

ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.

District: FDOT District 4

County: Broward County

ETDM Number: 14244

Financial Management Number: 436964-1-22-01

Federal-Aid Project Number: N/A

Project Manager:

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT.

This action has been determined to be a Categorical Exclusion, which meets the definition contained in 40 CFR 1508.4, and based on past experience with similar actions and supported by this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:

Director Office of Environmental Management
Florida Department of Transportation

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HNTB

Consulting Project Manager:
Vilma Croft

This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

Table of Contents

1. Project Information	1
1.1 Project Description	1
1.2 Purpose and Need	8
1.3 Planning Consistency	14
2. Environmental Analysis Summary	16
3. Social and Economic	17
3.1 Social	17
3.2 Economic	18
3.3 Land Use Changes	19
3.4 Mobility	21
3.5 Aesthetic Effects	22
3.6 Relocation Potential	22
3.7 Farmland Resources	22
4. Cultural Resources	23
4.1 Section 106 of the National Historic Preservation Act	23
4.2 Section 4(f) of the USDOT Act of 1966, as amended	23
4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965	24
4.4 Recreational Areas and Protected Lands	24
5. Natural Resources	25
5.1 Protected Species and Habitat	25
5.2 Wetlands and Other Surface Waters	28
5.3 Essential Fish Habitat (EFH)	32
5.4 Floodplains	32
5.5 Sole Source Aquifer	35
5.6 Water Resources	35
5.7 Aquatic Preserves	36
5.8 Outstanding Florida Waters	36
5.9 Wild and Scenic Rivers	36

5.10 Coastal Barrier Resources 36

6. Physical Resources 37

6.1 Highway Traffic Noise 37

6.2 Air Quality 39

6.3 Contamination 41

6.4 Utilities and Railroads 44

6.5 Construction 47

7. Engineering Analysis Support 48

8. Permits 49

9. Public Involvement 51

10. Commitments Summary 54

11. Technical Materials 55

Attachments 56

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1. Project Information

1.1 Project Description

The Florida Department of Transportation (FDOT) District Four conducted a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to assess potential operational and safety improvements along 3.1 miles of Interstate 95 (I-95), from south of NE 48th [Mile Post (MP) 22.0] to north of the Hillsboro Boulevard interchange (MP 25.10), in Broward County, Florida.

The project extends along I-95 from just south of NE 48th Street to just north of Hillsboro Boulevard and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the City of Deerfield Beach. I-95 is part of the Strategic Intermodal System and the National Highway System which is Florida's high priority network of transportation facilities important to the state's economy, mobility and defense.

The study evaluated alternatives for improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of NE 48th Street to just north of the Hillsboro Boulevard interchange. SW 10th Street provides a direct connection between I-95 and the Sawgrass Expressway. The study also evaluated improvements along both SW 10th Street and Hillsboro Boulevard near I-95.

Alternatives were also evaluated to modify the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges. Replacement of the existing SW 10th Street bridge over I-95 and a grade separation at the existing at-grade railroad crossing at Hillsboro Boulevard were also evaluated. The project study area is shown in **Figure 1-1**.

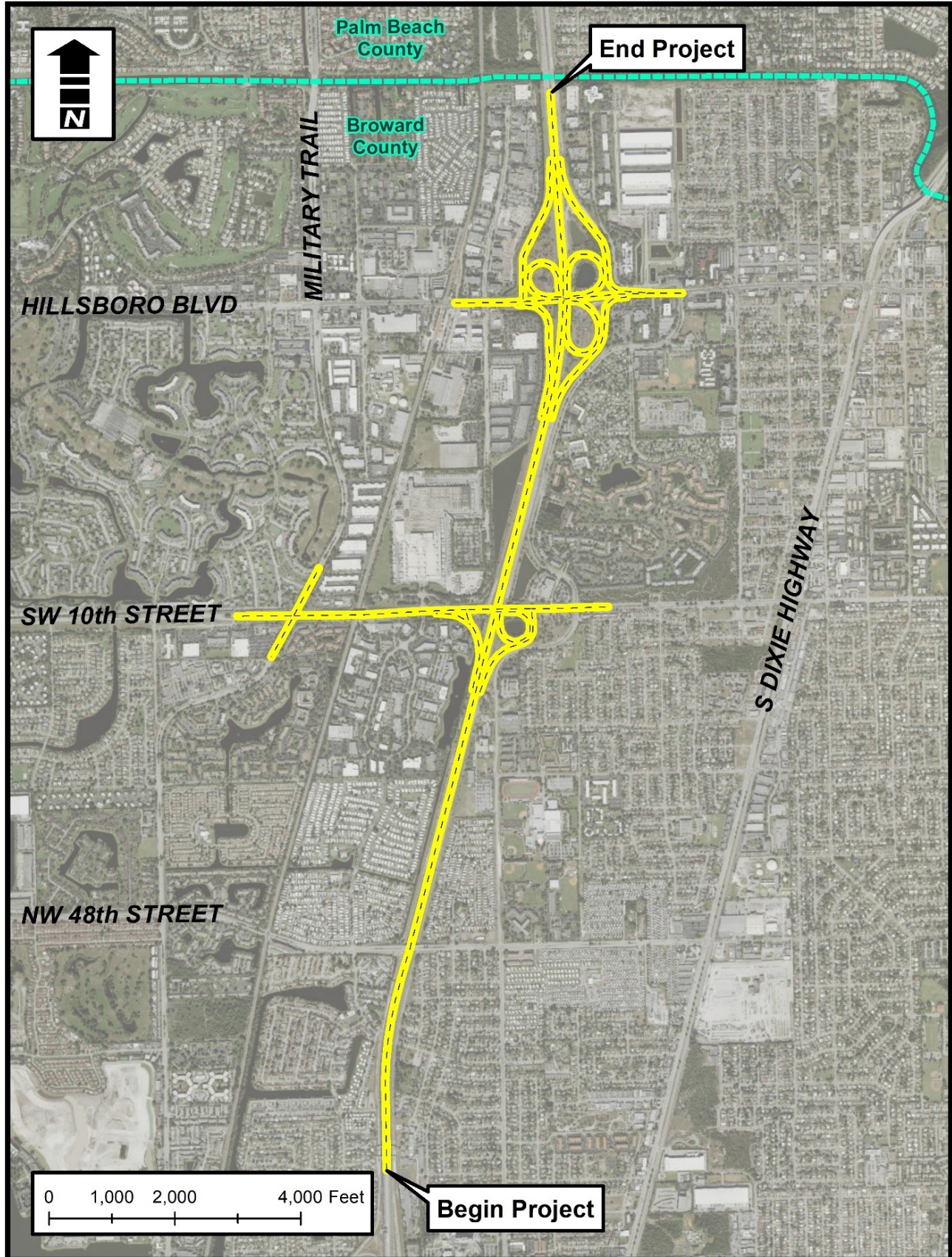


Figure 1 - 1: Project Study Area

Existing Conditions

Due to the uniqueness of this project, the analysis and evaluation of the existing conditions were separated into three corridors; I-95 (SR 9), SW 10th Street (SR 869) and Hillsboro Boulevard (SR 810). Data gathering for each of these corridors focused on the areas of roadway, bridge and environmental characteristics. Assessment of the existing conditions began with the collection and review of all data pertaining to the existing facilities which included conducting on-site field inventories, review of existing documents, as well as, review of other pertinent data used for the evaluation of these transportation facilities. The general characteristics of the roadway facilities located within the project limits are described in the sections below. A summary is presented in **Table 1-1**.

The following data below is based on information gathered from, including but not limited to, the FDOT's Roadway Characteristics Inventory, Straight Line Diagrams (SLDs), Broward County Metropolitan Planning Organization (MPO), Broward County Traffic and Engineering Division and field reviews.

Typical Section Element	Roadway		
	Interstate 95	SW 10th Street	Hillsboro Boulevard
Facility Type	Freeway, Limited Access, SIS Facility	Arterial	Arterial
Functional Classification	Urban Principal Arterial - Interstate	Urban Principal Arterial - Other	Urban Principal Arterial - Other
Context Classification	N/A	Suburban Commercial (C3C)	Suburban Commercial (C3C)
Access Management Classification (FDOT)	Class 1	Class 3	Class 5
Typical Section	North of Sample Road to North of Hillsboro Boulevard Interchange: Northbound and Southbound: 3 GP, 1 EP / BW South of Sample Road Interchange: Northbound and Southbound: 1 AUX, 3 GP, 1 HOV / BW Wall Median	Eastbound & Westbound: 3 Lanes/Raised Median	Eastbound & Westbound: 3 Lanes/Raised Median
Posted Speed Limit	65 mph	45 mph	45 mph
Legend:	AUX-Auxiliary Lane GP-General Purpose Lane EP-Express Lane BW-Barrier		

Table 1 -1: Summary of Roadway Characteristics

Typical Sections

The following **Table 1-2** depicts the existing typical section characteristics for each corridor.

Typical Section Element	Roadway		
	Interstate 95	SW 10th Street	Hillsboro Boulevard
Number of Travel Lanes	8	6	6
Travel Lane Width	12-feet	11 to 12-feet	11-feet
Parking Lane Width	n/a	n/a	n/a
Curb and Gutter	n/a	Type F	Type F
Inside Shoulders Width	12-feet	n/a	n/a
Outside Shoulders Width (Bike Lane)	12-feet	Varies 4-feet to 8-feet	Varies 4-feet to 6-feet
Median Width	26.5-feet	14-feet to 17.5-feet	15.5-feet
Sidewalk Width	n/a	Varies 5-feet to 6-feet	Varies 6-feet to 7-feet
Right-of-Way Width	240-feet to 300-feet	106-feet (+)	106-feet to 136-feet

Table 1 - 2: Existing Typical Section Characteristics

Interstate 95

Within the limits of the study, I-95 is an eight-lane divided limited access facility consisting primarily of a two and a half-foot (2.5') center barrier wall with two twelve-foot (12') paved inside shoulders (one in each direction). The inside lane in each direction is a twelve-foot (12') wide Express Lane (EP) lane with a two-foot (2') striped buffer area separating the EP lane from the three twelve-foot (12') general purpose lanes. In each direction, along the outside of the general-purpose lanes is a twelve-foot (12') shoulder (ten-foot (10') paved and two-foot (2') unpaved). In the northbound direction, a twelve-foot (12') auxiliary lane exists between the SW 10th Street on-ramp and Hillsboro Boulevard off-ramp. Additionally, in the southbound direction a twelve-foot (12') auxiliary lane exists between the Hillsboro Boulevard on-ramp and SW 10th Street off-ramp. The existing roadway segment typical section for this corridor is shown in **Figure 1-2**.

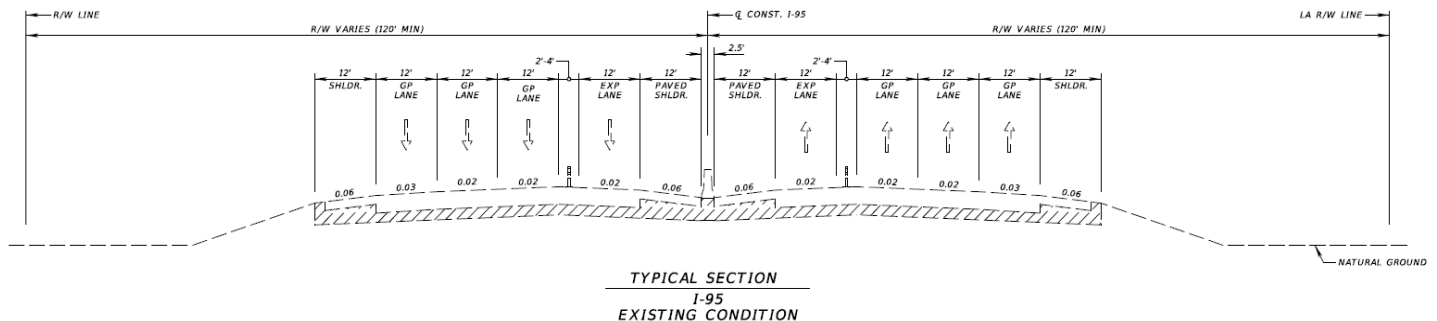


Figure 1 - 2: Existing Typical Section - Interstate 95

SW 10th Street

Eastbound along SW 10th Street (SR 869) from approximately 1000-feet west of the intersection at Military Trail to the intersection, three twelve-foot (12') lanes, a four to five-foot (4' to 5') bike lane, and an eight-foot (4' paved and 4' unpaved) outside shoulder exist. In the center, there is a 17.5 foot raised curb and gutter median.

Westbound along SW 10th Street (SR 869) from approximately 1000-feet west of the intersection at Military Trail to the intersection, there are two twelve-foot (12') lanes, a four-foot (4') bike lane and four-foot (4') unpaved shoulder.

In each direction, from the intersection at Military Trail to East Newport Center Drive, there are three twelve-foot (11') lanes, a four-foot (4') bike lane, two-foot (2') curb and gutter with a five-foot (5') concrete sidewalk running along at the back of curb. In the center of the roadway there is a raised curb and gutter median that varies in width from 14.0 to 17.5 feet. In the westbound direction, the outside lane is an auxiliary lane used for right turns and/or acceleration that terminates at the intersection with Military Trail. In the eastbound direction, a fourth (outside) 12 to 14-foot wide lane exists as an auxiliary lane used for right turns and/or acceleration and terminates at the southbound on-ramp to I-95.

From East Newport Center Drive to SW Natura Boulevard/FAU Research Park Boulevard, there are three eleven-foot (11') lanes in each direction, two-foot (2') curb and gutter with a six-foot (6') concrete sidewalk running along at the back of curb with no bicycle lane or shoulder. Heading eastbound, the third lane (outside) terminates at the northbound entrance ramp to I-95 and then remerges west of the northbound I-95 off-ramp intersection continuing to the Florida Atlantic University (FAU) Research Park Boulevard intersection. Westbound are three eleven-foot (11') lanes, two-foot (2') curb and gutter with a six-foot (6') concrete sidewalk running along at the back of curb with no bike lane or shoulder present. A fourth westbound lane emerges at the southbound I-95 off-ramp intersection and terminates at the East Newport Center Drive intersection. In the center of the roadway there is a raised curb and gutter median that varies in width from 14 to 17.5 feet. The existing roadway segment typical section for this corridor is shown in **Figure 1-3**.

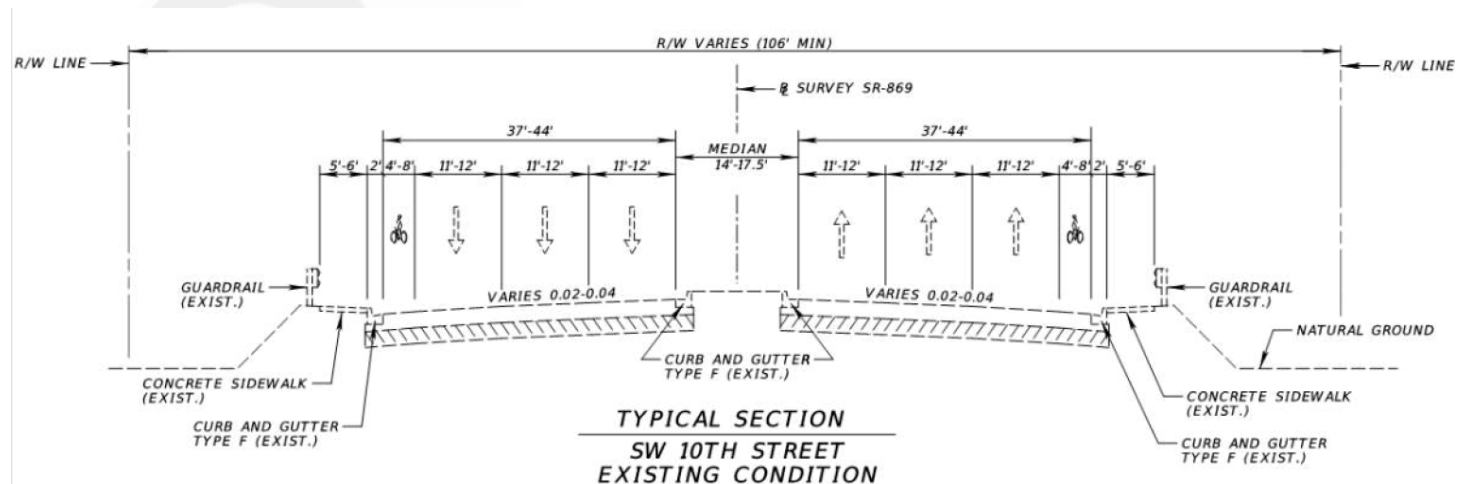


Figure 1 - 3: Existing Typical Section - SW 10th Street

Hillsboro Boulevard

Hillsboro Boulevard (SR 810) from east of the Military Trail intersection to the intersection with Natura Boulevard/Fairway Drive is an urban arterial typical section with a fifteen and a half-foot (15.5') raised median, six eleven-foot (11') thru lanes (3 lanes in each direction) and two four-foot (4') bicycle lanes (one in each direction). In each direction outside the bicycle lanes is a two-foot (2') curb and gutter with six-foot (6') concrete sidewalk running along at the back of curb. Total right-of-way (ROW) width varies.

The existing roadway segment typical section for this corridor is shown in **Figure 1-4**.

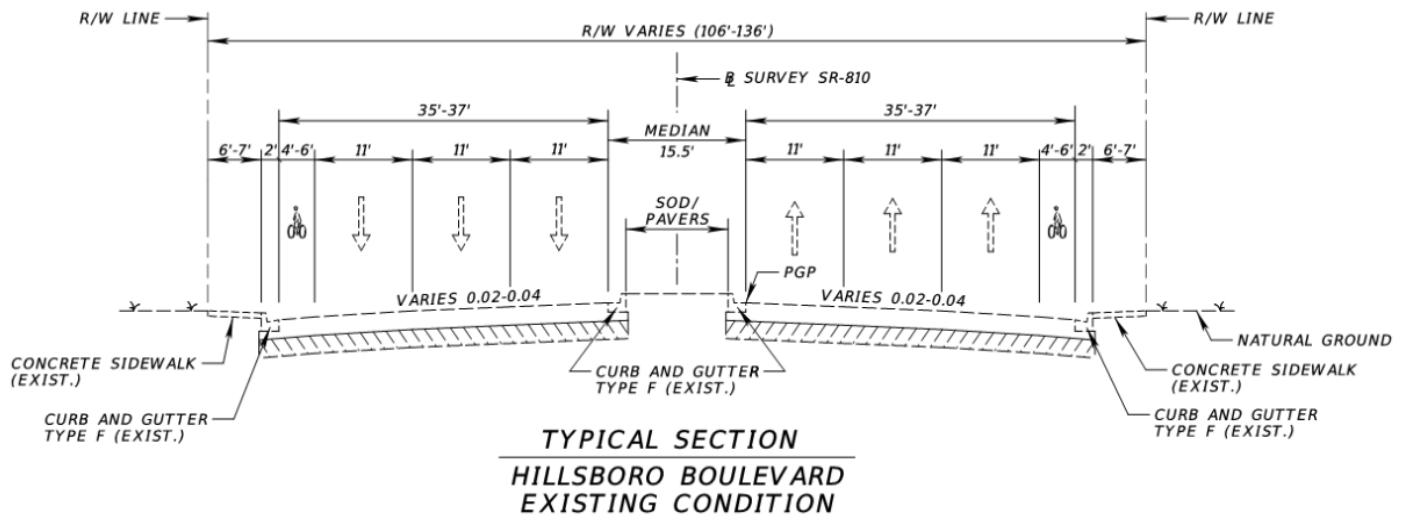


Figure 1 - 4: Existing Typical Section - Hillsboro Boulevard

Right-of-Way

Interstate 95

The existing ROW along I-95 varies with a minimum of 240 feet and varies based on shoulder width and natural ground.

SW 10th Street

The existing ROW along SW 10th Street varies with a minimum of 125 feet and varies based on median width, shoulder width and natural ground with a typical width between 180 to 250 feet.

Hillsboro Boulevard

The existing ROW along Hillsboro Boulevard varies from 106 feet to 136 feet and varies based on median width.

Design and Posted Speed

The posted speed limit for I-95 is 65 miles per hour (mph). The posted speed limit for SW 10th Street is 40 mph eastbound between Military Trail and Natura/FAU Research Park Boulevard and 45 mph westbound. The posted speed limit for Hillsboro Boulevard is 40 mph.

Multi-Modal Facilities

Multi-modal facilities include pedestrian and bicycle features as well as existing transit services along each portion of I-95, SW 10th Street and Hillsboro Boulevard.

Pedestrian

Continuous sidewalks exist on the north and south side of SW 10th Street and Hillsboro Boulevard. I-95 is limited access facility and as such does not provide sidewalks along the corridor.

Bicycle

Continuous bicycle lanes exist on the north and south side of SW 10th Street and Hillsboro Boulevard. I-95 is a limited access facility and does not provide bicycle facilities along the corridor.

Transit

No designated transit services including Broward County Transit (BCT) Routes or commuter rail services are provided on the I-95 corridor or within the area of the SW 10th Street interchange.

Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Beach Station located just west of the Hillsboro interchange.

The Deerfield Beach Station provides commuter rail service for Tri-Rail and Amtrak which provide connections south to Miami-Dade County including Tri-Rail's southernmost terminus at Miami Airport Station (Miami Intermodal Center) and Amtrak's southernmost terminus at Miami Station, and to the north with Tri-Rail's northernmost terminus in West Palm Beach at Mangonia Park Station and Amtrak providing service throughout the state of Florida.

1.2 Purpose and Need

Purpose and Need

The purpose of this project is to eliminate existing operational and safety deficiencies along I-95 from south of NE 48th Street to north of Hillsboro Boulevard including the interchanges at SW 10th Street and Hillsboro Boulevard, and on SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The primary need for the project is based on capacity/operational and safety issues, with secondary considerations for the needs of evacuation and emergency services, transportation demand, system linkage, modal interrelationships, and social demands and economic development.

Capacity/Operational Deficiencies

A need exists to improve traffic operations along I-95 between the SW 10th Street and Hillsboro Boulevard interchanges, especially at existing merge and diverge ramps that are the sources of traffic turbulence and collisions. The mainline directional volumes range from 4,400 to 5,850 annual average daily traffic (AADT) with ramp volumes from 800 to 1,250 vehicles per hour (vph) at SW 10th Street and 400 to 1,000 vph at Hillsboro Boulevard.

Operational analyses along I-95 indicate that all freeway segments in the study area operate at Level of Service (LOS) D or better except for the following:

- The diverge segment at I-95 southbound off-ramp to SW 10th Street eastbound and westbound during the AM and PM peak periods;
- The I-95 mainline segment between I-95 southbound on-ramp from SW 10th Street eastbound and westbound and I-95 southbound off-ramp to Sample Road eastbound and westbound during the PM peak period;

- The I-95 mainline between I-95 southbound on-ramp from Palmetto Park Boulevard eastbound and I-95 southbound Off-Ramp to Hillsboro Boulevard eastbound and westbound during the AM peak period;
- The merge at I-95 southbound on-ramp from Hillsboro Boulevard westbound during AM and PM peak periods; and
- The diverge segment at I-95 northbound off-ramp to Hillsboro Boulevard eastbound during the AM peak period.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Year 2040 traffic projections show the mainline directional volumes ranging from 6,000 to 7,300 vph. Year 2040 peak hour directional volumes on I-95 Express are forecasted to range an additional 1,300 to 2,550 vph within the I-95 corridor. Operational analyses under the "No-Action" option in year 2040 reflects implementation of two major programmed improvements: 1) I-95 Express Phase 3 (and 2) I-95 Ramp Metering. All of the mainline freeway segments in the study area would operate at a deficient LOS (E or F) during one or both peak periods, with the exception that the merge segment for I-95 southbound On-Ramp from westbound Hillsboro Boulevard would operate at LOS D during the PM peak hour.

Safety

A need exists to resolve safety issues within the project limits along I-95 as well as SW 10th Street and Hillsboro Boulevard. Crash analyses for the years 2008 through 2012 reveal that the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment for four of the five study years. It should also be noted that the existing interchanges are closely located together and have short weave distances. Crash rates along SW 10th Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing into this area.

Evacuation and Emergency Services

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10th Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

Transportation Demand

A need exists to improve capacity and safety while meeting transportation demand and maintaining consistency with other transportation plans and projects, such as the Broward County Interchange Master Plan (IMP) and I-95 Express Lanes Phase III Project. The project is included in the FDOT Work Program with Preliminary Engineering (design phase) is scheduled for fiscal year 2022. The project is also included in the Broward County MPO Commitment 2045 Metropolitan Transportation Plan [previously known as the Long Range Transportation Plan (LRTP)] for fiscal years 2020-2024. Additionally, the project is included in the Broward County MPO Transportation Improvement Program (TIP) for fiscal year 2020-2024.

System Linkage

A need exists to ensure that I-95 continues to meet the minimum requirements of a component of the state's SIS and the National Highway System, as well as provides access connectivity to other major arterials such as I-595 and Florida's Turnpike.

Modal Interrelationships

There exists a need for capacity improvements along the I-95 project corridor to enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Increased mobility to public transit operations are needed and will benefit as a result of this project. Although no designated BCT Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange.

Social Demands and Economic Development

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO Commitment 2045 Metropolitan Transportation Plan predicted that the population would grow from 1.9 million in 2018 to 2.2 million by 2045, an increase of 16 percent. Jobs were predicted to increase by 25 percent during the same time period. A need exists for the proposed improvements to support the predicted social and economic travel.

Project Status

The proposed project is identified in FDOT State Transportation Improvement Program (STIP) FY 2019/2020 - FY 2023/2024 with \$4,500,191 programmed for a PD&E Study in FY Less Than 2020-2020, the Broward MPO Commitment 2045 Metropolitan Transportation Plan (previously known as the LRTP), and the Broward MPO's FY 2019/2020 - FY 2023/2024 TIP as #5 on the MPO's 2019 Project Priorities List. Coordination will need to take place between FDOT, Broward Country, and the City of Deerfield Beach to ensure the project is consistent with the STIP, TIP, Broward MPO Commitment 2045 Metropolitan Transportation Plan, and local government comprehensive plans.

Preferred Alternative

For additional information on the following, please refer to the Preliminary Engineering Report (PER) completed for this project, which is in the project file and listed as Technical Material under the project file.

I-95

The Preferred Alternative for the I-95 corridor is Build Alternative 2. Build Alternative 2 was refined to provide direct access from the SW 10th Street Connector to both the I-95 express lanes and general-purpose lanes compatible with the SW 10th Street Modified North Alignment Alternative. Alternative 2 proposes to maintain the existing number of general-purpose lanes throughout the I-95 corridor. The express lanes will be separated from the general-purpose lanes with tubular markers and a 2-foot to 4-foot wide buffer.

In the northbound direction, an egress point is proposed for the northbound express lanes north of the Sample Road interchange for traffic destined to the northbound I-95 general-purpose lanes. A second egress point south of the SW 10th Street interchange is proposed for traffic destined to the westbound SW 10th Street Connector lanes which braids under and merges with I-95.

Access from eastbound SW 10th Street Connector to I-95 northbound is also provided for both the I-95 general-purpose and express-lanes. Access to the general-purpose lanes is provided by an egress access point from the express lanes north of SW 10th Street interchange. A new I-95 northbound on-ramp is introduced for westbound SW 10th Street as a free-flow right turn on the northeast quadrant of the interchange relocating the existing left turn movement at the current intersection. The new I-95 northbound on-ramp merges with eastbound on-ramp and the eastbound SW 10th Street Connector traffic destined to the I-95 general-purpose lanes on the northbound CD road. The northbound CD road braids over the northbound Hillsboro Boulevard off-ramp to merge with the I-95 northbound as an auxiliary lane just south of the Hillsboro Boulevard overpass bridge. It continues north connecting with the auxiliary lane being built by the I-95 Express Phase 3B-1 project to the north of Hillsboro Boulevard.

In the southbound direction, an egress point is proposed from the express lanes south of Hillsboro Boulevard interchange for the traffic destined to the westbound SW 10th Street Connector. Access to the SW 10th Street Connector from the general-purpose lanes is also provided south of the Hillsboro Boulevard interchange. The proposed CD road on the west side of I-95 braids over the I-95 southbound traffic entering from eastbound/westbound Hillsboro Boulevard on-ramps. Traffic from the I-95 general-purpose lanes and express-lanes merge on the CD road to provide access to the SW 10th Street Connector.

Access from the eastbound SW 10th Street Connector to I-95 southbound is provided for both the I-95 general-purpose and express-lanes. Access to the general-purpose lanes is provided by an egress access point from the I-95 express-lanes north of SW 10th Street interchange which braids over the general-purpose lanes to merge with the I-95 mainline on the west side of I-95.

Figure 1-5 shows the proposed improvements south of the SW 10th Street interchange, and **Figure 1-6** shows the proposed improvements north of the SW 10th Street interchange.

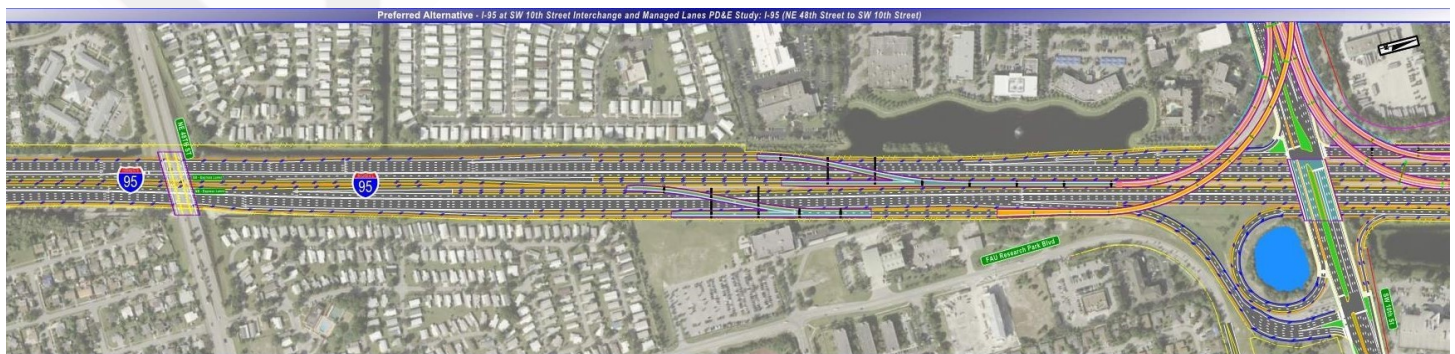


Figure 1 - 5: I-95 - Preferred Alternative Concept Plan (South of SW 10th Street)

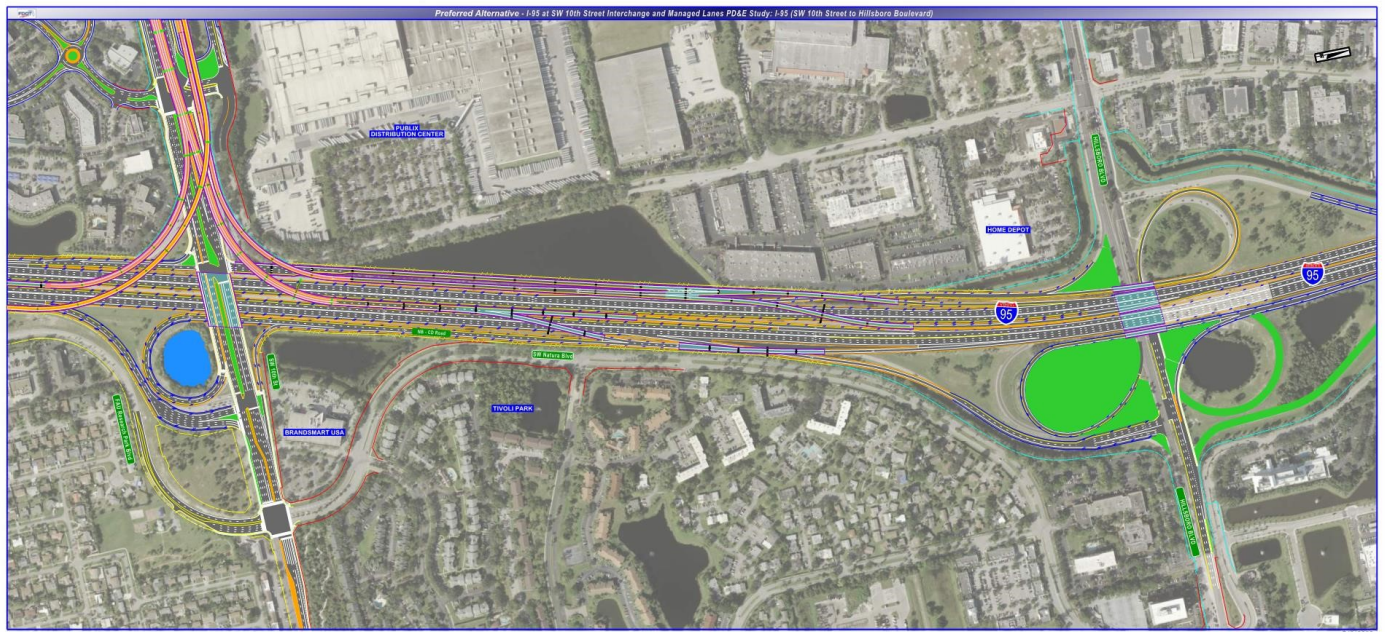


Figure 1 - 6: I-95 - Preferred Alternative Concept Plan (North of SW 10th Street)

SW 10th Street

The Preferred Alternative for SW 10th Street is the Modified North Alignment. The Modified North Alignment provides three 11-foot lanes with a 7-foot buffered bike lane and 6-foot sidewalk in the westbound direction. A 12-foot shared use path is provided in the eastbound direction along SW 10th Street for local pedestrian and bike traffic. However, no sidewalk is provided along the north side from East Newport Center Drive/SW 12th Avenue intersection to Military Trail. Two 12-foot connector lanes are provided in each direction with direct connect ramps providing access to/from the I-95 express lanes and general-purpose lanes allowing regional connectivity to the express lanes network. In the eastbound direction along the connector lanes an egress ramp departs from the connector lanes west of the Military Trail intersection braiding over the eastbound SW 10th Street local lanes connecting along the outside lane. The egress ramp allows access to the Newport Center and local SW 10th Street east of the I-95 Interchange.

On SW 10th Street at the northbound and southbound legs of the East Newport Center Drive intersection triple right turn lanes and no left turn or through lanes are provided. In addition, dual left turn lanes and exclusive right turn lanes are provided for the eastbound and westbound movements at this intersection. This configuration allows improved operations and mitigates congestion for the intersection, the interchange ramp intersections and along SW 10th Street.

A roundabout is provided at the intersection of West and East Newport Center Drive to improve left turn movements at the Newport Center. A loop ramp is provided along SW 12th Avenue that connects directly to the SW 10th Street Connector

lanes to improve operations of the East Newport Center Drive intersection with SW 10th Street by allowing westbound traffic making a right turn to bypass the signal.

At I-95, the northbound exit ramp terminal was expanded to accommodate triple left and triple right turn lanes. The intersection at Natura Boulevard is expanded to accommodate double left and single right turn lanes on all intersection approaches. **Figure 1-7** shows the modified north Alignment concept. The top figure illustrates the proposed SW 10th Street Connector to be constructed above local SW 10th Street. The lower figure illustrates the local SW 10th configuration and intersection design.

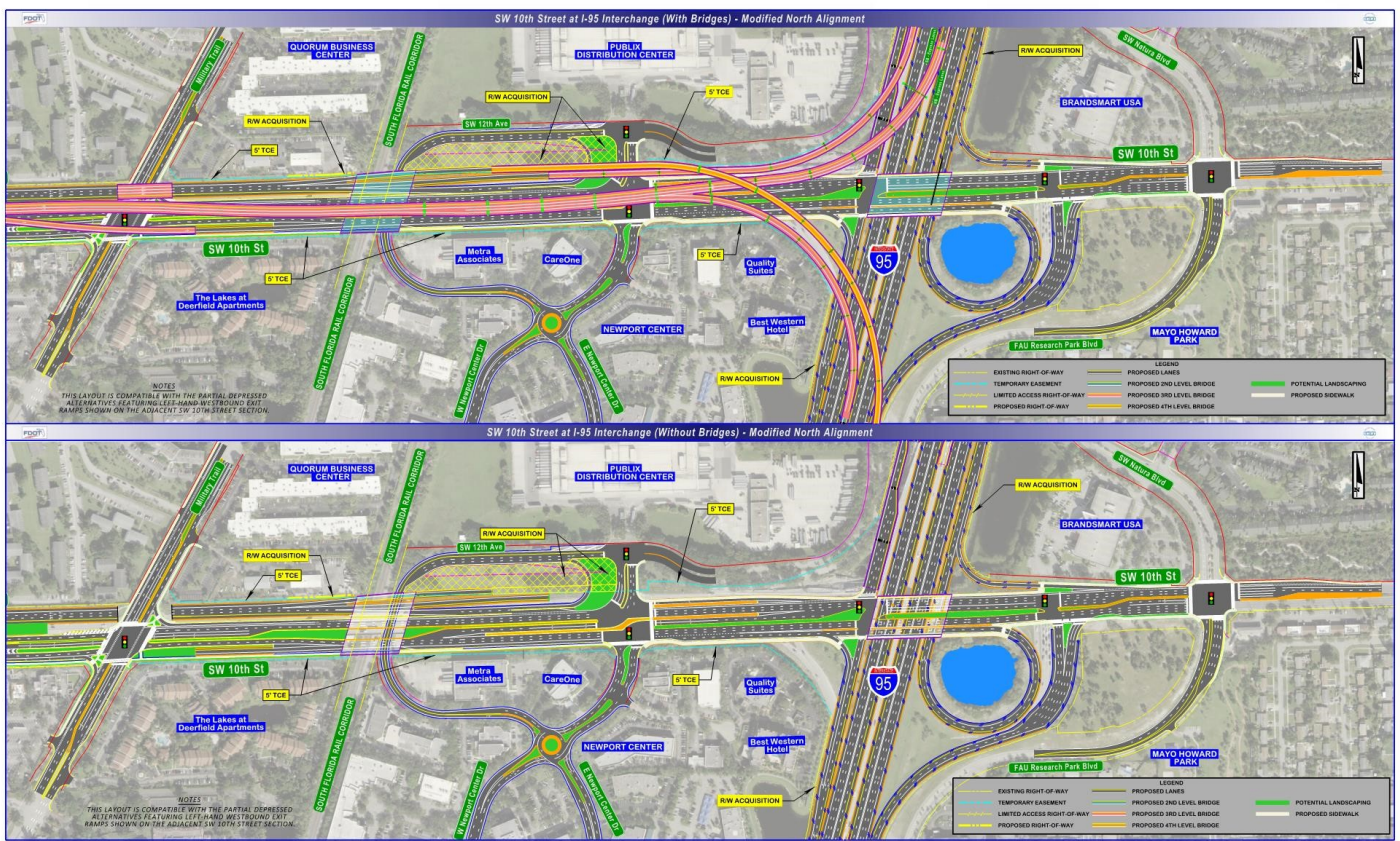


Figure 1 - 7: SW 10th Street - Preferred Alternative Concept Plan

Hillsboro Boulevard

The Preferred Alternative along Hillsboro Boulevard evaluated a depressed profile and an elevated section from Goolsby Boulevard to SW 12th Avenue but was considered non-viable due to significant impacts to property access, right of way, utilities, and major temporary traffic control impacts for both the railroad tracks and Hillsboro Boulevard. Therefore, the proposed improvements along Hillsboro Boulevard are limited to the ramp terminals (**Figure 1-8**).

The improvements include providing a two-lane northbound exit ramp with a signal controlled and expanded storage for a triple-left turn movement for the northbound to westbound egress ramp terminal while maintaining the dual right turn

movement for the eastbound traffic. This improvement resulted in the elimination of the northbound off-ramp loop to westbound Hillsboro Boulevard combining both I-95 northbound egress ramps into one location. In addition, the northbound on-ramp from westbound Hillsboro Boulevard was realigned to be within the proximity of I-95. A new configuration is proposed for the eastbound to southbound and the westbound to southbound on-ramp to minimize the weaving maneuvers within the interchange area.

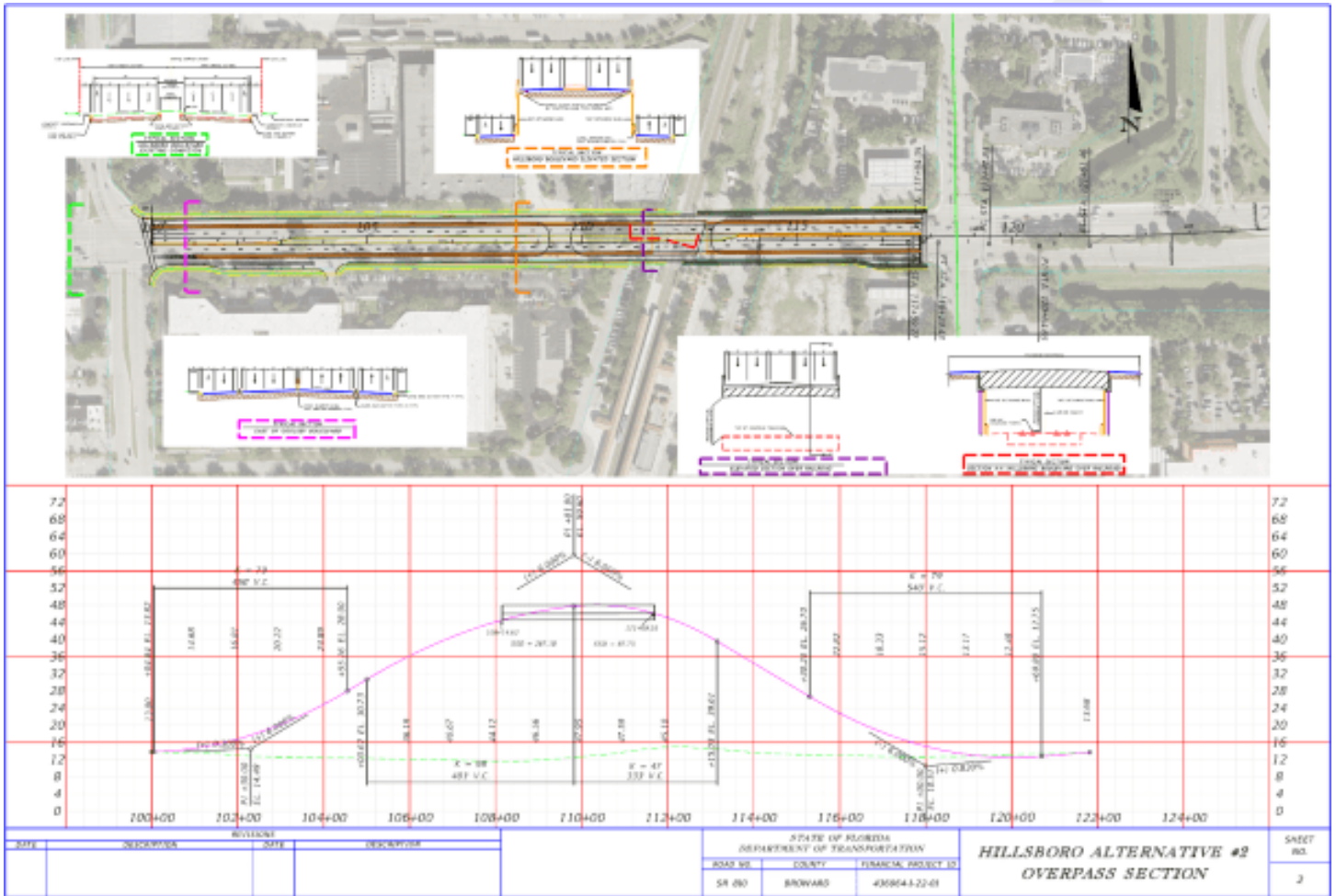


Figure 1 - 8: Hillsboro Boulevard - Preferred Alternative

1.3 Planning Consistency

The project improvements are included in the Commitment 2045 Metropolitan Transportation Plan (MTP) (formerly LRTP) and the five-year TIP (2020-2024) for Broward County, as well as the STIP (July 2019). A copy of the Planning Consistency documentation is included as **Attachment A**.

Currently Adopted LRTP-CFP	COMMENTS
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Yes				
	Currently Approved	\$	FY	COMMENTS
PE (Final Design)				
TIP	Y	503,255 2,750,000	2020 2022	No TIP amendment is needed.
STIP	Y	59,756 3,255 2,750,000	<2020 2020 2022	
R/W				
TIP	Y	1,232,275 26,915,098	2020 2021	The ROW phase is not programmed in the FY2019/20 TIP; however, \$28,144,373 for ROW is programmed in the Roll Forward report which is expected to be amended into the FY2019/20 TIP by the MPO Board in September/October.
STIP	Y	726,574 1,232,275 26,912,098	<2020 2020 2021	
Construction				
TIP				
STIP				

2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?*			
	Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Relocation Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Farmland Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Section 4(f) of the USDOT Act of 1966	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Section 6(f) of the Land and Water Conservation Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Recreational Areas and Protected Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Natural Resources				
1. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Essential Fish Habitat (EFH)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sole Source Aquifer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Water Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Outstanding Florida Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Physical Resources				
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Utilities and Railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

USCG Permit

- A USCG Permit IS NOT required.
- A USCG Permit IS required.

* **Impact Determination:** Yes = Significant; No = No Significant Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s).

3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

The project was screened through the Environmental Screening Tool (EST) as part of the ETDM Programming Screen phase (ETDM #14244). Socio-economic data was generated and is included in the Programming Screen Summary Report, prepared under separate cover, published on July 11, 2016. For additional information on the following, please refer to the Sociocultural Effects Evaluation (SCEE) report completed for this project, which is in the project file and listed as Technical Material under the project file.

Community Cohesion

The improvements to the I-95 mainline will occur within the existing ROW, and are not expected to adversely affect community cohesion. Improvements at SW 10th Street include ramp and local roadway modifications and the incorporation of elevated express lanes. North-south connectivity across SW 10th Street will be maintained at existing signalized intersections. Bicycle lanes and sidewalks will also be maintained along the length of the SW 10th Street to support local use. The elevated express lanes are intended to divert regional traffic off of local surface streets and on to the elevated lanes. Reduced traffic on surface streets will allow for better local circulation and access. Improvements at Hillsboro Boulevard include ramp modifications and widening of the I-95 northbound bridge overpass. These improvements would not result in long-term disruption of the surrounding community.

I-95, Hillsboro Boulevard, and SW 10th Street are major roadways in northern Broward County. The proposed improvements would require additional ROW, but would not displace existing residents, businesses, or affect community focal points. The proposed improvements would occur along existing road corridors and are not expected to result in major changes in land use or serve to divide or isolate a population. Overall, the proposed roadway improvements would not affect existing community networks; therefore, the FDOT has determined that no significant impacts to community cohesion will occur.

Safety and Emergency Response/Evacuation

Crash analyses conducted for the five year period from 2008 through 2012 showed that the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment in four of the five study years. Crash rates along SW 10th Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing. Additionally, crashes on I-95 may be influenced by the short weaving distance between the existing interchanges.

Both SW 10th Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

The No-Action Alternative would leave the facility as it is currently and therefore not improve safety or capacity. This could impact the ability of local emergency service response (police, fire rescue and EMS) to reach those in need. The Preferred Alternative is intended to address safety and operational deficiencies on I-95 and at the SW 10th Street and Hillsboro Boulevard interchanges, and increase roadway capacity to meet future demand. Therefore, conditions related to Safety and Emergency Response/Evacuation will be Enhanced by the proposed project.

Special Designations

Special designations are discussed in the appropriate sections (e.g., 3.2 Economic and 3.4 Mobility). Please reference these sections for details.

3.2 Economic

For additional information on the following, please refer to the SCEE report completed for this project, which is in the project file and listed as Technical Material under the project file.

Business Access and Activity

Based on figures produced by the US Census Bureau reported in the Longitudinal Employer-Household Dynamics database, the SCEE study area currently supports 13,275 jobs (**Table 3-1**). The Professional, Scientific, and Technical Services; Administration & Support, Waste Management and Remediation; and Transportation and Warehousing sectors support the greatest share of the job market.

NAICS Industry Sector	Year 2015	
	Count	Share
Mining, Quarrying, and Oil and Gas Extraction	27	0.2%
Construction	596	4.5%
Manufacturing	1,186	8.9%
Wholesale Trade	1,263	9.5%
Retail Trade	1,100	8.3%
Transportation and Warehousing	1,410	10.6%
Information	233	1.8%
Finance and Insurance	715	5.4%
Real Estate and Rental and Leasing	300	2.3%
Professional, Scientific, and Technical Services	2,132	16.1%
Management of Companies and Enterprises	889	6.7%
Administration & Support, Waste Management and Remediation	1,478	11.1%
Educational Services	28	0.2%
Health Care and Social Assistance	849	6.4%
Arts, Entertainment, and Recreation	10	0.1%

Accommodation and Food Services	962	7.2%
Other Services (excluding Public Administration)	97	0.7%

Table 3 - 1: SCEE Study Area Jobs by NAICS Industry Sector

Both Build Alternatives for SW 10th Street include a roundabout modification to New Port Center Drive which will reduce congestion thereby improving access to the adjacent commercial center and Publix Distribution Center. Intersection improvements on SW 10th Street at FAU Research Park Boulevard would improve access to the newly designated "Opportunity Zone" economic investment area. Activity in the Transportation and Warehousing job sectors would receive direct benefit from the improved traffic operations in the area. The proposed improvement of the SW 10th Street interchange would improve traffic conditions along SW 10th Street and access to I-95, part of Florida's SIS which is important to local, regional, and state economies.

The proposed improvements on Hillsboro Boulevard will improve access to the Tri-Rail and Amtrak services provided at the Deerfield Beach Rail Station and the adjacent Transit Oriented Development (TOD), and improve access to governmental services provided at the Broward County North Regional Courthouse.

Bicycle and pedestrian access will be maintained along both SW 10th Street and Hillsboro Boulevard. No commercial businesses will be relocated. Overall, the project is expected to improve access to existing local businesses and support a more reliable regional transportation system.

Tax Base

The vast majority of the proposed improvements will occur within the existing ROW. The proposed Preferred Alternative will not result in the displacement of any homes or businesses. Partial acquisition of a limited number of parcels relative to each alternative will occur with a negligible reduction to the tax base when compared to total revenue collected. No change in land use classification is expected to result from the proposed improvements.

The US Department of Treasury and the Internal Revenue Service (IRS) have designated the area that occupies the southeast quadrant of the I-95 interchange at SW 10th Street as a "Qualified Opportunity Zone".

Opportunity Zones are part of a new federal tax incentives program to attract new capital investment and job opportunities to disadvantaged areas. Qualified Opportunity Zones retain their designation for 10 years. Within each zone, investors can defer taxes on financial gains, so long as the gain is reinvested in a Qualified Opportunity Fund. Opportunity Zones are expected to spur public-private partnerships in disadvantaged communities.

This project will not have significant adverse effects on the tax base within the City of Deerfield Beach or Broward County. The enhanced mobility has the potential to attract new businesses and support the continued growth within the tax base resulting in a long-term net economic gain.

3.3 Land Use Changes

Existing Land Use

Existing land use was assessed through review of current zoning map information. GIS shapefiles were downloaded from the City of Deerfield Beach and compared to the SCEE study area. **Table 3-2** reports total area by zoning classification found within the study area.

The project is located in an urbanized area of the City of Deerfield Beach. The predominant land use present is residential (40 percent) followed by industrial (34 percent) and business/commercial (16 percent).

Zoning Class	Zoning Description	Acres
B-1, B-2, B-2c, B-3	Business and Commercial	210.7
CF	Community Facility	62.9
I, PID	Industrial and Planned Industrial	434.9
PUD	Planned Unit Development	141.2
RM-10, RM-10(5), RM-13c, RM-15, RM-25	Residential, Multi-Family	178.4
RP-10(7), T-1c, T-1Cc	Residential, Mobile Home	118.6
RS-4c, RS-5, RS-7	Residential, Single Family	79.8
	Open Space	61.6
TOD	Transit Oriented Development	8.7

Table 3 - 2: SCEE Study Area Zoning Classifications

Future Land Use

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The anticipated employment center has been branded as the Hillsboro Technology Center.

SW 10th Street Interchange

The City of Deerfield Beach Future Land Use Map shows the area west of the SW 10th Street Interchange as Industrial. The NE quadrant of the interchange is shown as Residential Moderate [10 dwelling units per acre (DU/AC)], Commercial and Conservation. The SE quadrant shows as Community Facility, Recreation Open Space, Residential - Medium (15 DU/AC), Residential Moderate (10 DU/AC) and Residential Low (5 DU/AC).

Hillsboro Boulevard Interchange

The City of Deerfield Beach Future Land Use Map shows the NW quadrant of the Hillsboro Boulevard Interchange as Industrial and Commercial while the NE quadrant is shown as Industrial, Commercial, Recreation Commercial, Recreation Open Space and Employment Center. The SE quadrant shows as Commercial, Residential Moderate (10 DU/AC) and Recreation Open Space. The SW quadrant shows as Commercial, Industrial and York Residential TOD.

3.4 Mobility

Both SW 10th Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95, is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

The elimination of existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10th Street and Hillsboro Boulevard and on SW 10th Street and Hillsboro Boulevard near I-95 would improve existing capacity/operational and safety issues. Improved operations and reduced congestion on SW 10th Street and Hillsboro Boulevard as well as on I-95 would enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks.

Additionally, the inclusion of express lanes at SW 10th Street would connect workers, businesses, and residents within Deerfield Beach and the SCEE study area to a more reliable regional transportation system that extends across Miami-Dade, Broward and into Palm Beach Counties. Overall, implementation of the proposed project is expected to enhance access and mobility in an area targeted for economic investment by the US Department of Treasury.

With the implementation of the express lanes, north-south connectivity across SW 10th Street will be maintained at existing signalized intersections, and local improvements, including a roundabout on Newport Center Drive, will enhance local circulation. Bicycle lanes and sidewalks will also be maintained along the length of the SW 10th Street to support local use. The elevated express lanes are intended to divert regional traffic off of local surface streets and on to the elevated lanes. Reduced traffic on surface streets will allow for better local circulation and access. The proposed interchange improvements and inclusion of a grade separation on Hillsboro Boulevard would improve safety, eliminate periodic traffic delays, and enhance access to/from the Deerfield Beach Train Station that supports regional (Tri-Rail) and intercity (Amtrak) passenger rail service.

Based on the foregoing, a degree of effect of Enhanced is assigned to the Mobility issue.

3.5 Aesthetic Effects

Viewshed

Improvements to I-95, SW 10th Street, and Hillsboro Boulevard would occur within an urbanized area of the City of Deerfield Beach. Proposed improvements to I-95 would occur within the existing ROW and are not expected to have a detrimental visual effect on the surrounding community. Similarly, the proposed interchange ramp improvements and bridge widening associated with Hillsboro Boulevard would have a limited visual impact.

Improvements at SW 10th Street would incorporate 4th level structures likely to exceed 100 feet in height, and 3rd level structures likely to exceed 75 feet in height above existing grade. The proposed structures would extend west from I-95 through an area of commercial and industrial development before crossing the CSX rail corridor. Once west of the rail corridor, the 3rd level structures would pass within close proximity of two residential developments, Century Village and The Lakes at Deerfield Apartments.

Transportation infrastructure including rail lines, bridges, and roadway all contribute to the existing visual character of the area. The proposed project is consistent with the existing aesthetics of the corridor. Aesthetic considerations will be considered during the design phase throughout project development.

3.6 Relocation Potential

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

3.7 Farmland Resources

Lands within the project vicinity do not meet the definition of farmland as defined in 7 CFR § 658 and the provisions of the Farmland Protection Policy Act of 1981 do not apply because the entire project area is located in the urbanized area of Broward County with no designated farmlands adjacent to the project corridor.

4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that some of these resources meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP), and State Historic Preservation Officer (SHPO) has concurred with this determination. After application of the Criteria of Adverse Effect, and in consultation with SHPO, FDOT has determined that the proposed project will have No Adverse Effect on these resources.

A Cultural Resource Assessment Survey (CRAS) was conducted for the proposed project in accordance with Stipulation VII of the Section 106 Programmatic Agreement among the FHWA, the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017).

The CRAS identified one cultural resource within the Area of Potential Effect (APE): CSX Railroad (8BD4649). The segment of this resource within the current APE, spanning approximately 1,225 feet and extending both to the north and south from SW 10th Street, is consistent with nearby segments, and accordingly, is considered eligible for listing in the National Register under Criterion A in the categories of Transportation and Community Planning and Development. However, the limited nature of the proposed improvements will have no adverse effects on the National Register eligibility of this linear resource. The SHPO concurred with this finding December 3, 2018 (**Attachment B**).

For additional information regarding cultural and historical resources, please refer to the CRAS report completed for this project, which is in the project file.

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, and 23 CFR Part 774.

Section 4(f) Pursuant to USDOT Act of 1966

In compliance with the Department of Transportation Act of 1966 [Title 49, U.S. Code, Section 1653(f)], as amended, the study corridor was evaluated for potential Section 4(f) involvement. For additional information on Section 4(f) resources, please refer to the Section 4(f) Determination of Applicability prepared for this project, which is in the project file.

Four park/recreational resources within the vicinity of the project study corridor were identified for potential Section 4(f) involvement with this project:

- Willie James Linear Park (500 SW 10th Street); owned by the City of Deerfield Beach
- Tivoli Sand Preserve (501 SW 10th Court); owned by the City of Deerfield Beach
- Teen Center (1303 FAU Research Park Boulevard); owned by the City of Deerfield Beach
- Mayo Howard Park (1131 FAU Research Park Boulevard); owned by the City of Deerfield Beach

A Section 4(f) Determination of Applicability report was prepared for these four sites. The project will not acquire land from any of the Section 4(f) resources, and there will be no acquisitions of land on a temporary or permanent basis by the proposed project. Access to all Section 4(f) resources will be maintained during construction because all the Section 4(f) sites have local street access (no access from I-95). In addition, none of the sites are sensitive to proximity impacts, including noise. The FDOT has determined that there will be no Section 4(f) involvement with the Teen Center, and there will be No Section 4(f) Use of Willie James Linear Park, Tivoli Sand Preserve, or Mayo Howard Park. Section 4(f) coordination documentation for these sites is included in **Attachment C**.

In addition to the recreational resources discussed above, the CRAS identified one cultural resource within the APE: the CSX Railroad (8BD4649), which is considered eligible for listing in the National Register (see Section 4.1, above).

The limited nature of the proposed improvements will have no adverse effects on the National Register eligibility of this linear resource. The SHPO concurred with this finding December 3, 2018. Therefore, FDOT has determined that there will be no Section 4(f) involvement with this resource.

4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no properties in the project area that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965.

4.4 Recreational Areas and Protected Lands

There are no other protected public lands in the project area.

5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

For additional information on the following, please refer to the Natural Resources Evaluation (NRE) report completed for this project, which is in the project file and listed as Technical Material in the project file.

Protected Species and Habitat

The project study area was evaluated for potential occurrences of federally listed and state-listed plant and animal species in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended; the Fish and Wildlife Conservation Act; the Migratory Bird Treaty Act; and Chapters 5B-40 and 68A-27, F.A.C. The project study area was also evaluated for the occurrence of federally designated Critical Habitat as defined by Congress in 50 CFR 17. Based on this evaluation, it was deterring that no federally designated Critical Habitat is present within the limits of the Preferred Alternative.

The project was screened through the ETDM Process (ETDM Project #14244) in 2015 (Screening Summary Report re-published on July 11, 2016). During this time, the FWS and FWC commented on potential effects of the project to wildlife and habitat resources. Both agencies indicated that the project may contain suitable wood stork (*Mycteria americana*) foraging habitat. The FWC indicated that the following federally listed species may occur within or adjacent to the project study area: American alligator (*Alligator mississippiensis*) and eastern indigo snake (*Drymarchon corais couperi*). The FWC further indicated that the following state-listed species have potential to utilize habitats within the project study area: gopher tortoise (*Gopherus polyphemus*) and least tern (*Sternula antillarum*). The FWC also indicated that the following additional species have the potential to utilize habitats within the project study area: gopher frog (*Lithobates capito*), Florida burrowing owl (*Athene cunicularia floridana*), limpkin (*Aramus guarauna*), snowy egret (*Egretta thula*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), roseate spoonbill (*Platalea ajaja*), and white ibis (*Eudocimus albus*). The FWC added that Florida burrowing owls have been documented within the infield regions of the I-95 and Glades Road interchange north of the project limits; this species may use similar habitat within the infield regions of the project study area.

The project is located within the FWS Consultation Areas for the Everglade snail kite (*Rostrhamus sociabilis plumbeus*) and the wood stork, and falls within the core foraging areas (CFA) of four (4) active nesting wood stork colonies.

Based on the analysis documented in the NRE, at the time of publishing, a total of 16 federally listed animal species (plus 1 candidate species), 4 federally listed plant species, 8 state-listed animal species, and 15 state-listed plant species were identified as potentially occurring within the limits of the Preferred Alternative. Additionally, while not state or federally listed under the ESA, the bald eagle (*Haliaeetus leucocephalus*), the gopher frog (*Lithobates capito*), limpkin (*Aramus guarauna*), snowy egret (*Egretta thula*), and white ibis (*Eudocimus albus*) were included in the protected species analysis due to the regulatory protections associated with these species. **Table 5-1** provides a summary of the federally listed and

state-listed animal and plant species with potential to occur within the limits of the Preferred Alternative, along with their corresponding effect determinations.

	Scientific Name	Common Name	Effect Determination	Status	
				Federal	State
Federally Listed Wildlife Species	<i>Aphelocoma coerulescens</i>	Florida scrub-jay	No Effect	T	FT
	<i>Calidris canutus rufa</i>	Red knot	No Effect	T	FT
	<i>Charadrius melodus</i>	Piping plover	No Effect	T	FT
	<i>Rostrhamus sociabilis plumbeus</i>	Everglade snail kite	No Effect	E	FE
	<i>Picoides borealis</i>	Red-cockaded woodpecker	No Effect	E	FE
	<i>Grus americana</i>	Whooping Crane	May Affect, Not Likely to Adversely Affect	E	FE
	<i>Mycteria americana</i>	Wood stork	May Affect, Not Likely to Adversely Affect	T	FT
	<i>Crocodylus acutus</i>	American crocodile	May Affect, Not Likely to Adversely Affect	T	FT
	<i>Drymarchon corais couperi</i>	Eastern indigo snake	May Affect, Not Likely to Adversely Affect	T	FT
	<i>Peromyscus polionotus niveiventris</i>	Southeastern beach mouse	No Effect	T	FT
	<i>Puma concolor</i>	Puma	No Effect	T(S/A)	FT(S/A)
	<i>Puma concolor coryi</i>	Florida panther	No Effect	E	FE
	<i>Trichechus manatus latirostris</i>	West Indian manatee	No Effect	T	FT
	<i>Strymon acis bartrami</i>	Bartram's hairstreak butterfly	No Effect	E	FE
	<i>Anaea troglodyta floralis</i>	Florida leafwing butterfly	No Effect	E	FE
<i>Cyclargusthomasia bethunebakeri</i>	Miami blue butterfly	No Effect	E	FE	
Federally Listed Plant Species	<i>Cucurbita okeechobeensis</i> ssp. <i>Okeechobeensis</i>	Okeechobee gourd	No Effect	E	FE
	<i>Dalea carthagensis</i> var. <i>floridana</i>	Florida prairie-clover	No Effect	E	FE
	<i>Jacquemontia reclinata</i>	Beach jacquemontia	No Effect	E	FE
	<i>Polygala smallii</i>	Tiny polygala	No Effect	E	FE
State-Listed Wildlife Species	<i>Athene cunicularia floridana</i>	Florida burrowing owl	No Effect Anticipated	NL	ST
	<i>Egretta caerulea</i>	Little blue heron	No Effect Anticipated	NL	ST
	<i>Egretta tricolor</i>	Tricolored heron	No Adverse Effect Anticipated	NL	ST

	<i>Falco sparverius paulus</i>	Southeastern American kestrel	No Effect Anticipated	NL	ST
	<i>Gopherus polyphemus</i>	Gopher tortoise	No Effect Anticipated	C(1)	ST
	<i>Grus canadensis pratensis</i>	Florida sandhill crane	No Effect Anticipated	NL	ST
	<i>Platalea ajaja</i>	Roseate spoonbill	No Effect Anticipated	NL	ST
	<i>Sternula antillarum</i>	Least tern	No Effect Anticipated	NL	ST
	<i>Haliaeetus leucocephalus</i>	Bald eagle	No Effect Anticipated	NL(2)	NL
	<i>Lithobates capito</i>	Gopher frog	No Effect Anticipated	NL(3)	NL
	<i>Aramus guarana</i>	Limpkin	No Effect Anticipated	NL(3)	NL
	<i>Egretta thula</i>	Snowy egret	No Effect Anticipated	NL(3)	NL
	<i>Eudocimus albus</i>	White ibis	No Effect Anticipated	NL(3)	NL
State-Listed Plant Species	<i>Acrostichum aureum</i>	Golden leather fern	No Effect Anticipated	NL	ST
	<i>Aeschynomene pratensis</i> var. <i>pratensis</i>	Meadow jointvetch	No Effect Anticipated	NL	SE
	<i>Asplenium dentatum</i>	American toothed spleenwort	No Effect Anticipated	NL	SE
	Asplenium serratum	American bird's nest fern	No Effect Anticipated	NL	SE
	<i>Euphorbia</i> (= <i>Chamaesyce</i>) <i>cumulicola</i>	Sand-dune spurge	No Effect Anticipated	NL	SE
	<i>Conradina grandiflora</i>	Large-flowered rosemary	No Effect Anticipated	NL	ST
	<i>Ctenitis sloanei</i>	Florida tree fern	No Effect Anticipated	NL	SE
	<i>Epidendrum nocturnum</i>	Night scented orchid	No Effect Anticipated	NL	SE
	<i>Heliotropium gnaphalodes</i>	Sea rosemary	No Effect Anticipated	NL	SE
	<i>Lechea cernua</i>	Nodding pinweed	No Effect Anticipated	NL	ST
	<i>Okenia hypogaea</i>	Burrowing four-o'clock	No Effect Anticipated	NL	SE
	<i>Ophioglossum palmatum</i>	Hand fern	No Effect Anticipated	NL	SE
	<i>Tillandsia flexuosa</i>	Banded wild-pine	No Effect Anticipated	NL	ST
<i>Trichostigma octandrum</i>	Hoop vine	No Effect Anticipated	NL	SE	
	Zanthoxylum coriaceum	Biscayne prickly ash	No Effect Anticipated	NL	SE

Table 5 - 1: Summary of Listed Species and Effect Determinations

F = Federally Listed / S = State Listed / E = Endangered / T = Threatened / T(S/A) = Threatened due to similar appearance / NL = Not Listed

(1) The gopher tortoise is currently a candidate species for federal protection under the ESA.

(2) The bald eagle is neither state nor federally listed; however, this species is federally protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. The bald eagle is also managed in Florida by the FWC's bald eagle rule (FAC 68A-16.002).

(3) The gopher frog, limpkin, snowy egret, and white ibis are no longer listed in Florida as of January 11, 2017. However, these species are part of the FWC Florida's Imperiled Species Management Plan, as amended (December 2018).

Designated Habitats

The project study area was evaluated for the presence of federally designated Critical Habitat as defined by Congress in 50 CFR 17. Based on this evaluation, it was determined that no federally designated Critical Habitat is present within or directly adjacent to the Preferred Alternative.

Agency Coordination

The FDOT submitted an ESA Section 7 Consultation/Concurrence letter to the FWS on December 5, 2018 (see **Attachment D**) to request written concurrence on the effects to the listed species. A copy of the NRE was appended to that letter for FWS review. FWS concurred with the effect determinations and concluded that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the ESA. The FWS response letter is attached as **Attachment E**.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

In accordance with Presidential Executive Order 11990 entitled "Protection of Wetlands" and United States Department of Transportation Order 5660.1A, "Preservation of the Nation's Wetlands", the project study area was reviewed to identify, quantify, and map wetland communities that are located within the proposed project boundaries. In order to protect, preserve, and enhance wetlands to the fullest extent possible, the FDOT has assessed wetlands that may be affected by proposed roadway improvements.

Wetland/surface water habitats were delineated and assessed in accordance with the State of Florida Wetlands Delineation Manual (Chapter 62-340, F.A.C.) and the guidelines found within the Regional Supplement to the US Army Corps of Engineers (USACE) Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACE 2010). No viable wetland habitat was observed within the limits of the project study area; however, ten surface water habitats were identified, delineated, and assessed.

Surface Water Habitats

The surface water habitats within the Preferred Alternative consist primarily of upland-cut drainage conveyances and stormwater retention features associated with I-95. Based on desktop (GIS, aerial, etc.) reviews and field verification, a total of twelve individual surface water features, comprising a total of 20.50 acres, were identified within the limits of the project study area (see **Figure 5-1** for individual surface water locations). Individual surface water habitats located within the project study area, by Florida land use, cover and forms classification system (FLUCFCS) code and FWS classification, are summarized in **Table 5-2**. Descriptions of each are also provided below.

SW ID	FLUCFCS Description	FLUCFCS Code	FWS Wetland Classification*	Acres in Study Area
SW-1	Reservoirs <10 acres	534	POWHx	5.46
SW-2	Reservoirs <10 acres	534	POWHx	0.22
SW-3	Reservoirs <10 acres	534	POWHx	6.05
SW-4	Reservoirs <10 acres	534	POWHx	1.47
SW-5	Reservoirs <10 acres	534	POWHx	0.29
SW-6	Streams and Waterways	510	PEM1Cx	0.66
SW-7	Reservoirs <10 acres	534	POWHx	2.69
SW-8	Reservoirs <10 acres	534	POWHx	1.97
SW-9	Streams and Waterways	510	PEM1Cx	0.57
SW-10	Streams and Waterways	510	PEM1Cx	0.27
SW-11	Reservoirs <10 acres	534	POWHx	0.50
SW-12	Streams and Waterways	510	PEM1Cx	0.37
Total				20.50

Table 5 - 2: Summary of Individual Surface Waters

***FWS Wetland Descriptions:**

PEM1Cx: Palustrine, Emergent, Persistent, Seasonally Flooded, Excavated

POWHx: Palustrine, Open Water, Permanently Flooded, Excavated

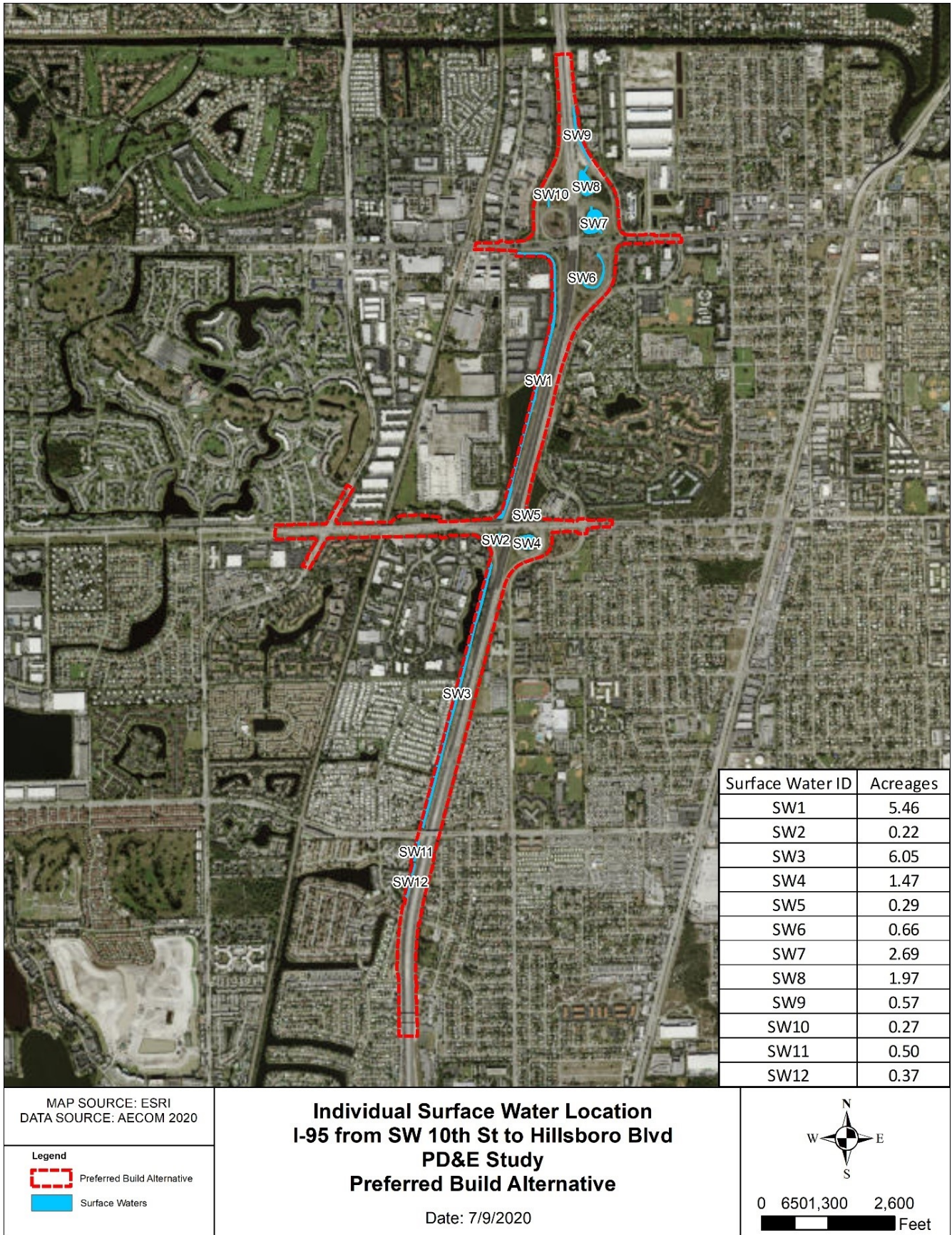


Figure 5 - 1: Individual Surface Water Locations

Wetland and Surface Water Impacts

The Preferred Alternative will result in impacts to state and federally jurisdictional surface waters. The existing surface waters within the project study area all provide low quality habitat due to their location with a densely developed urban area and proximity to the existing roadway corridor. The proposed surface water impacts will occur to excavated stormwater management facilities (SMFs) associated with I-95 in which water quality/quantity impacts will be addressed through improvements to the existing stormwater management system. As such, compensatory mitigation is not proposed, and a wetland functional assessment was not conducted as part of the NRE. **Table 5-3** below provides a summary of proposed impacts to individual surface water features within the project study area. Individual impact areas were determined based on the footprint of proposed new roadway construction (not the total acreage of each surface water feature within the project ROW). As shown below in **Table 5-3**, no impacts are proposed to SW-4, SW-9, or SW-10.

SW ID	FLUCFCS Description	FLUCFCS Code	Acres of Impact	Total Acres in Study Area
SW-1	Reservoirs <10 acres	534	3.89	5.46
SW-2	Reservoirs <10 acres	534	0.22	0.22
SW-3	Reservoirs <10 acres	534	1.07	6.05
SW-4	Reservoirs <10 acres	534	0.00	1.47
SW-5	Reservoirs <10 acres	534	0.02	0.29
SW-6	Streams and Waterways	510	0.06	0.66
SW-7	Reservoirs <10 acres	534	0.12	2.69
SW-8	Reservoirs <10 acres	534	0.01	1.97
SW-9	Streams and Waterways	510	0.00	0.57
SW-10	Streams and Waterways	510	0.00	0.27
SW-11	Reservoirs <10 acres	534	0.04	0.50
SW-12	Streams and Waterways	510	0.26	0.37
Total			5.69	20.50

Table 5 - 3: Summary of Proposed Surface Water Impacts

Avoidance and Minimization

Avoidance and minimization of impacts were demonstrated through utilization of the existing, previously disturbed ROW for the majority of the study area. Additionally, all unavoidable surface water impacts will be minimized to greatest extent practicable during the project's design and permitting phase, and best management practices (BMPs) will be implemented during construction and operation of the project in accordance with FDOT's Standard Specifications for Road and Bridge Construction (FDOT 2017). Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. 1344.

5.3 Essential Fish Habitat (EFH)

There is no Essential Fish Habitat (EFH) in the project area.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

Floodplains

Pursuant to Presidential Executive Order 11988, entitled "Floodplain Management," U.S. Department of Transportation Order 5650.2, and Chapter 23, CFR 650A, the project was analyzed for potential floodplain impacts.

FEMA Flood Insurance Rate Maps (FIRM) were used to evaluate the 100-year floodplain encroachment. The project area is located within four FEMA FIRM panels (August 2014) (**Figure 5-2**). The floodplain encroachments are within the zones AE and AH with base flood elevations (BFE) ranging from 12 to 16 feet [North American Vertical Datum of 1988 (NAVD 88)].

Zone AE are areas that have a one percent probability of flooding every year (also known as the "100-year floodplain") and where BFEs have been established. This floodplain zone is present intermittently throughout the project corridor. Zone AH is a special flood hazard area inundated by a 100-year flood event, with flood depths of one to three feet and characterized by areas of ponding. The BFEs have been determined. This floodplain (Zone AH) is concentrated mostly along SW 10th Street, Military Trail, and Hillsboro Boulevard within the project study area as well as along the eastern edge of the project - north of Hillsboro Boulevard and south of NE 48th Street. Properties in Zone AE and AH are considered to be at high risk of flooding under the National Flood Insurance Program. Construction in Zone AE and Zone AH areas must meet local floodplain zoning ordinance requirements.

Replacement drainage structures for this project are limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. Therefore, potential floodplain compensation areas are being considered at several offsite locations (**Figure 5-3**). The exact locations and configurations will be finalized during the Final Design phase of the project. The proposed system will be hydraulically equivalent to or greater than that of the existing system and backwater surface elevations are not expected to increase. As a result, this project will not affect existing flood heights or floodplain limits. Therefore, it has been determined that floodplain encroachment is not significant for this project. Please refer to Section 5.6 for information relating to the proposed stormwater management system.

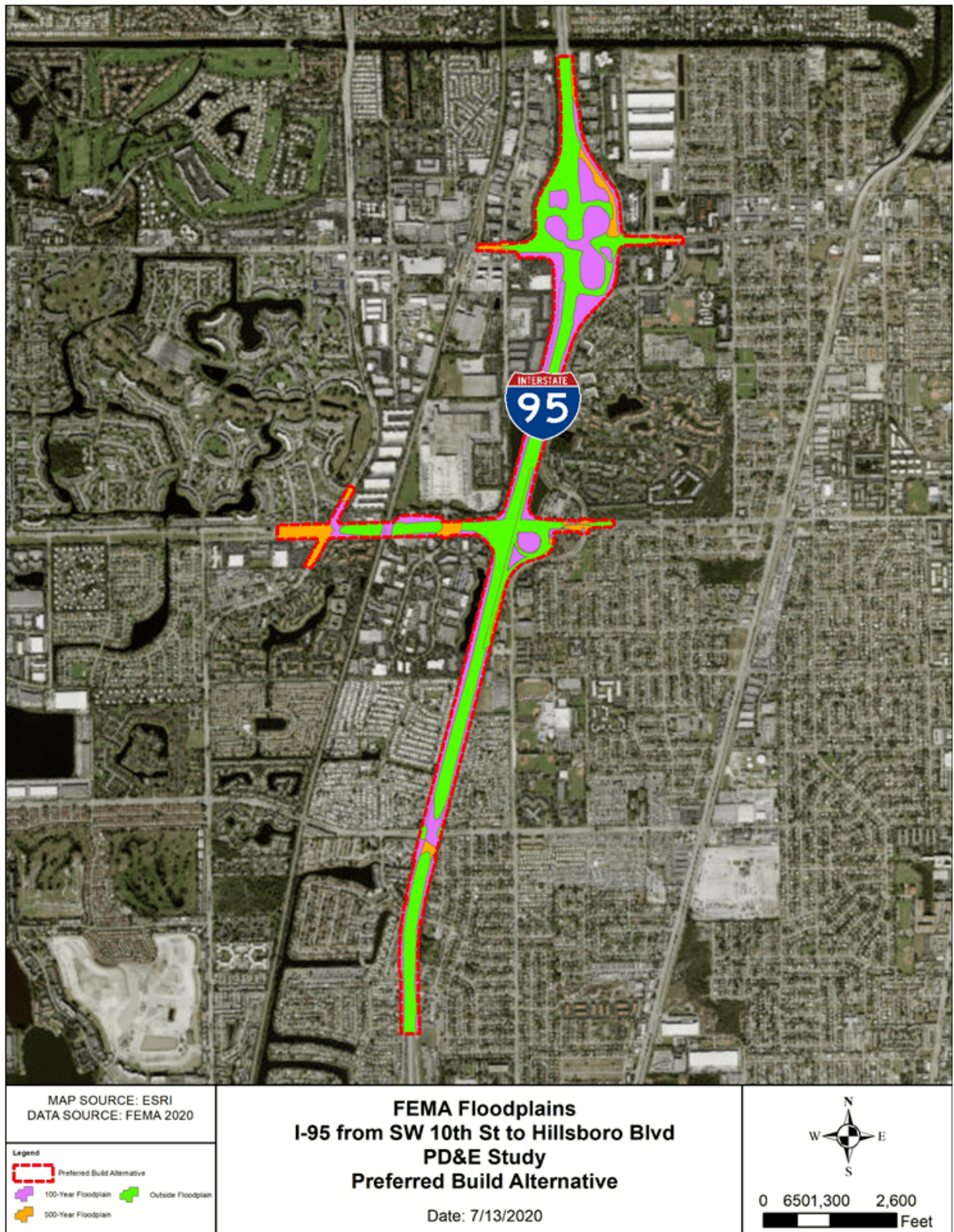


Figure 5 - 2: FEMA Floodplains

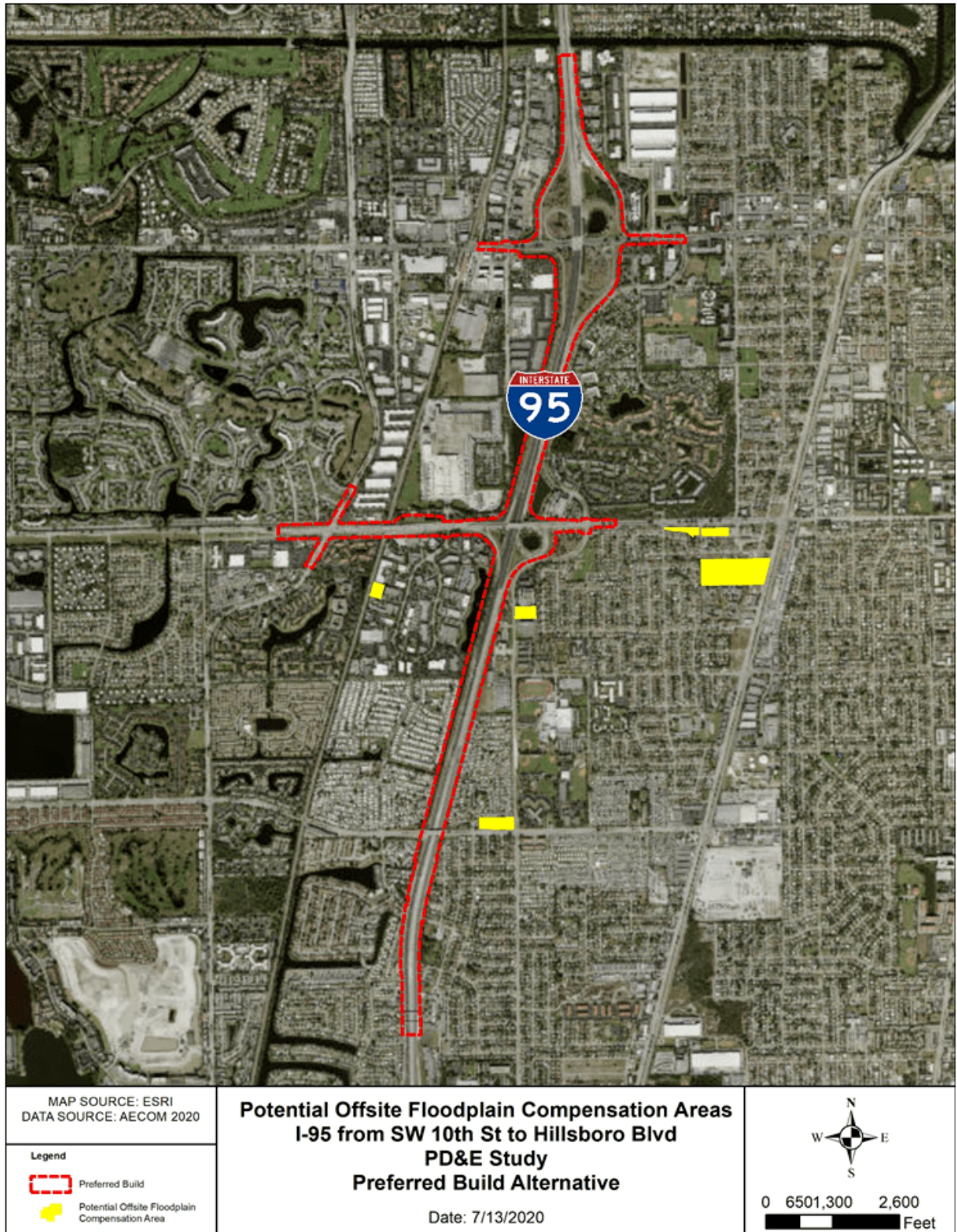


Figure 5 - 3: Potential Offsite Floodplain Compensation Areas

5.5 Sole Source Aquifer

Biscayne Aquifer

The project limits lie within the boundaries of the Biscayne Sole Source Aquifer. In accordance with the Sole Source Aquifer (SSA) Program, authorized by Section 1424(e) of the Safe Drinking Water Act of 1974, the project study area was evaluated for contamination concerns. These concerns were assessed in the contamination screening evaluation report (CSER) as part of this study. The contamination concerns are summarized in section 6.3 of this document. In summary, no underground plumes or monitoring wells will be affected by the proposed project. Applicable necessary precautions and BMPs pertaining to construction will be followed to prevent adverse impacts to the underlying sole source aquifer.

Additionally, for the proposed project, the proposed SMFs will be constructed first, treating stormwater as the roadway is constructed. Water quality will be accomplished using a combination of wet and dry detention volumes as required by South Florida Water Management District (SFWMD). Drainage inlets will also have inlet protections to prevent silt or debris discharges during construction. After construction is completed, the SMFs will continue to treat stormwater discharges from the newly constructed roadway. The SFWMD and FDOT stormwater quality and quantity criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

The proposed project is not anticipated to have negative impacts to the Biscayne Aquifer system, which is the sole source of potable water for most of southeastern Florida. The FDOT requested the EPA's concurrence that no adverse impacts to the Biscayne Aquifer are anticipated as a result of the proposed project. The written request included the EPA's SSA Checklist and the Water Quality Impact Evaluation Checklist (WQIE). The EPA concurred that there will be no significant impact to the Biscayne Aquifer. The EPA's response letter is attached as **Attachment F**.

5.6 Water Resources

Existing Drainage Conditions

Along SW 10th Street, from east of Military Trail to west of the railroad tracks, the proposed roadway improvements are within the Broward County Water Control District (BCWCD) #2 C-2 canal basin. Drainage for this portion is incorporated in the adjacent SW 10th Street Connector PD&E Study from Florida's Turnpike/ Sawgrass Expressway to SR 9/I-95 (FM 439891-1-22-02). Drainage improvements include collection and conveyance of runoff and proposed SMF within the C-2 canal basin.

Along SW 10th Street west of I-95, storm water is currently not treated. However, east of I-95, storm water is treated by a borrow lake, located at the southeast corner of the interchange.

Storm water collected along existing I-95 is not treated and is discharged to the BCWCD#2 C-1 canal located west of I-95. However, the current construction project (express lanes) is adding treatment for new impervious areas only. Due to the widening of this project, portions of the new treatment areas need to be removed. Any treatment removed will be replaced. The C-1 canal is used by the County for flood protection and to prevent saltwater intrusion.

Along Hillsboro Boulevard, storm water is currently not treated and discharges to the BCWCD#2 C-1 canal. Again, the current construction project (express lanes) is adding treatment for new impervious areas only. Any treatment removed will be replaced.

The BCWCD#2 C-1 canal ultimately discharges to the Hillsboro Canal, north of the project limits.

Proposed Drainage Conditions

For the Preferred Alternative, the proposed SMF will be constructed first, treating stormwater as the roadway is constructed. Water quality will be accomplished using a combination of wet and dry detention volumes as required by SFWMD. Drainage inlets will also have inlet protections to prevent silt or debris discharges during construction. After construction is completed, the SMFs will continue to treat stormwater discharges from the newly constructed roadway. The SFWMD and the FDOT require that the post-development discharge rates not exceed the pre-development discharge rates. The proposed design will be analyzed with the SFWMD 25 year - 72 hour storm event. The SFWMD and FDOT stormwater quality and quantity criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

A WQIE Checklist was prepared for this project and is included in the Technical Materials in the project file. Water quality impacts resulting from erosion and sedimentation during construction activities will be controlled in accordance with the latest edition of the FDOT's Standard Specifications for Road and Bridge Construction and through the use of BMPs, including temporary erosion control measures.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

There are no Outstanding Florida Waters (OFW) in the project area.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers or other protected rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, and Section 335.17, F.S., State highway construction; means of noise abatement.

- **Highway Traffic Noise**

Traffic noise levels were predicted for noise sensitive locations along the project corridor for the existing conditions and the design year (2040) No-Action and Preferred Alternative. Traffic noise levels at the residences are expected to range from approximately 49.8 to 75.9 dB(A) during the project's design year. Preferred Alternative traffic noise levels at the non-residential/special-use sites are expected to range from approximately 45.0 dB(A) inside the UM Health offices Church to 77.1 dB(A) on the basketball court at the Deerfield Beach Teen Center. The worst-case design year traffic noise levels with the Preferred Alternative are predicted to be no more than 13.0 dB(A) greater than existing levels and 11.6 dB(A) greater than the expected design year No-Action noise levels.

Design year traffic noise levels with the planned improvements are predicted to approach or exceed both the FHWA Noise Abatement Criteria (NAC) for residential use [67 dB(A)] at 116 residences. The design year traffic noise level with the planned improvements is predicted to exceed the NAC at a basketball court at the City of Deerfield Beach Teen Center, the walking trail at the Tivoli Sand Pine Preserve park, and the playground at the JM Family Daycare Center for [All Activity Class C sites, NAC = 67.0 dB(A)]. Therefore, based on the FHWA and FDOT methodologies used to evaluate traffic noise levels in this study, modifications proposed with this project were determined to generate noise impacts at noise sensitive sites within the project study area and consideration of noise abatement is required to mitigate these impacts. An analysis of noise abatement measures considered for the sites that approach or exceed the NAC is presented in the project's Noise Study Report (NSR). Although a number of sites approach or exceed the NAC, the proposed improvements do not result in any substantial noise increases (i.e., greater than 15 dB(A) over existing levels).

In accordance with traffic noise study requirements set forth by both the FHWA and FDOT, noise barriers were considered for all noise sensitive receptor sites where design year traffic noise levels were predicted to equal or exceed the NAC. Noise barriers were evaluated at eight locations to mitigate noise impacts.

At this time, noise barriers are recommended for further consideration and public input at three locations:

- **I95HV** - East side of I-95 north of NE 48th Street. This noise barrier would replace an existing 14-foot tall noise barrier in its entirety and benefit 66 sites, including all 35 impacted residences.
- **I95SL_LI** - West side of I-95 south of NW 48th Street. This noise barrier will replace-in-kind a segment of the existing noise barrier that is being removed to accommodate the project. Will benefit two impacted residences.

- **I95CK-HM** - West side of I-95 north of NW 48th Street. This noise barrier will replace an existing 16-foot tall noise barrier that will be removed to accommodate the project. Will benefit 84 sites, including 55 impacted residences. The FDOT is committed to the construction of feasible and reasonable noise abatement measures at the noise-impacted locations identified in the project's NSR contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process;
- Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement;
- Cost analysis indicates that the cost of the noise barriers will not exceed the cost reasonable criterion;
- Community input supporting types, heights, and locations of the noise barriers is provided to the District Four Office; and,
- Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

It is likely that the noise abatement measure for this location will be constructed if found feasible based on the contingencies listed above. If, during the Final Design phase, any of the contingency conditions listed above cause abatement to no longer be considered reasonable or feasible for a given location(s), such determination(s) will be made prior to requesting approval for construction advertisement. Commitments regarding the exact abatement measure location, height, and type (or approved Alternatives) will be made during project reevaluation and at a time before the construction advertisement is approved.

Noise abatement is not recommended for the remaining impacted sites as described below.

Traffic noise impacts are predicted to occur behind the existing noise barrier along the west side of I-95 between NE 48th Street and NE 53rd Place. This noise barrier was evaluated in accordance with FHWA guidance regarding existing noise barriers. It was determined that the existing noise barrier will continue to provide a substantial noise reduction with the Preferred Alternative even though impacts are predicted to occur behind the noise barrier. In accordance with FHWA guidance, the existing noise barrier will continue to meet the FDOT's current noise policy requirements with the Preferred Alternative and no further analysis is necessary.

The noise level reduction provided by the noise barrier design concepts for the following CNEs did not meet FDOT's Noise Reduction Design Goal and/or FDOT's Noise Barrier Cost Reasonableness Criteria:

- **I95Teen** - Deerfield Beach Teen Center, east side of I-95 at SW 11th Court (greater than \$995,935 \$/person-hours/square-foot).
- **I95DH** - Deerfield Highlands, east side of I-95 from SW 12th Court to SW 11th Court [6.7 dB(A) maximum and (\$188,925 per benefited site)].
- **TSPPark** - Tivoli Sand Pine Preserve, north side of SW 10th Street between Natura Boulevard and the eastern project limit (greater than \$995,935 \$/person-hours/square-foot).
- **JMPG** - JM Family Daycare Center Playground, west side of I-95 at NW 6th Street (greater than \$995,935 \$/person-hours/square-foot).

- **LAKES** - Lakes at Deerfield Apartments, SW 10th Street at S Military Trail [6.2 dB(A) maximum and (\$47,550 per benefited site)].

Therefore, noise barriers are not recommended for further consideration or construction at these locations. Based on the noise analyses performed to date, there are no apparent solutions available to mitigate the noise impacts at 12 residences in Highland Village, 3 residences in Deerfield Highland, 20 apartments in the Lakes at Deerfield and three special land use sites. The traffic noise impacts to these noise sensitive sites are considered to be an unavoidable consequence of the project.

6.2 Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to not change the Level of Service (LOS) and not change delay and congestion on all facilities within the study area.

The proposed project is located in Broward County, an area currently designated as being in attainment for particulate matter (2.5 microns in size and 10 microns in size) and carbon monoxide (CO).

The Preferred Alternative was not subjected to a CO screening model since the project is a Type 2 Categorical Exclusion. In addition, the project does not meet the following thresholds per Section 19.2.2.1, Part 2, Chapter 19 of the PD&E Manual:

1. The project is an Environmental Impact Statement (EIS) and/or;
2. The total vehicular delay time (veh-hours) at an intersection in the design year build condition is projected to increase when compared to the design year no-build condition and/or;
3. The project is expected to have community controversy regarding air quality. (Coordination with District specialists may be required to determine potential community controversy.)

Florida is in attainment for particulate matter; therefore, no project level analysis is needed. In addition, since the Class of Action has been determined to be a Type 2 Categorical Exclusion, the project has no potential meaningful Mobile Source Air Toxics (MSAT) effects and is exempt from a MSAT analysis.

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to improve the Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.

Construction Air Quality Impacts

Construction activities for the proposed action may potentially have short-term air quality impacts within the immediate vicinity of the project. SEQ CHAPTER \h \r 1 Construction activities may generate temporary increases in air pollutant emissions in the form of dust from earthwork and unpaved roads and smoke from open burning. Such emissions and potential impacts will be minimized by adherence to applicable regulations and to the latest edition of the FDOT *Standard*

Specifications for Road and Bridge Construction.

The project was reviewed for air quality impacts consistent with the FHWA discussion paper *Appropriate Level of Highway Air Quality Analysis for a CE, EA/FONSI, and EIS*. Estimates of CO were predicted for the default receptors which are located at pre-determined worst-case locations from the edge of the roadway. Based on the results from the CO Florida 2012 screening models, 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. The one-hour and eight-hour estimates predicted by the CO Florida 2012 models are directly compared to the current one-and eight-hour NAAQS for CO, which are 35 PPM and 9 PPM, respectively.

The CO screening analysis for this project indicates that the worst-case one-hour CO level is 8.7 PPM during the opening year (2027) and 8.4 PPM during the design year (2040). The predicted worst-case eight-hour CO level is estimated to be 5.2 PPM during the opening year (2027) and 5.0 PPM during the design year (2040). The project "passes" the screening model by achieving CO levels well below the one-hour and eight-hour NAAQS CO standards.

The South Florida region is currently in attainment for all of the pollutants for which NAAQS have been developed. Broward County is currently designated as in attainment for all of the NAAQS under the criteria provided in the CAA. Therefore, the project is located in an area which is designated as attainment under the criteria provided in the CAA; the CAA conformity requirements do not apply to the project.

Based on the air quality analysis conducted for this project, air quality impacts are not expected to occur as a result of this project.

For additional information, please refer to the Air Quality Technical Memorandum (AQTM) report completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material in the project file.

Agency Coordination

Agency coordination to obtain air quality related information occurred through the ETDM Programming Screen (ETDM #14244) and the Advance Notification (AN) process. The ETDM Programming Screen review occurred between 2015 and 2016, and the most recent ETDM Programming Screen Summary Report was published on July 11, 2016. The EPA reviewed the project and listed a degree of effect of 'Minimal' for air quality for all Build Alternatives. The summary degree of effect for air quality for all Build Alternatives was also listed as 'Minimal' in the ETDM Programming Screen Summary Report.

Construction Air Quality Impacts

Construction activities for the proposed action may potentially have short-term air quality impacts within the immediate vicinity of the project. Construction activities may generate temporary increases in air pollutant emissions in the form of dust from earthwork and unpaved roads and smoke from open burning. Such emissions and potential impacts will be minimized by adherence to all applicable state and local regulations and to the latest edition of the FDOT *Standard Specifications for Road and Bridge Construction*.

6.3 Contamination

A contamination screening evaluation was performed to evaluate the potential presence of contaminated sites within project corridor. A CSER was prepared pursuant to the FHWA XE "FHWA" 's Technical Advisory T 6640.8A.

A review of all available data occurred, including agency file reviews at the FDEP XE "FDEP" , EPA, and the Broward County Environmental Protection and Growth Management Department (EPGMD). Public file review summaries were provided by Environmental Data Resources, Inc. In addition, aerial photographs from 1963 to 2019 were reviewed from the Broward County Public Works Department for the project corridor and a site reconnaissance was performed on June 7, 2018 and July 1, 2020 to further evaluate the potential for environmental contamination. The field reconnaissance also served to confirm current business address listings and site conditions.

As a result of a review of all available data, such as agency file reviews at Broward County EPGMD, and FDEP; the Environmental Data Resources (EDR) database report; historic data reviews including aerial photography; and the site reconnaissance; twelve (12) sites were identified to pose potential contamination concerns to the proposed project. Remaining sites identified in the above-referenced sources are not considered to pose potential contamination concerns either because of the current regulatory status of the site and/or their position with respect to the project corridor and the groundwater direction at their location (down-gradient/cross-gradient). The twelve (12) identified sites, with risk rating (no risk, low risk, and medium risk) associated with the project development, are identified on **Figure 6-1** and are summarized in **Table 6-1**.

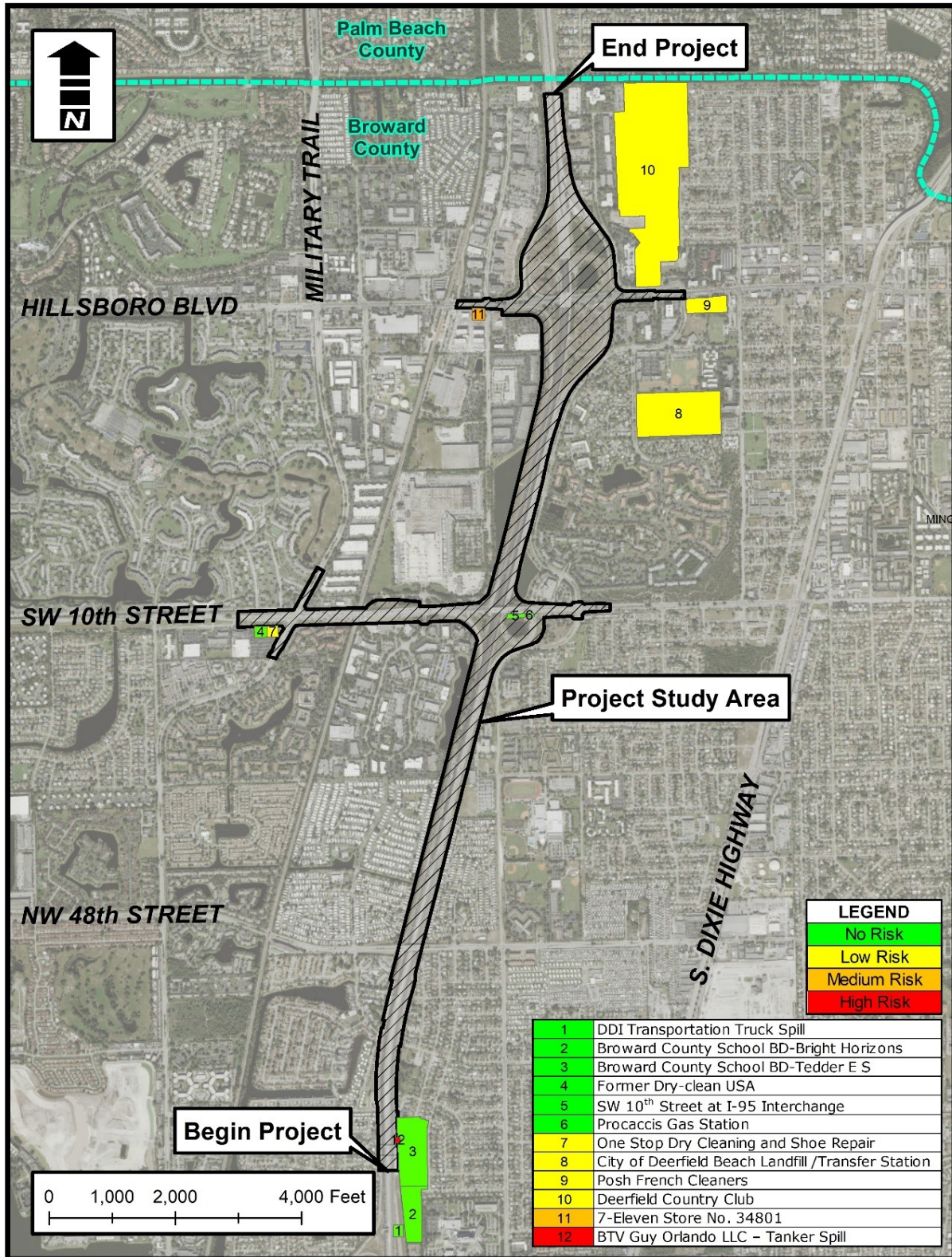


Figure 6 - 1: Potential Contamination Concerns

Site ID	Property Description	Permit # / Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating
1	DDI Transportation Truck Spill I-95 Near Sample Road - North Bound Pompano Beach FL 33064	06-9802066	FDEP	No	Within the project corridor	Former Spills	NO
2	Broward County School BD- Bright Horizons 3901 NE 1st Terrace Pompano Beach FL 33064	06-9047323	FDEP	No	150 feet southeast of southern terminus of the corridor.	Erroneous inclusion in the list and determined that no cleanup was required	NO
3	Broward County School BD- Tedder E S 4157 NE 1st Terrace Pompano Beach FL 33064	06-9047396	FDEP	No	100 feet east	Erroneous inclusion in the list and determined that no cleanup was required	NO
4	Former Dry-clean USA 1379 South Military Trail Deerfield Beach FL 33441	06-9500804	FDEP	No	200 feet southwest	Former Dry Cleaner facility; Demolished. Site Closure without restrictions issued in 2013	NO
5	SW 10th Street at I-95 Interchange Deerfield Beach FL 33441 Broward County	23473	FDEP	No	Within the project corridor	Former spills	NO
6	Procacci's Gas Station 1100 SW 10th Street Deerfield Beach FL 33441	06-9602459	FDEP	No	Within the project corridor	Former gasoline station that was removed in 1999	NO
7	One Stop Dry Cleaning and Shoe Repair 1323 South Military Trail Deerfield Beach FL 33441	06-9800735	FDEP	No	200 feet southwest	Closure without restrictions issued in 2017	LOW
8	City of Deerfield Beach Landfill /Transfer Station 360 SW 4th Street Deerfield Beach FL 33442	SW 53368 /95123 /96035	FDEP	No	700 feet southeast	Former landfill, Soil contamination	LOW
9	Posh French Cleaners 498 W Hillsboro Boulevard Deerfield Beach FL 33441	06-9500890	FDEP	Yes	175 feet southeast	Site Closure without restrictions issued in 2008	LOW
10	Deerfield Country Club 50 Fairway Drive Deerfield Beach FL 33441	1898B	EPGMD	Yes	550 feet east	Arsenic contamination in soil and groundwater	LOW
11	7-Eleven Store No. 34801 1200 W Hillsboro Boulevard Deerfield Beach FL 33442	06-8502350	FDEP	Yes	150 feet south	Site Closure without restrictions issued, active gasoline station	MEDIUM

12	BTV Guy Orlando LLC - Tanker Spill I-95 Northbound at Sample Road Pompano Beach FL 33064	06-9817567	FDEP/ EPGMD	No	Within the project corridor	Petroleum Contamination in soil and groundwater	HIGH
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Table 6 - 1: Potential Contaminated Sites in the Vicinity of the PD&E Study

The FDOT District IV Planning and Environmental Management Office will utilize the information contained in this report to determine the need for additional investigation during the design phase of the Project. The Level II Contamination Assessment investigation will be conducted prior to any ROW acquisition and/or at the early stages of design phase, should any become necessary. Based on the findings of updated future review and Level II investigation, the design engineers may be instructed to avoid the areas of concern or to include special provisions with the plans to require that the construction activities performed in the areas of concern be performed or supervised by a contamination assessment and remediation contractor specified by the FDOT.

If construction dewatering will be necessary during construction, a Water Use Permit from SFWMD may be required. The contractor will be held responsible for ensuring compliance with any necessary dewatering permit(s). The dewatering plan will need to consider the radius of influence of any dewatering activity on nearby contamination plumes to avoid potential contamination plume exacerbation. All permits will be obtained in accordance with applicable Federal, State, and local laws and regulations and in coordination with the District Contamination Impact Coordinator (DCIC).

For additional information, please refer to the CSER completed for this project, which is in the project file and listed as Technical Material in the project file.

6.4 Utilities and Railroads

Utilities

The following utility owners were identified to be impacted by the proposed improvements. **Table 6-2** shows the potential utility impacts.

These utility companies and government utility owners will be coordinated with during the Final Design phase of this project.

Utility Impacts along I-95	
Utility Owner	Impacts
AT&T Distribution	Underground Copper and Fiber Cable may be present on under proposed southbound I-95 On Ramp at SW 10th Street
Broward County Water and Wastewater Services	Water main crosses I-95 around 2,200 ft south of bridge at SW 10th Street over I-95 (BL I-95 - Station 1337+00)

City of Deerfield Beach	Water and Sewer main crosses I-95 about 2,200 ft south of bridge over Hillsboro Boulevard (BL I-95 - Station 1388+60)
FDOT ITS	West side of I-95: Underground ITS fiber optics. Crosses I-95 southbound on-ramp from eastbound Hillsboro Boulevard. Attached to the westside of the I-95 bridge over Hillsboro Boulevard. Crosses I-95 southbound on-ramp from westbound Hillsboro Boulevard. Crosses I-95 southbound off-ramp to Hillsboro Boulevard.
FPL Distribution and Transmission	Buried Electric - Along eastside of I-95 off ramp to SW 10th Street Overhead and Buried Electric - Along southside of SW 10th Street bridge over I-95. Overhead and Buried Electric - Along northside of I-95 bridge over Hillsboro Boulevard. Overhead Electric - Across I-95 about 400 ft south of Hillsboro Canal.
Comcast Cable	Buried Fiber optic cables along I-95
Sice, Inc	Buried Fiber optic cables along I-95
Crown Castle Fiber	Fiber optic lines buried along the North side of NE 48th Street
Utility Impacts along SW 10th Street	
Utility Owner	Impacts
AT&T Distribution	Overhead Fiber Optic along northside of SW 10th Street along R/W between just west of Military Trail and Newport Center Drive. The same line appears to become buried and goes across SW 10th Street on the west side of Newport Center Drive. Underground Duct along the northside of SW 10th Street (just along the edge of pavement) between Military Trail and just east of Natura Boulevard) Buried Copper along southside of SW 10th Street along R/W (between Military Trail and SFRC Railroad) Various feeders
Florida Power and Light- Broward	Transmission line along Military Trail and north and south side of SW 10th Street
Broward County Water and Wastewater Services	Water main along the southside of SW 10th Street along R/W. Main crosses SW 10th Street just east of Military Trail. Sewer main along Military trail (crosses SW 10th Street)
City of Deerfield Beach	Water main along the northside of SW 10th Street along R/W between Military Trail and Natura Boulevard (includes, various laterals/feeders across SW 10th Street) Water main along the southside of SW 10th Street along R/W west of Military Trail (includes, various laterals/feeders across SW 10th Street) Water main along east and westside of Military Trail (northward from SW 10th Street) Water main along East Newport Center Drive and West Newport Center Drive (including the intersection).

FPL Distribution and Transmission	Overhead Electric - Along the south side of SW 10th Street (along R/W) west of Military Trail (feeder goes North and South along west side of Military Trail). Overhead Electric - Along the northside of SW 10th Street (along R/W) from west of Military Trail to East of Newport Center Drive). Feeders go South under SW 10th Street just east of bridge over SFRTA RR. Overhead Electric - Along the southside of SW 10th Street (along R/W) east of Newport Center Drive to just west of Natura Boulevard). Feeders go across SW 10th Street just east of Newport Center Drive and just west of Natura Boulevard). Various other feeders.
Sprint	Fiber optic lines are installed along the south side of SW 10th Street
Comcast Cable	CATV & Fiber Line are installed along SW 10th Street
CVE Master Management Co Inc	Water and Irrigation Systems installed along SW 10th Street
Crown Castle Fiber	Fiber lines installed along SW 10th Street
Level 3 Communications	Fiber optic lines installed along SW 10th Street
MCI	Underground Duct lines installed along SW 10th Street
TECO People Gas South Florida	Gas line installed along SW 10th Street
Sice, Inc	Buried Fiber optic cables along SW 10th Street
Utility Impacts along Hillsboro Boulevard	
Utility Owner	Impacts
AT&T Distribution	On the Northside of Hillsboro Boulevard: Underground Duct crossing the southbound On-Ramp from westbound Hillsboro Boulevard and northbound On-Ramp from westbound Hillsboro Boulevard.
Crown Castle (Fibernet Direct)	Northside of Hillsboro Boulevard: Overhead fiber crossing Northside of the roadway.
FDOT ITS	Northside of Hillsboro Boulevard: Underground ITS crossing Northside of the roadway. Westside of Hillsboro Interchange: Underground ITS running along westside of I-95.
TECO Gas	On the Southside of Hillsboro Boulevard along R/W line.
Comcast Cable	Comcast lines installed along Hillsboro Boulevard.
MCI	Fiber optic lines installed along Hillsboro Boulevard.
FPL	Electric lines installed along Hillsboro Boulevard.
City of Deerfield Beach Water and Sewer	Water main along the sides of Hillsboro Boulevard along R/W. Sewer main along Military trail (crosses Hillsboro Boulevard)

Table 6 - 2: Utility Impacts

Railroad Crossing

The South Florida Rail Corridor (SFRC)/CSX Railroad runs parallel to the west side of the I-95 interchange at a distance of 2,250 feet and SW 10th Street crosses over the tracks with a bridge. The SW 10th Street typical section within the limits of the limited access ROW is a six-lane urban divided roadway with a raised, landscaped median. In the eastbound direction, a drop right-turn lane is provided for the I-95 northbound on-ramp and in the westbound direction, a single left turn is provided for the I-95 southbound on-ramp.

The SFRC/CSX Railroad runs parallel to the west side of the I-95 interchange at an approximate distance of 1,900 feet and crosses Hillsboro Boulevard at grade. The Hillsboro Boulevard typical section within the limits of the limited access ROW is a six-lane urban divided roadway with a raised, landscaped median. Underneath the I-95 overpass, the eastbound and westbound lanes are separated by median containing a raised concrete barrier wall as well as support piers for the I-95 overpass. In the eastbound direction, a right-turn lane is provided for the I-95 northbound on-ramp and in the westbound direction, an auxiliary lane is provided for the transition between the I-95 northbound off-ramp merge lane and the right-turn lane provided for the I-95 southbound on-ramp.

6.5 Construction

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

Construction activities will be controlled in accordance with the latest edition of the *FDOT's Standard Specifications for Road and Bridge Construction* (see Technical Materials) and through the use of BMPs.

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to the FDOT Standard Specifications for Road and Bridge Construction.

Construction noise and vibration impacts to the project corridor will be minimized by adherence to the controls listed in the latest edition of the *FDOT's Standard Specifications for Road and Bridge Construction*. According to Section 335.02 of the Florida Statutes, the FDOT is exempt from compliance with local ordinances. However, it is the FDOT's policy is to follow the requirements of local ordinances to the extent that is considered reasonable. Also, the contractor will be instructed to coordinate with the project engineer and the Department Noise Specialist should unanticipated noise or vibration issues arise during project construction.

Water quality effects resulting from erosion and sedimentation will be controlled in accordance with the FDOT's latest edition of *Standard Specifications for Road and Bridge Construction* and through the use of BMPs.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of access to local businesses and other pertinent information to the traveling public. All provisions of the FDOT's latest edition of *Standard Specifications for Road and Bridge Construction* will be followed.

7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Preliminary Engineering Report.

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8. Permits

The following environmental permits are anticipated for this project:

Federal Permit(s)

USACE Section 10 or Section 404 Permit

Status

To be acquired

State Permit(s)

DEP or WMD Environmental Resource Permit (ERP)

DEP National Pollutant Discharge Elimination System Permit

Status

To be acquired

To be acquired

Permits Comments

Both the USACE and SFWMD regulate impacts to wetlands and surface waters within the project study area. Other resource agencies, including the NMFS, EPA, and FWS, and FWC, review and comment on wetland permit applications. In addition, the FDEP regulates stormwater discharges from construction sites. The complexity of the permitting process will depend greatly on the degree of the impact to jurisdictional areas. As a precursor to the permitting process, the project was introduced to the SFWMD and USACE on June 21, 2018. No comments adverse to the proposed project were received during this agency meeting (please reference the NRE for a copy of the agency meeting minutes).

It is anticipated that the following permits will be required for this project:

Permit Issuing Agency

Section 404 Wetland Dredge and Fill Permit USACE

Environmental Resource Permit (ERP) SFWMD

National Pollutant Discharge Elimination System (NPDES) FDEP

It is anticipated that a Regional General or Nationwide Permit will be required from the USACE. These permits will require compliance with the 404(b)(1) guidelines including verification that all impacts have first been avoided to the greatest extent possible; that unavoidable impacts have been minimized to the greatest extent possible; and that unavoidable impacts have been mitigated in the form of wetlands creation, restoration, and/or enhancement.

The SFWMD requires an ERP when construction of any project results in the creation of a new or modification of an existing stormwater management system or results in impacts to waters of the state. As with USACE permits, the complexity associated with the ERP permitting process will depend on the size of the project and/or the extent of wetland impacts. The SFWMD will likely require an Individual ERP for this project.

40 C.F.R. Part 122 prohibits point source discharges of stormwater to waters of the United States without a NPDES permit. Under the State of Florida's delegated authority (from the EPA) to administer the NPDES program, construction

sites that will result in greater than one acre of disturbance must file for and obtain either coverage under an appropriate generic permit contained in Chapter 62- 621, F.A.C. or an individual permit issued pursuant to Chapter 62-620, F.A.C. A major component of the NPDES permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site and identifies specific engineering practices (i.e., best management practices) that will be used to reduce the pollutants from stormwater discharge.

Depending on the types of permits needed from the regulatory agencies, the permitting process typically ranges from 90 to 180 days.

For additional information regarding permits, please refer to the NRE completed for this project, which is in the project file and listed as Technical Material.

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9. Public Involvement

The following is a summary of public involvement activities conducted for this project:

Summary of Activities Other than the Public Hearing

A public involvement program (PIP) was developed and implemented for the PD&E Study. The program is documented in the PIP, a companion document to this PD&E study (see Technical Materials). The PIP was updated and amended throughout the project development process to incorporate the latest public involvement policies and techniques as they evolved during the life of the study. The purpose of the program is to outline the public involvement approach to be taken with the project, provide and share project information with people living and working in the area, listen to ideas and concerns and to solicit and incorporate input received during the study process. For this project, the PIP focused on the ETDM Programming Screen process, elected official and agency meetings, a series of public informational meetings and several community outreach techniques including a project website and project newsletters.

Public information meetings began in March of 2017 and have continued throughout the study process. Exhibits and project information were provided for public review and comment at each meeting. FDOT representatives were available at each meeting to discuss the project and answer questions, as were members of the consultant team.

Public Kick-Off Meetings

A Public Kick-Off Meeting was held on March 14, 2017 at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL 33441 from 5:30 p.m. to 7:30 p.m.

Notice of the Public Kick-off Meeting was published in the Sun Sentinel - Northeast Zone newspaper on March 5, 2017. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the Florida Administrative Register (FAR) on March 6, 2017, on the FDOT website, and through an FDOT media release.

The purpose of this meeting was to provide the community a forum through which to learn about the improvements being studied as well as the PD&E process in general, and to provide the FDOT with initial concerns and areas to look into as part of the study. Numerous exhibits and project information were provided for public review. Forty-five people signed in at the registration table.

An additional Public Kick-Off Meeting was held on April 6, 2017 at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL 33441 from 5:30 p.m. to 7:30 p.m.

Notice of the Public Kick-off Meeting was published in the Sun Sentinel - Northeast Zone newspaper on March 26, 2017. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the FAR on March 29, 2017, on the FDOT website, and through an FDOT media release.

The purpose of the meeting was to introduce the local agencies and the public to the project, explain the PD&E process, and gather input. This Kick-Off Meeting presented the same information as the meeting that was held on March 14, 2017 and was intended to provide another opportunity for the public to provide input on this project.

The Kick-off Meeting began as an open house, with FDOT personnel stationed at aerial displays and available to answer questions about the project. At 6:00 p.m. there was a brief PowerPoint presentation with a recorded voice-over. The presentation lasted approximately ten minutes. Project staff remained after the presentation for any additional questions and discussion with those in attendance. Fifty-seven people signed in at the registration table.

Alternatives Public Workshop

An Alternatives Public Workshop was held in conjunction with the SW 10th Street Connector, SR 869/SW 10th Street from Florida's Turnpike/Sawgrass Expressway to SR 9/I-95 PD&E Study on April 24, 2018. The workshop was an open house from 2:30-7:30 p.m. at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL, 33441.

Notice of the Alternative Public Workshop was published in the Sun Sentinel newspaper on April 13, 2018. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the FAR on April 16, 2018, on the FDOT website, and through an FDOT media release.

The workshop consisted of a joint project open house in the hotel ballroom, with FDOT personnel stationed at aerial displays and other project information boards to answer questions about the project. A presentation with a recorded voice-over was provided in a separate room at regularly scheduled intervals, followed by question and answer sessions with project staff. A court reporter was present to record public comments.

Two hundred and twelve people signed in at the registration table, not including project staff.

Virtual Public Meetings

Due to the State of Emergency declared by Governor DeSantis in Executive Order 20-52 as a result of the COVID-19 pandemic, a series of webinars were held in place of a third in-person Alternatives Public Meeting. The webinars were held on June 18, 2020, June 29, 2020, and July 1, 2020 from 7:00 p.m. to 8:30 p.m. via the GoToWebinar platform. In advance of the webinars, the exhibit boards were posted to the project website in an "Exhibit Room" layout, so that stakeholder could easily navigate through the exhibit boards, similar to an in-person public meeting. The webinar was divided into two sections: slideshow presentation (7:00 p.m. to approximately 7:35 p.m.) and the Q&A period (7:35 p.m. to 8:30 p.m.). The presentation covered the project updates since the last public meeting, Alternatives Public Workshop No. 2. The Q&A period covered questions asked in advance of the webinar, and also questions that were submitted during the webinar via the question / chat function. The presentation, the Q&A slides, and recordings of the webinars were posted onto the project website following the webinar. A matrix of the questions and answers for each question was also posted onto the project website.

The direct connections from SW 10th Street to both southbound and northbound I-95 express and general-use lanes were presented during the webinars. Connecting to both I-95 express and general-use lanes improves traffic flow and safety on the SW 10 Street local lanes. In response to the City's concerns, the bike lanes along the south side of local SW 10th Street were replaced with a shared use path. Both design options were discussed during the webinars. A total of 330 people attended Webinar No. 1 and the majority of comments received related to noise, accessibility, and the adjacent Florida's Turnpike Study. A total of 377 people attended Webinar No. 2 and the majority of comments received related to noise walls and accessibility. Attendance dropped for Webinar No. 3, down to 92 attendees, and only a handful of comments were received.

Public Hearing

A Public Hearing is scheduled on September 21, 2020. The purpose of this hearing will be to present to the public the Preferred Alternative and seek public input. Numerous exhibits detailing the project will be provided for public review. A project newsletter describing the PD&E study to date will be distributed to all the attendees.

Date of Public Hearing: 09/21/2020

Summary of Public Hearing

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10. Commitments Summary

1. COMMITMENTS SUMMARY

Part 2, Chapter 22 (Commitments) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

No project commitments resulted from the PD&E Study.

DRAFT

11. Technical Materials

The following technical materials have been prepared to support this environmental document.

2020-09-14_SW 10th Street SIMR with Appendices

Sociocultural Effects Evaluation (SCEE)

Cultural Resources Assessment Survey (CRAS)

Section 4(f) Determination of Applicability

WQIE Checklist_Signed

Natural Resources Evaluation (NRE)

Noise Study Report (NSR)

Air Quality Technical Memorandum

Contamination Screening Evaluation Report (CSER)

DRAFT

Attachments

Project Information

ETDM Programming Screening Report
Type 2 Categorical Exclusion Determination Form
Preliminary Engineering Report

Planning Consistency

Project Plan Consistency Documentation

Cultural Resources

SHPO Concurrence Letter

Natural Resources

WQIE Checklist_Signed
Species Concurrence Letter
Species Concurrence Letter
Sole Source Aquifer Coordination Letter

DRAFT

Project Information Appendix

Contents:

ETDM Programming Screening Report

Type 2 Categorical Exclusion Determination Form

Preliminary Engineering Report

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Attachment A
ETDM Programming Screen Summary Report



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

ETDM Summary Report

Project #14244 - I-95 from SW 10th St to Hillsboro Blvd

Final Programming Screen - Published on 07/11/2016

Generated by Anson Sonnett (on behalf of FDOT District 4)

Printed on: 7/11/2016

Table of Contents

Chapter 1 Overview	2
Chapter 2 Project Details	3
2.1. Purpose and Need	3
Chapter 3 Alternative #1	8
3.1. Alternative Description	8
3.2. Segment Description(s)	8
Chapter 4 Eliminated Alternative Information	53
4.1. Eliminated Alternatives	53
Chapter 5 Project Scope	54
5.1. General Project Recommendations	54
5.2. Required Permits	54
5.3. Required Technical Studies	54
5.4. Class of Action	54
5.5. Dispute Resolution Activity Log	54
Appendices	55
6.1. Preliminary Environmental Discussion Comments	55
6.2. Advance Notification Comments	62
6.3. GIS Analyses	62
6.4. Project Attachments	62
6.5. Degree of Effect Legend	62

Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project recommendations resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.

#14244 I-95 from SW 10th St to Hillsboro Blvd

District: District 4

Phase: Programming Screen

County: Broward

From:

Planning Organization: FDOT District 4

To:

Plan ID: Not Available

Financial Management No.: 436964-1-22-01

Federal Involvement: FHWA Funding Other Federal Permit

Contact Information: Shandra Davis-Sanders (954) 677-7896 shandra.davis@dot.state.fl.us

Snapshot Data From: Programming Screen Summary Report Re-published on 07/11/2016 by Anson Sonnett
 Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic						Cultural			Natural				Physical							
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations
Alternative #1	2	3	0	0	2	1	1	2	3	2	3	3	3	2	0	2	2	3	2	N/A	3
<i>Re-Published: 07/11/2016 Reviewed from 09/09/2015 to 10/24/2015</i>																					

Purpose and Need

Purpose and Need

The purpose of this project is to eliminate various existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10th Street and Hillsboro Boulevard, and also on SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The primary need for the project is based on capacity/operational and safety issues, with secondary considerations for the needs of evacuation and emergency services, transportation demand, system linkage, modal interrelationships, and social demands and economic development.

Capacity/Operational Deficiencies

A need exists to improve traffic operations along I-95 between the SW 10th Street and Hillsboro Boulevard interchanges, especially at existing merge and diverge ramps that are the sources of traffic turbulence and collisions. The mainline directional volumes range from 4,400 to 5,850 vehicles per hour (vph) with ramp volumes from 800 to 1,250 vph at SW 10th Street and 400 to 1,000 vph at Hillsboro Boulevard.

Operational analyses along I-95 indicate that all freeway segments in the study area operate at Level of Service (LOS) D or better except for the following:

- The diverge segment at I-95 southbound (SB) off-ramp to SW 10th Street EB and WB during the AM and PM peak periods;
- The I-95 mainline segment between I-95 SB on-ramp from SW 10th Street eastbound (EB) and westbound (WB) and I-95 SB off-ramp to Sample Road EB and WB during the PM peak period;
- The I-95 mainline between I-95 SB On-Ramp from Palmetto Park Boulevard EB and I-95 SB Off-Ramp to Hillsboro Boulevard EB and WB during the AM peak period;
- The merge at I-95 SB on-ramp from Hillsboro Boulevard WB during AM and PM peak periods; and
- The diverge segment at I-95 northbound (NB) off-ramp to Hillsboro Boulevard EB during the AM peak period.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Year 2040 traffic projections show the mainline directional volumes ranging from 6,000 to 7,300 vph. Year 2040 peak hour directional volumes on I-95 Express are forecasted to range an additional 1,300 to 2,550 vph within the I-95 corridor.

Operational analyses under the "No Build" option in year 2040 reflects implementation of two major programmed improvements: 1) I-95 Express Phase 3 (two express travel lanes in each direction), and 2) I-95 Ramp Metering. All of the mainline freeway segments in the study area would operate at a deficient LOS (E or F) during one or both peak periods with the exception that the merge segment for I-95 SB On-Ramp from WB Hillsboro Boulevard would operate at LOS D during the PM peak hour.

Safety

A need exists to resolve safety issues within the project limits along I-95 as well as SW 10th Street and Hillsboro Boulevard. Crash analyses for the years 2008 through 2012 reveal that the I-95 project segment within the SW 10th Street interchange area is not a high crash segment but the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment for four of the five study years. It should also be noted that the existing interchanges are closely located together and have short weave distances. Crash rates along SW 10th Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing into this area.

Evacuation and Emergency Services

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10th Street and Hillsboro Boulevard are designated as emergency

evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

Transportation Demand

A need exists to improve capacity and safety while meeting transportation demand and maintaining consistency with other transportation plans and projects, such as the Broward County Interchange Master Plan (IMP) and I-95 Express Lanes Phase III Project. The project is included in the FDOT Work Program for fiscal years 2016 to 2020, where PD&E is scheduled for fiscal years 2015 and 2016 and PE is scheduled for fiscal years 2017 and 2018. The Broward County MPO 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

System Linkage

A need exists to ensure that I-95 continues to meet the minimum requirements of a component of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS), as well as provides access connectivity to other major arterials such as I-595 and Florida's Turnpike.

Modal Interrelationships

There exists a need for capacity improvements along the I-95 project corridor to enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Increased mobility to public transit operations are needed and will benefit as a result of this project. Although no designated Broward County Transit (BCT) Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange.

Social Demands and Economic Development

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicted that the population would grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs were predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent. A need exists for the proposed improvements to support the predicted social and economic travel demands.

Project Description

This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps) in Broward County, Florida (see Location Map in the EST). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extend from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.

I-95 within the project limits currently has six general purpose lanes (three in each direction) and two High Occupancy Vehicle (HOV) lanes (one in each direction). This segment of I-95 is functionally classified as a Divided Urban Principal Arterial Interstate and has a posted speed limit of 65 miles per hour. The access management classification for this

corridor is Class 1.2, Freeway in an existing urbanized area with limited access. SW 10th Street is classified as a six lane divided State Principal arterial west of I-95 and as a six lane divided City Minor Arterial east of I-95. Hillsboro Boulevard is classified as a six-lane divided State Minor Arterial west of I-95 and as a State Principal Arterial east of I-95. Year 2013 AADT for I-95 was approximately 102,000 vehicles per day (vpd) NB and 102,000 vpd SB. Forecasted Year 2040 AADT for I-95 NB is approximately 129,000 vpd and 132,000 vpd SB in the vicinity of Hillsboro Boulevard, with 147,000 vpd NB and 146,000 vpd SB in the vicinity of SW 10th Street.

This project will evaluate the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, consider the replacement of the existing SW 10th Street bridge over I-95 and the provision of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard, located 1900 feet west of the existing interchange.

Summary of Public Comments

Summary of Public Comments is not available at this time.

Planning Consistency Status

Federal Consistency Determination

Date: 10/14/2015

Determination: CONSISTENT with Coastal Zone Management Program.

Lead Agency

Federal Highway Administration

Participating and Cooperating Agencies

Participating and Cooperating agencies are not applicable for this class of action.

Exempted Agencies

Agency Name	Justification	Date
US Coast Guard	US Coast Guard has requested to be exempt from reviewing any projects that do not impact navigable waterways.	08/28/2015
Federal Transit Administration	FTA has requested to be exempt from reviewing any non-transit projects.	08/28/2015

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

User Defined Communities Within 500 Feet

No user defined communities were found within a 500 ft. buffer distance for this project.

Census Places Within 500 Feet

- DeLand Southwest

Purpose and Need Reviews

FDOT District 4

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/22/2015	Gaspar Jorge Padron (gaspar.padron@dot.state.fl.us)	No Purpose and Need comments found.

FL Department of Agriculture and Consumer Services

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/09/2015	Steve Bohl (Steve.Bohl@freshfromflorida.com)	No Purpose and Need comments found.

FL Department of Economic Opportunity

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/12/2015	Adam Biblo (adam.biblo@deo.myflorida.com)	No Purpose and Need comments found.

FL Department of Environmental Protection

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/14/2015	Lauren Milligan (lauren.milligan@dep.state.fl.us)	No Purpose and Need comments found.

FL Department of State

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/01/2015	Ginny Jones (ginny.jones@dos.myflorida.com)	none

FL Fish and Wildlife Conservation Commission

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/20/2015	Jennifer Goff (jennifer.goff@MyFWC.com)	No Purpose and Need comments found.

Federal Highway Administration

Acknowledgment	Date Reviewed	Reviewer	Comments
Accepted	10/22/2015	Luis Lopez (luis.d.lopez@dot.gov)	<p>Planning consistency will need to be met before FHWA can approve the environmental document. The public needs to be aware of the funding situation and timeframe of the project development and delivery.</p> <p>The study area identified in the map just included on of the 3 ramps of the partial cloverleaf interchange. If this is correct, the PD&E needs to explain why those ramps were left out the study.</p>

National Marine Fisheries Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	09/15/2015	Brandon Howard (Brandon.Howard@noaa.gov)	None

National Park Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/19/2015	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Natural Resources Conservation Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/14/2015	Rick Robbins (rick.a.robbins@fl.usda.gov)	No Purpose and Need comments found.

South Florida Water Management District

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/16/2015	Mindy Parrott (mparrott@sfwmd.gov)	No Purpose and Need comments found.

US Army Corps of Engineers

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/09/2015	Randy Turner (Randy.L.Turner@usace.army.mil)	No Purpose and Need comments found.

US Environmental Protection Agency

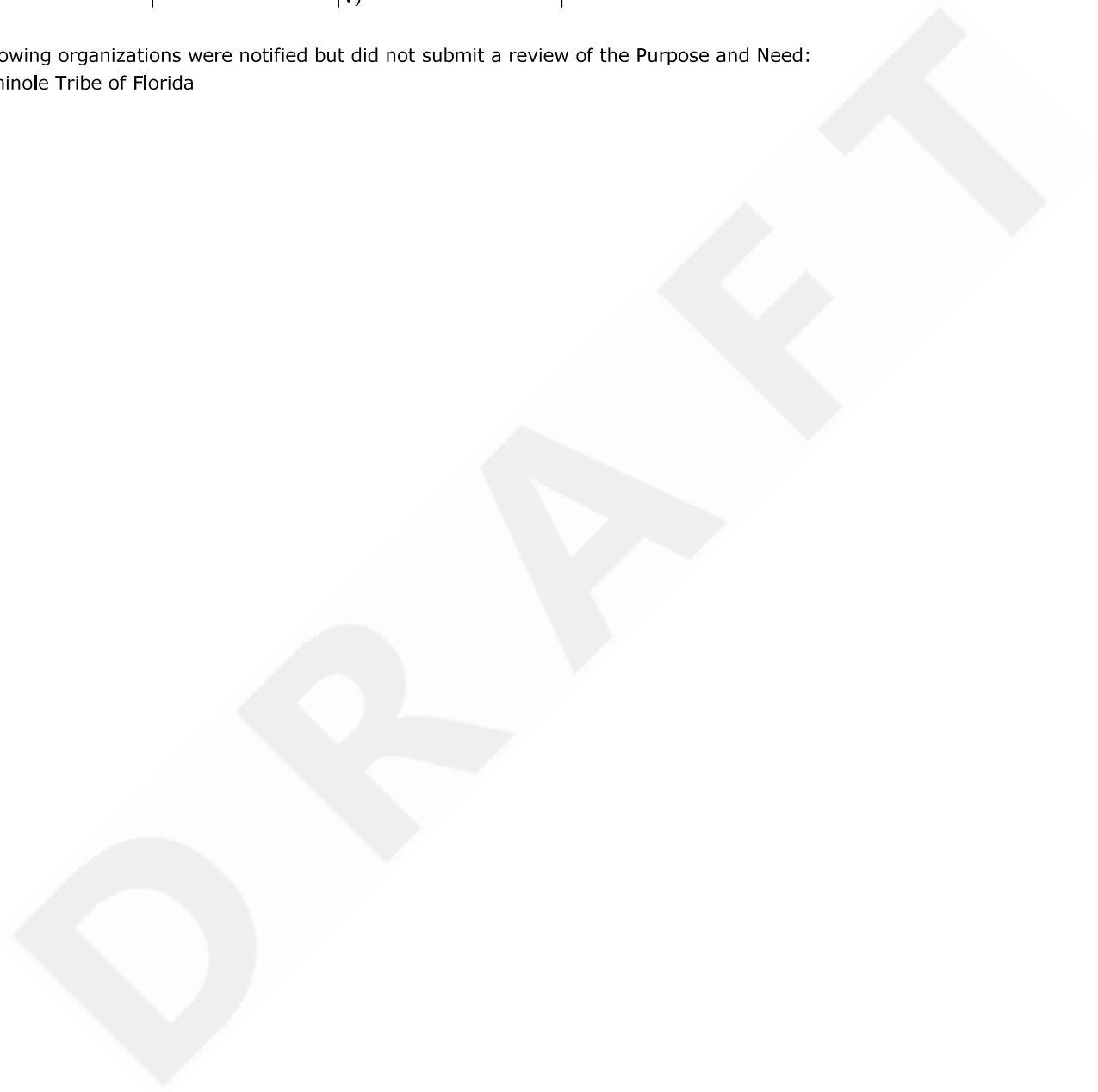
Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/23/2015	Kim Gates (gates.kim@epa.gov)	No comments at this time.

US Fish and Wildlife Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	09/11/2015	John Wrublik (john_wrublik@fws.gov)	No Purpose and Need comments found.

The following organizations were notified but did not submit a review of the Purpose and Need:

- Seminole Tribe of Florida



Alternative #1**Alternative Description**

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
Alternative was not named.	?	?	Widening	ETAT Review Complete	5.92 mi.		None Selected	Y

Segment Description(s)**Location and Length**

Segment Record	Segment Name	Facility Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
S-001	Unnamed Segment	Unnamed Segment			5.92			

Jurisdiction and Class

Segment Record	Segment Name	Jurisdiction	Urban Service Area	Functional Class
S-001	Unnamed Segment			

Base Conditions

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Interim Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Needs Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Cost Feasible Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Funding Sources

No funding sources found.

Project Effects Overview for Alternative #1

Issue	Degree of Effect	Organization	Date Reviewed
Social and Economic			
Land Use Changes	0 None	FL Department of Economic Opportunity	10/23/2015
Land Use Changes	2 Minimal	Federal Highway Administration	10/22/2015
Land Use Changes	2 Minimal	FDOT District 4	10/22/2015
Social	3 Moderate	US Environmental Protection Agency	10/24/2015
Social	2 Minimal	Federal Highway Administration	10/22/2015
Social	2 Minimal	FDOT District 4	10/22/2015
Relocation Potential	0 None	FDOT District 4	10/23/2015
Relocation Potential	0 None	Federal Highway Administration	10/22/2015
Farmlands	0 None	Federal Highway Administration	10/22/2015
Farmlands	0 None	Natural Resources Conservation Service	10/14/2015
Aesthetic Effects	2 Minimal	Federal Highway Administration	10/22/2015

Aesthetic Effects	2	Minimal	FDOT District 4	10/22/2015
Economic	0	None	FL Department of Economic Opportunity	10/23/2015
Economic	1	Enhanced	Federal Highway Administration	10/22/2015
Economic	1	Enhanced	FDOT District 4	10/22/2015
Mobility	1	Enhanced	Federal Highway Administration	10/22/2015
Mobility	1	Enhanced	FDOT District 4	10/22/2015
Cultural				
Section 4(f) Potential	2	Minimal	Federal Highway Administration	10/22/2015
Historic and Archaeological Sites	2	Minimal	Federal Highway Administration	10/22/2015
Historic and Archaeological Sites	3	Moderate	FL Department of State	10/01/2015
Recreation Areas	2	Minimal	US Environmental Protection Agency	10/23/2015
Recreation Areas	2	Minimal	Federal Highway Administration	10/22/2015
Recreation Areas	N/A	N/A / No Involvement	National Park Service	10/19/2015
Recreation Areas	2	Minimal	South Florida Water Management District	10/16/2015
Recreation Areas	2	Minimal	FL Department of Environmental Protection	10/14/2015
Natural				
Wetlands	3	Moderate	US Environmental Protection Agency	10/24/2015
Wetlands	2	Minimal	Federal Highway Administration	10/22/2015
Wetlands	2	Minimal	South Florida Water Management District	10/16/2015
Wetlands	2	Minimal	FL Department of Environmental Protection	10/14/2015
Wetlands	2	Minimal	US Army Corps of Engineers	10/09/2015
Wetlands	0	None	National Marine Fisheries Service	09/15/2015
Wetlands	2	Minimal	US Fish and Wildlife Service	09/11/2015
Water Quality and Quantity	3	Moderate	US Environmental Protection Agency	10/24/2015
Water Quality and Quantity	2	Minimal	Federal Highway Administration	10/22/2015
Water Quality and Quantity	2	Minimal	South Florida Water Management District	10/16/2015
Water Quality and Quantity	2	Minimal	FL Department of Environmental Protection	10/14/2015
Floodplains	3	Moderate	US Environmental Protection Agency	10/23/2015
Floodplains	2	Minimal	Federal Highway Administration	10/22/2015
Floodplains	2	Minimal	South Florida Water Management District	10/16/2015
Wildlife and Habitat	2	Minimal	Federal Highway Administration	10/22/2015
Wildlife and Habitat	2	Minimal	FL Fish and Wildlife Conservation Commission	10/20/2015

Wildlife and Habitat	0 None	FL Department of Agriculture and Consumer Services	10/09/2015
Wildlife and Habitat	2 Minimal	US Fish and Wildlife Service	09/11/2015
Coastal and Marine	0 None	Federal Highway Administration	10/22/2015
Coastal and Marine	0 None	South Florida Water Management District	10/16/2015
Coastal and Marine	0 None	National Marine Fisheries Service	09/15/2015

Physical

Noise	2 Minimal	Federal Highway Administration	10/22/2015
Air Quality	2 Minimal	US Environmental Protection Agency	10/23/2015
Air Quality	2 Minimal	Federal Highway Administration	10/22/2015
Contamination	3 Moderate	US Environmental Protection Agency	10/23/2015
Contamination	3 Moderate	Federal Highway Administration	10/22/2015
Contamination	3 Moderate	South Florida Water Management District	10/16/2015
Contamination	3 Moderate	FL Department of Environmental Protection	10/14/2015
Infrastructure	2 Minimal	Federal Highway Administration	10/22/2015
Navigation	N/A N/A / No Involvement	Federal Highway Administration	10/22/2015
Navigation	N/A N/A / No Involvement	US Army Corps of Engineers	10/09/2015

Special Designations

Special Designations	3 Moderate	US Environmental Protection Agency	10/23/2015
Special Designations	0 None	Federal Highway Administration	10/22/2015
Special Designations	0 None	South Florida Water Management District	10/16/2015

ETAT Reviews and Coordinator Summary: Social and Economic

Land Use Changes

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

This project will be completed within existing right-of-way. It is compatible with the existing and future land use patterns of the area and not anticipated to affect the land use patterns in the project area. FDEO indicated that the project is compatible with the community's development goals and marginally compatible with the local government comprehensive plan. FDEO assigned a degree of effect of None. FHWA assigned a degree of effect of Minimal and stated that minimal to no land use effects are expected. A Summary Degree of Effect of **Minimal** has been assigned to the Land Use Changes issue.

Public outreach will be conducted during the PD&E Stage in coordination with the Broward County MPO and the City of Deerfield to solicit feedback on potential adverse effects as a result of the project.

Degree of Effect: 0 *None* assigned 10/23/2015 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The local government's comprehensive plan: City of Deerfield Beach Comprehensive Plan, January 28, 2014.

Comments on Effects to Resources:

Project compatibility with community development goals? Yes.

Project compatibility with the local government(s) comprehensive plan?

Marginally. Would temporarily mitigate Level of Service Standard deficiency for I-95. In contrast, Section 3.7.2 of the Transportation Element, Implementation of Future Expected Roadway Improvements specifies, that for I-95, alleviation of congestion will rely on transit enhancements planned for this corridor.

Is the project on the Future Transportation Map?

No.

Future Land Use Map categories that surround the project: Transportation; Commercial; Commercial 2; Residential Moderate; Residential Medium; Community Facility; Water; and, Industrial.

Local parks (City or County) within a quarter mile of the project: Mayo Howard Park (Deerfield Beach City Park).

Does the project encroach on a military base? Is the project within an Area of Critical State Concern, encroach on a military base, or located in the project in a Rural Area of Opportunity? No.

Is the project within the Coastal High Hazard Area?No.

Is the project within an Area of Critical State Concern? No.

Other planning items that would affect or be enhanced by the project:

The project will improve the traffic flow merging onto I-95 and merging off I-95.

Contact information for the affected local government: Amanda Martinez, Director, Planning & Development Services, City of Deerfield Beach, (954) 480-4208

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Land uses have been identified in the report.

Comments on Effects to Resources:

The project is expected to be constructed within the existing ROW and doesn't foresee any changes on travel patterns. Minimal to no effects on land uses are expected.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

City of Deerfield Beach Future Land Use Plan

200-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%
1400 COMMERCIAL AND SERVICES / 42.1 / 17.26%
1411 SHOPPING CENTERS / 3.2 / 1.31%
1550 OTHER LIGHT INDUSTRY / 13 / 5.32%
1700 INSTITUTIONAL / 6.4 / 2.61%
1820 GOLF COURSE / 3.6 / 1.45%
4130 SAND PINE / 0.5 / 0.21%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 3.6 / 1.48%
5300 RESERVOIRS / 7.5 / 3.07%
8140 ROADS AND HIGHWAYS / 153.4 / 62.81%

2010 Census Designated Places (1)

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

500-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%
1400 COMMERCIAL AND SERVICES / 141.7 / 28.9%
1411 SHOPPING CENTERS / 10.6 / 2.15%
1550 OTHER LIGHT INDUSTRY / 45.3 / 9.25%
1700 INSTITUTIONAL / 21.1 / 4.3%
1820 GOLF COURSE / 12.4 / 2.52%
4130 SAND PINE / 1.9 / 0.38%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 1.54%
5300 RESERVOIRS / 22.6 / 4.61%
8140 ROADS AND HIGHWAYS / 164.8 / 33.61%
1850 PARKS AND ZOOS / 3.5 / 0.72%
1900 OPEN LAND / 0.5 / 0.1%

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
1400 COMMERCIAL AND SERVICES / 364.5 / 30.4%
1411 SHOPPING CENTERS / 12.4 / 1.03%
1550 OTHER LIGHT INDUSTRY / 163.4 / 13.7%

1700 INSTITUTIONAL / 43.1 / 3.6%
 1820 GOLF COURSE / 52.9 / 4.41%
 4130 SAND PINE / 5.5 / 0.46%
 4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 0.63%
 5300 RESERVOIRS / 30.1 / 2.51%
 8140 ROADS AND HIGHWAYS / 199.2 / 16.61%
 1850 PARKS AND ZOOS / 24.9 / 2.07%
 1900 OPEN LAND / 4.4 / 0.37%
 1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
 1320 MOBILE HOME UNITS / 5 / 0.42%
 5120 CHANNELIZED WATERWAYS CANALS / 1.2 / 0.1%

Comments on Effects to Resources:

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The project will be constructed mostly within existing right of way with the potential only for minor impacts to commercial properties which would be unlikely to result in changes to existing land use. The project will support the future growth and accommodate transportation to the employment centers in the project area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:**CLC Recommendations:**

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses that may be impacted by the interchange improvements.

Indirect Effects**Identified Resources and Level of Importance:****Comments on Effects to Resources:****Recommended Avoidance, Minimization, and Mitigation Opportunities:****Social****Project Effects**

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

This project will support increasing social and economic demands expected due to continued population and employment growth in this area. The proposed project is anticipated to improve traffic flow and safety to the surrounding communities, social service facilities, recreational assets, and businesses. The project vicinity contains minority and low-income populations and Community Development Block Grant Targeted Areas. Due to these sensitive populations, the USEPA gave the Social issue a Moderate rating. FHWA anticipated Minimal effects. Thus, a Summary DOE of **Moderate** has been assigned for the Social category.

During the PD&E phase, a Community Awareness Memorandum as recommended by USEPA, and a Sociocultural Effects Evaluation in accordance with Part 2, Chapter 9 of the FDOT PD&E Manual will be performed. Public outreach will be conducted by FDOT District Four in coordination with the Broward County MPO and the City of Deerfield Beach to solicit input from the general public to ensure that both the social and transportation needs of the community are addressed through the project.

Degree of Effect: 3 *Moderate* assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Community Awareness Memorandum (PD&E Manual, Part 1, Chapter 11), and
- Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 13).

Direct Effects

Identified Resources and Level of Importance:

Based on available information (primarily USEPA's EJSCREEN tool, <http://www2.epa.gov/ejscreen>), the project could have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

According to EJSCREEN, the population within 1/2 mile of the I-95 & Hillsboro Blvd interchange is:

- 67% minority,
- 47% low income,
- 12% linguistically isolated, and
- 19% with less than a high school education.

Also according to EJSCREEN, the population within 1/2 mile of the I-95 & SW 10th Street interchange is:

- 62% minority,
- 52% low income,
- 18% linguistically isolated, and
- 16% with less than a high school education.

Furthermore, the areas in the project vicinity are Community Development Block Grant (CDBG) Targeted Areas by the City of Deerfield Beach, <http://www.deerfield-beach.com/DocumentCenter/View/5312>

The Preliminary Environmental Discussion Comments Report identified several social services and recreational assets in the vicinity of the project corridor, including:

- South Florida Railway Museum (1300 West Hillsboro Boulevard),
- Assembly of God New Life (1015 W Newport Center Drive #105),
- Grace Christian Church (W Hillsboro Boulevard),
- Westside Park Recreation Center (445 SW 2nd Street),
- Broward County Fire Department and Rescue Station 111 (232 Goolsby Boulevard),
- Broward County North Regional County Court (1600 W Hillsboro Boulevard),
- U.S. Post Office - Deerfield Beach Annex (155 Goolsby Boulevard),
- Mayo Howard Park located at 1131 FAU Research Park Boulevard,
- Westside Park located at 445 SW 2nd Street, and
- Tivoli Sand Pine Preserve located along SW 10th Street between SW Natura Boulevard and SW Martin Luther King Jr Ave.

Additionally, the Seaboard Air Line Railway Station, which was recorded in the National Register of Historic Places in 1990 (<http://www.broward.org/History/NationalRegister/Pages/SeaboardAirLineRailwayStation.aspx>), and the Oveta McKeithen Recreational Complex (<http://www.deerfield-beach.com/index.aspx?NID=1223>) are located in the project study area.

Comments on Effects to Resources:

According to FDOT's PD&E Manual, Part 1, Chapter 11 Public Involvement, "[p]rojects processed through the ETDM EST have undergone a Sociocultural Effects Evaluation (SCE) as part of the screening process prior to the PD&E phase." And, according to FDOT's Practical Application Guides for SCE Evaluations - ETDM Process (April 23, 2013), "The timing of the SCE evaluation process for Planning and Programming screens [is] generally within the 45-day review period during which the Environmental Technical Advisory Team (ETAT) reviews and comments on a project." However, based on available information, USEPA could not determine if a Sociocultural Effects Evaluation will be conducted for this project. The Preliminary Environmental Discussion Comments Report identified several social services and recreational assets in the vicinity of the project corridor, and the Project Description stated that "an extensive Public Involvement Plan (PIP) will be prepared and conducted during the PD&E phase of this project." But conducting outreach to establish community concerns and preferences and to ascertain which public involvement activities will be appropriate during PD&E was not addressed.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends development of a Community Awareness Memorandum to describe how affected communities and sensitive community issues will be identified, documented (preferably in a Sociocultural Effects Evaluation Technical Memorandum), and dealt with during the public involvement process.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Access to properties could be affected during the construction phase of the project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The public must be involved in the project development. The access to properties during and after project delivery should be maintained.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

2010 Census Designated Places (1)

Deerfield Beach

Bus Transit Routes (3)

Route 92

Route 93

Route 48 (Fixed Route from most recent Broward County Transit Map)

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Facility Crossings (10)

I-95 Northbound

SR 810 Hillsboro Boulevard

I-95 Southbound

SW 10th Street/SR 869

I-95/SR 9

SCL RR

SCL RR

SW 12th Avenue

SW 12th Avenue

FDOT RCI Bridges (5)

860123

860557

860124

860564

860194

Geocoded Civic Centers (2)

Deerfield Beach Country Club

Hilton Deerfield Beach

Geocoded Cultural Centers (1)

South Florida Railway Museum

Geocoded Laser Facilities (1)

Dentist - 10 Fairway Drive

Geocoded Religious Centers (2)

Assembly of God New Life

Grace Christian Church

Geocoded Social Service Facilities (4)

Food for the Poor

Florida Counseling & Wellness

Allied Barton Security Services

Barton Protective Services

Railroads in the State of Florida (1)

CSX Mainline

Transportation Disadvantaged Service Provider Areas (2)

-BROWARD

-BREVARD, BROWARD, DUVAL, MANATEE, PINELLAS - TMS OF BREVARD, INC.

500-Foot Buffer:

Community and Fraternal Centers 2015 (1)

Westside Park Recreation Center

Fixed-Guideway Transit Network Stations

Deerfield Beach Station - Tri County Commuter

Geocoded Government Buildings (1)

Broward County - County Court - North Regional Courthouse

Geocoded Religious Centers (3) (2 within 200 feet)

Church of Latter Day Saints

Geocoded Social Service Facilities (7) (4 within 200 feet)

Food for the Poor

Kasky, PA

Pegasus Home Health Care Inc

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

Bus Transit Routes (5) (3 within 500 feet)

Route 50

Route 97

Geocoded Assisted Housing (2)

Lakes at Deerfield

Praxis of Deerfield Beach III

Geocoded Cultural Centers (2) (1 within 500 feet)

Century Plaza Branch Library

Geocoded Government Buildings (3) (1 within 500 feet)

US Post Office - Village

US Post Office - Deerfield Beach Carrier Annex

Geocoded Laser Facilities (2) (1 within 500 feet)

Hillsboro Urgent Care - 1855 W Hillsboro Boulevard

Geocoded Religious Centers (3 within 500 feet)

More than Conquerors Ministries

Temple Beth Israel at Century Village East

Examsoft Worldwide

Geocoded Schools (1)

University of Miami

Geocoded Social Service Facilities (19) (7 within 500 feet)

Ali Florida Fire and Mold

Image

Deerfield Beach City of Public Works Environmental Services

Puffin Learning Academy

Jodi B Green PA

Israel Humanitarian Foundation

Jewish National Fund Broward & Palm Beach Counties

Adventures in Early Learning

Deerfield Beach CBOC

Baroum Nabil A MD PA 100 S Military

Tropical Palms Hand Therapy Incorporated

Van Pelt and Associates Physical Rehabilitation Services

Group Care Facilities (3)

06-51-01204

06-51-02247

06-51-04374

Comments on Effects to Resources:

This project will support increasing social and economic demands on the I-95 corridor due to continued population and employment growth in this area. The project is located entirely within the City of Deerfield Beach, Broward County, Florida in an urbanized area. The proposed improvements involve existing roads and thus would not create any physical barriers between neighborhoods. Right of way impacts, if any, would be limited to partial acquisition of commercial/industrial property. There are no residences adjacent to the project; therefore, relocations are not anticipated. The residences east of I-95 are behind Natura Boulevard. The project would not result in changes to population or demographics.

