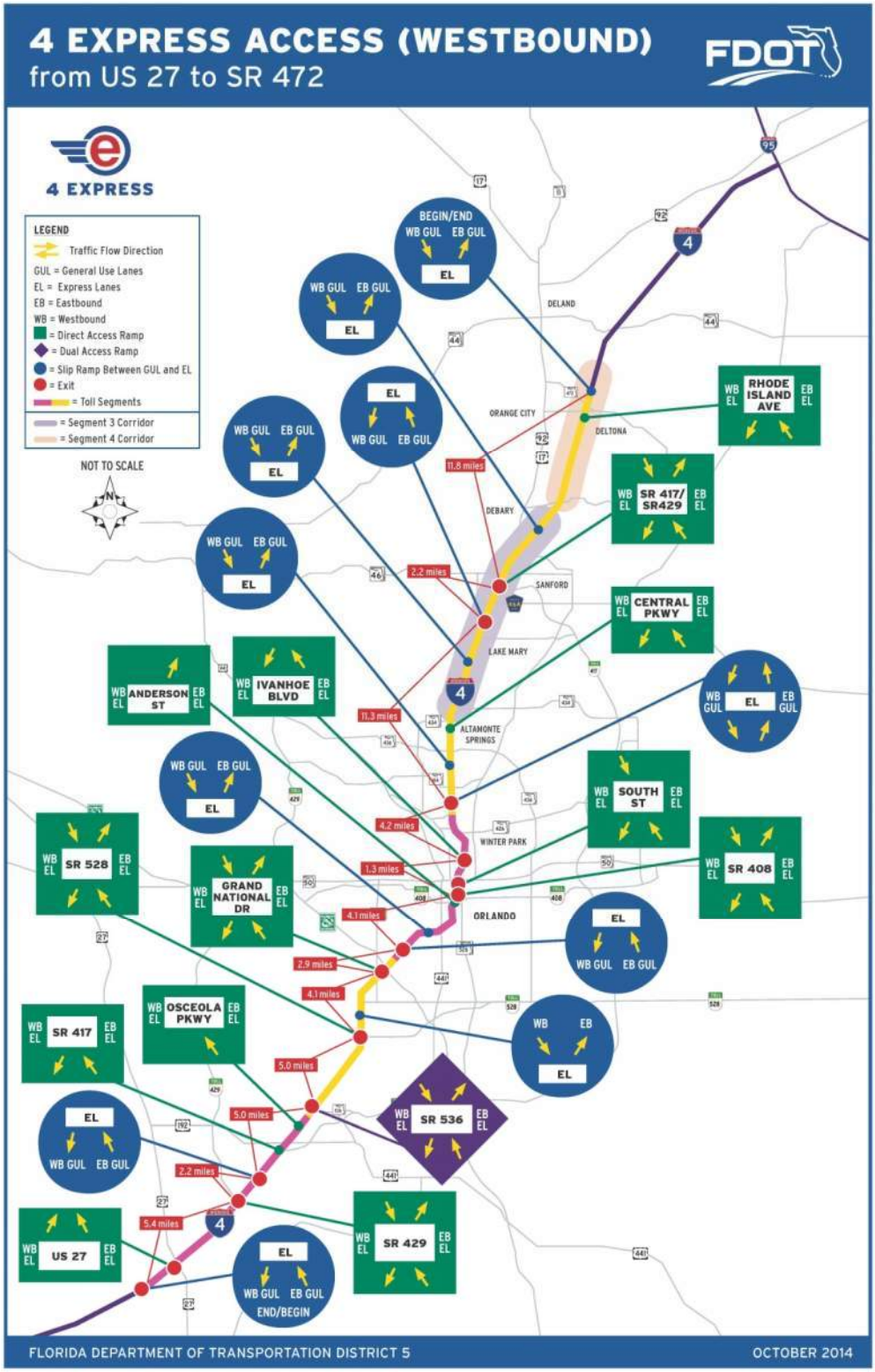

Figure 15 – Proposed Westbound Toll Segments

7.0 St. Johns River Bridge

A major component of determining the feasibility of extending the use of the express lanes along the I-4 Segments 3 and 4 corridor is the impact to the bridge over the St. Johns River. A supplemental report, *SR 400 (I-4) Over US 17-92 and St. Johns River Structural Evaluation Study (September, 2014),* addressing the I-4 BtU extension project has been prepared and submitted to FDOT. The following sections provide a summary of the study findings.

In 2000-2001, the St. Johns River Veterans Memorial Bridge was designed and constructed with provisions to accept a future interior (median) widening (herein referred to as the "original widening"), as part of the original I-4 PD&E. The original widening was to carry a roadway consisting of a 10' inside shoulder, one 12' managed lane and a 12' outside shoulder on the Eastbound and Westbound bridges. The existing structure provides a 132'-11" open median available for widening between the Eastbound and Westbound bridges. The original widening was suitable to accommodate the typical sections for Alternatives 2 and 4 presented in this reversible express lanes evaluation report. Therefore, the bridge study evaluated two separate alternatives for the feasibility of accommodating the proposed improvements for Alternative 1 and Alternative 3 of this reversible lane analysis.

Alternative 1 Bridge Widening

The Alternative 1 Bridge Widening for Alternative 1 (6 GUL + 4EL - No Reversible Lanes) requires several changes to the original widening design. Firstly, the beam layout will need to be revised to support the increase in the roadway width from 36 feet to 42 feet to add a second managed lane. This will require larger beam spacing and an extra beam line in some spans. Also, the Florida Bulb-T 78 beams selected in the original widening will be replaced by current Florida I-78 beams. The result is an estimated additional 4,310 linear feet of Florida I-78 beams required to carry the proposed Alternative 1 widening over the original widening configuration. Furthermore, a 6 feet increase in the widening width will also require wider end bents and pier caps.

Based on our preliminary investigation, the existing river piers appear to have adequate foundation capacity as installed to handle the proposed widening without modification to the pile supported foundations. The not-yet-constructed pier caps and columns at these piers will likely require additional reinforcing than what was anticipated in the original widening design, as well as revised connection details to the existing foundations to assure safe transfer of loads. However, based on the relatively small level of increased load demand from the proposed widening, it will be feasible to develop constructible details in the final design phase. Figure 16 and Figure 17 show the typical land and river pier configurations for both the original widening and the proposed Alternative 1 widening.

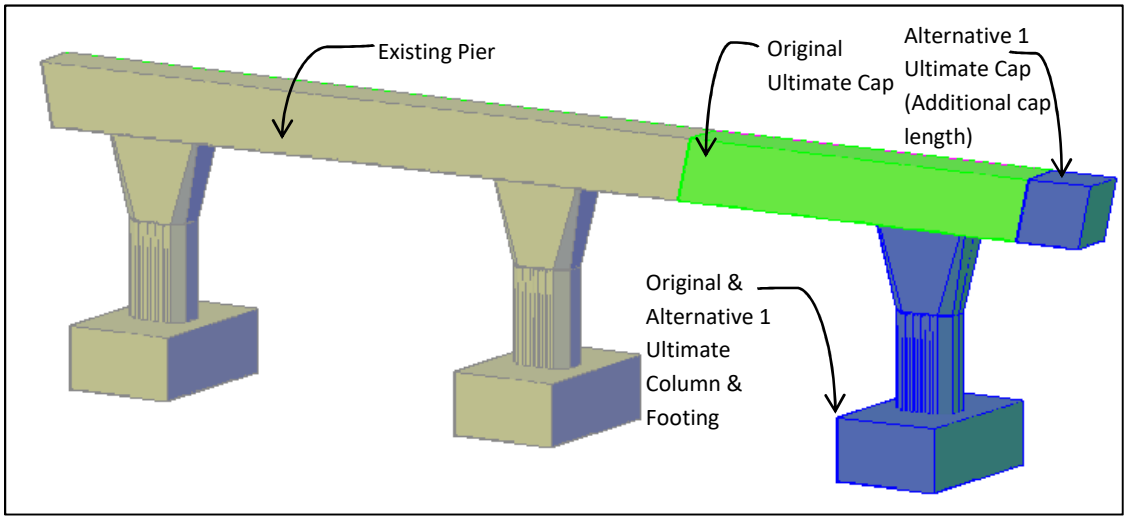

Figure 16 – Typical Land Pier

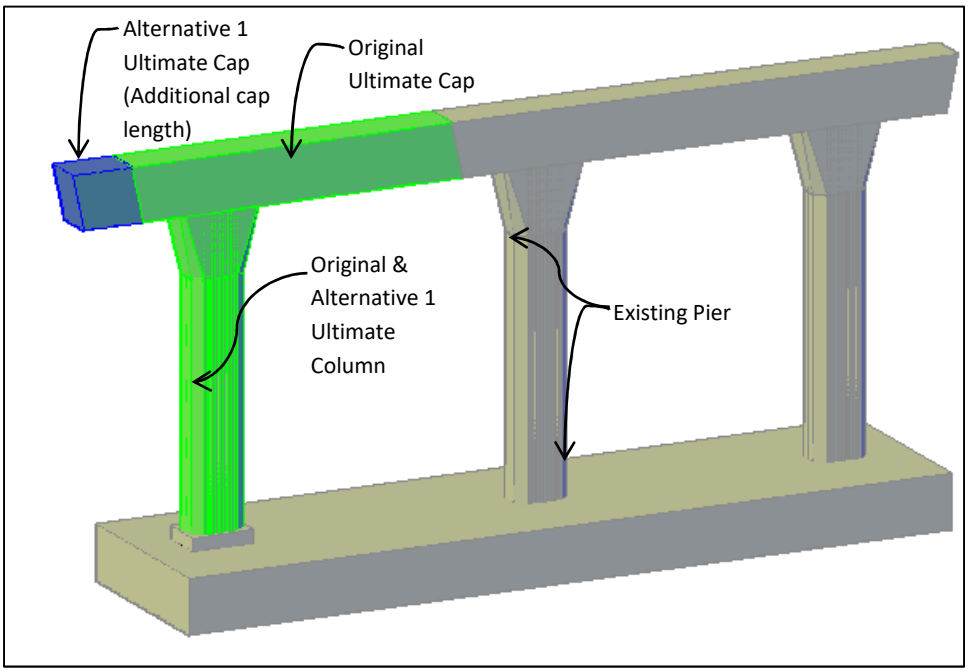

Figure 17 – Typical River Pier

Alternative 2 Bridge Widening

The Alternative 2 Bridge Widening for Alternative 3 (6 GUL + 3 EL – with Reversible "Zipper" Lane) was completed to determine the feasibility of one managed lane in each direction with a reversible center managed lane. This widening would need to be carried on a separate superstructure located in the median area between the Eastbound and Westbound bridges. The most viable solution for this configuration consists of constructing straddle piers spanning between existing pier footings at river pier locations. Furthermore, entirely new end bents need to be constructed at the North and South ends of the bridge. Due to the existing MSE walls in these locations, the potential for conflicts between end bent piles and existing MSE wall straps need to be investigated. For land pier locations, new multi-column piers can be constructed in the median to carry the proposed bridge section. According to As-Built plans, old piles and foundations at Pier 2 may still be intact and need to be field verified before carrying out substructure design at that location. This option also presents the possibility of dealing with construction during design and record high water levels, which places the existing river pier footings under water. Vessel collision also needs to be addressed to assure new collapse mechanisms do not present themselves due to the linking of the river pier footings. Figure 18 shows the typical straddle pier configuration for the proposed Alternative 2 widening.

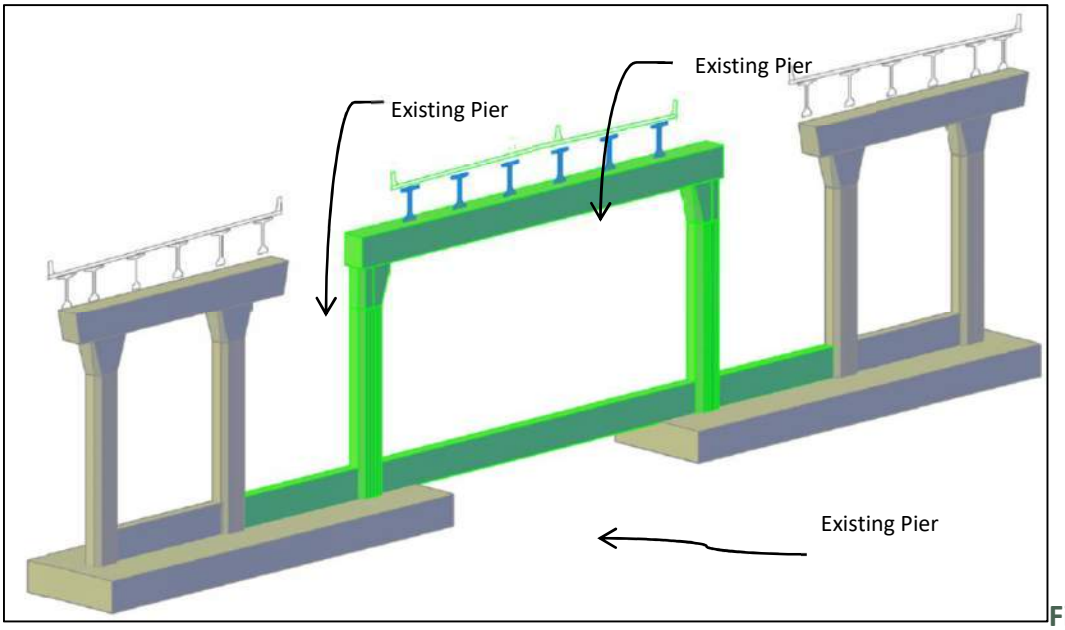

Figure 18 – Typical Straddle Pier

Typical sections including the express lanes for the bridge sections over the St. Johns River were developed for Alternative 1 (6+4) and Alternative 3 (6+3), as shown in Figure 19 and Figure 20. Estimated costs for bridge construction over the St. John's River were also determined for Alternative 1 and Alternative 3 and are shown in Table 4. The overall construction cost of Alternative 1 was estimated to be similar to that of Alternative 3, with a costs savings of 8.8% for construction of Alternative 3 over Alternative 1. However, the Alternative 1 widening provides more roadway usage per dollar spent.

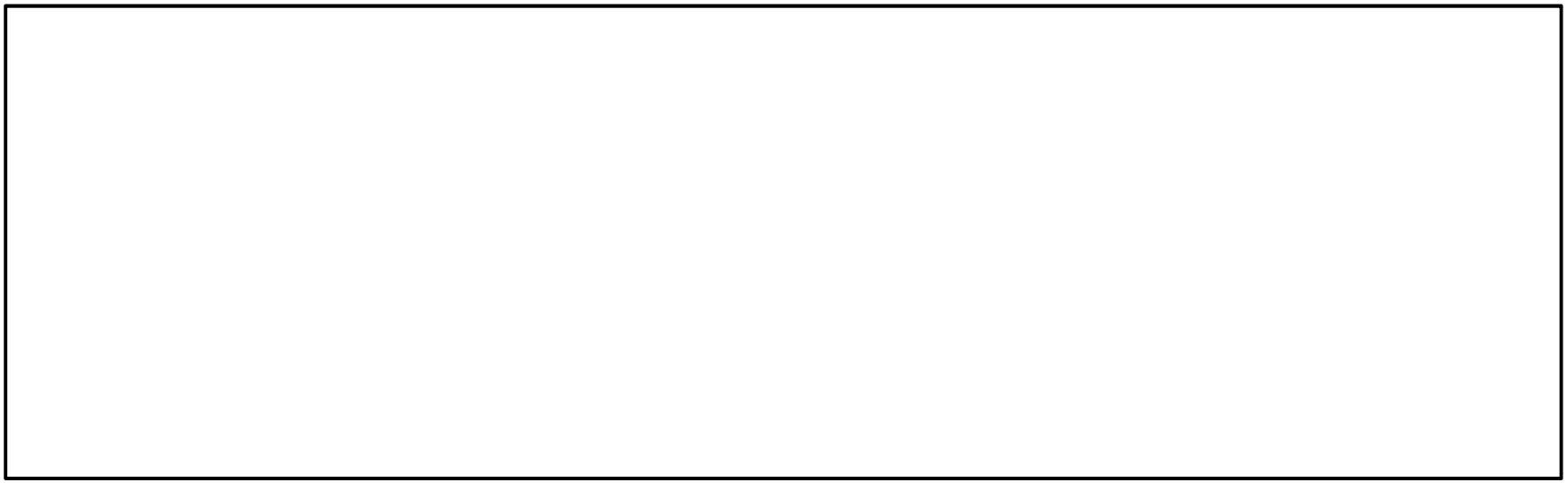

Figure 19 – St. Johns River Bridge (Proposed 6 + 4 Section, Eastbound)

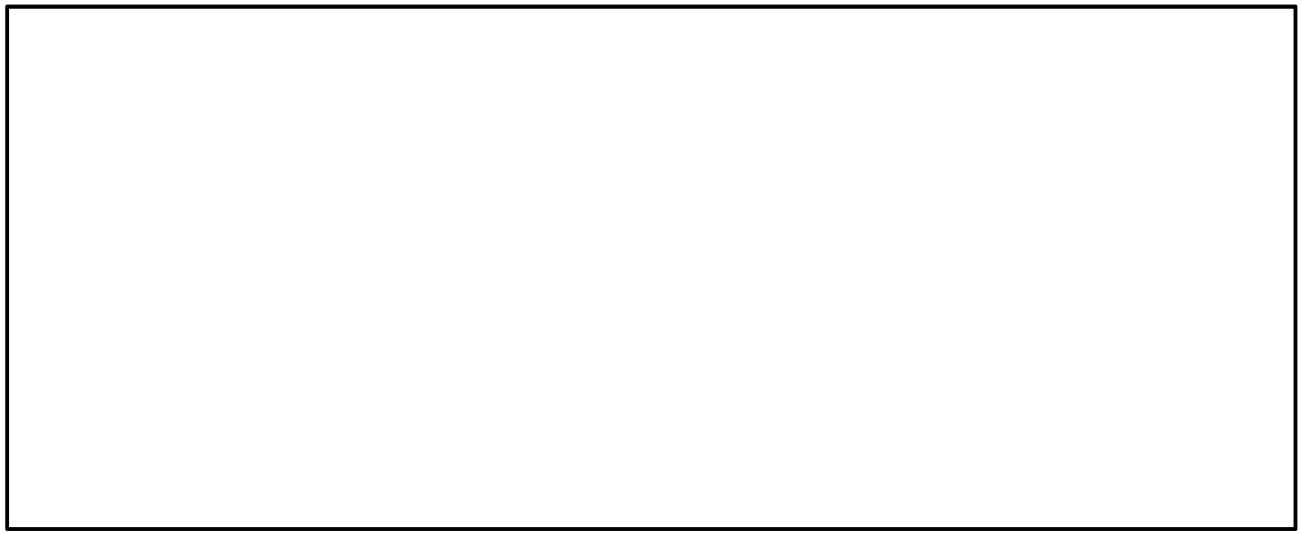

Figure 20 – St. Johns River Bridge (Proposed 6 + 3 Section)

Table 4 – Construction Cost Estimate for St. Johns River Bridge

Alternative	Pier Type	Express Lanes Provided	Bridge Deck Area	Estimated Construction Cost	Cost per Square Foot	Cost per Lane
			(SF)	($ Million)	($/SF)	($M/Lane)
Widening	Single Column Widening	4	215,565	19.4	90	4.85
Reversible Lanes with Straddle Piers*	Straddle	3	190,108	17.7	93	5.90

*Cost estimate does not include moveable barrier system or MSE wall work which may be required.

8.0 COST ANALYSIS

8.1.1 BTM Operations and Maintenance Costs

Costs to operate and maintain the BTMs include parts and labor for operations and storage facilities for maintenance. A 40-year life cycle cost analysis was completed for the alternatives which include the "zipper" lane system, Alternative 3. Labor estimates assumed a full time crew operating for the duration of a full year utilizing one Hawaii Class model BTM with one back-up machine. Operating costs also include parts such as, fuel and hydraulic oil. The initial cost for one liner foot of MMB assumed was $320 ($1,689,600 per mile). One on-site storage and maintenance facility for storage of parts, fueling/maintaining and protection of equipment was deemed necessary based on annual maintenance requirements and typical weather conditions in central Florida. The cost analysis is based on Barrier Systems by Lindsay Corporation line of products and assumes ten median transfers per week for the approximate 20-mile project. Table 5 provides a summary of the life cycle cost analysis for the BTM and MMB components of the reversible lane alternative (Alternative 3).

Preliminary design concept plans were developed for the alternatives evaluated to assist in preparation of the preliminary engineer's estimates. The engineer's estimates included construction costs for roadway and bridges, right of way impacts and moveable barriers, as applicable for each of the alternatives. The costs for Alternative 4 were estimated by combining estimates from Alternative 1 and Alternative 2. A total project length of 19.7 miles (Segment 3 and Segment 4) was assumed. The cross roads were excluded from the cost estimation, as their costs were assumed to be equal for all alternatives. Right of way impacts included roadway construction only and excluded impacts for various pond alternatives. Table 6 summarizes the total construction costs for each alternative evaluated. Detailed calculations are provided in Appendix G.

Table 5 – 40 Year Life Cycle Cost Analysis for Moveable Median Barrier (Alternative 3 – 6 GUL + 3 EL)

Item	Quantity	Units	Cycle (Years)	Number of Recurring Costs	Capital/ Replacement Costs	Units	Annualized Costs
Capital Costs							
Barrier Transfer Machine (BTM)	2	EA	20	2	$ 1,632,000.00	EA	$ 163,200.00
Moveable Median Barrier (MMB)	19.7	MI	40	1	$ 1,689,600.00	$/MI	$ 832,128.00
Storage and Maintenance Facility	1	EA	40	1	$ 3,500,000.00	EA	$ 87,500.00
Yearly Expenses							
Operations and Maintenance							
Operating Costs (including fuel and hydraulic oil)							$ 145,000.00
Labor							$ 385,000.00
Maintenance							$ 18,000.00
Average Annual Cost							**$ 1,630,828.00**
Total Cost Over 40 Years							$ 65,233,120.00

Table 6 – Construction Cost Estimate for I-4, Segments 3 and 4 for Alternatives 1 through 4

Item	Alternative 1 (6+4) No Reversible Lanes	Alternative 2 (6+2) No Reversible Lanes	Alternative 3 (6+3) Reversible "Zipper" Lane	Alternative 4 (6+4 & 6+2) No Reversible Lanes
Number of Bridges that Need to be Replaced	9	6	10	6
Total New Bridge Area (SF)	670,829	442,573	643,826	603,531
Total Roadway Footprint Width	236-ft	212-ft	226-ft	236-ft & 212-ft
Right of Way Impacts	5316 SF	518 SF	5316 SF	5316 SF
Bridge cost	$86,558,991	$60,649,006	$82,281,339	$75,791,311
Roadway cost	$202,833,330	$183,093,703	$179,873,490	$193,327,309
Capital Cost of Barrier Transfer Machine and Moveable Median Barrier	$0	$0	$40,049,120	$0
40 Year Life Cycle Cost Analysis - Cost Per Year	$0	$0	$1,630,828	$0
Total Cost*	**$290,000,000**	**$244,000,000**	**$303,000,000**	**$270,000,000**

***Rounded up to the nearest $1M**

9.0 CONCLUSIONS AND RECOMMENDATIONS

Four alternative typical sections were considered as part of the reversible lane feasibility analysis for I-4, Segments 3 and 4. As summarized in National Cooperative Highway Research Program's (NCHRP) Synthesis 340 - Convertible Roadways and Lanes, critical criteria established by the American Association of State Highway and Transportation Officials (AASHTO) and the Institute of Transportation Engineers (ITE) should be met when determining the need for a reversible lane facility; these are:

1. Need for a high directional split - perhaps the most critical aspect in establishing need. NCHRP Synthesis 340, states "reversible operations are justified when 65 percent or more of the traffic moves in one direction during peak hours."
2. Average speed of the freeway should decrease by at least 25% during the trouble periods over the normal speed.
3. Traffic congestion problem under investigation should be both "periodic and predictable."
4. Transition periods, the conversion of flow from one direction to another, result in no use of reversible lanes, depending upon the length of facility, this can last for 6 to 8 hours. This is a loss of revenue for a tolled reversible managed lane facility.
5. The ratio of major flow direction lanes to minor flow direction lanes should be at least 2:1 and preferably 3:1, with the minor flow direction never having less than two lanes.
6. Reversible flow facilities are most suited for long limited access pass-through travel, such as moving vehicles from further suburban areas into central business districts (CBD) or activity centers.

The highest projected 2040 directional split is estimated to be 57% for the I-4 Segments 3 and 4 corridor and although distinct peaking periods when traffic is more directional are anticipated, the splits are not expected to be as significant throughout the remainder of the day and therefore, criterion 1 and 3 are not anticipated to be met. For the proposed corridor length of 19.7 miles, the total transfer time would take approximately 2 to 3 hours resulting in no use of the express lanes and loss of toll revenue during the transition period per criterion 4. The proposed reversible lane typical section configuration (Alternative 3 – 6 GUL +3 EL with Reversible "zipper" lane) results in one lane in the minor flow direction, therefore criterion 5 is not met.

As previously shown in Table 3, the projected 2040 traffic volumes in the express lanes would require a minimum of two express lanes to maintain LOS D in the peak direction of travel between west of SR 434 and the slip ramps west of Lake Mary Boulevard and between the slip ramps west of CR 46A and the slip ramps west of Dirksen Drive. All four alternatives were considered and reviewed based on historical and projected traffic volumes, existing and projected directional distribution patterns, project construction costs and other criteria used to address the need for long-term congestion relief along the I-4 corridor. Based on the preceding factors, Alternative 2 (6 GUL + 2 EL - No reversible lane) was not advanced for further consideration as desirable LOSs in the express lanes would not be achieved with a single express lane throughout the entire corridor. Of the remaining three alternatives, the estimated construction cost for the reversible lane alternative (Alternative 3) is approximately $303,000,000. Although the roadway and bridge construction

costs for Alternative 3 ($263M) were lower than for Alternative 1 ($290), the initial capital costs and recurring annual costs of the MMB system resulted in an overall higher cost for this alternative. The total construction costs for Alternatives 1 and 4 were similar with Alternative 4 approximately 7% ($20M) lower than Alternative 1. Based on the preceding life cycle cost analysis for the MMB system, the structural analysis of the bridge system over the St. Johns River and considering other design, operations, maintenance and cost factors evaluated in this report, it is recommended that the Alternative 1 (6 GUL + 4 EL) configuration be implemented throughout I-4, Segments 3 and 4.

APPENDICES

APPENDIX A

TRAFFIC INFORMATION

FDOT TRAFFIC COUNTS
HOURLY CONTINUOUS COUNTS

799906 ON I-4,169' E OF ENTERPRISE RD O/P,VOLUSIA CO. 5/24/2013

	EB	WB	TOTAL	EB	WB
1	671	454	1125	60%	40%
2	471	373	844	56%	44%
3	399	361	760	53%	48%
4	336	433	769	44%	56%
5	372	621	993	37%	63%
6	723	1600	2323	31%	69%
7	1531	3447	4978	31%	69%
8	2424	4084	6508	37%	63%
9	2588	3572	6160	42%	58%
10	2483	3018	5501	45%	55%
11	2989	2917	5906	51%	49%
12	3205	2949	6154	52%	48%
13	3444	3076	6520	53%	47%
14	3677	3197	6874	53%	47%
15	3865	3469	7334	53%	47%
16	4514	3727	8241	55%	45%
17	4626	3821	8447	55%	45%
18	4437	3848	8285	54%	46%
19	4202	3436	7638	55%	45%
20	3516	2813	6329	56%	44%
21	2650	2294	4944	54%	46%
22	2357	1872	4229	56%	44%
23	1920	1473	3393	57%	43%
24	1319	999	2318	57%	43%

770343 SR-400/I-4,1.6 MI E OF SR-434,SEMINOLE CO. 3/5/2013

	EB	WB	TOTAL	EB	WB
1	623	567	1190	52%	48%
2	404	376	780	52%	48%
3	349	305	654	53%	47%
4	324	349	673	48%	52%
5	392	663	1055	37%	63%
6	860	1867	2727	32%	68%
7	2315	4787	7102	33%	67%
8	4234	5476	9710	44%	56%
9	4776	4886	9662	49%	51%
10	3872	4209	8081	48%	52%
11	3667	3746	7413	49%	51%
12	3997	3809	7806	51%	49%
13	3862	3594	7456	52%	48%
14	4131	3561	7692	54%	46%
15	4283	3828	8111	53%	47%
16	4966	3869	8835	56%	44%
17	5728	4364	10092	57%	43%
18	5819	5503	11322	51%	49%
19	5267	4428	9695	54%	46%
20	3830	2827	6657	58%	42%
21	2748	2040	4788	57%	43%
22	2193	1739	3932	56%	44%
23	1608	1315	2923	55%	45%
24	1190	893	2083	57%	43%

APPENDIX B

CONCEPT PLANS (ALTERNATIVE 1)

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PLOT SCALE: 1:200

MARKHAM WOOD RD.

SEMINOLE WEKIVA TRAIL

0 50 200
Feet

NEIGHBORHOOD ALLIANCE CHRUCH

EXIST. LA R/W LINE

WB REST AREA TO BE REALIGNED PER FPID 432193-1-52-10 CONSTRUCTION EXPECTED FY 2015

2030 2035 2040 2045 2050 2055

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

END I-4 ULTIMATE
EB-SUL AND EXPRESS LANES
FPID 242484-3-52-01
BEGIN SEGMENT 3
EB-GUL AND EXPRESS LANES
FPID 432100-1-22-01
STA. 2043+71.32

EXIST. LA R/W LINE

MATCHLINE STA. 2057+00.00

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EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

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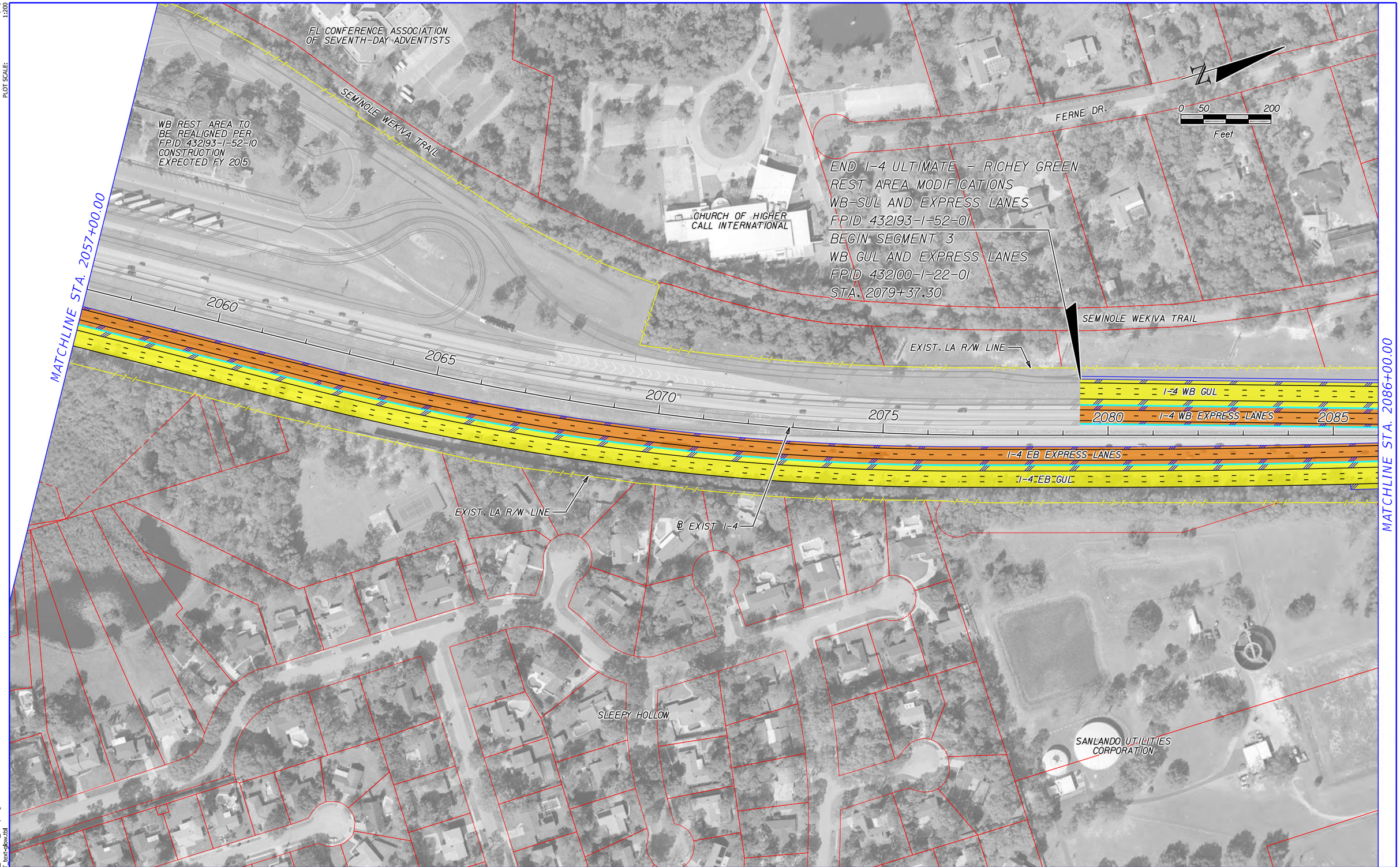

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EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

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MATCHLINE STA. 2086+00.00

MATCHLINE STA. 2116+00.00

SEMINOLE WEKIVA TRAIL

SUNSHINE TREE BLVD.

EE WILLIAMSON

MARKHAM WOODS ANIMAL HOSPITAL

EXIST. LA R/W LINE

PROPOSED R/W LINE

FPC 300-B

I-4 WB GUL

2090

I-4 WB EXPRESS LANES

2095

2100

2105

2110

2115

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

DES PINAR LANE

NORTH COVE

POND 300

PROPOSED LA R/W LINE

0 50 200

Feet

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

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I-4 MAINLINE
SEGMENT 3

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PLOT SCALE: 1:200

SUNSHINE TREE BLVD.
DIXON RD.
RUTLEDGE RD.
0 50 200
Feet
PROPOSED R/W LINE
PARCEL ID: 26-20-29-300-0010-0000
AREA TAKEN: 64,502 SF
10
FPC 300-B
MARKHAM WOODS
CHURCH & CHRISTIAN ACADEMY
10
100 FT. ACCESS EASEMENT
15
15 FT. NON-EXCLUSIVE ACCESS EASEMENT
DIXON RD.
EXIST. LA R/W LINE
EXIST. 48" RCP
EXIST. 54" RCP
MATCHLINE STA. 2116+00.00
I-4 WB GUL
2120
2125
2130
2135
2140
2145
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
@ EXIST I-4
MATCHLINE STA. 2146+00.00
I-4 EB GUL TO
REST AREA
EB REST AREA
POND 300
8
PROPOSED LA R/W LINE
12
FPC 300-A
EXIST. LA R/W LINE
12
13
14
NORTHRIDGE DR.
POND 301
PROPOSED LA R/W LINE
11
PARCEL ID: 25-20-29-300-0050-0000
AREA TAKEN: 53,615 SF
PARCEL ID: 25-20-29-503-0A00-0000
AREA TAKEN: 150,337 SF
NORTHRIDGE

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:48:30 AM
U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

STA. 2146+00.00

MATCHLINE STA.

STA. 2176+00.00

MATCHLINE STA.

N

0 50 200
Feet

16

15 FT. NON-EXCLUSIVE ACCESS EASEMENT

POND 302

EXIST. LA R/W LINE

GROWLEY CIR.

15 17 22 23 31 32 33 38 39 40 45 46 47

I-4 WB GUL

2150 2155 2160 2165 2170 2175

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EB REST AREA

REST AREA TO I-4 EB GUL

18 19 20 21 24 25 26 27 28 29 30 34 35 36 37 43 44

EXIST. LA R/W LINE

PINE BAY DR

HUNTINGTON POINTE

PERPETUAL EASEMENT

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:48:50 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2176+00.00

MATCHLINE STA. 2206+00.00

CROWLEY CIR.

LONG POND DR.

WALDENS POND COVE

0 50 200
Feet

PARCEL ID: 24-20-29-300-0090-0000
AREA TAKEN: 17,872 SF

PROPOSED LA R/W LINE

POND 303-B2

47 48 51 52 53 54 55 56 58 59 60 61 62 64 65

EXIST. LA R/W LINE

℄ EXIST I-4

I-4 WB GUL

2180 2185 2190 2195 2200 2205

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST. LA R/W LINE

POND 303-A2

SKYLINE DR

49A 50 57 63

FOX 35 WOFL

GOOD LIFE BROADCASTING

POND 303-A1

49B

PROPOSED LA R/W LINE

SUN TECH COMMERCE PARK

SKYLINE DR.

PARCEL ID: 24-20-29-512-0000-0020
AREA TAKEN: 99,473 SF

FL POWER CORP

ATRIUM CORPORATE CENTER

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:49:18 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2206+00.00

MATCHLINE STA. 2236+00.00

N

0 50 200
Feet

CHARDONNAY CT.

DUNBROOKE LOOP

LAKE MARY SENIOR LIVING

INTERNATIONAL PKWY.

BENTONSHIRE PL.

WALDENS POND COVE

25 FT. MAINTENANCE ROAD EASEMENT

POND 304

EXIST. LA R/W LINE

65 66 67 68 69 70 76

I-4 WB GUL

2210 2215 2220 2225 2230 2235

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

63

SKYLINE DR.

CANDLEWOOD SUITES

EXIST. LA R/W LINE

SCHOLASTIC

FILUTOWSKI INSTITUTE

FOUR NORTHPOINT CENTER

THE A.G. MAURO COMPANY

DUKE ENERGY

SANDPOND RD

71 72 73 74 75

GREENWOOD BLVD

LAKE MARY DORMITORY

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

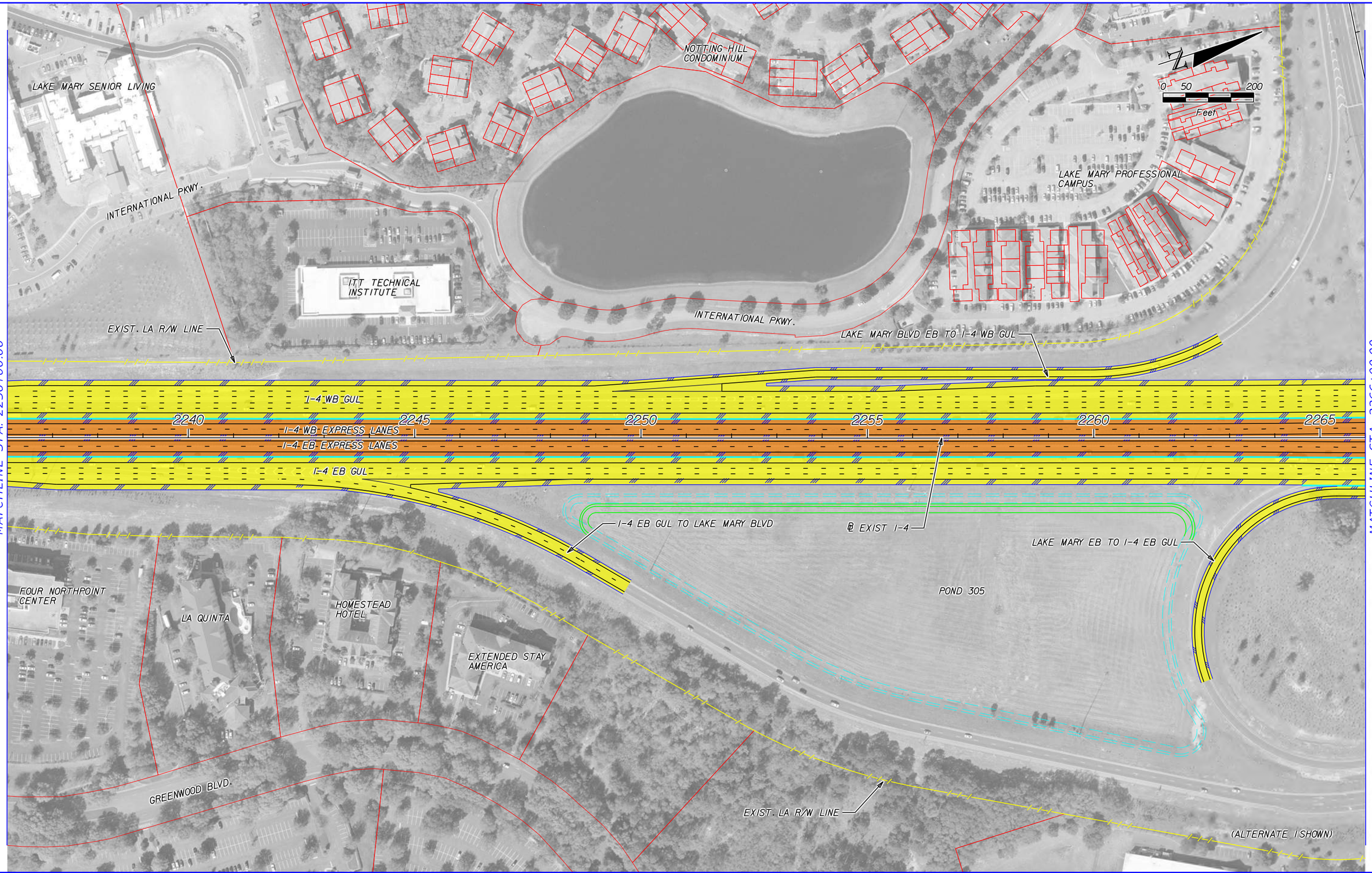
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:49:43 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:50:01 AM

U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2266+00.00

MATCHLINE STA. 2296+00.00

WESCAR

EXIST. LA R/W LINE

65 LAKE MARY BLVD

I-4 WB GUL TO LAKE MARY BLVD

COVERGY'S

77

INTERNATIONAL PKWY.

0 50 200
Feet

SEMINOLE COUNTY WASTEWATER TREATMENT

80

LAKE MARY WB TO I-4 WB GUL

POND 306

70

2270 2275 2280 2285 2290 2295

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

LAKE MARY EB TO I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

LAKE MARY WB TO I-4 EB GUL

HILTON GARDEN INN

HOMEWOOD SUITES

78

CRESCENT AT PRIMERA ONE

CRESCENT AT PRIMERA TWO

HNTB CORPORATION

75 LAKE MARY BLVD

80

202

MACARONI GRILL

(ALTERNATE I SHOWN)

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

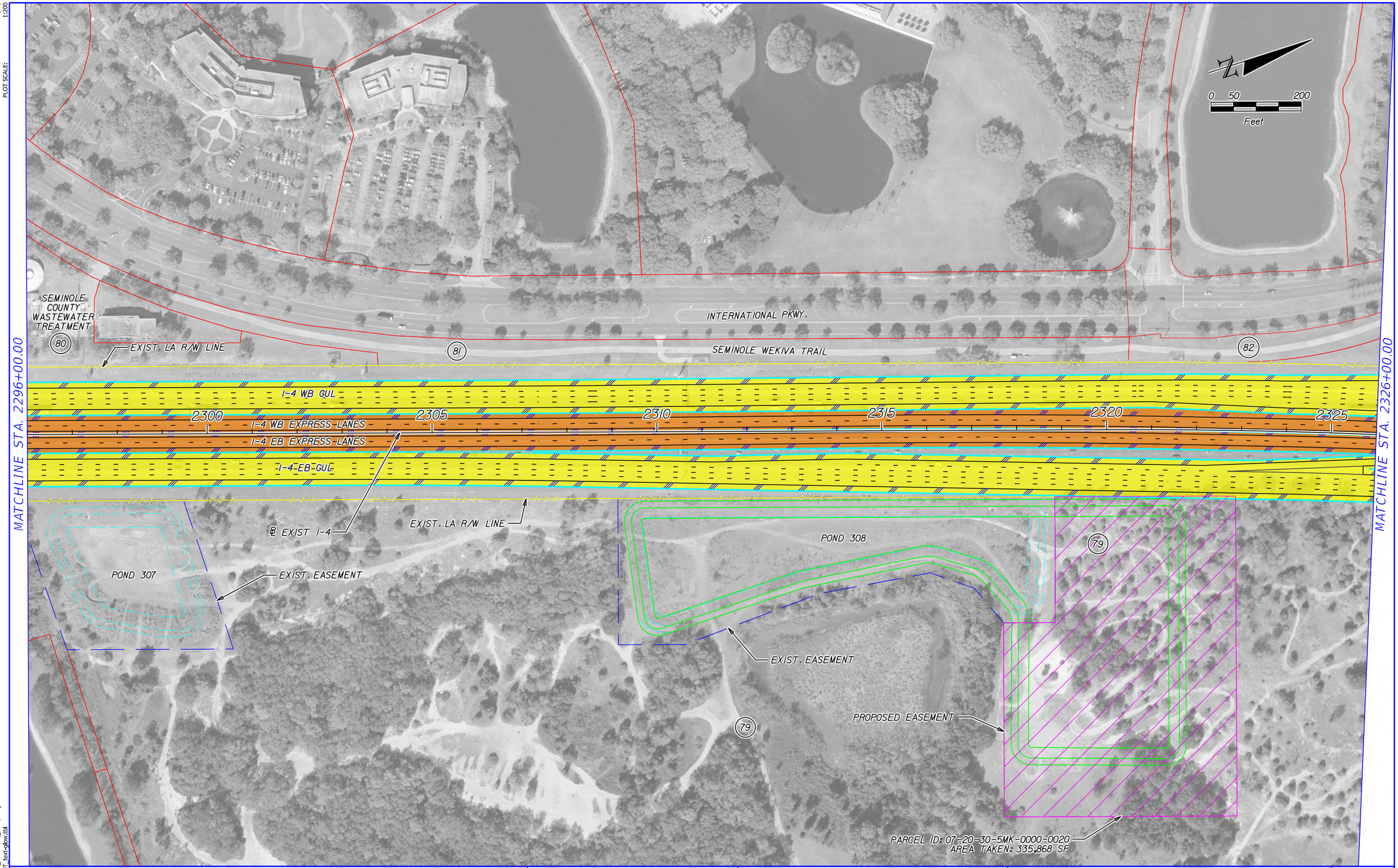
I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:50:20 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDE_PPE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

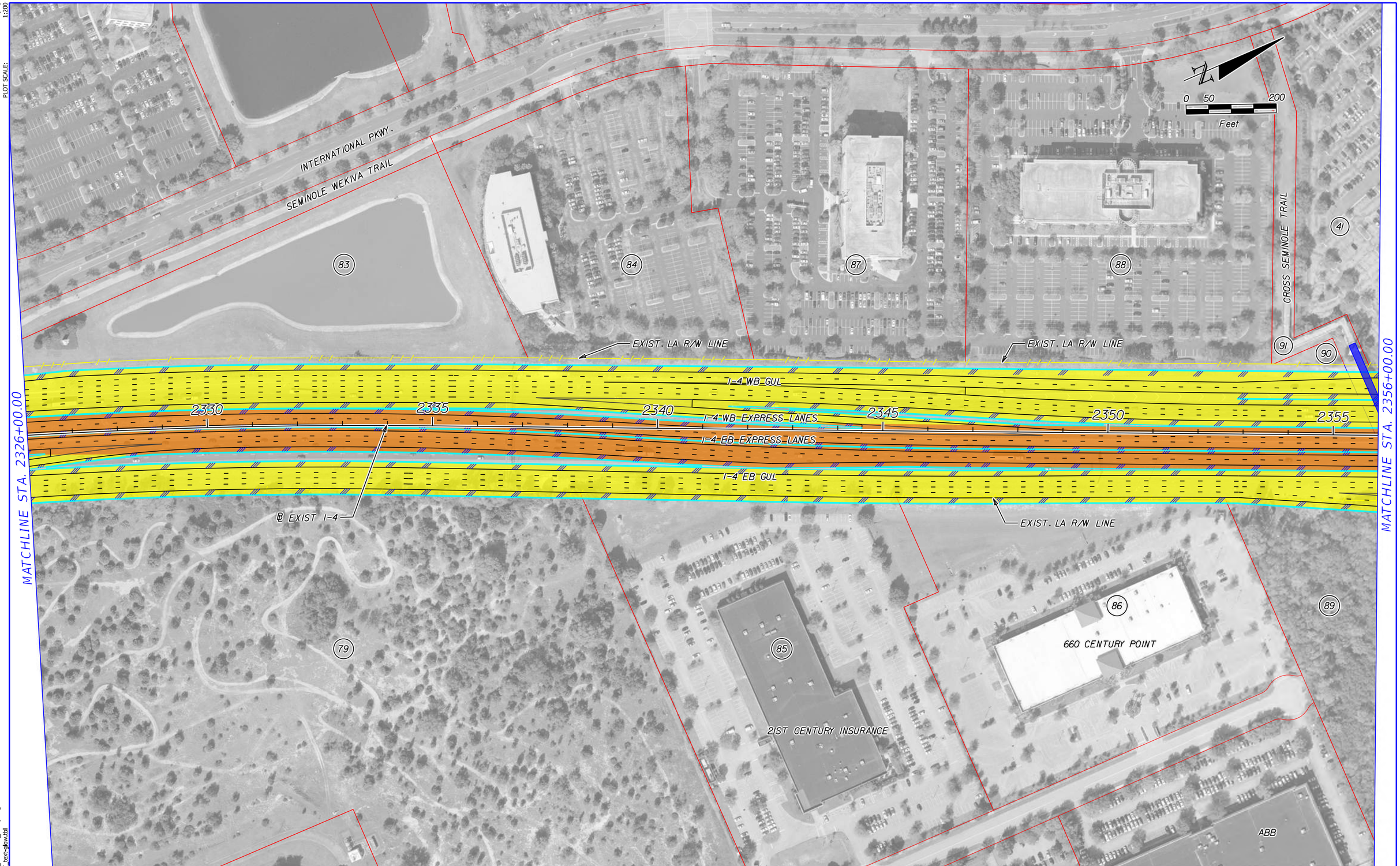
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:50:38 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:50:57 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2356+00.00

MATCHLINE STA. 2386+00.00

92B

41

92A

EXIST. LA R/W LINE

AIRSPACE AGREEMENT

CR 46A GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2360

2365

2370

2375

2380

2385

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

PARCEL ID: 06-20-30-300-0010-0000
AREA TAKEN: 15,382 SF

EXISTING BRIDGE TO REMAIN

PARCEL ID: 06-20-30-300-0010-0000
AREA TAKEN: 3,27 SF

I-4 EB GUL RAMP TO CR 46A GUL

0 50 200
Feet

POND 309

EXIST. LA R/W LINE

GR-46A

65

89

CROSS SEMINOLE TRAIL

93

POST OFFICE

EXIST. LA R/W LINE

POND 310

94

CENTENNIAL BANK

UNITED STATES POST OFFICE

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:51:15 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2386+00.00

MATCHLINE STA. 2416+00.00

0 50 200
Feet

EXIST. LA R/W LINE

SR 429 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL RAMP TO SR 417 GUL

SR 417 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2390 2395 2400 2405 2410 2415

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

CR 46A RAMP TO I-4 EB GUL

I-4 EB GUL RAMP TO SR 417 GUL

EXIST. LA R/W LINE

POND 311

CR 46A

EXIST. LA R/W LINE

RINEHART RD.

ABC FINE WINE & SPIRITS

SANFORD INFINITI

HONDA

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:51:33 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2416+00.00

MATCHLINE STA. 2446+00.00

EXIST. R/W LINE

WEKIVA PARKWAY

30

35

40

45

50

SR 417

0 50 200
Feet

I-4 WB GUL RAMP TO SR 417 GUL

EXIST. LA R/W LINE

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2420

2425

2430

2435

2440

2445

EXIST. LA R/W LINE

SR 417 GUL RAMP TO I-4 EB GUL

EXIST. LA R/W LINE

132W

UNITED ARTISTS
SEMINOLE TOWNE CENTER
10 MOVIE THEATER

TOWNE CENTER C/R.

EXIST. R/W LINE

134W

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:51:55 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2446+00.00

MATCHLINE STA. 2476+00.00

EXIST. LA R/W LINE

POND 312

DS = 55 MPH
R = 955'

9

0 50 200
Feet

SEMINOLE FORD

EXIST. PERP. EASEMENT

2450 2455 2460 2465 2470 2475

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

TOWNE CENTER CIR.

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

MILLER'S ALE HOUSE RESTAURANT

N. MALL ENTRANCE RD.

STEAK'N SHAKE

SEMINOLE TOWNE SQUARE MALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:52:16 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2476+00.00

MATCHLINE STA. 2506+00.00

AUDI NORTH ORLANDO AND AUTO MALL

0 50 200
Feet

EXIST. LA R/W LINE

SR 46 GUL RAMP TO I-4 WB GUL

SR 46 EB GUL RAMP TO I-4 WB GUL

EXIST. LA R/W LINE
EXIST. PERP. EASEMENT

POND 313A

POND 313

AUDI NORTH ORLANDO

I-4 WB GUL RAMP TO SR 46 GUL

65

SR 46

70

75

80

2480

2485

2490

2495

2500

2505

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

I-4 EB GUL RAMP TO SR 46 GUL

99

100

101

102

103

SUPER 8 MOTEL

CRACKER BARREL

EXIST. LA R/W LINE

COMFORT INN

POND 314

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

SPRINGHILL SUITES

TOWNE RD.

HOPS RESTAURANT

OREGON AVE.

SUNOCO GAS STATION

OUTBACK STEAKHOUSE

HICKMAN DR.

MCDONALDS

7-11 GAS STATION

MOBIL GAS STATION

MATRESS GIANT

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:52:35 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-6-4.dgn

MODEL:
SHEET SIZE: planrd17
PLOT SCALE: 16.5x10.6 (in.) 1:200

0 50 200
Feet

50 FT. EASEMENT

EXIST. LA R/W LINE

MATCHLINE STA. 2506+00.00

MATCHLINE STA. 2536+00.00

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

2510
2515
2520
2525
2530
2535

℄ EXIST I-4

EXIST. LA R/W LINE

104
105
106
107

POND 314

HARLEY-DAVIDSON

FIVE-R

HICKMAN CIR.

PLUMMER

RUG KING

HIGH REACH 2

FASTERER CORP

GO ELECTRONICS

HICKMAN DR.

GUARDIAN EQUIPMENT

EWING

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkbw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:52:54 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2536+00.00

MATCHLINE STA. 2566+00.00

DUNBAR AVE.

CHESTNUT ST.

PORT OF SANFORD

ORANGE BLVD.

LA MESA RV

0 50 200
Feet

SEMINOLE COUNTY PORT AUTHORITY

110

116

109

115

110 FT. DUKE ENERGY EASEMENT

110 FT. FPL EASEMENT

EXIST. LA R/W LINE

US 17/92 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2540 2545 2550 2555 2560 2565

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST. LA R/W LINE

108

107

112

EXIST I-4

113

114

117

118

118

I-4 EB GUL RAMP TO US 17/92

SCHOOL ST.

ELDER RD.

SOUTHERN PRIDE BUSINESS CENTER

ORANGE BLVD.

POND 316

FLORIDA ROCK INDUSTRIES

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

smoss 4/29/2014 9:53:12 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2566+00.00

EXIST LA R/W LINE

150

70

US 17/92

151

I-4 WB GUL RAMP TO US 17/92 GUL

75

EXIST. LA R/W LINE

END SEGMENT 3
STA. 2583+00.00

I-4 WB GUL

2570

I-4 WB EXPRESS LANES

2575

2580

2585

2590

2595

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

80

EXISTING BRIDGES TO REMAIN

MONROE RD GUL RAMP TO I-4 EB GUL

EXIST. R/W LINE

US 17/92

85

MONROE RD.