Community facilities in the project vicinity include two (2) civic centers, two (2) cultural centers, three (3) government buildings, six (6) religious centers, one (1) school, and nineteen (19) social service facilities. Direct impacts would not occur; however, temporary disruptions to access may occur during construction.

The 2013 American Community Survey showed that eight (8) of the ten (10) block groups within 500 feet of the project limits have a lower median income than Broward County. The block groups that intersect the project have median incomes that range from \$3,676 to \$63,640, while Broward County has a median income of \$51,251. The block groups within 500 feet of the project area have a lower percentage of minority residents than the Broward County with 47 percent minority population compared to 59 percent minority population in the County. The project would not involve displacement of any minority and/or low-income residences or businesses and does not include tolling. Effects of construction would be temporary and would occur throughout the corridor. The project is not expected to cause minority or low-income populations to experience disproportionately high or adverse impacts.

The purpose and needs notes that the I-95 segment within the Hillsboro Boulevard interchange area was considered a high crash segment during a 2008 to 2012 study. The proposed improvements to provide increase weaving distances and a grade separation of the CSX Railroad crossing at Hillsboro Boulevard would enhance safety.

The proposed improvements to the interchanges will improve vehicular traffic flow, and provide enhanced access to and from I-95,

including the future managed lanes.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development and Environment study, FDOT District Four will coordinate with the Broward County Metropolitan Planning Organization and the City of Deerfield Beach to conduct public outreach and obtain feedback to ensure that the social and transportation needs of the community are addressed during the interchange improvements. FDOT District Four will inform the community of its construction schedule and access disruptions through signage, websites, and/or other means, as appropriate.

There are households with limited ability to speak English; thus, it is recommended that FDOT District Four further refine the limited English speaking households and possible requirements during the PD&E study as part of any public involvement efforts.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Relocation Potential

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

Improvements proposed to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will occur primarily within the existing right-of-way. FHWA rated effects as None. No relocations are anticipated; therefore, a Summary DOE of **No Involvement** has been assigned to the relocation issue.

Degree of Effect: 0 None assigned 10/23/2015 by Richard Young, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
- 1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
- 1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Geocoded Civic Centers (2)

- Deerfield Beach Country Club
- Hilton Deerfield Beach

Geocoded Cultural Centers (1)

South Florida Railway Museum

Geocoded Laser Facilities (1)

Dentist - 10 Fairway Drive

Geocoded Religious Centers (2)

Assembly of God New Life

Assembly of God New Life
Grace Christian Church

Geocoded Social Service Facilities (4)

Food for the Poor
Florida Counseling & Wellness
Allied Barton Security Services
Barton Protective Services

Comments on Effects to Resources:

The proposed improvements are anticipated to be mostly accommodated within existing right-of-way. Slight acquisitions may be proposed to accommodate improvements to turning movements. The potential right-of-way impacts may affect commercial or industrial properties but would not impact any structures or require relocations. Refinement of the proposed improvements should help to determine if impacts can be avoided or minimized.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses that may be impacted by the interchange improvements. FDOT District Four will determine which businesses, if any, may experience impacts during the PD&E Study.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Farmlands

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

NRCS has determined that there are no prime, unique, or locally important farmland soils within the project area. According to Part 2, Chapter 28, Section 28-2.1 of the FDOT PD&E Manual, transportation projects situated within urbanized areas with no adjacent present or future agricultural lands are excluded from Farmland Assessments. Because the project is located within a designated urban area anticipated to continue to support residential and industrial uses, a Summary DOE of **None** has been assigned to the Farmlands issue.

Degree of Effect: 0 *None* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 10/14/2015 by Rick Allen Robbins, Natural Resources Conservation Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland. In addition, the USDA-NRCS considers any soils with important soil properties and have significant acreages that are used in the production of commodity crops (such as, cotton, citrus, row crops, specialty crops, nuts, etc.) to be considered as Farmlands of Unique Importance or Farmlands of Local Importance. Nationally, there has been a reduction in the overall amount of Prime and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

Comments on Effects to Resources:

There are no Important Farmland soils or agricultural lands within the 200 foot buffer width for this project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Aesthetic Effects

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Due to the urbanized nature of the area and the improvements being located on existing highways, the improvements are unlikely to impact the aesthetic environment. The potential grade separation at Hillsboro Boulevard and CSX Railroad would be a new

structure; however, the area already has bridge structures at the interchange. FHWA rated aesthetic effects as Minimal due to the urbanized nature of the area. The Summary Degree of Effect (DOE) of **Minimal** has been assigned to the Aesthetic Effects issue.

Public outreach will be conducted during the Project Development and Environment (PD&E) phase by FDOT District Four in coordination with the Broward County Metropolitan Planning Organization (MPO) and the City of Deerfield Beach. This will include soliciting opinions on community preferences as they relate to improving the aesthetics of the area.

Degree of Effect: 2 **Minimal** assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Communities have been identified in the report.

Comments on Effects to Resources:

No permanent impacts are expected but any potential impacts should be minimized and mitigated.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 **Minimal** assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%

National Register of Historic Places (1)

Seaboard Air Line Railway Station, Old

Noise Barriers (3)

FDOT District 4 ID 499
FDOT District 4 ID 527
FDOT District 4 ID 574

OGT: Multi-Use Trails Opportunities (1)

Hillsboro Canal Corridor

Public Land (1)

Tivoli Sand Pine Preserve

500-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%

1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
- 1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
- 1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
- 1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
- 1320 MOBILE HOME UNITS / 5 / 0.42%

Florida Site File Historic Standing Structures (1)

SCL Railroad Depot

Geocoded Parks (2)

- Westside Park
- Mayo Howard Park

Noise Barriers (4) (3 within 500 feet)

FDOT District 4 ID 700

Comments on Effects to Resources:

There is a residential area east of Natura Boulevard and south of Hillsboro Boulevard within 500 feet of the improvements. Other features associated with aesthetics include the Tivoli Sand Pine Preserve, two (2) parks, the Seaboard Airline Railway Station, the SCL Railroad Depot, and four (4) noise barriers. Facilities on the west side of I-95 are generally industrial; however, impacts of noise and vibration should be identified.

Due to the urbanized nature of the area and the improvements being located on existing highways, the improvements are unlikely to impact the aesthetic environment. The potential grade separation at Hillsboro Boulevard and CSX Railroad would be a new structure; however, the area already has bridge structures at the interchange. Construction would result in temporary noise, vibration and visual impacts.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses to obtain feedback regarding preferences for the project related to aesthetics.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Economic

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 12/09/2015 by FDOT District 4

Comments:

Broward County is expected to see continuous population and employment growth through 2035. The project is expected to support future growth and accommodate transportation to the employment centers in the project area. The Florida Department of Economic Opportunity assigned a DOE of None to the Economic issue. FHWA noted that there could be temporary effects during construction; however, still assigned a DOE of Enhanced. A Summary DOE of **Enhanced** has been assigned to the Economic issue.

During the PD&E phase, public outreach will be conducted by FDOT District Four in coordination with the Broward County MPO and the City of Deerfield Beach to solicit input from local residents and businesses regarding potential economic enhancements/impacts as a result of the project. Access to businesses and government services will be maintained during construction.

Degree of Effect: 0 None assigned 10/23/2015 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The local government's comprehensive plan: City of Deerfield Beach Comprehensive Plan, January 28, 2014.

Comments on Effects to Resources:

Does the project have potential to attract new development?No.

Does the project have potential to generate jobs? No.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 1 Enhanced assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Temporary effects could include impact on the access to these facilities during construction. Access to these facilities should be maintained during construction period.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 1 Enhanced assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%

1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%

1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%
1400 COMMERCIAL AND SERVICES / 42.1 / 17.26%
1411 SHOPPING CENTERS / 3.2 / 1.31%
1550 OTHER LIGHT INDUSTRY / 13 / 5.32%
1700 INSTITUTIONAL / 6.4 / 2.61%
1820 GOLF COURSE / 3.6 / 1.45%
4130 SAND PINE / 0.5 / 0.21%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 3.6 / 1.48%
5300 RESERVOIRS / 7.5 / 3.07%
8140 ROADS AND HIGHWAYS / 153.4 / 62.81%

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

2010 Census Designated Places (1)

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Railroads in the State of Florida (1)

CSX Mainline

500-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%
1400 COMMERCIAL AND SERVICES / 141.7 / 28.9%
1411 SHOPPING CENTERS / 10.6 / 2.15%
1550 OTHER LIGHT INDUSTRY / 45.3 / 9.25%
1700 INSTITUTIONAL / 21.1 / 4.3%
1820 GOLF COURSE / 12.4 / 2.52%
4130 SAND PINE / 1.9 / 0.38%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 1.54%
5300 RESERVOIRS / 22.6 / 4.61%
8140 ROADS AND HIGHWAYS / 164.8 / 33.61%
1850 PARKS AND ZOOS / 3.5 / 0.72%
1900 OPEN LAND / 0.5 / 0.1%

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
1400 COMMERCIAL AND SERVICES / 364.5 / 30.4%
1411 SHOPPING CENTERS / 12.4 / 1.03%
1550 OTHER LIGHT INDUSTRY / 163.4 / 13.7%
1700 INSTITUTIONAL / 43.1 / 3.6%
1820 GOLF COURSE / 52.9 / 4.41%
4130 SAND PINE / 5.5 / 0.46%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 0.63%
5300 RESERVOIRS / 30.1 / 2.51%
8140 ROADS AND HIGHWAYS / 199.2 / 16.61%
1850 PARKS AND ZOOS / 24.9 / 2.07%
1900 OPEN LAND / 4.4 / 0.37%
1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
1320 MOBILE HOME UNITS / 5 / 0.42%
5120 CHANNELIZED WATERWAYS CANALS / 1.2 / 0.1%

Comments on Effects to Resources:

As discussed in the purpose and need, Broward County is expected to see continuous population and employment growth through

2035. In the project vicinity, there are industrial and commercial developments west of I-95 and near the interchanges. Additionally, the former Deerfield Country Club Golf Course is planned to be converted into an employment center. The project is not anticipated to require any business relocations, although some businesses may experience temporary disruption during the construction phase. The project will support future growth and accommodate transportation to the employment centers in the project area. Thus, while construction may have temporary economic impacts, the overall impact of the project will support economic growth.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses regarding potential economic enhancements/impacts as a result of the project. Access to business should be maintained during construction.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Mobility

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 12/09/2015 by FDOT District 4

Comments:

Construction may cause temporary effects on mobility in the area; however, the overall effect of the project would be to improve mobility. FHWA rated the Mobility issue as *Enhanced*. Therefore, a Summary Degree of Effect of ***Enhanced*** has been assigned to the Mobility issue.

To avoid potential effects, public outreach will be conducted by FDOT District Four in coordination with Broward County MPO and the City of Deerfield Beach during the Project Development and Environmental phase. Public outreach programs will be conducted to solicit community opinions and preferences, identify project-related effects and refine plans to minimize the effects on area mobility.

Degree of Effect: 1 *Enhanced* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

The project will improve mobility in the area. Also, access to bike/peds and to transit should be maintain during construction and should be improved with the project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **1** Enhanced assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

Bus Transit Routes (3)

Route 92

Route 93

Route 48 (Fixed Route from most recent Broward County Transit Map)

Facility Crossings (10)

I-95 Northbound

SR 810 Hillsboro Boulevard

I-95 Southbound

SW 10th Street/SR 869

I-95/SR 9

SCL RR

SCL RR

SW 12th Avenue

SW 12th Avenue

FDOT RCI Bridges (5)

860123

860557

860124

860564

860194

Railroads in the State of Florida (1)

CSX Mainline

Transportation Disadvantaged Service Provider Areas (2)

-BROWARD

-BREVARD, BROWARD, DUVAL, MANATEE, PINELLAS - TMS OF BREVARD, INC.

500-Foot Buffer:

Fixed-Guideway Transit Network Stations

Deerfield Beach Station - Tri County Commuter

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

Bus Transit Routes (5) (3 within 200 feet)

Route 50

Route 97

Comments on Effects to Resources:

Capacity improvements at the I-95/Hillsboro Boulevard and I-95/SW 10th Street interchanges will enhance the mobility of people and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Mobility may be temporarily impacted during construction; however, the overall effect would be enhanced.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses to obtain feedback regarding preferences for the project related to mobility.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Cultural

Section 4(f) Potential

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street.

FHWA rated Section 4(f) issue as minimal because work is limited to the FDOT right-of-way. The Summary DOE assigned to the section 4(f) issue is *Minimal*. If during project development a potential for section 4(f) impacts develops, then FDOT would coordinate with the officials with jurisdiction and FHWA.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Project is expected to be constructed within existing ROW. Any potential impact to any Section 4(f) resources will require coordination with the officials with jurisdiction and FHWA.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

There is one National Register of Historic Places listed site within the project study area, the Seaboard Air Line Railway Station (8BD128). A Cultural Resources Assessment Survey (CRAS) was prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) in August 2013 for the I-95 Express project, ETDM Number 3330, FM Numbers 409359-1-22-01 and 409355-1-22-01. The CRAS did not identify any additional resources eligible for listing in the National Register within the study area for this project.

FHWA assigned a Minimal DOE and Florida Department of State (FDOS) assigned a Moderate DOE. The Seminole Tribe of Florida did not provide review input. FDOS stated that direct impacts to the Seaboard Air Line Railway Station are unlikely but that the resource is vulnerable to indirect effects and should be considered during project development. FDOS also noted that if there is ground disturbance outside of the previous survey then there would be potential to impact unrecorded cultural resources, although it is unlikely that unrecorded resources occur in the project area. A Summary DOE of **Moderate** has been assigned to the historic and archaeological sites issue.

Degree of Effect: **2** *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

A CRAS was prepared in 2013. It identified the resources within the project's limit.

Comments on Effects to Resources:

The analysis must consider the existing resources and should avoid any impacts to it.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **3** *Moderate* assigned 10/01/2015 by Ginny Leigh Jones, FL Department of State

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Once the Area of Potential Effect (APE) is determined for the proposed project, the extent of the 2013 survey should be compared to the current project APE. Those areas not covered in the 2013 survey should be subjected to a comprehensive survey. For those areas that need to be surveyed, all cultural resources, including potential historic districts, within the area of potential effect should be documented and assessed for NRHP eligibility. The resultant survey report shall conform to the specifications set forth in Chapter 1A-46 Florida Administrative Code, FDOT PD&E Manual Part 2, Chapter 12 and will need to be forwarded to this agency (or the appropriate Federal Agency) for review and comment.

Direct Effects

Identified Resources and Level of Importance:

As reported in the PED, there is one resource - the Seaboard Air Line Railway Station (8BD128) recorded near the project area. This resource is listed on the National Register of Historic Places and is near the Hillsboro Boulevard interchange.

It is unlikely there are unrecorded resources in the project area since I-95 was surveyed in 2013 (also noted in the PED). However, depending on the interchange improvements, portions of those areas may need to be surveyed if they fall outside of the 2013 survey boundaries.

Comments on Effects to Resources:

It is unlikely there will be direct impacts to the Seaboard Air Line Railway Station (8BD128). If there is ground disturbance planned for areas not previously surveyed in 2013, there is a potential to impact unrecorded cultural resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

It is unlikely there are unrecorded cultural resources in the project area. Historic aerials demonstrate that historic development near the project area was centered around Dixie Highway - well east of the current project. One exception to this development was the presence of Hillsboro Boulevard and the Seaboard Air Line Railway and Station in the 1958 aerial. However, any historic development near the project area along Hillsboro Boulevard is likely gone, except for the Seaboard Air Line Station.

Comments on Effects to Resources:

The Seaboard Air Line Railway Station is vulnerable to indirect impacts from the interchange improvements. This resource should be considered during the development of the interchange improvement design.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

The following organization(s) were expected to but did not submit a review of the Historic and Archaeological Sites issue for this alternative: Seminole Tribe of Florida

Recreation Areas

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 12/09/2015 by FDOT District 4

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street, south of Hillsboro Boulevard.

The project will be limited to existing right-of-way and therefore minimal impacts are anticipated to these resources. FHWA, SFWMD, USEPA, and FDEP also rated effects to recreation as minimal. NPS identified No Involvement. Therefore, a Summary DOE of **Minimal** has been assigned to the Recreation Areas issue.

Degree of Effect: 2 Minimal assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

No follow-up on Section 4(f) resources needed. However, USEPA would like to review PD&E support documentation for other resources within its purview.

Direct Effects

Identified Resources and Level of Importance:

Section 4(f) of the U.S. Department of Transportation Act of 1966 requires consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. USEPA notes that two public parks and one preserve owned and maintained by the City of Deerfield Beach are located in the project vicinity:

- Mayo Howard Park located at 1131 FAU Research Park Boulevard,
- Westside Park located at 445 SW 2nd Street, and
- Tivoli Sand Pine Preserve located along SW 10th Street between SW Natura Boulevard and SW Martin Luther King Jr Ave.

The Preliminary Environmental Discussion (PED) Comments Report identified the Seaboard Air Line Railway Station as a National Register-eligible resource within the project study area. This information is not correct. The station was added to the National Register in 1990 (<http://www.broward.org/History/NationalRegister/Pages/SeaboardAirLineRailwayStation.aspx>).

Comments on Effects to Resources:

The PED Comments Report indicates that, because work will be limited to within the FDOT right-of-way, impacts on Section 4(f) resources are anticipated to be minimal. If right-of-way impacts on Section 4(f) resources are identified during PD&E, USEPA notes that FDOT will submit the required Section 4(f) Evaluation for a formal Determination of Section 4(f) Applicability.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

The project needs to make sure that access to the resources are not affected during and after construction of the project. Coordination with appropriate officials would be required accordingly.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A N/A / No Involvement assigned 10/19/2015 by Anita Barnett, National Park Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary comments.

Comments on Effects to Resources:

As described in the preliminary comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The City of Deerfield Beach's Tivoli Sand Pine Preserve is located within the 500-ft. project buffer zone.

Comments on Effects to Resources:

The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary and cumulative impacts of any interchange construction on the above public lands.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Natural Wetlands

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

The surrounding area is largely developed, paved, cleared and landscaped, with minimal wetland habitat. Some of the stormwater

swales located within and adjacent to the right-of-way may support hydrophytic vegetation, but are components of the highway drainage system and are constructed man-made features. Potential impacts to wetlands will be assessed during the PD&E study and avoidance and minimization strategies will be implemented during the design process. FHWA, FDEP, USFWS, SFWMD, and USACE assigned a Minimal DOE for the wetlands issue and emphasized the desire for avoidance and minimization strategies. NMFS rated wetlands impacts as None. USEPA rated wetlands as Moderate due to concern about contaminated stormwater runoff impacting the freshwater ponds in the project corridor. Therefore, the Summary DOE for the wetlands issue is **Moderate**.

A new ERP or modification of the existing permit 88-0040-S will be required from the SFWMD. Depending on the extent of impacts jurisdictional palustrine wetlands, the project may qualify for the USACE Regional General Permit-92 or may be verified with a Nationwide Permit.

During the PD&E phase, further coordination will occur with the agencies to determine what documentation will be required to address agency concerns over potential wetland impacts. Necessary measures will be taken to avoid and/or minimize impacts to wetlands to the greatest extent practicable during project design. Should avoidance and/or minimization not be practicable, a Mitigation Plan will be prepared. In addition, existing compensatory mitigation sites within the area of influence will be identified and reviewed. Further, best management practices will be utilized during project construction and all applicable permits (including an ERP) will be obtained in accordance with federal, state, and local laws and regulations.

Degree of Effect: 3 Moderate assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18), and
- Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20).

Direct Effects

Identified Resources and Level of Importance:

According to the National Wetlands Inventory Map (<http://www.fws.gov/wetlands/Data/Mapper.html>), a number of freshwater ponds are located in the project corridor.

Comments on Effects to Resources:

Contaminated stormwater runoff could impact the freshwater ponds in the project corridor.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate stormwater impacts on the freshwater ponds, especially the surface water bodies identified in the City of Deerfield Beach's Future Land Use Map (<http://www.deerfield-beach.com/DocumentCenter/View/555>).

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Wetlands have been identified within 200' from project study area.

Comments on Effects to Resources:

Effects will be study during the PD&E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of permit 88-00040-S would be required.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary comments.

Comments on Effects to Resources:

None expected based on the project description and the preliminary evaluation. At the time of application for an Environmental Resource Permit, wetland and surface water impacts will be evaluated. Impacts to wetlands and surface waters must meet the criteria in Section 10 of Applicant's Handbook Volume I, including Elimination and Reduction as well as mitigation.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The National Wetlands Inventory GIS report indicates that there are 30.7 acres of palustrine wetlands within the 500-ft. project corridor.

Comments on Effects to Resources:

If interchange ramp expansion is proposed, an environmental resource permit (ERP) will be required from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of interchange construction to the greatest extent practicable:

- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.
- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/09/2015 by Randy Turner, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

The project as proposed, may qualify for the Department of the Army's Regional General Permit (RGP) - 92 for impacts to the palustrine wetlands. Depending on the amount of proposed impacts to waters of the U.S., the project maybe verified with a Nationwide Permit.

Direct Effects

Identified Resources and Level of Importance:

A review of the EST revealed the presence of approximately 30.7 acres of palustrine wetlands within a 500 foot buffer; 13.4 palustrine acres within a 200 foot buffer; and, 7.9 acres within a 100 foot buffer. The project area is adjacent to heavily used roadway systems and a surface water canal tributary to the Hillsboro Canal along the west side of the project area. The only jurisdictional waters of the U.S. within the project area appear to be the surface waters of the canal and any adjacent wetlands. The other surface waters appear to be stormwater pond systems. The level of importance would be minimal.

Comments on Effects to Resources:

Upon initial review it appears that any wetland or surface water impacts could be avoided by bridge/culverting the canal waters. The palustrine wetlands are along existing, high-usage roadways which would have already been secondarily impacted so a functional assessment should reveal a lower quality of wetlands along the corridor.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Corps recommends a continued emphasis on wetland avoidance and minimization opportunities throughout the planning process. A wetland survey should be conducted along the project corridor to identify any existing wetlands, and if any are found, a jurisdictional determination should be completed. A review of the Corps RIBITS indicates that all of the proposed project corridor would traverse the geographical service areas of the federally approved FP&L Everglades Phase II Mitigation Bank (MB), which has 462.57 WATER assessed palustrine credits available; Florida Wetlandsbank at Pembroke Pines MB, which has 67.99 Integrated Functional Index assessed palustrine credits available; and Loxahatchee MB, which has 51.99 palustrine forested and 133.13 Modified WRAP palustrine emergent credits available. Any unavoidable wetland impacts should be assessed using the same assessment methodology of the MB (s) that credits may be purchased from.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

A review of the EST revealed the presence of approximately 30.7 acres of palustrine wetlands within a 500 foot buffer; 13.4 palustrine acres within a 200 foot buffer; and, 7.9 acres within a 100 foot buffer. The project area is adjacent to heavily used roadway systems and a surface water canal tributary to the Hillsboro Canal along the west side of the project area. The only jurisdictional waters of the U.S. within the project area appear to be the surface waters of the canal and any adjacent wetlands. The other surface waters appear to be stormwater pond systems. The level of importance would be minimal.

Comments on Effects to Resources:

Given the current project's location amid high-usage roadway systems, there should not be any significant additional effects to the canal or adjacent wetlands.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Corps recommends a continued emphasis on wetland avoidance and minimization opportunities throughout the planning process. A wetland survey should be conducted along the project corridor to identify any existing wetlands, and if any are found, a jurisdictional determination should be completed. A review of the Corps RIBITS indicates that all of the proposed project corridor would traverse the geographical service areas of the federally approved FP&L Everglades Phase II Mitigation Bank (MB), which has 462.57 WATER assessed palustrine credits available; Florida Wetlandsbank at Pembroke Pines MB, which has 67.99 Integrated Functional Index assessed palustrine credits available; and Loxahatchee MB, which has 51.99 palustrine forested and 133.13 Modified WRAP palustrine emergent credits available. Any unavoidable wetland impacts should be assessed using the same assessment methodology of the MB (s) that credits may be purchased from.

Degree of Effect: 0 *None* assigned 09/15/2015 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

None

Comments on Effects to Resources:

None

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on a site inspection on September 9, 2015, the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 09/11/2015 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Wetlands

Comments on Effects to Resources:

Wetlands provide important habitat for fish and wildlife, and are known to occur within the project area. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the

FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

Presently, stormwater drainage and treatment is provided primarily by a series of dry swales and ponds. The project would increase the impervious area. A new ERP or modification of the existing permit 88-0040-S will be required from the SFWMD. FHWA, SFWMD, and FDEP concurred with a Minimal DOE to the issue of water quality and quantity provided that the project is designed to meet water quality and quantity criteria of the ERP Applicant's Handbook Volumes I and II, including Appendix E. USEPA assigned a Moderate rating due to the potential for contaminated stormwater runoff which could impact the Biscayne Sole Source Aquifer and Broward County's 2A Wellfield Protection Area. Therefore, the Summary DOE assigned to the Water Quality and Quantity issue is **Moderate**.

During the PD&E phase, FDOT District Four will conduct a Water Quality Impact Evaluation, in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual. FDOT will coordinate with appropriate agencies for the design of the proposed stormwater system and the requirements for stormwater treatment, evaluating existing stormwater treatment adequacy and details on the future stormwater treatment facilities. All necessary permits will be obtained in accordance with federal, state, and local laws and regulations. The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during construction.

Degree of Effect: 3 *Moderate* assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

The Biscayne aquifer, which underlies Broward County, supplies virtually all of the potable water needs for residents in densely populated Dade, Broward, Palm Beach, and Monroe Counties. The Biscayne aquifer is highly susceptible to contamination due to its high permeability and proximity to the land surface

(http://my.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/2013_1ec_plan.pdf).

A number of freshwater ponds, which are hydraulically connected to the Biscayne Aquifer, are located in the project corridor. Broward County's 2A Wellfield Protection Area may also be located in the project corridor

(http://www.broward.org/PollutionPrevention/Wellfield/Documents/Official11_5_13WPZOrdMap.pdf).

Comments on Effects to Resources:

Contaminated stormwater runoff in the project corridor could impact the Biscayne Aquifer and Broward County's 2A Wellfield Protection Area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts on surface waters and stormwater

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts on surface waters and stormwater management systems in the project vicinity. In addition, we recommend performing a Water Quality Impact Evaluation and coordinating with the South Florida Water Management District and Broward County.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

No additional comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of 88-00040-S will be necessary.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary evaluation.

Comments on Effects to Resources:

SFWMD concurs with the assignment of a minimal degree of effect, provided that the project is designed to meet the stormwater water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II., including appendix E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. Additional runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface will be of concern.

Comments on Effects to Resources:

Every effort should be made to maximize the treatment of stormwater runoff from the proposed interstate improvements project to prevent ground and surface water contamination. Stormwater treatment should be designed to maintain the natural predevelopment hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands. We recommend that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on the future stormwater treatment facilities. Retrofitting of stormwater conveyance systems would help reduce impacts to water quality.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Floodplains

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

A new Environmental Resource Permit (ERP) or modification of the existing permit 88-0040-S will be required from the SFWMD. SFWMD and FHWA rated the floodplains issue as Minimal. USEPA rated the floodplains issue as Moderate because the PED Comments Report indicates that the project will increase the impervious area, which will increase stormwater runoff and affect existing drainage patterns in the surrounding area. Therefore, a Summary DOE of **Moderate** has been assigned to the Floodplain issue.

A Location Hydraulic Report will be prepared during the PD&E phase in accordance with the PD&E Manual, Part 2, Chapter 24.

Degree of Effect: 3 *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Location Hydraulic Report (PD&E Manual, Part 2, Chapter 24), and
- Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20).

Direct Effects

Identified Resources and Level of Importance:

Protection of floodplains and floodways is required by Executive Order 11988, "Floodplain Management", USDOT Order 5650.2, "Floodplain Management and Protection", and Federal-Aid Policy Guide 23 CFR 650A. USEPA notes that portions of the project corridor are located within flood zones AE and AH. Moreover, numerous stormwater management ponds and NPDES stormwater

outfall sites are located in the project corridor (see Broward County Water Resources Fact Book, June 2015, <http://www.awra.org/memberservices/brochures/Broward County Brochure.pdf>).

Comments on Effects to Resources:

According to the Preliminary Environmental Discussion (PED) Comments Report, FDOT anticipates minimal effects on floodplains. However, the PED Comments Report also indicates that the project will increase the impervious area, which will increase stormwater runoff and affect existing drainage patterns in the surrounding area. Information should have been provided about the efficacy of the existing stormwater management infrastructure, whether work will be performed below the 100-year flood elevation, and if the project will involve modification and/or replacement of any existing drainage structures or construction of any new drainage structures. As stated in FDOT's PD&E Manual, Part 2, Chapter 24 Floodplains, "[p]rojects that affect flood heights and flood limits, even minimally, may require further evaluation to support statements that emphasize the insignificance of the modifications."

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends hydraulic and risk evaluations to identify the least environmentally damaging alternative and assess measures to avoid, minimize, and mitigate impacts to the floodplains, to the extent practicable.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: ■ *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

No additional resources.

Comments on Effects to Resources:

No additional comments at this stage of the process.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: ■ *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of 88-00040-S will be necessary.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary evaluation.

Comments on Effects to Resources:

SFWMD concurs with the assignment of a minimal degree of effect, provided that the project is designed to meet the stormwater water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II., including appendix E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Core Foraging Areas (CFA) of two active wood stork nests and the USFWS designated consultation area for snail kites overlap the project area. No areas of designated Critical Habitat are present. FHWA rated the wildlife and habitat issue as *Minimal*. USFWS rated the wildlife and habitat issue as *Minimal* but recommended that FDOT prepare a *Biological Assessment* due to the potential occurrence of the wood stork. FFWCC stated that impacts could be minimal provided that construction avoids the Tivoli Sand Pines Preserve and that water quality best management practices are implemented. FFWCC recommended that FDOT perform plant mapping and wildlife surveys and develop a plan to address potential impacts, including avoidance measures for the Florida burrowing owl. Therefore, the Summary DOE assigned to the Wildlife and Habitat issue is *Minimal*.

During the PD&E phase further coordination will occur with USFWS and FFWCC to determine what documentation will be required to analyze potential wildlife issues. The final design of the project will avoid and/or minimize impacts to wetlands and wildlife and habitat to the greatest extent possible and best management practices will be utilized during project design and construction. Appropriate mitigation will also be provided for unavoidable impacts.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified but it is not clear if a survey has been performed to identify any other species in the study area.

Comments on Effects to Resources:

Effects will be discussed in the PD&E study.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/20/2015 by Jennifer Goff, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed ETDM #14244, Broward County, and provides the following comments related to potential effects to fish and wildlife resources of this Programming Phase project.

The Project Description Summary states that this project involves improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 between these interchanges, a distance of approximately 1.8 miles. The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The Project Description did not address the possible need for new Drainage Retention Areas (DRAs) to handle the stormwater runoff from the expanded roadways.

An assessment of the project area was performed on lands within 500 feet of the proposed alignment to determine potential impacts to habitat which supports listed species and other fish and wildlife resources. Our inventory included a review of aerial and ground-level photography, various wildlife observation and landcover data bases, along with coordination with FWC biologists and other State and Federal agencies. A GIS analysis was performed using the Florida Department of Transportation's (FDOT) Environmental Screening Tool to determine the potential quality and extent of upland and wetland habitat, and other wildlife and fisheries resource information. We have reviewed the Preliminary Environmental Discussion Comments Report provided by the FDOT, and offer the following comments and recommendations.

Our assessment reveals that land use in the project area is almost entirely urban, with 93.99% of the assessment area classified as Transportation and High or Low Intensity Urban. Other landcover types include Open Water (borrow/stormwater lakes and their associated drainage canals at 4.37%, 253.0 acres), Sand Pine Scrub (within the Tivoli Sand Pine Preserve at 1.53%, 7.5 acres), and Rural Lands (0.11%, 0.6 acres). The Tivoli Sand Pine Preserve, a 22.52-acre area adjacent to the north side of SW 10th Street, and which is owned and managed by the City of Deerfield Beach, provides the most valuable wildlife habitat in the project vicinity.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) have the potential to occur in the project area: American alligator (FT based on similarity of appearance to American crocodile), Eastern indigo snake (FT), wood stork (FT), gopher frog (SSC), gopher tortoise (ST), Florida burrowing owl (SSC), least tern (ST), limpkin (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), roseate spoonbill (SSC), and white ibis (SSC). Special attention is warranted regarding burrowing owls, which have been documented in the I-95 interchange infields at nearby Glades Road, and may also utilize similar habitat at the subject interchanges.

The GIS analysis revealed several specific characteristics associated with lands along the project alignment that provide an indication of potential habitat quality or sensitivity that will require field studies to verify the presence or absence of listed wildlife species and the quality of wildlife habitat resources. In the FWC's Integrated Wildlife Habitat Ranking System, 2.9% of the assessment area is ranked Medium, and in the Florida Natural Areas Inventory Critical Lands and Waters Identification Project (CLIP), 1.58% is ranked Priority 2 (high) for Biodiversity Resources. The project is within the Core Foraging Area of four wood stork colonies, and is within the U.S. Fish and Wildlife Service Consultation Area for the Snail Kite.

Comments on Effects to Resources:

Primary wildlife issues associated with this project include: potential adverse impacts to the Tivoli Sand Pine Preserve; potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; and potential for water quality impacts during construction.

Based on the project information provided, we believe that direct and indirect effects of this project could be minimal provided that construction, including any new DRAs, avoids impacting the Tivoli Sand Pine Preserve, and that water quality BMPs are included in the project design.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

We recommend that the Project Development and Environment Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area.

1. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed. Basic guidance for conducting wildlife surveys may be found in the FWC's Florida Wildlife Conservation Guide at:

<http://myfwc.com/conservation/value/fwcg/>.

2. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. Equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. The plan should address specific habitat needs which are biologically compatible with the recovery of the target species. For guidance in this effort, FWC's Draft Species Action Plans should be consulted at: <http://myfwc.com/wildlifehabitats/imperiled/species-action-plans/>.

3. Florida burrowing owls may be present in the project area. Avoidance and minimization measures for burrowing owls include: Avoid construction activities that would impact active burrowing owl nests. Burrowing owl nests are generally considered to be active from February to July. Avoid adverse impacts to burrowing owl nests by establishing a 150-foot radius around the burrow entrance that is staked and roped -off prior to construction. Take care to avoid digging or using heavy equipment near burrow entrances during the breeding season so as not to collapse burrows and potentially trap owls or destroy eggs. If impacts to burrowing owl burrows or nests are unavoidable, please contact the FWC staff identified below to discuss potential permitting alternatives.

4. For impacts to other state-listed species, refer to the FWC's Draft Species Action Plans which include methods for avoidance as well as options and state requirements for minimizing and mitigating potential impacts.

5. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat functional values for listed species which are lost as a result of the project. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email brian.barnett@MyFWC.com to initiate the process for further overall coordination on this project.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 10/09/2015 by Steve Bohl, FL Department of Agriculture and Consumer Services

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 09/11/2015 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and fish and wildlife resources

Comments on Effects to Resources:

Federally-listed species -

The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of Federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources. Based on review of our GIS database, the Service notes that the following Federally listed species may occur in or near the project area.

Wood Stork

The project corridor is located in the Core Foraging Areas (CFA)(within 18.6 miles) of two active nesting colonies of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology" (Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can be found at: <http://www.fws.gov/verobeach/ListedSpecies/Birds.html> .

The Service believes that the following federally listed species have the potential to occur in or near the project site include the wood stork. Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment process.

Fish and Wildlife Resources -

Wetlands provide important habitat for fish and wildlife, and are known to occur within the project area. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

The proposed project corridor is not located within a Coastal Barrier Resource Area, and Essential Fish Habitat is not located within the project limits. Consequently, FHWA, SFWMD, and NMFS anticipated that the effect to coastal and marine will be None; therefore, the Summary DOE is **None**.

Degree of Effect: 0 None assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 09/15/2015 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

None

Comments on Effects to Resources:

None

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on a site inspection on September 9, 2015, the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS

that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Physical

Noise

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Residential, commercial/retail, public, institutional and industrial properties were identified in the immediate vicinity of the project corridor. Residential land uses are located east of I-95 to the south of Hillsboro Boulevard. While temporary construction noise impacts may have short-term effects on adjacent properties, overall noise and vibration-related impacts as a result of the project are anticipated to be minimal. FHWA also anticipates noise effects to be minimal. Therefore, a Summary DOE of *Minimal* has been assigned to the Noise issue.

During the PD&E phase, a Noise Study Report will be prepared if warranted by the proposed project alternatives in accordance with Part 2, Chapter 17 of the FDOT PD&E Manual.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified within the project area.

Comments on Effects to Resources:

A study will be prepared to assess potential noise impacts to the existing resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

The proposed project corridor is located within the Southeast Florida Airshed, which is a USEPA-designated Air Quality Maintenance Attainment Area for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. However, as a former ozone nonattainment area, the project is subject to the maintenance plan approved by USEPA as a revision to Florida's State Implementation Plan (75 FR 29671, May 27, 2010). Therefore, if federal funds are used for the proposed improvements then a transportation conformity demonstration will be necessary to show that estimated pollutant/precursor emissions associated with the project are within the emissions limits specified in the SIP.

USEPA and FHWA rated air quality issue as Minimal due to impacts during construction, but no permanent effects to air quality are anticipated. Minor air quality enhancement can be expected because the improvements are likely to reduce idling traffic conditions. A Summary DOE of *Minimal* has been assigned to the Air Quality issue.

An Air Quality Technical Memorandum will be prepared as a support document to the PD&E Study in accordance with Part 2, Chapter 16 of the FDOT PD&E Manual.

Degree of Effect: 2 *Minimal* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 16, Section 16-3)

Direct Effects

Identified Resources and Level of Importance:

The project area is in attainment with the Clean Air Act's National Ambient Air Quality Standards (NAAQS). However, as a former ozone nonattainment area, the project is subject to the maintenance plan approved by USEPA as a revision to Florida's State Implementation Plan (75 FR 29671, May 27, 2010). As noted in Part 2, Chapter 16 of FDOT's PD&E Manual, current information on the NAAQS compliance status of areas in Florida is available in USEPA's "Green Book" (<http://www.epa.gov/oar/oaqps/greenbk/>).

Comments on Effects to Resources:

FDOT's PD&E Manual further states that USEPA promulgated transportation conformity regulations in 1993 to implement NAAQS requirements. These regulations (40 CFR Part 93) apply to transportation (highway) plans, programs, and projects within nonattainment or maintenance areas that are developed, funded, or approved under U.S.C. Title 23 or the Federal Transit Act.

Therefore, if federal funds are used for the proposed improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps), then a transportation conformity demonstration will be necessary to show that estimated pollutant/precursor emissions associated with the project are within the emissions limits specified in the SIP.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Clean Air Act requirements doesn't apply to this project.

Comments on Effects to Resources:

Not additional comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Contamination

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

A review of Geographic Information System data revealed the presence of dry cleaning sites, hazardous waste facilities, petroleum contamination monitoring sites, storage tank contamination monitoring sites, and Resource Conservation and Recovery Act regulated facilities within a quarter mile of the project, and two solid waste, CERCLA, and/or superfund sites within one mile of the project.

Due to the potential presence or documented presence of contamination associated with these sites and a Moderate degree of effect being assigned by SFWMD, USEPA, FDEP, and FHWA, a Summary DOE of **Moderate** has been assigned to the contamination issue.

A CSER will be prepared in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual, including site specific surveys to assess existing or historical contamination sources and their proximity to construction activities. Contamination (including any required permits) will be evaluated during project development in accordance with federal, state and local laws and regulations. SFWMD noted that if dewatering is necessary, a water use permit may be required. A general permit under rule 40E-2.061(2), FAC may be applicable.

Degree of Effect: 3 *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

Direct Effects

Identified Resources and Level of Importance:

USEPA notes that more than 90 potentially contaminated facilities and sites are present within a quarter-mile of the project corridor, and two solid waste, RCRA, and/or CERCLA sites were identified within one mile of the project corridor.

Comments on Effects to Resources:

USEPA supports the contamination assessment process described in FDOT's PD&E Manual (Part 2, Chapter 22). Each property within the project corridor (including the buffer areas) needs to be evaluated for the presence of potential contamination within the right-of-way or contamination that may have migrated onto or under the right-of-way.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends avoidance of, or minimized impacts to, these facilities/sites to the extent practicable.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Contamination facilities have been identified in the report.

Comments on Effects to Resources:

Contamination areas should be avoided, minimized and mitigated as possible.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

If dewatering is necessary, a water use permit may be required. A general permit is available in rule 40E-2.061(2), FAC. Projects that do not qualify for the general permit will require a water use permit from SFWMD.

Direct Effects

Identified Resources and Level of Importance:

Staff concurs with the preliminary evaluation.

Comments on Effects to Resources:

Construction methodologies, such as dewatering, must be designed to minimize movement of contaminant plumes.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

GIS data indicates that there are 2 FDEP dry cleaning program sites, 17 hazardous waste facilities, 10 petroleum contamination monitoring sites, 29 storage tank contamination monitoring sites and 13 RCRA regulated facilities within the 500-ft. project buffer zone.

Comments on Effects to Resources:

A Contamination Screening Evaluation (similar to Phase I and Phase II Audits) may need to be conducted along the project rights-of-way considering the proximity to the listed petroleum and hazardous material handling facilities. The Contamination Screening Evaluation should outline specific procedures that would be followed by the applicant in the event drums, wastes, tanks or potentially contaminated soils are encountered during construction. Special attention should be made in the screening evaluation to historical land uses (such as solid waste disposal) that may have an affect on the proposed project, including stormwater retention and treatment areas.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Infrastructure

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 12/09/2015 by FDOT District 4

Comments:

The project corridor includes the SW 10th Street Bridge over I-95 and the I-95 over Hillsboro Boulevard Bridge. CSX railroad mainline runs within 2,000 feet east of the project limits and the Amtrak Deerfield Beach terminal is located southwest of the Hillsboro Boulevard interchange. The proposed project will utilize existing right-of-way. FHWA stated that effects to existing infrastructure would be minimal to none. A Summary DOE of **Minimal** has been assigned to the Infrastructure issue.

Degree of Effect: 2 Minimal assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

No additional resources besides the one mentioned in the report.

Comments on Effects to Resources:

Minimal to no effects are expected on the existing infrastructure.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Navigation

Project Effects

Coordinator Summary Degree of Effect: N/A N/A / No Involvement assigned 12/09/2015 by FDOT District 4

Comments:

USACE and FHWA assigned a DOE of None because no navigable waters were identified in the project area. Therefore, a Summary DOE of **No Involvement** has been assigned to the Navigation issue.

Degree of Effect: N/A N/A / No Involvement assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A N/A / No Involvement assigned 10/09/2015 by Randy Turner, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

Permit required for any discharge of fill material into waters of the U.S. Section 404 of the Clean Water Act.

Direct Effects

Identified Resources and Level of Importance:

No navigable waters were identified within the project area. The project will have no impacts to navigation.

Comments on Effects to Resources:

N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:

N/A

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

N/A

Comments on Effects to Resources:

N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:

N/A

ETAT Reviews and Coordinator Summary: Special Designations

Special Designations

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 12/21/2015 by FDOT District 4

Comments:

There are no Outstanding Florida Waters, Aquatic Preserves, Scenic Highways/Byways, or Wild and Scenic Rivers reported within the project area. The FHWA and SFWMD rated the DOE as None. However, USEPA noted the Biscayne Bay sole source aquifer, sensitive karst area, and wellfield protection area as special designations which must be protected from groundwater contamination. USEPA assigned a Moderate DOE. Therefore, a Summary DOE of **Moderate** has been assigned to the issue Special Designations. As recommended by USEPA, FDOT will seek to avoid, minimize, and mitigate impacts of stormwater runoff in the project vicinity.

Degree of Effect: **3** *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

Sole Source Aquifer - In southeast Florida, the Biscayne aquifer supplies virtually all of the potable water needs for over 4 million residents in densely populated Dade, Broward, Palm Beach, and Monroe Counties. Water from the Biscayne aquifer is also transported by pipeline to the Florida Keys. USEPA has designated the Biscayne aquifer as a Sole Source Aquifer.

Sensitive Karst Area - The Biscayne aquifer is mainly composed of two lithostratigraphic formations dominated by eogenetic karst limestone: the Miami Limestone and the Fort Thompson Formation (<http://www.sciencedirect.com/science/article/pii/S0022169414003229>). The Biscayne aquifer is highly susceptible to contamination due to its high permeability and proximity to the land surface (http://my.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/2013_lec_plan.pdf).

Wellfield Protection Area - Because the Biscayne aquifer is extremely porous and the water table is very close to the surface, pollutants discharged onto the ground or that occur in surface waters can contaminate the groundwater and be drawn into wells that supply drinking water. To reduce the risk of pollution and the cost of public water treatment, Broward County and local municipalities oversee protection programs in areas around networks of drinking water wells (<http://www.broward.org/POLLUTIONPREVENTION/WELLFIELD/Pages/ProtectionProgram.aspx>).

Comments on Effects to Resources:

Contaminated stormwater runoff in the project corridor could impact the surrounding surface water bodies, which are hydraulically connected to the Biscayne Aquifer. Contaminated stormwater runoff could also impact Broward County's 2A Wellfield Protection Area (http://www.broward.org/PollutionPrevention/Wellfield/Documents/Official11_5_13WPZOrdMap.pdf).

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts of stormwater runoff in the project vicinity. In addition, we recommend performing a Water Quality Impact Evaluation and coordinating with the South Florida Water Management District and Broward County.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **0** *None* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Eliminated Alternatives

There are no eliminated alternatives for this project.

DRAFT

Project Scope

General Project Recommendations

There are no general project recommendations identified for this project in the EST.

Anticipated Permits

Permit	Type	Conditions	Assigned By	Date
Environmental Resource Permit	Water		FDOT District 4	12/10/15
Regional General Use Permit	USACE		FDOT District 4	12/10/15

Anticipated Technical Studies

Technical Study Name	Type	Conditions	Assigned By	Date
Public Involvement Plan	ENVIRONMENTAL		FDOT District 4	12/10/2015
Noise Study Report	ENVIRONMENTAL		FDOT District 4	12/10/2015
Contamination Screening Evaluation Report	ENVIRONMENTAL		FDOT District 4	12/10/2015
Air Quality Technical Memorandum	Other		FDOT District 4	12/10/2015
Wetlands Technical Memorandum	ENVIRONMENTAL		FDOT District 4	12/10/2015
Preliminary Engineering Report	ENGINEERING		FDOT District 4	12/10/2015
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL		FDOT District 4	12/10/2015
Cultural Resource Assessment Survey	ENVIRONMENTAL		FDOT District 4	12/10/2015

Class of Action

Class of Action Determination

Class of Action	Other Actions	Lead Agency	Cooperating Agencies	Participating Agencies
Type 2 Categorical Exclusion	Endangered Species Assessment Consultation	Federal Highway Administration	No Cooperating Agencies have been identified.	No Participating Agencies have been identified.

Class of Action Signatures

Name	Agency	Review Status	Date	ETDM Role
Anson Sonnett	FDOT District 4	ACCEPTED	06/15/2016	FDOT ETDM Coordinator
Luis D Lopez	Federal Highway Administration	ACCEPTED	07/11/2016	Lead Agency ETAT Member

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Appendices

Preliminary Environmental Discussion Comments

Social and Economic

Land Use Changes

Project Level

Comments:

The existing land uses in the vicinity of the project corridor were identified using the Environmental Screening Tool (EST). This project lies within the City of Deerfield Beach. West of I-95 within the project limits, the dominant land uses are industrial and commercial, including a Publix distribution center and several hotels at the interchanges. Additional land uses west of I-95 include City of Deerfield government offices located west of the CSX railroad and south of Hillsboro Boulevard, and a residential development southwest of SW 10th Street and the railroad. East of I-95 and south of Hillsboro Boulevard, land use is mainly single and multi-family residential with a mixture of commercial development at the interchanges. North of Hillsboro Boulevard, land use is mainly commercial along I-95 and Hillsboro Boulevard. Set behind the commercial development is the former Deerfield Country Club Golf Course.

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The anticipated employment center has been branded as the Hillsboro Technology Center.

The SR-9/I-95 from SW 10th Street to Hillsboro Boulevard Project is included in the FDOT Work Program for fiscal years 2016 to 2020, where Project Development and Environment (PD&E) is scheduled for fiscal year 2016 and Preliminary Engineering is scheduled for fiscal year 2019. The Broward County Metropolitan Planning Organization (MPO) 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

This project is designed to complement the I-95 Express project, and will improve connectivity to the area. This project is not anticipated to affect the land use patterns in the project corridor or the expected levels of development activity therein. Overall impacts to surrounding land uses are anticipated to be Minimal.

Social

Project Level

Comments:

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicts that the population will grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs are predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent.

The project is located within Deerfield Beach, Broward County, Florida. The 2013 American Community Survey showed that 8 of the 10 block groups within 200 feet of the project limits have a lower median income than Broward County. The block groups that intersect the project have median incomes that range from \$3,676 to \$63,640, while Broward County has a median income of \$51,251. The project area has a slightly lower percentage of minority residents than the county (55 percent compared to 59 percent).

Based on US DOT Policy Guidance, the FDOT has identified four factors to help determine if Limited English Proficiency (LEP) services would be required as listed in the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.1.2.2. Based on review of these factors, LEP services will need to be considered as part of the public involvement plan. Refinement of the LEP population totals and requirements will be further evaluated in the PD&E study as part of the public involvement efforts.

Several social services and recreational assets exist in the vicinity of the project corridor. These include:

- South Florida Railway Museum (1300 West Hillsboro Boulevard)
- Assembly of God New Life (1015 W Newport Center Drive #105)
- Grace Christian Church (W Hillsboro Boulevard)
- Westside Park Recreation Center (445 SW 2nd Street)
- Broward County Fire Department and Rescue Station 111 (232 Goolsby Boulevard)
- Broward County North Regional County Court (1600 W Hillsboro Boulevard)
- U.S. Post Office - Deerfield Beach Annex (155 Goolsby Boulevard)

While access to these facilities may be temporarily impacted during construction, long-term impacts are not anticipated and all work is proposed within the existing ROW.

The proposed project is anticipated to improve traffic flow and safety to the surrounding communities and businesses. Construction may result in temporary noise impacts for residents within the vicinity of the project and may require temporary modifications to access local services. However, impacts will be temporary in nature and overall impacts on the social environment and community cohesion are anticipated to be Minimal.

This project will be developed in accordance with the Civil Rights Act of 1964 and 1968, along with Title VI of the Civil Rights Act, Executive Order 12898 (Environmental Justice), which ensures that minority and/or low-income households are neither disproportionately adversely impacted by major transportation projects, nor denied reasonable access to them by excessive costs or physical barriers.

Relocation Potential

Project Level

Comments:

Improvements proposed to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will occur primarily within the existing ROW. Partial right-of-way impacts may occur along Hillsboro Boulevard west of I-95 and at the northeast quadrant of the I-95/SW 10th Street Interchange; however, the potential impacts would not affect residential properties and relocations are not anticipated. It is anticipated that the effect to relocation potential will be None.

Farmlands

Project Level

Comments:

Farmlands were not reported within a 200-foot buffer of the interchange. Based on a review of existing land use in the vicinity of the project corridor, there are no agricultural parcels in the project area. The project occurs entirely within the Miami Urbanized Area. According to Part 2, Chapter 28, Section 28-2.1 of the FDOT PD&E Manual, transportation projects situated entirely within urbanized areas are excluded from Farmland Assessments. Additionally, work will be limited to within the existing ROW. Overall impacts to farmland are anticipated to be None.

Aesthetic Effects

Project Level

Comments:

The proposed improvements to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will utilize existing ROW; however, it would likely result in minor visual impacts to surrounding communities. Construction activities would result in a temporary disturbance of the existing visual quality and character of the surrounding environment. However, this disturbance is temporary and should not pose a long term visual impact for local areas where construction would occur. Outdoor advertising signs exist within a quarter mile of the project corridor. Impacts to permitted signs and their viewsheds will need to be addressed as plans develop. Overall impacts to visual quality and surrounding aesthetics are anticipated to be Minimal.

Economic

Project Level

Comments:

The project corridor is surrounded by residential, commercial/retail, public, institutional and industrial uses. The proposed construction will mainly utilize existing ROW along I-95 and at the interchanges. Access to adjacent businesses could temporarily be affected during construction.

The proposed project will improve traffic flow in the region, which will result in improvements to mobility and reduce congestion in a busy residential, commercial and industrial area that includes a variety of retail establishments, businesses and services both east and west of I-95. Therefore, it is anticipated that the overall project effect to the economy of the area would be Enhanced.

Mobility

Project Level

Comments:

Overall the proposed project will improve safety and overall flow of traffic along I-95 from SW 10th Street to Hillsboro Boulevard and at the interchanges. SW 10th Street provides east-west connection to US-1, Florida's Turnpike, and US 441. Hillsboro Boulevard provides east-west connection with US-1 and major arterials to the west. SW 10th Street west of I-95, Hillsboro Boulevard from I-95 to Goolsby Boulevard, and I-95 are part of the state's Strategic Intermodal System (SIS), and provide high-priority transportation facilities and services of statewide and interregional significance. The I-95 corridor is the primary interstate facility along the Atlantic

Seaboard, and a major north-south transportation spine of the Atlantic Commerce Corridor, with access to all three South Florida Ports. The I-95 corridor is a major connector between Palm Beach, Broward and Miami-Dade Counties, and is designated as a major evacuation route.

Although no designated Broward County Transit (BCT) Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange. There are no bicycle lanes in the project area; however, SW 10th Street west of Military Trail is equipped with bicycle lanes.

The proposed project will improve the flow of traffic to and from I-95 along Hillsboro Boulevard and SW 10th Street, and on I-95 between the interchanges, to support the region's growth, and improve mobility and safety. It is anticipated that the effect to mobility will be Enhanced.

Cultural

Section 4(f) Potential

Project Level

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street.

While not anticipated, if there is potential for ROW impacts to one of the parks, or temporary impacts to access, then a Determination of Applicability will be prepared.

Historic and archeological sites may be considered Section 4(f) resources; historic and archeological resources within the vicinity of the project area are listed in the Historic and Archeological Sites section. Because work is limited to within FDOT ROW, impacts to Section 4(f) resources are anticipated to be Minimal.

Historic and Archaeological Sites

Project Level

Comments:

The EST review identified one National Register-eligible resource within the project study area, the Seaboard Air Line Railway Station (BD00128).

A Cultural Resources Assessment Survey (CRAS) was prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) in August 2013 for the I-95 Express project, ETDM Number 3330, FM Numbers 409359-1-22-01 and 409355-1-22-01. The CRAS did not identify any additional resources eligible for listing in the National Register within the study area for this project. It is anticipated that impacts to Historical and Archaeological Sites will be Minimal.

Recreation Areas

Project Level

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street, south of Hillsboro Boulevard.

Tivoli Sand Pine Park is a conservation area with a public walkway accessed by SW 10th Street at SW 6th Avenue. Mayo Howard is a neighborhood park accessed by FAU Research Park Boulevard. Westside Park is a neighborhood park with mixed use recreation. Because work will be limited to the FDOT ROW, it is anticipated that the effect to recreation areas will be Minimal.

Natural

Wetlands

Project Level

Comments:

The surrounding area is largely developed, paved, cleared and landscaped, with minimal wetland habitat. The EST showed 13.39 acres of palustrine wetlands within 200 feet of the project. Some of the stormwater swales located within and adjacent to the ROW may support hydrophytic vegetation, but are components of the highway drainage system and are constructed man-made features. Potential impacts to wetlands will be assessed during the PD&E study. Avoidance and minimization strategies will be implemented during the design process. Wetland impacts are anticipated to be Minimal.

Water Quality and Quantity

Project Level

Comments:

Presently, stormwater drainage and treatment is provided primarily by a series of dry swales and ponds. The proposed project lies approximately 1,000 feet south of the Hillsboro Canal; however, impacts are not anticipated. The project would increase the impervious area. The project is located within a verified impaired water basin, the ICWW Above Pompano. The increased pollutant loading will be analyzed during the Water Quality Impact Evaluation (WQIE) as per Part 2, Chapter 20 of the PD&E manual. The WQIE will comply with the goals of the Clean Water Act. The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during construction. It is anticipated that the effect to water quality and quantity will be Minimal.

Floodplains

Project Level

Comments:

According to the FEMA Flood Insurance Rate Map data, portions of the project are located within flood zones AE and AH. Flood zones AE and AHE are defined as areas within the 100-year floodplain, with average floodplain elevations of seven feet and one to three feet, respectively. Properties within Flood Zone Areas AE and AH have a one percent annual chance of flooding.

The project is not anticipated to affect existing flood heights or floodplain limits. It is anticipated that the effect on floodplains will be Minimal.

Wildlife and Habitat

Project Level

Comments:

Core Foraging Areas (CFA) of two active wood stork nests and the US Fish and Wildlife Service (FWS) designated consultation area for snail kites overlap the project area. No areas of designated Critical Habitat are present. The proposed project corridor will utilize existing ROW; therefore, minimal involvement regarding wildlife and habitat resources is anticipated due to the limited amount of suitable habitat along the project corridor. It is anticipated that the effect to wildlife and habitat will be Minimal.

Coastal and Marine

Project Level

Comments:

The proposed project corridor is not located within a Coastal Barrier Resource Area, and Essential Fish Habitat is not located within the project limits. Consequently, it is anticipated that the effect to coastal and marine will be None.

Physical

Noise

Project Level

Comments:

Residential, commercial/retail, public, institutional and industrial properties were identified in the immediate vicinity of the project corridor. Residential land uses are located east of I-95 to the south of Hillsboro Boulevard. Natura Boulevard is in between the project and residential areas. The EST identified one constructed noise wall at I-95 north at Hillsboro Boulevard and two recommended noise walls located near SW 10th Street and Military Trail. While temporary construction noise impacts may have short-term effects on adjacent properties, overall noise and vibration-related impacts as a result of the project are anticipated to be Minimal. A Noise Study Report will be prepared to determine potential noise effects.

Air Quality

Project Level

Comments:

The proposed project corridor is located within the Southeast Florida Airshed, which is a US Environmental Protection Agency designated Air Quality Maintenance Attainment Area for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air conformity requirements do not apply to this project at this time. However, an Air Quality Technical Memorandum will be prepared as a support document to the PD&E Study. Air quality effects from the proposed project are anticipated to be Minimal.

Contamination

Project Level

Comments:

A review of the EST identified a number of potentially contaminated facilities within a quarter mile of the project corridor including 20 petroleum contamination monitoring sites, 2 dry cleaners, 29 other storage tank contamination monitoring, and 40 hazardous waste facilities, such as automotive and pharmacy retail stores. (Note that some facilities are included in multiple databases.)

The following solid waste, CERCLA and superfund sites were identified within one mile of the project corridor:

- City of Deerfield Beach Transfer Station - 360 SW 4th Street - FDEP ID# 95123
- Deerfield Beach Old City Landfill - Natura Avenue - FDEP ID# 53368

The proposed project corridor will utilize existing ROW. Moderate involvement regarding sources of contamination may occur given the proximity of these facilities to the project. A Contamination Screening Evaluation Report (CSER) prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) for the I-95 Express project indicated that asbestos containing materials (ACMs) testing was conducted for bridges along this corridor, and that ACM were not detected. A CSER will be prepared to determine any contamination impacts. Avoidance, minimization, and mitigation strategies as well as any necessary special construction provisions will be developed based on the CSER, to avoid impacts and to ensure human health and safety if avoidance is not possible. It is anticipated that the impact to contamination will be Moderate.

Infrastructure

Project Level

Comments:

The project corridor includes the SW 10th Street Bridge over I-95 and the I-95 over Hillsboro Boulevard Bridge. The project is also considering a new ramp from SW 10th Street to I-95 which includes a bridge over a retention pond and a grade separation at Hillsboro Boulevard and the railroad. CSX railroad mainline runs within 2,000 feet east of the project limits and the Amtrak Deerfield Beach terminal is located southwest of the Hillsboro Boulevard interchange. The proposed project will utilize existing ROW. It is anticipated that overall impacts to infrastructure will be Minimal.

Navigation

Project Level

Comments:

The proposed project corridor does not intersect any navigable waters. It is anticipated that the effect to Navigation will be No Involvement.

Special Designations

Special Designations: Outstanding Florida Waters

Project Level

Comments:

The proposed project corridor is not located within an Outstanding Florida Water. It is anticipated that the effect to Outstanding Florida Waters will be No Involvement.

Special Designations: Aquatic Preserves

Project Level

Comments:

The proposed project corridor is not located within an Aquatic Preserve. It is anticipated that the effect to Aquatic Preserves will be No Involvement.

Special Designations: Scenic Highways

Project Level

Comments:

The proposed project corridor is not designated a Scenic Highway. It is anticipated that the effect to Scenic Highways will be No Involvement.

Special Designations: Wild and Scenic Rivers

Project Level

Comments:

The proposed project corridor is not located in the vicinity of a Wild and Scenic River. It is anticipated that the effect to Wild and Scenic Rivers will be No Involvement.

Advance Notification Comments

There are no Advance Notification (AN) Package comments for this project.

GIS Analyses

Since there are so many GIS Analyses available for Project #14244 - I-95 from SW 10th St to Hillsboro Blvd, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fl-a-etat.org/est/index.jsp?tpID=14244&startPageName=GIS%20Analysis%20Results>

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 07/11/2016 by Anson Sonnett Milestone** is selected. GIS Analyses snapshots have been taken for Project #14244 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

There are no attachments for this project.

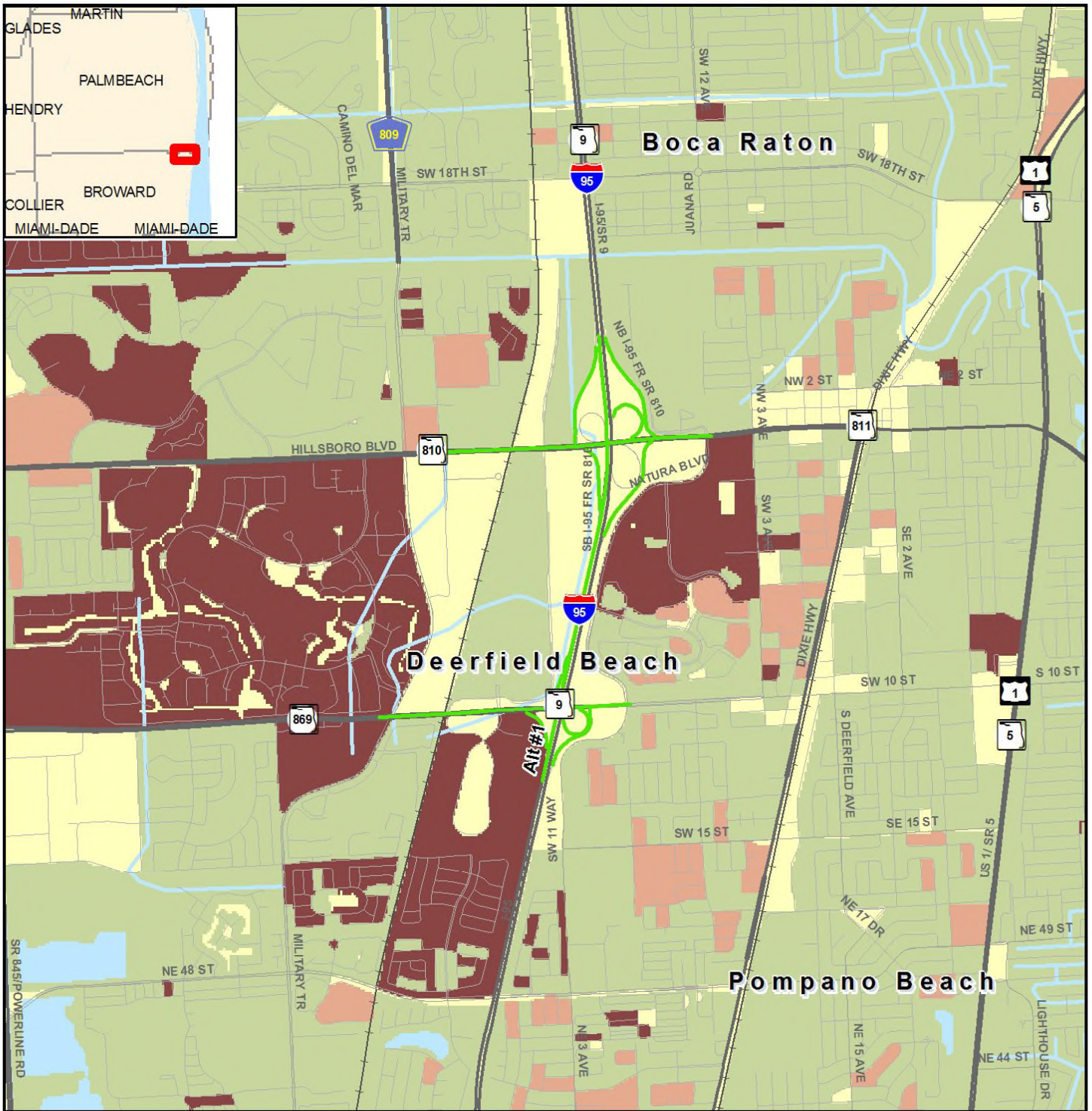
Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	

0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

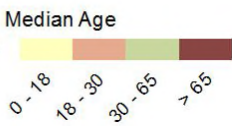
Project-Level Hardcopy Maps

14244 I-95 from SW 10th St to Hillsboro Blvd



Age Distribution Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail



Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



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14244 I-95 from SW 10th St to Hillsboro Blvd



Coastal and Marine Map

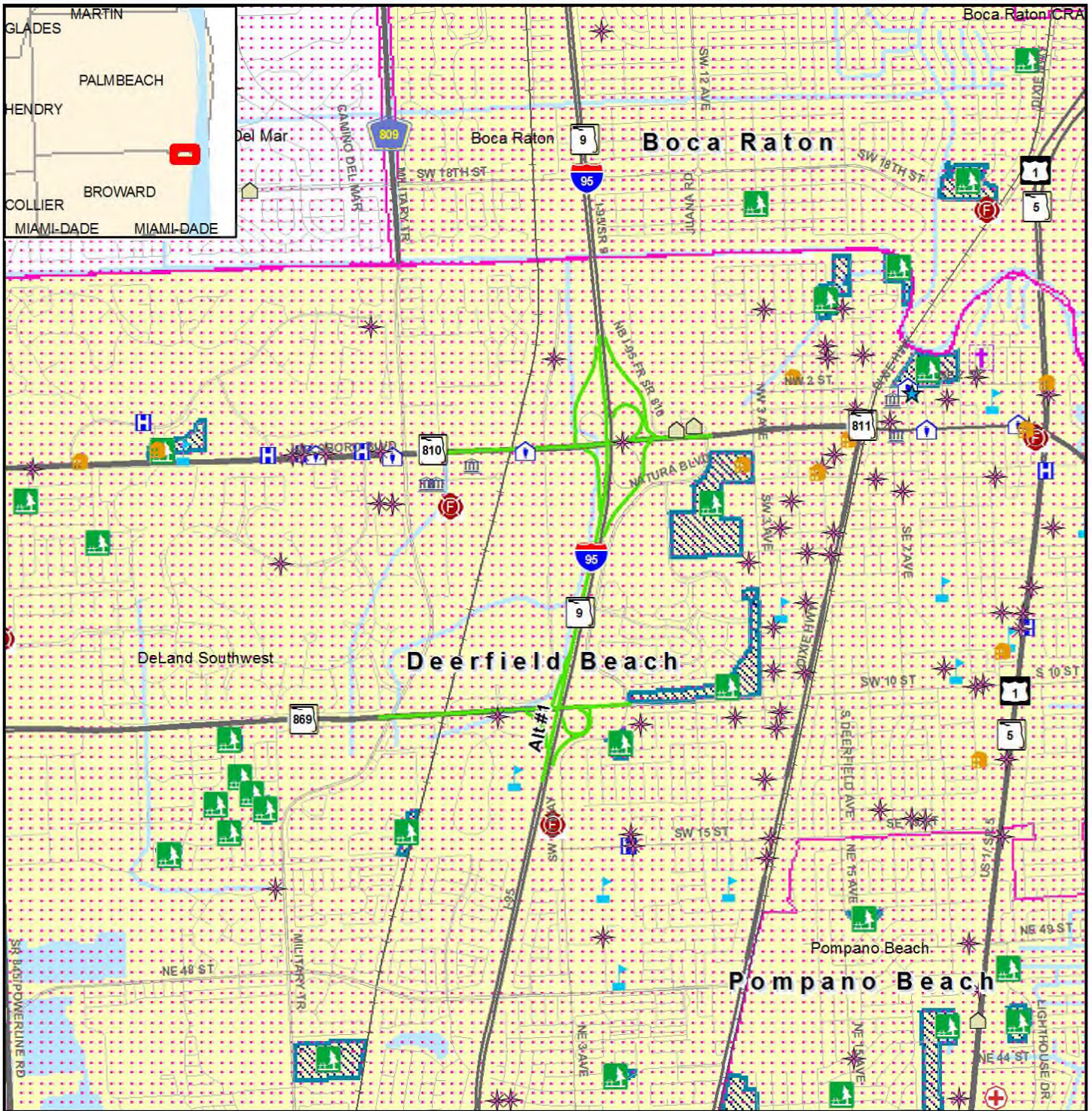
ETDM Alternative	Swamp or Marsh	Coastal Barrier Resource Area	Non-vegetated Wetland
ETDM Alternative Terminus	Exposed Rocky Platform	Continuous Seagrass	Vegetated Non-forested Wetland
City Limits	Sand Beach	Discontinuous Seagrass	Wetland Forested Mixed
Navigable Water Way	Gravel Beach/Riprap	Aquatic Preserve	Wetland Coniferous Forest
	Exposed Tidal Flat		Wetland Hardwood Forest
	Sheltered Tidal Flat		
	Mixed Sand And Gravel Beach		
	Sheltered Rock/Seawall/Vegetated		
	Exposed Vertical Rocky Shore/Seawall		

Data Sources: NAVTEQ; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts

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14244 I-95 from SW 10th St to Hillsboro Blvd



Community Services Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Government
- Civic Center
- Cemetery
- Social Service
- Community Center
- Law Enforcement
- Place of Worship
- Cultural Center
- Fire Station
- Health Care
- School
- Park
- Recreational Trail
- Community Boundary
- Conservation or Recreation Area

Data Sources:
 US Geological Survey; FL Department of Transportation; NAVTEQ; FL Property Appraisers; FL Natural Areas Inventory

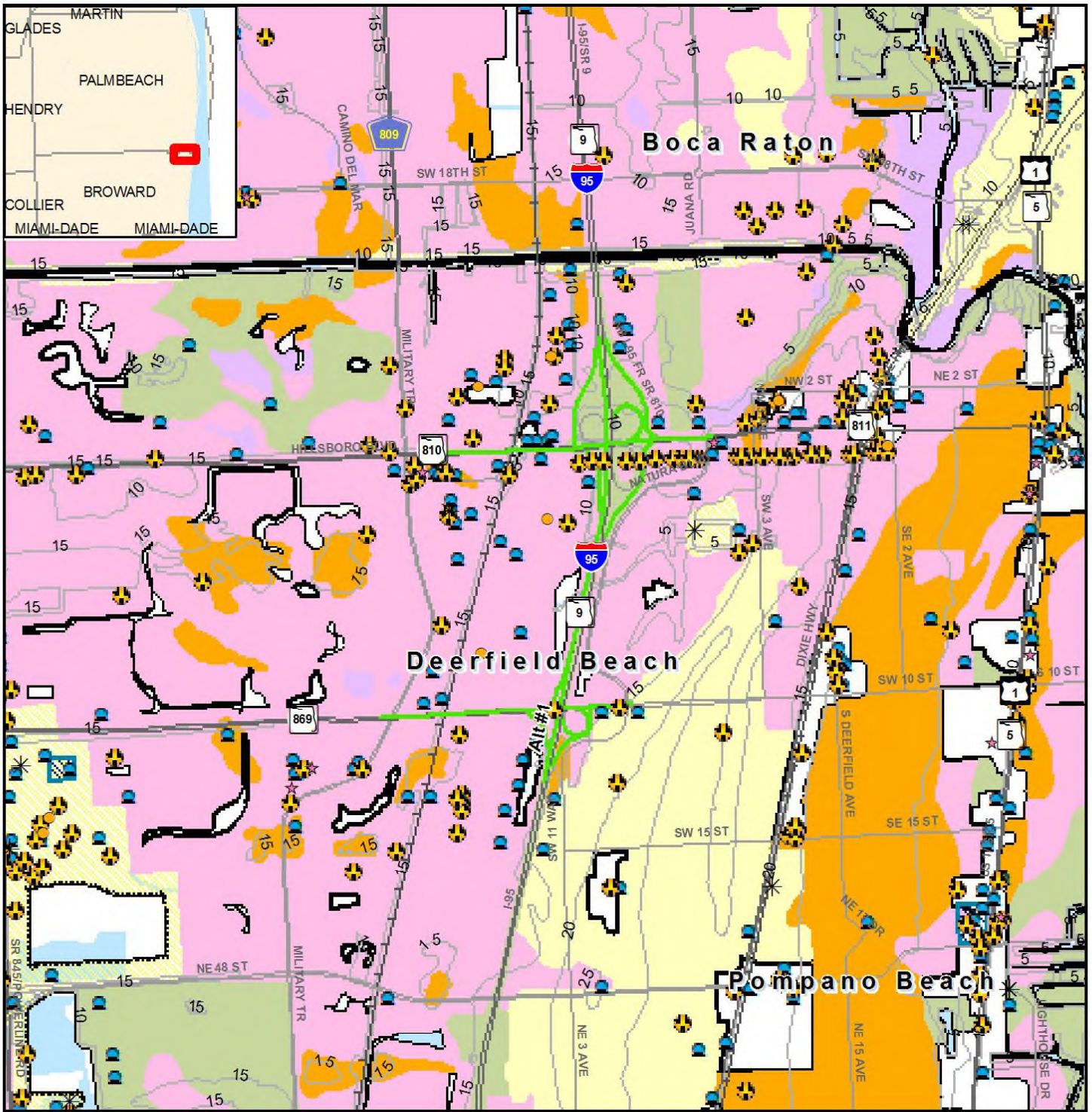


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14244 I-95 from SW 10th St to Hillsboro Blvd

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. 143004-1-22-01



Contamination Map

ETDM Alternative	Hazardous Material Site	5 FT Contour	Somewhat Poorly Drained
ETDM Alternative Terminus	Power Plant	NPL Remediation Site	Poorly Drained
Major Road	Superfund Site	Brownfield Area	Very Poorly Drained
Local Road or Trail	Nuclear Site	Excessively Drained	Unclassified
Toxic Release Inventory	FDEP Tanks	Well Drained	
Dry Cleaning Facility		Somewhat Excessively Drained	
Solid Waste Facility		Moderately Well Drained	

Data Sources: NAVTEQ; US Geological Survey; FL Department of Transportation; FL Department of Environmental Protection; FL Water Management Districts; US Environmental Protection Agency; Natural Resource Conservation Service

0 0.15 0.3 0.6 Miles

etdm Environmental Screening Tool

Centennial FDOT 1915 * 2015

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14244 I-95 from SW 10th St to Hillsboro Blvd



Farmlands Map

- ETDM Alternative
- Cropland/Pastureland
- Prime Farmland Soils
- ETDM Alternative Terminus
- Nurseries/Vineyards
- Specialty Farms
- Major Road
- Local Road or Trail
- City Limits
- Tree Crops
- Rural Open Lands

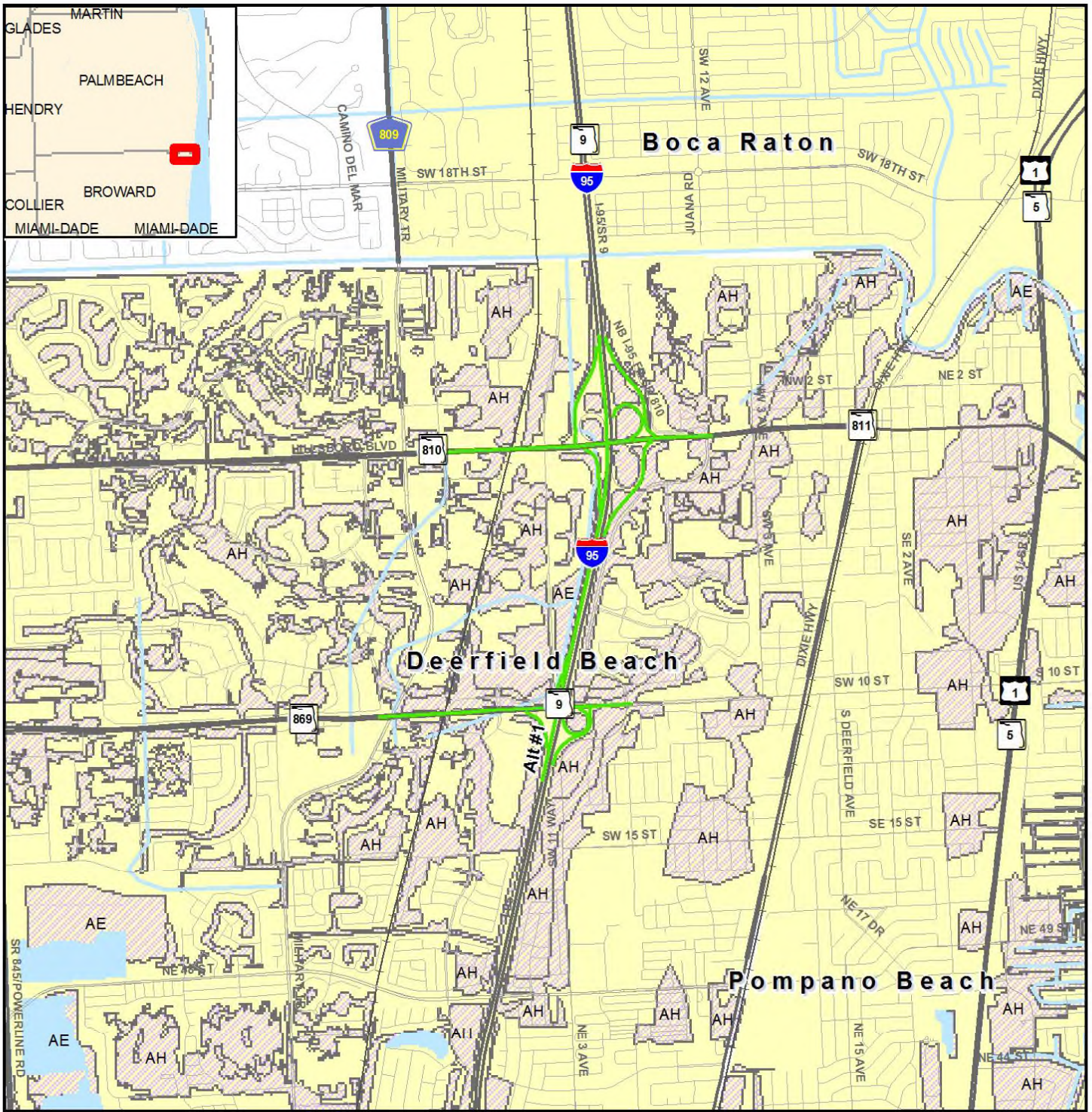
Data Sources:
 NAVTEQ
 Florida Water Management Districts
 US Geological Survey
 Natural Resources Conservation Services



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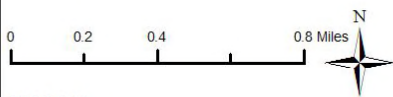
14244 I-95 from SW 10th St to Hillsboro Blvd



Floodplains Map

- ETDM Alternative
- Special Flood Hazard Area
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits

Data Sources:
 NAVTEQ
 US Geological Survey
 Federal Emergency Management Agency



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14244 I-95 from SW 10th St to Hillsboro Blvd



Historic Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Year Built
 - Pre 1970
 - Post 1980
 - 1970 - 1979
 - Parcels w/ no values
- ★ Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Department of State,
 Bureau of Archaeological Research

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

0 0.15 0.3 0.6 Miles

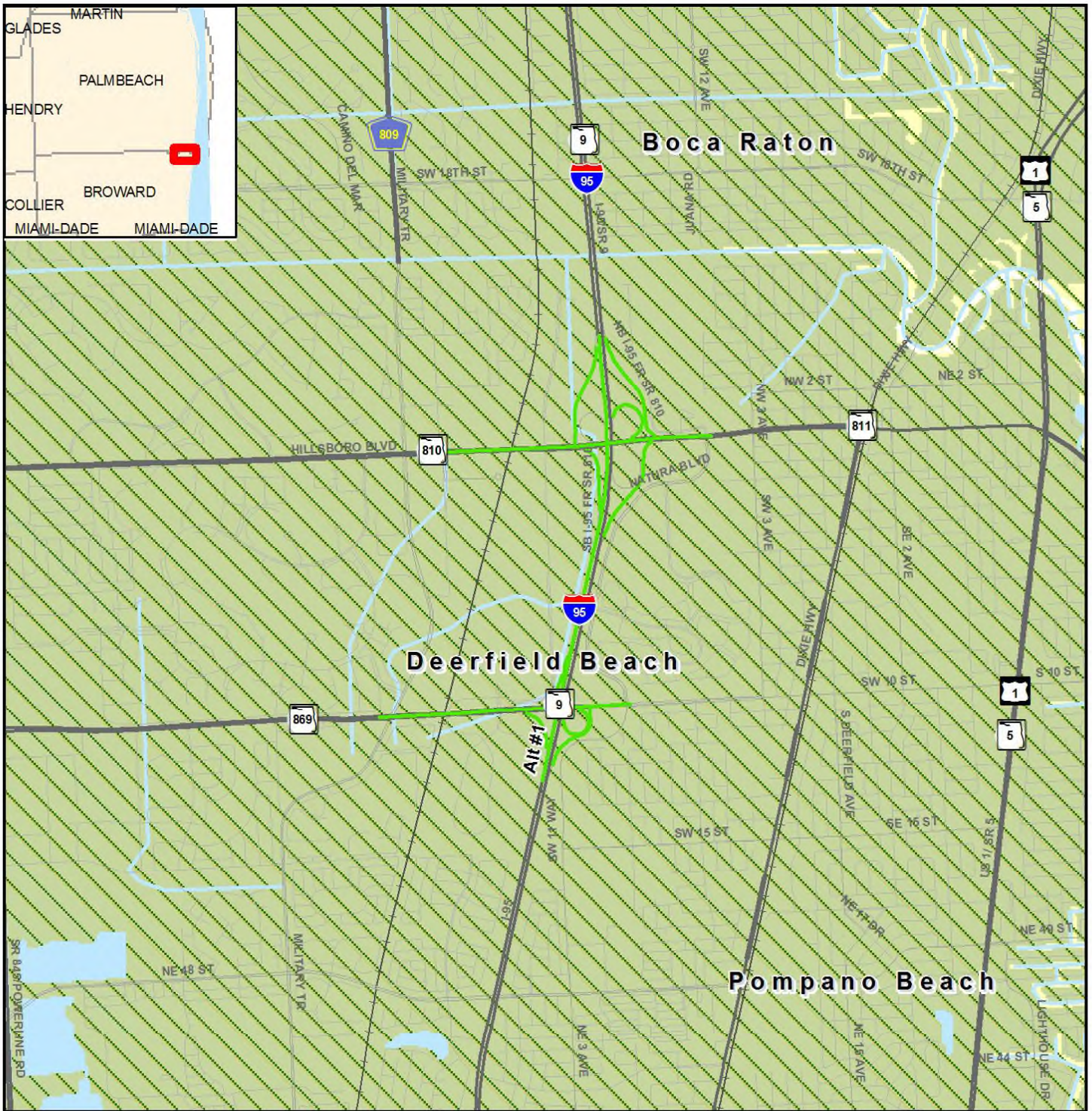


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14244 I-95 from SW 10th St to Hillsboro Blvd



Hydrogeology Map

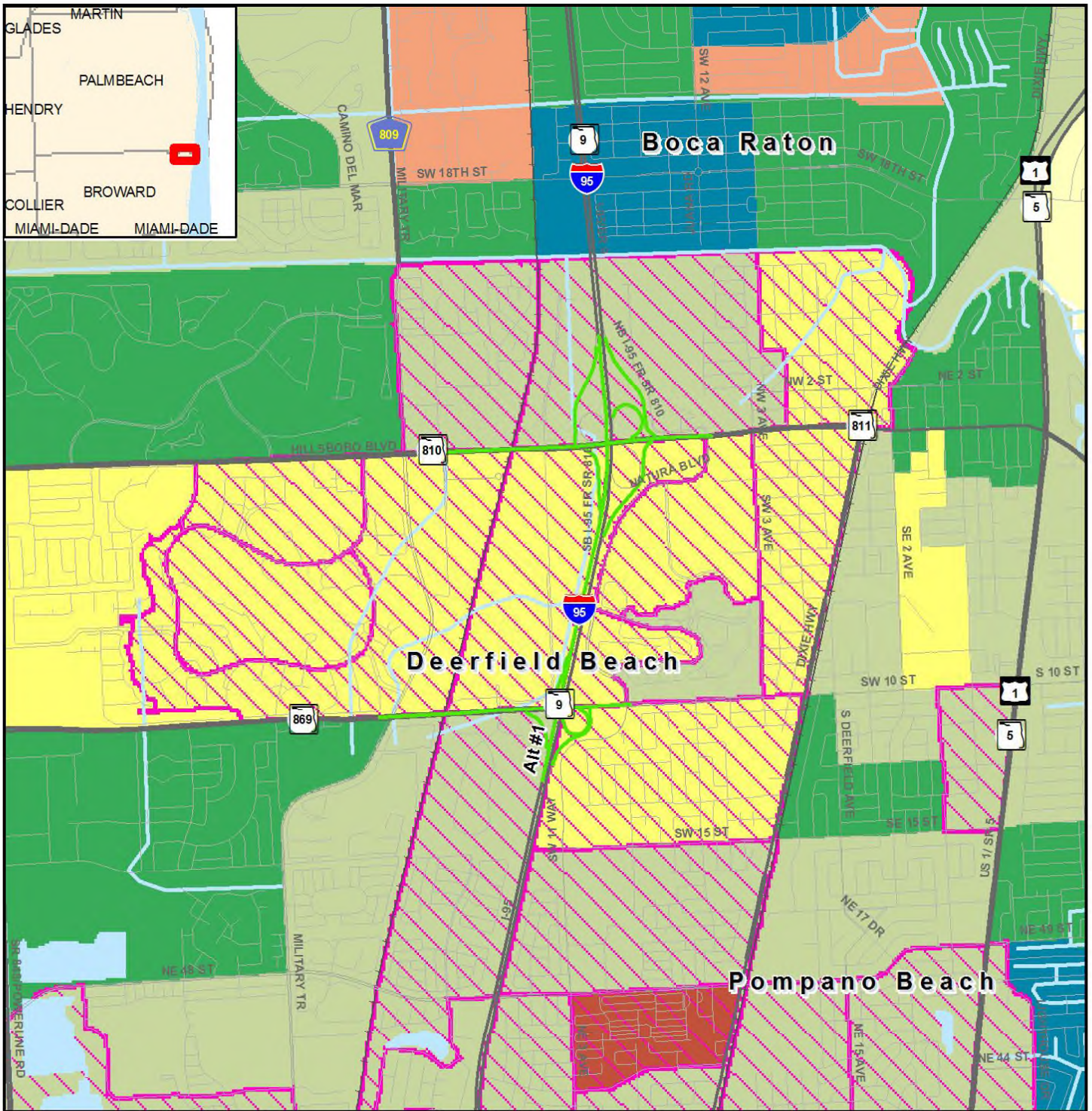
<ul style="list-style-type: none"> ■ ETDM Alternative ● ETDM Alternative Terminus — Major Road — Local Road or Trail ■ City Limits 	<p>Recharge Areas of the Floridan Aquifer</p> <ul style="list-style-type: none"> □ Discharge 1 to 5 □ Discharge > 5 □ Discharge < 1 □ Recharge 1 to 10 □ Recharge > 10 □ Recharge < 1 	<p>Surface Geology</p> <ul style="list-style-type: none"> ■ Eocene ■ Miocene ■ Miocene/Pliocene ■ Oligocene ■ Oligocene/Miocene ■ Pleistocene ■ Holocene ■ Pleistocene/Holocene ■ Pliocene ■ Pliocene/Pleistocene
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Data Sources: NAVTEQ; US Geological Survey
 Florida Department of Transportation
 South West Florida Water Management District
 Florida Geological Survey

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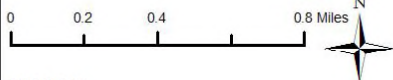
14244 I-95 from SW 10th St to Hillsboro Blvd



Income Map

- ETDM Alternative
 - ETDM Alternative Terminus
 - Major Road
 - Local Road or Trail
 - > 20% Below Poverty
- | Median Household Income | |
|-------------------------|------------------|
| | 0 - 10,000 |
| | 10,001 - 29,999 |
| | 30,000 - 49,999 |
| | 50,000 - 79,999 |
| | 80,000 - 125,000 |
| | > 125,000 |

Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



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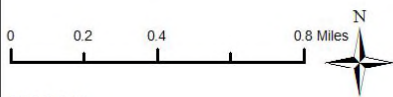
14244 I-95 from SW 10th St to Hillsboro Blvd



Integrated Wildlife Model Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

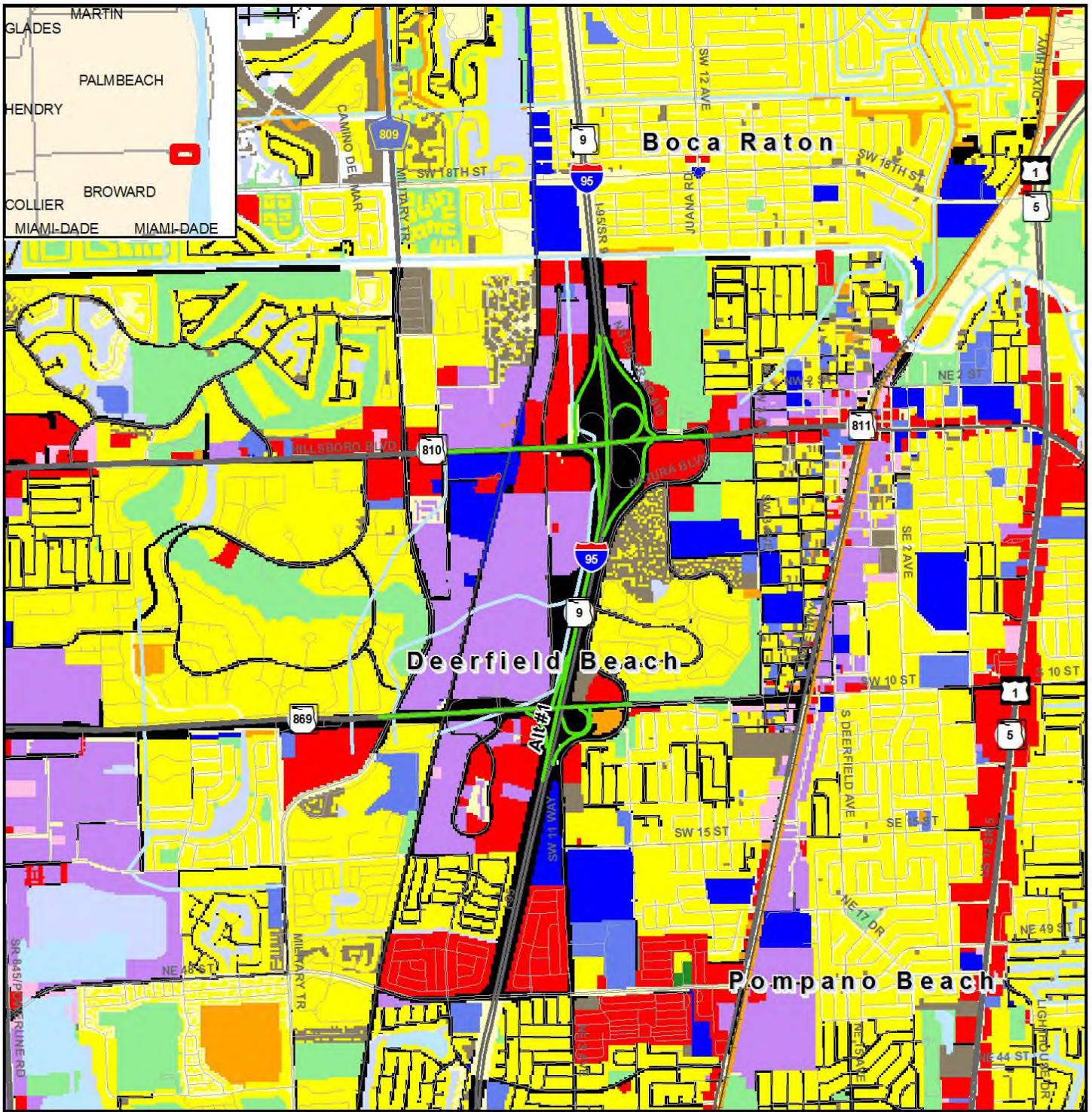
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission



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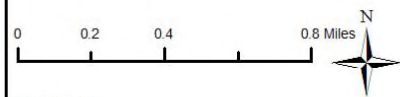
14244 I-95 from SW 10th St to Hillsboro Blvd



Land Use Map

- | | | | |
|--|---|--|---|
| ■ ETDM Alternative | ■ Agricultural | ■ Other | ■ Retail/Office |
| ● ETDM Alternative Terminus | ■ Industrial | ■ Public | ■ Vacant (Residential) |
| — Major Road | ■ Institutional | ■ Right-of-Way | ■ Vacant (Nonresidential) |
| — Local Road or Trail | ■ Mining | ■ Recreational | ■ Water |
| | ■ Open (Not Agricultural) | ■ Residential | □ No Data |

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Revenue
 Florida Department of Transportation
 Florida County Property Appraiser Offices

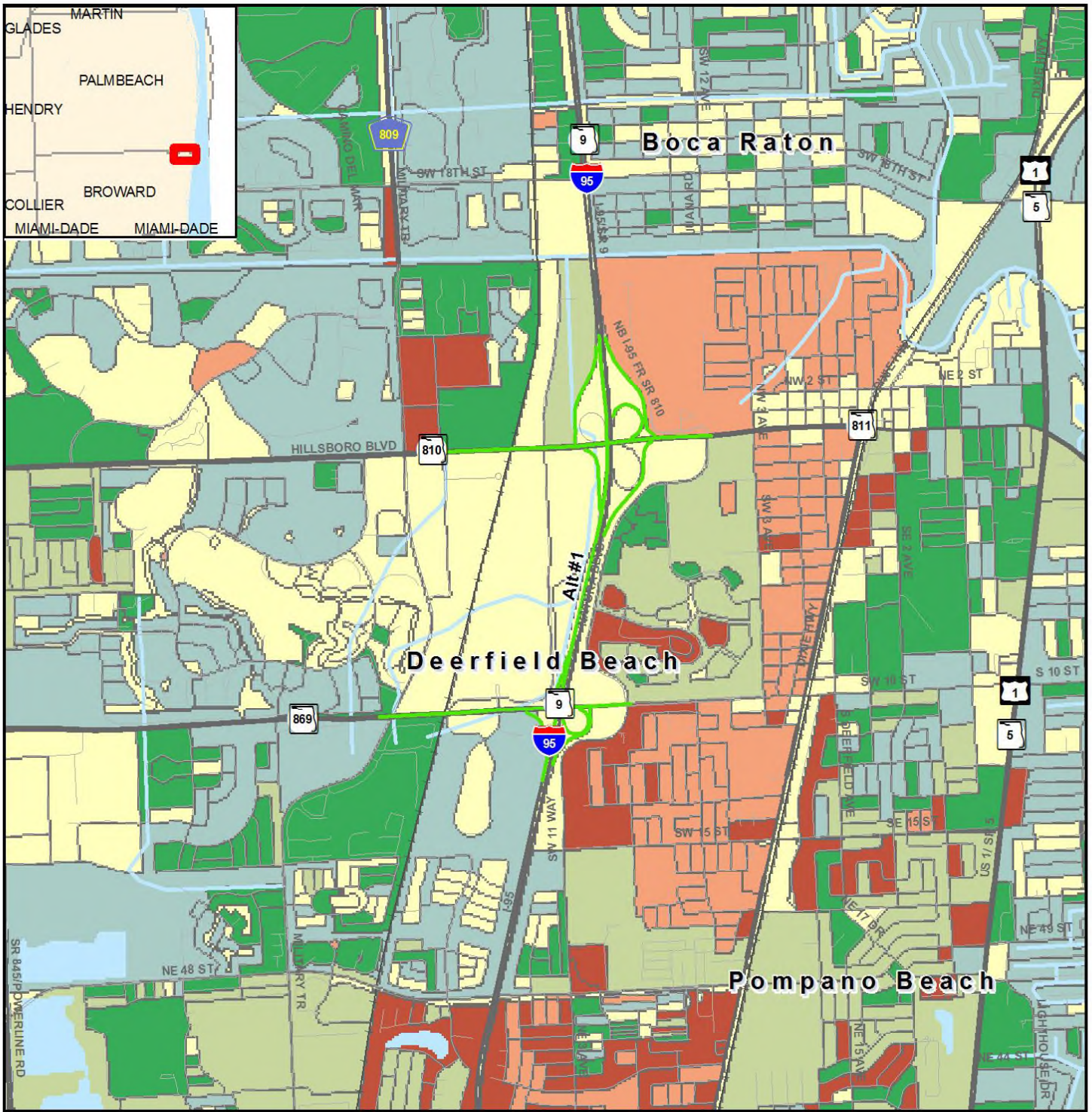


8/30/2015

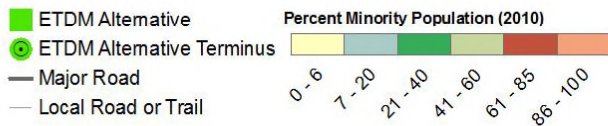


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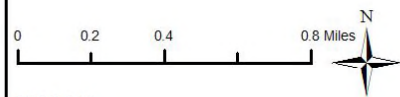
14244 I-95 from SW 10th St to Hillsboro Blvd



Minority Population Map



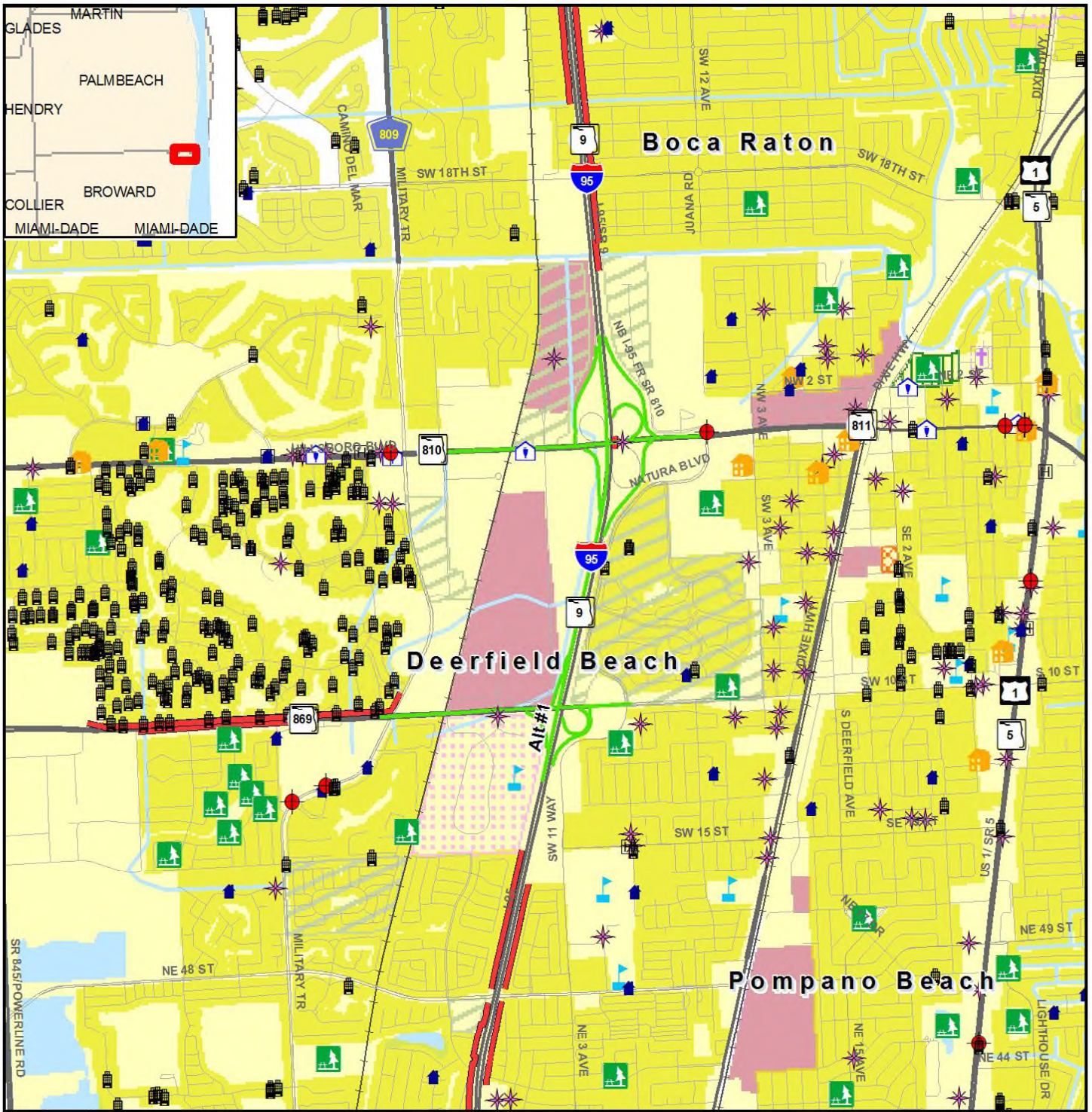
Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



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14244 I-95 from SW 10th St to Hillsboro Blvd



Noise Map

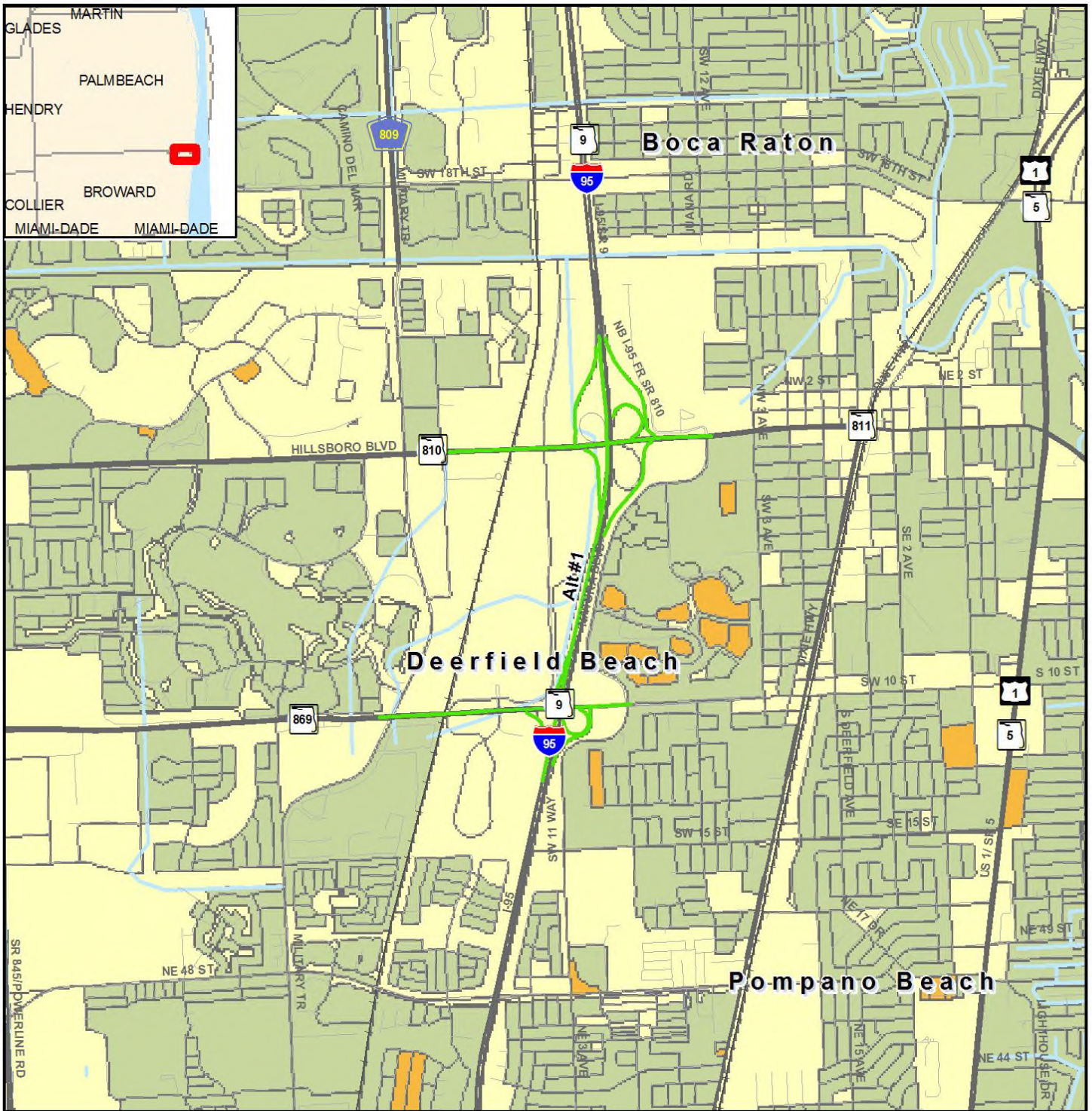
ETDM Alternative	Condo Owners Associations	Cultural Center	Historic Cemetery	Industrial
ETDM Alternative Terminus	Hospitals	Health Care	Planned Unit Developments	Residential
City Limits	Laser On-site	Park	Wildlife Refuges	HUD Renewal
Noise Barriers	Group Care Facilities	National Parks	National Park Projects	Nat'l Estuarine Reserves
Existing Trails	Cemetery	Marine Sanctuaries	Military Installations	Enterprise Zones
	Community Center	School		DRI

Data Sources: GeoPlan Center, US Geological Survey, US Census Bureau, HUD, Florida DOT, US Fish and Wildlife, National Park Service, NOAA, National Estuarine Research, Enterprise Florida

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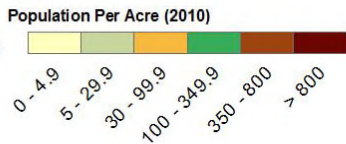
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14244 I-95 from SW 10th St to Hillsboro Blvd



Population Density Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail



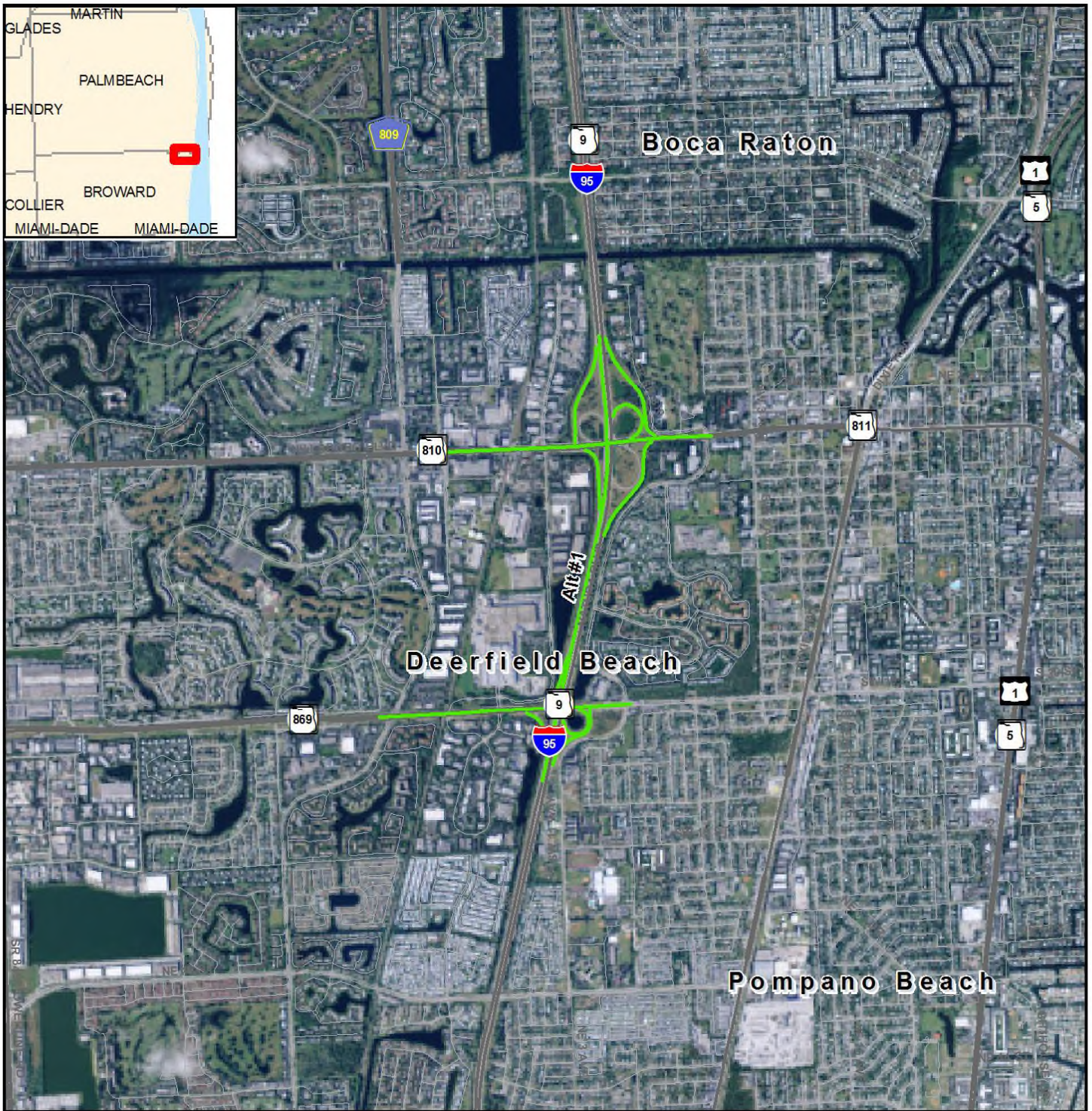
Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



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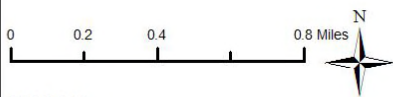
14244 I-95 from SW 10th St to Hillsboro Blvd



Project Aerial Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

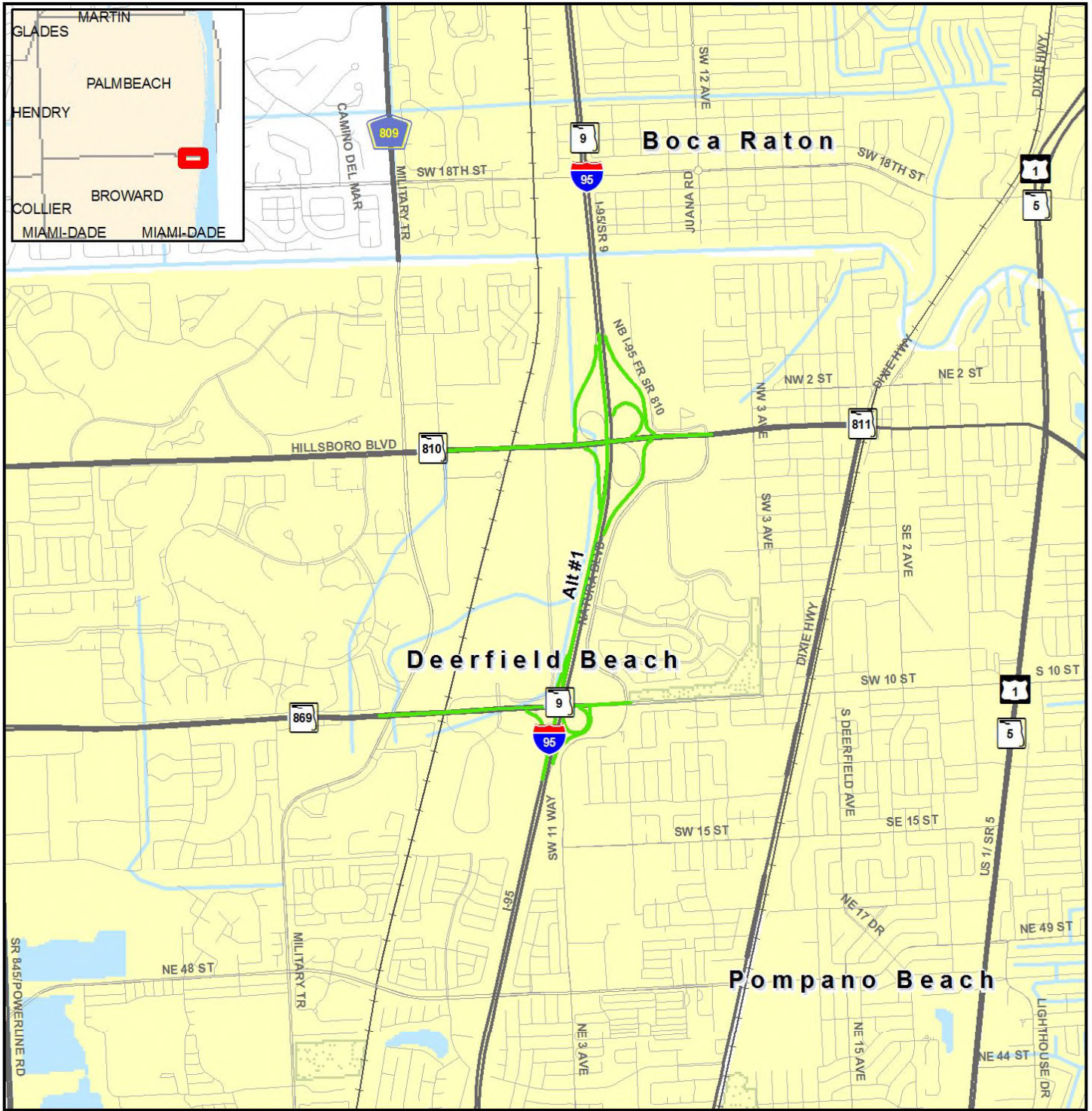
Data Sources:
 Highways - NAVTEQ
 Digital Orthophotograph - ArcGIS Online



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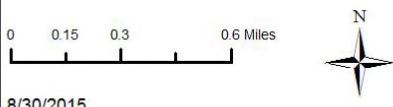
14244 I-95 from SW 10th St to Hillsboro Blvd



Project Base Map

- ETDM Alternative
- ETDM Alternative Terminus
- Local Road or Trail
- Major Road
- City Limits
- Managed Conservation Lands

Data Sources:
 NAVTEQ
 US Geological Survey
 US Census Bureau
 County Property Appraisers
 Florida Natural Areas Inventory



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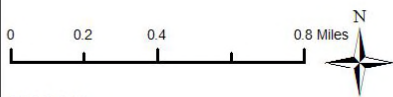
14244 I-95 from SW 10th St to Hillsboro Blvd



Recreational Areas Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Conservation or Recreation Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Natural Areas Inventory



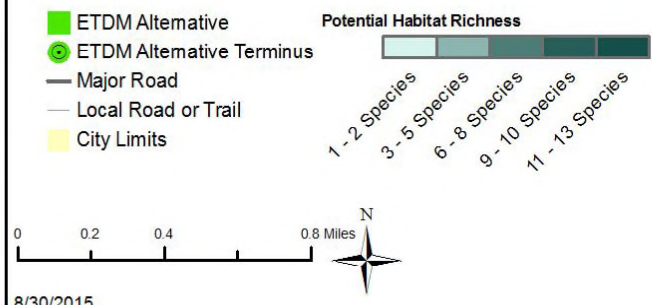
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14244 I-95 from SW 10th St to Hillsboro Blvd



Species Potential Map



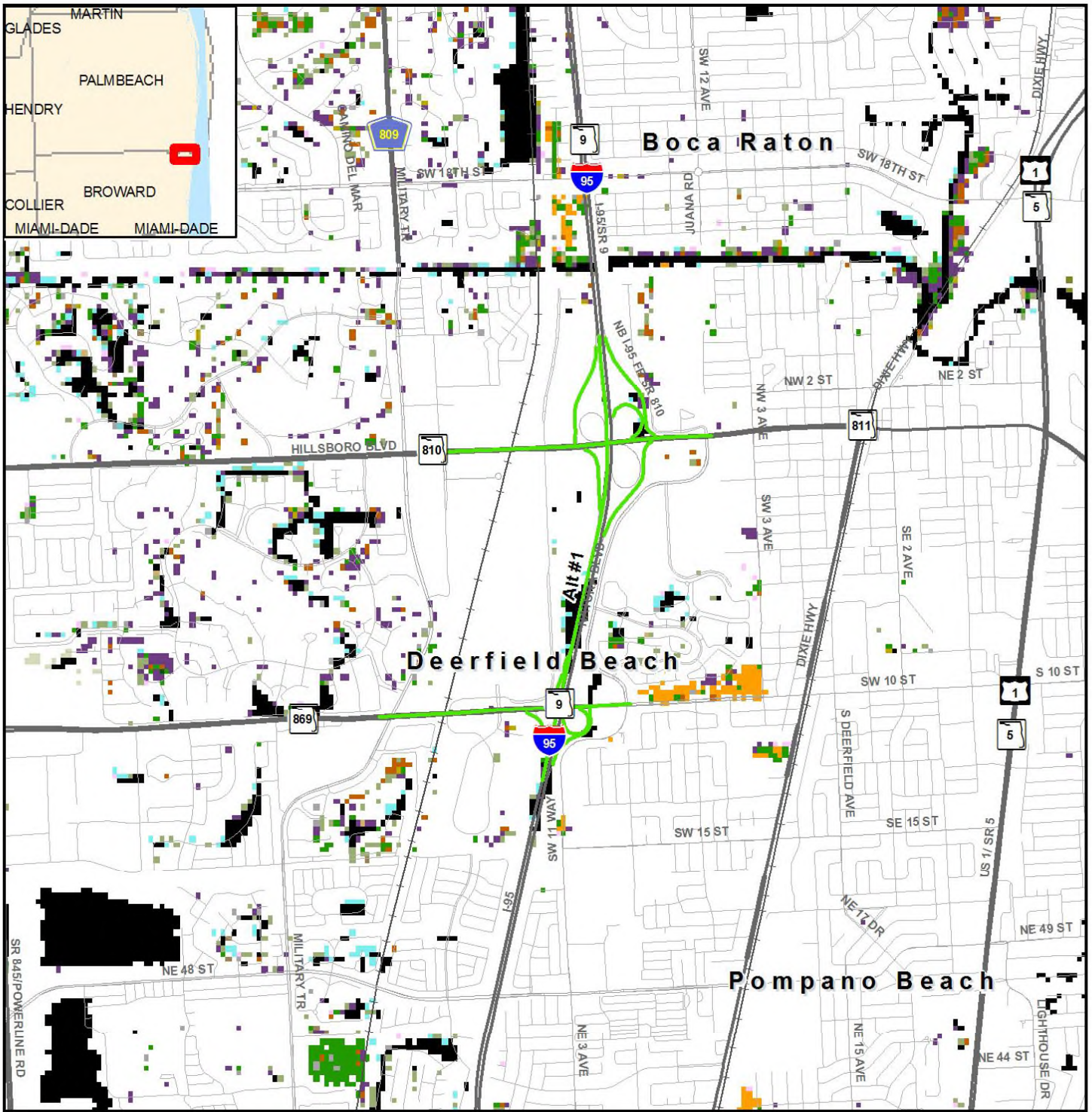
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission



8/30/2015

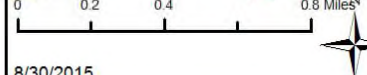
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14244 I-95 from SW 10th St to Hillsboro Blvd



Vegetation Map

- | | | | | | |
|---------------------------|----------------------------------|---------------------------|----------------------------|---------------------|-------------------|
| ETDM Alternative | Dry Prairie | Cattail Marsh | Bottomland Hardwood Forest | Bare Soil/Clearcut | Australian Pine |
| ETDM Alternative Terminus | Mixed Hardwood-pine Forest | Shrub Swamp | Salt Marsh | Improved Pasture | Melaleuca |
| Not Classified | Hardwood Hammocks and Forests | Bay Swamp | Mangrove Swamp | Unimproved Pasture | Brazilian Pepper |
| Coastal Strand | Pinelands | Cypress Swamp | Scrub Mangrove | Sugarcane | High Impact Urban |
| Sand/Beach | Cabbage Palm-live Oak Hammock | Cypress/Pine/Cabbage Palm | Tidal Flats | Citrus | Low Impact Urban |
| Xeric Oak Scrub | Tropical Hardwood Hammock | Mixed Wetland Forest | Open Water | Row and Field Crops | Extractive |
| Sand Pine Scrub | Freshwater Marsh and Wet Prairie | Hardwood Swamp | Shrub and Brushland | Other Agriculture | Exotic Plants |
| Sandhill | Sawgrass Marsh | Hydric Hammock | Grassland | | |



Data Sources: NAVTEQ; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission



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14244 I-95 from SW 10th St to Hillsboro Blvd



Water Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- ⊕ 1st Magnitude Spring
- River, Stream or Canal
- Navigable Water Way
- SFWMD Canals
- Drainage Basin
- Outstanding Florida Water
- Surface Water Class I
- Surface Water Class II
- Water Body
- Swamp/Marsh

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Department of Environmental Protection
 Florida Geological Survey
 US Bureau of Transportation Statistics

0 0.15 0.3 0.6 Miles



8/30/2015

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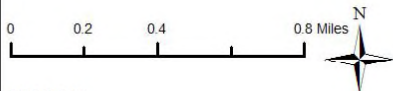
14244 I-95 from SW 10th St to Hillsboro Blvd



Wetlands Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources:
 NAVTEQ
 Florida Water Management Districts
 US Geological Survey



8/30/2015

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ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.

District: FDOT District 4

County: Broward County

ETDM Number: 14244

Financial Management Number: 436964-1-22-01

Federal-Aid Project Number: N/A

Project Manager:

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT. Submitted pursuant 49 U.S.C. § 303.

This action has been determined to be a Categorical Exclusion which meets the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions and this analysis, does not involve significant environmental impacts. Signature below constitutes Location and Design Concept

Acceptance:

Director of the Office of Environmental Management
Florida Department of Transportation

For additional information, contact:

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Prime Consulting Firm:
HNTB

Consulting Project Manager:
Vilma Croft

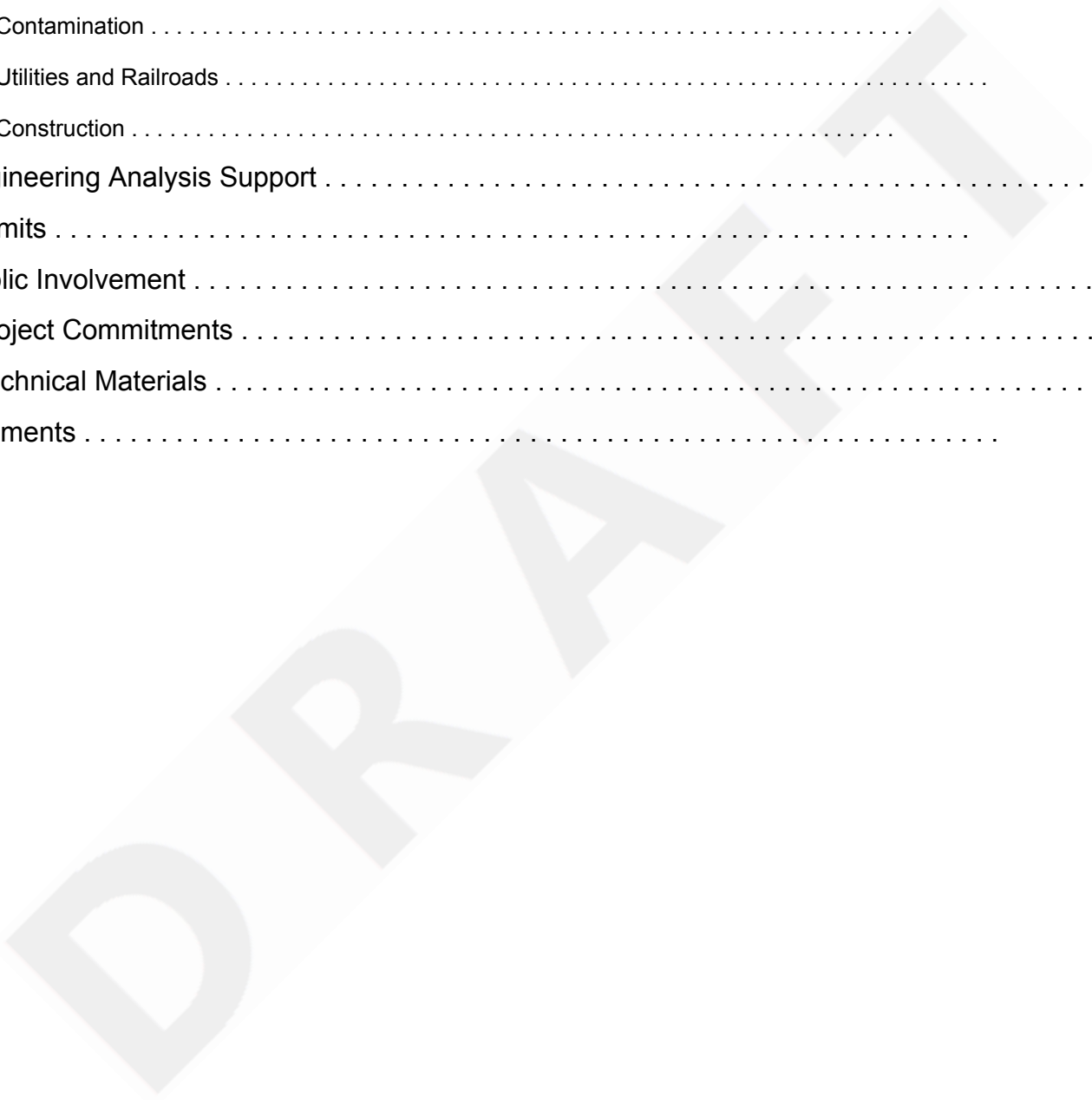
This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

Table of Contents

1. Project Information	2
1.1 Project Description	2
1.2 Purpose and Need	11
1.3 Planning Consistency	13
2. Environmental Analysis Summary	15
3. Social and Economic	16
3.1 Social	16
3.2 Economic	17
3.3 Land Use Changes	18
3.4 Mobility	21
3.5 Aesthetic Effects	22
3.6 Relocation Potential	23
3.7 Farmland Resources	23
4. Cultural Resources	24
4.1 Section 106 of the National Historic Preservation Act	24
4.2 Section 4(f) of the USDOT Act of 1966, as amended	24
4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965	25
4.4 Other Protected Public Lands	25
5. Natural Resources	26
5.1 Protected Species and Habitat	26
5.2 Wetlands and Other Surface Waters	29
5.3 Essential Fish Habitat (EFH)	33
5.4 Floodplains	33
5.5 Sole Source Aquifer	37
5.6 Water Quality and Stormwater	37
5.7 Aquatic Preserves	38
5.8 Outstanding Florida Waters	38
5.9 Wild and Scenic Rivers	39

5.10 Coastal Barrier Resources	39
6. Physical Resources	40
6.1 Highway Traffic Noise	40
6.2 Air Quality	41
6.3 Contamination	42
6.4 Utilities and Railroads	45
6.5 Construction	46
7. Engineering Analysis Support	47
8. Permits	48
9. Public Involvement	50
10. Project Commitments	52
11. Technical Materials	53
Attachments	54



1. Project Information

1.1 Project Description

Project Description and Location

Part 2, Chapter 1 [Project Description and Purpose and Need (PPE)] of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

The FDOT is currently conducting a PD&E study for State Road (SR) 9/Interstate (I)-95 from south of SW 10th Street to north of Hillsboro Boulevard.

The project extends along I-95 from just south of SW 10th Street to just north of Hillsboro Boulevard and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard (**Figure 1-1**). The entire project lies within the city of Deerfield Beach. I-95 is part of the Strategic Intermodal System (SIS) and the National Highway System which is Florida's high priority network of transportation facilities important to the state's economy, mobility and defense.

This study will evaluate the potential modification of the existing merge and diverge ramp areas along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Blvd. Interchange. Improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard as well as improvements along SW 10th Street and Hillsboro Blvd. will also be considered.

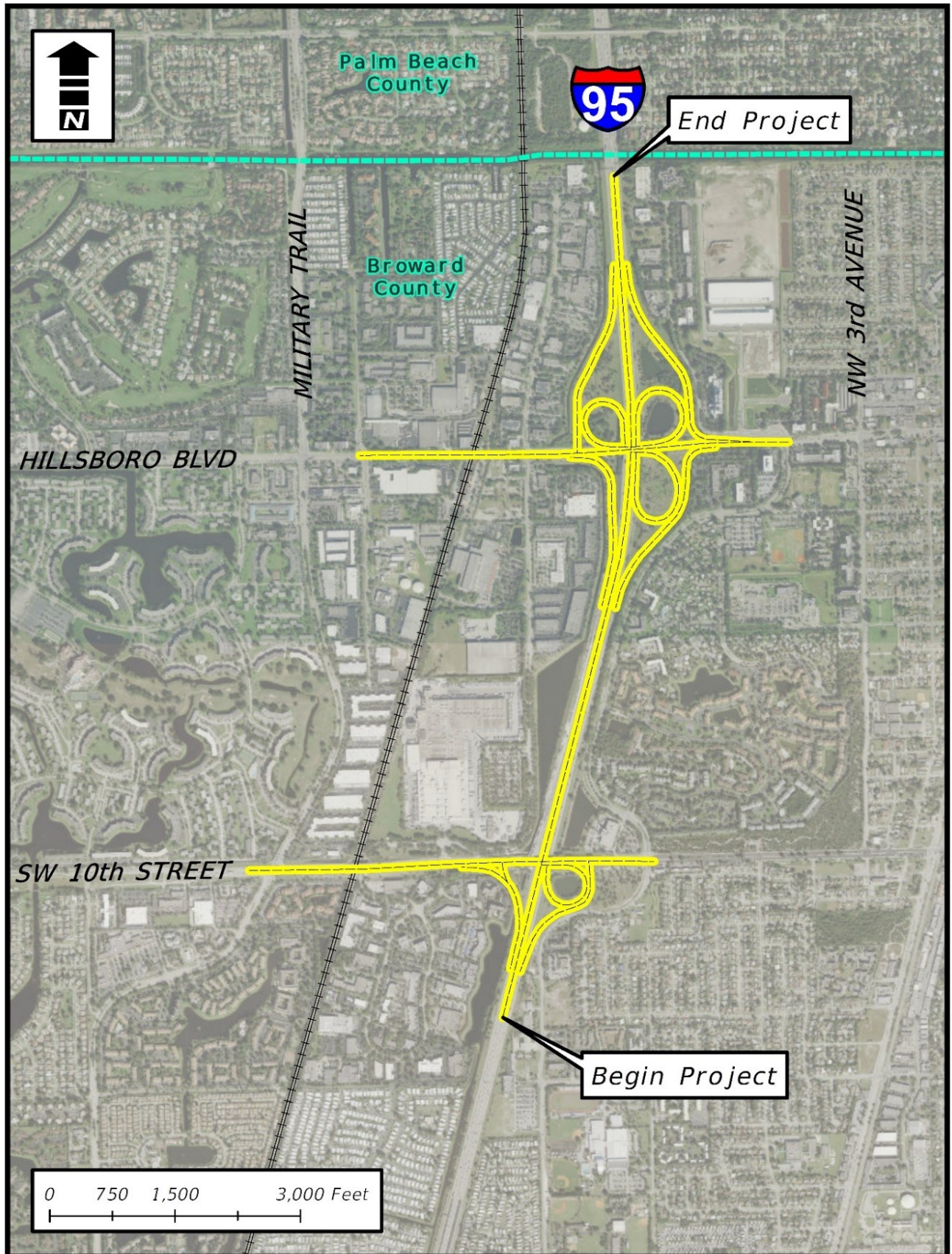


Figure 1 - 1: Project Study Area

Existing Conditions

Due to the uniqueness of this project, the analysis and evaluation of the existing conditions was separated into three corridors; I-95 (SR 9), SW 10th Street (SR 869) and Hillsboro Boulevard (SR 810). Data gathering for each of these corridors focused on the areas of roadway, bridge and environmental characteristics. Assessment of the existing conditions began with the collection and review of all data pertaining to the existing facilities which included conducting on-site field inventories, review of existing documents, as well as, review of other pertinent data used for the evaluation of these transportation facilities. The general characteristics of the roadway facilities located within the project limits are described in the sections below. A summary is presented in **Table 1-1**.

The following data below is based on information gathered from, including but not limited to, the FDOT's Roadway Characteristics Inventory, Straight Line Diagrams (SLDs), Broward County Metropolitan Planning Organization (MPO), Broward County Traffic and Engineering Division and field reviews.

Typical Section Element	Roadway	
	Interstate 95	SW 10th Street and Hillsboro Boulevard
Facility Type	Freeway, Limited Access, SIS Facility	Arterial
Functional Classification	Urban Principal Arterial - Interstate	Urban Principal Arterial - Other
Access Management Classification (FDOT)	Class 1	Class 5
Typical Section	North of Sample Road to North of Hillsboro Boulevard Interchange: Northbound and Southbound: 3 GP, 1 EP / BW South of Sample Road Interchange: Northbound and Southbound: 1 AUX, 3 GP, 1 HOV / BW Wall Median	Eastbound & Westbound: 3 Lanes/Raised Median
Posted Speed Limit	65 mph	45 mph
Legend: AUX-Auxiliary Lane GP-General Purpose Lane EP-Express Lane BW-Barrier		

Table 1 - 1: Summary of Roadway Characteristics

Typical Sections

The following **Table 1-2** depicts the existing typical section characteristics for each corridor.

Typical Section Element	Roadway		
	Interstate 95	SW 10th Street	Hillsboro Boulevard
Number of Travel Lanes	8	6	6
Travel Lane Width	12-feet	11 to 12-feet	11-feet
Parking Lane Width	n/a	n/a	n/a
Curb and Gutter	n/a	Type F	Type F
Inside Shoulders Width	12-feet	n/a	n/a
Outside Shoulders Width (Bike Lane)	12-feet	Varies 4-feet to 8-feet	Varies 4-feet to 6-feet
Median Width	26.5-feet	14-feet to 17.5-feet	15.5-feet
Sidewalk Width	n/a	Varies 5-feet to 6-feet	Varies 6-feet to 7-feet
Right-of-Way Width	240-feet to 300-feet	106-feet (+)	106-feet to 136-feet

Table 1 - 2: Existing Typical Section Characteristics

Interstate 95

Within the limits of the study, I-95 is an eight-lane divided limited access facility consisting primarily of a two and a half-foot (2.5') center barrier wall with two twelve-foot (12') paved inside shoulders (one in each direction). The inside lane in each direction is a twelve-foot (12') wide Express Lane (EP) lane with a two-foot (2') striped buffer area separating the EP lane from the three twelve-foot (12') general purpose lanes. In each direction, along the outside of the general-purpose lanes is a twelve-foot (12') shoulder (ten-foot (10') paved and two-foot (2') unpaved). In the northbound direction, a twelve-foot (12') auxiliary lane exists between the SW 10th Street on-ramp and Hillsboro Boulevard off-ramp. Additionally, in the southbound direction a twelve-foot (12') auxiliary lane exists between the Hillsboro Boulevard on-ramp and SW 10th Street off-ramp. The existing roadway segment is depicted in **Figure 1-2** and the typical section for this corridor is shown in **Figure 1-3**.

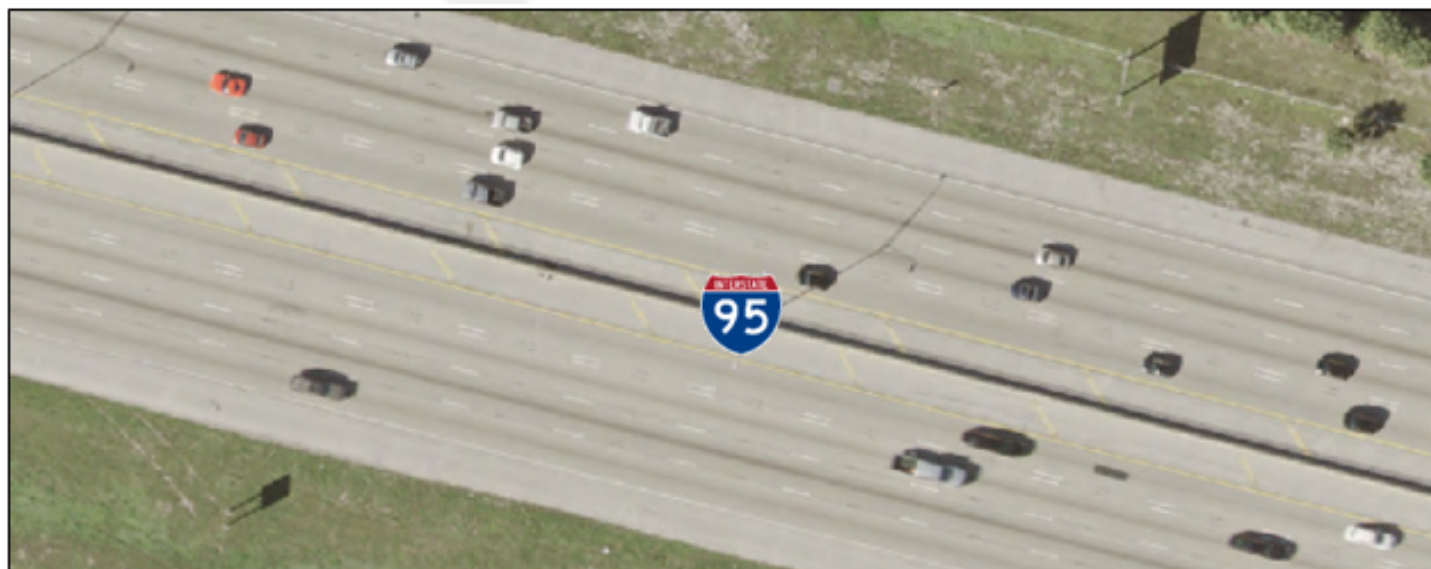


Figure 1 - 2: Roadway Segment - I-95 Corridor

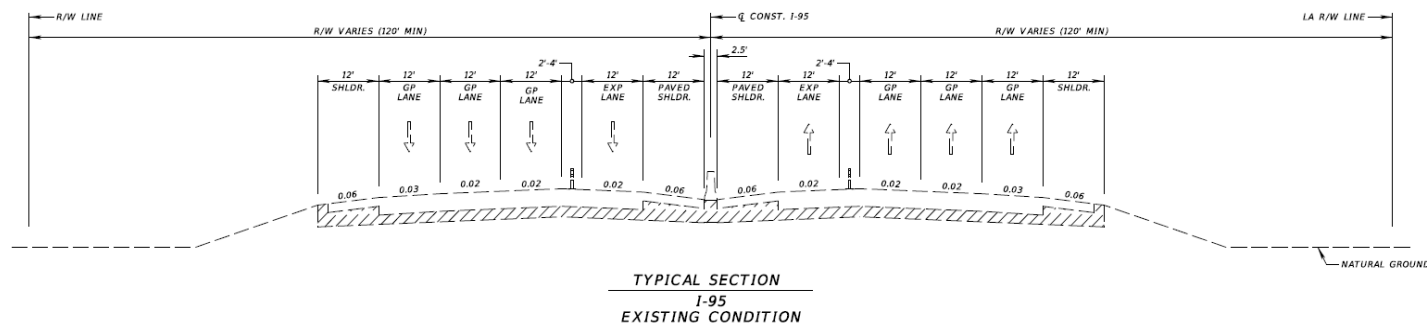


Figure 1 - 3: Existing Typical Section - Interstate 95

SW 10th Street

Eastbound along SW 10th Street (SR 869) from approximately 1000-feet west of the intersection at Military Trail to the intersection, three twelve-foot (12') lanes, a four to five-foot (4' to 5') bike lane, and an eight-foot (4' paved and 4' unpaved) outside shoulder exist. In the center, there is a 17.5 foot raised curb and gutter median.

Westbound along SW 10th Street (SR 869) from approximately 1000-feet west of the intersection at Military Trail to the intersection, there are two twelve-foot (12') lanes, a four-foot (4') bike lane and four-foot (4') unpaved shoulder.

In each direction, from the intersection at Military Trail to East Newport Center Drive, there are three twelve-foot (11') lanes, a four-foot (3') bike lane, two-foot (2') curb and gutter with a five-foot (5') concrete sidewalk running along at the back of curb. In the center of the roadway there is a raised curb and gutter median that varies in width from 14.0 to 17.5 feet. In the westbound direction, the outside lane is an auxiliary lane used for right turns and/or acceleration that terminates at the intersection with Military Trail. In the eastbound direction, a fourth (outside) 12 to 14-foot wide lane exists as an auxiliary lane used for right turns and/or acceleration and terminates at the southbound on-ramp to I-95.

From East Newport Center Drive to SW Natura Boulevard/FAU Research Park Boulevard, there are three eleven-foot (11') lanes in each direction, two-foot (2') curb and gutter with a six-foot (6') concrete sidewalk running along at the back of curb with no bicycle lane or shoulder. Eastbound the third lane (outside) terminates at the northbound entrance ramp to I-95 and then reemerges west of the northbound I-95 off-ramp intersection continuing to the FAU Research Park Boulevard intersection. Westbound are three eleven-foot (11') lanes, two-foot (2') curb and gutter with a six-foot (6') concrete sidewalk running along at the back of curb with no bike lane or shoulder present. A fourth westbound lane emerges at the southbound I-95 off-ramp intersection and terminates at the East Newport Center Drive intersection. In the center of the roadway there is a raised curb and gutter median that varies in width from 14 to 17.5 feet. The existing roadway segment is depicted in **Figure 1-4** and typical section for this corridor is shown in **Figure 1-5**.

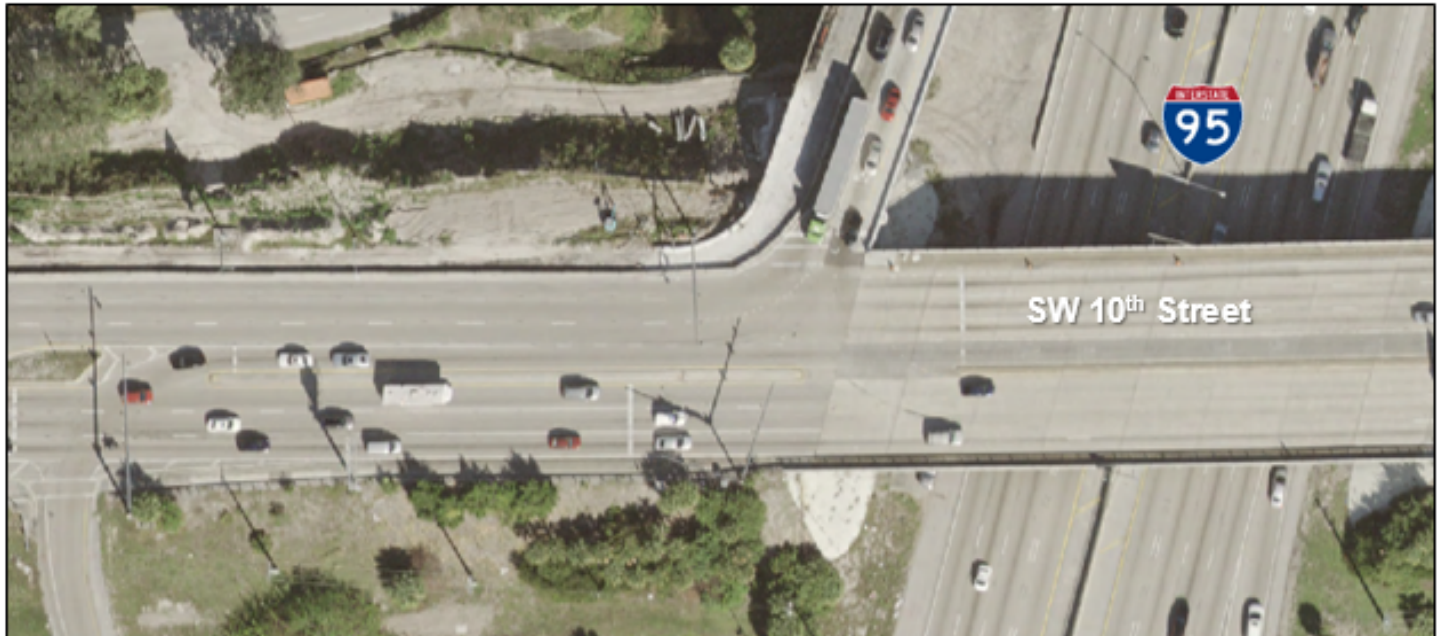


Figure 1 - 4: Existing Roadway Segment - SW 10th Street

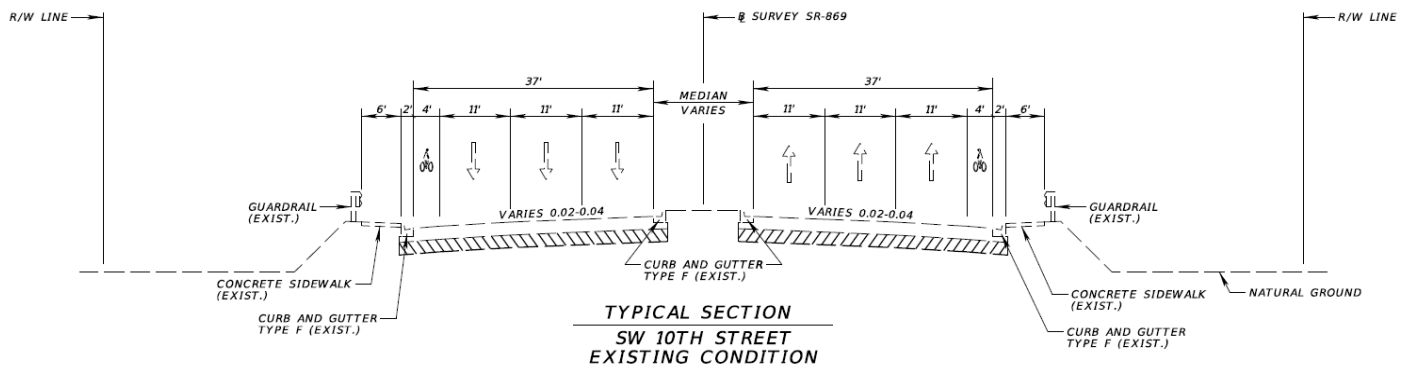


Figure 1 - 5: Existing Typical Section - SW 10th Street

Hillsboro Boulevard

Hillsboro Boulevard (SR 810) from east of the Military Trail intersection to the intersection with Natura Boulevard/Fairway Drive is an urban arterial typical section with a fifteen and a half-foot (15.5') raised median, six eleven-foot (11') thru lanes (3 lanes in each direction) and two four-foot (4') bicycle lanes (one in each direction) with Type F curb and gutter on both sides of the roadway. In each direction outside the bicycle lanes is a two-foot (2') curb and gutter with six-foot (6') concrete sidewalk running along at the back of curb. Total right-of-way width varies. The existing roadway segment is depicted in **Figure 1-6** and typical section for this corridor is shown in **Figure 1-7**.



Figure 1 - 6: Existing Roadway Segment - Hillsboro Boulevard

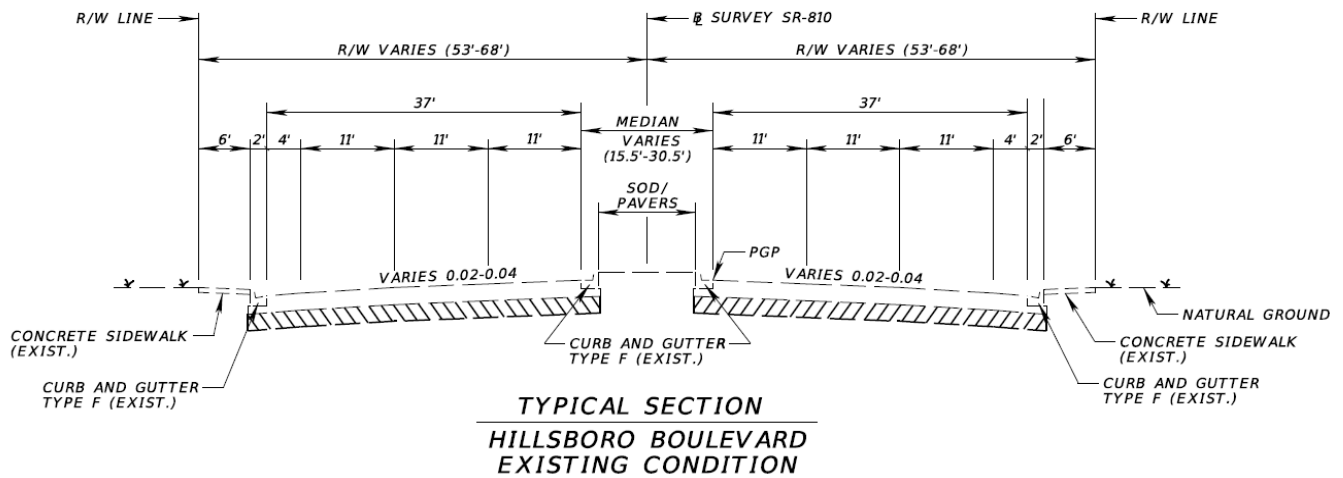


Figure 1 - 7: Existing Typical Section - Hillsboro Boulevard

Right-of-Way

Interstate 95

The existing right-of-way along I-95 varies with a minimum of 240 feet and varies based on shoulder width and natural ground.

SW 10th Street

The existing right-of-way along SW 10th Street varies with a minimum of 125 feet and varies based on median width, shoulder width and natural ground with a typical width between 180 to 250 feet.

Hillsboro Boulevard

The existing right-of-way along Hillsboro Boulevard varies from 106 feet to 136 feet and varies based on median width.

Design and Posted Speed

The posted speed limit for I-95 is 65 miles per hour (mph). The posted speed limit for SW 10th Street is 40 mph eastbound between Military Trail and Natura/FAU Research Park Boulevard and 45 mph westbound. The posted speed limit for Hillsboro Boulevard is 40 mph.

Multi-Modal Facilities

Multi-modal facilities include pedestrian and bicycle features as well as existing transit services along each I-95, SW 10th Street and Hillsboro Blvd.

Pedestrian

Continuous sidewalks exist on the north and south side of SW 10th Street and Hillsboro Boulevard. I-95 is limited access facility and as such does not provide sidewalks along the corridor.

Bicycle

Continuous bicycle lanes exist on the north and south side of SW 10th Street and Hillsboro Boulevard. I-95 is limited access facility and as such does not provide bicycle facilities along the corridor.

Transit

No designated transit services including Broward County Transit (BCT) Routes or commuter rail services are provided on the I-95 corridor or within the area of the SW 10th Street interchange.

Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Beach Station located just west of the Hillsboro interchange (Figure 1-8).

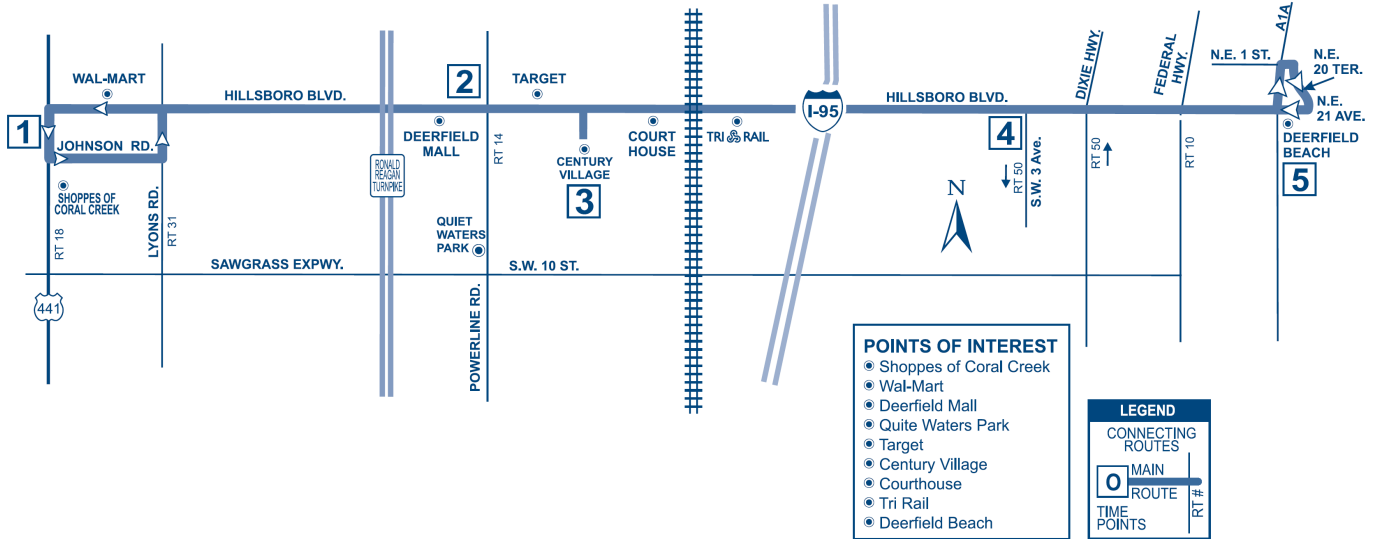


Figure 1 - 8: BCT Route 48

The Deerfield Beach Station provides commuter rail service for Tri-Rail and Amtrak which provide connections south to Miami-Dade County including Tri-Rail's southernmost terminus at Miami Airport Station (Miami Intermodal Center) and Amtrak's southernmost terminus at Miami Station, and to the north with Tri-Rail's northernmost terminus in West Palm Beach at Mangonia Park Station and Amtrak providing service throughout the state of Florida (Figure 1-9).



Figure 1 - 9: Deerfield Beach Station

1.2 Purpose and Need

Purpose and Need

Part 2, Chapter 1 [Project Description and Purpose and Need (PPE)] of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

The purpose of this project is to eliminate existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10th Street and Hillsboro Boulevard, and on SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The primary need for the project is based on capacity/operational and safety issues, with secondary considerations for the needs of evacuation and emergency services, transportation demand, system linkage, modal interrelationships, and social demands and economic development.

Capacity/Operational Deficiencies

A need exists to improve traffic operations along I-95 between the SW 10th Street and Hillsboro Boulevard interchanges, especially at existing merge and diverge ramps that are the sources of traffic turbulence and collisions. The mainline directional volumes range from 4,400 to 5,850 vehicles per hour (vph) with ramp volumes from 800 to 1,250 vph at SW 10th Street and 400 to 1,000 vph at Hillsboro Boulevard.

Operational analyses along I-95 indicate that all freeway segments in the study area operate at Level of Service (LOS) D or better except for the following:

- The diverge segment at I-95 southbound off-ramp to SW 10th Street eastbound and westbound during the AM and PM peak periods;
- The I-95 mainline segment between I-95 SB on-ramp from SW 10th Street eastbound and westbound and I-95 SB off-ramp to Sample Road eastbound and westbound during the PM peak period;
- The I-95 mainline between I-95 southbound On-Ramp from Palmetto Park Boulevard eastbound and I-95 southbound Off-Ramp to Hillsboro Boulevard eastbound and westbound during the AM peak period;
- The merge at I-95 southbound on-ramp from Hillsboro Boulevard westbound during AM and PM peak periods; and
- The diverge segment at I-95 northbound off-ramp to Hillsboro Boulevard eastbound during the AM peak period.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Year 2040 traffic projections show the mainline directional volumes ranging from 6,000 to 7,300 vph. Year 2040 peak hour directional volumes on I-95 Express are forecasted to range an additional 1,300 to 2,550 vph within the I-95 corridor. Operational analyses under the "No-Action" option in year 2040 reflects implementation of two major programmed improvements: 1) I-95 Express Phase 3 (and 2) I-95 Ramp Metering. All of the mainline freeway segments in the study area would operate at a deficient LOS (E or F) during one or both peak periods with the exception that the merge segment for I-95 SB On-Ramp from westbound Hillsboro Boulevard would operate at LOS D during the PM peak hour.

Safety

A need exists to resolve safety issues within the project limits along I-95 as well as SW 10th Street and Hillsboro Boulevard. Crash analyses for the years 2008 through 2012 reveal that the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment for four of the five study years. It should also be noted that the existing interchanges are closely located together and have short weave distances. Crash rates along SW 10th Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing into this area.

Evacuation and Emergency Services

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10th Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

Transportation Demand

A need exists to improve capacity and safety while meeting transportation demand and maintaining consistency with other transportation plans and projects, such as the Broward County Interchange Master Plan (IMP) and I-95 Express Lanes Phase III Project. The project is included in the FDOT Work Program with PE is scheduled for fiscal years 2017 and 2018. The Broward County MPO 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

System Linkage

A need exists to ensure that I-95 continues to meet the minimum requirements of a component of the state's SIS and the National Highway System (NHS), as well as provides access connectivity to other major arterials such as I-595 and Florida's Turnpike SIS and the National Highway System (NHS), as well as provides access and connectivity to other major arterials such as I-595 and Florida's Turnpike.

Modal Interrelationships

There exists a need for capacity improvements along the I-95 project corridor to enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Increased mobility to public transit operations are needed and will benefit as a result of this project. Although no designated Broward County Transit (BCT) Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange.

Social Demands and Economic Development

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicted that the population would grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs were predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent. A need exists for the proposed improvements to support the predicted social and economic travel.

1.3 Planning Consistency

The project improvements are included in the 2040 Long-Range Transportation Plan (LRTP) and the five-year Transportation Improvement Program (TIP) for Broward County, as well as the State Transportation Improvement Program (STIP). A copy of the Planning Consistency documentation is included as **Attachment B**.

Currently Adopted LRTP-CFP	COMMENTS
Yes	

	Currently Approved	\$	FY	COMMENTS
PE (Final Design)				
TIP	Y	2,750,000	2022	No TIP amendment is needed.
STIP	Y	2,755,262	2019/22	
R/W				
TIP	Y	28,964,970	2019	The ROW phase is not programmed in the FY2019/20 TIP; however, \$28,144,373 for ROW is programmed in the Roll Forward report which is expected to be amended into the FY2019/20 TIP by the MPO Board in September/October.
STIP	Y	28,964,970	2019	
Construction				
TIP				
STIP				

DRAFT

2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?*			
	Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Relocation Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Farmland Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Section 4(f) of the USDOT Act of 1966	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Section 6(f) of the Land and Water Conservation Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Other Protected Public Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Natural Resources				
1. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Essential Fish Habitat (EFH)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sole Source Aquifer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Water Quality and Stormwater	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Outstanding Florida Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Physical Resources				
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Utilities and Railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

USCG Permit

- A USCG Permit IS NOT required.
- A USCG Permit IS required.

* **Impact Determination:** Yes = Significant; No = No Significant Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s).

3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

Pat 2, Chapter 4 (Sociocultural Effects Evaluation) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

For additional information on the following, please refer to the Sociocultural Effects Evaluation (SCEE) report completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material under the project file.

Community Cohesion

Improvements to the I-95 mainline will occur within the existing right-of-way and are not expected to have an effect on the surrounding community. Improvements at SW 10th Street include ramp and local roadway modifications and the incorporation of elevated express lanes. North-south connectivity across SW 10th Street will be maintained at existing signalized intersections. Bicycle lanes and sidewalks will also be maintained along the length of the SW 10th Street to support local use. The elevated express lanes are intended to divert regional traffic off of local surface streets and on to the elevated lanes. Reduced traffic on surface streets will allow for better local circulation and access. Improvements at Hillsboro Boulevard include ramp modifications and a grade separation on Hillsboro Boulevard at the CSX crossing. These improvements would not result in long-term disruption of the surrounding community.

I-95, Hillsboro Boulevard, and SW 10th Street exist as major roadways in northern Broward County. The proposed improvements would require additional right-of-way, but would not displace existing residents, businesses, or affect community focal points. The proposed improvements would occur along existing road corridors and are not expected to result in major changes in land use or serve to divide or isolate a population. Overall, the proposed roadway improvements would not affect existing community networks; therefore, a degree of effect of minimal is assigned to this issue.

Safety and Emergency Response/Evacuation

Crash analyses conducted for the five-year period from 2008 through 2012 showed that the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment in four of the five study years. Crash rates along SW 10th Street near I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard near I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the CSX railroad crossing. Additionally, crashes on I-95 may be influenced by the short weaving distance between the existing interchanges.

Both SW 10th Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

The No-Action Alternative would leave the facility as it is currently and therefore not improve safety or capacity. This could impact the ability of local emergency service response (police, fire rescue and EMS) to reach those in need. The Build

Alternatives are intended to address safety and operational deficiencies on I-95 and at the SW 10th Street and Hillsboro Boulevard interchanges and increase roadway capacity to meet future demand. Therefore, conditions related to Safety and Emergency Response/Evacuation will be Enhanced by the proposed project.

Special Designations

The US Department of Treasury and the Internal Revenue Service (IRS) have designated the area that occupies the southeast quadrant of the I-95 interchange at SW 10th Street as a "Qualified Opportunity Zone".

Opportunity Zones are part of a new federal tax incentives program to attract new capital investment and job opportunities to disadvantaged areas. Qualified Opportunity Zones retain their designation for 10 years. Within each zone, investors can defer taxes on financial gains, so long as the gain is reinvested in a Qualified Opportunity Fund. Opportunity Zones are expected to spur public-private partnerships in disadvantaged communities.

The proposed improvement of the SW 10th Street interchange would improve traffic conditions along SW 10th Street and access to I-95, part of Florida's SIS which is important to local, regional, and state economies.

Overall, implementation of the proposed project supports this special designation, and is expected to enhance access and mobility in an area targeted for economic investment by the US Department of Treasury.

3.2 Economic

For additional information on the following, please refer to the Sociocultural Effects Evaluation (SCEE) report completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material under the project file.

Business Access and Activity

Based on figures produced by the US Census Bureau reported in the Longitudinal Employer-Household Dynamics database, the SCEE study area currently supports 13,275 jobs (**Table 3-1**). The Professional, Scientific, and Technical Services; Administration & Support, Waste Management and Remediation; and Transportation and Warehousing sectors support the greatest share of the job market.

NAICS Industry Sector	Year 2015	
	Count	Share
Mining, Quarrying, and Oil and Gas Extraction	27	0.2%
Construction	596	4.5%
Manufacturing	1,186	8.9%
Wholesale Trade	1,263	9.5%
Retail Trade	1,100	8.3%
Transportation and Warehousing	1,410	10.6%
Information	233	1.8%
Finance and Insurance	715	5.4%

Real Estate and Rental and Leasing	300	2.3%
Professional, Scientific, and Technical Services	2,132	16.1%
Management of Companies and Enterprises	889	6.7%
Administration & Support, Waste Management and Remediation	1,478	11.1%
Educational Services	28	0.2%
Health Care and Social Assistance	849	6.4%
Arts, Entertainment, and Recreation	10	0.1%
Accommodation and Food Services	962	7.2%
Other Services (excluding Public Administration)	97	0.7%

Table 3 - 1: SCEE Study Area Jobs by NAICS Industry Sector

Both Build Alternatives for SW 10th Street include a roundabout modification to New Port Center Drive which will reduce congestion thereby improving access to the adjacent commercial center and Publix Distribution Center. Intersection improvements on SW 10th Street at FAU Research Park Boulevard would improve access to the newly designated "Opportunity Zone" economic investment area. Activity in the Transportation and Warehousing job sectors would receive direct benefit from the improved traffic operations in the area.

The proposed improvements on Hillsboro Boulevard will improve access to the Tri-Rail and Amtrak services provided at the Deerfield Beach Rail Station and the adjacent Transit Oriented Development (TOD), and improve access to governmental services provided at the Broward County North Regional Courthouse.

Bicycle and pedestrian access will be maintained along both SW 10th Street and Hillsboro Boulevard. No commercial businesses will be relocated. Overall, the project is expected to improve access to existing local businesses and support a more reliable regional transportation system.

Tax Base

The vast majority of the proposed improvements will occur within the existing right-of-way. The proposed Build Alternatives will not result in the displacement of any homes or businesses. Partial acquisition of a limited number of parcels relative to each alternative will occur with a negligible reduction to the tax base when compared to total revenue collected. No change in land use classification is expected to result from the proposed improvements.

This project will not have significant adverse effects on the tax base within the City of Deerfield Beach or Broward County. The enhanced mobility has the potential to attract new businesses and support the continued growth within the tax base resulting in a long-term net economic gain.

3.3 Land Use Changes

Existing Land Use

Existing land use was assessed through review of current zoning map information. GIS shapefiles were downloaded from the City of Deerfield Beach and compared to the SCEE study area. **Table 3-2** reports total area by zoning classification found within the study area. **Figure 3-1** shows the location of each zoning district.

The project is located in an urbanized area of the City of Deerfield Beach. The predominant land use present is residential (40 percent) followed by industrial (34 percent) and business/commercial (16 percent).

Zoning Class	Zoning Description	Acres
B-1, B-2, B-2c, B-3	Business and Commercial	210.7
CF	Community Facility	62.9
I, PID	Industrial and Planned Industrial	434.9
PUD	Planned Unit Development	141.2
RM-10, RM-10(5), RM-13c, RM-15, RM-25	Residential, Multi-Family	178.4
RP-10(7), T-1c, T-1Cc	Residential, Mobile Home	118.6
RS-4c, RS-5, RS-7	Residential, Single Family	79.8
	Open Space	61.6
TOD	Transit Oriented Development	8.7

Table 3 - 2: SCEE Study Area Zoning Classifications

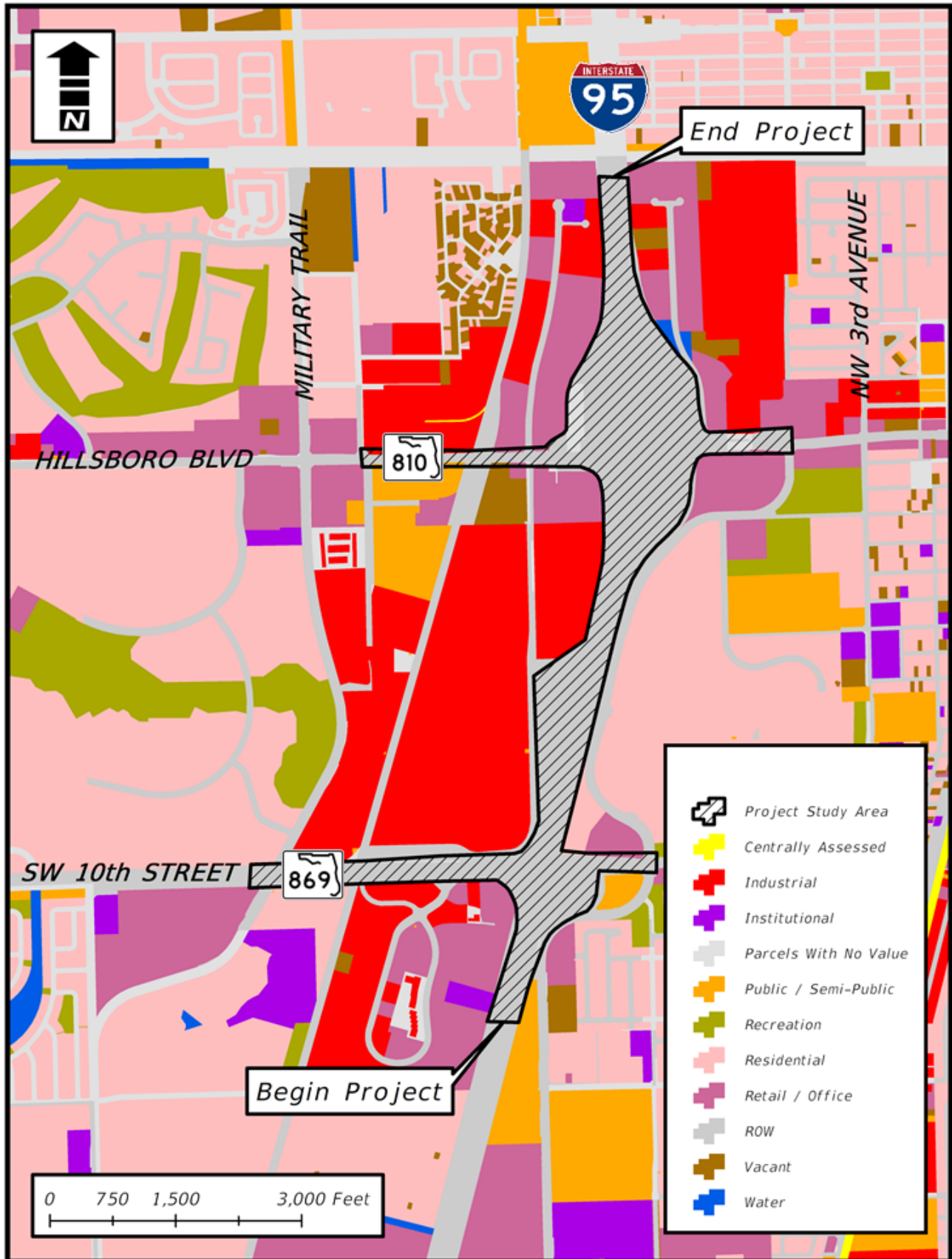


Figure 3 - 1: Project Corridor Land Use

Future Land Use

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) shown in **Figure 3-2** predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The anticipated employment center has been branded as the Hillsboro Technology Center

SW 10th Street Interchange

The City of Deerfield Beach Future Land Use Map shows the area west of the SW 10th Street Interchange as Industrial. The NE quadrant of the interchange is shown as Residential Moderate [10 dwelling units per acre (DU/AC)], Commercial and Conservation. The SE quadrant shows as Community Facility, Recreation Open Space, Residential - Medium (15 DU/AC), Residential Moderate (10 DU/AC) and Residential Low (5 DU/AC).

Hillsboro Boulevard Interchange

The City of Deerfield Beach Future Land Use Map shows the NW quadrant of the Hillsboro Boulevard Interchange as Industrial and Commercial while the NE quadrant is shown as Industrial, Commercial, Recreation Commercial, Recreation Open Space and Employment Center. The SE quadrant shows as Commercial, Residential Moderate (10 DU/AC) and Recreation Open Space. The SW quadrant shows as Commercial, Industrial and York Residential Transit Oriented Development.

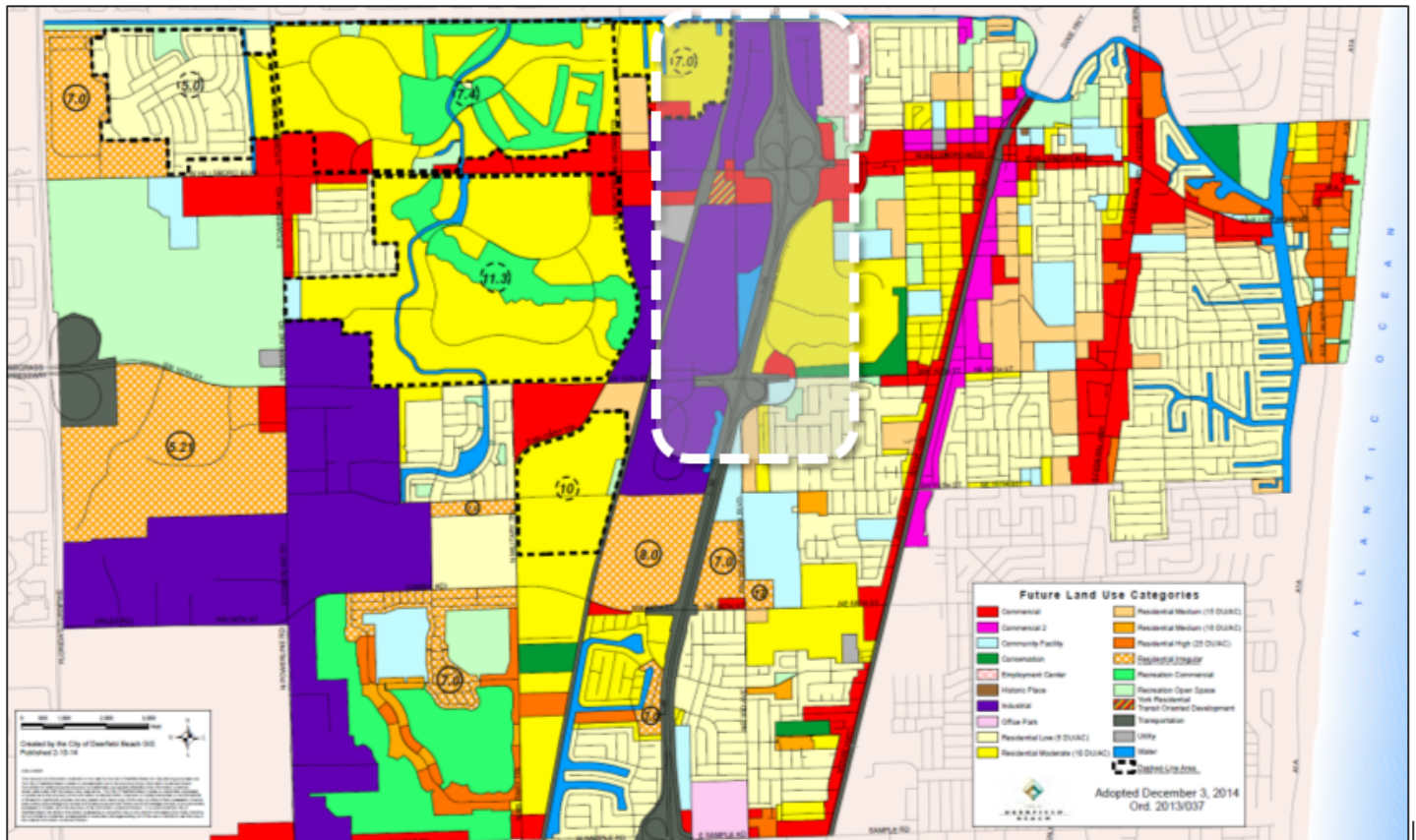


Figure 3 - 2: Future Land Use Map

3.4 Mobility

The elimination of existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10th St and Hillsboro Blvd and on SW 10th Street and Hillsboro Boulevard near I-95 would improve existing capacity/operational and safety issues. Improved operations and reduced congestion on SW 10th Street and Hillsboro Boulevard as well as on I-95 would enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks.

Additionally, the inclusion of managed lanes at SW 10th Street would connect workers, businesses, and residents within Deerfield Beach and the SCEE study area to a more reliable regional transportation system that extends across Miami-Dade, Broward and into Palm Beach Counties.

With the implementation of the managed lanes, north-south connectivity across SW 10th Street will be maintained at existing signalized intersections, and local improvements, including a roundabout on Newport Center Drive, will enhance local circulation. Bicycle lanes and sidewalks will also be maintained along the length of the SW 10th Street to support local use. The elevated express lanes are intended to divert regional traffic off of local surface streets and on to the elevated lanes. Reduced traffic on surface streets will allow for better local circulation and access. The proposed interchange improvements and inclusion of a grade separation on Hillsboro Boulevard would improve safety, eliminate periodic traffic delays, and enhance access to/from the Deerfield Beach Train Station that supports regional (Tri-Rail) and intercity (Amtrak) passenger rail service.

Based on the foregoing, a degree of effect of Enhanced is assigned to the Mobility issue.

3.5 Aesthetic Effects

Part 2, Chapter 5 [Aesthetic Effects (CBT)] of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

Viewshed

Improvements to I-95, SW 10th Street, and Hillsboro Boulevard would occur within an urbanized area of the City of Deerfield Beach. Proposed improvements to I-95 would occur within the existing right-of-way and are not expected to have a detrimental visual effect on the surrounding community. Similarly, the proposed interchange ramp improvements and new grade separated rail crossing associated with Hillsboro Boulevard would have a limited visual impact.

Improvements at SW 10th Street would incorporate 4th level structures likely to exceed 100 feet in height, and 3rd level structures likely to exceed 75 feet in height above existing grade. The proposed structures would extend west from I-95 through an area of commercial and industrial development before crossing the CSX rail corridor. Once west of the rail corridor, the 3rd level structures would pass within close proximity of two residential developments, Century Village and The Lakes at Deerfield Apartments.

Transportation infrastructure including rail lines, bridges, and roadway all contribute to the existing visual character of the area. However, if constructed, the managed lanes structure would be the predominant visual feature present in the corridor. The project is likely to be perceived by many members of the public as incompatible with the community's aesthetic character.

Continued public coordination is recommended to identify context sensitive design solutions that lessen the visual impact of the viaduct. Based on the potential for contention related to project aesthetics, the degree of effect is deemed

Moderate.

3.6 Relocation Potential

The conceptual plans presented for each alternative shown previously in this document identify several areas of expanded right-of-way, but also indicate that no relocations would occur as a result of the Build Alternatives.

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, the Florida Department of Transportation (FDOT) will carry out a Right of Way and Relocation Assistance Program in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

3.7 Farmland Resources

This project is not subject to the provisions of the Farmland Protection Policy Act of 1981.

In accordance with the Farmland Protection Policy Act of 1984 and the FDOT PD&E Manual, Part 2, Chapter 6 - Farmlands (dated January 14, 2019), this project was reviewed for involvement with farmlands. No farmlands were determined to exist along the project corridor; therefore, no impacts to farmlands will occur as a result of the proposed roadway improvements.

4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that some of these resources meet the eligibility criteria for inclusion in the National Register, and State Historic Preservation Officer (SHPO) has concurred with this evaluation. After application of the Criteria of Adverse Effect, and in consultation with SHPO, FDOT has determined that the proposed project will have **No Adverse Effect** on these resources.

A Cultural Resource Assessment Survey (CRAS) was conducted for the proposed project in accordance with Stipulation VII of the Section 106 Programmatic Agreement among the FHWA, the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017).

The CRAS identified one cultural resource within the Area of Potential Effect (APE): the Seaboard Air Line (CSX) Railroad (8BD4649). The segment of this resource within the current APE, spanning approximately 1,225 feet and extending both to the north and south from SW 10th Street, is consistent with nearby segments, and accordingly, is considered eligible for listing in the National Register under Criterion A in the categories of Transportation and Community Planning and Development. However, the limited nature of the proposed improvements will have no adverse effects on the National Register eligibility of this linear resource. The SHPO concurred with this finding December 3, 2018 (**Attachment C**).

For additional information regarding cultural and historical resources, please refer to the Cultural Resource Assessment Survey report completed for this project, which is in the SWEPT project file at the FDOT District Four office in Fort Lauderdale, Florida.

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to PART 774-PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES, AND HISTORIC SITES (SECTION 4(f)).

Section 4(f) Pursuant to USDOT Act of 1966

In compliance with the Department of Transportation Act of 1966 [Title 49, U.S. Code, Section 1653(f)], as amended, and in accordance with the FDOT PD&E Manual, Part 2, Chapter 7 - Section 4(f) Evaluations (dated January 14, 2019), the study corridor was evaluated for potential Section 4(f) involvement. The provisions of Section 4(f) apply to any significant publicly-owned parks, recreation areas, or wildlife and waterfowl refuges; historic and archeological sites; and properties which represent public multiple-use land holdings. For additional information on Section 4(f) resources, please refer to the Section 4(f) Determination of Applicability prepared for this project, which is in the SWEPT project file at the FDOT District

Four office in Fort Lauderdale, Florida.

Section 4(f): Recreation

Four park/recreational resources within the vicinity of the project study corridor were identified for potential Section 4(f) involvement with this project:

- Willie James Linear Park (500 SW 10th Street); owned by the City of Deerfield Beach
- Tivoli Sand Preserve (501 SW 10th Court); owned by the City of Deerfield Beach
- Teen Center (1303 FAU Research Park Boulevard); owned by the City of Deerfield Beach
- Mayo Howard Park (1131 FAU Research Park Boulevard); owned by the City of Deerfield Beach

A Section 4(f) Determination of Applicability report was prepared for these four sites. The project would not acquire land from any of the Section 4(f) resources, and there would be no short-term or long-term impacts to the resources by the proposed project. Access to all Section 4(f) resources would be maintained during construction because all the Section 4(f) sites have local street access (no access from I-95). In addition, none of the sites were sensitive to proximity impacts, including noise. The FDOT has determined that there will be no Section 4(f) involvement with the above referenced four resources. Section 4(f) coordination documentation for these sites is included in **Attachment D**

Section 4(f): Historical and Archeological

Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

A CRAS was conducted for the proposed project in accordance with Stipulation VII of the Section 106 Programmatic Agreement as discussed in Section 4.1, above. The CRAS identified one cultural resource within the APE: the Seaboard Air Line (CSX) Railroad (8BD4649), which is considered eligible for listing in the National Register (see Section 4.1, above).

The limited nature of the proposed improvements will have no adverse effects on the National Register eligibility of this linear resource. The SHPO concurred with this finding December 3, 2018. Therefore, FDOT has determined that there will be no Section 4(f) involvement with this resource.

4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no properties in the project area that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965.

4.4 Other Protected Public Lands

There are no other protected public lands in the project area.

5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

For additional information on the following, please refer to the Natural Resources Evaluation (NRE) report completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material in the project file.

Protected Species and Habitat

The project study area was evaluated for potential occurrences of federally listed and state-listed plant and animal species in accordance with Section 7 of the ESA of 1973, as amended; the Fish and Wildlife Conservation Act; the Migratory Bird Treaty Act; Part 2, Chapter 16 of the FDOT PD&E Manual; and Chapters 5B-40 and 68A-27, F.A.C. It is important to note that all federally listed species are also considered state-listed species. The project study area was also evaluated for the occurrence of federally designated Critical Habitat as defined by Congress in 50 C.F.R. 17.

The project was screened through the ETDM Programming Screen process (ETDM Project #14244) in 2015/2016. During this time, the United States Fish and Wildlife Service (FWS) and Florida Fish and Wildlife Conservation Commission (FWC) commented on potential effects of the project to wildlife and habitat resources. Both agencies indicated that the project may contain suitable wood stork (*Mycteria americana*) foraging habitat. The FWC indicated that the following federally listed species may occur within or adjacent to the project study area: American alligator (*Alligator mississippiensis*) and eastern indigo snake (*Drymarchon corais couperi*). The FWC further indicated that the following state-listed species have potential to utilize habitats within the project study area: gopher tortoise (*Gopherus polyphemus*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), least tern (*Sternula antillarum*), roseate spoonbill (*Platalea ajaja*), and Florida burrowing owl (*Athene cunicularia floridana*). The FWC added that Florida burrowing owls have been documented within the infield regions of the I-95 and Glades Road interchange north of the project limits; this species may use similar habitat within the infield regions of the project study area.

The project is located within the FWS Consultation Areas for the Everglade snail kite (*Rostrhamus sociabilis plumbeus*) and the wood stork, and falls within the core foraging areas (CFA) of four (4) active nesting wood stork colonies.

Species Occurrence and Effect Determinations

The project alternatives were evaluated for potential occurrences of federally listed and state-listed animal and plant species in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended; the Fish and Wildlife Conservation Act; the Migratory Bird Treaty Act; Part 2, Chapter 16 of the FDOT PD&E Manual; and Chapters 5B-40 and 68A-27 Florida Administrative Code (F.A.C.). Based on this evaluation, a total of 12 federally listed animal species (plus 1 candidate species), 4 federally listed plant species, 8 state-listed animal species, and 15 state-listed plant species were identified as potentially occurring within the limits of the viable Build Alternatives. Additionally, while not state or federally listed under the ESA, the bald eagle (*Haliaeetus leucocephalus*) and osprey (*Pandion haliaetus*) were included in the

protected species analysis due to the regulatory protections associated with these species. **Table 5-1** provides a summary of the federally listed and state-listed animal and plant species with potential to occur within the limits of the viable Build Alternatives, along with their corresponding effect determinations.

	Scientific Name	Common Name	Effect Determination	Status		
				Federal	State	
Federally Listed Wildlife Species	<i>Aphelocoma coerulescens</i>	Florida scrub-jay	No Effect	T	FT	
	<i>Calidris canutus rufa</i>	Red knot	No Effect	T	FT	
	<i>Charadrius melodus</i>	Piping plover	No Effect	T	FT	
	<i>Crocodylus acutus</i>	American crocodile	No Effect	T	FT	
	<i>Drymarchon corais couperi</i>	Eastern indigo snake	No Effect	T	FT	
	<i>Grus americana</i>	Whooping crane	No Effect	E	FE	
	<i>Mycteria americana</i>	Wood stork	May Affect, Not Likely to Adversely Affect	T	FT	
	<i>Picoides borealis</i>	Red-cockaded woodpecker	No Effect	E	FE	
	<i>Peromyscus polionotus niveiventris</i>	Beach mouse	No Effect	T	FT	
	<i>Puma concolor</i>	Puma	No Effect	T(S/A)	FT(S/A)	
	<i>Puma concolor coryi</i>	Florida panther	No Effect	E	FE	
	<i>Rostrhamus sociabilis plumbeus</i>	Everglade snail kite	No Effect	E	FE	
	Federally Listed Plant Species	<i>Cucurbita okeechobeensis</i> ssp. <i>Okeechobeensis</i>	Okeechobee gourd	No Effect	E	FE
		<i>Dalia carthagenensis floridana</i>	Florida prairie-clover	No Effect	E	FE
<i>Jacquemontia reclinata</i>		Beach jacquemontia	No Effect	E	FE	
<i>Polygala smallii</i>		Tiny polygala	No Effect	E	FE	
State-Listed Wildlife Species	<i>Athene cunicularia floridana</i>	Florida burrowing owl	No adverse effect anticipated	NL	T	
	<i>Egretta caerulea</i>	Little blue heron	No adverse effect anticipated	NL	T	
	<i>Egretta tricolor</i>	Tricolored heron	No adverse effect anticipated	NL	T	
	<i>Falco sparverius paulus</i>	Southeastern American kestrel	No adverse effect anticipated	NL	T	
	<i>Gopherus polyphemus</i>	Gopher tortoise	No adverse effect anticipated	C(1)	T	
	<i>Grus canadensis pratensis</i>	Florida sandhill crane	No adverse effect anticipated	NL	T	
	<i>Platalea ajaja</i>	Roseate spoonbill	No adverse effect anticipated	NL	T	

	<i>Sternula antillarum</i>	Least tern	No adverse effect anticipated	NL	T
State-Listed Plant Species	<i>Acrostichum aureum</i>	Golden leather fern	No adverse effect anticipated	NL	T
	<i>Aeschynomene pratensis</i> var. <i>pratensis</i>	Meadow jointvetch	No adverse effect anticipated	NL	E
	<i>Asplenium dentatum</i>	American toothed spleenwort	No adverse effect anticipated	NL	E
	Asplenium serratum	American bird's nest fern	No adverse effect anticipated	NL	E
	<i>Chamaesyce cumulicola</i>	Sand-dune spurge	No adverse effect anticipated	NL	E
	<i>Conradina grandiflora</i>	Large-flowered rosemary	No adverse effect anticipated	NL	T
	<i>Ctenitis sloanei</i>	Florida tree fern	No adverse effect anticipated	NL	E
	<i>Epidendrum nocturnum</i>	Night scented orchid	No adverse effect anticipated	NL	E
	<i>Heliotropium gnaphalodes</i>	Sea rosemary	No adverse effect anticipated	NL	E
	<i>Lechea cernua</i>	Nodding pinweed	No adverse effect anticipated	NL	T
	<i>Okenia hypogaea</i>	Burrowing four-o'clock	No adverse effect anticipated	NL	E
	<i>Ophioglossum palmatum</i>	Hand fern	No adverse effect anticipated	NL	E
	<i>Tillandsia flexuosa</i>	Banded wild-pine	No adverse effect anticipated	NL	T
	<i>Trichostigma octandrum</i>	Hoop vine	No adverse effect anticipated	NL	E
	Zanthoxylum coriaceum	Biscayne prickly ash	No adverse effect anticipated	NL	E

Table 5 - 1: Summary of Listed Species and Effect Determinations

Designated Habitats

The project study area was evaluated for the presence of federally designated Critical Habitat as defined by Congress in 50 Code of Federal Regulations (C.F.R.) 17. Based on this evaluation, it was determined that no federally designated Critical Habitat is present within or directly adjacent to any of the alternatives.

Agency Coordination

The project was screened through the ETDM Programming Screen process (ETDM Project #14244) in 2015/2016. During this time, the FWS and FWC commented on potential effects of the project to wildlife and habitat resources. Both agencies indicated that the project may contain suitable wood stork (*Mycteria americana*) foraging habitat. The FWC indicated that the following federally listed species may occur within or adjacent to the project study area: American alligator (*Alligator mississippiensis*) and eastern indigo snake (*Drymarchon corais couperi*). The FWC further indicated that the following state-listed species have potential to utilize habitats within the project study area: gopher tortoise (*Gopherus polyphemus*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), least tern (*Sternula antillarum*), roseate spoonbill (*Platalea ajaja*), and Florida burrowing owl (*Athene cunicularia floridana*). The FWC added that Florida burrowing owls have been documented within the infield regions of the I-95 and Glades Road interchange north of the project limits; this species may use similar habitat within the infield regions of the project study area. The FDOT submitted an ESA Section 7 Consultation/Concurrence letter to the FWS on December 5, 2018 (see **Attachment E**) to request written concurrence on the effects to the listed species. A copy of the NRE was appended to that letter for

FWS review. FWS concurred with the effect determinations and concluded that the proposed action is not likely to adversely affect and federally listed species or designated critical habitat protected by the ESA. The FWS response letter is attached as **Attachment F**.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

In accordance with Presidential Executive Order 11990 entitled "Protection of Wetlands" and United States Department of Transportation Order 5660.1A, "Preservation of the Nation's Wetlands" and Part 2, Chapter 9 of the FDOT PD&E Manual, the project study area was reviewed to identify, quantify, and map wetland communities that are located within the proposed project boundaries. In order to protect, preserve, and enhance wetlands to the fullest extent possible, the FDOT has assessed wetlands that may be affected by proposed roadway improvements.

Wetland/surface water habitats were delineated and assessed in accordance with the State of Florida Wetlands Delineation Manual (Chapter 62-340, F.A.C.) and the guidelines found within the Regional Supplement to the USACE Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACE 2010). No viable wetland habitat was observed within the limits of the project study area; however, ten surface water habitats were identified, delineated, and assessed.

Surface Water Habitats

The surface water habitats within both Build Alternatives are identical in size and nature and consist primarily of upland-cut drainage conveyances and stormwater retention features associated with I-95. Based on desktop (GIS, aerial, etc.) reviews and field verification, a total of ten individual surface water features, comprising a total of 13.63 acres, were identified within the limits of the project study area (see **Figure 5-1** for individual surface water locations). Individual surface water habitats located within the project study area, by Florida land use, cover and forms classification system (FLUCFCS) code and FWS classification, are summarized in **Table 5-2**. Descriptions of each are also provided below.

SW ID	FLUCFCS Description	FLUCFCS Code	FWS Wetland Classification*	Acres in Study Area
SW-1	Reservoirs <10 acres	534	POWHx	5.46
SW-2	Reservoirs <10 acres	534	POWHx	0.22
SW-3	Reservoirs <10 acres	534	POWHx	0.03
SW-4	Reservoirs <10 acres	534	POWHx	1.47
SW-5	Reservoirs <10 acres	534	POWHx	0.29
SW-6	Streams and Waterways	510	PEM1Cx	0.66
SW-7	Reservoirs <10 acres	534	POWHx	2.69
SW-8	Reservoirs <10 acres	534	POWHx	1.97

SW-9	Streams and Waterways	510	PEM1Cx	0.57
SW-10	Streams and Waterways	510	PEM1Cx	0.27
Total				13.63

Table 5 - 2: Summary of Individual Surface Waters

***FWS Wetland Descriptions:**

PEM1Cx: Palustrine, Emergent, Persistent, Seasonally Flooded, Excavated

POWHx: Palustrine, Open Water, Permanently Flooded, Excavated

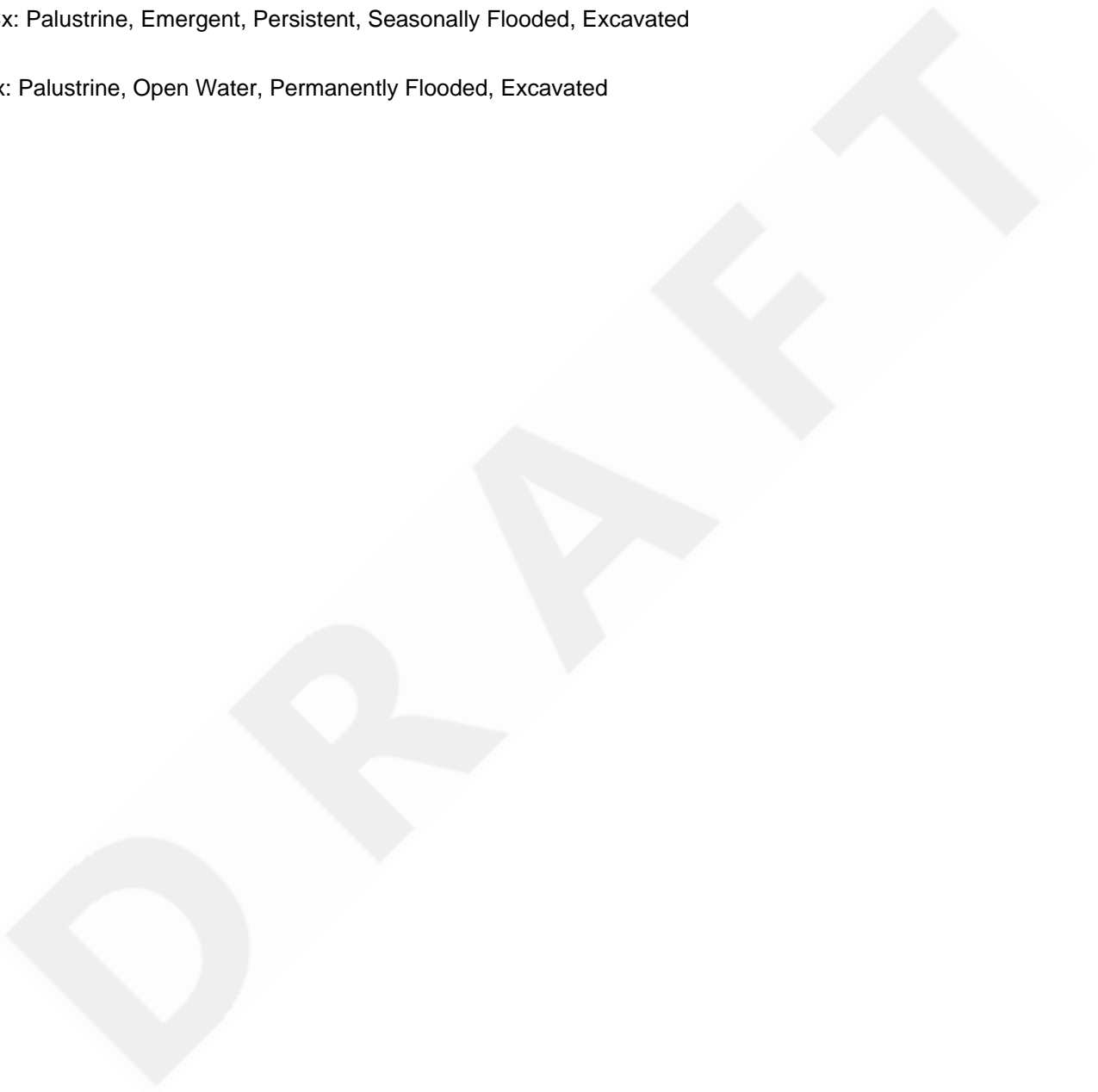




Figure 5 - 1: Individual Surface Water Locations

Wetland and Surface Water Impacts

No wetland or surface water impacts will result from the No-Action Alternative. Both viable Build Alternatives will result in identical acreage of impacts to state and federally jurisdictional surface waters. The existing surface waters within the project study area all provide low quality habitat due to their location with a densely developed urban area and proximity to the existing roadway corridor. The proposed surface water impacts will occur to excavated stormwater management facilities associated with I-95 in which water quality/quantity impacts will be addressed through improvements to the existing stormwater management system. As such, compensatory mitigation is not proposed, and a wetland functional assessment was not conducted as part of this NRE. **Table 5-3** below provides a summary of proposed impacts to individual surface water features within the project study area. Individual impact areas were determined based on the footprint of proposed new roadway construction (not the total acreage of each surface water feature within the project ROW). As shown below in **Table 5-3**, no impacts are proposed to SW-4, SW-8, SW-9, or SW-10.

SW ID	FLUCFCS Description	FLUCFCS Code	Acreage of Impact	Total Acres in Study Area
SW-1	Reservoirs <10 acres	534	1.5	5.46
SW-2	Reservoirs <10 acres	534	0.17	0.22
SW-3	Reservoirs <10 acres	534	0.03	0.03
SW-4	Reservoirs <10 acres	534	0	1.47
SW-5	Reservoirs <10 acres	534	0.16	0.29
SW-6	Streams and Waterways	510	0.06	0.66
SW-7	Reservoirs <10 acres	534	0.07	2.69
SW-8	Reservoirs <10 acres	534	0	1.97
SW-9	Streams and Waterways	510	0	0.57
SW-10	Streams and Waterways	510	0	0.27
Total			1.99	13.63

Table 5 - 3: Summary of Proposed Surface Water Impacts

Avoidance and Minimization

Avoidance and minimization of impacts were demonstrated through utilization of the existing, previously disturbed right-of-way for the majority of the study area. Additionally, all unavoidable surface water impacts will be minimized to greatest extent practicable during the project's design and permitting phase, and best management practices will be implemented during construction and operation of the project in accordance with FDOT's Standard Specifications for Road and Bridge Construction (FDOT 2017).

Agency Coordination

Regulatory agencies that provided comments during the ETDM Programming Screen process included the Florida Department of Environmental Protection (FDEP), USACE, U.S. Environmental Protection Agency (USEPA), South Florida Water Management District (SFWMD), National Marine Fisheries Service (NMFS), and FWS. The Degree of Effect (DOE) for the Wetlands issue varied by alternative from 0 (None) to 3 (Moderate). The NMFS assigned a 0 (None) DOE for the project since it does not affect coastal or marine resources. The USEPA expressed concerns regarding potential water quality issues and assigned a 3 (Moderate) DOE to the project. The USACE noted that, while the Hillsboro Canal is federally jurisdictional, the remaining surface waters within the project study area are not federally jurisdictional as they

are excavated features associated with a stormwater management system. The USACE also noted that the project may qualify for a Regional General Permit-92 or a Nationwide Permit. The wetland permitting agencies indicated that impacts to wetlands should be avoided and minimized to the greatest extent practicable, the design should meet state water quality and quantity standards, and best management practices should be implemented during construction.

5.3 Essential Fish Habitat (EFH)

There is no Essential Fish Habitat (EFH) in the project area.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

Pursuant to Presidential Executive Order 11988, entitled "Floodplain Management," U.S. Department of Transportation Order 5650.2, and Chapter 23, CFR 650A, and in accordance with the FDOT PD&E Manual, Part 2, Chapter 13 - Floodplains (dated January 14, 2019), the project alternatives were analyzed for potential floodplain impacts.

The Federal Emergency Management Agency (FEMA), in implementing the National Flood Insurance Program, established a system of building guidelines. All local and state building ordinances are based upon these guidelines. This project will comply with all applicable federal, state, and local ordinances relating to floodplains. In accordance with the FDOT's latest edition of *Standard Specifications for Road and Bridge Construction*, BMPs will be utilized during the construction phase of the project for erosion control and water quality considerations.

FEMA Flood Insurance Rate Maps (FIRM) were used to evaluate the 100-year floodplain encroachment. The project area is located within four FEMA FIRM panels (August 2014) (**Figure 5-2**). The floodplain encroachments are within the zones AE and AH with base flood elevations (BFE) ranging from 12 to 16 feet (NAVD 88).

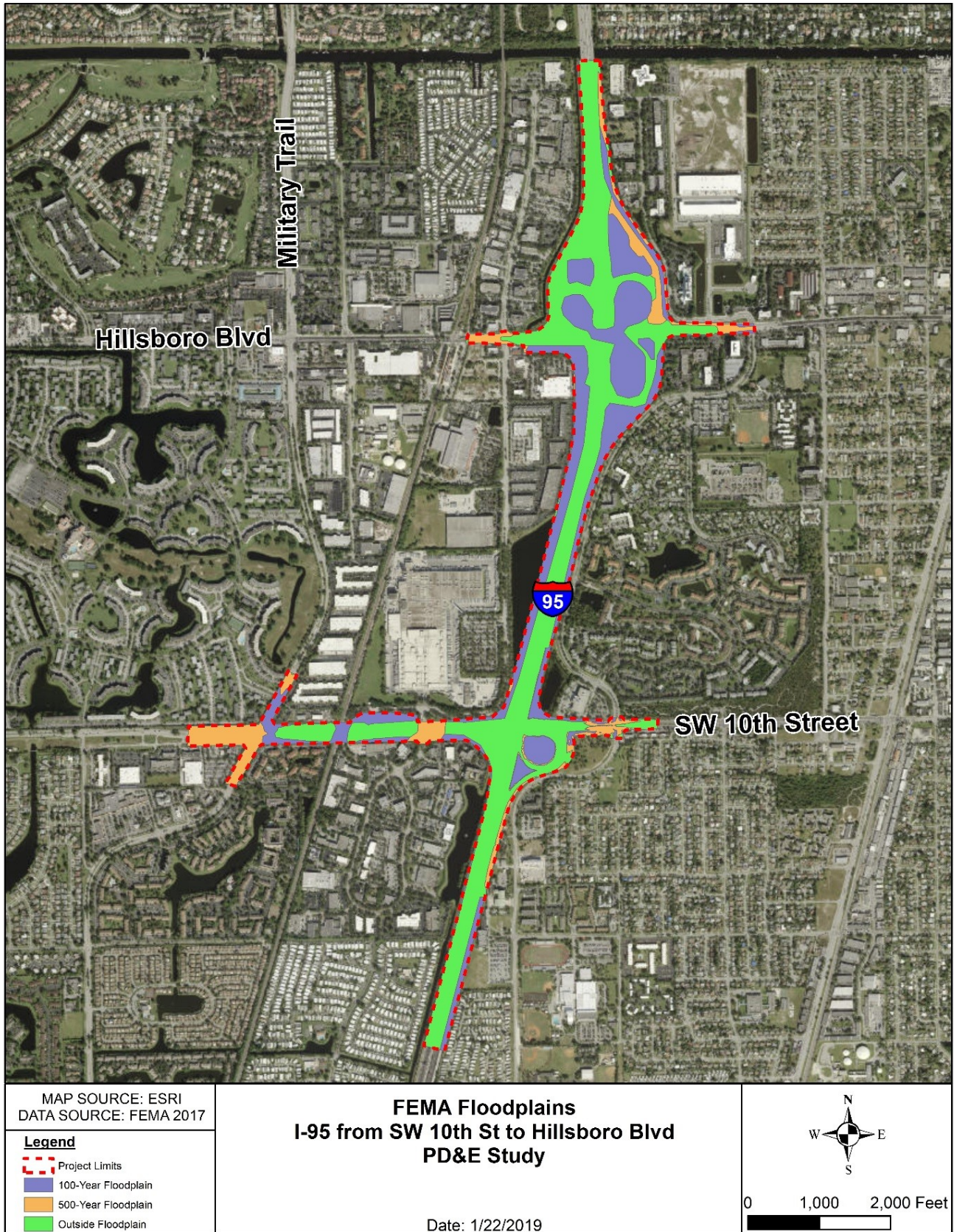


Figure 5 - 2: FEMA Floodplains

Zone AE are areas that have a one percent probability of flooding every year (also known as the "100-year floodplain") and where base flood elevations have been established. This floodplain zone is present intermittently throughout the project corridor. Zone AH is a special flood hazard area inundated by a 100-year flood event, with flood depths of one to three feet and characterized by areas of ponding. The base flood elevations have been determined. This floodplain (Zone AH) is concentrated mostly along SW 10th Street, Military Trail, and Hillsboro Boulevard within the project study area as well as along the eastern edge of the project - north of Hillsboro Boulevard and south of SW 10th Street. Properties in Zone AE and AH are considered to be at high risk of flooding under the National Flood Insurance Program. Construction in Zone AE and Zone AH areas must meet local floodplain zoning ordinance requirements.

Replacement drainage structures for this project are limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. Therefore, potential floodplain compensation areas are being considered at several offsite locations (**Figure 5-3**). The exact locations and configurations will be finalized during the Final Design phase of the project. The proposed system will be hydraulically equivalent to or greater than that of the existing system and backwater surface elevations are not expected to increase. As a result, this project will not affect existing flood heights or floodplain limits. Therefore, it has been determined that floodplain encroachment is not significant for this project. Please refer to Section 5.6 for information relating to the proposed stormwater management system.

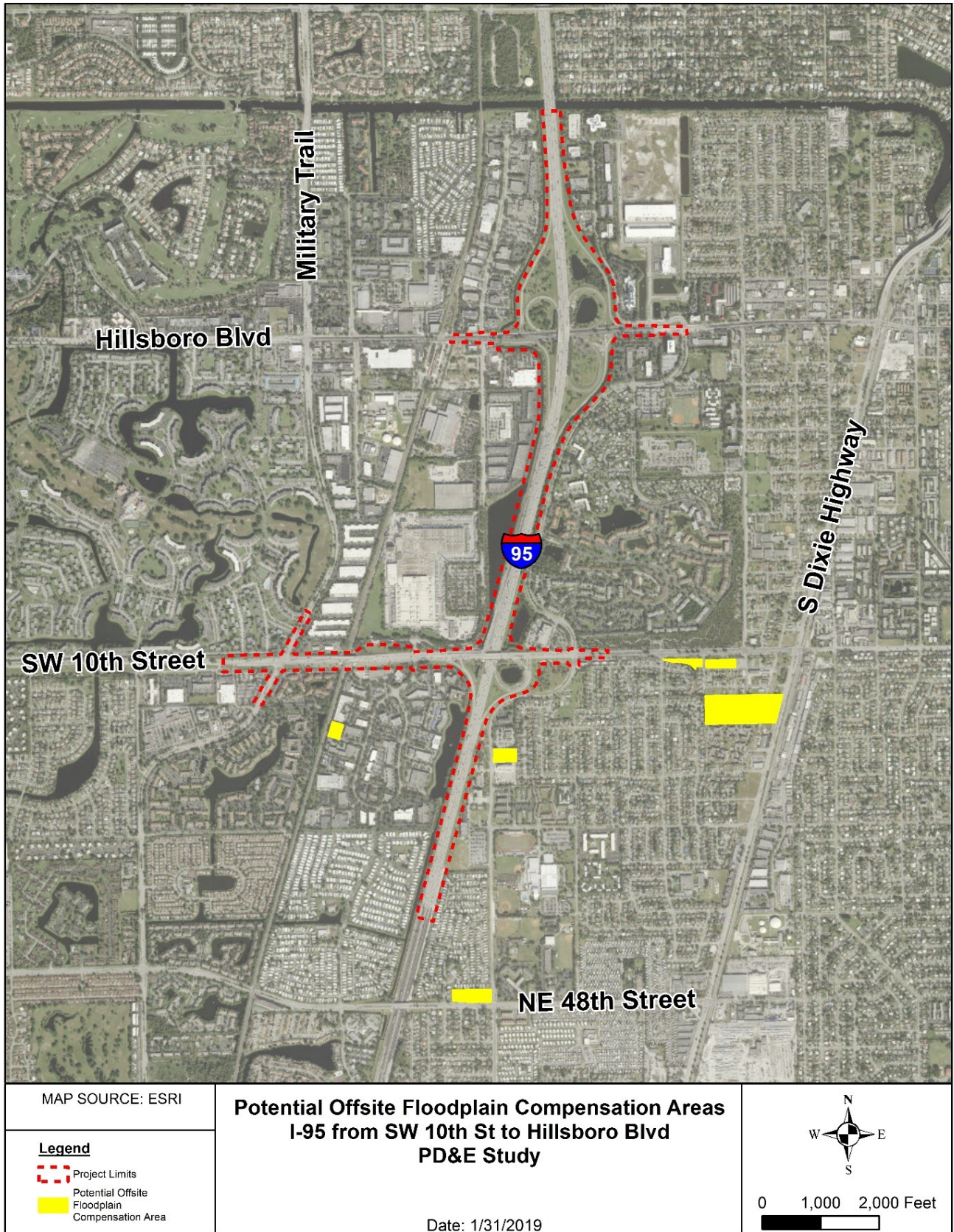


Figure 5 - 3: Potential Offsite Floodplain Compensation Areas

5.5 Sole Source Aquifer

Biscayne Aquifer

The ETDM Programming Screen Summary Report was published on July 11, 2016 (ETDM#14244). For the issue of Water Quality and Quantity, the U.S. Environmental Protection Agency's (EPA) degree of effect was determined to be Moderate (reviewed by EPA on October 24, 2015 by Ms. Kim Gates). The comments from the EPA included the following:

The Biscayne aquifer, which underlies Broward County, supplies virtually all of the potable water needs for residents in densely populated Dade, Broward, Palm Beach, and Monroe Counties. The Biscayne aquifer is highly susceptible to contamination due to its high permeability and proximity to the land surface.

A number of freshwater ponds, which are hydraulically connected to the Biscayne Aquifer, are located in the project corridor. Broward County's 2A Wellfield Protection Area may also be located in the project corridor.

Contaminated stormwater runoff in the project corridor could impact the Biscayne Aquifer and Broward County's 2A Wellfield Protection Area.

The project limits lie within the boundaries of the Biscayne Sole Source Aquifer. In accordance with the Sole Source Aquifer Program, authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.

The project study area was evaluated for contamination concerns. These concerns were assessed in the contamination screening contamination report (CSER) as part of this study. The contamination concerns are summarized in section 6.3 of this document. In summary, no underground plumes or monitoring wells will be affected by the proposed project. All necessary precautions and BMPs pertaining to construction will be followed to prevent adverse impacts to the underlying sole source aquifer.

Additionally, for all Build Alternatives, the proposed stormwater management facilities (SMF) will be constructed first, treating stormwater as the roadway is constructed. Water quality will be accomplished using a combination of wet and dry detention volumes as required by South Florida Water Management District (SFWMD). Drainage inlets will also have inlet protections to prevent silt or debris discharges during construction. After construction is completed, the SMFs will continue to treat stormwater discharges from the newly constructed roadway. The SFWMD and FDOT stormwater quality and quantity criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

The proposed project is not anticipated to have negative impacts to the Biscayne Aquifer system, which is the sole source of potable water for most of southeastern Florida. The FDOT requested the EPA's concurrence that no adverse impacts to the Biscayne Aquifer are anticipated as a result of the proposed project. The written request included the EPA's Sole Source Aquifer Checklist and the Water Quality Impact Evaluation Checklist. The EPA concurred that there will be no significant impact to the Biscayne Aquifer. The EPA's response letter is attached as **Attachment F**.

5.6 Water Quality and Stormwater

Part 2, Chapter 11 (Water Quality and Stormwater) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

Existing Drainage Conditions

Along SW 10th Street, from east of Military Trail to west of the railroad tracks, the proposed roadway improvements are within the Broward County Water Control District (BCWCD) #2 C-2 canal basin. Drainage for this portion is incorporated in the adjacent SW 10th Street Connector PD&E Study from Florida's Turnpike/ Sawgrass Expressway to SR 9/I-95 (FM 439891-1-22-02). Drainage improvements include collection and conveyance of runoff and proposed stormwater management facilities (SMF) within the C-2 canal basin.

Along SW 10th Street west of I-95, storm water is currently not treated. However, east of I-95, storm water is treated by a borrow lake, located at the southeast corner of the interchange. Storm water collected along existing I-95 is not treated and is discharged to the BCWCD#2 C-1 canal located west of I-95. However, the current construction project (managed lanes) is adding treatment for new impervious areas only. Due to the widening of this project, portions of the new treatment areas need to be removed. Any treatment removed will be replaced. The C-1 canal is used by the County for flood protection and to prevent saltwater intrusion.

Along Hillsboro Boulevard, storm water is currently not treated and discharges to the BCWCD#2 C-1 canal. Again, the current construction project (managed lanes) is adding treatment for new impervious areas only. Any treatment removed will be replaced.

The BCWCD#2 C-1 canal ultimately discharges to the Hillsboro Canal, north of the project limits.

Proposed Drainage Conditions

For all Build Alternatives, the proposed stormwater management facilities (SMF) will be constructed first, treating stormwater as the roadway is constructed. Water quality will be accomplished using a combination of wet and dry detention volumes as required by South Florida Water Management District (SFWMD). Drainage inlets will also have inlet protections to prevent silt or debris discharges during construction. After construction is completed, the SMFs will continue to treat stormwater discharges from the newly constructed roadway. The SFWMD and the FDOT require that the post-development discharge rates not exceed the pre-development discharge rates. The proposed design will be analyzed with the SFWMD 25 year - 72 hour storm event. The SFWMD and FDOT stormwater quality and quantity criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

A Water Quality Impact Evaluation Checklist was prepared for this project and is included in the Technical Materials in the project file. Water quality impacts resulting from erosion and sedimentation during construction activities will be controlled in accordance with the latest edition of the FDOT's Standard Specifications for Road and Bridge Construction and through the use of BMPs, including temporary erosion control measures.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

There are no Outstanding Florida Waters (OFW) in the project area.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

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6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 and Section 335.17, F.S., Procedures for Abatement of Highway Traffic Noise and Construction Noise.

Part 2, Chapter 19 (Highway Traffic Noise) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

In summary, traffic noise levels were predicted for noise sensitive locations along the project corridor for the existing conditions and the design year (2040) No-Build and recommended Build Alternatives. Build Alternative traffic noise levels at the residences are expected to range from approximately 53.8 to 71.1 dB(A) during the project's design year. Build Alternative traffic noise levels at the non-residential/special-use sites are expected to range from approximately 45.6 dB(A) inside the UM Health offices Church to 78.4 dB(A) on the basketball court at the Deerfield Beach Teen Center. The worst-case design year traffic noise levels with the Build Alternative are predicted to be no more than 6.8 dB(A) greater than existing levels and 6.2 dB(A) greater than the expected design year No-Build noise levels.

Design year traffic noise levels with the planned improvements are predicted to approach or exceed the FHWA NAC for residential use [67 dB(A)] at 55 residences. The design year traffic noise level with the planned improvements is predicted to equal the NAC at a basketball court at the City of Deerfield Beach Teen Center, the walking trail at the Tivoli Sand Pine Preserve park and the playground at the JM Family Daycare Center for [All Activity Class C sites, NAC = 67.0 dB(A)]. Therefore, based on the FHWA and FDOT methodologies used to evaluate traffic noise levels in this study, modifications proposed with this project were determined to generate noise impacts at noise sensitive sites within the project study area and consideration of noise abatement is required to mitigate these impacts. An analysis of noise abatement measures considered for the sites that approach or exceed the NAC is presented in the Noise Study Report. Although a number of sites approach or exceed the NAC, the proposed improvements do not result in any substantial noise increases (i.e., greater than 15 dB(A) over existing levels).

In accordance with traffic noise study requirements set forth by both the FHWA and FDOT, noise barriers were considered for all noise sensitive receptor sites where design year Build Alternative traffic noise levels were predicted to equal or exceed the NAC. Noise barriers were evaluated at three locations to mitigate noise impacts.

Noise and Vibration

During construction of the project, there is the potential for noise impacts to be substantially greater than those resulting from normal traffic operations due to the heavy equipment typically used to build roadways. In addition, construction activities may result in vibration impacts. Therefore, early identification of potential noise/vibration sensitive sites along the project corridor is important in minimizing noise and vibration impacts. The project area does include museums, parks, country clubs, government service facilities, medical facilities, a fire rescue, a school, and a religious center that may be affected by noise and vibration associated with construction activities. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the latest edition of the FDOT's *Standard Specifications for Road and Bridge Construction*. According to Section 335.02 of the Florida Statutes, the FDOT is exempt from compliance

with local ordinances. However, it is the FDOT's policy is to follow the requirements of local ordinances to the extent that is considered reasonable. Also, the contractor will be instructed to coordinate with the project engineer and the Department Noise Specialist should unanticipated noise or vibration issues arise during project construction.

6.2 Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to not change the Level of Service (LOS) and not change delay and congestion on all facilities within the study area.

Part 2, Chapter 19 (Air Quality) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

Potential air quality impacts in the area surrounding the project corridor were assessed for the project Build Alternatives, including the No-Build Alternative. O₃, NO_x, and PM-10 are analyzed at the program level unless specific review of an individual project is requested by appropriate reviewing agencies (these pollutants are not analyzed at the project level since Broward County is currently designated as in attainment for all of the NAAQS under the criteria provided in the CAA). Since CO is a localized pollutant that is emitted directly into the atmosphere by vehicles, it is analyzed for individual roadway projects where substantial changes to the traffic conditions are anticipated.

The project was reviewed for air quality impacts consistent with the FHWA discussion paper *Appropriate Level of Highway Air Quality Analysis for a CE, EA/FONSI, and EIS*. Estimates of CO were predicted for the default receptors which are located at pre-determined worst-case locations from the edge of the roadway. Based on the results from the CO Florida 2012 screening models, 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. The one-hour and eight-hour estimates predicted by the CO Florida 2012 models are directly compared to the current one-and eight-hour NAAQS for CO, which are 35 PPM and 9 PPM, respectively.

The CO screening analysis for this project indicates that the worst-case one-hour CO level is 8.7 PPM during the opening year (2027) and 8.4 PPM during the design year (2040). The predicted worst-case eight-hour CO level is estimated to be 5.2 PPM during the opening year (2027) and 5.0 PPM during the design year (2040). The project "passes" the screening model by achieving CO levels well below the one-hour and eight-hour NAAQS CO standards.

The South Florida region is currently in attainment for all of the pollutants for which NAAQS have been developed. Broward County is currently designated as in attainment for all of the NAAQS under the criteria provided in the CAA. Therefore, the project is located in an area which is designated as attainment under the criteria provided in the CAA; the CAA conformity requirements do not apply to the project.

Based on the air quality analysis conducted for this project, air quality impacts are not expected to occur as a result of this project.

For additional information, please refer to the Air Quality Technical Memorandum (AQTM) report completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material in the project file.

Agency Coordination

Agency coordination to obtain air quality related information occurred through the ETDM Programming Screen (ETDM #14244) and the Advance Notification (AN) process. The ETDM Programming Screen review occurred between 2015 and 2016, and the most recent ETDM Programming Screen Summary Report was published on July 11, 2016. The EPA reviewed the project and listed a degree of effect of 'Minimal' for air quality for all Build Alternatives. The summary degree of effect for air quality for all Build Alternatives was also listed as 'Minimal' in the ETDM Programming Screen Summary Report.

Construction Air Quality Impacts

Construction activities for the proposed action may potentially have short-term air quality impacts within the immediate vicinity of the project. Construction activities may generate temporary increases in air pollutant emissions in the form of dust from earthwork and unpaved roads and smoke from open burning. Such emissions and potential impacts will be minimized by adherence to all applicable state and local regulations and to the latest edition of the FDOT *Standard Specifications for Road and Bridge Construction*.

6.3 Contamination

A contamination screening evaluation was performed to evaluate the potential presence of contaminated sites within project corridor. A Contamination Screening Evaluation Report (CSER) was prepared pursuant to the FHWA's Technical Advisory T 6640.8A and in accordance with the FDOT PD&E Manual, Part 2, Chapter 20 - Contamination (dated June 14, 2017).

A review of all available data occurred, including agency file reviews at the Florida Department of Environmental Protection (FDEP), U.S Environmental Protection Agency (USEPA), and the Broward County Environmental Protection and Growth Management Department (EPGMD). Public file review summaries were provided by Environmental Data Resources, Inc. In addition, aerial photographs from 1963 to 2017 were reviewed from the Broward County Public Works Department for the project corridor and a site reconnaissance was performed on June 7, 2018 to further evaluate the potential for environmental contamination. The field reconnaissance also served to confirm current business address listings and site conditions.

As a result of a review of all available data, such as agency file reviews at Broward County EPGMD, and FDEP; the EDR database report; historic data reviews including aerial photography; and the site reconnaissance; the following eight (8) sites were identified to pose potential contamination concerns to the proposed project. Remaining sites identified in the above-referenced sources are not considered to pose potential contamination concerns either because of the current regulatory status of the site and/or their position with respect to the project corridor and the groundwater direction at their location (down-gradient/cross-gradient). The eight (8) identified sites, with risk rating (no risk, low risk, and medium risk) associated with the project development, are identified on **Figure 6-1** and are summarized in **Table 6-1**.

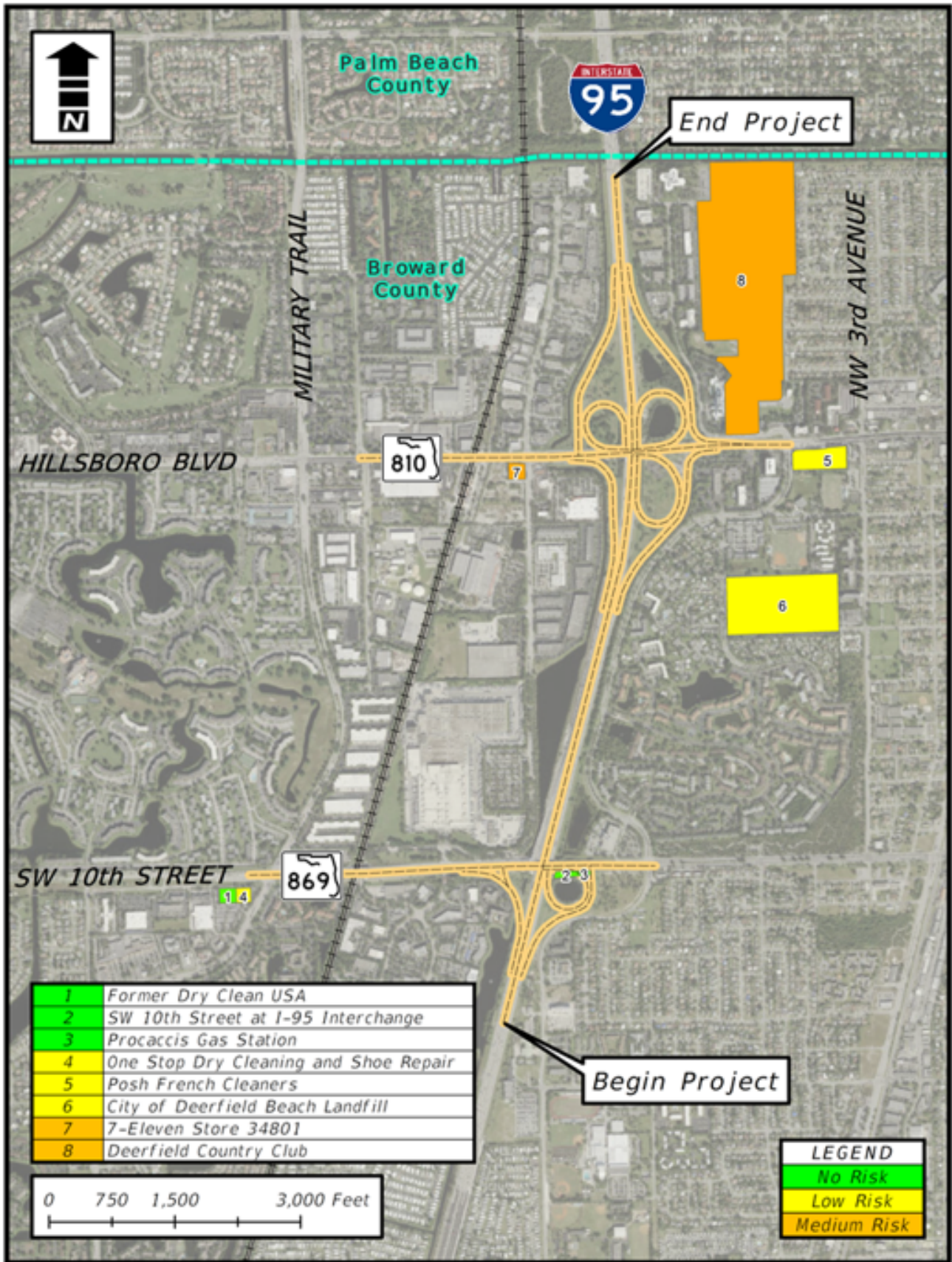


Figure 6 - 1: Potential Contamination Concerns

Site ID	Property Description	Permit # / Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating
1	Former Dry-clean USA 1379 South Military Trail Deerfield Beach FL 33441	06-9500804	FDEP	No	200 feet southwest	Former Dry Cleaner facility; Demolished. Site Closure without restrictions issued in 2013	NO
2	SW 10th Street at I-95 Interchange Deerfield Beach FL 33441 Broward County	23473	FDEP	No	Within the project corridor	Former spills	NO
3	Procaccis Gas Station 1100 SW 10th Street Deerfield Beach FL 33441	9602459	FDEP	No	Within the project corridor	Former gasoline station that was removed in 1999	NO
4	One Stop Dry Cleaning and Shoe Repair 1323 South Military Trail Deerfield Beach FL 33441	06-9800735	FDEP	No	200 feet southwest	Closure without restrictions issued in 2017	LOW
5	Posh French Cleaners 498 W Hillsboro Boulevard Deerfield Beach FL 33441	06-9500890	FDEP	Yes	175 feet southeast	Site Closure without restrictions issued in 2008	LOW
6	City of Deerfield Beach Landfill /Transfer Station 360 SW 4th Street Deerfield Beach FL 33442	SW 53368 /95123 /96035	FDEP	No	700 feet southeast	Former landfill, Soil contamination	LOW
7	7-Eleven Store No. 34801 1200 W Hillsboro Boulevard Deerfield Beach FL 33442	8502350	FDEP	Yes	150 feet south	Site Closure without restrictions issued, active gasoline station	MEDIUM
8	Deerfield Country Club 50 Fairway Drive Deerfield Beach FL 33441	1898B	EPGMD	Yes	Adjacent to Hillsboro Blvd	Arsenic contamination in soil and groundwater	MEDIUM

Table 6 - 1: Potential Contaminated Sites in the Vicinity of the PD&E Study

The FDOT District IV Planning and Environmental Management Office will utilize the information contained in this report to determine the need for additional investigation during the design phase of the Project. The Level II Contamination Assessment investigation may be conducted prior to any right of way acquisition and/or at the early stages of design phase, should any become necessary. Based on the findings of updated future review and Level II investigation, the design engineers may be instructed to avoid the areas of concern or to include special provisions with the plans to require that the construction activities performed in the areas of concern be performed or supervised by a contamination assessment and remediation contractor specified by the FDOT.

It must be recognized that the possibility exists that some contaminated substances, petroleum products, or environmental contamination not identified during this assessment may exist on or in the immediate vicinity of the project. This is because regulatory agency records are not always complete; not all leaks, spills, and discharges are reported; not

all USTs and ASTs are registered. It is unknown if any registered substances were illegally dumped or were deposited during past construction activities.

If construction dewatering will be necessary during construction, a Water Use Permit from SFWMD may be required. The contractor will be held responsible for ensuring compliance with any necessary dewatering permit(s). The dewatering plan will need to consider the radius of influence of any dewatering activity on nearby contamination plumes to avoid potential contamination plume exacerbation. All permits will be obtained in accordance with Federal, State, and local laws and regulations and in coordination with the District Contamination Impact Coordinator (DCIC).

For additional information, please refer to the CSER completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material in the project file.

6.4 Utilities and Railroads

Part 2, Chapter 21 (Utilities and Railroads) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

Utilities

The following utility companies and government utility owners have facilities located near or within the project limits.

Existing utility owners and contact information is listed in **Table 6-2**.

No.	Utility Company	Address	Contact	Phone Number	Email
1	AT&T Distribution	8601 W. Sunrise Boulevard - 1st Floor Plantation, FL 33322	Mr. Otis Keeve	(954) 723-2540	ok1184@att.com
2	Broward County Traffic Engineering	2300 W. Commercial Blvd. Fort Lauderdale, Florida 33309	Bret Henderson	(954) 847-2702	brhenderson@broward.org
3	Broward County Water and Wastewater Services	2555 West Copans Road, Pompano Beach, FL 33069	Latissa Collins	(954) 831-4132	lcollins@broward.org
4	Comcast Cable	2601 SW 145 Ave. Miramar, FL 33027	Leonard Maxwell-Newbold	(954) 447-8405	Leonard_Maxwell-Newbold@cable.comcast.com
5	City of Deerfield Beach	200 Goolsby Blvd. Deerfield Beach, FL 33442	Rocky Figueroa	(954) 422-5822	rfigueroa@deerfield-beach.com
6	CVE Master Management Co Inc. **	277 Goolsby Blvd. Unit 4C Deerfield Beach, FL 33442	Craig A Smith and Associates Inc. (Jim Driscoll)	(561) 314-4445	jdriscoll@craigasmith.com
7	Florida Department of Transportation (FDOT)	3400 W Commercial Blvd, Fort Lauderdale, FL 33309	Carolyn Leach	(954) 847-2690	Carolyn.Leach@dot.state.fl.us
8	Florida Power & Light - Broward	Post Office Box 8248 Ft. Lauderdale, FL 33340-8248	Byron Sample	(954) 321-2056	byron.a.sample@fpl.com
9	FPL Fibernet LLC	810-B Charlotte Ave. West Palm Beach, FL 33401	Jacob Marroney	(561) 616-1884	Jacob.Marroney@fpl.com

10	Level 3 Communications	2121 W. Prospect Rd Tamarac, FL 33309	Jake Jacobson	(877) 366- 8344	jake.jacobson@level3. com
11	MCI (Verizon Business Communications) *	2400 N. Glenville Drive Richardson, TX 75082	John Bachelder	(972) 729- 6322	John.bachelder@verizo n.com
12	TECO Peoples Gas South Florida	5101 NW 21 Avenue Suite 460 Ft. Lauderdale, FL 33309	Max Chamorro	(954) 453- 0812	mjchamorro@tecoener gy.com

Table 6 - 2: Utility Agency Owners

*Hillsboro Boulevard and SW 10th Street only

**SW 10th Street only

These utility companies and government utility owners will be coordinated with during the Final Design phase of this project.

Railroad Crossing

The South Florida Rail Corridor (SFRC)/CSX Railroad runs parallel to the west side of the I-95 interchange at a distance of 2,250 feet and SW 10th Street crosses over the tracks with a bridge. The SW 10th Street typical section within the limits of the limited access right-of-way is a six-lane urban divided roadway with a raised, landscaped median. In the eastbound direction, a drop right-turn lane is provided for the I-95 northbound on-ramp and in the westbound direction, a single left turn is provided for the I-95 southbound on-ramp.

The SFRC/CSX Railroad runs parallel to the west side of the I-95 interchange at an approximate distance of 1,900 feet and crosses Hillsboro Boulevard at grade. The Hillsboro Boulevard typical section within the limits of the limited access right-of-way is a six-lane urban divided roadway with a raised, landscaped median. Underneath the I-95 overpass, the eastbound and westbound lanes are separated by median containing a raised concrete barrier wall as well as support piers for the I-95 overpass. In the eastbound direction, a right-turn lane is provided for the I-95 northbound on-ramp and in the westbound direction, an auxiliary lane is provided for the transition between the I-95 northbound off-ramp merge lane and the right-turn lane provided for the I-95 southbound on-ramp.

6.5 Construction

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to the FDOT Standard Specifications for Road and Bridge Construction.

Construction activities will be controlled in accordance with the latest edition of the *FDOT's Standard Specifications for Road and Bridge Construction* (see Technical Materials) and through the use of BMPs.

7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Preliminary Engineering Report.

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8. Permits

The following environmental permits are anticipated for this project:

Federal Permit(s)

USACE Section 10 or Section 404 Permit

Status

To be acquired

State Permit(s)

DEP or WMD Environmental Resource Permit (ERP)

DEP National Pollutant Discharge Elimination System Permit

Status

To be acquired

To be acquired

Permits Comments

Both the USACE and SFWMD regulate impacts to wetlands and surface waters within the project study area. Other resource agencies, including the NMFS, EPA, and FWS, and FWC, review and comment on wetland permit applications. In addition, the FDEP regulates stormwater discharges from construction sites. The complexity of the permitting process will depend greatly on the degree of the impact to jurisdictional areas. As a precursor to the permitting process, the project was introduced to the SFWMD and USACE on June 21, 2018. No comments adverse to the proposed project were received during this agency meeting (please reference the NRE for a copy of the agency meeting minutes).

It is anticipated that the following permits will be required for this project:

Permit & Issuing Agency

- Section 404 Wetland Dredge and Fill Permit- USACE
- Environmental Resource Permit (ERP)- SFWMD
- National Pollutant Discharge Elimination System (NPDES)- FDEP

It is anticipated that a Regional General or Nationwide Permit will be required from the USACE. These permits will require compliance with the 404(b)(1) guidelines including verification that all impacts have first been avoided to the greatest extent possible; that unavoidable impacts have been minimized to the greatest extent possible; and that unavoidable impacts have been mitigated in the form of wetlands creation, restoration, and/or enhancement.

The SFWMD requires an ERP when construction of any project results in the creation of a new or modification of an existing stormwater management system or results in impacts to waters of the state. As with USACE permits, the complexity associated with the ERP permitting process will depend on the size of the project and/or the extent of wetland impacts. The SFWMD will likely require an Individual ERP for this project.

40 C.F.R. Part 122 prohibits point source discharges of stormwater to waters of the United States without a NPDES permit. Under the State of Florida's delegated authority (from the EPA) to administer the NPDES program, construction sites that will result in greater than one acre of disturbance must file for and obtain either coverage under an appropriate generic permit contained in Chapter 62- 621, F.A.C. or an individual permit issued pursuant to Chapter 62-620, F.A.C. A major component of the NPDES permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater

discharges from the site and identifies specific engineering practices (i.e., best management practices) that will be used to reduce the pollutants from stormwater discharge.

Depending on the types of permits needed from the regulatory agencies, the permitting process typically ranges from 90 to 180 days.

For additional information regarding permits, please refer to the NRE completed for this project, which is in the SWEPT project file at the FDOT District Four offices in Fort Lauderdale, Florida and listed as Technical Material in the project file.

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9. Public Involvement

The following is a summary of public involvement activities conducted for this project:

Summary of Activities Other than the Public Hearing

A public involvement program was developed and implemented for the PD&E Study. The program is documented in the Public Involvement Program (PIP), a companion document to this PD&E study (see Technical Materials). The PIP was updated and amended throughout the project development process to incorporate the latest public involvement policies and techniques as they evolved during the life of the study. The purpose of the program is to outline the public involvement approach to be taken with the project, provide and share project information with people living and working in the area, listen to ideas and concerns and to solicit and incorporate input received during the study process. For this project, the PIP focused on the ETDM Programming Screen process, elected official and agency meetings, a series of public informational meetings and several community outreach techniques including a project website and project newsletters.

Public information meetings began in March of 2017 and have continued throughout the study process. Exhibits and project information were provided for public review and comment at each meeting. FDOT representatives were available at each meeting to discuss the project and answer questions, as were members of the consultant team.

Public Kick-Off Meetings

A Public Kick-Off Meeting was held on March 14, 2017 at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL 33441 from 5:30 p.m. to 7:30 p.m.

Notice of the Public Kick-off Meeting was published in the Sun Sentinel - Northeast Zone newspaper on March 5, 2017. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the Florida Administrative Register (FAR) on March 6, 2017, on the FDOT website, and through an FDOT media release.

The purpose of this meeting was to provide the community a forum through which to learn about the improvements being studied as well as the PD&E process in general, and to provide the FDOT with initial concerns and areas to look into as part of the study. Numerous exhibits and project information were provided for public review. Forty-five people signed in at the registration table.

An additional Public Kick-Off Meeting was held on April 6, 2017 at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL 33441 from 5:30 p.m. to 7:30 p.m.

Notice of the Public Kick-off Meeting was published in the Sun Sentinel - Northeast Zone newspaper on March 26, 2017. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the Florida Administrative Register (FAR) on March 29, 2017, on the FDOT website, and through an FDOT media release.

The purpose of the meeting was to introduce the local agencies and the public to the project, explain the PD&E process, and gather input. This Kick-Off Meeting presented the same information as the meeting that was held on March 14, 2017 and was intended to provide another opportunity for the public to provide input on this project.

The Kick-off Meeting began as an open house, with FDOT personnel stationed at aerial displays and available to answer questions about the project. At 6:00 p.m. there was a brief PowerPoint presentation with a recorded voice-over. The presentation lasted approximately ten minutes. Project staff remained after the presentation for any additional questions and discussion with those in attendance. Fifty-seven people signed in at the registration table.

Alternatives Public Workshop

An Alternatives Public Workshop was held in conjunction with the SW 10th Street Connector, SR 869/SW 10th Street from Florida's Turnpike/Sawgrass Expressway to SR 9/I-95 PD&E Study on April 24, 2018. The workshop was an open house from 2:30-7:30 p.m. at the Doubletree by Hilton Hotel on 100 Fairway Boulevard, Deerfield Beach, FL, 33441.

Notice of the Alternative Public Workshop was published in the Sun Sentinel newspaper on April 13, 2018. Notices were sent to property owners and tenants located within at least 300 feet on either side of the project corridor, public officials, and individuals interested in the project. Meeting notices were posted with the Florida Administrative Register (FAR) on April 16, 2018, on the FDOT website, and through an FDOT media release.

The workshop consisted of a joint project open house in the hotel ballroom, with FDOT personnel stationed at aerial displays and other project information boards to answer questions about the project. A presentation with a recorded voice-over was provided in a separate room at regularly scheduled intervals, followed by question and answer sessions with project staff. A court reporter was present to record public comments.

Two hundred and twelve people signed in at the registration table, not including project staff.

Public Hearing

[To be scheduled in 2019]

10. Project Commitments

1. COMMITMENTS SUMMARY

Part 2, Chapter 22 (Commitments) of the FDOT PD&E Manual (January 14, 2019) was used to evaluate the following section.

No project commitments resulted from the PD&E Study.

DRAFT

11. Technical Materials

The following technical materials have been prepared to support this environmental document.

- Preliminary Engineering Report (PER)
- Natural Resources Evaluation (NRE)
- Air Quality Technical Memorandum (AQTM)
- Sociocultural Effects Evaluation (SCEE)
- Cultural Resources Assessment Survey (CRAS)
- Noise Study Report (NSR)
- Contamination Screening Evaluation Report (CSER)
- Location Hydraulics Report
- Systems Interchange Modification Report (SIMR)
- Public Involvement Program (PIP)
- Sole Source Aquifer (SSA) Cover Letter
- Sole Source Aquifer (SSA) Checklist
- Water Quality Impact Evaluation (WQIE) Checklist
- Pond Siting Report
- FDOT's Standard Specifications for Road and Bridge Construction

Attachments

Project Information

ETDM Programming Screening Report

Planning Consistency

Project Plan Consistency Documentation

Cultural Resources

SHPO Concurrence Letter

Natural Resources

WQIE Checklist_Signed

ESA Species Concurrence Letter

FWS Species Concurrence Letter

Sole Source Aquifer Coordination Letter

DRAFT

Project Information Appendix

Contents:

ETDM Programming Screening Report

DRAFT

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Attachment A
ETDM Programming Screen Summary Report



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

ETDM Summary Report

Project #14244 - I-95 from SW 10th St to Hillsboro Blvd

Final Programming Screen - Published on 07/11/2016

Generated by Anson Sonnett (on behalf of FDOT District 4)

Printed on: 7/11/2016

Table of Contents

Chapter 1 Overview	2
Chapter 2 Project Details	3
2.1. Purpose and Need	3
Chapter 3 Alternative #1	8
3.1. Alternative Description	8
3.2. Segment Description(s)	8
Chapter 4 Eliminated Alternative Information	53
4.1. Eliminated Alternatives	53
Chapter 5 Project Scope	54
5.1. General Project Recommendations	54
5.2. Required Permits	54
5.3. Required Technical Studies	54
5.4. Class of Action	54
5.5. Dispute Resolution Activity Log	54
Appendices	55
6.1. Preliminary Environmental Discussion Comments	55
6.2. Advance Notification Comments	62
6.3. GIS Analyses	62
6.4. Project Attachments	62
6.5. Degree of Effect Legend	62

Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project recommendations resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.

#14244 I-95 from SW 10th St to Hillsboro Blvd

District: District 4

County: Broward

Planning Organization: FDOT District 4

Plan ID: Not Available

Federal Involvement: FHWA Funding Other Federal Permit

Phase: Programming Screen

From:

To:

Financial Management No.: 436964-1-22-01

Contact Information: Shandra Davis-Sanders (954) 677-7896 shandra.davis@dot.state.fl.us

Snapshot Data From: Programming Screen Summary Report Re-published on 07/11/2016 by Anson Sonnett
 Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic						Cultural			Natural				Physical							
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations
Alternative #1	2	3	0	0	2	1	1	2	3	2	3	3	3	2	0	2	2	3	2	N/A	3

Re-Published: 07/11/2016 Reviewed from 09/09/2015 to 10/24/2015)

Purpose and Need

Purpose and Need

The purpose of this project is to eliminate various existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10th Street and Hillsboro Boulevard, and also on SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The primary need for the project is based on capacity/operational and safety issues, with secondary considerations for the needs of evacuation and emergency services, transportation demand, system linkage, modal interrelationships, and social demands and economic development.

Capacity/Operational Deficiencies

A need exists to improve traffic operations along I-95 between the SW 10th Street and Hillsboro Boulevard interchanges, especially at existing merge and diverge ramps that are the sources of traffic turbulence and collisions. The mainline directional volumes range from 4,400 to 5,850 vehicles per hour (vph) with ramp volumes from 800 to 1,250 vph at SW 10th Street and 400 to 1,000 vph at Hillsboro Boulevard.

Operational analyses along I-95 indicate that all freeway segments in the study area operate at Level of Service (LOS) D or better except for the following:

- The diverge segment at I-95 southbound (SB) off-ramp to SW 10th Street EB and WB during the AM and PM peak periods;
- The I-95 mainline segment between I-95 SB on-ramp from SW 10th Street eastbound (EB) and westbound (WB) and I-95 SB off-ramp to Sample Road EB and WB during the PM peak period;
- The I-95 mainline between I-95 SB On-Ramp from Palmetto Park Boulevard EB and I-95 SB Off-Ramp to Hillsboro Boulevard EB and WB during the AM peak period;
- The merge at I-95 SB on-ramp from Hillsboro Boulevard WB during AM and PM peak periods; and
- The diverge segment at I-95 northbound (NB) off-ramp to Hillsboro Boulevard EB during the AM peak period.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Year 2040 traffic projections show the mainline directional volumes ranging from 6,000 to 7,300 vph. Year 2040 peak hour directional volumes on I-95 Express are forecasted to range an additional 1,300 to 2,550 vph within the I-95 corridor.

Operational analyses under the "No Build" option in year 2040 reflects implementation of two major programmed improvements: 1) I-95 Express Phase 3 (two express travel lanes in each direction), and 2) I-95 Ramp Metering. All of the mainline freeway segments in the study area would operate at a deficient LOS (E or F) during one or both peak periods with the exception that the merge segment for I-95 SB On-Ramp from WB Hillsboro Boulevard would operate at LOS D during the PM peak hour.

Safety

A need exists to resolve safety issues within the project limits along I-95 as well as SW 10th Street and Hillsboro Boulevard. Crash analyses for the years 2008 through 2012 reveal that the I-95 project segment within the SW 10th Street interchange area is not a high crash segment but the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment for four of the five study years. It should also be noted that the existing interchanges are closely located together and have short weave distances. Crash rates along SW 10th Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing into this area.

Evacuation and Emergency Services

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10th Street and Hillsboro Boulevard are designated as emergency

evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

Transportation Demand

A need exists to improve capacity and safety while meeting transportation demand and maintaining consistency with other transportation plans and projects, such as the Broward County Interchange Master Plan (IMP) and I-95 Express Lanes Phase III Project. The project is included in the FDOT Work Program for fiscal years 2016 to 2020, where PD&E is scheduled for fiscal years 2015 and 2016 and PE is scheduled for fiscal years 2017 and 2018. The Broward County MPO 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

System Linkage

A need exists to ensure that I-95 continues to meet the minimum requirements of a component of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS), as well as provides access connectivity to other major arterials such as I-595 and Florida's Turnpike.

Modal Interrelationships

There exists a need for capacity improvements along the I-95 project corridor to enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Increased mobility to public transit operations are needed and will benefit as a result of this project. Although no designated Broward County Transit (BCT) Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange.

Social Demands and Economic Development

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicted that the population would grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs were predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent. A need exists for the proposed improvements to support the predicted social and economic travel demands.

Project Description

This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps) in Broward County, Florida (see Location Map in the EST). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extend from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.

I-95 within the project limits currently has six general purpose lanes (three in each direction) and two High Occupancy Vehicle (HOV) lanes (one in each direction). This segment of I-95 is functionally classified as a Divided Urban Principal Arterial Interstate and has a posted speed limit of 65 miles per hour. The access management classification for this

corridor is Class 1.2, Freeway in an existing urbanized area with limited access. SW 10th Street is classified as a six lane divided State Principal arterial west of I-95 and as a six lane divided City Minor Arterial east of I-95. Hillsboro Boulevard is classified as a six-lane divided State Minor Arterial west of I-95 and as a State Principal Arterial east of I-95. Year 2013 AADT for I-95 was approximately 102,000 vehicles per day (vpd) NB and 102,000 vpd SB. Forecasted Year 2040 AADT for I-95 NB is approximately 129,000 vpd and 132,000 vpd SB in the vicinity of Hillsboro Boulevard, with 147,000 vpd NB and 146,000 vpd SB in the vicinity of SW 10th Street.

This project will evaluate the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, consider the replacement of the existing SW 10th Street bridge over I-95 and the provision of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard, located 1900 feet west of the existing interchange.

Summary of Public Comments

Summary of Public Comments is not available at this time.

Planning Consistency Status

Federal Consistency Determination

Date: 10/14/2015

Determination: CONSISTENT with Coastal Zone Management Program.

Lead Agency

Federal Highway Administration

Participating and Cooperating Agencies

Participating and Cooperating agencies are not applicable for this class of action.

Exempted Agencies

Agency Name	Justification	Date
US Coast Guard	US Coast Guard has requested to be exempt from reviewing any projects that do not impact navigable waterways.	08/28/2015
Federal Transit Administration	FTA has requested to be exempt from reviewing any non-transit projects.	08/28/2015

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

User Defined Communities Within 500 Feet

No user defined communities were found within a 500 ft. buffer distance for this project.

Census Places Within 500 Feet

- DeLand Southwest

Purpose and Need Reviews

FDOT District 4

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/22/2015	Gaspar Jorge Padron (gaspar.padron@dot.state.fl.us)	No Purpose and Need comments found.

FL Department of Agriculture and Consumer Services

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/09/2015	Steve Bohl (Steve.Bohl@freshfromflorida.com)	No Purpose and Need comments found.

FL Department of Economic Opportunity

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/12/2015	Adam Biblo (adam.biblo@deo.myflorida.com)	No Purpose and Need comments found.

FL Department of Environmental Protection

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/14/2015	Lauren Milligan (lauren.milligan@dep.state.fl.us)	No Purpose and Need comments found.

FL Department of State

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/01/2015	Ginny Jones (ginny.jones@dos.myflorida.com)	none

FL Fish and Wildlife Conservation Commission

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/20/2015	Jennifer Goff (jennifer.goff@MyFWC.com)	No Purpose and Need comments found.

Federal Highway Administration

Acknowledgment	Date Reviewed	Reviewer	Comments
Accepted	10/22/2015	Luis Lopez (luis.d.lopez@dot.gov)	<p>Planning consistency will need to be met before FHWA can approve the environmental document. The public needs to be aware of the funding situation and timeframe of the project development and delivery.</p> <p>The study area identified in the map just included on of the 3 ramps of the partial cloverleaf interchange. If this is correct, the PD&E needs to explain why those ramps were left out the study.</p>

National Marine Fisheries Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	09/15/2015	Brandon Howard (Brandon.Howard@noaa.gov)	None

National Park Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/19/2015	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Natural Resources Conservation Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/14/2015	Rick Robbins (rick.a.robbins@fl.usda.gov)	No Purpose and Need comments found.

South Florida Water Management District

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/16/2015	Mindy Parrott (mparrott@sfwmd.gov)	No Purpose and Need comments found.

US Army Corps of Engineers

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/09/2015	Randy Turner (Randy.L.Turner@usace.army.mil)	No Purpose and Need comments found.

US Environmental Protection Agency

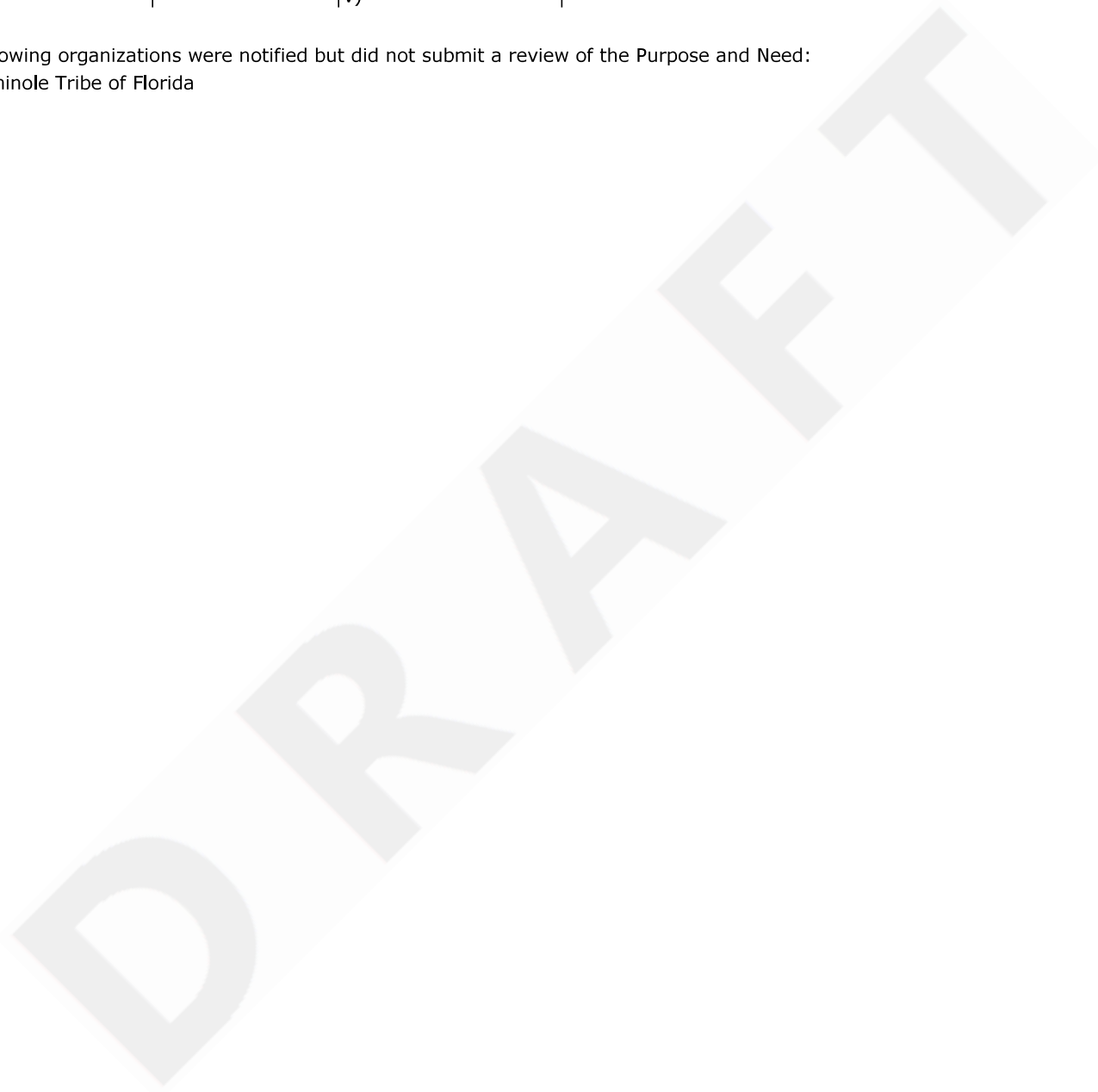
Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/23/2015	Kim Gates (gates.kim@epa.gov)	No comments at this time.

US Fish and Wildlife Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	09/11/2015	John Wrublik (john_wrublik@fws.gov)	No Purpose and Need comments found.

The following organizations were notified but did not submit a review of the Purpose and Need:

- Seminole Tribe of Florida



Alternative #1

Alternative Description

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
Alternative was not named.	?	?	Widening	ETAT Review Complete	5.92 mi.		None Selected	Y

Segment Description(s)

Location and Length

Segment Record	Segment Name	Facility Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
S-001	Unnamed Segment	Unnamed Segment			5.92			

Jurisdiction and Class

Segment Record	Segment Name	Jurisdiction	Urban Service Area	Functional Class
S-001	Unnamed Segment			

Base Conditions

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Interim Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Needs Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Cost Feasible Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Unnamed Segment				

Funding Sources

No funding sources found.

Project Effects Overview for Alternative #1

Issue	Degree of Effect	Organization	Date Reviewed
Social and Economic			
Land Use Changes	0 None	FL Department of Economic Opportunity	10/23/2015
Land Use Changes	2 Minimal	Federal Highway Administration	10/22/2015
Land Use Changes	2 Minimal	FDOT District 4	10/22/2015
Social	3 Moderate	US Environmental Protection Agency	10/24/2015
Social	2 Minimal	Federal Highway Administration	10/22/2015
Social	2 Minimal	FDOT District 4	10/22/2015
Relocation Potential	0 None	FDOT District 4	10/23/2015
Relocation Potential	0 None	Federal Highway Administration	10/22/2015
Farmlands	0 None	Federal Highway Administration	10/22/2015
Farmlands	0 None	Natural Resources Conservation Service	10/14/2015
Aesthetic Effects	2 Minimal	Federal Highway Administration	10/22/2015

Aesthetic Effects	2	Minimal	FDOT District 4	10/22/2015
Economic	0	None	FL Department of Economic Opportunity	10/23/2015
Economic	1	Enhanced	Federal Highway Administration	10/22/2015
Economic	1	Enhanced	FDOT District 4	10/22/2015
Mobility	1	Enhanced	Federal Highway Administration	10/22/2015
Mobility	1	Enhanced	FDOT District 4	10/22/2015
Cultural				
Section 4(f) Potential	2	Minimal	Federal Highway Administration	10/22/2015
Historic and Archaeological Sites	2	Minimal	Federal Highway Administration	10/22/2015
Historic and Archaeological Sites	3	Moderate	FL Department of State	10/01/2015
Recreation Areas	2	Minimal	US Environmental Protection Agency	10/23/2015
Recreation Areas	2	Minimal	Federal Highway Administration	10/22/2015
Recreation Areas	N/A	N/A / No Involvement	National Park Service	10/19/2015
Recreation Areas	2	Minimal	South Florida Water Management District	10/16/2015
Recreation Areas	2	Minimal	FL Department of Environmental Protection	10/14/2015
Natural				
Wetlands	3	Moderate	US Environmental Protection Agency	10/24/2015
Wetlands	2	Minimal	Federal Highway Administration	10/22/2015
Wetlands	2	Minimal	South Florida Water Management District	10/16/2015
Wetlands	2	Minimal	FL Department of Environmental Protection	10/14/2015
Wetlands	2	Minimal	US Army Corps of Engineers	10/09/2015
Wetlands	0	None	National Marine Fisheries Service	09/15/2015
Wetlands	2	Minimal	US Fish and Wildlife Service	09/11/2015
Water Quality and Quantity	3	Moderate	US Environmental Protection Agency	10/24/2015
Water Quality and Quantity	2	Minimal	Federal Highway Administration	10/22/2015
Water Quality and Quantity	2	Minimal	South Florida Water Management District	10/16/2015
Water Quality and Quantity	2	Minimal	FL Department of Environmental Protection	10/14/2015
Floodplains	3	Moderate	US Environmental Protection Agency	10/23/2015
Floodplains	2	Minimal	Federal Highway Administration	10/22/2015
Floodplains	2	Minimal	South Florida Water Management District	10/16/2015
Wildlife and Habitat	2	Minimal	Federal Highway Administration	10/22/2015
Wildlife and Habitat	2	Minimal	FL Fish and Wildlife Conservation Commission	10/20/2015

Wildlife and Habitat	0 None	FL Department of Agriculture and Consumer Services	10/09/2015
Wildlife and Habitat	2 Minimal	US Fish and Wildlife Service	09/11/2015
Coastal and Marine	0 None	Federal Highway Administration	10/22/2015
Coastal and Marine	0 None	South Florida Water Management District	10/16/2015
Coastal and Marine	0 None	National Marine Fisheries Service	09/15/2015

Physical

Noise	2 Minimal	Federal Highway Administration	10/22/2015
Air Quality	2 Minimal	US Environmental Protection Agency	10/23/2015
Air Quality	2 Minimal	Federal Highway Administration	10/22/2015
Contamination	3 Moderate	US Environmental Protection Agency	10/23/2015
Contamination	3 Moderate	Federal Highway Administration	10/22/2015
Contamination	3 Moderate	South Florida Water Management District	10/16/2015
Contamination	3 Moderate	FL Department of Environmental Protection	10/14/2015
Infrastructure	2 Minimal	Federal Highway Administration	10/22/2015
Navigation	N/A N/A / No Involvement	Federal Highway Administration	10/22/2015
Navigation	N/A N/A / No Involvement	US Army Corps of Engineers	10/09/2015

Special Designations

Special Designations	3 Moderate	US Environmental Protection Agency	10/23/2015
Special Designations	0 None	Federal Highway Administration	10/22/2015
Special Designations	0 None	South Florida Water Management District	10/16/2015

ETAT Reviews and Coordinator Summary: Social and Economic

Land Use Changes

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

This project will be completed within existing right-of-way. It is compatible with the existing and future land use patterns of the area and not anticipated to affect the land use patterns in the project area. FDEO indicated that the project is compatible with the community's development goals and marginally compatible with the local government comprehensive plan. FDEO assigned a degree of effect of None. FHWA assigned a degree of effect of Minimal and stated that minimal to no land use effects are expected. A Summary Degree of Effect of **Minimal** has been assigned to the Land Use Changes issue.

Public outreach will be conducted during the PD&E Stage in coordination with the Broward County MPO and the City of Deerfield to solicit feedback on potential adverse effects as a result of the project.

Degree of Effect: 0 *None* assigned 10/23/2015 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The local government's comprehensive plan: City of Deerfield Beach Comprehensive Plan, January 28, 2014.

Comments on Effects to Resources:

Project compatibility with community development goals? Yes.

Project compatibility with the local government(s) comprehensive plan?

Marginally. Would temporarily mitigate Level of Service Standard deficiency for I-95. In contrast, Section 3.7.2 of the Transportation Element, Implementation of Future Expected Roadway Improvements specifies, that for I-95, alleviation of congestion will rely on transit enhancements planned for this corridor.

Is the project on the Future Transportation Map?

No.

Future Land Use Map categories that surround the project: Transportation; Commercial; Commercial 2; Residential Moderate; Residential Medium; Community Facility; Water; and, Industrial.

Local parks (City or County) within a quarter mile of the project: Mayo Howard Park (Deerfield Beach City Park).

Does the project encroach on a military base? Is the project within an Area of Critical State Concern, encroach on a military base, or located in the project in a Rural Area of Opportunity? No.

Is the project within the Coastal High Hazard Area?No.

Is the project within an Area of Critical State Concern? No.

Other planning items that would affect or be enhanced by the project:

The project will improve the traffic flow merging onto I-95 and merging off I-95.

Contact information for the affected local government: Amanda Martinez, Director, Planning & Development Services, City of Deerfield Beach, (954) 480-4208

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Land uses have been identified in the report.

Comments on Effects to Resources:

The project is expected to be constructed within the existing ROW and doesn't foresee any changes on travel patterns. Minimal to no effects on land uses are expected.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

City of Deerfield Beach Future Land Use Plan

200-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%
1400 COMMERCIAL AND SERVICES / 42.1 / 17.26%
1411 SHOPPING CENTERS / 3.2 / 1.31%
1550 OTHER LIGHT INDUSTRY / 13 / 5.32%
1700 INSTITUTIONAL / 6.4 / 2.61%
1820 GOLF COURSE / 3.6 / 1.45%
4130 SAND PINE / 0.5 / 0.21%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 3.6 / 1.48%
5300 RESERVOIRS / 7.5 / 3.07%
8140 ROADS AND HIGHWAYS / 153.4 / 62.81%

2010 Census Designated Places (1)

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

500-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%
1400 COMMERCIAL AND SERVICES / 141.7 / 28.9%
1411 SHOPPING CENTERS / 10.6 / 2.15%
1550 OTHER LIGHT INDUSTRY / 45.3 / 9.25%
1700 INSTITUTIONAL / 21.1 / 4.3%
1820 GOLF COURSE / 12.4 / 2.52%
4130 SAND PINE / 1.9 / 0.38%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 1.54%
5300 RESERVOIRS / 22.6 / 4.61%
8140 ROADS AND HIGHWAYS / 164.8 / 33.61%
1850 PARKS AND ZOOS / 3.5 / 0.72%
1900 OPEN LAND / 0.5 / 0.1%

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
1400 COMMERCIAL AND SERVICES / 364.5 / 30.4%
1411 SHOPPING CENTERS / 12.4 / 1.03%
1550 OTHER LIGHT INDUSTRY / 163.4 / 13.7%

1700 INSTITUTIONAL / 43.1 / 3.6%
 1820 GOLF COURSE / 52.9 / 4.41%
 4130 SAND PINE / 5.5 / 0.46%
 4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 0.63%
 5300 RESERVOIRS / 30.1 / 2.51%
 8140 ROADS AND HIGHWAYS / 199.2 / 16.61%
 1850 PARKS AND ZOOS / 24.9 / 2.07%
 1900 OPEN LAND / 4.4 / 0.37%
 1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
 1320 MOBILE HOME UNITS / 5 / 0.42%
 5120 CHANNELIZED WATERWAYS CANALS / 1.2 / 0.1%

Comments on Effects to Resources:

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The project will be constructed mostly within existing right of way with the potential only for minor impacts to commercial properties which would be unlikely to result in changes to existing land use. The project will support the future growth and accommodate transportation to the employment centers in the project area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:**CLC Recommendations:**

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses that may be impacted by the interchange improvements.

Indirect Effects**Identified Resources and Level of Importance:****Comments on Effects to Resources:****Recommended Avoidance, Minimization, and Mitigation Opportunities:****Social****Project Effects**

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

This project will support increasing social and economic demands expected due to continued population and employment growth in this area. The proposed project is anticipated to improve traffic flow and safety to the surrounding communities, social service facilities, recreational assets, and businesses. The project vicinity contains minority and low-income populations and Community Development Block Grant Targeted Areas. Due to these sensitive populations, the USEPA gave the Social issue a Moderate rating. FHWA anticipated Minimal effects. Thus, a Summary DOE of **Moderate** has been assigned for the Social category.

During the PD&E phase, a Community Awareness Memorandum as recommended by USEPA, and a Sociocultural Effects Evaluation in accordance with Part 2, Chapter 9 of the FDOT PD&E Manual will be performed. Public outreach will be conducted by FDOT District Four in coordination with the Broward County MPO and the City of Deerfield Beach to solicit input from the general public to ensure that both the social and transportation needs of the community are addressed through the project.

Degree of Effect: 3 *Moderate* assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Community Awareness Memorandum (PD&E Manual, Part 1, Chapter 11), and
- Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 13).

Direct Effects

Identified Resources and Level of Importance:

Based on available information (primarily USEPA's EJSCREEN tool, <http://www2.epa.gov/ejscreen>), the project could have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

According to EJSCREEN, the population within 1/2 mile of the I-95 & Hillsboro Blvd interchange is:

- 67% minority,
- 47% low income,
- 12% linguistically isolated, and
- 19% with less than a high school education.

Also according to EJSCREEN, the population within 1/2 mile of the I-95 & SW 10th Street interchange is:

- 62% minority,
- 52% low income,
- 18% linguistically isolated, and
- 16% with less than a high school education.

Furthermore, the areas in the project vicinity are Community Development Block Grant (CDBG) Targeted Areas by the City of Deerfield Beach, <http://www.deerfield-beach.com/DocumentCenter/View/5312>

The Preliminary Environmental Discussion Comments Report identified several social services and recreational assets in the vicinity of the project corridor, including:

- South Florida Railway Museum (1300 West Hillsboro Boulevard),
- Assembly of God New Life (1015 W Newport Center Drive #105),
- Grace Christian Church (W Hillsboro Boulevard),
- Westside Park Recreation Center (445 SW 2nd Street),
- Broward County Fire Department and Rescue Station 111 (232 Goolsby Boulevard),
- Broward County North Regional County Court (1600 W Hillsboro Boulevard),
- U.S. Post Office - Deerfield Beach Annex (155 Goolsby Boulevard),
- Mayo Howard Park located at 1131 FAU Research Park Boulevard,
- Westside Park located at 445 SW 2nd Street, and
- Tivoli Sand Pine Preserve located along SW 10th Street between SW Natura Boulevard and SW Martin Luther King Jr Ave.

Additionally, the Seaboard Air Line Railway Station, which was recorded in the National Register of Historic Places in 1990 (<http://www.broward.org/History/NationalRegister/Pages/SeaboardAirLineRailwayStation.aspx>), and the Oveta McKeithen Recreational Complex (<http://www.deerfield-beach.com/index.aspx?NID=1223>) are located in the project study area.

Comments on Effects to Resources:

According to FDOT's PD&E Manual, Part 1, Chapter 11 Public Involvement, "[p]rojects processed through the ETDM EST have undergone a Sociocultural Effects Evaluation (SCE) as part of the screening process prior to the PD&E phase." And, according to FDOT's Practical Application Guides for SCE Evaluations - ETDM Process (April 23, 2013), "The timing of the SCE evaluation process for Planning and Programming screens [is] generally within the 45-day review period during which the Environmental Technical Advisory Team (ETAT) reviews and comments on a project." However, based on available information, USEPA could not determine if a Sociocultural Effects Evaluation will be conducted for this project. The Preliminary Environmental Discussion Comments Report identified several social services and recreational assets in the vicinity of the project corridor, and the Project Description stated that "an extensive Public Involvement Plan (PIP) will be prepared and conducted during the PD&E phase of this project." But conducting outreach to establish community concerns and preferences and to ascertain which public involvement activities will be appropriate during PD&E was not addressed.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends development of a Community Awareness Memorandum to describe how affected communities and sensitive community issues will be identified, documented (preferably in a Sociocultural Effects Evaluation Technical Memorandum), and dealt with during the public involvement process.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Access to properties could be affected during the construction phase of the project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The public must be involved in the project development. The access to properties during and after project delivery should be maintained.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

2010 Census Designated Places (1)

Deerfield Beach

Bus Transit Routes (3)

Route 92

Route 93

Route 48 (Fixed Route from most recent Broward County Transit Map)

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Facility Crossings (10)

I-95 Northbound

SR 810 Hillsboro Boulevard

I-95 Southbound

SW 10th Street/SR 869

I-95/SR 9

SCL RR

SCL RR

SW 12th Avenue

SW 12th Avenue

FDOT RCI Bridges (5)

860123

860557

860124

860564

860194

Geocoded Civic Centers (2)

Deerfield Beach Country Club

Hilton Deerfield Beach

Geocoded Cultural Centers (1)

South Florida Railway Museum

Geocoded Laser Facilities (1)

Dentist - 10 Fairway Drive

Geocoded Religious Centers (2)

Assembly of God New Life

Grace Christian Church

Geocoded Social Service Facilities (4)

Food for the Poor

Florida Counseling & Wellness

Allied Barton Security Services

Barton Protective Services

Railroads in the State of Florida (1)

CSX Mainline

Transportation Disadvantaged Service Provider Areas (2)

-BROWARD

-BREVARD, BROWARD, DUVAL, MANATEE, PINELLAS - TMS OF BREVARD, INC.

500-Foot Buffer:

Community and Fraternal Centers 2015 (1)

Westside Park Recreation Center

Fixed-Guideway Transit Network Stations

Deerfield Beach Station - Tri County Commuter

Geocoded Government Buildings (1)

Broward County - County Court - North Regional Courthouse

Geocoded Religious Centers (3) (2 within 200 feet)

Church of Latter Day Saints

Geocoded Social Service Facilities (7) (4 within 200 feet)

Food for the Poor

Kasky, PA

Pegasus Home Health Care Inc

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

Bus Transit Routes (5) (3 within 500 feet)

Route 50

Route 97

Geocoded Assisted Housing (2)

Lakes at Deerfield

Praxis of Deerfield Beach III

Geocoded Cultural Centers (2) (1 within 500 feet)

Century Plaza Branch Library

Geocoded Government Buildings (3) (1 within 500 feet)

US Post Office - Village

US Post Office - Deerfield Beach Carrier Annex

Geocoded Laser Facilities (2) (1 within 500 feet)

Hillsboro Urgent Care - 1855 W Hillsboro Boulevard

Geocoded Religious Centers (3 within 500 feet)

More than Conquerors Ministries

Temple Beth Israel at Century Village East

Examsoft Worldwide

Geocoded Schools (1)

University of Miami

Geocoded Social Service Facilities (19) (7 within 500 feet)

Ali Florida Fire and Mold

Image

Deerfield Beach City of Public Works Environmental Services

Puffin Learning Academy

Jodi B Green PA

Israel Humanitarian Foundation

Jewish National Fund Broward & Palm Beach Counties

Adventures in Early Learning

Deerfield Beach CBOC

Baroum Nabil A MD PA 100 S Military

Tropical Palms Hand Therapy Incorporated

Van Pelt and Associates Physical Rehabilitation Services

Group Care Facilities (3)

06-51-01204

06-51-02247

06-51-04374

Comments on Effects to Resources:

This project will support increasing social and economic demands on the I-95 corridor due to continued population and employment growth in this area. The project is located entirely within the City of Deerfield Beach, Broward County, Florida in an urbanized area. The proposed improvements involve existing roads and thus would not create any physical barriers between neighborhoods. Right of way impacts, if any, would be limited to partial acquisition of commercial/industrial property. There are no residences adjacent to the project; therefore, relocations are not anticipated. The residences east of I-95 are behind Natura Boulevard. The project would not result in changes to population or demographics.

Community facilities in the project vicinity include two (2) civic centers, two (2) cultural centers, three (3) government buildings, six (6) religious centers, one (1) school, and nineteen (19) social service facilities. Direct impacts would not occur; however, temporary disruptions to access may occur during construction.

The 2013 American Community Survey showed that eight (8) of the ten (10) block groups within 500 feet of the project limits have a lower median income than Broward County. The block groups that intersect the project have median incomes that range from \$3,676 to \$63,640, while Broward County has a median income of \$51,251. The block groups within 500 feet of the project area have a lower percentage of minority residents than the Broward County with 47 percent minority population compared to 59 percent minority population in the County. The project would not involve displacement of any minority and/or low-income residences or businesses and does not include tolling. Effects of construction would be temporary and would occur throughout the corridor. The project is not expected to cause minority or low-income populations to experience disproportionately high or adverse impacts.

The purpose and needs notes that the I-95 segment within the Hillsboro Boulevard interchange area was considered a high crash segment during a 2008 to 2012 study. The proposed improvements to provide increase weaving distances and a grade separation of the CSX Railroad crossing at Hillsboro Boulevard would enhance safety.

The proposed improvements to the interchanges will improve vehicular traffic flow, and provide enhanced access to and from I-95,

including the future managed lanes.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development and Environment study, FDOT District Four will coordinate with the Broward County Metropolitan Planning Organization and the City of Deerfield Beach to conduct public outreach and obtain feedback to ensure that the social and transportation needs of the community are addressed during the interchange improvements. FDOT District Four will inform the community of its construction schedule and access disruptions through signage, websites, and/or other means, as appropriate.

There are households with limited ability to speak English; thus, it is recommended that FDOT District Four further refine the limited English speaking households and possible requirements during the PD&E study as part of any public involvement efforts.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Relocation Potential

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

Improvements proposed to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will occur primarily within the existing right-of-way. FHWA rated effects as None. No relocations are anticipated; therefore, a Summary DOE of **No Involvement** has been assigned to the relocation issue.

Degree of Effect: 0 None assigned 10/23/2015 by Richard Young, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
- 1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
- 1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Geocoded Civic Centers (2)

- Deerfield Beach Country Club
- Hilton Deerfield Beach

Geocoded Cultural Centers (1)

South Florida Railway Museum

Geocoded Laser Facilities (1)

Dentist - 10 Fairway Drive

Geocoded Religious Centers (2)

Assembly of God New Life

Assembly of God New Life
Grace Christian Church

Geocoded Social Service Facilities (4)

Food for the Poor
Florida Counseling & Wellness
Allied Barton Security Services
Barton Protective Services

Comments on Effects to Resources:

The proposed improvements are anticipated to be mostly accommodated within existing right-of-way. Slight acquisitions may be proposed to accommodate improvements to turning movements. The potential right-of-way impacts may affect commercial or industrial properties but would not impact any structures or require relocations. Refinement of the proposed improvements should help to determine if impacts can be avoided or minimized.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses that may be impacted by the interchange improvements. FDOT District Four will determine which businesses, if any, may experience impacts during the PD&E Study.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Farmlands

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

NRCS has determined that there are no prime, unique, or locally important farmland soils within the project area. According to Part 2, Chapter 28, Section 28-2.1 of the FDOT PD&E Manual, transportation projects situated within urbanized areas with no adjacent present or future agricultural lands are excluded from Farmland Assessments. Because the project is located within a designated urban area anticipated to continue to support residential and industrial uses, a Summary DOE of **None** has been assigned to the Farmlands issue.

Degree of Effect: 0 *None* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 10/14/2015 by Rick Allen Robbins, Natural Resources Conservation Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland. In addition, the USDA-NRCS considers any soils with important soil properties and have significant acreages that are used in the production of commodity crops (such as, cotton, citrus, row crops, specialty crops, nuts, etc.) to be considered as Farmlands of Unique Importance or Farmlands of Local Importance. Nationally, there has been a reduction in the overall amount of Prime and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

Comments on Effects to Resources:

There are no Important Farmland soils or agricultural lands within the 200 foot buffer width for this project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Aesthetic Effects

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Due to the urbanized nature of the area and the improvements being located on existing highways, the improvements are unlikely to impact the aesthetic environment. The potential grade separation at Hillsboro Boulevard and CSX Railroad would be a new

structure; however, the area already has bridge structures at the interchange. FHWA rated aesthetic effects as Minimal due to the urbanized nature of the area. The Summary Degree of Effect (DOE) of **Minimal** has been assigned to the Aesthetic Effects issue.

Public outreach will be conducted during the Project Development and Environment (PD&E) phase by FDOT District Four in coordination with the Broward County Metropolitan Planning Organization (MPO) and the City of Deerfield Beach. This will include soliciting opinions on community preferences as they relate to improving the aesthetics of the area.

Degree of Effect: 2 **Minimal** assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Communities have been identified in the report.

Comments on Effects to Resources:

No permanent impacts are expected but any potential impacts should be minimized and mitigated.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 **Minimal** assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%
1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%

National Register of Historic Places (1)

Seaboard Air Line Railway Station, Old

Noise Barriers (3)

FDOT District 4 ID 499
FDOT District 4 ID 527
FDOT District 4 ID 574

OGT: Multi-Use Trails Opportunities (1)

Hillsboro Canal Corridor

Public Land (1)

Tivoli Sand Pine Preserve

500-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%

1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
- 1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
- 1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
- 1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
- 1320 MOBILE HOME UNITS / 5 / 0.42%

Florida Site File Historic Standing Structures (1)

SCL Railroad Depot

Geocoded Parks (2)

- Westside Park
- Mayo Howard Park

Noise Barriers (4) (3 within 500 feet)

FDOT District 4 ID 700

Comments on Effects to Resources:

There is a residential area east of Natura Boulevard and south of Hillsboro Boulevard within 500 feet of the improvements. Other features associated with aesthetics include the Tivoli Sand Pine Preserve, two (2) parks, the Seaboard Airline Railway Station, the SCL Railroad Depot, and four (4) noise barriers. Facilities on the west side of I-95 are generally industrial; however, impacts of noise and vibration should be identified.

Due to the urbanized nature of the area and the improvements being located on existing highways, the improvements are unlikely to impact the aesthetic environment. The potential grade separation at Hillsboro Boulevard and CSX Railroad would be a new structure; however, the area already has bridge structures at the interchange. Construction would result in temporary noise, vibration and visual impacts.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses to obtain feedback regarding preferences for the project related to aesthetics.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Economic

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 12/09/2015 by FDOT District 4

Comments:

Broward County is expected to see continuous population and employment growth through 2035. The project is expected to support future growth and accommodate transportation to the employment centers in the project area. The Florida Department of Economic Opportunity assigned a DOE of None to the Economic issue. FHWA noted that there could be temporary effects during construction; however, still assigned a DOE of Enhanced. A Summary DOE of **Enhanced** has been assigned to the Economic issue.

During the PD&E phase, public outreach will be conducted by FDOT District Four in coordination with the Broward County MPO and the City of Deerfield Beach to solicit input from local residents and businesses regarding potential economic enhancements/impacts as a result of the project. Access to businesses and government services will be maintained during construction.

Degree of Effect: 0 None assigned 10/23/2015 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The local government's comprehensive plan: City of Deerfield Beach Comprehensive Plan, January 28, 2014.

Comments on Effects to Resources:

Does the project have potential to attract new development? No.

Does the project have potential to generate jobs? No.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 1 Enhanced assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Temporary effects could include impact on the access to these facilities during construction. Access to these facilities should be maintained during construction period.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 1 Enhanced assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 4.7 / 14.22%

1330 MULTIPLE DWELLING UNITS LOW RISE / 3.3 / 1.35%

1340 MULTIPLE DWELLING UNITS HIGH RISE / 2.9 / 1.2%
1400 COMMERCIAL AND SERVICES / 42.1 / 17.26%
1411 SHOPPING CENTERS / 3.2 / 1.31%
1550 OTHER LIGHT INDUSTRY / 13 / 5.32%
1700 INSTITUTIONAL / 6.4 / 2.61%
1820 GOLF COURSE / 3.6 / 1.45%
4130 SAND PINE / 0.5 / 0.21%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 3.6 / 1.48%
5300 RESERVOIRS / 7.5 / 3.07%
8140 ROADS AND HIGHWAYS / 153.4 / 62.81%

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

2010 Census Designated Places (1)

Deerfield Beach

Developments of Regional Impact (1)

Newport Center [ADA NO: 1982-020]

Railroads in the State of Florida (1)

CSX Mainline

500-Foot Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 19.4 / 3.95%
1330 MULTIPLE DWELLING UNITS LOW RISE / 29 / 5.92%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 10 / 2.04%
1400 COMMERCIAL AND SERVICES / 141.7 / 28.9%
1411 SHOPPING CENTERS / 10.6 / 2.15%
1550 OTHER LIGHT INDUSTRY / 45.3 / 9.25%
1700 INSTITUTIONAL / 21.1 / 4.3%
1820 GOLF COURSE / 12.4 / 2.52%
4130 SAND PINE / 1.9 / 0.38%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 1.54%
5300 RESERVOIRS / 22.6 / 4.61%
8140 ROADS AND HIGHWAYS / 164.8 / 33.61%
1850 PARKS AND ZOOS / 3.5 / 0.72%
1900 OPEN LAND / 0.5 / 0.1%

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

1210 FIXED SINGLE FAMILY UNITS / 103.7 / 8.65%
1330 MULTIPLE DWELLING UNITS LOW RISE / 122.6 / 10.22%
1340 MULTIPLE DWELLING UNITS HIGH RISE / 46.3 / 3.86%
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1820 GOLF COURSE / 52.9 / 4.41%
4130 SAND PINE / 5.5 / 0.46%
4340 UPLAND MIXED CONIFEROUS HARDWOOD / 7.6 / 0.63%
5300 RESERVOIRS / 30.1 / 2.51%
8140 ROADS AND HIGHWAYS / 199.2 / 16.61%
1850 PARKS AND ZOOS / 24.9 / 2.07%
1900 OPEN LAND / 4.4 / 0.37%
1310 FIXED SINGLE FAMILY UNITS / 0.3 / 0.03%
1320 MOBILE HOME UNITS / 5 / 0.42%
5120 CHANNELIZED WATERWAYS CANALS / 1.2 / 0.1%

Comments on Effects to Resources:

As discussed in the purpose and need, Broward County is expected to see continuous population and employment growth through

2035. In the project vicinity, there are industrial and commercial developments west of I-95 and near the interchanges. Additionally, the former Deerfield Country Club Golf Course is planned to be converted into an employment center. The project is not anticipated to require any business relocations, although some businesses may experience temporary disruption during the construction phase. The project will support future growth and accommodate transportation to the employment centers in the project area. Thus, while construction may have temporary economic impacts, the overall impact of the project will support economic growth.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses regarding potential economic enhancements/impacts as a result of the project. Access to business should be maintained during construction.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Mobility

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 12/09/2015 by FDOT District 4

Comments:

Construction may cause temporary effects on mobility in the area; however, the overall effect of the project would be to improve mobility. FHWA rated the Mobility issue as *Enhanced*. Therefore, a Summary Degree of Effect of **Enhanced** has been assigned to the Mobility issue.

To avoid potential effects, public outreach will be conducted by FDOT District Four in coordination with Broward County MPO and the City of Deerfield Beach during the Project Development and Environmental phase. Public outreach programs will be conducted to solicit community opinions and preferences, identify project-related effects and refine plans to minimize the effects on area mobility.

Degree of Effect: 1 *Enhanced* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

The project will improve mobility in the area. Also, access to bike/peds and to transit should be maintain during construction and should be improved with the project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **1** Enhanced assigned 10/22/2015 by Gaspar Jorge Padron, FDOT District 4

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

200-Foot Buffer:

2010 Amtrak Intercity Railroad Terminals

Deerfield Beach

Bus Transit Routes (3)

Route 92

Route 93

Route 48 (Fixed Route from most recent Broward County Transit Map)

Facility Crossings (10)

I-95 Northbound

SR 810 Hillsboro Boulevard

I-95 Southbound

SW 10th Street/SR 869

I-95/SR 9

SCL RR

SCL RR

SW 12th Avenue

SW 12th Avenue

FDOT RCI Bridges (5)

860123

860557

860124

860564

860194

Railroads in the State of Florida (1)

CSX Mainline

Transportation Disadvantaged Service Provider Areas (2)

-BROWARD

-BREVARD, BROWARD, DUVAL, MANATEE, PINELLAS - TMS OF BREVARD, INC.

500-Foot Buffer:

Fixed-Guideway Transit Network Stations

Deerfield Beach Station - Tri County Commuter

Railroads in the State of Florida (2) (1 within 200 feet)

CSX Spur

1320-Foot (Quarter Mile) Buffer:

Bus Transit Routes (5) (3 within 200 feet)

Route 50

Route 97

Comments on Effects to Resources:

Capacity improvements at the I-95/Hillsboro Boulevard and I-95/SW 10th Street interchanges will enhance the mobility of people and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Mobility may be temporarily impacted during construction; however, the overall effect would be enhanced.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

During the Project Development phase, FDOT District Four, in coordination with the Broward Metropolitan Planning Organization and the City of Deerfield Beach, will solicit input from residents and local businesses to obtain feedback regarding preferences for the project related to mobility.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Cultural

Section 4(f) Potential

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street.

FHWA rated Section 4(f) issue as minimal because work is limited to the FDOT right-of-way. The Summary DOE assigned to the section 4(f) issue is *Minimal*. If during project development a potential for section 4(f) impacts develops, then FDOT would coordinate with the officials with jurisdiction and FHWA.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

Project is expected to be constructed within existing ROW. Any potential impact to any Section 4(f) resources will require coordination with the officials with jurisdiction and FHWA.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

There is one National Register of Historic Places listed site within the project study area, the Seaboard Air Line Railway Station (8BD128). A Cultural Resources Assessment Survey (CRAS) was prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) in August 2013 for the I-95 Express project, ETDM Number 3330, FM Numbers 409359-1-22-01 and 409355-1-22-01. The CRAS did not identify any additional resources eligible for listing in the National Register within the study area for this project.

FHWA assigned a Minimal DOE and Florida Department of State (FDOS) assigned a Moderate DOE. The Seminole Tribe of Florida did not provide review input. FDOS stated that direct impacts to the Seaboard Air Line Railway Station are unlikely but that the resource is vulnerable to indirect effects and should be considered during project development. FDOS also noted that if there is ground disturbance outside of the previous survey then there would be potential to impact unrecorded cultural resources, although it is unlikely that unrecorded resources occur in the project area. A Summary DOE of **Moderate** has been assigned to the historic and archaeological sites issue.

Degree of Effect: **2** *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

A CRAS was prepared in 2013. It identified the resources within the project's limit.

Comments on Effects to Resources:

The analysis must consider the existing resources and should avoid any impacts to it.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **3** *Moderate* assigned 10/01/2015 by Ginny Leigh Jones, FL Department of State

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Once the Area of Potential Effect (APE) is determined for the proposed project, the extent of the 2013 survey should be compared to the current project APE. Those areas not covered in the 2013 survey should be subjected to a comprehensive survey. For those areas that need to be surveyed, all cultural resources, including potential historic districts, within the area of potential effect should be documented and assessed for NRHP eligibility. The resultant survey report shall conform to the specifications set forth in Chapter 1A-46 Florida Administrative Code, FDOT PD&E Manual Part 2, Chapter 12 and will need to be forwarded to this agency (or the appropriate Federal Agency) for review and comment.

Direct Effects

Identified Resources and Level of Importance:

As reported in the PED, there is one resource - the Seaboard Air Line Railway Station (8BD128) recorded near the project area. This resource is listed on the National Register of Historic Places and is near the Hillsboro Boulevard interchange.

It is unlikely there are unrecorded resources in the project area since I-95 was surveyed in 2013 (also noted in the PED). However, depending on the interchange improvements, portions of those areas may need to be surveyed if they fall outside of the 2013 survey boundaries.

Comments on Effects to Resources:

It is unlikely there will be direct impacts to the Seaboard Air Line Railway Station (8BD128). If there is ground disturbance planned for areas not previously surveyed in 2013, there is a potential to impact unrecorded cultural resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

It is unlikely there are unrecorded cultural resources in the project area. Historic aerials demonstrate that historic development near the project area was centered around Dixie Highway - well east of the current project. One exception to this development was the presence of Hillsboro Boulevard and the Seaboard Air Line Railway and Station in the 1958 aerial. However, any historic development near the project area along Hillsboro Boulevard is likely gone, except for the Seaboard Air Line Station.

Comments on Effects to Resources:

The Seaboard Air Line Railway Station is vulnerable to indirect impacts from the interchange improvements. This resource should be considered during the development of the interchange improvement design.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

The following organization(s) were expected to but did not submit a review of the Historic and Archaeological Sites issue for this alternative: Seminole Tribe of Florida

Recreation Areas

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 12/09/2015 by FDOT District 4

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street, south of Hillsboro Boulevard.

The project will be limited to existing right-of-way and therefore minimal impacts are anticipated to these resources. FHWA, SFWMD, USEPA, and FDEP also rated effects to recreation as minimal. NPS identified No Involvement. Therefore, a Summary DOE of **Minimal** has been assigned to the Recreation Areas issue.

Degree of Effect: 2 Minimal assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

No follow-up on Section 4(f) resources needed. However, USEPA would like to review PD&E support documentation for other resources within its purview.

Direct Effects

Identified Resources and Level of Importance:

Section 4(f) of the U.S. Department of Transportation Act of 1966 requires consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. USEPA notes that two public parks and one preserve owned and maintained by the City of Deerfield Beach are located in the project vicinity:

- Mayo Howard Park located at 1131 FAU Research Park Boulevard,
- Westside Park located at 445 SW 2nd Street, and
- Tivoli Sand Pine Preserve located along SW 10th Street between SW Natura Boulevard and SW Martin Luther King Jr Ave.

The Preliminary Environmental Discussion (PED) Comments Report identified the Seaboard Air Line Railway Station as a National Register-eligible resource within the project study area. This information is not correct. The station was added to the National Register in 1990 (<http://www.broward.org/History/NationalRegister/Pages/SeaboardAirLineRailwayStation.aspx>).

Comments on Effects to Resources:

The PED Comments Report indicates that, because work will be limited to within the FDOT right-of-way, impacts on Section 4(f) resources are anticipated to be minimal. If right-of-way impacts on Section 4(f) resources are identified during PD&E, USEPA notes that FDOT will submit the required Section 4(f) Evaluation for a formal Determination of Section 4(f) Applicability.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 Minimal assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

The project needs to make sure that access to the resources are not affected during and after construction of the project. Coordination with appropriate officials would be required accordingly.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A N/A / No Involvement assigned 10/19/2015 by Anita Barnett, National Park Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary comments.

Comments on Effects to Resources:

As described in the preliminary comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

The City of Deerfield Beach's Tivoli Sand Pine Preserve is located within the 500-ft. project buffer zone.

Comments on Effects to Resources:

The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary and cumulative impacts of any interchange construction on the above public lands.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Natural Wetlands

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

The surrounding area is largely developed, paved, cleared and landscaped, with minimal wetland habitat. Some of the stormwater

swales located within and adjacent to the right-of-way may support hydrophytic vegetation, but are components of the highway drainage system and are constructed man-made features. Potential impacts to wetlands will be assessed during the PD&E study and avoidance and minimization strategies will be implemented during the design process. FHWA, FDEP, USFWS, SFWMD, and USACE assigned a Minimal DOE for the wetlands issue and emphasized the desire for avoidance and minimization strategies. NMFS rated wetlands impacts as None. USEPA rated wetlands as Moderate due to concern about contaminated stormwater runoff impacting the freshwater ponds in the project corridor. Therefore, the Summary DOE for the wetlands issue is **Moderate**.

A new ERP or modification of the existing permit 88-0040-S will be required from the SFWMD. Depending on the extent of impacts jurisdictional palustrine wetlands, the project may qualify for the USACE Regional General Permit-92 or may be verified with a Nationwide Permit.

During the PD&E phase, further coordination will occur with the agencies to determine what documentation will be required to address agency concerns over potential wetland impacts. Necessary measures will be taken to avoid and/or minimize impacts to wetlands to the greatest extent practicable during project design. Should avoidance and/or minimization not be practicable, a Mitigation Plan will be prepared. In addition, existing compensatory mitigation sites within the area of influence will be identified and reviewed. Further, best management practices will be utilized during project construction and all applicable permits (including an ERP) will be obtained in accordance with federal, state, and local laws and regulations.

Degree of Effect: 3 *Moderate* assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18), and
- Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20).

Direct Effects

Identified Resources and Level of Importance:

According to the National Wetlands Inventory Map (<http://www.fws.gov/wetlands/Data/Mapper.html>), a number of freshwater ponds are located in the project corridor.

Comments on Effects to Resources:

Contaminated stormwater runoff could impact the freshwater ponds in the project corridor.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate stormwater impacts on the freshwater ponds, especially the surface water bodies identified in the City of Deerfield Beach's Future Land Use Map (<http://www.deerfield-beach.com/DocumentCenter/View/555>).

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Wetlands have been identified within 200' from project study area.

Comments on Effects to Resources:

Effects will be study during the PD&E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of permit 88-00040-S would be required.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary comments.

Comments on Effects to Resources:

None expected based on the project description and the preliminary evaluation. At the time of application for an Environmental Resource Permit, wetland and surface water impacts will be evaluated. Impacts to wetlands and surface waters must meet the criteria in Section 10 of Applicant's Handbook Volume I, including Elimination and Reduction as well as mitigation.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The National Wetlands Inventory GIS report indicates that there are 30.7 acres of palustrine wetlands within the 500-ft. project corridor.

Comments on Effects to Resources:

If interchange ramp expansion is proposed, an environmental resource permit (ERP) will be required from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of interchange construction to the greatest extent practicable:

- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.
- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/09/2015 by Randy Turner, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

The project as proposed, may qualify for the Department of the Army's Regional General Permit (RGP) - 92 for impacts to the palustrine wetlands. Depending on the amount of proposed impacts to waters of the U.S., the project maybe verified with a Nationwide Permit.

Direct Effects

Identified Resources and Level of Importance:

A review of the EST revealed the presence of approximately 30.7 acres of palustrine wetlands within a 500 foot buffer; 13.4 palustrine acres within a 200 foot buffer; and, 7.9 acres within a 100 foot buffer. The project area is adjacent to heavily used roadway systems and a surface water canal tributary to the Hillsboro Canal along the west side of the project area. The only jurisdictional waters of the U.S. within the project area appear to be the surface waters of the canal and any adjacent wetlands. The other surface waters appear to be stormwater pond systems. The level of importance would be minimal.

Comments on Effects to Resources:

Upon initial review it appears that any wetland or surface water impacts could be avoided by bridge/culverting the canal waters. The palustrine wetlands are along existing, high-usage roadways which would have already been secondarily impacted so a functional assessment should reveal a lower quality of wetlands along the corridor.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Corps recommends a continued emphasis on wetland avoidance and minimization opportunities throughout the planning process. A wetland survey should be conducted along the project corridor to identify any existing wetlands, and if any are found, a jurisdictional determination should be completed. A review of the Corps RIBITS indicates that all of the proposed project corridor would traverse the geographical service areas of the federally approved FP&L Everglades Phase II Mitigation Bank (MB), which has 462.57 WATER assessed palustrine credits available; Florida Wetlandsbank at Pembroke Pines MB, which has 67.99 Integrated Functional Index assessed palustrine credits available; and Loxahatchee MB, which has 51.99 palustrine forested and 133.13 Modified WRAP palustrine emergent credits available. Any unavoidable wetland impacts should be assessed using the same assessment methodology of the MB (s) that credits may be purchased from.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

A review of the EST revealed the presence of approximately 30.7 acres of palustrine wetlands within a 500 foot buffer; 13.4 palustrine acres within a 200 foot buffer; and, 7.9 acres within a 100 foot buffer. The project area is adjacent to heavily used roadway systems and a surface water canal tributary to the Hillsboro Canal along the west side of the project area. The only jurisdictional waters of the U.S. within the project area appear to be the surface waters of the canal and any adjacent wetlands. The other surface waters appear to be stormwater pond systems. The level of importance would be minimal.

Comments on Effects to Resources:

Given the current project's location amid high-usage roadway systems, there should not be any significant additional effects to the canal or adjacent wetlands.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Corps recommends a continued emphasis on wetland avoidance and minimization opportunities throughout the planning process. A wetland survey should be conducted along the project corridor to identify any existing wetlands, and if any are found, a jurisdictional determination should be completed. A review of the Corps RIBITS indicates that all of the proposed project corridor would traverse the geographical service areas of the federally approved FP&L Everglades Phase II Mitigation Bank (MB), which has 462.57 WATER assessed palustrine credits available; Florida Wetlandsbank at Pembroke Pines MB, which has 67.99 Integrated Functional Index assessed palustrine credits available; and Loxahatchee MB, which has 51.99 palustrine forested and 133.13 Modified WRAP palustrine emergent credits available. Any unavoidable wetland impacts should be assessed using the same assessment methodology of the MB (s) that credits may be purchased from.

Degree of Effect: 0 *None* assigned 09/15/2015 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

None

Comments on Effects to Resources:

None

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on a site inspection on September 9, 2015, the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 09/11/2015 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Wetlands

Comments on Effects to Resources:

Wetlands provide important habitat for fish and wildlife, and are known to occur within the project area. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the

FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

Presently, stormwater drainage and treatment is provided primarily by a series of dry swales and ponds. The project would increase the impervious area. A new ERP or modification of the existing permit 88-0040-S will be required from the SFWMD. FHWA, SFWMD, and FDEP concurred with a Minimal DOE to the issue of water quality and quantity provided that the project is designed to meet water quality and quantity criteria of the ERP Applicant's Handbook Volumes I and II, including Appendix E. USEPA assigned a Moderate rating due to the potential for contaminated stormwater runoff which could impact the Biscayne Sole Source Aquifer and Broward County's 2A Wellfield Protection Area. Therefore, the Summary DOE assigned to the Water Quality and Quantity issue is **Moderate**.

During the PD&E phase, FDOT District Four will conduct a Water Quality Impact Evaluation, in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual. FDOT will coordinate with appropriate agencies for the design of the proposed stormwater system and the requirements for stormwater treatment, evaluating existing stormwater treatment adequacy and details on the future stormwater treatment facilities. All necessary permits will be obtained in accordance with federal, state, and local laws and regulations. The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during construction.

Degree of Effect: 3 *Moderate* assigned 10/24/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

The Biscayne aquifer, which underlies Broward County, supplies virtually all of the potable water needs for residents in densely populated Dade, Broward, Palm Beach, and Monroe Counties. The Biscayne aquifer is highly susceptible to contamination due to its high permeability and proximity to the land surface

(http://my.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/2013_1ec_plan.pdf).

A number of freshwater ponds, which are hydraulically connected to the Biscayne Aquifer, are located in the project corridor. Broward County's 2A Wellfield Protection Area may also be located in the project corridor

(http://www.broward.org/PollutionPrevention/Wellfield/Documents/Official11_5_13WPZOrdMap.pdf).

Comments on Effects to Resources:

Contaminated stormwater runoff in the project corridor could impact the Biscayne Aquifer and Broward County's 2A Wellfield Protection Area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts on surface waters and stormwater

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts on surface waters and stormwater management systems in the project vicinity. In addition, we recommend performing a Water Quality Impact Evaluation and coordinating with the South Florida Water Management District and Broward County.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified in the report.

Comments on Effects to Resources:

No additional comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of 88-00040-S will be necessary.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary evaluation.

Comments on Effects to Resources:

SFWMD concurs with the assignment of a minimal degree of effect, provided that the project is designed to meet the stormwater water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II., including appendix E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. Additional runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface will be of concern.

Comments on Effects to Resources:

Every effort should be made to maximize the treatment of stormwater runoff from the proposed interstate improvements project to prevent ground and surface water contamination. Stormwater treatment should be designed to maintain the natural predevelopment hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands. We recommend that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on the future stormwater treatment facilities. Retrofitting of stormwater conveyance systems would help reduce impacts to water quality.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Floodplains

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

A new Environmental Resource Permit (ERP) or modification of the existing permit 88-0040-S will be required from the SFWMD. SFWMD and FHWA rated the floodplains issue as Minimal. USEPA rated the floodplains issue as Moderate because the PED Comments Report indicates that the project will increase the impervious area, which will increase stormwater runoff and affect existing drainage patterns in the surrounding area. Therefore, a Summary DOE of **Moderate** has been assigned to the Floodplain issue.

A Location Hydraulic Report will be prepared during the PD&E phase in accordance with the PD&E Manual, Part 2, Chapter 24.

Degree of Effect: 3 *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

- Location Hydraulic Report (PD&E Manual, Part 2, Chapter 24), and
- Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20).

Direct Effects

Identified Resources and Level of Importance:

Protection of floodplains and floodways is required by Executive Order 11988, "Floodplain Management", USDOT Order 5650.2, "Floodplain Management and Protection", and Federal-Aid Policy Guide 23 CFR 650A. USEPA notes that portions of the project corridor are located within flood zones AE and AH. Moreover, numerous stormwater management ponds and NPDES stormwater

outfall sites are located in the project corridor (see Broward County Water Resources Fact Book, June 2015, http://www.awra.org/memberservices/brochures/Broward_County_Brochure.pdf).

Comments on Effects to Resources:

According to the Preliminary Environmental Discussion (PED) Comments Report, FDOT anticipates minimal effects on floodplains. However, the PED Comments Report also indicates that the project will increase the impervious area, which will increase stormwater runoff and affect existing drainage patterns in the surrounding area. Information should have been provided about the efficacy of the existing stormwater management infrastructure, whether work will be performed below the 100-year flood elevation, and if the project will involve modification and/or replacement of any existing drainage structures or construction of any new drainage structures. As stated in FDOT's PD&E Manual, Part 2, Chapter 24 Floodplains, "[p]rojects that affect flood heights and flood limits, even minimally, may require further evaluation to support statements that emphasize the insignificance of the modifications."

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends hydraulic and risk evaluations to identify the least environmentally damaging alternative and assess measures to avoid, minimize, and mitigate impacts to the floodplains, to the extent practicable.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: ■ *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

No additional resources.

Comments on Effects to Resources:

No additional comments at this stage of the process.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: ■ *Minimal* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A new ERP or modification of 88-00040-S will be necessary.

Direct Effects

Identified Resources and Level of Importance:

As described in the preliminary evaluation.

Comments on Effects to Resources:

SFWMD concurs with the assignment of a minimal degree of effect, provided that the project is designed to meet the stormwater water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II., including appendix E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Core Foraging Areas (CFA) of two active wood stork nests and the USFWS designated consultation area for snail kites overlap the project area. No areas of designated Critical Habitat are present. FHWA rated the wildlife and habitat issue as *Minimal*. USFWS rated the wildlife and habitat issue as *Minimal* but recommended that FDOT prepare a *Biological Assessment* due to the potential occurrence of the wood stork. FFWCC stated that impacts could be minimal provided that construction avoids the Tivoli Sand Pines Preserve and that water quality best management practices are implemented. FFWCC recommended that FDOT perform plant mapping and wildlife surveys and develop a plan to address potential impacts, including avoidance measures for the Florida burrowing owl. Therefore, the Summary DOE assigned to the Wildlife and Habitat issue is *Minimal*.

During the PD&E phase further coordination will occur with USFWS and FFWCC to determine what documentation will be required to analyze potential wildlife issues. The final design of the project will avoid and/or minimize impacts to wetlands and wildlife and habitat to the greatest extent possible and best management practices will be utilized during project design and construction. Appropriate mitigation will also be provided for unavoidable impacts.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified but it is not clear if a survey has been performed to identify any other species in the study area.

Comments on Effects to Resources:

Effects will be discussed in the PD&E study.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/20/2015 by Jennifer Goff, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed ETDM #14244, Broward County, and provides the following comments related to potential effects to fish and wildlife resources of this Programming Phase project.

The Project Description Summary states that this project involves improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 between these interchanges, a distance of approximately 1.8 miles. The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The Project Description did not address the possible need for new Drainage Retention Areas (DRAs) to handle the stormwater runoff from the expanded roadways.

An assessment of the project area was performed on lands within 500 feet of the proposed alignment to determine potential impacts to habitat which supports listed species and other fish and wildlife resources. Our inventory included a review of aerial and ground-level photography, various wildlife observation and landcover data bases, along with coordination with FWC biologists and other State and Federal agencies. A GIS analysis was performed using the Florida Department of Transportation's (FDOT) Environmental Screening Tool to determine the potential quality and extent of upland and wetland habitat, and other wildlife and fisheries resource information. We have reviewed the Preliminary Environmental Discussion Comments Report provided by the FDOT, and offer the following comments and recommendations.

Our assessment reveals that land use in the project area is almost entirely urban, with 93.99% of the assessment area classified as Transportation and High or Low Intensity Urban. Other landcover types include Open Water (borrow/stormwater lakes and their associated drainage canals at 4.37%, 253.0 acres), Sand Pine Scrub (within the Tivoli Sand Pine Preserve at 1.53%, 7.5 acres), and Rural Lands (0.11%, 0.6 acres). The Tivoli Sand Pine Preserve, a 22.52-acre area adjacent to the north side of SW 10th Street, and which is owned and managed by the City of Deerfield Beach, provides the most valuable wildlife habitat in the project vicinity.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) have the potential to occur in the project area: American alligator (FT based on similarity of appearance to American crocodile), Eastern indigo snake (FT), wood stork (FT), gopher frog (SSC), gopher tortoise (ST), Florida burrowing owl (SSC), least tern (ST), limpkin (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), roseate spoonbill (SSC), and white ibis (SSC). Special attention is warranted regarding burrowing owls, which have been documented in the I-95 interchange infields at nearby Glades Road, and may also utilize similar habitat at the subject interchanges.

The GIS analysis revealed several specific characteristics associated with lands along the project alignment that provide an indication of potential habitat quality or sensitivity that will require field studies to verify the presence or absence of listed wildlife species and the quality of wildlife habitat resources. In the FWC's Integrated Wildlife Habitat Ranking System, 2.9% of the assessment area is ranked Medium, and in the Florida Natural Areas Inventory Critical Lands and Waters Identification Project (CLIP), 1.58% is ranked Priority 2 (high) for Biodiversity Resources. The project is within the Core Foraging Area of four wood stork colonies, and is within the U.S. Fish and Wildlife Service Consultation Area for the Snail Kite.

Comments on Effects to Resources:

Primary wildlife issues associated with this project include: potential adverse impacts to the Tivoli Sand Pine Preserve; potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; and potential for water quality impacts during construction.

Based on the project information provided, we believe that direct and indirect effects of this project could be minimal provided that construction, including any new DRAs, avoids impacting the Tivoli Sand Pine Preserve, and that water quality BMPs are included in the project design.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

We recommend that the Project Development and Environment Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area.

1. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed. Basic guidance for conducting wildlife surveys may be found in the FWC's Florida Wildlife Conservation Guide at:

<http://myfwc.com/conservation/value/fwcg/>.

2. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. Equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. The plan should address specific habitat needs which are biologically compatible with the recovery of the target species. For guidance in this effort, FWC's Draft Species Action Plans should be consulted at: <http://myfwc.com/wildlifehabitats/imperiled/species-action-plans/>.