132

134

VOLUSIA COUNTY
SEMINOLE COUNTY

ST. JOHNS RIVER

0 50 200
Feet

(ALTERNATE I SHOWN)

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:53:34 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-4.dgn

MODEL:
SHEET SIZE: planrd01
PLOT SCALE: 16.5x10.6 (in.) 1:200

WETLAND BOUNDARY
WETLAND BOUNDARY
SURFACE WATER LINE
SURFACE WATER BOUNDARY
LA R/W LINE
WETLAND LINE
BEGIN SEGMENT 4
STA. 2583+00.00
℄ EXIST I-4
SURFACE WATER LINE
WETLAND BOUNDARY
SURFACE WATER BOUNDARY
SURFACE WATER BOUNDARY
WETLAND LINE
WETLAND LINE
WETLAND BOUNDARY
WETLAND LINE
R/W LINE
R/W LINE

US 17/92
70
75
80
85

2570 2575 2580 2585 2590 2595

I-4 WB CUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB CUL

VOLUSIA COUNTY
SEMINOLE COUNTY
ST. JOHNS RIVER

0 50 200
Feet

MATCHLINE STA. 2596+00.00

Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.ctb
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 9:55:13 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2596+00.00

MATCHLINE STA. 2626+00.00

0 50 200
Feet

83

WETLAND LINE

LA R/W LINE

I-4 WB CUL

2600

I-4 WB EXPRESS LANES

2605

2610

2615

2620

2625

I-4 EB EXPRESS LANES

I-4 EB CUL

℄ EXIST I-4

WETLAND LINE

LA R/W LINE

LAKE MONROE

R/W LINE

VOLUSIA COUNTY
SEMINOLE COUNTY

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:55:54 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2626+00.00

MATCHLINE STA. 2656+00.00

POND 400

0 50 200
Feet

83

84

85

WETLAND LINE

LA R/W LINE

SW-2(W)

WL-3(W)

I-4 WB GUL

2630 2635 2640 2645 2650 2655

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

WETLAND LINE

LA R/W LINE

WL-1(E)

1

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

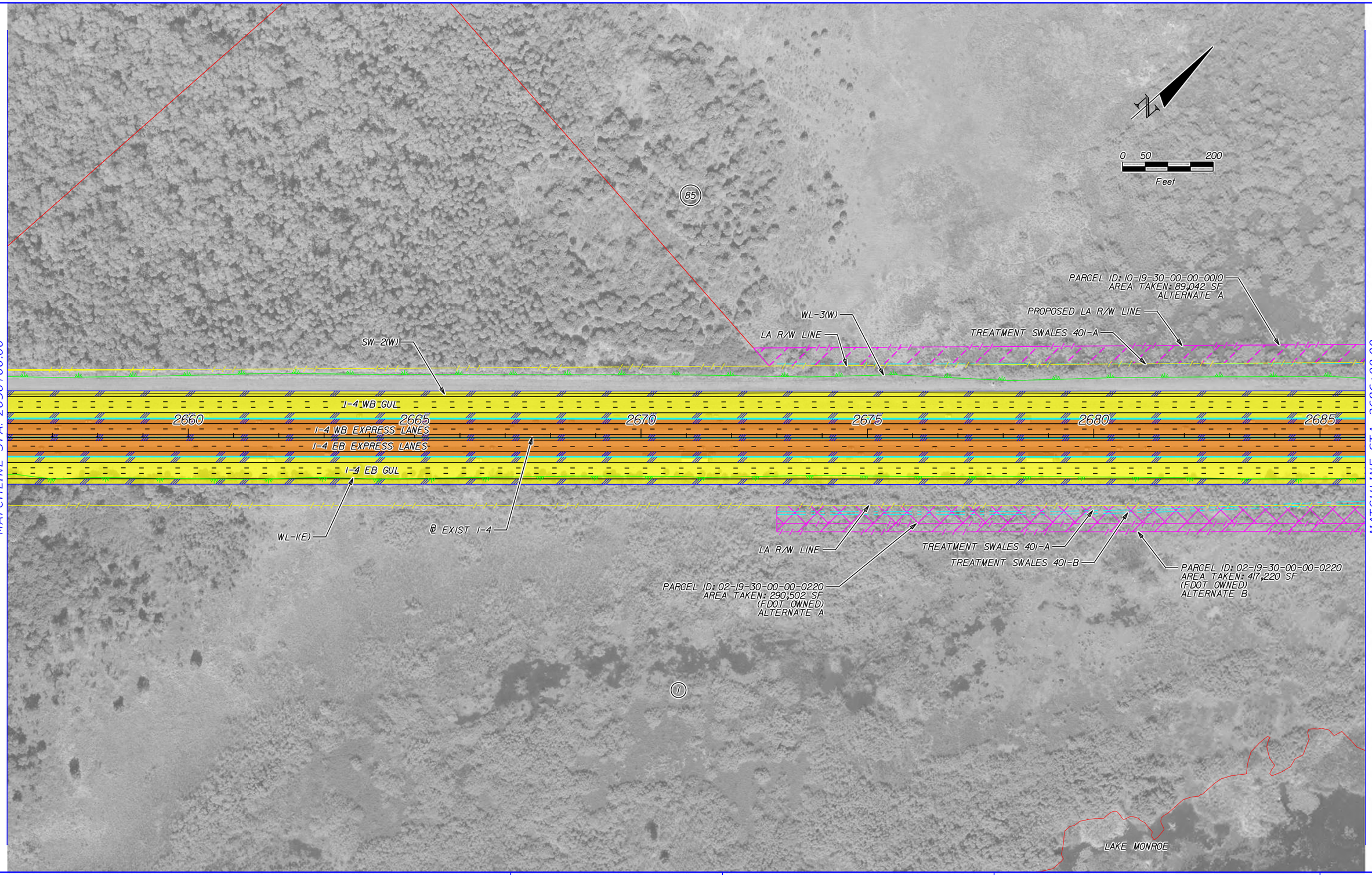
I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.ctb
PRINT DRIVER:
PEN TABLE:

smoss 4/29/2014 9:56:23 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 9:56:44 AM

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MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2686+00.00

MATCHLINE STA. 2716+00.00

0 50 200
Feet

85

86

87

1

PARCEL ID: 10-19-30-00-00-0010
AREA TAKEN: 89,042 SF
ALTERNATE A

PARCEL ID: 11-19-30-00-00-0010
AREA TAKEN: 52,676 SF
ALTERNATE A

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 33,264 SF
ALTERNATE A

WL-3(W)

SW-2(W)

LA R/W LINE

PROPOSED LA R/W LINE

TREATMENT SWALES 401-A

I-4 WB GUL

2690

2695

2700

2705

I-4 WB EXPRESS LANES

2710

2715

I-4 EB EXPRESS LANES

I-4 EB GUL

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 290,502 SF
(FDOT OWNED)
ALTERNATE A

WL-1(E)

℄ EXIST I-4

LA R/W LINE

TREATMENT SWALES 401-A

TREATMENT SWALES 401-B

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 417,220 SF
(FDOT OWNED)
ALTERNATE B

LAKE MONROE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

smoss 4/29/2014 9:57:06 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2716+00.00

MATCHLINE STA. 2746+00.00

PADGET CREEK

0 50 200
Feet

POND 401

88

87

263

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 2,152 SF
ALTERNATE A

LA R/W LINE

WL-3(W)

PROPOSED LA R/W LINE

TREATMENT SWALES 401-A

PARCEL ID: 02-19-30-00-00-0002
AREA TAKEN: 102,043 SF
ALTERNATE A

I-4 WB GUL

2720 2725 2730 2735 2740 2745

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

WL-1(E)

LA R/W LINE

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 290,502 SF
(FDOT OWNED)
ALTERNATE A

TREATMENT SWALES 401-A

TREATMENT SWALES 401-B

PARCEL ID: 02-19-30-00-00-0220
AREA TAKEN: 417,220 SF
(FDOT OWNED)
ALTERNATE B

1

LAKE MONROE

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 9:57:28 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2746+00.00

MATCHLINE STA. 2776+00.00

RIVER OAKS

WETLAND LINE

SURFACE WATER BOUNDARY

BURGER KING

65

KANGAROO GAS STATION

HAMPTION INN

DIRKSEN DR.

LA R/W LINE

SW-3A(W)

WETLAND BOUNDARY

0 50 200 Feet

POND 402A

IHOP

SW-4(W)

PADGETT CREEK

89

88

WETLAND LINE

SURFACE WATER BOUNDARY

90

WL-3(W)

LA R/W LINE

RIVERSIDE

SW-3(W)

70

DIRKSEN DR RAMP TO I-4 WB GUL

POND 402D

2750

2755

I-4 WB GUL

2760

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2765

2770

2775

WL-1(E)

LA R/W LINE

℄ EXIST I-4

WETLAND LINE

1

92

93

94

95

96

LAKE MONROE

WL1A(E)

I-4 EB GUL RAMP TO DIRKSEN DRIVE

POND 402B

POND 402C

SPRING TO SPRING TRAIL (CURRENTLY UNDER CONSTRUCTION)

260 FT. DUKE ENERGY EASEMENT

SW-3(W)

80

LA R/W LINE

SW-2(E)

85

(ALTERNATE I SHOWN)

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

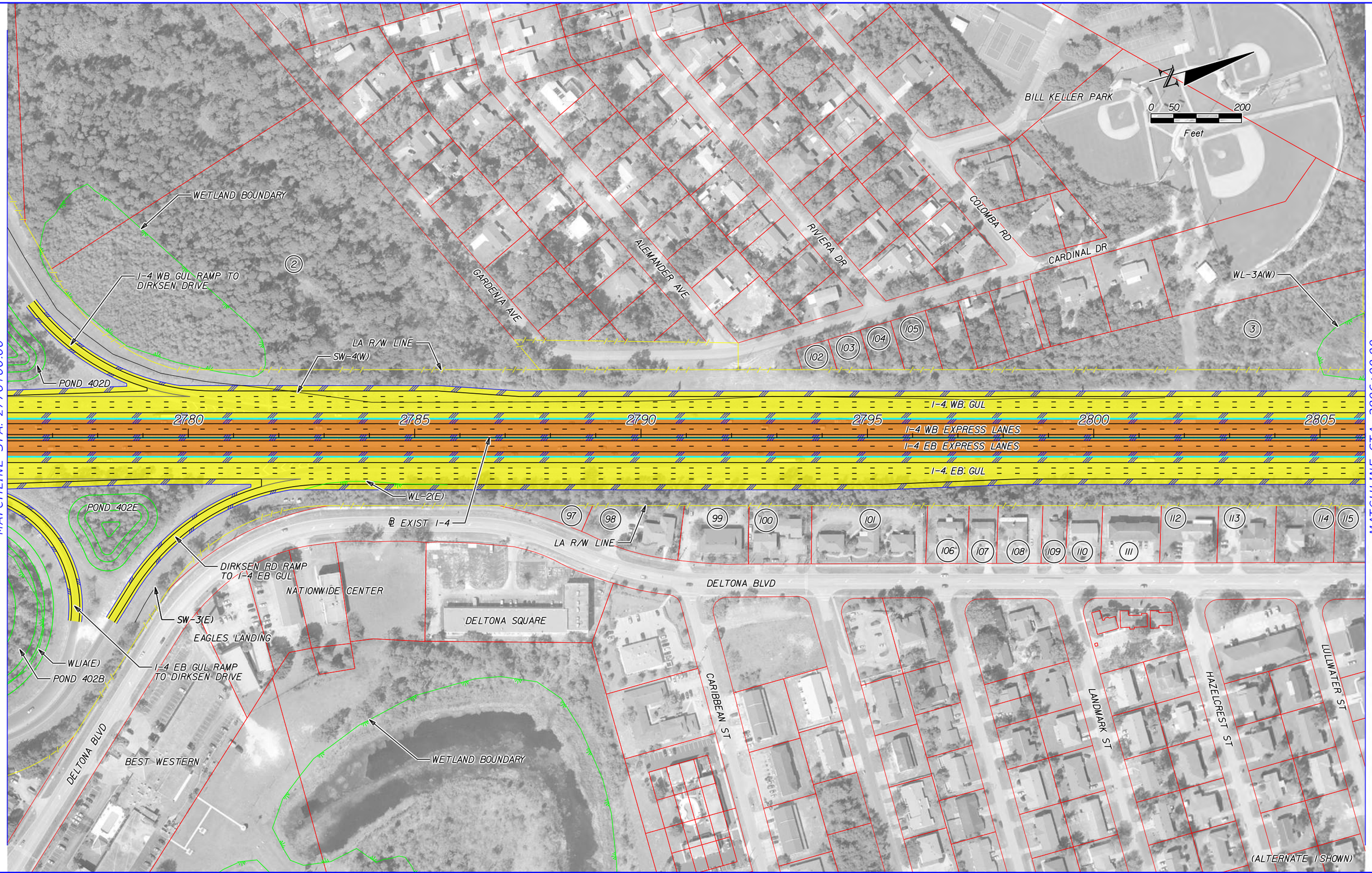
smoss 4/29/2014 9:57:52 AM

U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2776+00.00

MATCHLINE STA. 2806+00.00



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 9:58:15 AM

U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2806+00.00

MATCHLINE STA. 2836+00.00

0 50 200
Feet

LA R/W LINE

WL-3A(W)

ENTERPRISE RD.

VOLUSIA RENTAL

UNCLE BOB'S SELF STORAGE

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2810 2815 2820 2825 2830 2835

WETLAND BOUNDARY B EXIST I-4

LA PETITE ACADEMY

DELTONA FOUNTAINS MEDICAL CLINIC

MUFFLER MAN

JUSTIN SQUARE

SUNTRUST

FIRST SOUTHERN BANK

S. EMBASSY DR

W. EMBASSY DR

DARTMOUTH ST

SUNOCO GAS STATION

HERITAGE GOLD & DIAMOND EXCHANGE

SPACE COAST CREDIT UNION

US POST OFFICE

DELTONA BLVD

3 4 5 6 7 8 115 116 117 118 119 120 121 122 123 124 125 126 127 129 130 131 132 133 134 135 136 137 138 139 140 141

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkvw.tbl

smoss 4/29/2014 9:58:35 AM

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MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2836+00.00

MATCHLINE STA. 2866+00.00

0 50 200
Feet

HUFFORD DR
BROKENSHIRE DR
DONALDSON DR
SW-5(W)
SW-7(W)
SW-6(W)
SW-8(W)
LA R/W LINE
GASLINE LAKE
I-4 WB GUL
I-4 WB EXPRESS LANES
POND 403
FPC 403
℄ EXIST I-4
I-4 EB EXPRESS LANES
I-4 EB GUL
2840
2845
2850
2855
2860
2865
W. EMBASSY DR
DARTMOUTH ST
QUAIL ROOST ST
EAGLES NEST AVE
ARAB ST
ABBEVILLE ST
BUCCANEER AVE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

smoss 4/29/2014 9:58:54 AM

U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2866+00.00

MATCHLINE STA. 2896+00.00

HAYMAN CT
DOLPHIN COVE CT
MOSS POINT COVE CT
LANYARD LN
LAKE EMERALD
SURFACE WATER LINE
0 50 200
Feet
WL-4(W)
SW-7(W)
SURFACE WATER BOUNDARY
SW-9(W)
LA R/W LINE
SW-12A(W)
I-4 WB GUL
I-4 WB EXPRESS LANES
EMERALD AVE
FLORIDA AVE
189
188
SW-8(W)
SW-10(W)
POND 404
℄ EXIST I-4
SW-11(W)
SW-12(W)
2870
2875
2880
2885
2890
2895
I-4 EB EXPRESS LANES
I-4 EB GUL
WL-3(E)
179
180
181
182
183
184
185
186
187
LA R/W LINE
KETTERING RD
W. EVANS CIR
HAVERSHAM RD
COUNTY R/W LINE
WETLAND LINE
ASHBOURNE WAY
BUCCANEER AVE
KETTERING RD
TROUT LAKE
SURFACE WATER LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 9:59:12 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MATCHLINE STA. 2896+00.00

HOLIDAY INN EXPRESS
SURFACE WATER BOUNDARY
189
GOOSE LAKE
LA R/W LINE
SW-12A(W)
SAXON BLVD RAMP TO I-4 WB GUL
SW-12B(W)
EXIST. 36" RCP
I-4 WB GUL RAMP TO SAXON BLVD EB
POND 405A
SW-12C(W)
POND 405B
SAXON BLVD.
65
145 FT. FPL EASEMENT
R/W LINE
0 50 200
Feet
POND 406A
SURFACE WATER BOUNDARY
LA R/W LINE
14
SAXON BLVD WB RAMP TO I-4 WB GUL
POND 406B
I-4 WB GUL RAMP TO WB SAXON BLVD
70
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
2900
2905
2910
2915
2920
2925
℄ EXIST I-4
COUNTY R/W LINE
I-4 EB GUL RAMP TO SAXON BLVD EB
30 FT. DRAINAGE EASEMENT
SURFACE WATER LINE
LA R/W LINE
TROUT LAKE
75
SAXON BLVD.
80
I-4 EB GUL RAMP TO SAXON BLVD WB
POND 407A
SW-4A(E)
SW-4(E)
POND 407B
POND 407C
SAXON BLVD RAMP TO I-4 EB GUL
LA R/W LINE
SW-5(E)
POND 408
SURFACE WATER LINE (ALTERNATE I SHOWN)

MATCHLINE STA. 2926+00.00

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
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SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

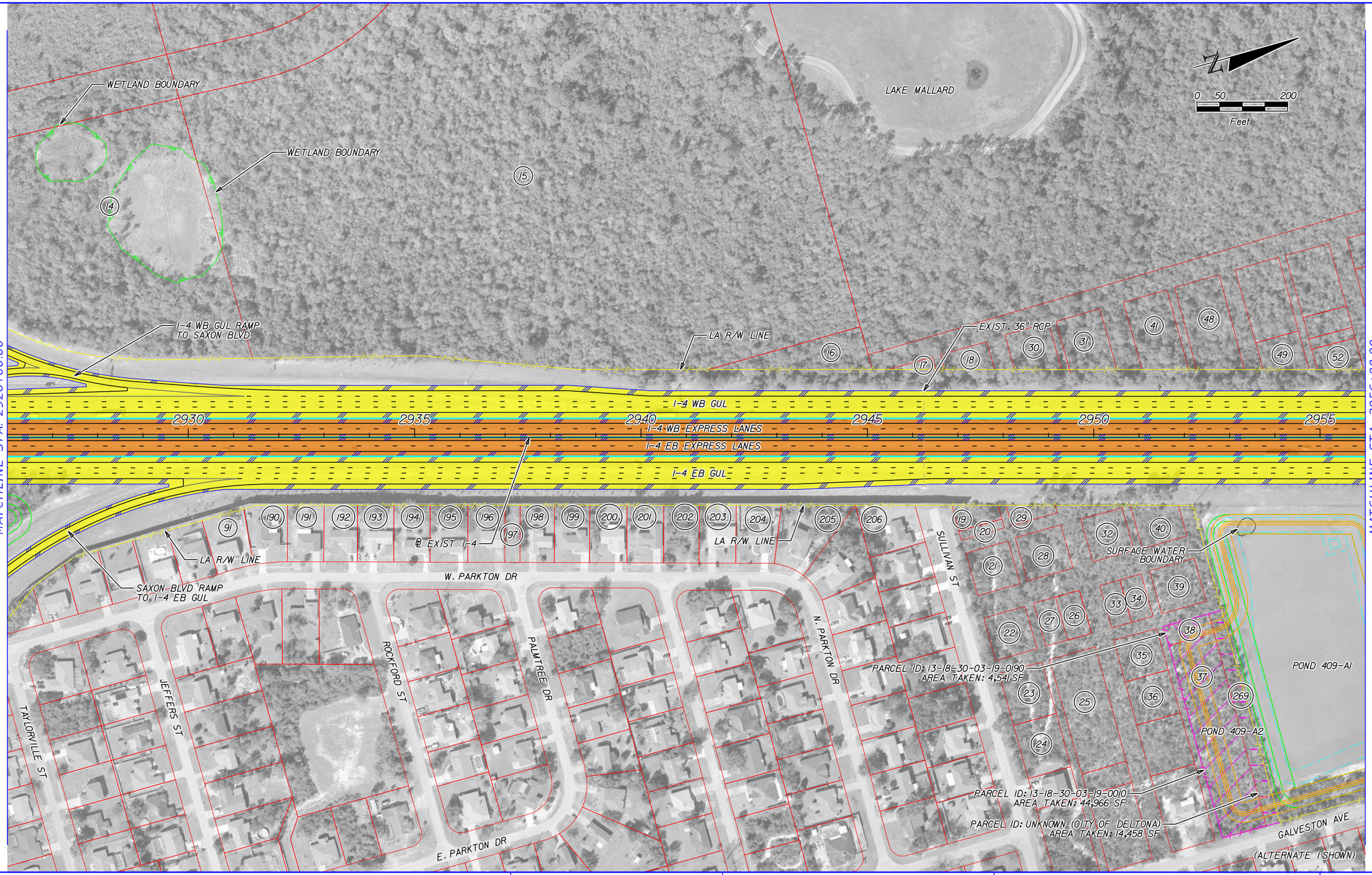
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

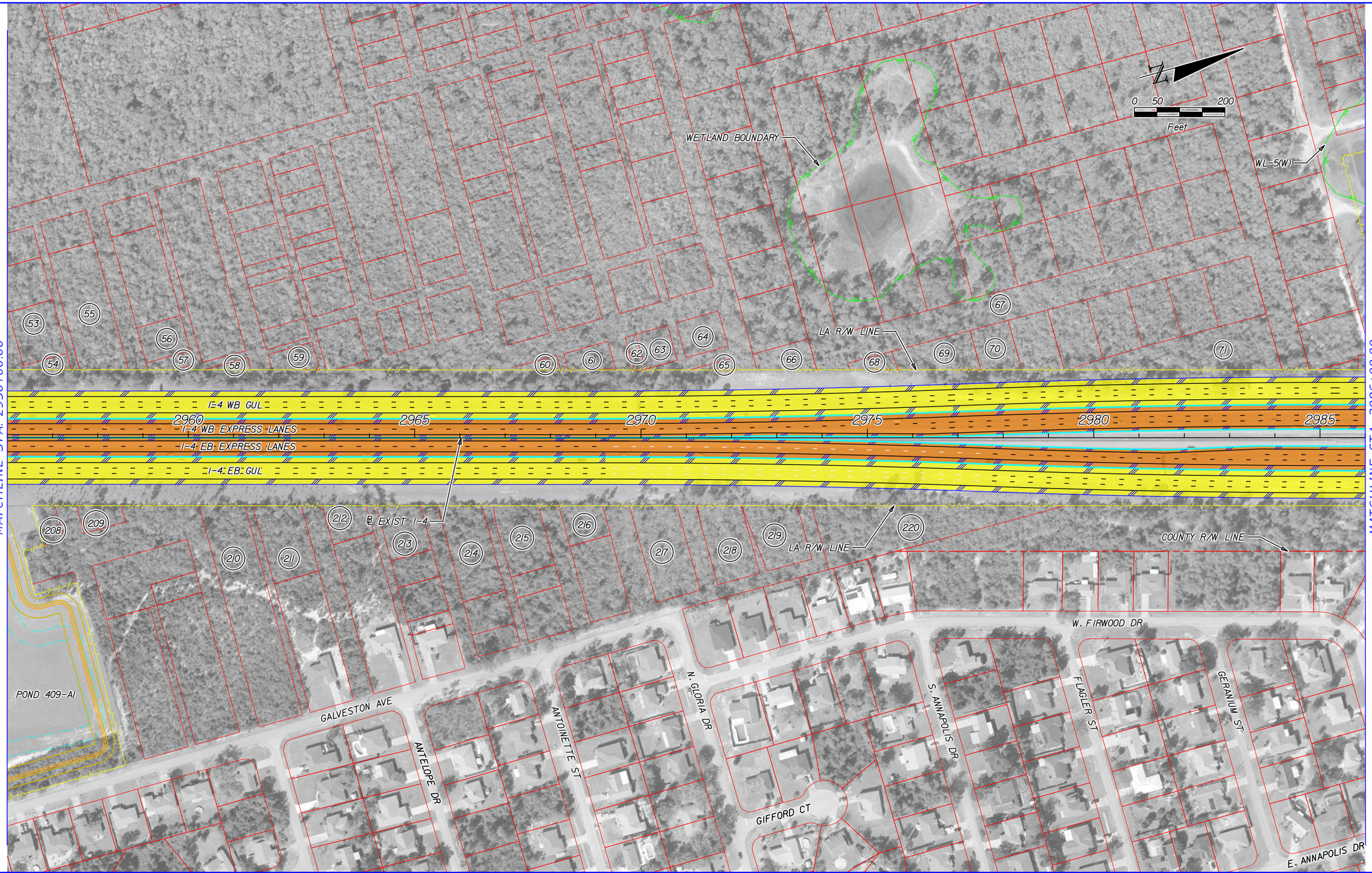
SHEET NO.

smoss 4/29/2014 9:59:50 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2956+00.00

MATCHLINE STA. 2986+00.00



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-gkw.tbl

smoss 4/29/2014 10:00:12 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL:
SHEET SIZE: planrd15
PLOT SCALE: 16.5x10.6 (in.) 1:200

MATCHLINE STA. 2986+00.00

MATCHLINE STA. 3016+00.00

PROPOSED COUNTY R/W LINE

RHODE ISLAND

PROPOSED COUNTY R/W LINE

WL-5(W)

73

110R

FUTURE RHODE ISLAND AVENUE ALIGNMENT

S. KENTUCKY AVE

ABBOTT WOODS LN

HOLLOW RIDGE DR

N

0 50 200

Feet

PROPOSED LA R/W LINE

111R

POND 409-BI

72

PROPOSED LA R/W LINE

LA R/W LINE

227 228 229 230 231 232 235 238 239 243 244 245

I-4 WB GUL

I-4 WB EXPRESS LANES

2990 2995 3000 3005 3010 3015

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST. 36" RCP

℄ EXIST I-4

COUNTY R/W LINE

COUNTY R/W LINE

LA R/W LINE

50 FT. FPL EASEMENT

PROPOSED LA R/W LINE

225 226 233 234 236 237 240 241 242

221 222 223 224

PROPOSED LA R/W LINE

PROPOSED COUNTY R/W LINE

RHODE ISLAND

DELTONA WATER TREATMENT

PROPOSED COUNTY R/W LINE

112R

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

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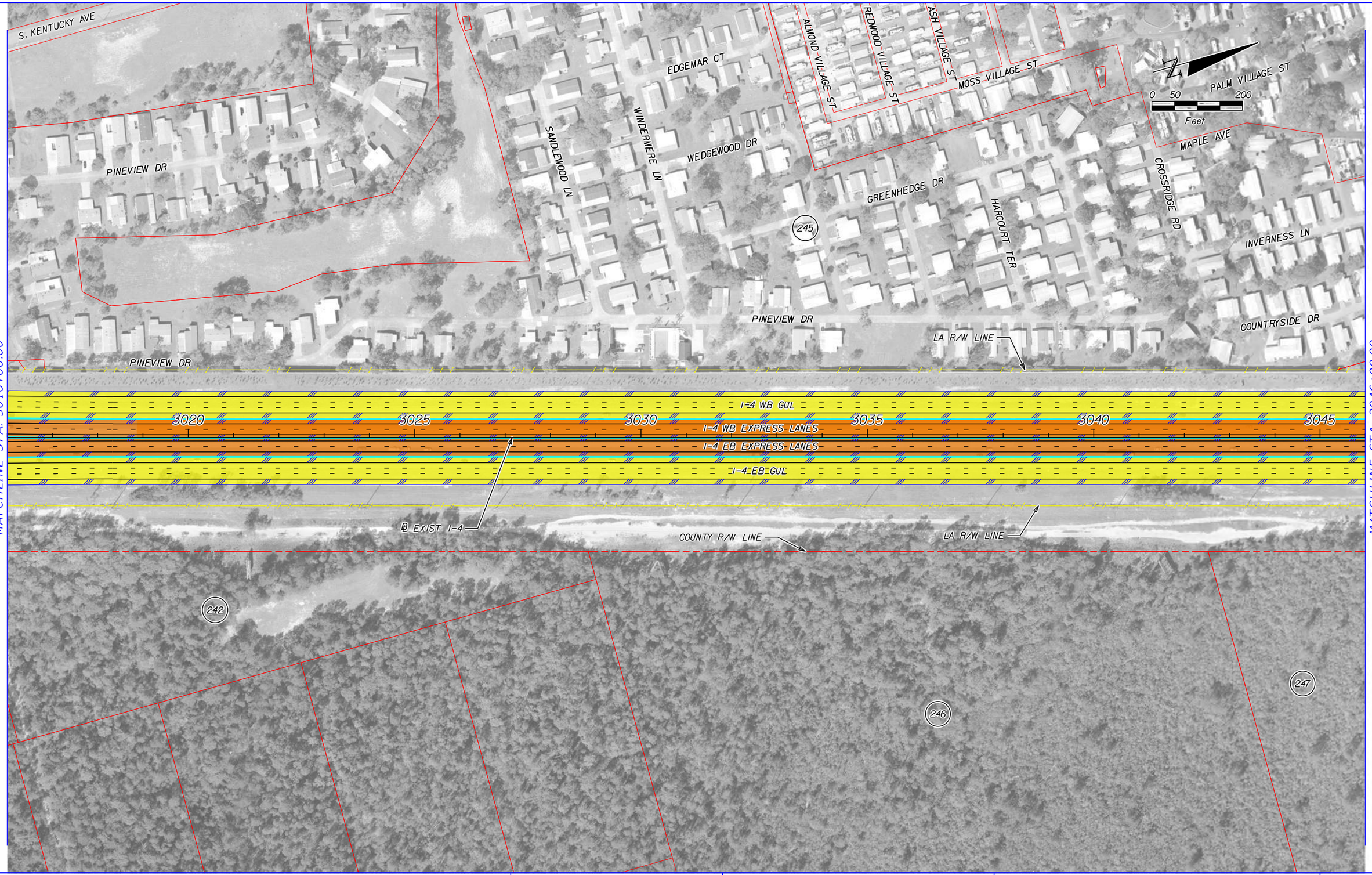
MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3016+00.00



MATCHLINE STA. 3046+00.00

Color_FDOTPDE_PDE.pltcfg
FDOT_text-sbkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

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MODEL: planrd17
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MAPLE AVE
COUNTRYSIDE DR
INVERNESS LN
COUNTRYSIDE DR
RICH AVE
VILLAGE SQUARE RETAIL CENTER
GRAVES AVE.
245
248
249
250
251
253
254
264
COUNTY R/W LINE
LA R/W LINE
COUNTY R/W LINE
LA R/W LINE
COUNTY R/W LINE
SR 472 GUL RAMP TO I-4 WB GUL
0 50 200
Feet

MATCHLINE STA. 3046+00.00

I-4 WB GUL
3050
3055
3060
3065
3070
3075
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

B EXIST I-4
POND 410A
SR 472 RAMP TO I-4 EB GUL
POND 410B
WETLAND BOUNDARY
I-4 EB GUL RAMP TO SR 472 GUL
GRAVES AVE.
COUNTY R/W LINE
247
252
POND 411
(ALTERNATE I SHOWN)

MATCHLINE STA. 3076+00.00

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qbw.tbl

smoss 4/29/2014 10:01:25 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3076+00.00

MATCHLINE STA. 3106+00.00

SR 472 WB RAMP TO I-4 WB GUL

PARCEL ID: 06-18-31-00-00-0130
AREA TAKEN: 1,017,011 SF

POND 412

255

74

0 50 200
Feet

LA R/W LINE

SR-472

59

EXISTING POND TO BE REMOVED

I-4 WB GUL RAMP TO SR 472

SR 472 WB RAMP TO I-4 WB GUL

PARCEL ID: 06-18-31-00-00-0091
AREA TAKEN: 152,647 SF

EXISTING POND TO BE REMOVED

SR 472 GUL RAMP TO I-4 WB GUL

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES 3080 3085 3090 3095 3100 3105

I-4 EB EXPRESS LANES

I-4 EB GUL

PARCEL ID: 06-18-31-00-00-0150
AREA TAKEN: 54,147 SF

℄ EXIST I-4

LA R/W LINE

256

LA R/W LINE

POND 411

75

270

PARCEL ID: 06-18-31-00-00-0184
AREA TAKEN: 3,507 SF

SR 472 RAMP TO I-4 EB GUL

EXISTING POND TO BE REMOVED

HOWLAND BLVD.

POND 413

08

BLACKJACK RIDGE TRAIL

(ALTERNATE I SHOWN)

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

PRINT DRIVER: C:\dot_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-sknw.tbl

smoss 4/29/2014 10:01:47 AM

U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 4\roadway\planrd401-6-4.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3106+00.00

SAN JUAN ST

CASSADAGA RD.

0 50 200
Feet

74

258

260

261

LA R/W LINE

END SEGMENT 4
STA. 3118+46.00

I-4 WB GUL

I-4 EB GUL

3110 3115 3120 3125 3130

℄ EXIST I-4

LA R/W LINE

EXIST. 36" RCP

EXIST. 36" RCP

75

78

79

259

257

SEVILLA AVE

80

76

81

82

77

POND 414

262

CASSADAGA RD.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY
I-4 MAINLINE
SEGMENT 4

SHEET NO.

smoss 4/29/2014 10:02:11 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-4.dgn

APPENDIX C

CONCEPT PLANS (ALTERNATIVE 2)

MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MARKHAM WOOD RD.

SEMINOLE WEKIVA TRAIL

CHURCH NEIGHBORHOOD OF CHRIST

EXIST. LA R/W LINE

WB REST AREA TO BE REALIGNED PER FPDI CONSTRUCTION EXPECTED FY 20

2030 2035 2040 2045 2050 2055

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

END I-4 ULTIMATE
EB-SUL AND EXPRESS LANES
FPID 242484-3-52-01
BEGIN SEGMENT 3
EB-GUL AND EXPRESS LANES
FPID 432100-1-22-01
STA. 2043+71.32

EXIST. LA R/W LINE

MATCHLINE STA. 2057+00.00

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

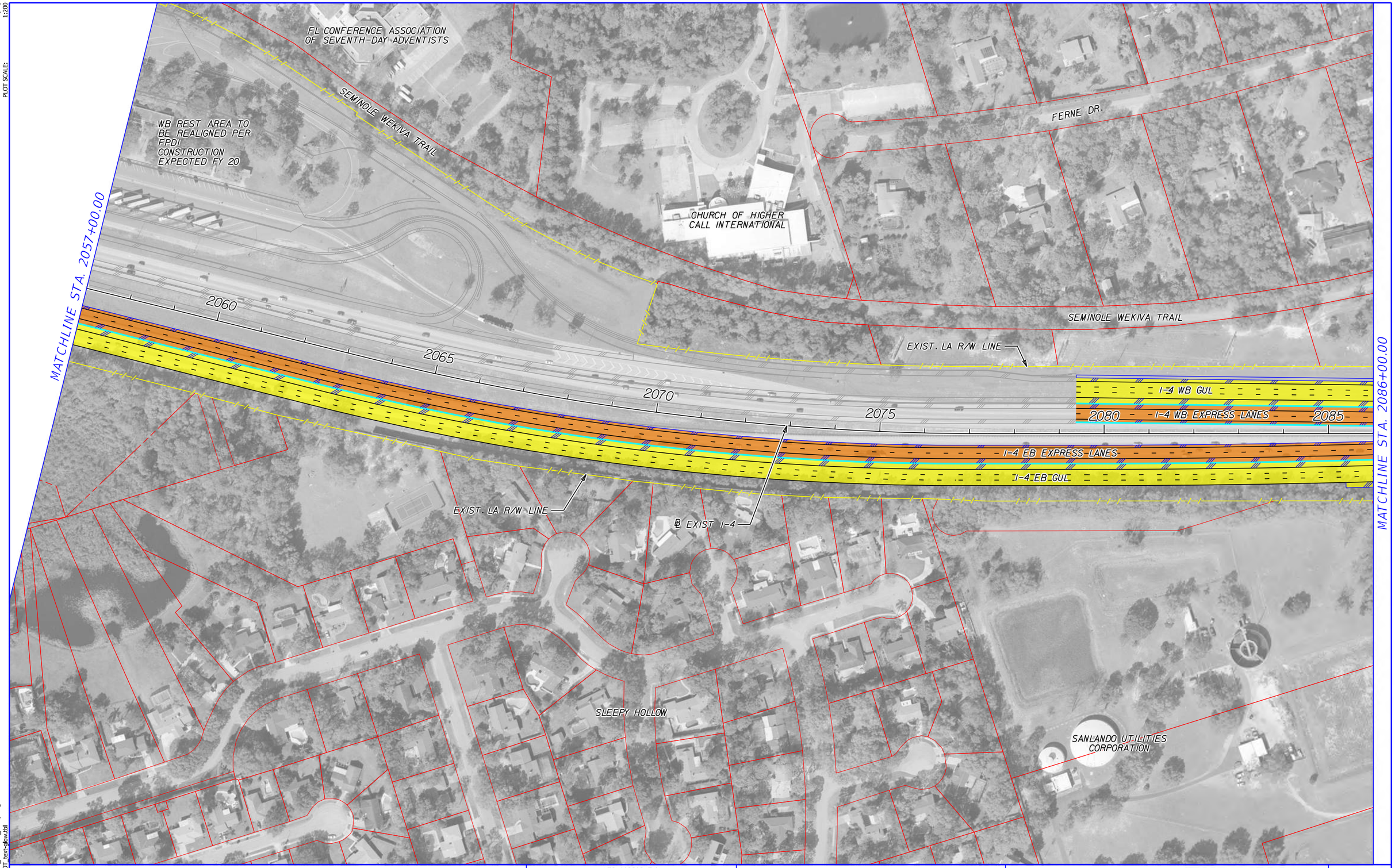
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:08:16 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:08:40 AM
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MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2086+00.00

MATCHLINE STA. 2116+00.00

SEMINOLE WEKIVA TRAIL

SUNSHINE TREE BLVD.

EE WILLIAMSON

MARKHAM WOODS ANIMAL HOSPITAL

EXIST. LA R/W LINE

FPC 300-B

I-4 WB GUL

2090

I-4 WB EXPRESS LANES

2095

2100

2105

2110

2115

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST. LA R/W LINE

℄ EXIST I-4

DES PINAR LANE

POND 300

NORTH COVE

EE WILLIAMSON

Color_FDOTPDF_PDE.pltcfg
FDOT_text-gbkw.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:08:56 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2116+00.00

MATCHLINE STA. 2146+00.00

SUNSHINE TREE BLVD.

DIXON RD.

RUTLEDGE RD.

MARKHAM WOODS
CHURCH & CHRISTIAN ACADEMY

FPC 300-B

EXIST. LA R/W LINE

DIXON RD.

2120

2125

2130

2135

2140

2145

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

I-4 EB GUL TO
REST AREA

EB REST AREA

POND 300

FPC
300-A

NORTHRIDGE DR.

POND 301

NORTHRIDGE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

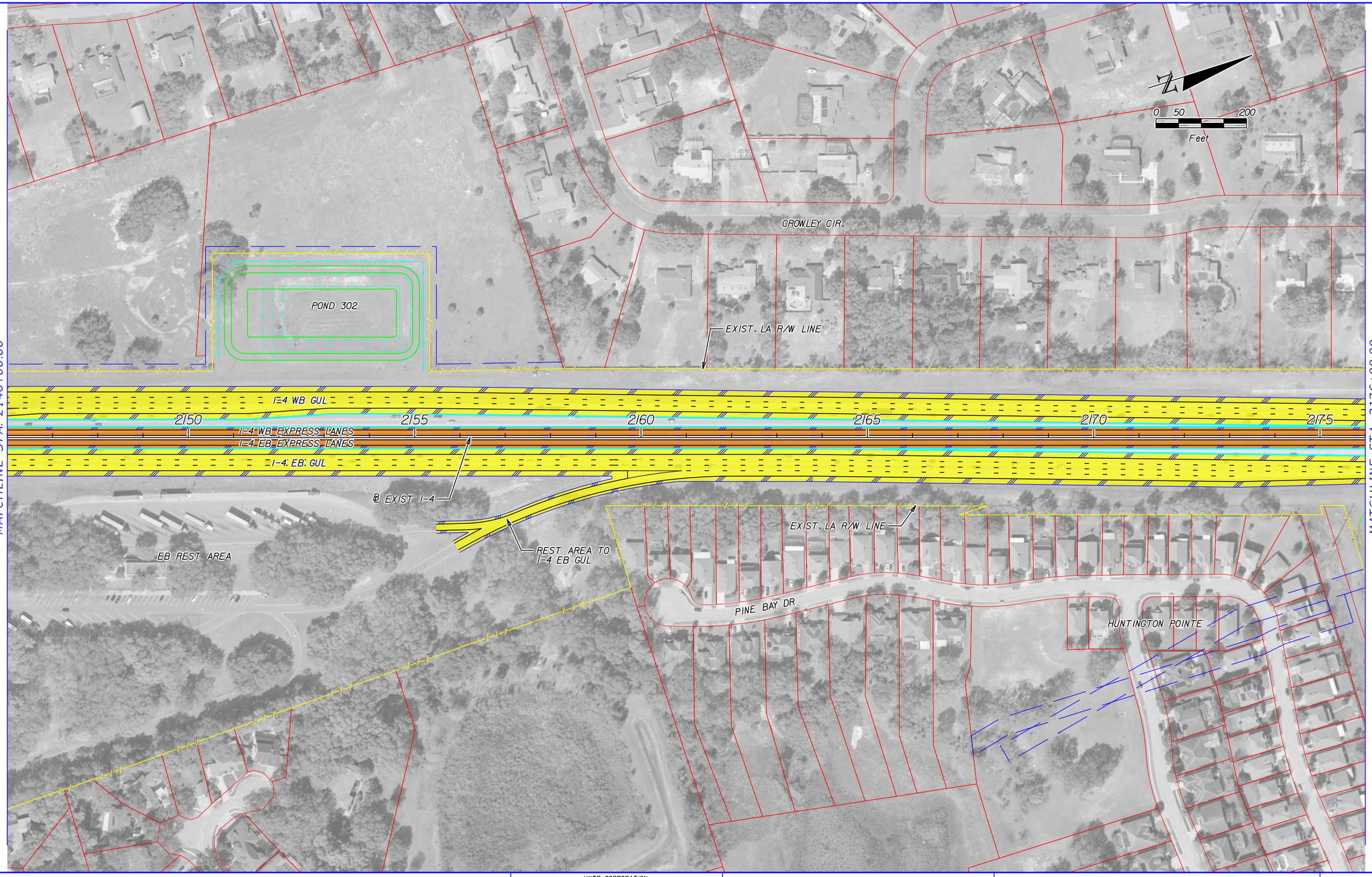
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:09:13 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:09:30 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2176+00.00

MATCHLINE STA. 2206+00.00

CROWLEY CIR.

LONG POND DR.

WALDENS POND COVE

0 50 200
Feet

POND 303-B2

EXIST. LA R/W LINE

℄ EXIST I-4

2180 2185 2190 2195 2200 2205

I=4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

POND 303-A2

SKYLINE DR

POND 303-AI

SUN TECH COMMERCE PARK

EXIST. LA R/W LINE

FOX 35 WOFL

GOOD LIFE BROADCASTING

SKYLINE DR.

FL POWER CORP

ATRIUM CORPORATE CENTER

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:09:47 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2206+00.00

MATCHLINE STA. 2236+00.00

N

0 50 200
Feet

CHARDONNAY CT.

DUNBROOKE LOOP

LAKE MARY SENIOR LIVING

INTERNATIONAL PKWY.

BENTONSHIRE PL.

WALDENS POND COVE

POND 304

EXIST. LA R/W LINE

2210 2215 2220 2225 I-4 WB GUL 2230 2235

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

SKYLINE DR.

CANDLEWOOD SUITES

SCHOLASTIC

FILUTOWSKI INSTITUTE

FOUR NORTHPOINT CENTER

THE A.G. MAURO COMPANY

SANDPOND RD

DUKE ENERGY

GREENWOOD BLVD

LAKE MARY DORMITORY

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:10:05 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2236+00.00

MATCHLINE STA. 2266+00.00

LAKE MARY SENIOR LIVING

NOTTING HILL CONDOMINIUM

INTERNATIONAL PKWY.

ITT TECHNICAL INSTITUTE

LAKE MARY PROFESSIONAL CAMPUS

0 50 200
Feet

EXIST. LA R/W LINE

INTERNATIONAL PKWY.

LAKE MARY BLVD EB TO I-4 WB GUL

2240 2245 I-4 WB GUL 2250 2255 2260 2265

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

I-4 EB GUL TO LAKE MARY BLVD

℄ EXIST I-4

LAKE MARY EB TO I-4 EB GUL

FOUR NORTHPOINT CENTER

LA QUINTA

HOMESTEAD HOTEL

EXTENDED STAY AMERICA

POND 305

EXIST. LA R/W LINE

GREENWOOD BLVD.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:10:22 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2266+00.00

MATCHLINE STA. 2296+00.00

WESCAR

EXIST. LA R/W LINE

0 50 200
Feet

INTERNATIONAL PKWY.

COVERGY'S

I-4 WB GUL TO LAKE MARY BLVD

SEMINOLE COUNTY WASTEWATER TREATMENT

65 LAKE MARY BLVD

LAKE MARY WB TO I-4 WB GUL

POND 306

EXIST. LA R/W LINE

70

2270 2275 2280 2285 2290 2295

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

LAKE MARY EB TO I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

75 LAKE MARY BLVD

LAKE MARY WB TO I-4 EB GUL

HILTON GARDEN INN

HOMEWOOD SUITES

CRESCENT AT PRIMERA ONE

HNTB CORPORATION

CRESCENT AT PRIMERA TWO

MACARONI GRILL

80

Color: FDOTPDE_PDE.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:10:42 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2296+00.00

MATCHLINE STA. 2326+00.00

SEMINOLE COUNTY WASTEWATER TREATMENT

EXIST. LA R/W LINE

INTERNATIONAL PKWY.

SEMINOLE WEKIVA TRAIL

I-4 WB GUL

2300

2305

2310

2315

2320

2325

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

POND 307

POND 308

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

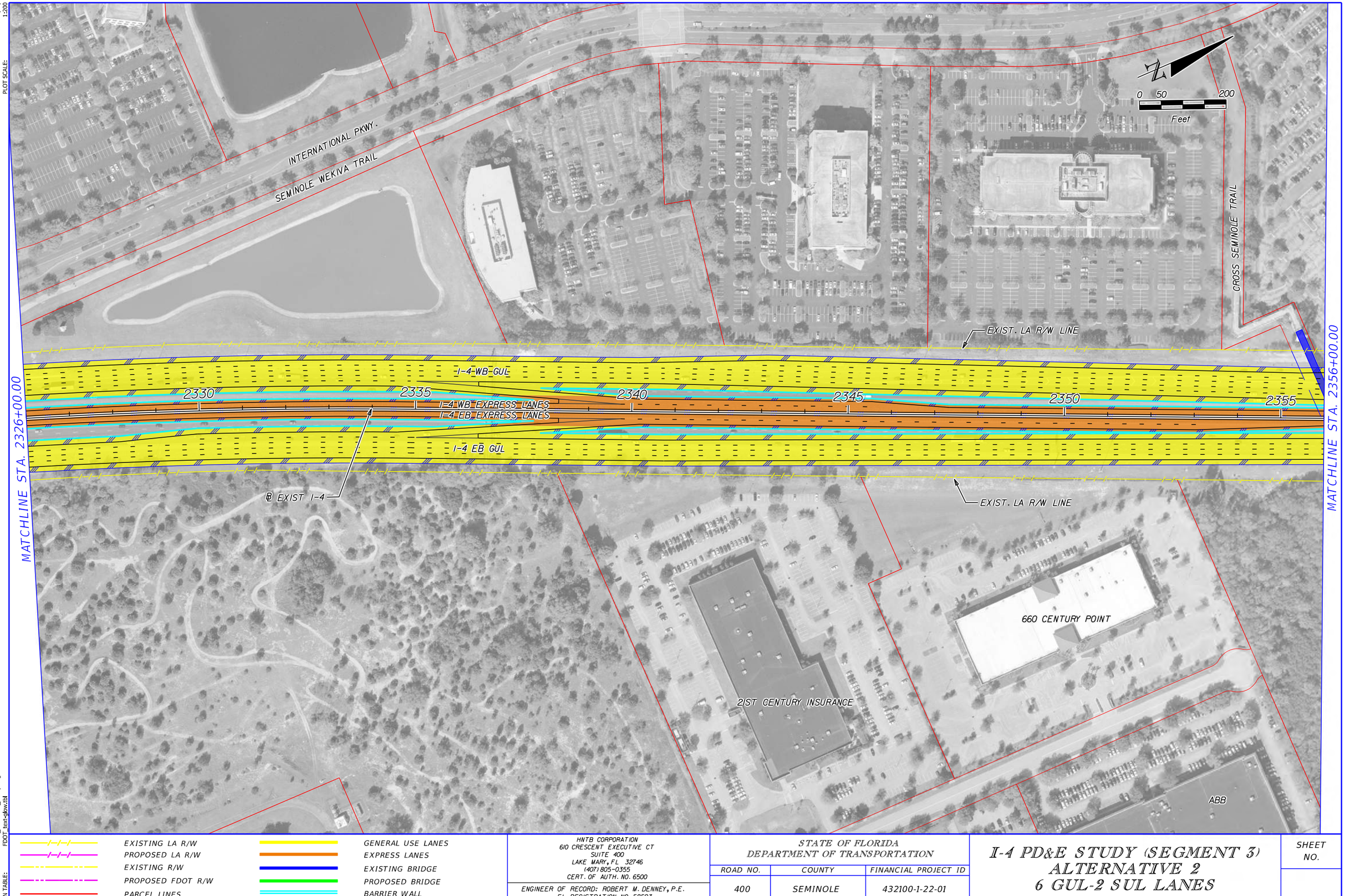
I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qblow.tbl

smoss 4/29/2014 9:11:00 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL:
SHEET SIZE: planrd11
PLOT SCALE: 16.5x10.6 (in.) 1:200



Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:11:20 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2356+00.00

MATCHLINE STA. 2386+00.00

EXIST. LA R/W LINE

CR 46A GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

0 50 200
Feet

POND 309

EXIST. LA R/W LINE

CR 46A NL

65

2360 2365 2370 2375 2380 2385

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXISTING BRIDGE TO REMAIN

CROSS SEMINOLE TRAIL

POST OFFICE

UNITED STATES POSTAL SERVICE

I-4 EB GUL RAMP TO CR 46A GUL

EXIST. LA R/W LINE

POND 310

CENTENNIAL BANK

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:11:38 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2386+00.00

MATCHLINE STA. 2416+00.00

0 50 200
Feet

EXIST. LA R/W LINE

SR 429 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL RAMP TO SR 417 GUL

SR 417 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2390 2395 2400 2405 2410 2415

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

CR 46A RAMP TO I-4 EB GUL

I-4 EB GUL RAMP TO SR 417 GUL

EXIST. LA R/W LINE

POND 311

CR 46A

EXIST. LA R/W LINE

RINEHART RD.

ABC FINE WINE & SPIRITS

SANFORD INFINITI

HONDA

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:11:57 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2416+00.00

MATCHLINE STA. 2446+00.00

WEKIVA PARKWAY

30

35

40

45

50

SR 417

EXIST. R/W LINE

EXIST. LA R/W LINE

0 50 200
Feet

I-4 WB GUL RAMP TO SR 417 GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2420

2425

2430

2435

2440

2445

℄ EXIST I-4

SR 417 GUL RAMP TO I-4 EB GUL

UNITED ARTISTS
SEMINOLE TOWNE CENTER
IO MOVIE THEATER

TOWNE CENTER C/R.

EXIST. R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:12:17 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2446+00.00

MATCHLINE STA. 2476+00.00

EXIST. LA R/W LINE

POND 312

SEMINOLE FORD

0 50 200
Feet

2450 2455 2460 2465 2470 2475

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

℄ EXIST I-4

TOWNE CENTER CIR.

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

MILLER'S ALE HOUSE RESTAURANT

N. MALL ENTRANCE RD.

STEAK'N SHAKE

SEMINOLE TOWNE SQUARE MALL

PRINT DRIVER: Color_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:12:35 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2476+00.00

MATCHLINE STA. 2506+00.00

AUDI NORTH ORLANDO AND AUTO MALL

0 50 200
Feet

EXIST. LA R/W LINE

SR 46

65

SR 46 GUL RAMP TO I-4 WB GUL

SR 46 EB GUL RAMP TO I-4 WB GUL

EXIST. LA R/W LINE

POND 313A

POND 313

I-4 WB GUL RAMP TO SR 46 GUL

AUDI NORTH ORLANDO

70

2480

2485

2490

2495

2500

2505

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

75

EXIST. LA R/W LINE

I-4 EB GUL RAMP TO SR 46 GUL

SUPER 8 MOTEL

CRACKER BARREL

EXIST. LA R/W LINE

COMFORT INN

POND 314

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

SPRINGHILL SUITES

TOWNE RD.

HOPS RESTAURANT

OREGON AVE.

SR 46

80

SUNOCO GAS STATION

OUTBACK STEAKHOUSE

MCDONALDS

HICKMAN DR.

MOBIL GAS STATION

7-11 GAS STATION

MATRESS GIANT

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:12:55 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd17
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

EXIST. LA R/W LINE

0 50 200
Feet

MATCHLINE STA. 2506+00.00

2510 2515 2520 2525 2530 2535

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

℄ EXIST I-4

MATCHLINE STA. 2536+00.00

EXIST. LA R/W LINE

POND 314

HARLEY-DAVIDSON

FIVE-R

HICKMAN CIR.

PLUMMER

RUG KING

HIGH REACH 2

FASTERER CORP

GO ELECTRONICS

HICKMAN DR.

GUARDIAN EQUIPMENT

EWING

Color_FDOTPDF_PDE.pltcfg
FDOT_text-qkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:13:14 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2536+00.00

MATCHLINE STA. 2566+00.00

DUNBAR AVE.

CHESTNUT ST.

LA MESA RV

ORANGE BLVD.

PORT OF SANFORD

0 50 200
Feet

SEMINOLE COUNTY PORT AUTHORITY

EXIST. LA R/W LINE

US 17/92 GUL RAMP TO I-4 WB GUL

2540 2545 2550 2555 2560 2565

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

I-4 EB GUL RAMP TO US 17/92

SCHOOL ST.

ELDER RD.

SOUTHERN PRIDE BUSINESS CENTER

ORANGE BLVD.

POND 316

FLORIDA ROCK INDUSTRIES

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:13:33 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2566+00.00

EXIST. LA R/W LINE

I-4 WB GUL RAMP TO US 17/92 GUL

EXIST. LA R/W LINE

END SEGMENT 3
STA. 2583+00.00

VOLUSIA COUNTY
SEMINOLE COUNTY

ST. JOHNS RIVER

0 50 200
Feet

70

US 17/92

75

I-4 WB GUL

I-4 WB EXPRESS LANES

2570 2575 2580 2585 2590 2595

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

MONROE RD GUL RAMP TO I-4 EB GUL

EXISTING BRIDGES TO REMAIN

80

US 17/92

ST JOHNS RIVER

VOLUSIA COUNTY
SEMINOLE COUNTY

MONROE RD.