3. Florida burrowing owls may be present in the project area. Avoidance and minimization measures for burrowing owls include: Avoid construction activities that would impact active burrowing owl nests. Burrowing owl nests are generally considered to be active from February to July. Avoid adverse impacts to burrowing owl nests by establishing a 150-foot radius around the burrow entrance that is staked and roped -off prior to construction. Take care to avoid digging or using heavy equipment near burrow entrances during the breeding season so as not to collapse burrows and potentially trap owls or destroy eggs. If impacts to burrowing owl burrows or nests are unavoidable, please contact the FWC staff identified below to discuss potential permitting alternatives.

4. For impacts to other state-listed species, refer to the FWC's Draft Species Action Plans which include methods for avoidance as well as options and state requirements for minimizing and mitigating potential impacts.

5. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat functional values for listed species which are lost as a result of the project. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email brian.barnett@MyFWC.com to initiate the process for further overall coordination on this project.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 10/09/2015 by Steve Bohl, FL Department of Agriculture and Consumer Services

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 09/11/2015 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and fish and wildlife resources

Comments on Effects to Resources:

Federally-listed species -

The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of Federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources. Based on review of our GIS database, the Service notes that the following Federally listed species may occur in or near the project area.

Wood Stork

The project corridor is located in the Core Foraging Areas (CFA)(within 18.6 miles) of two active nesting colonies of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology" (Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can be found at: <http://www.fws.gov/verobeach/ListedSpeciesBirds.html> .

The Service believes that the following federally listed species have the potential to occur in or near the project site include the wood stork. Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment process.

Fish and Wildlife Resources -

Wetlands provide important habitat for fish and wildlife, and are known to occur within the project area. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 12/09/2015 by FDOT District 4

Comments:

The proposed project corridor is not located within a Coastal Barrier Resource Area, and Essential Fish Habitat is not located within the project limits. Consequently, FHWA, SFWMD, and NMFS anticipated that the effect to coastal and marine will be None; therefore, the Summary DOE is **None**.

Degree of Effect: 0 None assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 09/15/2015 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

None

Comments on Effects to Resources:

None

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on a site inspection on September 9, 2015, the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS

that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Physical

Noise

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

Residential, commercial/retail, public, institutional and industrial properties were identified in the immediate vicinity of the project corridor. Residential land uses are located east of I-95 to the south of Hillsboro Boulevard. While temporary construction noise impacts may have short-term effects on adjacent properties, overall noise and vibration-related impacts as a result of the project are anticipated to be minimal. FHWA also anticipates noise effects to be minimal. Therefore, a Summary DOE of *Minimal* has been assigned to the Noise issue.

During the PD&E phase, a Noise Study Report will be prepared if warranted by the proposed project alternatives in accordance with Part 2, Chapter 17 of the FDOT PD&E Manual.

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Resources have been identified within the project area.

Comments on Effects to Resources:

A study will be prepared to assess potential noise impacts to the existing resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 12/09/2015 by FDOT District 4

Comments:

The proposed project corridor is located within the Southeast Florida Airshed, which is a USEPA-designated Air Quality Maintenance Attainment Area for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. However, as a former ozone nonattainment area, the project is subject to the maintenance plan approved by USEPA as a revision to Florida's State Implementation Plan (75 FR 29671, May 27, 2010). Therefore, if federal funds are used for the proposed improvements then a transportation conformity demonstration will be necessary to show that estimated pollutant/precursor emissions associated with the project are within the emissions limits specified in the SIP.

USEPA and FHWA rated air quality issue as Minimal due to impacts during construction, but no permanent effects to air quality are anticipated. Minor air quality enhancement can be expected because the improvements are likely to reduce idling traffic conditions. A Summary DOE of *Minimal* has been assigned to the Air Quality issue.

An Air Quality Technical Memorandum will be prepared as a support document to the PD&E Study in accordance with Part 2, Chapter 16 of the FDOT PD&E Manual.

Degree of Effect: 2 *Minimal* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 16, Section 16-3)

Direct Effects

Identified Resources and Level of Importance:

The project area is in attainment with the Clean Air Act's National Ambient Air Quality Standards (NAAQS). However, as a former ozone nonattainment area, the project is subject to the maintenance plan approved by USEPA as a revision to Florida's State Implementation Plan (75 FR 29671, May 27, 2010). As noted in Part 2, Chapter 16 of FDOT's PD&E Manual, current information on the NAAQS compliance status of areas in Florida is available in USEPA's "Green Book" (<http://www.epa.gov/oar/oaqps/greenbk/>).

Comments on Effects to Resources:

FDOT's PD&E Manual further states that USEPA promulgated transportation conformity regulations in 1993 to implement NAAQS requirements. These regulations (40 CFR Part 93) apply to transportation (highway) plans, programs, and projects within nonattainment or maintenance areas that are developed, funded, or approved under U.S.C. Title 23 or the Federal Transit Act.

Therefore, if federal funds are used for the proposed improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps), then a transportation conformity demonstration will be necessary to show that estimated pollutant/precursor emissions associated with the project are within the emissions limits specified in the SIP.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Clean Air Act requirements doesn't apply to this project.

Comments on Effects to Resources:

Not additional comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Contamination

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 12/09/2015 by FDOT District 4

Comments:

A review of Geographic Information System data revealed the presence of dry cleaning sites, hazardous waste facilities, petroleum contamination monitoring sites, storage tank contamination monitoring sites, and Resource Conservation and Recovery Act regulated facilities within a quarter mile of the project, and two solid waste, CERCLA, and/or superfund sites within one mile of the project.

Due to the potential presence or documented presence of contamination associated with these sites and a Moderate degree of effect being assigned by SFWMD, USEPA, FDEP, and FHWA, a Summary DOE of **Moderate** has been assigned to the contamination issue.

A CSER will be prepared in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual, including site specific surveys to assess existing or historical contamination sources and their proximity to construction activities. Contamination (including any required permits) will be evaluated during project development in accordance with federal, state and local laws and regulations. SFWMD noted that if dewatering is necessary, a water use permit may be required. A general permit under rule 40E-2.061(2), FAC may be applicable.

Degree of Effect: 3 *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

Direct Effects

Identified Resources and Level of Importance:

USEPA notes that more than 90 potentially contaminated facilities and sites are present within a quarter-mile of the project corridor, and two solid waste, RCRA, and/or CERCLA sites were identified within one mile of the project corridor.

Comments on Effects to Resources:

USEPA supports the contamination assessment process described in FDOT's PD&E Manual (Part 2, Chapter 22). Each property within the project corridor (including the buffer areas) needs to be evaluated for the presence of potential contamination within the right-of-way or contamination that may have migrated onto or under the right-of-way.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

USEPA recommends avoidance of, or minimized impacts to, these facilities/sites to the extent practicable.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Contamination facilities have been identified in the report.

Comments on Effects to Resources:

Contamination areas should be avoided, minimized and mitigated as possible.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

If dewatering is necessary, a water use permit may be required. A general permit is available in rule 40E-2.061(2), FAC. Projects that do not qualify for the general permit will require a water use permit from SFWMD.

Direct Effects

Identified Resources and Level of Importance:

Staff concurs with the preliminary evaluation.

Comments on Effects to Resources:

Construction methodologies, such as dewatering, must be designed to minimize movement of contaminant plumes.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 10/14/2015 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

GIS data indicates that there are 2 FDEP dry cleaning program sites, 17 hazardous waste facilities, 10 petroleum contamination monitoring sites, 29 storage tank contamination monitoring sites and 13 RCRA regulated facilities within the 500-ft. project buffer zone.

Comments on Effects to Resources:

A Contamination Screening Evaluation (similar to Phase I and Phase II Audits) may need to be conducted along the project rights-of-way considering the proximity to the listed petroleum and hazardous material handling facilities. The Contamination Screening Evaluation should outline specific procedures that would be followed by the applicant in the event drums, wastes, tanks or potentially contaminated soils are encountered during construction. Special attention should be made in the screening evaluation to historical land uses (such as solid waste disposal) that may have an affect on the proposed project, including stormwater retention and treatment areas.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Infrastructure

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 12/09/2015 by FDOT District 4

Comments:

The project corridor includes the SW 10th Street Bridge over I-95 and the I-95 over Hillsboro Boulevard Bridge. CSX railroad mainline runs within 2,000 feet east of the project limits and the Amtrak Deerfield Beach terminal is located southwest of the Hillsboro Boulevard interchange. The proposed project will utilize existing right-of-way. FHWA stated that effects to existing infrastructure would be minimal to none. A Summary DOE of **Minimal** has been assigned to the Infrastructure issue.

Degree of Effect: 2 Minimal assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

No additional resources besides the one mentioned in the report.

Comments on Effects to Resources:

Minimal to no effects are expected on the existing infrastructure.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Navigation

Project Effects

Coordinator Summary Degree of Effect: N/A N/A / *No Involvement* assigned 12/09/2015 by FDOT District 4

Comments:

USACE and FHWA assigned a DOE of None because no navigable waters were identified in the project area. Therefore, a Summary DOE of **No Involvement** has been assigned to the Navigation issue.

Degree of Effect: N/A N/A / *No Involvement* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A N/A / *No Involvement* assigned 10/09/2015 by Randy Turner, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

Permit required for any discharge of fill material into waters of the U.S. Section 404 of the Clean Water Act.

Direct Effects

Identified Resources and Level of Importance:

No navigable waters were identified within the project area. The project will have no impacts to navigation.

Comments on Effects to Resources:

N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:

N/A

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

N/A

Comments on Effects to Resources:

N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:

N/A

ETAT Reviews and Coordinator Summary: Special Designations

Special Designations

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 12/21/2015 by FDOT District 4

Comments:

There are no Outstanding Florida Waters, Aquatic Preserves, Scenic Highways/Byways, or Wild and Scenic Rivers reported within the project area. The FHWA and SFWMD rated the DOE as None. However, USEPA noted the Biscayne Bay sole source aquifer, sensitive karst area, and wellfield protection area as special designations which must be protected from groundwater contamination. USEPA assigned a Moderate DOE. Therefore, a Summary DOE of **Moderate** has been assigned to the issue Special Designations. As recommended by USEPA, FDOT will seek to avoid, minimize, and mitigate impacts of stormwater runoff in the project vicinity.

Degree of Effect: **3** *Moderate* assigned 10/23/2015 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

Sole Source Aquifer - In southeast Florida, the Biscayne aquifer supplies virtually all of the potable water needs for over 4 million residents in densely populated Dade, Broward, Palm Beach, and Monroe Counties. Water from the Biscayne aquifer is also transported by pipeline to the Florida Keys. USEPA has designated the Biscayne aquifer as a Sole Source Aquifer.

Sensitive Karst Area - The Biscayne aquifer is mainly composed of two lithostratigraphic formations dominated by eogenetic karst limestone: the Miami Limestone and the Fort Thompson Formation (<http://www.sciencedirect.com/science/article/pii/S0022169414003229>). The Biscayne aquifer is highly susceptible to contamination due to its high permeability and proximity to the land surface (http://my.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/2013_lec_plan.pdf).

Wellfield Protection Area - Because the Biscayne aquifer is extremely porous and the water table is very close to the surface, pollutants discharged onto the ground or that occur in surface waters can contaminate the groundwater and be drawn into wells that supply drinking water. To reduce the risk of pollution and the cost of public water treatment, Broward County and local municipalities oversee protection programs in areas around networks of drinking water wells (<http://www.broward.org/POLLUTIONPREVENTION/WELLFIELD/Pages/ProtectionProgram.aspx>).

Comments on Effects to Resources:

Contaminated stormwater runoff in the project corridor could impact the surrounding surface water bodies, which are hydraulically connected to the Biscayne Aquifer. Contaminated stormwater runoff could also impact Broward County's 2A Wellfield Protection Area (http://www.broward.org/PollutionPrevention/Wellfield/Documents/Official11_5_13WPZOrdMap.pdf).

Recommended Avoidance, Minimization, and Mitigation Opportunities:

To the extent practicable, USEPA encourages FDOT to avoid, minimize, and mitigate impacts of stormwater runoff in the project vicinity. In addition, we recommend performing a Water Quality Impact Evaluation and coordinating with the South Florida Water Management District and Broward County.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **0** *None* assigned 10/22/2015 by Luis D Lopez, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 None assigned 10/16/2015 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Eliminated Alternatives

There are no eliminated alternatives for this project.

DRAFT

Project Scope

General Project Recommendations

There are no general project recommendations identified for this project in the EST.

Anticipated Permits

Permit	Type	Conditions	Assigned By	Date
Environmental Resource Permit	Water		FDOT District 4	12/10/15
Regional General Use Permit	USACE		FDOT District 4	12/10/15

Anticipated Technical Studies

Technical Study Name	Type	Conditions	Assigned By	Date
Public Involvement Plan	ENVIRONMENTAL		FDOT District 4	12/10/2015
Noise Study Report	ENVIRONMENTAL		FDOT District 4	12/10/2015
Contamination Screening Evaluation Report	ENVIRONMENTAL		FDOT District 4	12/10/2015
Air Quality Technical Memorandum	Other		FDOT District 4	12/10/2015
Wetlands Technical Memorandum	ENVIRONMENTAL		FDOT District 4	12/10/2015
Preliminary Engineering Report	ENGINEERING		FDOT District 4	12/10/2015
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL		FDOT District 4	12/10/2015
Cultural Resource Assessment Survey	ENVIRONMENTAL		FDOT District 4	12/10/2015

Class of Action

Class of Action Determination

Class of Action	Other Actions	Lead Agency	Cooperating Agencies	Participating Agencies
Type 2 Categorical Exclusion	Endangered Species Assessment Consultation	Federal Highway Administration	No Cooperating Agencies have been identified.	No Participating Agencies have been identified.

Class of Action Signatures

Name	Agency	Review Status	Date	ETDM Role
Anson Sonnett	FDOT District 4	ACCEPTED	06/15/2016	FDOT ETDM Coordinator
Luis D Lopez	Federal Highway Administration	ACCEPTED	07/11/2016	Lead Agency ETAT Member

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Appendices

Preliminary Environmental Discussion Comments

Social and Economic

Land Use Changes

Project Level

Comments:

The existing land uses in the vicinity of the project corridor were identified using the Environmental Screening Tool (EST). This project lies within the City of Deerfield Beach. West of I-95 within the project limits, the dominant land uses are industrial and commercial, including a Publix distribution center and several hotels at the interchanges. Additional land uses west of I-95 include City of Deerfield government offices located west of the CSX railroad and south of Hillsboro Boulevard, and a residential development southwest of SW 10th Street and the railroad. East of I-95 and south of Hillsboro Boulevard, land use is mainly single and multi-family residential with a mixture of commercial development at the interchanges. North of Hillsboro Boulevard, land use is mainly commercial along I-95 and Hillsboro Boulevard. Set behind the commercial development is the former Deerfield Country Club Golf Course.

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The anticipated employment center has been branded as the Hillsboro Technology Center.

The SR-9/I-95 from SW 10th Street to Hillsboro Boulevard Project is included in the FDOT Work Program for fiscal years 2016 to 2020, where Project Development and Environment (PD&E) is scheduled for fiscal year 2016 and Preliminary Engineering is scheduled for fiscal year 2019. The Broward County Metropolitan Planning Organization (MPO) 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

This project is designed to complement the I-95 Express project, and will improve connectivity to the area. This project is not anticipated to affect the land use patterns in the project corridor or the expected levels of development activity therein. Overall impacts to surrounding land uses are anticipated to be Minimal.

Social

Project Level

Comments:

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicts that the population will grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs are predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent.

The project is located within Deerfield Beach, Broward County, Florida. The 2013 American Community Survey showed that 8 of the 10 block groups within 200 feet of the project limits have a lower median income than Broward County. The block groups that intersect the project have median incomes that range from \$3,676 to \$63,640, while Broward County has a median income of \$51,251. The project area has a slightly lower percentage of minority residents than the county (55 percent compared to 59 percent).

Based on US DOT Policy Guidance, the FDOT has identified four factors to help determine if Limited English Proficiency (LEP) services would be required as listed in the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.1.2.2. Based on review of these factors, LEP services will need to be considered as part of the public involvement plan. Refinement of the LEP population totals and requirements will be further evaluated in the PD&E study as part of the public involvement efforts.

Several social services and recreational assets exist in the vicinity of the project corridor. These include:

- South Florida Railway Museum (1300 West Hillsboro Boulevard)
- Assembly of God New Life (1015 W Newport Center Drive #105)
- Grace Christian Church (W Hillsboro Boulevard)
- Westside Park Recreation Center (445 SW 2nd Street)
- Broward County Fire Department and Rescue Station 111 (232 Goolsby Boulevard)
- Broward County North Regional County Court (1600 W Hillsboro Boulevard)
- U.S. Post Office - Deerfield Beach Annex (155 Goolsby Boulevard)

While access to these facilities may be temporarily impacted during construction, long-term impacts are not anticipated and all work is proposed within the existing ROW.

The proposed project is anticipated to improve traffic flow and safety to the surrounding communities and businesses. Construction may result in temporary noise impacts for residents within the vicinity of the project and may require temporary modifications to access local services. However, impacts will be temporary in nature and overall impacts on the social environment and community cohesion are anticipated to be Minimal.

This project will be developed in accordance with the Civil Rights Act of 1964 and 1968, along with Title VI of the Civil Rights Act, Executive Order 12898 (Environmental Justice), which ensures that minority and/or low-income households are neither disproportionately adversely impacted by major transportation projects, nor denied reasonable access to them by excessive costs or physical barriers.

Relocation Potential

Project Level

Comments:

Improvements proposed to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will occur primarily within the existing ROW. Partial right-of-way impacts may occur along Hillsboro Boulevard west of I-95 and at the northeast quadrant of the I-95/SW 10th Street Interchange; however, the potential impacts would not affect residential properties and relocations are not anticipated. It is anticipated that the effect to relocation potential will be None.

Farmlands

Project Level

Comments:

Farmlands were not reported within a 200-foot buffer of the interchange. Based on a review of existing land use in the vicinity of the project corridor, there are no agricultural parcels in the project area. The project occurs entirely within the Miami Urbanized Area. According to Part 2, Chapter 28, Section 28-2.1 of the FDOT PD&E Manual, transportation projects situated entirely within urbanized areas are excluded from Farmland Assessments. Additionally, work will be limited to within the existing ROW. Overall impacts to farmland are anticipated to be None.

Aesthetic Effects

Project Level

Comments:

The proposed improvements to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard will utilize existing ROW; however, it would likely result in minor visual impacts to surrounding communities. Construction activities would result in a temporary disturbance of the existing visual quality and character of the surrounding environment. However, this disturbance is temporary and should not pose a long term visual impact for local areas where construction would occur. Outdoor advertising signs exist within a quarter mile of the project corridor. Impacts to permitted signs and their viewsheds will need to be addressed as plans develop. Overall impacts to visual quality and surrounding aesthetics are anticipated to be Minimal.

Economic

Project Level

Comments:

The project corridor is surrounded by residential, commercial/retail, public, institutional and industrial uses. The proposed construction will mainly utilize existing ROW along I-95 and at the interchanges. Access to adjacent businesses could temporarily be affected during construction.

The proposed project will improve traffic flow in the region, which will result in improvements to mobility and reduce congestion in a busy residential, commercial and industrial area that includes a variety of retail establishments, businesses and services both east and west of I-95. Therefore, it is anticipated that the overall project effect to the economy of the area would be Enhanced.

Mobility

Project Level

Comments:

Overall the proposed project will improve safety and overall flow of traffic along I-95 from SW 10th Street to Hillsboro Boulevard and at the interchanges. SW 10th Street provides east-west connection to US-1, Florida's Turnpike, and US 441. Hillsboro Boulevard provides east-west connection with US-1 and major arterials to the west. SW 10th Street west of I-95, Hillsboro Boulevard from I-95 to Goolsby Boulevard, and I-95 are part of the state's Strategic Intermodal System (SIS), and provide high-priority transportation facilities and services of statewide and interregional significance. The I-95 corridor is the primary interstate facility along the Atlantic

Seaboard, and a major north-south transportation spine of the Atlantic Commerce Corridor, with access to all three South Florida Ports. The I-95 corridor is a major connector between Palm Beach, Broward and Miami-Dade Counties, and is designated as a major evacuation route.

Although no designated Broward County Transit (BCT) Routes are provided within the SW 10th Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange. There are no bicycle lanes in the project area; however, SW 10th Street west of Military Trail is equipped with bicycle lanes.

The proposed project will improve the flow of traffic to and from I-95 along Hillsboro Boulevard and SW 10th Street, and on I-95 between the interchanges, to support the region's growth, and improve mobility and safety. It is anticipated that the effect to mobility will be Enhanced.

Cultural

Section 4(f) Potential

Project Level

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street.

While not anticipated, if there is potential for ROW impacts to one of the parks, or temporary impacts to access, then a Determination of Applicability will be prepared.

Historic and archeological sites may be considered Section 4(f) resources; historic and archeological resources within the vicinity of the project area are listed in the Historic and Archeological Sites section. Because work is limited to within FDOT ROW, impacts to Section 4(f) resources are anticipated to be Minimal.

Historic and Archaeological Sites

Project Level

Comments:

The EST review identified one National Register-eligible resource within the project study area, the Seaboard Air Line Railway Station (BD00128).

A Cultural Resources Assessment Survey (CRAS) was prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) in August 2013 for the I-95 Express project, ETDM Number 3330, FM Numbers 409359-1-22-01 and 409355-1-22-01. The CRAS did not identify any additional resources eligible for listing in the National Register within the study area for this project. It is anticipated that impacts to Historical and Archaeological Sites will be Minimal.

Recreation Areas

Project Level

Comments:

There are three public parks owned and maintained by the City of Deerfield Beach in the project vicinity:

- Tivoli Sand Pine Park/Sand Pine Preserve located along SW 10th Street between SW 3rd Avenue and Natura Boulevard,
- Mayo Howard Park located at 1131 FAU Research Park Boulevard, and
- Westside Park located at 445 SW 2nd Street, south of Hillsboro Boulevard.

Tivoli Sand Pine Park is a conservation area with a public walkway accessed by SW 10th Street at SW 6th Avenue. Mayo Howard is a neighborhood park accessed by FAU Research Park Boulevard. Westside Park is a neighborhood park with mixed use recreation. Because work will be limited to the FDOT ROW, it is anticipated that the effect to recreation areas will be Minimal.

Natural

Wetlands

Project Level

Comments:

The surrounding area is largely developed, paved, cleared and landscaped, with minimal wetland habitat. The EST showed 13.39 acres of palustrine wetlands within 200 feet of the project. Some of the stormwater swales located within and adjacent to the ROW may support hydrophytic vegetation, but are components of the highway drainage system and are constructed man-made features. Potential impacts to wetlands will be assessed during the PD&E study. Avoidance and minimization strategies will be implemented during the design process. Wetland impacts are anticipated to be Minimal.

Water Quality and Quantity

Project Level

Comments:

Presently, stormwater drainage and treatment is provided primarily by a series of dry swales and ponds. The proposed project lies approximately 1,000 feet south of the Hillsboro Canal; however, impacts are not anticipated. The project would increase the impervious area. The project is located within a verified impaired water basin, the ICWW Above Pompano. The increased pollutant loading will be analyzed during the Water Quality Impact Evaluation (WQIE) as per Part 2, Chapter 20 of the PD&E manual. The WQIE will comply with the goals of the Clean Water Act. The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during construction. It is anticipated that the effect to water quality and quantity will be Minimal.

Floodplains

Project Level

Comments:

According to the FEMA Flood Insurance Rate Map data, portions of the project are located within flood zones AE and AH. Flood zones AE and AHE are defined as areas within the 100-year floodplain, with average floodplain elevations of seven feet and one to three feet, respectively. Properties within Flood Zone Areas AE and AH have a one percent annual chance of flooding.

The project is not anticipated to affect existing flood heights or floodplain limits. It is anticipated that the effect on floodplains will be Minimal.

Wildlife and Habitat

Project Level

Comments:

Core Foraging Areas (CFA) of two active wood stork nests and the US Fish and Wildlife Service (FWS) designated consultation area for snail kites overlap the project area. No areas of designated Critical Habitat are present. The proposed project corridor will utilize existing ROW; therefore, minimal involvement regarding wildlife and habitat resources is anticipated due to the limited amount of suitable habitat along the project corridor. It is anticipated that the effect to wildlife and habitat will be Minimal.

Coastal and Marine

Project Level

Comments:

The proposed project corridor is not located within a Coastal Barrier Resource Area, and Essential Fish Habitat is not located within the project limits. Consequently, it is anticipated that the effect to coastal and marine will be None.

Physical

Noise

Project Level

Comments:

Residential, commercial/retail, public, institutional and industrial properties were identified in the immediate vicinity of the project corridor. Residential land uses are located east of I-95 to the south of Hillsboro Boulevard. Natura Boulevard is in between the project and residential areas. The EST identified one constructed noise wall at I-95 north at Hillsboro Boulevard and two recommended noise walls located near SW 10th Street and Military Trail. While temporary construction noise impacts may have short-term effects on adjacent properties, overall noise and vibration-related impacts as a result of the project are anticipated to be Minimal. A Noise Study Report will be prepared to determine potential noise effects.

Air Quality

Project Level

Comments:

The proposed project corridor is located within the Southeast Florida Airshed, which is a US Environmental Protection Agency designated Air Quality Maintenance Attainment Area for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air conformity requirements do not apply to this project at this time. However, an Air Quality Technical Memorandum will be prepared as a support document to the PD&E Study. Air quality effects from the proposed project are anticipated to be Minimal.

Contamination

Project Level

Comments:

A review of the EST identified a number of potentially contaminated facilities within a quarter mile of the project corridor including 20 petroleum contamination monitoring sites, 2 dry cleaners, 29 other storage tank contamination monitoring, and 40 hazardous waste facilities, such as automotive and pharmacy retail stores. (Note that some facilities are included in multiple databases.)

The following solid waste, CERCLA and superfund sites were identified within one mile of the project corridor:

- City of Deerfield Beach Transfer Station - 360 SW 4th Street - FDEP ID# 95123
- Deerfield Beach Old City Landfill - Natura Avenue - FDEP ID# 53368

The proposed project corridor will utilize existing ROW. Moderate involvement regarding sources of contamination may occur given the proximity of these facilities to the project. A Contamination Screening Evaluation Report (CSER) prepared for the I-95 corridor from north of Oakland Park Boulevard (SR 816) to south of Glades Boulevard (SR 808) for the I-95 Express project indicated that asbestos containing materials (ACMs) testing was conducted for bridges along this corridor, and that ACM were not detected. A CSER will be prepared to determine any contamination impacts. Avoidance, minimization, and mitigation strategies as well as any necessary special construction provisions will be developed based on the CSER, to avoid impacts and to ensure human health and safety if avoidance is not possible. It is anticipated that the impact to contamination will be Moderate.

Infrastructure

Project Level

Comments:

The project corridor includes the SW 10th Street Bridge over I-95 and the I-95 over Hillsboro Boulevard Bridge. The project is also considering a new ramp from SW 10th Street to I-95 which includes a bridge over a retention pond and a grade separation at Hillsboro Boulevard and the railroad. CSX railroad mainline runs within 2,000 feet east of the project limits and the Amtrak Deerfield Beach terminal is located southwest of the Hillsboro Boulevard interchange. The proposed project will utilize existing ROW. It is anticipated that overall impacts to infrastructure will be Minimal.

Navigation

Project Level

Comments:

The proposed project corridor does not intersect any navigable waters. It is anticipated that the effect to Navigation will be No Involvement.

Special Designations

Special Designations: Outstanding Florida Waters

Project Level

Comments:

The proposed project corridor is not located within an Outstanding Florida Water. It is anticipated that the effect to Outstanding Florida Waters will be No Involvement.

Special Designations: Aquatic Preserves

Project Level

Comments:

The proposed project corridor is not located within an Aquatic Preserve. It is anticipated that the effect to Aquatic Preserves will be No Involvement.

Special Designations: Scenic Highways

Project Level

Comments:

The proposed project corridor is not designated a Scenic Highway. It is anticipated that the effect to Scenic Highways will be No Involvement.

Special Designations: Wild and Scenic Rivers

Project Level

Comments:

The proposed project corridor is not located in the vicinity of a Wild and Scenic River. It is anticipated that the effect to Wild and Scenic Rivers will be No Involvement.

Advance Notification Comments

There are no Advance Notification (AN) Package comments for this project.

GIS Analyses

Since there are so many GIS Analyses available for Project #14244 - I-95 from SW 10th St to Hillsboro Blvd, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fl-a-etat.org/est/index.jsp?tpID=14244&startPageName=GIS%20Analysis%20Results>

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 07/11/2016 by Anson Sonnett Milestone** is selected. GIS Analyses snapshots have been taken for Project #14244 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

There are no attachments for this project.

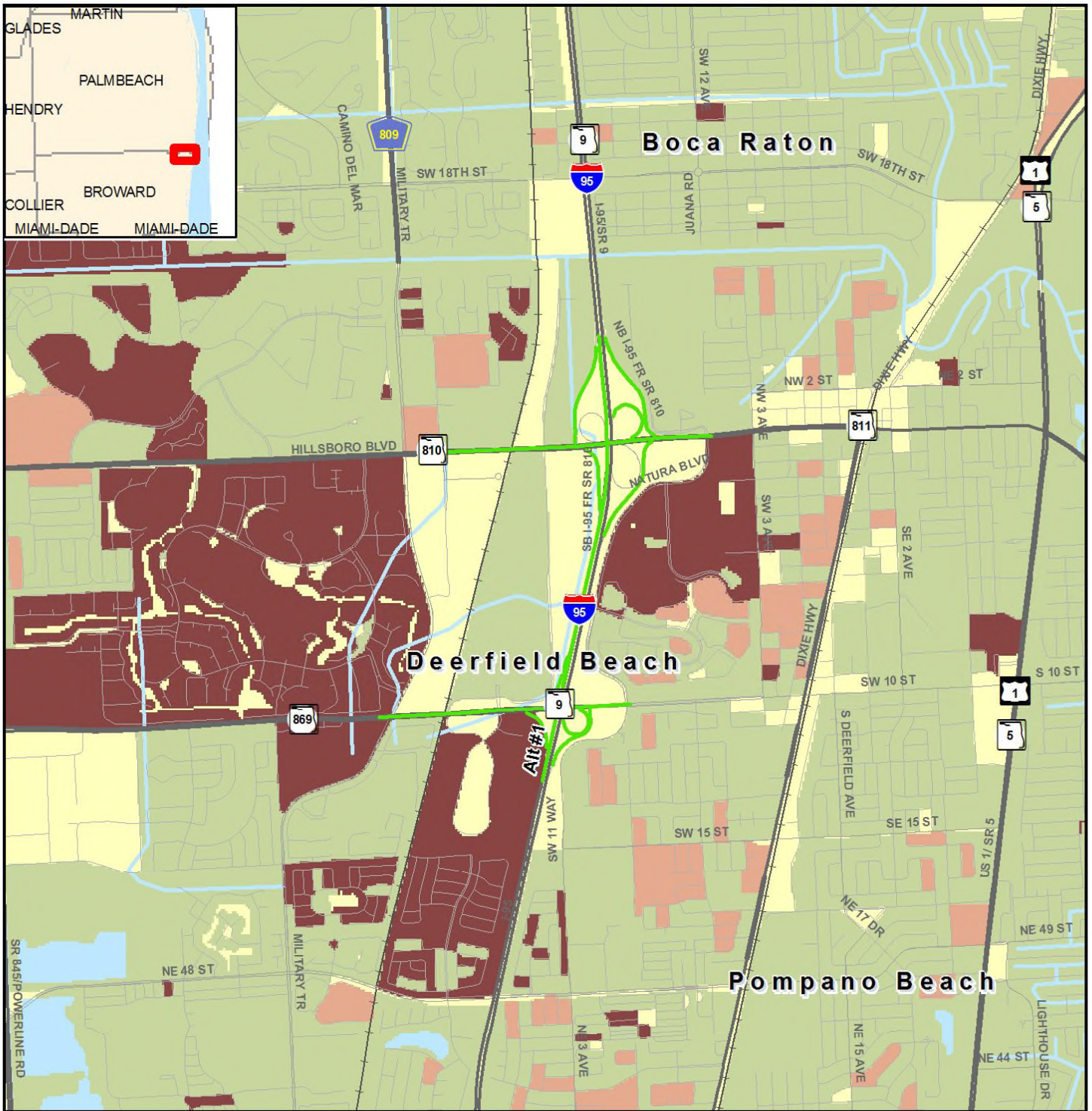
Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	

0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

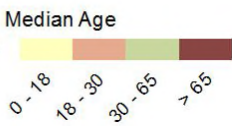
Project-Level Hardcopy Maps

14244 I-95 from SW 10th St to Hillsboro Blvd



Age Distribution Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail



Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



8/30/2015

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14244 I-95 from SW 10th St to Hillsboro Blvd



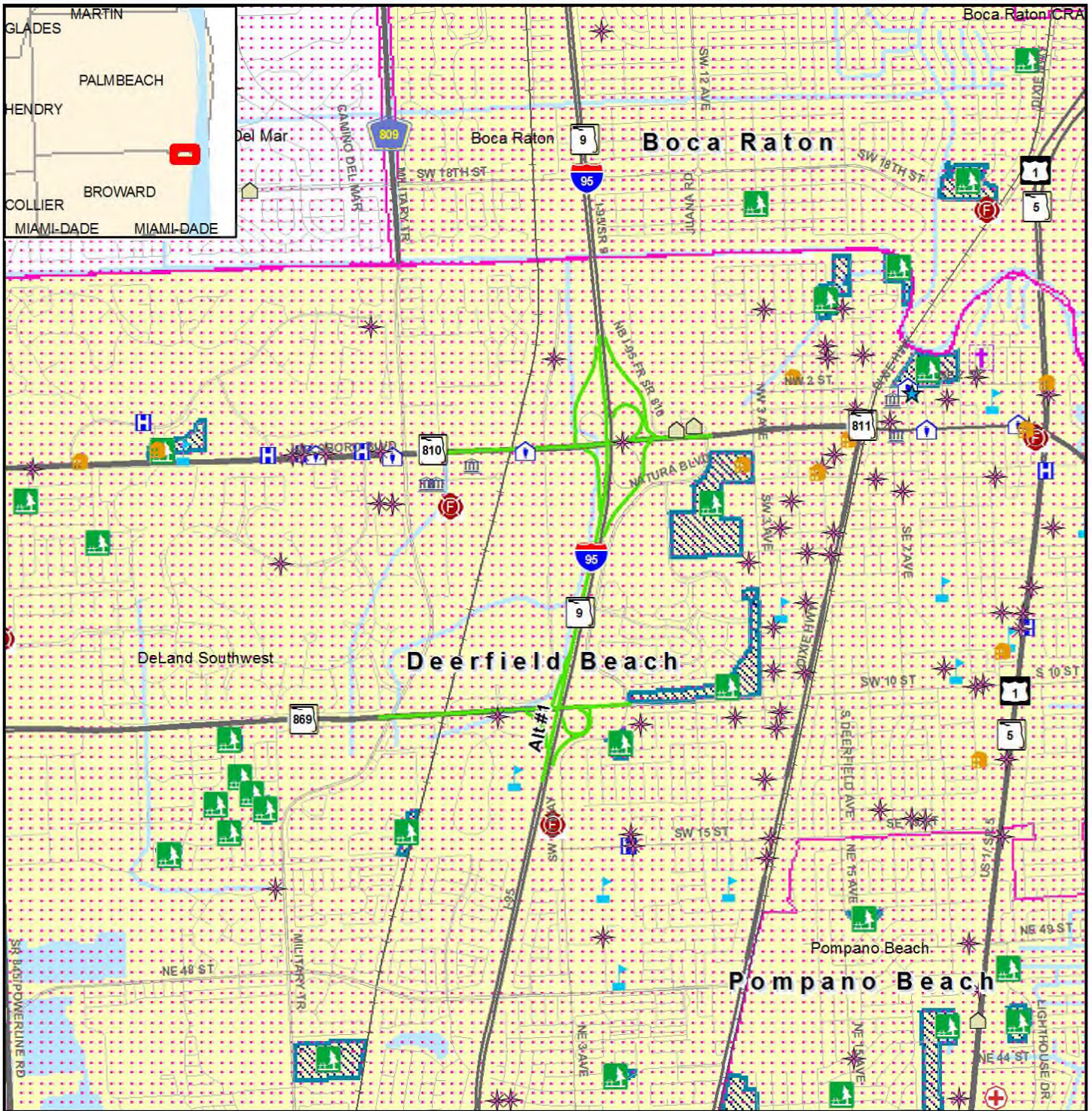
Coastal and Marine Map

ETDM Alternative	Swamp or Marsh	Coastal Barrier Resource Area	Non-vegetated Wetland
ETDM Alternative Terminus	Exposed Rocky Platform	Continuous Seagrass	Vegetated Non-forested Wetland
City Limits	Sand Beach	Discontinuous Seagrass	Wetland Forested Mixed
Navigable Water Way	Gravel Beach/Riprap	Aquatic Preserve	Wetland Coniferous Forest
	Exposed Tidal Flat		Wetland Hardwood Forest
	Sheltered Tidal Flat	Data Sources: NAVTEQ; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts	
	Mixed Sand And Gravel Beach	Environmental Screening Tool Centennial FDOT 1915 * 2015	
	Sheltered Rock/Seawall/Vegetated		
	Exposed Vertical Rocky Shore/Seawall		

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14244 I-95 from SW 10th St to Hillsboro Blvd



Community Services Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Government
- Civic Center
- Cemetery
- Social Service
- Community Center
- Law Enforcement
- Place of Worship
- Cultural Center
- Fire Station
- Health Care
- School
- Park
- Recreational Trail
- Community Boundary
- Conservation or Recreation Area

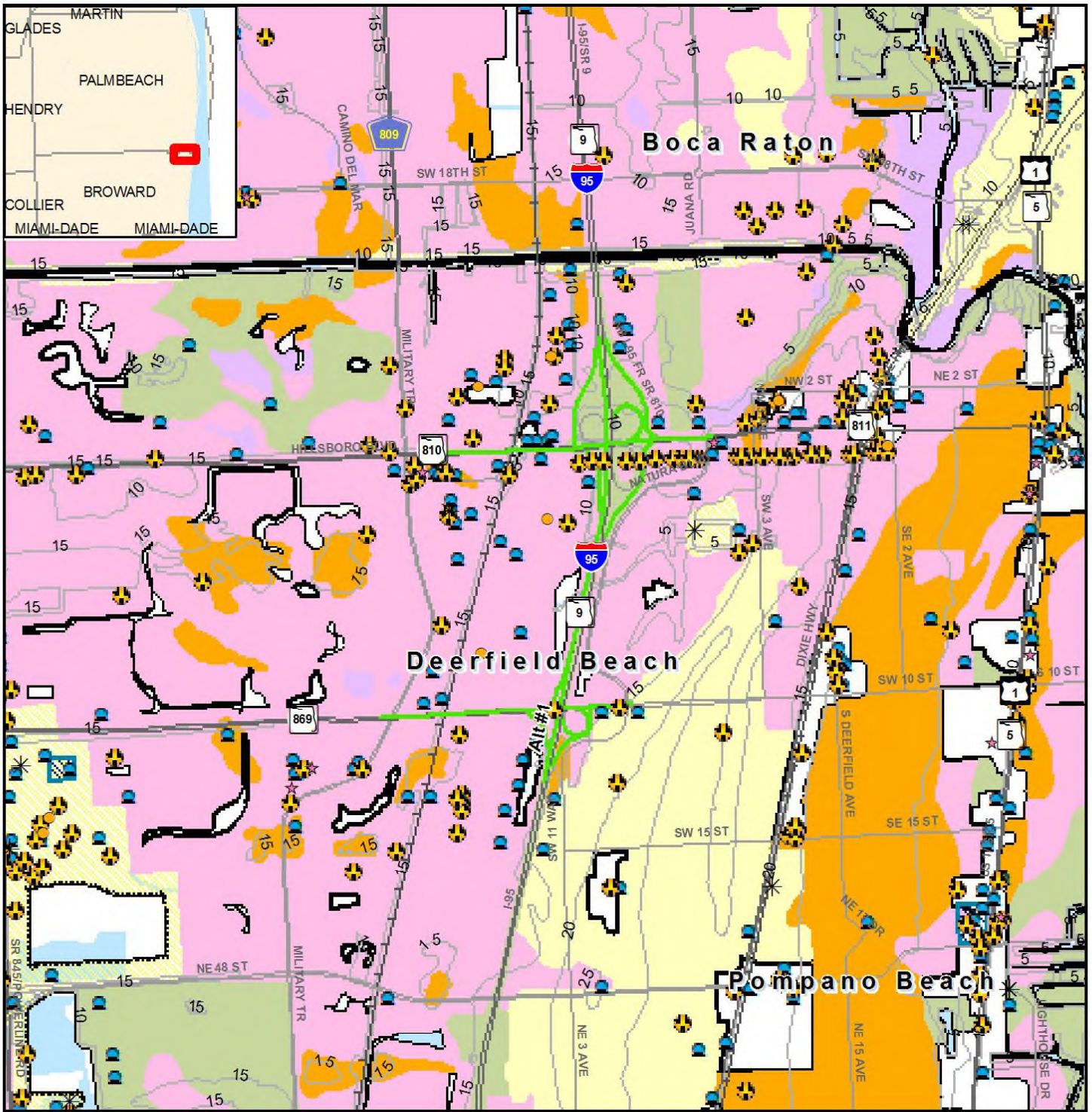
Data Sources: US Geological Survey; FL Department of Transportation; NAVTEQ; FL Property Appraisers; FL Natural Areas Inventory



8/30/2015

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14244 I-95 from SW 10th St to Hillsboro Blvd



Contamination Map

ETDM Alternative	Hazardous Material Site	5 FT Contour	Soil Drainage	Somewhat Poorly Drained
ETDM Alternative Terminus	Power Plant	NPL Remediation Site	Excessively Drained	Poorly Drained
Major Road	Superfund Site	Brownfield Area	Well Drained	Very Poorly Drained
Local Road or Trail	Nuclear Site		Somewhat Excessively Drained	Unclassified
Toxic Release Inventory	FDEP Tanks		Moderately Well Drained	
Dry Cleaning Facility				
Solid Waste Facility				

Data Sources: NAVTEQ; US Geological Survey; FL Department of Transportation; FL Department of Environmental Protection; FL Water Management Districts; US Environmental Protection Agency; Natural Resource Conservation Service

0 0.15 0.3 0.6 Miles

etdm Environmental Screening Tool

Centennial FDOT 1915 * 2015

8/30/2015

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14244 I-95 from SW 10th St to Hillsboro Blvd



Farmlands Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Cropland/Pastureland
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands
- Prime Farmland Soils

Data Sources:
 NAVTEQ
 Florida Water Management Districts
 US Geological Survey
 Natural Resources Conservation Services



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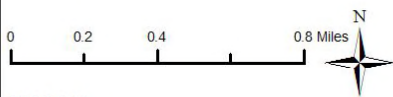
14244 I-95 from SW 10th St to Hillsboro Blvd



Floodplains Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Special Flood Hazard Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Federal Emergency Management Agency



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14244 I-95 from SW 10th St to Hillsboro Blvd



Historic Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Year Built
 - Pre 1970
 - Post 1980
 - 1970 - 1979
 - Parcels w/ no values
- ★ Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Department of State,
 Bureau of Archaeological Research

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

0 0.15 0.3 0.6 Miles



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14244 I-95 from SW 10th St to Hillsboro Blvd



Hydrogeology Map

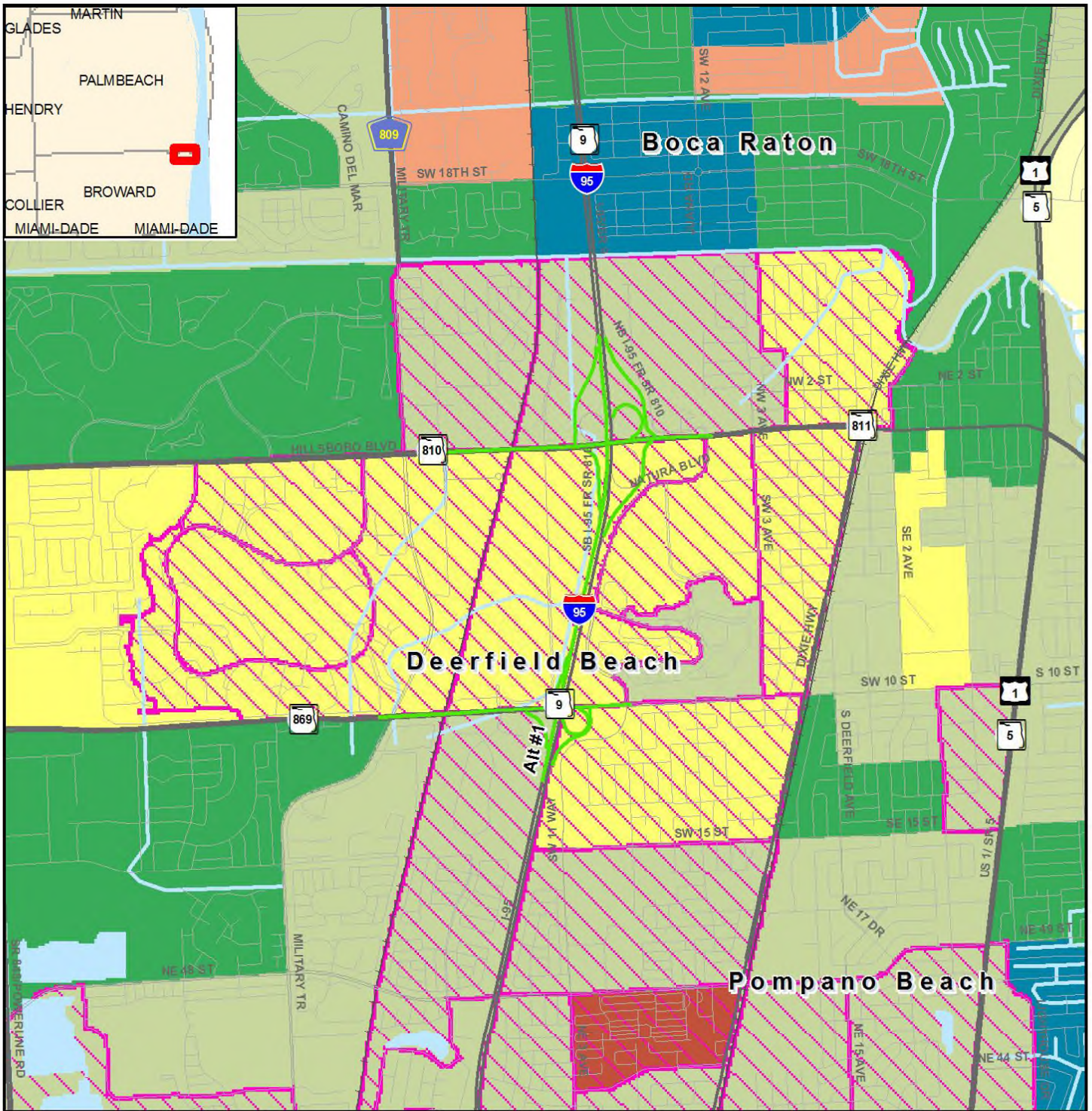
<ul style="list-style-type: none"> ■ ETDM Alternative ● ETDM Alternative Terminus — Major Road - - - Local Road or Trail City Limits 	<p>Recharge Areas of the Floridan Aquifer</p> <ul style="list-style-type: none"> Discharge 1 to 5 Discharge > 5 Discharge < 1 Recharge 1 to 10 Recharge > 10 Recharge < 1 	<p>Surface Geology</p> <ul style="list-style-type: none"> ■ Eocene ■ Miocene ■ Miocene/Pliocene ■ Oligocene ■ Oligocene/Miocene ■ Pleistocene ■ Holocene ■ Pleistocene/Holocene ■ Pliocene ■ Pliocene/Pleistocene
---	---	--

Data Sources: NAVTEQ; US Geological Survey
 Florida Department of Transportation
 South West Florida Water Management District
 Florida Geological Survey

8/30/2015

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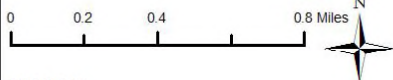
14244 I-95 from SW 10th St to Hillsboro Blvd



Income Map

- ETDM Alternative
 - ETDM Alternative Terminus
 - Major Road
 - Local Road or Trail
 - > 20% Below Poverty
- | Median Household Income | |
|-------------------------|------------------|
| | 0 - 10,000 |
| | 10,001 - 29,999 |
| | 30,000 - 49,999 |
| | 50,000 - 79,999 |
| | 80,000 - 125,000 |
| | > 125,000 |

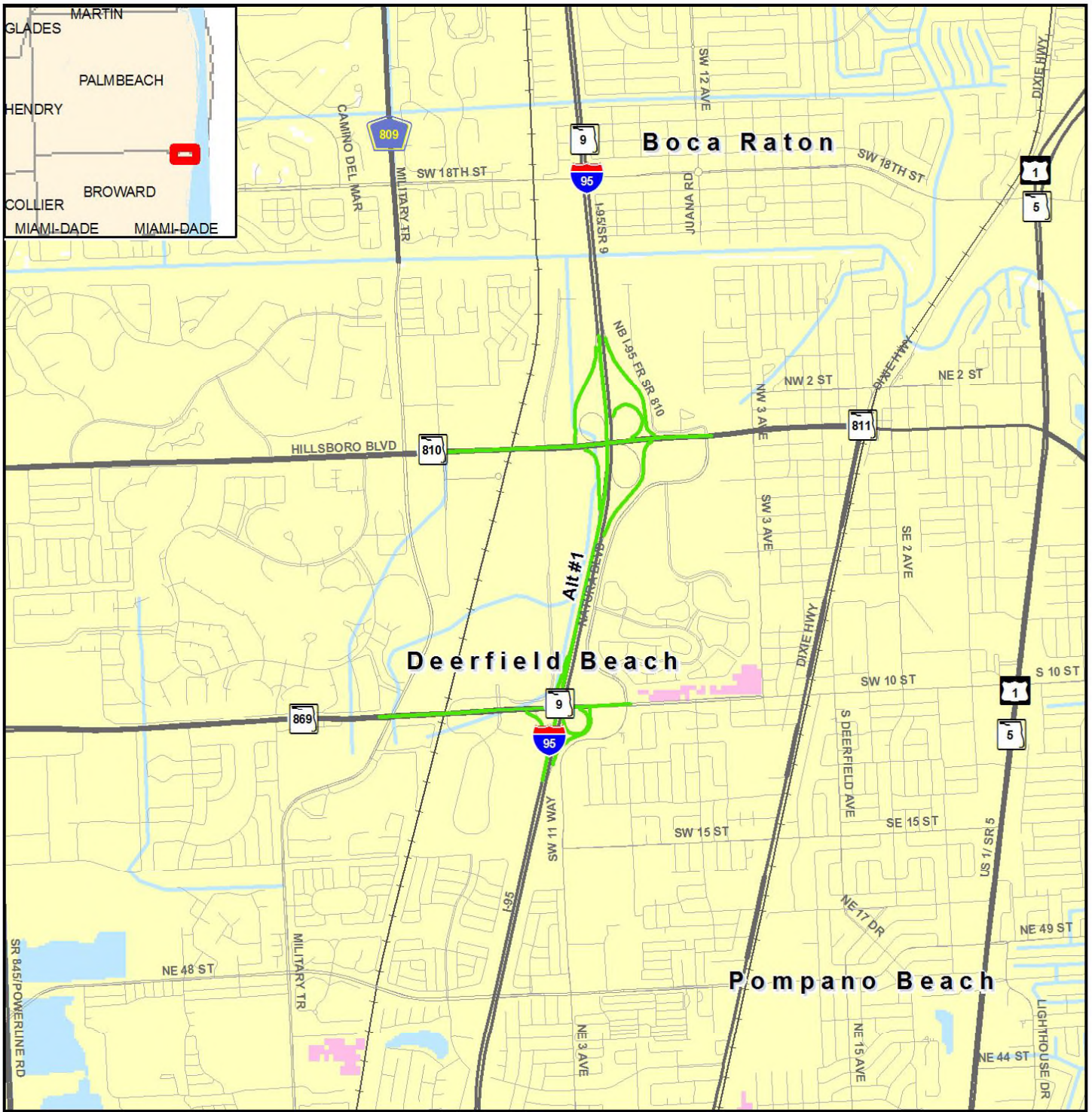
Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



8/30/2015

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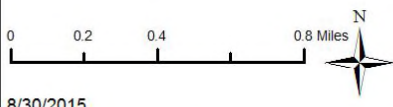
14244 I-95 from SW 10th St to Hillsboro Blvd



Integrated Wildlife Model Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

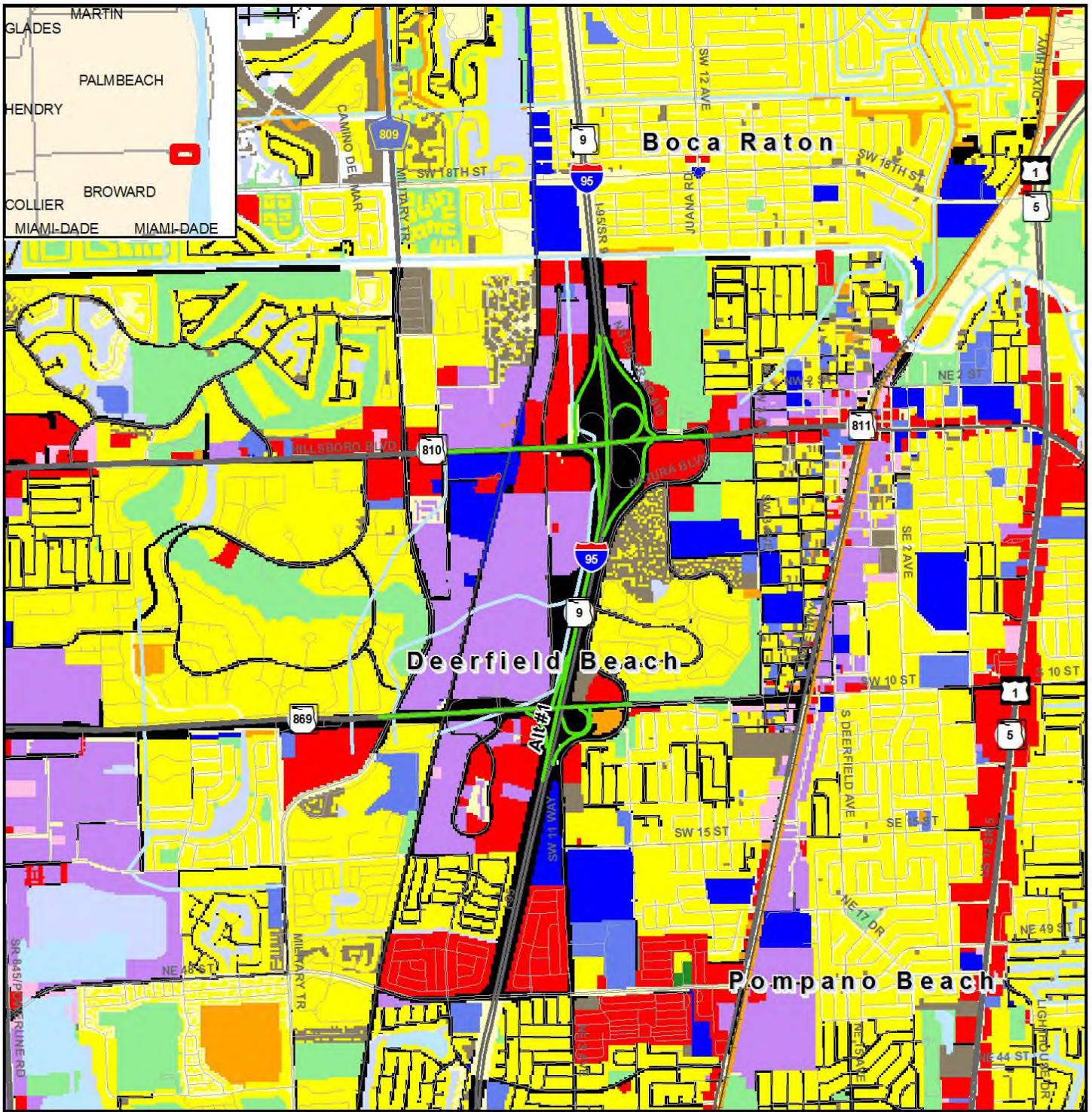
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission



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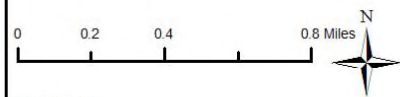
14244 I-95 from SW 10th St to Hillsboro Blvd



Land Use Map

- | | | | |
|--|---|--|---|
| ■ ETDM Alternative | ■ Agricultural | ■ Other | ■ Retail/Office |
| ● ETDM Alternative Terminus | ■ Industrial | ■ Public | ■ Vacant (Residential) |
| — Major Road | ■ Institutional | ■ Right-of-Way | ■ Vacant (Nonresidential) |
| — Local Road or Trail | ■ Mining | ■ Recreational | ■ Water |
| | ■ Open (Not Agricultural) | ■ Residential | □ No Data |

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Revenue
 Florida Department of Transportation
 Florida County Property Appraiser Offices

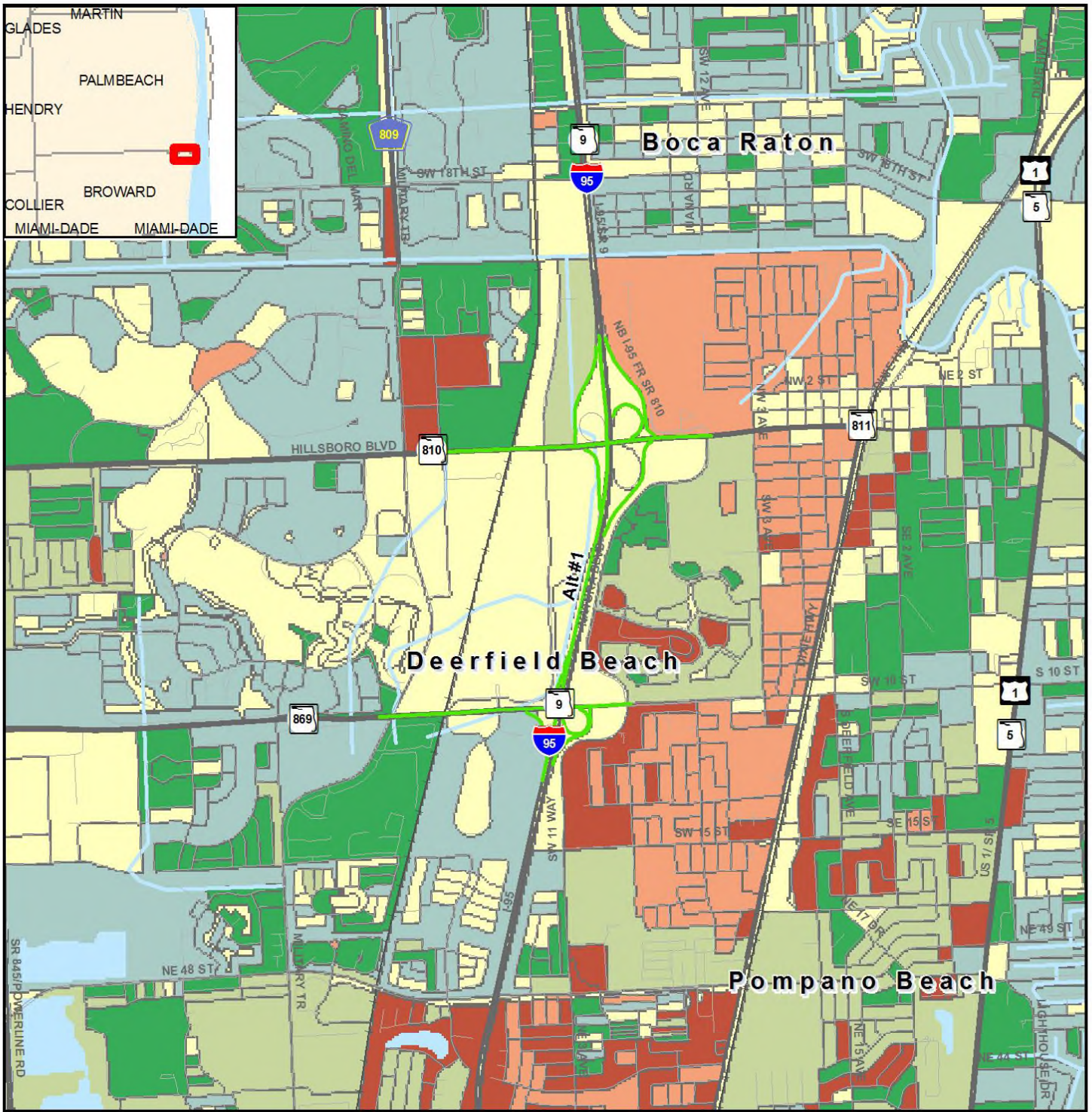


8/30/2015

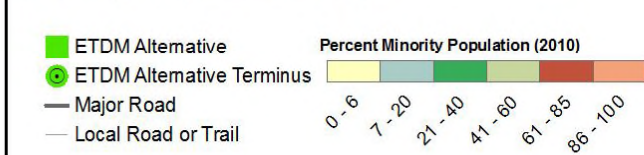


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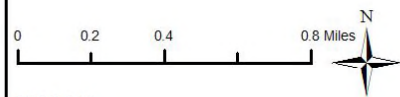
14244 I-95 from SW 10th St to Hillsboro Blvd



Minority Population Map



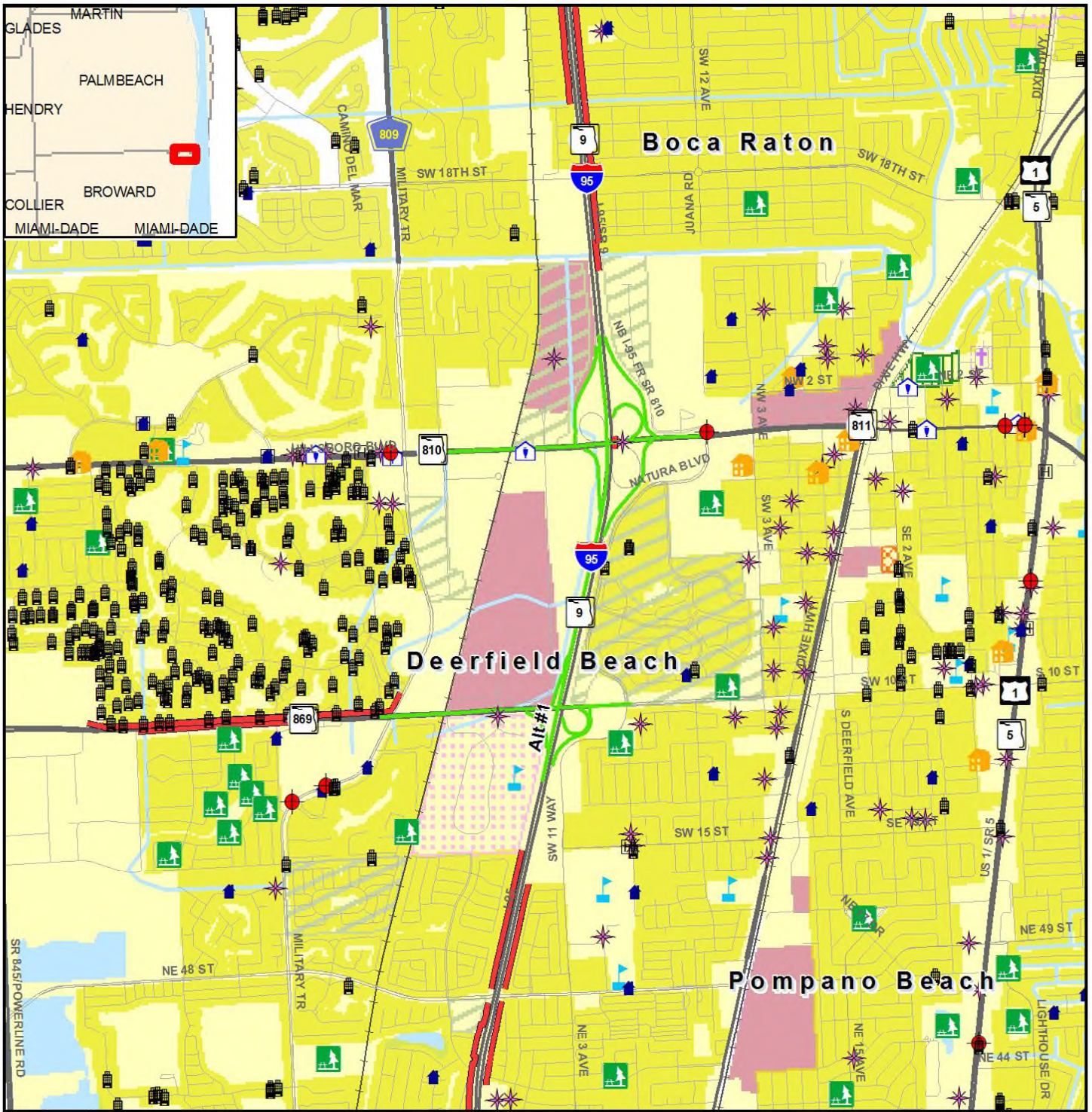
Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



8/30/2015

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14244 I-95 from SW 10th St to Hillsboro Blvd



Noise Map

ETDM Alternative	Condo Owners Associations	Cultural Center	Historic Cemetery	Industrial
ETDM Alternative Terminus	Hospitals	Health Care	Planned Unit Developments	Residential
City Limits	Laser On-site	Park	Wildlife Refuges	HUD Renewal
Noise Barriers	Group Care Facilities	National Parks	National Park Projects	Nat'l Estuarine Reserves
Existing Trails	Cemetery	Place of Worship	Marine Sanctuaries	Enterprise Zones
	Community Center	School	Military Installations	DRI

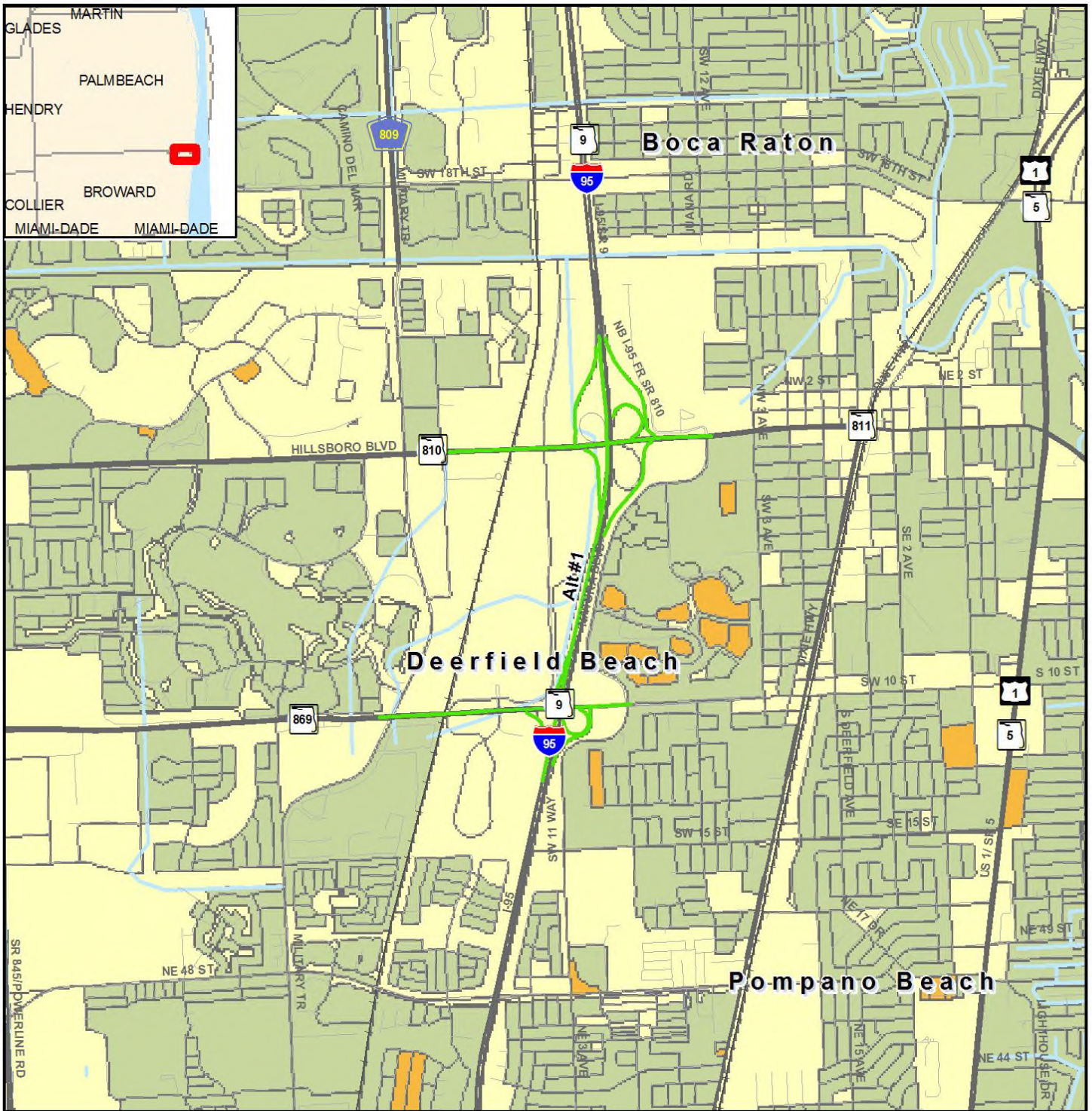
Data Sources:
 GeoPlan Center, US Geological Survey, US Census Bureau,
 HUD, Florida DOT, US Fish and Wildlife, National Park Service,
 NOAA, National Estuarine Research, Enterprise Florida

Environmental Screening Tool
 Centennial FDOT 1915 * 2015

8/30/2015

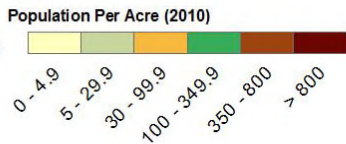
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14244 I-95 from SW 10th St to Hillsboro Blvd



Population Density Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail



Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)

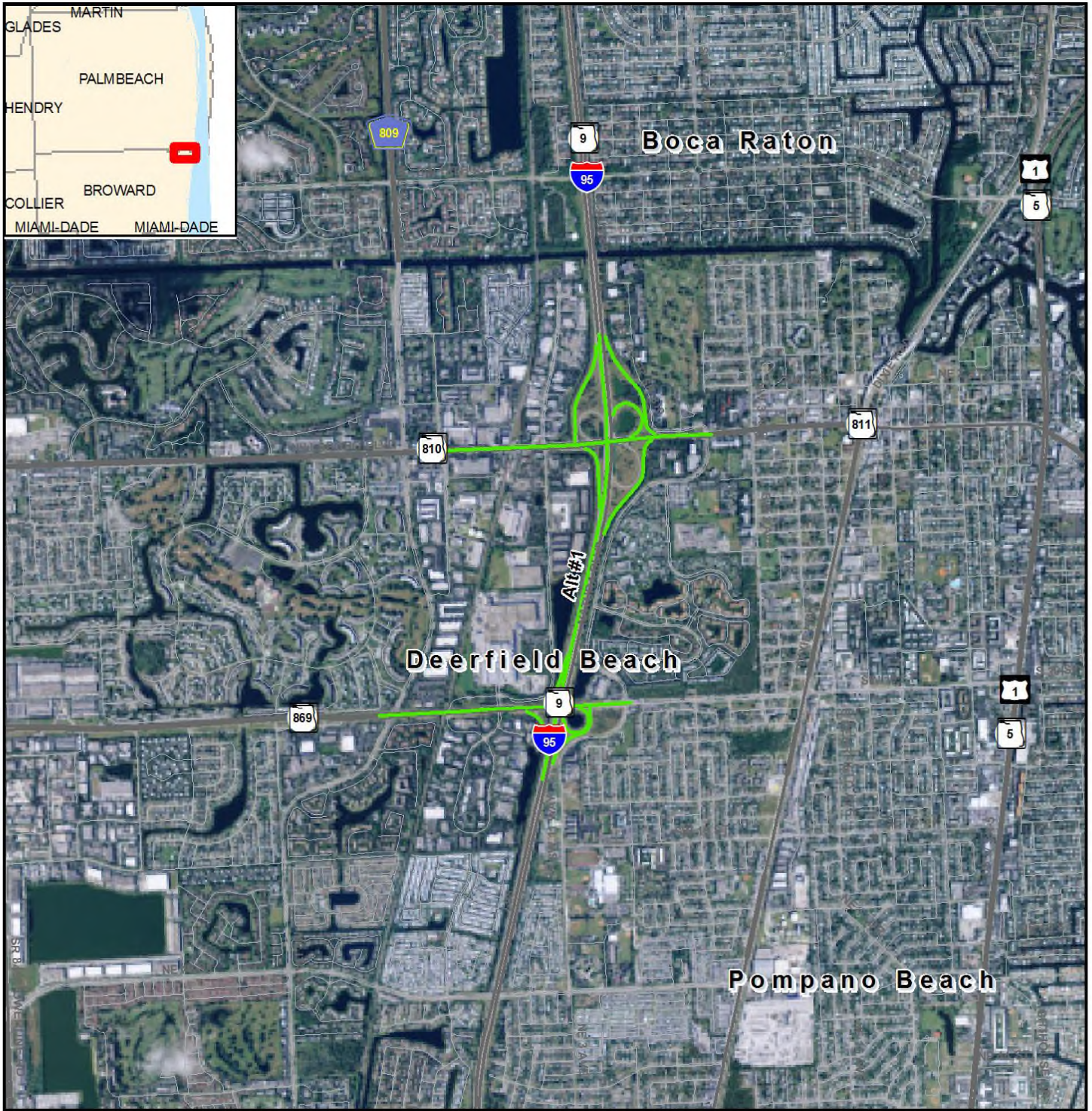
0 0.125 0.25 0.5 Miles



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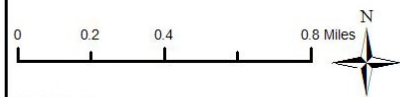
14244 I-95 from SW 10th St to Hillsboro Blvd



Project Aerial Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

Data Sources:
 Highways - NAVTEQ
 Digital Orthophotograph - ArcGIS Online



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14244 I-95 from SW 10th St to Hillsboro Blvd



Project Base Map

- ETDM Alternative
- ETDM Alternative Terminus
- Local Road or Trail
- Major Road
- City Limits
- Managed Conservation Lands

Data Sources:
 NAVTEQ
 US Geological Survey
 US Census Bureau
 County Property Appraisers
 Florida Natural Areas Inventory



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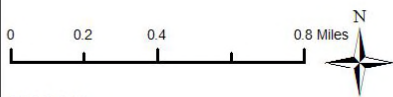
14244 I-95 from SW 10th St to Hillsboro Blvd



Recreational Areas Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Conservation or Recreation Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Natural Areas Inventory



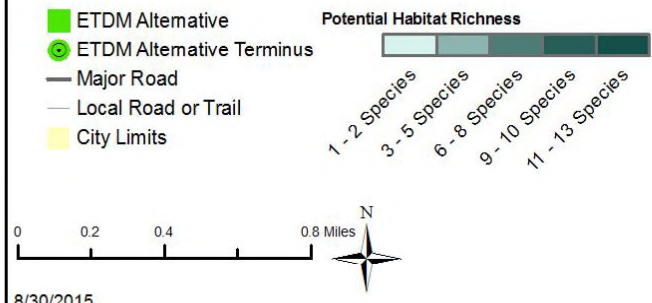
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14244 I-95 from SW 10th St to Hillsboro Blvd



Species Potential Map



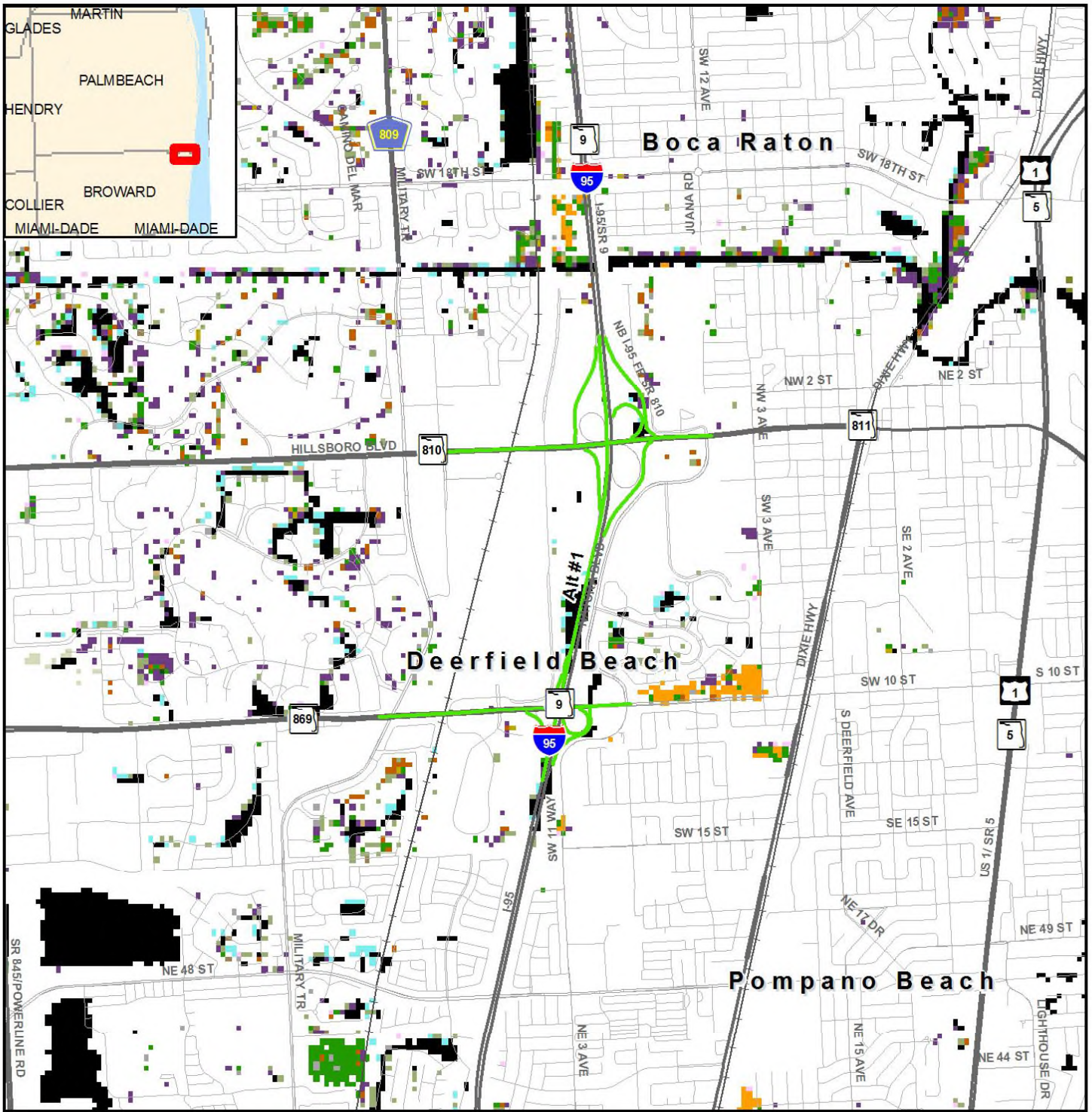
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission



8/30/2015

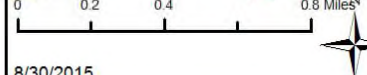
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14244 I-95 from SW 10th St to Hillsboro Blvd



Vegetation Map

- | | | | | | |
|---------------------------|----------------------------------|---------------------------|----------------------------|---------------------|-------------------|
| ETDM Alternative | Dry Prairie | Cattail Marsh | Bottomland Hardwood Forest | Bare Soil/Clearcut | Australian Pine |
| ETDM Alternative Terminus | Mixed Hardwood-pine Forest | Shrub Swamp | Salt Marsh | Improved Pasture | Melaleuca |
| Not Classified | Hardwood Hammocks and Forests | Bay Swamp | Mangrove Swamp | Unimproved Pasture | Brazilian Pepper |
| Coastal Strand | Pinelands | Cypress Swamp | Scrub Mangrove | Sugarcane | High Impact Urban |
| Sand/Beach | Cabbage Palm-live Oak Hammock | Cypress/Pine/Cabbage Palm | Tidal Flats | Citrus | Low Impact Urban |
| Xeric Oak Scrub | Tropical Hardwood Hammock | Mixed Wetland Forest | Open Water | Row and Field Crops | Extractive |
| Sand Pine Scrub | Freshwater Marsh and Wet Prairie | Hardwood Swamp | Shrub and Brushland | Other Agriculture | Exotic Plants |
| Sandhill | Sawgrass Marsh | Hydric Hammock | Grassland | | |



Data Sources: NAVTEQ; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission



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14244 I-95 from SW 10th St to Hillsboro Blvd



Water Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- 1st Magnitude Spring
- River, Stream or Canal
- Navigable Water Way
- SFWMD Canals
- Drainage Basin
- Outstanding Florida Water
- Surface Water Class I
- Surface Water Class II
- Water Body
- Swamp/Marsh

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Department of Environmental Protection
 Florida Geological Survey
 US Bureau of Transportation Statistics

0 0.15 0.3 0.6 Miles



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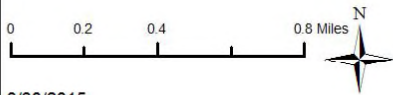
14244 I-95 from SW 10th St to Hillsboro Blvd



Wetlands Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources:
 NAVTEQ
 Florida Water Management Districts
 US Geological Survey



8/30/2015

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DRAFT

Attachment B
Planning Consistency Documentation

Planning Requirements for Environmental Document Approvals

Document Information:

Date compiled: 8/1/2019 Document Type: _____ Document Status: _____

Project Name: SR-9/I-95 from South of SW 10th Street to North of Hillsboro Blvd. FM #: 436964-1

Project Limits: South of SW 10th Street to North of Hillsboro Blvd. ETDM #: _____

Are the limits consistent with the plans? Yes. The STIP and TIP limits match the plans.

Identify MPO(s) (if applicable): Broward MPO Original PD&E FAP#: _____

Currently Adopted CFP-LRTP	COMMENTS
Y	Broward MPO's 2040 LRTP Plan (Page 46-47)

PHASE	Currently Approved TIP	Currently Approved STIP	Current STIP	Adopted FY2019/20 TIP	FY2019/20 Roll Forward Report	Approved TIP \$ FY	Approved STIP \$ FY	Current STIP \$ FY	Adopted FY2019/20 TIP \$ FY	FY2019/20 Roll Forward Report \$ FY	COMMENTS
Environmental (ENV)	Y	Y	Y	N	Y	40,000	40,000	29,979		20,000	The ENV phase is not programmed in the FY2019/20 TIP; however, \$20,000 for ENV is programmed in the Roll Forward report which is expected to be amended into the FY2019/20 TIP by the MPO Board in September/October.
						FY 2019	FY 2019	FY 2019/20		FY 2020	
Preliminary Design & Engineering (PD&E)	Y	Y	Y	N	Y		101,257	1,623,198		16,130	The PD&E phase is not programmed in the FY2019/20 TIP; however, \$16,130 for PD&E is programmed in the Roll Forward report which is expected to be amended into the FY2019/20 TIP by the MPO Board in September/October.
							FY 2019	FY2019/20		FY 2020	
Right of Way (ROW)	Y	Y	Y	N	Y	28,964,970	28,964,970	28,870,947		28,144,373	The ROW phase is not programmed in the FY2019/20 TIP; however, \$28,144,373 for ROW is programmed in the Roll Forward report which is expected to be amended into the FY2019/20 TIP by the MPO Board in September/October.
						FY 2019	FY 2019	FY 2019/20/21		FY 2020/21	
Preliminary Engineering (PE)	Y	Y	Y	Y	Y	2,750,000	2,755,262	2,755,262	2,750,000	2,753,255	No TIP amendment is needed.
						FY 2022	FY 2019/22	FY 2019/20/22	FY 2022	FY 2020/22	

Project Segmented: N

Preparer's Name: John Podczewinsky Date: 8/1/2019 8/1/2019 Phone # 954-777-4651

Preparer's Signature: *John Podczewinsky* Email: John.Podczew@dot.state.fl.us

Phase	Fund Source	2020	2021	2022	2023	2024	Total
SR-9/I-95 FROM SOUTH OF SHERIDAN STREET TO NORTH OF GRIFFIN ROAD - FM# 4391701					Length: 4.480		*SIS*
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 47		
SIS 2ND FIVE YEARS; INTERCHANGE IMPROVEMENTS							
PDE	ACNP	0	0	500,000	2,500,000	0	3,000,000
ENV	DS	0	0	0	0	30,000	30,000
Total		0	0	500,000	2,500,000	30,000	3,030,000
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		51,651,695	<i>Total Project Cost</i>		54,681,695
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369641					Length: 7.250		*SIS*
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 47		
2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONSTRUCTION ON 436964-2							
PE	DI	0	0	2,750,000	0	0	2,750,000
Total		0	0	2,750,000	0	0	2,750,000
<i>Prior Years Cost</i>		37,783,208	<i>Future Years Cost</i>		<i>Total Project Cost</i>		40,533,208
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369642					Length: 5.084		*SIS*
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 46		
2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD DESIGN & R/W ON SEG 1							
RRU	DI	0	0	0	0	3,000,000	3,000,000
Total		0	0	0	0	3,000,000	3,000,000
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		402,971,121	<i>Total Project Cost</i>		405,971,121
SR-9/I-95 MOBILITY HUB AT CYPRESS CREEK ROAD - FM# 4358085					Length: .880		*Non-SIS*
Type of Work: WIDEN/RESURFACE EXIST LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 6		
WIDENING FOR ADDITIONAL TURN LANE AND BIKE LANES, SIDEWALK CONSTRUCTION, RESURFACING. WEST CYPRESS CREEK RD FROM POWER LINE RD TO W OF SFRC; NW 59TH CT; N ANDREWS WAY. NO RIGHT OF WAY REQUIRED SEE WP45 FOR ADDITIONAL COMMENTS PRIOR YEAR MPO PRIORITY							
CST	SU	0	0	0	0	2,817,494	2,817,494
CST	SA	0	0	0	0	150,000	150,000
Total		0	0	0	0	2,967,494	2,967,494
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		<i>Total Project Cost</i>		2,967,494	

Phase	Fund Source	2019	2020	2021	2022	2023	Total	
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369642 (TIP#)					Length: 5.084	*SIS*		
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT			
Project Type: Imported					LRTP#: Pg. 46			
RRU	DI	0	0	0	3,000,000	1,000,000	4,000,000	
DSB	DI	0	0	0	0	2,000,000	2,000,000	
DSB	ACNP	0	0	0	0	187,408,360	187,408,360	
DSB	LFB	0	0	0	0	100,000,000	100,000,000	
DSB	PKLF	0	0	0	0	20,000,000	20,000,000	
DSB	PKYI	0	0	0	0	80,000,000	80,000,000	
Total		0	0	0	3,000,000	390,408,360	393,408,360	
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		<i>Total Project Cost</i>			393,408,360	
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369641 (TIP#)					Length: 7.250	*SIS*		
Type of Work: INTERCHANGE IMPROVEMENT					Lead Agency: MANAGED BY FDOT			
Project Type: Imported					LRTP#: Pg. 47			
SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT								
ROW	DI	23,643,345	0	0	0	0	23,643,345	
ROW	DIH	326,000	0	0	0	0	326,000	
ROW	DSB2	4,995,625	0	0	0	0	4,995,625	
ENV	DDR	40,000	0	0	0	0	40,000	
PE	DI	0	0	0	2,750,000	0	2,750,000	
Total		29,004,970	0	0	2,750,000	0	31,754,970	
<i>Prior Years Cost</i>		8,074,066	<i>Future Years Cost</i>		<i>Total Project Cost</i>			39,829,036
SR-9/I-95 FROM SR-869/SW 10TH STREET TO BROWARD/PALM BEACH COUNTY LINE - FM# 4331086 (TIP#)					Length: 1.771	*SIS*		
Type of Work: ADD SPECIAL USE LANE					Lead Agency: MANAGED BY FDOT			
Project Type: Imported					LRTP#: Pg. 47			
CDC ON SEGMENT 433108-1 BROWARD COUNTY; 2014 MPO #19 (3B)								
INC	ACNP	1,000,000	1,500,000	0	0	0	2,500,000	
Total		1,000,000	1,500,000	0	0	0	2,500,000	
<i>Prior Years Cost</i>		49,565,856	<i>Future Years Cost</i>		<i>Total Project Cost</i>			52,065,856



SP-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01
FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - [Alerts](#).



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Web Application

Federal Aid Management Office Cynthia Lorenzo - Manager

STIP Project Detail and Summaries Online Report

Selection Criteria
Approved STIP
Detail Report
Financial Project:436964 1

HIGHWAYS										
Item Number: 436964 1 Project Description: SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.										
District: 04		County: BROWARD		Type of Work: INTERCHANGE - ADD LANES			Project Length: 7.250MI			
Extra Description: 2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONSTRUCTION ON 43 6964-2										
Phase / Responsible Agency				Fiscal Year						
				<2019	2019	2020	2021	2022	>2022	All Years
ENVIRONMENTAL / MANAGED BY FDOT										
Fund Code:	DDR - DISTRICT DEDICATED REVENUE			40,000						40,000
P D & E / MANAGED BY FDOT										
Fund Code:	DDR - DISTRICT DEDICATED REVENUE		962,182	78,764						1,040,946
	DI - ST. - S/W INTER/INTRASTATE HWY		79,708							79,708
	DIH - STATE IN-HOUSE PRODUCT SUPPORT		17,656	22,493						40,149
	DS - STATE PRIMARY HIGHWAYS & PTO		1,830,350							1,830,350

SR-91/95 FROM SOUTH OF SW 10th STREET TO NORTH OF HILLBROOK BLVD // 436964-1-22-01

Phase: P D & E Totals 2,889,896

101,257

2,991,153

PRELIMINARY ENGINEERING / MANAGED BY FDOT

Fund Code:	DI - ST. - S/W INTER/INTRASTATE HWY	5,113,114				2,750,000		7,863,114
	DIH - STATE IN-HOUSE PRODUCT SUPPORT	14,738	5,262					20,000
Phase: PRELIMINARY ENGINEERING Totals		5,127,852	5,262			2,750,000		7,883,114

RIGHT OF WAY / MANAGED BY FDOT

Fund Code:	DI - ST. - S/W INTER/INTRASTATE HWY		23,643,345					23,643,345
	DIH - STATE IN-HOUSE PRODUCT SUPPORT		326,000					326,000
	DSB2 - EVERGLADES PKY/ALLIGATOR ALLEY		4,995,625					4,995,625
Phase: RIGHT OF WAY Totals			28,964,970					28,964,970
Item: 436964 1 Totals		8,017,748	29,111,489			2,750,000		39,879,237
Project Totals		8,017,748	29,111,489			2,750,000		39,879,237
HIGHWAYS Totals		8,017,748	29,111,489			2,750,000		39,879,237
Grand Total		8,017,748	29,111,489			2,750,000		39,879,237

This site is maintained by the Federal Aid Management Office, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.
 For additional information please e-mail questions or comments to:
 Cynthia Lorenzo: cynthia.lorenzo@dot.state.fl.us or call 850-414-4448

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SP-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01
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Federal Aid Management Office Cynthia Lorenzo - Manager

STIP Project Detail and Summaries Online Report

Selection Criteria
Current STIP
Detail Report
Financial Project:436964 1

HIGHWAYS							
Item Number: 436964 1 Project Description: SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.							
District: 04		County: BROWARD		Type of Work: INTERCHANGE - ADD LANES		Project Length: 7.250MI	
Extra Description: 2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONSTRUCTION ON 43 6964-2							
Phase / Responsible Agency		Fiscal Year					
		<2019	2019	2020	2021	2022	>2022
ENVIRONMENTAL / MANAGED BY FDOT							
Fund Code:	DDR - DISTRICT DEDICATED REVENUE		9,979	20,000			29,979
P D & E / MANAGED BY FDOT							
Fund Code:	DDR - DISTRICT DEDICATED REVENUE	947,996					947,996
	DI - ST. - S/W INTER/INTRASTATE HWY	79,708	1,546,458				1,626,166
	DIH - STATE IN-HOUSE PRODUCT SUPPORT	18,939	38,407	16,130			73,476
	DS - STATE PRIMARY						
Type:	Highways & PTO	1,830,350	22,203				1,852,553

		Phase: P D & E Totals	2,876,993	1,607,068	16,130			4,500,191
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
Fund Code:	DI - ST. - S/W INTER/INTRASTATE HWY		42,407				2,750,000	2,792,407
	DIH - STATE IN-HOUSE PRODUCT SUPPORT		15,342	2,007	3,255			20,604
Phase: PRELIMINARY ENGINEERING Totals			57,749	2,007	3,255		2,750,000	2,813,011
RIGHT OF WAY / MANAGED BY FDOT								
Fund Code:	ACNP - ADVANCE CONSTRUCTION NHPP				1,000,000	25,617,598		26,617,598
	DI - ST. - S/W INTER/INTRASTATE HWY		726,393	164,727	1,294,500			2,185,620
	DIH - STATE IN-HOUSE PRODUCT SUPPORT		181	67,548				67,729
Phase: RIGHT OF WAY Totals			726,574	1,232,275	26,912,098			28,870,947
Item: 436964 1 Totals		2,934,742	2,345,628	1,271,660	26,912,098	2,750,000		36,214,128
Project Totals		2,934,742	2,345,628	1,271,660	26,912,098	2,750,000		36,214,128
HIGHWAYS Totals		2,934,742	2,345,628	1,271,660	26,912,098	2,750,000		36,214,128
Grand Total		2,934,742	2,345,628	1,271,660	26,912,098	2,750,000		36,214,128

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 Cynthia Lorenzo: cynthia.lorenzo@dot.state.fl.us or call 850-414-4448

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Eligible project screening

Candidate projects considered for funding will be screened against such items as:

- Demonstrated project purpose and need;
- Demonstrated inclusion within local plans/program/studies;
- Demonstrated public support; and
- Demonstrated ability to fund project operation and maintenance.

Eligible project evaluation

Once basic eligibility screening is complete, further analysis will be conducted based upon available safety, traffic and transit data, followed by subsequent project scoring and ranking. FDOT involvement in this analysis will result in a determination of feasibility for proposed improvements. This analysis will ultimately conclude with further assessment by us in relation to such subjective measures, such as equitable geographic distribution of proposed projects and EJ and Title VI considerations from a system's level perspective.

As the specifics of this new Complete Streets and other Localized Initiatives Program are developed and refined, other planning partners and agencies will be engaged for involvement or feedback. This will ensure a transparent process is developed, including a project selection procedure that is understandable to the public, with accompanying information on award selection discussion and scoring. Projects identified in the previous plan, *Transformation 2035*, may be considered in the ranking of the new annual award

process. We intend to identify potential funding recipients and adequately assist in education through such means as direct outreach or conducting workshops.

Facilities extending beyond the MPO planning area

There are a number of agencies and private entities responsible for the development of transportation projects that have impacts beyond our planning area. Most of the following systems (and their operators) are direct recipients of Federal funds or loans, have independent authority and/or an ownership interest to develop financially constrained plans including operation and maintenance. The fiscally constrained plans developed for these facilities are incorporated into *Commitment 2040* in their entirety by reference.

Strategic Intermodal System

FDOT is the agency responsible for the designation, implementation and management of the Florida Transportation Plan which includes the Strategic Intermodal System (SIS). The SIS is an intermodal network of transportation facilities that flows from one mode to the next with the goal of providing the highest degree of mobility for people and goods traveling throughout Florida. The SIS is an integral piece of Florida's goal to enhance economic competitiveness and quality of life for its citizens.

Florida Statutes §339.62 through §339.65 define FDOT's role to designate the SIS, to plan and fund its components. The last major update to the SIS 2040 Cost Feasible Plan

was completed in 2013, which lists affordable projects. It identified more than \$2.3 billion of investments planned for interstates, Turnpike facilities, Port Everglades, Fort Lauderdale-Hollywood International Airport and the Florida East Coast Railroad (FEC).²⁶



Construction of I-595; completed in 2014

Port Everglades

Port Everglades contributes substantially to the region's economy, is a leading container port in Florida and is one of the most active cargo ports in the United States. Additionally, Port Everglades is a major cruise port. The Port is thus a significant economic asset to the region. Port Everglades is a self-funded enterprise of Broward County government that maintains a master plan which guides its investment strategies and lists affordable projects.²⁷

²⁶For additional additional information the SIS, visit <http://www.dot.state.fl.us/planning/sis/>.

²⁷For additional information on Port Everglades' Master Plan, visit www.broward.org/port/masterplan/Pages/Default.aspx.



Port Everglades

Fort Lauderdale-Hollywood International Airport

Just as Port Everglades is essential to the mobility of freight and passengers, the Fort Lauderdale-Hollywood International Airport is also a facility with regional impacts on the flow of people, goods and the economy. We continue to collaborate with the airport on its growth which, ultimately, will lead to business attraction, promote economic growth and create new jobs. The airport is also a self-funded enterprise of Broward County government that maintains a master plan which directs its investment strategies and lists affordable projects.²⁸

²⁸For additional information on Fort Lauderdale/Hollywood International Airport's Master Plan, visit www.broward.org/Airport/Community/Pages/MasterPlanUpdate.aspx.

BROWARD MPO

ITEM NUMBER:436962 1 PROJECT DESCRIPTION:SR-9/I-95 @COPANS RD FR S OF NB EXIT RAMP TO N OF SB TO WB EXIT RAMP *SIS*
 DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE JUSTIFICA/MODIFICA
 EX DESC:COMBINE THE SB TO EB EXIT, SB TO WB EXIT AND WB TO SB ENTRANCE RAMPS ONTO A SINGLE RAMP, PHYSICALLY SEPARATED FACIL
 ITY FROM THE THE MAINLINE. PROVIDE A TWO-LANE SB EXIT RAMP WITH A CHOICE LANE FOR THE OUTSIDE GP LANE. COMBINE THE
 NB ENTRANCE RAMPS ONTO A SINGLE RAMP, PHYSICALLY SEPARATED FACILITY FROM THE THE MAINLINE.
 ROADWAY ID:86070000 PROJECT LENGTH: 3.466MI LANES EXIST/IMPROVED/ADDED: 5/ 5/ 0

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	2024	GREATER THAN 2024	ALL YEARS
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	2,450,000	0	0	0	0	0	0	2,450,000
DIH	38,803	218	0	0	0	0	0	39,021
PHASE: RAILROAD & UTILITIES / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,286,600	0	0	0	0	0	1,286,600
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	21,240,994	0	0	0	0	0	21,240,994
ACSA	0	245,898	0	0	0	0	0	245,898
DDR	0	1,026,000	0	0	0	0	0	1,026,000
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DS	8,510	0	0	0	0	0	0	8,510
TOTAL 436962 1	2,497,313	23,799,710	0	0	0	0	0	26,297,023
TOTAL PROJECT:	2,497,313	23,799,710	0	0	0	0	0	26,297,023

ITEM NUMBER:436964 1 PROJECT DESCRIPTION:SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. *SIS*
 DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE - ADD LANES
 EX DESC:2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD;
 SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONS
 TRUCTION ON 436964-2
 ROADWAY ID:86070000 PROJECT LENGTH: 7.250MI LANES EXIST/IMPROVED/ADDED: 8/ 8/ 1

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	2024	GREATER THAN 2024	ALL YEARS
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	947,996	0	0	0	0	0	0	947,996
DI	1,626,166	0	0	0	0	0	0	1,626,166
DIH	57,346	16,130	0	0	0	0	0	73,476
DS	1,852,553	0	0	0	0	0	0	1,852,553
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DI	42,407	0	0	2,750,000	0	0	0	2,792,407
DIH	17,349	3,255	0	0	0	0	0	20,604
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,000,000	25,617,598	0	0	0	0	26,617,598
DI	726,393	164,727	1,294,500	0	0	0	0	2,185,620
DIH	181	67,548	0	0	0	0	0	67,729
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	9,979	20,000	0	0	0	0	0	29,979
TOTAL 436964 1	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128
TOTAL PROJECT:	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128

DRAFT

Attachment C

SHPO Concurrence Request Letter and SHPO Concurrence Letter



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Blvd.
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

November 13, 2018

Dr. Timothy Parsons, Director and
State Historic Preservation Officer
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32301

2018 NOV 19 P 3:29
STATE HISTORIC PRESERVATION
DIVISION

Subject: **Request for Review**
Cultural Resource Assessment Survey
SR 9/I-95 from SW 10th Street to Hillsboro Boulevard
Financial Management #: 436964-1-22-01
Broward County, Florida

Attention: Adrienne Daggett

Dear Ms. Daggett;

The Florida Department of Transportation (FDOT), District Four, is currently conducting a Project Development & Environment (PD&E) Study to evaluate alternatives for improvements to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard in Broward County, Florida. The limits of the project include I-95 from just south of SW 10th Street to just north of Hillsboro Boulevard and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard, and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the city of Deerfield Beach. This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. In addition, the project proposes improvements along both SW 10th Street and Hillsboro Boulevard near I-95. This project will evaluate the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, consider the replacement of the existing SW 10th Street bridge over I-95 and the provision of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard.

No newly or previously recorded archaeological sites were identified within the archaeological area of potential effect (APE). Two shovel tests were excavated within the archaeological APE. No cultural material was recovered. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, berms, and buried utilities.

The historic resources survey resulted in the identification of one linear resource within the project APE, the Seaboard Air Line (CSX) Railroad (8BD4649). While the current segment within the APE has not been previously recorded, a segment to the north, at Hillsboro Boulevard, was determined eligible by the SHPO. This segment was determined National Register-eligible under Criterion A in the categories of Transportation and Community Planning and Development. The segment within the current APE,

*Cultural Resources Assessment Survey
I-95 from SW 10th Street to Hillsboro Blvd.
FM 436964.1*

spanning approximately 1,225 feet and extending both to the north and south from SW 10th Street, is consistent with nearby segments, and accordingly, is considered eligible for listing in the National Register under Criterion A in the categories of Transportation and Community Planning and Development.

No impacts to the CSX Railroad are anticipated to result from proposed improvements. The rail line will continue to operate in its current alignment. Therefore, the District has determined that no historic properties will be affected by the proposed project. I respectfully request your concurrence with this determination.

If there are any questions, please feel free to contact me at (954) 777-4324 or Lynn Kelley at (954) 777-4334.

Sincerely,




Ann Broadwell
Environmental Administrator
FDOT - District 4

Enclosures
cc. file

Cultural Resources Assessment Survey
I-95 from SW 10th Street to Hillsboro Blvd.
FM 436964.1

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Report complete and sufficient and concurs with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number 2015-4758C.

SHPO Comments:

For  Deputy SHPO
Timothy A. Parsons
State Historic Preservation Officer
Florida Division of Historical Resources

12/3/18
Date

DRAFT

Attachment D
*Section 4(f) Determination of Applicability Report &
Coordination Documentation*

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
 Environmental
 Management
 06/17

Project Name:	SR 9/I-95 Interchanges from SW 10 th Street to Hillsboro Boulevard		
FM#:	436964-1-22-02	ETDM#:	14244
Project Review Date:	1/24/2018	FAP#:	To be Determined
FDOT District:	4		
County(ies):	Broward		

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

Project Description including Section 4(f) Specific Information:

Project Description including Section 4(f) Specific Information:

This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extends from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.

There are five resources that occur near or alongside the proposed project area, specifically near the NW 10th Street Interchange. Four of the five resources appear to be Section 4(f) resources, and the fifth (the teen center) does not qualify as a resource. No Section 4(f) use is proposed to all five areas because no right of way will be required from these resources. All are located a distance from the project alternatives; access to all properties will be maintained during construction. See enclosed maps showing each resource in relationship to the proposed project.

This project will provide two express lanes in each direction on I-95 mainline between SW 10th Street and Hillsboro Boulevard and will evaluate potential modifications to the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges. Alternatives will also be developed at SW 10th Street to provide direct connect ramps to the I-95 Express lanes. Replacement of the existing SW 10th Street bridge over I-95, and the provision of a grade separation at SW 10th Street and South Military Trail; and at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard located 1900 feet west of the existing interchange will also be considered.

Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: Mayo Howard Park is a 4.8 acre recreational park with a walking path/fitness trail, pavillion, volleyball court, two childrens playgrounds, and picnic area.

Criteria of Selected Property Type(s):

- Public Parks and Recreation Areas**
 - o Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
 - o Must be open to the public during normal hours of operation
 - o The major purpose must be for park or recreation activities
 - o Must be designated or function as a significant park or recreational area.
 - Applies to the entire park or recreation area not just a specific feature

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

Wildlife and Waterfowl Refuge

- Must be publicly owned which refers to ownership by local, state or federal government;
 - Ownership can also include permanent easements and long-term lease agreements;
- Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species**;
- The major purpose must be for wildlife and waterfowl refuges;
- Must be designated or function as a significant as a wildlife and waterfowl refuges; -
 - Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

- Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or
- If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form

No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Deerfield Beach

Date correspondence sent to the OWJ: 9/20/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (be sure to document these communications in writing).

What is the size and location of the property (include a map of the resource)?

4.8 acres

Who/what organization owns/manages the property?

The City of Deerfield Beach owns and manages the property.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

The primary function is recreation.

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

The following facilities are located on the property:

Two children's playgrounds

Pavillion

Picnic tables

One sand volleyball court

Bathrooms

parking lot

What is the function of/or the available activities on the property?

Childrens activities, picniking, volleyball etc.

Access and Usage of the property by the Public:

The park can be accessed by automobile and pedestrians from FAU Research Boulevard. The City has no information on usage.

Relationship to other similarly used lands/facilities in the vicinity:

None

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain:

None

Describe project activities that could potentially "use" the resource:

None

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

N/A

Based on the above information the recommended level of Section 4(f) evaluation for this property is:

Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

The proposed project will not acquire any property from the park and this resource is a distance from proposed alternatives. See attached map. Access to the park will be maintained during construction.

Supporting Documentation

The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

3. Determination of Eligibility or Listing in the National Register of Historic Places, Archaeological Site (include criterion of eligibility) or a Historic District if applicable.

Signatures

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Signature: Christi Pritchard : 1/24/2018
Preparer Date

Signature: Ann Broadwell 2/22/2018
Environmental Manager, or designee Click here to enter a date.
Date

OEM
Concurrence: Ralph 3/8/2018

Signature: [Signature] 3/9/18 Click here to enter a date.
Director of OEM, or designee Date



LEGEND:

- BRIDGE
- ROADWAY
- SHOULDER
- SIDEWALK
- SOD
- R/W
- LIMITED ACCESS R/W

Mayo Howard Park
1131 SW 11th Way
Owned and
Managed by City of
Deerfield Beach

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
08/17

<p>Project Name: SR 9/1-95 Interchanges from SW 10th Street to Hillsboro Boulevard _____</p> <p>FM#: 436964-1-22-02 _____ ETDM#: 14244 _____ FAP#: TBD _____</p> <p>Project Review Date: <u>1/24/2018</u></p> <p>FDOT District: 4</p> <p>County(ies): Broward</p>

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

Project Description including Section 4(f) Specific Information:

Project Description including Section 4(f) Specific Information:
 This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extends from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.

There are five resources that occur near or alongside the proposed project area, specifically near the NW 10th Street Interchange. Four of the five resources appear to be Section 4(f) resources, and the fifth (the teen center) does not qualify as a resource. No Section 4(f) use is proposed to all five areas because no right of way will be required from these resources. All are located a distance from the project alternatives; access to all properties will be maintained during construction. See enclosed maps showing each resource in relationship to the proposed project.

This project will provide two express lanes in each direction on I-95 mainline between SW 10th Street and Hillsboro Boulevard and will evaluate potential modifications to the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges. Alternatives will also be developed at SW 10th Street to provide direct connect ramps to the I-95 Express lanes. Replacement of the existing SW 10th Street bridge over I-95, and the provision of a grade separation at SW 10th Street and South Military Trail; and at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard located 1900 feet west of the existing interchange will also be considered.

Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: The McKeithen Recreational Complex is a 22.38 acre recreational area that includes a community center, recreation building and auditorium, basketball court, baseball fields, multi-purpose field, gymnasium, and concession stands. It is open to the general public.

Criteria of Selected Property Type(s):

- Public Parks and Recreation Areas**
 - Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
 - Must be open to the public during normal hours of operation
 - The major purpose must be for

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
06/17

park or recreation activities ○ Must be designated or function as a significant park or recreational area.

+ Applies to the entire park or recreation area not just a specific feature

Wildlife and Waterfowl Refuge ○ Must be publicly owned which refers to ownership by local, state or federal government;

+ Ownership can also include permanent easements and long-term lease agreements;

○ Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species**; ○ The major purpose must be for wildlife and waterfowl refuges; ○ Must be designated or function as a significant as a wildlife and waterfowl refuges; -

+ Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

○ Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or ○ If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form

No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Deerfield Beach

Date correspondence sent to the OWJ: 9/20/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (be sure to document these communications in writing).

What is the size and location of the property (include a map of the resource)?

22.38 Acres

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
06/17

Who/what organization owns/manages the property?

The City of Deerfield Beach owns and manages the property.

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

The primary function is for recreation.

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

The following is a listing of facilities within the property:

Johnny Tigner Community Center

Recreation building & auditorium (capacity 180)

Dr. Leo J. Robb, Jr. Gymnasium (capacity 450)

Wardell Chance Field

Concession area & Meeting room & restrooms

(Bleachers: 2 large sets & 2 small sets)

1 Score Board

Playground

Basketball Court (outdoor)

Lincoln McThay Complex @ (OMRC) Little League Field with lights, 2 sets of metal bleachers, 1 Practice field with two sets of metal benches

1 Multi-purpose Field with lights, baseball field w/dugout & 1 set of metal bleachers

Lincoln McThay Complex

Field #1 Little League Field with lights, 2 metal bleachers, 2 long metal benches in each dugout

Field #2 Practice field with 2 sets of metal benches

Field #3 Multi-purpose Field with lights, baseball field w/dugout & 2 bleachers & 2 metal benches in each dugout, 3 recyclable benches, 5 concrete benches

What is the function of/or the available activities on the property?

Children's activities, walking/hiking, football, basketball. baseball, indoor game room with table and quiet games, pool, table tennis, foosball and playstation video games.

Access and Usage of the property by the Public:

Access to the facility is for both pedestrians and automobiles from SW Natura Boulevard or from MLK Jr Avenue. The City does not have information on usage of the Recreation Center.

Relationship to other similarly used lands/facilities in the vicinity:

No other park facility that is similar to this park.

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain: None

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
06/17

Describe project activities that could potentially “use” the resource: None

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

N/A

Based on the above information the recommended level of Section 4(f) evaluation for this property is:

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-053-45
Environmental
Management
08/17

Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

See enclosed map, there will be no Section 4(f) use by the proposed project. In addition, access to the facility will be maintained during construction.

Supporting Documentation

The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.
3. Determination of Eligibility or Listing in the National Register of Historic Places, Archaeological Site (include criterion of eligibility) or a Historic District if applicable.

Signatures

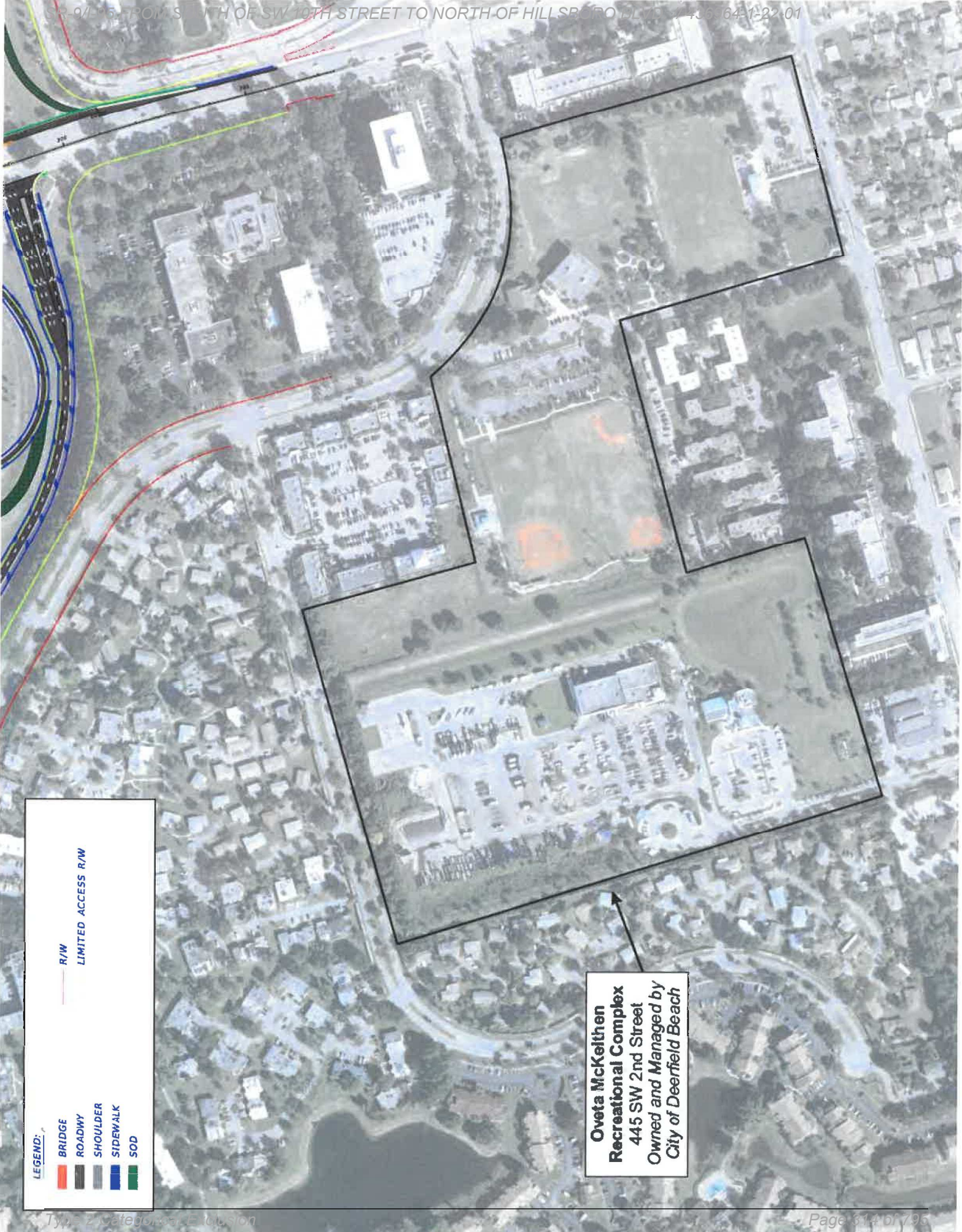
The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Signature: Christin Pughland : 1/24/2018
Preparer Date

Signature: Ann Broadwell 2/22/2018
Environmental Manager, or designee Date

OEM
Concurrence: [Signature] 3/8/2018

Signature: [Signature] 3/9/18 Click here to e-sign (if applicable)
Director of OEM, or designee Date



LEGEND:

- BRIDGE
- ROADWAY
- SHOULDER
- SIDEWALK
- SOD
- R/W
- LIMITED ACCESS R/W

**Oveta McKeithen
Recreational Complex
445 SW 2nd Street
Owned and Managed by
City of Deerfield Beach**

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
06/17

<p>Project Name: SR 9/I-95 Interchanges from SW 10th Street to Hillsboro Boulevard _____</p> <p>FM#: 436964-1-22-02 _____ ETDM#: 14244 _____ FAP#: TBD _____</p> <p>Project Review <u>1/24/2018</u> Date: _____</p> <p>FDOT District: ⁴ _____</p> <p>County(ies): Broward</p>

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

<p align="center">Project Description including Section 4(f) Specific Information:</p> <p>Project Description including Section 4(f) Specific Information: This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extends from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.</p> <p>There are five resources that occur near or alongside the proposed project area, specifically near the NW 10th Street Interchange. Four of the five resources appear to be Section 4(f) resources, and the fifth (the teen center) does not qualify as a resource. No Section 4(f) use is proposed to all five areas because no right of way will be required from these resources. All are located a distance from the project alternatives; access to all properties will be maintained during construction. See enclosed maps showing each resource in relationship to the proposed project.</p> <p>This project will provide two express lanes in each direction on I-95 mainline between SW 10th Street and Hillsboro Boulevard and will evaluate potential modifications to the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges. Alternatives will also be developed at SW 10th Street to provide direct connect ramps to the I-95 Express lanes. Replacement of the existing SW 10th Street bridge over I-95, and the provision of a grade separation at SW 10th Street and South Military Trail; and at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard located 1900 feet west of the existing interchange will also be considered.</p>

Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: Tivoli Sand Preserve is a natural area which provides a walking path and pavilion with benches for passive recreation. The site is a sand pine habitat for several flora and fauna.

Criteria of Selected Property Type(s):

- Public Parks and Recreation Areas**
 - Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
 - Must be open to the public during normal hours of operation
 - The major purpose must be for

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
06/17

park or recreation activities ○ Must be designated or function as a significant park or recreational area.

+ Applies to the entire park or recreation area not just a specific feature

Wildlife and Waterfowl Refuge ○ Must be publicly owned which refers to ownership by local, state or federal government;

+ Ownership can also include permanent easements and long-term lease agreements;

○ Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species**; ○ The major purpose must be for wildlife and waterfowl refuges; ○ Must be designated or function as a significant as a wildlife and waterfowl refuges; -

+ Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

○ Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or ○ If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form

No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Deerfield Beach

Date correspondence sent to the OWJ: 9/20/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (be sure to document these communications in writing).

What is the size and location of the property (include a map of the resource)?

22.23 acres

SECTION 4(F) DETERMINATION OF APPLICABILITY

Environmental Management
08/17

Who/what organization owns/manages the property?

The City of Deerfield Beach owns and manages the property.

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

The primary function is to provide a pineland scrub habitat for fauna and flora and to provide passive recreation including hiking.

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

The following is a listing of facilities on the property:

Walking path which comprises a concrete pathway approximately 5200 Linear Feet that circles around the site

Pavilion with benches

Parking lot

Interpretive signage along pathway

What is the function of/or the available activities on the property?

Hiking; this is also a nature preserve which provides gopher tortoise habitat

Access and Usage of the property by the Public:

The City has no information on usage. Access to this facility is by pedestrians and/or automobile through SW 10th Street.

Relationship to other similarly used lands/facilities in the vicinity:

There is no other facility that is similar to this park.

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain:

This site provides pineland scrub habitat for several types of flora and fauna.

Describe project activities that could potentially "use" the resource: None

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

N/A

Based on the above information the recommended level of Section 4(f) evaluation for this property is: Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

See enclosed map; there will be no Section 4(f) use by the proposed project because there will be no right of way acquisition of the Tivoli Sand Preserve and access to the resource will be maintained throughout the construction of the project.

Supporting Documentation

SECTION 4(F) DETERMINATION OF APPLICABILITY

The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

3. Determination of Eligibility or Listing in the National Register of Historic Places, Archaeological Site (*include criterion of eligibility*) or a Historic District if applicable.

Signatures

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Signature: Christi Pritchard : 1/24/2018
Preparer Date

Signature: Ann Broadwell 2/22/2018
Environmental Manager, or designee [Click here to enter a date.](#)
Date

OEM
Concurrence: R.D.P. 3/8/2018

Signature: [Signature] 5/9/18 [Click here to enter a date.](#)
Director of OEM, or designee Date

LEGEND:

- BRIDGE
- ROADWAY
- SHOULDER
- SIDEWALK
- SOD
- R/W
- LIMITED ACCESS R/W

Tivoli Sand Pine Preserve
SW 10th Street / 3rd Avenue
Owned by Broward County /
City of Deerfield Beach
Managed by City of Deerfield
Beach

**Reverend Willie James
Ford Linear Park**
500 SW 10th Street
Owned and Managed by
City of Deerfield Beach

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
 Environmental
 Management
 06/17

Project Name:	<u>SR 9/I-95 Interchanges from SW 10th Street to Hillsboro Boulevard</u>		
FM#:	<u>436964-1-22-02</u>	ETDM#:	<u>14244</u>
Project Review Date:	<u>1/24/2018</u>	FAP#:	<u>TBD</u>
FDOT District:	<u>4</u>		
County(ies):	<u>Broward</u>		

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

Project Description including Section 4(f) Specific Information:

Project Description including Section 4(f) Specific Information:

This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard interchange (a distance of approximately 1.8 miles not including the length of the ramps). The project also proposes improvements along both SW 10th Street and Hillsboro Boulevard in the vicinity of I-95. The logical termini along SW 10th Street extends from just west of Military Trail east to SW Natura Boulevard, a distance of approximately 0.95 miles. Along Hillsboro Boulevard the improvements extend for approximately 0.97 miles from Goolsby Boulevard east to SW Natura Boulevard.

There are five resources that occur near or alongside the proposed project area, specifically near the NW 10th Street Interchange. Four of the five resources appear to be Section 4(f) resources, and the fifth (the teen center) does not qualify as a resource. No Section 4(f) use is proposed to all five areas because no right of way will be required from these resources. All are located a distance from the project alternatives; access to all properties will be maintained during construction. See enclosed maps showing each resource in relationship to the proposed project.

This project will provide two express lanes in each direction on I-95 mainline between SW 10th Street and Hillsboro Boulevard and will evaluate potential modifications to the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges. Alternatives will also be developed at SW 10th Street to provide direct connect ramps to the I-95 Express lanes. Replacement of the existing SW 10th Street bridge over I-95, and the provision of a grade separation at SW 10th Street and South Military Trail; and at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard located 1900 feet west of the existing interchange will also be considered.

Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: The Teen Center is a recreational facility and open green space which offers youth ages 13-18 a place to participate in various programs including technology, field trips, garden club, and radio controlled cars etc. The center has limited access to the public because it is only open to members of the center.

Criteria of Selected Property Type(s):

- Public Parks and Recreation Areas**
 - Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
 - Must be open to the public during normal hours of operation
 - The major purpose must be for park or recreation activities
 - Must be designated or function as a significant park or recreational area.
 - Applies to the entire park or recreation area not just a specific feature

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

Wildlife and Waterfowl Refuge

- Must be publicly owned which refers to ownership by local, state or federal government;
 - Ownership can also include permanent easements and long-term lease agreements;
- Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species;**
- The major purpose must be for wildlife and waterfowl refuges;
- Must be designated or function as a significant as a wildlife and waterfowl refuges; -
 - Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

- Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or
- If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form

No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Deerfield Beach

Date correspondence sent to the OWJ: 9/20/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (be sure to document these communications in writing).

What is the size and location of the property (include a map of the resource)?

[Redacted]

Who/what organization owns/manages the property?

[Redacted]

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

What is the function of/or the available activities on the property?

Access and Usage of the property by the Public:

Relationship to other similarly used lands/facilities in the vicinity:

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain:

Describe project activities that could potentially "use" the resource:

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

Based on the above information the recommended level of Section 4(f) evaluation for this property is:

Select the level of Section 4(f) evaluation: Choose an Item

Reason the selected level is appropriate:

Supporting Documentation

The following items **must** be attached to this form:

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Signature: Christi L. Schrad : 1/24/2018
 Preparer Date

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

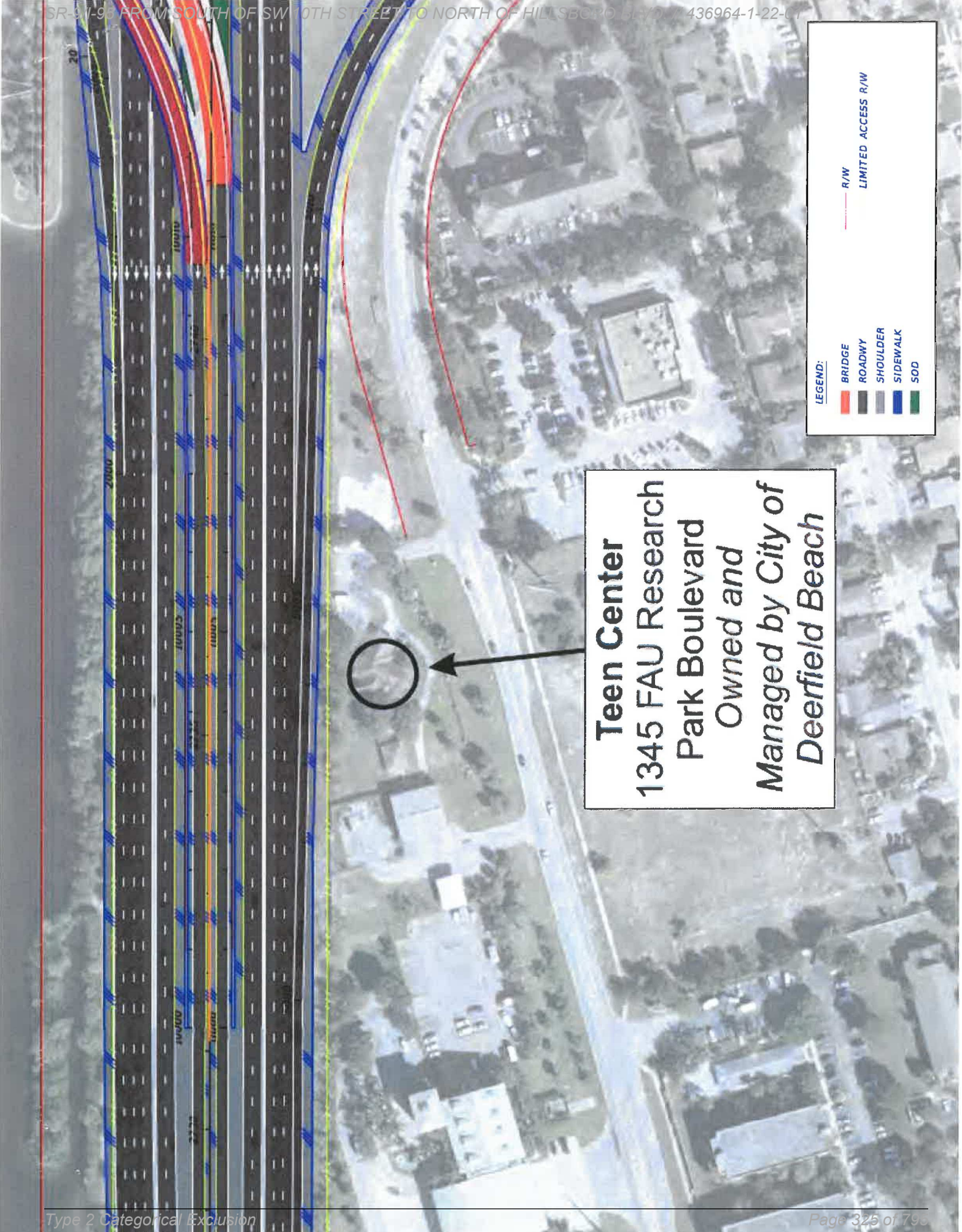
Signature: Ann Broadwell
Environmental Manager, or designee

2/22/2018
Click here to enter a date.
Date

OEM
Concurrence: [Signature] 3/8/2018

Signature: [Signature]
Director of OEM, or designee

3/8/18
Click here to enter a date.
Date



LEGEND:

Orange line	BRIDGE
Black line	ROADWAY
Grey line	SHOULDER
Blue line	SIDEWALK
Green line	SOD
Red line	R/W
Dashed red line	LIMITED ACCESS R/W

Teen Center
1345 FAU Research
Park Boulevard
Owned and
Managed by City of
Deerfield Beach

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
 Environmental
 Management
 06/17

Project Name:	SR 9/I-95 Interchanges from SW 10 th Street to Hillsboro Boulevard		
FM#:	436964-1-22-02	ETDM#:	14244
Project Review Date:	1/24/2018	FAP#:	TBD
FDOT District:	4		
County(ies):	Broward		

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

Project Description including Section 4(f) Specific Information:
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Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: The Willie James Linear Park comprises 2025 feet of a concrete parkway located on the south side of SW 10th Street. It is a walking pathway which starts east of Mayo Howard Park and ends just west of Dixie Highway.

Criteria of Selected Property Type(s):

- Public Parks and Recreation Areas**
 - Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
 - Must be open to the public during normal hours of operation
 - The major purpose must be for park or recreation activities

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

- Must be designated or function as a significant park or recreational area.
 - Applies to the entire park or recreation area not just a specific feature

Wildlife and Waterfowl Refuge

- Must be publicly owned which refers to ownership by local, state or federal government;
 - Ownership can also include permanent easements and long-term lease agreements;
- Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species**;
- The major purpose must be for wildlife and waterfowl refuges;
- Must be designated or function as a significant as a wildlife and waterfowl refuges; -
 - Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

- Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or
- If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form
No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Deerfield Beach

Date correspondence sent to the OWJ: 9/20/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (be sure to document these communications in writing).

What is the size and location of the property (include a map of the resource)?

2,025 Linear Feet, See Map.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

Who/what organization owns/manages the property?

The City of Deerfield Beach owns and manages the property.

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

The primary function is for recreation.

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

The following is a listing of facilities on the property:

Walking path which comprises a concrete pathway approximately 2,025 Linear Feet.

What is the function of/or the available activities on the property?

walking, hiking, bicycling.

Access and Usage of the property by the Public:

The City has no information on usage. Access to this facility is by pedestrians through SW 10th Street.

Relationship to other similarly used lands/facilities in the vicinity:

This pathway is similar to the pathway within Tivoli Sand Preserve and Mayo Howard Park.

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain:

None

Describe project activities that could potentially "use" the resource:

None

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

N/A

Based on the above information the recommended level of Section 4(f) evaluation for this property is:

Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

See enclosed map; there will be no Section 4(f) use by the proposed project because there will be no right of way acquisition of the linear park, and access to the pathway will be maintained throughout the construction of the project.

Supporting Documentation

The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
08/17

Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

See enclosed map; there will be no Section 4(f) use by the proposed project. In addition, access to the facility will be maintained during construction.

Supporting Documentation


The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.
3. Determination of Eligibility or Listing in the National Register of Historic Places, Archaeological Site (include criterion of eligibility) or a Historic District if applicable.

Signatures

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Signature:  : 1/24/2018
Preparer Date

Signature:  2/22/2018
Environmental Manager, or designee Date

OEM
Concurrence:  3/8/2018

Signature:  3/9/18 Click here to review date.
Director of OEM, or designee Date

LEGEND:

-  BRIDGE
-  ROADWAY
-  SHOULDER
-  SIDEWALK
-  SOD
-  R/W
-  LIMITED ACCESS R/W

**Reverend Willie James
Ford Linear Park
500 SW 10th Street
Owned and Managed by
City of Deerfield Beach**



Mr. Anson Sonnett, P.E Project Manager
Florida Department of Transportation, District Four
3400 West Commercial Boulevard
Ft. Lauderdale, FL 33309

September 28, 2017

Subject: Section 4(f) Statement of Significance for Parks
SR 9/I-95 from South of SW 10th Street Interchange to North of Hillsboro Boulevard
Interchange Project Development & Environment Study
FM Number: 436964-1-22-01
ETDM Number: 14244
County: Broward

Dear Mr. Sonnett:

Regarding your interest in the following City of Deerfield Beach Parks: Mayo Howard Park (1131 FAU Research Park Boulevard); Tivoli Sand Pine Preserve (501 SW 10th Street); and Reverend Willie James Ford Linear Park (500 SW 10th Street), Teen Center (1345FAU Research Park Boulevard) and Oveta McKeithen Recreational Complex (445 SW 2nd Street) as it relates to the above referenced Project Development and Environment (PD&E) Study, I submit the following information for use in the Section 4(f) Determination of Applicability. Mayo Howard Park, Tivoli Sand Pine Preserve, Teen Center and Oveta McKeithen Recreational Complex are publicly owned parks available to the public for recreational use. Similarly, the Reverend Willie James Linear Park is a publicly owned trail also open to the public for recreational use.

According to the FDOT PD&E Manual, Part 2 Chapter 7 a Statement of Significance is necessary from the Official with Jurisdiction over Section 4(f) resources. The manual states that "*Significance means that in comparing the availability and function of the recreation, park, or wildlife and waterfowl refuge area with the recreational, park, and refuge objectives of that community, the land in question plays an important role in meeting those objectives*". I am the Official with Jurisdiction and attest that the above referenced parks play an important role in meeting the park objectives of the surrounding community and appears to meet the requirement of significant Section 4(f) resources.



If you have any further questions or comments, please contact me at (954) 777-4152.

Sincerely yours,

A handwritten signature in blue ink that reads "Burgess J. Hanson". The signature is written in a cursive, flowing style.

Burgess Hanson
City Manager

cc: Ms. Ann Broadwell, FDOT District Four
Ms. Lynn Kelley, FDOT District Four
Ms. Vilma Croft, P.E., HNTB Inc.
Ms. Christie Pritchard, Pritchard Environmental LLC

DRAFT

Attachment E
ESA Section 7 Consultation/Concurrence Request Letter



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

ERIK R. FENNIMAN
INTERIM SECRETARY

December 5, 2018

Via Electronic Mail

Roxanna Hinzman
Field Supervisor
South Florida Ecological Services Office
US Fish and Wildlife Service
1339 20th Street
Vero Beach, FL 32960

Attn: John Wrublik

Subject: ESA Section 7 Consultation/Concurrence Request Letter
Project Name: State Road 9 / Interstate 95
From South of SW 10th Street to North of Hillsboro Boulevard
Financial Management No.: 436964-1-22-02
Federal Aid Project No.: 0202-054-P
ETDM No.: 14244
County: Broward

Dear John:

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment Study (PD&E) for the referenced project. The project extends along I-95 from just south of SW 10th Street (MP 22.00) to just north of Hillsboro Boulevard (MP 25.10) and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the City of Deerfield Beach.

The PD&E Study evaluated improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. SW 10th Street provides a direct connection between I-95 and the Sawgrass Expressway. The study is also evaluating improvements along both SW 10th Street and Hillsboro Boulevard near I-95. Additionally, this study evaluates the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, considers the replacement of the existing SW 10th Street bridge over I-95 and provisions of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard. This project connects into the State Road 869 / SW 10th Street Connector Project to the west along SW 10th Street (FM#

439891-1-22-02), which is being conducted as a separate PD&E Study by the FDOT concurrent with this project.

This project, along State Road 9 / Interstate 95 from south of SW 10th Street to north of Hillsboro Boulevard, was screened through the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) and the final programming screen was published July 11, 2016 (ETDM #14244 - <https://etdmpub.flas-etat.org/est/>).

A Natural Resource Evaluation (NRE) has been prepared for the project and is attached. The project results in no wetland impacts and 1.99 acres of fill impacts in man-made surface waters (swales, ditches and stormwater retention ponds). The project corridor is located within the Core Foraging Areas of four active wood stork nesting colonies and the US Fish and Wildlife Service (USFWS) Consultation Area for the Everglade snail kite. The project is not within any USFWS designated critical habitat.

Twelve federally listed animal species and four federally listed plant species were identified as potentially occurring within the limits of the viable Build Alternatives. Based on the review of available data (species habitat needs, past known occurrence, species range, etc.), field surveys, and an assessment of the proposed construction elements associated with each of the viable build alternatives, the following effects determinations have been made:

	Scientific Name	Common Name	Effect Determination
Federally Listed Wildlife Species	<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	No Effect
	<i>Calidris canutus rufa</i>	Red Knot	No Effect
	<i>Charadrius melodus</i>	Piping Plover	No Effect
	<i>Crocodylus acutus</i>	American Crocodile	May Affect, Not Likely to Adversely Affect
	<i>Drymarchon corais couperi</i>	Eastern Indigo Snake	May Affect, Not Likely to Adversely Affect
	<i>Grus americana</i>	Whooping Crane	May Affect, Not Likely to Adversely Affect
	<i>Mycteria americana</i>	Wood Stork	May Affect, Not Likely to Adversely Affect
	<i>Picoides borealis</i>	Red-cockaded Woodpecker	No Effect
	<i>Peromyscus polionotus niveiventris</i>	Beach Mouse	No Effect
	<i>Puma concolor</i>	Puma	No Effect
	<i>Puma concolor coryi</i>	Florida panther	No Effect
	<i>Rostrhamus sociabilis plumbeus</i>	Everglade Snail Kite	No Effect

	Scientific Name	Common Name	Effect Determination
Federally Listed Plant Species	<i>Cucurbita okeechobeensis</i> ssp. <i>Okeechobeensis</i>	Okeechobee Gourd	No Effect
	<i>Dalia carthagenensis floridana</i>	Florida Prairie-clover	No Effect
	<i>Jacquemontia reclinata</i>	Beach Jacquemontia	No Effect
	<i>Polygala smallii</i>	Tiny Polygala	No Effect

As part of the standard specifications, FDOT incorporates the most current versions of the Standard Protection Measures for the Eastern Indigo Snake during construction.

The purpose of this letter is to request written concurrence on the effects to listed species. Enclosed is the NRE for your review. Please call me at 954-777-4325 if you have any questions.

Sincerely,

Ann Broadwell
 Environmental Administrator
 FDOT – District 4

cc: Robert E. Bostian, Jr. P.E., FDOT
 Lynn Kelley, FDOT
 Vilma Croft, P.E. HNTB
 Keith Stannard, AECOM

DRAFT

Attachment F
FWS Effect Determination Concurrence Letter

www.fdot.gov

The PD&E Study evaluated improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. SW 10th Street provides a direct connection between I-95 and the Sawgrass Expressway. The study is also evaluating improvements along both SW 10th Street and Hillsboro Boulevard near I-95. Additionally, this study evaluates the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, considers the replacement of the existing SW 10th Street bridge over I-95 and provisions of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard. This project connects into the State Road 869 / SW 10th Street Connector Project to the west along SW 10th Street (FM#

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment Study (PD&E) for the referenced project. The project extends along I-95 from just south of SW 10th Street (MP 22.00) to just north of Hillsboro Boulevard (MP 25.10) and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the City of Deerfield Beach.

Dear John:

Subject: ESA Section 7 Consultation/Concurrence Request Letter
Project Name: State Road 9 / Interstate 95
From South of SW 10th Street to North of Hillsboro Boulevard
Financial Management No.: 436964-1-22-02
Federal Aid Project No.: 0202-054-P
ETDM No.: 14244
County: Broward

Attn: John Wrublik

Vero Beach, FL 32960

1339 20th Street

US Fish and Wildlife Service

South Florida Ecological Services Office

Field Supervisor

Roxanna Hinzman

Via Electronic Mail

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Roxanna Hinzman, Field Supervisor

Date 2/22/15

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the South Florida Ecological Service Office.

FWS Log No. 04EF2000-2015-I-0322

U.S. Fish and Wildlife Service
1339 20th Street
Vero Beach, Florida 32960
772-562-3909 Fax 772-562-4288



Florida Department of

3400 West Comm
Fort Lauderdale,

December 5,

RICK SCOTT
GOVERNOR

DRAFT

Attachment G
EPA Sole Source Aquifer Concurrence Letter

The project has been determined to lie inside the designated boundaries of the Biscayne Aquifer and based on the information provided, is not expected to cause a significant impact to the aquifer system. However, it is requested that all debris from any demolition of the existing structures are properly contained and removed from the site prior to construction of the new structure. If applicable, all county flood plain management plans and public notification processes should be followed. During construction, it is the EPA's understanding and expectation that those responsible for the project will strictly adhere to all Federal, State and local government permits, ordinances, planning designs, construction codes, operation & maintenance requirements, and engineering as well as any contaminant mitigation recommendations outlined by Federal and State agency reviews. All best management practices for erosion and sedimentation control should be followed. State and County environmental offices should be contacted to address proper drainage and storm water designs. Additionally, the project manager should contact State and local environmental officials to obtain a copy of any local Wellhead Protection Plans. <http://www.dep.state.fl.us/swapp/Default.htm>

The U.S. Environmental Protection Agency (EPA) Region 4, received your January 4, 2019 request to assess the above referenced projects and we reviewed it pursuant to Section 1424(e) of the Safe Drinking Water Act. The assessment is to determine if the project lies within the boundaries (recharge and streamflow source zones) of an EPA designated Sole Source Aquifer (SSA); and to determine if the project poses potential, adverse health or environmental impacts. A SSA is the sole or principal water source for a designated area. If the aquifer is contaminated, there would be a significant hazard to public health and an economic burden for those using the aquifer as a drinking water source.

Dear Ms. Broadwell:

Subject: Sole Source Aquifer Review for the FDOT, District 4 - Project Development and Environment (PD&E) study along I-95 from SW 10th Street to Hillsboro Boulevard in the City of Deerfield Beach, Broward County, Florida – FM No. 436964-1-22-01; Federal Aid Project Number: 0202-054-P

Ms. Ann Broadwell
Environmental Administrator
Florida Department of Transportation – District 4
3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960
MAY 20 2019



Please note that this “no significant impact” finding has been determined based on the information provided and under Section 1424(e) of the Safe Drinking Water Act only. If there are any significant changes to the project, it is requested that the EPA Region 4 office be notified for further review. Other regulatory groups within the EPA responsible for administering other programs may, at their own discretion and under separate cover, provide additional comments

Thank you for your concern with the environmental impacts of this project. If you have any questions, please contact Mr. Larry Cole at 404-562-9474 or cole.larry@epa.gov or Mr. Khurram Rafi at 404-562-9283 or rafi.khurram@epa.gov.

Sincerely,



Tara L. Houda
Lieutenant Commander, U.S. Public Health Service
Acting Chief, Ground Water/UIC & GIS Section
Safe Drinking Water Branch

DRAFT PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation



District Four
3400 W Commercial Blvd
Fort Lauderdale, FL 33309

SR 9/Interstate 95 from South of
SR 869 (SW 10 Street- MP 22.00) to North of
SR 810 (Hillsboro Boulevard- MP 25.10)

Financial Management Number 436964-1-22-01
ETDM Number 14244

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

October 2019

Vilma Croft, P.E.

TABLE OF CONTENTS

SECTION	PAGE
TABLE OF CONTENTS	i
LIST OF TABLES	viii
LIST OF FIGURES	x
LIST OF APPENDICES	xii
1 Project Summary	1
1.1 Project Description and Location	1
1.2 Purpose and Need	2
1.2.1 Capacity/Operational Deficiencies	2
1.2.2 Safety	3
1.2.3 Evacuation and Emergency Services	4
1.2.4 Transportation Demand	4
1.2.5 System Linkage	4
1.2.6 Modal Interrelationships	5
1.2.7 Social Demands and Economic Development	5
1.3 Description of Preferred Alternative	5
1.4 Commitments.....	7
2 Existing Conditions	8
2.1 Functional Classification	9
2.1.1 I-95	9
2.1.2 SW 10 Street	9
2.1.3 Hillsboro Boulevard	9
2.1.4 Context Classification	9
2.2 Access Management.....	9
2.2.1 I-95	9
2.2.2 SW 10 Street	10
2.2.3 Hillsboro Boulevard	10

2.3	Typical Sections.....	10
2.3.1	I-95	10
2.3.2	SW 10 Street	13
2.3.3	Hillsboro Boulevard	15
2.4	Right of Way	17
2.4.1	I-95	17
2.4.2	SW 10 Street	17
2.4.3	Hillsboro Boulevard	17
2.5	Property Lines and Land Use	17
2.5.1	Existing Land Use	17
2.6	Existing Structural Characteristics.....	19
2.6.1	Structures.....	19
2.6.1.1	Existing Bridges.....	19
2.6.1.2	Type of Structure.....	28
2.6.1.3	Condition	28
2.6.1.4	Horizontal and Vertical Clearance.....	32
2.7	Roadway Geometric Characteristics.....	33
2.7.1	Horizontal Alignment.....	33
2.7.1.1	I-95	34
2.7.1.2	SW 10 Street	34
2.7.1.3	Hillsboro Boulevard	35
2.7.2	Vertical Alignment	35
2.7.2.1	I-95	35
2.7.2.2	SW 10 Street I-95.....	35
2.7.2.3	Hillsboro Boulevard	36
2.7.3	Posted Speed	36
2.7.4	Design Speed	36
2.7.5	Pavement Condition	36

2.7.5.1	I-95	36
2.7.5.2	SW 10 Street	38
2.7.5.3	Hillsboro Boulevard	38
2.7.6	Multi-Modal Facilities	38
2.7.6.1	Pedestrian.....	38
2.7.6.2	Bicycle.....	38
2.7.6.3	Transit.....	38
2.7.7	Intersections and Interchanges	40
2.7.8	Physical and Operational Restrictions	42
2.8	Existing Traffic Data	42
2.8.1	Existing Traffic Volumes.....	42
2.9	Roadway Operational Conditions.....	45
2.10	Safety Analysis	46
2.10.1	I-95	46
2.10.2	SW 10 Street	52
2.10.3	Hillsboro Boulevard	56
2.10.4	Crash Analysis Summary	60
2.10.5	Economic Loss.....	60
2.11	Railroad Crossing	61
2.12	Existing Drainage.....	61
2.12.1	Existing Drainage Conditions	61
2.13	Floodplains.....	62
2.14	Lighting	62
2.14.1	I-95	62
2.14.2	SW 10 Street	63
2.14.3	Hillsboro Boulevard	63
2.14.4	Utilities.....	63
2.15	Soils Classification	64

2.16	Aesthetic Features	64
2.17	Traffic Signs	64
3	Future Conditions	65
3.1	Future Land Use	65
3.1.1.1	SW 10 Street	65
3.1.1.2	Hillsboro Boulevard	65
3.2	Future Context Classification	67
3.3	Future Travel Forecast.....	67
3.4	Future Improvement Plans	72
4	Design Controls and Criteria	73
4.1	Roadway Design Criteria	74
5	Alternative Analysis	77
5.1	No-Action Alternative	77
5.2	Transportation Systems Management and Operation	77
5.3	Build Alternatives.....	77
5.3.1	I-95	78
5.3.2	SW 10 Street	78
5.3.3	Hillsboro Boulevard	82
5.4	Alternative Evaluation	85
5.4.1	Evaluation Criteria	85
5.4.2	Comparative Alternative Evaluation.....	86
5.5	Alternative Analysis.....	93
5.5.1	I-95	93
5.5.2	SW 10 Street	93
5.5.3	Hillsboro Boulevard	94
6	Public Involvement	95
7	Preferred Alternative	96
7.1	I-95	96

7.2	SW 10 Street	97
7.3	Hillsboro Boulevard	97
7.4	Typical Section	98
	7.4.1 I-95	98
	7.4.2 SW 10 Street	99
7.5	Horizontal and Vertical Geometry	99
	7.5.1 Horizontal Geometry	99
	7.5.1.1 Interstate 95	99
	7.5.1.2 SW 10 Street	101
	7.5.2 Vertical Geometry	102
	7.5.2.1 I-95	102
	7.5.2.2 SW 10 Street	103
7.6	Access Management	104
7.7	Preliminary Drainage	104
7.8	Maintenance of Traffic	104
	7.8.1 I-95 Mainline (under SW 10 Street)	105
	7.8.2 SW 10 Street (over I-95 Mainline)	108
7.9	Variations and Exceptions	111
	7.9.1 I-95	111
	7.9.2 SW 10 Street	111
	7.9.3 Hillsboro Boulevard	111
7.10	Utilities	111
	7.10.1 I-95	111
	7.10.2 SW 10 Street	112
	7.10.3 Hillsboro Boulevard	114
7.11	Proposed Structures	114
	7.11.1 Flyovers - Direct Connect Ramps Between SW 10 Street and I-95	116

7.11.1.1 Flyover - Direct Connect Ramp from I-95 NB to SW 10 Street WB (Bridge No. 1) 116

7.11.1.2 Flyover - Direct Connect Ramp From I-95 SB to SW 10 Street WB (Bridge No. 2) 118

7.11.1.3 Flyover - Direct Connect Ramp from SW 10 Street EB to I-95 NB (Bridge No. 3) 120

7.11.1.4 Flyover - Direct Connect Ramp from SW 10 Street EB to I-95 SB (Bridge No. 4)..... 121

7.11.2 Elevated Viaduct 122

7.11.2.1 SW 10 Street EB Elevated Viaduct (Bridge No. 9) . 122

7.11.3 Interchanges/Grade Separation 123

7.11.3.1 SW 10 Street Connector Lane WB Ramp Over SFRC Railroad & SW 12 Avenue. (Bridge No. 5) 123

7.11.3.2 SW 10 Street Connector Lane WB Over SFRC Railroad & SW 12 Avenue. (Bridge No. 6)..... 125

7.11.3.3 SW 10 Street General Purpose Lanes WB over SFRC Railroad and SW 12 Avenue (Bridge No. 7) 126

7.11.3.4 SW 10 Street Local Lanes EB over SFRC Railroad and SW 12 Avenue (Bridge No. 8)..... 127

7.11.3.5 SW 10 Street WB Connector Lanes Over Military Trail (Bridge No.10) 128

7.11.3.6 SW 10 Street EB Connector Lane Off-Ramp Over Military Trail (Bridge No.11) 129

7.11.3.7 SW 10 Street Over I-95 (Bridge No.12) 130

7.11.3.8 I-95 SB Off-ramp to SW 10 Street (Bridge No.13) 132

7.11.3.9 I-95 SB On-Ramp Over Hillsboro Blvd. (Bridge No.16) 133

7.11.3.10 I-95 NB Over Hillsboro Boulevard Widening (Bridge No.17) 133

7.11.4 Braided Ramps 134

7.11.4.1 SW 10 Street to I-95 NB Braided On-ramp (Bridge No.14) 134

7.11.4.2 I-95 SB to SW 10 Street Braided Off-ramp (Bridge No.15) 135

7.11.5 Conceptual geotechnical data 137

7.11.6 Aesthetic Level for Bridge and Bridge Approaches 137

7.11.7 Bridge Deck Drainage Considerations 137

7.12 Intersection and Interchange Concepts 139

7.13 Right-of-Way 141

7.14 Lighting 141

7.15 Landscaping 141

7.16 Preliminary Cost Estimates 141

8 Conceptual Design Plans 143

9 List of Technical Reports 144

LIST OF TABLES

TABLE	PAGE
Table 2-1 Summary of Roadway Characteristics	8
Table 2-2 Existing Typical Section Characteristics	10
Table 2- 3 Existing Bridge Characteristics (Hillsboro Boulevard and I-95 Interchange)	20
Table 2-4 Existing Bridge Characteristics (SW 10 Street and I-95 Interchange) ..	23
Table 2-5 Existing Bridge Characteristics (SW 10 Street and SW 12 Avenue / SFRC Railroad Interchange).....	26
Table 2-6 Horizontal Alignment I-95.....	34
Table 2-7 Horizontal Alignment – SW 10 Street.....	34
Table 2- 8 Vertical Alignment I-95	35
Table 2-9 Vertical Alignment – SW 10 Street.....	36
Table 2-10 Signalized Intersections	42
Table 2-11 Limits for the Safety Analysis.....	46
Table 2-12 Five Year Crash Summary for I-95.....	48
Table 2-13 Fatal Crashes along I-95	50
Table 2-14 Crash Distribution by Year and Milepost along I-95	51
Table 2-15 Five Year Crash Summary for SW 10 Street.....	53
Table 2-16 Crash Distribution by Year and Milepost along SW 10 Street	55
Table 2-17 Five Year Crash Summary for Hillsboro Boulevard	57
Table 2-18 Fatal Crashes along Hillsboro Boulevard	59
Table 2-19 Crash Distribution by Year and Milepost along Hillsboro Boulevard...	59
Table 2-20 Summary of Cross Drains.....	62
Table 2-21 Utility Agency Owners	63
Table 4-1 Roadway Design Controls – Mainline	74
Table 4-2 Roadway Design Controls – I-95 Ramps.....	75
Table 5-1 Evaluation Criteria	85
Table 5-2 Comparative Alternative Evaluation – SW 10 Street.....	87
Table 5-3 Comparative Alternative Evaluation- Hillsboro Blvd.....	90
Table 7-1 Design Elements for Direct Connect Ramps.....	99
Table 7-2 Design Elements for I-95 Ingress/Egress ramps	100

Table 7-3 Design Elements for SW 10 Street (Local Lanes) 101

Table 7-4 Design Elements for SW 10 St Connector Lanes 101

Table 7-5 Design Elements for SW 10 St, Connector Ingress Ramps 102

Table 7-6 Design Elements for SW 10 St. Connector Egress Ramps..... 102

Table 7-7 Utility Impacts along I-95..... 112

Table 7-8 Utility Impacts along SW 10 Street 112

Table 7-9 Utility Impacts along Hillsboro Boulevard..... 114

Table 7-10 Proposed Bridge Improvements for Preferred Alternative..... 138

Table 7-11 Preliminary Cost Estimates 142

LIST OF FIGURES

FIGURE	PAGE
Figure 1-1 Project Study Area	2
Figure 2-1 Roadway Segment – I-95 Corridor	12
Figure 2-2 Existing Typical Section – I-95.....	12
Figure 2-3 Existing Roadway Segment – SW 10 Street.....	14
Figure 2-4 Existing Typical Section – SW 10 Street.....	14
Figure 2-5 Existing Roadway Segment – Hillsboro Boulevard	16
Figure 2-6 Existing Typical Section – Hillsboro Boulevard.....	16
Figure 2-7 Zoning Map –Existing	18
Figure 2-8 Existing Bridge Locations	19
Figure 2-9 Bridges at Hillsboro Boulevard and I-95 Interchange (Bridge Nos. 861094 & 860124)	21
Figure 2-10 Bridge No. 860194 Looking West	21
Figure 2-11 Bridge No. 860124 Looking East	22
Figure 2-12 Bridges at SW 10 Street and I-95 Interchange (Bridge Nos. 860123 & 860564)	24
Figure 2-13 Bridge No. 860123 Looking North	24
Figure 2-14 Bridge No. 860123 Looking South	25
Figure 2-15 Bridge No. 860564 Looking West	25
Figure 2-16 Bridges at SW 10 Street and SW 12 Avenue / SFRC Railroad Interchange (Bridge Nos. 860557 & 860553).....	27
Figure 2-17 Bridge No. 860557 Looking North	27
Figure 2-18 Bridge No. 860553 Looking South	28
Figure 2-19 BCT Route 48	39
Figure 2-20 Deerfield Beach Station	39
Figure 2-21 Existing Roadway and Intersection Lane Configurations Hillsboro Boulevard	40
Figure 2-22 Existing Roadway and Intersection Lane Configurations	41
Figure 2-23 Existing Roadway and Intersection Lane Configurations Sample Road	41
Figure 2-24 Existing Traffic Volumes – Hillsboro Boulevard	43

Figure 2-25 Existing Traffic Volumes – SW 10 Street	44
Figure 2-26 Existing Traffic Volumes – Sample Road.....	44
Figure 2-27 Five Year Crash Characteristics for I-95	49
Figure 2-28 Crash Distribution by Year and Milepost along I-95	51
Figure 2-29 Five Year Crash Characteristics for SW 10 Street	54
Figure 2-30 Crash Distribution by Year and Milepost along SW 10 Street.....	55
Figure 2-31 Five Year Crash Characteristics for Hillsboro Boulevard	58
Figure 2-32 Crash Distribution by Year and Milepost along Hillsboro Boulevard ..	60
Figure 3-1 Future Land Use Map.....	66
Figure 3-2 No-Action Roadway and Intersection Lane Configurations	68
Figure 3-3 2020 No-Action Volumes – Hillsboro Boulevard.....	69
Figure 3-4 2020 No-Action Volumes – SW 10 Street	69
Figure 3-5 2020 No-Action Volumes – Sample Road.....	70
Figure 3-6 2040 No-Action Volumes – Hillsboro Boulevard.....	70
Figure 3-7 2040 No-Action Volumes – SW 10 Street	71
Figure 3-8 2040 No-Action Volumes – Sample Road.....	71
Figure 5-1 SW 10 Street – North Alignment Concept Plan.....	80
Figure 5-2 Hillsboro Boulevard – Concept Plan – Alternative 2.....	84
Figure 7-1 TCP Typical Section SW 10 St – PHASE 1	106
Figure 7-2 TCP Typical Section SW 10 St – PHASE 2	106
Figure 7-3 TCP Typical Section SW 10 St – PHASE 3	107
Figure 7-4 TCP Typical Section I-95 – PHASE 1	109
Figure 7-5 TCP Typical Section I-95 – PHASE 2	109
Figure 7-6 TCP Typical Section I-95 – PHASE 3	110
Figure 7-7 Proposed Bridge Locations (1 of 2).....	115
Figure 7-8 Proposed Bridge Locations (2 of 2).....	115
Figure 7-9 Bridge Typical Section (Bridge No. 1)	116
Figure 7-10 Bridge Typical Section (Bridge No. 2)	119
Figure 7-11 Bridge Typical Section (Bridge No. 3)	120
Figure 7-12 Bridge Typical Section (Bridge No. 4)	121
Figure 7-13 Bridge Typical Section (Bridge No. 9)	122
Figure 7-14 Bridge Typical Section (Bridge No. 5)	124

Figure 7-15 Bridge Typical Section (Bridge No. 6) 125
Figure 7-16 Bridge Typical Section (Bridge No. 7) 126
Figure 7-17 Bridge Typical Section (Bridge No. 8) 127
Figure 7-18 Bridge Typical Section (Bridge No. 10)..... 128
Figure 7-19 Bridge Typical Section (Bridge No. 11)..... 129
Figure 7-20 Bridge Typical Section (Bridge No. 12) 1 of 2 130
Figure 7-21 Bridge Typical Section (Bridge No. 12) 2 of 2 131
Figure 7-22 Bridge Typical Section (Bridge No. 13) 1 of 2 132
Figure 7-23 Bridge Typical Section (Bridge No. 13) 2 of 2 132
Figure 7-24 Bridge Typical Section (Bridge No. 16)..... 133
Figure 7-25 Bridge Typical Section (Bridge No. 17)..... 134
Figure 7-26 Bridge Typical Section (Bridge No. 14)..... 135
Figure 7-27 Bridge Typical Section (Bridge No. 15)..... 136
Figure 7-28 Roadway and Intersection Lane Configurations 140

LIST OF APPENDICES

- Appendix A** Roadway Concept Plans
- Appendix B** Preliminary Cost Estimates

1 Project Summary

1.1 Project Description and Location

The Florida Department of Transportation (FDOT) District Four is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to assess potential operational and safety improvements along 3.1 miles of Interstate 95 (I-95), from just south of the SW 10 Street interchange [Mile Post (MP) 22.0] to just north of the Hillsboro Boulevard (Blvd) interchange (MP 25.10), in Broward County, Florida.