85

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

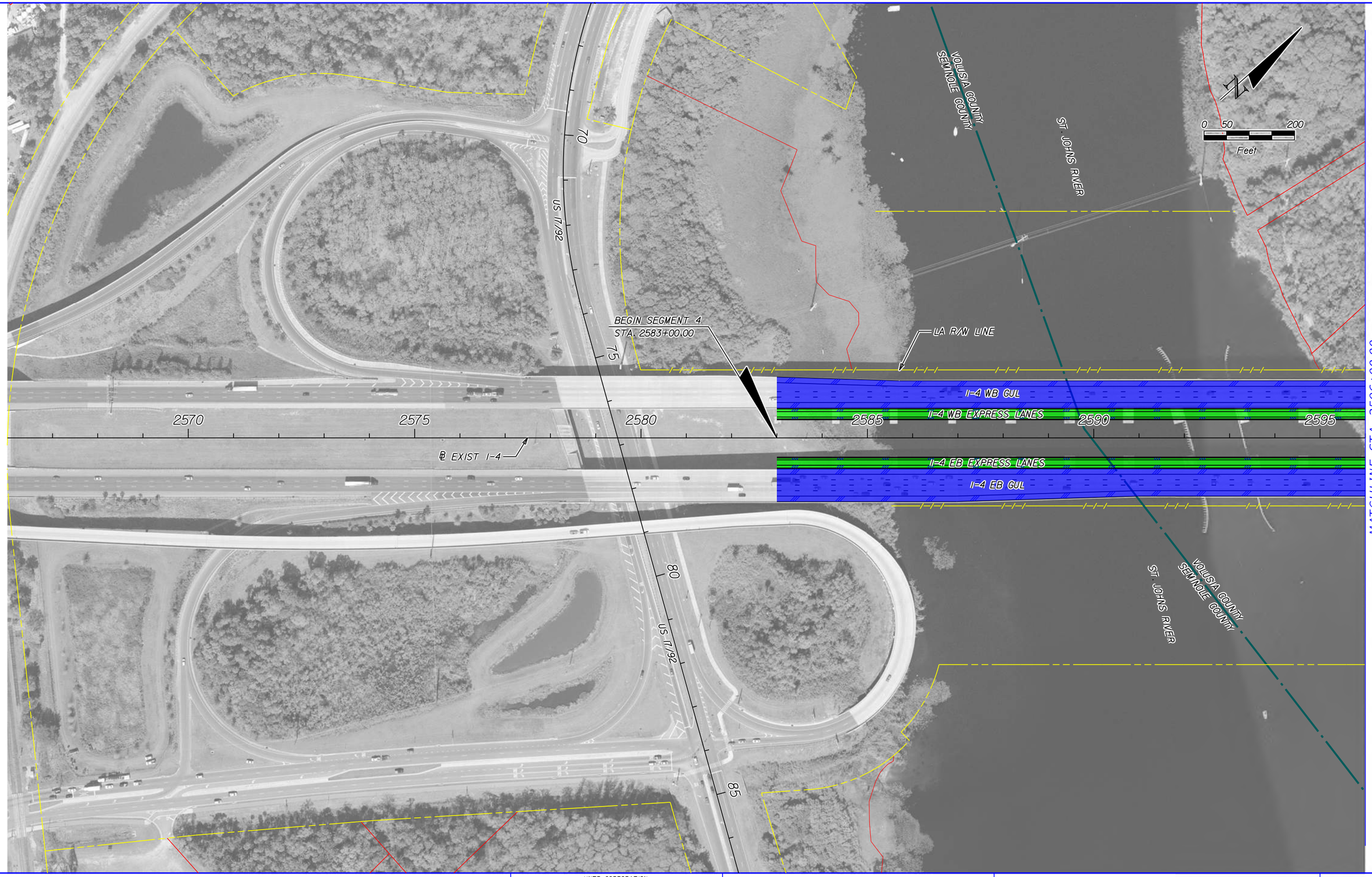
I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:13:53 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-6-2.dgn

MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.ctb

smoss 4/29/2014 9:14:57 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

STA. 2596+00.00

MATCHLINE STA. 2626+00.00

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES

2600 2605 2610 2615 2620 2625

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

MATCHLINE STA. 2626+00.00

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

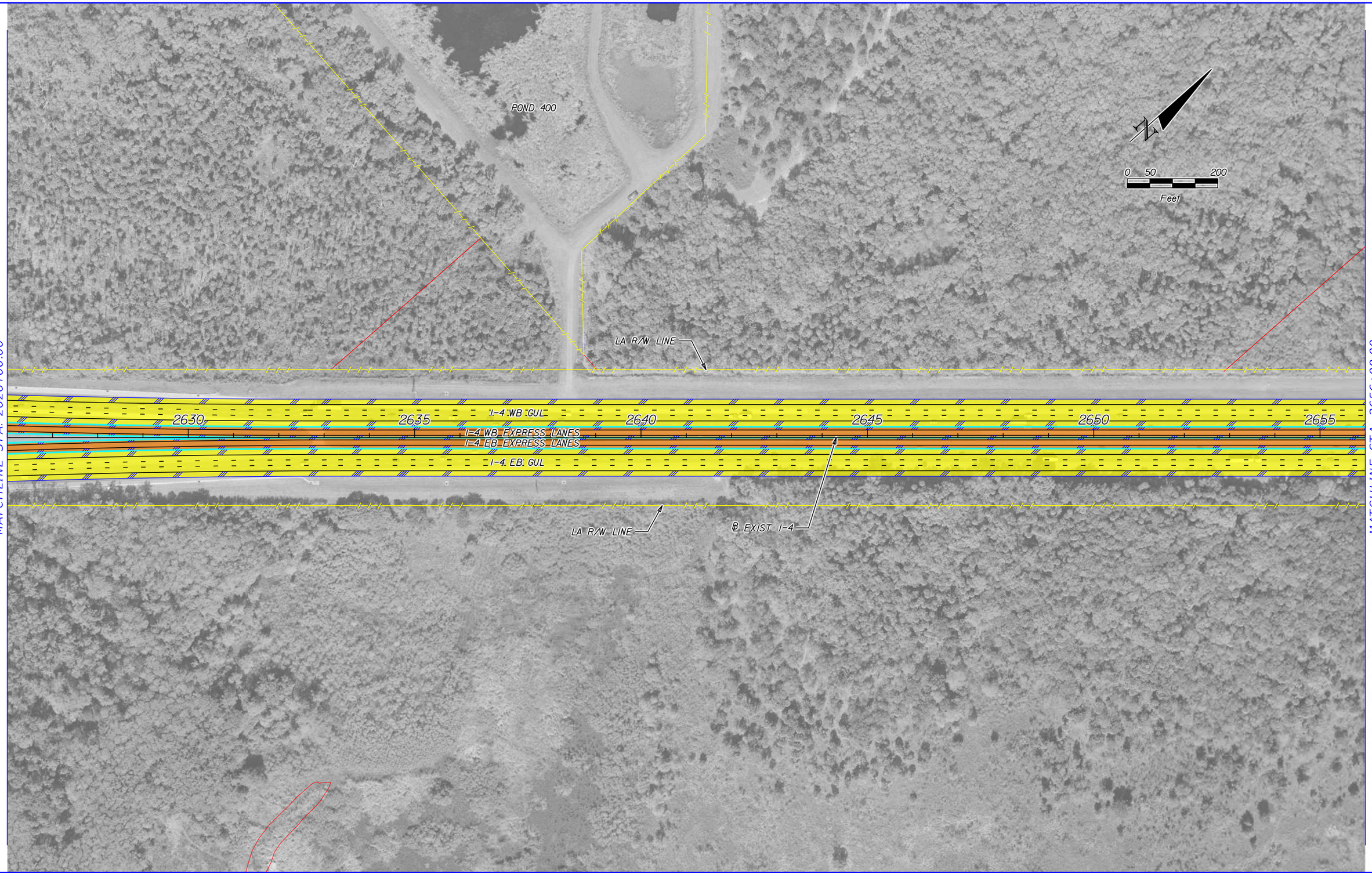
I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:15:08 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:15:48 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2656+00.00

MATCHLINE STA. 2686+00.00

0 50 200
Feet

LA R/W LINE

2660 2665 2670 2675 2680 2685

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

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MODEL:
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200
planrd05

MATCHLINE STA. 2686+00.00

MATCHLINE STA. 2716+00.00

0 50 200
Feet

LA R/W LINE

POND 401

2690 2695 2700 2705 2710 2715

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

smoss 4/29/2014 9:16:32 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2716+00.00

MATCHLINE STA. 2746+00.00

POND 401

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

2720 2725 2730 2735 2740 2745

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

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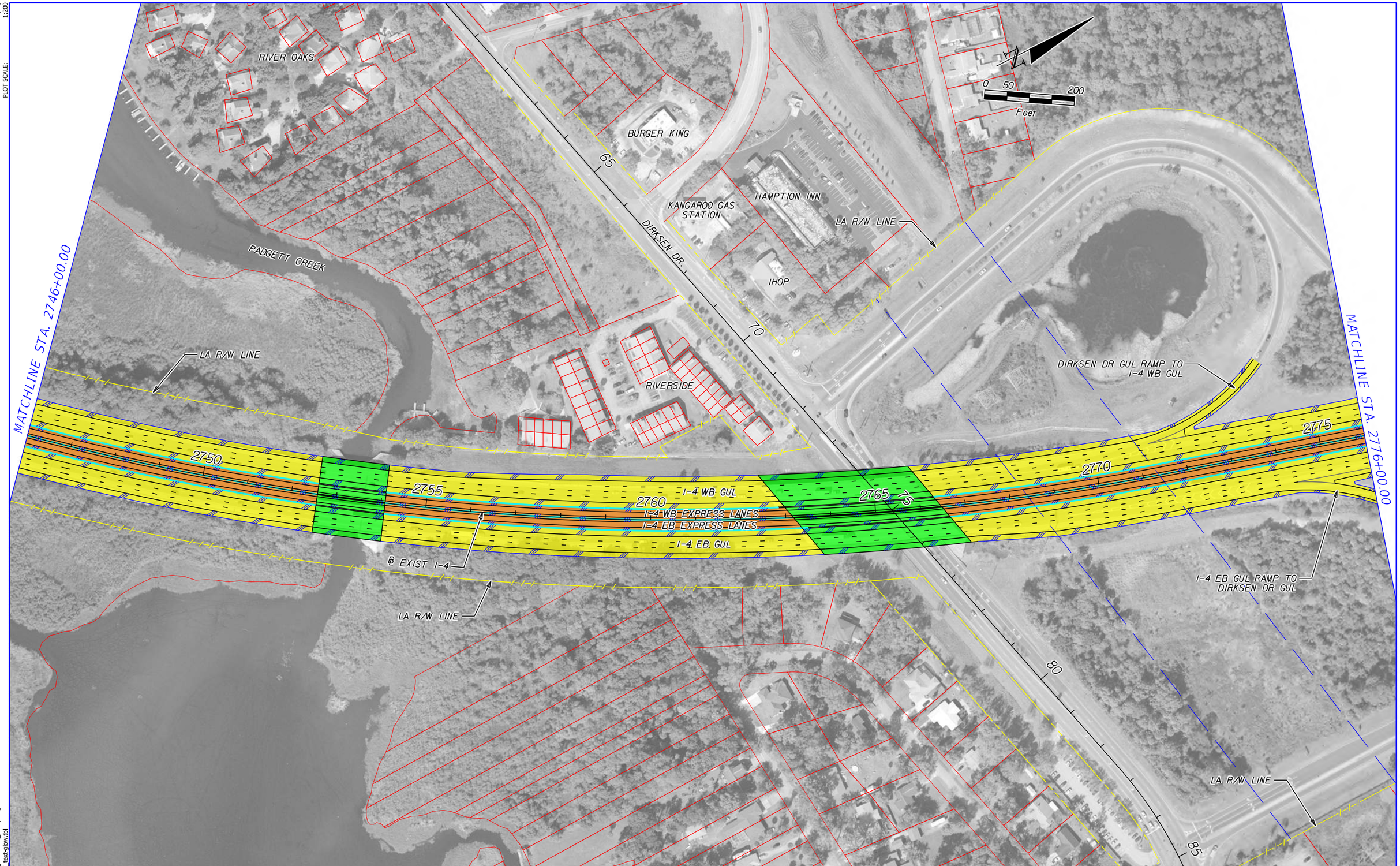
MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



Color_FDOTPDF_PDE.pltcfg
FDOT_text-qkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

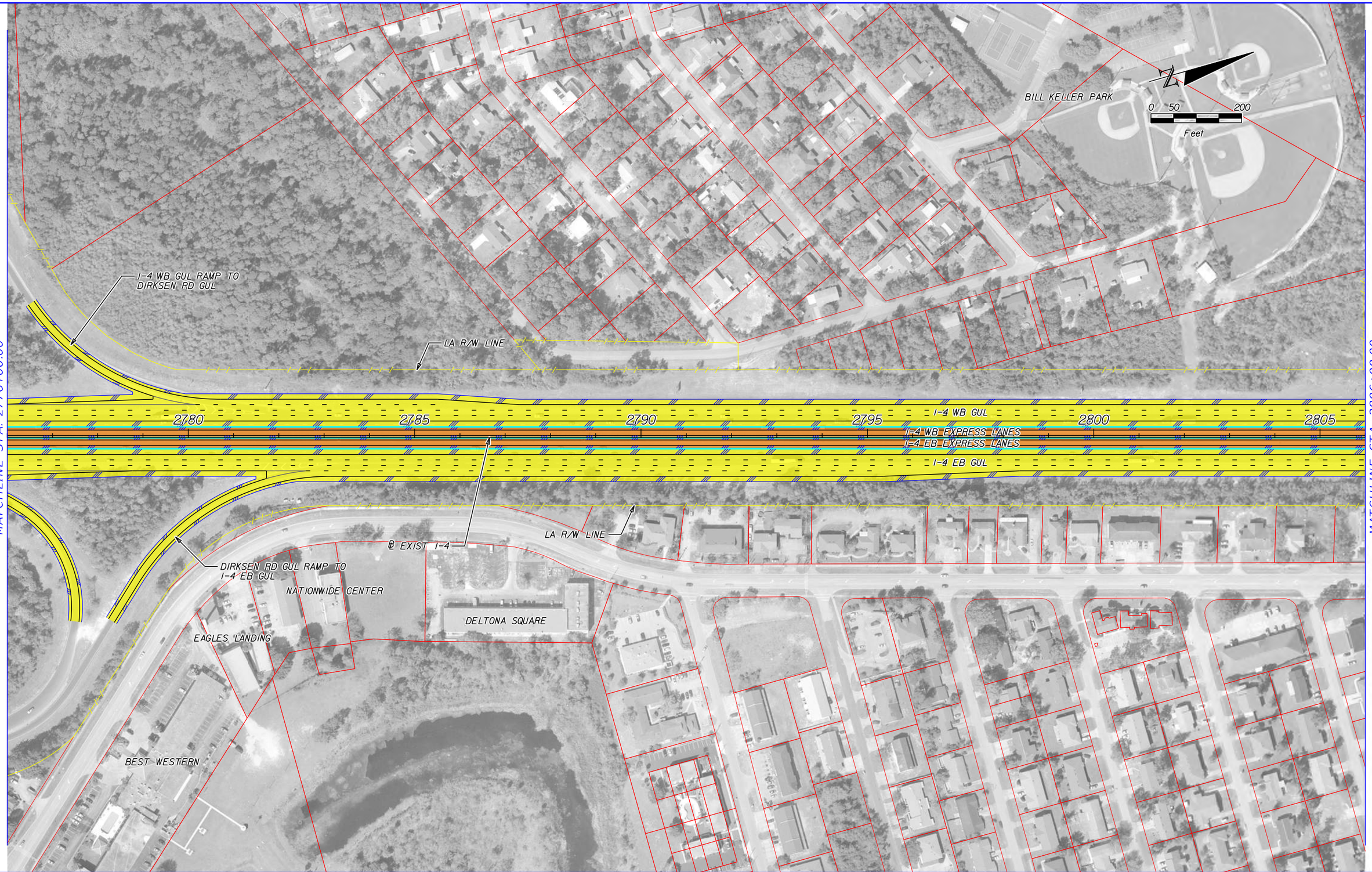
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:17:13 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



MATCHLINE STA. 2776+00.00

MATCHLINE STA. 2806+00.00

PRINT DRIVER: Color_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:17:35 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2806+00.00

MATCHLINE STA. 2836+00.00

0 50 200
Feet

LA R/W LINE

VOLUSIA RENTAL

UNCLE BOB'S SELF STORAGE

ENTERPRISE RD.

LA R/W LINE

2810 2815 I-4 WB GUL 2820 2825 2830 2835

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST I-4

LA PETITE ACADEMY

LA R/W LINE

LA R/W LINE

DELTONA FOUNTAINS MEDICAL CLINIC

MUFFLER MAN

ENTERPRISE RD.

FIRST SOUTHERN BANK

JUSTIN SQUARE

SUNTRUST

SUNOCO GAS STATION

HERITAGE GOLD & DIAMOND EXCHANGE

SPACE COAST CREDIT UNION

US POST OFFICE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:17:55 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2836+00.00

MATCHLINE STA. 2866+00.00

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

I-4 WB EXPRESS LANES

℄ EXIST I-4

2840 2845 2850 2855 2860 2865

I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

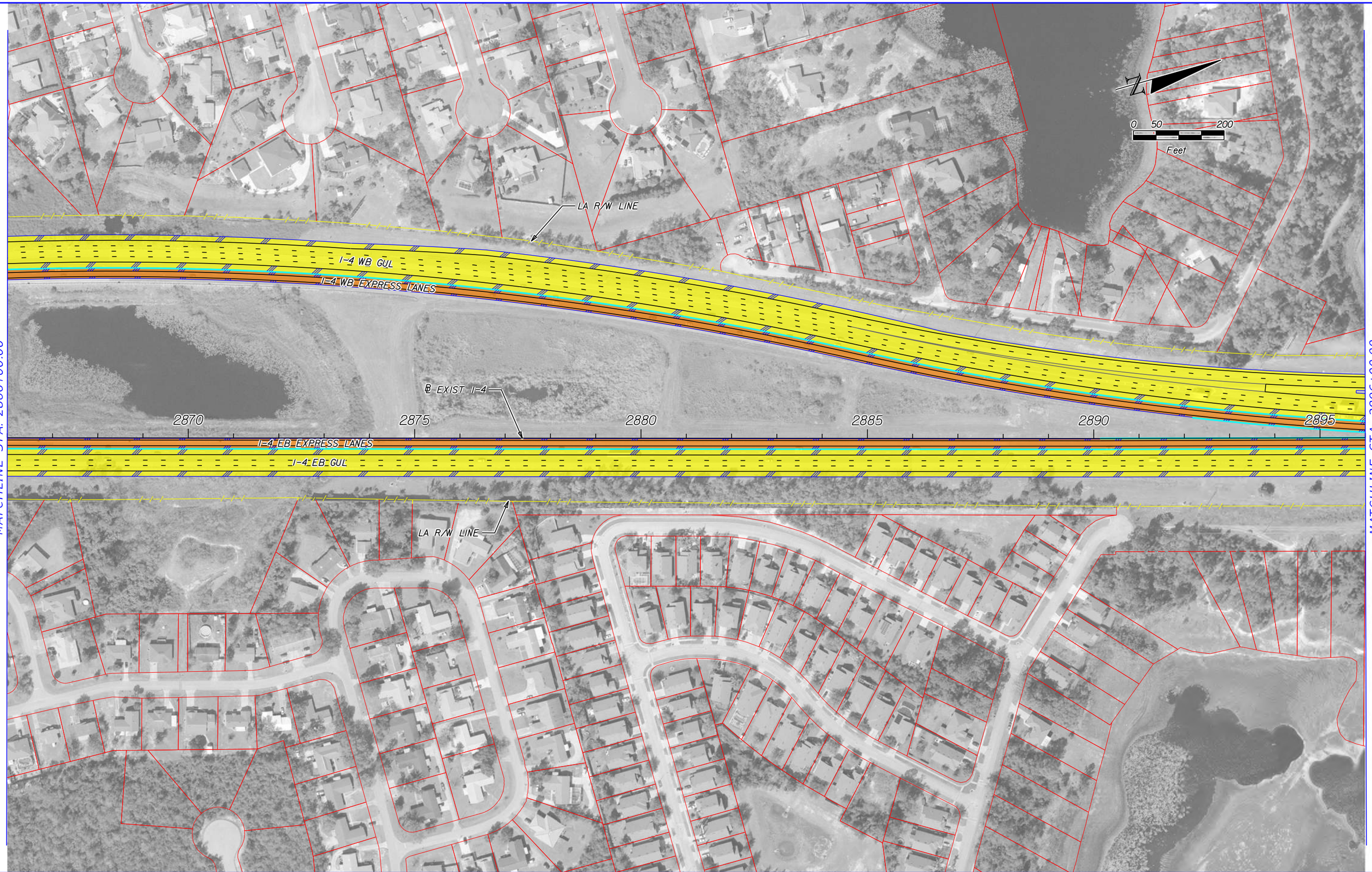
smoss 4/29/2014 9:18:13 AM

U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2866+00.00

MATCHLINE STA. 2896+00.00



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sbkw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

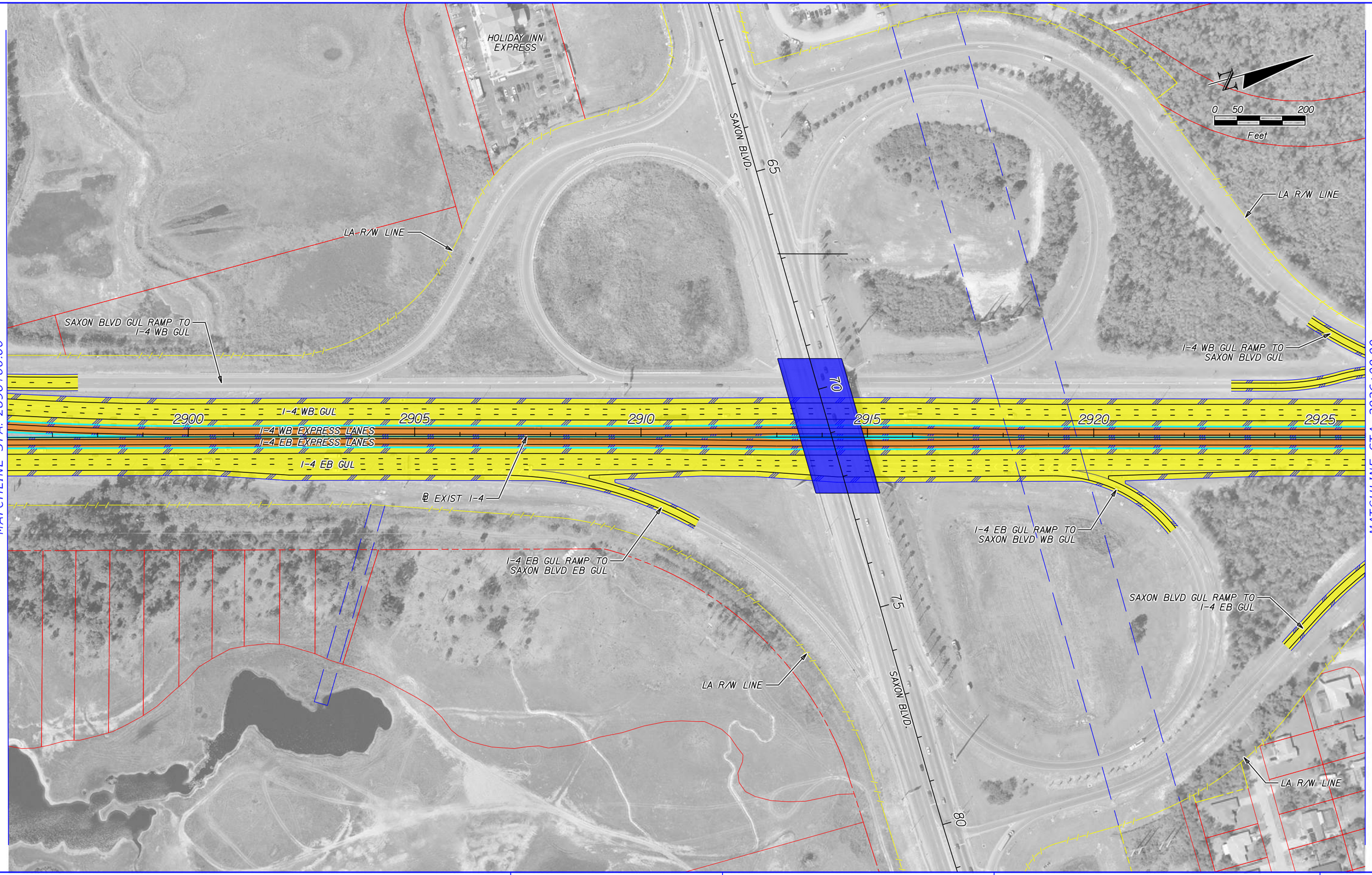
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:18:29 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:18:46 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2926+00.00

MATCHLINE STA. 2956+00.00

0 50 200
Feet

LA R/W LINE

2930 2935 2940 2945 2950 2955

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

LA R/W LINE

POND 420-AI

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:19:03 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2956+00.00

MATCHLINE STA. 2986+00.00

0 50 200
Feet

LA R/W LINE

2960 2965 2970 2975 2980 2985

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:19:21 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2986+00.00

MATCHLINE STA. 3016+00.00

N

0 50 200
Feet

RHODE ISLAND

POND

LA R/W LINE

I=4 WB GUL

I=4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

2990 2995 3000 3005 3010 3015

℄ EXIST I-4

DELTONA WATER TREATMENT

RHODE ISLAND

LA R/W LINE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

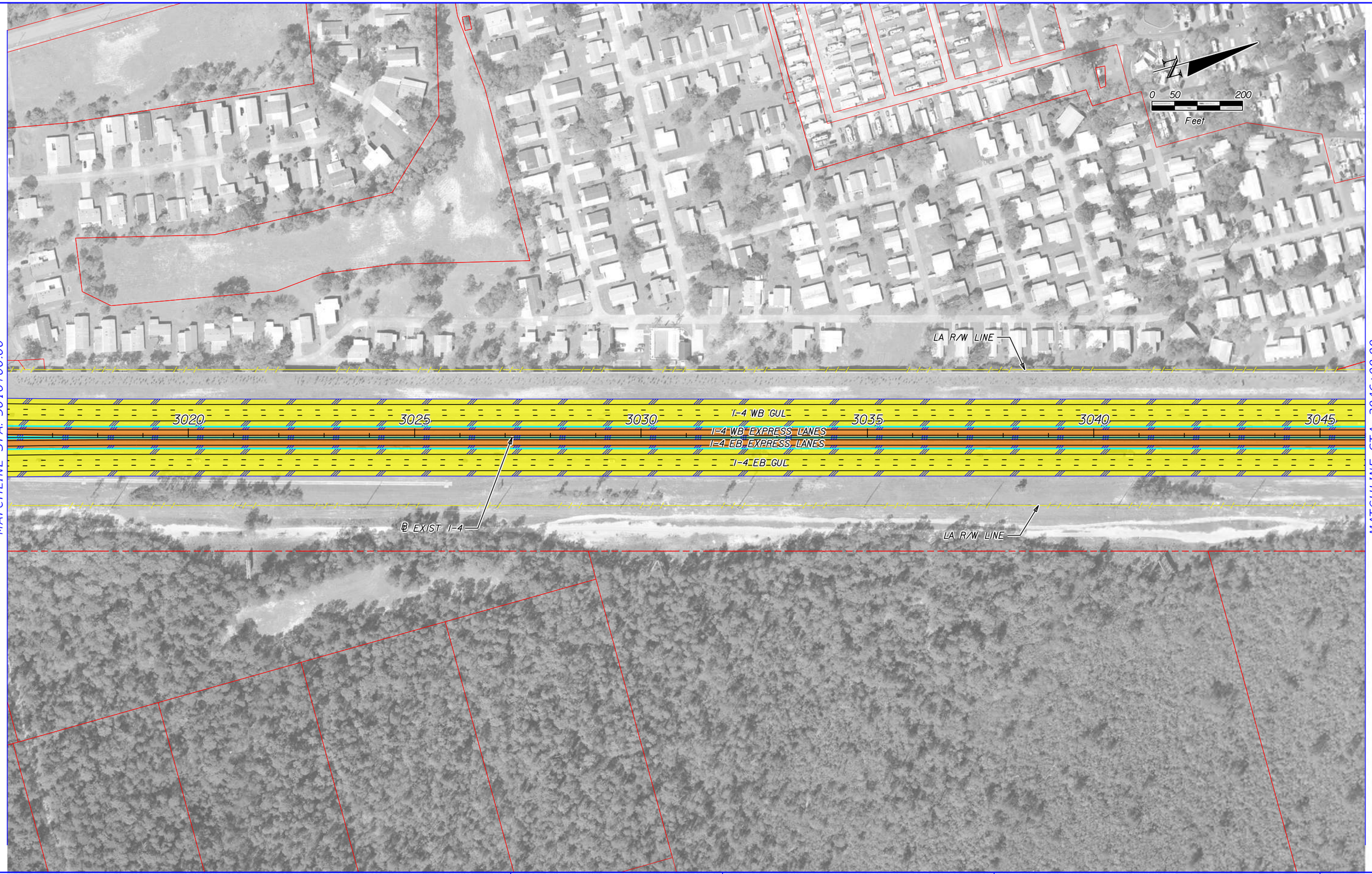
I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:19:39 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



Color_FDOTPDF_PDF.pltcfg
FDOT_text-qlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:20:00 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd17
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

VILLAGE SQUARE RETAIL CENTER

GRAVES AVE.

0 50 200
Feet

SR 472 GUL RAMP TO I-4 WB GUL

LA R/W LINE

MATCHLINE STA. 3046+00.00

3050 3055 3060 3065 3070 3075

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

E EXIST I-4

I-4 EB GUL RAMP TO SR 472 GUL

SR 472 GUL RAMP TO I-4 EB GUL

LA R/W LINE

GRAVES AVE.

MATCHLINE STA. 3076+00.00

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

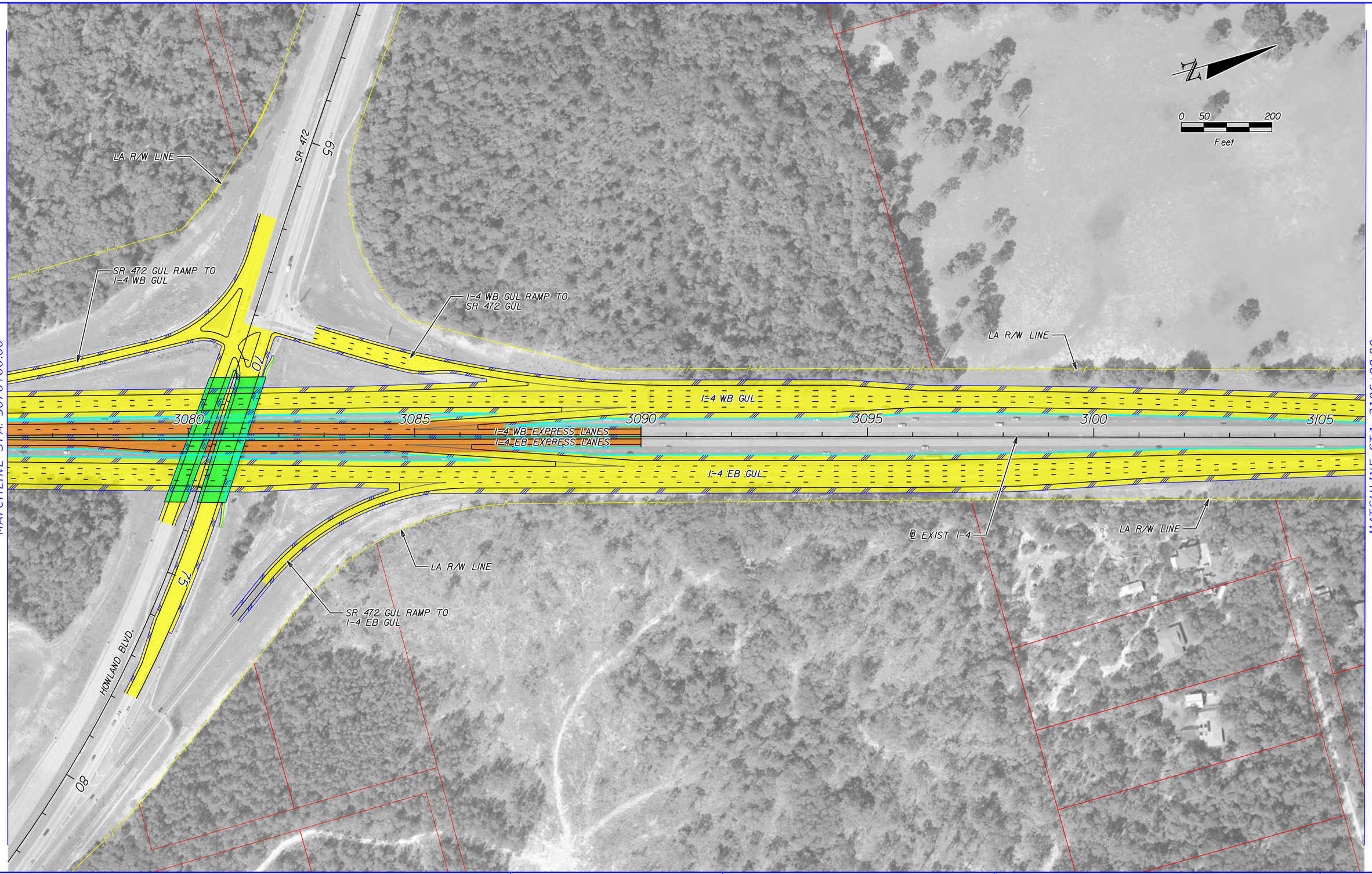
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:20:21 AM
U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



Color_FDOTPDF_PDF.pltcfg
FDOT_text-qlow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

smoss 4/29/2014 9:20:43 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-6-2.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3106+00.00

LA R/W LINE

END SEGMENT 4
STA. 3118+46.00

I-4 WB GUL

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

3110 3115 3120 3125 3130

CASSADAGA RD.

CASSADAGA RD.

0 50 200
Feet

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 2
6 GUL-2 SUL LANES

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:21:05 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-6-2.dgn

APPENDIX D

CONCEPT PLANS (ALTERNATIVE 3)

MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MARKHAM WOOD RD.

SEMINOLE WEKIVA TRAIL

CHURCH NEIGHBORHOOD OF CHRIST

EXIST. LA R/W LINE

WB REST AREA TO BE REALIGNED PER FPDI CONSTRUCTION EXPECTED FY 20

2030 2035 2040 2045 2050 2055

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

END I-4 ULTIMATE
EB-SUL AND EXPRESS LANES
FPID 242484-3-52-01
BEGIN SEGMENT 3
EB GUL AND EXPRESS LANES
FPID 432100-1-22-01
STA. 2043+71.32

EXIST. LA R/W LINE

MATCHLINE STA. 2057+00.00

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
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SUITE 400
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(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

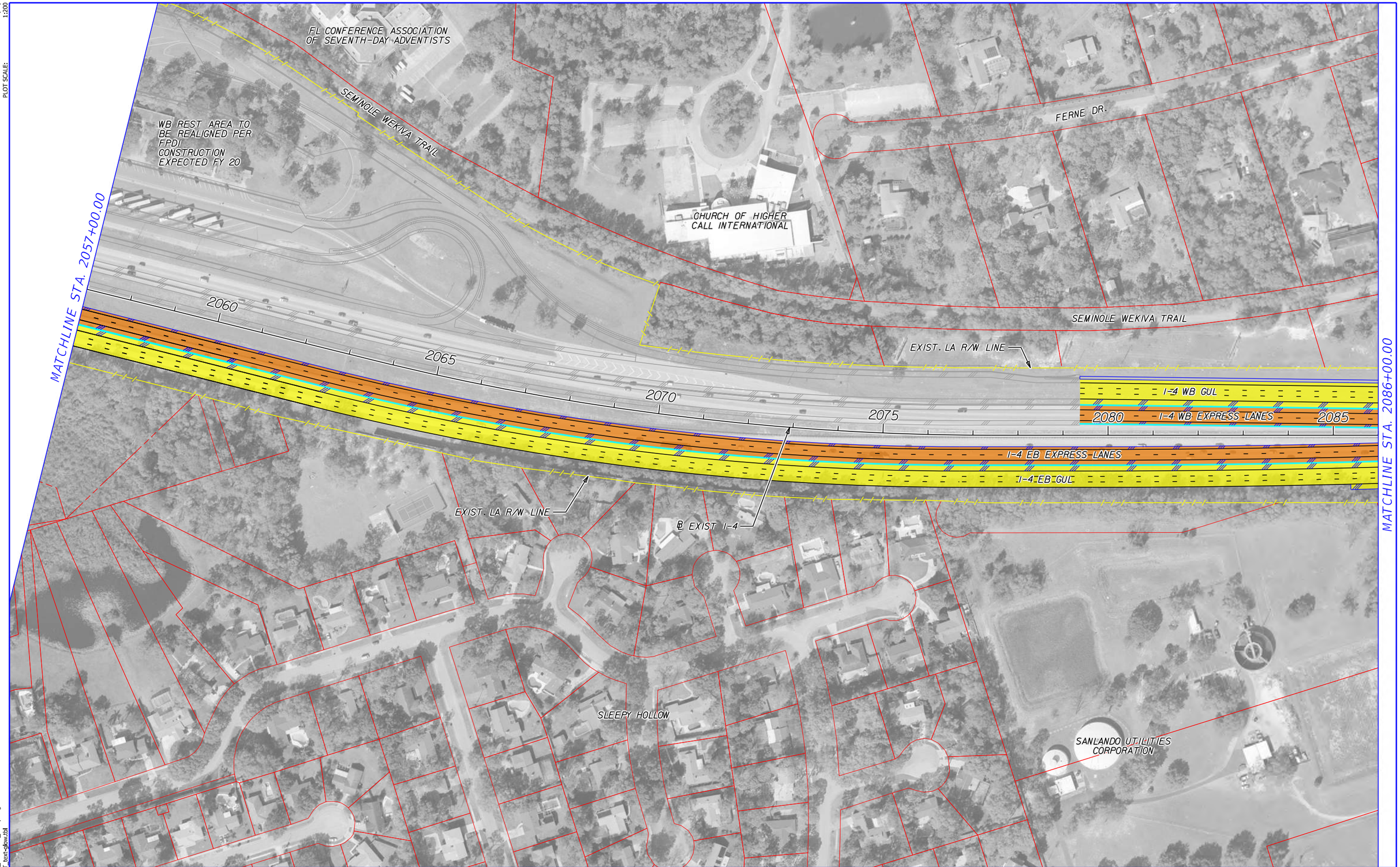
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3) ALTERNATIVE 3 REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:27:37 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:27:54 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2086+00.00

MATCHLINE STA. 2116+00.00

SEMINOLE WEKIVA TRAIL

SUNSHINE TREE BLVD.

EE WILLIAMSON

MARKHAM WOODS ANIMAL HOSPITAL

EXIST. LA R/W LINE

FPC 300-B

I-4 WB GUL

2090

I-4 WB EXPRESS LANES

2095

2100

2105

2110

2115

I-4 EB EXPRESS LANES

I-4 EB GUL

EXIST. LA R/W LINE

℄ EXIST I-4

DES PINAR LANE

POND 300

NORTH COVE

EE WILLIAMSON

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:28:09 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd04
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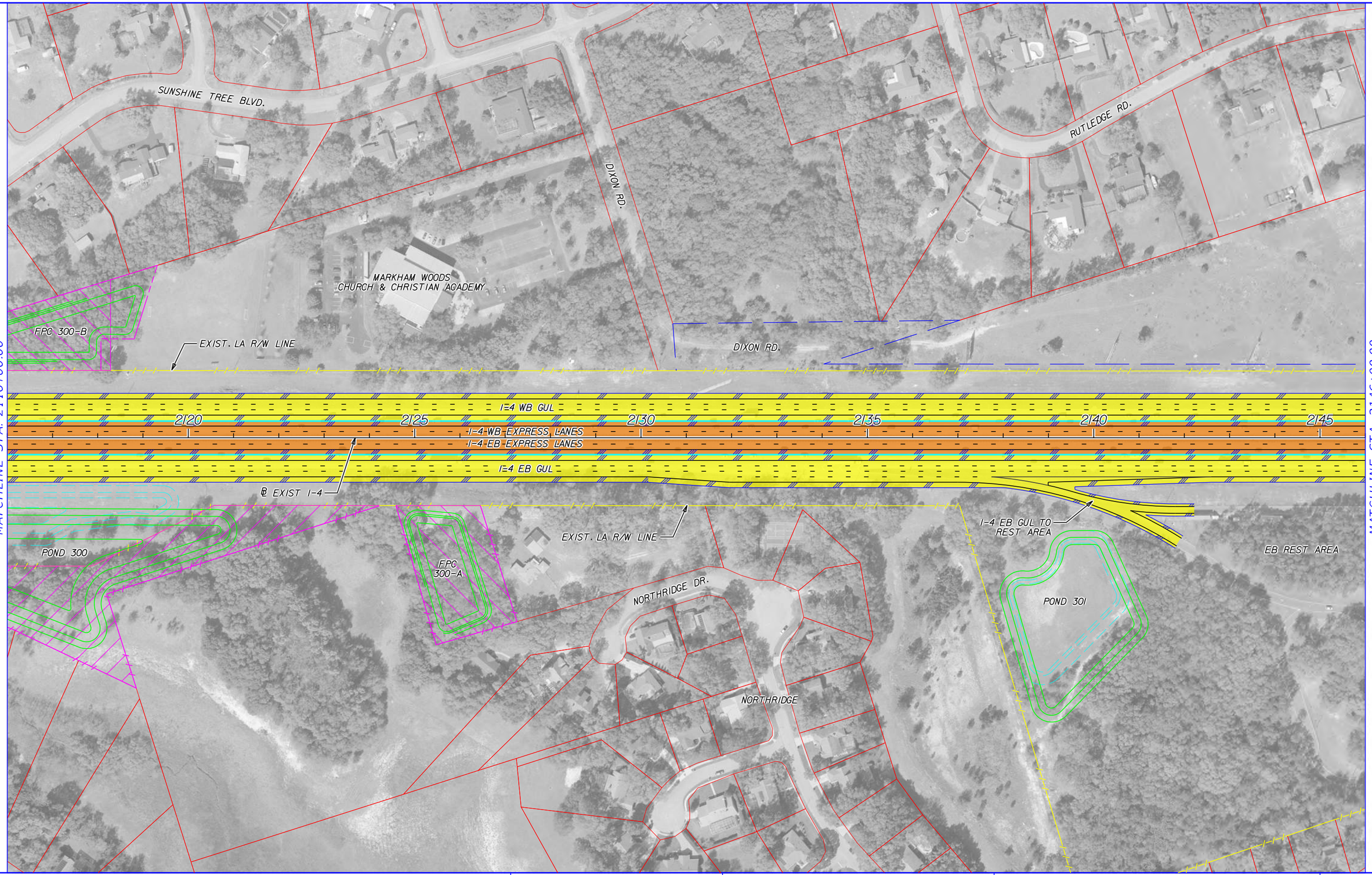
PLOT SCALE: 1:200



PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

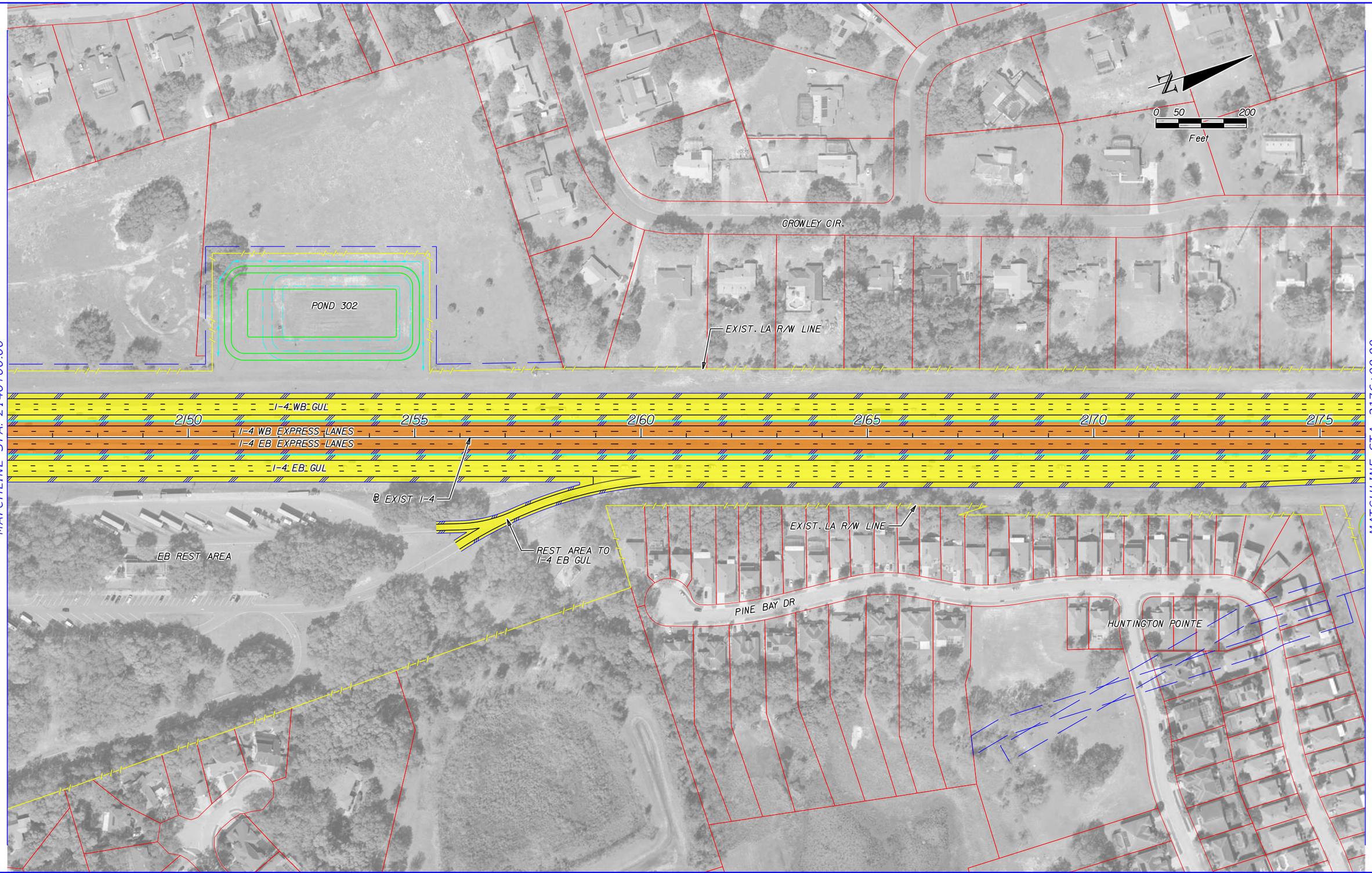
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:28:27 AM
U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:28:44 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2176+00.00

CROWLEY CIR.

LONG POND DR.

WALDENS POND COVE

0 50 200
Feet

POND 303-B2

EXIST. LA R/W LINE

℄ EXIST I-4

2180 2185 2190 2195 2200 2205

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

MATCHLINE STA. 2206+00.00

POND 303-A2

SKYLINE DR

POND 303-A1

SUN TECH COMMERCE PARK

EXIST. LA R/W LINE

FOX 35 WOFL

GOOD LIFE BROADCASTING

SKYLINE DR.

FL POWER CORP

ATRIUM CORPORATE CENTER

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:29:01 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2206+00.00

MATCHLINE STA. 2236+00.00

PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
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CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:29:19 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd08
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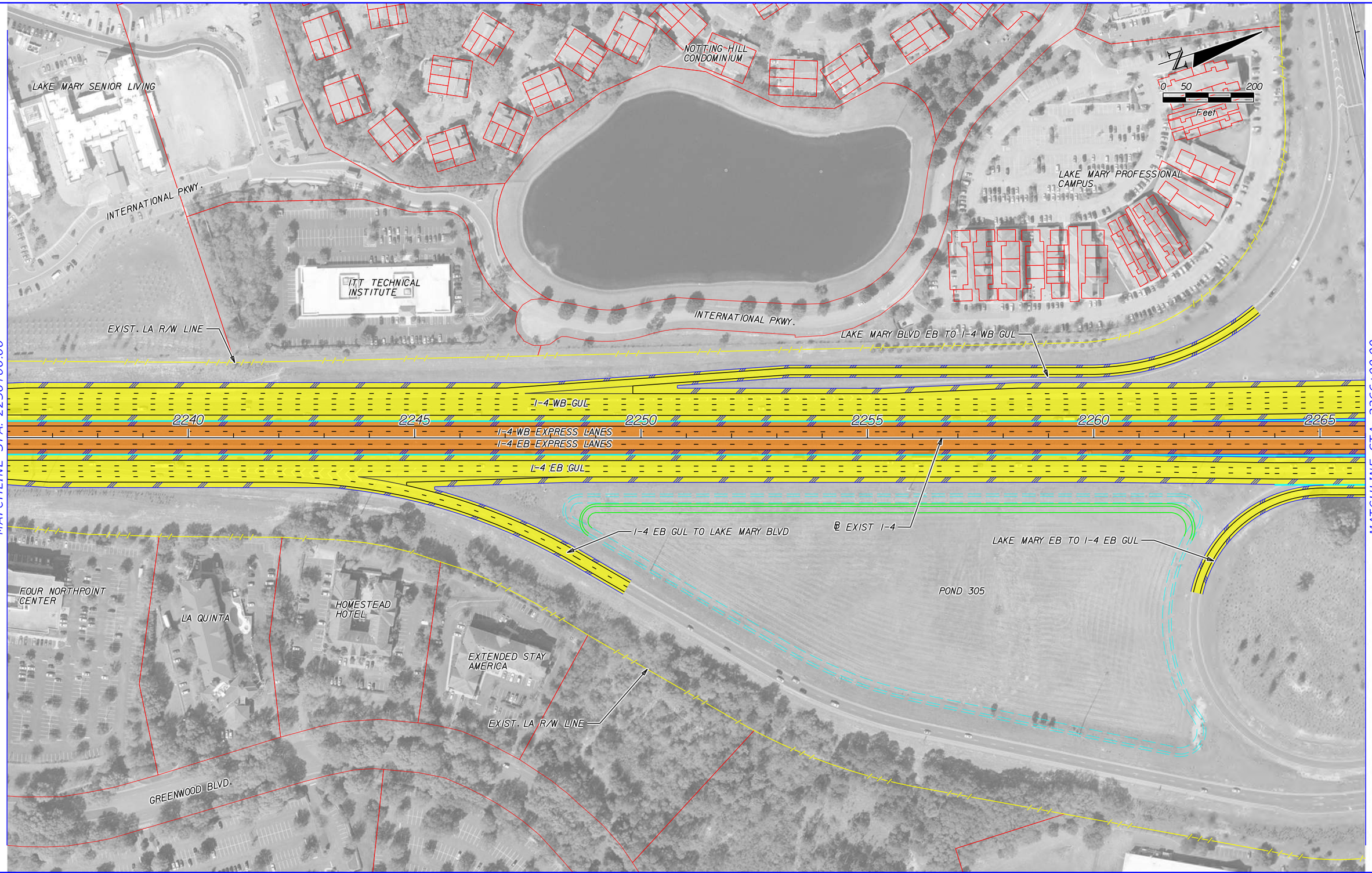

PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sglow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:29:37 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

WESCAR

EXIST. LA R/W LINE

0 50 200
Feet

INTERNATIONAL PKWY.

65 LAKE MARY BLVD

COVERGY'S

I-4 WB GUL TO LAKE MARY BLVD

SEMINOLE COUNTY WASTEWATER TREATMENT

LAKE MARY WB TO I-4 WB GUL

POND 306

EXIST. LA R/W LINE

STA. 2266+00.00

MATCHLINE STA.

70

2270 2275 2280 2285 2290 2295

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

LAKE MARY EB TO I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

LAKE MARY WB TO I-4 EB GUL

HILTON GARDEN INN

HOMEWOOD SUITES

CRESCENT AT PRIMERA ONE

HNTB CORPORATION

CRESCENT AT PRIMERA TWO

75 LAKE MARY BLVD

80

MACARONI GRILL

STA. 2296+00.00

MATCHLINE STA.

EXISTING LA R/W	GENERAL USE LANES		
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL		

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SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

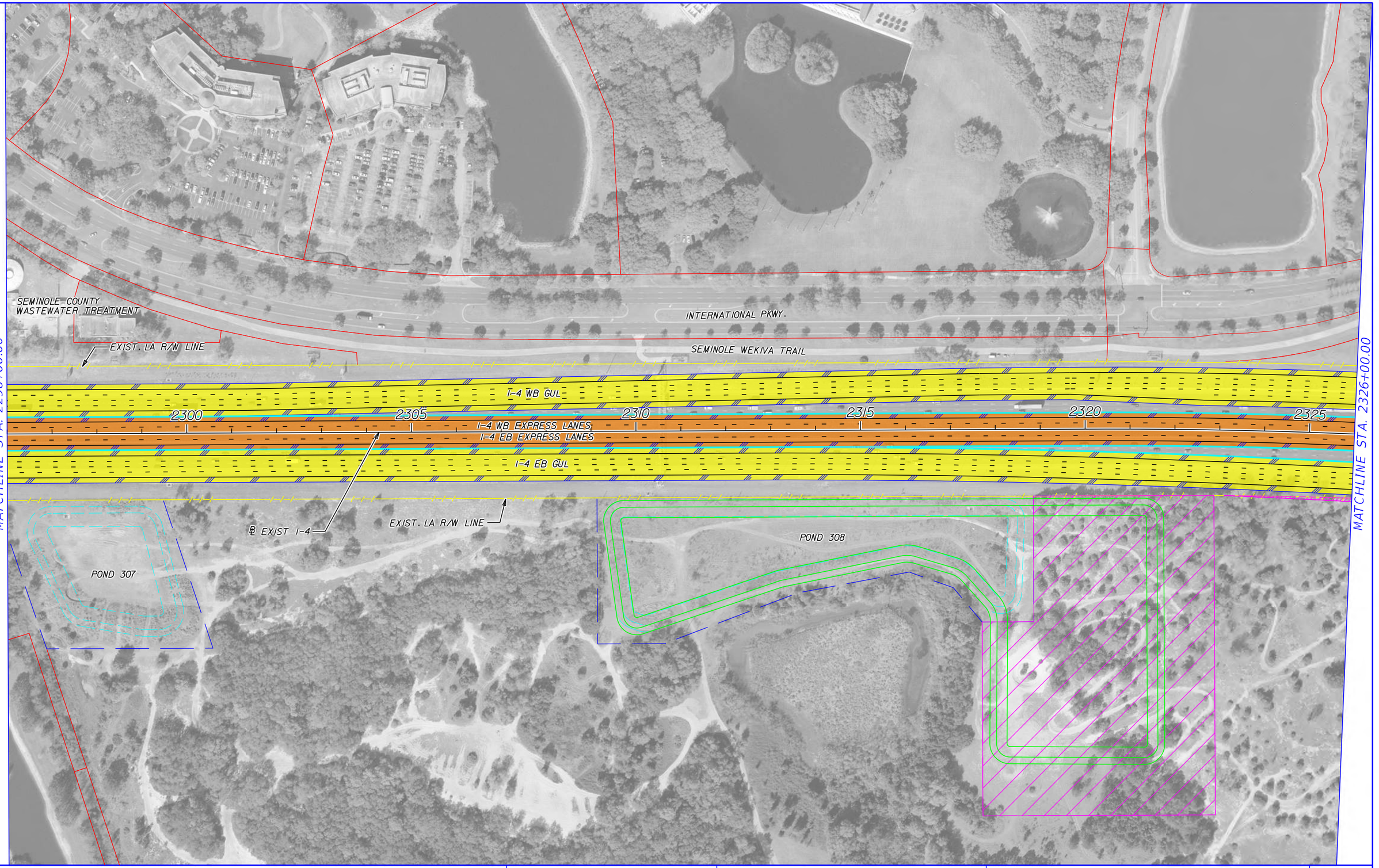
I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:29:53 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

smoss 4/29/2014 9:30:09 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd11
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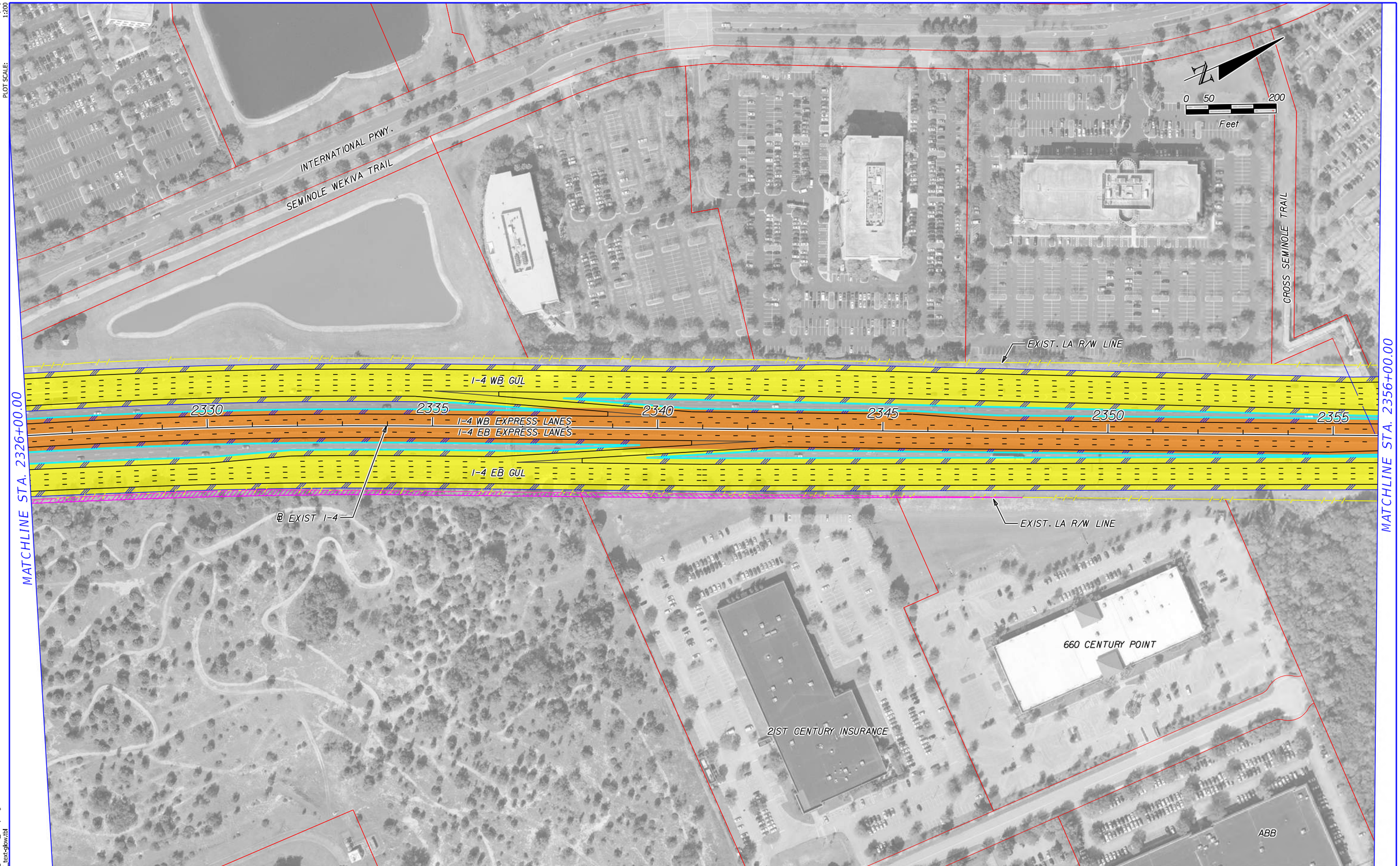
PLOT SCALE: 1:200



Color_FDOTPDE_PDE.pltcfg
FDOT_text-qkow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W		GENERAL USE LANES	
PROPOSED LA R/W		EXPRESS LANES	
EXISTING R/W		EXISTING BRIDGE	
PROPOSED FDOT R/W		PROPOSED BRIDGE	
PARCEL LINES		BARRIER WALL	

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:30:25 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2356+00.00

MATCHLINE STA. 2386+00.00

EXIST. LA R/W LINE

CR 46A GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

0 50 200
Feet

POND 309

EXIST. LA R/W LINE

CR 46A

65

I-4 WB GUL

2360 2365 2370 2375 2380 2385

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXISTING BRIDGE TO REMAIN

CROSS SEMINOLE TRAIL

POST OFFICE

UNITED STATES POSTAL SERVICE

I-4 EB GUL RAMP TO CR 46A GUL

EXIST. LA R/W LINE

POND 310

CENTENNIAL BANK

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:30:43 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2386+00.00

MATCHLINE STA. 2416+00.00

0 50 200
Feet

EXIST. LA R/W LINE

SR 429 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL RAMP TO SR 417 GUL

SR 417 GUL RAMP TO I-4 WB GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2390 2395 2400 2405 2410 2415

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

CR 46A RAMP TO I-4 EB GUL

I-4 EB GUL RAMP TO SR 417 GUL

EXIST. LA R/W LINE

POND 311

75

CR 46A

EXIST. LA R/W LINE

RINEHART RD.

ABC FINE WINE & SPIRITS

80

SANFORD INFINITI

HONDA

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-cglow.tbl
PRINT DRIVER:
PEN TABLE:

smoss 4/29/2014 9:31:02 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2416+00.00

MATCHLINE STA. 2446+00.00

30

35

40

45

50

WEKIVA PARKWAY

SR 417

EXIST. R/W LINE

EXIST. LA R/W LINE

0 50 200
Feet

I-4 WB GUL RAMP TO SR 417 GUL

SR 417 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

SR 417 GUL RAMP TO I-4 EB GUL

UNITED ARTISTS
SEMINOLE TOWNE CENTER
10 MOVIE THEATER

TOWNE CENTER C/R.

2420 2425 2430 2435 2440 2445

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:31:21 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2446+00.00

MATCHLINE STA. 2476+00.00

EXIST. LA R/W LINE

POND 312

SEMINOLE FORD

0 50 200
Feet

2450 2455 2460 2465 2470 2475

I-4 WB GUL

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

TOWNE CENTER CIR.

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

MILLER'S ALE HOUSE RESTAURANT

N. MALL ENTRANCE RD.

STEAK'N SHAKE

SEMINOLE TOWNE SQUARE MALL

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3) ALTERNATIVE 3 REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:31:38 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2476+00.00

MATCHLINE STA. 2506+00.00

AUDI NORTH ORLANDO AND AUTO MALL

AUDI NORTH ORLANDO

0 50 200
Feet

EXIST. LA R/W LINE

SR 46

65

70

75

80

SR 46 GUL RAMP TO I-4 WB GUL

SR 46 EB GUL RAMP TO I-4 WB GUL

EXIST. LA R/W LINE

POND 313A

POND 313

I-4 WB GUL RAMP TO SR 46 GUL

I-4 WB GUL

2480

2485

2490

2495

2500

2505

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

I-4 EB GUL RAMP TO SR 46 GUL

EXIST. LA R/W LINE

EXIST. LA R/W LINE

TOWNE CENTER PLAZA

SPRINGHILL SUITES

TOWNE RD.

HOPS RESTAURANT

OREGON AVE.

SUPER 8 MOTEL

SUNOCO GAS STATION

CRACKER BARREL

COMFORT INN

POND 314

OUTBACK STEAKHOUSE

MCDONALDS

HICKMAN DR.

7-11 GAS STATION

MOBIL GAS STATION

MATRESS GIANT

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-gblw.tbl

smoss 4/29/2014 9:31:55 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd17
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

EXIST. LA R/W LINE

I-4 WB GUL

2520

2525

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

2530

2515

2510

2535

I-4 EB GUL

MATCHLINE STA. 2506+00.00

℄ EXIST I-4

EXIST. LA R/W LINE

MATCHLINE STA. 2536+00.00

0 50 200

Feet

POND 314

HARLEY-DAVIDSON

FIVE-R

HICKMAN CIR.

PLUMMER

FASTERER CORP

GO ELECTRONICS

HIGH REACH 2

HICKMAN DR.

RUG KING

GUARDIAN EQUIPMENT

EWING

Color_FDOTPDF_PDE.ptcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:32:13 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2536+00.00

MATCHLINE STA. 2566+00.00

DUNBAR AVE.

CHESTNUT ST.

LA MESA RV

ORANGE BLVD.

PORT OF SANFORD

0 50 200
Feet

SEMINOLE COUNTY PORT AUTHORITY

EXIST. LA R/W LINE

US 17/92 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

2540 2545 2550 2555 2560 2565

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

EXIST. LA R/W LINE

I-4 EB GUL RAMP TO US 17/92

SCHOOL ST.

ELDER RD.

SOUTHERN PRIDE BUSINESS CENTER

ORANGE BLVD.