The project extends along I-95 from just south of SW 10 Street to just north of Hillsboro Boulevard and along both SW 10 Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the city of Deerfield Beach. I-95 is part of the Strategic Intermodal System and the National Highway System which is Florida's high priority network of transportation facilities important to the state's economy, mobility and defense.

This study evaluates alternatives for improvements to the I-95 partial cloverleaf interchanges at SW 10 Street and Hillsboro Boulevard and along I-95 from just south of the SW 10 Street interchange to just north of the Hillsboro Boulevard interchange. SW 10 Street provides a direct connection between I-95 and the Sawgrass Expressway. The study also evaluates improvements along both SW 10 Street and Hillsboro Boulevard near I-95.

This study evaluates alternatives to modify the existing merge and diverge ramp areas at the SW 10 Street and Hillsboro Boulevard interchanges, considers the replacement of the existing SW 10 Street bridge over I-95 and providing a grade separation at the existing at-grade railroad crossing at Hillsboro Boulevard.

The construction of express lanes on I-95 within the project area is also analyzed as part of this project.

The project study area is shown in **Figure 1-1**.

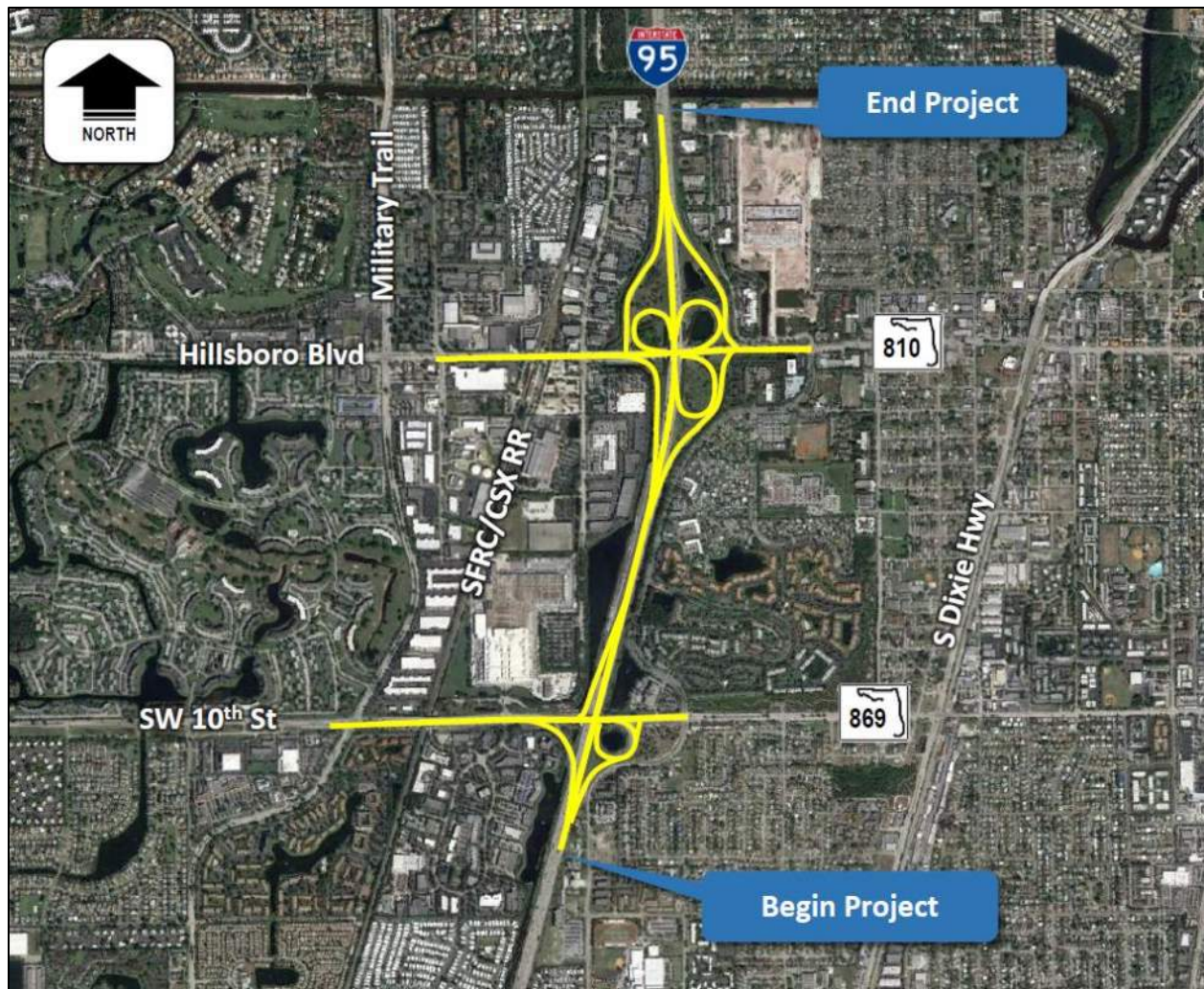


Figure 1-1 Project Study Area

1.2 Purpose and Need

The purpose of this project is to eliminate existing operational and safety deficiencies along I-95 between and including the interchanges at SW 10 Street and Hillsboro Boulevard, and on SW 10 Street and Hillsboro Boulevard in the vicinity of I-95. The primary need for the project is based on capacity/operational and safety issues, with secondary considerations for the needs of evacuation and emergency services, transportation demand, system linkage, modal interrelationships, and social demands and economic development.

1.2.1 Capacity/Operational Deficiencies

FDOT has identified the need to improve traffic operations along I-95 between the SW 10 Street and Hillsboro Boulevard interchanges, especially at existing merge and

diverge ramps that are the sources of traffic turbulence and collisions. The mainline directional volumes range from 4,400 to 5,850 vehicles per hour (vph) with ramp volumes from 800 to 1,250 vph at SW 10 Street and 400 to 1,000 vph at Hillsboro Boulevard.

Operational analyses along I-95 indicate that all freeway segments in the study area operate at Level of Service (LOS) D or better except for the following:

- The diverge segment at I-95 southbound (SB) off-ramp to SW 10 Street EB and WB during the AM and PM peak periods;
- The I-95 mainline segment between I-95 SB on-ramp from SW 10 Street eastbound (EB) and westbound (WB) and I-95 SB off-ramp to Sample Road EB and WB during the PM peak period;
- The I-95 mainline between I-95 SB On-Ramp from Palmetto Park Boulevard EB and I-95 SB Off-Ramp to Hillsboro Boulevard EB and WB during the AM peak period;
- The merge at I-95 SB on-ramp from Hillsboro Boulevard WB during AM and PM peak periods; and
- The diverge segment at I-95 northbound (NB) off-ramp to Hillsboro Boulevard EB during the AM peak period.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Year 2040 traffic projections show the mainline directional volumes ranging from 6,000 to 7,300 vph. Year 2040 peak hour directional volumes on I-95 Express are forecasted to range an additional 1,300 to 2,550 vph within the I-95 corridor. Operational analyses under the "No Action" option in year 2040 reflects implementation of two major programmed improvements: 1) I-95 Express Phase 3 (two express travel lanes in each direction), and 2) I-95 Ramp Metering. All of the mainline freeway segments in the study area would operate at a deficient LOS (E or F) during one or both peak periods with the exception that the merge segment for I-95 SB On-Ramp from WB Hillsboro Boulevard would operate at LOS D during the PM peak hour.

1.2.2 Safety

A need exists to resolve safety issues within the project limits along I-95 as well as SW 10 Street and Hillsboro Boulevard. Crash analyses for the years 2008 through 2012 reveal that the I-95 segment within the Hillsboro Boulevard interchange area is classified as a high crash segment for four of the five study years. It should also

be noted that the existing interchanges are closely located together and have short weave distances. Crash rates along SW 10 Street in the vicinity of I-95 exceed the statewide average for similar facilities for all five study years, but the segment along Hillsboro Boulevard in the vicinity of I-95 does not. Field observations indicate that the number of crashes along the Hillsboro Boulevard project segment may be influenced by queues extending from the railroad crossing into this area.

1.2.3 Evacuation and Emergency Services

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10 Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County. A need exists to enhance capacity and traffic circulation along evacuation routes to improve evacuation and enhance emergency response.

1.2.4 Transportation Demand

A need exists to improve capacity and safety while meeting transportation demand and maintaining consistency with other transportation plans and projects, such as the Broward County Interchange Master Plan (IMP) and I-95 Express Lanes Phase III Project. The project is included in the FDOT Work Program with PE is scheduled for fiscal years 2017 and 2018. The Broward County MPO 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.

1.2.5 System Linkage

A need exists to ensure that I-95 continues to meet the minimum requirements of a component of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS), as well as provides access connectivity to other major arterials such as I-595 and Florida's Turnpike Intermodal System (SIS) and the National Highway System (NHS), as well as provides access and connectivity to other major arterials such as I-595 and Florida's Turnpike.

1.2.6 Modal Interrelationships

There exists a need for capacity improvements along the I-95 project corridor to enhance the mobility of public transit and goods by alleviating current and future congestion along the corridor and on the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Increased mobility to public transit operations are needed and will benefit as a result of this project. Although no designated Broward County Transit (BCT) Routes are provided within the SW 10 Street interchange area, Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Tri-Rail Station located just west of the Hillsboro interchange.

1.2.7 Social Demands and Economic Development

Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Broward County MPO 2035 LRTP predicted that the population would grow from 1.7 million in 2005 to 2.3 million by 2035, an increase of 29 percent. Jobs were predicted to increase from 0.7 to 1 million during the same time period, an increase of 37 percent. A need exists for the proposed improvements to support the predicted social and economic travel.

1.3 Description of Preferred Alternative

This project and the recommended improvements were closely coordinated with the SW 10 Street Connector PD&E Study Project (FM 439891-1) which is studying the feasibility of connecting the existing Sawgrass Expressway with the proposed connector lanes along SW 10 Street. An Alternatives Analysis Memorandum documenting the development and screening of various alternatives including No-Build, Partial Build and Build concepts was submitted to FDOT District 4 on June 29, 2018 and is included in Appendix I of the Systems Interchange Modification Report (SIMR) prepared for this PD&E Study.

The preferred alternative for the I-95 corridor is Build Alternative 2. Build Alternative 2 proposes to add one tolled express lane in each direction in the median along I-95 while maintaining the existing access points south of the SW 10 Street interchange and north of the Hillsboro Boulevard interchange. The existing number of general-purpose lanes throughout the I-95 corridor will be maintained and the express lanes

will be separated from the general-purpose lanes with tubular markers and a 4-ft wide buffer. A Collector-Distributor (CD) road and braided ramps are proposed on the east side of I-95 for the NB traffic and a separate CD road on the west side of I-95 is proposed for the SB traffic.

The preferred alternative for SW 10 Street is the modified north alignment alternative. This alternative provides three 11-ft lanes with 7-ft buffered bike lanes and 6-ft sidewalks in each direction for the SW 10 Street local traffic. Additionally, two 12-ft elevated connector lanes are provided in each direction with direct connect ramps to/from the I-95 express lanes providing regional connectivity to the express lanes network. A WB ingress ramp is proposed west of the Newport Center Drive intersection that provides access from the SW 10 Street WB local lanes to the connector lanes. In the EB direction along the connector lanes an egress ramp departs from the connector lanes west of the Military Trail intersection braiding over the EB SW 10 Street local lanes connecting along the outside. The egress ramp allows access to the Newport Center and to ramps to NB and SB I-95.

On SW 10 Street at the NB and SB legs of the East Newport Center Drive intersection triple right turn lanes and no left turn or through lanes are provided. In addition, dual left turn lanes and exclusive right turn lanes are provided for the EB and WB movements at this intersection. This configuration allows improved operations and mitigates congestion for the intersection, the interchange ramp intersections and along SW 10 Street.

A roundabout is provided at the intersection of West and East Newport Center Drive to improve left turn movements at the Newport Center. A loop ramp is provided along SW 12 Avenue that connects directly to the SW 10 Street connector lanes to improve operations of the East Newport Center Drive intersection with SW 10 Street by allowing WB traffic making a right turn to bypass the signal.

The NB exit ramp terminal will be widened to accommodate triple left and triple right turn lanes. The intersection at Natura Boulevard is expanded to accommodate double left and single right turn lanes on all intersection approaches.

Alternatives 1 and 2 along Hillsboro Boulevard which evaluated a depressed profile under the South Florida Rail Corridor (SFRC) and a grade separation over the railroad tracks were considered non-viable due to significant impacts to property access, right of way, utilities, and major temporary traffic control impacts for both the railroad tracks and Hillsboro Boulevard. Therefore, the proposed improvements along

Hillsboro Boulevard are limited to the ramp terminals. The improvements include an additional left turn movement for the NB egress ramp terminal while maintaining the dual right turn movement which resulted in the elimination of the NB off-ramp loop to WB Hillsboro Boulevard. In addition, the NB on-ramp from WB Hillsboro Blvd was realigned to be within the proximity of I-95. Moreover, a new configuration was proposed for the WB to NB on-ramp and the WB to SB on-ramp to minimize the weaving maneuvers within the interchange area. Additionally, a new bridge is proposed to be constructed on the west side of the I-95 mainline, due to the existing vertical clearance above Hillsboro Boulevard.

1.4 Commitments

Continue coordination with the City of Deerfield Beach and Newport area businesses during design and construction.

Bicycle lanes and sidewalks will be provided along local SW 10 Street. Sidewalk will be provided along the north side from East Newport Center Drive to east of Natura Boulevard and along the south side from Military Trail to east of SW Natura/FAU Research Park Boulevard.

Landscaping will be coordinated with the local communities and the City of Deerfield Beach and will be constructed as a separate project.

2 Existing Conditions

Due to the uniqueness of this project, the analysis and evaluation of the existing conditions were separated into three corridors; I-95 (SR 9), SW 10 Street (SR 869) and Hillsboro Boulevard (SR 810). Data gathering for each of these corridors focused on the areas of roadway, bridge and environmental characteristics. Field reviews were conducted. The FDOT's Roadway Characteristics Inventory, Straight Line Diagrams (SLDs), Broward County MPO traffic counts, traffic and roadway data from Broward County Traffic and Engineering Division and other documents were reviewed and collected. A summary of the characteristics of the roadway facilities is presented in

Table 2-1.

Table 2-1 Summary of Roadway Characteristics			
Typical Section Element	Roadway		
	I-95	SW 10 Street	Hillsboro Boulevard
Facility Type	Freeway, Limited Access, SIS Facility	Arterial	Arterial
Functional Classification	Urban Principal Arterial - Interstate	Urban Principal Arterial - Other	Urban Principal Arterial - Other
Access Management Classification (FDOT)	Class 1	Class 3	Class 5
Typical Section	North of Sample Road to North of Hillsboro Boulevard Interchange: NB and SB: 3 GP, 1 EP / BW South of Sample Road Interchange: NB and SB: 1 AUX, 3 GP, 1 EP / BW Wall Median	EB & WB: 3 Lanes/Raised Median	EB & WB: 3 Lanes/Raised Median
Posted Speed Limit	65 mph	45 mph	45 mph
Legend: AUX-Auxiliary Lane GP-General Purpose Lane EP-Express Lane BW-Barrier			

2.1 Functional Classification

The roadway network within the project study area is comprised of interstate expressways, state roads, county roads and local roads that provide access and traffic circulation within residential, commercial and industrial areas.

2.1.1 I-95

Within the limits of the study for access management, I-95 is defined as Limited Access Class 1.2 Freeway in an Existing Urbanized Area with a functional classification as an urban principal arterial interstate. I-95 is an essential part of the Strategic Intermodal System (SIS) and National Highway System (NHS) networks. Within the limits of the project, I-95 has six general purpose lanes (three in each direction) and two Express lanes (EP) lanes (one in each direction).

2.1.2 SW 10 Street

SW 10 Street has a functional classification as an urban principal arterial other. SW 10 Street is classified as a six-lane divided State Principal Arterial west of I-95 and as a six-lane divided City Minor Arterial east of I-95. In addition, it is on the State Highway System (SHS) and SIS systems being classified as a SIS corridor.

2.1.3 Hillsboro Boulevard

Hillsboro Boulevard has a functional classification as an urban principal arterial other. Hillsboro Boulevard is classified as a six-lane divided State Minor Arterial west of I-95 and as a State Principal Arterial east of I-95. In addition, it is on the SHS and SIS systems being classified as a SIS connector classification as an urban principal arterial from the intersection at Goolsby Boulevard (MP 4.760) to I-95 (MP 5.365) since it connects the I-95 Expressway to South Florida Rail Corridor (SFRC).

2.1.4 Context Classification

Hillsboro Boulevard and SW 10 Street are classified as Suburban Commercial (C3C) which includes facilities that have mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.

2.2 Access Management

2.2.1 I-95

The access management classification for the I-95 corridor is Class 1.2, Freeway in an existing urbanized area with limited access.

2.2.2 SW 10 Street

SW 10 Street is designated as Class 3 for access management, where the highway is distinguished by restrictive medians, and the adjacent land is highly developed.

2.2.3 Hillsboro Boulevard

Hillsboro Boulevard is designated as Class 5 for access management, where the highway is distinguished by restrictive medians, and the adjacent land is highly developed.

2.3 Typical Sections

Table 2-2 summarizes the typical section characteristics for each corridor.

Table 2-2 Existing Typical Section Characteristics			
Typical Section Element	Roadway		
	I- 95	SW 10 Street	Hillsboro Boulevard
Number of Travel Lanes	8	6	6
Travel Lane Width	12-ft	11 to 12-ft	11-ft
Parking Lane Width	n/a	n/a	n/a
Curb and Gutter	n/a	Type F	Type F
Inside Shoulders Width	12-ft	n/a	n/a
Outside Shoulders Width (Bike Lane)	12-ft	Varies 4-ft to 8-ft	Varies 4-ft to 6-ft
Median Width	26.5 ft	14 to 17.5 ft	15.5 ft
Sidewalk Width	n/a	Varies 5-6 ft	Varies 6-7 ft
Right-of-Way Width	240 ft – 300 ft	106 ft (+)	106 – 136 ft

2.3.1 I-95

Within the limits of the study, I-95 is an eight-lane divided limited access facility consisting primarily of a 2.5-ft center barrier wall with two 12-ft paved inside shoulders (one in each direction). The inside lane in each direction is a 12-ft wide EL with a 2-ft striped buffer area separating the EP lane from the three 12-ft general-purpose lanes. In each direction, along the outside of the general-purpose lanes is a 12-ft shoulder [10-ft paved and 2-ft unpaved]. In the NB direction, a 12-ft auxiliary lane exists between the SW 10 Street on-ramp and Hillsboro Boulevard off-ramp. Additionally, in the SB direction a 12-ft auxiliary lane exists between the Hillsboro

Boulevard on-ramp and SW 10 Street off-ramp. The existing roadway segment is depicted in **Figure 2-1** and typical section for this corridor is shown in **Figure 2-2**.

DRAFT



Figure 2-1 Roadway Segment – I-95 Corridor

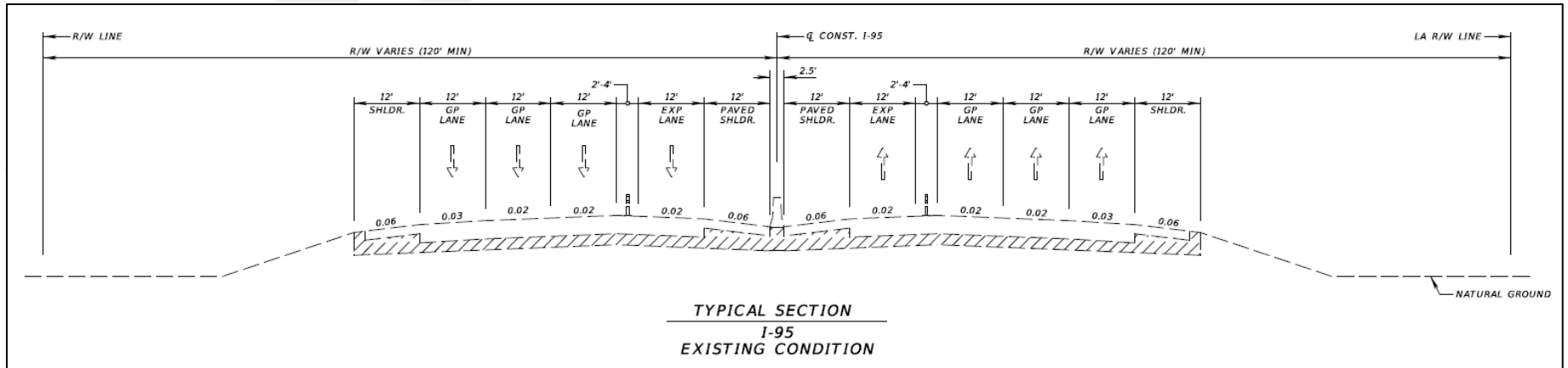


Figure 2-2 Existing Typical Section – I-95

2.3.2 SW 10 Street

Along SW 10 Street EB from approximately 1,000-ft west of the intersection of Military Trail to the intersection there are three 11-ft lanes, a 4- to 5-ft bike lane, and a 6-ft sidewalk. In the center, there is a 17.5-ft raised curb and gutter median.

Along SW 10 Street WB from approximately 1,000-ft west of the intersection of Military Trail to the intersection there are two 12-ft lanes, a 4-ft bike lane and a 4-ft unpaved shoulder.

In each direction, from the intersection at Military Trail to East Newport Center Drive there are three 11-ft lanes, a 4-ft bike lane, 2-ft curb and gutter and a 6-ft concrete sidewalk running along at the back of curb. In the center of the roadway there is a raised curb and gutter median that varies in width from 14-ft to 17.5-ft. In the WB direction, the outside lane is an auxiliary lane used for right turns and/or acceleration that terminates at the intersection with Military Trail. In the EB direction, a fourth (outside) 12-ft to 14-ft wide lane exists as an auxiliary lane used for right turns and/or acceleration and terminates at the SB on-ramp to I-95.

From East Newport Center Drive to SW Natura Boulevard/FAU Research Park Boulevard there are three 11-ft lanes in each direction, 2-ft curb and gutter with a 6-ft concrete sidewalk running along at the back of curb with no bicycle lane or shoulder. The outside EB lane terminates at the NB entrance ramp to I-95 and then remerges west of the NB I-95 off-ramp intersection continuing to the FAU Research Park Boulevard intersection. WB are three 11-ft lanes, 2-ft curb and gutter with a 6-ft concrete sidewalk running along at the back of curb with no bike lane or shoulder present. A fourth WB lane emerges at the SB I-95 off-ramp intersection and terminates at the East Newport Center Drive intersection. In the center of the roadway there is a raised curb and gutter median that varies in width from 14-ft to 20-ft.

The existing roadway segment is depicted in **Figure 2-3** and typical section for this corridor is shown in **Figure 2-4**.



Figure 2-3 Existing Roadway Segment – SW 10 Street

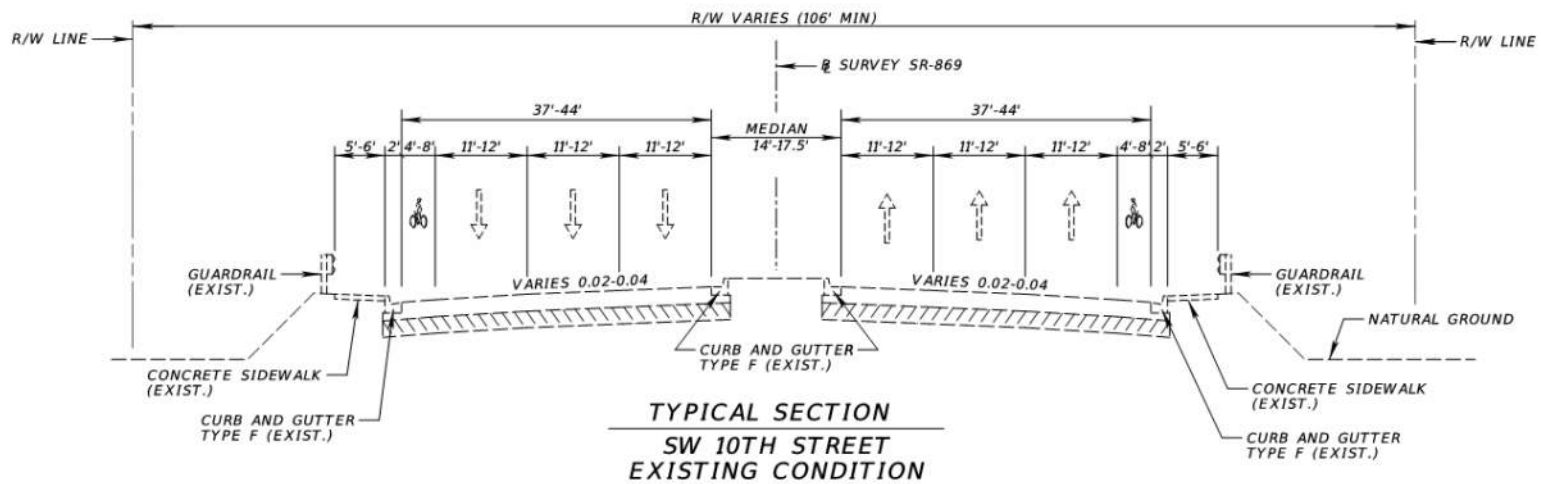


Figure 2-4 Existing Typical Section – SW 10 Street

2.3.3 Hillsboro Boulevard

Hillsboro Boulevard from east of the Military Trail intersection to the intersection with Natura Boulevard/Fairway Drive is an urban arterial typical section with a 15.5 ft raised median, six 11-ft thru lanes (3 lanes in each direction) and two 4-ft bicycle lanes (one in each direction) with Type F curb and gutter on both sides of the roadway. In each direction outside the bicycle lanes is a 2-ft curb and gutter with 6-ft concrete sidewalk running along at the back of curb. The right of way varies from 53-ft to 68-ft on each side.

The existing roadway segment is depicted in **Figure 2-5** and typical section for this corridor is shown in **Figure 2-6**.



Figure 2-5 Existing Roadway Segment – Hillsboro Boulevard

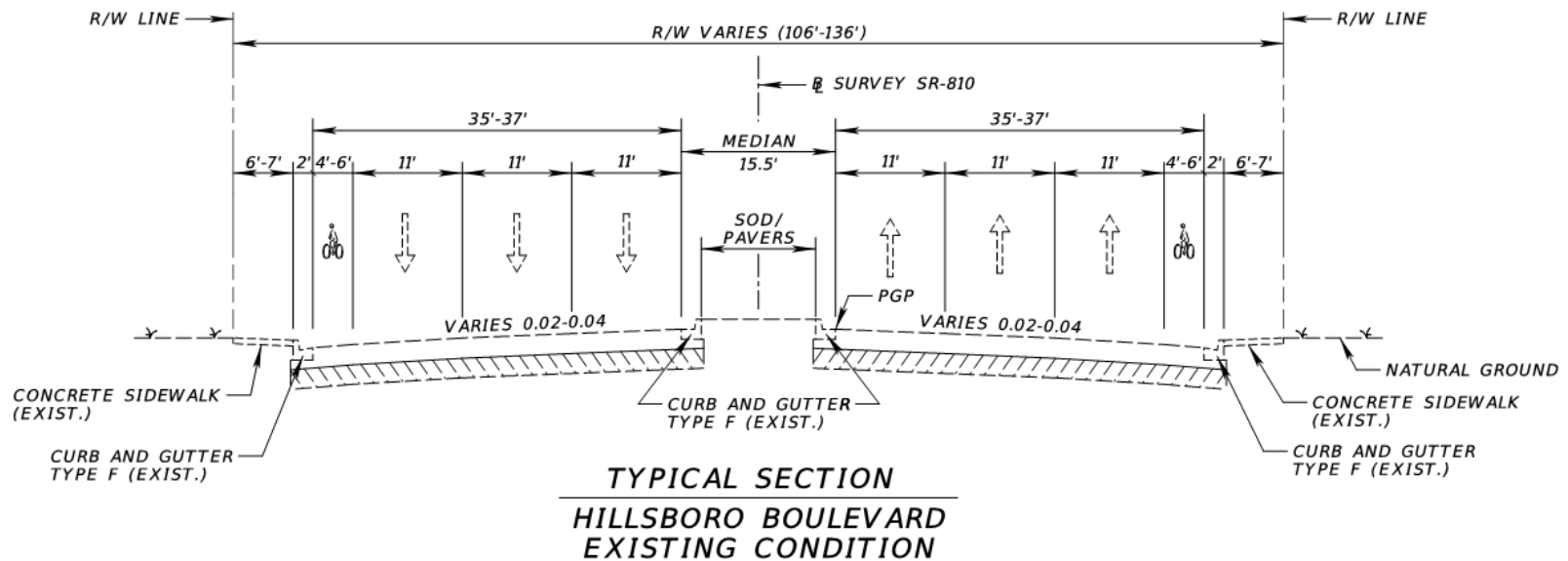


Figure 2-6 Existing Typical Section – Hillsboro Boulevard

2.4 Right of Way

2.4.1 I-95

The existing right of way along I-95 varies with a minimum of 240-ft and varies based on shoulder width and natural ground.

2.4.2 SW 10 Street

The existing right of way along SW 10 Street varies with a minimum of 106-ft and varies based on median width.

2.4.3 Hillsboro Boulevard

The existing right of way along Hillsboro Boulevard varies from 106- to 136-ft based on median width, shoulder width and natural ground.

2.5 Property Lines and Land Use

2.5.1 Existing Land Use

This project lies within the City of Deerfield Beach. West of I-95 within the project limits, the dominant land uses are industrial and commercial, including a Publix distribution center and several hotels in the vicinity of the interchanges. Additional land uses west of I-95 include City of Deerfield government offices located west of the SFRC and south of Hillsboro Boulevard, and a residential development southwest of SW 10 Street and the railroad. East of I-95 and south of Hillsboro Boulevard, land use is mainly single and multi-family residential with a mixture of commercial development at the interchanges. North of Hillsboro Boulevard, land use is mainly commercial along I-95 and Hillsboro Boulevard. Set behind the commercial development is the former Deerfield Country Club Golf Course.

The City of Deerfield Beach Zoning Map shown in **Figure 2-7** shows the NW quadrant of SW 10 Street interchange as zone I (Industrial), the SW quadrant as zone PID (Planned Industrial Development), the SE quadrants as zone B-2 (Business) and the NE quadrant as zones B-2 (Business) and PUD (Planned Unit Development).

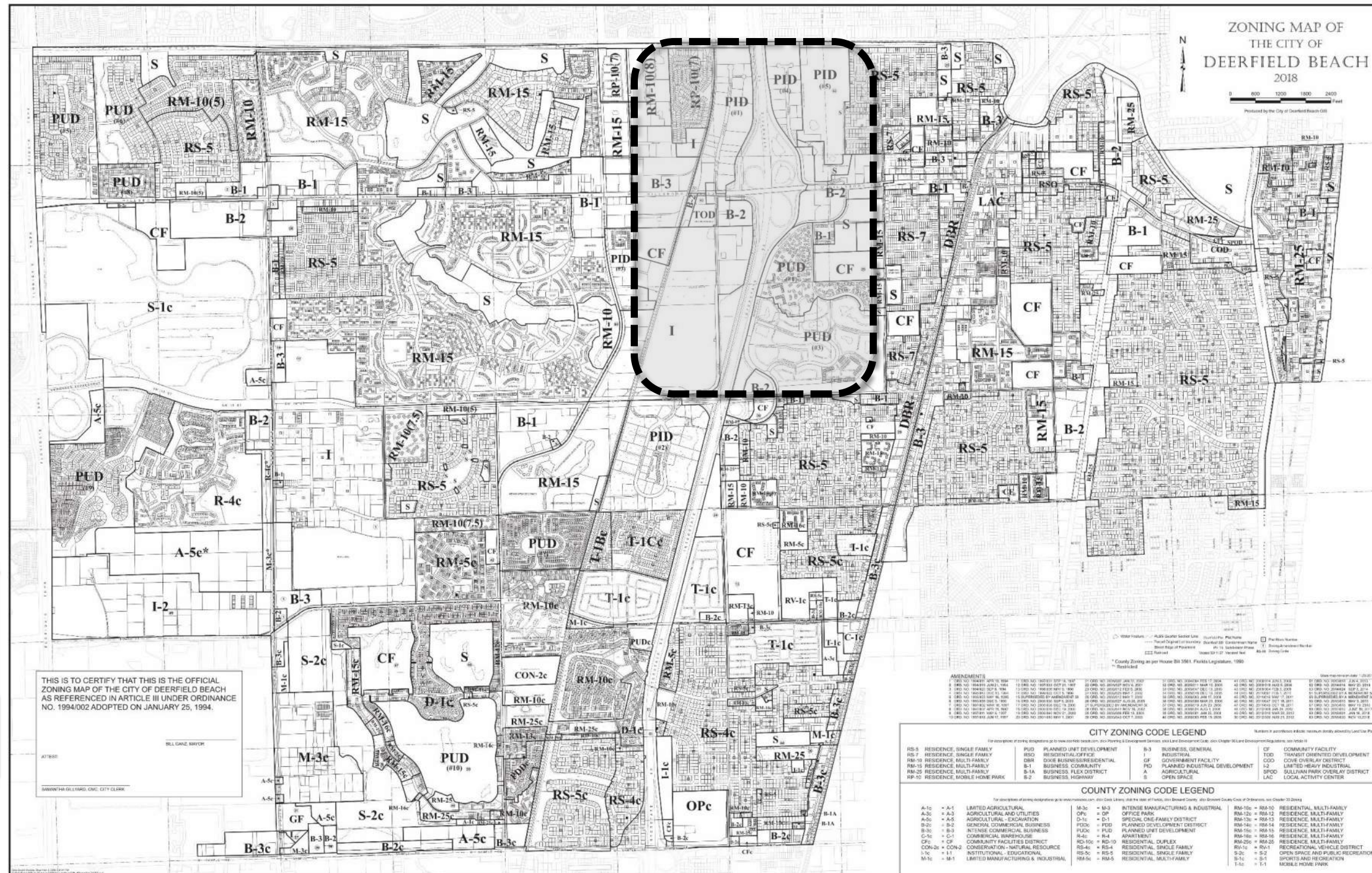


Figure 2-7 Zoning Map – Existing

2.6 Existing Structural Characteristics

2.6.1 Structures

As part of this PD&E study, six bridge structures were evaluated. Bridge locations are identified in **Figure 2-8**.

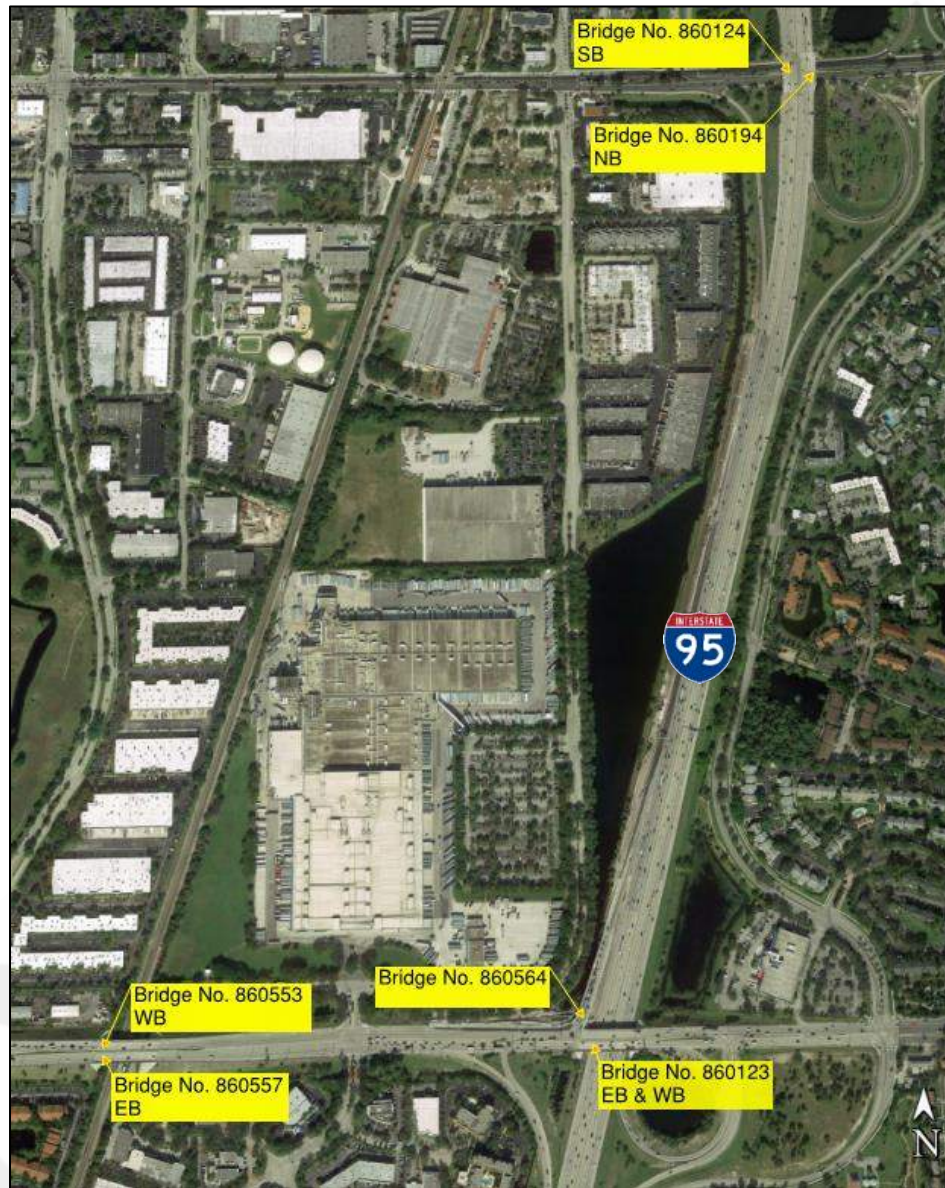


Figure 2-8 Existing Bridge Locations

2.6.1.1 Existing Bridges

There are six bridge structures within the project limits including:

- I-95 NB over Hillsboro Boulevard (Bridge No. 860194),

- I-95 SB over Hillsboro Boulevard (Bridge No. 860124),
- SW 10 Street EB and WB over I-95 (Bridge No. 860123),
- I-95 SB off-ramp connecting to SW 10 Street (Bridge No. 860564),
- SW 10 Street EB and WB over SW 12 Avenue and SFRC railroad (Bridge Nos. 860557, 860553).

Existing bridges are shown in **Figure 2-9** through **Figure 2-18**. The location, geometrics, alignment, type of structure, and condition of the above-mentioned bridges are listed in **Table 2-3**, **Table 2-4**, and **Table 2-5**.

2.6.1.1.1 Hillsboro Boulevard and I-95 Interchange

Table 2- 3 Existing Bridge Characteristics (Hillsboro Boulevard and I-95 Interchange)			
Bridge ID No.		860194 (NB)	860124 (SB)
Location	Bridge Location	I-95 over Hillsboro Boulevard	I-95 over Hillsboro Boulevard
	Direction	NB	SB
Geometrics	Bridge Length (ft)	231	231
	Deck Width (ft)	87.17	87.17
	No. of Lanes	5 (3 GP, 1 HOV, 1 merge)	5 (3 GP, 1 HOV, 1 merge)
Alignment	Skew Angles (Degrees)	6	6
	Minimum Horizontal Clearance	Inside (LT)	8'-1"
		Outside (RT)	14'-1 3/4", 14'-6 7/8" ⁽¹⁾
	Min. Vertical Clearance	N/A ⁽²⁾	15.39 ft ⁽²⁾
Structural	Number of Spans	4	4
	Interior Span Length (ft)	74.25	74.25
	Outer Span Length (ft)	41.25	41.25
	Superstructure Type	AASHTO Type III/II	AASHTO Type III/II
	Substructure Type	Multicolumn Pier/Bent/18" Prest. Piles	Multicolumn Pier/Bent/18" Prest. Piles
Condition	Year Built / Widened	1972/1990	1972/1990
	Sufficiency Rating (percent)	98.0	98.0
	Health Index (percent)	99.81	99.93
	Inspection Date	5/8/2017	5/8/2017
	Number of Documented Hits	None	None
	Significant Deficiencies	None	None
	Load Rating (Inventory Rating Factor- IRF)	(IRF>1) 1.011	(IRF>1) 1.011

Notes:

1. Minimum horizontal clearance per existing bridge plans.
2. Minimum vertical clearance per the existing bridge plans for SB bridge, not available for NB bridge but larger than that of SB bridge due to superelevation.



Figure 2-9 Bridges at Hillsboro Boulevard and I-95 Interchange (Bridge Nos. 861094 & 860124)



Figure 2-10 Bridge No. 860194 Looking West



Figure 2-11 Bridge No. 860124 Looking East

2.6.1.1.2 SW 10 Street and I-95 Interchange

Table 2-4 Existing Bridge Characteristics (SW 10 Street and I-95 Interchange)			
Bridge ID No.		860123	860564
Location	Bridge Location		SW 10 Street over I-95
	Direction		EB/WB
Geometrics	Bridge Length (ft)		272
	Deck Width (ft)		97.75
	No. of Lanes		7
Alignment	Skew Angles (Degrees)		16
	Minimum Horizontal Clearance	Inside (LT)	10'-4" (+/-) ¹
		Outside (RT)	30.04 ²
	Min. Vertical Clearance		16.16
Structural	Number of Spans		4
	Interior Span Length (ft)		103.75
	Outer Span Length (ft)		32.25
	Superstructure Type		AASHTO Type IV/II
	Substructure Type		Multicolumn Pier/Bent/18" Prest. Piles
Condition	Year Built / Widened		1972
	Sufficiency Rating (percent)		83
	Health Index (percent)		99.78
	Inspection Date		6/14/2016
	Number of Documented Hits		None
	Significant Deficiencies		None
	Load Rating (Inventory Rating Factor- IRF)		(IRF > 1) 1.389

Notes:

1. Horizontal clearance: measured from the edge of the travel lane to the pier, per existing bridge plans.
2. Minimum vertical clearance: per the bridge inspection report.

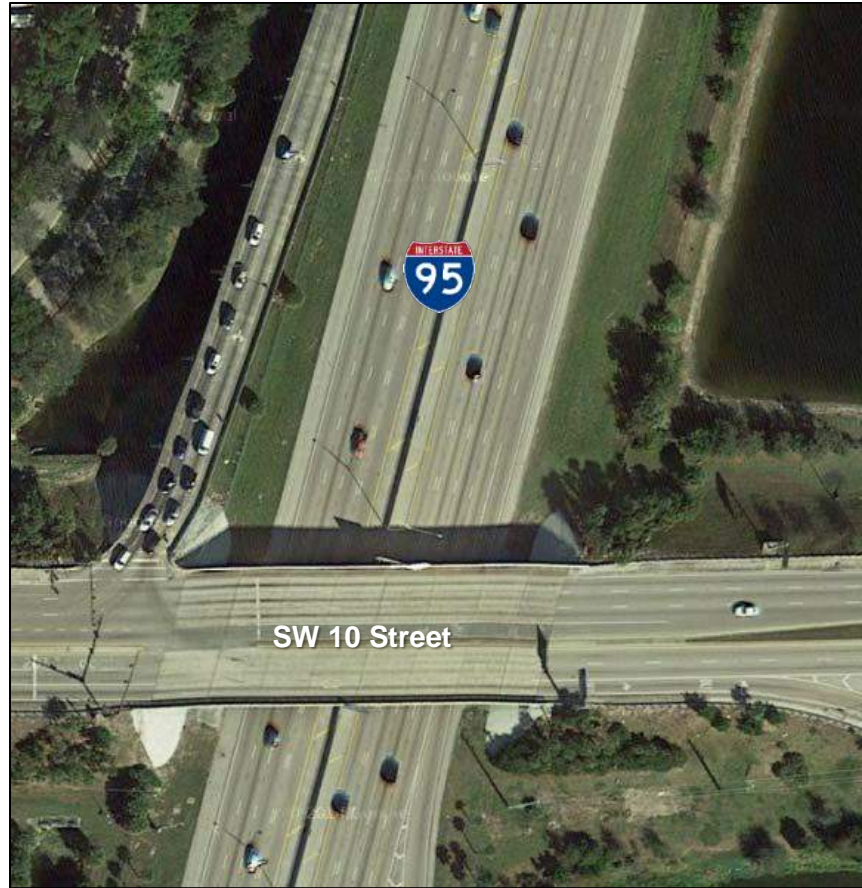


Figure 2-12 Bridges at SW 10 Street and I-95 Interchange (Bridge Nos. 860123 & 860564)

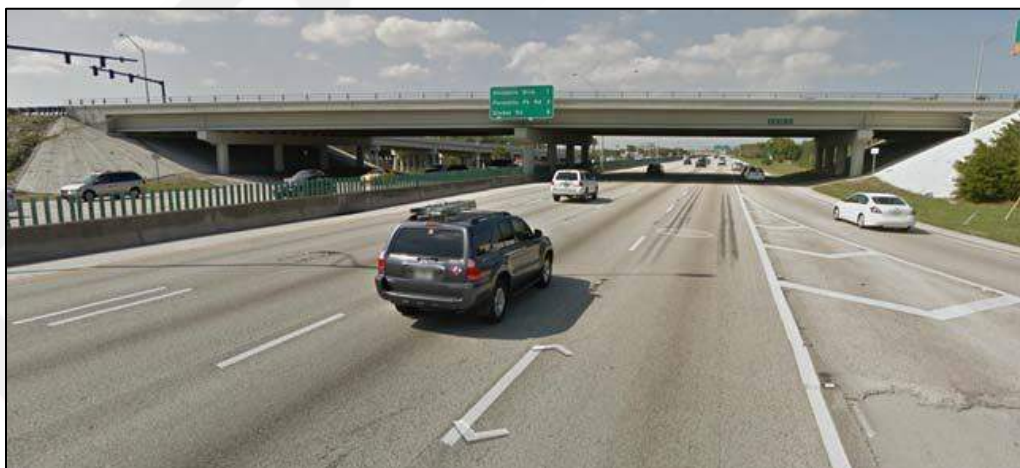


Figure 2-13 Bridge No. 860123 Looking North



Figure 2-14 Bridge No. 860123 Looking South



Figure 2-15 Bridge No. 860564 Looking West

2.6.1.1.3 SW 10 Street and SW 12 Avenue / SFRC Rail Interchange

Table 2-5 Existing Bridge Characteristics (SW 10 Street and SW 12 Avenue / SFRC Railroad Interchange)			
Bridge ID No.		860553	860557
Location	Bridge Location		SW 10 Street over SW 12 Avenue / SFRC Railroad
	Direction		WB
Geometrics	Bridge Length (ft)		286
	Deck Width (ft)		49.83
	No. of Lanes		3
Alignment	Skew Angles (Degrees)		17
	Minimum Horizontal Clearance	Inside (LT)	20'-5 3/4" ⁽²⁾ (to center of track)
		Outside (RT)	16'-8 3/4" ⁽²⁾
	Min. Vertical Clearance		23.03 ft ⁽¹⁾
Structural	Number of Spans		4
	Interior Span Length (ft)		71
	Outer Span Length (ft)		82, 62
	Superstructure Type		AASHTO Type III
	Substructure Type		Multicolumn Pier/Bent/18" Prest. Piles
Condition	Year Built / Widened		1982
	Sufficiency Rating (percent)		81.4
	Health Index (percent)		84.04
	Inspection Date		8/10/2016
	Number of Documented Hits		None
	Significant Deficiencies		None
	Load Rating (Inventory Rating Factor- IRF)		(IRF>1) 1.244

Notes:

1. Minimum vertical clearance per the bridge inspection report.
2. Minimum horizontal clearance per existing bridge plans.



Figure 2-16 Bridges at SW 10 Street and SW 12 Avenue / SFRC Railroad Interchange (Bridge Nos. 860557 & 860553)



Figure 2-17 Bridge No. 860557 Looking North



Figure 2-18 Bridge No. 860553 Looking South

2.6.1.2 Type of Structure

Per the existing bridge plans, the superstructure of all existing six bridges consists of cast-in-place (CIP) deck supported on pre-stressed AASHTO girders. The bridge inspection reports indicate that the deck of the bridges over SFRC (Bridge Nos. 86553 and 860557) was constructed with a partially CIP deck on precast panels. The substructure for all bridges except Bridge No. 860564 consists of multicolumn piers and pile end bents supported by 18 inches square pre-stressed concrete piles. The substructure of Bridge No. 860564 consists of pile bents supported by 18 inches square pre-stressed concrete piles and steel H piles (HP 14 x 89). The type of structure for each bridge within the project is summarized in **Table 2-3, Table 2-4, and Table 2-5.**

2.6.1.3 Condition

Per the National Bridge Inventory (NBI) and Structural Inventory and Appraisal Program, FDOT is required by FHWA to perform biennial bridge inspections and produce Bridge Inspection Reports (BIR) to determine the overall condition of all its fixed bridges.

The most recent bridge inspection reports for the six existing bridges that traverse the proposed project corridor were obtained from FDOT. The key identifiers from the bridge inspection reports are **Sufficiency Rating, Health Index, Noted Deficiencies, and Load Rating.**

The Sufficiency Rating is a measure used to evaluate a highway bridge to determine whether it should be repaired or replaced using the following factors:

- Structural Adequacy and Safety
- Serviceability and Functional Obsolescence

- Essentiality for Public Use
- Special Reductions

Approximately half of the above factors relate to the actual condition of the bridge. The Sufficiency Rating can vary between 0 (percent) to 100 (percent) with 0 indicating a bridge that is completely deficient and 100 indicating a bridge that is completely sufficient. Bridges with sufficiency rating of less than 80 but greater than 50 are eligible for rehabilitation using federal funding. Bridges with sufficiency rating less than 50 are eligible for replacement using federal funding.

The health index is a tool that measures the overall condition of a bridge. A health index of 100 (percent) represents a perfect bridge (entirely sufficient for its current use). A health index of 0 (percent) is the worst possible bridge (entirely insufficient for its current use). A lower health index means that more work would be required to improve the bridge to an ideal condition. A health index below 85 generally indicates that some repairs are needed, although it doesn't mean the bridge is unsafe. A low health index may also indicate that it would be more economical to replace the bridge than to repair it. The bridge inspection reports were obtained from the FDOT District 4 Structures and Facilities library for each structure.

The existing I-95 NB bridge over Hillsboro Boulevard (Bridge No. 860194) is a slightly curved and skewed precast pre-stressed concrete AASHTO girder type structure. The bridge was constructed originally around 1972 and widened around 1990. The bridge was widened along the inside, and the original outside traffic railing was replaced with a F Shape Traffic Railing (Index No. 14286). The bridge is comprised of two outer and two middle spans, 41'-3" for each outer span and 74'-3" for each middle span with a total overall length of 231'-0". The total bridge width is approximately 87'-2". The bridge currently carries three travel lanes, one merge lane, an HOV lane, and shoulders on both sides. A concrete traffic railing barrier satisfying the current standards borders the bridge on each side. The minimum vertical clearance of the SB bridge is 15.39-ft. The minimum vertical clearance of the NB bridge is not given on the existing bridge plans. However, the minimum vertical clearance of the SB bridge governs, since both bridges are super-elevated toward the east side. The bridge inspection report for this bridge indicates a good to excellent overall NBI ratings for this bridge. The Sufficiency Rating is 98 out of a possible 100 and the health index is 99.81 out of a possible 100. The report also provides descriptions and pictures of the deficiencies that exist on this bridge.

The existing I-95 SB bridge over Hillsboro Boulevard (Bridge No. 860124) is a slightly curved and skewed precast pre-stressed concrete AASHTO girder type structure. The bridge was constructed originally around 1972 and widened around 1990. The bridge was widened along the inside, and the original outside traffic railing was replaced with a F Shape Traffic Railing (Index No. 14286). The bridge is comprised of two outer and two middle spans, 41'-3" for each outer span and 74'-3" for each middle span with a total overall length of 231'-0". The total bridge width is approximately 87'-2". The bridge currently carries three travel lanes, one merge lane, an HOV lane, and shoulders on both sides. A concrete traffic railing barrier satisfying the current standards borders the bridge on each side. The minimum vertical clearance is approximately 15.40' per the existing bridge plans. The bridge inspection report for this bridge indicates a good to excellent overall NBI ratings for this bridge. The Sufficiency Rating is 98 out of a possible 100 and the health index is 99.93 out of a possible 100. The reports also provide descriptions and pictures of the deficiencies that exist on this bridge.

The existing SW 10 Street bridge over I-95 (Bridge No. 860123) is a slightly skewed precast pre-stressed concrete AASHTO girder type structure constructed originally around 1972. The bridge is comprised of two outer and two middle spans, approximately 32'-3" for each outer span and approximately 103'-9" for each middle span with an approximate total overall length of 272'-0". The total bridge width is approximately 97'-9". The bridge currently carries five travel lanes, two turn lanes, and a sidewalk on both sides of the bridge. A concrete traffic railing barrier borders the bridge on each side. The minimum vertical clearance is approximately 16.16' per the BIR. The bridge inspection report for this bridge indicates a good to excellent overall NBI ratings for this bridge. The Sufficiency Rating is 83.0 out of a possible 100 and the health index is 99.78 out of a possible 100. The report also provides descriptions and pictures of the deficiencies that exist on this bridge.

The existing I-95 SB off-ramp bridge connecting to SW 10 St (Bridge No. 860564) is a precast pre-stressed concrete AASHTO girder type structure. This bridge was constructed originally around 1988 and widened around 2018. The bridge is comprised of seven 65'-0" equally spaced spans, for a total overall length of 455'-0". The bridge width varies between 64'-1 1/4" to 43'-1/8". The bridge currently carries 3 travel lanes with shoulders on each side. A concrete traffic railing barrier satisfying the current standards borders the bridge on each side. The bridge inspection report for this bridge indicates a good to excellent overall National NBI ratings for this

bridge. The Sufficiency Rating is 80.5 out of a possible 100 and the health index is 99.39 out of a possible 100. The report also provides descriptions and pictures of the deficiencies that exist on this bridge.

The existing SW 10 Street EB bridge over SW 12 Avenue and SFRC railroad (Bridge No. 860557), constructed originally around 1982, is a slightly skewed precast prestressed concrete AASHTO girder type structure. The bridge is comprised of two outer and two middle spans, 82'- 0" and 62'-0" for each outer span and 71'- 0" for each middle span with a total overall length of 286'-0". The total bridge width is 49'-10". The bridge currently carries three travel lanes, with a 4'-6" shoulder on the North side and 5'-0" sidewalk on the South side. A concrete traffic railing barrier satisfying the current standards borders the bridge on each side. The minimum vertical clearance is approximately 23'-0" to the top of rail. The bridge inspection report for this bridge indicates a good to excellent overall NBI ratings for this bridge. The Sufficiency Rating is 81.4 out of a possible 100 and the health index is 85.32 out of a possible 100. The report also provides descriptions and pictures of the deficiencies that exist on this bridge. The bridge deck was constructed with CIP concrete deck on top of precast concrete panels per the BIR. The reinforced concrete deck on top of the precast panels has several longitudinal and transverse cracks with combined area of distress more than 25% but less than 50% of the total deck area. The deck is rated in satisfactory condition per the BIR but District 4 has slated it for replacement.

The existing SW 10 Street WB bridge over SW 12 Avenue and SFRC railroad (Bridge No. 860553), constructed originally around 1982, is a slightly skewed precast prestressed concrete AASHTO girder type structure. The bridge is comprised of two outer and two middle spans, 82'- 0" and 62'-0" for each outer span and 71'- 0" for each middle span with a total overall length of 286'-0". The total bridge width is 49'-10". The bridge currently carries two travel lanes and one turn lane, with a 4'-6" shoulder on the South side and 5'-0" sidewalk on the north side. A concrete traffic railing barrier satisfying the current standards borders the bridge on each side. The minimum vertical clearance is approximately 23'-0" to the of rail. The bridge inspection reports for this bridge indicate a good to excellent overall NBI ratings for this bridge. The Sufficiency Rating is 81.4 out of a possible 100 and the health index is 84.04 out of a possible 100. The reports also provide descriptions and pictures of the deficiencies that exist on this bridge. The bridge deck was constructed with CIP concrete deck on top of precast concrete panels per the BIR. The reinforced concrete deck on top of the precast panels has several longitudinal and transverse cracks with

combined area of distress more than 25% but less than 50% of the total deck area. The deck is rated in satisfactory condition per the BIR but District 4 has slated it for replacement.

Per the existing bridge inspection reports, all bridges have acceptable Sufficiency Ratings varying from 80.5 to 98.0 and acceptable Health Indexes varying from 84.04 to 99.93.

Currently, there is no load posted on any of the existing bridges.

Per the load rating summary forms or load capacity forms included in the bridge inspection reports, the IRF of each bridge except I-95 of-ramp to SW 10 Street (Bridge No. 860564) was derived and summarized in **Table 2-3**, **Table 2-4**, and **Table 2-5** above. The IRF of Bridge No. 860564 was obtained from the as-built load rating dated September 25, 2018 for the widened bridge provided by District 4, and summarized in **Table 2-4** above. All bridges have load rating factors greater than 1.0. Based on the BIRs, none of the bridges has any structural deficiencies, the superstructures and substructures of all bridge are in good conditions and very good conditions, respectively. Therefore, all bridges have sufficient structural capacities to carry traffic safely.

2.6.1.4 Horizontal and Vertical Clearance

Horizontal Clearance – The Horizontal Clearance underneath the existing bridges is the lateral distance from the edge of the travel lane to the bridge abutment or pier. The Horizontal Clearance is used to provide an area or Clear Zone to allow drivers of errant vehicles to regain control in case of an emergency. Per the FDOT 2018 Design Manual (FDM) and AASHTO requirements, bridge piers and abutments are to be placed either outside the Clear Zone or protected by FDOT approved barriers. For Hillsboro Boulevard with the Design Speed of 45 mph, the FDM calls for the Clear Zone to be 24-ft from the edge of travel lanes and multilane ramps, and 14 ft for auxiliary lanes and single lane ramps. For I-95, the width of the Clear Zone is 36 ft from the edge of travel lanes and multilane ramps, and 24 ft with auxiliary lanes and single lane ramps. Per the project survey and field reviews, proper Horizontal Clearance requirements and/or adequate pier protection barriers have been provided for all the existing bridge piers and abutments except for Bridge No. 860123.

The I-95 bridges over Hillsboro Boulevard (Bridge Nos. 860194 and 860124), with a horizontal clearance of 8'-1" to the median piers, do not have sufficient horizontal clearance required by FDM Table 215.2.2, and a concrete barrier wall is in place to

protect the piers. The outer piers on both side of Hillsboro Boulevard have a horizontal clearance of 14'-1 3/4" and 14'-6 7/8" for piers on the south side and north side respectively. Given that the adjacent lane is an auxiliary lane, both outer piers exceed the 14 ft minimum horizontal clearance from an auxiliary lane required by the FDM.

The SW 10 Street EB and WB bridge over I-95 (Bridge No. 860123) has a median pier located within the Clear Zone with a horizontal clearance of approximately 10'-4". A concrete barrier is in place to protect the pier. The outer piers with horizontal clearance of approximately 30.04' are located within the Clear Zone, and no concrete barriers are in place to protect the piers.

For the bridges over SFRC railroad (Bridge Nos. 860553 and 860557), the pier on the west side of the rail has a horizontal clearance of 20'-5 3/4" less than 25 ft, and a crash wall is in place to protect the pier meeting the requirements of FDM, Section 220.3.2 and Structures Design Guidelines, Section 2.6.7. The bridges' piers along both sides of SW 12 Avenue are located within the Clear Zone with a horizontal clearance of 16'-8 3/4", and guardrails are in place along both sides of the street to protect the piers.

Vertical Clearance – FDM Section 260.6 defines the Vertical Clearance for bridges as the "least distance measured between the lowest bridge superstructure element and the traffic lane or shoulder directly below the element." Table 260.6.1 of the FDM lists the Minimum Vertical Clearance of a roadway bridge over a roadway as 16'-6", 23'-6" for a roadway bridge over a railroad. Per AASHTO article 2.3.3.2, the Minimum Vertical Clearance required is 16'-0". Five of the existing bridges, except the I-95 SB off-ramp over SW 10 Street (Br. No. 860564), do not meet the Minimum Vertical Clearance set by FDOT, two (2) bridges (Br. Nos. 860194 & 860124) do not meet the Minimum Vertical Clearance set by AASHTO. The Minimum Vertical Clearance for each bridge is summarized in **Table 2-3**, **Table 2-4**, and **table 2-5** above.

2.7 Roadway Geometric Characteristics

2.7.1 Horizontal Alignment

The existing horizontal alignment was reviewed and evaluated to verify if the existing facility meets the current design standards for horizontal curves and sight distance. The design elements reviewed during the evaluation of the existing horizontal alignment conditions include curve radius, curve length, stopping sight distance (SSD), and superelevation of the roadway surface.

2.7.1.1 I-95

I-95 mainline contains one horizontal curve within the study limits. The curve occurs at the Hillsboro Boulevard interchange. The following **Table 2-6** contains the horizontal curve data.

Table 2-6 Horizontal Alignment I-95							
Standard/Location	Station	Radius	Length	Degree	Deflection Angle	Superelevation	Stopping Sight Distance
FDM (65mph)	-	7639	1950	00°45'00"	-	0.025	360
Hillsboro Boulevard Interchange	PC 1393+75.35 PI 1406+27.93 PT 1418+58.41	7639.44	2483.06	00°45'00"	18°37'22" (LT)	0.030	1050

2.7.1.2 SW 10 Street

With the exception of the interchange at I-95, as built plans for SW 10 Street were not available. Within the Limited Access right of way, SW 10 Street contains one horizontal curve over I-95. Observation of survey data outside of the Limited Access right of way shows various deflections/curves that appear to not meet FDM criteria.

The following **Table 2-7** contains the horizontal curve data for the one curve within the Limited Access right of way.

Table 2-7 Horizontal Alignment – SW 10 Street							
Standard/Location	Station	Radius	Length	Degree	Deflection Angle	Superelevation	Stopping Sight Distance
FDM (45mph)	-	2865	675	02°00'00"	-	NC	730
I-95 Interchange	PC 20+56.79 PI 23+33.19 PT 26+09.57	22918.31	552.78	00°15'00"	1°22'55" (LT)	NC	1816

2.7.1.3 Hillsboro Boulevard

Hillsboro Boulevard contains no horizontal curves within the study limits. Therefore, Hillsboro Boulevard meets the current design standards for horizontal curves and sight distance.

2.7.2 Vertical Alignment

The existing vertical alignment was reviewed and evaluated to verify if the existing alignment meets the current design standards for vertical curves and sight distance. The following components were verified during the review: percent grade, changes in grade, stopping sight distance, length of vertical curve and K value.

The minimum K value set forth in the FDM Part 2, Chapter 210 Section 2.10.2 are based on the minimum stopping sight distance criteria.

2.7.2.1 I-95

I-95 mainline contains one vertical curve within the study limits. The curve occurs at the Hillsboro Boulevard interchange. The following **Table 2-8** contains the vertical curve data.

Table 2- 8 Vertical Alignment I-95							
Standard/ Location	Station	Grade Back (%)	Grade Ahead (%)	Length (Sag) (ft)	Length (Crest) (ft)	K Value (Sag)	K Value (Crest)
FDM (65mph)	-	3	3	800	1800	157	313
Hillsboro Boulevard	PC 1404+33.49 PI 1411+33.49 PT 1418+33.49	2.5	2.68	-	1400	-	270

2.7.2.2 SW 10 Street I-95

SW 10 Street contains two vertical curves within the study limits. The curves occur at the SFRC railroad crossing and I-95 interchange. The following **Table 2-9** contains the vertical curve data.

Table 2-9 Vertical Alignment – SW 10 Street							
Standard/ Location	Station	Grade Back (%)	Grade Ahead (%)	Length (Sag) (ft)	Length (Crest) (ft)	K Value (Sag)	K Value (Crest)
FDM (45mph)	-	6	6	135	135	79	98
SFRC Railroad	PC 181+85.30 PI 183+95.30 PT 186+05.30	1.67	1.67		420		125.75
I-95 Interchange	PC 20+10.30 PI 24+10.30 PT 28+10.30	5	5		800		80

2.7.2.3 Hillsboro Boulevard

Hillsboro Boulevard contains no vertical curves within the study limits.

2.7.3 Posted Speed

The posted speed limit for I-95 is 65 mph. The posted speed limit for SW 10 Street is 35 mph EB between Military Trail and Natura/FAU Research Park Boulevard and 45 mph WB. The posted speed limit for Hillsboro Boulevard is 40 mph.

2.7.4 Design Speed

The design speed for I-95 is 65 mph. The design speed for SW 10 Street is 35 mph EB between Military Trail and Natura/FAU Research Park Boulevard and 45 mph WB. The design speed for Hillsboro Boulevard is 40 mph.

2.7.5 Pavement Condition

FDOT performs annual surveys of the entire State Highway System in support of the Department's Pavement Management Program. The data collected (in terms of crack, ride, and rut measurements) is used to assess the condition and performance of the State's roadways as well as to predict future rehabilitation needs.

2.7.5.1 I-95

The existing pavement type along I-95 is asphalt pavement (FC-5). Based on data obtained from the Pavement Condition Survey, I-95 was last resurfaced in 2008. The NB lanes along I-95 have adequate pavement ratings. The SB lanes along I-95 has

adequate pavement ratings for Rideability and Rutting. I-95 is currently under construction to add lanes for I-95 Express within the limits of this study (FM 433108-6, Phase 3B-1) and will be completely resurfaced as part of that project.

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2.7.5.2 SW 10 Street

The existing pavement type along SW 10 Street is asphalt pavement (FC-9.5). Based on data obtained from the Pavement Condition Survey, SW 10 Street was last resurfaced in 2014. Both the EB and WB lanes have adequate pavement ratings.

2.7.5.3 Hillsboro Boulevard

The existing pavement type along Hillsboro Boulevard is asphalt pavement (FC-9.5). Within the limits of this study, Hillsboro Boulevard was last resurfaced in 2017 (FM 430602-1). Therefore, both the EB and WB lanes have adequate pavement ratings.

2.7.6 Multi-Modal Facilities

Multi-modal facilities include pedestrian and bicycle features as well as existing transit services along each I-95, SW 10 Street and Hillsboro Boulevard.

2.7.6.1 Pedestrian

Continuous sidewalks exist on the north and south side of SW 10 Street and Hillsboro Boulevard. I-95 is limited access facility and as such does not provide sidewalks along the corridor.

2.7.6.2 Bicycle

Continuous bicycle lanes exist on the north and south side of SW 10 Street and Hillsboro Boulevard. I-95 is limited access facility and as such does not provide bicycle facilities along the corridor.

2.7.6.3 Transit

No designated transit services including Broward County Transit (BCT) Routes or commuter rail services are provided on the I-95 corridor or within the area of the SW 10 Street interchange.

Hillsboro Boulevard is serviced by BCT Route #48, which provides a connection from SR 7 to Deerfield Beach including a direct connection to the Deerfield Beach Station located just west of the Hillsboro interchange (**Figure 2-19**).

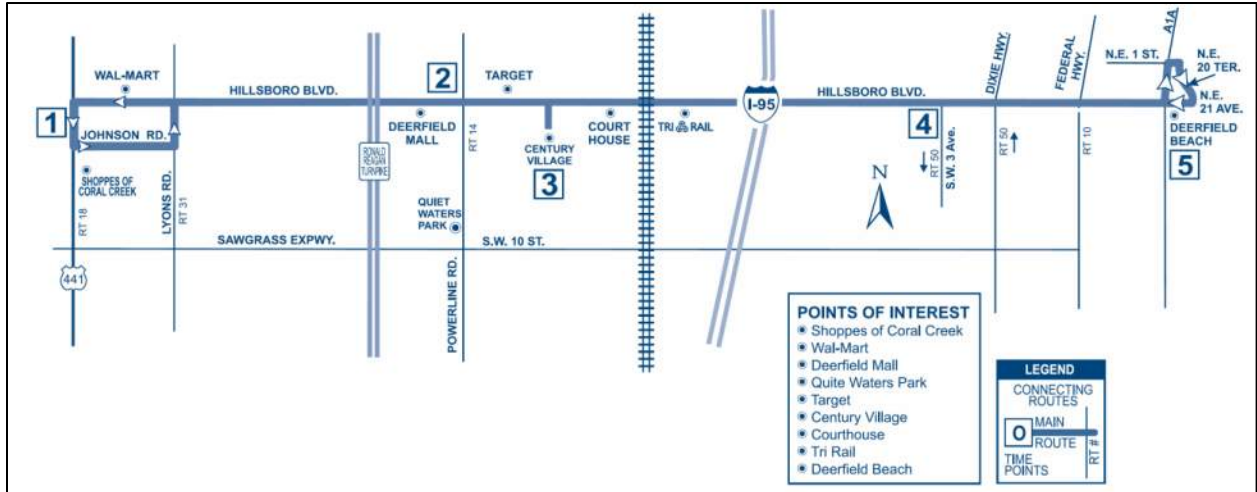


Figure 2-19 BCT Route 48

The Deerfield Beach Station provides commuter rail service for Tri-Rail and Amtrak which provide connections south to Miami-Dade County including Tri-Rail’s southernmost terminus at Miami Airport Station (Miami Intermodal Center) and Amtrak’s southernmost terminus at Miami Station, and to the north with Tri-Rail’s northernmost terminus in West Palm Beach at Mangonia Park Station and Amtrak providing service throughout the state of Florida (Figure 2-20).



Figure 2-20 Deerfield Beach Station

2.7.7 Intersections and Interchanges

The following **Figure 2-21** depicts the existing roadway and lane configurations for the I-95 corridor including interchanges with SW 10 Street and Hillsboro Boulevard.

Table 2-10 lists the locations of signalized intersections along SW 10 Street and the Hillsboro Boulevard corridors.

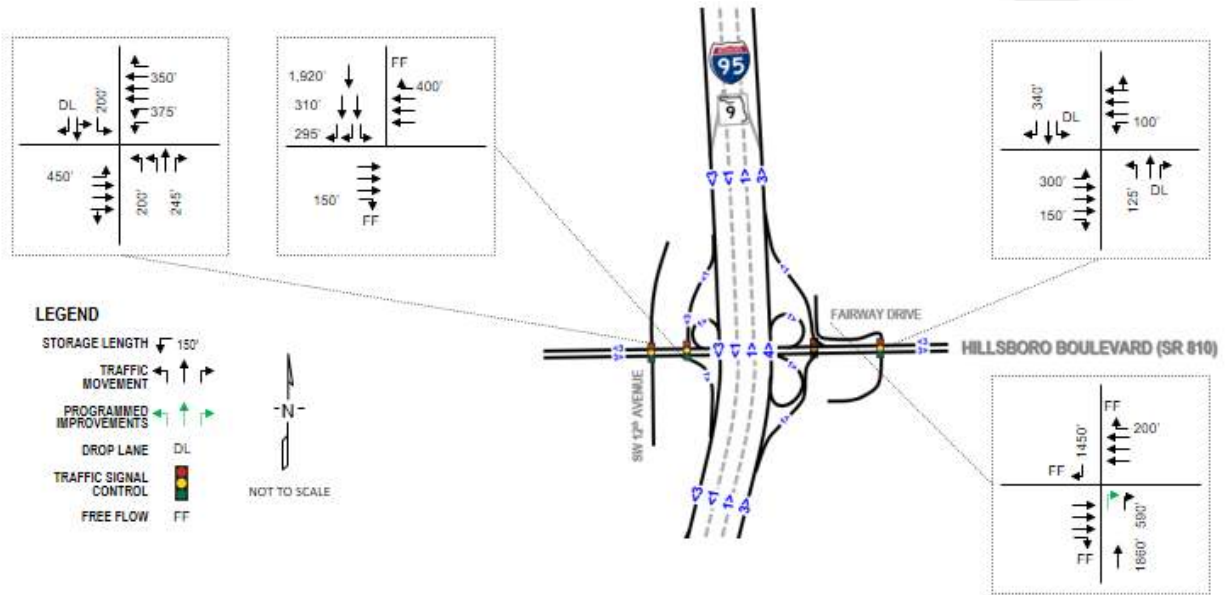
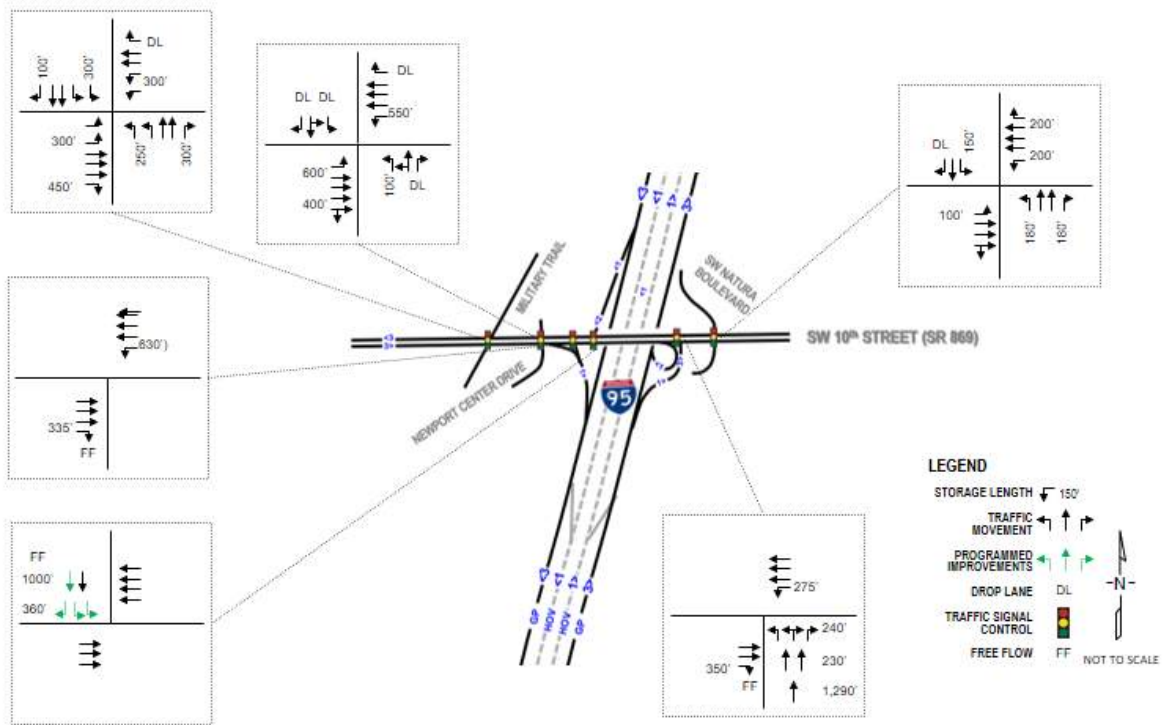
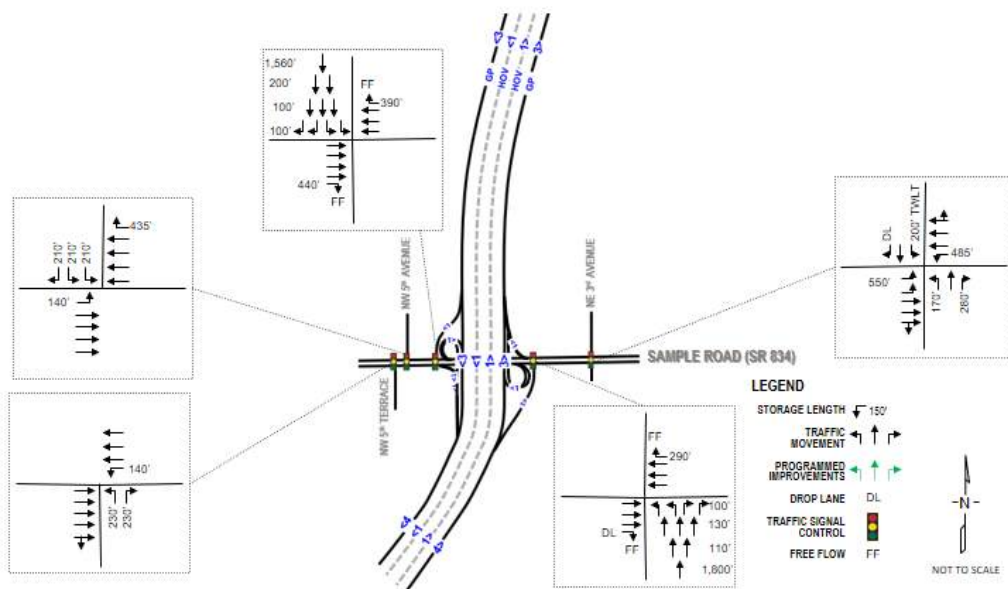


Figure 2-21 Existing Roadway and Intersection Lane Configurations Hillsboro Boulevard



**Figure 2-22 Existing Roadway and Intersection Lane Configurations
SW 10 Street**



**Figure 2-23 Existing Roadway and Intersection Lane Configurations
Sample Road**

Table 2-10 Signalized Intersections			
Hillsboro Boulevard			
Intersection	Type	Technology	Operational Considerations
Jim Moran Boulevard / SW 12 Avenue	Mast Arm	Standard	All directions of traffic
I-95 (West side of interchange)	Dual Mast Arm	Standard	SB off-ramp / WB traffic
Fairway Drive / Natura Boulevard	Concrete Strain Pole	Standard	All directions of traffic
SW 10 Street			
Military Trail	Concrete Strain Pole	Standard	All directions of traffic
E Newport Center Drive	Concrete Strain Pole	Standard	All directions of traffic
I-95 (West side of interchange)	Single Mast Arm	Standard	EB traffic
I-95 (West side of interchange)	Single Mast Arm	Standard	WB traffic
I-95 (West side of interchange)	Dual Mast Arm	Standard	SB to EB off-ramp traffic
I-95 (East side of interchange)	Mast Arm	Standard	EB traffic
I-95 (East side of interchange)	Dual Mast Arm	Standard	WB traffic / off-ramp traffic
SW Natura Boulevard	Concrete Strain Pole	Standard	All directions of traffic

2.7.8 Physical and Operational Restrictions

The South Florida region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as an area with a high degree of vulnerability to hurricanes and the Florida Division of Emergency Management has designated specific evacuation routes through the region. Both SW 10 Street and Hillsboro Boulevard are designated as emergency evacuation routes from I-95 to SR 5/US-1 and A1A. I-95 is designated as an emergency evacuation route throughout Broward County.

2.8 Existing Traffic Data

2.8.1 Existing Traffic Volumes

FDOT District 4 provided existing 2016 volumes that had been summarized in the Traffic Data Collection & Traffic Projections for I-95 PD&E Study from SW 10 Street

to Hillsboro Boulevard, dated May 19, 2016. The data collection effort was completed March 8 through March 10, 2016.

As part of the SW 10 Street Connector PD&E Study (FPID 439891-1), a comparison of these volumes with volumes from previous studies revealed significant differences. In most cases, the District's March 2016 data showed lower volumes. To address the discrepancies and to supplement existing data, additional 4-hour turning movement counts were conducted at 16 locations and 2-day to 7-day directional machine counts were collected at 3 locations. These additional counts were collected by Florida's Turnpike Enterprise (FTE) between October 18 and October 25, 2016. The locations and summaries are documented in the SW 10 Street PD&E Project Traffic Forecast Memorandum dated September 2018 prepared by FTE and included here for reference.

The additional counts verified that the March 2016 data presented lower volumes. Therefore, adjustments were made to develop balanced existing 2016 traffic volumes throughout the study area. I-95 ramp volumes were adjusted to volumes obtained as part of the Broward County Interchange Master Plan reports.

Figure 2-22 presents a summary of the balanced 2016 existing traffic volumes. The raw traffic counts and the existing signal timing are provided in The Systems Interchange Modification Report included here by reference. These volumes are consistent with the ongoing SW 10 Street Connector PD&E Study.

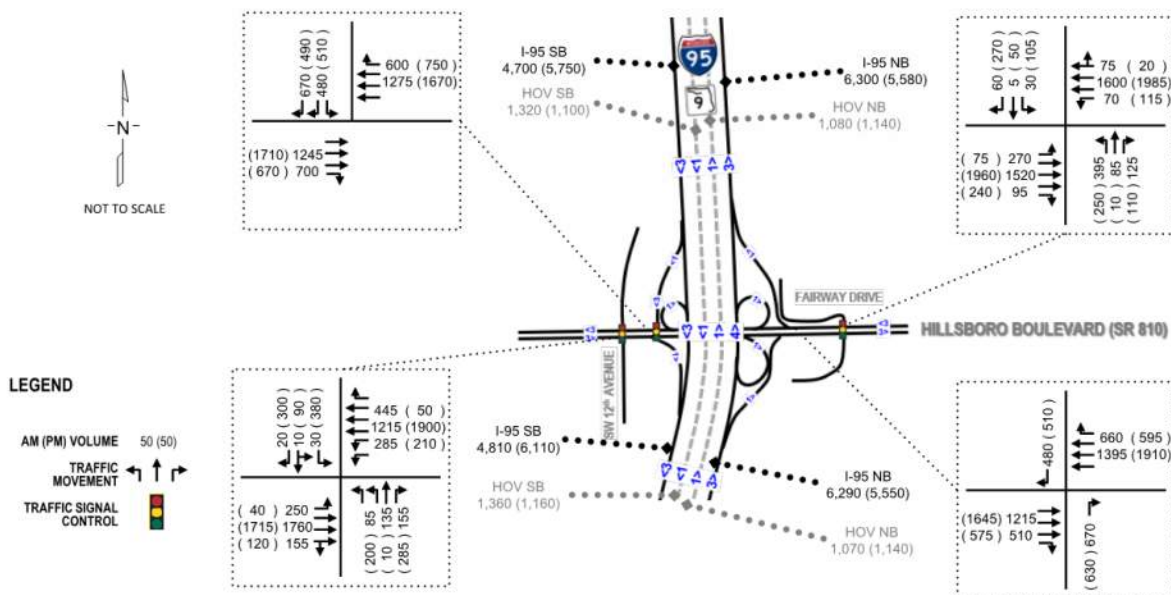


Figure 2-24 Existing Traffic Volumes – Hillsboro Boulevard

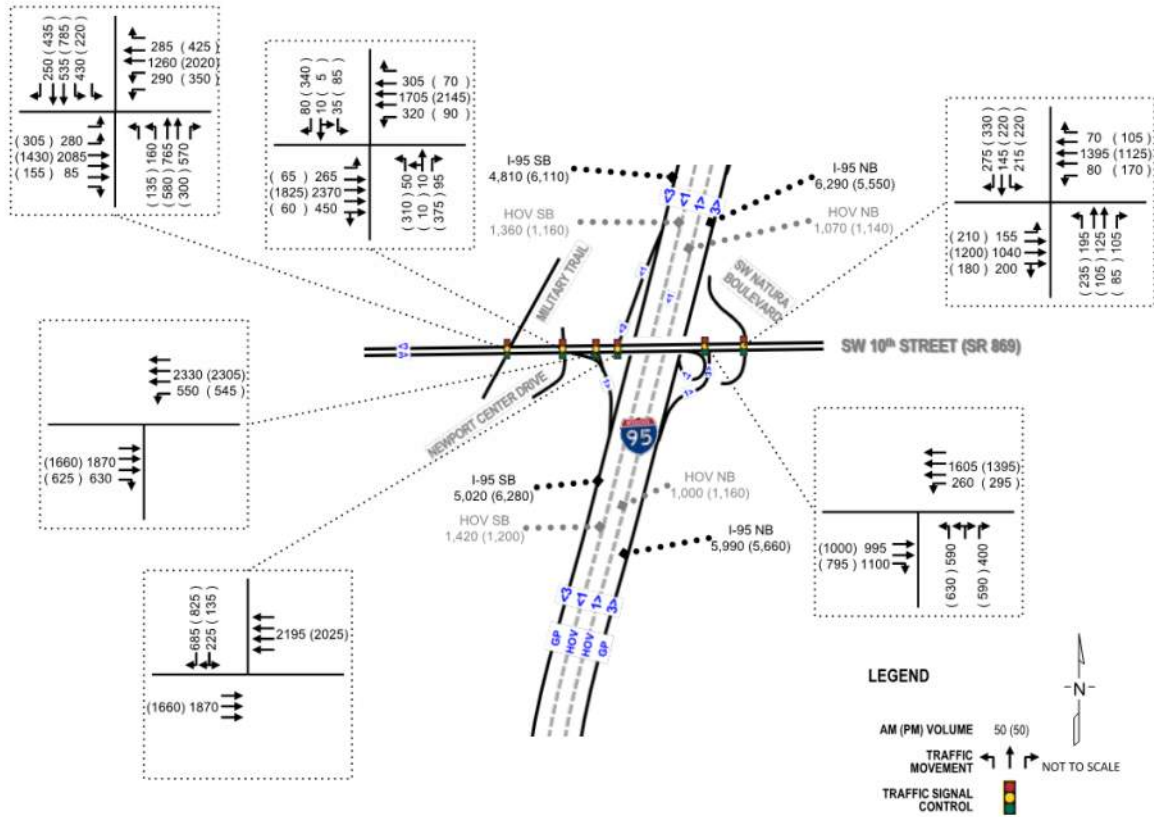


Figure 2-25 Existing Traffic Volumes – SW 10 Street

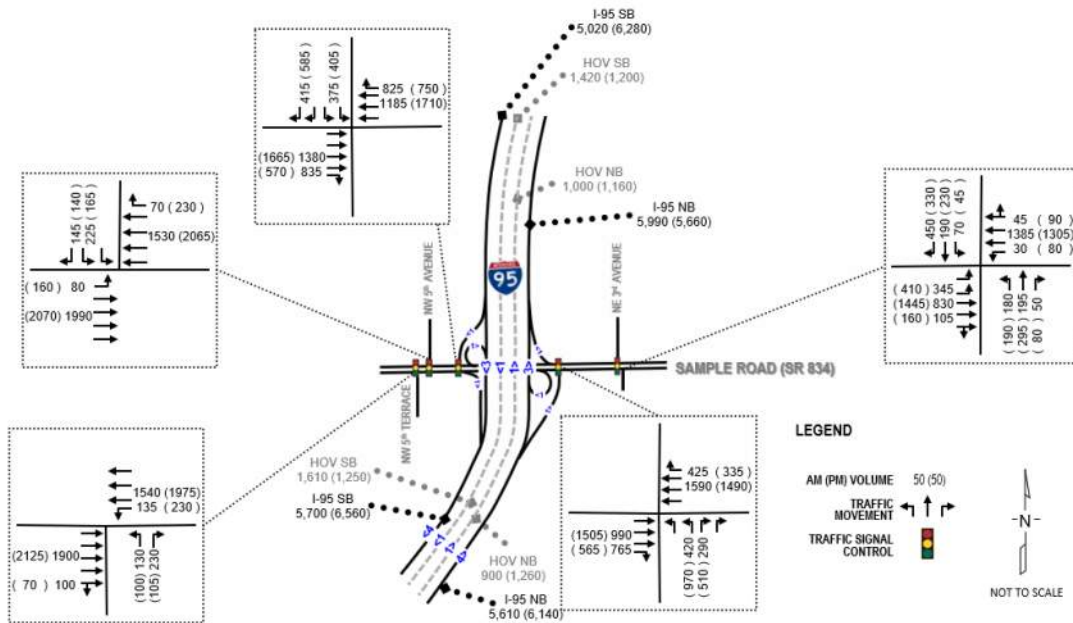


Figure 2-26 Existing Traffic Volumes – Sample Road

2.9 Roadway Operational Conditions

Traffic operational analyses were performed for the existing conditions and future No-Action alternative. Analyses were performed using the Highway Capacity Software (HCS2010), Version 6.60 and Synchro Version 9. HCS2010 was used for operational analyses of freeway segments - mainline, ramps, merge, diverge and weaving segments. Synchro analyses were performed for adjacent signalized intersections and interchange ramp terminal intersections. The HCS and Synchro operations analyses were performed for the following conditions:

- Existing year 2016 conditions, AM and PM peak hours
- Year 2020 conditions for No-Build, AM and PM peak hours
- Year 2040 No-Build, AM and PM peak hours

Design Hour Truck (DHT) values were calculated based on historical data from the FDOT count sites within the study area, mechanical classification counts and turning movement counts were conducted as part of the I-95 PD&E Study data collection efforts. Peak hour values from mechanical counts were calculated as half the daily value in accordance with the FDOT Project Traffic Forecasting Handbook. The calculated DHT used for the I-95 mainline was 3.0%. The calculated DHT used was 2.0% for the ramps and for the interchange cross-streets.

The measure of effectiveness used to estimate the LOS was density and volume to capacity ratio. The LOS for each freeway segment was determined using the corresponding HCS Freeways, Weaving or Ramps modules when applicable. When required by the specific geometry of a segment, additional ramp roadway (capacity checks) and/or major diverge analyses were conducted. Similarly, overlapping influence areas of on-ramp and off-ramp segments were analyzed both ways and the most restrictive output was reported. The upstream density of the major diverge areas was estimated using Equation 13-26 of the HCM. The capacity checks were documented as under capacity (Under) or over capacity (Over).

The HOV lane and corresponding volumes were excluded for the HCS analysis in order to be able to analyze the operating conditions of the general purpose lanes. The HOV lane demand was based on the data collection and analysis documented in the 2010 I-95 High-Occupancy Vehicle Lane Monitoring Report, dated May 2011. The report documents that the HOV NB lane demand is approximately 16% of the total traffic for the AM and PM peak hours and the HOV SB lane demand is approximately 16% and 18% for AM and PM peak hours, respectively. The percentile demand was applied

to the provided existing volumes. Documentation of the existing traffic freeway operational analysis is provided in detail in the I-95/SW 10 Street SIMR study. The results indicate that eight (8) of the sixteen (16) NB freeway segments in the study area operate at LOS E or F during one or both of the peak hours and three (3) of the fifteen (15) SB freeway segments in the study area operate at LOS E only during the PM peak hour.

2.10 Safety Analysis

The safety analysis included the evaluation of crash data for the freeway segment along I-95 as well as the arterial segments along SW 10 Street and Hillsboro Boulevard within the limits of the project shown in **Table 2-11**.

Table 2-11 Limits for the Safety Analysis				
Road Name	Roadway ID	Segment	BMP	EMP
SW 10 Street	86012000	SW 10 Street from SW 24 Avenue to just east of I-95	1.014	2.152
I-95	86070000	I-95 from NE 48 Street to Hillsboro Canal	22.625	25.334
Hillsboro Boulevard	86120000	Hillsboro Boulevard from Century Boulevard to Natura Boulevard	4.465	5.712

Crash data was obtained from the FDOT Crash Analysis Reporting System (CARS) for the five-year analysis period from 2011 to 2015.

The analysis also looked at identifying major hotspots with crash accumulations, as described in the following sections.

2.10.1 I-95

Table 2-12 and **Figure 2-23** show the summary of crashes between 2011 and 2015 along I-95. A total of 1,429 crashes were recorded for the section of I-95 (Roadway ID: 86070000) between NE 48 Street (MP 22.625) and Hillsboro Canal (MP 25.334). A total of 223 of those crashes took place in 2011, 229 in 2012, 295 in 2013, 327 in 2014 and 355 in 2015. Based on the distribution of crashes by year it can be concluded that crashes along I-95 have increased in the last five years of available data. Crashes between 2011 and 2015 had an average growth rate of 13 percent.

Based on the crash severity, out of the 1,429 crashes reported, a total of 873 or 61 percent were property damage only (PDO) a total of 549 or 38 percent resulted in

injuries and 7 crashes resulted in fatalities. **Table 2-13** shows the location of the fatal crashes.

Based on crash type distribution it can be concluded that rear-end crashes are the most common type of crash along SW 10 Street with 834 crashes or 58 percent followed by sideswipe crashes with 194 or 39 percent and fix object crashes with 166 or 33 percent. The relatively high percentage of crashes could be an indication of unfavorable conditions within merging and weaving areas.

The lighting conditions recorded at the time of the crashes indicate that 67 percent of the crashes occurred during daylight conditions while the remaining 23 percent occurred at dusk, dawn or at night, which is lower than the 33 percent State average during the same period (2011-2015) according to Florida's Integrated Report Exchange System (FIRES). The surface conditions reveal that 74 percent of the crashes occurred on a dry surface while the remaining 26 percent took place while the pavement was wet, which is higher than the 15 percent State average. Drainage conditions should be inspected along the corridor to discard any connection between the number of crashes on wet pavement and the conditions of the road. The distribution of crashes by day indicate that most of the crashes take place during weekdays. The distribution of crashes by hour indicate that most of the crashes take place during the peak periods (21 percent between 6:00 and 9:00 AM and 25 percent between 3:00 and 6:00 PM) and at night (24 percent between 6:00 PM and midnight).

Table 2-12 Five Year Crash Summary for I-95									
I-95 from NE 48 Street to Hillsboro Canal		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2011	2012	2013	2014	2015			
CRASH TYPE	Rear End	118	118	179	197	222	834	167	58.4%
	Head On	0	0	0	0	0	0	0	0.0%
	Angle	15	9	9	8	12	53	11	3.7%
	Left Turn	0	0	0	0	0	0	0	0.0%
	Right Turn	0	0	0	0	0	0	0	0.0%
	Sideswipe	33	36	41	40	44	194	39	13.6%
	Backed Into	1	0	0	0	0	1	0	0.1%
	Pedestrian	0	0	0	1	0	1	0	0.1%
	Bicycle	0	0	0	0	0	0	0	0.0%
	Fixed Object	30	28	30	33	45	166	33	11.6%
	Other Non-Fixed Object Collisions	4	13	6	14	5	42	8	2.9%
	Non-Collisions	11	16	9	12	9	57	11	4.0%
	Others	11	9	21	22	18	81	16	5.7%
	Total Crashes	223	229	295	327	355	1,429	286	100.0%
SEVERITY	PDO Crashes	121	138	176	211	227	873	175	61.1%
	Fatal Crashes	2	2	2	0	1	7	1	0.5%
	Injury Crashes	100	89	117	116	127	549	110	38.4%
LIGHTING CONDITIONS	Daylight	135	156	205	218	247	961	192	67.2%
	Dusk	4	6	4	13	9	36	7	2.5%
	Dawn	2	1	2	11	4	20	4	1.4%
	Dark	82	66	84	85	95	412	82	28.8%
	Unknown	0	0	0	0	0	0	0	0.0%
SURFACE CONDITIONS	Dry	153	177	214	247	263	1,054	211	73.8%
	Wet	70	52	81	80	92	375	75	26.2%
	Others	0	0	0	0	0	0	0	0.0%
DAY OF WEEK	Monday	29	33	52	43	59	216	43	15.1%
	Tuesday	42	28	49	48	66	233	47	16.3%
	Wednesday	34	30	49	82	43	238	48	16.7%
	Thursday	36	41	39	46	46	208	42	14.6%
	Friday	41	51	54	52	58	256	51	17.9%
	Saturday	20	23	31	36	46	156	31	10.9%
	Sunday	21	23	21	20	37	122	24	8.5%
HOUR OF DAY	00:00-06:00	22	22	22	38	43	147	29	10.3%
	06:00-09:00	42	44	72	69	71	298	60	20.9%
	09:00-11:00	12	9	26	22	21	90	18	6.3%
	11:00-13:00	8	14	17	16	21	76	15	5.3%
	13:00-15:00	9	30	15	23	40	117	23	8.2%
	15:00-18:00	63	56	70	81	89	359	72	25.1%
	18:00-24:00	67	54	73	78	70	342	68	23.9%

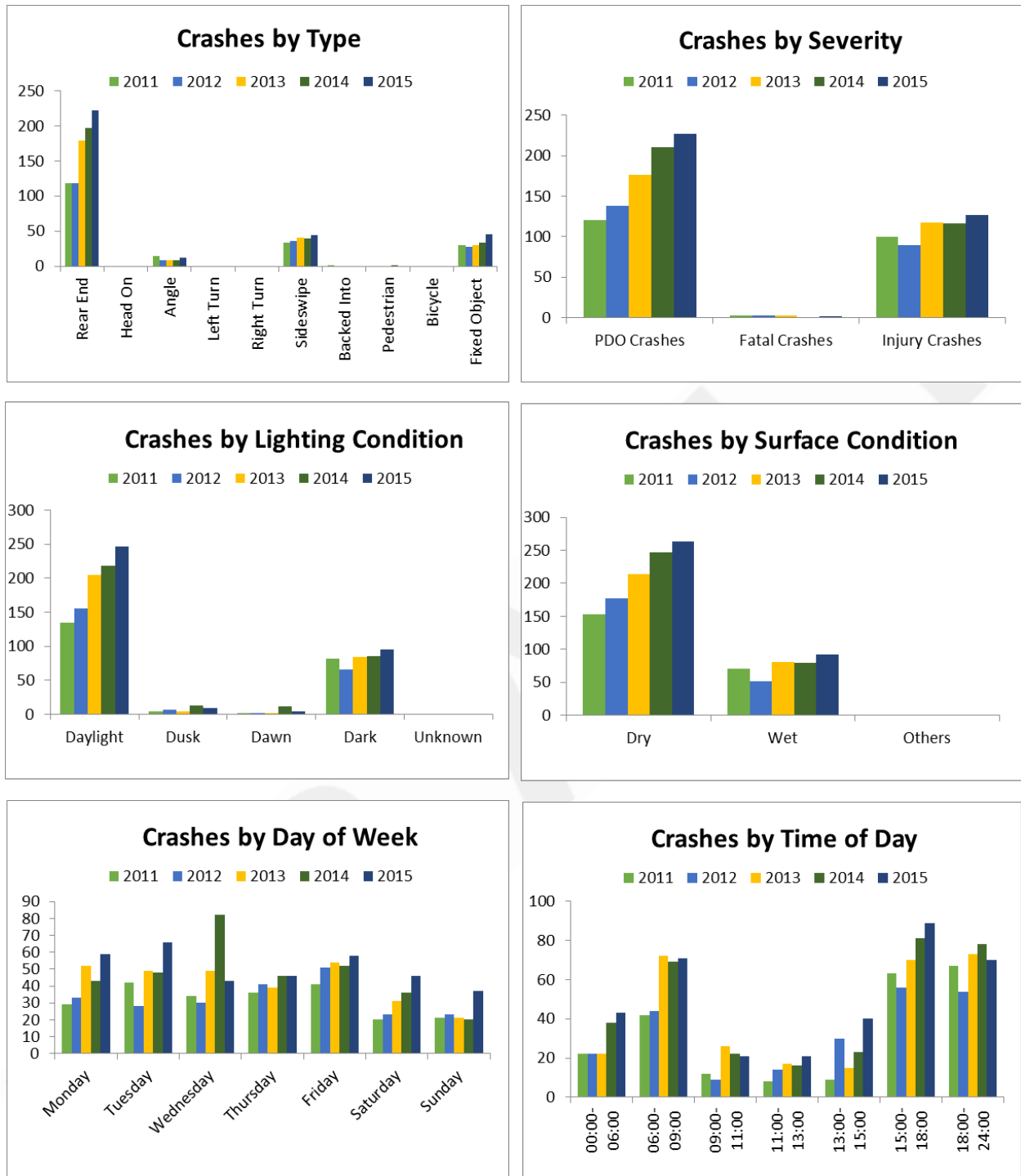


Figure 2-27 Five Year Crash Characteristics for I-95

Some of the description information shown in **Table 2-13** about the fatal crashes was found in FDOT State Safety Office Geographic Information System (SSOGis) Crash Query Tool.

Table 2-13 Fatal Crashes along I-95				
Crash No.	Year	Roadway ID	MP	Description
820871910	2011	86070000	23.665	Located on I-95 near SW 10 Street.
822706990	2011	86070000	23.933	Located just north of SW 10 Street along the NB direction of I-95.
829104240	2012	86070000	22.865	The crash took place on Saturday May 12 th at 8:26 AM just north of NW 48 Street along the NB direction of I-95.
820037480	2012	86070000	23.165	The crash took place on Sunday November 11 th at 1:45 PM between SW 10 Street and NW 48 Street on the SB direction of I-95.
832878780	2013	86070000	23.165	The crash took place on Monday April 1 st at 9:30 PM between SW 10 Street and NW 48 Street on the SB direction of I-95.
832686520	2013	86070000	24.392	The crash took place on Wednesday January 2 nd at 10:03 PM within the influence area of the SB I-95 on-ramp from Hillsboro Boulevard.
820121670	2015	86070000	25.262	The crash took place on Friday November 20 th at 10:40 PM within the influence area of the SB I-95 off-ramp to Hillsboro Boulevard.

Table 2-14 and **Figure 2-24** show the crash distribution by year and by milepost along I-95. The entire segment of I-95 was divided into 0.25-mile sections. The last section from mileposts 25.125 and 25.334 is slightly shorter than the other sections (approximately 0.21 mile). The data shows a higher concentration of crashes starting just south of the SW 10 Street interchange (MP 23.375) and ending just north of the Hillsboro Boulevard interchange (MP 25.125). The 0.25-mile segment with the highest number of crashes is located within the influence area of the Hillsboro Boulevard interchange between MP 24.375 and MP 24.625.

Table 2-14 Crash Distribution by Year and Milepost along I-95						
Section	2011	2012	2013	2014	2015	Total Crashes
22.625 to 22.875	6	10	9	14	10	49
22.875 to 23.125	3	2	1	5	1	12
23.125 to 23.375	8	7	24	21	15	75
23.375 to 23.625	25	31	35	43	36	170
23.625 to 23.875	23	17	25	38	37	140
23.875 to 24.125	28	27	33	23	35	146
24.125 to 24.375	24	24	40	37	33	158
24.375 to 24.625	33	32	34	49	44	192
24.625 to 24.875	32	24	39	38	96	229
24.875 to 25.125	24	33	37	36	27	157
25.125 to 25.334	9	17	12	13	12	63

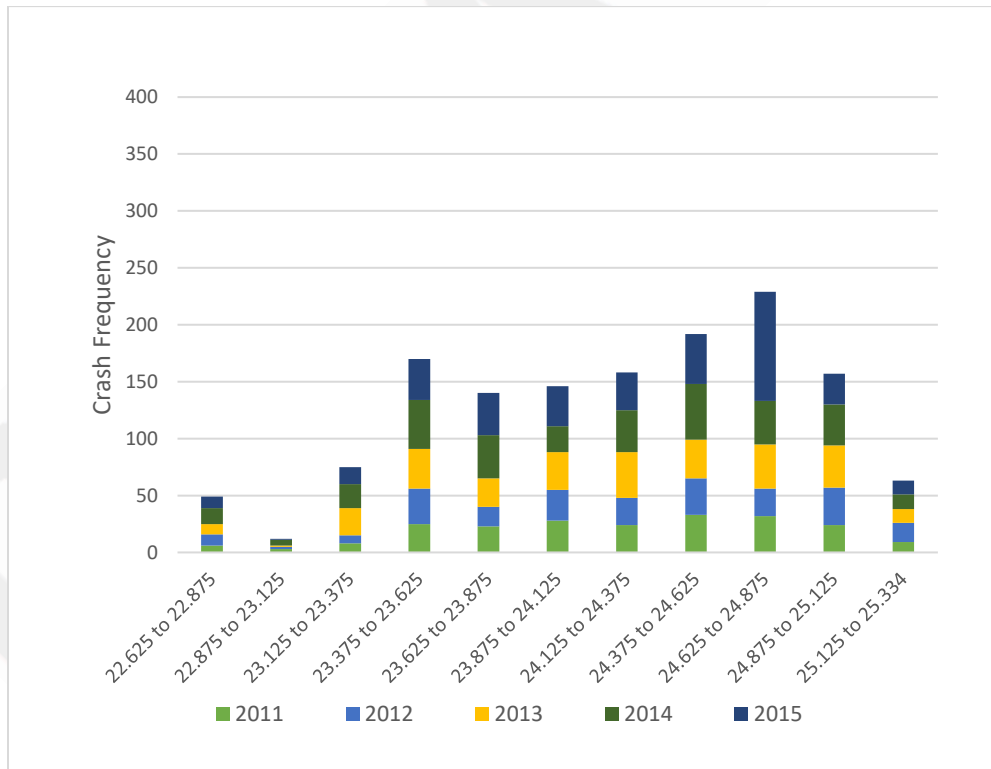


Figure 2-28 Crash Distribution by Year and Milepost along I-95

2.10.2 SW 10 Street

Table 2-15 and **Figure 2-25** show the summary of crashes between 2011 and 2015 along SW 10 Street. A total of 463 crashes were recorded for the section of SW 10 Street (Roadway ID: 86012000) between SW 24 Avenue (MP 1.014) and just east of I-95 (MP 2.152). A total of 65 of those crashes took place in 2011, 85 in 2012, 80 in 2013, 113 in 2014 and 120 in 2015. Based on the distribution of crashes by year it can be concluded that crashes along SW 10 Street have increased in the last five years of available data. Crashes between 2011 and 2015 had an average growth rate of 18 percent with a small decline between 2012 and 2013.

Based on the crash severity, out of the 463 crashes reported, a total of 289 or 62 percent were PDO, a total of 174 or 38 percent resulted in injuries and no crashes resulted in fatalities.

Based on crash type distribution it can be concluded that rear-end crashes are the most common type of crash along SW 10 Street with 260 crashes or 56 percent followed by angle and sideswipe crashes with 11 percent. It is important to mention that rear-end crashes are common on congested urban corridors.

The lighting conditions recorded at the time of the crashes indicate that 73 percent of the crashes occurred during daylight conditions while the remaining 27 percent occurred at dusk, dawn or at night, which is lower than the 33 percent State average during the same period (2011-2015) according to FIRES. The surface conditions reveal that 83 percent of the crashes occurred on a dry surface while the remaining 17 percent took place while the pavement was wet, which is slightly higher than the 15 percent State average. Drainage conditions should be inspected along the corridor to discard any connection between the number of crashes on wet pavement and the conditions of the road. The distribution of crashes by day indicate that most of the crashes take place during weekdays. The distribution of crashes by hour on the other hand indicate that most of the crashes take place during the afternoon or at night (22 percent took place between 3:00 and 6:00 PM while 23 percent between 6:00 PM and midnight).

The detailed crash data is provided in the Safety Analysis Technical Memorandum prepared as part of this study and included here by reference.

Table 2-15 Five Year Crash Summary for SW 10 Street									
SW 10 Street from SW 24 Avenue to just east of I-95		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2011	2012	2013	2014	2015			
CRASH TYPE	Rear End	41	49	43	56	71	260	52	56.2%
	Head On	0	0	1	0	0	1	0	0.2%
	Angle	6	11	9	14	12	52	10	11.2%
	Left Turn	4	1	3	8	6	22	4	4.8%
	Right Turn	0	0	0	0	2	2	0	0.4%
	Sideswipe	5	14	7	14	10	50	10	10.8%
	Backed Into	0	0	0	0	0	0	0	0.0%
	Pedestrian	0	0	0	0	1	1	0	0.2%
	Bicycle	0	0	1	0	1	2	0	0.4%
	Fixed Object	5	5	5	11	3	29	6	6.3%
	Other Non-Fixed Object Collisions	0	0	0	0	0	0	0	0.0%
	Non-Collisions	1	1	1	2	2	7	1	1.5%
	Others	3	4	10	8	12	37	7	8.0%
	Total Crashes	65	85	80	113	120	463	93	100.0%
SEVERITY	PDO Crashes	37	56	55	74	67	289	58	62.4%
	Fatal Crashes	0	0	0	0	0	0	0	0.0%
	Injury Crashes	28	29	25	39	53	174	35	37.6%
LIGHTING CONDITIONS	Daylight	56	60	57	77	89	339	68	73.2%
	Dusk	0	6	3	6	3	18	4	3.9%
	Dawn	1	3	0	1	1	6	1	1.3%
	Dark	8	16	20	29	27	100	20	21.6%
	Unknown	0	0	0	0	0	0	0	0.0%
SURFACE CONDITIONS	Dry	55	68	65	90	105	383	77	82.7%
	Wet	10	17	15	23	15	80	16	17.3%
	Others	0	0	0	0	0	0	0	0.0%
DAY OF WEEK	Monday	12	19	15	18	20	84	17	18.1%
	Tuesday	10	18	9	16	22	75	15	16.2%
	Wednesday	8	10	14	19	18	69	14	14.9%
	Thursday	13	9	8	20	18	68	14	14.7%
	Friday	14	20	14	17	22	87	17	18.8%
	Saturday	4	4	15	12	11	46	9	9.9%
	Sunday	4	5	5	11	9	34	7	7.3%
HOUR OF DAY	00:00-06:00	2	5	5	7	8	27	5	5.8%
	06:00-09:00	18	14	14	13	17	76	15	16.4%
	09:00-11:00	7	10	13	14	13	57	11	12.3%
	11:00-13:00	3	9	9	6	13	40	8	8.6%
	13:00-15:00	8	8	7	14	17	54	11	11.7%
	15:00-18:00	18	21	15	27	22	103	21	22.2%
	18:00-24:00	9	18	17	32	30	106	21	22.9%

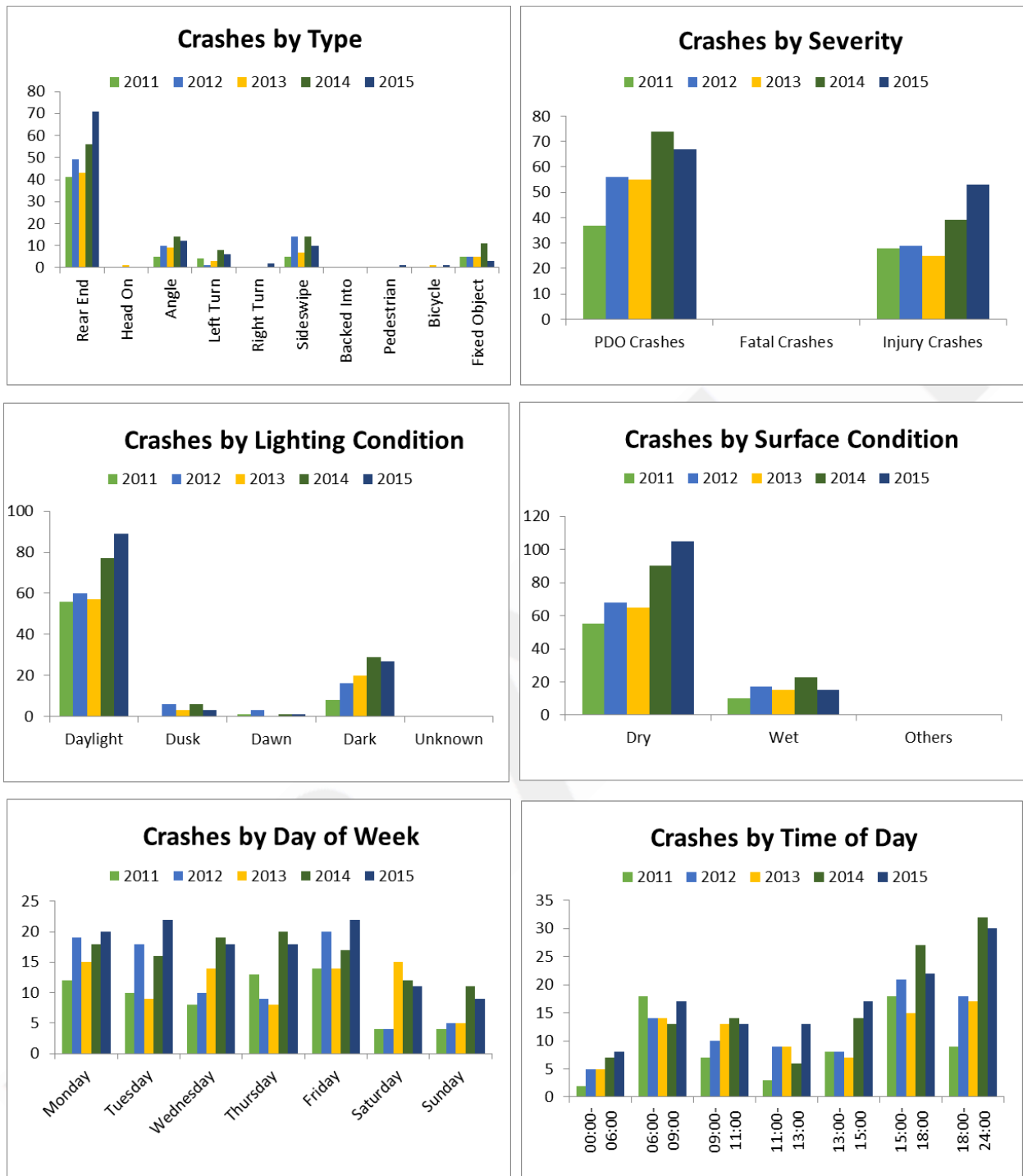


Figure 2-29 Five Year Crash Characteristics for SW 10 Street

Table 2-16 and **Figure 2-26** show the crash distribution by year and by milepost along SW 10 Street. The entire segment of SW 10 Street was divided into 0.25-mile sections. It is important to note that the last section from mileposts 2.014 and 2.152 is a relative short section (approximately 0.14 mile) and for that reason it only contains 45 crashes during the five years analyzed. The data shows two sections of roadway where most of the crashes are concentrated. The first section from MP 1.264 to MP 1.514 covers the area of the signalized intersection at Military Trail. The second section from MP 1.764 to MP 2.014 covers the area of the signalized intersections at E Newport Center Drive / SW 12 Avenue and at the SB I-95 ramps.

Table 2-16 Crash Distribution by Year and Milepost along SW 10 Street						
MP Section	2011	2012	2013	2014	2015	Total Crashes
1.014 to 1.264	1	2	4	4	1	12
1.264 to 1.514	18	28	23	33	40	142
1.514 to 1.764	1	2	1	0	2	6
1.764 to 2.014	24	26	32	32	43	157
2.014 to 2.152	5	13	5	13	9	45

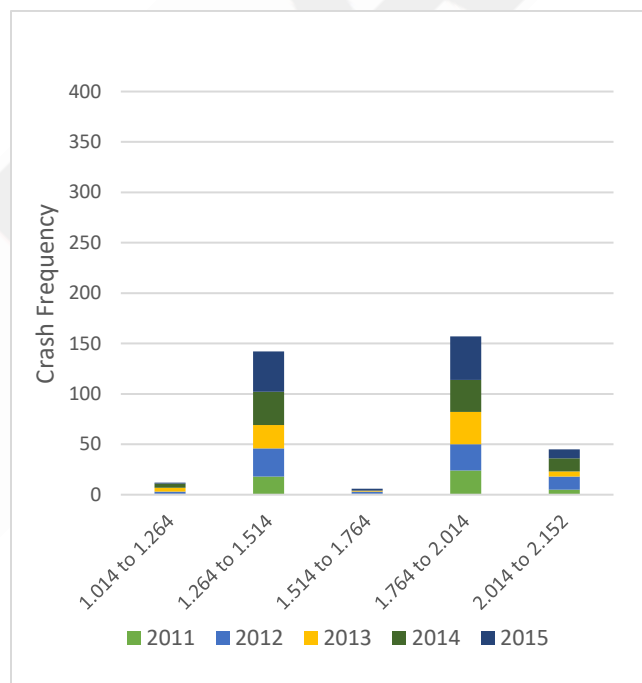


Figure 2-30 Crash Distribution by Year and Milepost along SW 10 Street

2.10.3 Hillsboro Boulevard

Table 2-17 and **Figure 2-27** show the summary of crashes between 2011 and 2015 along I-95. A total of 440 crashes were recorded for the section of Hillsboro Boulevard (Roadway ID: 86120000) between Century Boulevard (MP 4.465) and Natura Boulevard (MP 5.712). A total of 57 of those crashes took place in 2011, 105 in 2012, 87 in 2013, 85 in 2014 and 106 in 2015. Based on the distribution of crashes by year it can be concluded that crashes along Hillsboro Boulevard have increased in the last five years of available data. Crashes between 2011 and 2015 had an average growth rate of 22 percent.

Based on the crash severity, out of the 440 crashes reported, a total of 248 or 56 percent were PDO, a total of 188 or 43 percent resulted in injuries and 4 or 1 percent resulted in fatalities. **Table 2-18** shows the location of the fatal crashes.

Based on crash type distribution it can be concluded that rear-end crashes are the most common type of crash along Hillsboro Boulevard with 225 crashes or 51 percent followed by angle crashes with 58 or 13 percent. The relatively high percentage of angle crashes could be an indication of unfavorable operations at the signalized intersections.

The lighting conditions recorded at the time of the crashes indicate that 67 percent of the crashes occurred during daylight conditions while the remaining 23 percent occurred at dusk, dawn or at night, which is lower than the 33 percent State average during the same period (2011-2015) according to FIRES. The surface conditions reveal that 85 percent of the crashes occurred on a dry surface while the remaining 15 percent took place while the pavement was wet, which is equal to the 15 percent State average. The distribution of crashes by day indicate that most of the crashes take place during weekdays. The distribution of crashes by hour indicate that most of the crashes take place during the peak afternoon and evening hours (24 percent between 3:00 and 6:00 PM and 28 percent between 6:00 PM and midnight).

Table 2-17 Five Year Crash Summary for Hillsboro Boulevard									
Hillsboro Boulevard from Century Boulevard to Natura Boulevard		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2011	2012	2013	2014	2015			
CRASH TYPE	Rear End	28	55	50	43	49	225	45	51.1%
	Head On	0	0	0	1	0	1	0	0.2%
	Angle	5	11	12	14	16	58	12	13.2%
	Left Turn	0	1	1	3	3	8	2	1.8%
	Right Turn	1	0	0	1	2	4	1	0.9%
	Sideswipe	6	9	7	5	12	39	8	8.9%
	Backed Into	0	0	0	0	1	1	0	0.2%
	Pedestrian	1	2	2	3	2	10	2	2.3%
	Bicycle	3	2	1	1	4	11	2	2.5%
	Fixed Object	7	10	9	7	9	42	8	9.5%
	Other Non-Fixed Object Collisions	0	0	2	2	1	5	1	1.1%
	Non-Collisions	0	0	2	3	3	8	2	1.8%
	Others	6	15	1	2	4	28	6	6.4%
	Total Crashes	57	105	87	85	106	440	88	100.0%
SEVERITY	PDO Crashes	33	63	51	42	59	248	50	56.4%
	Fatal Crashes	2	0	0	1	1	4	1	0.9%
	Injury Crashes	22	42	36	42	46	188	38	42.7%
LIGHTING CONDITIONS	Daylight	34	65	60	55	80	294	59	66.8%
	Dusk	0	4	3	3	3	13	3	3.0%
	Dawn	3	2	0	3	0	8	2	1.8%
	Dark	20	34	23	24	23	124	25	28.2%
	Unknown	0	0	1	0	0	1	0	0.2%
SURFACE CONDITIONS	Dry	50	90	72	68	94	374	75	85.0%
	Wet	7	15	15	17	12	66	13	15.0%
	Others	0	0	0	0	0	0	0	0.0%
DAY OF WEEK	Monday	14	16	10	20	18	78	16	17.7%
	Tuesday	12	9	13	10	28	72	14	16.4%
	Wednesday	9	10	14	11	15	59	12	13.4%
	Thursday	8	15	13	13	16	65	13	14.8%
	Friday	6	29	17	13	11	76	15	17.3%
	Saturday	3	13	16	13	9	54	11	12.3%
	Sunday	5	13	4	5	9	36	7	8.2%
HOUR OF DAY	00:00-06:00	4	12	7	8	5	36	7	8.2%
	06:00-09:00	5	9	10	8	13	45	9	10.2%
	09:00-11:00	2	14	8	9	9	42	8	9.5%
	11:00-13:00	3	6	11	9	12	41	8	9.3%
	13:00-15:00	6	13	6	8	15	48	10	10.9%
	15:00-18:00	18	20	21	18	30	107	21	24.3%
	18:00-24:00	19	31	24	25	22	121	24	27.5%

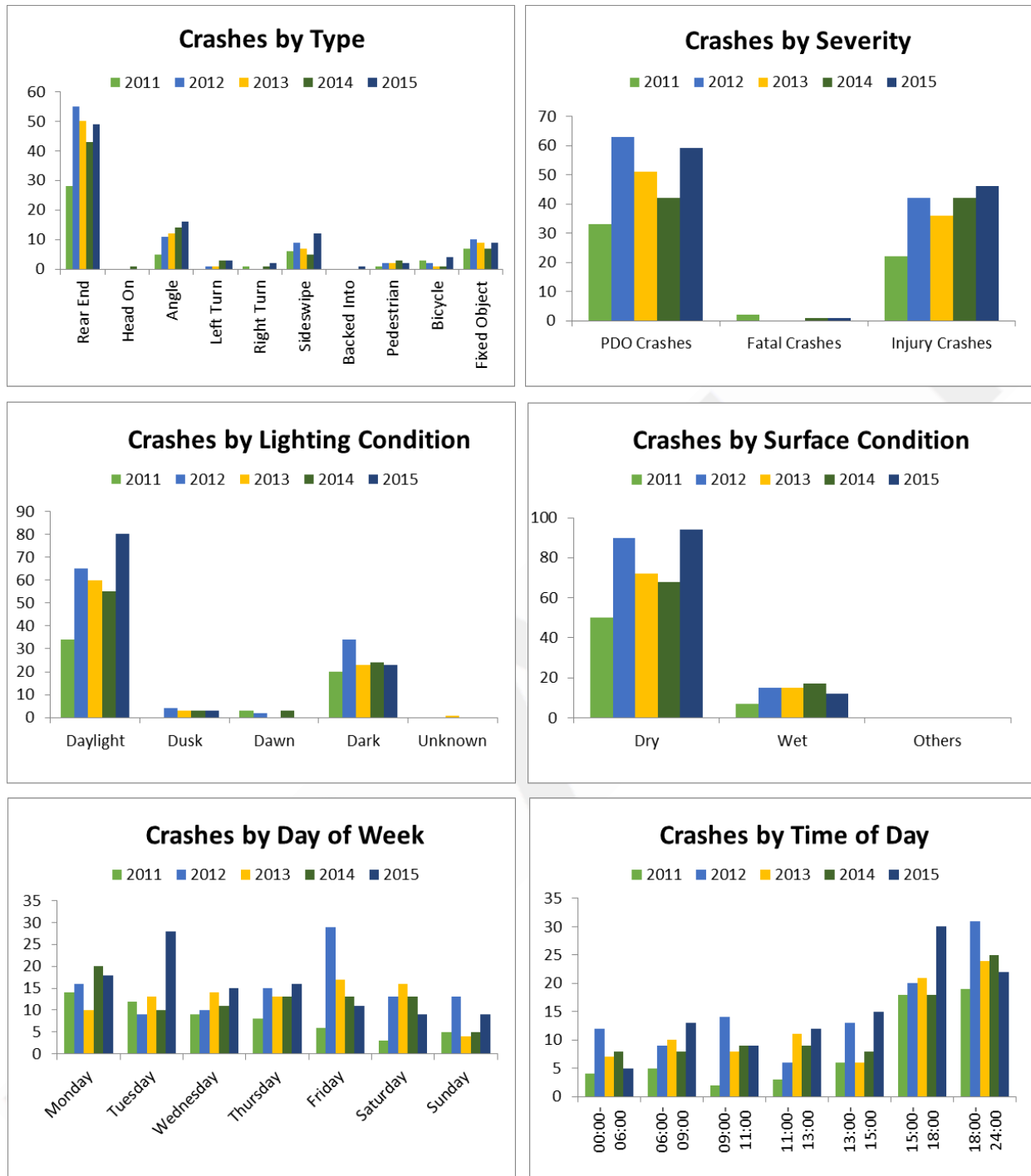


Figure 2-31 Five Year Crash Characteristics for Hillsboro Boulevard

Table 2-18 Fatal Crashes along Hillsboro Boulevard				
Crash No.	Year	Roadway ID	MP	Description
827429420	2011	86120000	5.712	The crash took place at the intersection of Hillsboro Boulevard and Natura Boulevard.
906725940	2011	86120000	5.636	The crash took place along the EB direction of Hillsboro Boulevard, just west of the intersection at Hillsboro Boulevard and Natura Boulevard.
843934590	2014	86120000	5.117	The crash took place on Tuesday April 22 nd at 6:41 AM at the intersection of Hillsboro Boulevard and SW 12 Avenue/Jim Moran Boulevard.
847530960	2015	86120000	4.465	The crash took place on Friday May 15 th at 10:17 AM at the intersection of Hillsboro Boulevard and Century Boulevard.

Table 2-19 and **Figure 2-28** show the crash distribution by year and by milepost along Hillsboro Boulevard. The entire segment of Hillsboro Boulevard was divided into 0.25-mile sections. The data shows that a high concentration of crashes take place between MP 4.465 and MP 4.715 which covers the signalized intersections at Century Boulevard, Military Trail, and Goolsby Boulevard. This coincides with the high percentage of angle crashes which is generally related to the operation at the intersections.

Table 2-19 Crash Distribution by Year and Milepost along Hillsboro Boulevard						
MP Section	2011	2012	2013	2014	2015	Total Crashes
4.465 to 4.715	18	32	19	20	33	122
4.715 to 4.965	13	25	24	17	16	95
4.965 to 5.215	8	25	20	20	18	91
5.215 to 5.465	2	3	2	7	8	22
5.465 to 5.712	10	16	8	13	17	64

- Property Damage Only (O) \$7,700

Using these values, the annual economic loss was estimated as follows:

$$\begin{aligned}
 \text{Annual Economic Loss} &= (\text{fatal crashes} \times \$10,670,000 + \text{injury crashes} \times \\
 &\quad \$383,615 + \text{property damage only} \times \$7,700) / \text{no. of years} \\
 &= \{[(11) \times \$10,670,000 + (911) \times \$383,615 + (1,410) \times \\
 &\quad \$7,700]\} / 5 \\
 &= \mathbf{\$95,540,053} \text{ (\$95.5 million)}
 \end{aligned}$$

2.11 Railroad Crossing

The SFRC runs parallel to the west side of the I-95 interchange and SW 10 Street crosses over the tracks with a bridge. The SW 10 Street typical section within the limits of the limited access right of way is a six-lane urban divided roadway with a raised, landscaped median. In the EB direction, a drop right-turn lane is provided for the I-95 NB on-ramp and in the WB direction, a single left turn is provided for the I-95 SB on-ramp.

The SFRC runs parallel to the west side of the I-95 interchange and crosses Hillsboro Boulevard at grade. The Hillsboro Boulevard typical section within the limits of the limited access right of way is a six-lane urban divided roadway with a raised, landscaped median. Underneath the I-95 overpass, the EB and WB lanes are separated by median containing a raised concrete barrier wall as well as support piers for the I-95 overpass. In the EB direction, a right-turn lane is provided for the I-95 NB on-ramp and in the WB direction, an auxiliary lane is provided for the transition between the I-95 NB off-ramp merge lane and the right-turn lane provided for the I-95 SB on-ramp.

2.12 Existing Drainage

2.12.1 Existing Drainage Conditions

The project discharges into the Broward County Water Control District (BCWCD) #2 C-1 and C-2 canals. SW 10 Street, west of the railroad tracks, sheet flows into the BCWCD #2 C-2 canal. Hillsboro Boulevard, west of the railroad tracks, discharges into the BCWCD #2 C-2 canal via a closed storm drain system. East of the railroad tracks along SW 10 Street and Hillsboro Boulevard and SR 9 (I-95) discharge to BCWCD #2 C-1 canal by sheet flow or through closed storm drain systems. There are 13 cross drains within the project limits along SW 10 Street, Hillsboro Boulevard and

I-95 corridors. **Table 2-20** includes a summary of the existing cross drains. The BCWCD#2 C-1 and C-2 canals discharge north to the Hillsboro canal.

Table 2-20 Summary of Cross Drains		
Cross Drain (CD)	Station (CL I-95)	Description
CD - 1	1333+50	1 - 36" RCP
CD - 2	1346+13	1 - 18" RCP
CD - 3	1352+15	1 - 72" RCP
CD - 4	1360+00	C-1 Control Structure
CD - 5	1368+14	1 - 18" RCP
CD - 6	1383+16	2 - 66" RCP
CD - 7	1396+34	1 - 18" RCP
CD - 8	1406+13	1 - 36" RCP
CD - 9	1410+37	C-1 Control Structure
CD - 10	1422+14	1 - 18" RCP
CD - 11	1428+13	1 - 18" RCP
CD - 12	1434+13	1 - 72" RCP
CD - 13	1441+14	1 - 18" RCP

2.13 Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were used to evaluate the 100-year floodplain encroachment. The project area is located within four FEMA FIRM panels (August 2014). The floodplain encroachments are within the zones AE and AH with base flood elevations (BFE) ranging from 12 to 16 feet (NAVD 88).

2.14 Lighting

2.14.1 I-95

The I-95 existing lighting system consists of dual arm poles with conventional cobra head luminaires installed on the median barrier wall, and single arm pole luminaries along the outside shoulder at the NB and SB exit and entrance ramps.

2.14.2 SW 10 Street

The existing lighting along SW 10 Street consists of single arm poles with cobra head luminaires on the south side of the road and joint use FP&L poles on the north side of the road.

2.14.3 Hillsboro Boulevard

The lighting along Hillsboro Boulevard consists of single arm poles with cobra head luminaires on the south side of the road and joint use FPL transmission poles on the north side of the road.

2.14.4 Utilities

The following utility companies and government utility owners have facilities located near or within the project limits. Existing utility owners and contact information is listed in **Table 2-21**.

No.	Utility Company	Address	Contact	Phone Number	Email
1	AT&T Distribution	8601 W. Sunrise Boulevard – 1st Floor Plantation, FL 33322	Mr. Otis Keeve	(954) 723- 2540	ok1184@att.com
2	Broward County Traffic Engineering	2300 W. Commercial Blvd. Fort Lauderdale, Florida 33309	Bret Henderson	(954) 847- 2702	brhenderson@browa rd.org
3	Broward County Water and Wastewater Services	2555 West Copans Road, Pompano Beach, FL 33069	Latissa Collins	(954) 831- 4132	lcollins@broward.org
4	Comcast Cable	2601 SW 145 Ave. Miramar, FL 33027	Leonard Maxwell- Newbold	(954) 447- 8405	Leonard_Maxwell- Newbold@cable.com cast.com
5	City of Deerfield Beach	200 Goolsby Blvd. Deerfield Beach, FL 33442	Rocky Figueroa	(954) 422- 5822	rfigueroa@deerfield- beach.com
6	CVE Master Management Co Inc. **	277 Goolsby Blvd. Unit 4C Deerfield Beach, FL 33442	Craig A Smith and Associates Inc. (Jim Driscoll)	(561) 314- 4445	jdriscoll@craigasmit h.com
7	Florida Department of Transportation (FDOT)	3400 W Commercial Blvd, Fort Lauderdale, FL 33309	Carolyn Leach	(954) 847- 2690	Carolyn.Leach@dot. state.fl.us
8	Florida Power & Light - Broward	Post Office Box 8248 Ft. Lauderdale, FL 33340-8248	Byron Sample	(954) 321- 2056	byron.a.sample@fpl. com
9	FPL Fibernet LLC	810-B Charlotte Ave. West Palm Beach, FL 33401	Jacob Marroney	(561) 616- 1884	Jacob.Marroney@fpl. com
10	Level 3 Communications	2121 W. Prospect Rd Tamarac, FL 33309	Jake Jacobson	(877) 366- 8344	jake.jacobson@level 3.com
11	MCI (Verizon Business Communications) *	2400 N. Glenville Drive Richardson, TX 75082	John Bachelder	(972) 729- 6322	John.bachelder@veri zon.com
12	TECO Peoples Gas South Florida	5101 NW 21 Avenue Suite 460 Ft. Lauderdale, FL 33309	Max Chamorro	(954) 453- 0812	mjchamorro@tecoen ergy.com

*Hillsboro Boulevard and SW 10 Street only, **SW 10 Street only

2.15 Soils Classification

Soils and soil profiles found in borings drilled for the roadway alignment study generally consisted of seven (7) general types:

Stratum 1: Brown sand with trace roots, sometimes with trace limerock fragments (Topsoil/A-8).

Stratum 2: Brown to light brown sand, sometimes with trace silt, trace limerock fragments (A-3).

Stratum 2A: Light brown sand and little to some limerock fragments with silt to silty (A-1-b).

Stratum 2B: Dark brown sand with silt, with trace organic (A-3).

Stratum 3: Light brown sandy to silty limestone.

Stratum 4: Light brown silty sand (A-2-4).

Stratum 5: Dark brown sand with silt, with few organic (A-8).

The majority of the project corridor is underlain with interlayering of Strata 1 and 2.

Stratum 2A, 2B, 3 and 4 soils were found at some isolated boring locations at various depths along the project corridor. Stratum 5 soils were found at only one boring locations between 4 and 6 feet depth interval.

2.16 Aesthetic Features

There are no existing aesthetic features within the project corridor. Existing landscaping is limited to the I-95 interchange.

2.17 Traffic Signs

There are numerous single post signs along both SW 10 Street and Hillsboro Boulevard corridors on both sides of the road and includes speed limit signs and wayfinding signage. Signs are located primarily at the intersections.

3 Future Conditions

3.1 Future Land Use

The City of Deerfield Beach Future Land Use Map (adopted December 3, 2013) shown in **Figure 3-1** predicts that land uses within the project area will remain similar except for the conversion of the former Deerfield Country Club Golf Course into an employment center. The anticipated employment center has been branded as the Hillsboro Technology Center.

3.1.1.1 SW 10 Street

The City of Deerfield Beach Future Land Use Map shows the area west of the SW 10 Street Interchange as Industrial. The NE quadrant of the interchange is shown as Residential Moderate (10 DU/AC), Commercial and Conservation. The SE quadrant shows as Community Facility, Recreation Open Space, Residential- Medium (15 DU/AC), Residential Moderate (10 DU/AC) and Residential Low (5 DU/AC).

3.1.1.2 Hillsboro Boulevard

The City of Deerfield Beach Future Land Use Map shows the NW quadrant of the Hillsboro Boulevard Interchange as Industrial and Commercial while the NE quadrant is shown as Industrial, Commercial, Recreation Commercial, Recreation Open Space and Employment Center. The SE quadrant shows as Commercial, Residential Moderate (10 DU/AC) and Recreation Open Space. The SW quadrant shows as Commercial, Industrial and York Residential Transit Oriented Development.

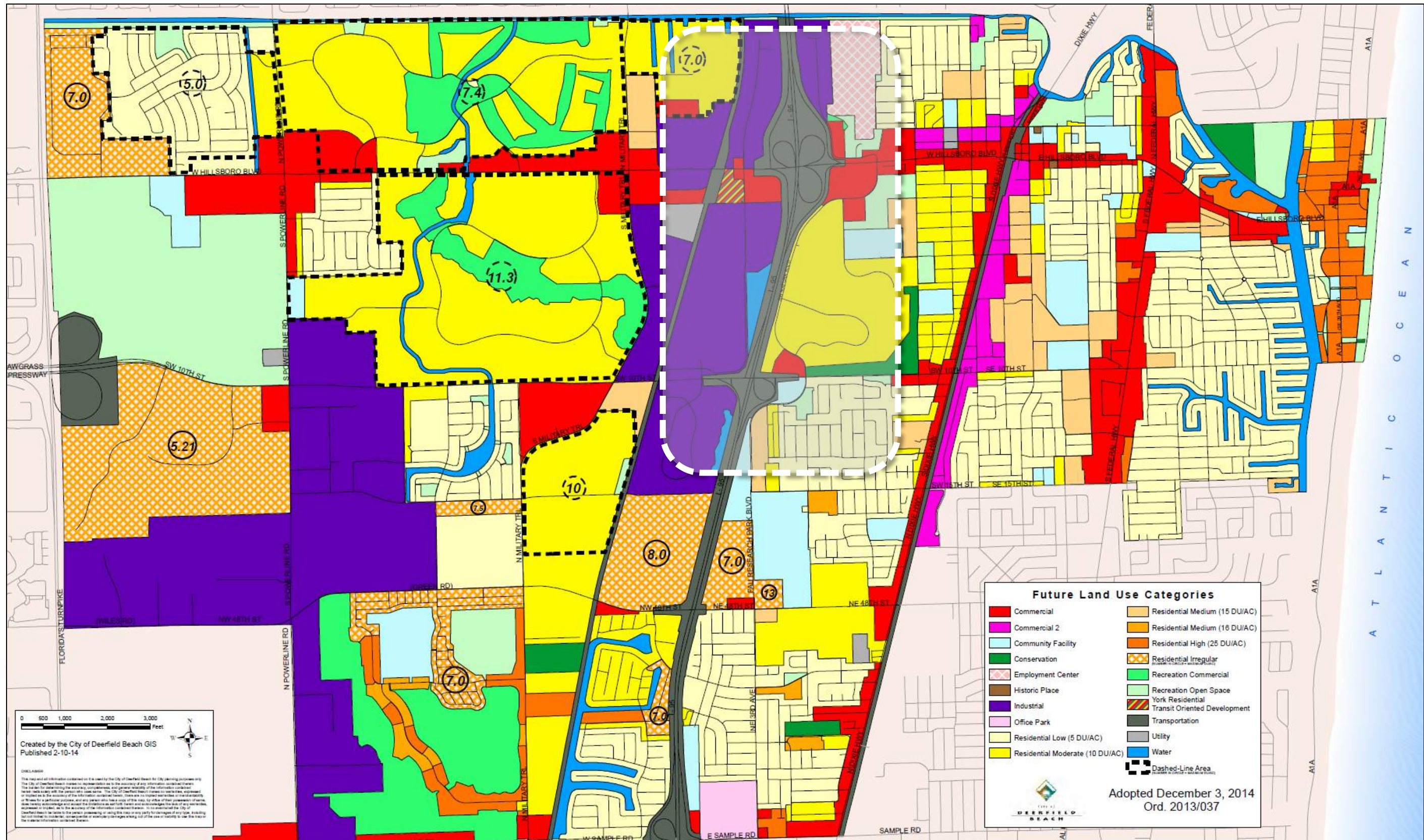


Figure 3-1 Future Land Use Map

3.2 Future Context Classification

Hillsboro Boulevard and SW 10 Street should be considered **Suburban Commercial (C3C)** as context classification for future conditions with no anticipated changes from existing.

3.3 Future Travel Forecast

To maintain consistency with the on-going SW 10 Street Connector PD&E Study, traffic projections for both the No-Action and Build conditions were obtained from the recently published SW 10 Street Connector PD&E Study Project Traffic Forecast Memorandum (PTFM) dated September 2018 (FM 439891-1) and included here by reference. Section 4 of the PTFM provides a detailed description of the modeling methodology and the development of the Directional Design Hour volumes (DDHVs).

Figure 3-2 presents the Future No-Action Alternative Lane Configuration. **Figure 3-3** and **Figure 3-4** depict the No-Action Traffic Projection Volumes for Opening Year 2020 and Design Year 2040.