POND 316

FLORIDA ROCK INDUSTRIES

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:32:32 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2566+00.00

EXIST. LA R/W LINE

US 17/92

70

75

80

85

I-4 WB GUL RAMP TO US 17/92 GUL

EXIST. LA R/W LINE

END SEGMENT 3
STA. 2583+00.00

I-4 WB GUL

2570 2575 2580 2585 2590 2595

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

MONROE RD GUL RAMP TO I-4 EB GUL

EXISTING BRIDGES TO REMAIN

MONROE RD.

VOLUSIA COUNTY
SEMINOLE COUNTY

ST. JOHNS RIVER

0 50 200
Feet

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

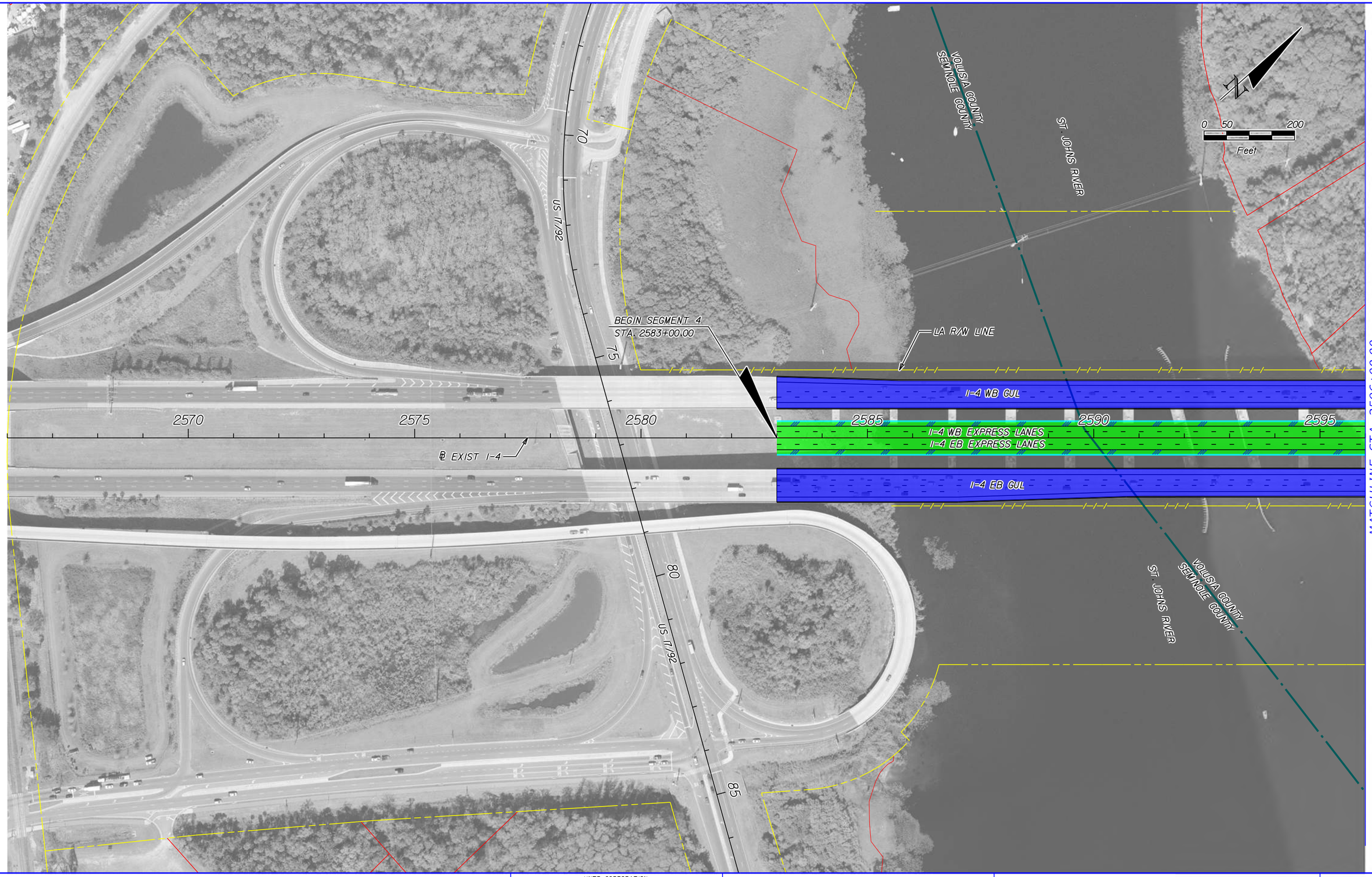
I-4 PD&E STUDY (SEGMENT 3)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 4/29/2014 9:32:53 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\roadway\planrd301-REVER-6-3.dgn

MODEL: planrd01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.ctb

smoss 4/29/2014 9:33:56 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2596+00.00

MATCHLINE STA. 2626+00.00

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

2600 2605 2610 2615 2620 2625

I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES

I-4 EB GUL

@ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:34:10 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2626+00.00

MATCHLINE STA. 2656+00.00

POND 400

LA R/W LINE

0 50 200
Feet

I-4 WB GUL

2630 2635 2640 2645 2650 2655

I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

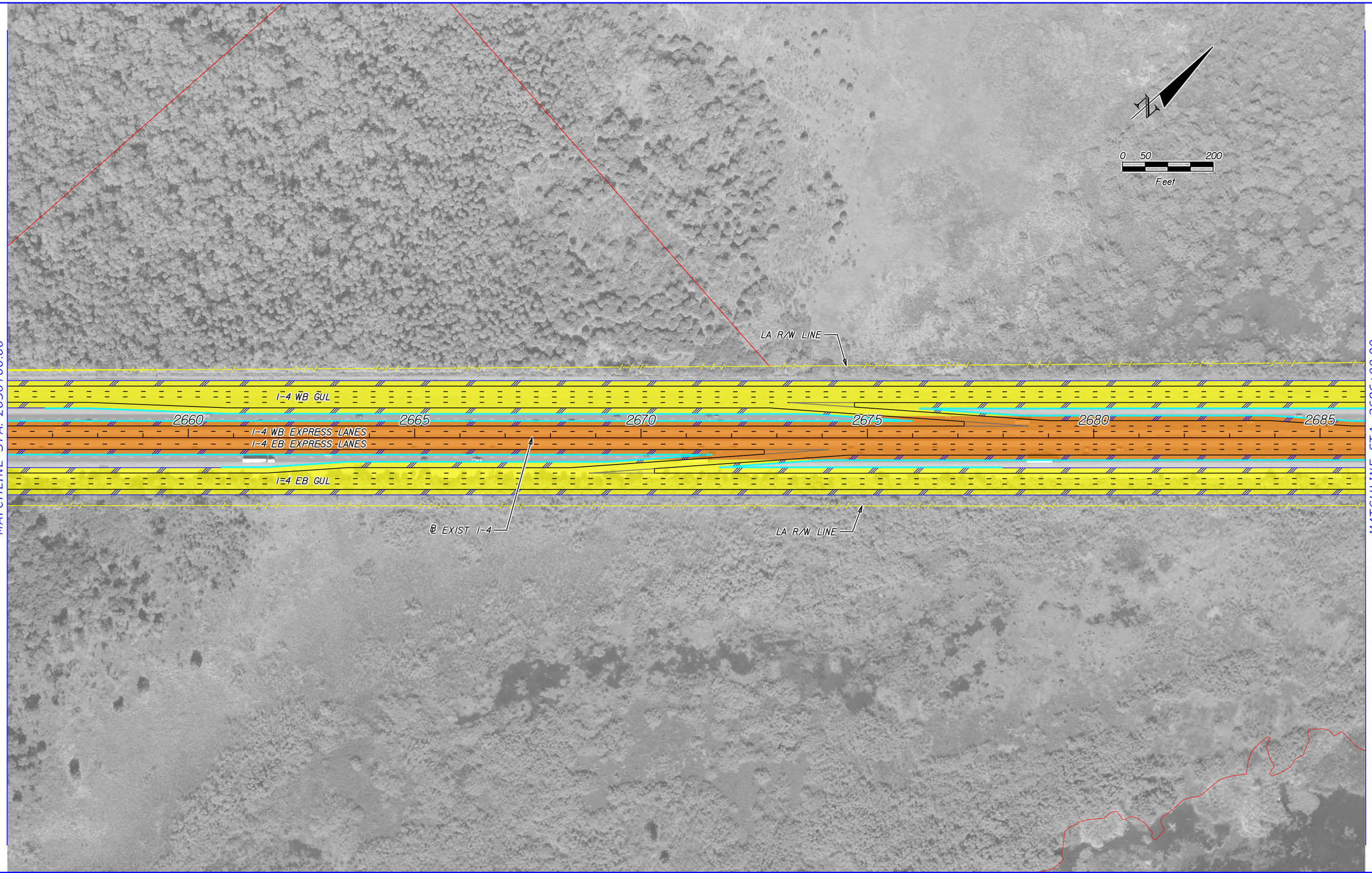
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:34:51 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

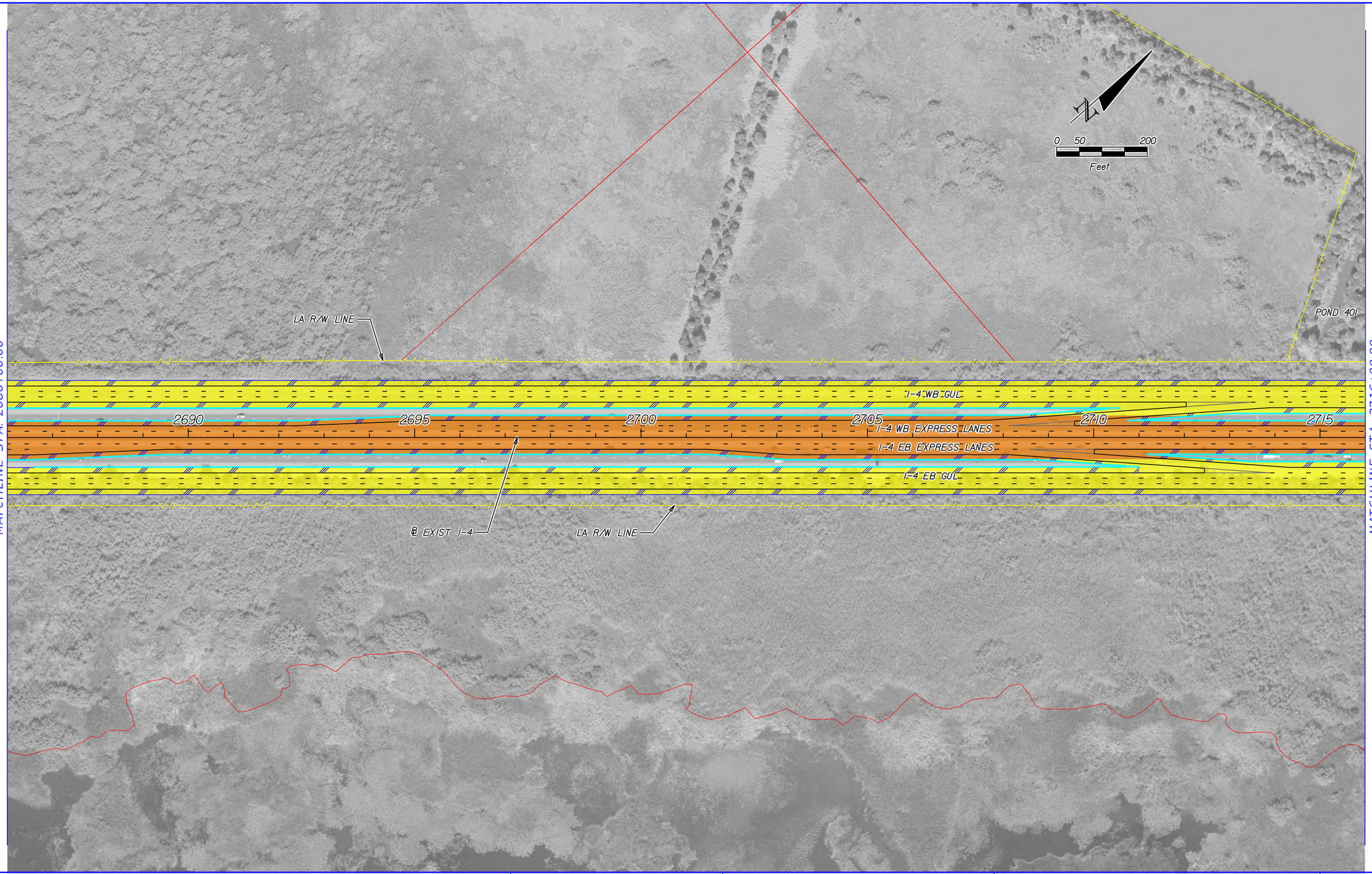
I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: C:\dor_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

smoss 4/29/2014 9:35:15 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:35:35 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2716+00.00

MATCHLINE STA. 2746+00.00

POND 401

LA R/W LINE

I-4 WB GUL

2720 2725 2730 2735 2740 2745

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

0 50 200

Feet

PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:35:54 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

RIVER OAKS
BURGER KING
KANGAROO GAS STATION
HAMPTION INN
IHOP
RIVERSIDE
PADGETT CREEK
DIRKSEN DR.
65
70
80
85
LA R/W LINE
LA R/W LINE
LA R/W LINE
LA R/W LINE
0 50 200
Feet
MATCHLINE STA. 2746+00.00
MATCHLINE STA. 2776+00.00
2750
2755
2760
2765
2770
2775
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
@ EXIST I-4
DIRKSEN DR GUL RAMP TO I-4 WB GUL
I-4 EB GUL RAMP TO DIRKSEN DR GUL

PRINT DRIVER: Color_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-plow.tbl

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

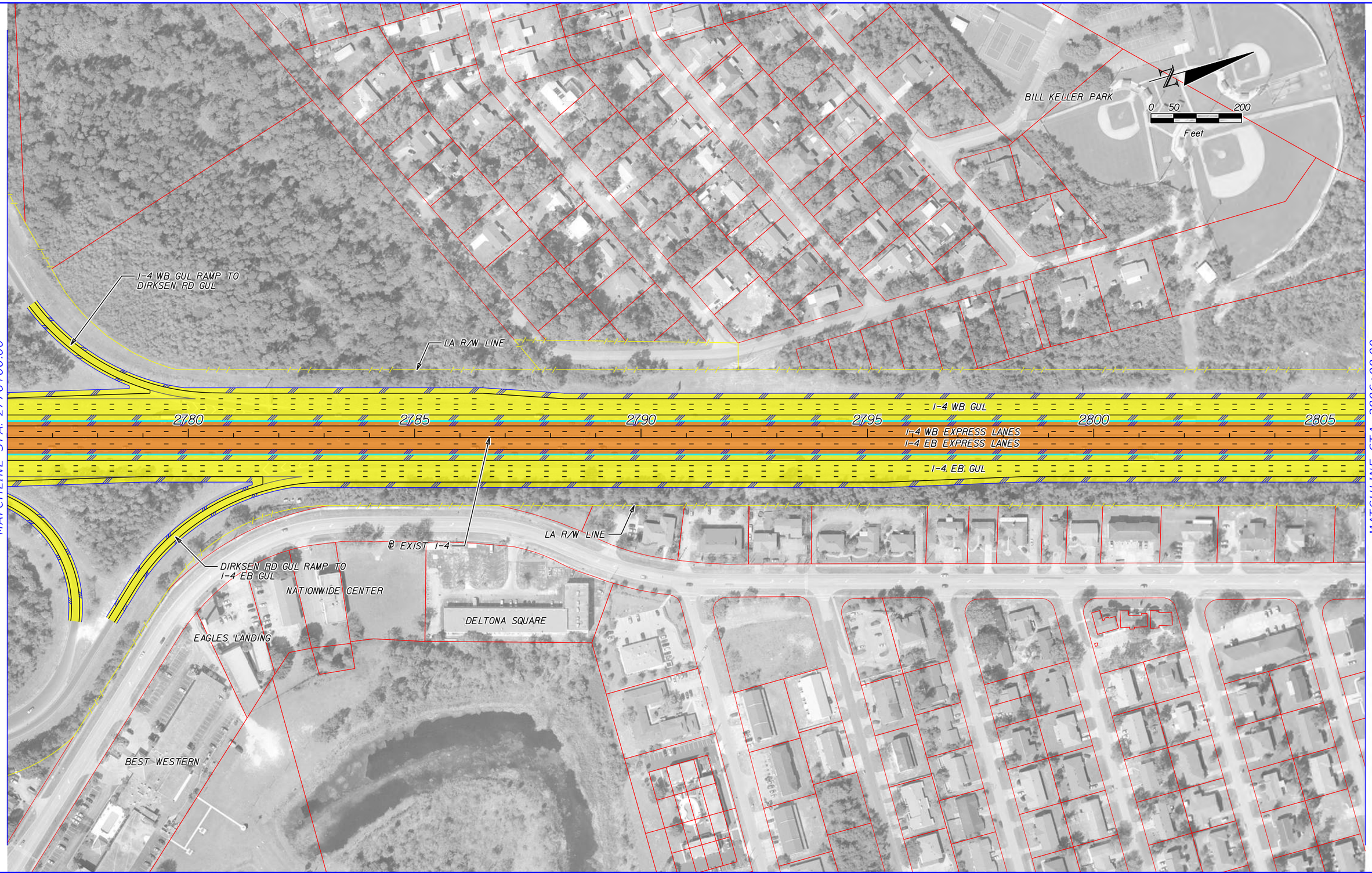
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:36:15 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: C:\dot_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

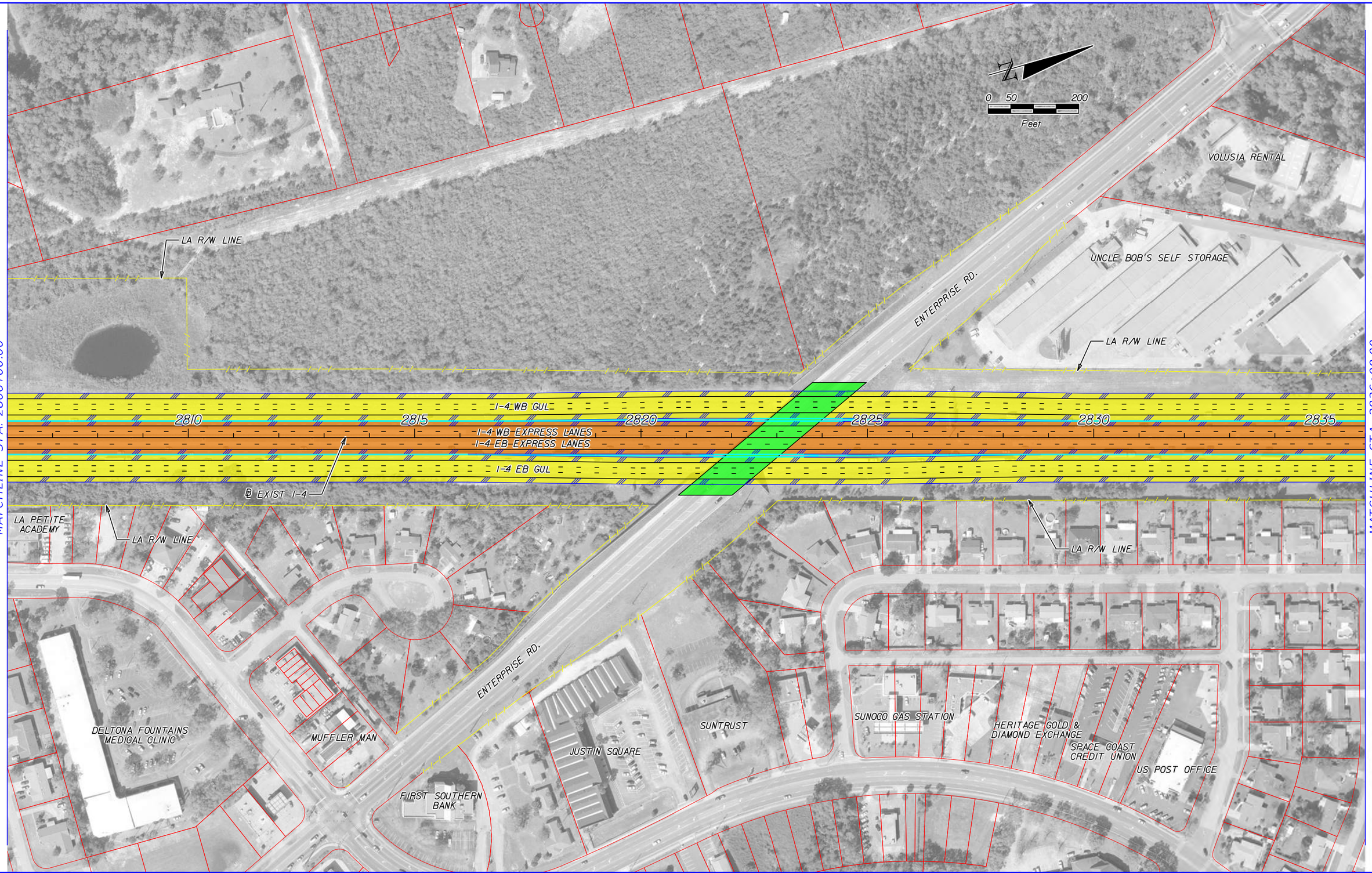
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:36:35 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:36:54 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2836+00.00

MATCHLINE STA. 2866+00.00

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

EXIST I-4

2840 2845 2850 2855 2860 2865

I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4) ALTERNATIVE 3 REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:37:12 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd11
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2866+00.00

MATCHLINE STA. 2896+00.00

N

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

℄ EXIST I-4

2870 2875 2880 2885 2890 2895

I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES

I-4 EB GUL

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

smoss 4/29/2014 9:37:29 AM

U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd12
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2896+00.00

MATCHLINE STA. 2926+00.00

HOLIDAY INN EXPRESS

SAXON BLVD.

65

70

75

80

0 50 200
Feet

LA R/W LINE

SAXON BLVD GUL RAMP TO I-4 WB GUL

I-4 WB GUL RAMP TO SAXON BLVD GUL

I-4 WB GUL

2900 2905 2910 2915 2920 2925

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

I-4 EB GUL RAMP TO SAXON BLVD EB GUL

I-4 EB GUL RAMP TO SAXON BLVD WB GUL

SAXON BLVD GUL RAMP TO I-4 EB GUL

LA R/W LINE

LA R/W LINE

LA R/W LINE

SAXON BLVD.

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-qlow.tbl
PRINT DRIVER:
PEN TABLE:

smoss 4/29/2014 9:37:44 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd13
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

0 50 200
Feet

MATCHLINE STA. 2926+00.00

MATCHLINE STA. 2956+00.00

LA R/W LINE

I-4 WB GUL

2930 2935 2940 2945 2950 2955

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

LA R/W LINE

POND 420-A2

POND 420-AI

Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
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ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:38:02 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd14
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2956+00.00

MATCHLINE STA. 2986+00.00

0 50 200
Feet

LA R/W LINE

I-4 WB GUL

2960 2965 2970 2975 2980 2985

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

smoss 4/29/2014 9:38:19 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd15
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 2986+00.00

MATCHLINE STA. 3016+00.00

N

0 50 200

Feet

POND

LA R/W LINE

I-4 WB GUL

2990 2995 3000 3005 3010 3015

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

@ EXIST I-4

LA R/W LINE

DELTONA WATER TREATMENT

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-gblw.tbl

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610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

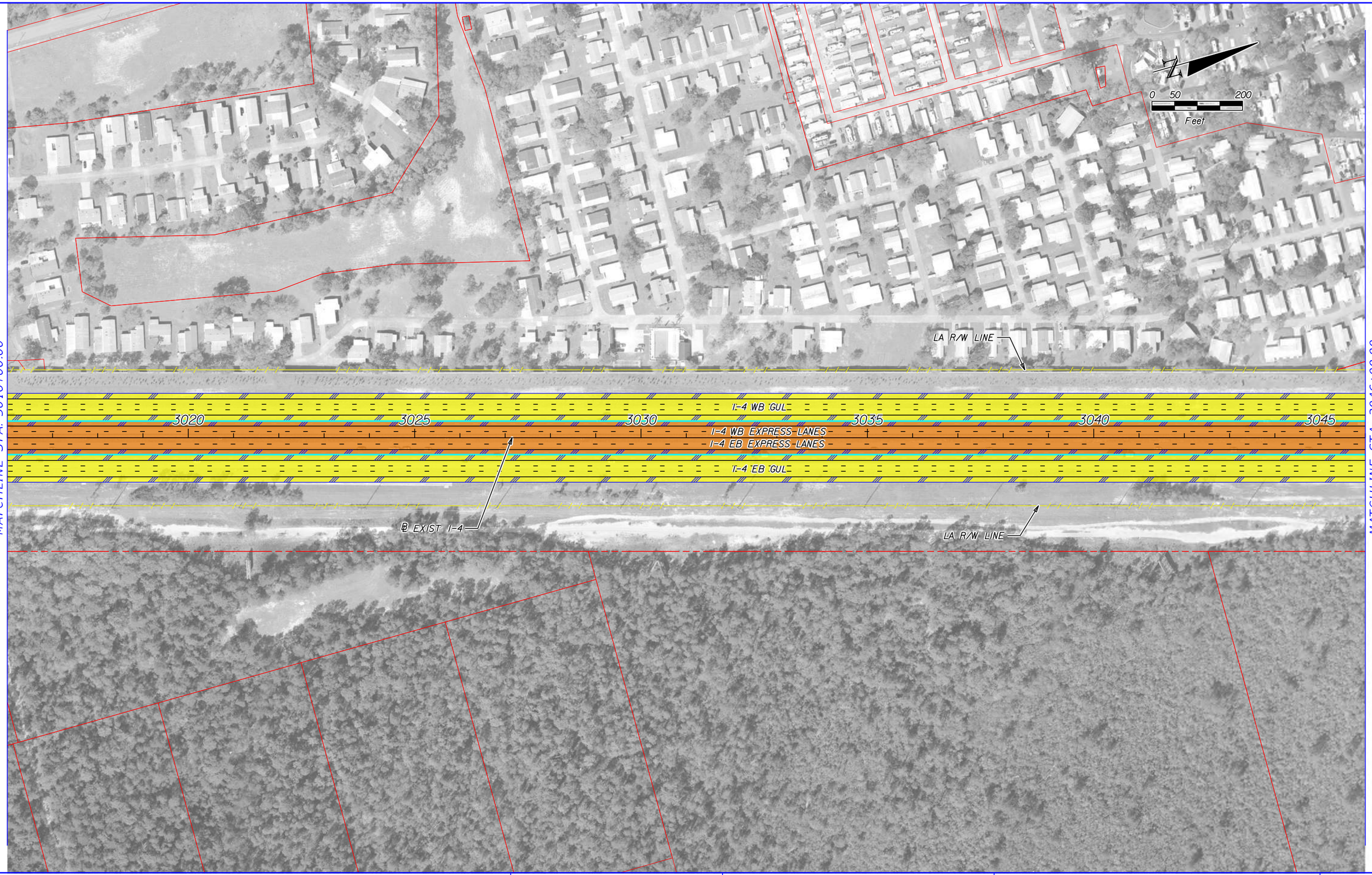
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4) ALTERNATIVE 3 REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:38:38 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd16
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200



EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE		
PROPOSED FDOT R/W	PROPOSED BRIDGE		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: C:\dot_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-sknw.tbl

smoss 4/29/2014 9:38:58 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd17
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3046+00.00

MATCHLINE STA. 3076+00.00

VILLAGE SQUARE RETAIL CENTER

GRAVES AVE.

0 50 200
Feet

LA R/W LINE

SR 472 GUL RAMP TO I-4 WB GUL

I-4 WB GUL

3050 3055 3060 3065 3070 3075

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

I-4 EB GUL RAMP TO SR 472 GUL

GRAVES AVE.

SR 472 GUL RAMP TO I-4 EB GUL

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4) ALTERNATIVE 3 REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-qkow.tbl
PRINT DRIVER:
PEN TABLE:

smoss 4/29/2014 9:39:20 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd18
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3076+00.00

MATCHLINE STA. 3106+00.00

N

0 50 200
Feet

LA R/W LINE

SR 472

59

SR 472 GUL RAMP TO
I-4 WB GUL

I-4 WB GUL RAMP TO
SR 472 GUL

LA R/W LINE

I-4 WB GUL

3080 3085 3090 3095 3100 3105

I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES

I-4 EB GUL

Ø

Ø EXIST I-4

LA R/W LINE

LA R/W LINE

75

HOWLAND BLVD.

SR 472 GUL RAMP TO
I-4 EB GUL

80

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE
PROPOSED BRIDGE
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
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(407) 805-0355
CERT. OF AUTH. NO. 6500

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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 4/29/2014 9:39:40 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\roadway\planrd401-REVER-6-3.dgn

MODEL: planrd19
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:200

MATCHLINE STA. 3106+00.00

LA R/W LINE

END SEGMENT 4
STA. 318+46.00

I-4 WB GUL

I-4 EB GUL

℄ EXIST I-4

LA R/W LINE

CASSADAGA RD.

3110 3115 3120 3125 3130

0 50 200
Feet

CASSADAGA RD.

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE
PROPOSED FDOT R/W	PROPOSED BRIDGE
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E STUDY (SEGMENT 4)
ALTERNATIVE 3
REVERSIBLE LANES 6 GUL-3 SUL

SHEET NO.

smoss 4/29/2014 9:40:01 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\roadway\planrd401-REVER-6-3.dgn

APPENDIX E

CONCEPTUAL SIGNING PLANS FOR ALTERNATIVE 1

MODEL: plansp01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2130+00.00

MATCHLINE STA. 2205+00.00

0 100 500
Feet

RUTLEDGE RD.
DIXON RD.
CROWLEY CIR.
CROWLEY CIR.
LONG POND DR.
WALDENS POND COVE
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
NORTHRIDGE DR.
EB REST AREA
PINE BAY DR
HUNTINGTON POINTE
SKYLINE DR
GOOD LIFE BROADCASTING
FOX 35 WOFL
SKYLINE DR.
FL POWER CORP
ATRIUM CORPORATE CENTER
NORTHRIDGE

2130 2135 2140 2145 2150 2155 2160 2165 2170 2175 2180 2185 2190 2195 2200 2205

LEFT ONLY EXPRESS LANES ENTRANCE
TH EE LINE DMS

ONLY TOLL VIOLATIONS PHOTO ENFORCED $100 PENALTY

LEFT ONLY EXPRESS LANES ENTRANCE 1/2 MILE
TH EE LINE DMS

EXPRESS LANE EXITS
Lee Rd XX
Ivanhoe Blvd XX
South St XX

LEFT ONLY EXPRESS LANES ENTRANCE 1 MILE
TH EE LINE DMS

LOCAL EXITS
Lake Mary Blvd
17 92
1 MILE

EXPRESS LANE EXITS
Dirksen Dr SOUTH
Rhode Island Ave XX
XX

EXPRESS LANE EXITS
Use 417 TOLL To 46
Orlando-Sanford Int'l Airport

LOCAL EXITS
Lake Mary Blvd
17 92
1/2 MILE

THREE LINE DMS

LOCAL EXITS
Heathrow
Seminole State College
NEXT RIGHT

EXPRESS LANES
4 EAST

LOCAL EXITS
Lake Mary Blvd
17 92

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
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FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

smoss 9/10/2014 8:17:47 AM
U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\signing\plansp301 6-4.dgn

MODEL: plansp02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2205+00.00

MATCHLINE STA. 2280+00.00

0 100 500
Feet

WALDENS POND COVE
CHARDONNAY CT.
DUNBROOKE LOOP
BENTONSHIRE PL.
INTERNATIONAL PKWY.
LAKE MARY SENIOR LIVING
INTERNATIONAL PKWY.
NOTTING HILL CONDOMINIUM
ITT TECHNICAL INSTITUTE
INTERNATIONAL PKWY.
LAKE MARY PROFESSIONAL CAMPUS
LAKE MARY BLVD
WESCAR

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

SKYLINE DR.
SANDPOND RD
THE A.G. MAURO COMPANY
DUKE ENERGY
CANDLEWOOD SUITES
SCHOLASTIC
FILUTOWSKI INSTITUTE
FOUR NORTHPOINT CENTER
LA QUINTA
HOMESTEAD HOTEL
EXTENDED STAY AMERICA
GREENWOOD BLVD.
GREENWOOD BLVD
LAKE MARY DORMITORY
LAKE MARY BLVD
HOMEWOOD SUITES
MACARONI GRILL

THREE LINE DMS
EXPRESS LANES ENTRANCE 1 MILE
LEFT
ONLY

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

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FL. REGISTRATION NO. 58593

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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

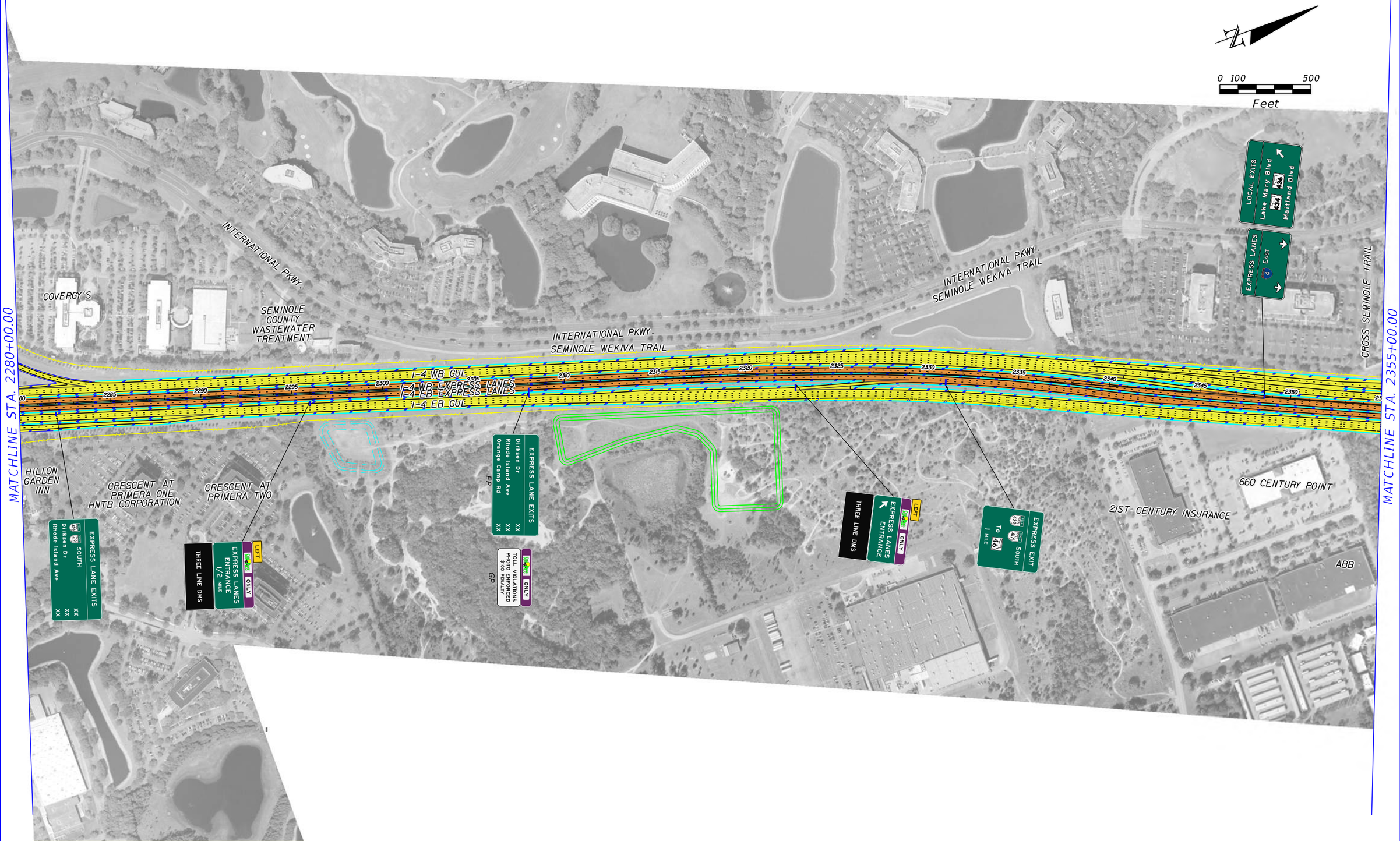
I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 9/10/2014 8:19:39 AM U:\Jobs\59219 - I4 SAMR\TECHPR0D\43210012201\Segment 3\signing\plansp301 6-4.dgn

plansp03
16.5x10.6 (in.)
1:500
MODEL:
SHEET SIZE:
PLOT SCALE:



PRINT DRIVER:
PEN TABLE:
Color_FDOTPDE_PDE.pltcfg
FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN SEGMENT 3

SHEET NO.

smoss 9/10/2014 8:21:34 AM
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MATCHLINE STA. 2355+00.00

MATCHLINE W1

MATCHLINE STA. 2430+00.00

0 100 500
Feet

LOCAL EXITS
Lake Mary Blvd 34
Maitland Blvd ½ MILE

EXPRESS LANE EXITS
Lee Rd XX
Ivanhoe Blvd XX
South bt XX

TH EE LINE DMS

LOCAL EXITS
Lake Mary Blvd 34
Maitland Blvd 1 MILE

EXPRESS LANES
WEST 4

WEST 4
EXPRESS LANES
LEFT

THREE LINE DMS
EAST 4
EXPRESS LANES
KEEP LEFT
LEFT

EXIT 101B
Int'l Airports
Sanford
EXIT ONLY

EXIT 101A
Sanford
Heathrow
3/4 MILE
WEST 4
Orlando
Tampa
LEFT LANES

Lake Mary Blvd 34
Maitland Blvd
NEXT RIGHT

EXPRESS LANES
EAST 4

EXIT 54
Rinehart Rd
1 1/4 MILE

BEGIN SOUTH
END NORTH

EAST 4

EXIT 55B
Int'l Pkwy
Heathrow

SOUTH 434

WEKIVA PARKWAY

SR 417

I-4 WB CUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB CUL

2360 2365 2370 2375 2380 2385 2390 2400 2405 2410 2415 2420 2425

CR 46A

POST OFFICE

PROPOSED EXP DMS

EXPRESS EXIT
To 46
½ MILE
SOUTH 434
SOUTH 417

EXPRESS LANES
EAST 4

EXPRESS EXIT
To 46
SOUTH 434
SOUTH 417

ABC FINE
WINE & SPIRITS
CENTENNIAL
BANK

RINEHART RD.

SANFORD INFINITI

HONDA

Town Center Mall
Orlando-Sanford Int'l
Airport
NEXT RIGHT

SOUTH 434
Mount Dora

EXIT ONLY
SOUTH 417
Sanford
To 46

SOUTH 434
Mount Dora

EXIT ONLY
SOUTH 417
Sanford
To 46

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl
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U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 3\signing\plansp301 6-4.dgn

MODEL: plansp05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2430+00.00

MATCHLINE STA. 2505+00.00

MATCHLINE W2"

0 100 500
Feet

SOUTH 17 92 Mount Dora
SOUTH 17 92 Sanford
WEST 4
EXPRESS LANES WEST 4
LOCAL EXITS Seminole State College Int'l Airports KEEP LEFT
LOCAL EXITS SOUTH 17 92 SOUTH 17 92
EXPRESS LANES EAST 4
LOCAL EXITS Seminole State College Int'l Airports NEXT RIGHT
P OPOSED EXP DMS
EXPRESS EXIT SOUTH 17 92 1/2 MILE

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

TOWNE CENTER CIR.
TOWNE CENTER PLAZA
MILLER'S ALE HOUSE RESTAURANT
SPRINGHILL SUITES
STEAK'N SHAKE
SEMINOLE TOWNE SQUARE MALL
N. MALL ENTRANCE RD.
TOWNE RD.
OREGON AVE.
SR 46
POND 313A
AUDI NORTH ORLANDO AND AUTO MALL
AUDI NORTH ORLANDO
SUPER 8 MOTEL
CRACKER BARREL
SUNOCO GAS STATION
HICKMAN DR.

LEFT EXPRESS LANES EAST 4 KEEP LEFT
THREE LINE DMS
EXPRESS LANES EAST 4
LEFT EXPRESS LANES WEST 4 KEEP LEFT
THREE LINE DMS
EXPRESS LANES ONLY WEST 4 Orlando
EXPRESS LANES ONLY EAST 4 Daytona
END NORTH 17 92
BEGIN SOUTH 17 92
EXIT 55 B Int'l Pkwy Heathrow 1/2 MILE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

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plansp06
16.5x10.6 (in.)
1:500
MODEL:
SHEET SIZE:
PLOT SCALE:

Color_FDOTPDF_PDE.pltcfg
FDOT_text-qkw.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

smoss 9/10/2014 8:27:22 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\signing\plansp301 6-4.dgn

MODEL: plansp07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

WEKIVA PARKWAY

MATCHLINE W1

THREE LINE DMS
EXPRESS LANES 2 MILES EXIT SS A
EXPRESS LANES ONLY
Int'l Pkwy Heathrow 1 MILE EXIT XX B
EXPRESS LANES 1¼ MILE EXIT XX A
EXPRESS LANE EXITS
Dirksen Dr XX
Rhode Island Ave XX
Orange Camp Rd XX
EXPRESS LANE EXITS EAST
END BEGIN NORTH SOUTH 1½ MILES
TOLL VIOLATIONS PHOTO ENFORCED $100 PENALTY
Lee Rd XX
Ivanhoe Blvd XX
South St XX
EXPRESS LANE EXITS WEST
EXPRESS LANES Orlando Daytona ¼ MILE EXIT XX A
Int'l Pkwy Heathrow ½ MILE EXIT XX B
THREE LINE DMS
THREE LINE DMS
EXPRESS LANES Orlando Daytona ¼ MILE EXIT XX A
Int'l Pkwy Heathrow EXIT XX B
Int'l Airports Sanford SOUTH
EXPRESS LANES Daytona EAST EXPRESS LANES Orlando WEST EXIT XX A
EXPRESS LANES Daytona EAST EAST EXPRESS LANES Orlando WEST WEST

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

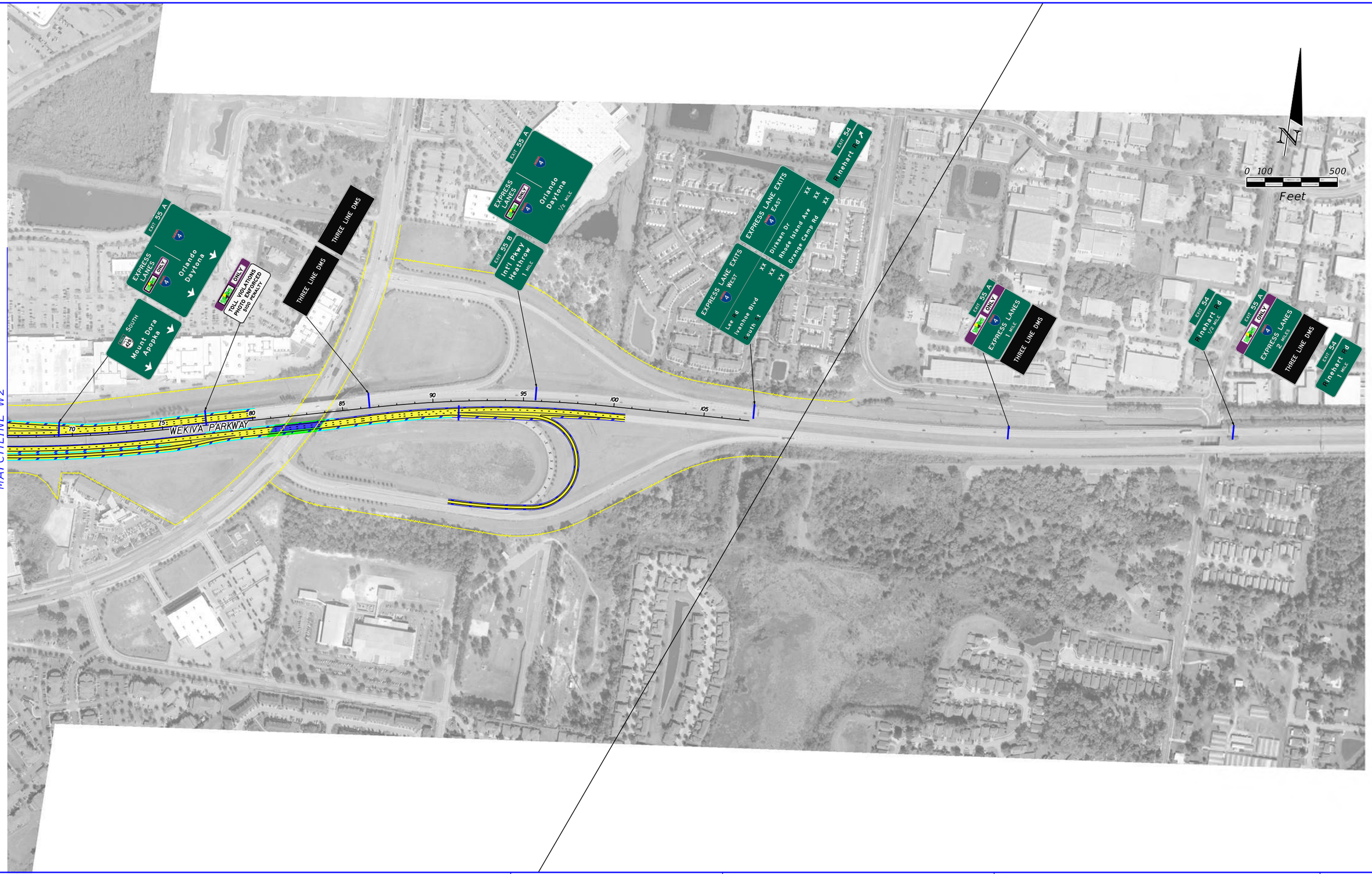
SHEET NO.

PRINT DRIVER: Color_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 9/10/2014 8:29:39 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122012\Segment 3\signing\plansp301 6-4.dgn

plansp08
16.5x10.6 (in.)
1:500
MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE W2



MATCHLINE W2

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-cplkw.tbl

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MODEL: planspl01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2650+00.00

MATCHLINE STA. 2725+00.00

0 100 500
Feet

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

2650 2655 2660 2665 2670 2675 2680 2685 2690 2695 2700 2705 2710 2715 2720

LOCAL EXITS
Dirksen Dr
Saxon Blvd
472
1 MILE

EXPRESS LANE EXITS
Rhode Island Ave XX
Orange Camp Rd XX

LOCAL EXITS
Dirksen Dr
Saxon Blvd
472
1/2 MILE

THREE LINE DMS

EXPRESS LANES
4 EAST

LOCAL EXITS
Dirksen Dr
Saxon Rd
472

LEFT
ONLY
EXPRESS LANES ENTRANCE
THREE LINE DMS

Color_FDOTPDE_PPE.pltcfg
FDOT_text-qlow.tbl
PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

smoss 9/10/2014 9:53:38 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401.dgn

MODEL:
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

plansp02

0 100 500
Feet

MATCHLINE STA. 2725+00.00

MATCHLINE STA. 2800+00.00

ONLY
TOLL VIOLATIONS PHOTO ENFORCED $100 PENALTY

LEFT ONLY
EXPRESS LANES ENTRANCE 1/2 MILE
THREE LINE DMS

EXPRESS LANE EXITS
SOUTH 17 SOUTH XX
SOUTH 92 Lake Mary Blvd XX
Lee Rd XX

LEFT ONLY
EXPRESS LANES ENTRANCE 1 MILE
THREE LINE DMS

PADGETT CREEK

LAKE MONROE

DIRKSEN DR

COLOMBA RD

RIVIERA DR

CARDINAL DR

ALEMANDER AVE

GARDENIA AVE

I-4 WB CUE

I-4 WB EXPRESS LANES

I-4 EB EXPRESS LANES

I-4 EB CUE

DELTONA BLVD

CARIBBEAN ST

DELTONA BLVD

DEBARY AVE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkw.tbl

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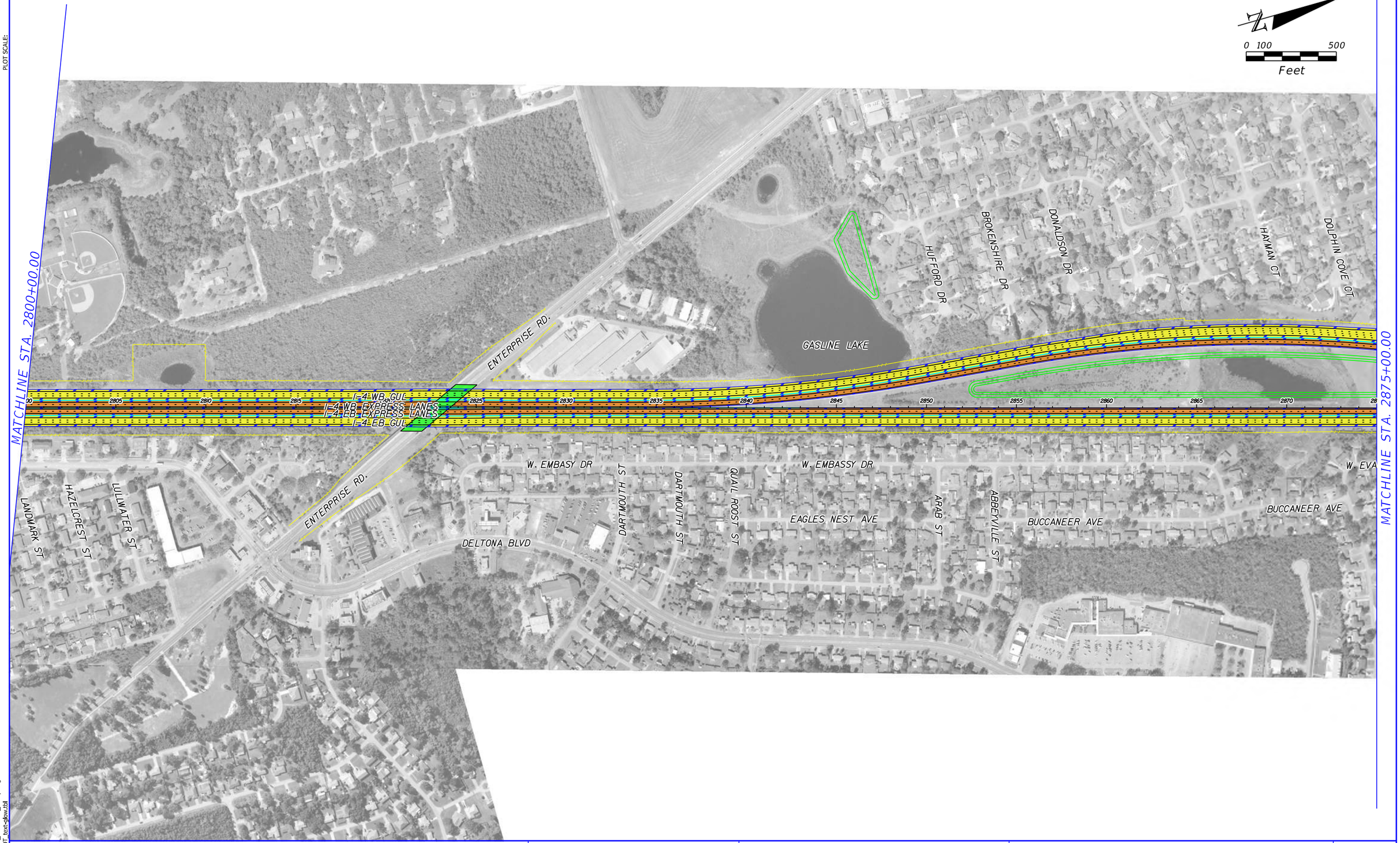
MODEL: planssp03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkow.tbl

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MODEL: plansp04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

MATCHLINE STA. 2875+00.00

MATCHLINE STA. 2950+00.00

LAKE EMERALD
GOOSE LAKE
LAKE MALLARD
TROUT LAKE
MOSS POINT COVE CT
LANYARD LN
FLORIDA AVE
EMERALD AVE
KETTERING RD
ASHBOURNE WAY
HAVERSHAM RD
SAXON BLVD
I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL
W. PARKTON DR
E. PARKTON DR
TAYLORVILLE ST
JEFFERS ST
PALMTREE DR
N. PARKTON DR
SULLIVAN ST

EXPRESS EXIT
LEFT
Rhode Island Ave
To Orange City
1 MILE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

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plansp05
16.5x10.6 (in.)
1:500

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE STA. 2950+00.00

MATCHLINE STA. 3025+00.00

0 100 500
Feet

I-4 WB GUL
I-4 WB EXPRESS LANES
I-4 EB EXPRESS LANES
I-4 EB GUL

RHODE ISLAND
S. KENTUCKY AVE
ABBOTTWOODS LN
HOLLOWRIDGE DR
PINEVIEW DR

THREE LINE DMS

TOLL VIOLATIONS PHOTO ENFORCED $100 PENALTY

GALVESTON AVE
ANTOINETTE ST
ANTELOPE DR
N. GLORIA DR
PROPOSED EXP DMS
S. ANNAPOLIS DR
FLAGLER ST
GERANIUM ST
W. FIRWOOD DR
E. ANNAPOLIS DR

Rhode Island Ave
To Orange City
½ MILE
EXPRESS EXIT
LEFT

EXPRESS LANES
EAST

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

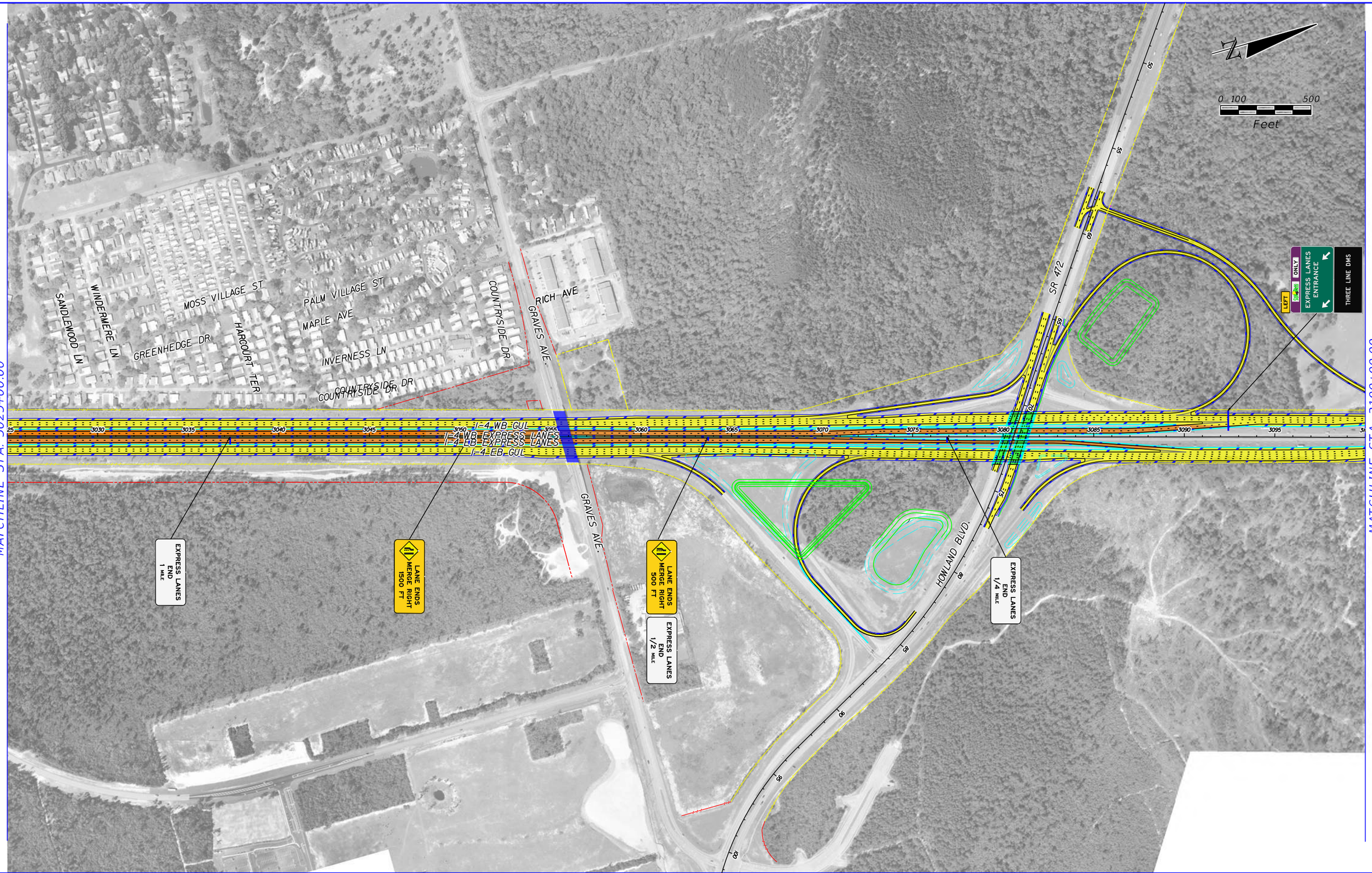
SHEET NO.

Color_FDOTPDF_POE.pltcfg
FDOT_text-cglow.tbl

PRINT DRIVER:
PEN TABLE:

smoss 9/10/2014 9:55:18 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\signing\plansp401.dgn

MATCHLINE STA. 3025+00.00



MATCHLINE STA. 3100+00.00

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407)805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

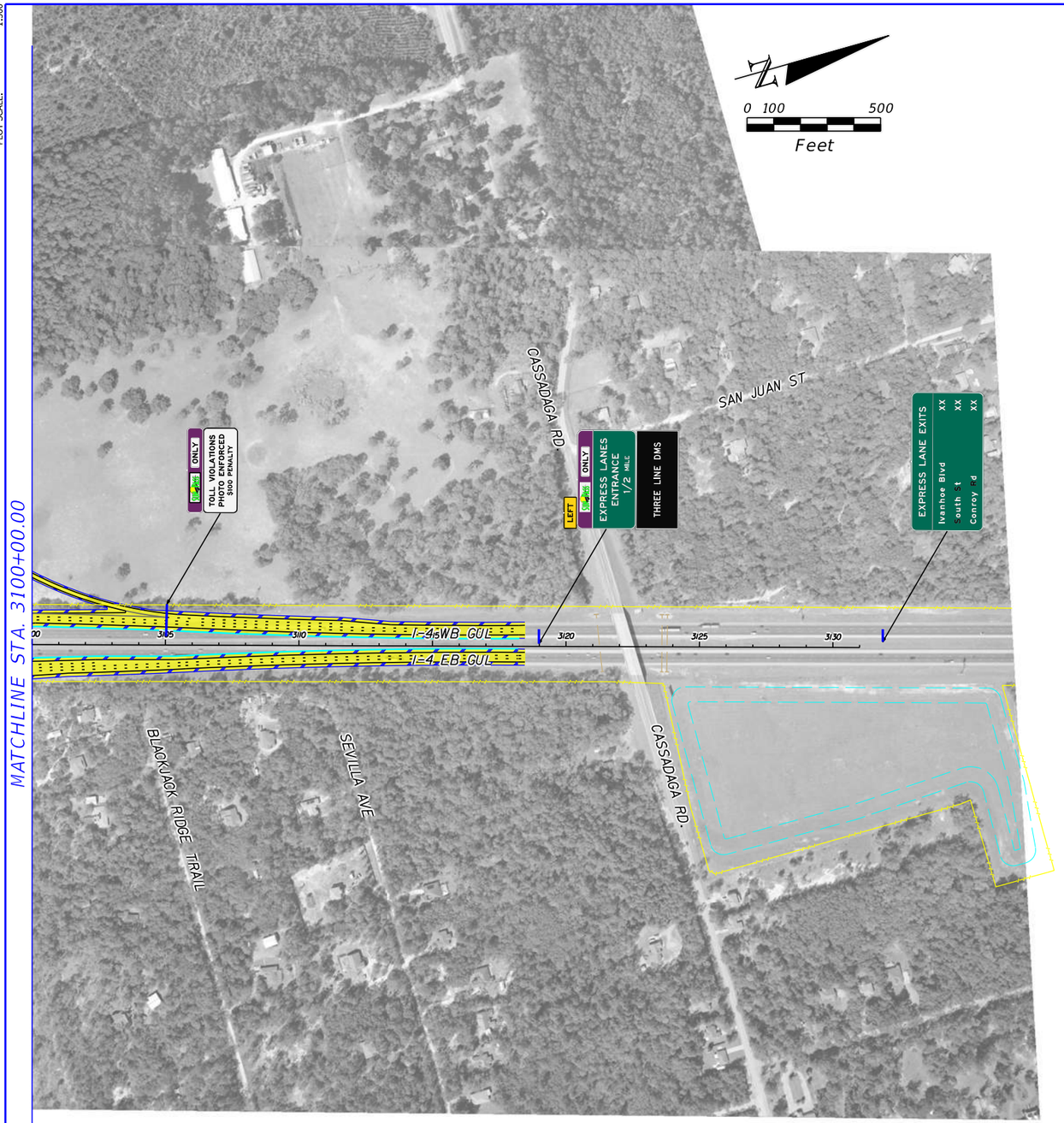
I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qkow.tbl

smoss 9/10/2014 9:55:45 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\signing\plansp401.dgn

MODEL: plansp07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500



EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_POE.pltcfg
PEN TABLE: FDOT_text-glow.tbl
smoss 9/10/2014 9:56:13 AM
U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 4\signing\plansp401.dgn

APPENDIX F

CONCEPTUAL SIGNING PLANS FOR ALTERNATIVE 3

MODEL: plansp10
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

PRINT DRIVER: Color_FDOTPDE_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

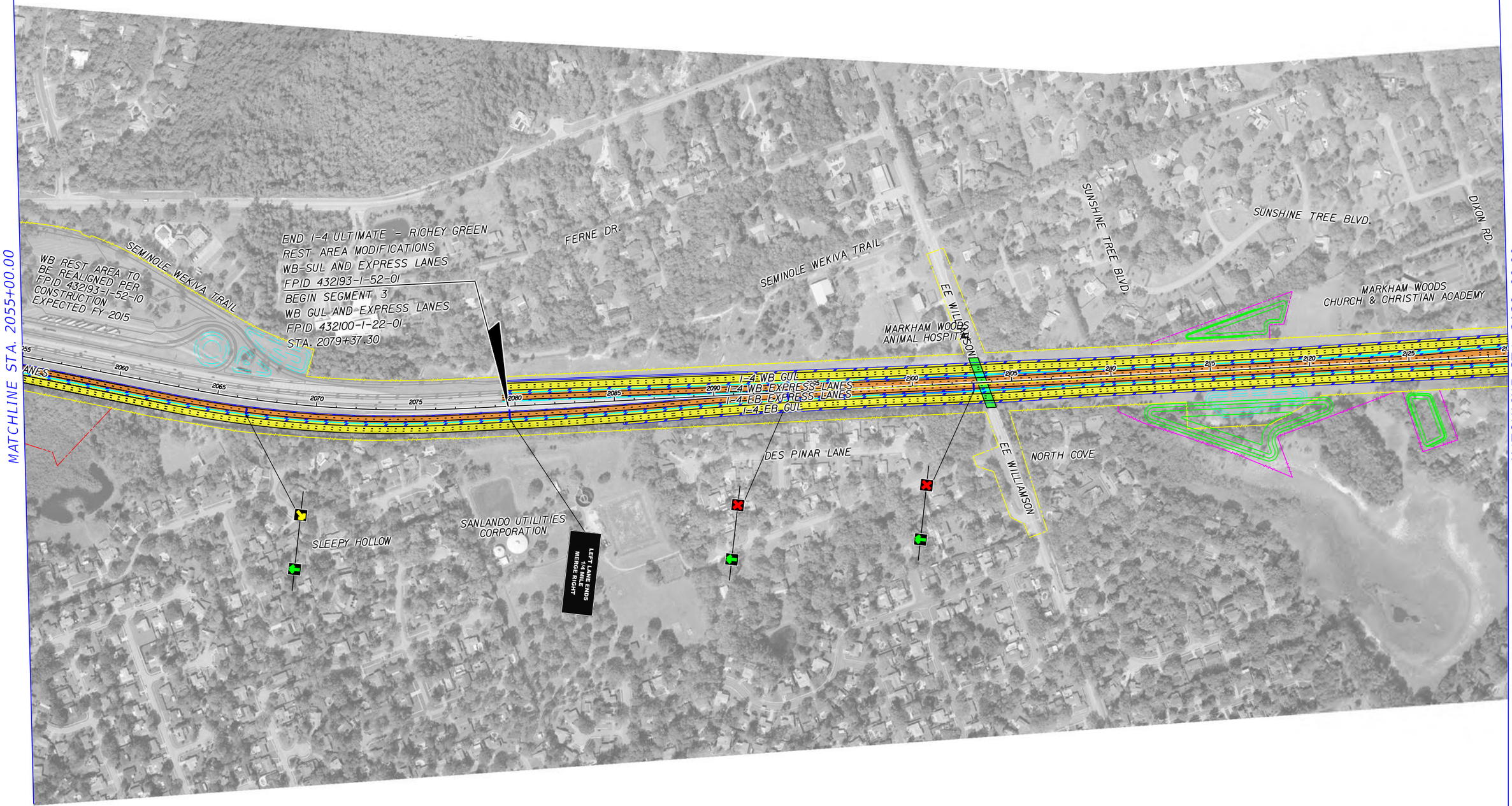
SHEET NO.

smoss 9/10/2014 8:46:19 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp09
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2055+00.00

MATCHLINE STA. 2130+00.00



EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qblow.tbl

smoss 9/10/2014 8:49:07 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122201\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp01
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

STA. 2130+00.00

MATCHLINE STA. 2130+00.00

STA. 2205+00.00

MATCHLINE STA. 2205+00.00

RUTLEDGE RD.
DIXON RD.
CROWLEY CIR.
CROWLEY CIR.
LONG POND DR.
WALDENS POND COVE
NORTHRIDGE DR.
NORTHRIDGE
EB REST AREA
PINE BAY DR
HUNTINGTON POINTE
SKYLINE DR
FL POWER CORP
GOOD LIFE BROADCASTING
FOX 35 WOFL
SKYLINE DR.
ATRIUM CORPORATE CENTER

I-4 WB COL
I-4 EXPRESS LANES
I-4 EB COL

2130 2135 2140 2145 2150 2155 2160 2165 2170 2175 2180 2185 2190 2195 2200

LEFT ONLY EXPRESS LANES ENTRANCE
TH EE LINE DMS

ONLY
TOLL VIOLATIONS PHOTO ENFORCED $100 PENALTY

LEFT ONLY EXPRESS LANES ENTRANCE 1/2 MILE
TH EE LINE DMS

EXPRESS LANE EXITS
Lee Rd XX
Ivanhoe Blvd XX
South St XX

LEFT ONLY EXPRESS LANES ENTRANCE 1 MILE
TH EE LINE DMS

LOCAL EXITS
Lake Mary Blvd
I-4 1 MILE 46A 32

EXPRESS LANE EXITS
SOUTH XX
Dirksen Dr XX
Rhode Island Ave XX

EXPRESS LANE EXITS
Use To I-4
Orlando Sanford Int'l Airport

LOCAL EXITS
Lake Mary Blvd
I-4 1/2 MILE 46A 32

TH EE LINE DMS

LOCAL EXITS
Heathrow
Seminole State College
NEXT RIGHT

EXPRESS LANES
4 EAST

LOCAL EXITS
Lake Mary Blvd
I-4 46A 32

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 9/10/2014 8:51:58 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\signing\plansp301 6-3.dgn

MODEL: $MODELNAME$
SHEET SIZE: $SHEETSIZE$
PLOT SCALE: $SCALEHSHORT$

MATCHLINE STA. 2205+00.00

MATCHLINE STA. 2280+00.00

0 100 500
Feet

WALDENS POND COVE
CHARDONNAY CT.
DUNBROOKE LOOP
INTERNATIONAL PKWY.
BENTONSHIRE PL.
LAKE MARY SENIOR LIVING
INTERNATIONAL PKWY.
NOTTING HILL CONDOMINIUM
ITT TECHNICAL INSTITUTE
INTERNATIONAL PKWY.
LAKE MARY PROFESSIONAL CAMPUS
LAKE MARY BLVD
WESCAR

I-4 WB GUL
I-4 EXPRESS LANES
I-4 EB GUL

SKYLINE DR.
SANDPOND RD
THE A.G. MAURO COMPANY
DUKE ENERGY
CANDLEWOOD SUITES
SCHOLASTIC
FILUTOWSKI INSTITUTE
FOUR NORTHPOINT CENTER
LA QUINTA
HOMESTEAD HOTEL
EXTENDED STAY AMERICA
GREENWOOD BLVD.
GREENWOOD BLVD.
LAKE MARY DORMITORY
LAKE MARY BLVD
HOMEWOOD SUITES
MACARONI GRILL

TH EE LINE DMS
EXPRESS LANES ENTRANCE 1 MILE
LEFT
ONLY

PRINT DRIVER: $PLTDRVS$
PEN TABLE: $PENTBLS$

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

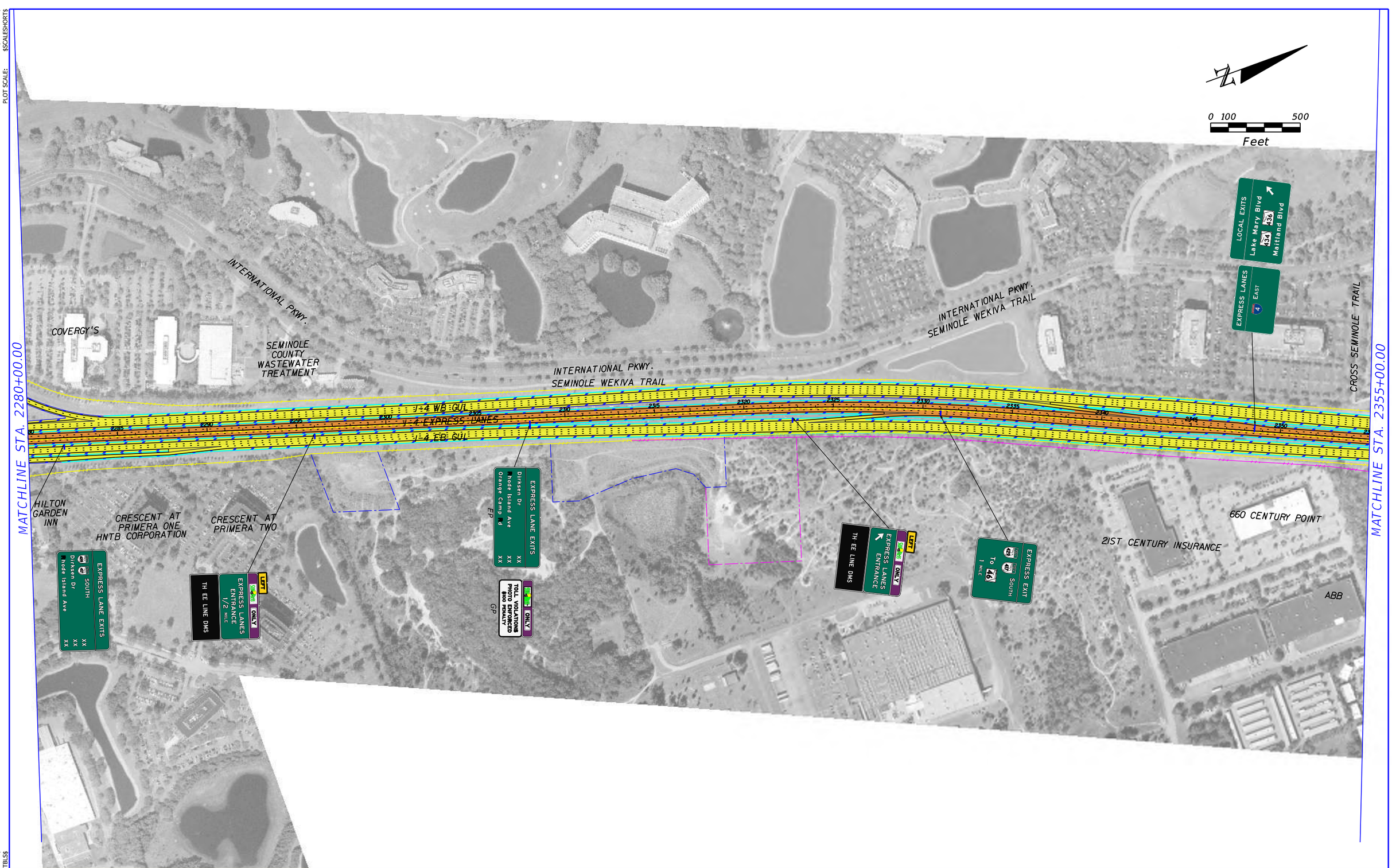
I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

$USERS $DATES $TIMES $FILES

$MODELNAMES
$SHEETSIZES
$SCALESHORTS

MODEL:
SHEET SIZE:
PLOT SCALE:



$PLTDRV$$
$PENTBL$$

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

$USERS $DATES $TIMES $FILES

plansp04
16.5x10.6 (in.)
1:500

MODEL:
SHEET SIZE:
PLOT SCALE:

MATCHLINE W1

MATCHLINE STA. 2355+00.00

MATCHLINE STA. 2430+00.00

0 100 500
Feet

TH EE LINE DMS

LOCAL EXITS
Lake Mary Blvd 34
Maitland Blvd ½ MILE

EXPRESS LANE EXITS
Lee Rd
Ivanhoe Blvd
South St

LOCAL EXITS
Lake Mary Blvd 34
Maitland Blvd 1 MILE

EXPRESS LANES
WEST

EXIT 101B
Int'l Airports
Sanford
EXIT ONLY

EXIT 101A
Sanford
Heathrow 3/4 MILE
WEST
Orlando
Tampa
LEFT LANES

TH EE LINE DMS
EXPRESS LANES
EAST
KEEP LEFT
LEFT

TH EE LINE DMS
EXPRESS LANES
EAST
KEEP LEFT
LEFT

Lake Mary Blvd
34
Maitland Blvd
KEEP RIGHT

EXPRESS LANES
EAST

EAST

EXIT 54
Rinehart Rd
1 1/4 MILE

BEGIN
NORTH
SOUTH

END
NORTH
SOUTH

EXIT 55 B
Int'l Pkwy
Heathrow

SOUTH

WEKIVA PARKWAY

I-4 WB CUL

I-4 EXPRESS LANES

I-4 EB CUL

CR 46A

SR 417

POST OFFICE

ABC FINE WINE & SPIRITS

CENTENNIAL BANK

RINEHART RD.

SANFORD INFINITI

HONDA

Town Center Mall
Orlando Sanford Int'l Airport
KEEP RIGHT

P OPOSED EXP DMS

EXPRESS EXIT
To 417
½ MILE
SOUTH

EXPRESS LANES
EAST

EXPRESS EXIT
To 417
SOUTH

Mount Dora
SOUTH

EXIT ONLY
Sanford
To 417
SOUTH

Mount Dora
SOUTH

EXIT ONLY
Sanford
To 417
SOUTH

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 9/10/2014 9:00:26 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2430+00.00

MATCHLINE STA. 2505+00.00

0 100 500
Feet

EXPRESS LANES WEST
SOUTH Mount Dora
SOUTH Sanford
LOCAL EXITS Seminole State College Int'l Airports KEEP LEFT
EXPRESS LANES EAST
LOCAL EXITS SOUTH SOUTH
LOCAL EXITS Seminole State College Int'l Airports NEXT RIGHT
PROPOSED EXP DMS
EXPRESS EXIT SOUTH 1/2 MILE

SR 46
AUDI NORTH ORLANDO AND AUTO MALL
AUDI NORTH ORLANDO
POND 313A
I-4 WB CUL
I-4 EXPRESS LANES
I-4 EB CUL
TOWNE CENTER CIR.
CRACKER BARREL
SUPER 8 MOTEL
TOWNE CENTER PLAZA
MILLER'S ALE HOUSE RESTAURANT
SPRINGHILL SUITES
SUNOCO GAS STATION
OREGON AVE.
STEAK'N SHAKE
SEMINOLE TOWNE SQUARE MALL
N. MALL ENTRANCE RD.
TOWNE RD.
HICKMAN DR.

LEFT EXPRESS LANES EAST KEEP LEFT
TH EE LINE DMS
EXPRESS LANES EAST
LEFT EXPRESS LANES WEST KEEP LEFT
TH EE LINE DMS
EXPRESS LANES EAST
EXPRESS LANES ONLY WEST Orlando
EXPRESS LANES ONLY EAST Daytona
END NORTH BEGIN SOUTH
EXIT 55 B Int'l Pkwy Heathrow 1/2 MILE

MATCHLINE W2

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

Color_FDOTPDF_PDE.pltcfg
FDOT_text-glow.tbl
PRINT DRIVER:
PEN TABLE:

smoss 9/10/2014 9:03:22 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-glow.tbl

smoss 9/10/2014 9:06:14 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\432100122O1\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

WEKIVA PARKWAY

MATCHLINE W1

TH EE LINE DMS

EXPRESS LANES
EXIT ONLY
Orlando
Daytona
1/4 MILE
EXIT XX A

EXPRESS LANES
EXIT ONLY
Orlando
Daytona
1/4 MILE
EXIT XX A

EXPRESS LANES
EXIT ONLY
Orlando
Daytona
2 MILES
EXIT 55 A

EXPRESS LANES
EXIT ONLY
1/4 MILE
EXIT XX A

EXPRESS LANE EXITS EAST
Dirksen Dr
Rhode Island Ave
Orange Camp Rd
XX

EXPRESS LANE EXITS WEST
Lee Rd
Ivanhoe Blvd
South St
XX

END
BEGIN
1 1/2 MILES
NORTH
SOUTH

TOLL VIOLATIONS
PHOTO ENFORCED
$100 PENALTY
EXIT ONLY

Int'l Pkwy
Heathrow
1 MILE
EXIT XX B

Int'l Pkwy
Heathrow
1/2 MILE
EXIT XX B

Int'l Pkwy
Heathrow
EXIT XX B

SOUTH
Int'l Airports
Sanford

EXPRESS LANES
EAST
Daytona
EXIT XX A

EXPRESS LANES
WEST
Orlando
EXIT XX A

EXPRESS LANES
EAST
Daytona
WEST
Orlando

Color: FDOTPDF_PDE.pltcfg
FDOT_text-qkow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

smoss 9/10/2014 9:09:30 AM U:\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 3\signing\plansp301 6-3.dgn

MODEL: plansp08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 3

SHEET NO.

PRINT DRIVER: Color_FDOTPDF_PDE.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 9/10/2014 9:12:11 AM U:\Jobs\59219 - 14 SAMR\TECHPROD\432100122O1\Segment 3\signing\plansp301 6-3.dgn

MODEL: planspd1
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2650+00.00

MATCHLINE STA. 2725+00.00

0 100 500
Feet

50 2655 2660 2665 2670 2675 2680 2685 2690 2695 2700 2705 2710 2715 2720

LOCAL EXITS
Dirksen Dr
Saxon Blvd
1 MILE

EXPRESS LANE EXITS
Rhode Island Ave XX
Orange Camp Rd XX

LOCAL EXITS
Dirksen Dr
Saxon Blvd
½ MILE

THREE LINE DMS

EXPRESS LANES
4 EAST

LOCAL EXITS
Dirksen Dr
Saxon Rd

LEFT
ONLY
EXPRESS LANES ENTRANCE
THREE LINE DMS

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qlow.tbl

smoss 11/12/2014 3:58:07 PM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401_ 6-3.dgn

MODEL:
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500
plansp02

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-qkbw.tbl

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

smoss 11/12/2014 3:58:39 PM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401_ 6-3.dgn

MODEL: plansp03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

MATCHLINE STA. 2800+00.00

MATCHLINE STA. 2875+00.00

2800 2805 2810 2815 2820 2825 2830 2835 2840 2845 2850 2855 2860 2865 2870 2875

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES
GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-cglow.tbl

smoss 11/12/2014 3:59:35 PM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401_ 6-3.dgn

MODEL: plansp04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

0 100 500
Feet

MATCHLINE STA. 2875+00.00

MATCHLINE STA. 2950+00.00

EXPRESS EXIT
Rhode Island Ave
To Orange City
1 MILE

PRINT DRIVER: C:\dor_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-sjkw.tbl

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

smoss 11/12/2014 4:00:02 PM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401_ 6-3.dgn

MODEL: plansp05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2950+00.00

MATCHLINE STA. 3025+00.00

0 100 500
Feet

50 2955 2960 2965 2970 2975 2980 2985 2990 2995 3000 3005 3010 3015 3020 30

55 55 60 70 70

Rhode Island Ave
To Orange City
1/4 MILE
EXPRESS EXIT

PROPOSED EXP DMS

EXPRESS LANES
4 East
Rhode Island Ave
To Orange City
EXPRESS EXIT

THREE LINE DMS

TOLL VIOLATIONS
PHOTO ENFORCED
$100 PENALTY
ONLY

10 WB 4 EXPRESS LANES

Color_FDOTPDF.pltcfg
FDOT_text-gBlow.tbl

PRINT DRIVER:
PEN TABLE:

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

smoss 11/12/2014 4:01:21 PM U:\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401_ 6-3.dgn

MODEL: plansp06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 3025+00.00

MATCHLINE STA. 3100+00.00

0 100 500
Feet

EXPRESS LANES ENTRANCE
TH EE LINE DMS

EXPRESS LANES END 1 MILE

LANE ENDS MERGE RIGHT 1500 FT

DMS

LANE ENDS MERGE RIGHT 500 FT

DMS

EXPRESS LANES END 1/2 MILE

EXPRESS LANES END 1/4 MILE

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT_text-glow.tbl

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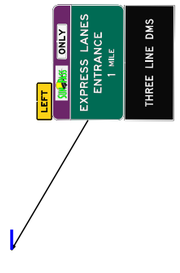
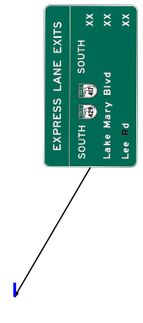
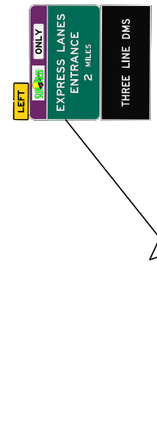
PLOT SCALE: 1:500

MATCHLINE STA. 3100+00.00







EXISTING LA R/W	GENERAL USE LANES	EXISTING BRIDGE TO REMAIN	BARRIER WALL
PROPOSED LA R/W	EXPRESS LANES	PROPOSED BRIDGE REPLACEMENT	
EXISTING R/W			
PROPOSED FDOT R/W			
PARCEL LINES			

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407)805-0355
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.
FL. REGISTRATION NO. 58593

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY
EXPRESS LANE SIGNING PLAN SEGMENT 4

SHEET NO.

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PEN TABLE: FDOT_text-glow.tbl

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APPENDIX G

COST ANALYSIS

I-4 Reversible Lane Summary

dirksen slip ramps
station 2710+01.89

Item	(6+4)	(6+2)	(6+3)	(6+4 & 6+2)
Number of Bridges that Need to be Replaced	9	6	10	6
Total New Bridge Area (sf)	670,829	442,573	643,826	603,531
Total Roadway Footprint Width	236-ft	212-ft	226-ft	236-ft & 200-ft
Right of Way Impacts	5316 SF	518 SF	5316 SF	5316 SF
Barrier Transfer Machine (Annual Operation and Maintenance)	$0	$0	$548,000	$0
Roadway cost	$202,833,330	$183,093,703	$179,873,490	$193,327,309
Bridge cost	$86,558,991	$60,649,006	$82,281,339	$75,791,311
Capital Cost of Barrier Transfer Machine and Moveable Median Barrier	$0	$0	$40,049,120	$0
40 Year Life Cycle Cost Analysis Cost Per Year	$0	$0	$1,630,828	$0
Total Cost	**$289,392,321**	**$243,742,709**	**$302,203,949**	**$269,118,620**

Notes & Assumptions

1. Cross road cost were not included in this comparison, as they were assumed to all be equal.
2. BTM - Barrier Transfer Machine
3. MMB - Moveable Median Barrier
4. BTM transfer speed = 9 mi/hr
5. $320 per foot
6. Total of 19.7 miles or 104,016 feet
7. BTM cost = $1,575,000 per machine (assume two machines will be needed)
8. Right of way impacts do not account for differnt pond areas for each alternate
9. Life Cycle Cost includes Annual Operations and Maintenance and Capital Cost of BTM and MMB

Bridge Summary for Reversible Lane Analysis

Location	(6+4)				
	Disposition	Length (ft)	Width (ft)	Area (sf)	Cost
EE Williamson over I-4	Replace	264	52	13,728	$ 2,196,480
Lake Mary Blvd over I-4	Replace	299	172	51,428	$ 8,228,480
CR 46A over I-4	Replace	328	117	38,376	$ 6,140,160
I-4 over SR 417	Replace	325	279	90,675	$ 14,508,000
I-4 over SR 46	Widen	205	81	16,605	$ 2,656,800
I-4 over Orange Blvd	Widen	270	88	23,760	$ 3,801,600
I-4 over US 17/92 and St Johns River Bridge	Widen	2618	96	251,328	$ 19,438,831
I-4 over Padgett Creek	Replace	152	221	33,592	$ 5,374,720
I-4 over Dirksen Rd	Replace	327	221	72,267	$ 11,562,720
Enterprise Rd over I-4	Replace	218	77	16,786	$ 2,685,760
Saxon Blvd over I-4	Replace	256	136	34,816	$ 5,570,560
Graves Ave over I-4	To Remain	0	0	0	$ -
SR 472 over I-4	Replace	252	109	27,468	$ 4,394,880
				Total Cost	**$ 86,558,991**

Location	(6+2)				
	Disposition	Length (ft)	Width (ft)	Area (sf)	Cost
EE Williamson over I-4	Replace	182	52	9,464	$ 1,514,240
Lake Mary Blvd over I-4	Replace	235	172	40,420	$ 6,467,200
CR 46A over I-4	Widen	328	15	4,920	$ 787,200
I-4 over SR 417	Replace	325	243	78,975	$ 12,636,000
I-4 over SR 46	Widen	205	81	16,605	$ 2,656,800
I-4 over Orange Blvd	Widen	270	85	22,950	$ 3,672,000
I-4 over US 17/92 and St Johns River Bridge	Widen	2618	60	157,080	$ 14,970,126
I-4 over Padgett Creek	Replace	152	185	28,120	$ 4,499,200
I-4 over Dirksen Rd	Replace	327	185	60,495	$ 9,679,200
Enterprise Rd over I-4	To Remain	0	0	0	$ -
Saxon Blvd over I-4	To Remain	0	0	0	$ -
Graves Ave over I-4	To Remain	0	0	0	$ -
SR 472 over I-4	Replace	216	109	23,544	$ 3,767,040
				Total Cost	**$ 60,649,006**

Location	(6+3)				
	Disposition	Length (ft)	Width (ft)	Area (sf)	Cost
EE Williamson over I-4	Replace	213	52	11,076	$ 1,772,160
Lake Mary Blvd over I-4	Replace	266	172	45,752	$ 7,320,320
CR 46A over I-4	Replace	311	117	36,387	$ 5,821,920
I-4 over SR 417	Replace	325	269	87,425	$ 13,988,000
I-4 over SR 46	Widen	205	81	16,605	$ 2,656,800
I-4 over Orange Blvd	Widen	270	87	23,490	$ 3,758,400
I-4 over US 17/92 and St Johns River Bridge	Widen	2618	87	227,766	$ 15,711,739
I-4 over Padgett Creek	Replace	152	211	32,072	$ 5,131,520
I-4 over Dirksen Rd	Replace	327	211	68,997	$ 11,039,520
Enterprise Rd over I-4	Replace	213	77	16,401	$ 2,624,160
Saxon Blvd over I-4	Replace	256	136	34,816	$ 5,570,560
Graves Ave over I-4	Replace	225	60	13,500	$ 2,160,000
SR 472 over I-4	Replace	271	109	29,539	$ 4,726,240
				Total Cost	**$ 82,281,339**

Location	(6+2 Reversible)				
	Disposition	Length (ft)	Width (ft)	Area (sf)	Cost
EE Williamson over I-4	Replace	180	52	9,360	$ 1,497,600
Lake Mary Blvd over I-4	Replace	233	172	40,076	$ 6,412,160
CR 46A over I-4	Widen	326	15	4,890	$ 782,400
I-4 over SR 417	Replace	325	241	78,325	$ 12,532,000
I-4 over SR 46	Widen	205	79	16,195	$ 2,591,200
I-4 over Orange Blvd	Widen	270	83	22,410	$ 3,585,600
I-4 over US 17/92 and St Johns River Bridge	Widen	2618	58	151,844	$ 14,970,126
I-4 over Padgett Creek	Replace	152	183	27,816	$ 4,450,560
I-4 over Dirksen Rd	Replace	327	183	59,841	$ 9,574,560
Enterprise Rd over I-4	To Remain	0	0	0	$ -
Saxon Blvd over I-4	To Remain	0	0	0	$ -
Graves Ave over I-4	To Remain	0	0	0	$ -
SR 472 over I-4	Replace	214	109	23,326	$ 3,732,160
				Total Cost	**$ 60,128,366**

(6+4)					
PARCEL NUMBER	PARCEL ID	NAME 1	REASON	PARENT TRACT (SF)	TOTAL AREA TAKEN (SF)
93	06-20-30-300-0010-0000	UNITED STATES POSTAL SERVICE	SLIP RAMP	2,188,454	4,798
175	06-20-30-300-032B-0000	HEATHROW INTERNATIONAL CENTER	CR 46A EXPANSION	54,494	518
				Total Area Taken	5,316

(6+3)					
PARCEL NUMBER	PARCEL ID	NAME 1	REASON	PARENT TRACT (SF)	TOTAL AREA TAKEN (SF)
175	06-20-30-300-032B-0000	HEATHROW INTERNATIONAL CENTER	CR 46A EXPANSION	54,494	518
93	06-20-30-300-0010-0000	UNITED STATES POSTAL SERVICE	SLIP RAMP	2,188,454	4,798
				Total Area Taken	5,316

(6+2)					
PARCEL NUMBER	PARCEL ID	NAME 1	REASON	PARENT TRACT (SF)	TOTAL AREA TAKEN (SF)
175	06-20-30-300-032B-0000	HEATHROW INTERNATIONAL CENTER	CR 46A EXPANSION	54,494	518
				Total Area Taken	518

(6+2 Reversible)					
PARCEL NUMBER	PARCEL ID	NAME 1	REASON	PARENT TRACT (SF)	TOTAL AREA TAKEN (SF)
175	06-20-30-300-032B-0000	HEATHROW INTERNATIONAL CENTER	CR 46A EXPANSION	54,494	518
				Total Area Taken	518

I-4 Reversible Lane Analysis (6+3) Segment 4

(Mainline I-4) STA. 2583+00.00 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	561	$ 4,336,660	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	154,087	$ 3,630,290	Area of existing bridge - EE WILL., CR46A, Wekiva
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,141,518	$ 3,310,403	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	388,330	$ 5,316,236	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	753,188	$ 10,559,699	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	42,716	$ 3,728,278	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	124,276	$ 10,838,115	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	82,851	$ 7,426,737	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	31,069	$ 3,641,288	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	120,301	$ 13,594,013	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	122	$ 386,748	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	5	$ 91,638	At gores
	Fencing	LF	$ 10.00	107,092	$ 1,070,920	LA R/W fence
	Embankment	CY	$ 5.94	1,141,518	$ 6,780,618	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	321,276	$ 10,923,384	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	-	$ -	Concrete
	Subtotal Cost	LS			$ 85,635,026	
	Compensable Utility Relocation	LS			$ 4,281,751	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 8,563,503	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 17,127,005	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,281,751	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,281,751	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 17,127,005	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,281,751	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 856,350	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 146,435,894	
	Contingency	LS			$ 29,287,179	Assume 20% of Construction Subtotal
	Grand Total				**$ 175,723,073**	

I-4 Reversible Lane Analysis (6+3) Segment 3

(Mainline I-4) STA. 2043+71.32 TO 2583+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	800	$ 6,181,730	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	119,555	$ 2,816,716	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,284,854	$ 3,726,078	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	406,511	$ 5,565,137	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	878,343	$ 12,314,374	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	44,716	$ 3,902,832	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	144,927	$ 12,639,053	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	96,618	$ 8,660,817	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	36,232	$ 4,246,351	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	121,716	$ 13,753,908	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	123	$ 389,512	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	18	$ 329,897	At gores
	Fencing	LF	$ 10.00	107,857	$ 1,078,574	LA R/W fence
	Embankment	CY	$ 5.94	1,284,854	$ 7,632,035	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	323,572	$ 11,001,451	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 94,238,464	
	Compensable Utility Relocation	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,423,846	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 942,385	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 161,147,773	
	Contingency	LS			$ 32,229,555	Assume 20% of Construction Subtotal
	Grand Total				**$ 193,377,328**	

I-4 Reversible Lane Analysis (6+2) Segment 4

(Mainline I-4) STA. 2583+00.00 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	561	$ 4,333,428	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	82,421	$ 1,941,839	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,076,733	$ 3,122,524	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	467,425	$ 6,399,045	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	609,308	$ 8,542,495	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	51,417	$ 4,487,652	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	100,536	$ 8,767,726	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	67,024	$ 6,008,018	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	25,134	$ 2,945,698	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	172,291	$ 19,468,883	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	122	$ 386,748	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	5	$ 91,638	At gores
	Fencing	LF	$ 10.00	107,092	$ 1,070,920	LA R/W fence
	Embankment	CY	$ 5.94	1,076,733	$ 6,395,791	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	321,276	$ 10,923,384	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 84,885,791	
	Compensable Utility Relocation	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,423,846	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 942,385	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 151,795,100	
	Contingency	LS			$ 30,359,020	Assume 20% of Construction Subtotal
	Grand Total				**$ 182,154,120**	

I-4 Reversible Lane Analysis (6+2) Segment 3

(Mainline I-4) STA. 2043+71.32 TO 2583+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	749	$ 5,785,972	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	83,459	$ 1,966,294	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,274,398	$ 3,695,754	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	483,955	$ 6,625,350	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	790,443	$ 11,082,005	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	53,235	$ 4,646,360	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	130,423	$ 11,374,192	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	86,949	$ 7,794,080	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	32,606	$ 3,821,395	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	186,258	$ 21,047,154	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	123	$ 389,512	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	18	$ 329,897	At gores
	Fencing	LF	$ 10.00	107,857	$ 1,078,574	LA R/W fence
	Embankment	CY	$ 5.94	1,274,398	$ 7,569,924	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	323,572	$ 11,001,451	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 98,207,913	
	Compensable Utility Relocation	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,423,846	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 942,385	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 165,117,222	
	Contingency	LS			$ 33,023,444	Assume 20% of Construction Subtotal
	Grand Total				**$ 198,140,666**	

I-4 Segment 3 (6+4)

(Mainline I-4) STA. 2043+70.33 TO 2583+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	1,122	$ 8,664,609	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	127,084	$ 2,994,099	Area of existing bridge - EE WILL., CR46A, Wekiva
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,210,248	$ 3,509,720	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	431,162	$ 5,902,606	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	779,086	$ 10,922,790	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	47,428	$ 4,139,499	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	128,549	$ 11,210,780	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	85,699	$ 7,682,103	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	32,137	$ 3,766,493	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	235,332	$ 26,592,516	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	143	$ 454,439	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	40	$ 733,105	At gores
	Fencing	LF	$ 10.00	124,994	$ 1,249,940	LA R/W fence
	Embankment	CY	$ 5.94	1,210,248	$ 7,188,874	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	477,178	$ 16,224,053	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	0	$ -	Concrete
	Subtotal Cost	LS			$ 111,235,626	
	Compensable Utility Relocation	LS			$ 9,651,719	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 19,303,438	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 38,606,876	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 9,651,719	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 9,651,719	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 38,606,876	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 9,651,719	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 1,930,344	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 330,088,790	
	Contingency	LS			$ 66,017,758	Assume 20% of Construction Subtotal
	Grand Total				**$ 396,106,548**	

I-4 Segment 4 (6+4)

(Mainline I-4) STA. 2583+00.00 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	548	$ 4,235,905	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	42,671	$ 1,005,329	Area of existing bridge - EE WILL., CR46A, Wekiva
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,138,097	$ 3,300,482	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	433,889	$ 5,939,946	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	704,208	$ 9,872,993	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	47,728	$ 4,165,686	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	116,194	$ 10,133,303	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	77,463	$ 6,943,770	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	29,049	$ 3,404,493	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	166,243	$ 18,785,459	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	142	$ 451,206	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	23	$ 421,535	At gores
	Fencing	LF	$ 10.00	107,092	$ 1,070,920	LA R/W fence
	Embankment	CY	$ 5.94	1,842,305	$ 10,943,292	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	321,276	$ 10,923,384	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	0	$ -	Concrete
	Subtotal Cost	LS			$ 91,597,704	
	Compensable Utility Relocation	LS			$ 6,614,035	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 13,228,069	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 26,456,139	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 6,614,035	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 6,614,035	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 26,456,139	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 6,614,035	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 1,322,807	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 226,199,987	
	Contingency	LS			$ 45,239,997	Assume 20% of Construction Subtotal
	Grand Total				**$ 271,439,984**	

I-4 Reversible Lane Analysis (6+4 & 6+2) Segment 3 & 4

(Mainline I-4) STA. 2043+71.32 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	561	$ 4,333,428	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	209,505	$ 4,935,938	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	2,396,209	$ 6,949,007	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	979,431	$ 13,408,409	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	1,416,778	$ 19,863,234	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	107,737	$ 9,403,320	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	233,768	$ 20,386,946	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	155,846	$ 13,970,002	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	58,442	$ 6,849,415	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	398,738	$ 45,057,394	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	244	$ 776,260	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	65	$ 1,191,296	At gores
	Fencing	LF	$ 10.00	214,949	$ 2,149,494	LA R/W fence
	Embankment	CY	$ 5.94	2,396,209	$ 14,233,483	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	644,848	$ 21,924,835	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 185,432,461	
	Compensable Utility Relocation	LS			$ 4,728,418	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,456,836	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,913,672	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,728,418	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,728,418	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,913,672	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,728,418	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 945,684	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 247,684,440	
	Contingency	LS			$ 49,536,888	Assume 20% of Construction Subtotal
	Grand Total				**$ 297,221,328**	

I-4 Reversible Lane Analysis (6+2 Reversible) Segment 3

(Mainline I-4) STA. 2043+71.32 TO 2583+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	749	$ 5,785,972	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	83,459	$ 1,966,294	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,274,398	$ 3,695,754	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	483,955	$ 6,625,350	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	790,443	$ 11,082,005	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	53,235	$ 4,646,360	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	130,423	$ 11,374,192	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	86,949	$ 7,794,080	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	32,606	$ 3,821,395	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	136,357	$ 15,408,341	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	123	$ 389,512	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	18	$ 329,897	At gores
	Fencing	LF	$ 10.00	107,857	$ 1,078,574	LA R/W fence
	Embankment	CY	$ 5.94	1,274,398	$ 7,569,924	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	323,572	$ 11,001,451	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 92,569,100	
	Compensable Utility Relocation	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,423,846	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 942,385	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 159,478,409	
	Contingency	LS			$ 31,895,682	Assume 20% of Construction Subtotal
	Grand Total				**$ 191,374,091**	

I-4 Reversible Lane Analysis (6+2 Reversible) Segment 4

(Mainline I-4) STA. 2583+00.00 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	561	$ 4,333,428	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	82,421	$ 1,941,839	Area of existing bridge - I-4 over Dirksen Road
160 4	Stabilization Type B LBR 40	SY	$ 2.90	1,076,733	$ 3,122,524	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	467,425	$ 6,399,045	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	609,308	$ 8,542,495	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	51,417	$ 4,487,652	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	100,536	$ 8,767,726	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	67,024	$ 6,008,018	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	25,134	$ 2,945,698	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	128,053	$ 14,469,989	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	122	$ 386,748	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	5	$ 91,638	At gores
	Fencing	LF	$ 10.00	107,092	$ 1,070,920	LA R/W fence
	Embankment	CY	$ 5.94	1,076,733	$ 6,395,791	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	321,276	$ 10,923,384	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Subtotal Cost	LS			$ 79,886,897	
	Compensable Utility Relocation	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 9,423,846	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	Lighting	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 18,847,693	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 4,711,923	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 942,385	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 146,796,206	
	Contingency	LS			$ 29,359,241	Assume 20% of Construction Subtotal
	Grand Total				**$ 176,155,447**	

Preliminary Cost of the BTM and MMB

Item	Quantity	Unit Cost	Total Cost
Barrier Transfer Machine (BTM)	2	$1,575,000	$3,150,000
Moveable Median Barrier (MMB)	104,016	$320	$33,285,120
Storage and Maintenance Facility	1	$3,500,000	$3,500,000
		Total Cost =	**$39,935,120**

Segment	miles	feet
Seg 3 (sta 2045+00 to sta 2583+00)	10.2	53,856
Seg 4 (sta 2583+00 to sta 3085+00)	9.5	50,160
Total Length of MMB	19.7	104,016

Assumptions
MMB assumptions = 700 euros per meter is roughly equal to $1,050 per meter, which is approximately $320 / lf.
BTM = 1,050,000 euros per machine which is roughly $1,575,000 per machine.

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Appendix C - **Public Involvement Documentation**

NOTICE OF PUBLIC HEARING:

This notice has nothing to do with any rule or rulemaking process.

The Florida Department of Transportation (FDOT), District Five announces a public hearing to which all persons are invited.

DATE:	Wednesday, November 16, 2016
TIME:	5:30 p.m. to 7:30 p.m.
Formal Presentation:	6:00 p.m.
PLACE:	Deltona City Hall, Commission Chambers 2345 Providence Boulevard Deltona, FL 32725

GENERAL SUBJECT MATTER TO BE CONSIDERED:

Financial Project I.D.:	432100-1-22-01
Design Project ID Number:	408464-2-32-01
Federal Aid Project No:	0041-227-I
Project Description:	"I-4 Beyond the Ultimate", from East of US 17/92 to East of SR 472 in Volusia County

The Florida Department of Transportation (FDOT) is conducting a public hearing for the "I-4 Beyond the Ultimate" PD&E Study. We will present the recommended design alternative for adding express lanes on the segment of Interstate 4 (I-4) from East of US 17/92 to East of State Road (SR) 472 in Volusia County. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.

The hearing will be Wednesday, November 16, 2016, from 5:30 p.m. to 7:30 p.m. at Deltona City Hall, Commission Chambers, located at 2345 Providence Boulevard, Deltona, FL 32725. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period. At the conclusion of the presentation, attendees who complete a speaker's card will be given the opportunity to make an oral statement that will become part of the public hearing record.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E., at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to beata.stys-palasz@dot.state.fl.us. All statements postmarked no later than November 26, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review starting on September 15, 2016 through November 26, 2016 at the Deltona Regional Library, located at 2150 Eustace Avenue, Deltona, FL 32725. The documents are also available for download on the study website, www.i4express.com, and will be available at the public hearing.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this hearing is asked to advise the agency at least seven (7) days before the hearing by contacting Ms. Beata Stys-Palasz, P.E. at 386-943-5418.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at (386) 943-5367, or via email at jennifer.smith2@dot.state.fl.us. Persons who require translation services (free of charge) should contact Ms. Beata Stys-Palasz, PE, at 386-943-5418 at least seven (7) days before the hearing.

A copy of the agenda may be obtained by contacting Ms. Beata Stys-Palasz, P.E., at 386-943-5418 or by email at beata.stys-palasz@dot.state.fl.us.

If you are hearing or speech impaired, please contact the agency using the Florida Relay Services, 1(800) 955-8771 (TDD) or 1(800) 955-8770 (Voice).

FOR MORE INFORMATION, YOU MAY CONTACT: Ms. Beata Stys-Palasz, P.E., FDOT Project Manager, at 386-943-5418 or email beata.stys-palasz@dot.state.fl.us.

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

October 24, 2016

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Elected Official,

On behalf of the Florida Department of Transportation (FDOT), I invite you to attend the rescheduled public hearing for the "I-4 Beyond the Ultimate" PD&E Study. This study focuses on the concept of adding express lanes on Interstate 4 (I-4), from west of US 27 to west of Kirkman Road/State Road (SR) 435 to the west, and from east of SR 434 to east of SR 472 to the east; a distance of approximately 40 miles. We will present the recommended design alternative for adding express lanes on the segment of I-4 from **East of US 17/92 to East of SR 472** in Volusia County. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.

The hearing will be Wednesday, November 16, 2016, from 5:30 p.m. to 7:30 p.m. at Deltona City Hall, Commission Chambers, located at 2345 Providence Boulevard, Deltona, FL 32725. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E. at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to beata.stys-palasz@dot.state.fl.us. All statements postmarked no later than November 26, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review from September 15, 2016 through November 26, 2016 at the following locations:

1. The Deltona Regional Library, located at 2150 Eustace Avenue, Deltona, FL 32725
2. The study website - www.i4express.com

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance

with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at 386-943-5367, or via email at jennifer.smith2@dot.state.fl.us.

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Beata Stys-Palasz, P.E., by phone at 386- 943-5418, or via email at beata.stys-palasz@dot.state.fl.us at least seven (7) days prior to the hearing. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

For information pertaining to this project, please contact Beata Stys-Palasz, P.E., FDOT Project Manager, by phone at 386-943-5418, or via email at beata.stys-palasz@dot.state.fl.us.

Sincerely,

Noranne Downs, P.E.
FDOT District Five Secretary

Upcoming FDOT Public Hearing I-4 BtU, Segment 4 (rescheduled)

Sirmans, Amy [Amy.Sirmans@dot.state.fl.us]

Sent: Thursday, October 20, 2016 11:31 AM

To: jdinneen@volusia.org; deckert@volusia.org; jangiulli@volusia.org; gbrinton@volusia.org; ppanton@volusia.org; cervin@volusia.org; jcheney@volusia.org; rperryman@volusia.org; jrussell@volusia.k12.fl.us; LBollenback@r2ctpo.org; pblankenship@r2ctpo.org; mduda@r2ctpo.org; HSeely@r2ctpo.org; RKeeth@r2ctpo.org; SHarris@r2ctpo.org; jparlow@www.r2ctpo.org; rmclemore@debary.org; wgraham@debary.org; mboerger@debary.org; awilliamson@debary.org; rlong@ourorangecity.com; aperkins@debary.org; jshang@deltonafl.gov; jraftery@deltonafl.gov; gchancellor@deltonafl.gov; CBowley@deltonafl.gov; bsnyder@deltonafl.gov; eeagan@vcso.us; darrington@ourorangecity.com; cgrier@ourorangecity.com; dfitzpatrick@ourorangecity.com; gthomas@ourorangecity.com; mhernandez@ourorangecity.com; bmendez@ourorangecity.com; pthomas@ourorangecity.com; rlong@ourorangecity.com; pleusm@deland.org; hennessy@deland.org; pressleyd@deland.org; rigerk@deland.org; holmesm@deland.org; mcdanielj@deland.org; ridgway@deland.org

Cc: Stys-Palasz, Beata [Beata.Stys-Palasz@dot.state.fl.us]; Jarrell, Colleen [Colleen.Jarrell@dot.state.fl.us]

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

October 21, 2016

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Government Partner,

On behalf of the Florida Department of Transportation (FDOT), I invite you to attend the rescheduled public hearing for the "I-4 Beyond the Ultimate" PD&E Study. This study focuses on the concept of adding express lanes on Interstate 4 (I-4), from west of US 27 to west of Kirkman Road/State Road (SR) 435 to the west, and from east of SR 434 to east of SR 472 to the east; a distance of approximately 40 miles. We will present the recommended design alternative for adding express lanes on the segment of I-4 from **East of US 17/92 to East of SR 472** in Volusia County. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.
The hearing will be Wednesday, November 16, 2016, from 5:30 p.m. to 7:30 p.m. at Deltona City Hall, Commission Chambers, located at 2345 Providence Boulevard, Deltona, FL 32725. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E. at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to beata.stys-palasz@dot.state.fl.us. All statements postmarked no later

than November 26, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review from September 15, 2016 through November 26, 2016 at the following locations:

1. The Deltona Regional Library, located at 2150 Eustace Avenue, Deltona, FL 32725
2. The study website - www.i4express.com

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at 386-943-5367, or via email at jennifer.smith2@dot.state.fl.us.

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Beata Stys-Palasz, P.E., by phone at 386- 943-5418, or via email at beata.stys-palasz@dot.state.fl.us at least seven (7) days prior to the hearing. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

For information pertaining to this project, please contact Beata Stys-Palasz, P.E., FDOT Project Manager, by phone at 386-943-5418, or via email at beata.stys-palasz@dot.state.fl.us.

Sincerely,

Amy Sirmans, P.E.
Project Development Manager

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01

PROJECT TEAM MEMBERS

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
Beata Stys-Palasz	FDOT, 719 S. Woodland Blvd, DeLand, FL	Beata.stys-palasz@dot.state.fl.us
~~Heather Johnstone~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Heather.johnstone@dot.state.fl.us
Catalina Chacon	FDOT, 719 S. Woodland Blvd, DeLand, FL	Catalina.chacon@dot.state.fl.us
Luis Diaz	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	ldiaz@hntb.com
Robert Denney	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	rdenney@hntb.com
Colleen Jarrell	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	cjarrell@hntb.com
~~Deepika Fields~~	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	dkfields@hntb.com
Camila Amaya	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	smoss@hntb.com
Sanam Rai	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	srai@hntb.com
Mark Bacal	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	mbacal@hntb.com
John Moore	Stantec, 615 Crescent Executive Ct, 248, Lake Mary	John.moore@stantec.com
Mike Drauer	Stantec, 615 Crescent Executive Ct, 248, Lake Mary	Mike.drauer@stantec.com
~~Michael Dollery~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Michael.dollery@dot.state.fl.us
~~Steve Olson~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Steve.olson@dot.state.fl.us
Brian Stanger	FDOT, 719 S. Woodland Blvd, DeLand, FL	Brian.Stanger@dot.state.fl.us
Amy Sirmans	FDOT, 719 S. Woodland Blvd, DeLand, FL	Amy.sirmans@dot.state.fl.us
~~Mary McGehee~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Mary.mcgehee@dot.state.fl.us
~~Jack Crahan~~	FPC Group, 101 N. Woodland Blvd, DeLand, FL	Jack@fpc-group.com
Jennifer Smith	FDOT, 719 S. Woodland Blvd, DeLand, FL	Jennifer.smith2@dot.state.fl.us

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01

PROJECT TEAM MEMBERS

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
~~Frank O'Dea~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Frank.odea@dot.state.fl.us
Jessica Ottaviano	FDOT, 719 S. Woodland Blvd, DeLand, FL	Jessica.keane@dot.state.fl.us
~~Jennifer Horton~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Jennifer.Horton@dot.state.fl.us
~~Loreen Bobo~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Loreen.Bobo@dot.state.fl.us
~~Jennifer Vreeland~~	FDOT, 719 S. Woodland Blvd, DeLand, FL	Jennifer.vreeland@dot.state.fl.us
DENNIS, KYLE	" "	DENNIS.KYLE@DOT.STATE.FL.US
Bill Walsh	" "	william.walsh@dot.state.fl.us

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

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FPID: 432100-1-22-01

PROJECT TEAM MEMBERS

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
Leslie Premo	FDOT ROW	Leslie.premo@dot.state.fl.us
Judee Boland	FDOT ROW	judee.boland@dot.state.fl.us
Dana Wainwright	FDOT R/W	386/943-5389 dana.wainwright@
Nick Trunong	FPCG / R/W	386-738-1105 Nick@FPC-Group.com

Public Hearing **Deltona City Hall, 2345 Providence Boulevard, Deltona, FL**

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
Terry M Rogers	1422 Wiltshire Ave	tro96@bellsouth.net
Ricky Rogers	541 Salerno Dr.	
Anita Bradford		abradford@deltonafl.gov
AUSTIN FULLER	901 6th St. Daytona Beach	austin.fuller@news-jrnl.com
~~FRANK DeMARSH~~	P.O. Box 2026, DELAND 32721	~~flcertheatres.com~~
CLINT DeMARSH	P.O. Box 2026 Deland 32721	CDEPICTHEATRES.com
Joel Ivey	691 Keene Arm Pike, Lake MARY, FL 32746	joeli@iveypg.com
Todd Helton	405 E. Oakdale Ave/Deland FL 32724	todd.helton@dot.state.fl.us
Edgar Lopez	1201 S Robinson Street, Orlando, FL 32801	Edgar@HUBBLFlorida.com.
LAUREL & PAUL Hudson	353 Lake Croscen Dr. DeBary, FL 32713	lhudson36@CFL.rr.com
Al Eversoll	110 W. New York Ave., DeLand FL 32720	al@beacononlinenews.com
CHARLES PIMENTA	1860 SAXON BLVD DELTONA	Pimenta162@Aol.com
Sharon Pimenta	1860 Saxon Blvd Deltona FL	Sharonpim@AOL.com
ERIK EASON	VCSO	ee9990@vcso.us
AMY WINDOM	225 E ROBINSON ST #505 ORLANDO FL 32801	AMY.WINDOM@CH2M.COM
Caroline Turgeon	120 S. Florida Ave, DeLand, FL 32720	turgeonc@deland.org
Carolyn EVANS	387 Magnolia Place, DeBary FL 32713	Carolyn@carolynevans.com

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
Ken Rollyson	PO Box 32024 Lakeland, FL 33003	Ken.Rollyson@ablv.com
PAULA PESCHA	1120 N. OLD MILL DR	PPESCHA@YAHOO.COM
JIM PESCHA	" "	JPESCHA@YAHOO.COM
Araceli's Estrada	515 Donaldson Dr, Debary FL 32713	arysmusica@Yahoo.Com
Scot Pittman	1509 B Gregg St Phila PA 19115	
Pam Blume	* Same *	
Sheila Garner	2469 Otis Ave Deltona FL 32738	hlindgren@cfl.rr.com
alyssa reed		
William Cook	11315 Corporate Blvd Orlando FL 32817	William.Cook@Stantec.com
BILL ANDERSON	" " " " "	bill.anderson@stantec.com
CHRIS NABICHT	3298 POST ST DELTONA FL 32738	CNABICHT@DELTONAFL.GOV.
Mary Ann Pandolfi	624 Fairhaven St - Deltona	N/A
Domenico Pandolfi	629 " " "	
VIKKI WAILES	770 GORDON CT DELTONA	386-532-3405
Wendell Bradford	2813 ~~Amber~~ Ridge st. Deltona	407 692-6678
Carol Shipp	110 Cardinal Dr. Debary, FL. 32713	356-668-6926
GARY WOLNIAK	110 CARDINAL DR DEBARY FL. 32713	386-668-6926
Debbie Frazier	1657 N. Normandy Blvd Deltona FL 32725	Home 386-789-3009
Chester Frazier	1657 N. Normandy Blvd Deltona FL 32725	cell 386-215-9669 - 386-215-3255 cell
Ron Black	1101 N. Lake Destiny Rd., #475 Maitland, FL 32751	ronblack@cfl.rr.com
Lika M. Zapien	618 Fairhaven St Deltona FL. 32725	386-789-0028

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

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FPID: 432100-1-22-01

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
MAYOR John MASIARCZYK	CITY of DELTONA	386-878-8860
Malaica Nicolas Dacéus	665 Moss Pointe Cove CT DeBary FL	561-542-7651
Brian Teichmann	1638 N. Normandy Blvd. DeLtona	(407) 618-4268
Bruce L. Noven	2932 Obannion St DeLtona 32738	386-259-5184
PATRICIA ThiLo	2921 Maldene Ct Deltona 32738	386 479 7338
Joseph Ruiz	2401 S Mellonville Ave, Sanford, FL 32771	561-502-7933
Lance Douglas	99 Goddard Drive, DeBary FL 32713	ldouglas27@gmail.com
Herman Herring	P.O. BOX 391 Osteen FL 32764	386-574-6230
MING YEN	4008 SHADY OAK CT. LAKE MARY FL 32746	407-718-6[illegible]3
Terry Rogers	505 Donaldson Dr. DeBary, FL 32713	386-668-7040
Harold Spaulding	1397 Brayford Point, DeLand, FL 32724	
Joé Summerall	313 Dirksen Dr C-4 DeBary FL 32713	vjsj223@gmail.com
Janet Deyette	2451 Timbercrest Dr Deltona 32738	
Bill [illegible]		
Ram Angel	114 N. RVR. SDE. DR EDGWTR, FLA. 3213[illegible]	407-670-4693
LINDA FERGUSON	511 Brokenshire Dr. DeBary FL 32713	referguson3@aol.com 407-443-5532
Lois BOLLENBACH	R2C TPO STAFF	
Kurt Garber		kgarber@mateerharbert.com
John WANAMAKER	1019 Town Center Drive O.C. Fl 32765	John@cheaigroup.com

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

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Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
RAMON AQUILO PERALTA	431 SULLIVAN ST. DELTONA FL. 32725	AQUILO52@YAHOO.COM.
Pedro Rivera	665 Seminole Haven Dr. DeBary FL. 32713	
Benny Privitera	645 SUMMERHAVEN DR. DEBARY	386-668-1161
Gladys Privitera	"	"
MICHAEL MCKENNA		
Mitch Honaker	2251 E ANNAPOLIS DR DELTONA FL	mhonaker@deltonafl.gov
LEIGH MATUSICK	2551 Sweet Springs St, Deltona FL 32738	* matusickl@deland.org
NEVILLE STEPHENS	300 Edgewood Blvd Deland, FL 32720	
Roberto Rivera	P.O. Box 390001 DELTONA FL 32739	386-860-3049
GRACE JACK	632 Fairhaven St Deltona	787-667-1889
STUMPY HARRIS	2921 Maldive Ct.	386 259 - 9431
MARK HERZOG	1500 Barrine Boca Circle Winter Park	407-353-7777
Becky Mendez	300 HAMMOCK OAK CIRCLE DEBARY FL 32713	-
Maze Habib	205 E. Graves Ave. Orange City, FL. 32738	bmendez@ourorangecity.com
Cathy Schuld	1970 Saxon Deltona 32725	insbrkrg@aol.com
Harley Strickland	1430 Clayton Dr. Deltona	
Beverly Merwocher	215 W. Univ. Ave Orange CS 32763	MAYORstrickland@gmail.com
Cathy Kendall	518 Brokenstirrup Drive, DeBary,	chekmerow@aol.com
AHMAD MESLEH	3500 Financial Plaza Talla 32303	~~ckendall@fdot~~ cathy.kendall@dot.gov
PETE ARNEY	846 N. Ludlum Dr 32725	MESL5@AOL.Com
	2072 WALLINGFORD ST 32738	

Public Hearing — **Deltona City Hall, 2345 Providence Boulevard, Deltona, FL**

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17/92 TO EAST OF SR 472

Wednesday, November 16, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
German + Loyda Santos	540 Fairhaven St, Deltona FL 32725	386 956-5951
Emilio & Martha Velazquez	400 Tayloville St, Deltona FL 32725	mtcnmilo@gmail.com 407-466-5303
Lita Handy-Peters	City of DeBary	386 668-2040
Mike Brady	City of DeBary	386 668-0883
Jane Shaney	Deltona	386 878-8850
Jon Cheney	Volusia County TE	386 736-5968
Chris Bowley	2345 PROVIDENCE BV DELTONA, FL 32725	cbowley@deltonafl.gov
Kate Snell	610 fairhaven St. Deltona, fl. 32725	
Keith Chester	218 WHITE DOVE AVE	
Jacqueline McCarthy Jones	1240 W. Embassy Dr. Deltona FL. 32725	(386) 860-3587
Rep. EMORNA HARRIDGE	536 FAIRHAVEN ST DELTONA FL 32725-4518	386 532 2709
H. Lester Carrero	1948 Saxon Blvd Deltona FL 32725	(386) 299-3144
Matt Dean	255 Enterprise Rd Deltona FL 32725	• mdean@deltonafl.gov
Wregge DeMarsh	833 W. 6th St Deland, FL 32724	386 736 6830
Edie Lawnic	PO Box 2076 Deland FL 32721	386 736 6830
Elaine Cole	3131 HOWLAND BLVD, Deltona FL. 32725	LECOLEMEC@aol.com
John Barberg	2502 SCOTTVILLE AVE, DELTONA FL 32725	386-561-9747
Mary Barberg	" " " " " "	
Carol Sheehan	1190 Stoneville St.	3865619131
LISA TRENLER	Delton 32738	386-338-7328

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17-92 TO EAST OF SR 472

FPID: 432100-1-22-01

Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than November 26, 2016.