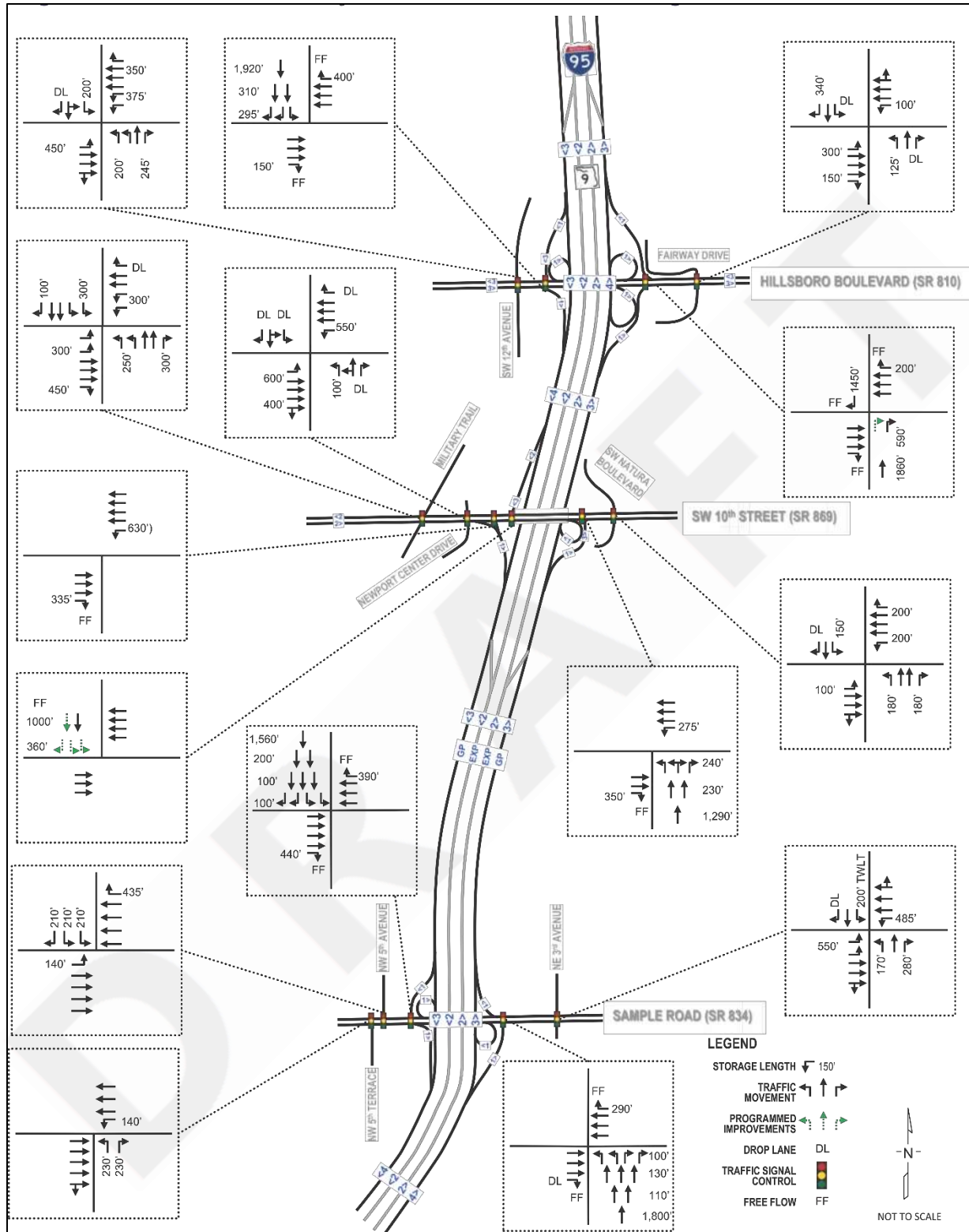


Figure 3-2 No-Action Roadway and Intersection Lane Configurations

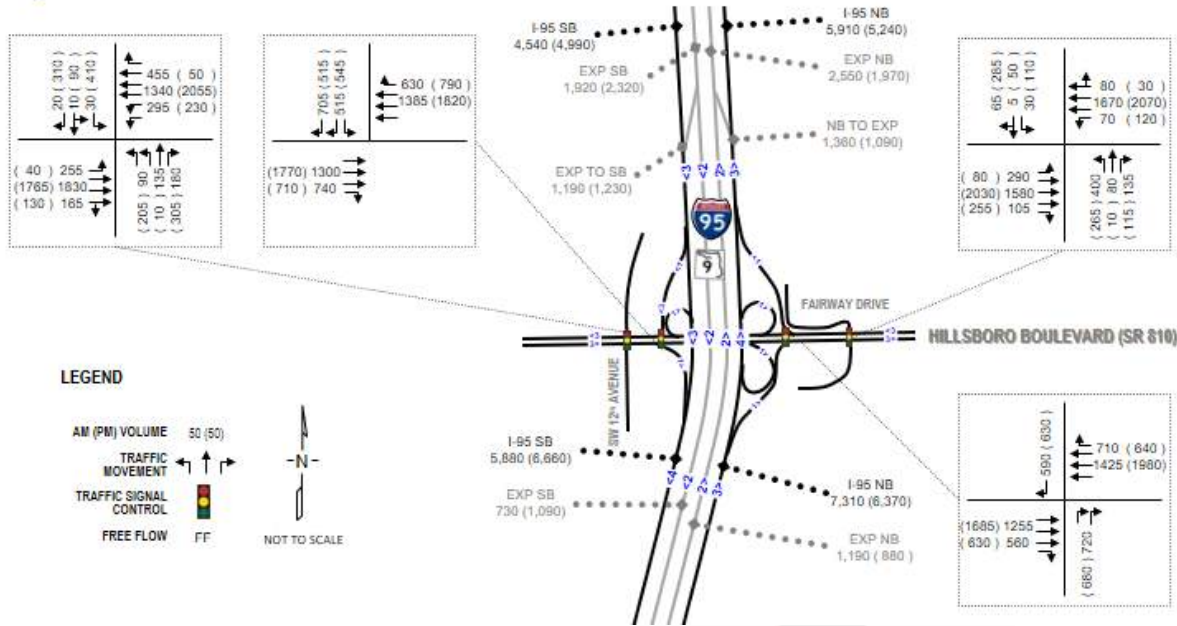


Figure 3-3 2020 No-Action Volumes – Hillsboro Boulevard

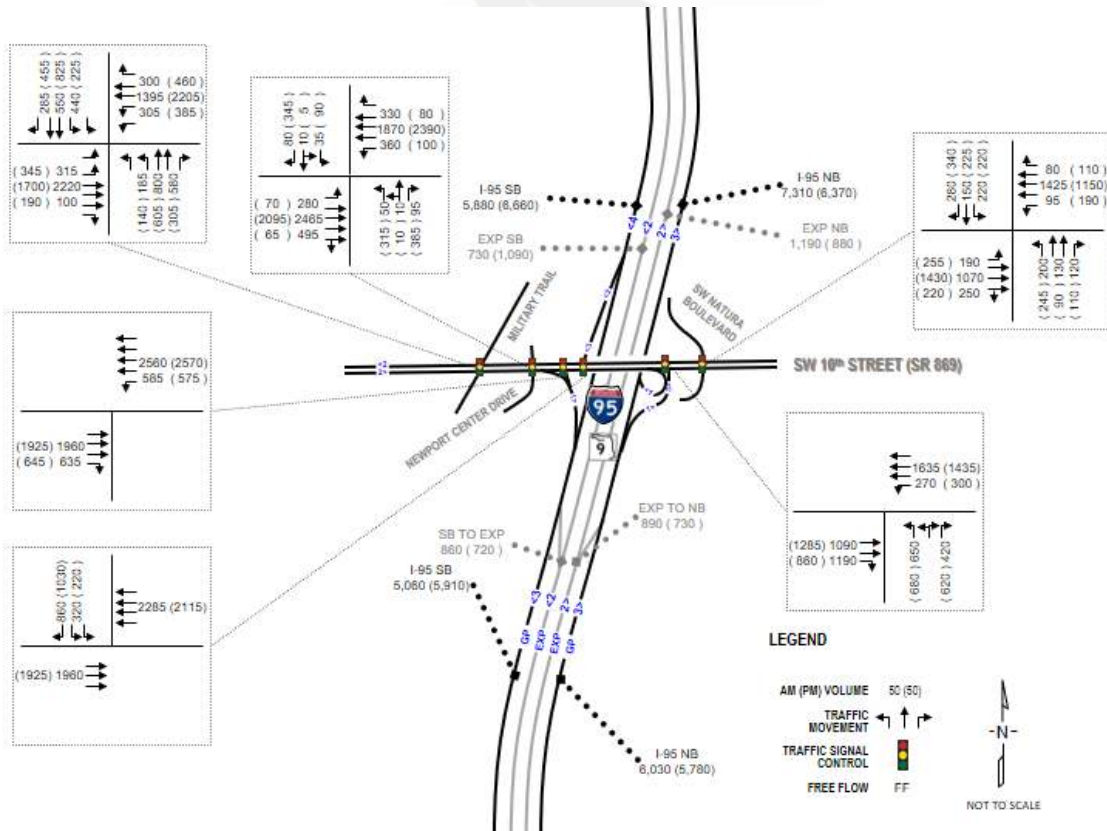


Figure 3-4 2020 No-Action Volumes – SW 10 Street

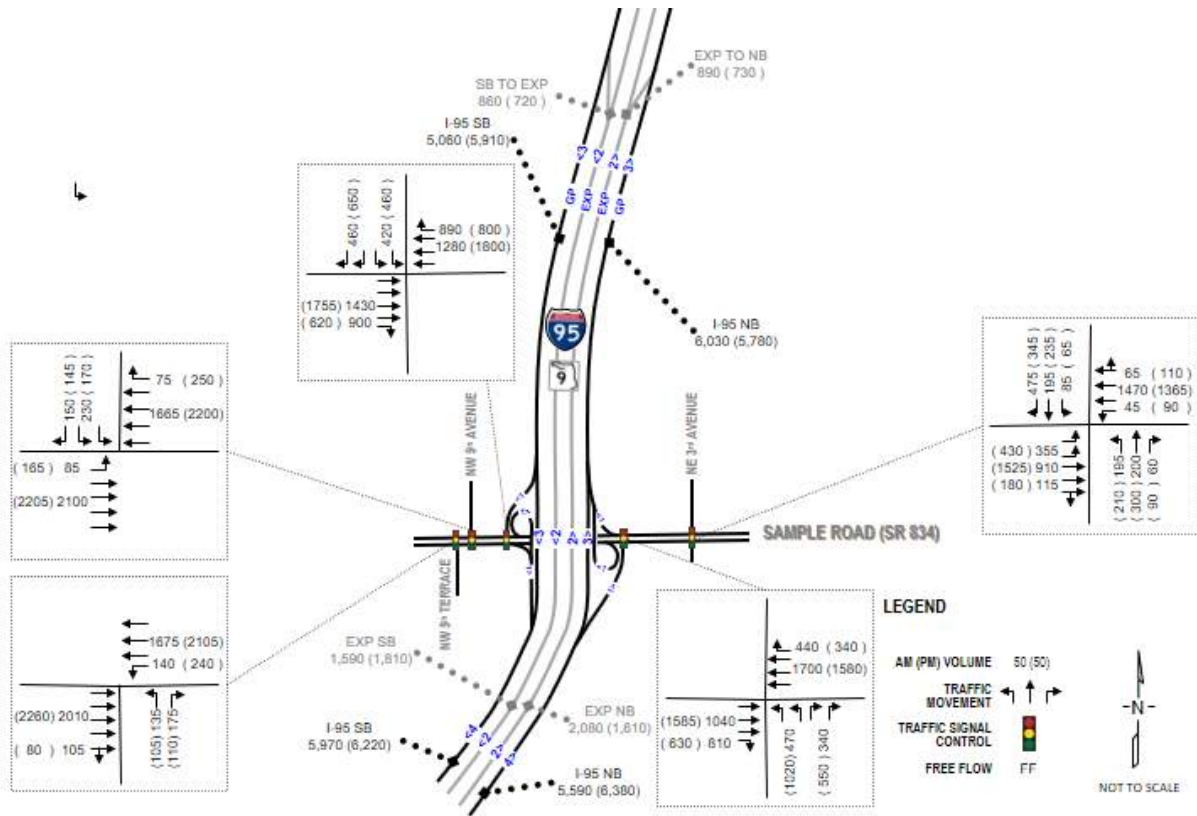


Figure 3-5 2020 No-Action Volumes - Sample Road

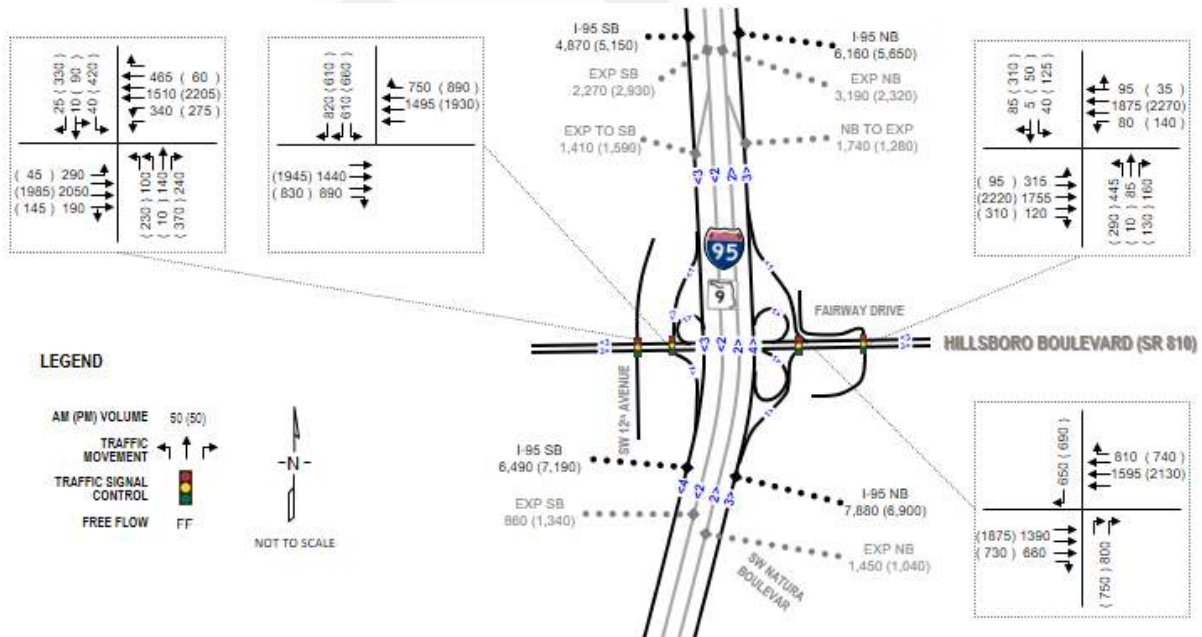


Figure 3-6 2040 No-Action Volumes - Hillsboro Boulevard

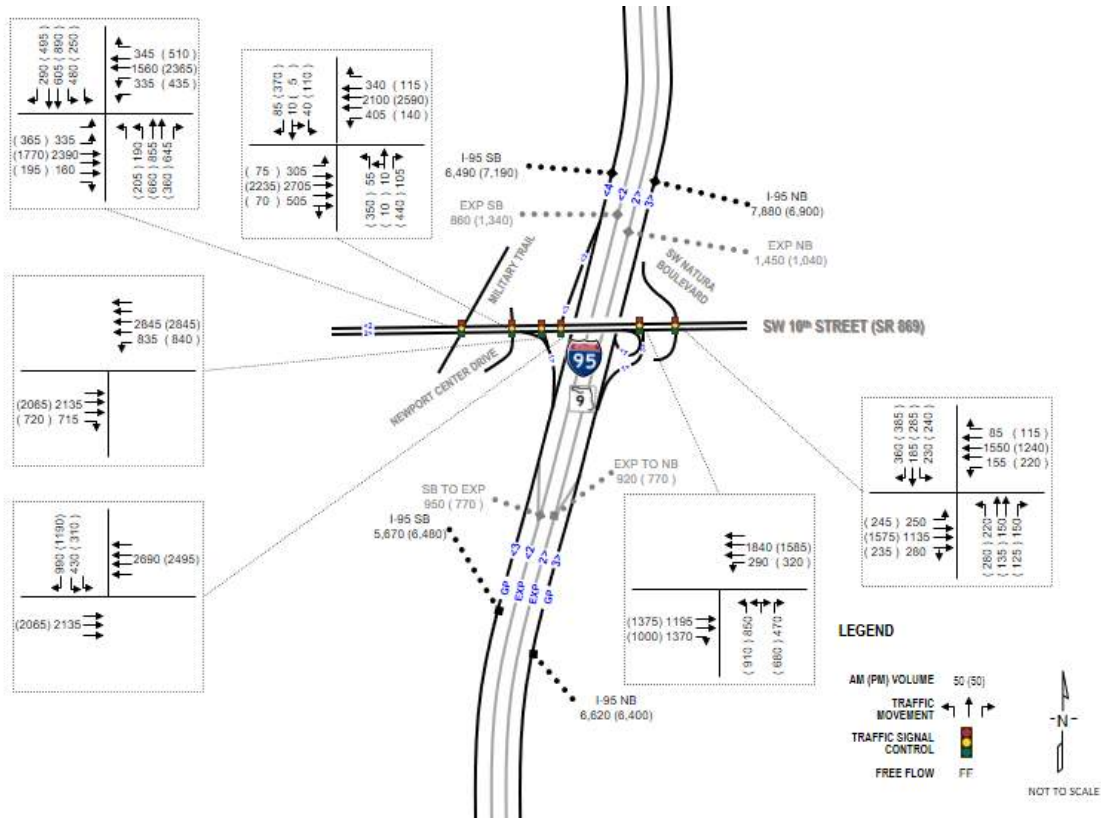


Figure 3-7 2040 No-Action Volumes – SW 10 Street

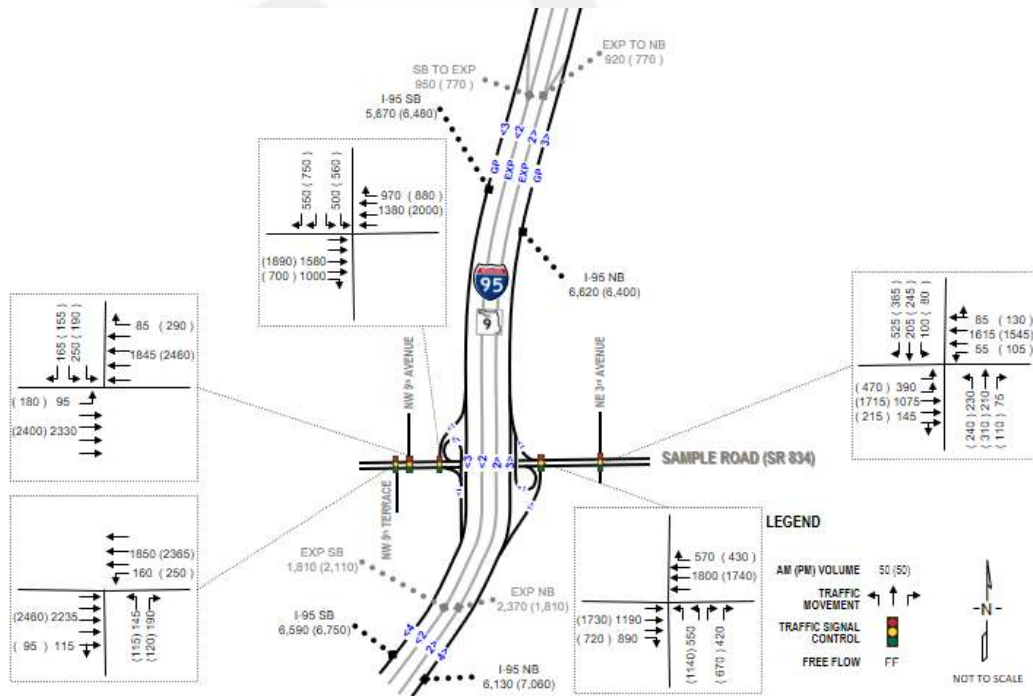
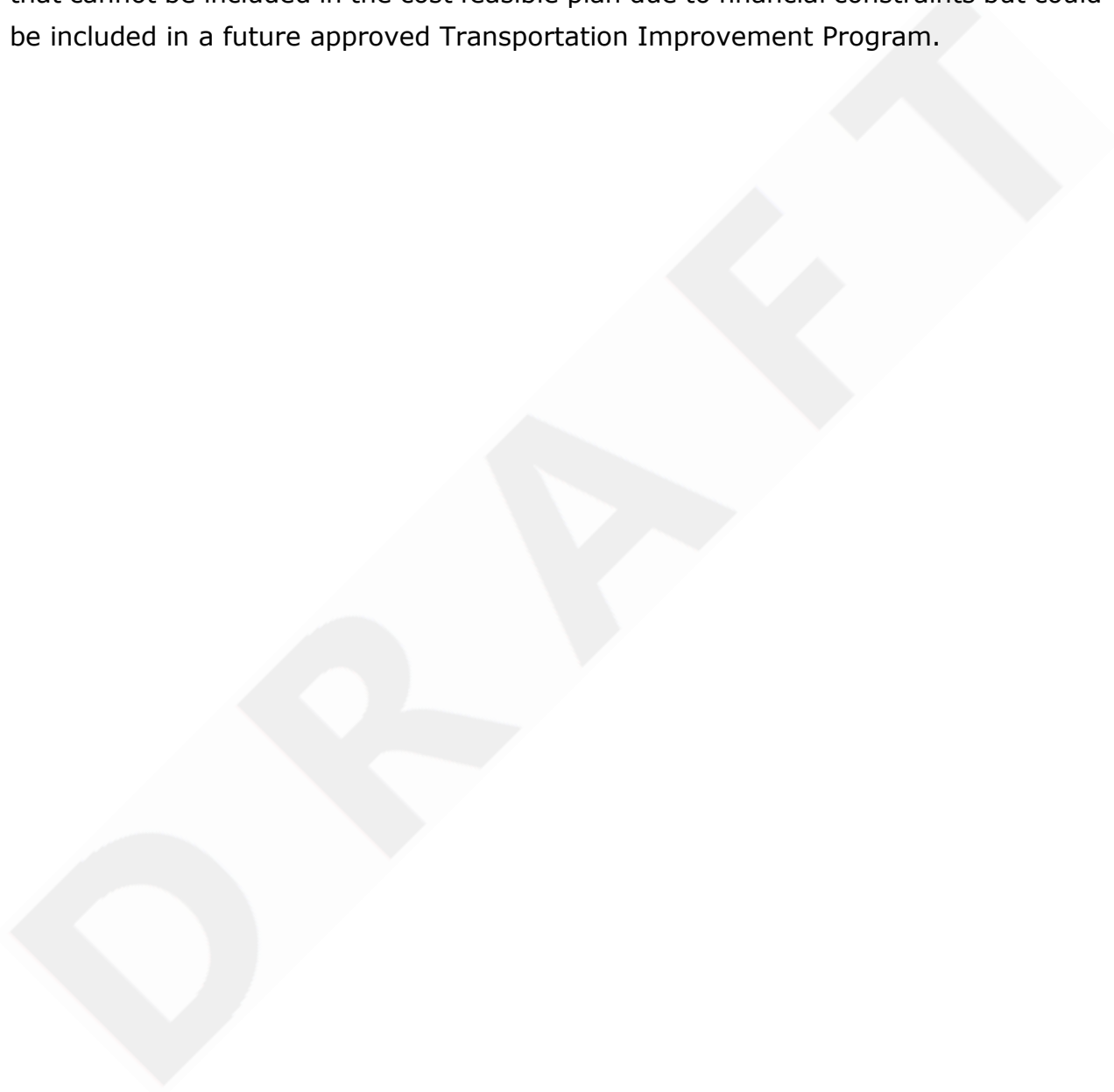


Figure 3-8 2040 No-Action Volumes – Sample Road

3.4 Future Improvement Plans

The Broward County MPO 2035 LRTP included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but could be included in a future approved Transportation Improvement Program.



4 Design Controls and Criteria

Several design standards and manuals were consulted to establish the final design criteria for this PD&E Study. The design criteria are based on design parameters outlined in the current editions of the following publications:

- Project Development and Environment Manual, FDOT, 2019
- FDOT Design Manual (FDM), FDOT, 2019
- A Policy on Geometric Design of Highways and Streets, American Association of State Highway Transportation Officials (AASHTO), 2011
- FDOT Standards Plans, FDOT, FY 2019-2020
- Manual of Uniform Minimum Standards for Design, Construction and Maintenance of Streets and Highways, "Florida Greenbook (FGB)", FDOT, 2016
- Drainage Manual, FDOT, 2019
- Flexible Pavement Design Manual, FDOT, 2018
- Pavement Type Selection Manual, FDOT, 2019
- Highway Capacity Manual 6, Transportation Research Board, 2016
- Manual of Uniform Traffic Control Devices (MUTCD), FHWA, 2009
- Project Traffic Forecasting Handbook, FDOT, 2014
- Roadside Design Guide, AASHTO, 2011
- Standard Specifications, FDOT, 2019
- Structures Manual, FDOT, 2019
- Utility Accommodation Manual, FDOT, 2010

4.1 Roadway Design Criteria

Table 4-1 Roadway Design Controls – Mainline		
Design Element	Design Standard	FDM January 2018
Design Speed		
Arterial	Urban Collector 35-50 mph	
Lane Widths		
Through Lane	11-ft	FDM Table 210.2.1
Turn Lane	11-ft	
Median Widths		
Arterial and Collectors	22-ft	FDM Table 210.3.1
Design Speed \leq 45 mph		
Border Width		
Arterial Collectors = 45 mph	Bicycle Lanes or Other Auxiliary Lane, 12-ft	FDM Table 210.7.1
Pedestrian and Bicycle		
Bike Lanes	Required in or within 1 mile of urban area	FDM Chapter 223
Bike Lane Width	7-ft, Buffered Bike Lane	FDM Chapter 223.2.1.1
Sidewalks	6-ft, Adjacent to curb	FDM Chapter 222.2.1
Roadway Cross Section Slope		
Roadway Pavement	0.02	FDM Figure 210.2.1
Roadway Grades		
Maximum Grade-Industrial	30-45 mph- 4%	FDM Table 210.10.1
Maximum Change-in-grade	Without a VC 30 mph - 1%, 40 mph - 0.80%	FDM Table 210.10.2
Base Clearance	Urban, 1-ft	FDM Chapter 210.10.3 (2)
Distance Between VPI's	250-ft	FDM Chapter 210.10.1.1
Minimum Grade	0.30%	
Horizontal Alignment- Arterials and Collectors, V= Design Speed in mph		
Maximum Deflection	Without a Horizontal Curve $V \leq 40$ mph- 2 Degrees	FDM Chapter 210.8.1
Length of Horizontal Curve	15V, minimum 400-ft	FDM Table 210.8.1
Maximum Curvature	Curb and Gutter, e max= 0.05 40 mph 14°15'	FDM Table 210.9.2

Table 4-2 Roadway Design Controls – I-95 Ramps			
Controlling Element	AASHTO Criteria	FDOT Criteria, FDM	
Design Speed	35 to 60 mph	30 MPH to 60 mph	
Lane Width Bridge Width	15-ft one-lane, 24-ft two-lanes Approach Roadway Width	15-ft one-lane, 24-ft two-lanes Approach Roadway width	
Shoulder Width	10-ft outside 10-ft inside	Outside Full Width (Paved Width)	Median Full Width (Paved Width)
1-Lane Ramp (without shoulder gutter)		6-ft (4-ft)	6-ft (2-ft)
1-Lane Ramp (with shoulder gutter)		11.5 ft (4 ft)	11.5-ft (4-ft)
2-Lane Ramp Non-Interstate (without shoulder gutter)		10-ft (8-ft)	8-ft (4-ft)
2-Lane Ramp Non-Interstate (with shoulder gutter)		15.5-ft (8-ft)	13.5-ft (6-ft)
2-Lane Ramp Interstate (without shoulder gutter)		12-ft (10-ft)	8-ft (4-ft)
2-Lane Ramp Interstate (with shoulder gutter)		15.5-ft (8-ft)	13.5-ft (6-ft)
Auxiliary Lanes (without shoulder gutter)		12-ft (10-ft)	8-ft (4-ft)
Auxiliary Lanes (with shoulder gutter)		15.5-ft (8-ft)	8-ft (4-ft)
Horizontal Curve Radius Min. Radius		30 mph, 35 mph, 40 mph, 50 mph	30 mph to 45 mph
Min. Radius (e-max 10%)	200-ft, 292-ft, 410-ft, 694-ft	300-ft (@30 mph)	
Superelevation	0.10 max	0.10 max	
Stopping Sight Distance		30 mph, 35 mph, 40 mph	
Vertical Alignment, SSD Minimum	200-ft, 250-ft, 305-ft, 360-ft, 425-ft (@ 30, 35, 40, 45, 50 mph)	182-ft, 226-ft, 275-ft upgrade (@7%) 218-ft, 276-ft, 339-ft downgrade (@ 7%)	
K Value – Sag SSD Minimum	37, 49, 64, 79, 96 (@ 30, 35, 40, 45, 50 mph)	37, 49, 64, 79, 96 (@ 30, 35, 40, 45, 50 mph)	
K Value – Crest (New Construction) SSD Minimum	19, 29, 44, 61, 84 (@ 30, 35, 40, 45, 50 mph)	31,47, 70 (@ 30 mph, 35 mph, 40 mph)	
K Value – Crest (RRR Criteria) SSD	19, 29, 44, 61, 84 (@ 30, 35, 40, 45, 50 mph)	19,29,44 (@ 30 mph, 35 mph, 40 mph)	
Maximum Grades	(@ 30, 35, 40, 45, 50 mph)	30 mph to 50 mph	
	8%, 7%, 7%, 6%, 6% upgrade	7% (<30 mph), 6% (35-40 mph), 5%(45-50 mph) upgrades	
	Downgrades may be increased by 2%	Downgrades may be increased by 2%	

Table 4-2 Roadway Design Controls – I-95 Ramps		
Controlling Element	AASHTO Criteria	FDOT Criteria, FDM
Min. Vertical Curve Length		90-ft, 105-ft, 120-ft (@ 30 mph, 35 mph, 40 mph) Sag or Crest
Cross Slope (Travel Lanes) Cross Slope (shoulder)	0.015-0.003 (0.030 allowed on additional outside lanes) 0.06 on shoulders 0.05 max algebraic difference in cross slope	0.02-0.03 0.06 on shoulders 0.06 max algebraic difference < 35 MPH 0.05 max algebraic difference ≥ 35 MPH
Vertical Clearance Over Roadway Over water (Drainage)	16.0-ft minimum for traveled structures 17.0-ft min for overhead sign structures and pedestrian bridges	16.5-ft for traveled structures (16-ft existing) 17.5-ft for sign structures, pedestrian bridges and signals (17-ft existing) 19.5-ft for Dynamic Message Signs (19-ft existing) 2.0-ft min over design flood stage
Design Loading Structural Capacity	HL-93 (LRFD)	HL-93 (LRFD)

5 Alternative Analysis

5.1 No-Action Alternative

The No-Action Alternative assumes that no improvements would be implemented within the project corridor. It serves as a baseline for comparison against the Build Alternatives. It will however, include on-going construction projects and all funded or programmed improvements scheduled to be opened to traffic in the analysis years being considered. These improvements must be part of the FDOT's adopted Five-Year Work Program, Broward County Metropolitan Planning Organization Cost Feasible LRTP, transportation elements of Local Government Comprehensive Plans (LGCP), or developer-funded transportation improvements specified in approved development orders.

The advantage of the No-Action Alternative is that it does not require any expenditure of public funds for design, right-of-way acquisition, construction or utility relocation. In addition, there would not be any traffic delays or disruptions due to construction, no direct or indirect impacts to the environment and/or the socio-economic characteristics from the project. However, the No-Action Alternative does not address the purpose and need of the project.

5.2 Transportation Systems Management and Operation

Transportation Systems Management and Operations (TSM&O) aims to optimize the performance of existing multimodal infrastructure through implementation of systems and services to preserve capacity and improve the safety and reliability of our transportation system. TSM&O improvements include traffic management and operations solutions such as Information Technology System (ITS) devices, signal retiming, and adaptive signal control.

The TSM&O alternative, however, will not significantly improve the capacity issues through the corridor by the design year 2040. Long term improvements are necessary to address the existing traffic congestion and meet the safety and capacity needs of the corridor.

5.3 Build Alternatives

Build alternatives were developed along I-95, SW 10 Street and Hillsboro Boulevard to address the purpose and need of the project.

5.3.1 I-95

All Build Alternatives considered for I-95 include:

- Two 12-foot wide express lanes (one in each direction)
- Six 12-foot wide general purpose lanes (three in each direction)
- Four-foot wide buffer with tubular markers separating the general purpose lanes from the express lanes
- A 12-foot wide paved inside shoulder
- A 12-foot wide outside shoulder (ten-feet paved and two-feet unpaved)
- A 2.5-foot wide center barrier wall
- Twelve-foot wide auxiliary lanes at selected locations

Alternative 1:

Alternative 1 provides a 3-lane, physically separated NB collector distributor (CD) road on the east side of I-95 between SW 10 Street and Hillsboro Boulevard that combines the EB to NB and WB to NB on-ramps. A proposed auxiliary lane on the west side of I-95 combines the EB to SB and WB to SB on-ramps. Widening is proposed in the median along I-95 to provide one 12-ft express lane in each direction.

Alternative 2:

Alternative 2 provides a braided ramp for the 3-lane proposed NB CD roadway on the east side of I-95 to separate the traffic destined to I-95 mainline from traffic exiting at Hillsboro Boulevard. A braided ramp is also proposed on the west side of I-95 for the SB CD roadway to separate the traffic destined to I-95 mainline from traffic exiting at SW 10 Street. Widening is proposed in the median along I-95 to provide one 12-ft express lane in each direction.

5.3.2 SW 10 Street

Build alternatives considered along SW 10 Street provide two connector lanes in each direction along SW 10 Street with direct connect access ramps to/from the I-95 express lanes. A WB on-ramp and EB off-ramp access to the connector lanes is provided just east of the Military Trail intersection. Improvements at the NB ramp terminal to accommodate triple lefts and triple rights as well as relocating the WB to NB entrance ramp from the SE quadrant of the interchange to the NE quadrant remain the same for both build alternatives.

Three 11-ft lanes with 7-ft buffered bike lanes and 6-ft sidewalks are proposed along SW 10 Street. A roundabout is provided at the intersection of W. and E. Newport

Center Drive. Triple rights are provided at the NB and SB legs of the SW 12 Avenue/E. Newport Center Drive intersection. Two alignments were considered for the connector lanes.

- North Alignment
- Center Alignment

Both north and center alignment options are basically the same. The north alignment, however, provides direct access to the connector lanes from SW 12 Avenue. Minor right-of-way acquisition is required on the north and south sides of SW 10 Street including six privately owned and three government owned parcels. No relocations are required.

The center alignment alternative also requires minor right-of-way acquisition on the north side as well as on the south side including 15 privately owned and nine government owned parcels. No relocations are required.

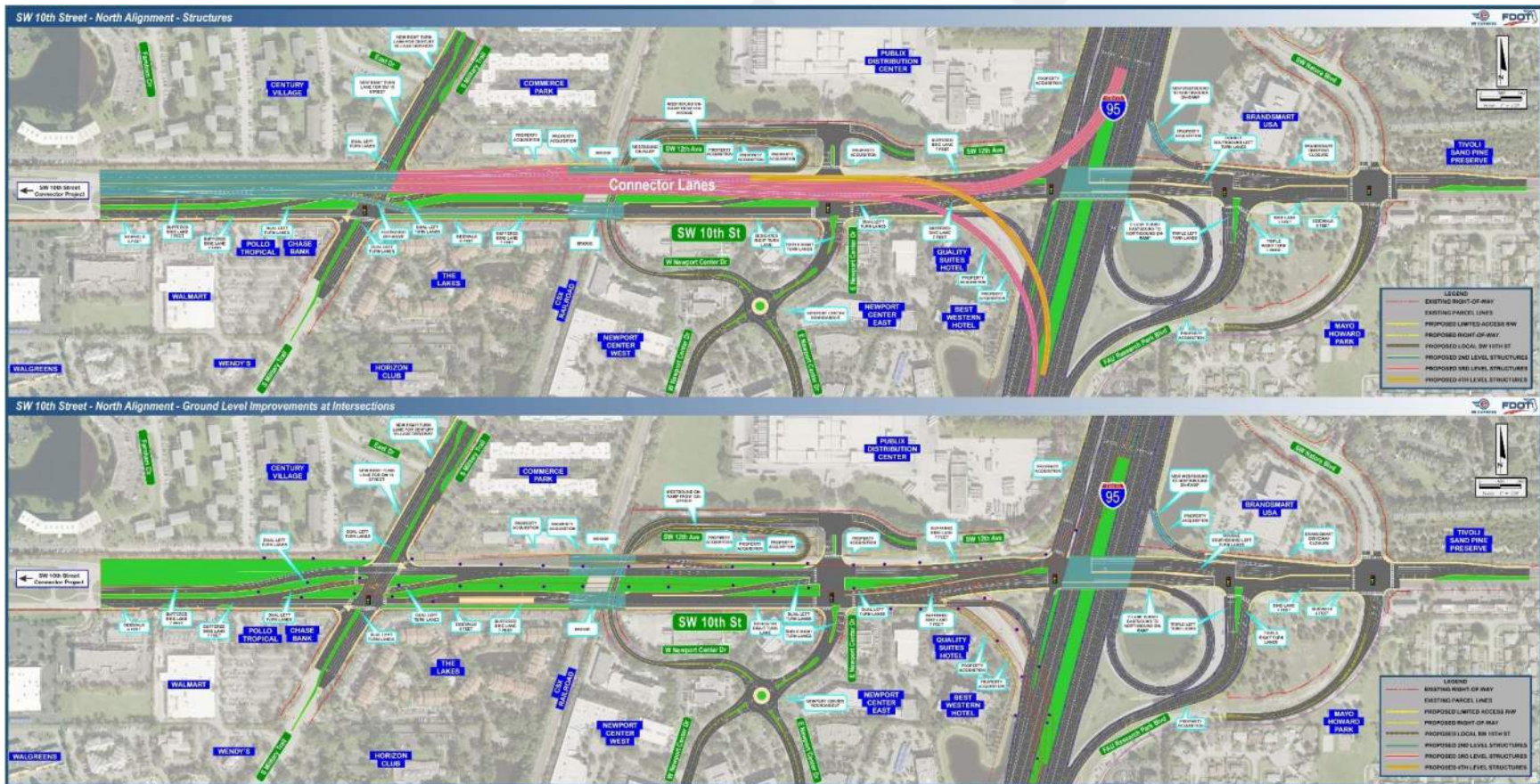


Figure 5-1 SW 10 Street – North Alignment Concept Plan

Figure 5-1 shows the North Alignment concept. The top figure illustrates the proposed connector lanes to be constructed above local SW 10 Street. The lower figure illustrates the local SW 10 Street configuration and intersection design.

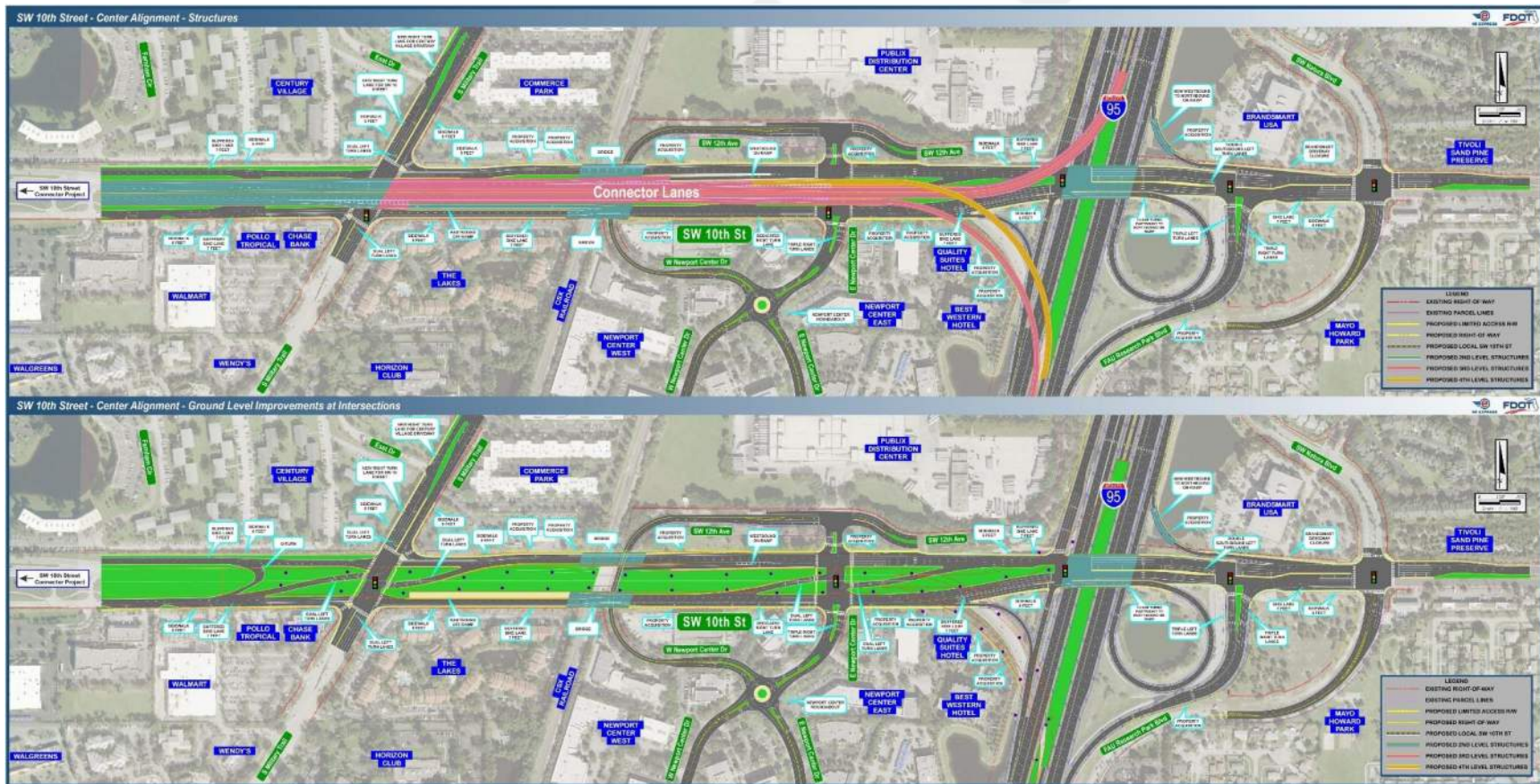


Figure 5-2 SW 10 Street – Center Alignment Concept Plan

Figure 5-2 shows the Center Alignment concept. The top figure illustrates the proposed connector lanes to be constructed above local SW 10 Street. The lower figure illustrates the local SW 10 Street configuration and intersection design.

5.3.3 Hillsboro Boulevard

Two Build Alternatives were considered along Hillsboro Boulevard. Alternative 1 proposes a depressed section while Alternative 2 proposes an elevated section. Improvements at the I-95 ramp terminals remained the same for both Build Alternatives and include providing a 2-lane NB exit ramp combining both exit ramps into a single ramp with a signal controlled. The NB exit ramp terminal will provide expanded storage for a triple left and double right turn lanes. Additional improvements include expanding the north leg of Jim Moran Boulevard to allow for SB double left and double right turn lanes, extending the NB to WB left turn lane storage and the EB to SB right turn storage at Natura Boulevard.

Alternative 1:

Alternative 1 proposes a depressed section from Goolsby Boulevard to SW 12 Avenue with two 11-ft lanes in each direction and a 7.5-ft inside shoulder. An access road is proposed on each side with one 11-ft lane, 7-ft buffered bike lane and 6-ft sidewalk. This alternative was deemed not viable due to impacts to the SFRC line and access to adjacent properties.

Alternative 2:

Alternative 2 proposes an elevated section from Goolsby Boulevard to SW 12 Avenue with two 11-ft lanes in each direction, a 7.5-ft inside shoulder, and 13-ft median. An access road is proposed on each side with one 11-ft lane, 7-ft buffered bike lane and 6-ft sidewalk. This alternative was deemed not viable due to access impacts to adjacent properties and the steep profile grade required to meet existing grade before the I-95 interchange.

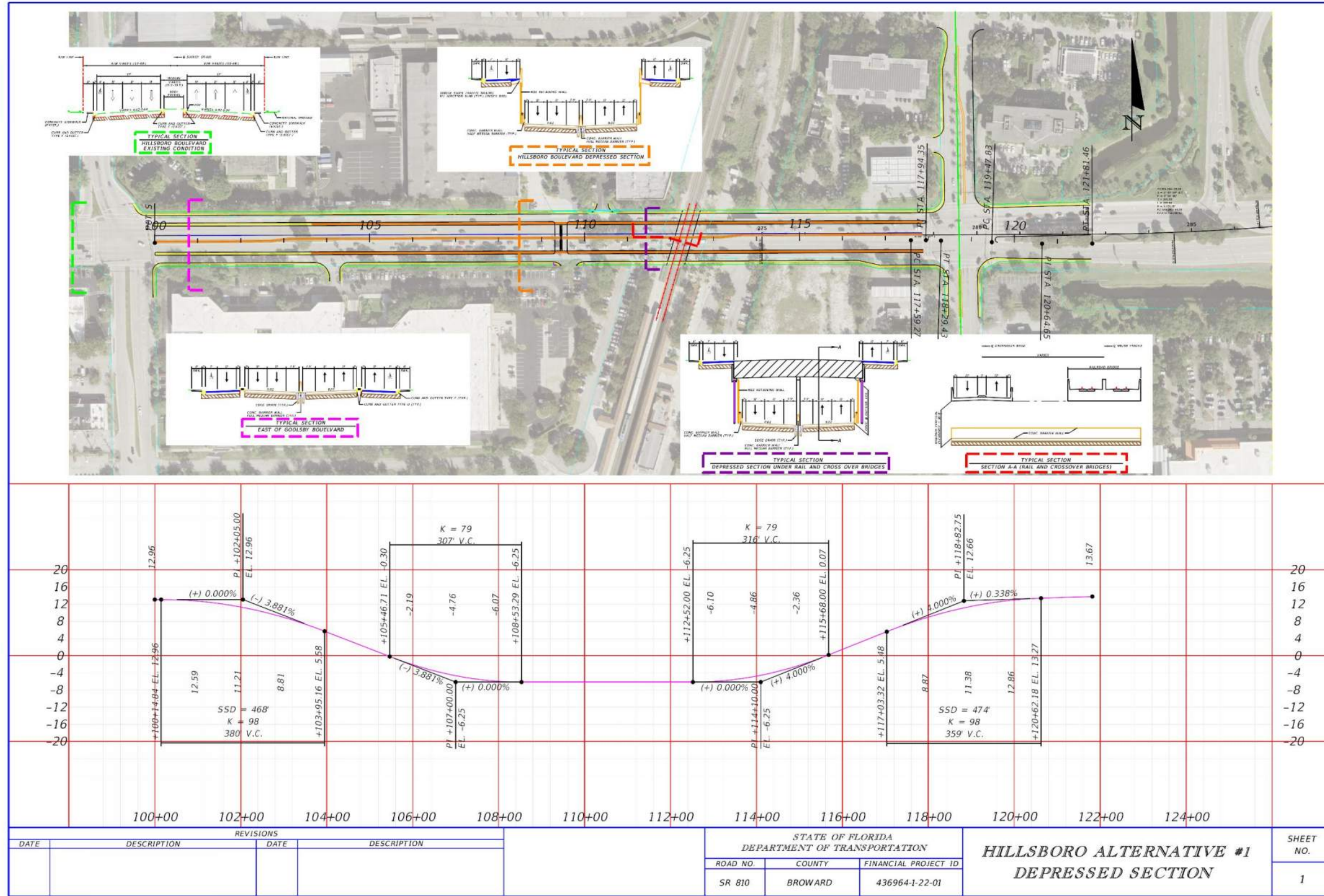


Figure 5-2 Hillsboro Boulevard – Concept Plan – Alternative 1

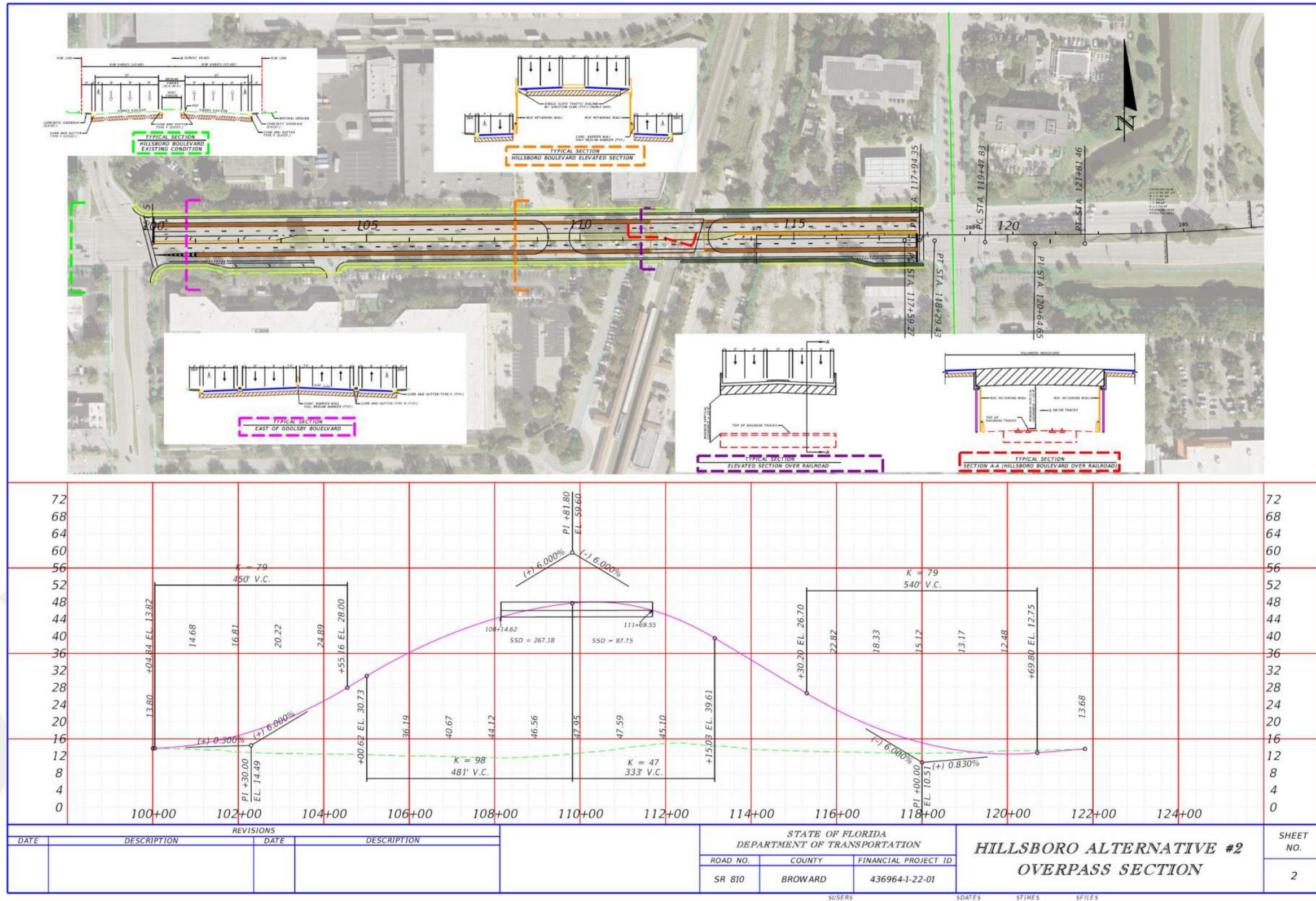


Figure 5-2 Hillsboro Boulevard – Concept Plan – Alternative 2

5.4 Alternative Evaluation

A qualitative Comparative Evaluation Matrix was used to determine the alternative that best addressed the purpose and need of the project, minimized impacts to the natural and physical environment and incorporated stakeholder's input.

5.4.1 Evaluation Criteria

The criteria selected for the evaluation matrix was based on engineering and environmental analysis and stakeholder's coordination. The criteria used in the evaluation matrix is described in **Table 5-1**.

Table 5-1 Evaluation Criteria	
Project Cost	
Design Phase:	Compares the cost of the design phase for each alternative.
Right of Way Acquisition:	Compares right-of-way costs between alternatives.
Construction:	Compares each alternative based on construction costs.
Construction Engineering and Inspection (CEI):	Measures the potential cost of construction engineering inspection.
Social and Economic Environment	
Right of Way Acquisition:	Compares the potential right-of-way acquisition impacts of each alternative.
Number of Relocations: (Commercial, Residential, and Government Owned):	Measures the total number of potential relocation for each alternative.
Social and Neighborhood Effects (includes aesthetics):	Measures the potential effect of each alternative on the social and neighborhood effects.
Economic and Employment Effects:	Measures the potential economic and employment effects of each alternative.
Mobility:	Measures the potential mobility improvements or congestion effects of each alternative.
Cultural Environment	
Section 4(f):	Measures the alternative's potential effect on Section 4(f).
Historic Sites and Districts:	Measures the degree of impact associated with existing historic sites within the project corridor for each alternative.
Recreational Areas:	Measures each alternative's potential effect on recreational areas.
Natural Environment	
Wetlands/Surface Waters:	Measures the potential effect on wetlands and/or surface waters for each alternative.
Protected Species and Habitat:	Measures the potential effect on protected species and habitat for each alternative.
Physical Environment	
Contamination:	Measures the impact on existing or potential hazardous material sites and or generators.
Noise Receptors:	Measures the alternative's potential impact on noise.

Table 5-1 Evaluation Criteria
Air Quality: Measures each alternative's impact against pre-established air quality standards.
Utility Impacts: Measures the utility impacts of the alternatives. This includes potential conflicts and relocation of the utility lines that are located within the existing and/or proposed right of way.
Bicycles and Pedestrians: Measures the impacts of each alternative on bicycles and pedestrians.
Traffic Operations and Safety
Bicycles and Pedestrians: Measures each alternative's improvements for bicycles and pedestrians.
Local Throughput (Vehicle Trips): Measures the amount of throughput of each alternative on local SW 10 Street.
Connector Throughput (Vehicle Trips): Measures the amount of throughput of each alternative on the connector lanes on SW 10 Street.
Travel Time: Compares travel time between alternatives.
Safety: Measures potential safety impacts for each alternative.
Emergency Evacuation Response: Compares impacts of each alternative on emergency evacuation.
Travel Time Reliability: Measures the travel time reliability of each alternative.

5.4.2 Comparative Alternative Evaluation

The Comparative Alternative Evaluation matrix for the No-Action and Build Alternatives for SW 10 Street is shown in **Table 5-2**. **Table 5-3** shows the Comparative Alternative Evaluation matrix for the No-Action and Build Alternatives for Hillsboro Boulevard.

Table 5-2 Comparative Alternative Evaluation – SW 10 Street																				
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point																				
EVALUATION CRITERIA	PROJECT COST					SOCIAL AND ECONOMIC ENVIRONMENT														
	Design Phase		Right of Way Acquisition		Construction	Construction Engineering and Inspection (CEI)		Utility Relocation Cost		Right of Way Acquisition		Number of Relocations (Commercial, Residential and Government owned)		Social and Neighborhood Effects (includes aesthetics)		Economic and Employment Effects		Mobility		
No-Action Alternative	No cost	5	No cost	5	No cost	5	No cost	5	No cost	5	None	5	None	5	No effects	5	Increased congestion will impact access to businesses and employment centers.	1	Increased congestion.	1
TSM&O	Very Low cost	4	No cost	5	Very Low cost	4	Low cost	5	No cost	5	None	5	None	5	No effects	5	Increased congestion will impact access to businesses and employment centers.	1	Increased congestion.	1
Build Alternative 2 North Alignment	Low cost	3	Medium Cost	3	High Cost	3	Low Cost	3	Highest Cost	2	Minimal	4	None	5	Community Focal Points unaffected. Limited right of way acquisition. Limited visual effects.	4	Reduced congestion will improve access to employment centers, Tri-Rail and Amtrak services.	5	Reduced congestion improves regional connectivity, transit, and freight operations.	5
Build Alternative 2 Center Alignment	Low cost	3	Highest Cost	2	High Cost	3	Low Cost	3	Medium Cost	3	Minor	3	None	5	Community Focal Points unaffected. Minor right of way acquisition. . Limited visual effects.	3	Reduced congestion will improve access to employment centers, Tri-Rail and Amtrak services.	5	Reduced congestion improves regional connectivity, transit, and freight operations.	5

Comparative Alternative Evaluation – SW 10 Street																				
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point																				
EVALUATION CRITERIA	CULTURAL ENVIRONMENT						NATURAL ENVIRONMENT				PHYSICAL ENVIRONMENT									
	Section 4(f)		Historic Sites and Districts		Recreational Areas		Wetlands/Surface Waters		Protected Species and Habitat		Contamination		Noise Receptors		Water Quality and Quantity		Air Quality		Utility Impacts	
No-Action Alternative	No use	5	No impacts	5	No use.	5	No impacts.	5	No impacts.	5	No impacts.	5	No increase in capacity and therefore no noise abatement considerations.	2	No improvement.	1	No realized benefits due to congestion.	1	No impacts.	5
TSM&O	No use	5	No impacts	5	No use.	5	No impacts.	5	No impacts.	5	No impacts.	5	No increase in capacity and therefore no noise abatement considerations.	2	Existing system has minimal treatment. Minimal improvement – confined to intersections	2	Improved benefits due to congestion.	2	No impacts.	5
Build Alternative 2 North Alignment	No use	5	No impacts	5	No use.	5	No impacts to wetlands. Less than 2 acres of impact to surface water/drainage features which will be mitigated with construction of new drainage system.	3	Not likely to adversely affect 4 federally listed wildlife species, and no effect to 8 federally listed wildlife species and 4 federally listed plant species	3	Three medium risk concerns identified, two low risk concerns, three no risk concerns. Concerns will be addressed during design.	3	Traffic noise impacts expected. Noise barriers being evaluated for feasibility and reasonableness.	4	Existing system has minimal treatment. The new drainage system proposed will meet or exceed water quality and quantity criteria.	5	Slight benefit due to increased mobility.	4	Minor Utility Impacts	3
Build Alternative 2 Center Alignment	No use	5	No impacts	5	No use.	5	No impacts to wetlands. Less than 2 acres of impact to surface water/drainage features which will be mitigated with construction of new drainage system.	3	Not likely to adversely affect 4 federally listed wildlife species, and no effect to 8 federally listed wildlife species and 4 federally listed plant species	3	Three medium risk concerns identified, two low risk concerns, three no risk concerns. Concerns will be addressed during design.	3	Traffic noise impacts expected. Noise barriers being evaluated for feasibility and reasonableness.	4	Existing system has minimal treatment. The new drainage system proposed will meet or exceed water quality and quantity criteria.	5	Slight benefit due to increased mobility.	4	Minimal utility Impacts.	4

Comparative Alternative Evaluation – SW 10 Street												
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point												
EVALUATION CRITERIA	TRAFFIC OPERATIONS AND SAFETY										RANKING	
	Bicycles and Pedestrians	Local Throughput (Vehicle Trips)	Connector Lanes Throughput (Vehicle Trips)	Travel Time	Safety	Emergency Evacuation Response	Travel Time Reliability					
No-Action Alternative	1	1	1	1	1	1	1	1	1	1	89	4
TSM&O	1	1	1	1	1	1	1	1	1	1	94	3
Build Alternative 2 North Alignment	5	5	5	5	5	5	5	5	5	5	112	1
Build Alternative 2 Center Alignment	5	4	5	4	4	4	4	4	4	4	102	2

Table 5-3 Comparative Alternative Evaluation- Hillsboro Blvd.																				
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point																				
EVALUATION CRITERIA	PROJECT COST										SOCIAL AND ECONOMIC ENVIRONMENT									
	Design Phase		Right of Way Acquisition		Construction		Construction Engineering and Inspection (CEI)		Utility Relocation Cost		Right of Way Acquisition		Number of Relocations (Commercial, Residential and Government owned)		Social and Neighborhood Effects (includes aesthetics)		Economic and Employment Effects		Mobility	
No-Action Alternative	No cost	5	No cost	5	No cost	5	No cost	5	No cost	5	None	5	None	5	No effects	5	Increased congestion will impact access to businesses and employment centers.	1	Increased congestion.	1
Build Alternative 1 – Depressed Section	High cost	1	Moderate cost	3	Very high cost	1	Very high cost	1	Very high cost	1	Moderate	3	None	5	Limited visual effects. Major accessibility impacts for residents.	1	Reduced congestion will improve access to employment centers, Tri-Rail and Amtrak services.	3	Reduced congestion improves regional connectivity, transit, and freight operations.	3
Build Alternative 2 – Elevated Section	Moderate cost	3	High cost	1	High cost	2	High cost	2	Moderate cost	3	High	1	None	5	Limited visual effects.	3	Reduced congestion will improve access to employment centers, Tri-Rail and Amtrak services.	3	Reduced congestion improves regional connectivity, transit, and freight operations.	3

Comparative Alternative Evaluation- Hillsboro Blvd.																				
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point																				
EVALUATION CRITERIA	CULTURAL ENVIRONMENT						NATURAL ENVIRONMENT				PHYSICAL ENVIRONMENT									
	Section 4(f)		Historic Sites and Districts		Recreational Areas		Wetlands/Surface Waters		Protected Species and Habitat		Contamination		Noise Receptors		Water Quality and Quantity		Air Quality		Utility Impacts	
No-Action Alternative	No use.	5	No impacts.	5	No use.	5	No impacts.	5	No impacts.	5	No impacts.	5	No increase in capacity and therefore no noise abatement considerations.	3	No impacts to groundwater basins. No water quality improvements.	3	No realized benefits due to congestion.	1	No impacts.	5
Build Alternative 1 – Depressed Section	No use.	5	Limited coordination needed for visual impacts.	3	No use.	5	Minor impacts.	3	No to low impacts.	3	Low to moderate contamination concerns along corridor.	2	Depressed traffic therefore, less traffic noise impacts.	4	Major impacts to groundwater basins and drainage structures. The new drainage system will meet or exceed water quality and quantity criteria.	1	Improved benefits due to reduced congestion.	3	Major impacts.	1
Build Alternative 2 – Elevated Section	No use.	5	Limited coordination needed for visual impacts.	3	No use.	5	Minor impacts.	3	No to low impacts.	3	Low to moderate contamination concerns along corridor.	2	Traffic noise impacts expected. Noise barriers to be evaluated for feasibility and reasonableness.	2	Minor impacts to drainage structures. The new drainage system will meet or exceed water quality and quantity criteria.	2	Improved benefits due to reduced congestion.	3	Moderate utility impacts.	2

Comparative Alternative Evaluation- Hillsboro Blvd.														
LEGEND: Substantial Improvement or Best Alternative = 5 points Major Improvement or Good Alternative= 4 points Moderate Improvement or Moderate Alternative = 3 points Minor Improvement or Inferior Alternative = 2 points Negative Effect or Worst Alternative = 1 point														
EVALUATION CRITERIA	TRAFFIC OPERATIONS AND SAFETY										RANKING			
	Bicycles and Pedestrians		Local Throughput (Vehicle Trips)		Driveway Access		Safety		Emergency Evacuation Response				Travel Time Reliability	
No-Action Alternative	No improvements.	3	Lowest throughput.	1	No impacts.	5	Increased congestion would most likely increase number of crashes.	1	Will get worse with congestion.	1	No improvements	1	1	93
Build Alternative 1 – Depressed Section	Reduces accessibility for pedestrians and bicycles.	1	Improved throughput	3	Major access impacts.	1	Safety improves with reduced congestion.	3	Improved accessibility and travel times would result in improved emergency responses.	3	Improves travel time reliability.	3	3	66
Build Alternative 2 – Elevated Section	Improves connectivity. Adds bicycle lanes and ADA ramps.	5	Improved throughput	3	Moderate access impacts.	3	Safety improves with reduced congestion.	3	Improved accessibility and travel times would result in improved emergency responses.	3	Improves travel time reliability.	3	2	76

5.5 Alternative Analysis

5.5.1 I-95

Alternative 2 is the preferred alternative for I-95. Alternative 2 proposes to add one tolled express lane in each direction in the median with NB braided ramps at the SW 10 Street interchange and SB braided ramps at the Hillsboro Boulevard interchange. The braided ramps not only reduce the number of merge and diverge points along I-95 but also provide for longer off-ramp storage lengths. Freeway analysis projects significant improvements over the No-Action conditions in the merge, diverge and mainline operations in both directions. The System Interchange Modification report prepared for the project and included here by reference includes the traffic analysis for the I-95 interchange.

5.5.2 SW 10 Street

The north alignment was selected as the preferred alternative. The north alignment was further refined to improve operations and reduce right of way impacts. Refinements to the north alignment include:

- Connector lanes along SW 10 Street were shifted slightly to the north to allow shifting the EB to SB direct connect ramp to avoid right of way impacts at the southwest corner of I-95 and SW 10 Street.
- The WB ingress ramp was placed on the inside of the WB connector lanes to reduce weaving and improve operations.
- The WB direct connect ramps were realigned/braided. To minimize weaving and improve operations the SB to WB ramp connection was placed on the inside lane of the connector lanes along SW 10 Street. The NB to WB direct connect ramp showing lower traffic volumes was placed on the outside lane of the connector lanes along SW 10 Street.
- The roundabout located at the intersection of SW 12 Avenue and East/West Newport Center Drive south of SW 10 Street was modified from a double lane roundabout to a single lane roundabout with separate right turn by-pass lanes for the heavier right turn movements. This change minimized right of way impacts.
- The right turn directional islands along Newport Center Drive were redesigned to better align the drivers with SW 10 Street in a directional right turn movement and eliminate the through movement across the intersection.

- The SW 10 Street local lanes were slightly realigned to accommodate more cost feasible placement of piers in medians for the connector lanes and direct connect ramp structures.
- The WB to NB ingress ramp was realigned and the curve radius reduced to minimize right of way impacts, eliminate a bridge over the existing drainage pond, and increase the merge distance along the I-95 NB CD road.
- Adjustments were made to the SB ingress ramp from EB SW 10 Street local lanes to SB I-95 that extended the merge further to the north thereby eliminating a bridge structure over the existing drainage pond along the west side of I-95.

5.5.3 Hillsboro Boulevard

Alternatives 1 and 2 were both determined non-viable due to construction impacts to the SFRC line and access impacts to adjacent properties. Proposed improvements at Hillsboro Boulevard are limited to the ramp terminals at the I-95 interchange.

6 Public Involvement

A Project Involvement Plan (PIP) was developed for the project and is included here by reference. The PIP documents the appropriate level of public involvement for this project in compliance with the Florida Department of Transportation's (FDOT) *Project Development and Environment (PD&E) Manual, Part 1, Chapter 11, and Part 2, Chapter 9*; the FDOT *Public Involvement Handbook; Section 339.155, Florida Statutes; Executive Orders 11990 and 11988; Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA)*; and *23 Code of Federal Regulations (CFR) 771*. The results of the PIP will be supportive of the NEPA process and local needs.

The objectives of the PIP are to ensure that the concerns and issues of those living and working within the study area, and those near the corridor who may be affected by the project, are identified; that stakeholders are given opportunities to review and comment on the findings of the alternative analysis; and that stakeholder concerns are addressed in the analysis process. The PIP provides an outline for:

- Early and continuous involvement of stakeholders;
- Reasonable availability of technical and other project information;
- Collaborative input on alternative transportation improvements for the study area and the criteria against which they will be measured and evaluated; and,
- Open access to the decision-making process

A project website was developed for the project. The project website was updated regularly and included the project information as well as a summary of all public meetings and presentations.

7 Preferred Alternative

7.1 I-95

The preferred alternative for the I-95 corridor is Build Alternative 2. Build Alternative 2 proposes to add one tolled express lane in each direction in the median along I-95 while maintaining the existing access points south of the SW 10 Street interchange and north of the Hillsboro Boulevard interchange. The existing number of general-purpose lanes throughout the I-95 corridor will be maintained and the express lanes will be separated from the general-purpose lanes with tubular markers and a 4-ft wide buffer. A CD road and braided ramps are proposed on the east side of I-95 for the NB traffic and a separate CD road and braided ramps on the west side of I-95 is proposed for the SB traffic.

The proposed direct connect ramps will connect I-95 express lanes to the SW 10 Street connector lanes. In addition, outside widening of the I-95 NB mainline is proposed to provide an auxiliary lane for traffic exiting to Hillsboro Boulevard.

For WB traffic on SW 10 Street a new NB ramp is introduced to eliminate the left turn movement at the current intersection. For EB traffic, the existing NB ingress loop ramp is expanded to two lanes for added capacity. Both ingress ramps intersect and braid over the NB egress ramp that is heading to Hillsboro Boulevard.

For NB traffic, the I-95 egress ramp that serves vehicles exiting to Hillsboro Boulevard starts north of the SW 10 Street overpass bridge and goes under the braided ingress ramp for the NB traffic coming from SW 10 Street. Traffic from the NB ingress ramps from SW 10 Street braid over the egress ramp and serve the SW 10 Street EB and WB traffic heading NB on I-95. This NB ingress begins the I-95 auxiliary lane just south of the Hillsboro Boulevard overpass bridge and continues north connecting with the auxiliary lane being built by the I-95 Express Phase 3B-1 project to the north of Hillsboro Boulevard.

A similar braided CD road configuration is also proposed on the west side of I-95 for the SB traffic on I-95 and coming from EB/WB Hillsboro Boulevard ingress ramps. At Hillsboro Boulevard traffic from both the SB ingress ramps merge and braid under the egress ramp from SB I-95 that is heading to SW 10 Street.

The WB traffic on Hillsboro Boulevard heading SB will utilize a realigned loop ingress ramp that has a new bridge over Hillsboro Boulevard separate from the existing bridge. The new bridge provides the desired 16'6" vertical clearance over Hillsboro

Boulevard and reduces traffic impacts during construction. For EB traffic from Hillsboro Boulevard heading SB the existing ramp is maintained with minor alignment adjustments to merge with the WB traffic from the loop ramp to braid under the SB egress ramp that is heading to SW 10 Street.

7.2 SW 10 Street

The preferred alternative for SW 10 Street is the modified north alignment. The modified north alignment provides three 11-ft lanes with 7-ft buffered bike lanes and 6-ft sidewalks in each direction for the SW 10 Street local traffic. However, no sidewalk is provided along the north side from East Newport Center Drive/SW 12 Avenue intersection to Military Trail. Two 12-ft connector lanes are provided in each direction with direct connect ramps to/from the I-95 express lanes providing regional connectivity to the express lanes network. In the EB direction along the connector lanes an egress ramp departs from the connector lanes west of the Military Trail intersection braiding over the EB SW 10 Street local lanes connecting along the outside. The egress ramp allows access to the Newport Center and to ramps to NB and SB I-95.

On SW 10 Street at the NB and SB legs of the East Newport Center Drive intersection triple right turn lanes and no left turn or through lanes are provided. In addition, dual left turn lanes and exclusive right turn lanes are provided for the EB and WB movements at this intersection. This configuration allows improved operations and mitigates congestion for the intersection, the interchange ramp intersections and along SW 10 Street.

A roundabout is provided at the intersection of West and East Newport Center Drive to improve left turn movements at the Newport Center. A loop ramp is provided along SW 12 Avenue that connects directly to the SW 10 Street connector lanes to improve operations of the East Newport Center Drive intersection with SW 10 Street by allowing WB traffic making a right turn to bypass the signal.

Expand the NB exit ramp terminal to accommodate triple left and triple right turn lanes. The intersection at Natura Boulevard is expanded to accommodate double left and single right turn lanes on all intersection approaches.

7.3 Hillsboro Boulevard

Alternatives 1 and 2 along Hillsboro Boulevard proposing a depressed profile under the SFRC or a grade separation over the railroad tracks were considered non-viable

due to significant impacts to property access, right of way, utilities, and major temporary traffic control impacts for both the railroad tracks and Hillsboro Boulevard. Therefore, the proposed improvements along Hillsboro Boulevard are limited to the ramp terminals. The improvements include an additional left turn movement for the NB egress ramp terminal while maintaining the dual right turn movement which resulted in the elimination of the NB off-ramp loop to WB Hillsboro Boulevard. In addition, the NB on-ramp from WB Hillsboro Blvd was realigned to be within the proximity of I-95. Moreover, a new configuration was proposed for the WB to NB on-ramp and the WB to SB on-ramp to minimize the weaving maneuvers within the interchange area. Additionally, a new bridge is proposed to be constructed on the west side of the I-95 mainline, due to the existing vertical clearance above Hillsboro Boulevard.

7.4 Typical Section

7.4.1 I-95

The preferred alternative mainline I-95 typical section will consist of the following:

- Four 12-ft wide express lanes (two in each direction)
- Six 12-ft wide general-purpose lanes (three in each direction)
- Four-ft wide buffer with tubular markers separating the general-purpose lanes from the express lanes
- A 12-ft wide paved inside shoulder
- A 12-ft wide outside shoulder (10-ft paved and 2-ft unpaved)
- A 2.5-ft wide center barrier wall

The typical section for the CD roads serving vehicles from the SW 10 Street and Hillsboro Boulevard arterials include:

- Two 12-ft wide travel lanes
- Two 6-ft paved shoulders

The typical section for all the direct connect ramps between I-95 and SW 10 Street connector lanes consist of the following:

- One 15-ft travel lane
- One inside 8-ft shoulder
- One outside 4-ft shoulder

The preferred alternative typical sections for I-95, the CD roads, and direct connect ramps are shown in **Figure 7-1, 7-2 and 7-3**.

7.4.2 SW 10 Street

The preferred alternative typical section for SW 10 Street includes:

- Three 11-ft wide WB through lanes from Natura Boulevard intersection to Military Trail
- Two 11-ft wide EB through lanes from Military Trail that add one additional 11-ft wide through lane with the connection of the EB egress ramp from the connector lanes.
- Raised median 40 to 60-ft wide
- A 7-ft buffered bike lane (in each direction)
- A 6-ft sidewalk along the north side from East Newport Center Drive to east of Natura Boulevard and along south side from Military Trail to east of SW Natura/FAU Research Park Boulevard
- Two 12-ft elevated connector lanes, with 12-ft inside and 12-ft outside shoulders in each direction connecting to the direct connect ramps from I-95.

7.5 Horizontal and Vertical Geometry

7.5.1 Horizontal Geometry

7.5.1.1 Interstate 95

The I-95 mainline contains one horizontal curve within the study limits. The curve occurs at the Hillsboro Boulevard interchange. The curve radius (7639 feet) meets design criteria for a 70 mph with 3% superelevation rate of cross slope.

The direct connect ramps at SW 10 Street are designed to meet criteria for a 50-mph design speed. The following are the design elements for each direct connect ramp.

Direct Connect Ramp	Radius	Length	Design Speed
NB I-95 to WB SW 10 Street	720.00	1,321.44	50
EB SW 10 Street to SB I-95	716.00	1,371.63	50
EB SW 10 Street to NB I-95	746.50	915.13	50
SB I-95 to WB SW 10 Street	716.00	874.81	50

The design elements for the horizontal curves for the I-95 on/off-ramps (including braided ingress-egress ramps) within the study limits are shown in the table below.

Table 7-2 Design Elements for I-95 Ingress/Egress ramps			
Ramp	Radius	Length	Design Speed
SW 10 Street			
NB off-ramp (Curve 1)	573.00	560.18	50
NB off-ramp (Curve 2)	270.84	315.40	30
EB to NB LOOP on-ramp (Curve 1)	249.90	138.99	30
EB to NB LOOP on-ramp (Curve 2)	213.00	941.56	30
WB to NB on-ramp (Curve 1) Ramp from SW 10 WB lanes, RT	100.00	175.69	25
NB on-ramp (Curve 1)	12,024.00	527.42	50
NB on-ramp (Curve 2)	9,286.00	407.32	50
NB on-ramp (Curve 3)	36,088.00	838.62	50
NB on-ramp (Curve 4)	26,677.49	265.31	50
NB on-ramp (Curve 5)	26,677.49	614.44	50
SB off-ramp (Curve 1)	13,993.01	502.77	50
SB off-ramp (Curve 2)	60,940.00	470.00	50
SB off-ramp (Curve 3)	6,156.65	281.90	50
SB off-ramp (Curve 4)	18,859.08	616.65	50
EB to SB on-ramp (Curve 1)	301.67	346.94	30
EB to SB on-ramp (Curve 2)	654.08	432.74	50
WB to SB on-ramp (Curve 1)	478.00	460.74	50
WB to SB on-ramp (Curve 2)	235.00	446.27	50
WB to SB on-ramp (Curve 3)	235.00	446.27	50
WB to SB on-ramp (Curve 4)	7,515.61	420.14	50
WB to SB on-ramp (Curve 5)	3,349.00	511.45	50
WB to SB on-ramp (Curve 6)	13,974.47	378.67	50
WB to SB on-ramp (Curve 7)	6,878.00	424.55	50
WB to SB on-ramp (Curve 8)	6,878.00	792.41	50
Hillsboro Boulevard			
NB off-ramp (Curve 1)	5,139.20	701.31	50
NB off-ramp (Curve 2)	5,575.00	274.28	50
NB off-ramp (Curve 3)	1,447.00	735.87	30
NB off-ramp (Curve 4)	756.31	457.32	30
EB to NB on-ramp (Curve 1)	310.00	176.03	30
EB to NB on-ramp (Curve 2)	478.00	473.78	30
EB to NB on-ramp (Curve 3)	239.00	390.29	30
EB to NB on-ramp (Curve 4)	239.00	390.29	50
EB to NB on-ramp (Curve 5)	7,761.69	229.74	50
EB to NB on-ramp (Curve 6)	8,352.00	243.87	50
EB to NB on-ramp (Curve 7)	8,337.00	853.36	50
EB to NB on-ramp (Curve 8)	10,287.53	601.60	50
WB to NB on-ramp (Curve 1)	368.21	515.23	30
WB to NB on-ramp (Curve 2)	1,241.50	262.81	30
WB to NB on-ramp (Curve 3)	8,361.00	280.00	30
WB to NB on-ramp (Curve 4)	8,352.00	86.84	30
WB to NB on-ramp (Curve 5)	12,027.56	703.35	30

Table 7-2 Design Elements for I-95 Ingress/Egress ramps			
Ramp	Radius	Length	Design Speed
SB off-ramp	1,029.25	459.26	30
WB to SB on-ramp (Curve 1)	478.00	460.73	30
WB to NB on-ramp (Curve 2)	235.00	446.27	30
WB to NB on-ramp (Curve 3)	235.00	446.27	30
WB to NB on-ramp (Curve 4)	7,515.61	420.14	30
WB to NB on-ramp (Curve 5)	3,349.00	511.45	50

7.5.1.2 SW 10 Street

There are two proposed grade lines (PGL) along SW 10 Street local lanes within the study limits. All horizontal curves are designed for 35 mph. The following are the design elements for each horizontal curve along the general-purpose lanes.

Table 7-3 Design Elements for SW 10 Street (Local Lanes)					
Curve	Radius	Length	Curve	Radius	Length
PGL_EB (Curve 1)	4,377.00	333.49	PGL_WB (Curve 1)	5,627.10	450.12
PGL_EB (Curve 2)	4,443.00	338.52	PGL_WB (Curve 2)	3,464.00	672.24
PGL_EB (Curve 3)	3,415.00	270.75	PGL_WB (Curve 3)	3,349.00	265.51
PGL_EB (Curve 4)	5,597.31	442.17	PGL_WB (Curve 4)	3,349.00	264.56
PGL_EB (Curve 5)	3,383.69	242.76	PGL_WB (Curve 5)	12,797.00	372.85
PGL_EB (Curve 6)	8,331.38	355.41			

There are three PGL along SW 10 Street connector lanes within the study limits. There is one PGL in the EB direction and two PGLs in the WB direction. For the PGLs in the WB direction, one serves I-95 NB to WB SW 10 Street connector lane traffic. The other PGL serves I-95 SB to WB SW 10 Street connector lane traffic. The following are the design elements for each horizontal curve along the connector lanes.

Table 7-4 Design Elements for SW 10 St Connector Lanes			
Ramp Direction	Radius	Length	Design Speed
EB to NB			
Curve 1 to I-95 Ramp	746.50	915.13	50
Curve 2 Ramp	8,337.00	669.89	50
Curve 3	8,337.00	654.13	60
Curve 4	8,361.00	632.75	60
EB to SB			
Curve 1 Ramp	716.00	1371.63	50
SB to WB			
Curve 1 Ramp	716.00	875.33	50
Curve 2	6,166.56	832.89	60

Table 7-4 Design Elements for SW 10 St Connector Lanes			
Ramp Direction	Radius	Length	Design Speed
Curve 3	8,358.92	725.01	60
Curve 4	6,183.00	223.35	60
NB to WB			
Curve 1 Ramp	720.00	1298.36	50
Curve 2 Ramp	8,337.00	612.00	50
Curve 3 Ramp	6,171.00	450.42	50

Table 7-5 Design Elements for SW 10 St, Connector Ingress Ramps			
Ramp	Radius	Length	Design Speed
12 Ave Loop Ramp (Curve 1) to connector Lanes	150	59.69	25
12 Ave Loop Ramp (Curve 2) to connector Lanes	86.00	202.34	25
12 Ave Loop Ramp (Curve 3) to connector Lanes	150.00	59.69	25

Table 7-6 Design Elements for SW 10 St. Connector Egress Ramps			
Ramp	Radius	Length	Design Speed
EB connector lanes to EB GP off-ramp (Curve 1)	3,200.00	406.61	50
EB connector lanes to EB GP off-ramp (Curve 2)	2,880.00	376.75	30

7.5.2 Vertical Geometry

7.5.2.1 I-95

The I-95 mainline contains one vertical crest curve with two sag vertical curves on either side of the crest at the overpass of Hillsboro Boulevard. The sag vertical curves have K-Values of 262 & 274 respectively and meet FDM (Table 211.9.2) design criteria K-Value for 65 mph for Interstate sag curves (K-Value = 181). The existing crest vertical curve for I-95 mainline over Hillsboro Boulevard does not meet the new construction (K-Value=401) criteria but does meet the resurfacing criteria (K-Value=247) with a K-Value of 262 and length of curve of 1,169-ft (Minimum Length of vertical curve = 900-ft, FDM Table 211.7.1). A design variation will not be needed for this crest vertical curve since the existing I-95 bridges are being maintained and this area of I-95 only requires widening and resurfacing to maintain the profile of I-95 avoiding reconstruction. To meet the new construction criteria for the crest vertical curve I-95 would need to be raised by reconstruction and the bridges over I-95 replaced.

7.5.2.1.1 I-95 Express Lane Direct Connect Ramps

The NB to WB direct connect ramp is the highest-level ramp over all the other direct connect ramps. This ramp is designed with two sag vertical curves on either side of the crest vertical curve. The two vertical curves beyond the ramp terminal (gore) are designed using 50-mph design speed criteria for ramps with the crest vertical curve having 5% grades, K-Value of 140 and a 1,400-ft length of vertical curve. The sag curve coming from I-95 is 634-ft long with a K-Value of 96 at a 65-mph design speed. This is designed using the freeway/expressway criteria based upon note 4, FDM Table 211.9.2. The west end sag curve leading to the merge with the other WB connector lane has grades of 5% & -0.12%, sag K-Value of 96 and length of curve of 468-ft using a 50-mph design speed for sag curve on a ramp.

The SB to WB direct connect ramp is designed with three sag vertical curves and two large crest vertical curves. The three vertical curves beyond the ramp terminal (gore) are designed using 50-mph design speed criteria for ramps with the first vertical curve (sag curve) having -2% % 3% grades, K-Value of 136 and a 800-ft length of vertical curve, and the second curve (crest curve) having 3% & -5% grades, K-Value of 137 and a 1100-ft length of vertical curve, and third vertical curve (sag curve) having -5% % -0.06% grades, K-Value of 96 and a 475-ft length of vertical curve. The second crest vertical curve before the ramp terminal has +3% & -2% grades, K-Value of 151 and a 1,225-ft length of vertical curve. The sag curve west of Military Trail is 800-ft long with a K-Value of 136 at a 60-mph design speed.

The EB to NB direct connect ramp is designed with one sag vertical curve and two large crest vertical curves.

The EB to SB direct connect ramp is designed with one sag vertical curve and one crest vertical curve.

7.5.2.2 SW 10 Street

The SW 10 Street corridor contains two vertical crest curves with three sag vertical curves within the study limits. The sag vertical curve at Military Trail intersection has a length of curve of 220-ft, with a K-Value of 37 and grades of 0.05% and 6.00%. The crest curve that occur over the SFRC railroad crossing and over I-95 mainline travel lanes has a length of curve of 800-ft, with a K-Value of 74 and grades of 6.0% and -4.9%. The crest curves meet design criteria for a 35-mph urban arterial (FDM Tables 210.10.3, 210.10.4). The sag vertical curve at Newport Center Drive intersection has a length of curve of 1,100-ft, with a K-Value of 117 and grades of -

4.85% and 4.5%. The crest vertical curve over the I-95 has a length of curve of 800-ft, with a K-Value of 84 and grades of 4.5% and -5.0%. The sag vertical curve east of I-95 has a length of curve of 600-ft, with a K-Value of 123 and grades of 5% and 0.13%. From FDM for an urban low speed arterial roadway with a 35 mph design speed, the minimum vertical curve length is 105, minimum K-Value is 47 crest vertical curve and 49 for a sag with a maximum grade of 7%.

7.6 Access Management

No changes to the existing Access Management classification are needed for the proposed improvements for I-95, SW 10 Street, and Hillsboro Boulevard. The Access Management classification will remain as Class 1.2, Freeway in an existing urbanized area with limited access for the I-95 corridor. SW 10 Street will remain as Access Management Class 3 and Hillsboro Boulevard will remain as Class 5.

7.7 Preliminary Drainage

A Pond Siting report and Location Hydraulics report were prepared for this project and are included here by reference. Except for SW 10 Street west of the railroad tracks to west of Military Trail, the project will discharge to the BCWCD#2 C-1 canal. Along SW 10 Street, Hillsboro Boulevard, and portions of I-95, the discharge will be through a closed storm drain system. The remaining portions of I-95 will sheet flow and discharge directly into the BCWCD#2 C-1 canal. Proposed wet and dry storm water management facilities will provide the required attenuation and water quality treatment per the SFWMD (2016) and FDOT (2017) standards. Moreover, additional storm water ponds are proposed in Basin 2, Basin 25, Basin 26, and Basin 27 within the limits of the project. The location and size of all cross drains will be determined in the design phase.

7.8 Maintenance of Traffic

The recommended alternative traffic control plan proposes to keep all travel lanes open during construction. Lane closures will be required during off-peak hours to modify or change construction phasing. Advanced notice of any lane closure should be given to minimize disruption to roadway users. Figures 7-1 to Figure 7-6 show the construction phases typical sections for I-95 and SW 10 Street.

7.8.1 I-95 Mainline (under SW 10 Street)

Phase I – Shift SB traffic to the outside.

The intent of Phase 1 is to provide a work zone on I-95 for foundation construction of the SW 10 overpass bridge. See Figure 7-1.

- Remove SB Connector lane designation. The connector lanes will become a general-purpose lane.
- Perform temporary widening to the outside in the SB direction.
- Reduce the SB inside shoulder width to 2-ft and the outside shoulder width to 10-ft.
- Reduce the NB inside shoulder with to 2-ft and the outside shoulder width to 10-ft.
- Shift SB traffic to temporary widened roadway.
- NB traffic to remain in existing configuration.
- Place temporary concrete barrier as need to protect work zone and construct foundations.

Phase 2 – Shift NB and SB traffic to the east.

The intent of Phase 2 is to shift NB and SB traffic under the NB span of overpass bridge in order to construct the direct connect foundations in the I-95 median. See Figure 7-2.

- Perform temporary widening to the outside in the NB direction and median of I-95.
- Reduce the SB inside shoulder width to 2-ft and the outside shoulder width to 2-ft at median foundations.
- Reduce the NB inside shoulder with to 2-ft and the outside shoulder width to 6-ft.
- Shift NB and SB traffic onto temporary widening and
- Place temporary concrete barrier as need to protect work zone.

Phase 3 – Shift SB traffic to final condition.

The intent of Phase 3 is to shift SB traffic to the final condition. See Figure 7-3.

- Shift SB traffic under the west side of SW 10 Street overpass.
- Under nighttime lane closures overbuild and reconstruct the NB pavement under SW 10 Street overpass.
- Place temporary concrete barrier as need to protect work zone.

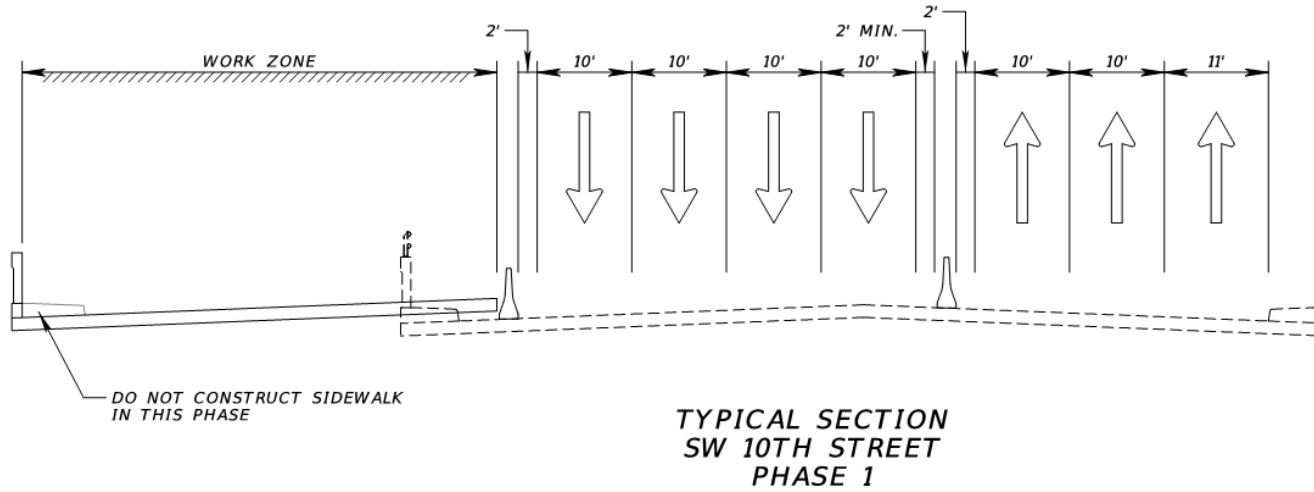


Figure 7-1 TCP Typical Section SW 10 St – PHASE 1

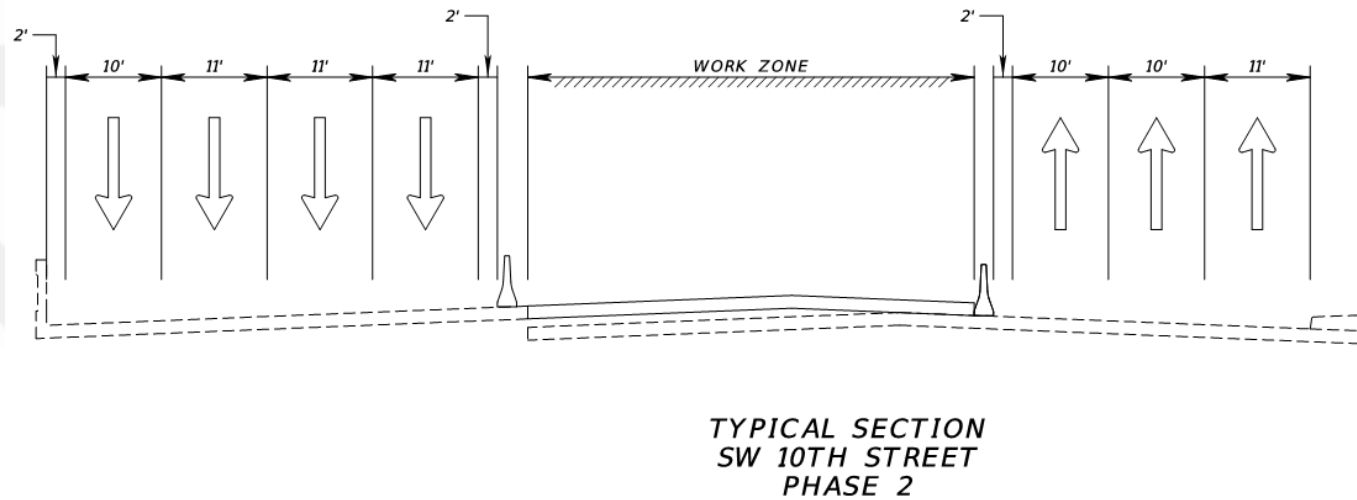


Figure 7-2 TCP Typical Section SW 10 St – PHASE 2

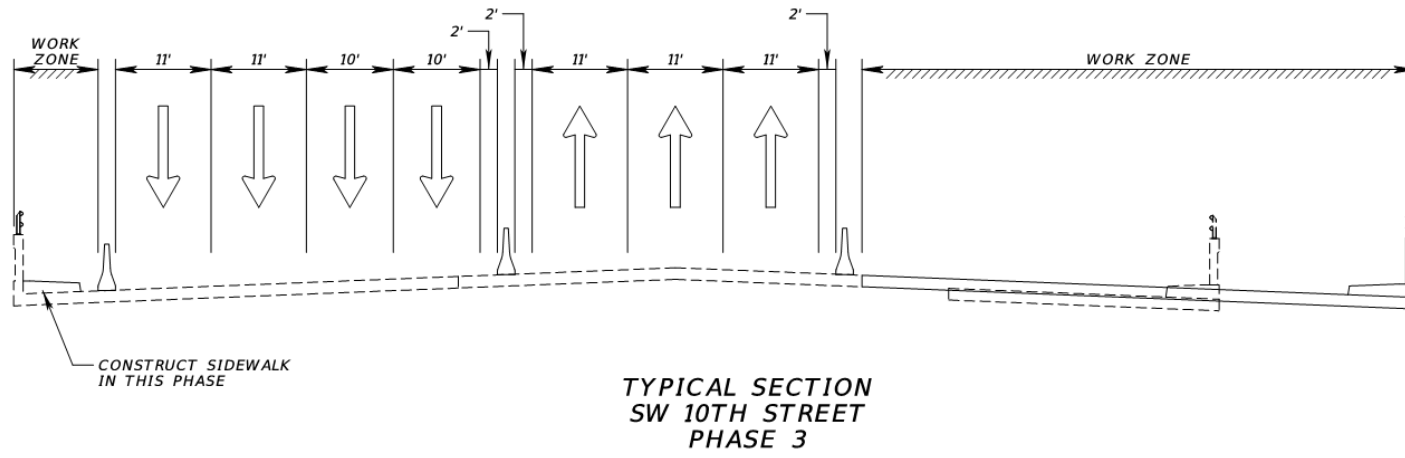


Figure 7-3 TCP Typical Section SW 10 St – PHASE 3

7.8.2 SW 10 Street (over I-95 Mainline)

Phase I – Shift traffic to the southside of existing bridge.

The intent of Phase 1 is to provide an offset for constructing the foundations and portion of the proposed SW 10 Street overpass bridge. See figure 7-4

- Remove existing traffic separator on the bridge of SW 10 Street.
- Shift lanes to the south and reduce lane width to 10-ft.
- Construct north section of proposed bridge.

Phase 2 – Shift WB traffic to the portion of the constructed bridge in Phase 1.

The intent of Phase 2 is to continue construction of the proposed SW 10 overpass. See figure 7-5.

- Shift WB traffic to portion of the proposed bridge constructed in Phase 1.
- Keep EB traffic in Phase 1 location.
- Construct center section of proposed bridge.

Phase 3 – Shift EB traffic to the portion of the constructed bridge in Phase 2.

The intent of Phase 3 is to finalize construction of the proposed SW 10 Street overpass. See figure 7-6.

- Shift EB traffic to portion of the proposed bridge constructed in Phase 2.
- Keep WB traffic in Phase 2 location.
- Construct south section of proposed bridge.

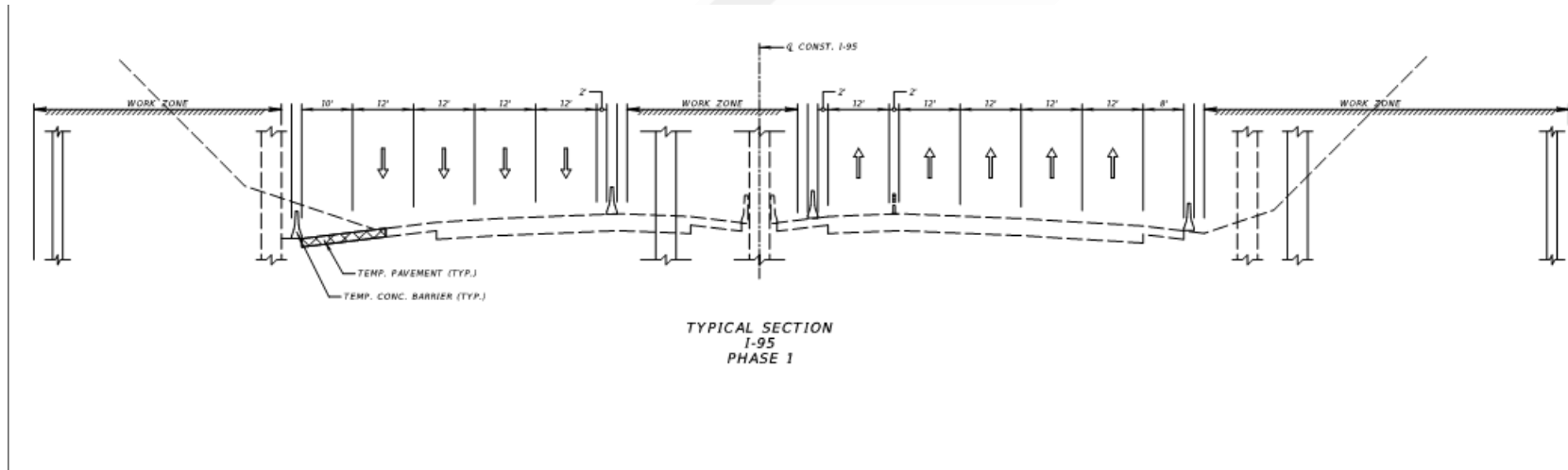


Figure 7-4 TCP Typical Section I-95 – PHASE 1

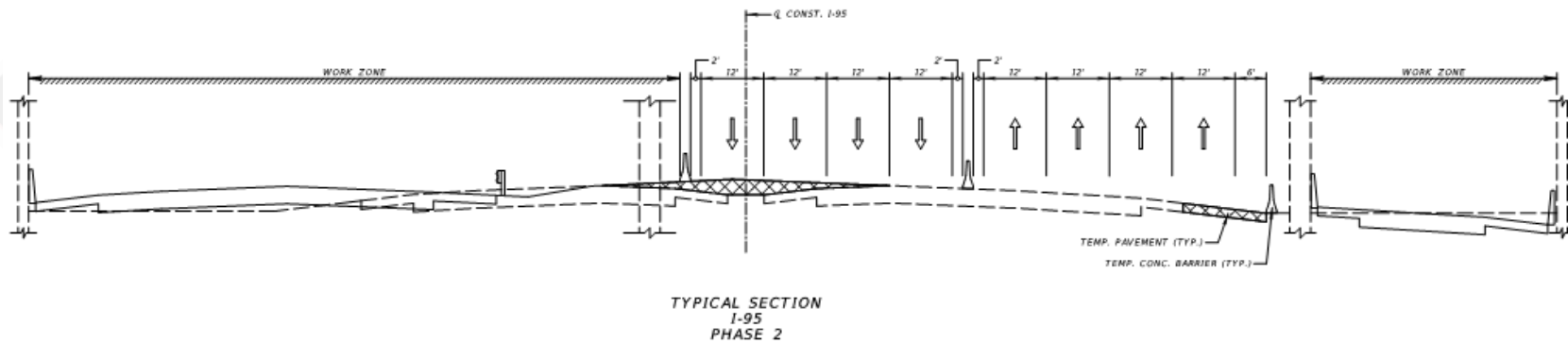


Figure 7-5 TCP Typical Section I-95 – PHASE 2

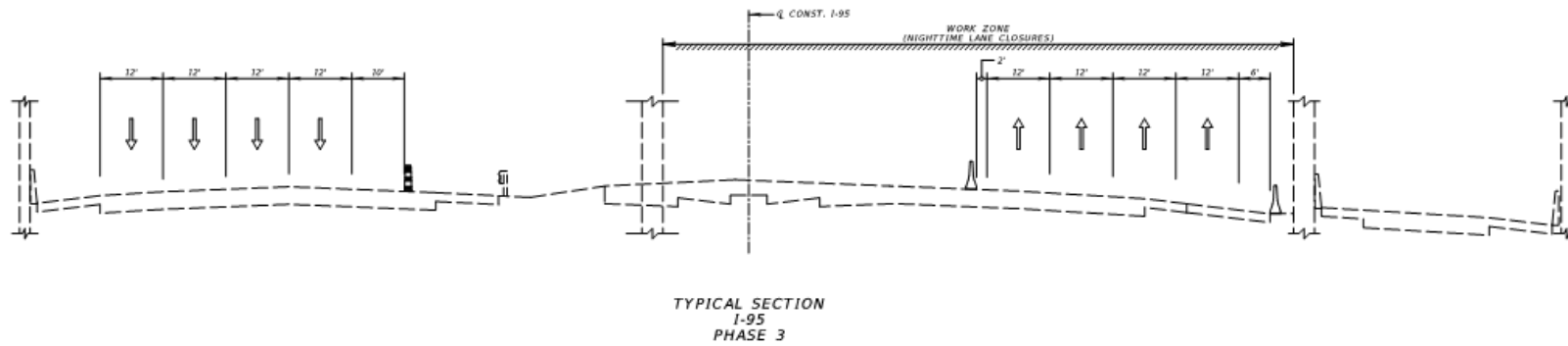


Figure 7-6 TCP Typical Section I-95 – PHASE 3

7.9 Variations and Exceptions

7.9.1 I-95

The anticipated design variations for I-95 are as follows:

Horizontal Curve Length (Ramps)

Horizontal Curve Radius (Ramps)

Border Width

Stopping Sight Distance (Express lane Tubular Markers)

Outside shoulder width for I-95 bridge over Hillsboro Boulevard.

Outside shoulder width of SB connector to SW 10 Street

Inside Shoulder Width for direct connect ramps

7.9.2 SW 10 Street

The anticipated design variations for SW 10 Street are as follows:

Horizontal Curve Length

Horizontal Curve Radius

7.9.3 Hillsboro Boulevard

One design variation is anticipated for Hillsboro Boulevard for:

Vertical Clearance at I-95 bridge over Hillsboro Blvd.

7.10 Utilities

7.10.1 I-95

Five utility owners were identified to be impacted by the proposed improvements.

Table 7-7 shows the potential utility impacts.

Table 7-7 Utility Impacts along I-95	
Utility Owner	Impacts
AT&T Distribution	Underground Copper and Fiber Cable may be present on under proposed SB I-95 On Ramp at SW 10 Street
Broward County Water and Wastewater Services	Water main crosses I-95 around 2,200 ft south of bridge at SW 10 Street over I-95 (BL I-95 - Sta. 1337+00)
City of Deerfield Beach	Water and Sewer main crosses I-95 about 2,200 ft south of bridge over Hillsboro Boulevard (BL I-95 - Station 1388+60)
FDOT ITS	West side of I-95: Underground ITS fiber optics. <ul style="list-style-type: none"> • Crosses I-95 SB on-ramp from EB Hillsboro Boulevard. • Attached to the westside of the I-95 bridge over Hillsboro Boulevard. • Crosses I-95 SB on-ramp from WB Hillsboro Boulevard. • Crosses I-95 SB off-ramp to Hillsboro Boulevard.
FPL Distribution	<ul style="list-style-type: none"> • Buried Electric – Along eastside of I-95 off ramp to SW 10 Street • Overhead and Buried Electric – Along southside of SW 10 Street bridge over I-95. • Overhead and Buried Electric – Along northside of I-95 bridge over Hillsboro Boulevard. • Overhead Electric – Across I-95 about 400 ft south of Hillsboro Canal.

7.10.2 SW 10 Street

Five utility owners were identified to be impacted by the proposed improvements. **Table 7-8** shows the potential utility impacts.

Table 7-8 Utility Impacts along SW 10 Street	
Utility Owner	Impacts
AT&T Distribution	<ul style="list-style-type: none"> • Overhead Fiber Optic along northside of SW 10 Street along R/W between just west of Military Trail and Newport Center Drive. The same line appears to become buried and goes across SW 10 Street on the west side of Newport Center Drive. • Underground Duct along the northside of SW 10 Street (just along the edge of pavement) between Military Trail and just east of Natura Boulevard) • Buried Copper along southside of SW 10 Street along R/W (between Military Trail and SFRC Rail Road) • Various feeders
Florida Power and Light- Broward	<ul style="list-style-type: none"> • Transmission line along Military Trail and north side of SW 10 Street
Broward County Water and Wastewater Services	<ul style="list-style-type: none"> • Water main along the southside of S.W. 10 Street along R/W. Main crosses S.W. 10 Street just east of Military Trail. • Sewer main along Military trail (crosses S.W. 10 Street)

Table 7-8 Utility Impacts along SW 10 Street	
Utility Owner	Impacts
City of Deerfield Beach	<ul style="list-style-type: none"> • Water main along the northside of SW 10 Street along R/W between Military Trail and Natura Boulevard (includes, various laterals/feeders across SW 10 Street) • Water main along the southside of SW 10 Street along R/W west of Military Trail (includes, various laterals/feeders across S.W. 10 Street) • Water main along east and westside of Military Trail (northward from SW 10 Street) • Water main along East Newport Center Drive and West Newport Center Drive (including the intersection).
FPL Distribution	<ul style="list-style-type: none"> • Overhead Electric – Along the south side of SW 10 Street (along R/W) west of Military Trail (feeder goes North and South along west side of Military Trail). • Overhead Electric – Along the northside of SW 10 Street (along R/W) from west of Military Trail to East of Newport Center Drive). Feeders go South under S.W. 10 Street just east of bridge over SFRTA RR. • Overhead Electric – Along the southside of S.W. 10 Street (along R/W) east of Newport Center Drive to just west of Natura Boulevard). Feeders go across SW 10 Street just east of Newport Center Drive and just west of Natura Boulevard). • Various other feeders.

7.10.3 Hillsboro Boulevard

Four utility owners were identified to be impacted by the proposed improvements. **Table 7-9** shows the potential utility impacts.

Table 7-9 Utility Impacts along Hillsboro Boulevard	
Utility Owner	Impacts
AT&T Distribution	<ul style="list-style-type: none"> On the Northside of Hillsboro Boulevard: Underground Duct crossing the SB On-Ramp from WB Hillsboro Boulevard and NB On-Ramp from WB Hillsboro Boulevard.
Crown Castle (Fibernet Direct)	<ul style="list-style-type: none"> Northside of Hillsboro Boulevard: Overhead fiber crossing Northside of the roadway.
FDOT ITS	<ul style="list-style-type: none"> Northside of Hillsboro Boulevard: Underground ITS crossing Northside of the roadway.
TECO Gas	<ul style="list-style-type: none"> On the Southside of Hillsboro Boulevard along R/W line.

7.11 Proposed Structures

There are six (6) existing bridges within the project limits that were evaluated in Section 2.6 above.

As part of this PD&E study, each of the existing bridges, which are impacted by proposed improvements, was further evaluated to determine if widening or replacement is required. Where feasible, the widening or retrofitting of existing bridges is recommended. All existing bridges except for I-95 NB and I-95 SB over Hillsboro Boulevard are determined to be replaced due to proposed roadway geometrics and alignments. The I-95 NB bridge over Hillsboro Boulevard needs to be widened and the I-95 SB overpass over Hillsboro Boulevard is to remain in place.

Within the limits of the PD&E study, sixteen (16) new bridges and one (1) bridge widening are proposed for the preferred alternative. The proposed bridges and bridge widening are summarized in Table 7-10 and their respective locations are depicted in Figures 7-7 and 7-8.

In addition, the required horizontal clearances for the proposed bridges are listed in Table 7-10 as well. The vertical clearances of the proposed bridges are specified in the following for each proposed bridge/bridge widening.

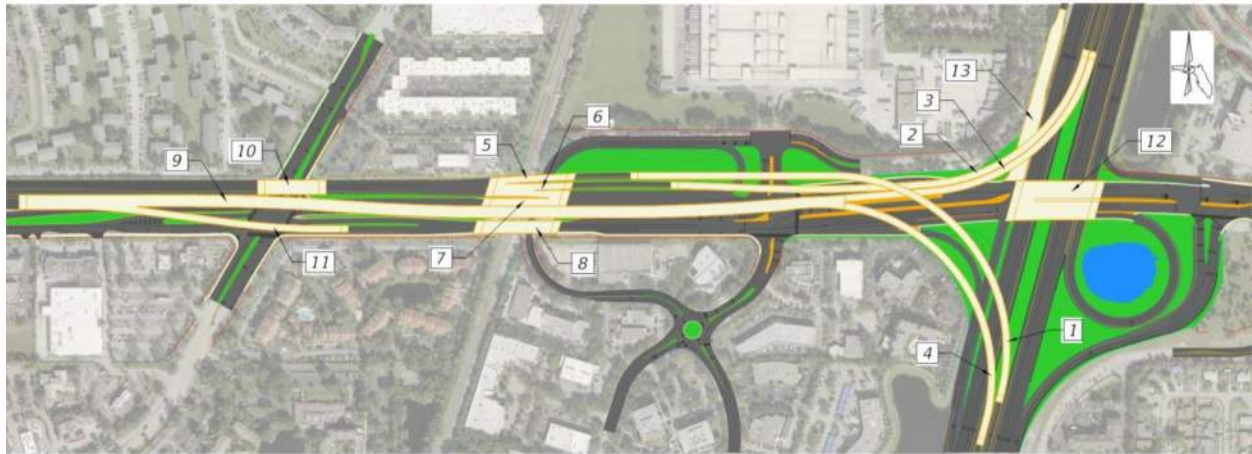


Figure 7-7 Proposed Bridge Locations (1 of 2)



Figure 7-8 Proposed Bridge Locations (2 of 2)

The proposed bridges are divided into the following categories:

- Flyovers of direct connect ramps between SW 10 Street and I-95 (4 new bridges)
- Elevated viaduct (1 new bridge)
- Interchanges/Grade separation (9 new bridges and 1 bridge widening)
- Braided ramp (2 new bridges)

7.11.1 Flyovers - Direct Connect Ramps Between SW 10 Street and I-95

7.11.1.1 Flyover - Direct Connect Ramp from I-95 NB to SW 10 Street WB (Bridge No. 1)

Bridge No.1 carries one (1) 15-foot connector lane from I-95 NB to SW 10 Street in the WB direction with an 8-foot inside shoulder and 4-foot outside shoulder. A 36" single slope traffic railing is at both sides of the bridge with an overall bridge width of 29'-8". Figure 7-9 below shows the bridge typical section.

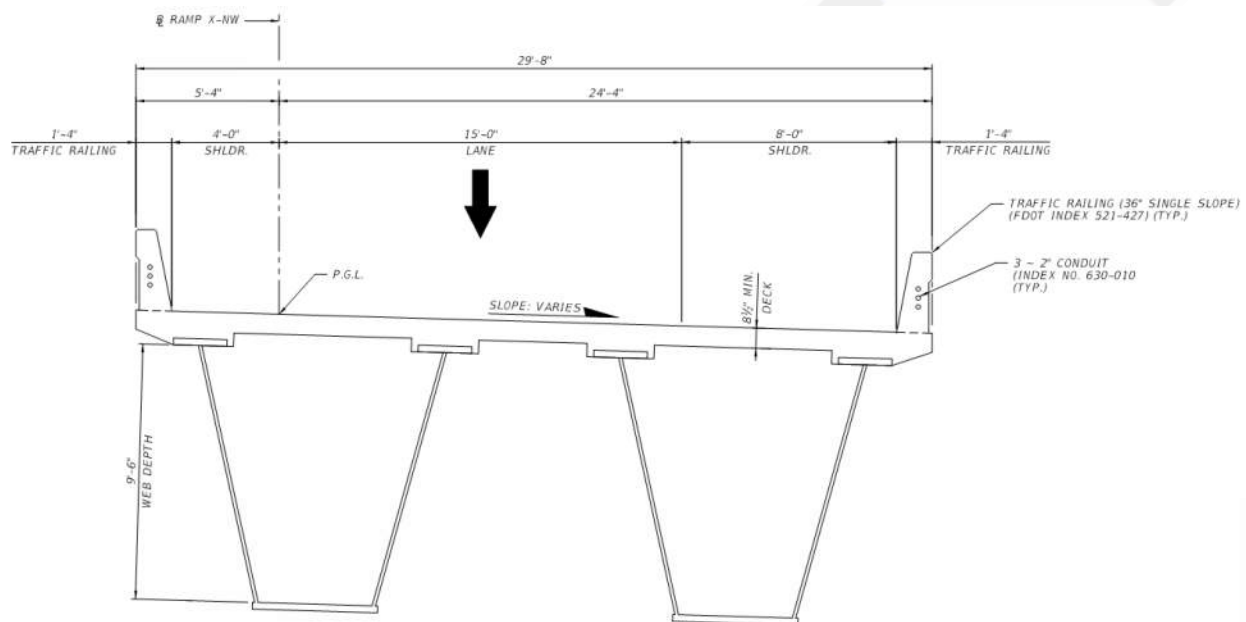


Figure 7-9 Bridge Typical Section (Bridge No. 1)

Bridge No.1 is a level 4 bridge that overpass I-95 SB, SW 10 Street, Bridge No. 2 and 3, and Newport Center Dr. The critical location of the bridge vertical clearance occurs where the bridge overpasses Bridge No.3 with a minimum vertical clearance of 16'-6". The bridge has multiple spans with a maximum span length of approximately 262' on a curved alignment.

The first option evaluated for superstructure is Florida-I beams. Given that proposed bridge spans exceed the practical span limit by Florida-I beams (approximately 200-foot maximum), they are determined to be an unviable option for the superstructure.

The second viable option evaluated is segmental concrete box girders. It provides the most efficient torsional resistance because of its box shape. Segmental concrete box girders can be less expensive than steel tub girders. However, they have some disadvantages compared with the latter. Segmental concrete box girders generally require more temporary works and heavier construction equipment which result in a longer construction period with more impact on the maintenance of traffic (MOT). Therefore, it is not recommended as the preferred option for the superstructure.

The third viable option evaluated for superstructure is steel plate girders. Steel plate girders do not provide sufficient resistance to torsional forces caused by the horizontal curvature of the ramp. Thus, additional cross members and stiffener bracings would be required to withstand torsional forces. This increases the costs and time of design, fabrication, and construction. Therefore, it is not recommended as the preferred option for the superstructure.

The last viable option evaluated for superstructure is steel tub girders. Steel tub girders are slightly more expensive than steel plate girders. However, steel tub girders offer several advantages over the latter. The shape of steel tub girders is more efficient in resisting torsional forces while providing a more aesthetically pleasing form with shortened construction time. Therefore, steel tub girders are the preferred alternative for all direct connect ramps and the elevated viaduct.

The proposed bridge is classified as a long bridge and the minimum 8 ½" thick CIP deck is required. The minimum height of the tub girder shall be 6-foot per FDOT Structure Design Guidelines (SDG), Structures Manual, Volume 1, Section 5.6.2. Maintenance access to the girder and interior lighting shall be provided per SDG, Section 5.6.2.

Hammerhead piers normal to the bridge alignment are proposed for the bridge substructure. They are located at either the outside of the roadway or within the median of the proposed roadway underneath.

Viable options of the foundation include driven prestressed concrete pile, steel H-pile, steel pipe piles, and drilled shafts. Prestressed concrete piles have some advantages over steel H piles and pipe piles due to its high availability, increased pile capacity, and overall low costs of the foundations. A review of existing bridges within the vicinity of the interchange reveals that they are supported on prestressed concrete piles. This is consistent with the findings documented in the Geotechnical Report. Therefore, prestressed concrete piles are proposed for the foundation of this bridge.

Drilled shafts are another feasible alternative for the deep foundation. The advantages of drilled shafts versus driven concrete piles are higher axial and horizontal capacities with less noise and vibration levels during construction. However, it should be noted that drilled shafts require more comprehensive quality control with greater risks for construction delays and heightened costs. Drilled shafts are generally not the preferred option if existing soil properties and site conditions can accommodate the use of prestressed concrete piles.

It is anticipated that no phased construction will be required for this bridge since most of the piers are located outside of existing roads (SW 10 Street and I-95). However, the proposed piers at SW 10 Street and I-95 are anticipated to be constructed within the work zone under appropriate maintenance of traffic (MOT) phases along SW 10 Street and I-95, which will be further developed in the design phase.

7.11.1.2 Flyover - Direct Connect Ramp From I-95 SB to SW 10 Street WB (Bridge No. 2)

Bridge No.2 carries one (1) 15-foot connector lane from I-95 SB to SW 10 Street in the WB direction with a 4-foot inside shoulder and 8-foot outside shoulder. A 36" single slope traffic railing is at both sides of the bridge with an overall bridge width of 29'-8". Figure 7-10 shows the bridge typical section. This bridge overpasses I-95 SB, I-95 SB off-ramp to SW 10 Street, SW 10 Street WB, Newport Center Dr., and runs underneath Bridge No.1. This is a level 3 bridge and will provide a minimum vertical clearance of 16'-6" over the roadway underneath.

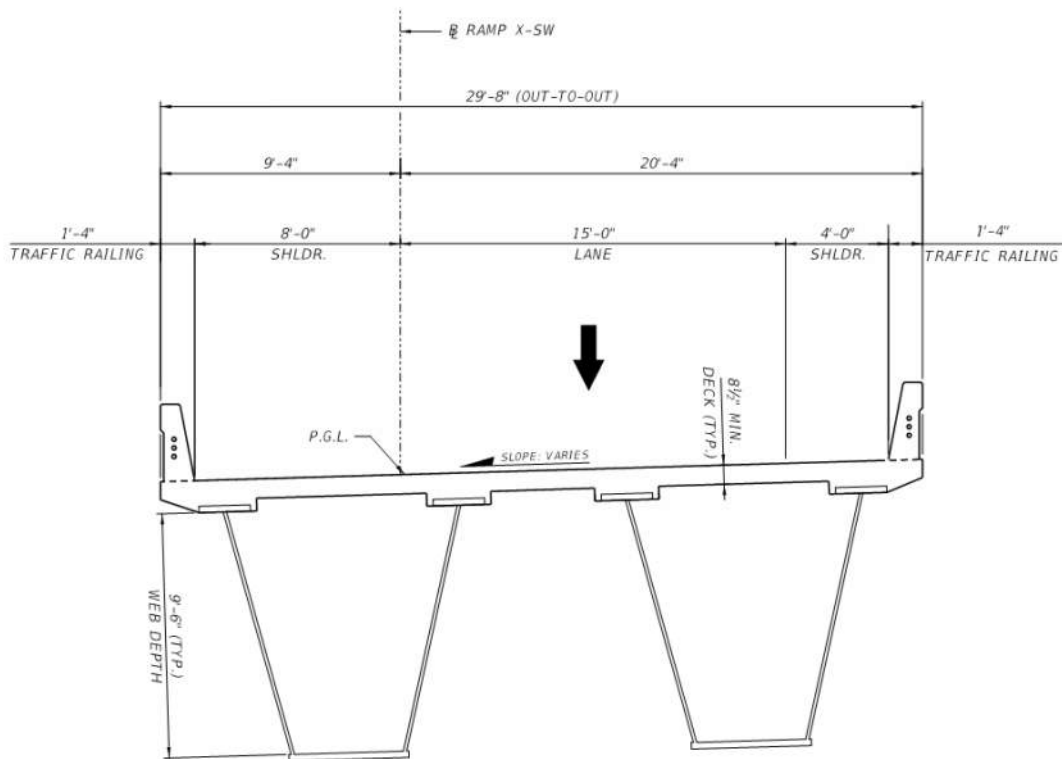


Figure 7-10 Bridge Typical Section (Bridge No. 2)

The bridge has 10 spans with a maximum span length of approximately 247-foot. Similar to Bridge No.1, the superstructure consists of continuous curved steel tub girders with a substructure consisting of pile end bents, hammerhead piers. This bridge is also anticipated to require straddle bents. The placement of straddle bents is dictated by the roadway geometric constraints of SW 10 Street and I-95 underneath the bridge. Under these constraints, hammerhead piers are unfeasible and cantilever piers would exceed conventional limits on bridge span and cantilever length. Therefore, straddle bents are proposed at Piers 4, 5, 6; integral straddle bents are proposed for Piers 7, 9, and 10 due to limited vertical clearance over the roadway underneath. Refer to the conceptual plan Sheet Nos. B2-1 and B2-2, in Appendix A, for additional information. The cross member of straddle bents is anticipated to be post-tensioned concrete or steel box. The steel box straddle bent is preferred since it would minimize impacts to traffic on roadways underneath due to expeditious construction. The type of straddle bent will be decided during the final design stage. Prestressed concrete piles are anticipated for the foundation.

It is anticipated that no phased construction will be required for this bridge. However, since most of the piers are located within the limits of existing roadways (SW 10 Street and I-95), the proposed piers at SW 10 Street and I-95 will be constructed within the work zone under appropriate MOT phases along SW 10 Street and I-95.

7.11.1.3 Flyover - Direct Connect Ramp from SW 10 Street EB to I-95 NB (Bridge No. 3)

Bridge No.3 carries one (1) 15-foot connector lane from SW 10 Street in the EB direction to I-95 NB with an 8-foot inside shoulder and 4-foot outside shoulder. A 36" single slope traffic railing is at both sides of the bridge with an overall bridge width of 29'-8". Figure 7-11 shows the bridge typical section.

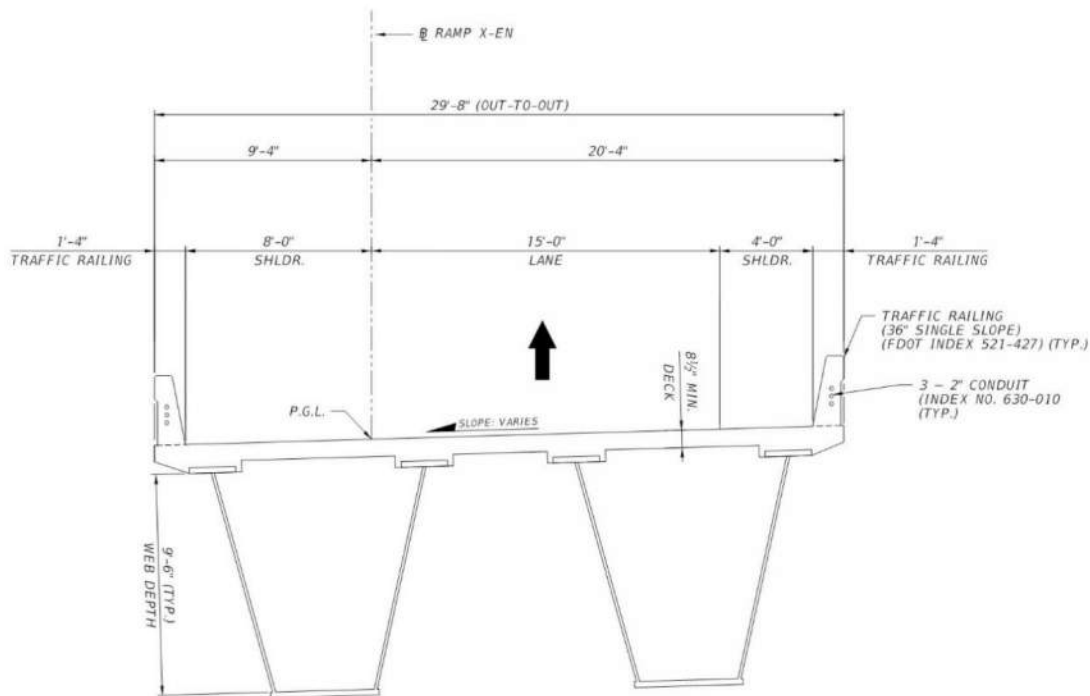


Figure 7-11 Bridge Typical Section (Bridge No. 3)

Bridge No.3 overpasses I-95 SB, I-95 SB off-ramp bridge to SW 10 Street (Bridge No. 13), SW 10 Street WB, and connects to the viaduct bridge (Bridge No. 9) on the east side of Newport Center Dr. This is a level 3 bridge and will provide a minimum vertical clearance of 16'-6" over the roadway underneath.

The bridge has multiple spans with a maximum span length of approximately 248-foot. Similar to Bridge No.1, the superstructure consists of continuous curved steel

tub girders with the substructure consisting of a hammerhead pier. Straddle bents, and integral straddle bents which also support Bridge No. 2 running parallel on its north/west side are anticipated. Refer to the conceptual plan Sheet No. B3-1 and B3-2 in Appendix A for additional details.

It is anticipated that no phased construction will be required for this bridge. However, most of the piers are within the limits of existing roads (SW 10 Street and I-95), and thus the construction of proposed piers will take place within the work zone under appropriate MOT phases along SW 10 Street and I-95.

7.11.1.4 Flyover - Direct Connect Ramp from SW 10 Street EB to I-95 SB (Bridge No. 4)

Bridge No. 4 carries one (1) 15-foot connector from SW 10 Street EB to I-95 SB with a 4-foot inside shoulder and 8-foot outside shoulder. The overall bridge width is 29'-8". This flyover has multiple spans with a maximum span length of approximately 287'. Figure 7-12 shows the bridge typical section.

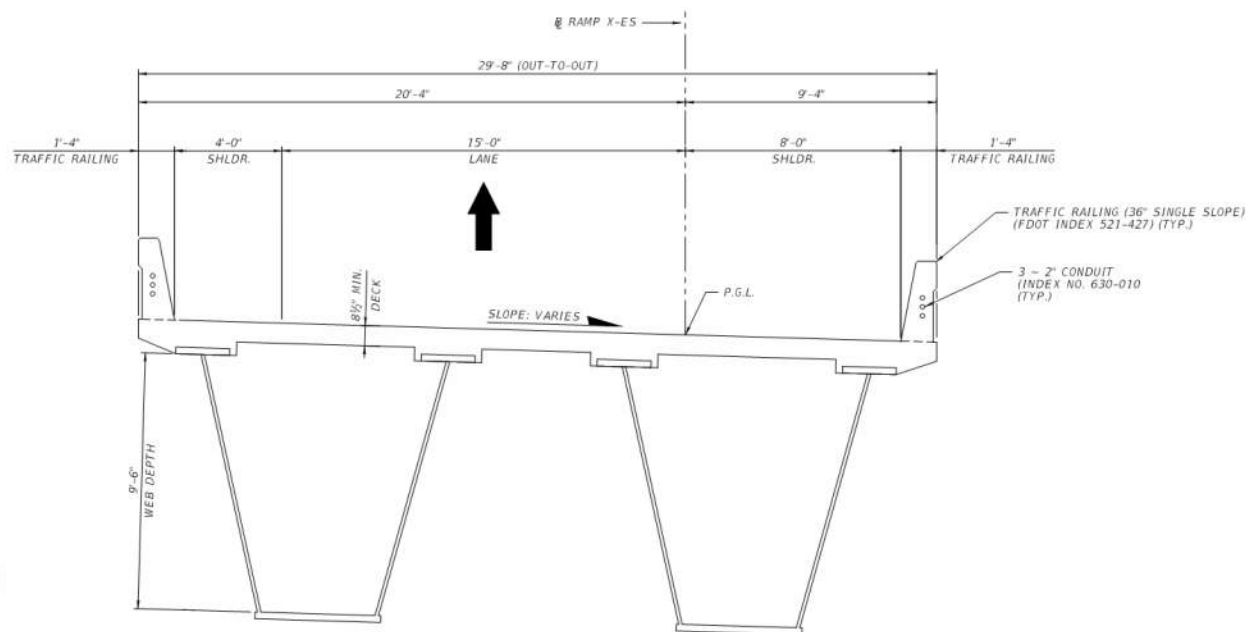


Figure 7-12 Bridge Typical Section (Bridge No. 4)

Bridge No.4 overpasses SW 10 Street WB & EB, SW 10 Street EB on ramp to I-95 SB, and I -95 SB. It connects to the viaduct bridge (Bridge No. 9) on the east side of Newport Center Dr. This is a level 3 bridge and will provide a minimum vertical clearance of 16'-6" over the roadway underneath.

Similar to Bridge No.1, the superstructure consists of curved steel tub girders and a minimum 8 ½" thick CIP deck. The substructure consists of hammerhead piers and a straddle bent at the beginning of the bridge that supports Bridge Nos. 2 and 3 as well. The type of straddle bent is to be finalized during the final design stage.

It is anticipated that no phased construction will be required for this bridge. However, most of the piers are within the limits of existing roadways (SW 10 Street and I-95), and thus the construction of proposed piers will take place within the work zone under appropriate MOT phases along SW 10 Street and I-95.

7.11.2 Elevated Viaduct

7.11.2.1 SW 10 Street EB Elevated Viaduct (Bridge No. 9)

The proposed viaduct bridge (Bridge No. 9), running from the west of Military Trail, will carry two (2) 12-foot connector lanes in the EB direction over SW 10 Street with 12-foot inside and outside shoulders to the direct connect ramps towards I-95 NB and I-95 SB (Bridge No. 3 and Bridge No. 4) respectively. A 36" single slope traffic railing is at each side of the bridge with an overall bridge width of 50'-8". Figure -13 below shows the bridge typical section. The viaduct has multiple bridge spans on a curved alignment. This bridge overpasses Military Trail, SW 10 Street local lanes in the WB and EB directions, SFRC railroad, and Newport Center Dr. It is the longest bridge within the limits the project, and the longest bridge span length is approximately 276-foot. Similar to Bridge No.1, steel tub girders are recommended for the superstructure. The bridge superstructure consists of three (3) curved steel tub girders and the minimum 8 ½" thick CIP deck.

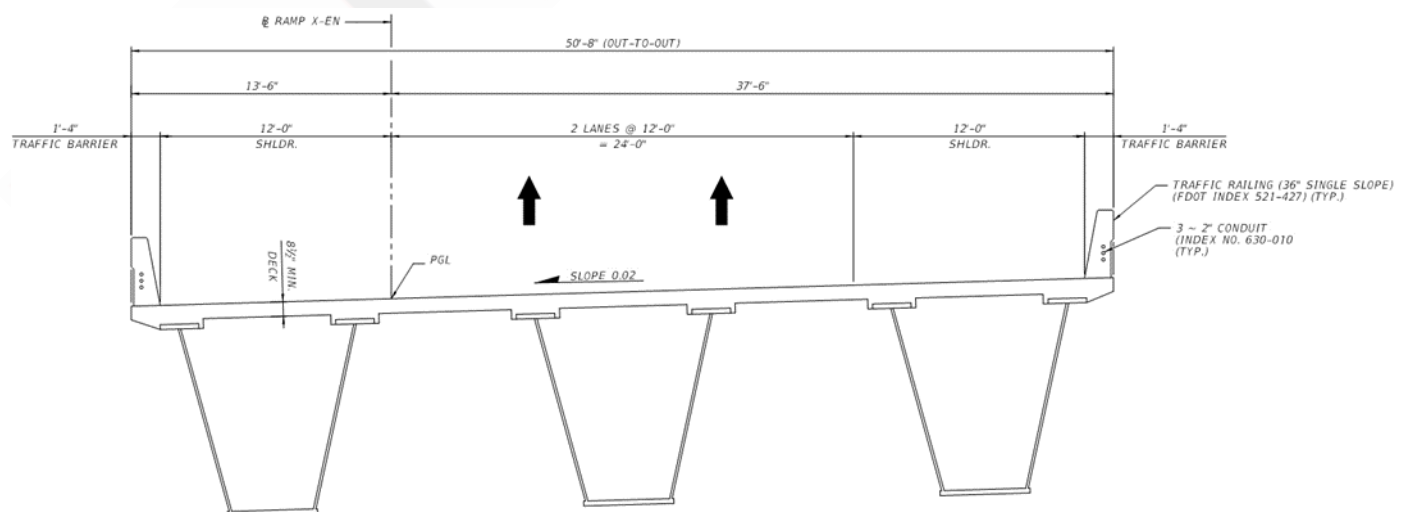


Figure 7-13 Bridge Typical Section (Bridge No. 9)

For the bridge substructure, hammerhead piers or multi-column piers are proposed within the SW 10 Street median where adequate space is available to accommodate the proposed piers. On the west end of the viaduct, in the close vicinity of Military Trail, several integral straddle bents would be required because of the limited available vertical clearance over SW 10 Street general-purpose lanes in the WB direction. On the east end of the viaduct, due to proposed roadway geometric constraints, two straddle bents would be required where it overpasses Newport Center Dr. An additional straddle bent would be required where the viaduct splits into two flyovers towards I-95 in the NB and SB directions (Bridge No. 3 and Bridge No.4 respectively).

It is anticipated that no phased construction will be required for this bridge. However, most of the piers are within the limit of the existing road (SW 10 Street), and thus the construction of the proposed piers will take place within the work zone under appropriate MOT phases along SW 10 Street.

7.11.3 Interchanges/Grade Separation

7.11.3.1 SW 10 Street Connector Lane WB Ramp Over SFRC Railroad & SW 12 Avenue. (Bridge No. 5)

Bridge No. 5 carries one (1) 15-foot connector lane in the WB direction (from Bridge 1) over SFRC railroad, with an 8-foot inside shoulder and 4-foot outside shoulder. A 36" single slope traffic railing is at both sides of the bridge with an overall bridge width of 29'-8". Figure 7-14 shows the bridge typical section.

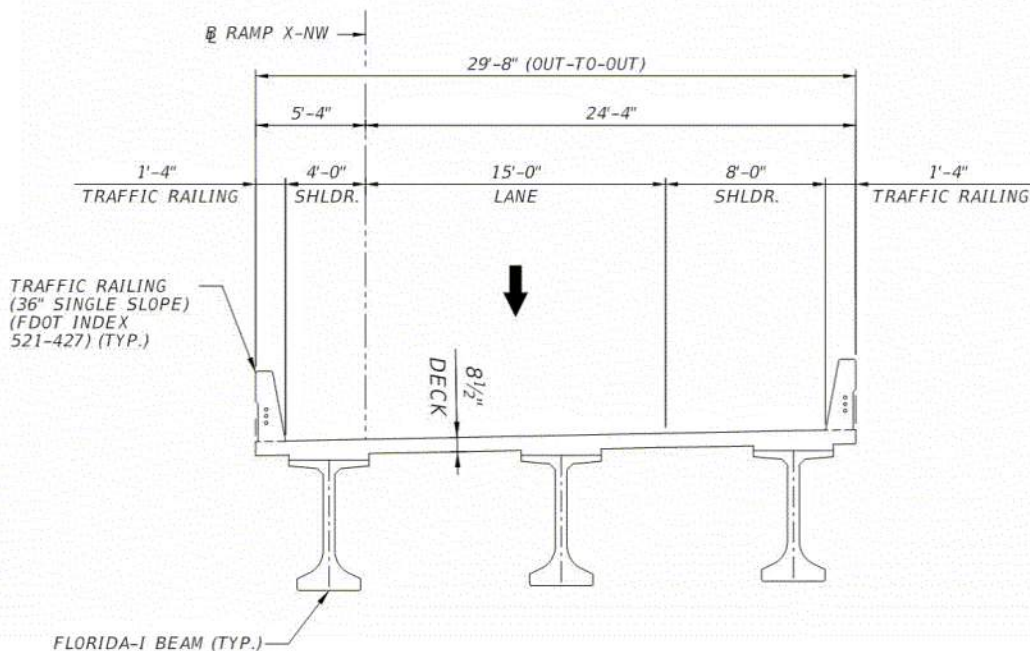


Figure 7-14 Bridge Typical Section (Bridge No. 5)

The bridge has three spans with a center span of approximately 167' over SFRC railroad. The superstructure consists of prestressed Florida-I Beams (FIBs) and an 8 1/2" thick CIP deck. The bridge substructure consists of end bents and two hammerhead piers supported on prestressed concrete piles. The first pier on the west side of SFRC is oriented parallel to the existing SFRC railroad to avoid encroaching into the existing SFRC right of way (ROW), in order to keep center span length within the span limits of FIBs. The second pier is proposed towards the east side of the proposed SW 12 Avenue and is oriented parallel to the proposed SW 12 Avenue to avoid encroaching into SW 10 Street, in order to keep center span length within the span limits of FIBs. The bridge will require minimum vertical clearance (MVC) of 23'-6" over SFRC railroad and an MVC of 16'-6" over SW 12 Avenue. Permanent Mechanically Stabilized Earth (MSE) walls are proposed at the end bents.

This bridge will not require phased construction since it is located outside of the existing SW 10 Street. However, construction activities including, but not limited to, staging, excavation, temporary sheet pile installation, structure demolition, girder placement, and deck pouring shall comply with the requirements of the railroad agency. In addition, a deck longitudinal construction joint is anticipated within the west and center spans between Bridge Nos. 5 and 6 due to the merger of the two bridges.

7.11.3.2 SW 10 Street Connector Lane WB Over SFRC Railroad & SW 12 Avenue. (Bridge No. 6)

Bridge No. 6 carries one (1) 15-foot connector lane (from Bridge 2) and one (1) 15-foot connector lane (from SW 12 Avenue) in the WB direction over SFRC railroad with a 6-foot inside shoulder and 8-foot outside shoulder. There is a gore area between the lanes as shown in the typical section in Figure 7-15.

The bridge superstructure consists of FIBs and 8 ½" thick CIP deck. The bridge substructure consists of end bents and two (2) multi-column piers supported on prestressed concrete piles. The first pier on the west side of SFRC is oriented parallel to existing SFRC railroad to avoid encroaching into existing SFRC right of way (ROW) while minimizing the center span length. The second pier is proposed towards the east side of proposed SW 12 Avenue, oriented parallel to the proposed SW 12th Avenue to avoid encroaching SW 10 Avenue, in order to keep center span length within the span limits of FIBs. The bridge will require minimum vertical clearance of 23'-6" over SFRC railroad and an MVC of 16'-6" over SW 12 Avenue.

Permanent MSE walls are proposed at the end bents.

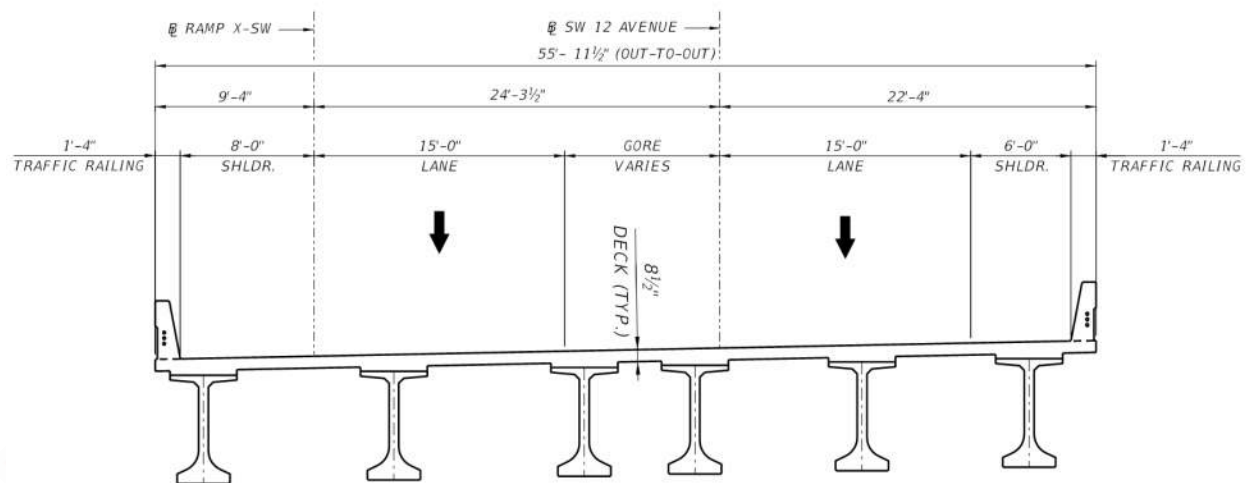


Figure 7-15 Bridge Typical Section (Bridge No. 6)

Bridge No. 6 is anticipated to require one phase of MOT on SW 10 Street to complete the bridge replacement over SFRC.

- Phase 1: Shift traffic on SW 10 Street in the EB direction to the newly constructed Bridge No. 8 (See Section 7.8.3.4 below), keep existing SW 10 Street EB bridge over SFRC carrying traffic in the WB direction, demolish existing WB bridge, and construct the proposed bridge.

In addition, deck longitudinal construction joint is anticipated within the east and center spans between Bridge No. 6 and Bridge No. 7 due to merger of the two bridges.

7.11.3.3 SW 10 Street General Purpose Lanes WB over SFRC Railroad and SW 12 Avenue (Bridge No. 7)

Bridge No. 7 carries three (3) 11-foot local lanes in the WB direction with a 4-foot inside shoulder and 7-foot outside shoulder. Overall bridge width is 46'-8" and a 36" single slope concrete traffic railing is at each side of the bridge. Figure 7-16 shows the proposed bridge typical section.

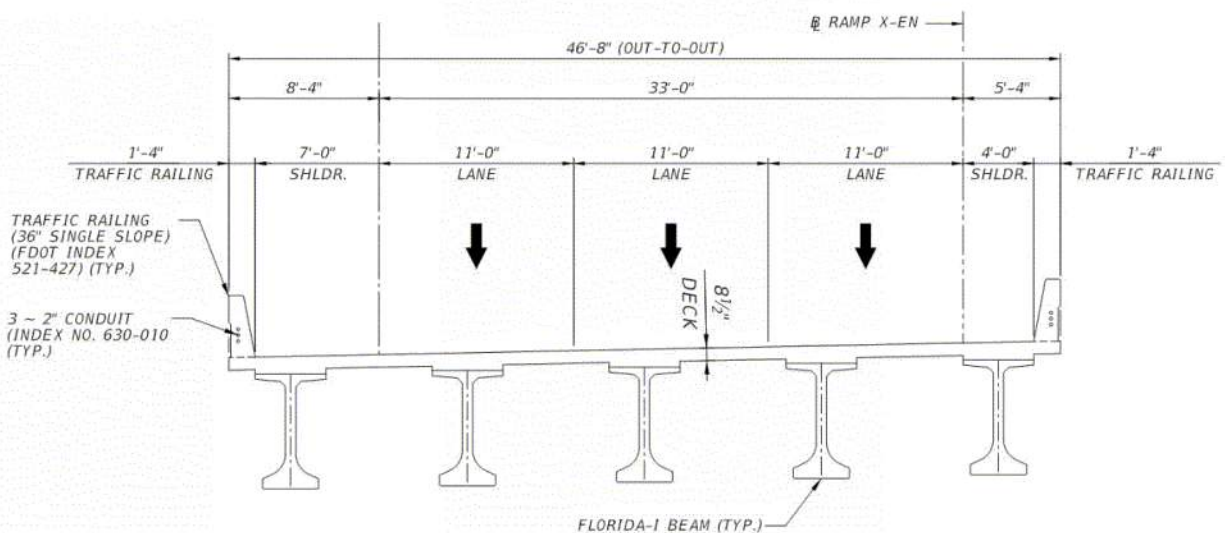


Figure 7-16 Bridge Typical Section (Bridge No. 7)

The bridge superstructure consists of FIBs and 8 1/2" thick CIP deck. The bridge substructure consists of end bents and two (2) multi-column piers supported on prestressed concrete piles. The first pier on the west side of SFRC is oriented parallel to existing SFRC railroad to avoid encroaching into existing SFRC right of way (ROW) while minimizing the center span length. The second pier is proposed on the east side of the proposed SW 12 Avenue and is oriented parallel to the proposed SW 12 Avenue to avoid encroaching SW 10 Street while minimizing the center span length. It will require two phases of MOT on SW 10 Street to complete the bridge replacement over SFRC.

- Phase 1: Shift the traffic on SW 10 Street in the EB direction to the newly built Bridge No. 8 (See section 7.8.3.4 below). Keep the existing SW 10 Street EB bridge over SFRC carrying traffic in the WB direction. Demolish the

existing WB bridge and construct the northern portion of the proposed bridge.

- Phase 2: Shift SW 10 Street traffic in the WB direction to the newly built Bridge 6 and the northern portion of Bridge No.7. Demolish the existing EB bridge and construct the remaining southern portion of the proposed bridge.

The detailed MOT for the construction of the bridge replacement will be further developed during the final design phase.

7.11.3.4 SW 10 Street Local Lanes EB over SFRC Railroad and SW 12 Avenue (Bridge No. 8)

Bridge No.8 carries three (3) 11-foot local lanes and one (1) 7-foot bicycle lane in the EB direction. The overall bridge width is 54'-4" with a 4' inside shoulder and 2'-0" outside shoulder. The bridge has a 6'-0" sidewalk and a 36" single slope traffic railing on the north side and a 32" traffic railing (vertical shape) the south side. The proposed bridge typical section is shown in Figure 7-17.

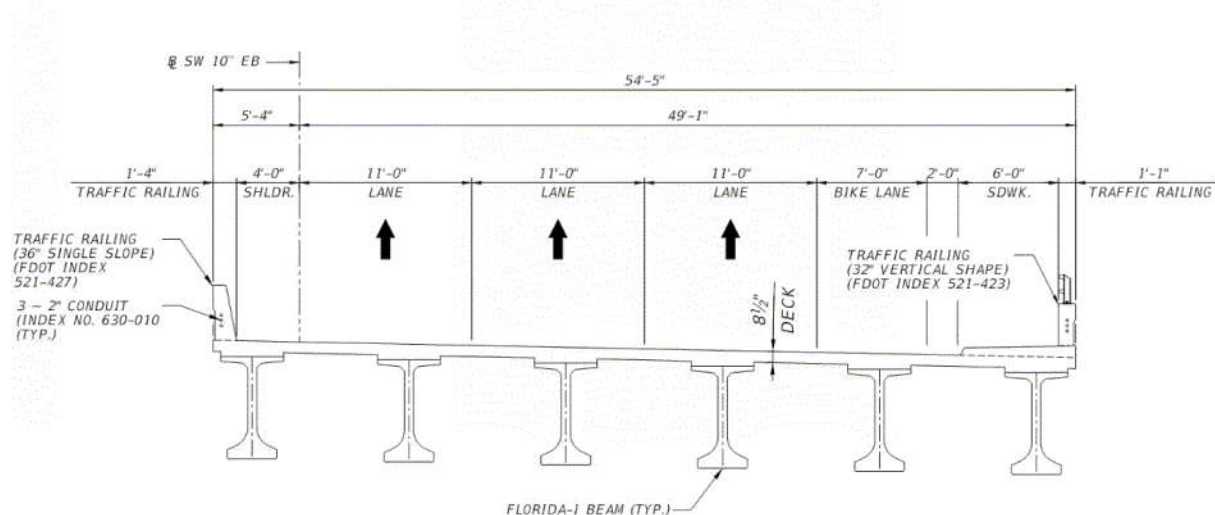


Figure 7-17 Bridge Typical Section (Bridge No. 8)

The bridge superstructure consists of FIBs and 8 1/2" thick CIP deck. The bridge substructure consists of end bents and two (2) multi-column piers supported on prestressed concrete piles. The first pier on the west side of SFRC is oriented parallel to existing SFRC railroad to avoid encroaching into existing SFRC right of way (ROW) while minimizing the center span length. The second pier is proposed on the east side of the proposed SW 12 Avenue and is oriented parallel to the proposed SW 12 Avenue to avoid encroaching SW 10 Street while minimizing the center span length.

7.11.3.6 SW 10 Street EB Connector Lane Off-Ramp Over Military Trail (Bridge No.11)

Bridge No.11 is proposed for SW 10 Street off-ramp over Military Trail carrying one (1) 15-foot connector lane in the EB direction with 6-foot shoulders. A 36" single slope traffic railing is at each side of the bridge and the overall bridge width is 29'-8" including the 6-foot shoulders. The proposed bridge has multiple spans with a maximum span length of approximately 272'-6" over Military Trail on a curved alignment merging with the viaduct at its end. The proposed bridge superstructure consists of multi-span steel tub girders. The proposed bridge substructure consists of an end bent supported on prestressed concrete piles, a hammerhead pier at the east side of Military Trail, and straddle bents on the west side of Military Trail due to roadway geometrics and alignment. The bridge will provide a MVC of 16'-6" over Military Trail and SW 10 Street EB. Permanent MSE walls will be required at the end bents. The proposed bridge typical section is shown in Figure 7-19.

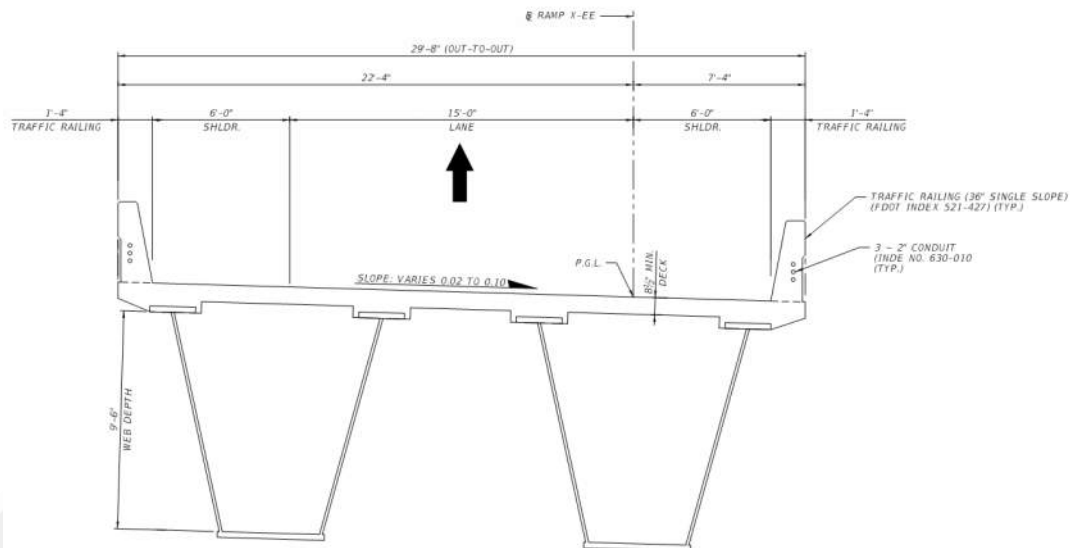


Figure 7-19 Bridge Typical Section (Bridge No. 11)

It is not anticipated that construction of the bridge requires phased MOT except for overnight closures of Military Trail during steel girder placement and deck pouring.

In addition, most of the proposed end bent, hammerhead pier, and straddle bent piers are within the limits of existing roadways (SW 10 Street), and thus construction of the proposed end bent, hammerhead pier, and straddle bent piers will take place within the work zone created by appropriate MOT phases along SW 10 Street.

7.11.3.7 SW 10 Street Over I-95 (Bridge No.12)

The existing SW 10 Street bridge over I-95 could not accommodate the proposed roadway geometrics of I-95 and SW 10 Street. WB towards the I-95 NB on-ramp, thus it will be replaced with a new 3-span concrete bridge with a maximum span length of approximately 127'-8" on a tangent alignment. Figures 7-20 and 7-21 depict the bridge typical section.

The proposed bridge superstructure consists of FIBs and an 8 1/2" thick CIP deck. The substructure consists of two (2) multi-column intermediate piers and end bents founded on prestressed concrete piles. The first pier will be located within the proposed median between I-95 NB and I-95 SB. The second pier is to be placed between the edges of shoulders on proposed SW 10 Street EB to I-95 NB on-ramp and I-95 NB. The column will be designed for vehicle collision load and protected by roadside concrete barrier per FDM Sections 215.4.5.4 and 215.4.5.1.

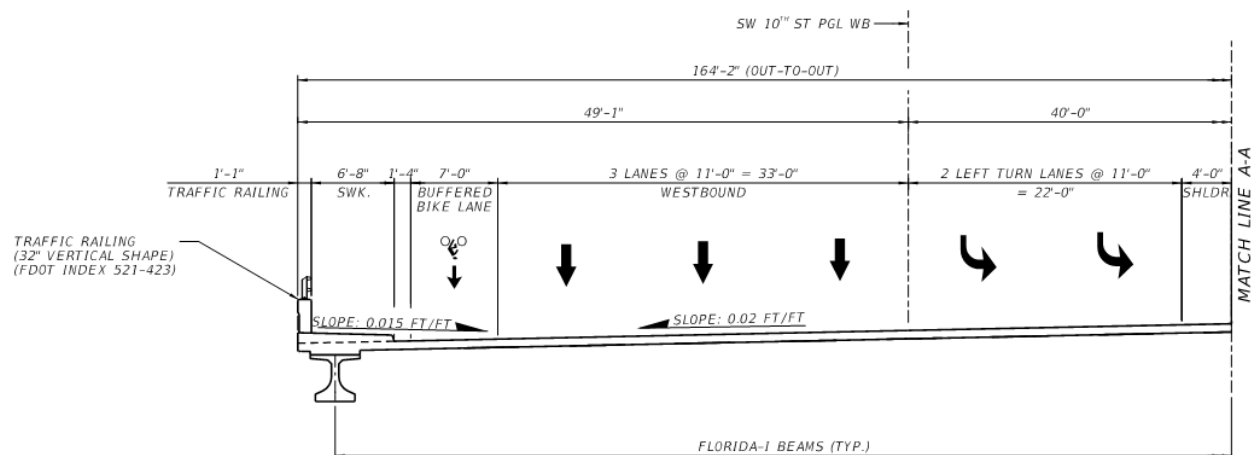


Figure 7-20 Bridge Typical Section (Bridge No. 12) 1 of 2

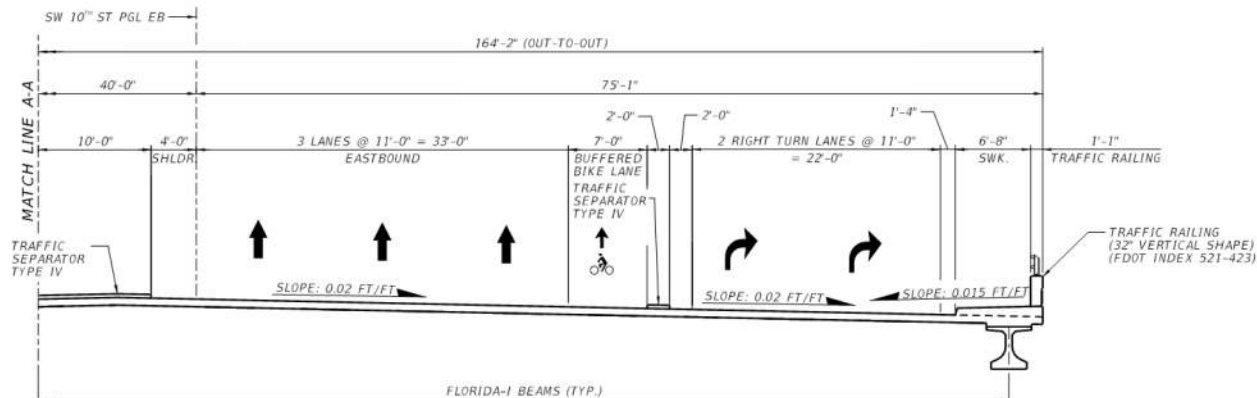


Figure 7-21 Bridge Typical Section (Bridge No. 12) 2 of 2

It is anticipated that phased MOT is required on SW 10 Street and I-95 to complete the bridge replacement over I-95.

MOT on I-95:

- Phase 1- Shift I-95 SB traffic to the west and install temporary concrete barriers along the edges of the shoulders and existing median barrier at I-95 NB. Construct the western pier within the work zone between the temporary concrete barriers.
- Phase 2- Shift I-95 SB to the east side of the newly built western pier. Install temporary concrete barrier along the shoulder of I-95 NB and construct the eastern pier and end bents.

MOT on SW 10 Street:

- Phase 1- Install two temporary concrete barriers in order to separate traffic between four (4) 10-foot lanes in the running WB direction and three (3) lanes (two (2) 10-foot & one (1) 11-foot) in the EB direction to create the designated work zone per traffic control concept plans. Demolish the northern portion of the existing bridge and construct the northern portion of the proposed bridge.
- Phase 2- Install temporary concrete barriers to shift 4 lanes of traffic in the WB direction to the newly built bridge. Demolish the center portion of the existing bridge and construct the center portion of the proposed bridge.
- Phase 3- Install temporary concrete barriers on the newly built bridge to provide work zones for constructing the northern sidewalk and the remaining

southern portion of the proposed bridge per traffic control concept plans. Shift four (4) lanes of traffic in the WB direction and three (3) lanes of traffic in the EB direction onto the newly built bridge. Demolish the remaining portion of the existing bridge and construct the remaining southern portion of the proposed bridge and sidewalk. See temporary traffic control concept plans for additional information.

7.11.3.8 I-95 SB Off-ramp to SW 10 Street (Bridge No.13)

The existing I-95 SB off-ramp to SW 10 Street is in the way of the proposed I-95 SB general purpose lanes and will need to be removed to accommodate the proposed I-95 SB geometrics. A new bridge (Bridge No. 13) is proposed for the off-ramp carrying two right turn lanes and two left turn lanes. Figure 7-22 and 7-23 show the bridge typical section.

The proposed bridge has multiple spans with the superstructure consisting of Florida-I Beams and an 8½” CIP deck. The substructure consists of pile bents. The Western portion of the proposed bridge will be over the existing C-1 Canal to the west of I-95 SB.

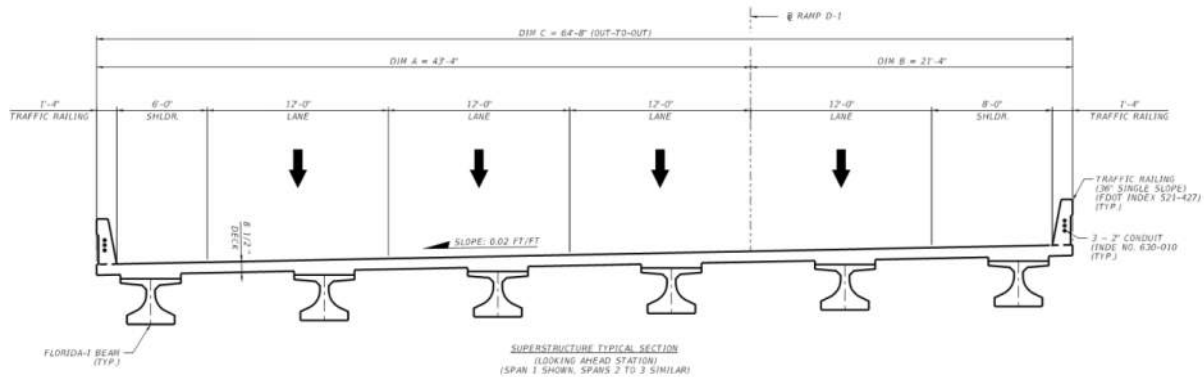


Figure 7-22 Bridge Typical Section (Bridge No. 13) 1 of 2

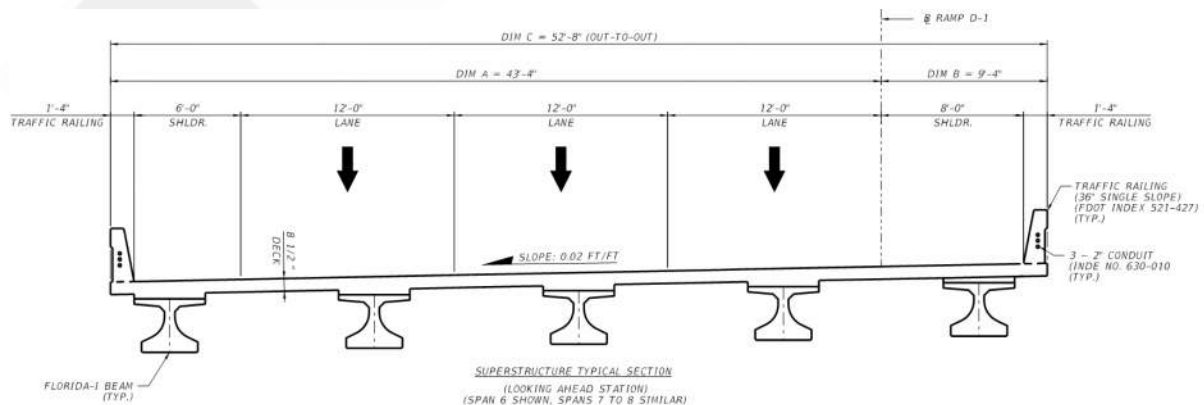


Figure 7-23 Bridge Typical Section (Bridge No. 13) 2 of 2

Construction of the bridge will need phased MOT that will be finalized in the design phase.

7.11.3.9 I-95 SB On-Ramp Over Hillsboro Blvd. (Bridge No.16)

The existing I-95 SB bridge over Hillsboro Boulevard exhibits a substandard minimum vertical clearance. Widening the bridge on the outside to accommodate proposed additional lanes would further decrease the MVC. Moreover, widening would require a phased construction with more impacts on traffic and MOT costs. Therefore, a new bridge (Bridge No. 16) is proposed on the west side of the existing I-95 SB bridge to achieve a MVC of 16'-6". Construction of the proposed bridge will not require phased construction. Figure 7-24 shows the bridge typical section.

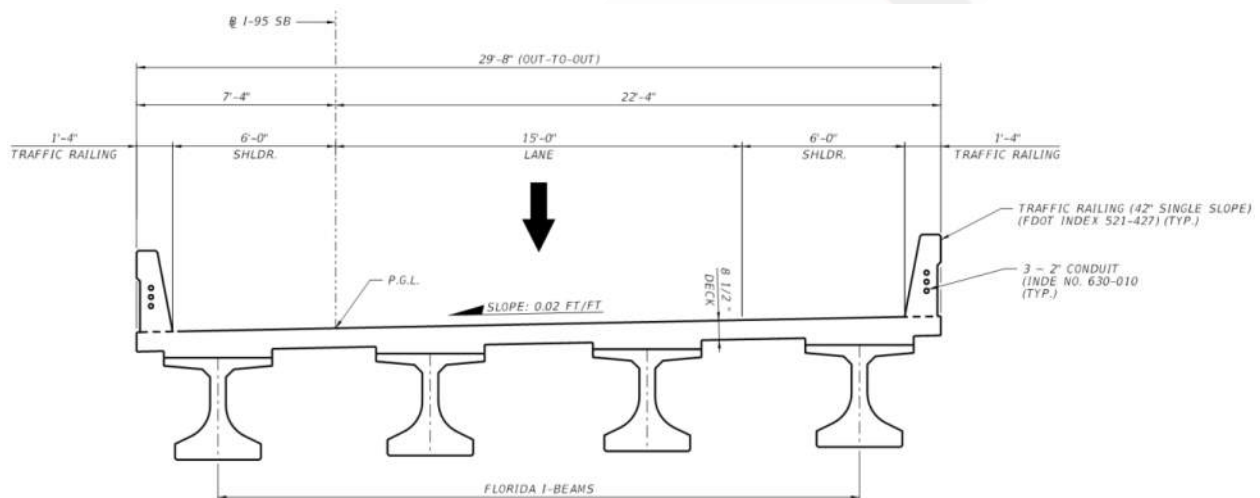


Figure 7-24 Bridge Typical Section (Bridge No. 16)

The proposed bridge has two spans with the superstructure consisting of FIBs and an 8 1/2" thick deck. The bridge substructure consists of a hammerhead pier and end bents founded on prestressed concrete piles. Permanent MSE walls will be required at the end bents. It is not anticipated that the construction of the bridge will require phased MOT except for overnight closures of Hillsboro Blvd. during girder placement and deck pouring.