My name is Araceli's Estrada, I live 515 Donaldson Dr. Debary, FL 32713
I have a concern with the the extension of I4. Since we "Summer Heaven" does not have any noise Barriel it will be unbearable to live in such a noisy neighborhood. Also the value of our properties will go down.
Im respectfully question that a fence be build in all these houses.

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager
Florida Department of Transportation – District Five

Florida Department of Transportation
719 S. Woodland Boulevard
DeLand, Florida 32720

(386) 943-5418
Toll Free: 1-800-780-7102

Beata.Stys-Palasz@dot.state.fl.us

www.i4express.com

Name Araceli's Estrada

Address 515 Donaldson Dr
Debary, FL 32713

Phone Number (787) 565-9401

Email arysmusic@yahoo.com

SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

PUBLIC HEARING – NOVEMBER 16, 2016

I-4 BEYOND THE ULTIMATE PD&E STUDY

FROM EAST US 17/92 TO EAST OF SR 472

FPID NO.: 432100-1-22-01

1

PLEASE PRINT

Name: Lance Douglas

Address: 99 Goddard Drive

DeBary FL 32713

City State Zip

Affiliation:

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part of the study's project file. This information may be provided to other individuals who make a public records request.

SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

PUBLIC HEARING – NOVEMBER 16, 2016

I-4 BEYOND THE ULTIMATE PD&E STUDY

FROM EAST US 17/92 TO EAST OF SR 472

FPID NO.: 432100-1-22-01

2

PLEASE PRINT

Name: BEVERLY MEROWCHEK

Address: 518 BROKENSHIRE DRIVE

DE BARY FL 32713

City State Zip

Affiliation: RESIDENT

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part of the study's project file. This information may be provided to other individuals who make a public records request.

SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

PUBLIC HEARING – NOVEMBER 16, 2016

I-4 BEYOND THE ULTIMATE PD&E STUDY

FROM EAST US 17/92 TO EAST OF SR 472

FPID NO.: 432100-1-22-01

3

PLEASE PRINT

Name: Scot Pittman

Address: 1509 B Gregg St

Phila PA 19115

City State Zip

Affiliation: Homeowner

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part of the study's project file. This information may be provided to other individuals who make a

SPEAKER REQUEST CARD

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PUBLIC HEARING – NOVEMBER 16, 2016

I-4 BEYOND THE ULTIMATE PD&E STUDY

FROM EAST US 17/92 TO EAST OF SR 472

FPID NO.: 432100-1-22-01

4

PLEASE PRINT

Name: Roberto Riviera

Address: 632 Fairhaven St.

DeBary FL

City State Zip

Affiliation:

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part

SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

PUBLIC HEARING – NOVEMBER 16, 2016

I-4 BEYOND THE ULTIMATE PD&E STUDY

FROM EAST US 17/92 TO EAST OF SR 472

FPID NO.: 432100-1-22-01

5

PLEASE PRINT

Name: Joe Summerlin

Address: 313 Dirksen Dr C-H

DeBary FL 32713

City State Zip

Affiliation:

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part

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INTERSTATE 4 - BEYOND THE ULTIMATE PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

CONDENSED

FINANCIAL MANAGEMENT PROJECT NO. 432100-1-22-01

FEDERAL AID PROJECT NO. 0041-227-I

EAST OF US 17/92 TO EAST OF SR 472

_____/

I-4 BtU, SEGMENT 4 PD&E STUDY

DATE: NOVEMBER 16, 2016

REPORTER: CLARISSA RIVERA

PLACE: DELTONA CITY HALL
2345 PROVIDENCE BOULEVARD
DELTONA, FLORIDA

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APPEARANCES

BEATA STYS-PALASZ - PROJECT MANAGER
COLLEEN T. JARRELL - ASSITANT DEPARTMENT MANAGER
LUIS DIAZ - CONSULTANT PROJECT MANAGER

LANCE DOUGLAS 1
99 DODDARD DRIVE
DEBARY, FLORIDA 32713

BEVERLY MEROWCHEK 2
518 BROKENSHIRE DRIVE
DEBARY, FLORIDA 32713

SCOT PITTMAN 3
1509 B GREGG STREET
PHILADELPHIA, PENNSYLVANIA 19115

ROBERTO RIVERA 4
632 FAIRHAVEN STREET
DELTONA, FLORIDA

JOE SUMMERALL
313 DIRKSEN DRIVE
DEBAY, FLORIDA 32713

3

PROCEEDINGS

BEATA STYS-PATASZ: We would like to welcome you to the public hearing for the Interstate 4, Beyond the Ultimate Project Development and Environmental Study. My name is Beata Stys-Patasz. I am the Project Manager for the Department of Transportation. The public hearing is relative to Financial Management Project Number 432100-1-22-01 and Federal Aid Project Number 0041-227-I. The proposed improvements involves widening Interstate 4 from the existing six lanes to 10 lanes. Three lanes, general use lanes, plus two express lanes in each direction. And the project is from the US 27 in Polk County to 472. This public hearing is concerning only the part in Volusia County, it is from East of US 17/92 that's practically in between Seminole and Volusia County from the bridge to East of State Road 472. This hearing is being heard to provide you with the opportunity to comment on this project and we really welcome any comments that you have provided. Here with me tonight is: Luis Diaz, the Consultant Project Manager. Right behind, over there on the right. And we have other representatives from FDOT and Consultants Design Team. You can see us with nametags. At this time,

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we would like to recognize any Federal, State, County, or City officials who may be present today. And I can see a couple of familiar faces. I would like to ask them maybe to stand up. Thank you very much, I appreciate that. We will now begin the presentation. Thank you.

AUDIO PLAYBACK: The State of Florida Department of Transportation, also known as FDOT, would like to welcome you to the public hearing for the Interstate 4, Beyond the Ultimate Project Development and Environment Study. This public hearing is being held relative to FDOT Financial Project ID Number 432100-1-22-01 and Federal Aid Project Number 0041-227-I. This public hearing was advertised consistent with federal and state requirements and is being conducted consistent with the Americans with Disability Act of 1990. Advertisements for this public hearing included letters to elected and agency officials, letters to property owners, newspaper ads, notifying local media, and advertising in the Florida Administrative Register. The Florida Department of Transportation is required to comply with various nondiscrimination laws and regulations, including title VI of the Civil Rights Act of 1964. This hearing is being

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held to give all interested persons the right to understand the project and comment on their concerns to the department. Public participation at this hearing is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons wishing to express their concerns about Title VI may do so by contacting the individuals listed on this slide, which is also provided in the project newsletter and on the board displayed at this hearing. The proposed improvements involves adding express lanes on I-4 from US 27 to Kirkman Road to the West and from State Road 434 to State Road 472 to the East. The purpose of this public hearing is to share information with the general public about the alternatives under consideration, the proposed improvements, and their potential environmental impacts. This public hearing also serves as an official forum providing an opportunity to the public to express their opinions and concerns regarding the location, conceptual design, and potential social, economic, and environmental effects of the proposed improvement on the community. There is a court reporter present at this hearing and tonight's proceedings are being

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recorded. An official transcript of the hearing will be produced. Following this presentation, the floor will be open for public comments. All written material received at this public hearing and at the Florida Department of Transportation office, postmarked no later than November 26, 2016, or through the project website, will become part of the public record for this hearing. The Project Development and Environment Study or PD&E is the second step of the project development process that the Florida Department of Transportation follows to evaluate social, cultural, economic, and environmental impacts associated with a planned transportation improvement project. The PD&E process was established by the FDOT as the State's procedure for complying with the National Environmental Policy Act or NEPA of 1969 and Florida Statutes. NEPA is a United States Environmental Law that requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. This phase involves the preparation of all preliminary engineering and environmental documentation required for study approval and subsequent funding. During a PD&E's study, several alternatives are developed to meet

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the purpose and need for the project. These alternatives are developed with input from the public, local government, and environmental agencies throughout the study process. Keeping the public involved and informed throughout the study is paramount to the success of a PD&E study. This study is a re-evaluation of PD&E studies that were previously done 14 to 17 years ago. The section from State Road 435, Kirkman Road, to State Road 434 in Orange and Seminole Counties, received approval from the Federal Highway Administration and is currently under construction to include the addition of express lanes. The study limits are along Interstate 4 from East of US 17/92 to East of State Road 472. This study proposes to widen Interstate 4 to 10 lanes. This includes six general use lanes and for express lanes. This study corridor is, approximately, 10 miles in length, and is located in Volusia County. The River to Sea Transportation Planning Organization and the Central Florida of Metropolitan Planning Organization Alliance works with the Florida Department of Transportation and local governments to fund, and implement projects identified through various plans developed by the TPO and MPO. It should be noted that the I-4 Beyond

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the Ultimate, Segment 4 is identified in the Central Florida Metropolitan Planning Organization, MPO, Alliance Fiscal Year 2016 through 2017 SIS Highway Projects for prioritization. This project segment is identified on the River to Sea TPO 2040 Long Range Transportation Plan. The project is consistent with the State Transportation Improvement Program and the Transportation Element of the Volusia County Comprehensive Plan. The purpose of this study is to accommodate future traffic needs based on anticipated population and employment growth, and enhance safety, and mobility along the studied corridor. The original PD&E study included high occupancy vehicles, or HOV, lanes in the median. This re-evaluation includes six general use lanes, three in each direction, and four express lanes, two in each direction, for the majority of the segment for corridor. The widening of I-4 is proposed to meet the design year 2040 projected travel volumes. The goal of the project is to maintain accessible levels of service along the corridor for the design year 2040. Levels of service are measured on an "A" through "F" grading scale with "A" being the best and "F" failing. Drivers will experience levels of service "E" and

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"F" under the "Original Build" condition in the design year 2040 along some portions of the corridor. Levels of service can be improved to "D" or better with the Express Lanes widening improvements of the recommended "Build" alternative. Typical sections are detailed cross-section depictions of a roadway's principal elements that are standard between certain segment limits and show typical conditions only. The existing typical section consists of three 12-foot travel lanes in each direction with 12-foot inside and outside shoulders. Guard rail is provided on the inside shoulder of the eastbound and westbound lanes in varying locations. The existing right-of-way varies from 300 to 630 feet. Meetings and presentations with local agencies and other stakeholders were held to discuss the study with the River to Sea TPO, Volusia County, City of Debary, City of Deltona, and the St. John River's Water Management District. A project website, www.I4express.com, was developed to allow the public to communicate with the study team and provide comments. And Alternatives Public Meeting was held on April 24, 2014. 52 members of the public and 17 project team members attended this meeting and four written comments were received.

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Public input from these meetings has factored into the study decision making process. Today's hearing will provide the public with another opportunity to comment on the proposed improvements under consideration. A "No-Build" and "Build" alternative, are being considered as part of this PD&E study. The study also includes a Reversible Lanes Alternative where the traffic flow in the lanes is switched in the peak direction of traffic to add additional capacity, and decrease congestion. The "No Build" alternative maintains the existing facility as is. No improvements are made and there is no congestion relief along the corridor. The "No Build" alternative is also evaluated as a baseline for comparison with the "Build" alternative. We will now discuss the recommended "Build" alternative, which proposes to widen Interstate 4 to 10 lanes with five lanes in each direction, three general use lanes and two express lanes. An evaluation matrix comparing the "No Build" alternative with the recommended roadway "Build" alternative is on display here tonight. The proposed typical section consists of two 12-foot wide express lanes with 4-foot inside and 10-foot outside shoulders, and three 12-foot wide general

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use lanes with 10-foot inside, and 12-foot outside shoulders, in each direction. A 2-foot wide barrier wall separates the general use from the express lanes. A 44-foot transit corridor is reversed in the median of I-4. The minimum right-of-way width required to accommodate this typical section is 300-feet. The proposed horizontal alignment of I-4 segment for closely follows the existing I-4 alignment. Right-of-way will be required for the roadway mainline improvements, storm water management facilities, and floodplain compensation sites. The total anticipated right-of-way impacts involved full or partial acquisition of 119 parcels for a total of, approximately, 73 acres. The recommended alternative for the Dirksen Drive interchange proposes a new I-4 eastbound free flow right turn ramp that provides access to eastbound Dirksen drive. A new park and ride lot is proposed on the west side of the interchange. In addition, two 12-foot travel lanes in each direction with a 5-foot sidewalk on the north side and an 8-foot trail on the south side, south side of Dirksen drive our proposed. The recommended alternatives for Saxon Boulevard proposes a new I-4 eastbound off-ramp in the southeast quadrant that will aligned with the

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modified I-4 eastbound Loop off-ramp in the northeast quadrant. Additionally, Saxon Boulevard will be widened to six lanes. The recommended alternative for Rhode Island Avenue proposes a new direct access interchange providing entry to I-4 westbound and exit from the I-4 eastbound express lanes. This alternative also includes the extension of Rhode Island Avenue, which will provide a connection between Veterans Memorial Parkway and Normandy Boulevard. The Rhode Island Avenue typical section will have two 11-foot travel lanes with 8-foot sidewalks in each direction. Additionally, a new park and ride lot is proposed along Normandy Boulevard south of Rhode Island Avenue. The recommended alternative for State Road 472 proposes modifying the existing interchange to a diverging diamond interchange, also known as DDI. A DDI is designed so that each direction of traffic is split and crosses over itself. The traffic will temporarily drive on the opposite side of the roadway and crossed back over on the other side of the interchange. In order to avoid wrong way movements through this type of interchange the opposite directions of the roadway are intersected at an angle that is large enough to appear to the

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driver as if they are making a through movement and that the other side of the roadway is an intersecting street. Improvements proposed also include additional turn lanes at the State Road 472 intersections with Kentucky Avenue and Graves Avenue. The existing drainage systems will be enhanced to accommodate storm water runoff from the proposed roadway improvements. The storm water management systems proposed by this study, have been designed to meet the current requirements of the St. John's River Water Management District and the Florida Department of Transportation. Storm water treatment will be provided in dry swales, wet or dry retention, and/or detention ponds, and a storm water vault located on or off-site. The treatment facilities and locations are on exhibit here this evening, as well as in the documents on display. In accordance with current FDOT standards for road and bridge construction, all best management practices for erosion control and water quality considerations, will be adhered to soaring construction phase of the project. Pond, citing evaluation criteria were developed to screen the various potential pond sites. Each of the criteria are evaluated for impacts which are then used for

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comparison, in order to identify overall suitability and select recommended ponds. Design criteria as set forth by the St. John's River Water Management District, Florida Department of Environmental Protection, Volusia County, and FDOT was used to determine pond sizing. Pond, citing evaluation criteria were developed to screen the various potential pond sites. Each of the criteria are evaluated for impacts, which are then used for comparison, in order to identify overall suitability and select recommended ponds. Design criteria as set forth by the St. John's River Water Management District, and FDOT was used to determine pond sizing. The recommended pond sites for this study are labeled and illustrated on the design concept boards on display. To comply with various executive orders and other federal and state requirements, engineering and environmental information was reviewed, and evaluated to determine if there were any substantial impacts to social and economic, cultural, physical, and natural resources that may result from construction of the proposed improvements. An archaeological survey was performed within the existing and proposed right-of-way. The results indicated that there are no

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archaeological sites or artifact occurrences within the study limits. There are 23 historic resources constructed before 1970 within the study area. None of the historic resources are recommended eligible for the National Register of Historical Places. No adverse effects to cultural resources are anticipated. The project was evaluated in accordance with the Executive Order 11990, entitled Protection of Wetlands. There are, approximately, 68.61 acres of direct wetland impacts and 45.24 acres of other surface water impacts associated with the recommended alternative. This project was evaluated for impacts to wildlife and habitat resources, including protected species in accordance with title 50 Code of Federal Regulations Part 402 of the Endangered Species act of 1973, as amended. It is determined that the project has a "May affect" and likely "Adversely affect" on one federal listed species, the Florida Scrub-Jay. Compensatory mitigation to offset impacts to occupied Scrub-Jay habitat in Segment 4 at a ratio of two to one to the Natural Conservancy Umbrella Plan Mitigation Fund will be provided. To avoid and/or minimize impacts to wildlife, FDOT will continue to coordinate with the U.S. Fish and Wildlife Service, and the Florida

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Fish and Wildlife Conservation Commission during the permitting phase of the project. This project was evaluated for impacts to essential fish habitat wetlands associated with Lake Monroe and the St. John's River. It is anticipated that the project will impact, approximately, 38 acres of wetlands in areas of Segment 4. Mitigation to offset essential fish habitat impacts will be provided via a 100-foot long bridge section in each direction of I-4, as approved by the National Marine Fisheries Service. The proposed storm water facilities will be designed to meet the current requirements of the St. John's River Water Management District. Storm water treatment will be provided by a combination of dry swales, wet or dry retention, or detention ponds, and a storm water vault located on or off-site. The following locations are on exhibit here this evening, as well as in the documents on display. In accordance with the Executive Order 11988, entitled "Floodplain Management" a floodplain analysis was performed. It was determined that, approximately, 65.01 acre feet of floodplain impacts are anticipated. Traffic noise impacts were evaluated in accordance with the Code of Federal Regulation part 772. Based on the results of the noise barrier

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evaluation, a noise barrier appears to be a reasonable and cost feasible noise abatement method for two locations within Segment 4. The west side of I-4 near Dirksen Drive and on the east side of I-4 north of Enterprise Road. Potentially contaminated sites in the vicinity of the project corridor were identified and evaluated to determine if impacts would occur as a result of the proposed improvements. 133 potential contamination sites have been identified. None are ranked as high risk, eight as medium risk, and 125 as no risk, or low risk of potential contamination. An Air Quality Analysis was performed on the project. The analysis was conducted using the established FDOT Air Quality Screening Model. Air quality impacts are not expected to occur as a result of this project. Right-of-way acquisition is anticipated for the recommended alternative for roadway and drainage improvements. Approximately, 33 acres of additional right-of-way is anticipated for roadway improvements and, approximately, 40 acres of additional right-of-way is anticipated for off-site ponds. In addition, there is a potential for 40 residential and one business relocation. These anticipated relocations are displayed on the aerials available at tonight's

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hearing. All right-of-way acquisition will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970, and FDOT Real Estate Acquisition Process. Right-of-way requirements for the project are on display here tonight. One of the unavoidable consequences on a project such as this is the necessary relocation of families for businesses. On this project, we anticipate the relocation of three families and one business. All right-of-way acquisition will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, commonly known as the Uniform Act. If you are required to make any type of move, as a result of a Department of Transportation project, you can expect to be treated in a fair and helpful manner, and in compliance with the Uniform Relocation Assistance Act. If a move is required, you will be contacted by an appraiser who will inspect your property. We encourage you to be present during the inspection, and provide information about the value of your property. You may also be eligible for relocation advisory services and payment benefits. If you are being moved and you are unsatisfied with the

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department's determination of your eligibility for payments, or the amount of that payment, you may appeal that determination. A special word of caution. If you move before your receipt notification of the relocation benefits that you might be entitled to, your benefits may be jeopardized. The relocation specialist who are supervising this program are here tonight. They will be happy to answer your questions and will also furnish you with copies of relocation assistant brochures. The estimated total cost for the recommended alternative will be, approximately, $507.7 million. This includes $413 million for construction and utility relocations, $28.9 million for right-of-way acquisition for roadway and pond improvements, and $65.5 million for final design and construction, engineering, and inspection. Over the next several months, FDOT will continue to finalize the analysis and will seek to approve the documents, and improvements presented here at tonight's public hearing. Following approval, FDOT will continue with the design, right-of-way acquisition, and construction phases. Currently, there is no funding available for the right-of-way or construction phases. The study is anticipated to be completed in

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November 2016. Design is fully funded for this segment of I-4. Draft documents for this public hearing were available for review starting September 15, 2016 and will remain on display until November 26, 2016 at the Deltona Regional Library, and also on the study website www.I4express.com. These documents are also on display here tonight. No final decisions will be made until after we review your comments. You may provide your comments in several ways. You may provide an oral statement to the court reporter present here tonight. Complete a speaker card and make an oral statement at the microphone during the public comment period. Complete a comment form and drop it in the comment box provided here at the hearing or mail your comments to the FDOT project manager at the address shown on the comment form. You may e-mail your comments to the FDOT at the address shown on the comment form or visit the project website and submit comments electronically. There is a dedicated page on the website for comments. All written material received at this public hearing and at the Florida Department of Transportation Office, postmarked no later than 10 days following the date of this public hearing or through the project website, will become

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a part of the public record for this hearing. This concludes our presentation. Thank you.

COLLEEN JARRELL: Okay. So the next portion of the public hearing is for public statements and we could take a few minutes to break. And if anybody wants to take a public comment at the podium, you need to fill out a card and handed to us, and we'll have the opportunity to come up. As it said in the presentation, you've got a variety of ways to provide your comments, either, you know, verbally here at the podium or you can speak to the court reporter on the side. You can fill out a comment form and leave it here tonight, or you can e-mail it to Beata or myself within the next 10 days, and it'll be included in the public record. And just so you know, the presentation that's been given tonight will be on the project website tomorrow, so if anybody wanting to look at that later, you could look at that, as well. And all the displays boards are all ready on the website. So can I ask if anybody would like to make public statement? No?

AUDIENCE SPEAKER 1: How about the specifics of our property?

MS. JARRELL: And that's why we have the project team, we're here until, you know, every

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question is answered. We can discuss with you as your project is specific at the boards. We've got a lot of project team members here tonight.

AUDIENCE SPEAKER 1: Is there going to be a future meeting about the design phase like this one?

MS. JARRELL: In the design phase, they will have another public meeting in the design phase. This is the final meeting for the PD&E phase or the study phase.

AUDIENCE SPEAKER 1: Okay.

MS. JARRELL: Okay. No --

MS. STYS-PATASZ: We have two.

MS. JARRELL: We do? Okay, great.

AUDIENCE SPEAKER 2: I just want to know when this is going to take place? When is this other meeting going to take place?

MS. JARRELL: All right. Lance Douglas?

LANCE DOUGLAS: Thank you.

MS. JARRELL: You're welcome.

MR. DOUGLAS: Hello, my name is Lance Douglas, I live at 99 Daughter Drive in Debary, which is just on the north side of I-4 between Enterprise and Saxon and we're in the Summer Haven community that's over there. The property we purchased back in December of last year, so we weren't around when the

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2014 meetings were held, so unfortunately, I didn't get involved with this until recently. Unfortunately, my property is one that backs up to the I-4 buffer, so my comment was just to express kind of the disappointment that when I went and did some review of some of the studies, in particular, the noise study. That we qualified as far as the noise level goes for a noise reduction barrier, but it was determined that it was cost prohibitive. Now, I can understand the cost has to be a factor in determining this, but what I kept going back to, and what was frustrating, is that the cost was very close. You can see from the board here, DOT allots for $42,000 per barrier and that's per number of receptors as they define it; I've also heard it called rooftops. And in our neighborhood, they determined that to be 64 receptors, which would put the cost around $49,000. So again, it's over the $42,000, but it was relatively close, within about 15, 16 percent. In addition to that, in reading through the noise study reports, I noticed that they only include homes or receptors that are within 200-feet of the wall as saying that they would get the benefit necessary to justify the cost. And just my inaccurate measurements from using Google because I

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don't know exactly what point I can measure from, we fall very close to having the whole second set row of houses that would hit that 200 mark. I see it somewhere around 218, 220-feet, so again, it's relatively close and I don't know if any of the plans have changed may be or the noise study has been reviewed after the latest plans were submitted to take into account that maybe some of those houses do now fall in that 200-foot range. So those are just some of my comments. I didn't know if DOT had a person that would work or speak with the Homeowner's Association which has said they are in favor of the wall because not only does it affect the 64 receptors, it will negatively affect the 347 total homeowners in the neighborhood because of the property value. The 64 receptors will definitely lose property value with the addition of the lanes coming even closer to the houses. And as anyone knows, any appraiser's going to go and do comps based on the neighborhood. So those 64 houses are going to take a hit and the appraisers are going to have to take into consideration for future sales. Thank you very much.

MS. JARRELL: Thank you. The next speaker we have is Beverly -- is it Merowchek?

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BEVERLY MEROWCHEK: Yes. Hi, my name is Beverly Merowchek. I live at 518 Brokenshire Drive, also in the Summer Haven section. I will not repeat everything that Lance told you because basically, we are of one mind. My concern, again, is with the noise barriers. My property does boarder on route 4 and again, I also bought my property in 2015 and was not aware of this going on before hand. With regard to the noise study, when you read the noise study, it was conducted in July 23rd -- July 25th, I believe. And it states the locations where they had setup their decibel meters, I guess, it's very, very technical and I'm not that technical of a person. But it did say that they took the study at 15 minute intervals between the hours of 10:00 and 11:30 in the morning and 1:00 and 3:00 in the afternoon. These are non-peak travel times. This is not when we get most of the noise. You have to try 9:00 at night or even during the day. So it is -- it is really, really troubling to me, that hour, you know, we're talking about fish and wildlife up there, as far as being protected. What about human life? I mean, it is affecting our ability to entertain and live comfortably in our own homes. So that is basically my statement on that.

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MS. JARRELL: Thank you very much. Do we have any more public statements? Scott Pitman, if you want to come up.

SCOT PITTMAN: Yeah. My name is Scott Pitman, I just had one point to make on the presentation. It said that there was three families involved under a relocation, but actually, it's more like 15 because our buildings -- the whole buildings gone and it's 12 units. That's all I got.

MS. JARRELL: Thank you, Mr. Pittman. Any other public statements?

ROBERTO RIVERA: I will, ma'am.

MS. JARRELL: One moment.

MR. RIVERA: Well, I don't know. I just want to make sure.

MS. JARRELL: If you're going to make a statement, I need to say your name.

MR. RIVERA: Hey, my name -- my name is Roberto Rivera. And my concern is: how sure are they that they are not going to buy those houses in the future. Like, if I make a construction of my house, are they going to make -- are they going to pay for that or I will lose that money if they repossess that house in the future. So my concern is, how sure are we that they are not going to buy these

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houses in the future, so I want to make sure that they answer the question. And that's it.

MS. JARRELL: Thank you. And then, we have Joe Summerall.

JOE SUMMERALL: Good evening, everyone. My name is Joseph Summerall. I am co-owner of a condo at Blue Side Condo's. Our primary concern is the value of remaining property, looking at the proposal with the condos. Spoke briefly, with one person who believes that the condos can, for lack of a better term, to be salvaged. The intention is to take one condo, tear it in half. Take another condo, take the corner condo's. While I understand that with engineering techniques these buildings can be saved, the presumption is that with the loss of these residents, there may also be a loss of an entire community because you're losing, approximately, 20 percent of the income to that Homeowner's Association. You're, basically, asking the Homeowner's Association to continue to function at an 80 percent level of dues paying income, that -- that is our concern. Also, the concern is, with a wall, practically, in the back door of some of these condos, not only aesthetics, the noise is also right there. I do not have an opportunity to study noise

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abatement in our particular area, but obviously, with a highway literally out your back door, this is also concern as well. My hope is the planning and progress of this project continues that these factors will be looked that. Thank you.

MS. JARRELL: Thank you. Any other public statements? Okay. Seeing none. We will close this portion of the hearing. Again, we've got plenty of project team members here that we can answer your questions directly at the display boards. I know a lot of you have specific property questions, so those are best answered with a project team member at the board. Thank you.

(PUBLIC MEETING CONCLUDED AT 7:21 P.M.)

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C E R T I F I C A T E

STATE OF FLORIDA)
COUNTY OF ORANGE)

I, CLARISSA RIVERA, Court Reporter and Notary Public for the State of Florida at Large, do hereby certify that I was authorized to and did report the foregoing proceeding, and that said transcript is a true record of the testimony given by the witness.

I FURTHER CERTIFY that I am not of counsel for, related to, or employed by any of the parties or attorneys involved herein, nor am I financially interested in said action.

Submitted on: December 1, 2016

_____
CLARISSA RIVERA
Court Reporter, Notary Public

From:	Luis Diaz
To:	Colleen Jarrell
Subject:	FW: Beyond the Ultimate, Segment 4 Public Hearing of 11/16/16
Date:	Monday, November 28, 2016 11:59:22 AM
Attachments:	FDOT Petition signatures.pdf

From: Stys-Palasz, Beata [mailto:Beata.Stys-Palasz@dot.state.fl.us]
Sent: Monday, November 28, 2016 11:46 AM
To: Luis Diaz <ldiaz@HNTB.com>
Cc: Chacon, Catalina <Catalina.Chacon@dot.state.fl.us>
Subject: FW: Beyond the Ultimate, Segment 4 Public Hearing of 11/16/16

Please add. Prepare a summary for this wall. Wall numbers from report for me to discuss with Frank. We need to prepare official responses.

Beata Stys-Palasz, P.E.
Senior Project Manager
State of Florida Department of Transportation
719 South Woodland Boulevard
Mail Station 542
Deland, Florida 32720
☎ **Phone (386) 943-5418**
Fax: (386) 736-5153
✉ **Email: beata.stys-palasz@dot.state.fl.us**

Your source for information on roadway projects in Central Florida: CFLRoads.com , i4express.com , i4ultimate.com

From: Chekmerow [mailto:chekmerow@aol.com]
Sent: Saturday, November 26, 2016 4:29 PM
To: Stys-Palasz, Beata
Subject: Beyond the Ultimate, Segment 4 Public Hearing of 11/16/16

Attached are additional signatures to be included in the record of the above public hearing voicing our concern for construction of sound barriers along I-4 in DeBary.

Thank you for your consideration.

Beverly Merowchek

City of DeLand

"The Athens of Florida"
www.deland.org

120 South Florida Avenue
DeLand, Florida 32720-5481
Telephone: (386) 626-7000
Fax: (386) 626-7140

November 22, 2016

Ms. Beata Stys-Palasz, P.E.
Project Manager
Florida DOT – District Five
719 South Woodland Boulevard
DeLand, FL 32720

Dear Ms. Stys-Palasz:

The DeLand City Commission reviewed the SR-400 (I-4) PD&E Study, Segment 4, SR 472 - Recommended Alternative and had some concerns about that configuration. The configuration as depicted on the rendering shows that a considerable amount of developable land would be utilized in the North West Quadrant for storm water retention. As you may know, DeLand at one point had a Development of Regional Impact (DRI) in place for this area for commercial development as it is an important gateway into the City. Given the proposed configuration we are concerned that a considerable amount of the developable land at this interchange would be used for storm water. This would significant limit the amount of development that could occur there. As a result, we respectfully request that you consider developing an alternate design that minimizes the storm water footprint on the developable land surrounding the interchange.

Thank you for your time in consideration of our request. Should you have any questions, please contact me at (386) 626-7109 or pleusm@deland.org.

Very truly yours,

Michael Pleus, ICMA-CM
City Manager

Cc: Honorable Mayor and Commission
Rick Werbiskis, Community Development Director
Keith Riger, Public Services Director
Mike Holmes, Planning Director

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

January 30, 2017

Mr. Michael Pleus
City Manager
City of DeLand
120 South Florida Avenue
DeLand, FL 32720

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Mr. Pleus:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the comment you submitted regarding this project. You expressed concerns with the recommended alternative for the SR 472 interchange configuration, specifically with regards to the amount of developable lands in the northwest quadrant being allocated for stormwater retention. This segment is currently in the design phase; however, right-of-way acquisition and construction of the recommended concepts is not currently funded. The Department is currently preparing preliminary plans. When the right-of-way phase of this project is funded, we will work with property owners regarding the best location for the pond.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or beata.stys-palasz@dot.state.fl.us.

Sincerely,

Beata Stys-Palasz, P.E.
FDOT Project Manager

From: Luis Diaz
To: Colleen Jarrell
Subject: FW: Comments related to proposed modifications to SR 472 interchange
Date: Monday, November 28, 2016 12:50:37 PM
Attachments: image002.jpg

From: Stys-Palasz, Beata [mailto:Beata.Stys-Palasz@dot.state.fl.us]
Sent: Monday, November 28, 2016 12:21 PM
To: fd@epictheatres.com; Chacon, Catalina <Catalina.Chacon@dot.state.fl.us>
Cc: Lynch, Deborah <Deborah.Lynch@dot.state.fl.us>; Luis Diaz <ldiaz@HNTB.com>
Subject: RE: Comments related to proposed modifications to SR 472 interchange

Frank, I would like to propose a meeting to discuss the relocation of the pond. If you have any preliminary concepts please send them our way to reevaluate.

Catalina Chacon will contact you with a couple of days for the meeting.

Thanks.

Beata Stys-Palasz, P.E.
Senior Project Manager
State of Florida Department of Transportation
719 South Woodland Boulevard
Mail Station 542
Deland, Florida 32720
☎ **Phone (386) 943-5418**
Fax: (386) 736-5153
Email: beata.stys-palasz@dot.state.fl.us

Your source for information on roadway projects in Central Florida: CFLRoads.com , i4express.com , i4ultimate.com

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From: fd@epictheatres.com [mailto:fd@epictheatres.com]
Sent: Saturday, November 26, 2016 10:59 AM
To: Stys-Palasz, Beata
Subject: Fw: Comments related to proposed modifications to SR 472 interchange

Beata:

It was a pleasure to meet you at the November 16th Public Hearing in Deltona, FL. Thank you for taking time to respond to our questions related to our property at the SE corner of I-4 @ SR 472.

We would appreciate the opportunity to have additional discussions with you regarding the following comments:

1. The current east bound exit ramp at SR 472 runs along the north west boundary of our property. The proposed re-alignment of this exit impacts our property. We would like to discuss some options to lessen that impact.

2. Pond 413 is an existing pond which is surrounded by our property. We would like to discuss relocating this pond to another location on our property.

Please let me know if you have any questions, or if you require any additional information. We look forward to hearing from you.

Best regards,

Frank DeMarsh
P.O. Box 2076
DeLand, FL 32721-2076
Direct: 386-313-8825
Fax: 386-738-2596
fd@epictheatres.com

From:	Luis Diaz
To:	Colleen Jarrell; Drauer, Mike (mike.drauer@stantec.com); Moore, John
Subject:	FW: Beyond I4 Expansion - Noise Barrier Petition (Segment 4)
Date:	Monday, November 28, 2016 12:52:13 PM

From: Stys-Palasz, Beata [mailto:Beata.Stys-Palasz@dot.state.fl.us]
Sent: Monday, November 28, 2016 12:27 PM
To: Lance Douglas <ldouglas27@gmail.com>
Cc: Chacon, Catalina <Catalina.Chacon@dot.state.fl.us>; Luis Diaz <ldiaz@HNTB.com>
Subject: RE: Beyond I4 Expansion - Noise Barrier Petition (Segment 4)

As mentioned I will work on this problem.

Thanks.

Beata Stys-Palasz, P.E.
Senior Project Manager
State of Florida Department of Transportation
719 South Woodland Boulevard
Mail Station 542
Deland, Florida 32720
☎ **Phone (386) 943-5418**
🖷 **Fax: (386) 736-5153**
✉ **Email: beata.stys-palasz@dot.state.fl.us**

Your source for information on roadway projects in Central Florida: CFLRoads.com , i4express.com , i4ultimate.com

From: Lance Douglas [mailto:ldouglas27@gmail.com]
Sent: Saturday, November 26, 2016 10:16 AM
To: Stys-Palasz, Beata
Subject: Beyond I4 Expansion - Noise Barrier Petition (Segment 4)

Hi, Beata. It was a pleasure meeting with you at the FDOT Public Hearing on Nov 16th, 2017. We discussed the possibility of including some form of noise abatement that would primarily benefit the Summerhaven and The Landings subdivisions between Enterprise Rd and Saxon Blvd. The current noise from I4 is already negatively affecting property value and as one neighbor said, "You won't be able to give these houses away when I4 is expanded." The number of benefiting 'receptors' compared to the cost of each receptor is relatively close to FDOT's allotment. It would be disastrous that a few thousand dollars per receptor is all that separates us from having these barriers approved.

Please include the attached petition names, addresses, and signatures to the minutes of the Public Hearing requesting noise barriers. This attachment includes approximately 150 signatures and I should have additional pages coming.

Let me know where we can go from here.

Thank you,

Lance Douglas
99 Goddard Drive, DeBary, FL 32713

407-687-7297 (cell)

Petition:

RE: I-4 Beyond the Ultimate PD&E Revaluation Study

Segment 4: From East of US 17/92 to East of SR 472

FDOT Project Number: 432100-1-22-01

We, the undersigned residents of Summerhaven (all phases) and The Landings (all units), Volusia County, Florida, urge the Florida Department of Transportation to take into consideration the construction of noise barriers along the west side of I-4 in bordering the above mentioned communities. The widening of I-4 from the current 6-lanes to 10-lanes will dramatically increase highway noise and adversely affect the quality of life for residents in our community, especially those bordering the I-4 corridor. Traffic is the main source of noise pollution in cities. Elevated levels of this type of environmental noise can cause hearing impairment, hypertension, ischemic heart disease, annoyance and sleep disturbance. Additional highway noise will significantly decrease the property values in these communities.

Please include our comments and concerns in the public hearing record.

Name: (Print)	Signature:	Address:	Phone No/Email:
Jason Mulrony		635 Mosspoint Covect.	jbird1958@yahoo.com
GREGORY RAMPERSAD		620 DOLPHIN COVE CT.	gregory-rampersad@yahoo.com
Lou Wolf		630 Dolphin Cove Ct	louie424@Gmail.com
Kimberly Wolf		630 Dolphin COVECT	Kimzie424@Gmail
Steve Ault		645 Dolphin Cove Ct.	cougjoe@gmail.com
Stacey Ault		645 Dolph Cove Ct.	four4hmm@bellsouthnet
Iris Lehmberg		625 Dolphin Cove Ct.	
John Crowley		615 Dolphin Cove CT	John.Crowley15@Gmail
George Traber		605 Dolphin Cove ct.	traber@cfl.rr.com
Sabra Farajallah		640 Hayman Ct	
Ben Farajallah		640 Hayman ct	

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RE: I-4 Beyond the Ultimate PD&E Revaluation Study

Segment 4: From East of US 17/92 to East of SR 472

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Name: (Print)	Signature:	Address:	Phone No/Email:
PEGGY MCLAREN	Peggy McLaren	660 Hayman Ct	386-668-4282
MICHAEL MCLAREN		660 HAYMAN CT	386-668-4282
John Berlin		645 HAYMAN CR.	386-259-9009
JEFF Simmons		615 Hayman CT.	
Hermancia Nicks		665 Moss Point Cove Ct.	
Malaica Nicolas		665 Moss Point Cove Ct	561-542-7651

Petition:

RE: I-4 Beyond the Ultimate PD&E Revaluation Study
Segment 4: From East of US 17/92 to East of SR 472
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Name: (Print) Maria Castellanos	Signature:	Address: 515 Brokenshire Dr.	Phone No/Email: mariacastand@hotmail.com
Name: (Print) Ronald Seguin	Signature:	Address: 511 Brokenshire Dr	Phone No/Email: mfaeraus@aol.com
Name: (Print) JOSEPH GONSALVES	Signature:	Address: 500 HUFFORD DRIVE	Phone No/Email: JGONSALVES8@CFL.RR.COM
Name: (Print) V. G. MURPHEY	Signature:	Address: 513 BROKENSHIRE DR.	Phone No/Email: WMURPHEY1@CFL.RR.COM
Name: (Print) DAN Reaume	Signature:	Address: 516 BROKENSHIRE DR.	Phone No/Email: 386.668.0873
Name: (Print) FRANK AVOLA	Signature:	Address: 514 BROKENSHIRE DR	Phone No/Email: 386 848.0495
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:

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lease include our comments and concerns in the public hearing record.

ame: (Print) JONATHAN BELTRE	**Signature:**	**Address:** 517 BROKENSHIRE DRIVE	**Phone No/Email:** (386) 747-7497	
lame: (Print) Joan Trotman	**Signature:** Joan Trotman	**Address:** 508 Brokenshire Dr	**Phone No/Email:** 386-747-3394	
Name: (Print) Katie Mitchell	**Signature:** Katie Mitchell	**Address:** 76 Goddard Dr	**Phone No/Email:** (786) 537-6498	
Name: (Print) Jo Opisso	**Signature:**	**Address:** 70 Goddard Dr	**Phone No/Email:** 407 920-3372	
Name: (Print) Tyrena Gonsalves	**Signature:** Tyrena	**Address:** 69 Goddard Dr	**Phone No/Email:** 321-946-1480	
Name: (Print) Wendy Joslyn	**Signature:** Wendy Joslyn	**Address:** 515 Hufford Dr.	**Phone No/Email:** 386.956.2572	
Name: (Print) SAMUEL LIGHTBOURNE	**Signature:**	**Address:** 514 HUFFORD	**Phone No/Email:** 386 668 1467	
Name: (Print) Theresa J Rogers	**Signature:** Theresa J Rogers	**Address:** 505 Donaldson Dr.	**Phone No/Email:** 386-668-7040	
Name: (Print) Irene Hodges	**Signature:** Irene Hodges	**Address:** 74 Goddard Dr.	**Phone No/Email:** 386-479-8872	
Name: (Print) Yvonne Taylor	**Signature:** Yvonne Taylor	**Address:** 68 Goddard Dr	**Phone No/Email:** 386-216-5116	
Name: (Print) Michelle Boerger	**Signature:**	**Address:** 66 Goddard Dr.	**Phone No/Email:** 386-753-2350	
Name: (Print)	**Signature:**	**Address:**	**Phone No/Email:**	

Petition:

RE: I-4 Beyond the Ultimate PD&E Revaluation Study

Segment 4: From East of US 17/92 to East of SR 472

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Name: (Print) Jimmy Davis	**Signature:**	**Address:** 512 Dansonsa DR.	**Phone No/Email:** 386-848-5709
Name: (Print) John Kaster	**Signature:** John Kaster	**Address:** 574 Donaldson DR	**Phone No/Email:** 407 310-5053
Name: (Print) Julia Montag	**Signature:**	**Address:** 519 Donaldson	**Phone No/Email:** 386-953-1813
Name: (Print) Tamonda Colberg	**Signature:** Tamonda Colberg	**Address:** 97 Goddard Dr. Debary	**Phone No/Email:** 386-801-0806
Name: (Print) Araceli's Estrada	**Signature:**	**Address:** 515 Donaldson Dr. Debary	**Phone No/Email:** (787) 565-9401
Name: (Print) Timothy D. Hussey Sr	**Signature:**	**Address:** 660 Summerhaven Dr	**Phone No/Email:** (386) 804-5450
Name: (Print) DONALD C. KLINE	**Signature:**	**Address:** 545 SNAPPER COVE DR	**Phone No/Email:** 215 896 4146 KCLINE00@gmail.com
Name: (Print) VIRGINIA G. KLEIN	**Signature:**	**Address:** 545 Snapper Cove Dr. Debary	**Phone No/Email:** 267-421-2199
Name: (Print)	**Signature:**	**Address:**	**Phone No/Email:**
Name: (Print)	**Signature:**	**Address:**	**Phone No/Email:**
Name: (Print)	**Signature:**	**Address:**	**Phone No/Email:**
Name: (Print)	**Signature:**	**Address:**	**Phone No/Email:**

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Name: (Print) Ben Pieck	Signature:	Address: 565 Berkeley Dr DeBary FL	Phone No/Email:
Name: (Print) Lance Douglas	Signature:	Address: 99 Goddard Dr	Phone No/Email: ldouglas27@gmail.com
Name: (Print) John Young	Signature:	Address: 517 Hufford DR	Phone No/Email: jkyoung10@bellsouth.net
Name: (Print) Carole Starr	Signature:	Address: 605 Dolphin Cove Ct	Phone No/Email: 386-668-7864
Name: (Print) Gayla Douglas	Signature:	Address: 99 Goddard Dr.	Phone No/Email: 401-687-7931
Name: (Print) Annette Mullins	Signature:	Address: 521 Lanyard Ln	Phone No/Email: 386-668-9130
Name: (Print) Philip J. Aievoli	Signature:	Address: 79 Spring Lake Dr.	Phone No/Email: 516-476-4569
Name: (Print) Virginia Aievoli	Signature:	Address: 79 Spring Lake Dr.	Phone No/Email: 516-343-3726
Name: (Print) Bethany Watson	Signature:	Address: 530 Snapper Cove Dr.	Phone No/Email: 386-956-7436
Name: (Print) DOUGLAS FOLEY	Signature:	Address: 525 SNAPPER COVE DR	Phone No/Email: 386-753-0463
Name: (Print) Rebecca Foley	Signature:	Address: 525 Snapper Cove Drive	Phone No/Email: 386-753-0463
Name: (Print) Erika Ayala	Signature:	Address: 530 Snapper Cove Dr	Phone No/Email: 813-995-4340

Petition:

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Name: (Print) Carmen Barbosa	**Signature:** Carmen Barbosa	**Address:** 665 Summerhaven Dr DeBary Fl. 32713	**Phone No/Email:**
Name: (Print) Pedro M Ruiz	**Signature:** Pedro M Ruiz	**Address:** 655 Summerhaven Dr DeBary Fl. 32713	**Phone No/Email:**
Name: (Print) Wilfredo Perez	**Signature:**	**Address:** 100 Goddard Dr.	**Phone No/Email:**
Name: (Print) Grace Marks	**Signature:** Grace Marks	**Address:** 98 Goddard Dr. DeBary Fl 32713	**Phone No/Email:**
Name: (Print) Sherra Mitchell	**Signature:** Sherra Mitchell	**Address:** 96 Goddard DeBary Fl	**Phone No/Email:**
Name: (Print) Albert Mitchell	**Signature:** Albert Mitchell	**Address:** 96 GODDARD DeBARY	**Phone No/Email:**
Name: (Print) SUZANNE PARISI	**Signature:** Suzanne B. Parisi	**Address:** 96 Goddard DeBary FLA	**Phone No/Email:**
Name: (Print) REX ANAYAS	**Signature:**	**Address:** 90 GODDARD Dr DeBARY	**Phone No/Email:**
Name: (Print) AL COMO	**Signature:**	**Address:** 82 GODDARD DR.	**Phone No/Email:**
Name: (Print) LISA WHITE	**Signature:**	**Address:** 508 Donaldson Dr.	**Phone No/Email:**
Name: (Print) Aaron Williams	**Signature:**	**Address:** 511 Donaldson DR	**Phone No/Email:**
Name: (Print) DOMINICK DELIO	**Signature:**	**Address:** 510 Donaldson Dr.	**Phone No/Email:**

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Name: (Print)	Signature:	Address:	Phone No/Email:
[illegible]		625 Haymen ct	
Nadia Ramperson		620 Dolphin Cove Ct	
Dreama Williamson	Dreama Williamson	650 Dolphin Cove Ct	(386) 668-4820
KEN WILLIAMSON		650 DOLPHIN COURT	386 668-4820
JOHN BIONDOLILLO		610 Dolphin Cove Court	
ROGER PIZZO	Roger Pizzo	3011 ANCHOR BAY COVE	(386) 801-5042
Johnny Diaz	Johnny Diaz	665 HAY MAN CT	
Malkiel		680 Haymon ct	
[illegible]		685 Haymon Ct	
[illegible]	Debora	535 Whitney	deerdobal@gm
[illegible]	[illegible]	565 HAYMAN CT	
Paulette Piccy	Paulette Piccy	565 Bernasek Dr	ppiccyk@cfl.rr.com

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Name: (Print) Adrian Cadena	**Signature:** Adrian Cadena	**Address:** 600 SUMMERHAVEN DR.	**Phone No/Email:**
Name: (Print) Molly Hudson	**Signature:**	**Address:** 660 Summerhaven Dr	**Phone No/Email:**
Name: (Print) Kathy Irizarry	**Signature:**	**Address:** 665 Summerhaven Dr.	**Phone No/Email:**
Name: (Print) BENNY PRIVITERA	**Signature:** Benny Privitera	**Address:** 645 SUMMERHAVEN DR.	**Phone No/Email:**
Name: (Print) Calvin	**Signature:**	**Address:** 630 Summerhaven	**Phone No/Email:**
Name: (Print) PETER PLAVCHAN	**Signature:**	**Address:** 605 BOB WASK DR. DEBARY FL	**Phone No/Email:** PeterPlavchan@ [illegible]
Name: (Print) Gregory L Vompench	**Signature:**	**Address:** 570 Hayman Ct	**Phone No/Email:**
Name: (Print) BOB FORCIER	**Signature:**	**Address:** 550 HAYMAN CT	**Phone No/Email:**
Name: (Print) Carmela Settanni	**Signature:** Settanni	**Address:** 555 Hayman Ct	**Phone No/Email:**
Name: (Print) Carolyn P. Goodreau	**Signature:** Carolyn P Goodreau	**Address:** 530 Hayman Ct. DeBary, FL 32713	**Phone No/Email:**
Name: (Print) JOAN Compton	**Signature:** Joan Compton	**Address:** 625 Summerhaven Ct DeBary FL 32713	**Phone No/Email:**
Name: (Print) HUNG + UYEN NGUYEN	**Signature:**	**Address:** 3070 Cattail LN Debary FL 32713	**Phone No/Email:**

Petition:

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Name: (Print) BARBARA WALTI	Signature: BWalti	Address: 78 SPRINGLAKE Dr	Phone No/Email:
Name: (Print) Mindy Briones	Signature:	Address: 565 Summerhaven Dr.	Phone No/Email:
Name: (Print) Sharon Shrader	Signature:	Address: 665 Bernasek Dr	Phone No/Email:
Name: (Print) Victor Shrader	Signature: VICTOR SHRADER	Address: 665 BERNASEK DR	Phone No/Email:
Name: (Print) James Lott	Signature:	Address: 660 Bernasek Dr	Phone No/Email:
Name: (Print) Dean Long	Signature:	Address: 561 Bernasek Dr	Phone No/Email:
Name: (Print) SIDNEY R COYD	Signature:	Address: 525 BERNASEK DR	Phone No/Email:
Name: (Print) Sherrie Coyd	Signature:	Address: 525 Bernasek Dr	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:

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Name: (Print) Teresa Hall	Signature: Teresa Hall	Address: 68 Spring Lake Dr DeBary	Phone No/Email: 386-668-0409
Name: (Print) Pam Waine	Signature: Pam Waine	Address: 102 Gems Dr, DeBary	Phone No/Email: 386-801-3404
Name: (Print) MARCO VORHEES	Signature: M. Vorhees	Address: 600 BERNASEK DR	Phone No/Email: 386-216-6193
Name: (Print) Judy Taranto	Signature: J. Taranto	Address: 620 Bernasek Dr.	Phone No/Email: 386-668-1262
Name: (Print) JOSE FERREIRA	Signature: Jose Ferreira	Address: 640 BERNASEK	Phone No/Email: 386-668-1258
Name: (Print) Ross Mussari	Signature:	Address: 585 Bernasek Dr.	Phone No/Email: 386 785 3099
Name: (Print) Dawn Piercy	Signature: Dawn Piercy	Address: 565 Bernasek	Phone No/Email: 386 216 8058
Name: (Print) Zilda Pandjin	Signature: Zilda	Address: 545 Bernasek	Phone No/Email: 386 259-6945
Name: (Print) Dennis Leslie	Signature: Dennis Leslie	Address: 520 Bernasek Dr	Phone No/Email: 386 742 7872
Name: (Print) Lisa Leslie	Signature: Lisa Leslie	Address: 520 Bernasek Dr.	Phone No/Email:
Name: (Print)	Signature:	Address: 520 Bernasek Dr	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:

Petition:

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Name: (Print) Tim Bartkowiak	Signature:	Address: 560 Summerhaven DR	Phone No/Email: 386-668-2669
Name: (Print) Claude R Mansel	Signature: Claude R Mansel	Address: 520 Summerhaven Dr	Phone No/Email: 386 383 7660
Name: (Print) KARIN McMann	Signature: K McMann	Address: 505 Summerhaven	Phone No/Email: 3866680217
Name: (Print) Gordon Harper	Signature:	Address: 480 Summerhaven Dr	Phone No/Email: 386 337 0434
Name: (Print) Cheryl Eagle	Signature: Cheryl Eagle	Address: 106 Spring Lake Dr	Phone No/Email: 617-852-6154
Name: (Print) Clyde Zaleski	Signature:	Address: 110 SPRING LAKE DR	Phone No/Email: 386 848 0935
Name: (Print) Irene DiNapoli	Signature: Irene DiNapoli	Address: 12 Spring Lake Dr.	Phone No/Email: 386-668-6493
Name: (Print) Leslie Arch	Signature: Leslie Arch	Address: 95 Spring Lake Dr.	Phone No/Email: 321-302-4380
Name: (Print) DON COWMAN	Signature: Donald Cowman	Address: 91 Spring Lake Dr.	Phone No/Email: Cowman ds @yahoo.com
Name: (Print) Vincent Abate	Signature:	Address: 83 Spring Lake Dr.	Phone No/Email: 3866688477
Name: (Print) Ron Lehr	Signature:	Address: 71 spring Lake Dr	Phone No/Email: 3868017047
Name: (Print) Bob Biller	Signature:	Address: 69 Spring Lake Dr	Phone No/Email: 386-956-8805

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Name: (Print)	Signature:	Address:	Phone No/Email:
Sophie Bailey	SophieBailey	585 Summerhaven Dr. DeBary, Fl 32713	
Lori Whatton	Lori Whatton	525 Summerhaven Dr.	
Hameed AKHTAR		101 Spring Lake DR	386 668-7718
Susan Hamm	Susan Hamm	105 Spring Lake Dr	386-479-5485
Nancy McCarna	Nancy McCarna	107 Spring Lake Dr	386-837-0790
Reeta Sahgal		116 Spring lake Dr	386-753-0982
Patricia Vetro	Patricia Vetro	96 Springlake Dr Debary, FL.	
Robert L. Metz	Robert L Metz		
Hlicia Parda	Hlicia Parda	88 Springlake Dr.	
Paul Reichard	Paul Reichard	86 SPRING LAKE DR.	
Jeanine Felix	Jeanine Felix	80 Spring Lake DR	
Doug Watt		78 Springlake Dr	

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Name: (Print) Jeff Kurk **Signature:** Jeffrey Kurk **Address:** 630 Moss Point Cove **Phone No/Email:**

Name: (Print) Linda Neuner **Signature:** Linda Neuner **Address:** 91 Goddard Drive **Phone No/Email:**

Name: (Print) Jessica Rivera **Signature:** Jessica Rivera **Address:** 635 Moss Pt. Cove Ct **Phone No/Email:**

Name: (Print) Fabian Cadavid **Signature:** **Address:** 625 moss Pt cove ct **Phone No/Email:**

Name: (Print) Debbie Cadavid **Signature:** **Address:** 625 Moss Pt cove CT **Phone No/Email:**

Name: (Print) Elaine Richard **Signature:** Elaine Richard **Address:** 620 Moss Pt. Cv. Ct. **Phone No/Email:**

Name: (Print) Simon Detour **Signature:** **Address:** 610 Moss Point Cove Ct **Phone No/Email:**

Name: (Print) Mark Cameron **Signature:** **Address:** 600 moss Point Cove CT **Phone No/Email:**

Name: (Print) Barbara Chapman **Signature:** Barbara Chapman **Address:** 600 Moss Point Cove CT **Phone No/Email:**

Name: (Print) Boyce Mulcahey **Signature:** **Address:** 635 Moss Point Cove Ct **Phone No/Email:**

Name: (Print) Jeffery Mulcahey **Signature:** **Address:** 635 Moss point Cove Ct **Phone No/Email:**

Name: (Print) Clyde Cameron **Signature:** **Address:** 635 moss point cove ct **Phone No/Email:**

Petition:

RE: I-4 Beyond the Ultimate PD&E Revaluation Study

Segment 4: From East of US 17/92 to East of SR 472

FDOT Project Number: 432100-1-22-01

We, the undersigned residents of Summerhaven (all phases) and The Landings (all units), Volusia County, Florida, urge the Florida Department of Transportation to take into consideration the construction of noise barriers along the west side of I-4 in bordering the above mentioned communities. The widening of I-4 from the current 6-lanes to 10-lanes will dramatically increase highway noise and adversely affect the quality of life for residents in our community, especially those bordering the I-4 corridor. Traffic is the main source of noise pollution in cities. Elevated levels of this type of environmental noise can cause hearing impairment, hypertension, ischemic heart disease, annoyance and sleep disturbance. Additional highway noise will significantly decrease the property values in these communities.

Please include our comments and concerns in the public hearing record.

Name: (Print) Kirby Mullins	Signature:	Address: 521 Lanyard Ln	Phone No/Email: 386-668-9130 Kirby@seminole-powersports.com
Name: (Print) Corey Mullins	Signature:	Address: 521 Lanyard Lane	Phone No/Email: 4074362896
Name: (Print) Theresa Kinsella	Signature:	Address: 510 Lanyard Ln	Phone No/Email:
Name: (Print) Jim Kinsella	Signature: Jim Kinsella	Address: 510 Lanyard Ln	Phone No/Email:
Name: (Print) Renee Jahr	Signature:	Address: 3050 cattail Lane	Phone No/Email: 386-668-5247
Name: (Print) Thomas Monico	Signature:	Address: 3060 CATTAIL LN	Phone No/Email: 386-753-9349
Name: (Print) Annie Frasco	Signature:	Address: 530 Whitecap Cove Ct.	Phone No/Email: 386-775-1785
Name: (Print) Joseph Frasco	Signature:	Address: 530 Whitecap Cv Court.	Phone No/Email: 386-775-1785
Name: (Print) Gayle Howell	Signature:	Address: 530 LANYARD LN	Phone No/Email: 386-668-4235.
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:
Name: (Print)	Signature:	Address:	Phone No/Email:

Petition regarding I-4 Beyond the Ultimate PD&E Revaluation Study
Segment 4: From East of US 17/92 to East of SR 472
FDOT Project Number: 432100-1-22-01

We, the undersigned residents of Summerhaven and The Landing in the City of DeBary, Volusia County, Florida, urge the Florida Department of Transportation to take into consideration the construction of noise barriers along the west side of I-4 in DeBary, Volusia County, Florida. The widening of I-4 from the current 6-lanes to 10-lanes will dramatically increase hgihway noise and adversely affect the quality of life for residents in our community, especially those bordering the I-4 corridor. Traffic is the main source of noise pollution in cities. Elevated levels of this type of environmental noise can cause hearing impairment, hypertension, ischemic heart disease, anoyance and sleep disturbance. Additional highway noise will significantly decrease our property values.

Please include our comments and concerns in the public hearing record.

Name: (Print)	Signature:	Address:	Phone/Email:
MURIEL ASHWOOD	[signature]	510 Hufford Dr	
Samuel Lightbourn	[signature]	514 Hufford Dr	
Vinzent Solar	[signature]	65 Galdord Dr	
[illegible]	[signature]	515 [illegible]	
Ruben Bermudez	[signature]	515 Donaldson Drive	787-587-6004
[illegible]	[signature]	[illegible]	
Zilda Panojiw	[signature]	545 Bernasek Dr	
Sherry Carrington	[signature]	525 Hayman Ct	386-668-0182
Bryan Carrington	[signature]	525 Hayman Ct	386-668-0182
Patricia Davidson	[signature]	535 Hayman Ct	321-231-1820
Paul Watkins	[signature]	535 Hayman Ct.	407-701-2523
Nadia Rampersad	[signature]	1020 Dolphin Cove Ct	—
Shalana Rampersad	[signature]	1020 Dolphin Cove Ct	—
Lenora Rampersad	[signature]	1020 Dolphin Cove Ct	—

Petition regarding I-4 Beyond the Ultimate PD&E Revaluation Study
Segment 4: From East of US 17/92 to East of SR 472
FDOT Project Number: 432100-1-22-01

We, the undersigned residents of Summerhaven and The Landing in the City of DeBary, Volusia County, Florida, urge the Florida Department of Transportation to take into consideration the construction of noise barriers along the west side of I-4 in DeBary, Volusia County, Florida. The widening of I-4 from the current 6-lanes to 10-lanes will dramatically increase hgihway noise and adversely affect the quality of life for residents in our community, especially those bordering the I-4 corridor. Traffic is the main source of noise pollution in cities. Elevated levels of this type of environmental noise can cause hearing impairment, hypertension, ischemic heart disease, anoyance and sleep disturbance. Additional highway noise will significally decrease our property values.

Please include our comments and concerns in the public hearing record.

Name: (Print)	Signature:	Address:	Phone/Email:
Ricky Crave		620 Dolphin Cove	
Andrew Jenkins		519 Brokenshire Dr	386-341-0041
Jasmin Jenkins		519 Brokenchire Dr	668 6863
Camellia Jenkins		519 Brokenshire Dr	386 837 6528
Sandy Jenkins		519 Brokenshire Drive	386-668-6863
HEWITT B. SMITH		64 GODDARD DRIVE	386-668-0478

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

January 30, 2017

Mr. Lance Douglas
99 Goddard Drive
DeBary, FL 32713

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Ms. Estrada:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the expressing your concerns and submitting the petition regarding noise impacts within your subdivision, Summerhaven. The petition has been added to the project record.

With respect to the noise barrier, several barrier types (barrier and ground mounted) and options (various heights mounted on the shoulder and at the ROW) were modelled. The most cost reasonable option was a 22-foot ground mounted wall located at the I-4 westbound right-of-way. This wall costs $3,180,370 and provides an average noise reduction of 7.4 dBA's to a total of 64 benefitted receivers. The average cost per benefitted receiver is $49,693. Since this cost exceeds the FDOT threshold of $42,000 (by $7,693 per benefitted receiver), the wall was determined to not be cost reasonable. Based on your comment and comments from others within Summerhaven, the Department will reevaluate the requirements for sound wall at the Noise Sensitive Area D (adjacent to the Summerhaven Subdivision) in Volusia County before scheduling construction of the 408464-2 project base on the final design and/or if any federal regulations for construction of the noise wall are changed. This segment is currently in the design phase; however, construction of the recommended concepts is not currently funded.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or beata.stys-palasz@dot.state.fl.us.

Sincerely,

Beata Stys-Palasz, P.E.
FDOT Project Manager

From: Luis Diaz
To: Colleen Jarrell
Subject: Fwd: Why not just widen 1-4 without the tolls ?
Date: Tuesday, November 29, 2016 1:01:45 PM

Begin forwarded message:

From: "Stys-Palasz, Beata" <Beata.Stys-Palasz@dot.state.fl.us>
Date: November 29, 2016 at 12:51:10 PM EST
To: "Diaz, Luis" <ldiaz@hntb.com>
Subject: FW: Why not just widen 1-4 without the tolls ?

FYI

Beata Stys-Palasz, P.E.
Senior Project Manager
State of Florida Department of Transportation
719 South Woodland Boulevard
Mail Station 542
Deland, Florida 32720
☎ **Phone (386) 943-5418**
Fax: (386) 736-5153
✉ **Email: beata.stys-palasz@dot.state.fl.us**

Your source for information on roadway projects in Central Florida: CFLRoads.com , i4express.com , i4ultimate.com

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From: Stys-Palasz, Beata
Sent: Tuesday, November 29, 2016 12:51 PM
To: 'Amanda Eaker-McClure'
Subject: RE: Why not just widen 1-4 without the tolls ?

Ms. Eaker-McClure,

Thank you for your interest with the proposed addition of the express lanes to the median of I-4. The Florida statue nr. 338 give permission to toll are the added capacity of the limited access facility. As the revenue from gas tax is not adequate to cover the cost of the needed improvements and maintenance of the road system the Department uses tolls to cover the deficit. From our experience with express lanes the addition of the lanes improves traffic in the non-toll lanes also.

Under 23 U.S.C. 129(a)(1)(C), a new lane that is to be initially constructed may be tolled so long as the total number of toll-free non-HOV lanes after construction is not less than the number of toll-free non-HOV lanes before construction (excludes auxiliary lanes). Under Florida Statute 338.151 the department may establish tolls on lanes added to existing limited access facilities on the State Highway System.

Beata Stys-Palasz, P.E.
Senior Project Manager
State of Florida Department of Transportation
719 South Woodland Boulevard
Mail Station 542
Deland, Florida 32720
☎ **Phone (386) 943-5418**
Fax: (386) 736-5153
Email: beata.stys-palasz@dot.state.fl.us

Your source for information on roadway projects in Central Florida: CFLRoads.com , i4express.com , i4ultimate.com

From: Amanda Eaker-McClure [mailto:orchidsnfl@gmail.com]
Sent: Thursday, November 17, 2016 1:18 PM
To: Stys-Palasz, Beata
Subject: Why not just widen 1-4 without the tolls ?

Hello,

I'm sure this has been asked before, but
Why is the 1-4 project using toll lanes instead of just widening the highway; like most every other city?
This plan will cause more congestion on the lanes without tolls and cause more stress and anger for the people who can't afford to pay for these elites lanes.
We already have more accidents than most cities and our insurance is pretty much unaffordable. Is there going to be a pass for low income people of central florida ?

Sincerely
Amanda Eaker McClure
Orchidsnfl@gmail.com

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17-92 TO EAST OF SR 472

FPID: 432100-1-22-01

Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than November 26, 2016.

My name is Araceli's Estrada, I live 515 Donaldson Dr. Debary, FL 32713
I have a concern with the the extension of I4. Since we "Summer Heaven" does not have any noise Barriel it will be cumbarsome to live in such a noisy neighborhood. Also the value of our properties will go down.
Im requesting that a fence be build in all these houses.

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager
Florida Department of Transportation – District Five

Florida Department of Transportation
719 S. Woodland Boulevard
DeLand, Florida 32720

(386) 943-5418
Toll Free: 1-800-780-7102

Beata.Stys-Palasz@dot.state.fl.us

www.i4express.com

Name Araceli's Estrada

Address 515 Donaldson Dr
Debary, FL 32713

Phone Number (787) 565-9401

Email arysmusic@yahoo.com

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

January 30, 2017

Ms. Aracelis Estrada
515 Donaldson Drive
DeBary, FL 32713

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Ms. Estrada:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the comment you submitted at the public hearing. You expressed concerned regarding noise impacts within your subdivision, Summerhaven.

With respect to the noise barrier, several barrier types (barrier and ground mounted) and options (various heights mounted on the shoulder and at the ROW) were modelled. The most cost reasonable option was a 22-foot ground mounted wall located at the I-4 westbound right-of-way. This wall costs $3,180,370 and provides an average noise reduction of 7.4 dBA's to a total of 64 benefitted receivers. The average cost per benefitted receiver is $49,693. Since this cost exceeds the FDOT threshold of $42,000 (by $7,693 per benefitted receiver), the wall was determined to not be cost reasonable. Based on your comment and comments from others within Summerhaven, the Department will reevaluate the requirements for sound wall at the Noise Sensitive Area D (adjacent to the Summerhaven Subdivision) in Volusia County before scheduling construction of the 408464-2 project base on the final design and or if any federal regulations for construction of the noise wall are changed. This segment is currently in the design phase; however, construction of the recommended concepts is not currently funded.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or beata.stys-palasz@dot.state.fl.us.

Sincerely,

Beata Stys-Palasz, P.E.
FDOT Project Manager

Saundra Hagood Gray

263 Bayou Circle
DeBary, Florida 32713

Tel. (386) 668-4049
Fax (386) 668-2604
seagem@cfl.rr.com

November 14, 2016

Beata Stys-Palasz, P.E.
F.D.O.T.
719 South Woodland Boulevard
DeLand, Florida 32720

Re: Public Hearing on "Beyond the Ultimate"

Dear Ms. Stys-Palasz, P.E.:

As Florida struggles to improve transportation I commend you for taking input from the public. We, as Floridians will never be able to pave enough roads to handle the increasing demand in Central Florida. SunRail is a beginning and hopefully people will learn to change their habits and participate. We cannot expect Rail to "pay its way" any more than roads "pay their way."

One issue with the expanding, widening and increasing traffic on I-4 is the noise. We live on the north shore of the marsh and DeBary Bayou, which means we are in a sort of bowl which captures and holds the interstate sounds of the bridge over DeBary Bayou and the noise of the cars speeding over the marsh on the west shore of Lake Monroe. I do not know what consideration can be given to muting some of that noise. Walls seem to be in style right now but I do not think that could be built at the bridge. The marsh is beautiful, full of birds and a lovely scene of Florida but the noise increases with the traffic flow. I would be happy to host any engineers from F.D.O.T. to come to River Oaks and visit my deck and tell me if there are any answers to muting some of the noise. We have lived on DeBary Bayou for approaching 50 years, first at Gemini Springs and now for the last 22 here at River Oaks so I have considerable experience with the area.

Thank you for your time and thoughtful consideration of my comments.

Sincerely,

Saundra H. Gray

Saundra H. Gray

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

January 30, 2017

Ms. Saundra Gray
263 Bayou Circle
DeBary, FL 32713

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Ms. Gray:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the comment you submitted regarding this project. You expressed concerned regarding noise impacts at your home due to the recommended improvements. FDOT has conducted multiple noise studies along the study segment to determine locations where a noise barrier could help reduce sound between the interstate and adjacent neighborhoods. Based upon the completed noise studies it was determined that a noise barrier adjacent to I-4 at the Riverside Apartments was determined to be cost reasonable and is recommended. In reviewing the location of your home, it appears to be approximately 700 feet from I-4 and the existing roadway right-of-way where a barrier could be construction. Noise barriers are typically effective means to reduce noise levels for sites that are within 200-300 feet of the barrier, therefore the location of your home will not likely realize a reduction in noise levels due to the addition of this barrier.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or beata.stys-palasz@dot.state.fl.us.

Sincerely,

Beata Stys-Palasz, P.E.
FDOT Project Manager

From: Luis Diaz
To: Colleen Jarrell
Subject: Fwd: Project inquiry
Date: Thursday, November 17, 2016 1:28:34 PM

Begin forwarded message:

> **From:** Ruthie Harvey <ruthie376@gmail.com>
> **Date:** November 17, 2016 at 1:12:43 PM EST
> **To:** <ldiaz@hntb.com>
> **Subject: Project inquiry**
>
> Good afternoon !
>
> I am hoping you can help with with some information regarding Segment 4 of the I-4 Beyond the Ultimate project.
>
> Can you tell me the current status/timeline for this project?
>
> Thank you in advance for your help !
>
> Ruthie Harvey

From:	Colleen Jarrell
To:	"ruthie376@gmail.com"
Subject:	FW: Project inquiry
Date:	Monday, January 02, 2017 3:07:00 PM

Ms. Harvey,
Good afternoon. I'm not sure I responded to your inquiry regarding the timeline/schedule of Segment 4. I apologize for the delay This segment has moved into the initial design and right-of-way mapping (determining the specific right-of-way needs). Segment 4 of the I-4 BtU has not been funded beyond this point, so the right-of-way acquisition and construction phases have not been scheduled.

In addition to asking questions via email, you can check the design project website for updates on funding and the schedule. http://www.i4express.com/408464-2.shtm

Please let us know if you have any additional comments or questions.

Happy New Year,
Colleen

Colleen T. Jarrell, P.E.
Assistant Department Manager
cjarrell@hntb.com
Tel (407) 547-3028 **Cell** (407) 474-8991

From: Luis Diaz
Sent: Thursday, November 17, 2016 1:28 PM
To: Colleen Jarrell <cjarrell@HNTB.com>
Subject: Fwd: Project inquiry

Begin forwarded message:

> **From:** Ruthie Harvey <ruthie376@gmail.com>
> **Date:** November 17, 2016 at 1:12:43 PM EST
> **To:** <ldiaz@hntb.com>
> **Subject: Project inquiry**
>
> Good afternoon !
>
> I am hoping you can help with with some information regarding Segment 4 of the I-4 Beyond the Ultimate project.
>
> Can you tell me the current status/timeline for this project?
>
> Thank you in advance for your help !

"BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM EAST OF US 17-92 TO EAST OF SR 472

FPID: 432100-1-22-01

Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than November 26, 2016.

TO WHOM IT MAY CONCERN!
ON BE-HALF OF MY WIFE AND I, WE ARE VERY WORRIED ABOUT THIS I4 ADDITION OF 4 LANES. WE RESIDE AT THIS LOCATION FOR OVER 28 years; SINCE THEN, THE I4 EXPANTION HAS GOTTEN MUCH CLOSER TO OUR HOME AND INCRESED TRAFFIC IS NEARLY UNBEARABLE, BECAUSE OF THE EXCESSIVE NOISE. AS IT IS NOW, WE ARE PRISONERS, IN OUR OWN HOME, NOT BEING ABLE TO OPEN OUR DOORS. THEREFORE, AS A RESULT, WE WILL CONSIDER SELLING THE PROPERTY TO THE FDOT. AT THE CORRENT VALUE PRICE.

Benny & Gladys Privitera 11/18/16

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager
Florida Department of Transportation – District Five

Florida Department of Transportation
719 S. Woodland Boulevard
DeLand, Florida 32720

(386) 943-5418
Toll Free: 1-800-780-7102

Beata.Stys-Palasz@dot.state.fl.us

www.i4express.com

Name BENNY AND GLADYS PRIVITERA

Address 645 SUMMERHAVEN DR.
DEBARY, FL 32713

Phone Number 386-668-1161

Email PRIVITERAB@YAHOO.COM

Florida Department of Transportation

RICK SCOTT
GOVERNOR

719 S. Woodland Boulevard
DeLand, FL 32720-6834

JIM BOXOLD
SECRETARY

January 30, 2017

Mr. & Mrs. Privitera
645 Summerhaven Drive
DeBary, FL 32713

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study
From East of US 17/92 to East of SR 472
Volusia County
Financial Project ID Number: 432100-1-22-01
Design Project ID Number: 408464-2-32-01
Federal Aid Project Number: 0041-227-I

Dear Mr. & Mrs. Privitera:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the comment you submitted at the public hearing. You expressed concerned regarding noise impacts within your subdivision, Summerhaven.

With respect to the noise barrier, several barrier types (barrier and ground mounted) and options (various heights mounted on the shoulder and at the ROW) were modelled. The most cost reasonable option was a 22-foot ground mounted wall located at the I-4 westbound right-of-way. This wall costs $3,180,370 and provides an average noise reduction of 7.4 dBA's to a total of 64 benefitted receivers. The average cost per benefitted receiver is $49,693. Since this cost exceeds the FDOT threshold of $42,000 (by $7,693 per benefitted receiver), the wall was determined to not be cost reasonable. Based on your comment and comments from others within Summerhaven, the Department will reevaluate the requirements for sound wall at the Noise Sensitive Area D (adjacent to the Summerhaven Subdivision) in Volusia County before scheduling construction of the 408464-2 project base on the final design and or if any federal regulations for construction of the noise wall are changed. This segment is currently in the design phase; however, construction of the recommended concepts is not currently funded.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or beata.stys-palasz@dot.state.fl.us.

Sincerely,

Beata Stys-Palasz, P.E.
FDOT Project Manager

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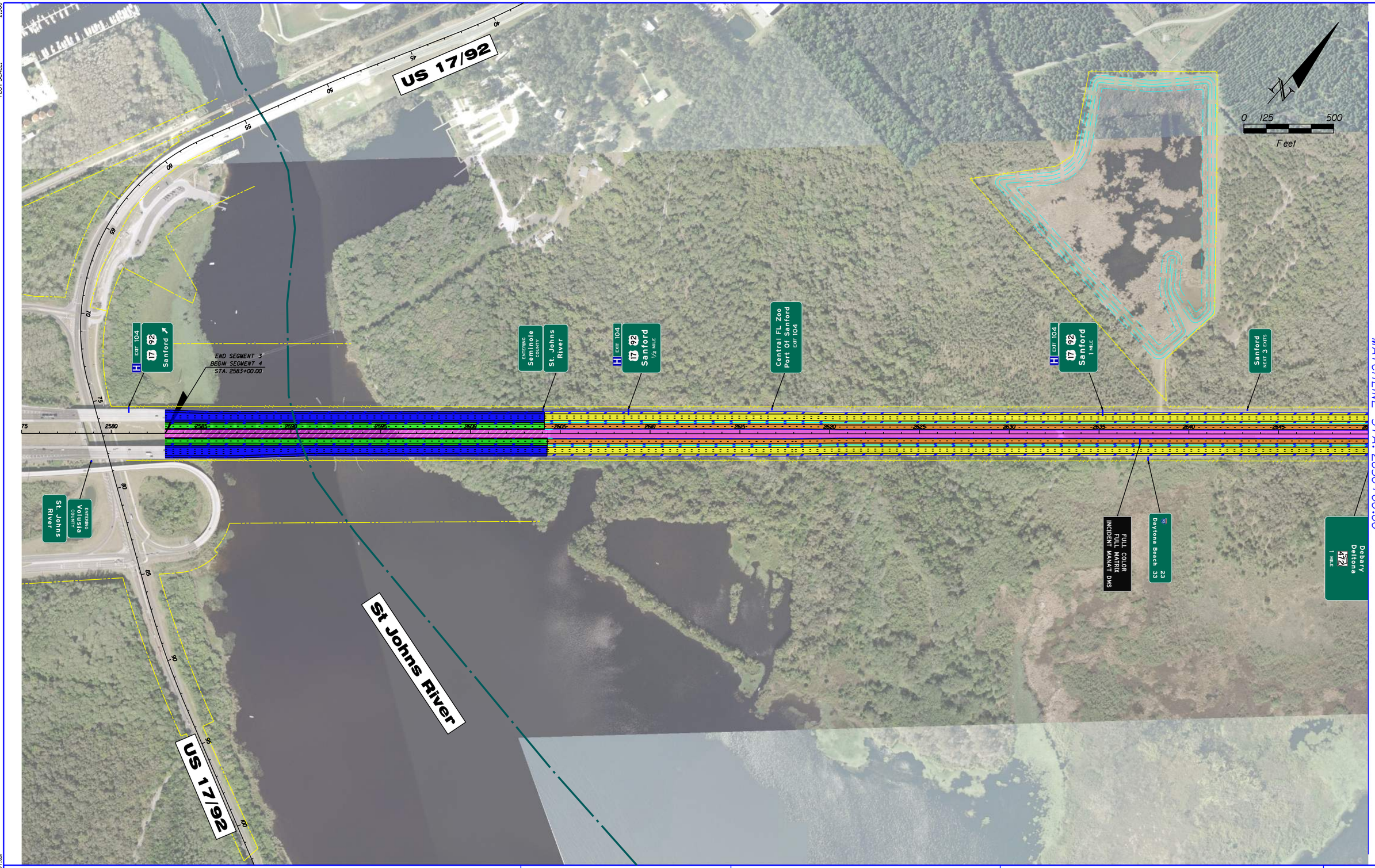
Appendix D - **Conceptual Signing Plan**

MODEL:
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500
plansp01



EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

D-1

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

dmsheets 5/24/2017 2:23:36 PM \\LKMw00\pmwork3\Jobs\59219 - I4 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401-PREFERRED.dgn

MODEL: plansp02
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2650+00.00

MATCHLINE STA. 2725+00.00

0 125 500
Feet

LEFT
NO TRUCKS
ONLY
EXPRESS LANES ENTRANCE
XXXXXXXXXXXXXX

2650 2655 2660 2665 2670 2675 2680 2685 2690 2695 2700 2705 2710 2715 2720

LOCAL EXITS 108 THRU 114

TO Orange City/Deltona
TO DeLand/Lake Helen
EXPRESS LANES
ONLY

Debary
Deltona
472
½ MILE
LOCAL EXITS 108 THRU 114

TO Orange City/Deltona
TO DeLand/Lake Helen
EXPRESS LANES
ONLY

Deltona
NEXT 3 EXITS

EXPRESS LANES
Orange City
DeLand

FDOT FULL COLOR
FULL MATRIX
INCIDENT MANAT DMS

Debary
Deltona
472
LOCAL EXITS 108 THRU 114

Debary
Deltona
1 MILE
EXITS 108 A-B

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

dmsheets 5/24/2017 2:24:54 PM \\LKMw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 4\signing\plansp401-PREFERRED.dgn

MODEL: plansp03
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2725+00.00

MATCHLINE STA. 2800+00.00

0 125 500
Feet

Dirksen Dr

EXPRESS LANES ONLY
TO I-4 EAST
TO SR 472 Lake Mary Blvd
TO SR 415 Lee Rd
$ XXXX
$ XXXX
$ XXXX
$25 PLUS TOLL FOR TOLL VIOLATION

EXPRESS LANES
TWO-AXLE ONLY
VEHICLES ONLY
BUSES ALLOWED

LEFT
NO TRUCKS
EXPRESS LANES ONLY
EXPRESS LANES ENTRANCE
½ MILE
XXXXXXXXXXXXXX

EXPRESS LANES ONLY
TO I-4 EAST
TO SR 472 Lake Mary Blvd
TO SR 415 Lee Rd
$ XXXX
$ XXXX
$ XXXX
$25 PLUS TOLL FOR TOLL VIOLATION

LEFT
NO TRUCKS
EXPRESS LANES ONLY
EXPRESS LANES ENTRANCE
1 MILE
XXXXXXXXXXXXXX

EXIT 108
DeBary
Deltona

FULL COLOR MATRIX
FULL INCIDENT MANAT DMS

Park & Ride
Enterprise
EXIT 108

DeBary
Deltona
½ MILE
EXIT 108 A-B

Park & Ride
Enterprise
EXIT 108

DeBary
Deltona
EXIT 108 A-B

DeBary
Sanford
Orlando

Deltona
Enterprise
DeBary

Central Florida
DeBary
Enterprise 1
Deltona

I-4 WEST
Orlando
RAMP ONLY

Deltona
EXIT (108)

DeBary
EXIT 105 B

Deltona
Enterprise Rd

Sanford
Deltona Rd

DeBary Mall

Central Florida
DeBary
Enterprise 1
Deltona

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

D-3

Color_FDOTPDF.pltcfg
FDOT.tbl
PRINT DRIVER:
PEN TABLE:

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MODEL: plansp04
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2800+00.00

MATCHLINE STA. 2875+00.00

0 125 500
Feet

EXIT 108 DeBary Deltona ½ MILE

EXIT 108 DeBary Deltona 1 MILE

FDOT FULL COLOR FULL MATRIX INCIDENT MANAT DMS

Orange City NEXT 3 EXITS

Deltona Orange City 1 MILE

H EXITS 111A-B

Park & Ride Lot

HOSPITAL EXIT 111B

Enterprise Rd

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

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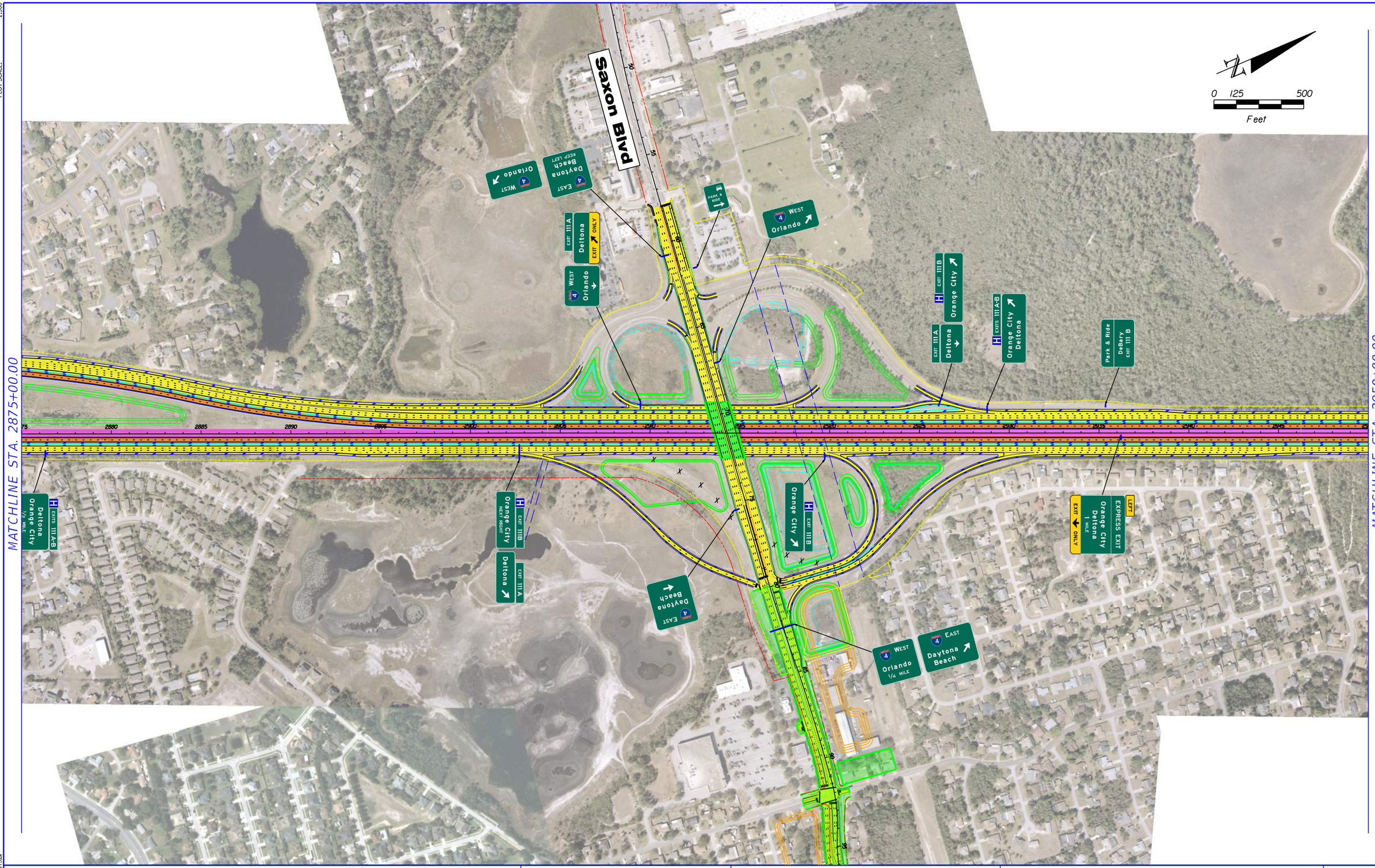
MODEL: plansp05
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500



EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

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MODEL: plansp06
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 2950+00.00

MATCHLINE STA. 3025+00.00

Rhode Island Ave

0 125 500
Feet

EXITS 111 A-B
Orange City
Deltona
½ MILE

Park & Ride Lot
HOSPITAL
EXIT 111B

EXITS 111 A-B
Orange City
Deltona
1 MILE

EXPRESS EXIT
EXIT ONLY
Orange City
Deltona
½ MILE
LEFT

EXPRESS EXIT
Rhode Island Ave
NEXT LEFT
LEFT

FDOT FULL COLOR
FULL MATRIX
INCIDENT MANAT DMS

EXPRESS EXIT
EXIT ONLY
Orange City
Deltona
LEFT

EXPRESS LANES
DeLand
Lake Helen

DeLand
NEXT 3 EXITS

EXPRESS LANES
TWO-AXLE
VEHICLES ONLY
BUSES ALLOWED

EXPRESS LANES
TWO-AXLE
VEHICLES ONLY
BUSES ALLOWED

ENTRANCE CLOSED
TO I-4
TO Lake Mary Blvd
TO 422 Lee Rd
S XXXX
S XXXX
S XXXX
EXPRESS LANES
ONLY

EXPRESS LANES
TWO-AXLE
VEHICLES ONLY
BUSES ALLOWED

EXPRESS LANES
ONLY
S XXXX
S XXXX
S XXXX
ENTRANCE CLOSED
TO I-4
TO Lake Mary Blvd
TO 422 Lee Rd

EXPRESS LANES
ONLY
S XXXX
S XXXX
S XXXX
ENTRANCE CLOSED
TO I-4
TO Lake Mary Blvd
TO 422 Lee Rd

NO TRUCKS
WEST
EXPRESS LANES
TO 4

NO TRUCKS
EAST
EXPRESS LANES
TO 4

NO TRUCKS
WEST
EXPRESS LANES
TO 4

NO TRUCKS
EAST
EXPRESS LANES
TO 4

EXIT 114
Deltona
DeLand
1 MILE

Orange City
Hist Dist
Blue Springs
State Park
EXIT 114

EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSED LA R/W	EXPRESS LANES		
EXISTING R/W	EXISTING BRIDGE TO REMAIN		
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT		
PARCEL LINES	BARRIER WALL		

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

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MODEL: plansp07
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 3025+00.00

MATCHLINE STA. 3100+00.00

Kentucky Ave

Graves Ave

Normandy Blvd

SR 472

0 125 500
Feet

Sanford I5 Orlando 32

EXPRESS LANE ENDS 1 MILE

EXPRESS LANE ENDS 1/2 MILE

EXPRESS LANE ENDS 1/4 MILE

Deltona DeLand 1/2 MILE EXIT 114

Deltona DeLand EXIT ONLY EXIT 114

DELTONA CITY LIMIT

JCT 1/4 MILE

EAST LEFT LANES WEST KEEP RIGHT

Daytona Beach LEFT LANES

Sanford Orlando

Deltona RIGHT 2 LANES

Daytona Beach

Orange City Historic Dist. 3
Blue Springs State Park 5

Cassadega 1
DeLand 3
Deltona 4

LEFT NO TRUCKS ONLY EXPRESS LANES ENTRANCE XXXXXXXXXXXXXXX

EXIT 114 Deltona DeLand EXIT ONLY

WEST Orlando

WEST DeLand Orange City RIGHT 2 LANES

WEST Orlando LEFT LANES

EAST Daytona Beach

WEST LEFT LANES EAST KEEP RIGHT

JCT 1/4 MILE

EXISTING LA R/W	GENERAL USE LANES
PROPOSED LA R/W	EXPRESS LANES
EXISTING R/W	EXISTING BRIDGE TO REMAIN
PROPOSED FDOT R/W	PROPOSED BRIDGE REPLACEMENT
PARCEL LINES	BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

D-7

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

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MODEL: plansp08
SHEET SIZE: 16.5x10.6 (in.)
PLOT SCALE: 1:500

MATCHLINE STA. 3100+00.00

EXPRESS LANES
ONLY
TO I-4 (EB) / SR 400
TO Lake Mary Blvd $ XXXX
TO SR 423 Lee Rd $ XXXX
$25 PLUS TOLL FOR TOLL VIOLATION

FULL COLOR
FULL MATRIX
INCIDENT MANAT DMS

EXPRESS LANES
TWO-AXLE VEHICLES ONLY
BUSES ALLOWED

EXIT 114
SR 472 Deltona
DeLand 1/2 MILE

LEFT
NO TRUCKS
ONLY
EXPRESS LANES ENTRANCE 1/2 MILE
XXXXXXXXXXXXXX

FDOT FULL COLOR
FULL MATRIX
INCIDENT MANAT DMS

EXPRESS LANES
ONLY
TO I-4 (EB) / SR 400
TO Lake Mary Blvd $ XXXX
TO SR 423 Lee Rd $ XXXX
$25 PLUS TOLL FOR TOLL VIOLATION

Orange City
Hist Dist
Blue Springs
State Park
EXIT 114

EXIT 114
SR 472 Deltona
DeLand 1 MILE

LEFT
NO TRUCKS
ONLY
EXPRESS LANES ENTRANCE 1 MILE
XXXXXXXXXXXXXX

DeLand
NEXT 3 EXITS

LEFT
NO TRUCKS
ONLY
EXPRESS LANES ENTRANCE 2 MILES
XXXXXXXXXXXXXX

3105 3110 3115 3120 3125 3130

END SEGMENT 4
STA. 3118+40.00

Daytona Beach XX XX

END SEGMENT 4
SIGNING

0 125 500
Feet

EXISTING LA R/W
PROPOSED LA R/W
EXISTING R/W
PROPOSED FDOT R/W
PARCEL LINES

GENERAL USE LANES
EXPRESS LANES
EXISTING BRIDGE TO REMAIN
PROPOSED BRIDGE REPLACEMENT
BARRIER WALL

HNTB CORPORATION
610 CRESCENT EXECUTIVE CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	VOLUSIA	432100-1-22-01

I-4 PD&E
CONCEPTUAL SIGNING PLAN
SEGMENT 4

SHEET NO.

PRINT DRIVER: Color_FDOTPDF.pltcfg
PEN TABLE: FDOT.tbl

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Appendix E - **Long Range Estimates (LRE)**

Date: 8/12/2016 1:57:27 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 408464-2-52-01 **Letting Date:** 01/2099

Description: SR 400 (I-4) from East of SR 15/600 US (Seminole/Volusia County Line) to 1/2 Mile East of SR 472 Volusia County (79110)

District: 05 **County:** 79 VOLUSIA **Market Area:** 06 **Units:** English
Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 10.140 MI

Project Manager: CDC

Version 21 Project Grand Total **$456,299,080.91**

Description: I-4 (SR400) from west of Orange Blvd. in Seminole Co. to east of SR 472 (URS Sta. 2950+00 to 3510+00) HNTB August 2016 Update: Express Lanes with Asphalt Pavement

Sequence: 1 NDR - New Construction, Divided, Rural **Net Length:** 8.759 MI 46,248 LF

Description: Mainline 6 GUL from West End of St. Johns River bridge (HNTB Sta. 2605+12 to 3067+60)

Special Conditions: GUL's are asphalt.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 150.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	8.760
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	318.51	AC	$10,000.00	$3,185,100.00
120-6	EMBANKMENT	315,649.66	CY	$8.00	$2,525,197.28
	Earthwork Component Total				$5,710,297.28

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	616,640.64	SY	$3.25	$2,004,082.08
285-712	OPTIONAL BASE,BASE GROUP 12	376,767.43	SY	$20.00	$7,535,348.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	122,094.85	TN	$97.88	$11,950,643.92
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	14,799.38	TN	$135.00	$1,997,916.30

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	5,912.00	EA	$3.74	$22,110.88
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	35.04	NM	$908.42	$31,831.04
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	35.04	GM	$383.54	$13,439.24
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	35.04	NM	$3,138.35	$109,967.78
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	35.04	GM	$1,027.15	$35,991.34

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	1,802.00
Noise Barrier Wall Begin Height	12.00
Noise Barrier Wall End Height	12.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	50.67	TN	$232.34	$11,772.67
534-72-101	SOUND/NOISE BARRIER-INC FOUNDATION, PERM	21,624.00	SF	$28.71	$620,825.04
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,500.00	LF	$17.75	$26,625.00
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	2.00	EA	$2,192.69	$4,385.38
544-75-1	CRASH CUSHION	13.00	EA	$15,521.81	$201,783.53
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	92,496.00	LF	$10.00	$924,960.00

Roadway Component Total $25,491,682.80

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	126,719.65	SY	$16.00	$2,027,514.40
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	20,349.14	TN	$114.21	$2,324,075.28
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	17.52	PM	$1,428.02	$25,018.91

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,849,920.00	SY	$2.25	$4,162,320.00
	Comment: 20' each side of road x sequence length				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	120,244.92	LF	$1.15	$138,281.66
104-11	FLOATING TURBIDITY BARRIER	2,189.78	LF	$9.63	$21,087.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	2,189.78	LF	$4.69	$10,270.07
104-15	SOIL TRACKING PREVENTION DEVICE	9.00	EA	$2,215.78	$19,942.02
104-18	INLET PROTECTION SYSTEM	53.00	EA	$94.06	$4,985.18
107-1	LITTER REMOVAL	212.32	AC	$35.63	$7,564.96
107-2	MOWING	212.32	AC	$55.77	$11,841.09
	Shoulder Component Total				$8,752,901.15

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	24.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
	OPTIONAL BASE,BASE GROUP				

285-708	08	126,719.65	SY	$16.00	$2,027,514.40
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	20,349.14	TN	$114.21	$2,324,075.28
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	138,650.00	LF	$111.97	$15,524,640.50
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	18.00	PM	$1,428.02	$25,704.36
	Median Component Total				$19,901,934.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	864.00	LF	$111.27	$96,137.28
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00	EA	$1,198.82	$7,192.92

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-1	CONC CLASS II, CULVERTS	509.00	CY	$965.27	$491,322.43
	Comment: Triple 4'x6'x450' = 382 cy Single 4'x6'x450' = 127 cy				
400-2-2	CONC CLASS II, ENDWALLS	152.00	CY	$1,301.59	$197,841.68
	Comment: 76 cy per culvert x 2 culverts				
415-1-6	REINF STEEL- MISCELLANEOUS	21,055.00	LB	$1.65	$34,740.75
	Comment: Triple 4'x6'x450' = 14585 lbs Single 4'x6'x450' = 6470 lbs Wing wall total = 1650 lbs				
425-1-901	INLETS, SPECIAL, <10'	310.00	EA	$4,822.27	$1,494,903.70
	Comment: TOTAL DIST. X 2 SIDES / 300' INTERVAL				

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	24" RCP SD	10.00	MI	$300,000.00	$3,000,000.00
	Comment: Trunk line. $300,000 per mile				

Retention Basin 1

Description	Value
Size	20 AC
Multiplier	1
Depth	8.00
Description	POND 401

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.00	AC	$10,000.00	$200,000.00
120-1	REGULAR EXCAVATION	258,133.33	CY	$4.50	$1,161,599.99
400-2-2	CONC CLASS II, ENDWALLS	54.00	CY	$1,301.59	$70,285.86
425-1-541	INLETS, DT BOT, TYPE D, <10'	3.00	EA	$3,512.69	$10,538.07
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$5,745.70	$17,237.10
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	152.00	LF	$133.10	$20,231.20
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$216.88	$130,128.00
550-10-220	FENCING, TYPE B, 5.1-6.0',	4,420.00	LF	$10.00	$44,200.00

	STANDARD				
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00	EA	$2,128.82	$12,772.92
570-1-1	PERFORMANCE TURF	96,800.00	SY	$0.76	$73,568.00

Retention Basin 2

Description	Value
Size	5 AC
Multiplier	1
Depth	8.00
Description	POND 402B

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$10,000.00	$50,000.00
120-1	REGULAR EXCAVATION	64,533.33	CY	$4.50	$290,399.98
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,301.59	$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$10.00	$18,600.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00	SY	$0.76	$18,392.00

Retention Basin 3

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 402C

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Retention Basin 4

Description	Value
Size	1 AC
Multiplier	1

Depth	8.00
Description	POND 402D

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.00	AC	$10,000.00	$10,000.00
120-1	REGULAR EXCAVATION	12,906.67	CY	$4.50	$58,080.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	840.00	LF	$10.00	$8,400.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	4,840.00	SY	$0.76	$3,678.40

Retention Basin 5

Description	Value
Size	.5 AC
Multiplier	1
Depth	8.00
Description	POND 402E

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$10,000.00	$5,000.00
120-1	REGULAR EXCAVATION	6,453.33	CY	$4.50	$29,039.98
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	600.00	LF	$10.00	$6,000.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	2,420.00	SY	$0.76	$1,839.20

Retention Basin 6

Description	Value
Size	.5 AC
Multiplier	1
Depth	8.00
Description	FPC403

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$10,000.00	$5,000.00
120-1	REGULAR EXCAVATION	6,453.33	CY	$4.50	$29,039.98
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69

425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	600.00	LF	$10.00	$6,000.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	2,420.00	SY	$0.76	$1,839.20

Retention Basin 7

Description	Value
Size	2 AC
Multiplier	2
Depth	8.00
Description	POND 403

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.00	AC	$10,000.00	$40,000.00
120-1	REGULAR EXCAVATION	51,626.66	CY	$4.50	$232,319.97
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,301.59	$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$3,512.69	$7,025.38
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$133.10	$14,907.20
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,360.00	LF	$10.00	$23,600.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64
570-1-1	PERFORMANCE TURF	19,360.00	SY	$0.76	$14,713.60

Retention Basin 8

Description	Value
Size	5 AC
Multiplier	1
Depth	8.00
Description	POND 404

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$10,000.00	$50,000.00
120-1	REGULAR EXCAVATION	64,533.33	CY	$4.50	$290,399.98
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,301.59	$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$10.00	$18,600.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64

570-1-1	PERFORMANCE TURF	24,200.00	SY	$0.76	$18,392.00

Retention Basin 9

Description	Value
Size	5 AC
Multiplier	1
Depth	8.00
Description	POND 406A

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$10,000.00	$50,000.00
120-1	REGULAR EXCAVATION	64,533.33	CY	$4.50	$290,399.98
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,301.59	$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$10.00	$18,600.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00	SY	$0.76	$18,392.00

Retention Basin 10

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 406B

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Retention Basin 11

Description	Value
Size	5 AC
Multiplier	1
Depth	8.00
Description	POND 407A

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$10,000.00	$50,000.00
120-1	REGULAR EXCAVATION	64,533.33	CY	$4.50	$290,399.98
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,301.59	$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$10.00	$18,600.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00	SY	$0.76	$18,392.00

Retention Basin 12

Description	Value
Size	1 AC
Multiplier	1
Depth	8.00
Description	POND 407B

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.00	AC	$10,000.00	$10,000.00
120-1	REGULAR EXCAVATION	12,906.67	CY	$4.50	$58,080.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	840.00	LF	$10.00	$8,400.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	4,840.00	SY	$0.76	$3,678.40

Retention Basin 13

Description	Value
Size	2 AC
Multiplier	1
Depth	8.00
Description	POND 407C

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00	AC	$10,000.00	$20,000.00
120-1	REGULAR EXCAVATION	25,813.33	CY	$4.50	$116,159.98
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$3,512.69	$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70

430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00	LF	$10.00	$11,800.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	9,680.00	SY	$0.76	$7,356.80

Retention Basin 14

Description	Value
Size	10 AC
Multiplier	1
Depth	8.00
Description	POND 409A2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$10,000.00	$100,000.00
120-1	REGULAR EXCAVATION	129,066.67	CY	$4.50	$580,800.02
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,301.59	$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$3,512.69	$7,025.38
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$133.10	$13,842.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00	LF	$10.00	$27,800.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$2,128.82	$6,386.46
570-1-1	PERFORMANCE TURF	48,400.00	SY	$0.76	$36,784.00

Retention Basin 15

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 409B1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Retention Basin 16

Description	Value
Size	2.5 AC
Multiplier	2
Depth	8.00
Description	POND 410A

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$10,000.00	$50,000.00
120-1	REGULAR EXCAVATION	64,533.34	CY	$4.50	$290,400.03
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,301.59	$46,857.24
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$5,040.98	$10,081.96
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$5,745.70	$11,491.40
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$133.10	$14,907.20
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$216.88	$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,670.00	LF	$10.00	$26,700.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,128.82	$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00	SY	$0.76	$18,392.00

Retention Basin 17

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 410B

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Retention Basin 18

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 411

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Retention Basin 19

Description	Value
Size	2.5 AC
Multiplier	1
Depth	8.00
Description	POND 412

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$10,000.00	$25,000.00
120-1	REGULAR EXCAVATION	32,266.67	CY	$4.50	$145,200.02
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,301.59	$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,040.98	$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$5,745.70	$5,745.70
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$133.10	$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$216.88	$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$10.00	$13,350.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,128.82	$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	$0.76	$9,196.00

Drainage Component Total $13,648,968.38

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	18.00	AS	$321.52	$5,787.36
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	211.00	AS	$1,053.87	$222,366.57
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	18.00	AS	$4,188.78	$75,398.04
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	53.00	AS	$5,697.97	$301,992.41

Signing Component Total $605,544.38

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

$750,000 per mile from FDOT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
ITS	ITS - ALL ITEMS	10.10	MI	$108,600.00	$1,096,860.00
	Comment: Per mile cost from FDOT				
	Intelligent Traffic System (ITS) Component Total				$1,096,860.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	421

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	84,200.00	LF	$6.43	$541,406.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	421.00	EA	$535.14	$225,293.94
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	252,600.00	LF	$2.15	$543,090.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	421.00	EA	$4,688.07	$1,973,677.47
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	421.00	EA	$553.54	$233,040.34
	Subcomponent Total				$3,516,507.75
	Lighting Component Total				$3,516,507.75

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N
Landscaping Component Total	$5,358,991.39

BRIDGES COMPONENT

Bridge PADCRK

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	138.00
Width (LF)	206.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	19,610.00
Default Cost per SF	$135.00
Factored Cost per SF	$168.75
Final Cost per SF	**$177.51**

Basic Bridge Cost **$4,797,225.00**

Description I-4 OVER PADGETT CREEK.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	19,610.00	SF	$20.00	$392,200.00
400-2-10	CONC CLASS II, APPROACH SLABS	457.78	CY	$379.38	$173,672.58
415-1-9	REINF STEEL- APPROACH SLABS	80,111.50	LB	$0.94	$75,304.81
	Bridge PADCRK Total				$5,438,402.39

Bridge DIRKSE

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	335.00
Width (LF)	275.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	50,000.00
Default Cost per SF	$120.00
Factored Cost per SF	$150.00
Final Cost per SF	**$153.61**
Basic Bridge Cost	**$13,818,750.00**

Description REPLACE I-4 OVER DIRKSEN.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	50,000.00	SF	$20.00	$1,000,000.00
400-2-10	CONC CLASS II, APPROACH SLABS	611.11	CY	$379.38	$231,842.91
415-1-9	REINF STEEL- APPROACH SLABS	106,944.25	LB	$0.94	$100,527.60
	Bridge DIRKSE Total				$15,151,120.51

Bridge WBGUL

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	850.00
Width (LF)	50.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$135.00
Factored Cost per SF	$168.75
Final Cost per SF	**$170.17**
Basic Bridge Cost	**$7,171,875.00**

Description WB GUL OVER GAS LINE LAKE

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	111.11	CY	$379.38	$42,152.91
415-1-9	REINF STEEL- APPROACH SLABS	19,444.25	LB	$0.94	$18,277.60

Bridge WBGUL Total $7,232,305.51

Bridge STJOHN

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	2,128.00
Width (LF)	88.00
Type	High Level, Widen
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$145.00
Factored Cost per SF	$181.25
Final Cost per SF	**$181.82**
Basic Bridge Cost	**$33,941,600.00**
Description	I-4 OVER ST. JOHNS RIVER. WIDEN TO MEDIAN TO ADD HOV. SUBSTRUCTURE PILINGS AND PILE CAPS EXISTING FROM PREVIOUS PHASE WORK.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	195.56	CY	$379.38	$74,191.55
415-1-9	REINF STEEL- APPROACH SLABS	34,223.00	LB	$0.94	$32,169.62

Bridge STJOHN Total $34,047,961.17

Bridge ML-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	100.00
Width (LF)	196.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$135.00
Factored Cost per SF	$168.75
Final Cost per SF	**$180.84**
Basic Bridge Cost	**$3,307,500.00**
Description	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	435.56	CY	$379.38	$165,242.75
415-1-9	REINF STEEL- APPROACH SLABS	76,223.00	LB	$0.94	$71,649.62

Bridge ML-1 Total	$3,544,392.37
Bridges Component Total	$65,414,181.95

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	92,496.00	LF	$240.44	$22,239,738.24

Retaining Wall 1

Description	Value
Length	92,496.00
Begin height	3.00
End Height	3.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	277,488.00	SF	$29.09	$8,072,125.92

Retaining Wall 2

Description	Value
Length	520.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,580.00	SF	$29.09	$249,592.20

Retaining Wall 3

Description	Value
Length	650.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	10,725.00	SF	$29.09	$311,990.25

Retaining Wall 4

Description	Value
Length	365.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

548-12	RET WALL SYSTEM, PERM, EX BARRIER	6,022.50	SF	$29.09	$175,194.52

Retaining Wall 5

Description	Value
Length	400.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	6,600.00	SF	$29.09	$191,994.00

Retaining Wall 6

Description	Value
Length	300.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,950.00	SF	$29.09	$143,995.50

Retaining Wall 7

Description	Value
Length	120.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,980.00	SF	$29.09	$57,598.20

Retaining Wall 8

Description	Value
Length	624.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	10,296.00	SF	$29.09	$299,510.64

Retaining Wall 9

Description	Value
Length	335.00
Begin height	16.50
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,527.50	SF	$29.09	$160,794.98

Retaining Wall 10

Description	Value
Length	360.00
Begin height	16.50
End Height	1.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,150.00	SF	$29.09	$91,633.50

Retaining Walls Component Total $31,994,167.96

ARCHITECTURAL COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
1	TOLL GANTRY, 40'	5.00	EA	$500,000.00	$2,500,000.00
	Comment: FIVE 40' SPAN TOLL GANTRYS				

Architectural Component Total $2,500,000.00

Sequence 1 Total $183,992,037.58

Sequence: 2 NDR - New Construction, Divided, Rural **Net Length:** 0.530 MI 2,800 LF

Description: 2,800' transition from Express Lanes to all GUL (HNTB Sta. 3067+60 to 3095+60)

Special Conditions: August 2016 Update: Express Lanes with Asphalt Pavement

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EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.530
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	1 to 1 / 1 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %

Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	22,244.17	CY	$8.00	$177,953.36
	Earthwork Component Total				$177,953.36

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	27,377.62	SY	$3.25	$88,977.26
285-712	OPTIONAL BASE,BASE GROUP 12	15,343.91	SY	$20.00	$306,878.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	4,927.97	TN	$97.88	$482,349.70
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	597.33	TN	$135.00	$80,639.55

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	215.00	EA	$3.74	$804.10
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.24	NM	$908.42	$3,851.70
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.12	GM	$383.54	$813.10

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	1,746.00
Noise Barrier Wall Begin Height	10.00
Noise Barrier Wall End Height	10.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT	93.33	TN	$232.34	$21,684.29

	PAVEMENT			
534-72-101	SOUND/NOISE BARRIER-INC FOUNDATION, PERM	17,460.00 SF	$28.71	$501,276.60
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	2,800.00 LF	$23.60	$66,080.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,600.00 LF	$10.00	$56,000.00
	Roadway Component Total			$1,609,354.51

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	6,427.52	SY	$16.00	$102,840.32
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,026.66	TN	$114.21	$117,254.84
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.06	PM	$1,428.02	$1,513.70

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,279.96	LF	$1.15	$8,371.95
104-11	FLOATING TURBIDITY BARRIER	132.57	LF	$9.63	$1,276.65
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	132.57	LF	$4.69	$621.75
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
104-18	INLET PROTECTION SYSTEM	4.00	EA	$94.06	$376.24
107-1	LITTER REMOVAL	12.85	AC	$35.63	$457.85
107-2	MOWING	12.85	AC	$55.77	$716.64
	Shoulder Component Total				$235,645.72

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	68.00
Performance Turf Width	48.00
Total Median Shoulder Width L/R	10.00 / 10.00
Paved Median Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	6,427.52	SY	$16.00	$102,840.32
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,026.66	TN	$114.21	$117,254.84
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.00	PM	$1,428.02	$1,428.02
570-1-2	PERFORMANCE TURF, SOD	14,933.25	SY	$2.25	$33,599.81
	Median Component Total				$255,122.99

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	5,600.00	LF	$25.36	$142,016.00
	Comment: TOTAL DIST. X 2 SIDES				
446-71-1	EDGEDRAIN OUTLET PIPE, 4"	112.00	LF	$28.30	$3,169.60
	Comment: TOTAL DIST. X 2 SIDES X 6' PIPE / 300' INTERVAL				
	Drainage Component Total				$145,185.60

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	2.00	AS	$241.18	$482.36
700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	13.00	AS	$640.62	$8,328.06
700-21-11	MULTI- POST SIGN, F&I, 50 OR <	2.00	AS	$2,749.17	$5,498.34
700-21-12	MULTI- POST SIGN, F&I, 51-100	4.00	AS	$3,821.43	$15,285.72

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-22-154	OHD TRUSS SPAN SGN,F&I,T>200,S>700	2.00	AS	$278,281.34	$556,562.68
	Comment: For HOV transitioning				
700-23-144	OHD TRUSS CANT SGN,F&I,T>50,S>300	2.00	AS	$70,000.67	$140,001.34
	Comment: For HOV transitioning				
	Signing Component Total				$726,158.50

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	28

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	16,800.00	LF	$2.15	$36,120.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	5,600.00	LF	$3.03	$16,968.00

715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	28.00 EA	$4,688.07	$131,265.96
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	28.00 EA	$330.70	$9,259.60
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	28.00 EA	$553.54	$15,499.12
	Subcomponent Total			$209,112.68

Lighting Component Total $209,112.68

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $100,756.00

Sequence 2 Total $3,459,289.36

Sequence: 3 NDR - New Construction, Divided, Rural **Net Length:** 0.963 MI 5,086 LF

Description: Mainline 6 GUL (HNTB Sta. 3067+60 to 3118+46)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 150.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.960
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	35.02	AC	$10,000.00	$350,200.00
120-6	EMBANKMENT	45,480.28	CY	$8.00	$363,842.24

Earthwork Component Total $714,042.24

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6

Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	67,816.32	SY	$3.25	$220,403.04
285-712	OPTIONAL BASE,BASE GROUP 12	41,435.77	SY	$20.00	$828,715.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	13,427.63	TN	$97.88	$1,314,296.42
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	1,627.59	TN	$135.00	$219,724.65

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	15,172.00	LF	$240.44	$3,647,955.68

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	650.00	EA	$3.74	$2,431.00
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.85	NM	$908.42	$3,497.42
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.85	GM	$383.54	$1,476.63
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	3.85	NM	$3,138.35	$12,082.65
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	3.85	GM	$1,027.15	$3,954.53

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	106.67	TN	$232.34	$24,783.71
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	10,174.00	LF	$186.18	$1,894,195.32
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	3,200.00	LF	$23.60	$75,520.00
	REL CRASH CUSHION-				

544-74-14	QUADGUARD	1.00	EA	$4,321.13	$4,321.13
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	10,172.00	LF	$10.00	$101,720.00
	Roadway Component Total				$8,355,077.58

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	13,936.25	SY	$16.00	$222,980.00
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,237.94	TN	$114.21	$255,595.13
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.93	PM	$1,428.02	$2,756.08

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	671,352.00	SY	$2.25	$1,510,542.00
	Comment: 66' each side of road x sequence length				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	13,224.18	LF	$1.15	$15,207.81
104-11	FLOATING TURBIDITY BARRIER	240.82	LF	$9.63	$2,319.10
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	240.82	LF	$4.69	$1,129.45
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
104-18	INLET PROTECTION SYSTEM	6.00	EA	$94.06	$564.36
107-1	LITTER REMOVAL	23.35	AC	$35.63	$831.96
107-2	MOWING	23.35	AC	$55.77	$1,302.23
	Shoulder Component Total				$2,015,443.90

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	64.00
Performance Turf Width	37.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	13,936.25	SY	$16.00	$222,980.00
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,237.94	TN	$114.21	$255,595.13
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	3,510.00	LF	$111.97	$393,014.70
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	2.00	PM	$1,428.02	$2,856.04
570-1-2	PERFORMANCE TURF, SOD	20,910.03	SY	$2.25	$47,047.57
	Median Component Total				$921,493.44

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	776.00	LF	$72.48	$56,244.48
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	336.00	LF	$75.40	$25,334.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	288.00	LF	$111.27	$32,045.76
570-1-1	PERFORMANCE TURF	678.16	SY	$0.76	$515.40

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	34.00	EA	$4,822.27	$163,957.18
	Comment: TOTAL DIST. X 2 SIDES / 300' INTERVAL				
	Drainage Component Total				$278,097.22

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$321.52	$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	24.00	AS	$1,053.87	$25,292.88
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,188.78	$8,377.56
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	6.00	AS	$5,697.97	$34,187.82
	Signing Component Total				$68,501.30

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	91

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	18,200.00	LF	$6.43	$117,026.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	91.00	EA	$535.14	$48,697.74
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	54,600.00	LF	$2.15	$117,390.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	91.00	EA	$4,688.07	$426,614.37
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	91.00	EA	$553.54	$50,372.14
	Subcomponent Total				$760,100.25
	Lighting Component Total				$760,100.25

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total	$393,382.68
Sequence 3 Total	$13,506,138.61

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 4.830 MI 25,500 LF

Description: Mainline auxiliary lanes only

Special Conditions: This is pavement for 12' wide aux. lanes at on / off ramp connections.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	4.830
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	16,642.68	CY	$8.00	$133,141.44
	Earthwork Component Total				$133,141.44

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	6.00 / 6.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	33,999.68	SY	$3.25	$110,498.96
285-712	OPTIONAL BASE,BASE GROUP 12	37,739.64	SY	$20.00	$754,792.80
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	11,219.89	TN	$97.88	$1,098,202.83
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	1,359.99	TN	$135.00	$183,598.65

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.83	NM	$908.42	$4,387.67
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	4.83	NM	$3,138.35	$15,158.23

Roadway Component Total $2,166,639.14

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $68,993.42

Sequence 4 Total $2,368,774.00

Sequence: 5 NUR - New Construction, Undivided, Rural **Net Length:** 0.755 MI 3,986 LF

Description: One-lane ramps - Dirksen Dr.

Special Conditions: Dirksen Dr concept with new ramp off of EB I4 Ped Culvert added.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.760
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	9.15	AC	$10,000.00	$91,500.00
120-6	EMBANKMENT	13,001.47	CY	$8.00	$104,011.76
	Earthwork Component Total				$195,511.76

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,957.62	SY	$3.25	$38,862.26
285-712	OPTIONAL BASE,BASE GROUP 12	6,935.42	SY	$20.00	$138,708.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,644.17	TN	$97.88	$160,931.36
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	265.72	TN	$135.00	$35,872.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.51	NM	$908.42	$1,371.71
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.51	NM	$3,138.35	$4,738.91

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	1,703.00	LF	$186.18	$317,064.54
	Roadway Component Total				$697,549.39

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	5,606.79	SY	$16.00	$89,708.64
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	584.59	TN	$114.21	$66,766.02

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,363.27	LF	$1.15	$11,917.76
104-11	FLOATING TURBIDITY BARRIER	188.72	LF	$9.63	$1,817.37
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	188.72	LF	$4.69	$885.10
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	9.15	AC	$35.63	$326.01
107-2	MOWING	9.15	AC	$55.77	$510.30
	Shoulder Component Total				$174,146.98

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	608.00	LF	$72.48	$44,067.84
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	128.00	LF	$111.27	$14,242.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-1	CONC CLASS II, CULVERTS	57.00	CY	$965.27	$55,020.39
	Comment: 10'x19'x50'				
400-2-2	CONC CLASS II, ENDWALLS	1,516.00	CY	$1,301.59	$1,973,210.44
415-1-6	REINF STEEL- MISCELLANEOUS	34,821.00	LB	$1.65	$57,454.65
425-1-901	INLETS, SPECIAL, <10'	14.00	EA	$4,822.27	$67,511.78
	Comment: TOTAL DIST. / 300' INTERVAL				
	Drainage Component Total				$2,211,507.66

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$321.52	$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	16.00	AS	$1,053.87	$16,861.92
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,188.78	$8,377.56
	Signing Component Total				$25,882.52

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	14

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	8,400.00	LF	$2.15	$18,060.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	2,800.00	LF	$3.03	$8,484.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	14.00	EA	$4,688.07	$65,632.98
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	14.00	EA	$330.70	$4,629.80
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	14.00	EA	$553.54	$7,749.56
	Subcomponent Total				$104,556.34
	Lighting Component Total				$104,556.34

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N
Landscaping Component Total	$102,274.64

Sequence 5 Total $3,511,429.29

Sequence: 7 NUR - New Construction, Undivided, Rural **Net Length:** 0.303 MI 1,600 LF

Description: Reconstruct Enterprise Rd. bridge

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.303
Top of Structural Course For Begin Section	124.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.67	AC	$10,000.00	$36,700.00
120-1	REGULAR EXCAVATION	159,799.13	CY	$4.50	$719,096.08
	Earthwork Component Total				$755,796.09

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Roadway Pavement Width L/R	31.50 / 31.50
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	14,754.08	SY	$3.25	$47,950.76
285-712	OPTIONAL BASE,BASE GROUP 12	11,316.20	SY	$20.00	$226,324.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,539.85	TN	$97.88	$150,720.52
337-7-33	ASPH CONC FC,TRAFFIC C,FC-12.5,RUBBER	923.91	TN	$121.25	$112,024.09

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	245.00	EA	$3.74	$916.30
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.61	NM	$908.42	$554.14
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.21	GM	$383.54	$464.08
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.61	NM	$3,138.35	$1,914.39
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	1.21	GM	$1,027.15	$1,242.85

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	1,167.00	LF	$186.18	$217,272.06

Roadway Component Total $759,383.19

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	1,894.92	SY	$16.00	$30,318.72
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	97.77	TN	$114.21	$11,166.31
337-7-33	ASPH CONC FC,TRAFFIC C,FC-12.5,RUBBER	19.36	TN	$121.25	$2,347.40
570-1-2	PERFORMANCE TURF, SOD	1,777.60	SY	$2.25	$3,999.60

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-6	SHOULDER GUTTER- CONCRETE	2,000.00	LF	$21.35	$42,700.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,159.58	LF	$1.15	$4,783.52
104-11	FLOATING TURBIDITY BARRIER	75.75	LF	$9.63	$729.47

104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	75.75 LF	$4.69	$355.27
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	3.67 AC	$35.63	$130.76
107-2	MOWING	3.67 AC	$55.77	$204.68
	Shoulder Component Total			$98,951.51

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	248.00	LF	$72.48	$17,975.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00	LF	$111.27	$6,231.12

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	6.00	EA	$4,822.27	$28,933.62
	Comment: TOTAL DIST. / 300' INTERVAL				
	Drainage Component Total				$53,139.78

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$321.52	$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,053.87	$7,377.09
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,188.78	$4,188.78
	Signing Component Total				$11,887.39

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N
Landscaping Component Total	$275,670.80

BRIDGES COMPONENT

Bridge ENTRP

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	400.00
Width (LF)	117.00
Type	Overpass Bridge

Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	17,423.00
Default Cost per SF	$120.00
Factored Cost per SF	$150.00
Final Cost per SF	**$153.02**
Basic Bridge Cost	**$7,020,000.00**
Description	REPLACE ENTERPRISE RD. OVER I-4

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	17,423.00	SF	$20.00	$348,460.00
400-2-10	CONC CLASS II, APPROACH SLABS	260.00	CY	$379.38	$98,638.80
415-1-9	REINF STEEL- APPROACH SLABS	45,500.00	LB	$0.94	$42,770.00
	Bridge ENTRP Total				$7,509,868.80
	Bridges Component Total				$7,509,868.80

Sequence 7 Total $9,464,697.56

Sequence: 8 NUU - New Construction, Undivided, Urban **Net Length:** 0.189 MI 1,000 LF

Description: Park & Ride lot access bridge and ramp

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.170
Top of Structural Course For Begin Section	130.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.29	AC	$10,000.00	$22,900.00
120-6	EMBANKMENT	120,431.66	CY	$8.00	$963,453.28
	Earthwork Component Total				$986,353.28

ROADWAY COMPONENT

User Input Data

Description	Value

Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,240.10	SY	$3.25	$10,530.32
285-712	OPTIONAL BASE,BASE GROUP 12	2,666.75	SY	$20.00	$53,335.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	366.68	TN	$97.88	$35,890.64
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	106.67	TN	$135.00	$14,400.45

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	26.00	EA	$3.74	$97.24
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.38	NM	$908.42	$345.20
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.19	GM	$383.54	$72.87
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.38	NM	$3,138.35	$1,192.57
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.19	GM	$1,027.15	$195.16

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	34.00	TN	$232.34	$7,899.56
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,000.00	LF	$17.75	$17,750.00
536-8	GUARDRAIL- BRIDGE ANCHORAGE ASSEM, F&I	2.00	EA	$2,292.42	$4,584.84
	Roadway Component Total				$146,293.86

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	60.25 / 60.25
Total Outside Shoulder Perf. Turf Width L/R	50.00 / 50.00
Sidewalk Width L/R	8.00 / 8.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,000.03	LF	$20.00	$20,000.60
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,000.03	LF	$20.00	$20,000.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,777.83	SY	$41.59	$73,939.95
570-1-2	PERFORMANCE TURF, SOD	11,111.47	SY	$2.25	$25,000.81

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,000.06	LF	$1.15	$2,300.07
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$9.63	$455.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$4.69	$222.07
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
104-18	INLET PROTECTION SYSTEM	10.00	EA	$94.06	$940.60
107-1	LITTER REMOVAL	2.30	AC	$35.63	$81.95
107-2	MOWING	2.30	AC	$55.77	$128.27
	Shoulder Component Total				$145,286.68

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00	EA	$4,578.47	$32,049.29
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$6,642.37	$13,284.74
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$2,939.36	$2,939.36
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$3,683.62	$3,683.62
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	448.00	LF	$75.40	$33,779.20
570-1-1	PERFORMANCE TURF	57.58	SY	$0.76	$43.76
	Drainage Component Total				$85,779.97

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$321.52	$1,286.08
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,053.87	$1,053.87
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$5,697.97	$5,697.97

Signing Component Total		$8,037.92

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	**Value**
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.03	LF	$6.43	$6,430.19
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	198.49	LF	$17.13	$3,400.13
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$535.14	$3,745.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,652.39	LF	$2.15	$7,852.64
715-4-111	LIGHT POLE COMP, F&I, WS150, 40'	7.00	EA	$4,662.25	$32,635.75
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$553.54	$3,874.78
	Subcomponent Total				$57,939.48

Lighting Component Total	$57,939.47

LANDSCAPING COMPONENT

User Input Data

Description	**Value**
Cost %	3.00
Component Detail	N

Landscaping Component Total	$139,467.85

BRIDGES COMPONENT

Bridge PRKRID

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	300.00
Width (LF)	57.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$135.00
Factored Cost per SF	$168.75
Final Cost per SF	**$172.78**
Basic Bridge Cost	**$2,885,625.00**
Description	PARK & RIDE LOT ACCESS

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	126.67	CY	$379.38	$48,056.06
415-1-9	REINF STEEL- APPROACH SLABS	22,167.25	LB	$0.94	$20,837.22

Bridge PRKRID Total	$2,954,518.28

	Bridges Component Total	$2,954,518.28

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,040.00
Begin height	1.00
End Height	16.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,100.00	SF	$29.09	$264,719.00
	Retaining Walls Component Total				$264,719.00

Sequence 8 Total $4,788,396.31

Sequence: 9 NUR - New Construction, Undivided, Rural **Net Length:** 0.227 MI 1,200 LF

Description: One-lane ramps - Park & Ride HOV On-Off Ramps

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.230
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	2,261.48	CY	$8.00	$18,091.84
	Earthwork Component Total				$18,091.84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50

Structural Spread Rate	495
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,600.43	SY	$3.25	$11,701.40
285-701	OPTIONAL BASE,BASE GROUP 01	2,088.25	SY	$11.87	$24,787.53
350-4-13	REINFORCED CEMENT CONC PVMT,12"	2,000.24	SY	$85.00	$170,020.40

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.45	NM	$3,138.35	$1,412.26

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	2,400.00	LF	$186.18	$446,832.00
	Roadway Component Total				$654,753.59

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit	Extended Amount

				Price	
285-708	OPTIONAL BASE,BASE GROUP 08	1,688.20	SY	$16.00	$27,011.20
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	176.02	TN	$114.21	$20,103.24

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,120.37	LF	$1.15	$3,588.43
104-11	FLOATING TURBIDITY BARRIER	56.82	LF	$9.63	$547.18
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	56.82	LF	$4.69	$266.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	2.75	AC	$35.63	$97.98
107-2	MOWING	2.75	AC	$55.77	$153.37
	Shoulder Component Total				$53,983.67

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	1,200.00	LF	$25.36	$30,432.00
	Comment: TOTAL DIST.				
446-71-1	EDGEDRAIN OUTLET PIPE, 4"	24.00	LF	$28.30	$679.20
	Comment: TOTAL DIST. X 6' PIPE / 300' INTERVAL				
	Drainage Component Total				$31,111.20

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$321.52	$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,053.87	$5,269.35
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,188.78	$4,188.78
	Signing Component Total				$9,779.65

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	10

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	$6.43	$12,860.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00	EA	$535.14	$5,351.40

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00 LF	$2.15	$12,900.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	10.00 EA	$4,688.07	$46,880.70
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	10.00 EA	$553.54	$5,535.40
	Subcomponent Total			$83,527.50

Lighting Component Total $83,527.50

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $25,537.42

Sequence 9 Total $876,784.87

Sequence: 10 NUR - New Construction, Undivided, Rural **Net Length:** 0.985 MI 5,200 LF

Description: One-lane ramps - Saxon Blvd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.990
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	11.94	AC	$10,000.00	$119,400.00
120-6	EMBANKMENT	16,936.13	CY	$8.00	$135,489.04
	Earthwork Component Total				$254,889.04

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50

Structural Spread Rate	495
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	15,599.23	SY	$3.25	$50,697.50
285-712	OPTIONAL BASE,BASE GROUP 12	9,047.55	SY	$20.00	$180,951.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	2,144.89	TN	$97.88	$209,941.83
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	346.65	TN	$135.00	$46,797.75

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.97	NM	$908.42	$1,789.59
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.97	NM	$3,138.35	$6,182.55

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	27.00	TN	$232.34	$6,273.18
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	750.00	LF	$17.75	$13,312.50
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	6.00	EA	$2,192.69	$13,156.14
	Roadway Component Total				$529,102.04

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O

Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	7,314.31	SY	$16.00	$117,028.96
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	762.63	TN	$114.21	$87,099.97

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	13,519.33	LF	$1.15	$15,547.23
104-11	FLOATING TURBIDITY BARRIER	246.20	LF	$9.63	$2,370.91
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	246.20	LF	$4.69	$1,154.68
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	11.94	AC	$35.63	$425.42
107-2	MOWING	11.94	AC	$55.77	$665.89
	Shoulder Component Total				$226,508.84

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	792.00	LF	$72.48	$57,404.16
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	168.00	LF	$111.27	$18,693.36
570-1-1	PERFORMANCE TURF	693.30	SY	$0.76	$526.91
	Drainage Component Total				$76,624.43

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$321.52	$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	20.00	AS	$1,053.87	$21,077.40
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,188.78	$8,377.56
	Signing Component Total				$30,098.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	61

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	12,200.00	LF	$6.43	$78,446.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	61.00	EA	$535.14	$32,643.54

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	36,600.00 LF	$2.15	$78,690.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	61.00 EA	$4,688.07	$285,972.27
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	61.00 EA	$553.54	$33,765.94
	Subcomponent Total			$509,517.75
	Lighting Component Total			$509,517.75

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $48,802.20

Sequence 10 Total $1,675,542.30

Sequence: 11 NUR - New Construction, Undivided, Rural **Net Length:** 0.568 MI 3,000 LF

Description: Two-lane ramps - Saxon Blvd.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.560
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	6.88	AC	$10,000.00	$68,800.00
120-6	EMBANKMENT	11,340.97	CY	$8.00	$90,727.76
	Earthwork Component Total				$159,527.76

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495

Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	14,000.45	SY	$3.25	$45,501.46
285-712	OPTIONAL BASE,BASE GROUP 12	8,220.26	SY	$20.00	$164,405.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,980.06	TN	$97.88	$193,808.27
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	320.01	TN	$135.00	$43,201.35

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	77.00	EA	$3.74	$287.98
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.14	NM	$908.42	$1,035.60
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.57	GM	$383.54	$218.62
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.14	NM	$3,138.35	$3,577.72
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.57	GM	$1,027.15	$585.48
	Roadway Component Total				$452,621.68

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 10.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	6,220.20	SY	$16.00	$99,523.20
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	660.02	TN	$114.21	$75,380.88

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,800.25	LF	$1.15	$8,970.29

104-11	FLOATING TURBIDITY BARRIER	142.05	LF	$9.63	$1,367.94
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	142.05	LF	$4.69	$666.21
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	6.89	AC	$35.63	$245.49
107-2	MOWING	6.89	AC	$55.77	$384.26
	Shoulder Component Total				$188,754.05

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	10.23	CY	$1,301.59	$13,315.27
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	456.00	LF	$72.48	$33,050.88
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	$111.27	$10,681.92
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	23.00	EA	$1,198.82	$27,572.86
570-1-1	PERFORMANCE TURF	400.01	SY	$0.76	$304.01
	Drainage Component Total				$84,924.94

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$321.52	$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	12.00	AS	$1,053.87	$12,646.44
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,188.78	$8,377.56
	Signing Component Total				$21,667.04

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	14

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,800.00	LF	$6.43	$18,004.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	14.00	EA	$535.14	$7,491.96
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	8,400.00	LF	$2.15	$18,060.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	14.00	EA	$4,688.07	$65,632.98
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	14.00	EA	$553.54	$7,749.56
	Subcomponent Total				$116,938.50
	Lighting Component Total				$116,938.50

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $30,733.02

Sequence 11 Total $1,055,166.99

Sequence: 13 NDU - New Construction, Divided, Urban **Net Length:** 0.189 MI 1,000 LF

Description: Reconstruct SR-472 bridge and SR 472 STA 68+00 TO 76+00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	105.00 / 105.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.231
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	124.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.81	AC	$10,000.00	$48,100.00
120-6	EMBANKMENT	201,374.14	CY	$8.00	$1,610,993.12

Earthwork Component Total $1,659,093.12

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,146.96	SY	$3.25	$29,727.62
285-712	OPTIONAL BASE,BASE GROUP 12	8,000.26	SY	$20.00	$160,005.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,320.04	TN	$97.88	$129,205.52

337-7-33	ASPH CONC FC,TRAFFIC C,FC-12.5,RUBBER	660.02 TN	$121.25	$80,027.42

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	128.00	EA	$3.74	$478.72
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.76	NM	$908.42	$690.40
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.76	GM	$383.54	$291.49
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.76	NM	$3,138.35	$2,385.15
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.76	GM	$1,027.15	$780.63

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	69.33	TN	$232.34	$16,108.13
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	2,000.00	LF	$17.75	$35,500.00
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	8.00	EA	$2,192.69	$17,541.52
	Roadway Component Total				$472,741.81

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	57.25 / 57.25
Total Outside Shoulder Perf. Turf Width L/R	50.00 / 50.00
Sidewalk Width L/R	5.00 / 5.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,000.03	LF	$20.00	$20,000.60
	CONCRETE CURB & GUTTER,				

520-1-10	TYPE F	1,000.03	LF	$20.00	$20,000.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,111.15	SY	$41.59	$46,212.73
570-1-2	PERFORMANCE TURF, SOD	11,111.47	SY	$2.25	$25,000.81

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,000.06	LF	$1.15	$2,300.07
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$9.63	$455.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$4.69	$222.07
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
104-18	INLET PROTECTION SYSTEM	10.00	EA	$94.06	$940.60
107-1	LITTER REMOVAL	4.82	AC	$35.63	$171.74
107-2	MOWING	4.82	AC	$55.77	$268.81
	Shoulder Component Total				$117,789.79

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	30.00
Performance Turf Width	30.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	2,000.06	LF	$18.00	$36,001.08
570-1-2	PERFORMANCE TURF, SOD	3,333.44	SY	$2.25	$7,500.24
	Median Component Total				$43,501.32

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00	EA	$4,578.47	$32,049.29
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$6,642.37	$13,284.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$3,683.62	$3,683.62
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	504.00	LF	$75.40	$38,001.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$111.27	$5,340.96
570-1-1	PERFORMANCE TURF	57.58	SY	$0.76	$43.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	7.00	EA	$4,822.27	$33,755.89
	Comment: TOTAL DIST. X 2 / 300'				
	Drainage Component Total				$126,159.86

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00	AS	$321.52	$1,607.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,053.87	$1,053.87
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$5,697.97	$5,697.97
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$8,881.39	$8,881.39
	Signing Component Total				$17,240.83

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	2 Lane Mast Arm
Multiplier	2
Description	WB SIDE OF SR 472 DDI INTERSECTION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$6.43	$10,288.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	400.00	LF	$17.13	$6,852.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,446.59	$8,893.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	$535.14	$12,843.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$1,774.62	$3,549.24
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$3.30	$396.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/0 LU 36-46	8.00	EA	$34,125.08	$273,000.64
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	16.00	AS	$931.67	$14,906.72
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	16.00	AS	$518.87	$8,301.92
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	16.00	EA	$179.15	$2,866.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	16.00	AS	$851.32	$13,621.12
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$196.31	$3,140.96
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$23,075.08	$46,150.16
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$209.21	$1,673.68

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	2
Description	EAST SIDE OF I-4 DDI INTERSECTION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$6.43	$10,288.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	400.00	LF	$17.13	$6,852.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,446.59	$8,893.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	$535.14	$12,843.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$1,774.62	$3,549.24
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$3.30	$396.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/0 LU 36-46	8.00	EA	$34,125.08	$273,000.64
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	16.00	AS	$931.67	$14,906.72
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	16.00	AS	$518.87	$8,301.92
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	16.00	EA	$179.15	$2,866.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	16.00	AS	$851.32	$13,621.12
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$196.31	$3,140.96
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$23,075.08	$46,150.16
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$209.21	$1,673.68
	Signalizations Component Total				$812,966.76

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.03	LF	$6.43	$6,430.19
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	198.49	LF	$17.13	$3,400.13
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$535.14	$3,745.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,652.39	LF	$2.15	$7,852.64
715-4-111	LIGHT POLE COMP, F&I, WS150, 40'	7.00	EA	$4,662.25	$32,635.75
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$553.54	$3,874.78
	Subcomponent Total				$57,939.48
	Lighting Component Total				$57,939.47

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total	$303,139.41

BRIDGES COMPONENT

Bridge SR472

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		305.00
Width (LF)		135.00
Type		Overpass Bridge
Cost Factor		1.25
Structure No.		
Removal of Existing Structures area		22,890.00
Default Cost per SF		$120.00
Factored Cost per SF		$150.00
Final Cost per SF		**$153.96**
Basic Bridge Cost		**$6,176,250.00**
Description	REPLACE SR-472 BRIDGE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	22,890.00	SF	$20.00	$457,800.00
400-2-10	CONC CLASS II, APPROACH SLABS	300.00	CY	$379.38	$113,814.00
415-1-9	REINF STEEL- APPROACH SLABS	52,500.00	LB	$0.94	$49,350.00
	Bridge SR472 Total				$6,797,214.00
	Bridges Component Total				$6,797,214.00

Sequence 13 Total $10,407,786.37

Sequence: 14 NUR - New Construction, Undivided, Rural **Net Length:** 0.189 MI 1,000 LF

Description: One-lane ramps - SR-472

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.730
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.29	AC	$10,000.00	$22,900.00

120-6	EMBANKMENT	29,595.46	CY	$8.00	$236,763.68
	Earthwork Component Total				$259,663.68

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,000.10	SY	$3.25	$9,750.33
285-712	OPTIONAL BASE,BASE GROUP 12	1,740.06	SY	$20.00	$34,801.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	412.51	TN	$97.88	$40,376.48
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	66.67	TN	$135.00	$9,000.45

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.38	NM	$908.42	$345.20
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.38	NM	$3,138.35	$1,192.57

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total $95,466.23

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220

Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	1,406.71	SY	$16.00	$22,507.36
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	146.67	TN	$114.21	$16,751.18
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	5.87	TN	$135.00	$792.45

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,600.08	LF	$1.15	$2,990.09
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$9.63	$455.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$4.69	$222.07
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$2,215.78	$2,215.78
107-1	LITTER REMOVAL	2.30	AC	$35.63	$81.95
107-2	MOWING	2.30	AC	$55.77	$128.27
	Shoulder Component Total				$46,145.13

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$321.52	$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,053.87	$4,215.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,188.78	$4,188.78
	Signing Component Total				$8,725.78

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	13

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,600.00	LF	$6.43	$16,718.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	13.00	EA	$535.14	$6,956.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,800.00	LF	$2.15	$16,770.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	13.00	EA	$4,688.07	$60,944.91
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	13.00	EA	$553.54	$7,196.02
	Subcomponent Total				$108,585.75

Lighting Component Total $108,585.75

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $15,557.60

Sequence 14 Total $534,144.17

Sequence: 15 NDR - New Construction, Divided, Rural **Net Length:** 8.759 MI 46,248 LF

Description: 4 Express Lanes from West End of St. Johns River bridge (HNTB Sta. 2605+12 to 3067+60)

Special Conditions: August 2016 Update: Express Lanes with Asphalt Pavement

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 150.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	8.760
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	318.51	AC	$10,000.00	$3,185,100.00
120-6	EMBANKMENT	248,497.45	CY	$8.00	$1,987,979.60

Earthwork Component Total $5,173,079.60

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	411,093.76	SY	$3.25	$1,336,054.72
285-712	OPTIONAL BASE,BASE GROUP 12	253,439.30	SY	$20.00	$5,068,786.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	81,396.56	TN	$97.88	$7,967,095.29
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	9,866.25	TN	$135.00	$1,331,943.75

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	3,547.00	EA	$3.74	$13,265.78
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	70.07	NM	$908.42	$63,652.99
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	35.04	GM	$383.54	$13,439.24

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	1,541.67	TN	$232.34	$358,191.61
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	46,250.00	LF	$23.60	$1,091,500.00
	Roadway Component Total				$17,243,929.38

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

285-708	OPTIONAL BASE,BASE GROUP 08	106,164.96	SY	$16.00	$1,698,639.36
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	16,957.62	TN	$114.21	$1,936,729.78
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	17.52	PM	$1,428.02	$25,018.91

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	120,244.92	LF	$1.15	$138,281.66
104-11	FLOATING TURBIDITY BARRIER	2,189.78	LF	$9.63	$21,087.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	2,189.78	LF	$4.69	$10,270.07
104-15	SOIL TRACKING PREVENTION DEVICE	9.00	EA	$2,215.78	$19,942.02
104-18	INLET PROTECTION SYSTEM	53.00	EA	$94.06	$4,985.18
107-1	LITTER REMOVAL	212.32	AC	$35.63	$7,564.96
107-2	MOWING	212.32	AC	$55.77	$11,841.09
	Shoulder Component Total				$3,874,360.61

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	12.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	6.00 / 6.00
Paved Median Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	65,055.59	SY	$16.00	$1,040,889.44
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	10,174.57	TN	$114.21	$1,162,037.64
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	18.00	PM	$1,428.02	$25,704.36
	Median Component Total				$2,228,631.44

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	92,496.00	LF	$25.36	$2,345,698.56
	Comment: TOTAL DIST. X 2 SIDES				
446-71-1	EDGEDRAIN OUTLET PIPE, 4"	1,850.00	LF	$28.30	$52,355.00
	Comment: TOTAL DIST. X2 X 6' PIPE / 300' INTERVAL				
	Drainage Component Total				$2,398,053.56

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	18.00	AS	$321.52	$5,787.36
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	211.00	AS	$1,053.87	$222,366.57
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	18.00	AS	$4,188.78	$75,398.04
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	53.00	AS	$5,697.97	$301,992.41
	Signing Component Total				$605,544.38

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	421

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	84,200.00	LF	$6.43	$541,406.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	421.00	EA	$535.14	$225,293.94
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	252,600.00	LF	$2.15	$543,090.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	421.00	EA	$4,688.07	$1,973,677.47
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	421.00	EA	$553.54	$233,040.34
	Subcomponent Total				$3,516,507.75
	Lighting Component Total				$3,516,507.75

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N
Landscaping Component Total	$1,051,203.20

Sequence 15 Total $36,091,309.92

Sequence: 16 NUR - New Construction, Undivided, Rural **Net Length:** 1.099 MI 5,800 LF

Description: Two-lane ramps - SR 472 DDI

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.420
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	13.31	AC	$10,000.00	$133,100.00
120-6	EMBANKMENT	8,505.73	CY	$8.00	$68,045.84
	Earthwork Component Total				$201,145.84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	27,067.04	SY	$3.25	$87,967.88
285-712	OPTIONAL BASE,BASE GROUP 12	15,892.22	SY	$20.00	$317,844.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	3,828.05	TN	$97.88	$374,689.53
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	618.68	TN	$135.00	$83,521.80

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	148.00	EA	$3.74	$553.52
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.20	NM	$908.42	$1,998.52
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.10	GM	$383.54	$421.89
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	2.20	NM	$3,138.35	$6,904.37
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	1.10	GM	$1,027.15	$1,129.86

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	193.33	TN	$232.34	$44,918.29
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	5,800.00	LF	$17.75	$102,950.00
	Roadway Component Total				$1,022,900.07

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 10.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	12,025.50	SY	$16.00	$192,408.00
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,276.02	TN	$114.21	$145,734.24

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	15,080.21	LF	$1.15	$17,342.24
104-11	FLOATING TURBIDITY BARRIER	274.62	LF	$9.63	$2,644.59
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	274.62	LF	$4.69	$1,287.97
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$2,215.78	$4,431.56
107-1	LITTER REMOVAL	13.31	AC	$35.63	$474.24
107-2	MOWING	13.31	AC	$55.77	$742.30
	Shoulder Component Total				$365,065.14

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	880.00	LF	$72.48	$63,782.40

430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	184.00 LF	$111.27	$20,473.68
570-1-1	PERFORMANCE TURF	773.34 SY	$0.76	$587.74
	Drainage Component Total			$84,843.82

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$321.52	$964.56
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	22.00	AS	$1,053.87	$23,185.14
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00	AS	$4,188.78	$12,566.34
	Signing Component Total				$36,716.04

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	14

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,800.00	LF	$6.43	$18,004.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	14.00	EA	$535.14	$7,491.96
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	8,400.00	LF	$2.15	$18,060.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	14.00	EA	$4,688.07	$65,632.98
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	14.00	EA	$553.54	$7,749.56
	Subcomponent Total				$116,938.50
	Lighting Component Total				$116,938.50

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N
Landscaping Component Total	$54,828.28

Sequence 16 Total $1,882,437.69

Sequence: 17 NDR - New Construction, Divided, Rural **Net Length:** 1.288 MI 6,800 LF

Description: SR 472 ROADWAY NOT INCLUDING AREA BETWEEN STA 68+00 TO 76+00.

Special Conditions: DDI

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 150.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	8.760
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	46.84	AC	$10,000.00	$468,400.00
120-6	EMBANKMENT	332,369.19	CY	$8.00	$2,658,953.52
	Earthwork Component Total				$3,127,353.52

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	660
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	66,489.98	SY	$3.25	$216,092.44
285-712	OPTIONAL BASE,BASE GROUP 12	37,264.61	SY	$20.00	$745,292.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	11,968.20	TN	$97.88	$1,171,447.42
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	1,450.69	TN	$135.00	$195,843.15

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	92,496.00	LF	$240.44	$22,239,738.24
	Comment: outside GUL shoulder.				

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	522.00	EA	$3.74	$1,952.28
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	5.15	NM	$908.42	$4,678.36
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.58	GM	$383.54	$989.53
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	5.15	NM	$3,138.35	$16,162.50
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	2.58	GM	$1,027.15	$2,650.05

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	66.67	TN	$232.34	$15,490.11
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	2,000.00	LF	$23.60	$47,200.00
544-75-1	CRASH CUSHION	13.00	EA	$15,521.81	$201,783.53
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	92,496.00	LF	$10.00	$924,960.00
	Roadway Component Total				$25,784,279.81

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	18,632.31	SY	$16.00	$298,116.96
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,992.05	TN	$114.21	$341,722.03
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	39.89	TN	$135.00	$5,385.15
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	2.58	PM	$1,428.02	$3,684.29

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	30,223.00	SY	$2.25	$68,001.75
	Comment: 20' each side of road x sequence length				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	17,680.29	LF	$1.15	$20,332.33
104-11	FLOATING TURBIDITY BARRIER	321.98	LF	$9.63	$3,100.67
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	321.98	LF	$4.69	$1,510.09
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$2,215.78	$4,431.56
104-18	INLET PROTECTION SYSTEM	8.00	EA	$94.06	$752.48
107-1	LITTER REMOVAL	31.22	AC	$35.63	$1,112.37
107-2	MOWING	31.22	AC	$55.77	$1,741.14
	Shoulder Component Total				$749,890.82

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	24.00
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	8.00 / 8.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	12,587.76	SY	$16.00	$201,404.16
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,994.70	TN	$114.21	$227,814.69
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	39.89	TN	$135.00	$5,385.15
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	138,744.00	LF	$111.97	$15,535,165.68
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	3.00	PM	$1,428.02	$4,284.06
570-1-2	PERFORMANCE TURF, SOD	18,133.63	SY	$2.25	$40,800.67
	Median Component Total				$16,014,854.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	8.00	EA	$3,814.23	$30,513.84
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	1,032.00	LF	$72.48	$74,799.36
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	448.00	LF	$75.40	$33,779.20

570-1-1	PERFORMANCE TURF	906.68 SY	$0.76	$689.08
	Drainage Component Total			$139,781.48

INTERSECTIONS COMPONENT

Intersection 1

Description	Value
Mainline No. of Left Turn Lanes	4
Mainline No. of Right Turn Lanes	2
Mainline Design Speed	50
Cross Street Thru Lanes	4
Cross Street No. of Left Turn Lanes	4
Cross Street No. of Right Turn Lanes	3
Cross Street Design Speed	50
T-Intersection?	N
Multiplier	2
Description	SR 472 AND N KENTUCKY AVE

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.72	AC	$10,000.00	$77,200.00
120-6	EMBANKMENT	38,423.20	CY	$8.00	$307,385.60
160-4	TYPE B STABILIZATION	8,640.00	SY	$3.25	$28,080.00
160-4	TYPE B STABILIZATION	19,967.76	SY	$3.25	$64,895.22
285-704	OPTIONAL BASE,BASE GROUP 04	1,688.88	SY	$13.00	$21,955.44
285-709	OPTIONAL BASE,BASE GROUP 09	18,278.88	SY	$18.00	$329,019.84
285-712	OPTIONAL BASE,BASE GROUP 12	8,640.00	SY	$20.00	$172,800.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,108.90	TN	$108.58	$337,564.36
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	2,851.20	TN	$97.88	$279,075.46
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	798.72	TN	$135.00	$107,827.20
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	345.60	TN	$135.00	$46,656.00
520-1-7	CONCRETE CURB & GUTTER, TYPE E	375.00	LF	$18.00	$6,750.00
570-1-1	PERFORMANCE TURF	901.86	SY	$0.76	$685.41

Intersection 2

Description	Value
Mainline No. of Left Turn Lanes	3
Mainline No. of Right Turn Lanes	2
Mainline Design Speed	50
Cross Street Thru Lanes	3
Cross Street No. of Left Turn Lanes	2
Cross Street No. of Right Turn Lanes	2
Cross Street Design Speed	50
T-Intersection?	N
Multiplier	2
Description	SR 472 AND E. GRAVES AVE.

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.72	AC	$10,000.00	$77,200.00

120-6	EMBANKMENT	28,201.00	CY	$8.00	$225,608.00
160-4	TYPE B STABILIZATION	15,074.42	SY	$3.25	$48,991.86
160-4	TYPE B STABILIZATION	7,560.00	SY	$3.25	$24,570.00
285-704	OPTIONAL BASE,BASE GROUP 04	1,688.88	SY	$13.00	$21,955.44
285-709	OPTIONAL BASE,BASE GROUP 09	13,385.54	SY	$18.00	$240,939.72
285-712	OPTIONAL BASE,BASE GROUP 12	7,560.00	SY	$20.00	$151,200.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	2,301.50	TN	$108.58	$249,896.87
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	2,494.80	TN	$97.88	$244,191.02
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	602.98	TN	$135.00	$81,402.30
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	302.40	TN	$135.00	$40,824.00
520-1-7	CONCRETE CURB & GUTTER, TYPE E	375.00	LF	$18.00	$6,750.00
570-1-1	PERFORMANCE TURF	901.86	SY	$0.76	$685.41
	Intersections Component Total				$3,194,109.18

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$321.52	$964.56
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	31.00	AS	$1,053.87	$32,669.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00	AS	$4,188.78	$12,566.34
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	8.00	AS	$5,697.97	$45,583.76
	Signing Component Total				$91,784.63

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	421

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	84,200.00	LF	$6.43	$541,406.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	421.00	EA	$535.14	$225,293.94
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	252,600.00	LF	$2.15	$543,090.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	421.00	EA	$4,688.07	$1,973,677.47
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	421.00	EA	$553.54	$233,040.34
	Subcomponent Total				$3,516,507.75
	Lighting Component Total				$3,516,507.75

LANDSCAPING COMPONENT

User Input Data

Description	Value
Cost %	3.00
Component Detail	N

Landscaping Component Total $1,578,556.85

Sequence 17 Total $54,197,118.45

Date: 8/12/2016 1:57:34 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 408464-2-52-01 **Letting Date:** 01/2099

Description: SR 400 (I-4) from East of SR 15/600 US (Seminole/Volusia County Line) to 1/2 Mile East of SR 472 Volusia County (79110)

District: 05 **County:** 79 VOLUSIA **Market Area:** 06 **Units:** English

Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 10.140 MI

Project Manager: CDC

Version 21 Project Grand Total **$456,299,080.91**

Description: I-4 (SR400) from west of Orange Blvd. in Seminole Co. to east of SR 472 (URS Sta. 2950+00 to 3510+00) HNTB August 2016 Update: Express Lanes with Asphalt Pavement

Project Sequences Subtotal **$327,811,053.47**

102-1	Maintenance of Traffic	10.00 %	$32,781,105.35
101-1	Mobilization	10.00 %	$36,059,215.88

Project Sequences Total **$396,651,374.70**

Project Unknowns	15.00 %	$59,497,706.21
Design/Build	0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00

Project Non-Bid Subtotal **$150,000.00**

Version 21 Project Grand Total **$456,299,080.91**

Engineer's Estimate

I-4 Segment 4

(Mainline I-4) STA. 2583+00.00 TO 3118+46.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	548	$ 4,235,905	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	84,655	$ 1,994,472	Area of existing bridge-Padgett, Dirksen, Enterprise
160 4	Stabilization Type B LBR 40	SY	$ 2.90	724,416	$ 2,100,807	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	273,042	$ 3,737,940	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	451,375	$ 6,328,271	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	30,035	$ 2,621,418	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	74,477	$ 6,495,122	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	49,651	$ 4,450,734	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	18,619	$ 2,182,170	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
350 1 3	Plain Cement Conc Pavt, 8"	SY	$ 55.00	476,908	$ 26,229,916	
521 1	Barrier Wall	LF	$ 113	121,034	$ 13,676,842	Concrete, Double face
536 1 1	Guardrail - Roadway	LF	$ 16	160,638	$ 2,570,208	
	Thermoplastic, White, Striping	NM	$ 3,178	139	$ 441,056	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	3	$ 54,983	At gores
	Fencing	LF	$ 10.00	107,092	$ 1,070,920	LA R/W fence
	Embankment	CY	$ 5.94	724,416	$ 4,303,032	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	321,276	$ 10,923,384	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	285,558	$ 45,689,280	Concrete
	Wetland Mitigation	AC	$ 108,000.00	64	$ 6,937,920	Used 25' from edge of shoulder for impacts
	Toll Gantry	EA	$ 500,000.00	5	$ 2,500,000	
	Subtotal Cost	LS			$ 148,544,381	
	Compensable Utility Relocation	LS			$ 7,427,219	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 14,854,438	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 14,854,438	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 7,427,219	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 7,427,219	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 29,708,876	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 7,427,219	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 1,485,444	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 239,156,454	
	Contingency	LS			$ 35,873,468	Assume 15% of Construction Subtotal
	Grand Total				**$ 275,029,922**	

Dirksen Road Alternate 1 - Base

(Tie-in) STA. 2750+00.00 TO 2785+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	1	$ 5,716	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	-	$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	3,369	$ 9,769	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	$ 13.69	1,450	$ 19,854	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	1,918	$ 26,897	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	160	$ 13,923	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	317	$ 27,606	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	211	$ 18,917	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	79	$ 9,275	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	-	$ -	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	1	$ 2,618	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	3,369	$ 20,010	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	-	$ -	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	-	$ -	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 191,238	
	Compensable Utility Relocation	LS			$ 9,562	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 19,124	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 19,124	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 9,562	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 9,562	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 38,248	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 9,562	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 1,912	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 307,894	
	Contingency	LS			$ 46,184	Assume 15% of Construction Subtotal
	Grand Total				**$ 354,078**	

Dirksen Road Alternate 2 - Ramp

(Tie-in) STA. 2750+00.00 TO 2785+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	4	$ 32,269	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	-	$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	20,221	$ 58,641	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	4,272	$ 58,490	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	15,949	$ 223,599	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	470	$ 41,019	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	2,632	$ 229,494	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	1,754	$ 157,259	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	658	$ 77,103	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	1,500	$ 169,500	Concrete, Double face
	Thermoplastic, White, Striping	NM	$ 3,178	5	$ 16,367	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	3	$ 54,983	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	20,221	$ 120,113	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	3,764	$ 127,976	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	1,088	$ 174,080	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 1,540,893	
	Compensable Utility Relocation	LS			$ 77,045	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 154,089	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 154,089	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 77,045	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 77,045	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 308,179	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 77,045	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 15,409	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 2,480,838	
	Contingency	LS			$ 372,126	Assume 15% of Construction Subtotal
	Grand Total				**$ 2,852,963**	

Saxon Boulevard Alternate 1 - Base

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	15	$ 118,606	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	74,323	$ 215,536	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	7,311	$ 100,088	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	67,012	$ 939,505	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	804	$ 70,191	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	11,057	$ 964,276	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	7,371	$ 660,763	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	2,764	$ 323,968	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
520 1 10	Concrete Curb and Gutter, Type F	LF	$ 19.65	18,567	$ 364,842	
521 1	Barrier Wall	LF	$ 113	-	$ -	Concrete, Double face
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	6,172	$ 283,902	
536 1 1	Guardrail - Roadway	LF	$ 16	2,250	$ 36,000	
	Thermoplastic, White, Striping	NM	$ 3,178	18	$ 56,143	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	8,786	$ 87,860	LA R/W fence
	Embankment	CY	$ 5.94	74,323	$ 441,477	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	6,072	$ 206,448	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	44,998	$ 7,199,680	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 12,896,475	
	Compensable Utility Relocation	LS			$ 644,824	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,289,647	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,289,647	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 644,824	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 644,824	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,579,295	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 644,824	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 128,965	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 20,763,325	
	Contingency	LS			$ 3,114,499	Assume 15% of Construction Subtotal
	Grand Total				**$ 23,877,823**	

Saxon Boulevard Alternate Alternate 2 - SPUI

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	55	$ 427,725	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	46,795	$ 135,706	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	8,979	$ 122,918	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	37,817	$ 530,188	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	988	$ 86,202	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	6,240	$ 544,167	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	4,160	$ 372,886	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	1,560	$ 182,824	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	4,477	$ 505,845	Concrete, Double face
520 1 10	Concrete Curb and Gutter, Type F	LF	$ 19.65	7,043	$ 138,395	Type F
520 5 11	Traffic Separator	LF	$ 34.69	1,100	$ 38,142	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	2,770	$ 127,415	
536 1 1	Guardrail - Roadway	LF	$ 16	7,600	$ 121,600	
	Thermoplastic, White, Striping	NM	$ 3,178	11	$ 36,459	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	8,786	$ 87,860	LA R/W fence
	Embankment	CY	$ 5.94	46,795	$ 277,964	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	48,400	$ 1,645,600	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	47,398	$ 7,583,680	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 13,792,765	
	Compensable Utility Relocation	LS			$ 689,638	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,379,276	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,379,276	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 689,638	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 689,638	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,758,553	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 689,638	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 137,928	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 22,206,351	
	Contingency	LS			$ 3,330,953	Assume 15% of Construction Subtotal
	Grand Total				**$ 25,537,304**	

Saxon Boulevard Alternate Alternate 3 - LEFT

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	17	$ 130,149	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	61,016	$ 176,946	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	1,284	$ 17,576	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	59,732	$ 837,441	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	141	$ 12,326	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	9,856	$ 859,521	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	6,571	$ 588,980	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	2,464	$ 288,774	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	-	$ -	Concrete, Double face
520 1 10	Concrete Curb and Gutter, Type F	LF	$ 19.65	17,400	$ 341,910	Type F
520 5 11	Traffic Separator	LF	$ 34.69	1,579	$ 54,776	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	6,338	$ 291,548	
536 1 1	Guardrail - Roadway	LF	$ 16	2,770	$ 44,320	
	Thermoplastic, White, Striping	NM	$ 3,178	7	$ 22,253	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	-	$ -	At gores
	Fencing	LF	$ 10.00	8,536	$ 85,360	Pond Perimeters
	Embankment	CY	$ 5.94	2,960	$ 17,582	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	-	$ -	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	45,227	$ 7,236,320	Concrete
	Utility Pole Relocation	EA	$ 200,000.00	6	$ 1,200,000	Number of transmission poles required to relocate
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 13,014,645	
	Compensable Utility Relocation	LS			$ 650,732	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,301,464	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,301,464	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 650,732	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 650,732	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,602,929	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 650,732	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 130,146	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 20,953,578	
	Contingency	LS			$ 3,143,037	Assume 15% of Construction Subtotal
	Grand Total				**$ 24,096,615**	

Saxon Boulevard Alternate Alternate 4 - CENTER

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	17	$ 133,439	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	63,078	$ 182,926	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	1,267	$ 17,348	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	61,811	$ 866,584	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	139	$ 12,166	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	10,199	$ 889,432	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	6,799	$ 609,477	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	2,550	$ 298,823	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	-	$ -	Concrete, Double face
520 1 10	Curb and Gutter	LF	$ 17.78	17,656	$ 313,924	Type F
520 5 11	Traffic Separator	LF	$ 34.69	1,685	$ 58,453	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	6,275	$ 288,665	
536 1 1	Guardrail - Roadway	LF	$ 16	2,770	$ 44,320	
	Thermoplastic, White, Striping	NM	$ 3,178	7	$ 22,253	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	8,836	$ 88,360	Pond Perimeters
	Embankment	CY	$ 5.94	2,926	$ 17,378	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	-	$ -	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	45,227	$ 7,236,320	Concrete
	Utility Pole Relocation	EA	$ 200,000.00	6	$ 1,200,000	Number of transmission poles required to relocate
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 13,107,058	
	Compensable Utility Relocation	LS			$ 655,353	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,310,706	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,310,706	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 655,353	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 655,353	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,621,412	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 655,353	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 131,071	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 21,102,363	
	Contingency	LS			$ 3,165,355	Assume 15% of Construction Subtotal
	Grand Total				**$ 24,267,718**	

Saxon Boulevard Alternate Alternate 5 - RIGHT

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	30	$ 233,985	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	77,925	$ 225,982	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	8,356	$ 114,391	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	69,569	$ 975,359	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	919	$ 80,222	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	11,479	$ 1,001,075	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	7,653	$ 685,979	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	2,870	$ 336,332	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	2,820	$ 318,660	Concrete, Double face
520 1 10	Curb and Gutter	LF	$ 17.78	18,089	$ 321,622	Type F
520 5 11	Traffic Separator	LF	$ 34.69	2,295	$ 79,614	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	6,206	$ 285,496	
536 1 1	Guardrail - Roadway	LF	$ 16	2,770	$ 44,320	
	Thermoplastic, White, Striping	NM	$ 3,178	19	$ 59,281	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	8,786	$ 87,860	Pond Perimeters
	Embankment	CY	$ 5.94	77,925	$ 462,874	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	6,072	$ 206,448	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	44,565	$ 7,130,400	Concrete
	Utility Pole Relocation	EA	$ 200,000.00	2	$ 400,000	Number of transmission poles required to relocate
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 13,877,090	
	Compensable Utility Relocation	LS			$ 693,854	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,387,709	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,387,709	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 693,854	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 693,854	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,775,418	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 693,854	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 138,771	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 22,342,115	
	Contingency	LS			$ 3,351,317	Assume 15% of Construction Subtotal
	Grand Total				**$ 25,693,432**	

Saxon Boulevard Alternate Alternate 6 - RIGHT W/ I-4 EB RAMP TO SAXON BLVD.

(Tie-in) STA. 2895+00.00 TO 2932+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	30	$ 233,985	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	34,332	$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	91,792	$ 266,196	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	13,556	$ 185,579	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	78,236	$ 1,096,866	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	1,491	$ 130,146	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	12,909	$ 1,125,785	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	8,606	$ 771,436	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	3,227	$ 378,231	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	2,820	$ 318,660	Concrete, Double face
520 1 10	Curb and Gutter	LF	$ 17.78	18,089	$ 321,622	Type F
520 5 11	Traffic Separator	LF	$ 34.69	2,295	$ 79,614	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	-	$ -	
536 1 1	Guardrail - Roadway	LF	$ 16	-	$ -	
	Thermoplastic, White, Striping	NM	$ 3,178	23	$ 73,365	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	8,786	$ 87,860	Pond Perimeters
	Embankment	CY	$ 5.94	91,792	$ 545,242	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	6,072	$ 206,448	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	44,565	$ 7,130,400	Concrete
	Utility Pole Relocation	EA	$ 200,000.00	2	$ 400,000	Number of transmission poles required to relocate
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 14,178,624	
	Compensable Utility Relocation	LS			$ 708,931	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,417,862	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,417,862	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 708,931	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 708,931	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 2,835,725	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 708,931	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 141,786	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 22,827,585	
	Contingency	LS			$ 3,424,138	Assume 15% of Construction Subtotal
	Grand Total				**$ 26,251,722**	

Rhode Island

(Tie-in) STA. 10+00.00 TO 74+67.88

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	26	$ 200,181	Total Disturved Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	-	$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	577,975	$ 1,676,128	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	4,753	$ 65,064	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	573,222	$ 8,036,577	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	523	$ 45,629	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	94,582	$ 8,248,469	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	63,054	$ 5,652,201	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	23,645	$ 2,771,243	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	4,764	$ 538,276	Concrete, Double face
520 1 10	Curb and Gutter	LF	$ 17.78	18,089	$ 321,622	Type F
520 5 11	Traffic Separator	LF	$ 34.69	2,295	$ 79,614	Type I, 4' Wide
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	11,540	$ 530,855	
536 1 1	Guardrail - Roadway	LF	$ 16	-	$ -	
	Thermoplastic, White, Striping	NM	$ 3,178	20	$ 64,540	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	1	$ 18,328	At gores
	Fencing	LF	$ 10.00	-	$ -	Pond Perimeters
	Embankment	CY	$ 5.94	577,975	$ 3,433,172	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	31,680	$ 1,077,120	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160.00	39,860	$ 6,377,600	Concrete
	Utility Pole Relocation	EA	$ 200,000.00	-	$ -	Number of transmission poles required to relocate
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 39,136,619	
	Compensable Utility Relocation	LS			$ 1,956,831	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 3,913,662	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 3,913,662	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 1,956,831	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 1,956,831	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 7,827,324	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 1,956,831	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 391,366	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 63,009,956	
	Contingency	LS			$ 9,451,493	Assume 15% of Construction Subtotal
	Grand Total				**$ 72,461,449**	

SR 472 ALT 1 - LOOP

(Tie-in) STA. 3051+00.00 TO 3115+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	13	$ 97,467	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	21,922	$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	20,069	$ 58,201	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	6,376	$ 87,281	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	13,694	$ 191,988	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	701	$ 61,210	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	2,259	$ 197,050	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	1,506	$ 135,027	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	565	$ 66,203	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	602	$ 68,026	Concrete, Double face
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	64	$ 2,934	
536 1 1	Guardrail - Roadway	LF	$ 16	1,000	$ 16,000	
	Thermoplastic, White, Striping	NM	$ 3,178	6	$ 18,252	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	20,069	$ 119,213	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	8,800	$ 299,200	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	31,182	$ 4,989,120	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 6,960,311	
	Compensable Utility Relocation	LS			$ 348,016	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 696,031	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 696,031	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 348,016	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 348,016	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 1,392,062	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 348,016	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 69,603	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 11,206,100	
	Contingency	LS			$ 1,680,915	Assume 15% of Construction Subtotal
	Grand Total				**$ 12,887,015**	

SR 472 ALT 2 - SPUI

(Tie-in) STA. 3051+00.00 TO 3115+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	32.02	$ 247,337	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	21,922	$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	61,677	$ 178,863	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	21,157	$ 289,635	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	40,520	$ 568,092	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	2,327	$ 203,121	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	6,686	$ 583,070	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	4,457	$ 399,545	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	1,671	$ 195,894	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	3,655	$ 412,959	Concrete, Double face
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	542	$ 24,922	
536 1 1	Guardrail - Roadway	LF	$ 16	6,000	$ 96,000	
	Thermoplastic, White, Striping	NM	$ 3,178	15	$ 46,155	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	61,677	$ 366,360	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	35,200	$ 1,196,800	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	61,392	$ 9,822,720	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 15,184,610	
	Compensable Utility Relocation	LS			$ 759,230	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,518,461	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,518,461	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 759,230	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 759,230	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 3,036,922	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 759,230	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 151,846	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 24,447,222	
	Contingency	LS			$ 3,667,083	Assume 15% of Construction Subtotal
	Grand Total				**$ 28,114,305**	

SR 472 ALT 3 - DBL LEFTS

(Tie-in) STA. 3051+00.00 TO 3115+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	14.00	$ 108,119	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	21,922	$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	20,348	$ 59,009	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	6,571	$ 89,962	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	13,776	$ 193,146	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	723	$ 63,090	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	2,273	$ 198,238	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	1,515	$ 135,841	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	568	$ 66,602	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	1,204	$ 135,996	Concrete, Double face
522 2 40	Plain Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	64	$ 2,934	
536 1 1	Guardrail - Roadway	LF	$ 16	1,365	$ 21,840	
	Thermoplastic, White, Striping	NM	$ 3,178	7	$ 20,710	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	20,348	$ 120,866	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	5,500	$ 187,000	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	38,231	$ 6,116,960	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 8,073,449	
	Compensable Utility Relocation	LS			$ 403,672	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 807,345	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 807,345	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 403,672	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 403,672	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 1,614,690	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 403,672	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 80,734	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 12,998,253	
	Contingency	LS			$ 1,949,738	Assume 15% of Construction Subtotal
	Grand Total				**$ 14,947,991**	

SR 472 ALT 4 - SPDI U-TURN

(Tie-in) STA. 3051+00.00 TO 3115+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	59	$ 455,806	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	21,922	$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	115,447	$ 334,796	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	33,827	$ 463,098	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	81,619	$ 1,144,305	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	3,721	$ 324,771	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	13,467	$ 1,174,475	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	8,978	$ 804,800	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	3,367	$ 394,589	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	7,309	$ 825,917	Concrete, Double face
522 2 40	Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	542	$ 24,922	
536 1 1	Guardrail - Roadway	LF	$ 16	6,000	$ 96,000	
	Thermoplastic, White, Striping	NM	$ 3,178	27	$ 84,965	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	115,447	$ 685,755	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	35,200	$ 1,196,800	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	61,392	$ 9,822,720	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 18,386,855	
	Compensable Utility Relocation	LS			$ 919,343	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,838,685	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,838,685	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 919,343	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 919,343	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 3,677,371	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 919,343	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 183,869	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 29,602,836	
	Contingency	LS			$ 4,440,425	Assume 15% of Construction Subtotal
	Grand Total				**$ 34,043,261**	

SR 472 ALT 5 - DDI

(Tie-in) STA. 3051+00.00 TO 3115+00.00

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	$ 7,724	73	$ 560,593	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	$ 24	21,922	$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	$ 2.90	155,467	$ 450,854	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	$ 13.69	50,527	$ 691,709	Total Shldr area
285 712	Base optional (base group 12) ML	SY	$ 14.02	104,940	$ 1,471,265	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	$ 87.28	5,558	$ 485,095	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	$ 87.21	17,315	$ 1,510,056	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	$ 89.64	11,543	$ 1,034,755	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	$ 117.20	4,329	$ 507,335	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	$ 113	3,800	$ 429,400	Concrete, Double face
522 2 40	Concrete Sidewalk and Driveways, 6" thick	SY	$ 46	458	$ 21,083	
536 1 1	Guardrail - Roadway	LF	$ 16	6,000	$ 96,000	
	Thermoplastic, White, Striping	NM	$ 3,178	32	$ 102,600	EOP and lane lines
	Vehicle Impact Attenuator	EA	$ 18,327.63	2	$ 36,655	At gores
	Fencing	LF	$ 10.00	-	$ -	LA R/W fence
	Embankment	CY	$ 5.94	155,467	$ 923,474	Assume 3' over entire roadway area
	MSE wall	SF	$ 34.00	10,296	$ 350,064	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	$ 160	39,732	$ 6,357,120	Concrete
	Wetland Mitigation	AC	$ 108,000.00	0	$ -	Used 25' from edge of shoulder for impacts
	Subtotal Cost	LS			$ 15,544,541	
	Compensable Utility Relocation	LS			$ 777,227	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			$ 1,554,454	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			$ 1,554,454	Assume 10% of Construction Subtotal Cost
	Lighting	LS			$ 777,227	Assume 5% of Construction Subtotal Cost
	Signage	LS			$ 777,227	Assume 5% of Construction Subtotal Cost
	Drainage	LS			$ 3,108,908	Assume 20% of Construction Subtotal Cost
	ITS	LS			$ 777,227	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			$ 155,445	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			$ 25,026,711	
	Contingency	LS			$ 3,754,007	Assume 15% of Construction Subtotal
	Grand Total				**$ 28,780,717**	

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