7.11.3.10 I-95 NB Over Hillsboro Boulevard Widening (Bridge No.17)

The existing bridge of I-95 NB over Hillsboro Blvd. (Bridge No. 17) is to be widened outside to accommodate additional lanes. To qualify the bridge for widening, load rating had been performed per SDG, Section 7.1.1. The refined load rating results indicated that the existing Beam 4 at Span 1 and Span 4 has an inventory Rating Factor and Operating Rating Factor less than 1 and 1.67, respectively. In view of the benefit towards costs and lessening of impacts toward traffic, it is recommended to either strengthen the beam at Span 1 and Span 4 or replacing the beam along with partial reconstruction of the deck per SDG, Section 7.1.1. The final selection on beam strengthening or beam replacement will be decided in the design phase of the project.

The bridge superstructure consists of FIBs and 8" thick deck per SDG, Section 4.2.2.C. Since the depth of proposed FIBs is the same as the existing beam and the bridge is superelevated towards the outside, the existing bridge vertical clearance will be maintained.

The bridge substructure will be hammerhead piers founded on precast prestressed concrete piles with the cap and column shape being the same as existing ones. Existing end bents will be extended to accommodate the bridge widening. Figure 7-25 shows the bridge typical section.

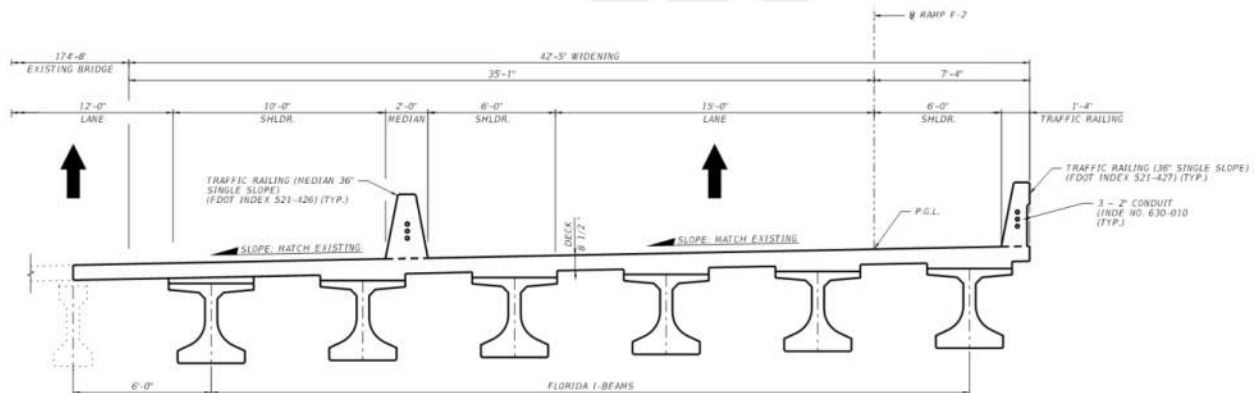


Figure 7-25 Bridge Typical Section (Bridge No. 17)

7.11.4 Braided Ramps

7.11.4.1 SW 10 Street to I-95 NB Braided On-ramp (Bridge No.14)

Bridge No.14 is proposed for SW 10 Street to I-95 NB braided on-ramp. The bridge carries two (2) 12-foot lanes with shoulders of 6-foot and 10-foot respectively. A 36" single slope concrete traffic railing is on each side with an overall bridge width of 42'-

8". The proposed bridge has four (4) spans with a maximum span length of approximately 270' on a slightly curved alignment.

Figure 7-26 shows the bridge typical section.

Similar to Bridge No.1, 4 options are evaluated for the superstructure. However, due to a slightly curved alignment, steel plates are less expensive than tub girders and recommend as the preferred option for the superstructure.

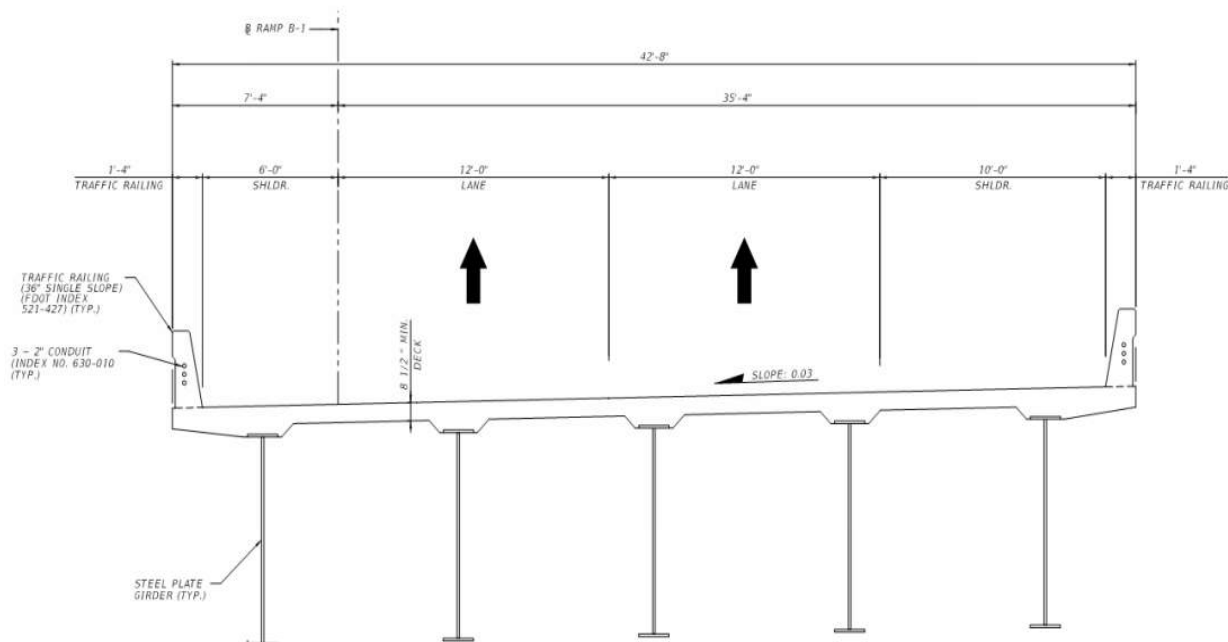


Figure 7-26 Bridge Typical Section (Bridge No. 14)

The bridge superstructure consists of multiple span steel plate girders and a minimum 8 ½" thick CIP deck. The bridge substructure consists of end bents, a hammerhead pier, a cantilever pier, and an integral straddle pier dictated by the minimum vertical clearance of 16'-6" required over I-95 NB egress lane and the proposed I-95 NB roadway geometrics.

It is anticipated that prestressed concrete piles would be used for the foundation. Drilled shafts are also an option for the foundation under the cantilever pier.

It is not anticipated that construction of the bridge requires phased construction. However, construction will take place within the work zone created by appropriate MOT phases along I-95.

7.11.4.2 I-95 SB to SW 10 Street Braided Off-ramp (Bridge No.15)

Bridge No. 15 is proposed for I-95 SB to SW 10 Street Braided Off-ramp. The bridge carries one (1) 15-foot lane with 6-foot shoulders. A 36" single slope concrete traffic railing is on each side with an overall bridge width of 29'-8". The proposed bridge has four (4) spans with a maximum span length of approximately 256' on a slightly curved alignment.

Figure 7-27 shows the bridge typical section.

Similar to Bridge No.1, 4 options are evaluated for the superstructure. However, due to a slightly curved alignment, steel plates are less expensive than tub girders and recommend as the preferred option for the superstructure.

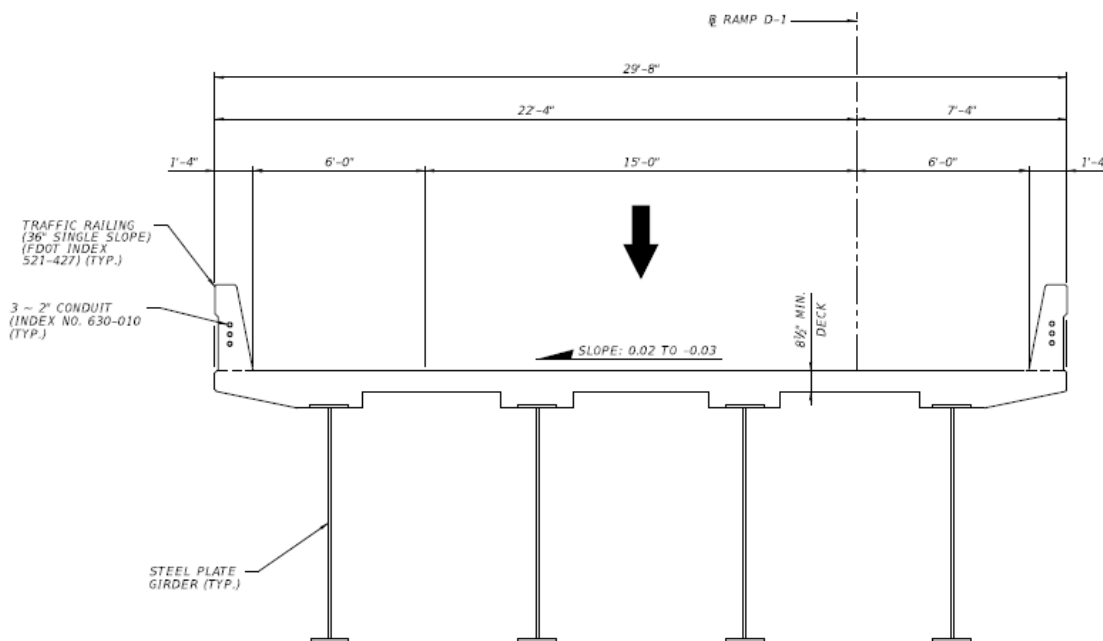


Figure 7-27 Bridge Typical Section (Bridge No. 15)

The superstructure of the bridge consists of steel plate girders with a substructure consisting of end bents, a hammerhead pier, and two (2) cantilever piers. The bridge will have a minimum vertical clearance of 16'-6" over I-95 SB ingress lane.

It is anticipated that prestressed concrete piles would be used for the foundation. Drilled shafts are also an option for the foundation under cantilever piers.

It is not anticipated that construction of the bridge requires phased construction. However, construction will take place within the work zone created by appropriate MOT phases along I-95.

7.11.5 Conceptual geotechnical data

The Geotechnical Services Report recommends classifying the evaluated bridges under the slightly aggressive environmental classification for substructures. Precast prestressed concrete piles and drilled shafts are recommended for bridge foundation in the report.

7.11.6 Aesthetic Level for Bridge and Bridge Approaches

The level of aesthetics for the proposed bridge and bridge approaches is anticipated to be Level Two per FDM 121.9.3.2.b.

7.11.7 Bridge Deck Drainage Considerations

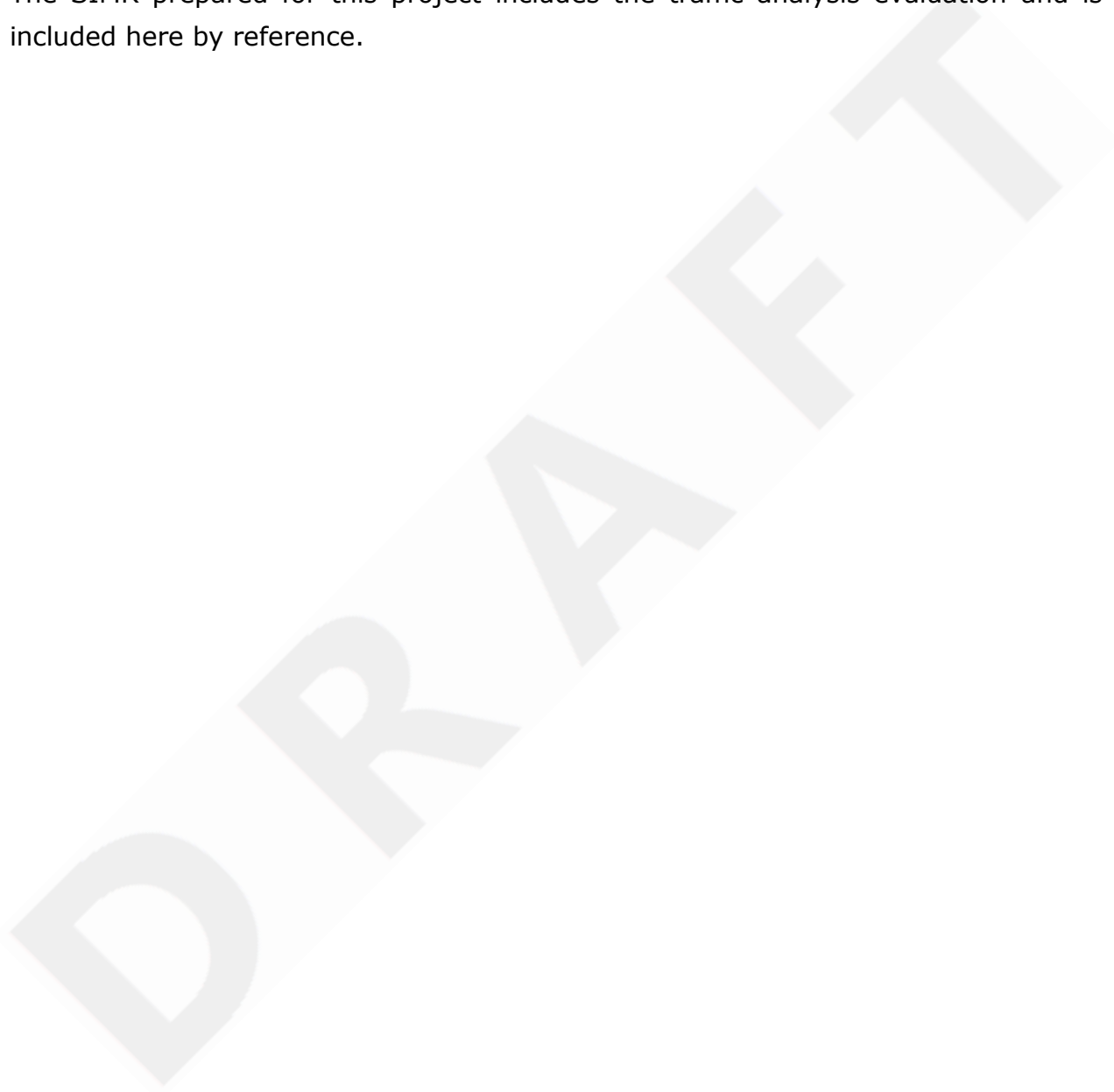
Bridge deck drainage is anticipated to be required for direct connect ramps and elevated viaduct bridges. It will be further developed in the design phase.

Table 7-10 Proposed Bridge Improvements for Preferred Alternative

Br No.	Bridge Description	Direction	Level	Begin Sta.	End Sta.	Superstr. Type	Substr. Type	Bridge length (ft)	Bridge Width (ft)	Max. Span (ft)	Bridge Area (ft ²)	Required Horizontal Clearance (ft)	Controlling Element
1	Flyover - Direct Connect Ramp from I-95 NB to SW 10 Street WB	N-W	4th	4212+32.73	4233+97.30	Steel Tub	Hammerhead Pier	2,165.00	29.67	261.19	66,215	1.50	Pier 10
2	Flyover - Direct Connect Ramp From I-95 SB to SW 10 Street WB	S-W	3rd	2214+00.00	2233+38.10	Steel Tub	Hammerhead Pier/Straddle Bent	1,938.00	29.67	246.89	60,121	3.00	Pier 9
3	Flyover - Direct Connect Ramp From SW 10 Street EB to I-95 NB	E-N	3rd	3220+79.33	3233+59.71	Steel Tub	Hammerhead Pier/Straddle Bent	1,280.00	29.67	247.67	39,489	3.00	Pier 9
4	Flyover - Direct Connect Ramp From SW 10 Street EB to I-95 SB	E-S	3rd	5220+77.54	5233+52.19	Steel Tub	Hammerhead Pier/Straddle Bent	1,275.00	29.67	286.75	39,412	0.00	Pier 7
5	SW 10 Street Connector Lane WB Ramp Over SFRC Railroad & SW 12 Avenue	WB	2nd	4206+48.89	4209+41.11	FIB	Multi-column Pier	292.22	29.67	176.69	10,573	0.00	Pier 3
6	SW 10 Street Connector Lane WB Over SFRC Railroad & SW 12 Avenue	WB	2nd	2206+38.67	2209+27.65	FIB	Multi-column Pier	288.98	62.69	174.71	20,452	14.00	Pier 3
7	SW 10 Street Local Lanes WB over SFRC Railroad and SW 12 Avenue	WB	2nd	372+59.52	375+47.96	FIB	Multi-column Pier	288.44	46.67	164.23	16,147	14.00	Pier 3
8	SW 10 Street Local Lanes EB over SFRC Railroad and SW 12 Avenue	EB	2nd	272+51.20	275+40.18	FIB	Multi-column Pier	288.98	54.42	175.14	19,561	0.00	Pier 3
9	SW 10 Street EB Elevated Viaduct	EB	3rd	3186+57.18	3220+79.33	Steel Plate Girder/Tub	Hammerhead/Straddle Bent/Integral Pier	3,422.00	50.67	277.41	180,501	0.00	Pier 7
10	SW 10 Street WB Connector Lanes Over Military Trail	WB	2nd	4196+68.40	4199+00.00	Steel Plate Girder/Tub	Pile Bent	231.60	62.67	231.60	17,885	0.00	End Bent 1
11	SW 10 Street EB Connector Lane Off-Ramp Over Military Trail	WB	2nd	90+79.49	99+76.23	Steel Plate Girder/Tub	Hammerhead Pier/Straddle Bent/Integral Pier	896.74	29.67	272.50	29,024	0.00	Pier 3
12	SW 10 Street Over I-95	EB&WB	2nd	394+83.72	397+93.98	FIB	Multi-column Pier	310.26	164.17	128.71	60,833	0.00	Pier 3
13	I-95 SB Off-ramp To SW 10 Street	S-W & S-E	2nd	90+75.70	97+60.00	FIB	Pile Bent	684.30	47.17	80.21	41,947	1.50	Pier 4
14	SW 10 Street to I-95 NB Braided On-ramp	NB	2nd	85+26.27	96+03.76	Steel Plate Girder/Tub	Hammerhead Pier/C-Pier/Straddle Bent	1,077.49	42.67	269.38	45,512	1.50	Pier 3
15	I-95 SB to SW 10 Street Braided Off-ramp	SB	2nd	119+06.94	129+28.08	Steel Plate Girder/Tub	C-Pier/Hammerhead Pier	1,021.14	29.67	255.86	32,515	1.50	Pier 3
16	I-95 SB On-Ramp Over Hillsboro Blvd.	SB	2nd	176+87.63	179+15.64	FIB	Hammerhead Pier	228.01	29.67	115.64	8,695	1.50	Pier 2
17	I-95 NB Over Hillsboro Blvd. Widening	NB	2nd	141+62.69	143+93.28	FIB	Multi-column Pier	230.59	42.42	115.51	12,399	1.50	Pier 2

7.12 Intersection and Interchange Concepts

The following **Figure 7-28** depicts the proposed roadway and lane configurations for the I-95 corridor including interchanges with Hillsboro Boulevard and SW 10 Street. The SIMR prepared for this project includes the traffic analysis evaluation and is included here by reference.



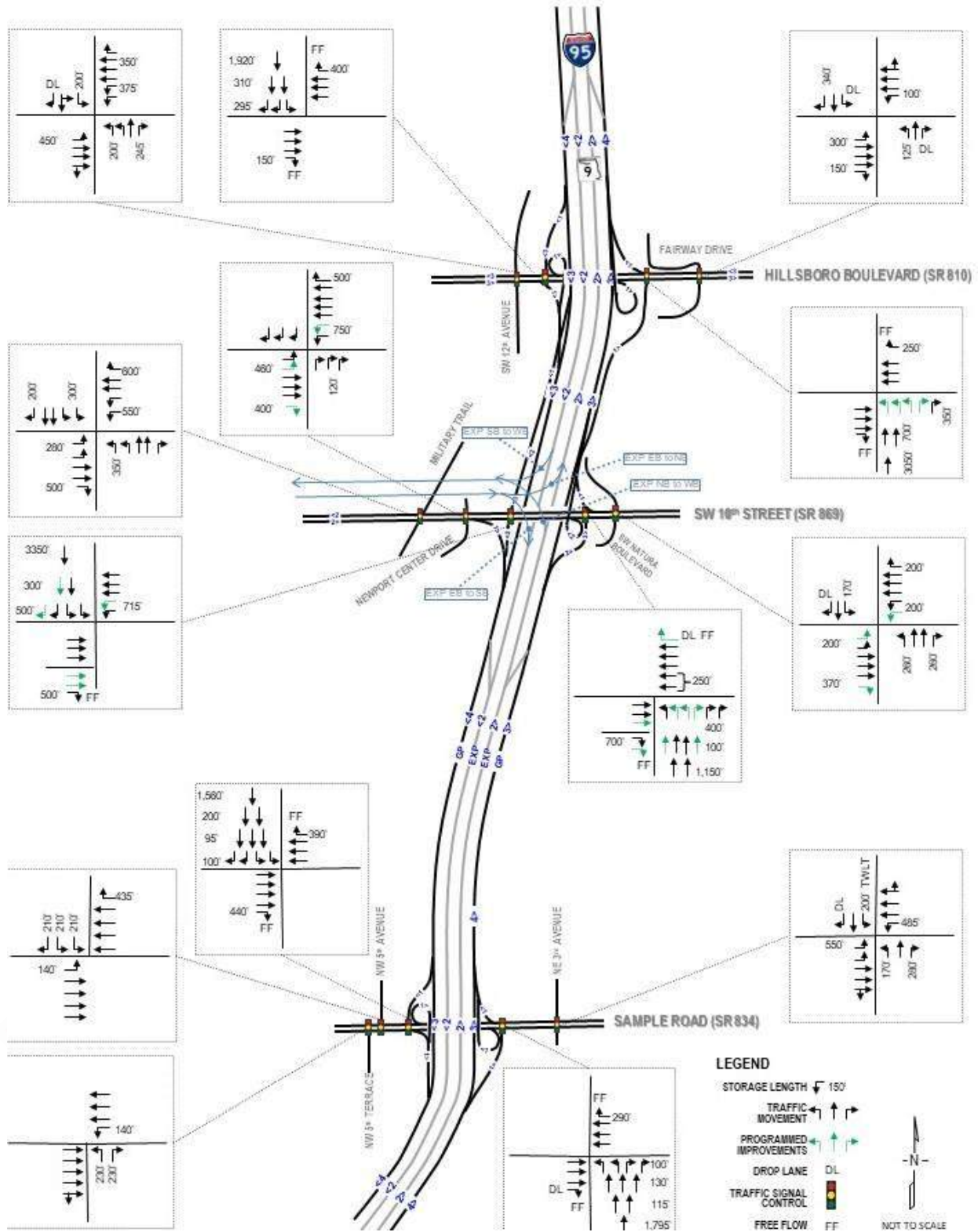


Figure 7-28 Roadway and Intersection Lane Configurations

7.13 Right-of-Way

No right-of-way acquisition is needed for proposed improvements along I-95. Minor right of way acquisition is needed on the north and south side along SW 10 Street. No relocations are required. Additional temporary construction easements will be required.

7.14 Lighting

Lighting should be upgraded to Light Emitting Diode (LED) light sources where required by the proposed roadway construction. The new lighting system options include a conventional lighting system or a mix of conventional and high-mast lighting to provide efficient lighting for ground and upper level structures.

7.15 Landscaping

A separate Landscaping project is currently funded and will follow construction of the PD&E proposed improvements.

7.16 Preliminary Cost Estimates

Preliminary project costs for construction, preliminary engineering (PE), right-of-way and construction engineering and inspection (CEI) costs were developed for the Preferred Alternative. Preliminary Cost Estimates for the preferred alternative are included in **Appendix B**.

Table 7-11 Preliminary Cost Estimates	
Cost Components	Total Costs
Base Construction Cost	\$222,964,484.78
Mobilization	\$17,837,158.78
Maintenance of Traffic	\$24,080,164.36
Construction Subtotal	\$264,881,807.92
Design/Build (9 percent)	\$23,839,362.71
Partnering (non-bid)	\$6,000
Contingency (non-bid)	\$150,000.00
TOTAL PROJECT COST	\$288,877,170.63

8 Conceptual Design Plans

See Appendix A

DRAFT

9 List of Technical Reports

Below is a list of technical reports prepared during this PD&E Study and on file at FDOT.

Technical Reports

- Natural Resources Evaluation
- Air Quality Technical Memorandum
- Social Cultural Effects Evaluation
- Cultural Resources Assessment Survey
- Noise Study Report
- Contamination Screening Evaluation Report
- Floodplain Hydraulics Report
- Systems Interchange Modification Report
- Public Involvement Plan
- Geotechnical Services Report

APPENDIX A
(Roadway Concept Plans)

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONCEPT PLANS

FINANCIAL PROJECT ID 436964-1-52-01 (FEDERAL FUNDS)

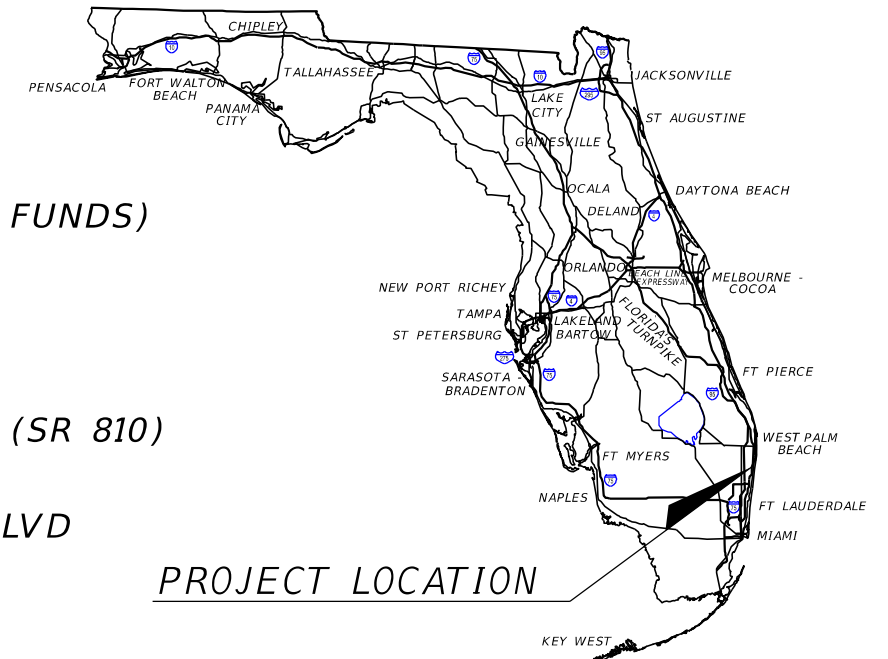
BROWARD COUNTY (86070) & (86012)

STATE ROAD NO. 9 (I-95)

FROM SOUTH OF SW 10TH ST. TO NORTH OF HILLSBORO BLVD. (SR 810)

STATE ROAD NO. 869 (SW 10TH ST)

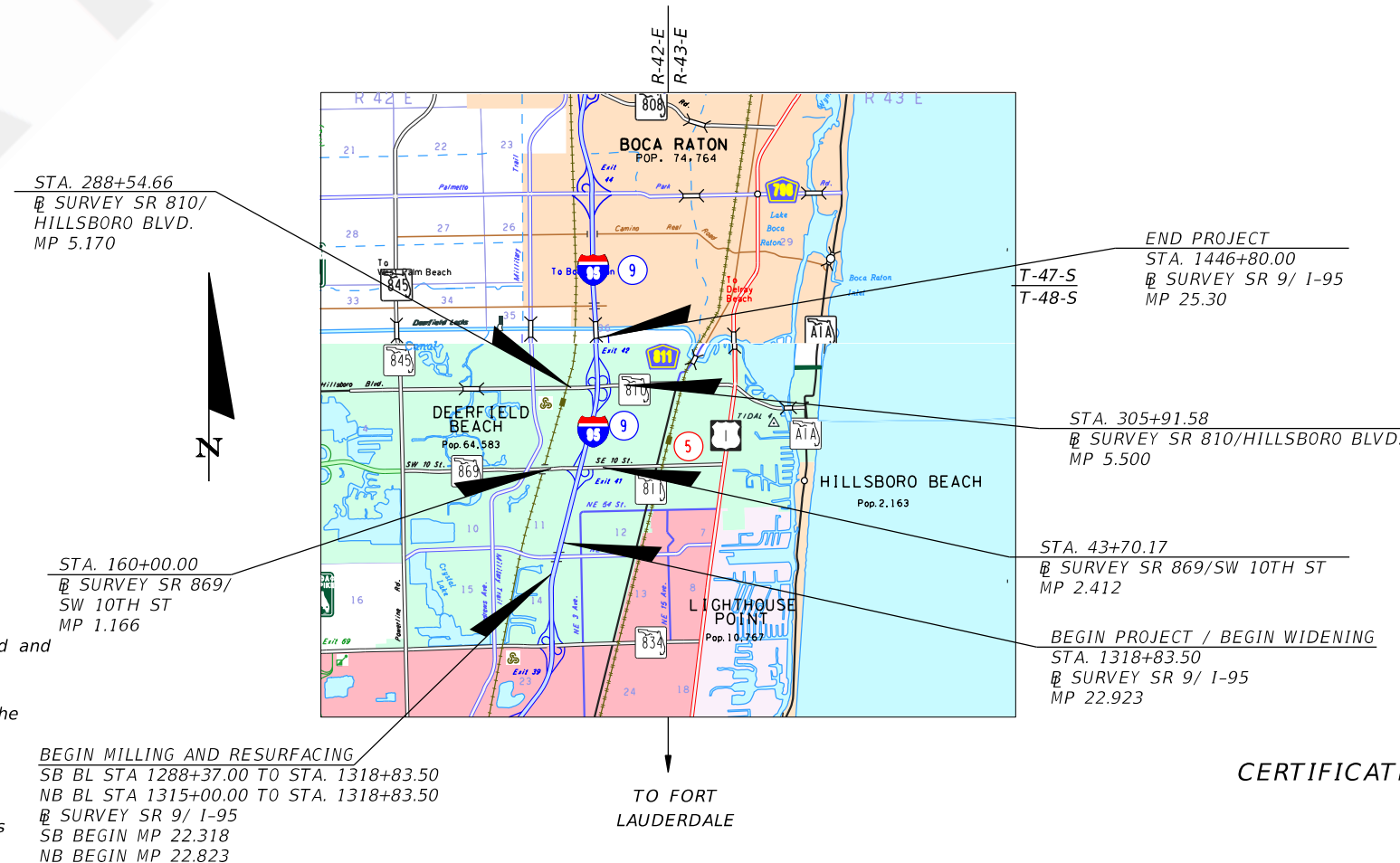
FROM WEST OF MILITARY TRAIL TO EAST OF NATURA BLVD



PROJECT LOCATION

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEYSHEET
2-14	TYPICAL SECTIONS
15-17	PROJECT LAYOUT
18-20	CURVE DATA
21-44	ROADWAY PLANS
45-117	ROADWAY PROFILES



GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2018-2019 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

APPLICABLE IRs: IR ___-___-___

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, 2018-2019 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

BEGIN MILLING AND RESURFACING
SB BL STA 1288+37.00 TO STA. 1318+83.50
NB BL STA 1315+00.00 TO STA. 1318+83.50
Survey SR 9/ I-95
SB BEGIN MP 22.318
NB BEGIN MP 22.823

TO FORT LAUDERDALE

ROADWAY PLANS
ENGINEER OF RECORD:

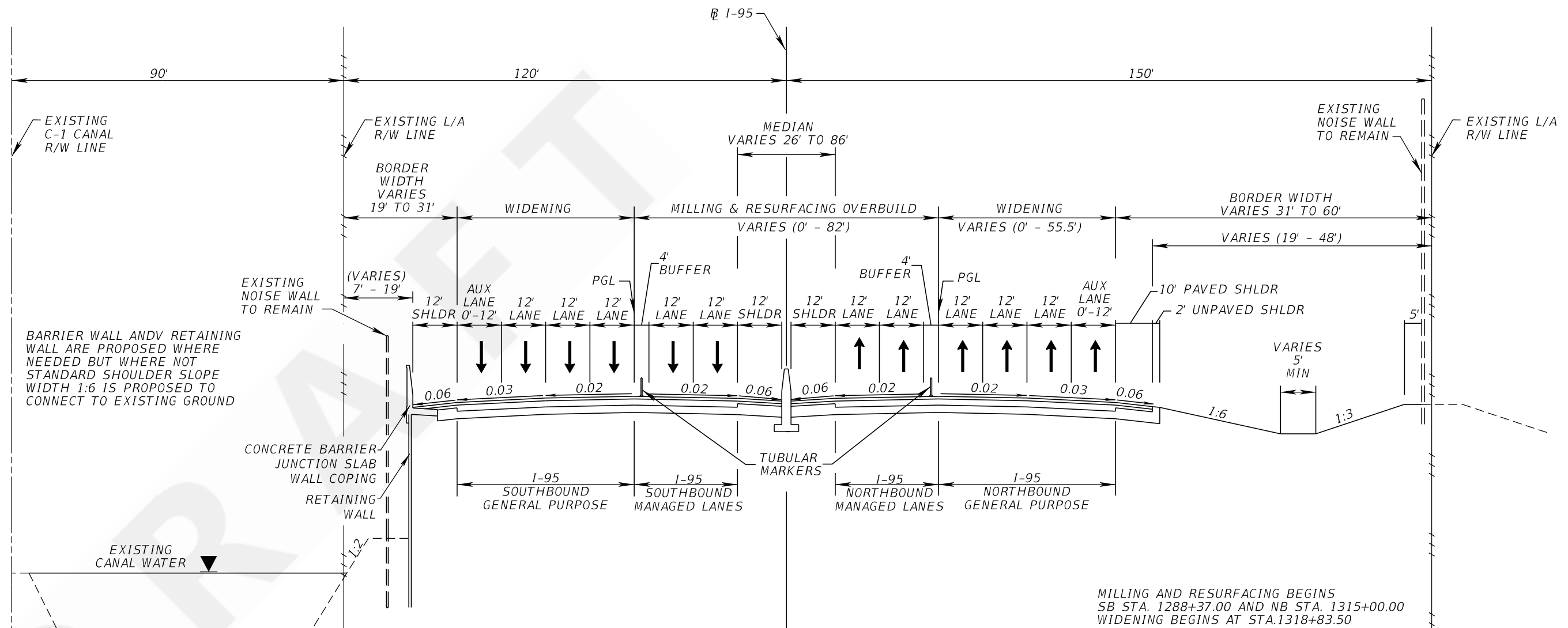
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE
SUITE 400
FORT LAUDERDALE, FL 33309
PHONE NO.: (954) 903-1785
FAX NO.: (305) 550-8100
CONTRACT NO. C9Y83
VENDOR NO. F431623092

CERTIFICATE OF AUTHORIZATION NO. 6500

FDOT PROJECT MANAGER:

ROBERT E. BOSTIAN JR., P.E.

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
N/A	Page 500 of 795	1



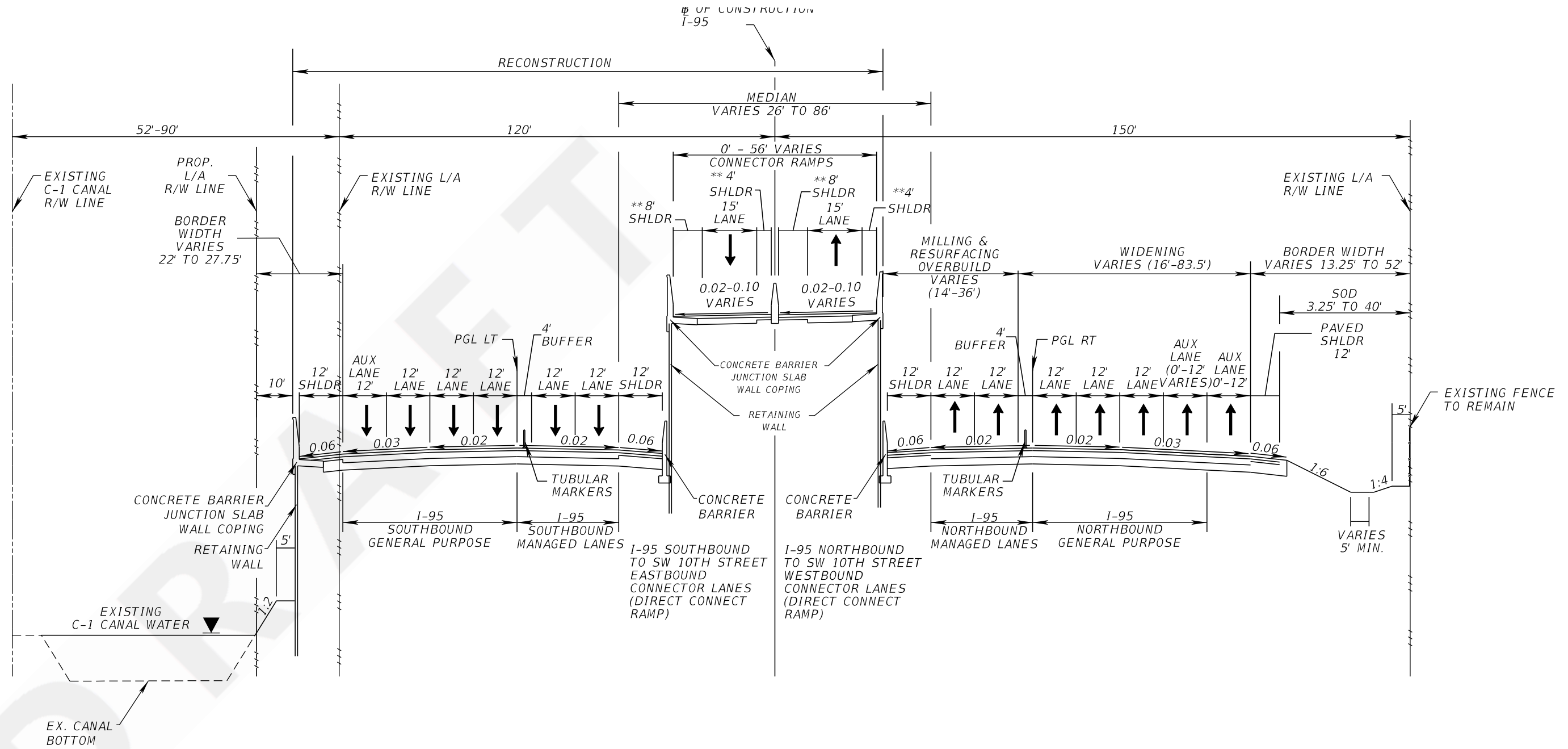
MILLING AND RESURFACING BEGINS
 SB STA. 1288+37.00 AND NB STA. 1315+00.00
 WIDENING BEGINS AT STA.1318+83.50

TRAFFIC DATA

CURRENT YEAR	= 2016 AADT = 211,900
ESTIMATED OPENING YEAR	= 2020 AADT = 215,900
ESTIMATED DESIGN YEAR	= 2040 AADT = 240,300
K = 7.00% D = 56.7% T = 6.0% (24 HOUR)	
DESIGN HOUR T = 3.0%	
DESIGN SPEED = 65 MPH	
POSTED SPEED = 65 MPH	

**TYPICAL SECTION
 SR 9 (I-95) MAINLINE
 NB I-95 STA. 1315+00.00 TO STA. 1340+93.60
 FROM NORTH OF NE 48TH STREET
 TO SOUTH OF SW 10TH STREET
 SB I-95 STA. 1288+37.00 TO STA. 1340+93.60
 FROM SOUTH OF NE 48TH STREET
 TO SOUTH OF SW 10TH STREET**

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 501 of 795 2



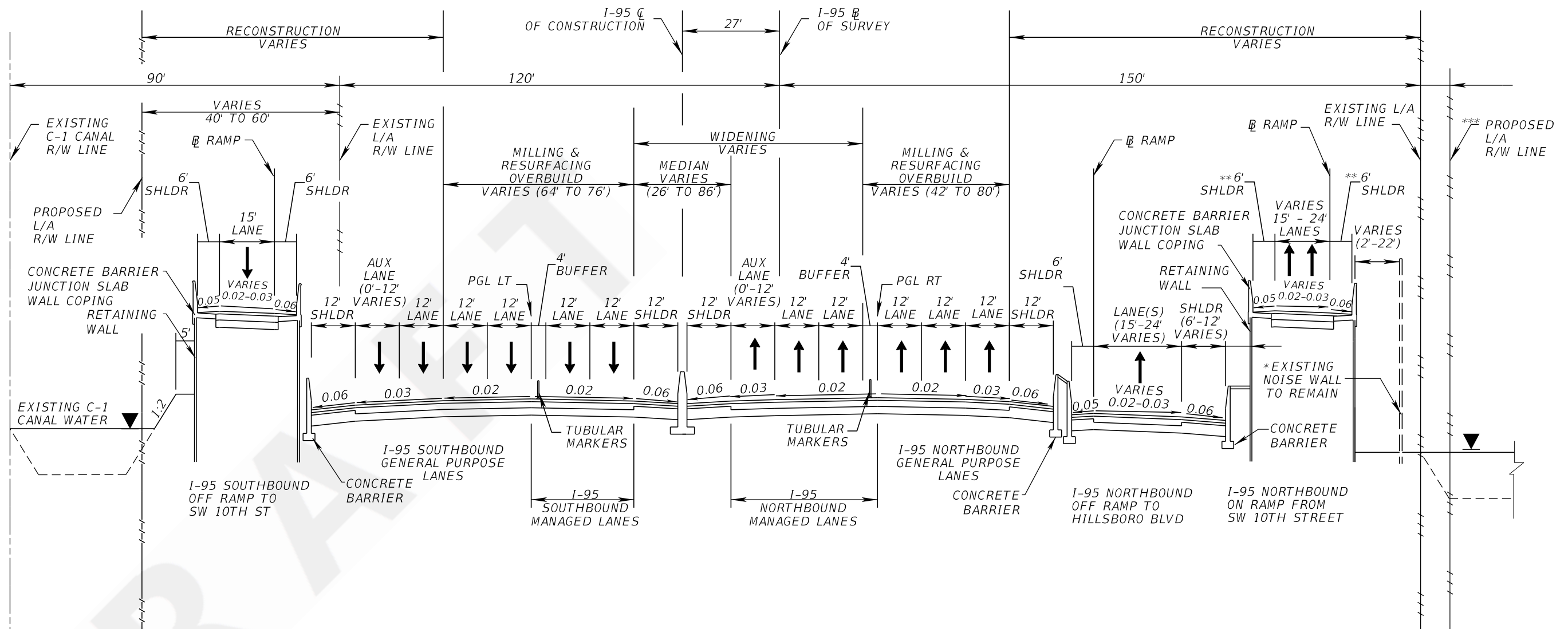
** SHOULDER WIDTH ON SINGLE LANE CONNECTOR RAMP ARE 8 FEET WIDE ON INSIDE OF CURVES AND 4 FEET ON OUTSIDE FOR IMPROVED HORIZONTAL STOPPING SIGHT DISTANCE

TRAFFIC DATA

CURRENT YEAR	= 2016 AADT = 211,900
ESTIMATED OPENING YEAR	= 2020 AADT = 215,900
ESTIMATED DESIGN YEAR	= 2040 AADT = 240,300
K = 7.00% D = 56.7% T = 6.0% (24 HOUR)	
DESIGN HOUR T = 3.0%	
DESIGN SPEED = 65 MPH	
POSTED SPEED = 65 MPH	

TYPICAL SECTION
SR 9 (I-95)
OF CONSTRUCTION I-95 STA. 1340+93.60 TO STA. 1373+72.19
FROM SOUTH OF SW 10TH STREET TO NORTH OF SW 10TH STREET

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 502 of 795 3



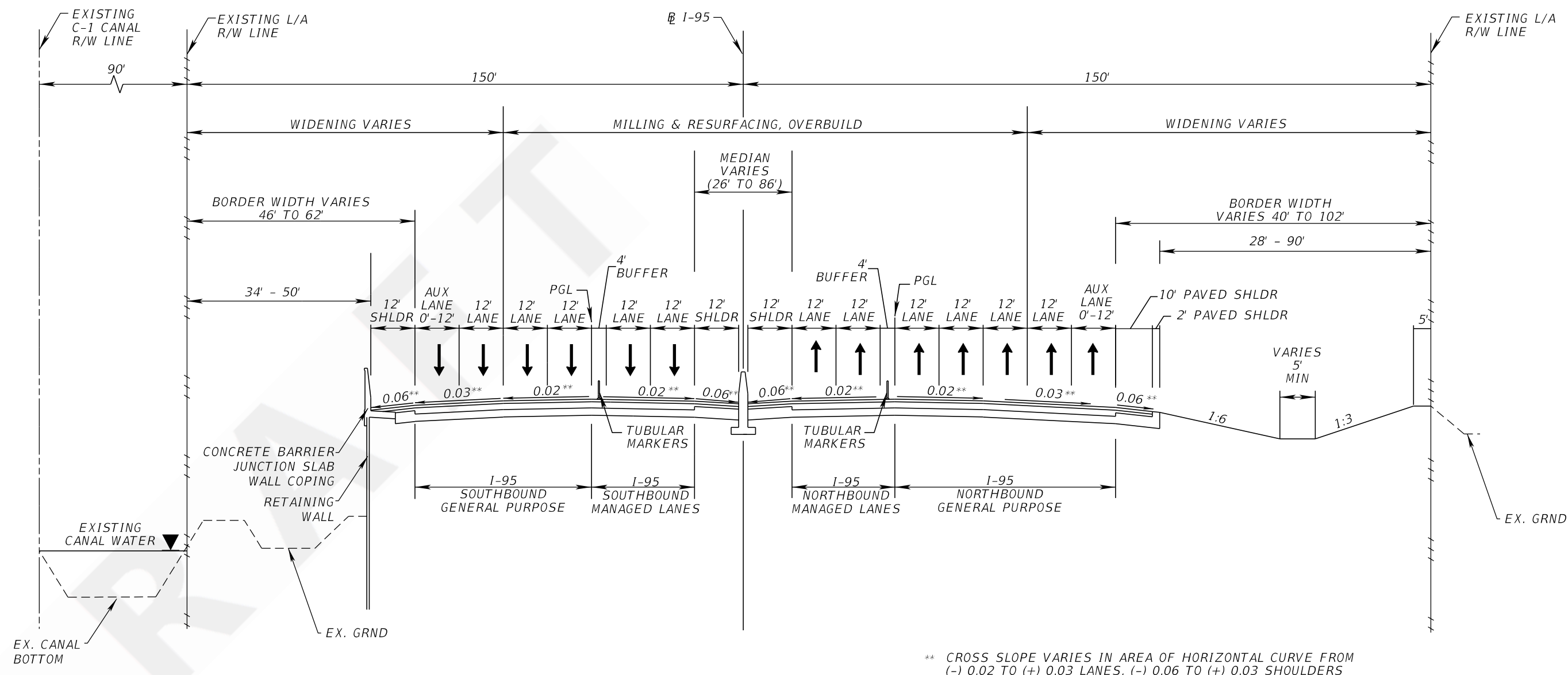
**TYPICAL SECTION
SR 9 (I-95) MAINLINE
I-95 \mathbb{B} OF SURVEY STA. 1373+72.19 TO STA. 1411+28.76
FROM NORTH OF SW 10TH STREET TO SOUTH OF HILLSBORO BLVD**

- * NOISE WALL REPLACED WHERE IMPACTED
- ** DESIGN VARIATION WHERE MULTILANE RAMP WITH 6FT INSIDE AND OUTSIDE SHOULDERS TO MINIMIZE RW IMPACTS
- *** PROPOSED R/W LINE VARIES STA.1362+70.12 TO STA. 1371+43.14

TRAFFIC DATA

	YEAR	I-95	NB ON RAMP	NB OFF RAMP	SB OFF RAMP
CURRENT (AADT)	2016	213,100	16,500	8,800	15,000
ESTIMATED OPENING (AADT)	2020	224,100	24,400	9,200	22,500
ESTIMATED DESIGN (AADT)	2040	252,100	31,500	10,000	29,100
		K = 7.00% (24 HOUR) D = 56.7% (24 HOUR) T = 6.0% (24 HOUR) DESIGN HOUR T = 3.0% DESIGN SPEED = 65 MPH POSTED SPEED = 65 MPH	K = 9.00% (24 HOUR) D = 51.5% (24 HOUR) T = 7.97% (24 HOUR) DESIGN HOUR T = 4.0% DESIGN SPEED = 50MPH POSTED SPEED = 50 MPH	K = 9.00% (24 HOUR) D = 51.5% (24 HOUR) T = 7.97% (24 HOUR) DESIGN HOUR T = 4.0% DESIGN SPEED = 50MPH POSTED SPEED = 50 MPH	K = 9.00% (24 HOUR) D = 51.5% (24 HOUR) T = 7.97% (24 HOUR) DESIGN HOUR T = 4.0% DESIGN SPEED = 50MPH POSTED SPEED = 50 MPH

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS

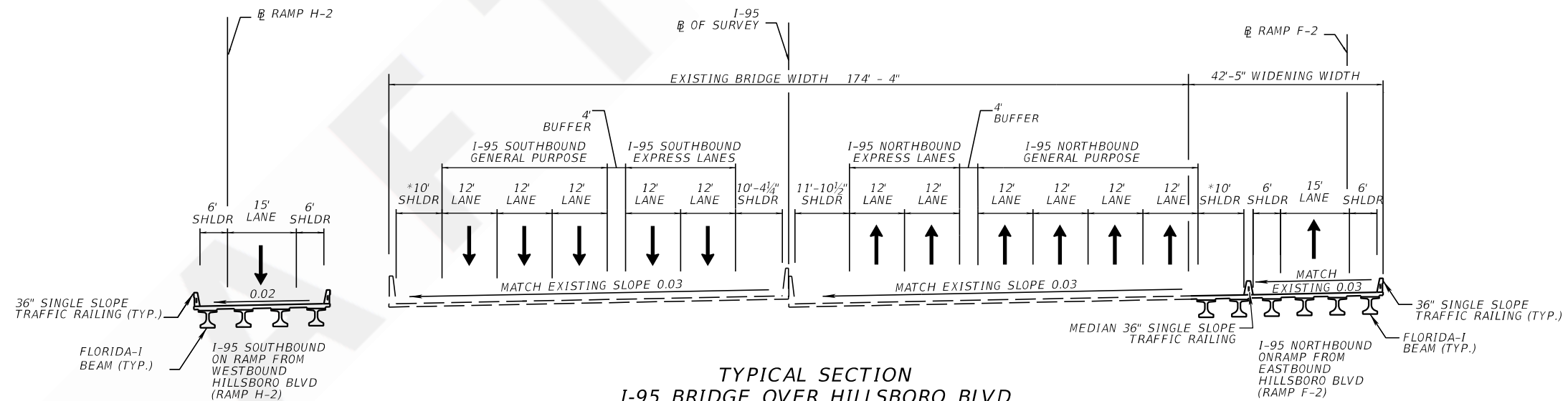


TRAFFIC DATA

CURRENT YEAR = 2016 AADT = 213,100
 ESTIMATED OPENING YEAR = 2020 AADT = 224,100
 ESTIMATED DESIGN YEAR = 2040 AADT = 252,100
 K = 7.00% D = 56.7% T = 6.0% (24 HOUR)
 DESIGN HOUR T = 3.0%
 DESIGN SPEED = 65 MPH
 POSTED SPEED = 65 MPH

**TYPICAL SECTION
 SR 9 (I-95) MAINLINE
 STA. 1411+28.76 TO STA. 1446+80.00
 FROM SOUTH OF HILLSBORO BLVD TO
 SOUTH OF HILLSBORO CANAL**

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 504 of 795 5



TYPICAL SECTION
I-95 BRIDGE OVER HILLSBORO BLVD
 I-95 Δ SURVEY STA 1410+13.40 TO 1412+44.25
 Δ RAMP F-2 BRIDGE OVER HILLSBORO BLVD STA 141+62.69 TO 143+93.28
 Δ RAMP H-2 BRIDGE OVER HILLSBORO BLVD STA 176+87.63 TO 179+15.64

TRAFFIC DATA

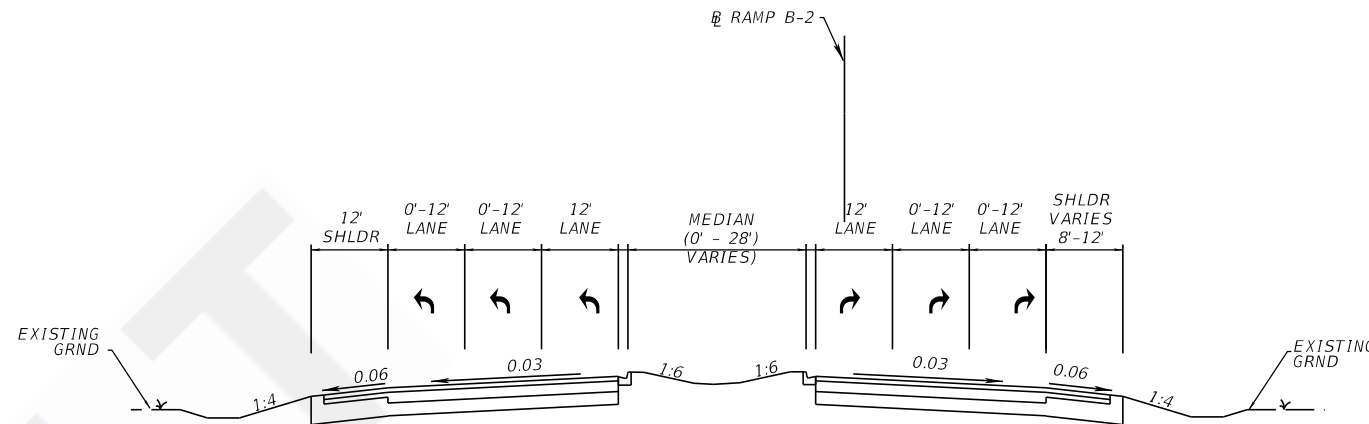
	YEAR	I-95	I-95 SB ON RAMP	I-95 NB ON RAMP
CURRENT (AADT)	2016	213,100	8,800	6,300
ESTIMATED OPENING (AADT)	2020	224,100	9,100	6,250
ESTIMATED DESIGN (AADT)	2040	252,100	10,000	6,550

K = 7.0 % D = 56.7% T = 6.0% (24 HOUR)
 DESIGN HOUR T = 3.0%
 DESIGN SPEED = 65 MPH
 POSTED SPEED = 65 MPH

REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS

TRAFFIC DATA

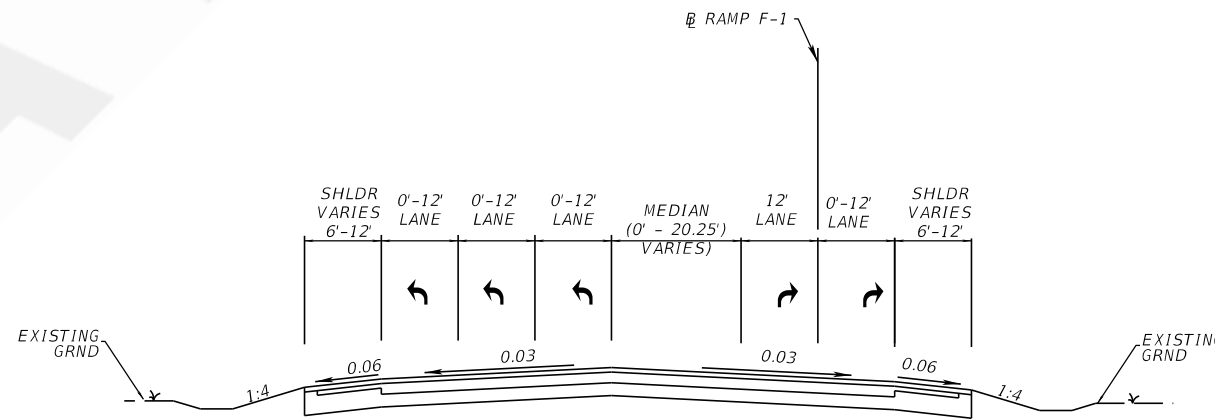
CURRENT YEAR = 2016 AADT = 15,800
 ESTIMATED OPENING YEAR = 2020 AADT = 20,650
 ESTIMATED DESIGN YEAR = 2040 AADT = 25,600
 K = 9.0 % D = 59.5% T = 8.0% (24 HOUR)
 DESIGN HOUR T = 4.0%
 DESIGN SPEED = 50 MPH
 POSTED SPEED = 50 MPH



TYPICAL SECTION
 SR 9 (I-95) RAMP B-2
 STA. 81+71.47 TO STA. 94+25.19
 I-95 NB OFF RAMP TO SW 10TH STREET

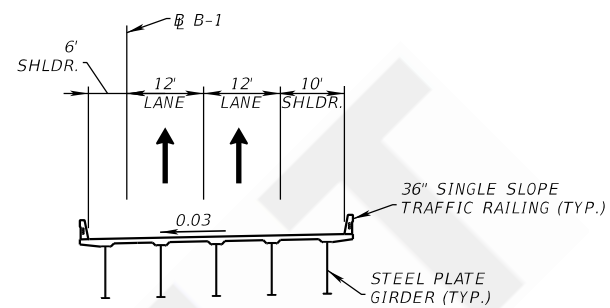
TRAFFIC DATA

CURRENT YEAR = 2016 AADT = 8,800
 ESTIMATED OPENING YEAR = 2020 AADT = 9,200
 ESTIMATED DESIGN YEAR = 2040 AADT = 10,000
 K = 9.0 % D = 51.5% T = 7.97% (24 HOUR)
 DESIGN HOUR T = 4.0%
 DESIGN SPEED = 50 MPH
 POSTED SPEED = 50 MPH

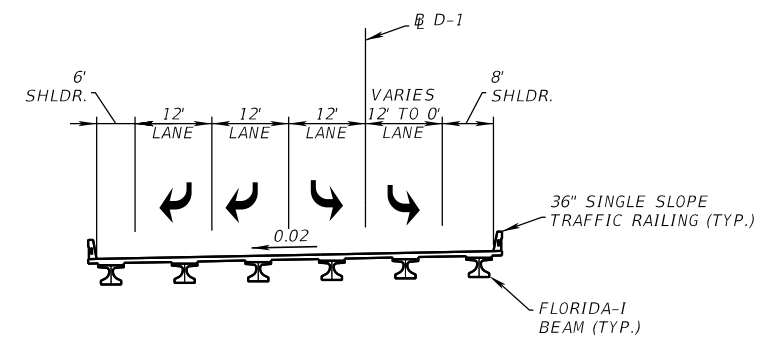


TYPICAL SECTION
 SR 9 (I-95) RAMP F-1
 STA. 106+30.00 TO STA. 145+70.92
 I-95 NB OFF RAMP TO HILLSBORO BLVD

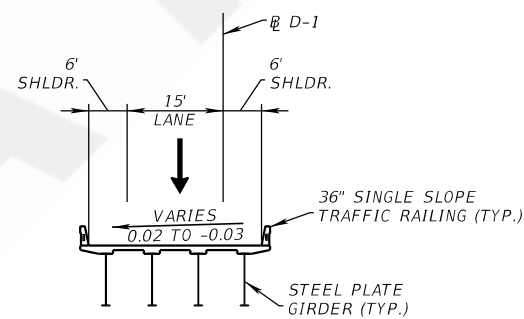
REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 506 of 795 7



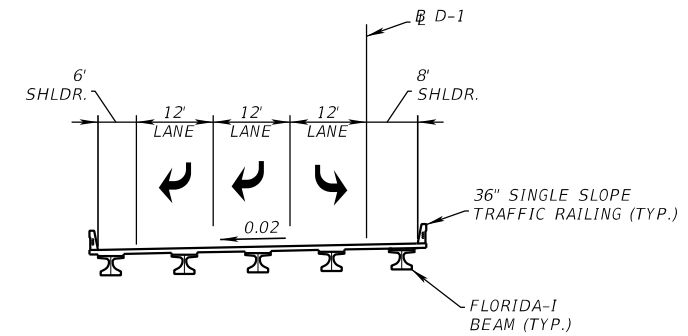
TYPICAL SECTION
 SW 10TH STREET BRAIDED ON RAMP TO NORTHBOUND I-95
 PGL RAMP B-1 STA. 85+26.27 TO 96+03.76



TYPICAL SECTION
 I-95 SOUTHBOUND OFF RAMP TO SW 10TH STREET
 STA. 90+75.70 TO 94+44.47



TYPICAL SECTION
 I-95 SOUTHBOUND BRAIDED OFF RAMP TO SW 10TH STREET
 PGL RAMP D-1 STA 119+06.94 TO STA. 129+28.08

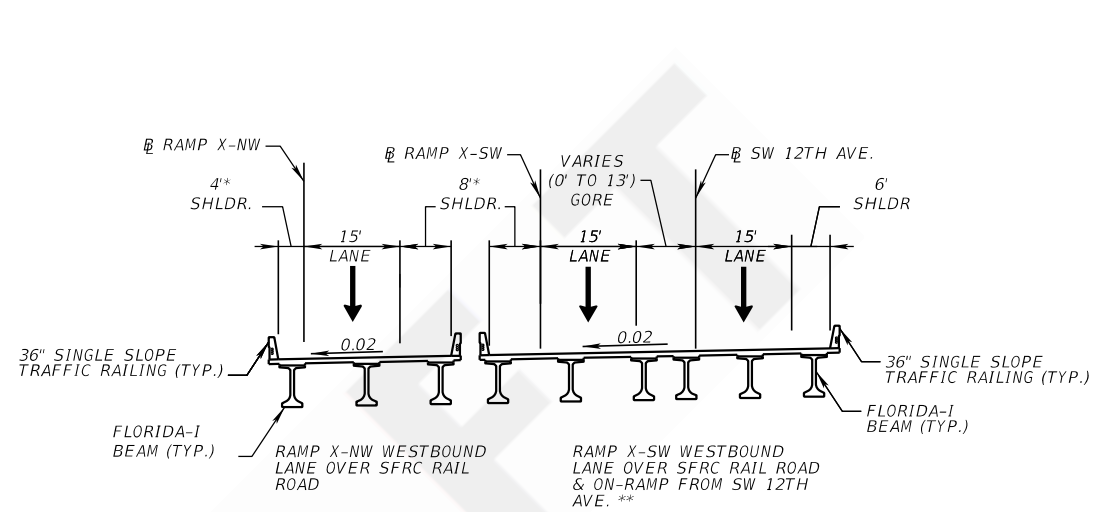


TYPICAL SECTION
 I-95 SOUTHBOUND OFF RAMP TO SW 10TH STREET
 STA. 94+44.47 TO STA 96+94.47

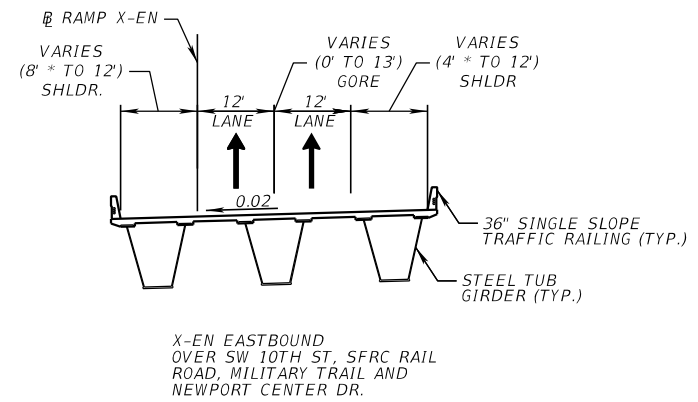
TRAFFIC DATA

RAMPS		YEAR	I-95 SB OFF RAMP	I-95 NB ON RAMP
CURRENT	(AADT)	2016	15,000	16,500
ESTIMATED OPENING	(AADT)	2020	22,500	24,400
ESTIMATED DESIGN	(AADT)	2040	29,100	31,500
K = 9.0 % D = 51.5% T = 7.97% (24 HOUR)				
DESIGN HOUR T = 3.99%				
DESIGN SPEED = 50 MPH				
POSTED SPEED = 50 MPH				

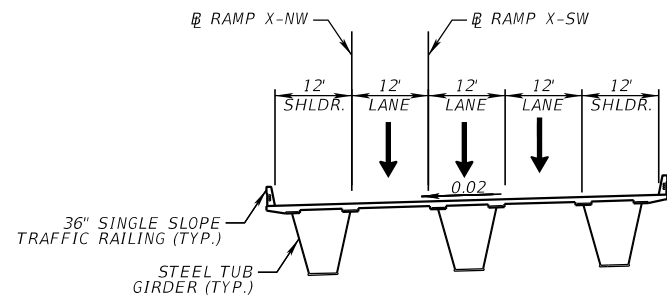
REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 507 of 795 8



TYPICAL SECTION
RAMP X-NW STA. 4206+48.89 TO 4209+41.11
RAMP X-SW STA. 2206+38.67 TO 2209+27.65



TYPICAL SECTION
RAMP X-EN STA. 3186+57.18 TO 3220+79.33



TYPICAL SECTION
X-NW/X-SW OVER MILITARY TRAIL
RAMP X-NW STA. 4196+68.40 TO 4199+00.00
RAMP X-SW STA. 2196+68.40 TO 2199+00.00

* SHOULDER WIDTH ON SINGLE LANE CONNECTOR RAMPS ARE 8 FEET WIDE ON INSIDE OF CURVE AND 4 FEET ON OUTSIDE FOR IMPROVED HORIZONTAL STOPPING SIGHT DISTANCE

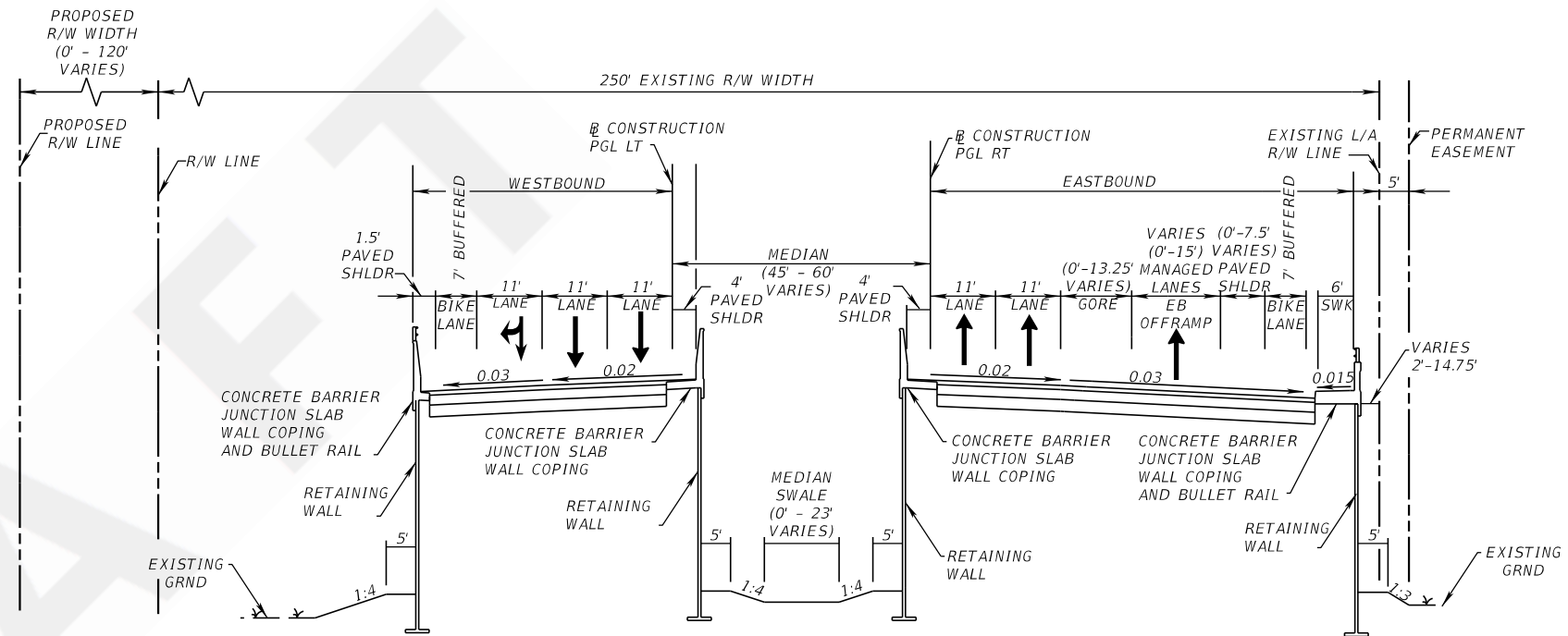
** BRIDGE IS SHOWN AT STA. 2207+60.00 INCLUDING LANE FROM SW 12TH AVENUE

TRAFFIC DATA

RAMPS	YEAR	X_NW	X_SW	X_EN	X_ES
ESTIMATED OPENING (AADT)	2020	4,273	9,740	12,788	3,048
ESTIMATED DESIGN (AADT)	2040	5,565	11,662	15,274	4,903

K = 9.0 % D = N/A T = N/A (24 HOUR)
 DESIGN HOUR T = N/A
 DESIGN SPEED = 50 MPH
 POSTED SPEED = 50 MPH

REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 508 of 795 9

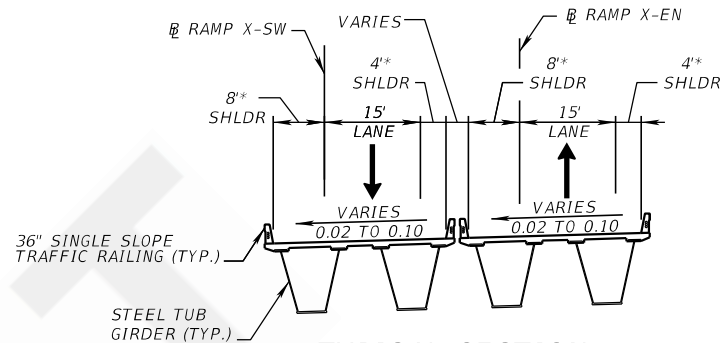


TYPICAL SECTION
SR 869 (SW 10TH ST LOCAL LANES)
PGL LT STA. 364+60.00 TO STA. 384+60.00
PGL RT STA. 264+60.00 TO STA. 284+60.00
FROM MILITARY TRAIL TO I-95 TO EAST NEWPORT CENTER DRIVE

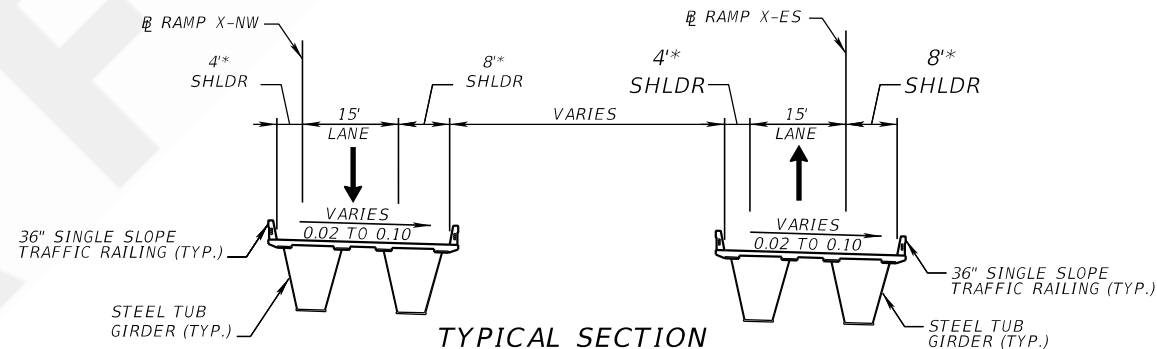
TRAFFIC DATA

CURRENT YEAR = 2016 AADT = 54,500
 ESTIMATED OPENING YEAR = 2020 AADT = 77,700
 ESTIMATED DESIGN YEAR = 2040 AADT = 94,200
 K = 9.0 % D = 59.5% T = 8.0% (24 HOUR)
 DESIGN HOUR T = 4.0%
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

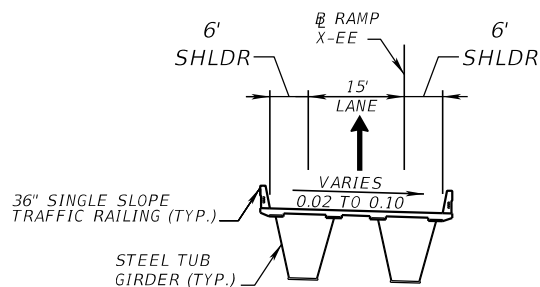
REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 509 of 795 10



**TYPICAL SECTION
SINGLE LANE RAMP**
RAMP X-SW STA. 2214+00.00 TO 2233+38.10 (SOUTHBOUND TO WESTBOUND)
RAMP X-EN STA. 3220+79.33 TO 3233+59.71 (EASTBOUND TO NORTHBOUND)



**TYPICAL SECTION
SINGLE LANE RAMP**
RAMP X-NW STA. 4212+32.73 TO 4233+97.30 (NORTHBOUND TO WESTBOUND)
RAMP X-ES STA. 5220+77.54 TO 5233+52.19 (EASTBOUND TO SOUTHBOUND)



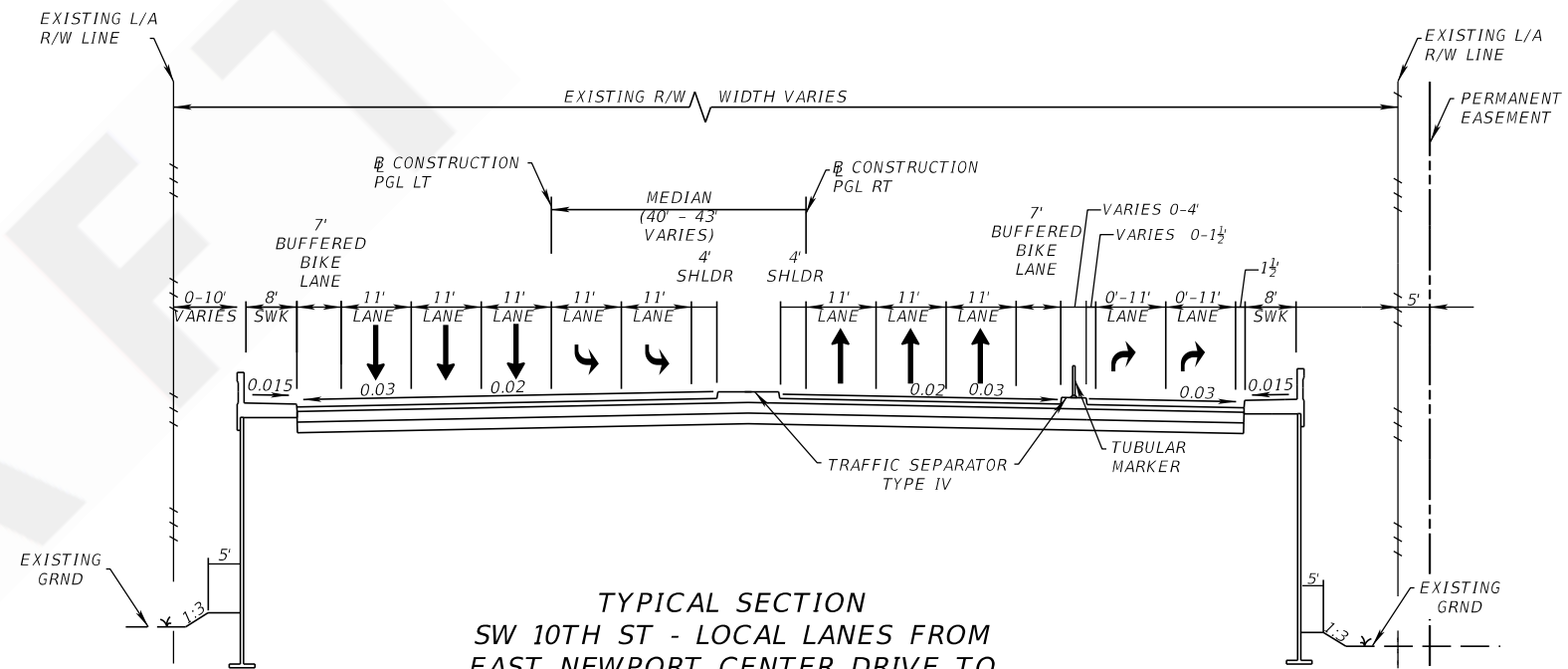
**TYPICAL SECTION
SINGLE LANE RAMP**
RAMP X-EE STA. 89+88.26 TO 99+76.23 (EASTBOUND)

* SHOULDER WIDTH ON SINGLE LANE CONNECTOR RAMPS ARE 8 FEET WIDE ON INSIDE OF CURVE AND 4 FEET ON OUTSIDE FOR IMPROVED HORIZONTAL STOPPING SIGHT DISTANCE

TRAFFIC DATA

RAMPS	YEAR	X_NW	X_SW	X_EN	X_ES	X_EE
ESTIMATED OPENING (AADT)	2020	4,273	9,740	12,788	3,048	9,210
ESTIMATED DESIGN (AADT)	2040	5,565	11,662	15,274	4,903	10,568
K = 9.0 % D = N/A T = N/A (24 HOUR)						
DESIGN HOUR T = N/A						
DESIGN SPEED = 50 MPH						
POSTED SPEED = 50 MPH						

REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 510 of 795 11

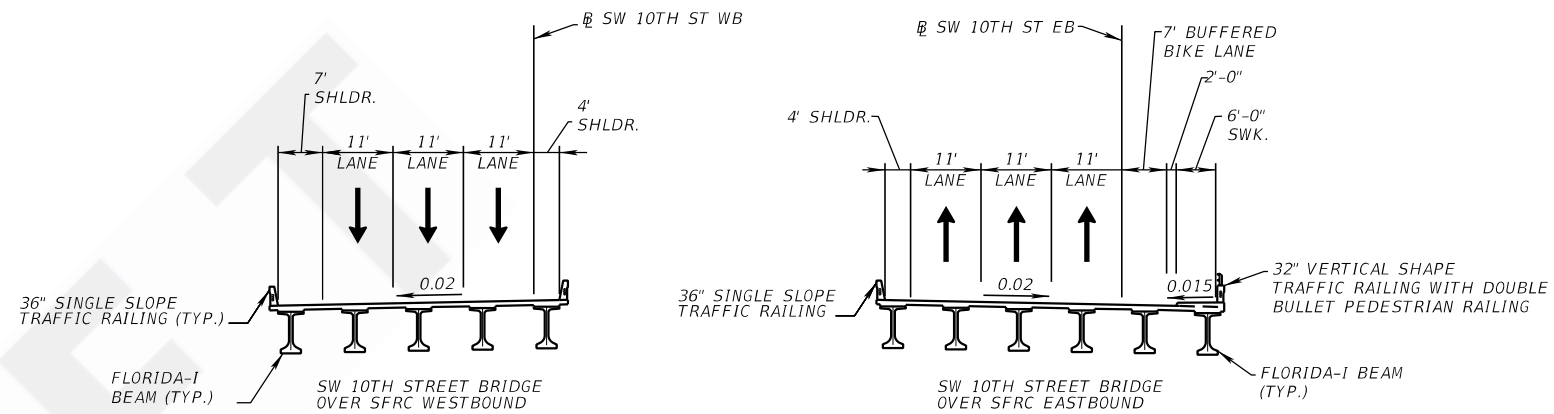


TYPICAL SECTION
 SW 10TH ST - LOCAL LANES FROM
 EAST NEWPORT CENTER DRIVE TO
 EAST OF NATURA BLVD/ FAU RESEARCH PKWY
 PGL LT STA 384+60.00 TO 402+72.08
 PGL RT STA 284+60.00 TO 302+80.00

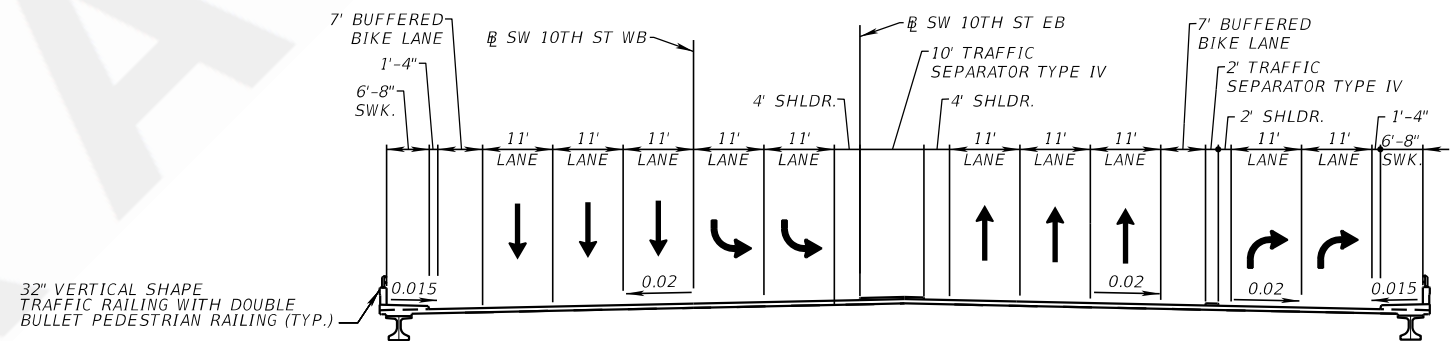
TRAFFIC DATA

	YEAR	SW 10TH ST FROM EAST NEWPORT CENTER DR TO I-95 OVERPASS BRIDGE	SW 10TH ST FROM I-95 OVERPASS BRIDGE TO EAST OF NATURA BLVD/ FAU RESEARCH PKWY
CURRENT (AADT)	2016	54,500	40,000
ESTIMATED OPENING (AADT)	2020	77,700	44,700
ESTIMATED DESIGN (AADT)	2040	94,200	46,300
		K = 9.00% (24 HOUR) D = 51.5% (24 HOUR) T = 7.97% (24 HOUR) DESIGN HOUR T = 3.99% DESIGN SPEED = 35 MPH POSTED SPEED = 35 MPH	K = 9.00% (24 HOUR) D = 51.5% (24 HOUR) T = 7.97% (24 HOUR) DESIGN HOUR T = 3.99% DESIGN SPEED = 35 MPH POSTED SPEED = 35 MPH

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	TYPICAL SECTIONS Page 511 of 795 12



TYPICAL SECTION
 SW 10TH STREET BRIDGE OVER SFRC WESTBOUND STA. 372+59.52 TO STA 375+47.96
 SW 10TH STREET BRIDGE OVER SFRC EASTBOUND STA. 272+51.20 TO STA 275+40.18

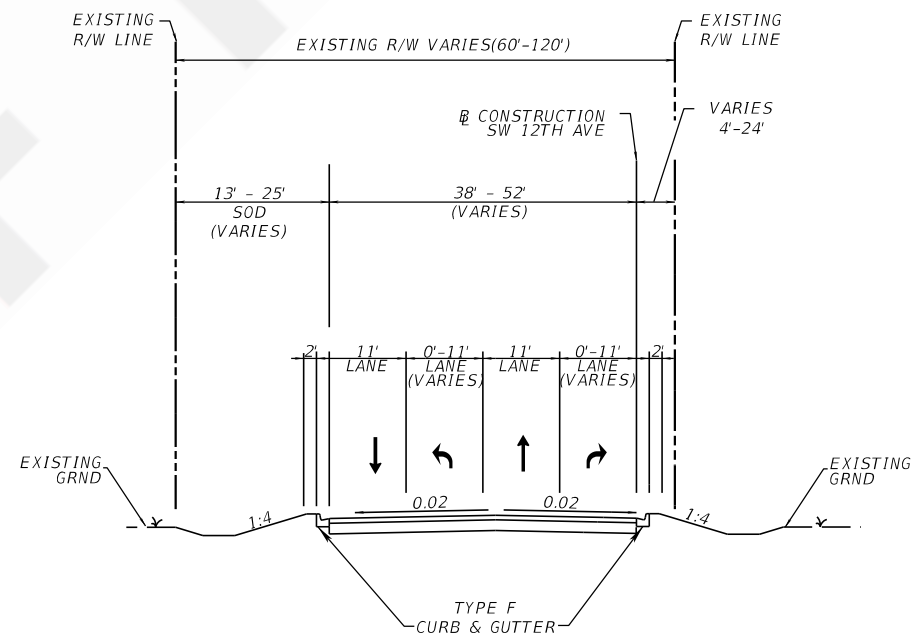


TYPICAL SECTION
 SW 10TH STREET BRIDGE OVER I-95 STA. 394+83.72 TO STA 397+96.57

TRAFFIC DATA

CURRENT YEAR = 2016 AADT = 40,000
 ESTIMATED OPENING YEAR = 2020 AADT = 44,700
 ESTIMATED DESIGN YEAR = 2040 AADT = 46,300
 K = 9.0 % D = 51.5% T = 7.97% (24 HOUR)
 DESIGN HOUR T = 3.99%
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

REVISIONS				FENG LIU, P.E. P.E. LICENSE NUMBER 65738 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. TYPICAL SECTIONS
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	13

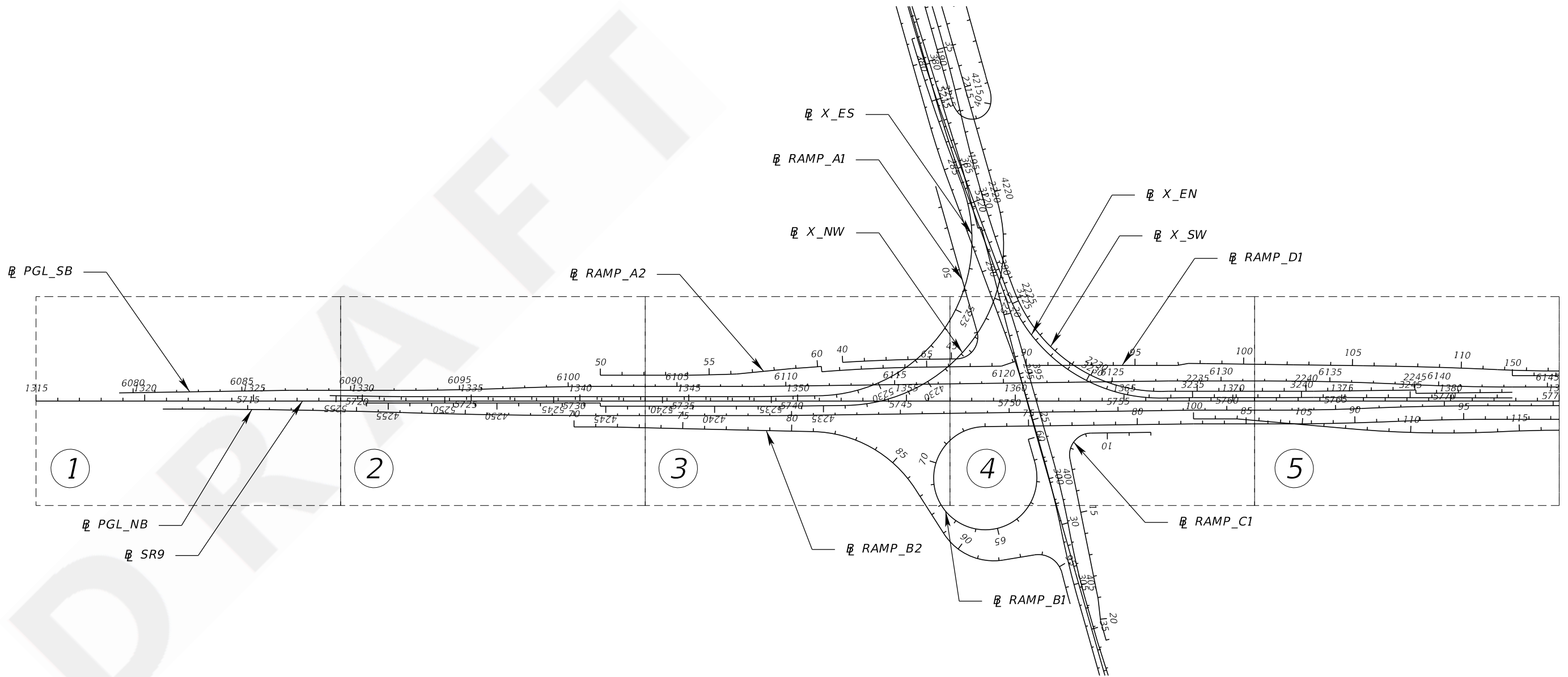
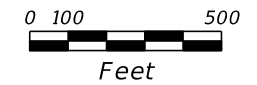


TYPICAL SECTION
 SW 12TH AVE / WEST NEWPORT CENTER DR.
 OF CONSTRUCTION 507+84.38 TO 529+40.71
 FROM EAST NEWPORT CENTER DR
 TO PUBLIX DRIVEWAY INTERSECTION

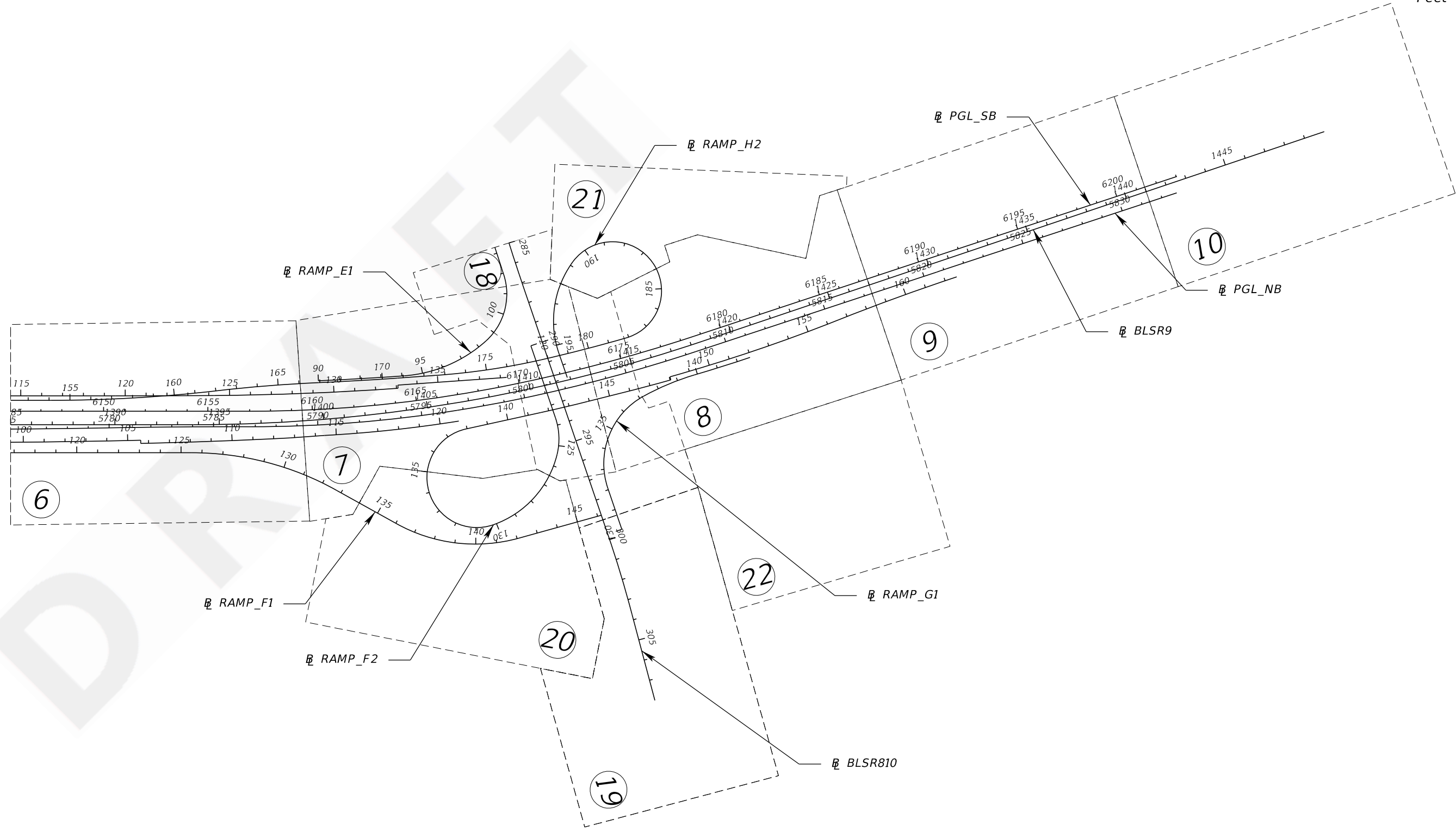
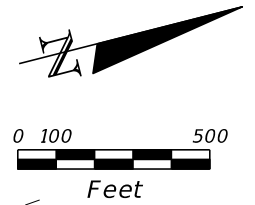
TRAFFIC DATA

CURRENT YEAR = 2016 AADT = 5,200
 ESTIMATED OPENING YEAR = 2020 AADT = 7,300
 ESTIMATED DESIGN YEAR = 2040 AADT = 8,700
 K = 9.8 % D = 51.1% T = 7.0% (24 HOUR)
 DESIGN HOUR T = 3.5%
 DESIGN SPEED = 25 MPH
 POSTED SPEED = 25 MPH

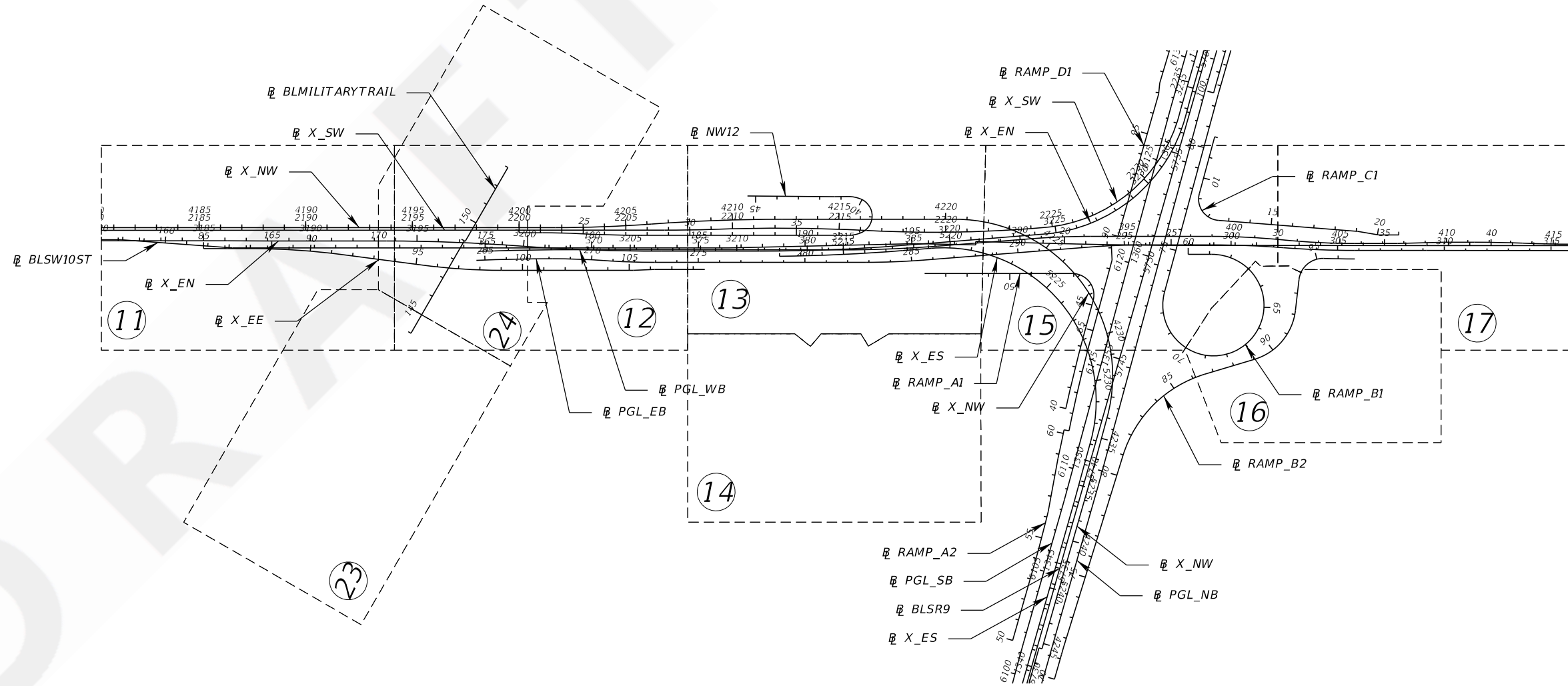
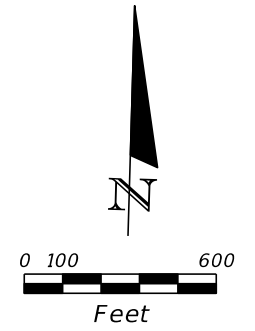
REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	<p>TYPICAL SECTIONS</p> <p>Page 513 of 795 14</p>



REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 15
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	PROJECT LAYOUT Page 514 of 795	



REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 16
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	PROJECT LAYOUT Page 515 of 795	



REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 17
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 869	BROWARD	436964-1-52-01	PROJECT LAYOUT Page 516 of 795	

PI STA. = 266+37.73
 Δ = 2° 26' 39" (RT)
 D = 0° 41' 16"
 T = 177.73
 L = 355.41
 R = 8,331.38
 PC STA. = 264+60.00
 PT STA. = 268+15.41

PI STA. = 367+20.68
 Δ = 1° 40' 09" (RT)
 D = 0° 26' 52"
 T = 186.44
 L = 372.85
 R = 12,797.77
 PC STA. = 365+34.24
 PT STA. = 369+07.09

PI STA. = 5716+93.94
 Δ = 1° 45' 14" (RT)
 D = 0° 10' 11"
 T = 516.70
 L = 1,033.32
 R = 33,754.52
 PC STA. = 5711+77.24
 PT STA. = 5722+10.56

PI STA. = 6094+83.98
 Δ = 2° 12' 49" (LT)
 D = 0° 26' 01"
 T = 255.33
 L = 510.60
 R = 13,216.00
 PC STA. = 6092+28.65
 PT STA. = 6097+39.24

PI STA. = 41+74.16
 Δ = 2° 53' 09" (RT)
 D = 0° 49' 43"
 T = 174.16
 L = 348.24
 R = 6,914.00
 PC STA. = 40+00.00
 PT STA. = 43+48.24

PI STA. = 55+16.65
 Δ = 1° 20' 46" (LT)
 D = 0° 36' 43"
 T = 109.98
 L = 219.95
 R = 9,363.00
 PC STA. = 54+06.67
 PT STA. = 56+26.63

PI STA. = 61+71.10
 Δ = 27° 03' 30" (RT)
 D = 22° 24' 51"
 T = 61.51
 L = 120.72
 R = 255.62
 PC STA. = 61+09.59
 PT STA. = 62+30.31

PI STA. = 269+36.84
 Δ = 4° 06' 38" (RT)
 D = 1° 41' 36"
 T = 121.43
 L = 242.76
 R = 3,383.69
 PC STA. = 268+15.41
 PT STA. = 270+58.17

PI STA. = 383+90.92
 Δ = 4° 31' 34" (LT)
 D = 1° 01' 25"
 T = 221.20
 L = 442.17
 R = 5,597.31
 PC STA. = 381+69.72
 PT STA. = 386+11.89

PI STA. = 5726+65.84
 Δ = 1° 45' 14" (LT)
 D = 0° 11' 34"
 T = 455.28
 L = 910.48
 R = 29,741.93
 PC STA. = 5722+10.56
 PT STA. = 5731+21.04

PI STA. = 6099+43.46
 Δ = 2° 12' 49" (RT)
 D = 0° 32' 31"
 T = 204.22
 L = 408.38
 R = 10,570.29
 PC STA. = 6097+39.24
 PT STA. = 6101+47.62

PI STA. = 46+53.04
 Δ = 105° 07' 41" (LT)
 D = 57° 17' 45"
 T = 130.62
 L = 183.48
 R = 100.00
 PC STA. = 45+22.41
 PT STA. = 47+05.89

PI STA. = 59+48.76
 Δ = 0° 50' 13" (LT)
 D = 0° 36' 46"
 T = 68.31
 L = 136.61
 R = 9,351.00
 PC STA. = 58+80.45
 PT STA. = 60+17.07

PI STA. = 67+27.65
 Δ = 129° 02' 28" (RT)
 D = 24° 10' 32"
 T = 497.34
 L = 533.77
 R = 237.00
 PC STA. = 62+30.31
 PT STA. = 67+64.08

PI STA. = 271+76.22
 Δ = 4° 04' 49" (LT)
 D = 1° 43' 44"
 T = 118.06
 L = 236.01
 R = 3,314.05
 PC STA. = 270+58.17
 PT STA. = 272+94.18

PI STA. = 391+99.28
 Δ = 4° 32' 33" (RT)
 D = 1° 42' 39"
 T = 132.83
 L = 265.51
 R = 3,349.00
 PC STA. = 390+66.46
 PT STA. = 393+31.97

PI STA. = 5764+38.38
 Δ = 2° 30' 49" (LT)
 D = 0° 41' 46"
 T = 180.55
 L = 361.04
 R = 8,230.00
 PC STA. = 5762+57.83
 PT STA. = 5766+18.87

PI STA. = 6135+36.66
 Δ = 2° 48' 05" (RT)
 D = 0° 26' 04"
 T = 322.47
 L = 644.82
 R = 13,188.00
 PC STA. = 6132+14.19
 PT STA. = 6138+59.00

PI STA. = 62+39.78
 Δ = 3° 42' 33" (RT)
 D = 0° 49' 59"
 T = 222.71
 L = 445.27
 R = 6,878.00
 PC STA. = 60+17.07
 PT STA. = 64+62.34

PI STA. = 72+61.42
 Δ = 129° 02' 28" (RT)
 D = 24° 10' 32"
 T = 497.34
 L = 533.77
 R = 237.00
 PC STA. = 67+64.08
 PT STA. = 72+97.85

PI STA. = 89+32.24
 Δ = 2° 30' 48" (LT)
 D = 0° 28' 39"
 T = 263.23
 L = 526.37
 R = 12,000.00
 PC STA. = 86+69.02
 PT STA. = 91+95.39

PI STA. = 284+17.75
 Δ = 4° 31' 34" (LT)
 D = 1° 42' 39"
 T = 132.35
 L = 264.56
 R = 3,349.00
 PC STA. = 282+85.40
 PT STA. = 285+49.96

PI STA. = 400+65.85
 Δ = 5° 33' 34" (RT)
 D = 1° 39' 15"
 T = 168.19
 L = 336.12
 R = 3,464.00
 PC STA. = 398+97.66
 PT STA. = 402+33.78

PI STA. = 5769+05.79
 Δ = 2° 30' 48" (RT)
 D = 0° 26' 17"
 T = 286.92
 L = 573.74
 R = 13,080.00
 PC STA. = 5766+18.87
 PT STA. = 5771+92.62

PI STA. = 6140+99.19
 Δ = 2° 48' 05" (LT)
 D = 0° 35' 00"
 T = 240.19
 L = 480.29
 R = 9,823.00
 PC STA. = 6138+59.00
 PT STA. = 6143+39.29

PI STA. = 6162+95.35
 Δ = 10° 51' 08" (LT)
 D = 0° 55' 34"
 T = 587.67
 L = 1,171.83
 R = 6,186.78
 PC STA. = 6157+07.67
 PT STA. = 6168+79.50

PI STA. = 93+99.61
 Δ = 2° 30' 48" (RT)
 D = 0° 36' 56"
 T = 204.22
 L = 408.38
 R = 9,310.00
 PC STA. = 91+95.39
 PT STA. = 96+03.76

PI STA. = 101+43.10
 Δ = 1° 19' 53" (LT)
 D = 0° 09' 32"
 T = 419.33
 L = 838.63
 R = 36,088.00
 PC STA. = 97+23.76
 PT STA. = 105+62.39

PI STA. = 294+64.47
 Δ = 4° 32' 33" (RT)
 D = 1° 40' 40"
 T = 135.44
 L = 270.75
 R = 3,415.00
 PC STA. = 293+29.03
 PT STA. = 295+99.77

PI STA. = 404+01.97
 Δ = 5° 33' 34" (LT)
 D = 1° 39' 15"
 T = 168.19
 L = 336.12
 R = 3,464.00
 PC STA. = 402+33.78
 PT STA. = 405+69.89

PI STA. = 5776+32.09
 Δ = 1° 00' 58" (LT)
 D = 0° 09' 33"
 T = 319.48
 L = 638.94
 R = 36,025.00
 PC STA. = 5773+12.62
 PT STA. = 5779+51.55

PI STA. = 6162+95.35
 Δ = 10° 51' 08" (LT)
 D = 0° 55' 34"
 T = 587.67
 L = 1,171.83
 R = 6,186.78
 PC STA. = 6157+07.67
 PT STA. = 6168+79.50

PI STA. = 6173+74.24
 Δ = 7° 26' 43" (LT)
 D = 0° 45' 13"
 T = 494.73
 L = 988.07
 R = 7,603.88
 PC STA. = 6168+79.50
 PT STA. = 6178+67.57

PI STA. = 109+20.04
 Δ = 1° 32' 07" (LT)
 D = 0° 12' 53"
 T = 357.65
 L = 715.26
 R = 26,692.49
 PC STA. = 105+62.39
 PT STA. = 112+77.65

PI STA. = 117+66.94
 Δ = 5° 52' 53" (LT)
 D = 0° 54' 27"
 T = 324.29
 L = 648.00
 R = 6,312.78
 PC STA. = 114+42.65
 PT STA. = 120+90.66

PI STA. = 300+78.07
 Δ = 4° 21' 56" (RT)
 D = 1° 17' 22"
 T = 169.34
 L = 338.52
 R = 4,443.00
 PC STA. = 299+08.73
 PT STA. = 302+47.25

PI STA. = 412+41.87
 Δ = 2° 17' 30" (RT)
 D = 1° 01' 06"
 T = 112.54
 L = 225.06
 R = 5,627.10
 PC STA. = 411+29.33
 PT STA. = 413+54.39

PI STA. = 5783+15.30
 Δ = 1° 02' 05" (RT)
 D = 0° 08' 32"
 T = 363.75
 L = 727.48
 R = 40,285.00
 PC STA. = 5779+51.55
 PT STA. = 5786+79.03

PI STA. = 6173+74.24
 Δ = 7° 26' 43" (LT)
 D = 0° 45' 13"
 T = 494.73
 L = 988.07
 R = 7,603.88
 PC STA. = 6168+79.50
 PT STA. = 6178+67.57

PI STA. = 5791+75.81
 Δ = 9° 04' 25" (LT)
 D = 0° 54' 55"
 T = 496.78
 L = 991.48
 R = 6,260.78
 PC STA. = 5786+79.03
 PT STA. = 5796+70.51

PI STA. = 109+20.04
 Δ = 1° 32' 07" (LT)
 D = 0° 12' 53"
 T = 357.65
 L = 715.26
 R = 26,692.49
 PC STA. = 105+62.39
 PT STA. = 112+77.65

PI STA. = 117+66.94
 Δ = 5° 52' 53" (LT)
 D = 0° 54' 27"
 T = 324.29
 L = 648.00
 R = 6,312.78
 PC STA. = 114+42.65
 PT STA. = 120+90.66

PI STA. = 304+14.08
 Δ = 4° 21' 56" (LT)
 D = 1° 18' 32"
 T = 166.83
 L = 333.49
 R = 4,377.00
 PC STA. = 302+47.25
 PT STA. = 305+80.74

PI STA. = 414+66.93
 Δ = 2° 17' 30" (LT)
 D = 1° 01' 06"
 T = 112.54
 L = 225.06
 R = 5,627.10
 PC STA. = 413+54.39
 PT STA. = 415+79.44

PI STA. = 5791+75.81
 Δ = 9° 04' 25" (LT)
 D = 0° 54' 55"
 T = 496.78
 L = 991.48
 R = 6,260.78
 PC STA. = 5786+79.03
 PT STA. = 5796+70.51

PI STA. = 5798+28.31
 Δ = 2° 46' 16" (LT)
 D = 0° 52' 42"
 T = 157.80
 L = 315.53
 R = 6,524.00
 PC STA. = 5796+70.51
 PT STA. = 5799+86.04

PI STA. = 5804+18.16
 Δ = 6° 26' 36" (LT)
 D = 0° 44' 47"
 T = 432.11
 L = 863.31
 R = 7,676.69
 PC STA. = 5799+86.04
 PT STA. = 5808+49.36

PI STA. = 109+20.04
 Δ = 1° 32' 07" (LT)
 D = 0° 12' 53"
 T = 357.65
 L = 715.26
 R = 26,692.49
 PC STA. = 105+62.39
 PT STA. = 112+77.65

PI STA. = 117+66.94
 Δ = 5° 52' 53" (LT)
 D = 0° 54' 27"
 T = 324.29
 L = 648.00
 R = 6,312.78
 PC STA. = 114+42.65
 PT STA. = 120+90.66

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				BROWARD	436964-1-52-01	18	

CURVE DATA

CURVE DATA RAMP CH1
 PI STA. = 11+95.68
 Δ = 100° 39' 51" (LT)
 D = 57° 17' 45"
 T = 120.59
 L = 175.69
 R = 100.00
 PC STA. = 10+75.09
 PT STA. = 12+50.78

CURVE DATA RAMP D11
 PI STA. = 108+58.27
 Δ = 1° 52' 24" (RT)
 D = 0° 18' 15"
 T = 308.11
 L = 616.16
 R = 18,844.08
 PC STA. = 105+50.16
 PT STA. = 111+66.32

CURVE DATA RAMP E11
 PI STA. = 92+06.41
 Δ = 1° 41' 43" (LT)
 D = 0° 24' 39"
 T = 206.41
 L = 412.78
 R = 13,950.47
 PC STA. = 90+00.00
 PT STA. = 94+12.78

CURVE DATA RAMP F11
 PI STA. = 110+72.15
 Δ = 7° 49' 08" (LT)
 D = 1° 06' 42"
 T = 352.23
 L = 703.36
 R = 5,154.20
 PC STA. = 107+19.92
 PT STA. = 114+23.28

CURVE DATA RAMP F21
 PI STA. = 124+55.67
 Δ = 32° 32' 08" (RT)
 D = 18° 28' 57"
 T = 90.46
 L = 176.03
 R = 310.00
 PC STA. = 123+65.21
 PT STA. = 125+41.25

CURVE DATA RAMP G11
 PI STA. = 135+16.81
 Δ = 80° 10' 27" (RT)
 D = 15° 33' 39"
 T = 309.92
 L = 515.23
 R = 368.21
 PC STA. = 132+06.89
 PT STA. = 137+22.12

CURVE DATA RAMP H21
 PI STA. = 158+04.62
 Δ = 6° 36' 04" (LT)
 D = 0° 49' 59"
 T = 396.64
 L = 792.41
 R = 6,878.00
 PC STA. = 154+07.98
 PT STA. = 162+00.38

CURVE DATA RAMP D12
 PI STA. = 113+07.64
 Δ = 2° 37' 24" (LT)
 D = 0° 55' 42"
 T = 141.32
 L = 282.58
 R = 6,171.65
 PC STA. = 111+66.32
 PT STA. = 114+48.90

CURVE DATA RAMP E12
 PI STA. = 96+37.41
 Δ = 37° 54' 24" (LT)
 D = 8° 45' 35"
 T = 224.62
 L = 432.74
 R = 654.08
 PC STA. = 94+12.78
 PT STA. = 98+45.52

CURVE DATA RAMP F12
 PI STA. = 115+60.08
 Δ = 2° 49' 08" (RT)
 D = 1° 01' 50"
 T = 136.80
 L = 273.54
 R = 5,560.00
 PC STA. = 114+23.28
 PT STA. = 116+96.82

CURVE DATA RAMP F22
 PI STA. = 127+99.65
 Δ = 56° 47' 26" (RT)
 D = 11° 59' 12"
 T = 258.40
 L = 473.79
 R = 478.00
 PC STA. = 125+41.25
 PT STA. = 130+15.03

CURVE DATA RAMP G12
 PI STA. = 138+54.02
 Δ = 12° 07' 43" (RT)
 D = 4° 36' 54"
 T = 131.90
 L = 262.81
 R = 1,241.50
 PC STA. = 137+22.12
 PT STA. = 139+84.93

CURVE DATA RAMP H22
 PI STA. = 164+47.15
 Δ = 4° 06' 02" (RT)
 D = 0° 49' 52"
 T = 246.76
 L = 493.31
 R = 6,893.00
 PC STA. = 162+00.38
 PT STA. = 166+93.70

CURVE DATA RAMP D13
 PI STA. = 121+89.72
 Δ = 0° 26' 31" (LT)
 D = 0° 05' 38"
 T = 235.06
 L = 470.11
 R = 60,955.00
 PC STA. = 119+54.66
 PT STA. = 124+24.78

CURVE DATA RAMP E13
 PI STA. = 100+41.03
 Δ = 65° 53' 34" (LT)
 D = 18° 59' 34"
 T = 195.51
 L = 346.94
 R = 301.67
 PC STA. = 98+45.52
 PT STA. = 101+92.46

CURVE DATA RAMP F13
 PI STA. = 129+21.65
 Δ = 29° 08' 09" (RT)
 D = 4° 00' 04"
 T = 372.15
 L = 728.20
 R = 1,432.00
 PC STA. = 125+49.50
 PT STA. = 132+77.69

CURVE DATA RAMP F23
 PI STA. = 132+69.39
 Δ = 93° 33' 54" (RT)
 D = 23° 58' 23"
 T = 254.35
 L = 390.29
 R = 239.00
 PC STA. = 130+15.03
 PT STA. = 134+05.33

CURVE DATA RAMP G13
 PI STA. = 141+24.94
 Δ = 1° 55' 08" (LT)
 D = 0° 41' 07"
 T = 140.01
 L = 280.00
 R = 8,361.00
 PC STA. = 139+84.93
 PT STA. = 142+64.93

CURVE DATA RAMP H23
 PI STA. = 168+82.84
 Δ = 1° 33' 09" (LT)
 D = 0° 24' 38"
 T = 189.14
 L = 378.26
 R = 13,959.47
 PC STA. = 166+93.70
 PT STA. = 170+71.96

CURVE DATA RAMP D14
 PI STA. = 128+66.36
 Δ = 3° 36' 40" (LT)
 D = 0° 24' 32"
 T = 441.59
 L = 882.88
 R = 14,008.01
 PC STA. = 124+24.78
 PT STA. = 133+07.66

CURVE DATA RAMP E14
 PI STA. = 139+21.45
 Δ = 44° 37' 14" (LT)
 D = 7° 20' 34"
 T = 320.19
 L = 607.69
 R = 780.31
 PC STA. = 136+01.25
 PT STA. = 142+08.94

CURVE DATA RAMP F14
 PI STA. = 139+21.45
 Δ = 44° 37' 14" (LT)
 D = 7° 20' 34"
 T = 320.19
 L = 607.69
 R = 780.31
 PC STA. = 136+01.25
 PT STA. = 142+08.94

CURVE DATA RAMP F24
 PI STA. = 136+59.68
 Δ = 93° 33' 54" (RT)
 D = 23° 58' 23"
 T = 254.35
 L = 390.29
 R = 239.00
 PC STA. = 134+05.33
 PT STA. = 137+95.62

CURVE DATA RAMP G14
 PI STA. = 141+24.94
 Δ = 1° 55' 08" (LT)
 D = 0° 41' 07"
 T = 140.01
 L = 280.00
 R = 8,361.00
 PC STA. = 139+84.93
 PT STA. = 142+64.93

CURVE DATA RAMP H24
 PI STA. = 175+11.46
 Δ = 8° 45' 00" (LT)
 D = 1° 42' 39"
 T = 256.22
 L = 511.45
 R = 3,349.00
 PC STA. = 172+55.24
 PT STA. = 177+66.69

CURVE DATA RAMP F25
 PI STA. = 142+77.24
 Δ = 1° 41' 45" (LT)
 D = 0° 44' 17"
 T = 114.88
 L = 229.74
 R = 7,761.69
 PC STA. = 141+62.36
 PT STA. = 143+92.10

CURVE DATA RAMP H25
 PI STA. = 179+76.82
 Δ = 3° 12' 11" (LT)
 D = 0° 45' 44"
 T = 210.13
 L = 420.14
 R = 7,515.61
 PC STA. = 177+66.69
 PT STA. = 181+86.83

CURVE DATA RAMP F26
 PI STA. = 146+81.96
 Δ = 1° 40' 23" (LT)
 D = 0° 41' 10"
 T = 121.94
 L = 243.87
 R = 8,352.00
 PC STA. = 145+60.02
 PT STA. = 148+03.89

CURVE DATA RAMP H26
 PI STA. = 185+15.11
 Δ = 108° 48' 19" (LT)
 D = 24° 22' 52"
 T = 328.28
 L = 446.27
 R = 235.00
 PC STA. = 181+86.83
 PT STA. = 186+33.10

CURVE DATA RAMP F27
 PI STA. = 152+30.94
 Δ = 5° 51' 53" (LT)
 D = 0° 41' 14"
 T = 427.05
 L = 853.36
 R = 8,337.00
 PC STA. = 148+03.89
 PT STA. = 156+57.25

CURVE DATA RAMP H27
 PI STA. = 189+61.38
 Δ = 108° 48' 19" (LT)
 D = 24° 22' 52"
 T = 328.28
 L = 446.27
 R = 235.00
 PC STA. = 186+33.10
 PT STA. = 190+79.37

CURVE DATA RAMP F28
 PI STA. = 159+58.13
 Δ = 3° 21' 02" (RT)
 D = 0° 33' 25"
 T = 300.88
 L = 601.60
 R = 10,287.53
 PC STA. = 156+57.25
 PT STA. = 162+58.84

CURVE DATA RAMP H28
 PI STA. = 193+29.40
 Δ = 55° 13' 35" (LT)
 D = 11° 59' 12"
 T = 250.03
 L = 460.74
 R = 478.00
 PC STA. = 190+79.37
 PT STA. = 195+40.10

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BROWARD	436964-1-52-01

CURVE DATA

SHEET NO.

CURVE DATA NW121
 PI STA. = 23+96.64
 Δ = 2° 58' 41" (RT)
 D = 1° 42' 31"
 T = 87.17
 L = 174.30
 R = 3,353.53
 PC STA. = 23+09.47
 PT STA. = 24+83.77

CURVE DATA X_EE1
 PI STA. = 89+43.79
 Δ = 7° 16' 49" (RT)
 D = 1° 47' 26"
 T = 203.58
 L = 406.61
 R = 3,200.00
 PC STA. = 87+40.21
 PT STA. = 91+46.81

CURVE DATA X_EN1
 PI STA. = 3196+74.35
 Δ = 4° 20' 10" (RT)
 D = 0° 41' 07"
 T = 316.53
 L = 632.75
 R = 8,361.00
 PC STA. = 3193+57.82
 PT STA. = 3199+90.57

CURVE DATA X_ES1
 PI STA. = 5214+88.96
 Δ = 3° 57' 32" (LT)
 D = 0° 41' 07"
 T = 288.96
 L = 577.70
 R = 8,361.00
 PC STA. = 5212+00.00
 PT STA. = 5217+77.70

CURVE DATA X_NW1
 PI STA. = 4203+94.36
 Δ = 4° 10' 55" (LT)
 D = 0° 55' 42"
 T = 225.31
 L = 450.42
 R = 6,171.00
 PC STA. = 4201+69.04
 PT STA. = 4206+19.47

CURVE DATA BL_NP_12AVE1
 PI STA. = 503+71.40
 Δ = 48° 27' 54" (LT)
 D = 9° 36' 56"
 T = 268.20
 L = 504.02
 R = 595.86
 PC STA. = 501+03.20
 PT STA. = 506+07.22

CURVE DATA BL_NP_12AVE10
 PI STA. = 532+59.92
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA NW122
 PI STA. = 26+27.01
 Δ = 2° 57' 11" (LT)
 D = 1° 01' 52"
 T = 143.24
 L = 286.41
 R = 5,557.00
 PC STA. = 24+83.77
 PT STA. = 27+70.18

CURVE DATA X_EE2
 PI STA. = 97+15.13
 Δ = 7° 29' 42" (LT)
 D = 1° 59' 22"
 T = 188.64
 L = 376.75
 R = 2,880.00
 PC STA. = 95+26.48
 PT STA. = 99+03.23

CURVE DATA X_EN2
 PI STA. = 3203+17.80
 Δ = 4° 29' 44" (LT)
 D = 0° 41' 14"
 T = 327.23
 L = 654.13
 R = 8,337.00
 PC STA. = 3199+90.57
 PT STA. = 3206+44.70

CURVE DATA X_ES2
 PI STA. = 5229+30.23
 Δ = 109° 45' 39" (RT)
 D = 8° 00' 08"
 T = 1,018.03
 L = 1,371.63
 R = 716.00
 PC STA. = 5219+12.21
 PT STA. = 5232+83.84

CURVE DATA X_NW2
 PI STA. = 4209+26.24
 Δ = 4° 12' 25" (RT)
 D = 0° 41' 10"
 T = 306.77
 L = 613.26
 R = 8,352.00
 PC STA. = 4206+19.47
 PT STA. = 4212+32.73

CURVE DATA BL_NP_12AVE2
 PI STA. = 508+14.37
 Δ = 13° 04' 13" (LT)
 D = 15° 17' 31"
 T = 42.92
 L = 85.47
 R = 374.68
 PC STA. = 507+71.45
 PT STA. = 508+56.92

CURVE DATA NW123
 PI STA. = 37+74.26
 Δ = 22° 47' 54" (LT)
 D = 38° 11' 50"
 T = 30.24
 L = 59.69
 R = 150.00
 PC STA. = 37+44.02
 PT STA. = 38+03.70

CURVE DATA X_EE3
 PI STA. = 3214+41.27
 Δ = 4° 36' 14" (LT)
 D = 0° 41' 14"
 T = 335.13
 L = 669.89
 R = 8,337.00
 PC STA. = 3211+06.15
 PT STA. = 3217+76.04

CURVE DATA X_EN3
 PI STA. = 3214+41.27
 Δ = 4° 36' 14" (LT)
 D = 0° 41' 14"
 T = 335.13
 L = 669.89
 R = 8,337.00
 PC STA. = 3211+06.15
 PT STA. = 3217+76.04

CURVE DATA X_ES3
 PI STA. = 4230+07.06
 Δ = 105° 03' 00" (RT)
 D = 7° 47' 43"
 T = 958.73
 L = 1,347.60
 R = 735.00
 PC STA. = 4220+48.33
 PT STA. = 4233+95.92

CURVE DATA X_NW3
 PI STA. = 4230+07.06
 Δ = 105° 03' 00" (RT)
 D = 7° 47' 43"
 T = 958.73
 L = 1,347.60
 R = 735.00
 PC STA. = 4220+48.33
 PT STA. = 4233+95.92

CURVE DATA BL_NP_12AVE3
 PI STA. = 509+24.53
 Δ = 11° 43' 57" (LT)
 D = 33° 18' 41"
 T = 17.67
 L = 35.22
 R = 172.00
 PC STA. = 509+06.86
 PT STA. = 509+42.08

CURVE DATA NW124
 PI STA. = 40+10.33
 Δ = 134° 48' 17" (LT)
 D = 66° 37' 23"
 T = 206.63
 L = 202.34
 R = 86.00
 PC STA. = 38+03.70
 PT STA. = 40+06.04

CURVE DATA X_EE4
 PI STA. = 3229+69.60
 Δ = 70° 14' 21" (LT)
 D = 7° 40' 31"
 T = 525.03
 L = 915.14
 R = 746.50
 PC STA. = 3224+44.57
 PT STA. = 3233+59.71

CURVE DATA X_EN4
 PI STA. = 3229+69.60
 Δ = 70° 14' 21" (LT)
 D = 7° 40' 31"
 T = 525.03
 L = 915.14
 R = 746.50
 PC STA. = 3224+44.57
 PT STA. = 3233+59.71

CURVE DATA X_ES4
 PI STA. = 514+99.40
 Δ = 85° 29' 38" (RT)
 D = 23° 58' 23"
 T = 220.91
 L = 356.62
 R = 239.00
 PC STA. = 512+78.50
 PT STA. = 516+35.12

CURVE DATA X_NW4
 PI STA. = 514+99.40
 Δ = 85° 29' 38" (RT)
 D = 23° 58' 23"
 T = 220.91
 L = 356.62
 R = 239.00
 PC STA. = 512+78.50
 PT STA. = 516+35.12

CURVE DATA BL_NP_12AVE4
 PI STA. = 509+90.37
 Δ = 34° 48' 10" (LT)
 D = 37° 11' 20"
 T = 48.29
 L = 93.58
 R = 154.07
 PC STA. = 509+42.08
 PT STA. = 510+35.66

CURVE DATA NW125
 PI STA. = 40+36.29
 Δ = 22° 47' 54" (LT)
 D = 38° 11' 50"
 T = 30.24
 L = 59.69
 R = 150.00
 PC STA. = 40+06.04
 PT STA. = 40+65.73

CURVE DATA X_EE5
 PI STA. = 2207+93.50
 Δ = 2° 04' 11" (LT)
 D = 0° 55' 36"
 T = 111.69
 L = 223.35
 R = 6,183.00
 PC STA. = 2206+81.81
 PT STA. = 2209+05.16

CURVE DATA X_EN5
 PI STA. = 2212+67.89
 Δ = 4° 58' 10" (RT)
 D = 0° 41' 08"
 T = 362.73
 L = 725.01
 R = 8,358.92
 PC STA. = 2209+05.16
 PT STA. = 2216+30.17

CURVE DATA X_ES5
 PI STA. = 2220+47.25
 Δ = 7° 44' 19" (LT)
 D = 0° 55' 45"
 T = 417.08
 L = 832.89
 R = 6,166.56
 PC STA. = 2216+30.17
 PT STA. = 2224+63.06

CURVE DATA X_NW5
 PI STA. = 2229+64.75
 Δ = 70° 00' 15" (LT)
 D = 7° 59' 51"
 T = 501.69
 L = 875.33
 R = 716.43
 PC STA. = 2224+63.06
 PT STA. = 2233+38.40

CURVE DATA BL_NP_12AVE5
 PI STA. = 516+85.90
 Δ = 18° 05' 22" (RT)
 D = 17° 57' 40"
 T = 50.78
 L = 100.71
 R = 319.00
 PC STA. = 516+35.12
 PT STA. = 517+35.84

CURVE DATA NW126
 PI STA. = 517+47.92
 Δ = 4° 20' 20" (RT)
 D = 17° 57' 40"
 T = 12.08
 L = 24.16
 R = 319.00
 PC STA. = 517+35.84
 PT STA. = 517+59.99

CURVE DATA X_EE6
 PI STA. = 520+92.36
 Δ = 72° 52' 30" (RT)
 D = 23° 40' 33"
 T = 178.66
 L = 307.80
 R = 242.00
 PC STA. = 519+13.69
 PT STA. = 522+21.50

CURVE DATA X_EN6
 PI STA. = 520+92.36
 Δ = 72° 52' 30" (RT)
 D = 23° 40' 33"
 T = 178.66
 L = 307.80
 R = 242.00
 PC STA. = 519+13.69
 PT STA. = 522+21.50

CURVE DATA X_ES6
 PI STA. = 530+98.45
 Δ = 41° 24' 54" (RT)
 D = 26° 29' 58"
 T = 81.73
 L = 156.29
 R = 216.22
 PC STA. = 530+16.72
 PT STA. = 531+73.00

CURVE DATA X_NW6
 PI STA. = 530+98.45
 Δ = 41° 24' 54" (RT)
 D = 26° 29' 58"
 T = 81.73
 L = 156.29
 R = 216.22
 PC STA. = 530+16.72
 PT STA. = 531+73.00

CURVE DATA BL_NP_12AVE6
 PI STA. = 530+98.45
 Δ = 41° 24' 54" (RT)
 D = 26° 29' 58"
 T = 81.73
 L = 156.29
 R = 216.22
 PC STA. = 530+16.72
 PT STA. = 531+73.00

CURVE DATA NW127
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EE7
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EN7
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_ES7
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_NW7
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA BL_NP_12AVE7
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA NW128
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EE8
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EN8
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_ES8
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_NW8
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA BL_NP_12AVE8
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA NW129
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EE9
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_EN9
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

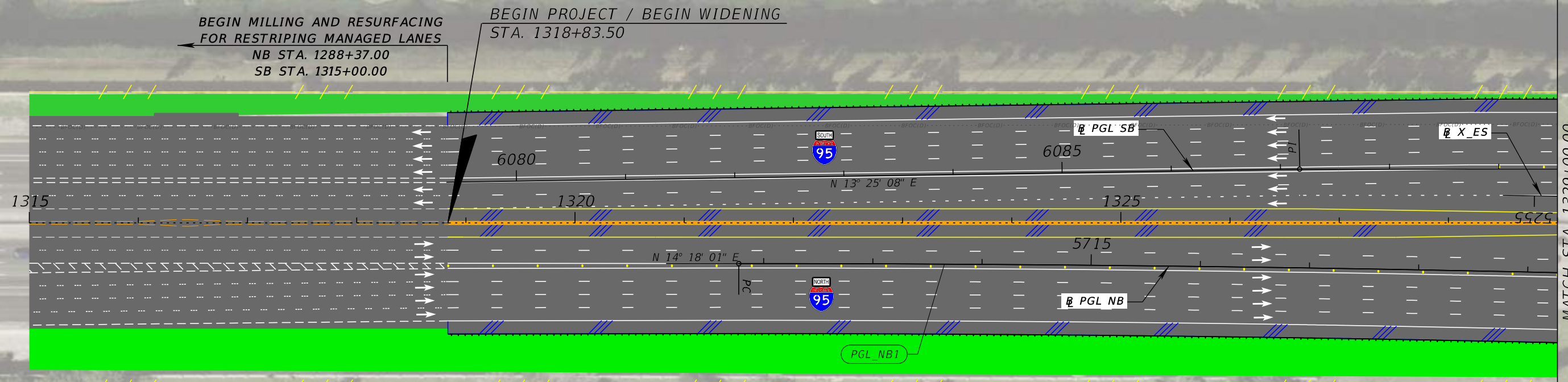
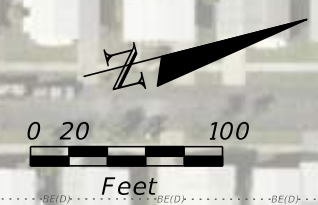
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 L = 165.26
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 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA X_NW9
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

CURVE DATA BL_NP_12AVE9
 PI STA. = 531+73.00
 Δ = 43° 52' 13" (LT)
 D = 26° 32' 44"
 T = 86.92
 L = 165.26
 R = 215.84
 PC STA. = 531+73.00
 PT STA. = 533+38.27

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				BROWARD	436964-1-52-01		

CURVE DATA

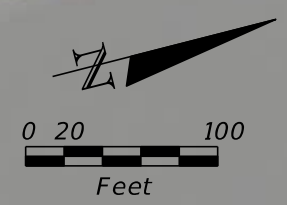
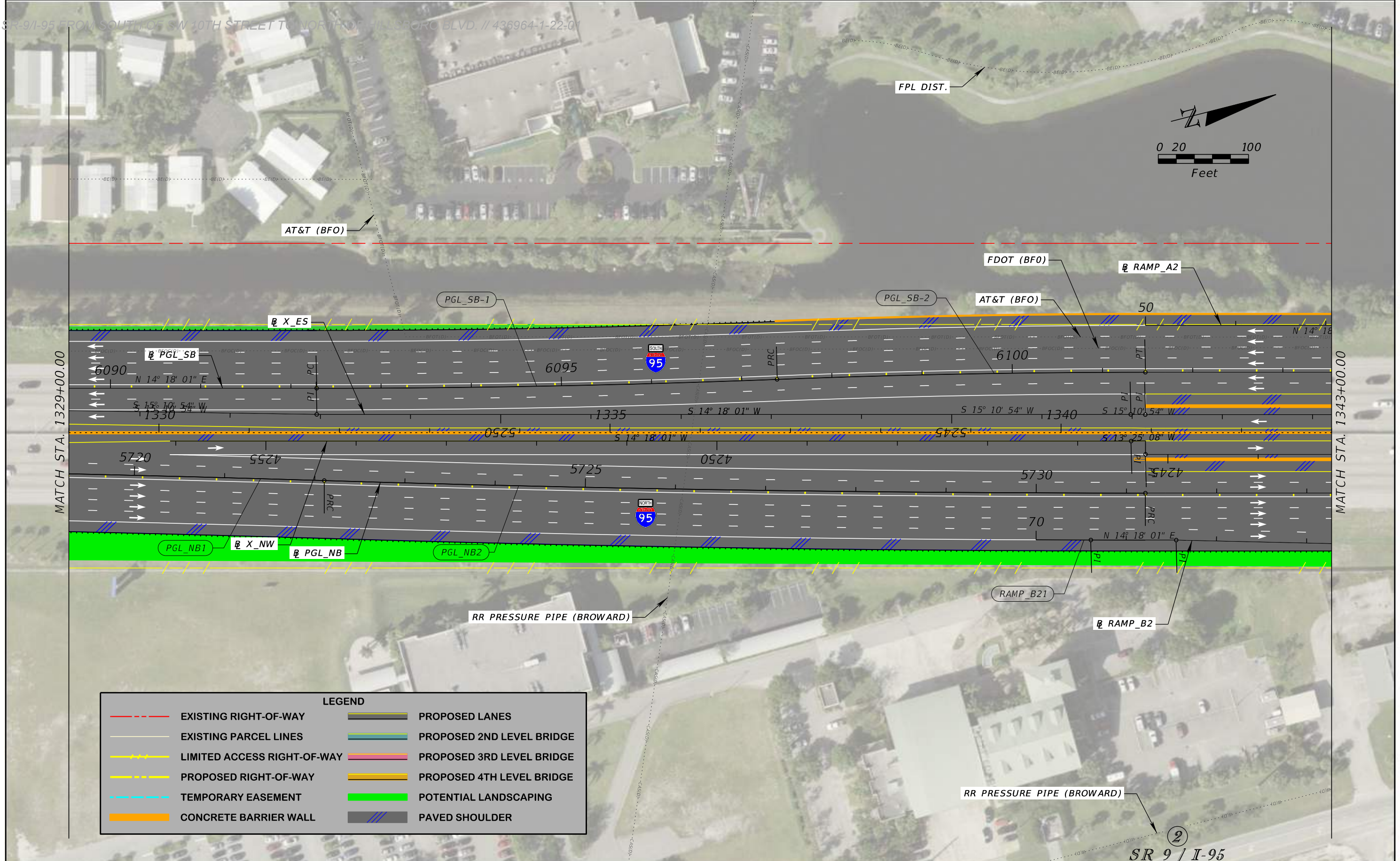


MATCH STA. 1329+00.00

LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

1
SR 9 / I-95

REVISIONS DATE DESCRIPTION DATE DESCRIPTION		JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		SHEET NO. ROADWAY PLAN
Type 2 Categorical Exclusion			ROAD NO. SR 9	COUNTY BROWARD	



MATCH STA. 1329+00.00

MATCH STA. 1343+00.00

LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

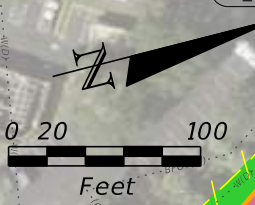
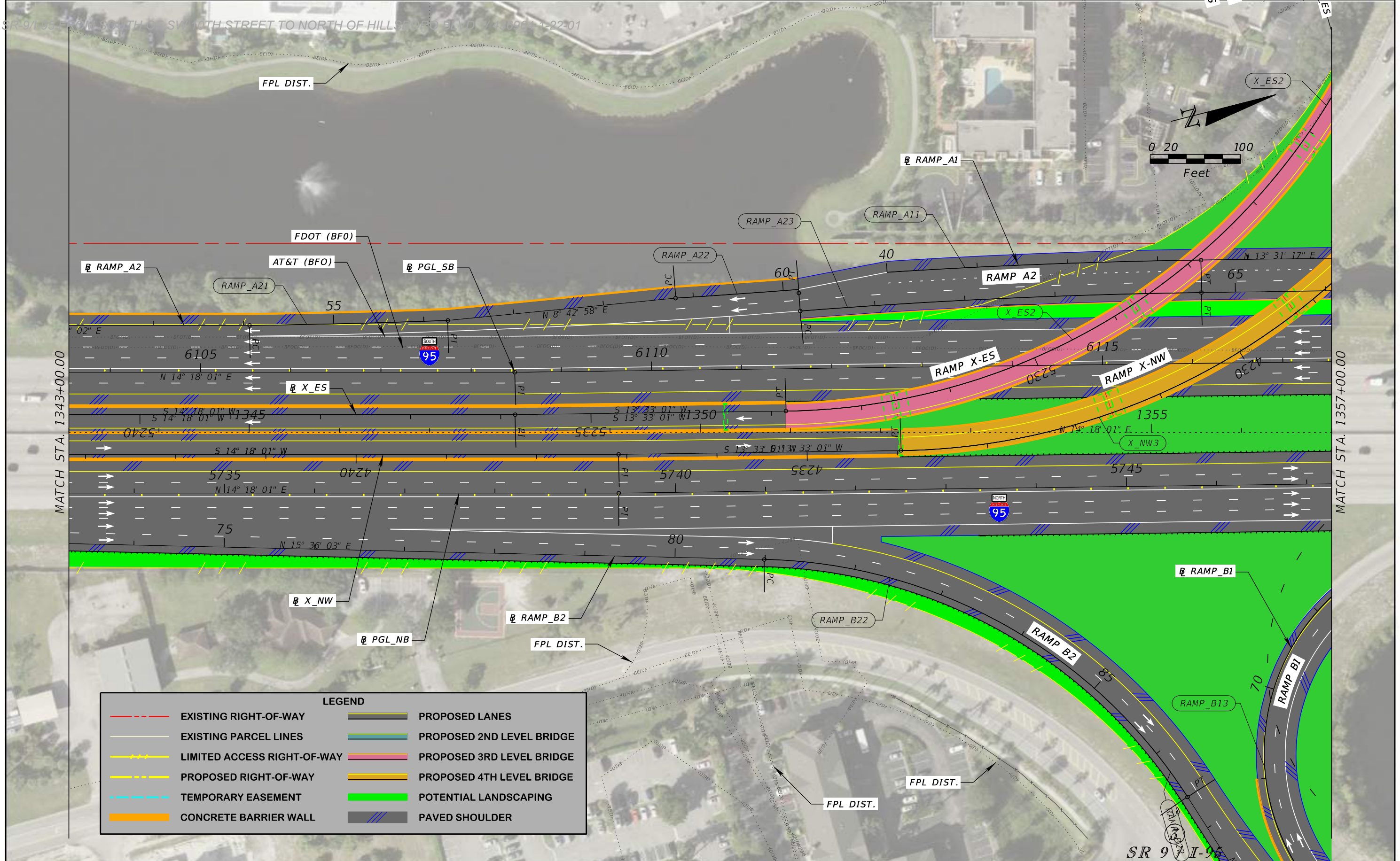
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 22
Page 521 of 795



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

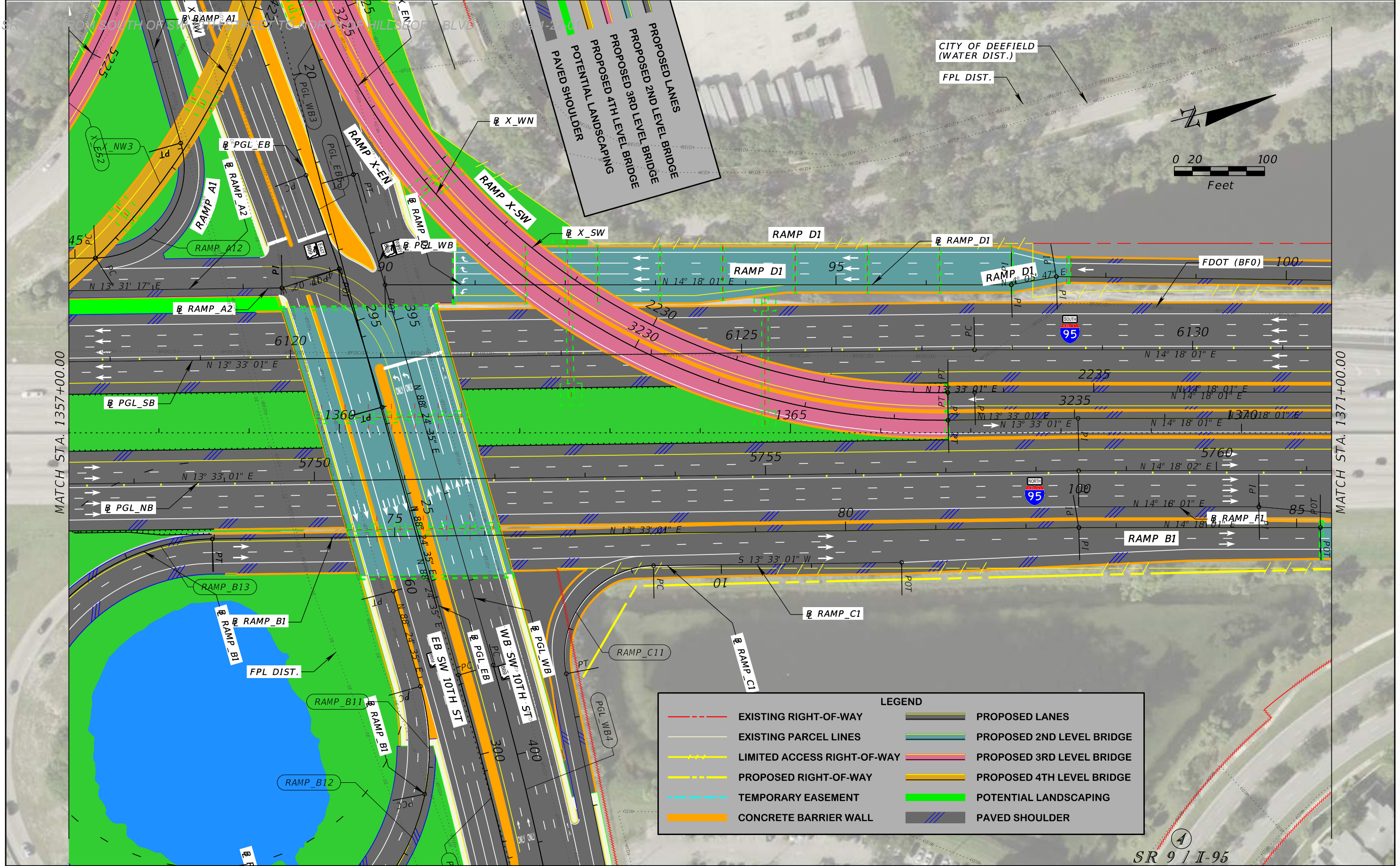
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 23
Page 522 of 795



MATCH STA. 1357+00.00

MATCH STA. 1371+00.00

REVISIONS	
DATE	DESCRIPTION
	Type 2 Categorical Exclusion

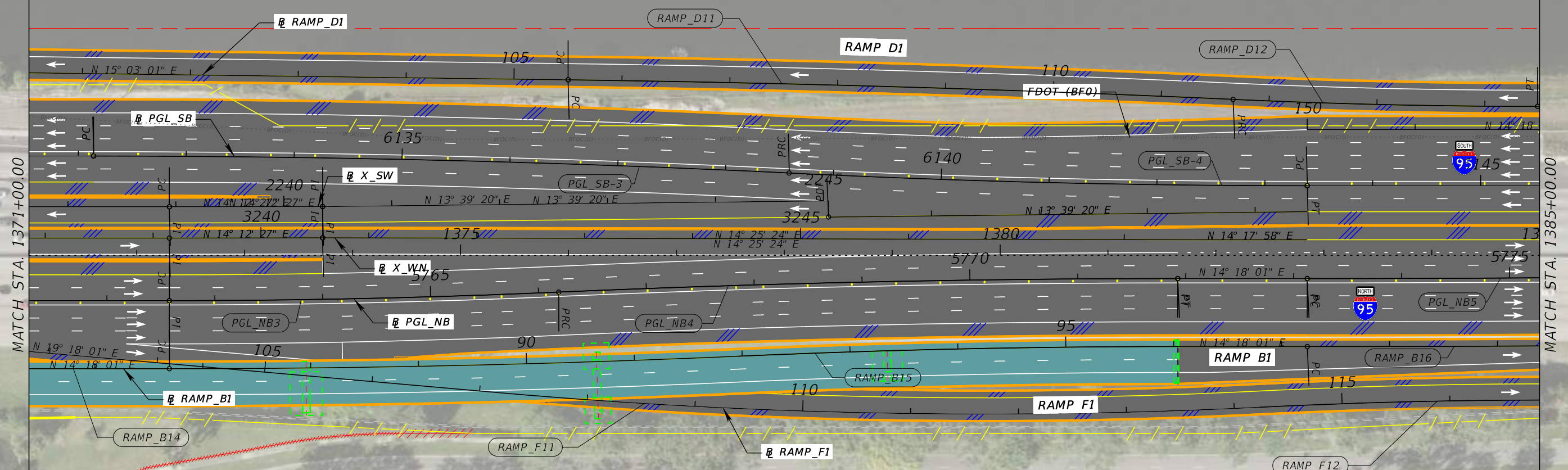
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN

Page 523 of 795
 24

CITY OF DEEFIELD
(WATER DIST.)



LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

5
SR 9 / I-95

REVISIONS	
DATE	DESCRIPTION
	Type 2 Categorical Exclusion

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P.E. LICENSE NUMBER 47526
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CERTIFICATE OF AUTHORIZATION 6500

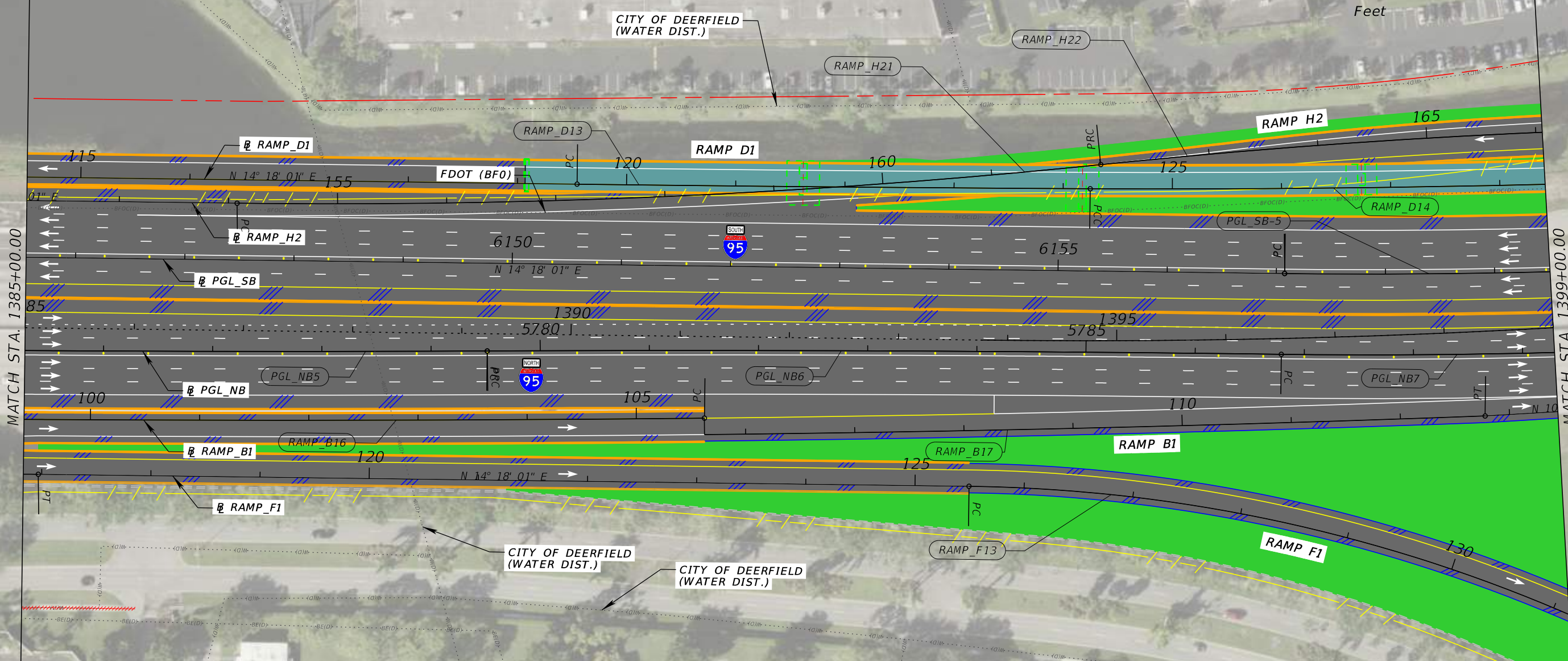
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN
Page 524 of 795
25



MATCH STA. 1385+00.00

MATCH STA. 1399+00.00

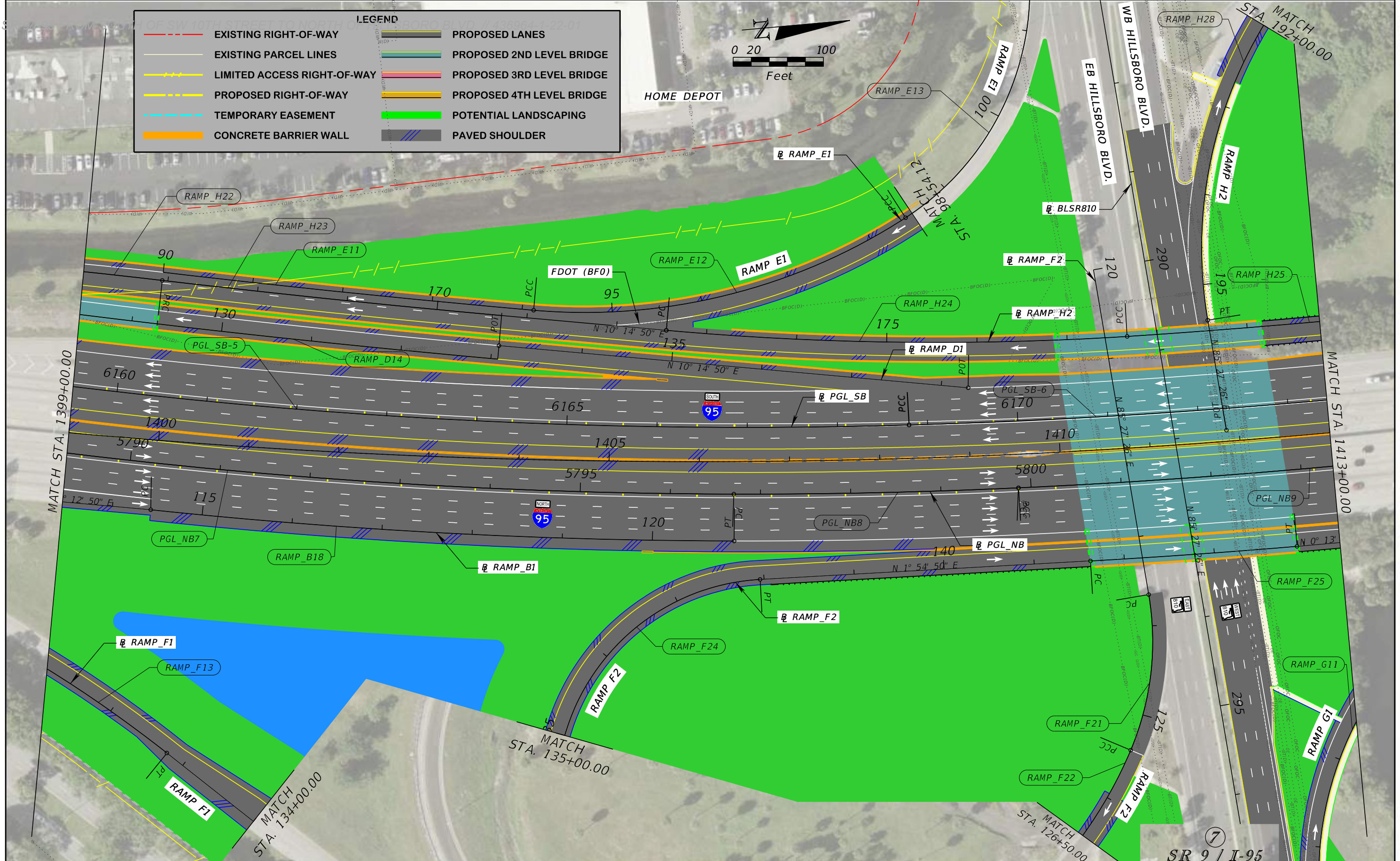
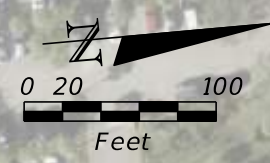


LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

6
SR 9 / I-95

DATE		REVISIONS		JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. ROADWAY PLAN
DESCRIPTION		DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
Type 2 Categorical Exclusion					SR 9	BROWARD	436964-1-52-01	26

LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER



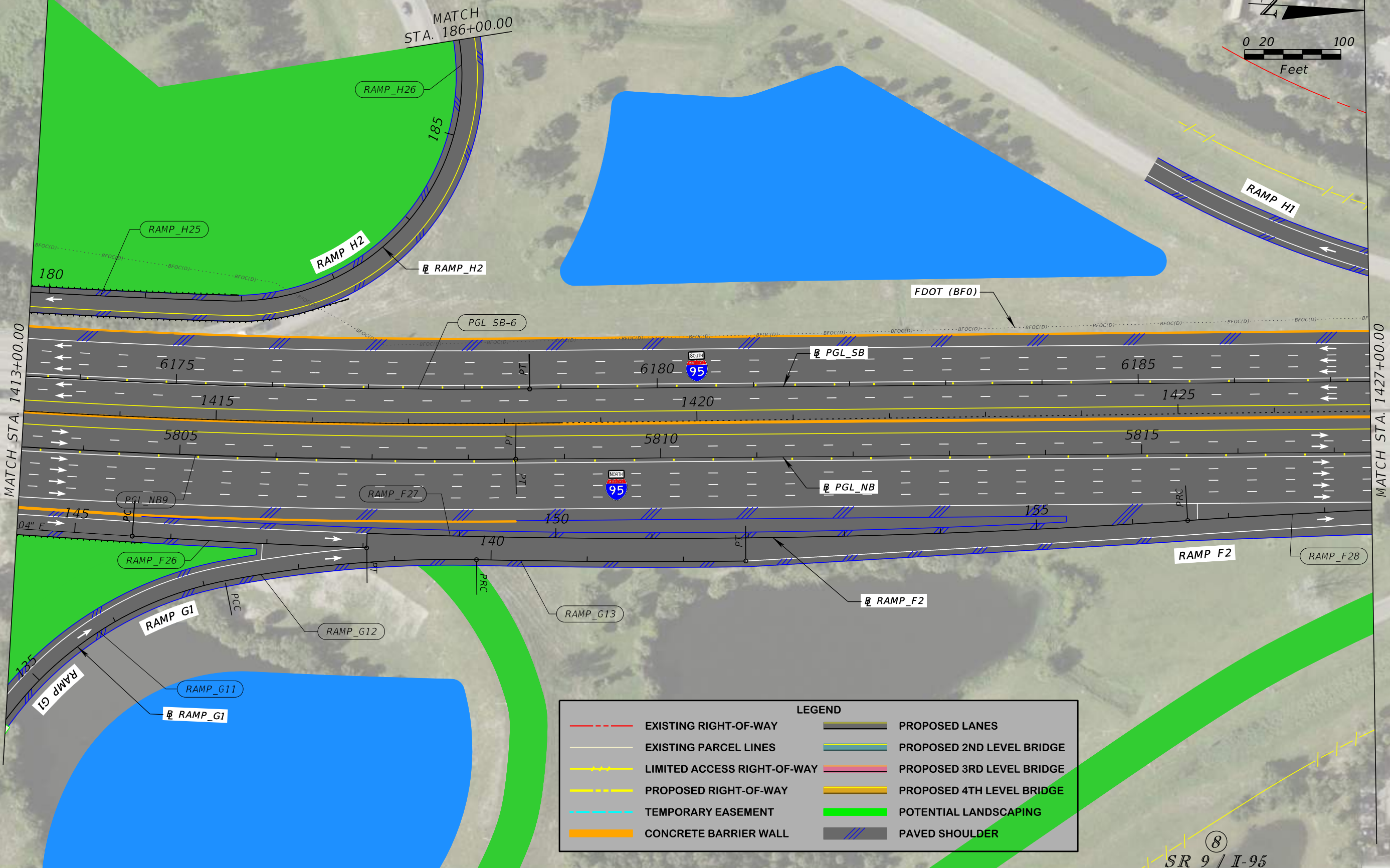
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 27
Page 526 of 795



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

8
SR 9 / I-95

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

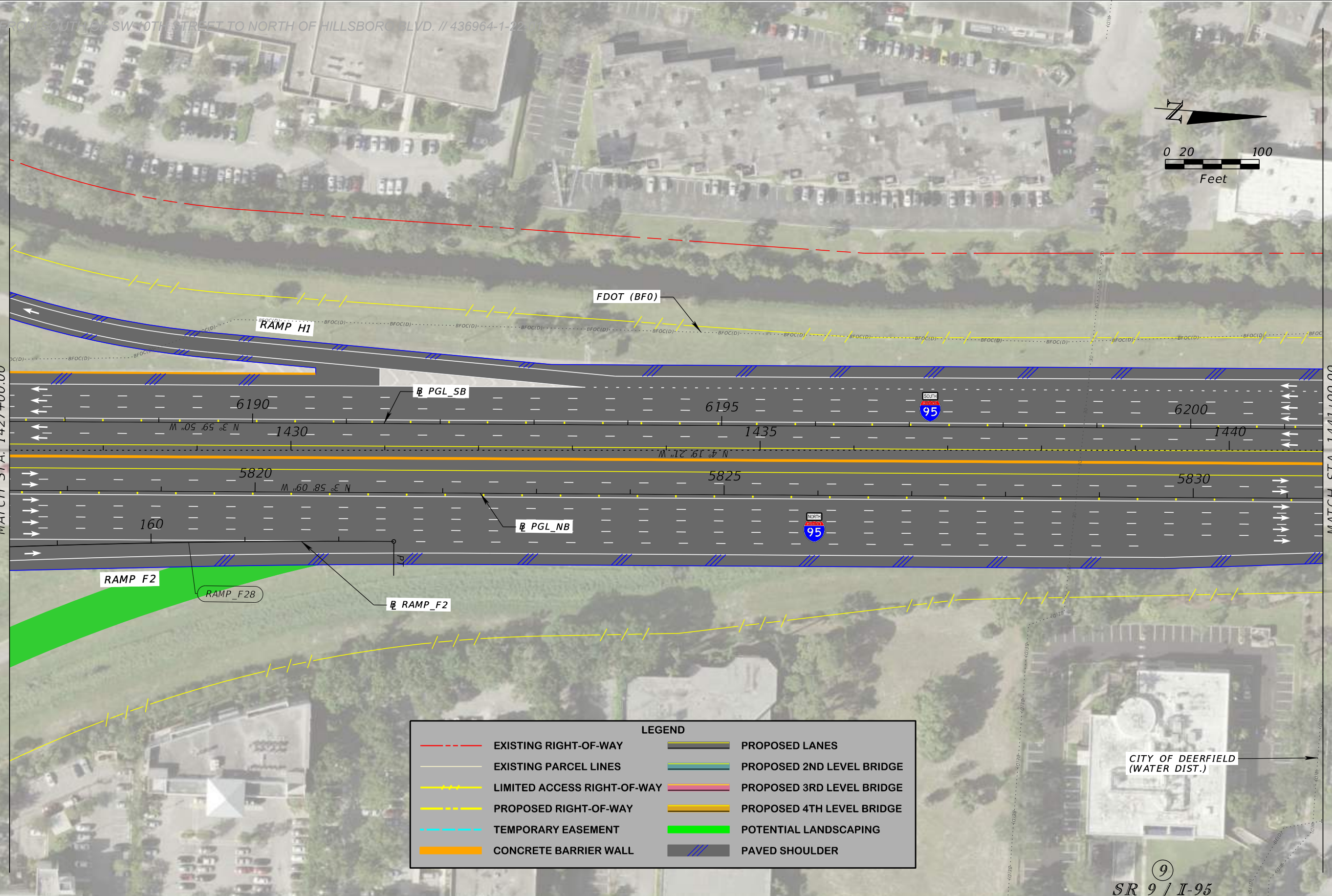
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN
SHEET NO. 28
Page 527 of 795



MATCH STA. 1427+00.00

MATCH STA. 1441+00.00



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

CITY OF DEERFIELD (WATER DIST.)

9
SR 9 / I-95

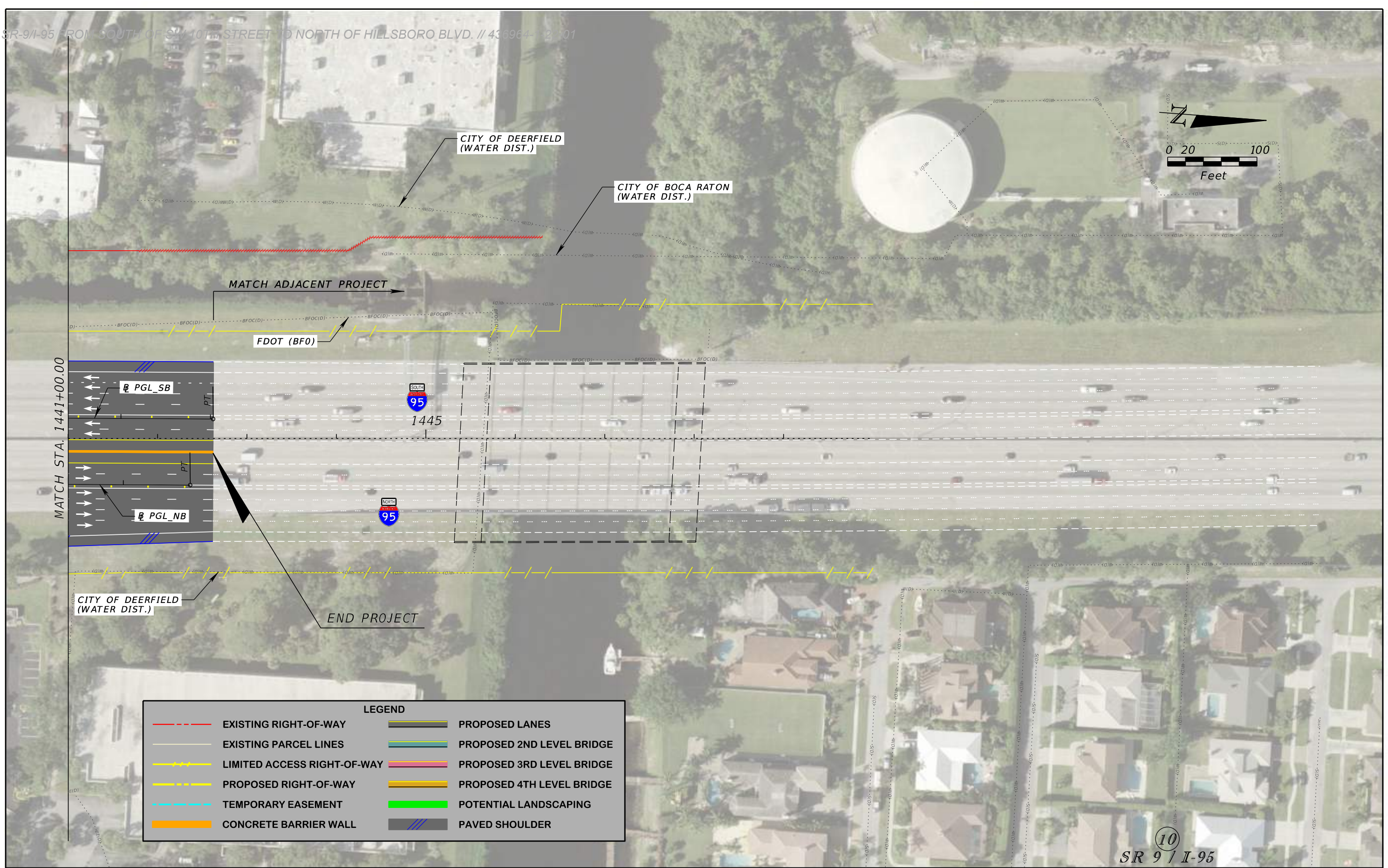
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO.
Page 528 of 795
29



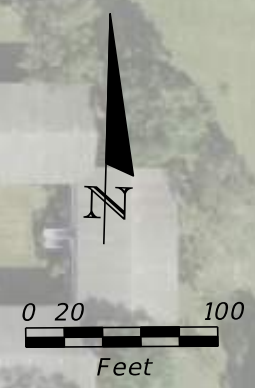
LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

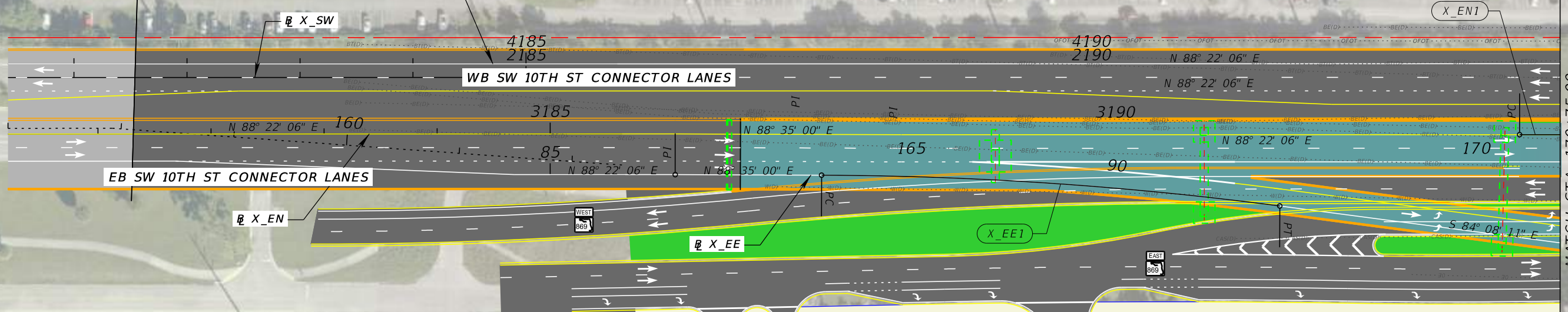
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

<p>10 SR 9 / I-95</p>	<p>ROADWAY PLAN</p>	<p>SHEET NO. 30</p>
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CONNECT TO SW 10TH ST CONNECTOR PROJECT

CENTURY VILLAGE



MATCH STA. 170+75.00

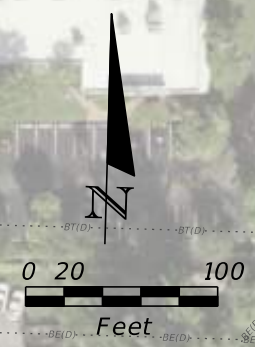
LEGEND	
	EXISTING RIGHT-OF-WAY
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	LIMITED ACCESS RIGHT-OF-WAY
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	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

SOUTH FLORIDA BIBLE COLLEGE

WALMART

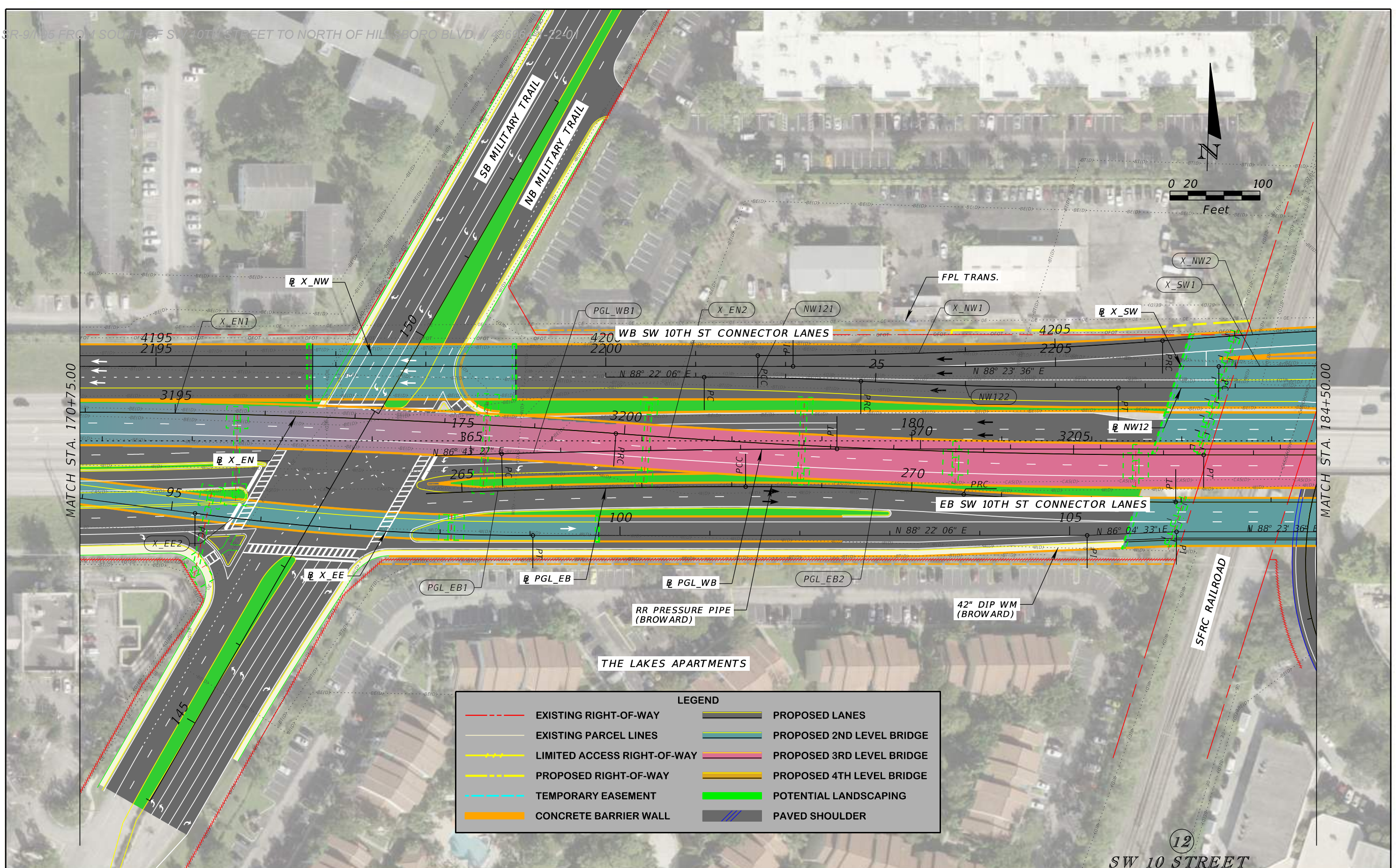
11 SW 10 STREET

DATE		REVISIONS		JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. ROADWAY PLAN
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 869	BROWARD	436964-1-52-01	Page 530 of 795 31	



MATCH STA. 170+75.00

MATCH STA. 184+50.00



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

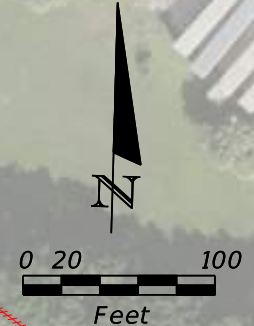
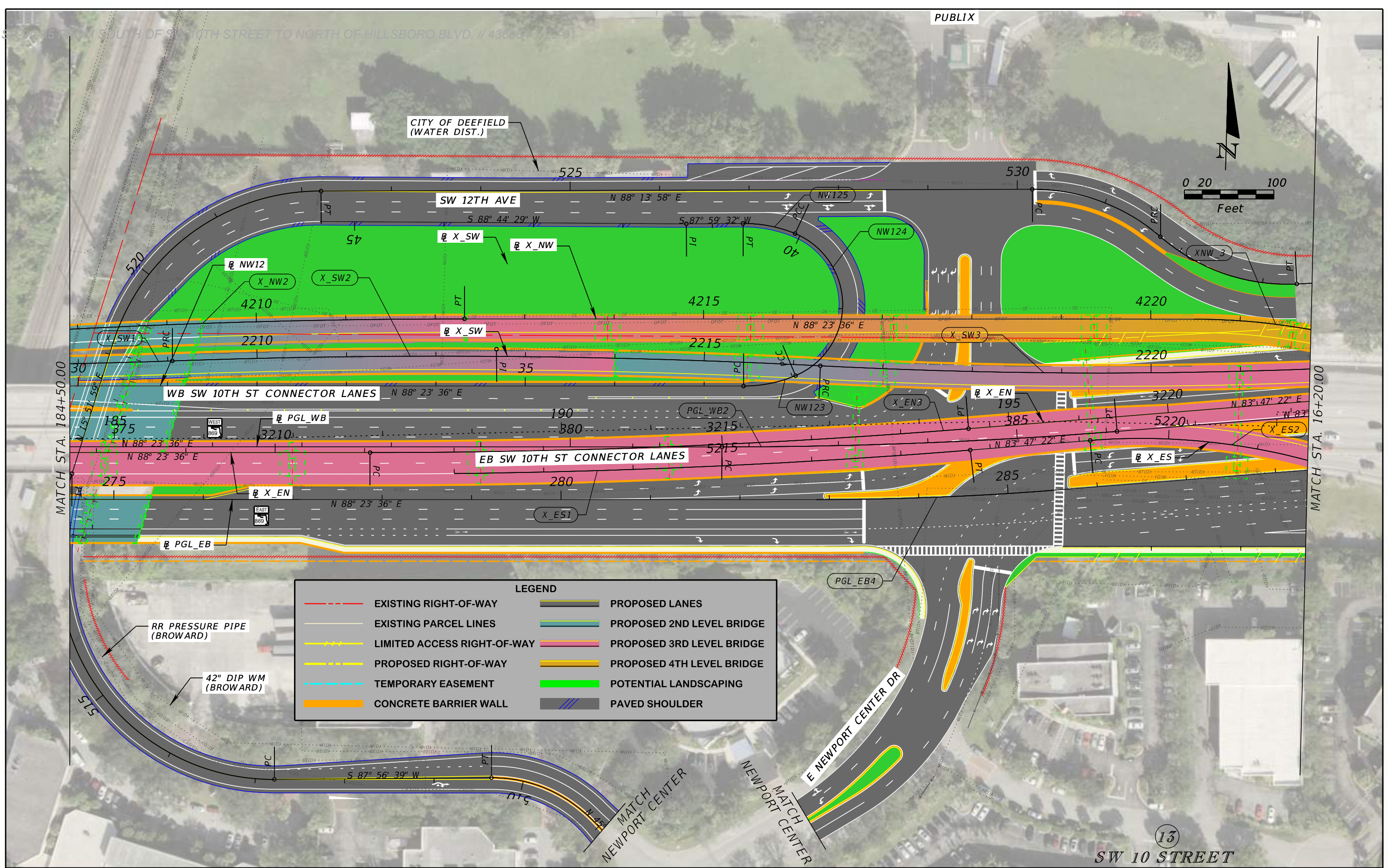
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 32
Page 531 of 795

SECTION 35 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-52-01



MATCH STA. 184+50.00

MATCH STA. 16+20.00

13
SW 10 STREET

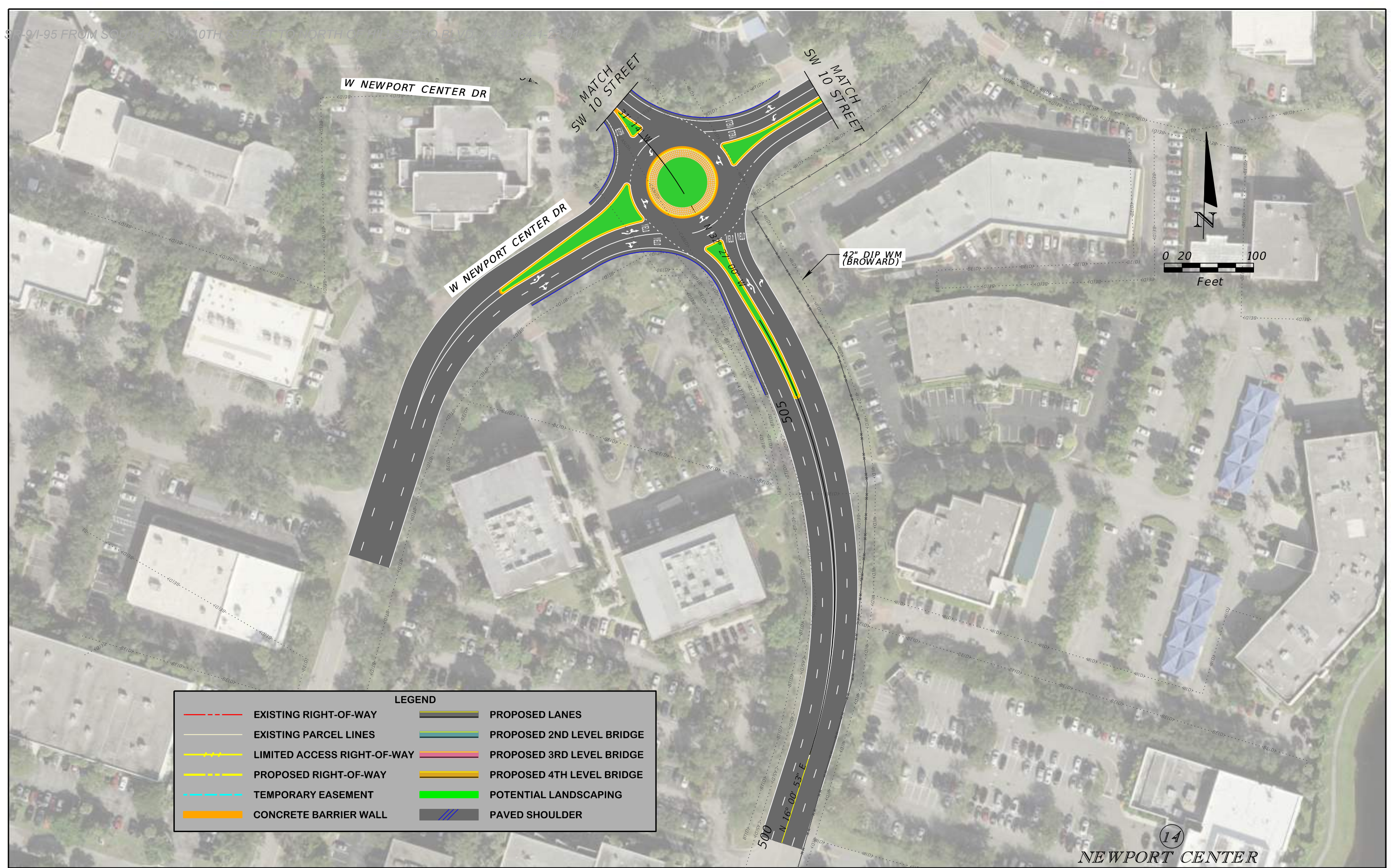
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

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HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

Page 532 of 795
33



LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

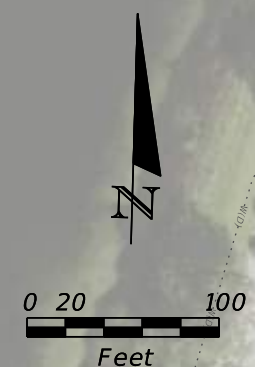
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
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 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

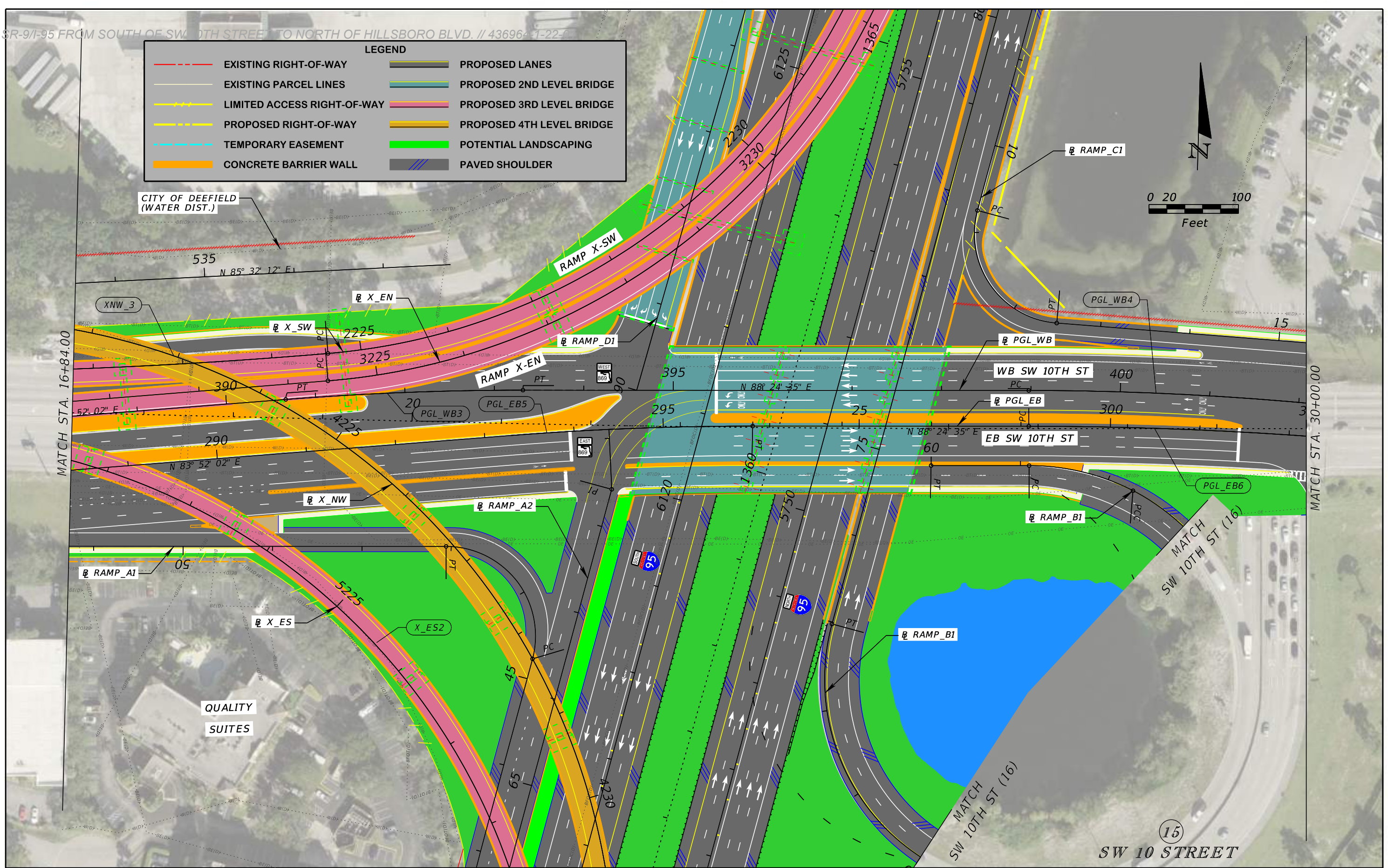
SHEET NO. 34
 Page 533 of 795

LEGEND			
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	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER



MATCH STA. 16+84.00

MATCH STA. 30+00.00



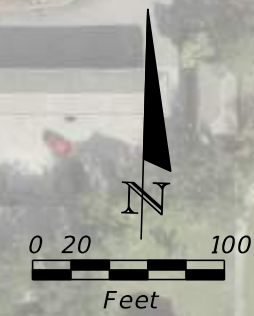
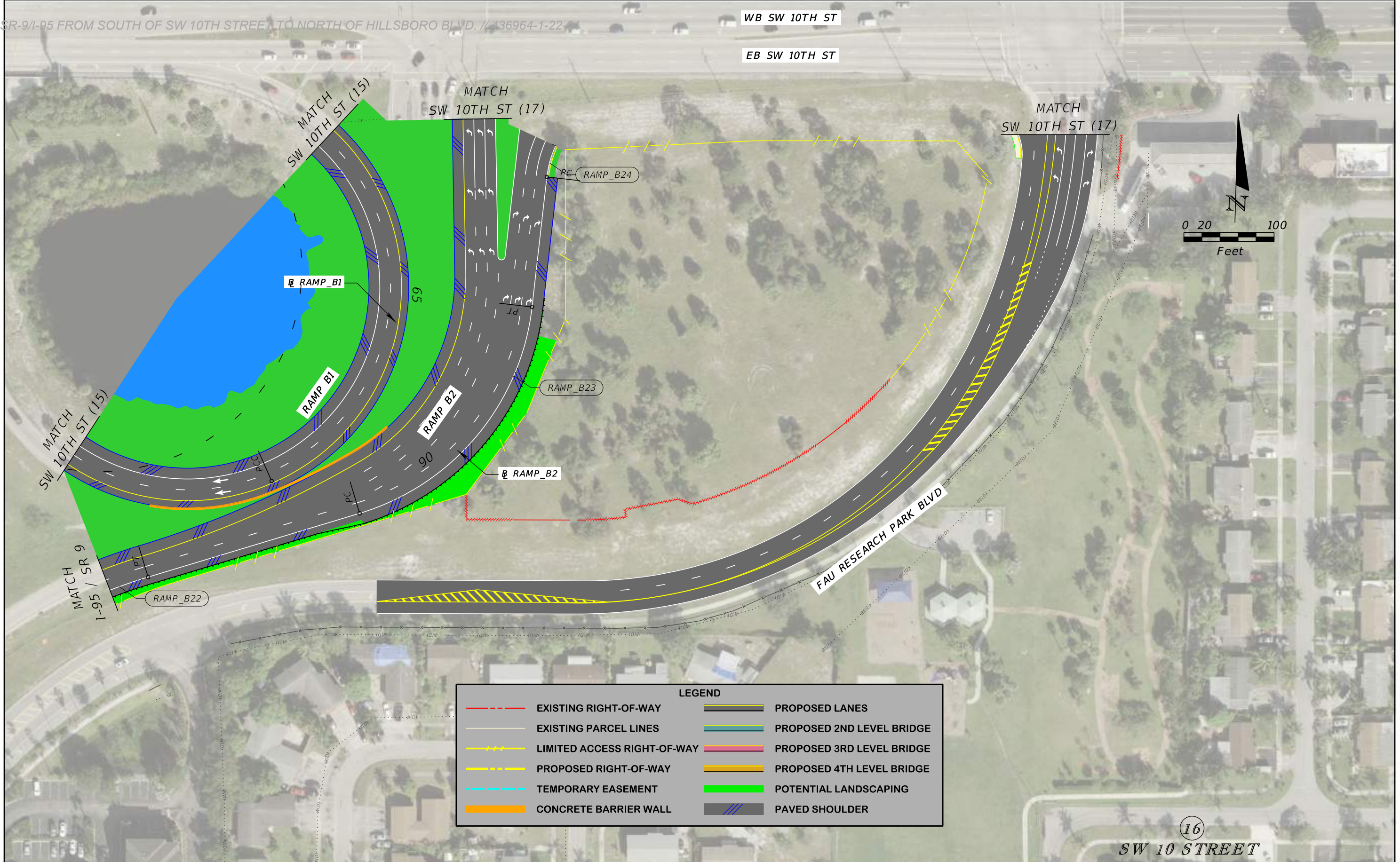
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DATE	DESCRIPTION	DATE	DESCRIPTION
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JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 35
 Page 534 of 795



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	POTENTIAL LANDSCAPING
	PAVED SHOULDER
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE

16
SW 10 STREET

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

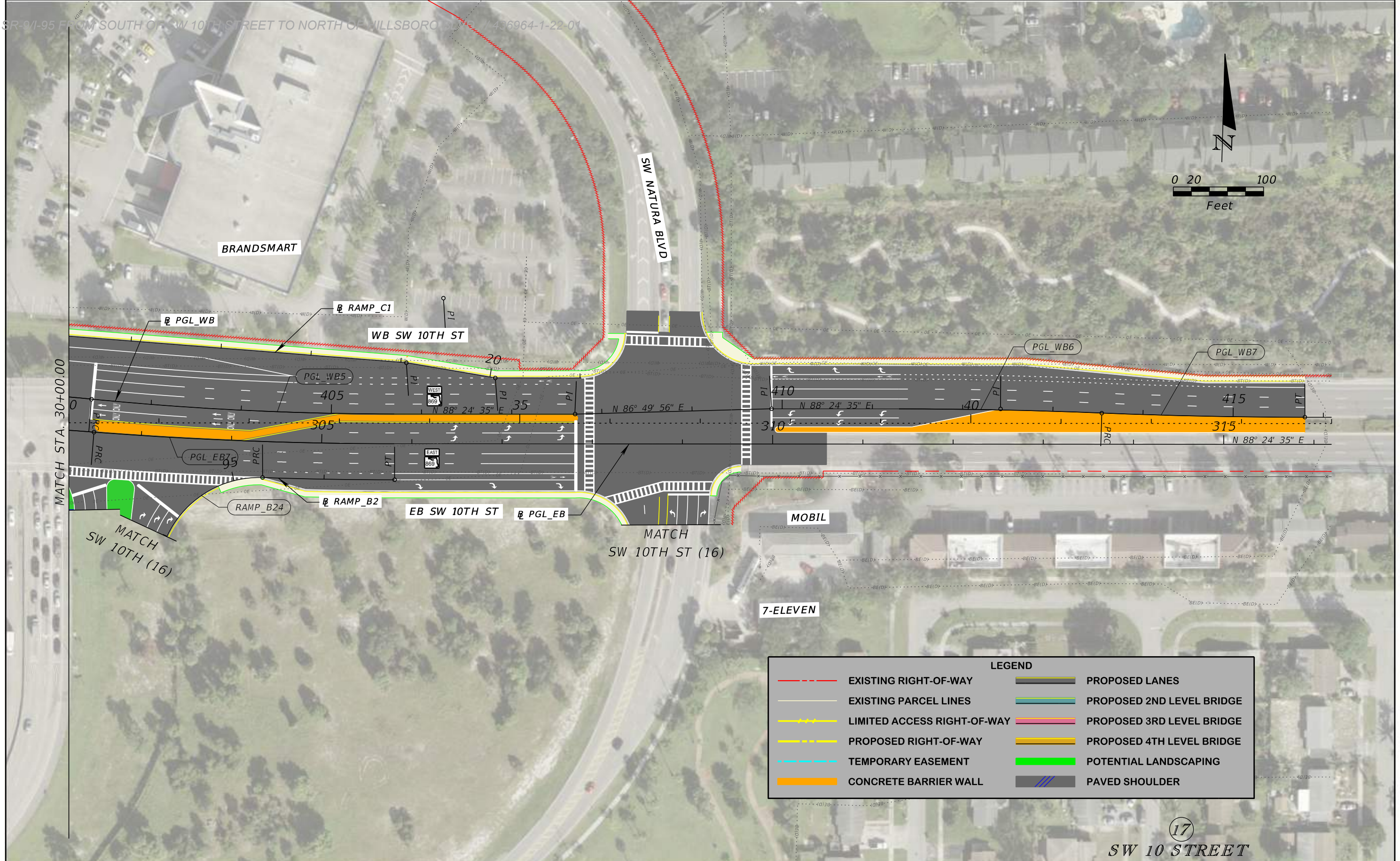
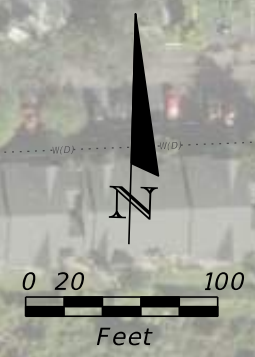
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. 36

Page 535 of 795



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

17
SW 10 STREET

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

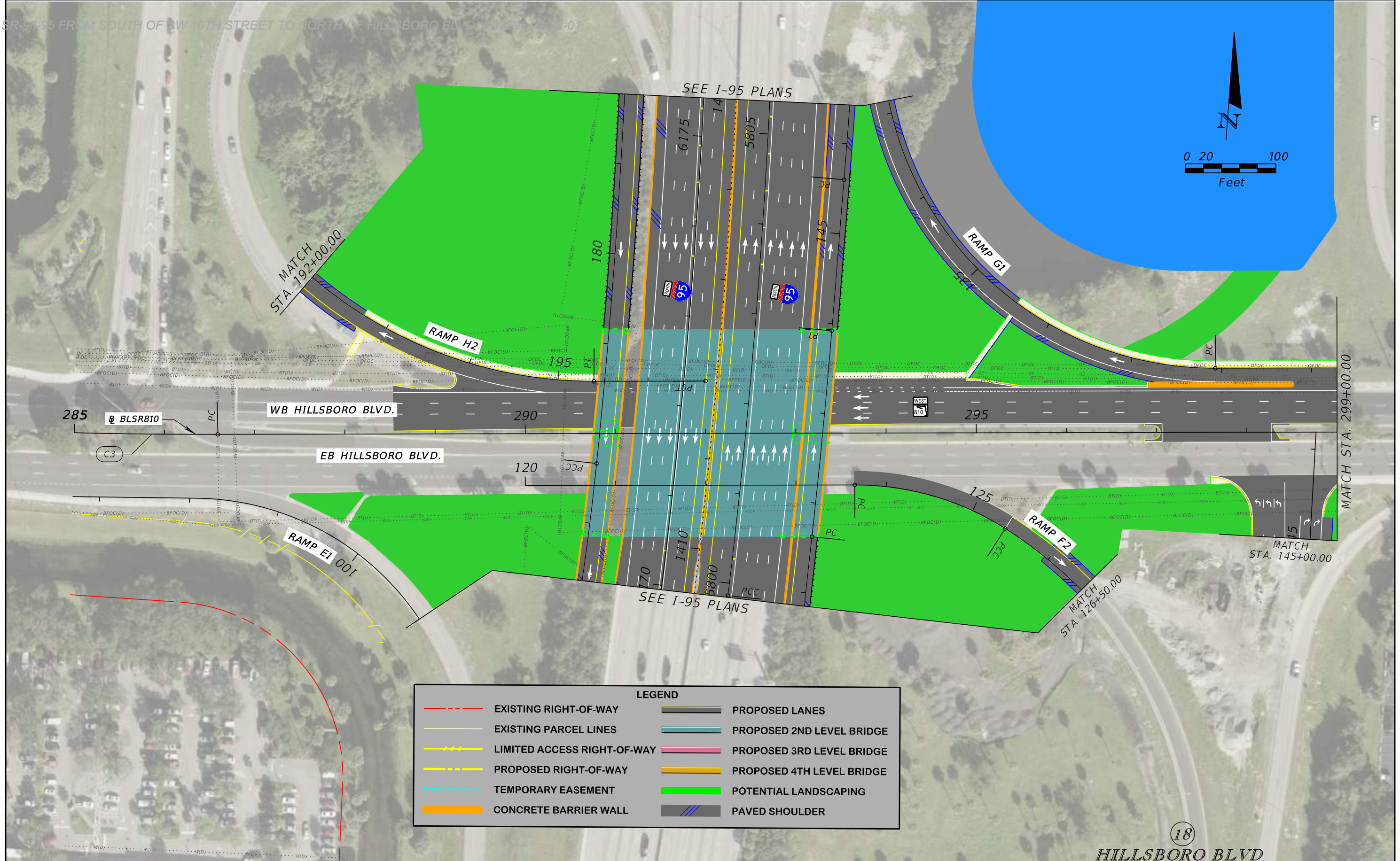
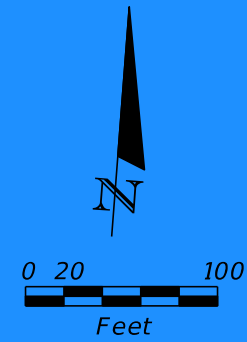
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

Page 536 of 795

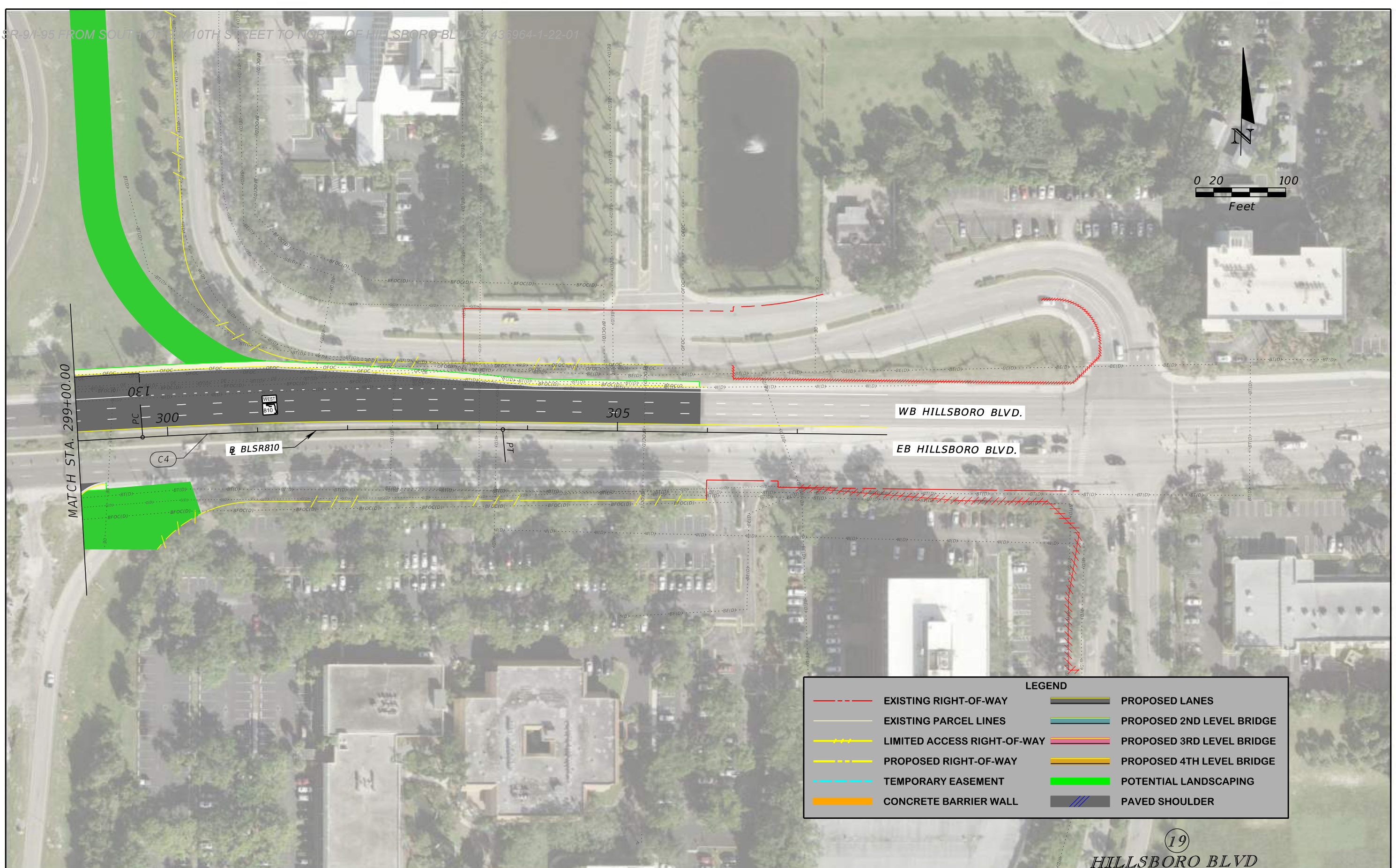
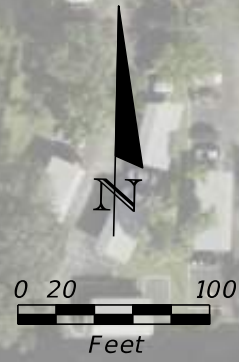
37



LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

18
HILLSBORO BLVD

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. ROADWAY PLAN
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 810	BROWARD	436964-1-52-01	Page 537 of 795 38



19
HILLSBORO BLVD

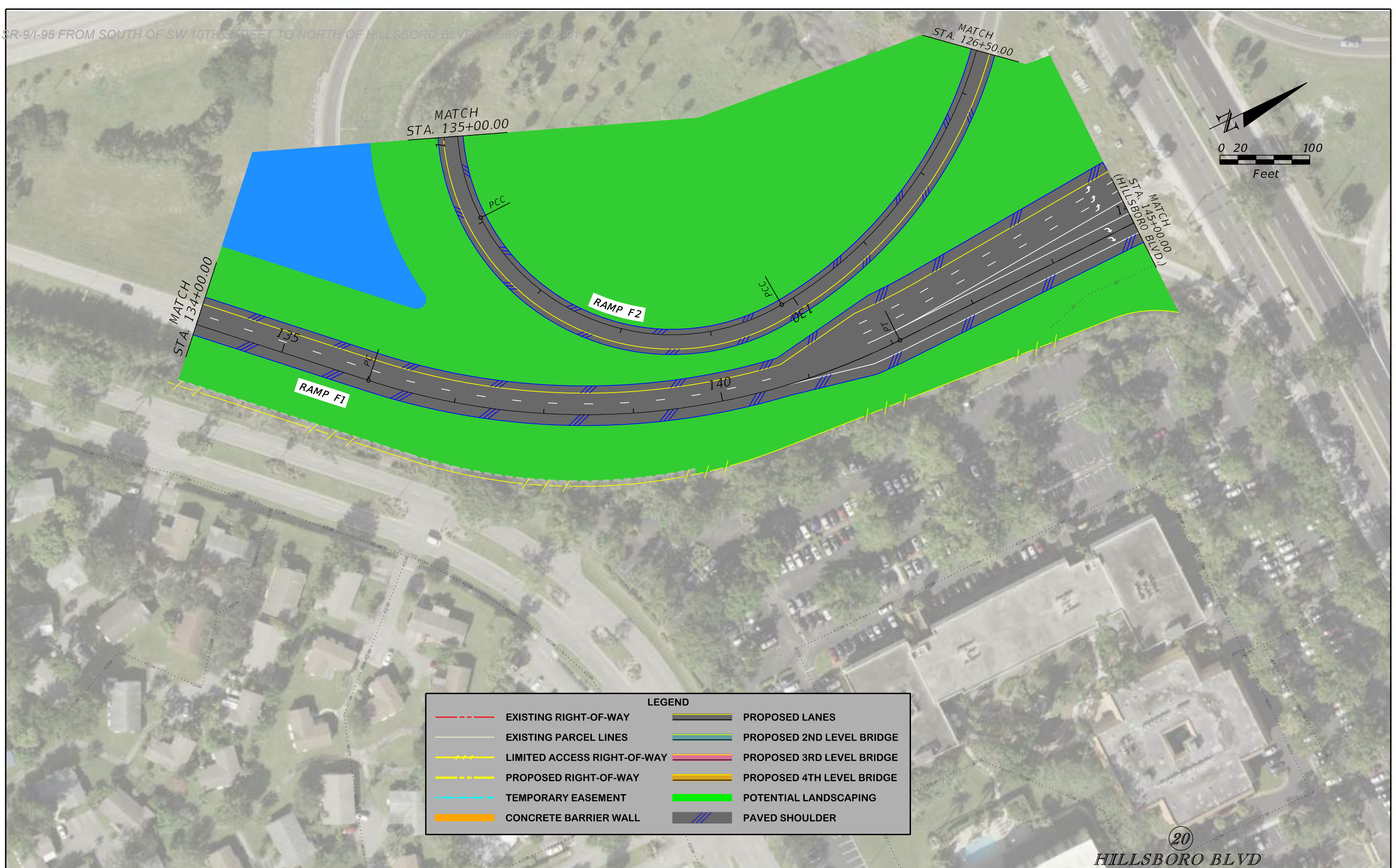
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 810	BROWARD	436964-1-52-01

ROADWAY PLAN

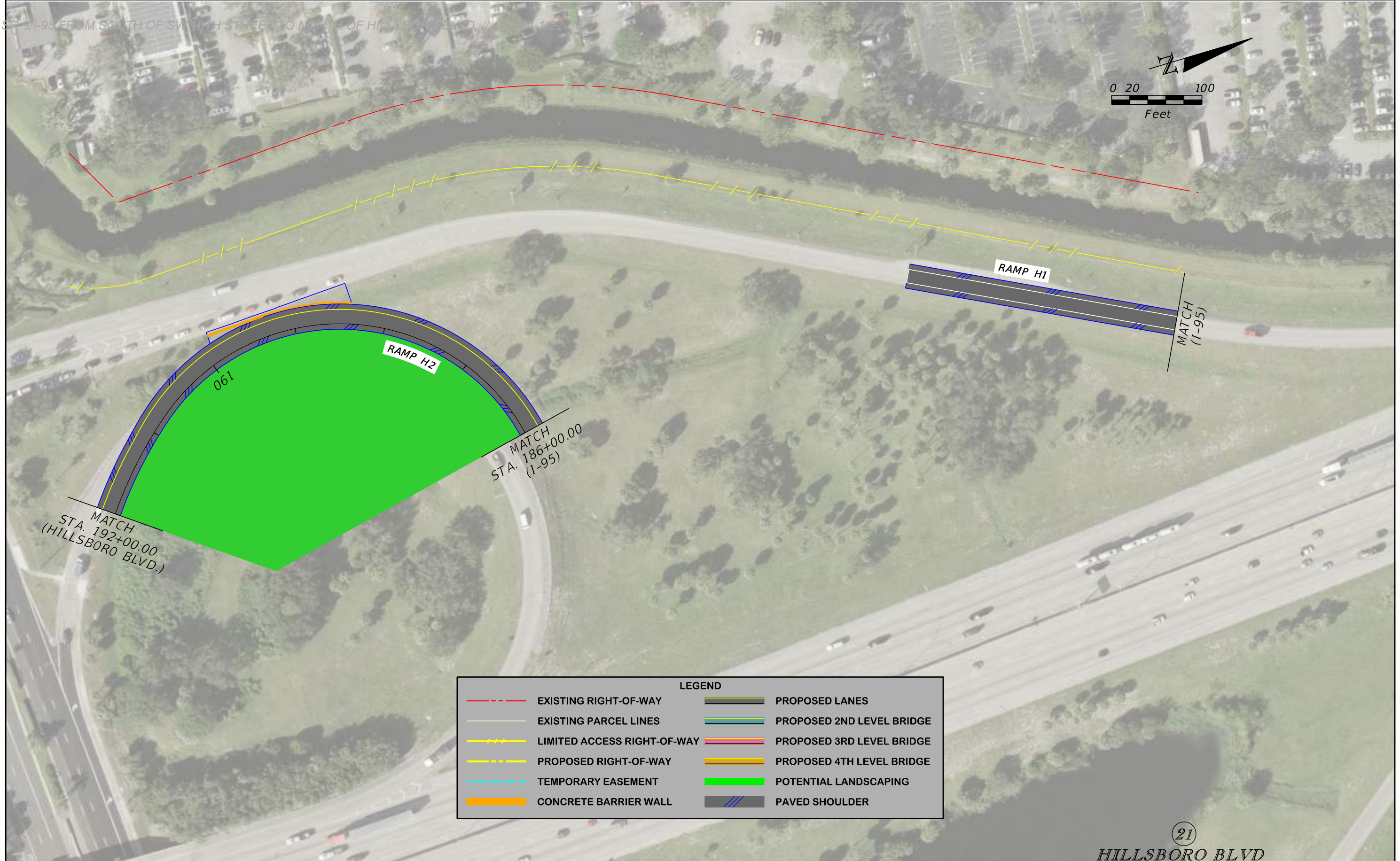
Page 538 of 795
39



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
	PROPOSED 4TH LEVEL BRIDGE
	POTENTIAL LANDSCAPING
	PAVED SHOULDER

20
HILLSBORO BLVD

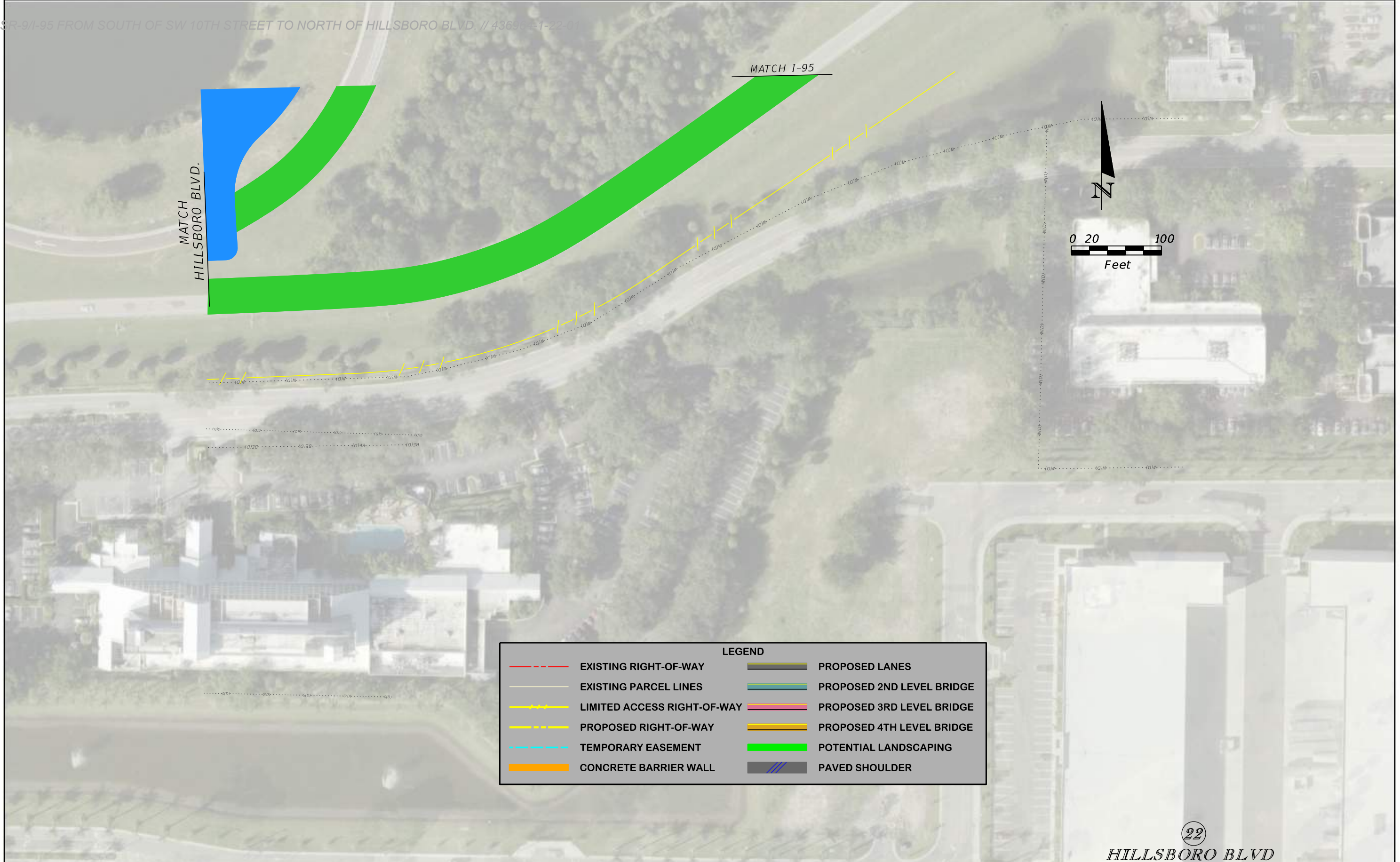
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 810	BROWARD	436964-1-52-01	40



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PARCEL LINES
	LIMITED ACCESS RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	CONCRETE BARRIER WALL
	PROPOSED LANES
	PROPOSED 2ND LEVEL BRIDGE
	PROPOSED 3RD LEVEL BRIDGE
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	POTENTIAL LANDSCAPING
	PAVED SHOULDER

(21)
HILLSBORO BLVD

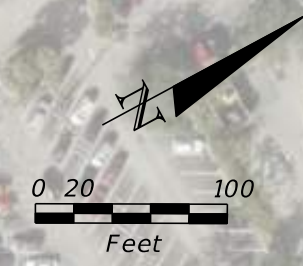
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 810	BROWARD	436964-1-52-01	



LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

22
HILLSBORO BLVD

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROADWAY PLAN	SHEET NO. 42
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	Type 2 Categorical Exclusion				SR 810	BROWARD	436964-1-52-01	Page 541 of 795	



LEGEND			
	EXISTING RIGHT-OF-WAY		PROPOSED LANES
	EXISTING PARCEL LINES		PROPOSED 2ND LEVEL BRIDGE
	LIMITED ACCESS RIGHT-OF-WAY		PROPOSED 3RD LEVEL BRIDGE
	PROPOSED RIGHT-OF-WAY		PROPOSED 4TH LEVEL BRIDGE
	TEMPORARY EASEMENT		POTENTIAL LANDSCAPING
	CONCRETE BARRIER WALL		PAVED SHOULDER

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

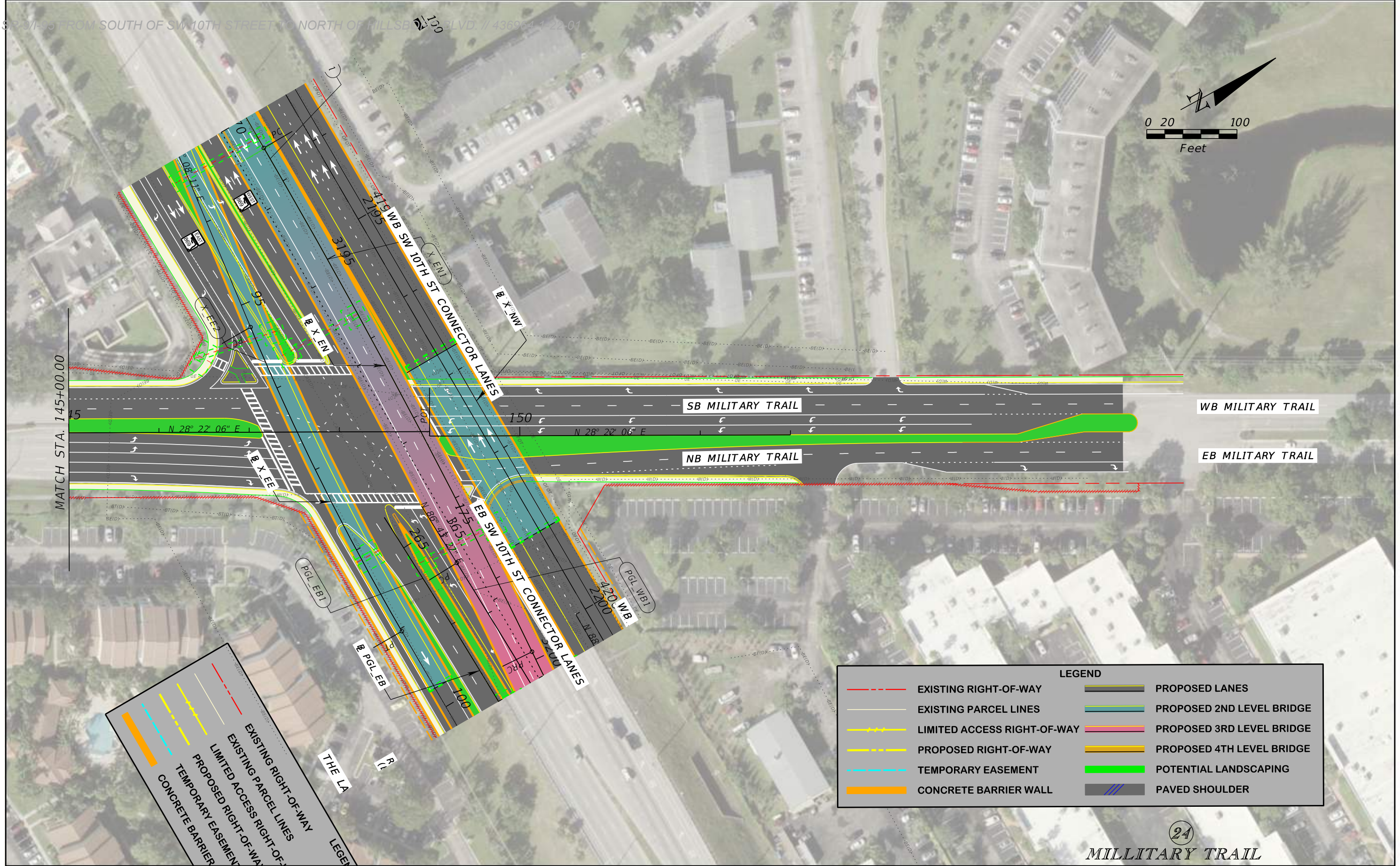
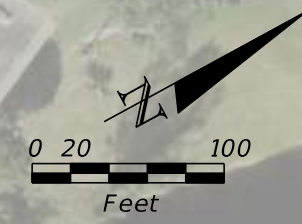
JAMES E. FORD P.E.
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 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

SHEET NO. **43**

Page 542 of 795



MATCH STA. 145+00.00

LEGEND

- EXISTING RIGHT-OF-WAY
- EXISTING PARCEL LINES
- LIMITED ACCESS RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- CONCRETE BARRIER
- EXISTING RIGHT-OF-WAY
- EXISTING PARCEL LINES
- LIMITED ACCESS RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- CONCRETE BARRIER

LEGEND

- PROPOSED LANES
- PROPOSED 2ND LEVEL BRIDGE
- PROPOSED 3RD LEVEL BRIDGE
- PROPOSED 4TH LEVEL BRIDGE
- POTENTIAL LANDSCAPING
- PAVED SHOULDER

24
MILITARY TRAIL

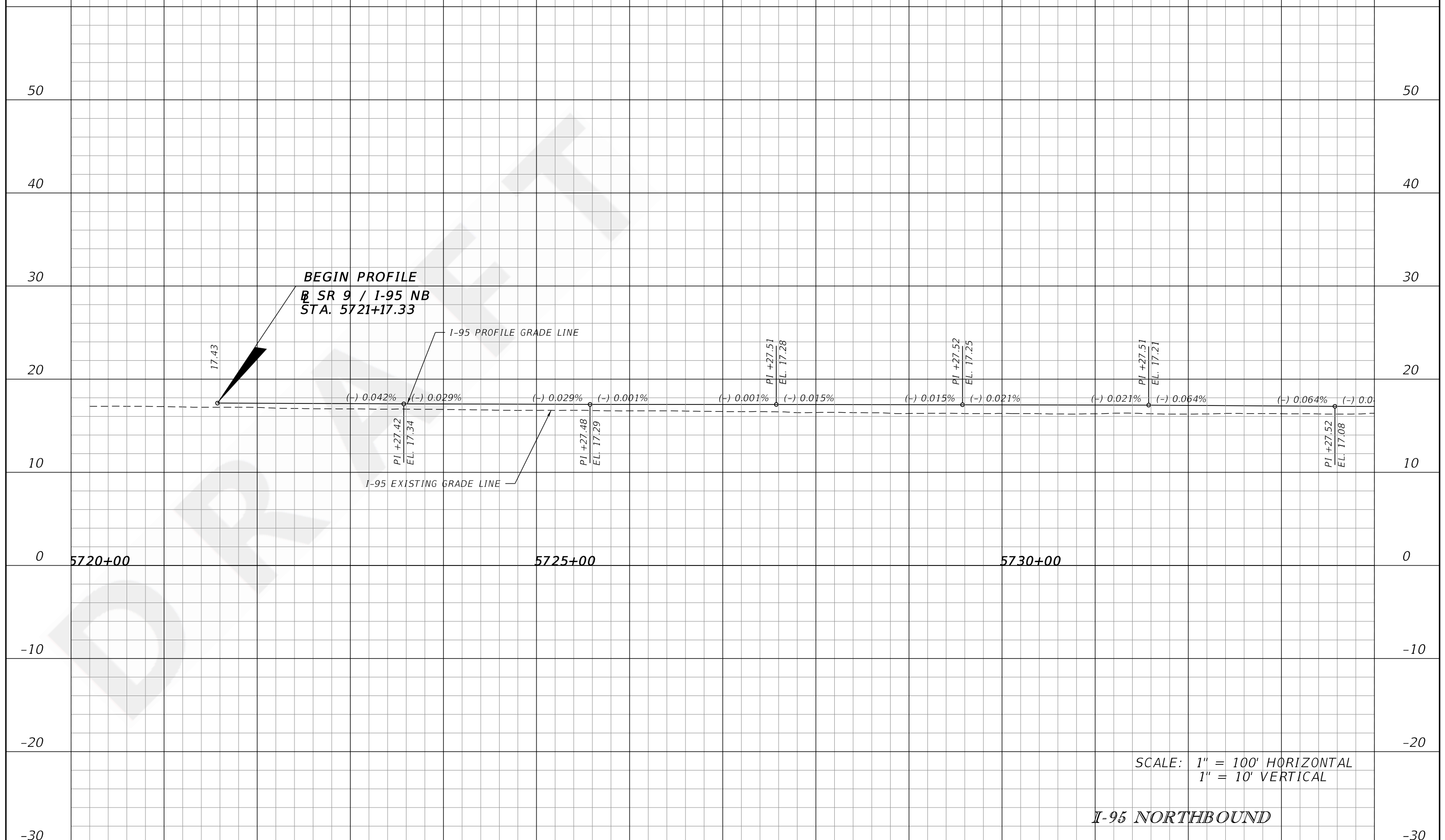
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DATE	DESCRIPTION

JAMES E. FORD P.E.
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HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PLAN

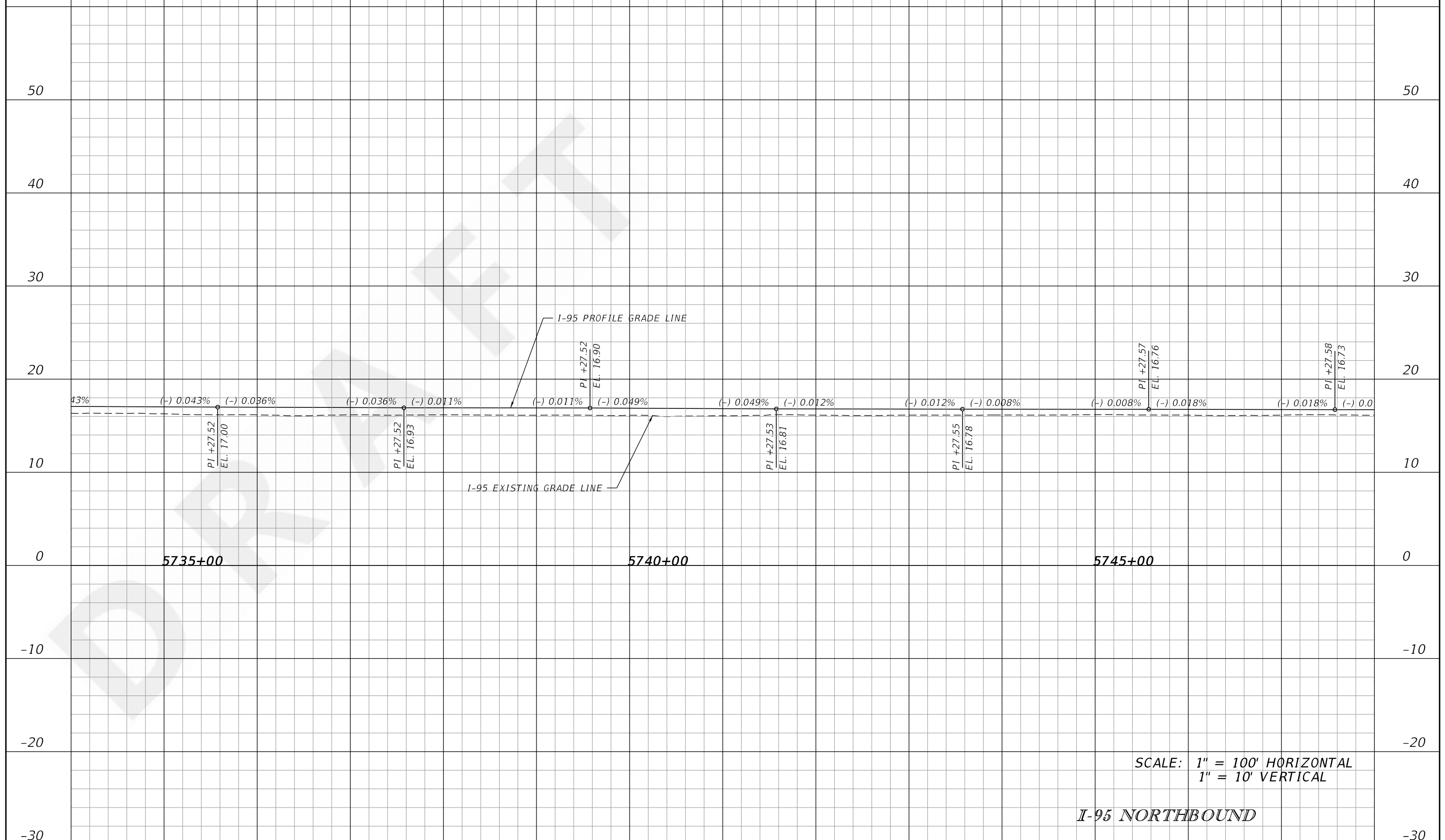
SHEET NO. 44
Page 543 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

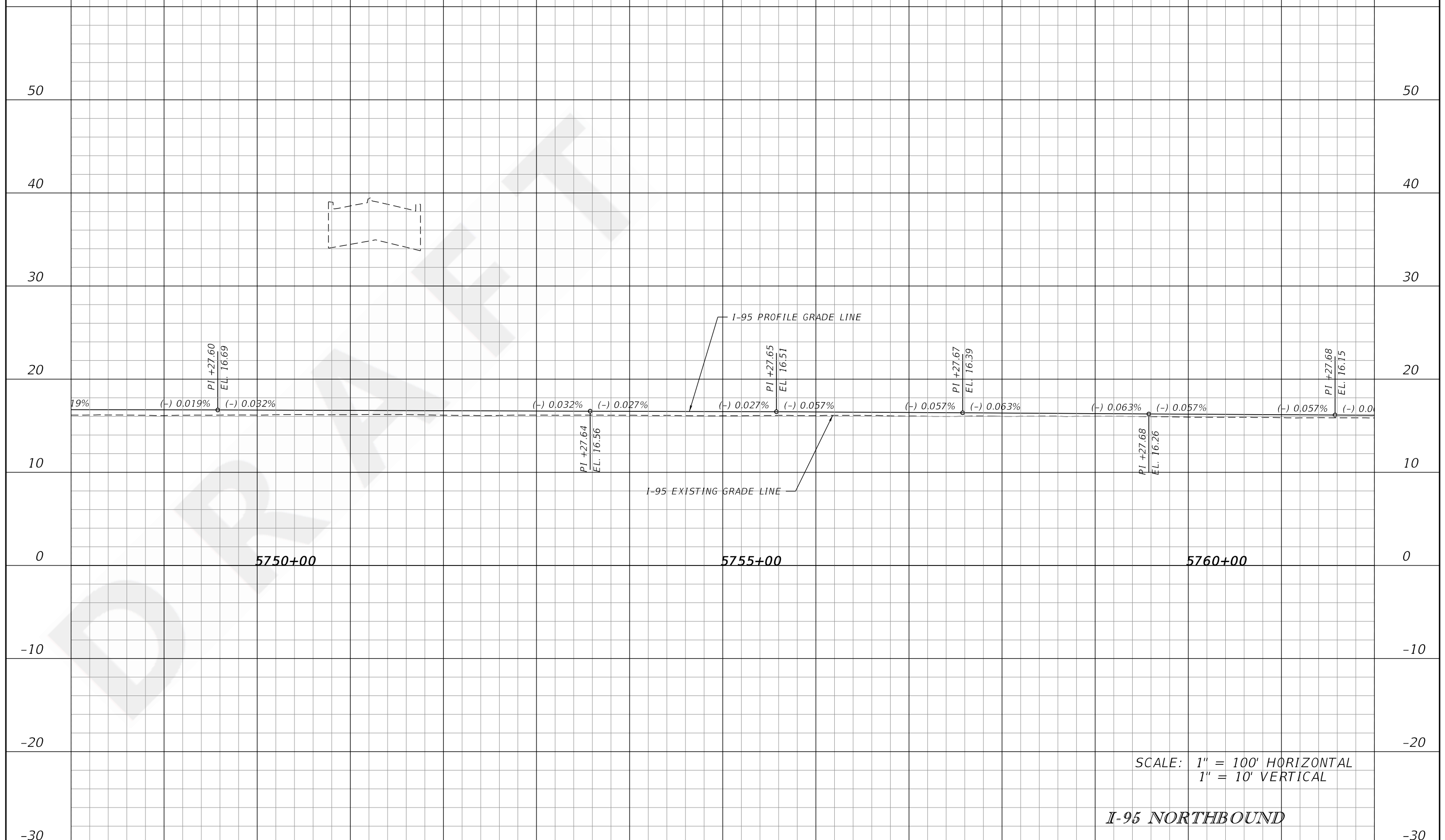
REVISIONS		DATE	DESCRIPTION	JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	45



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
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	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	46

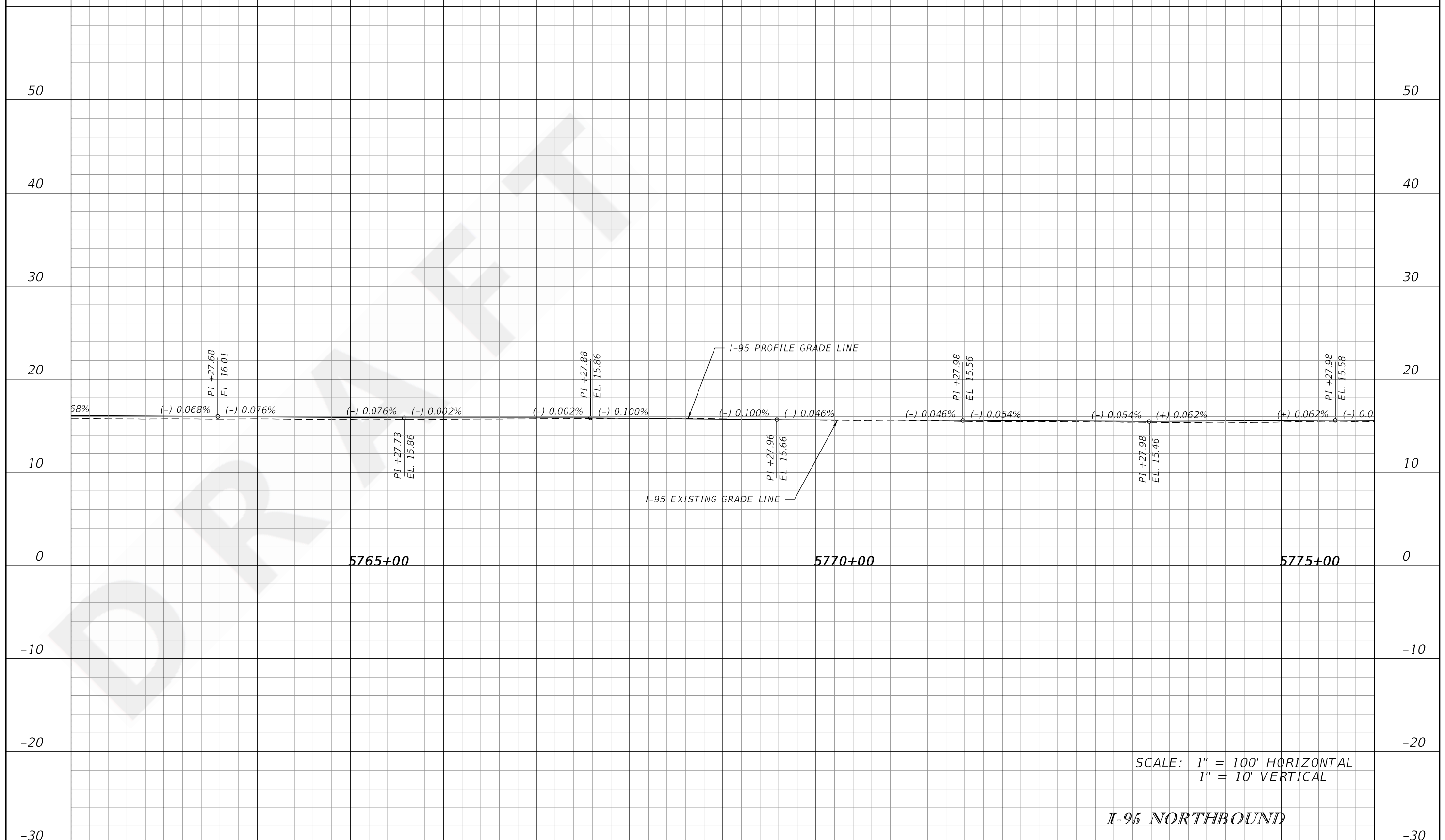


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1" = 10' VERTICAL

I-95 NORTHBOUND

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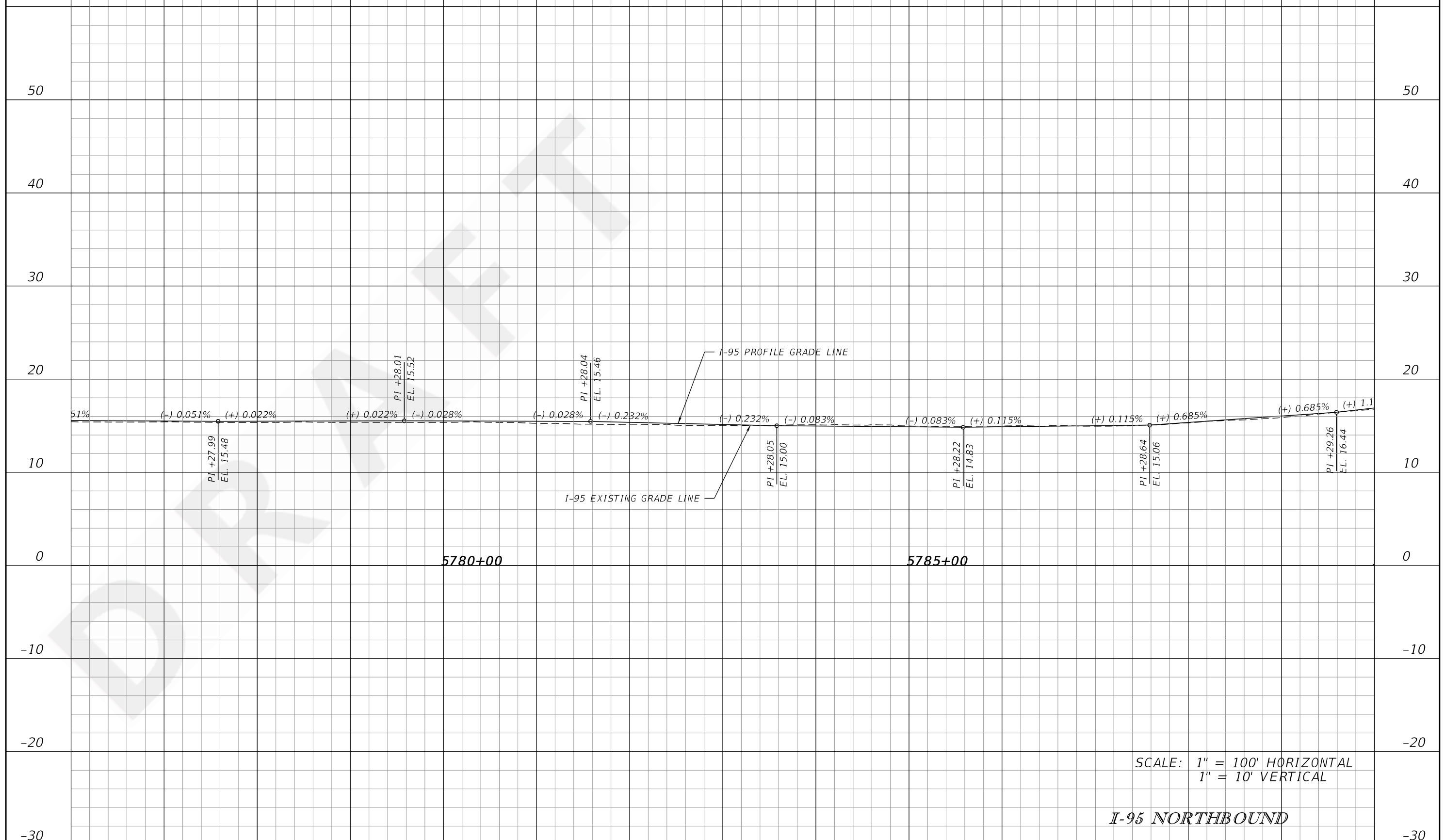
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SR 9	BROWARD	436964-1-52-01		



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

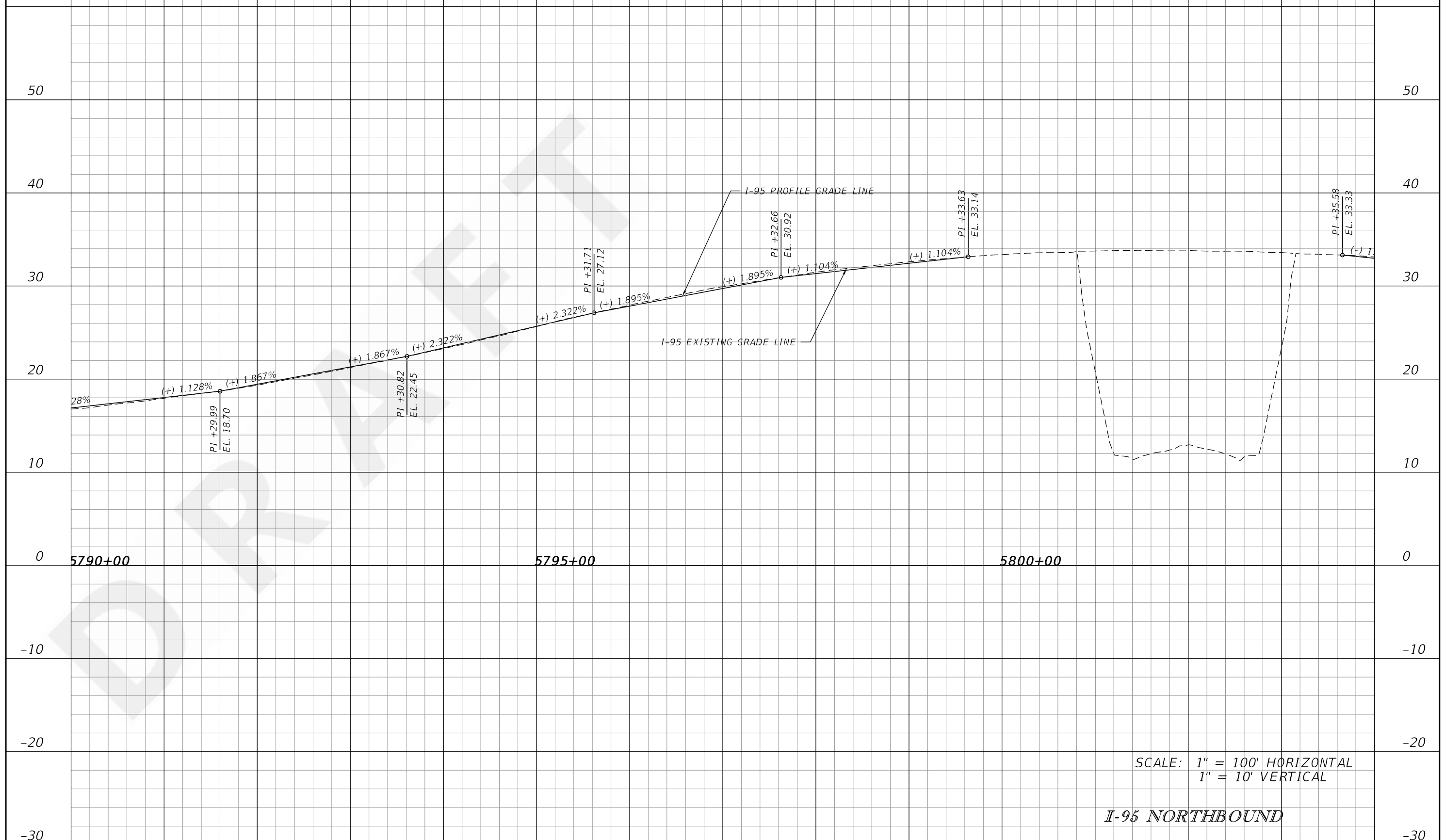
REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 48
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 547 of 795	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

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REVISIONS																	
DATE	DESCRIPTION																
	Type 2 Categorical Exclusion																
ROAD NO.	COUNTY	FINANCIAL PROJECT ID															
SR 9	BROWARD	436964-1-52-01															



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

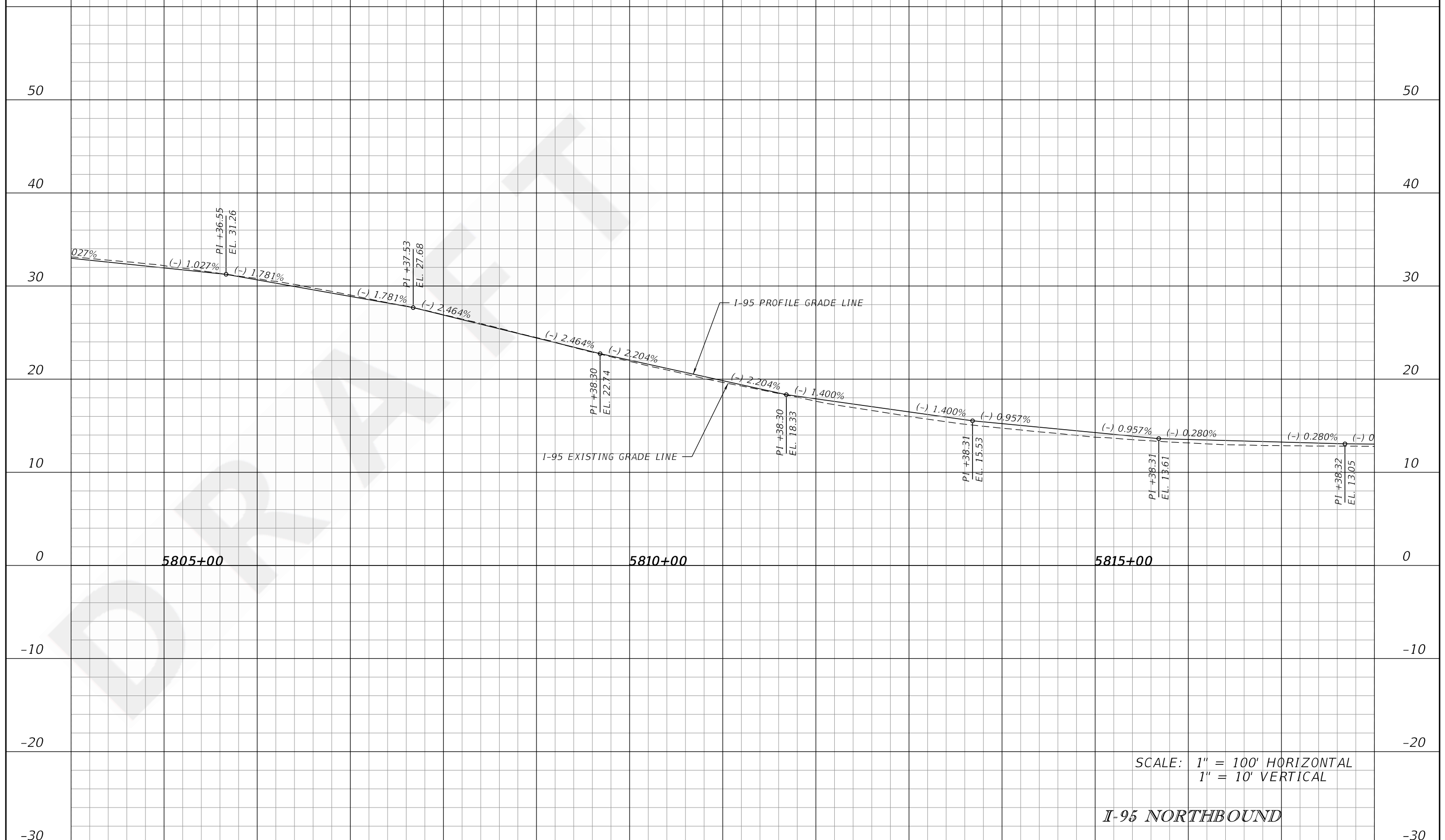
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 50
Page 549 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 NORTHBOUND

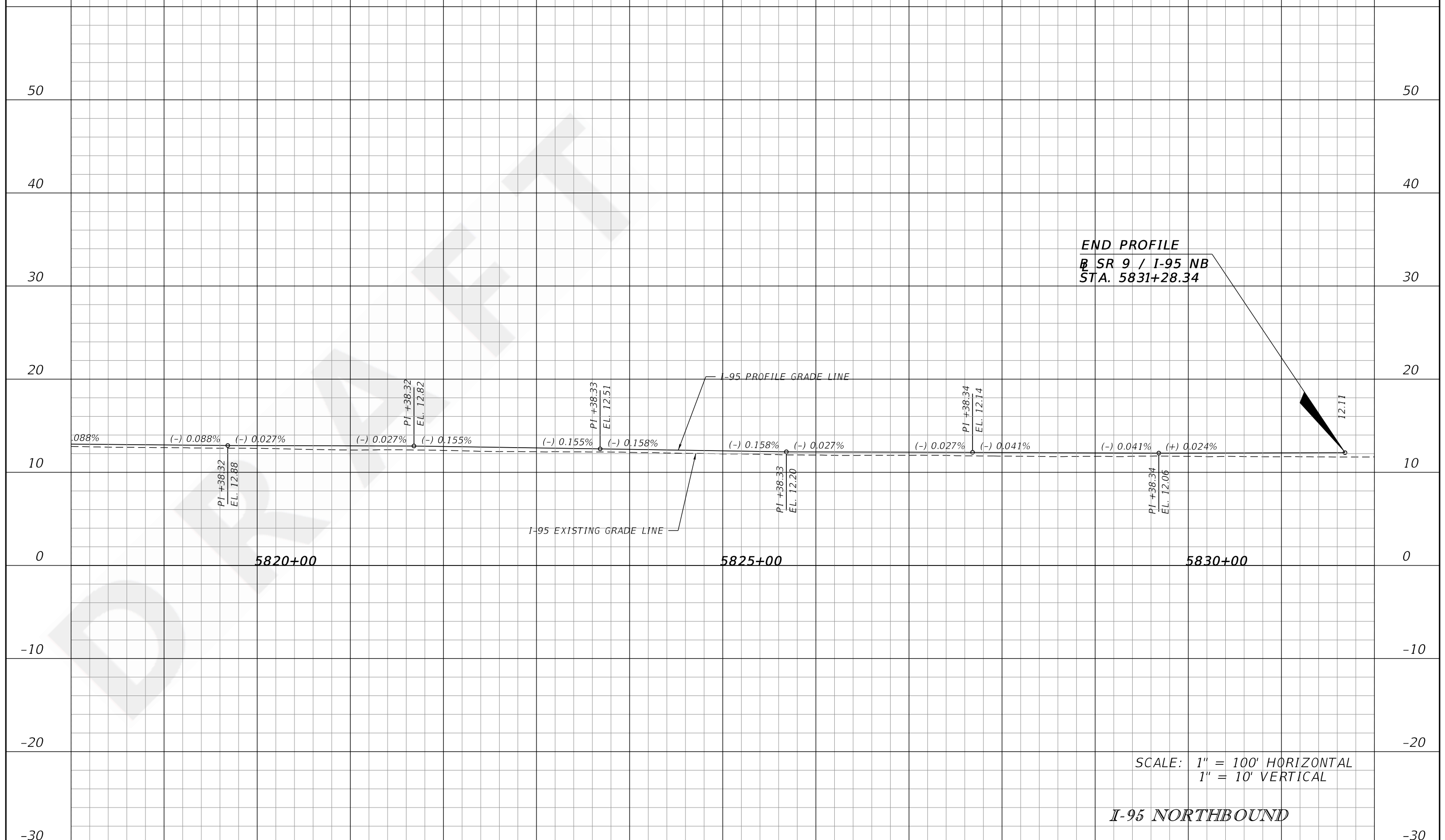
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

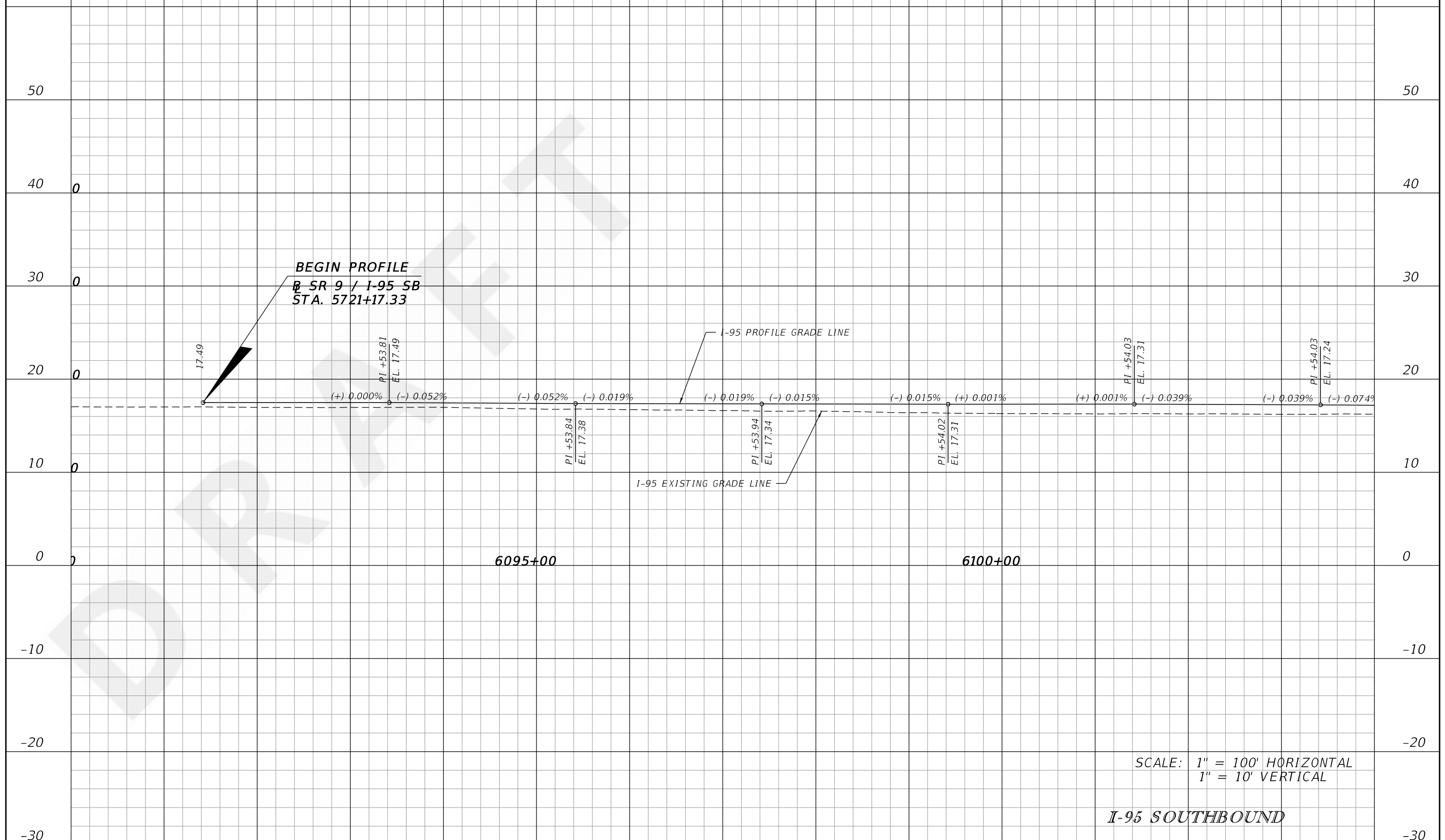
SHEET NO. 51
Page 550 of 795



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

I-95 NORTHBOUND

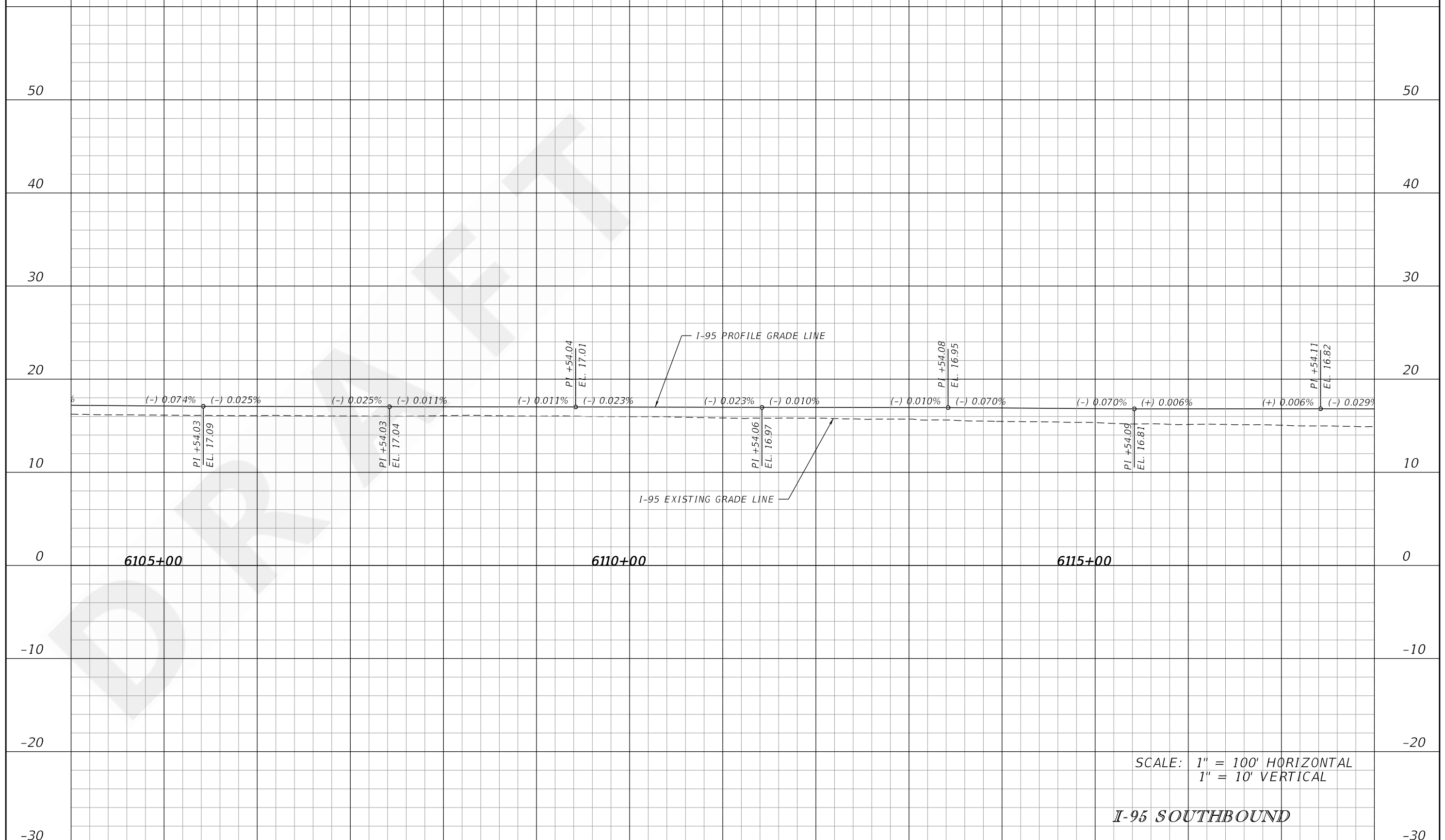
REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 52
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 SOUTHBOUND

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 53
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	ROADWAY PROFILE Page 552 of 795	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

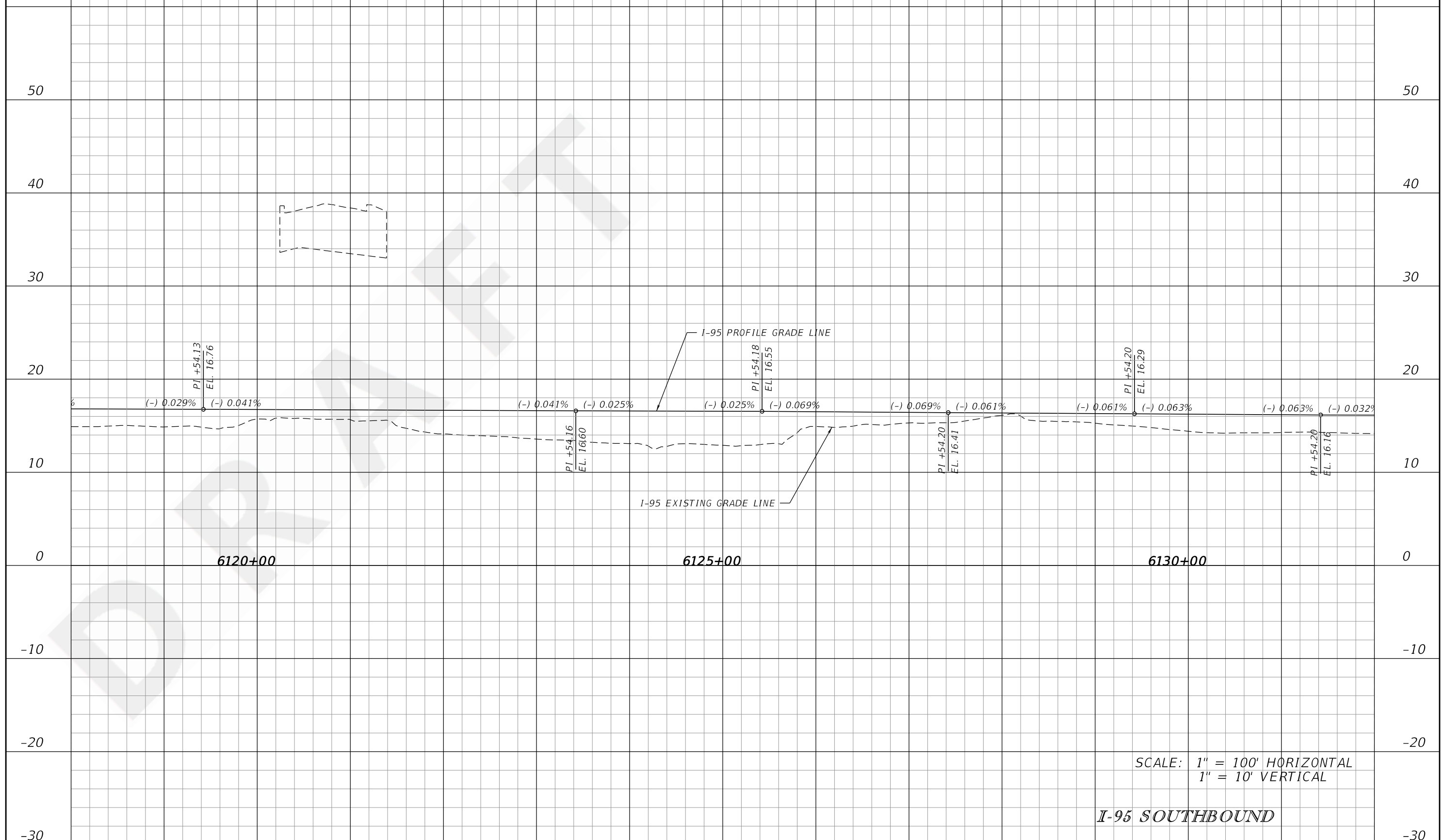
I-95 SOUTHBOUND

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE		SHEET NO.
		54



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

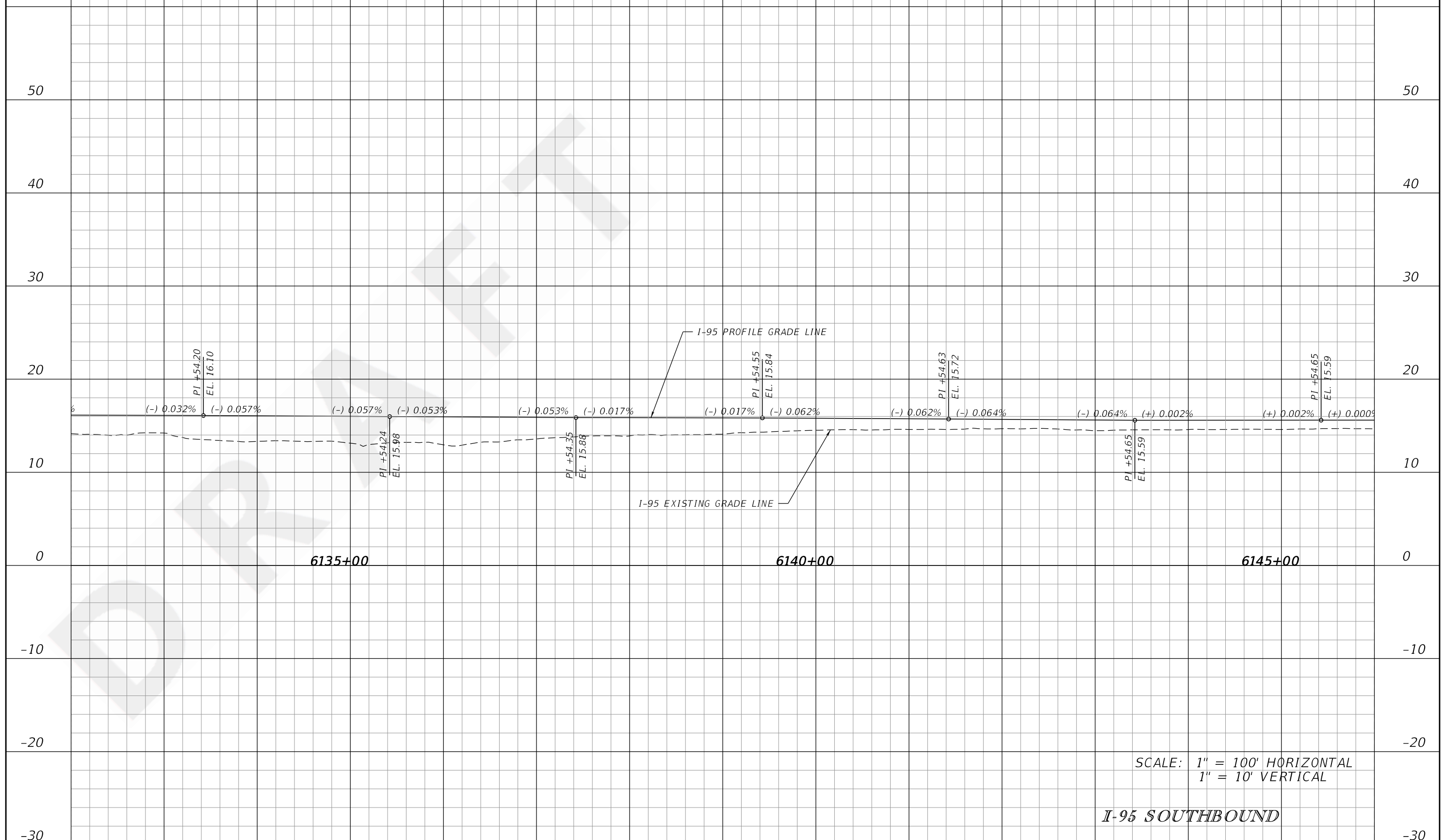
I-95 SOUTHBOUND

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE		SHEET NO. 55
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SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 SOUTHBOUND

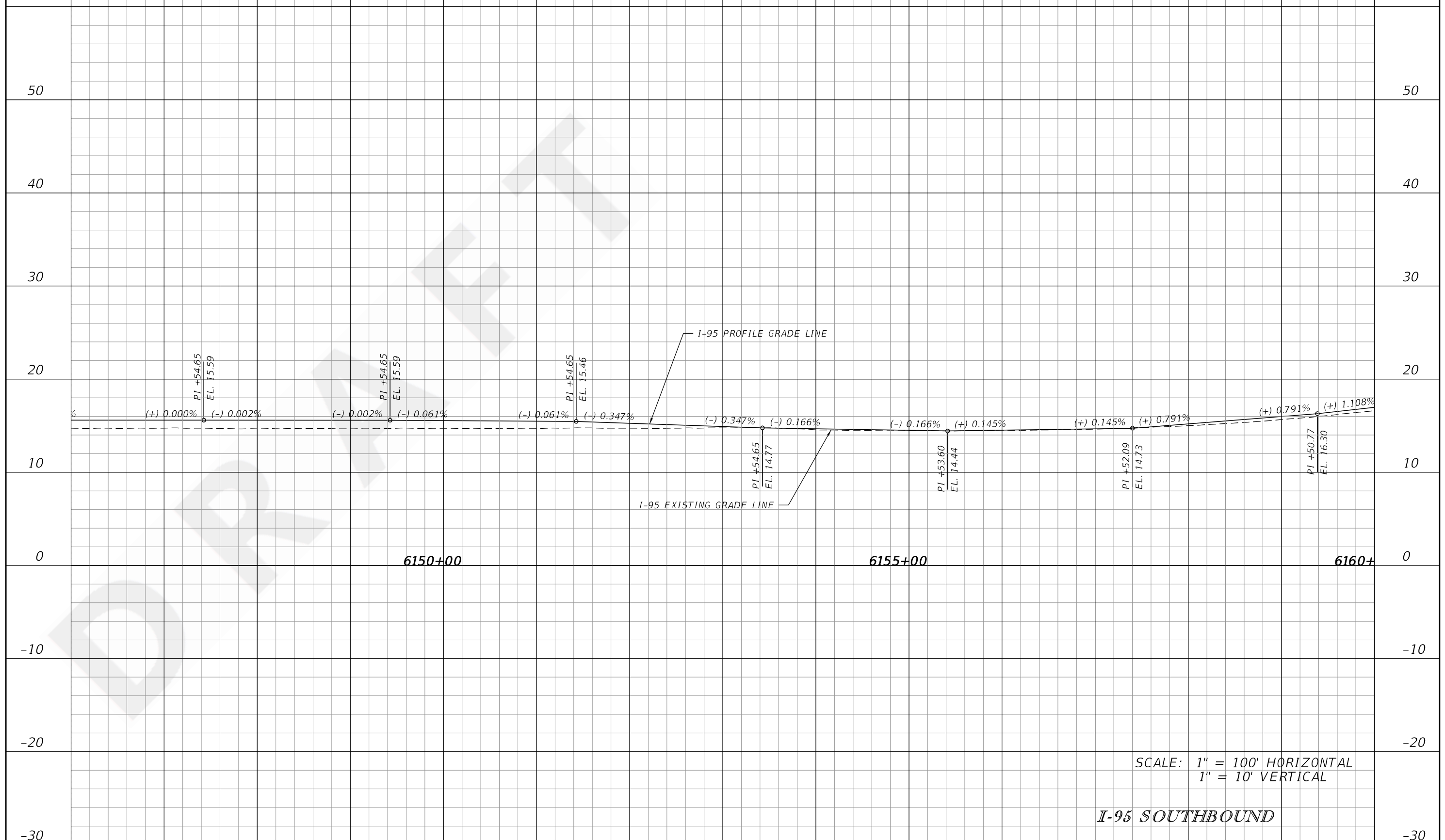
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 56
Page 555 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 SOUTHBOUND

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

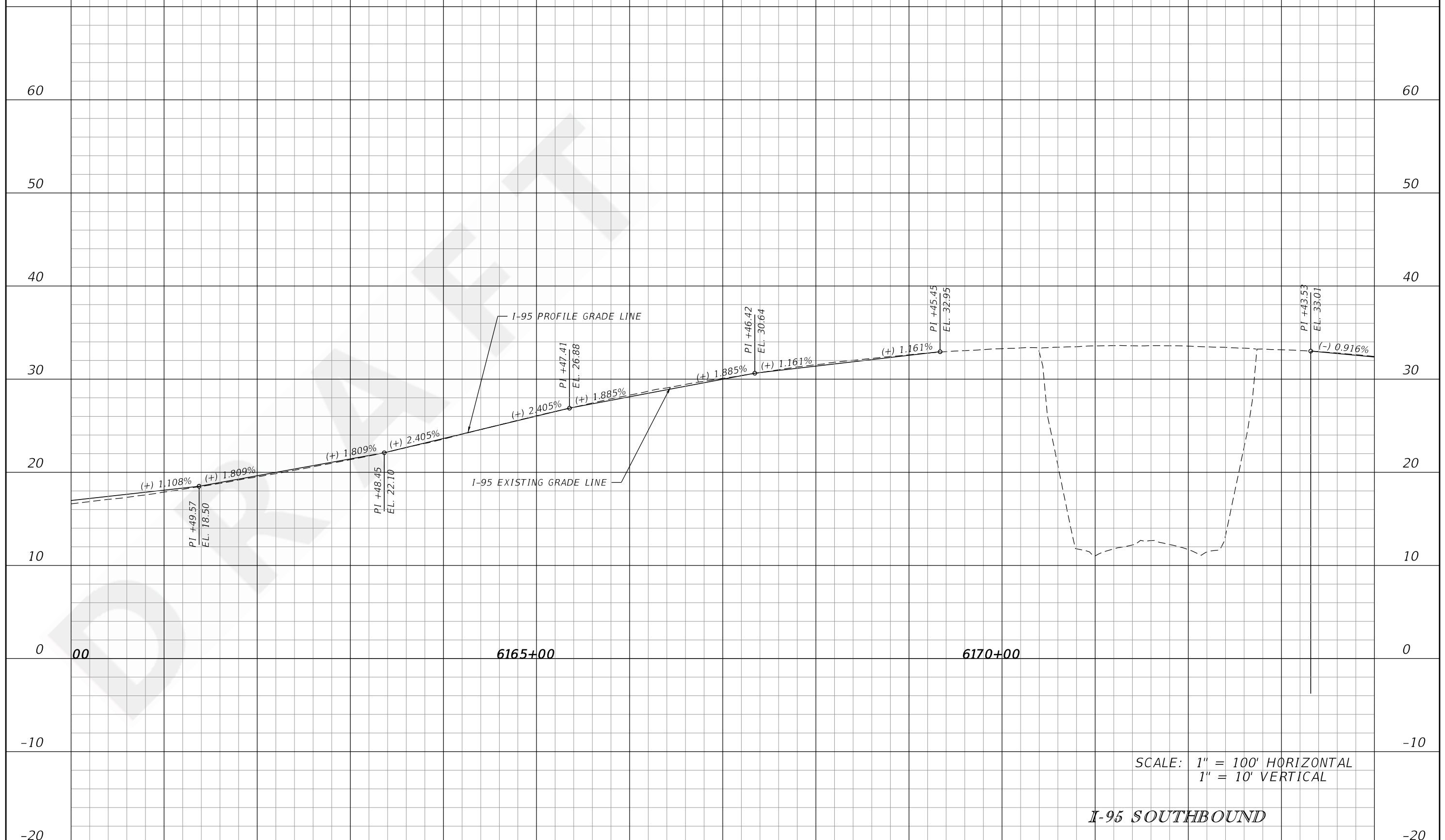
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 57

Page 556 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 SOUTHBOUND

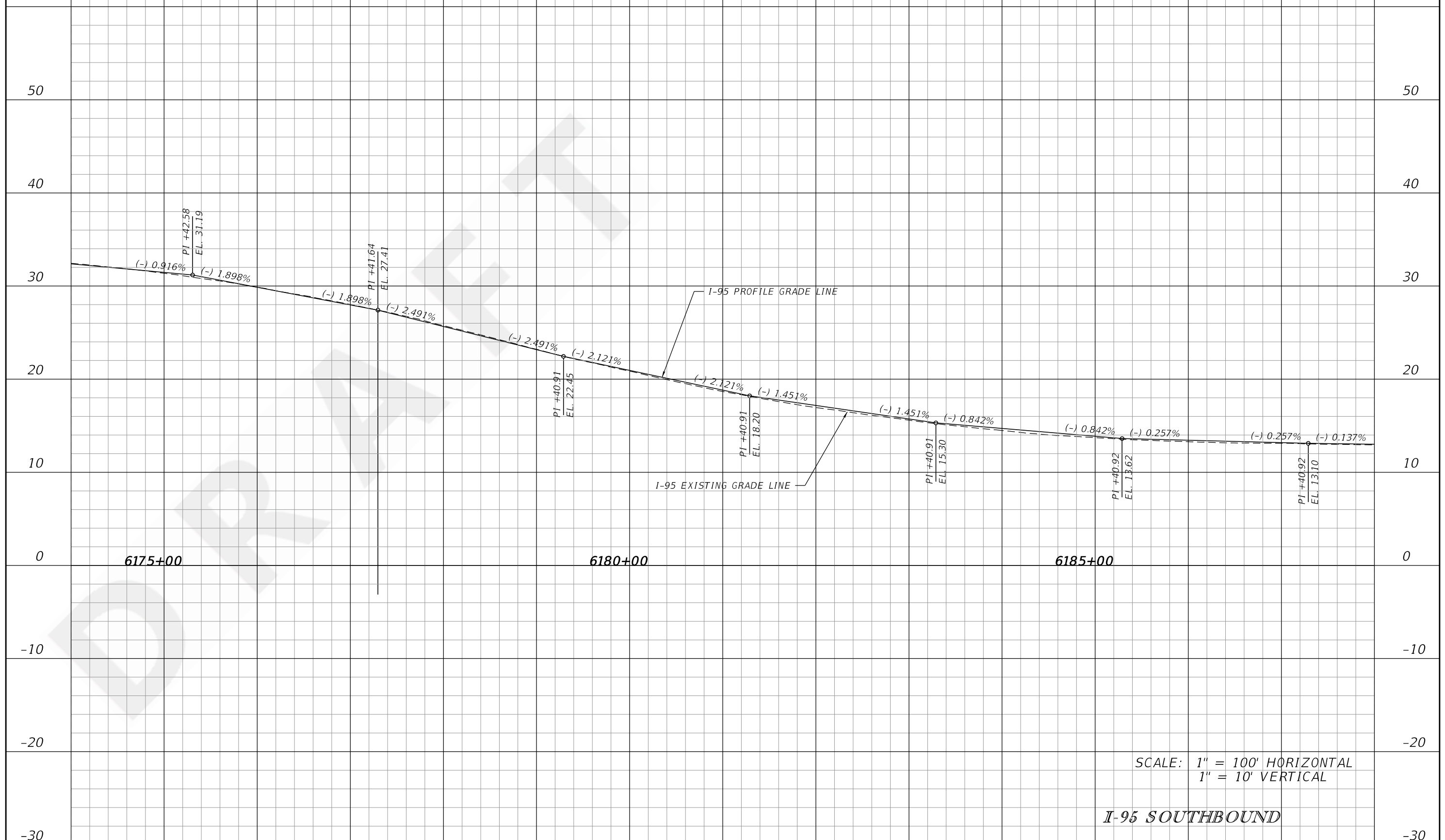
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 58
Page 557 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

I-95 SOUTHBOUND

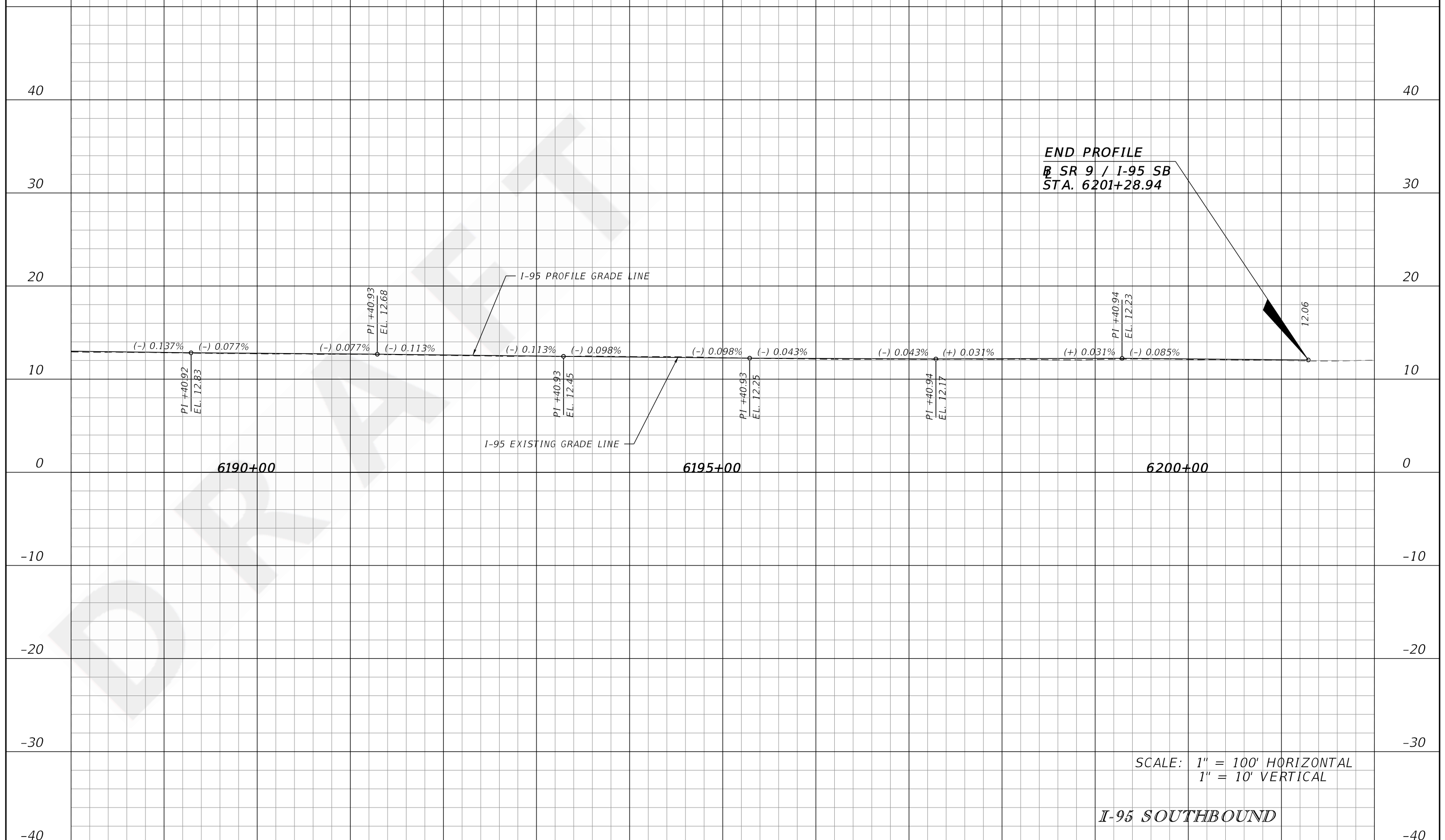
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 59
Page 558 of 795



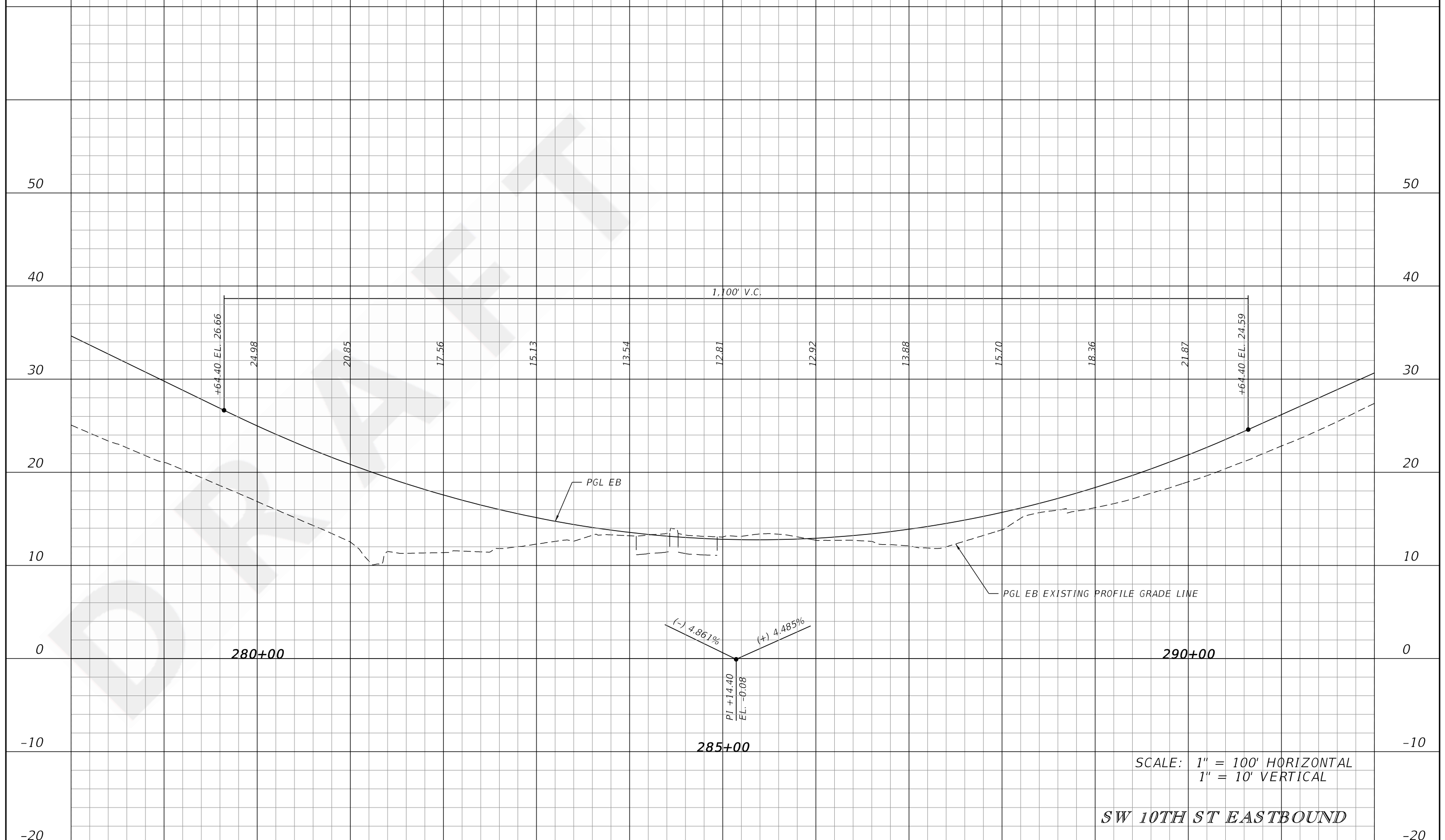
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 SR 9 / I-95 SB
 STA. 6201+28.94

SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

I-95 SOUTHBOUND

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 60
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	

ROADWAY PROFILE



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST EASTBOUND

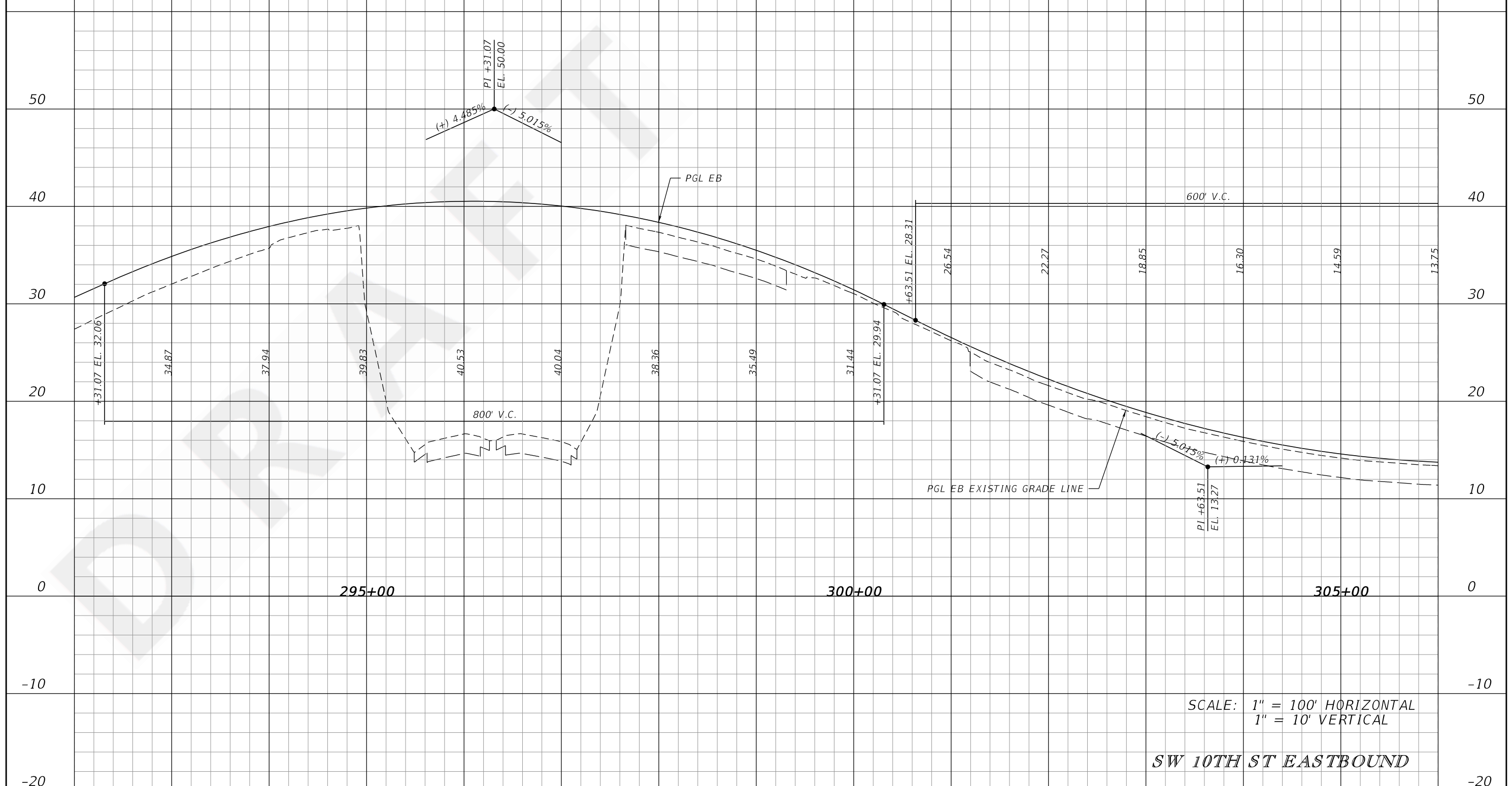
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 62
Page 561 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST EASTBOUND

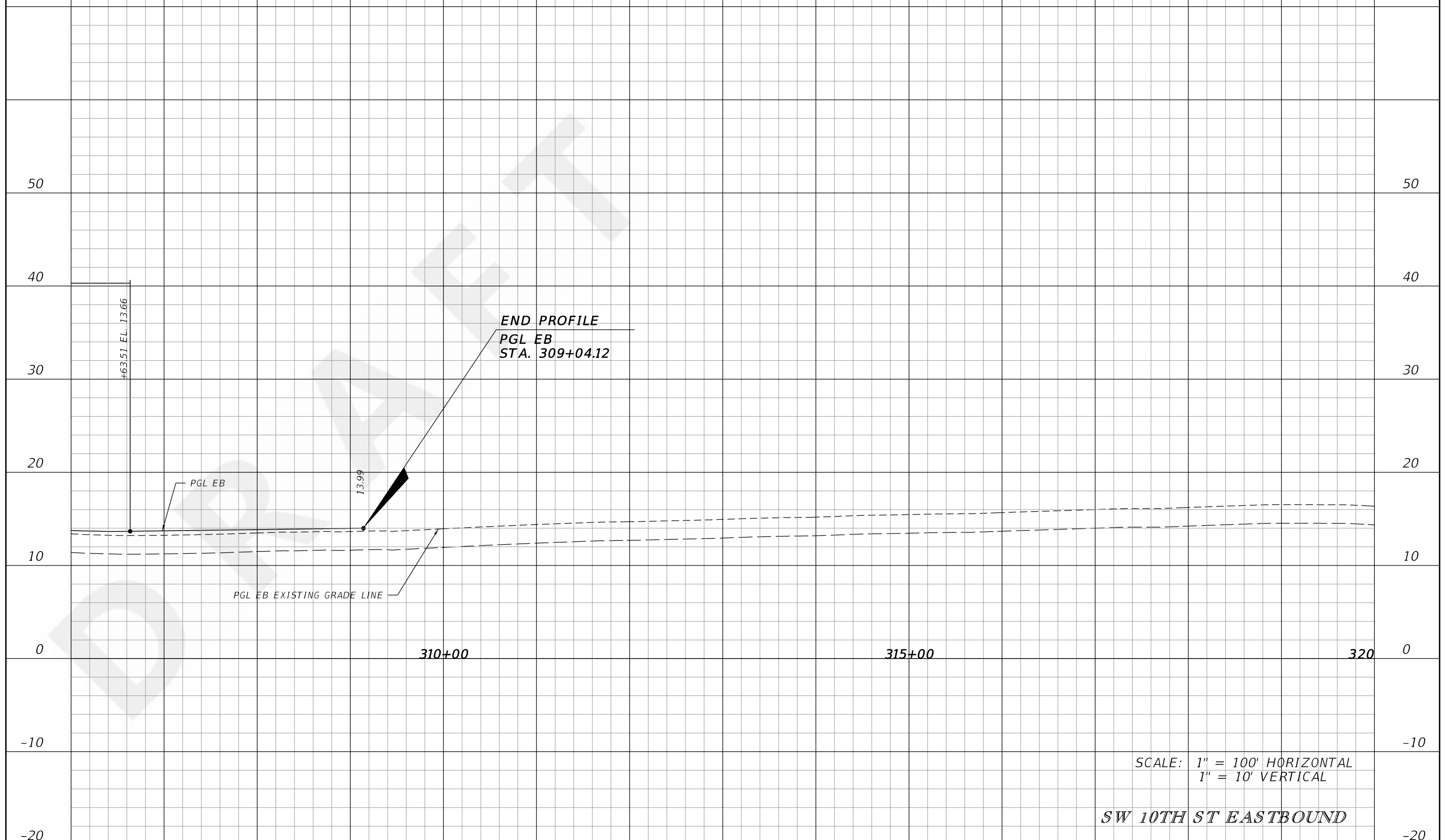
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

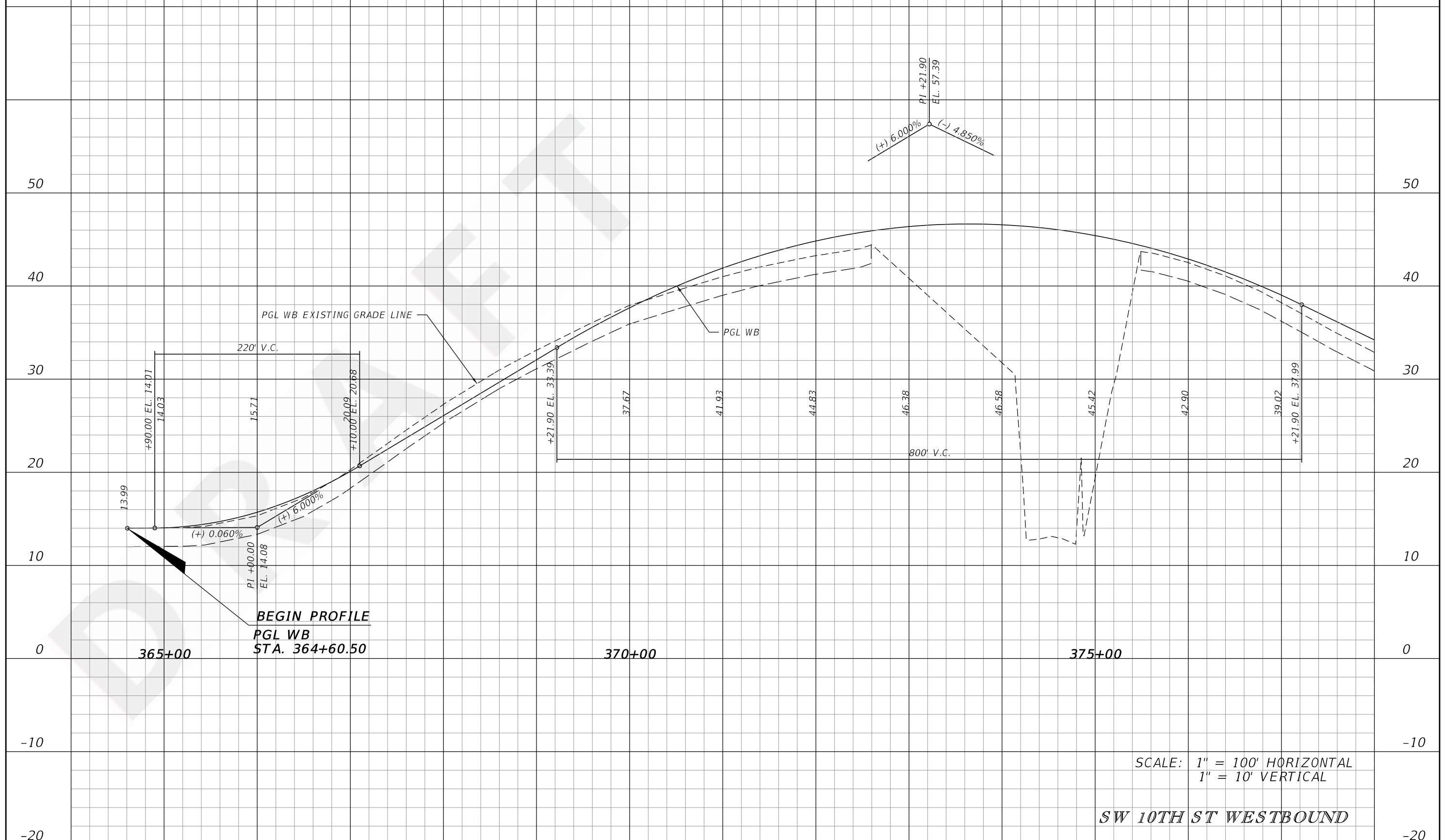
SHEET NO. 63
Page 562 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST EASTBOUND

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 64
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 869	BROWARD	436964-1-52-01	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST WESTBOUND

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

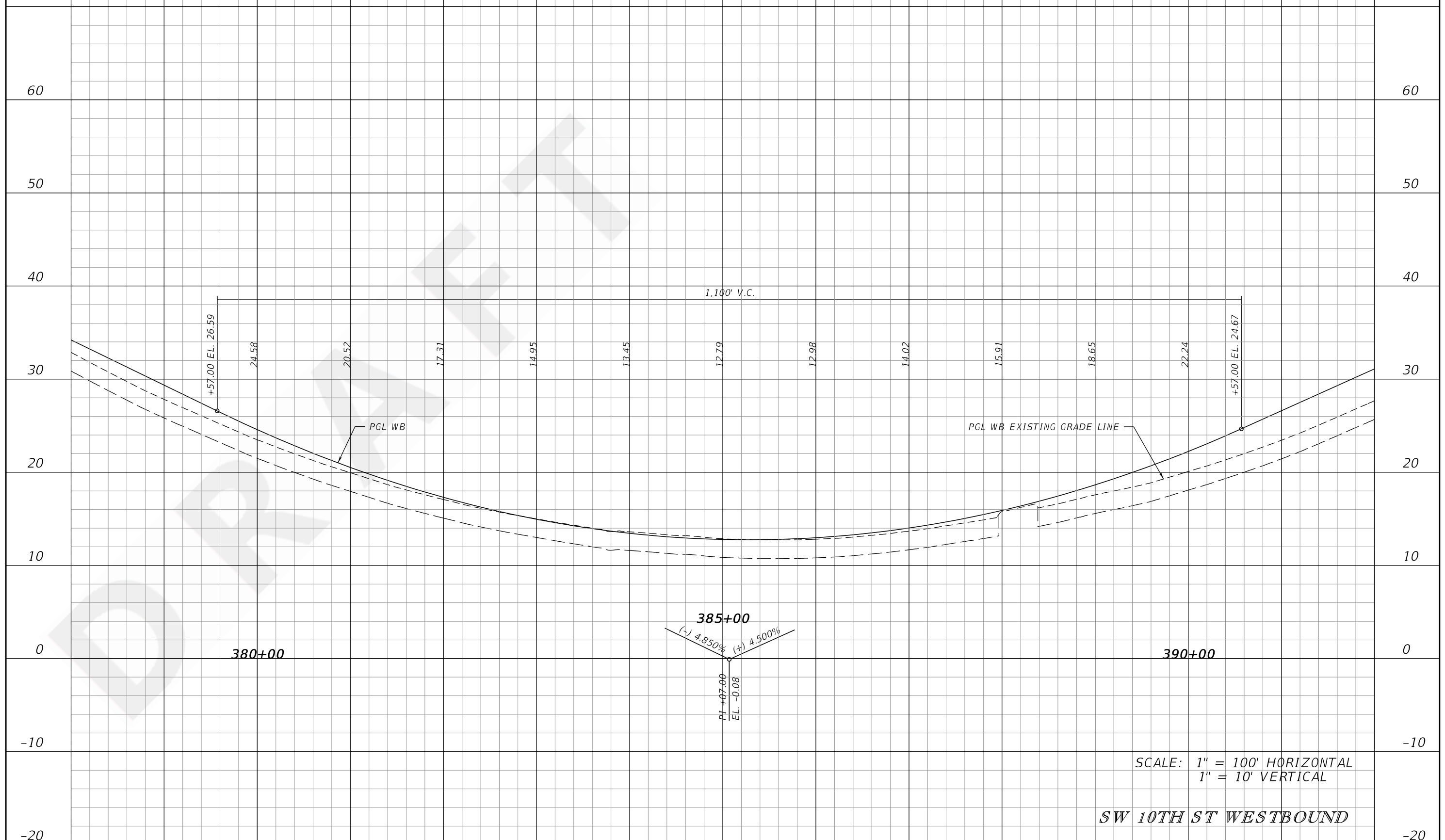
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO.
65

Page 564 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST WESTBOUND

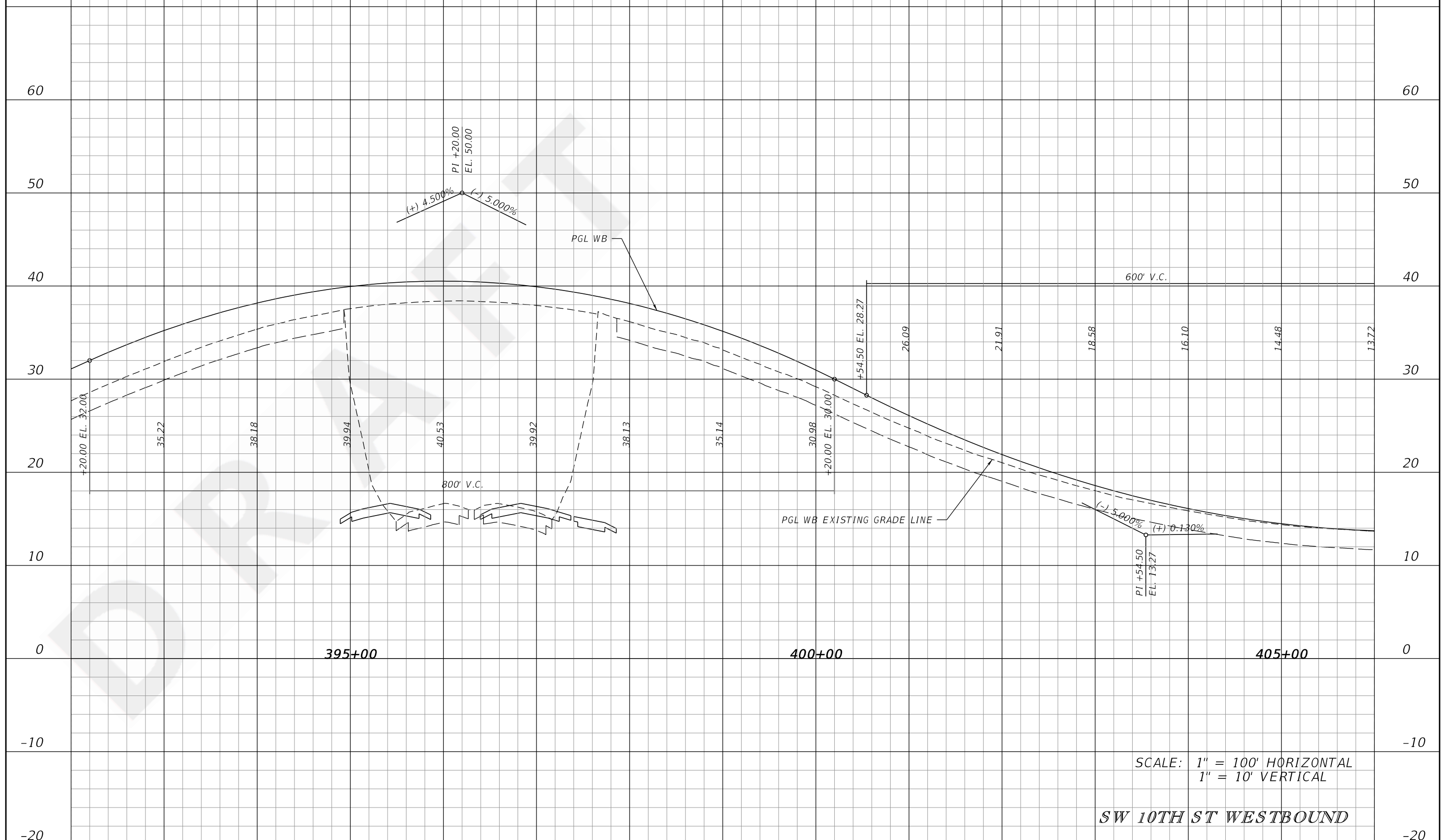
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 66
Page 565 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL
SW 10TH ST WESTBOUND

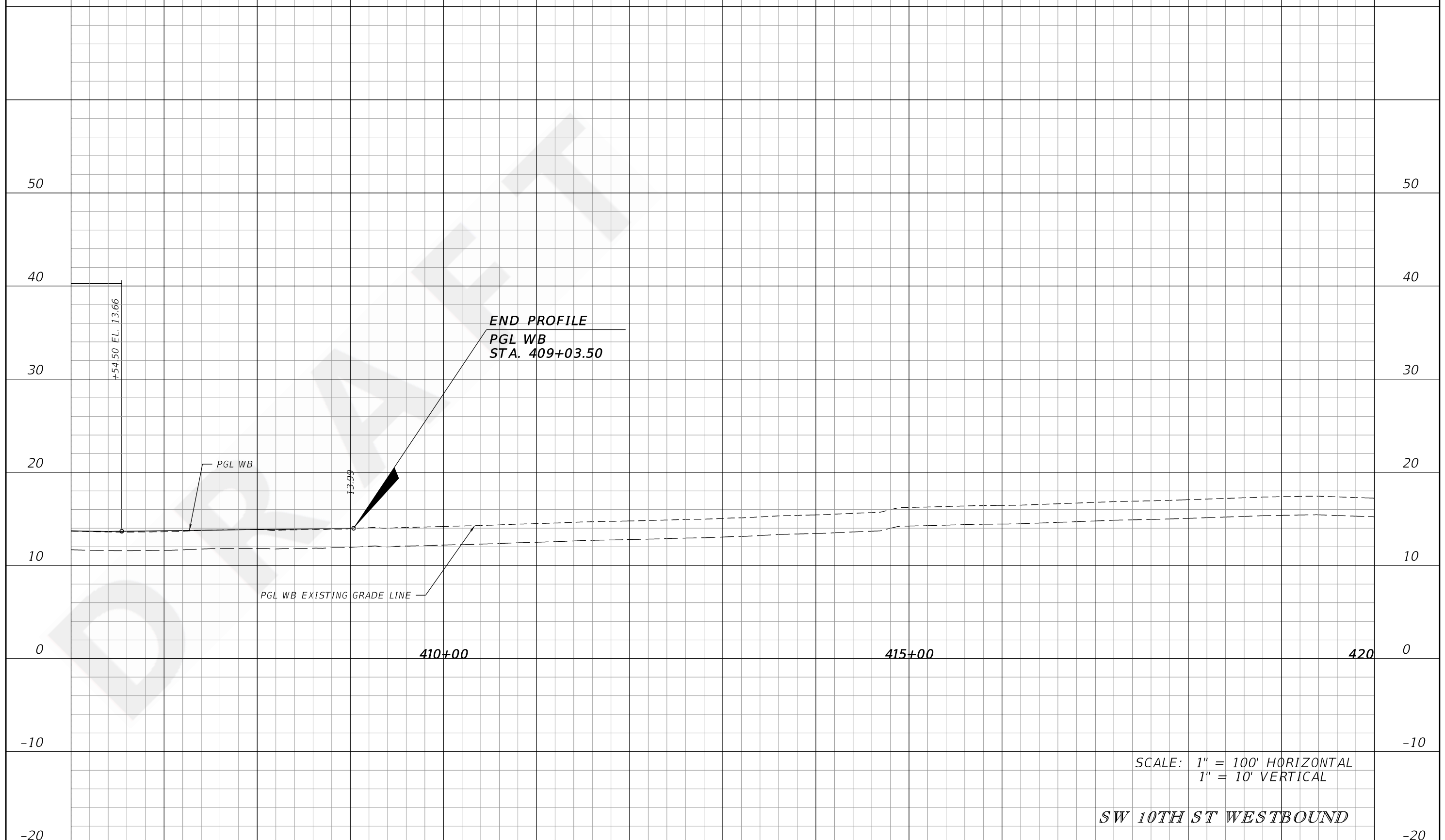
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 67
Page 566 of 795

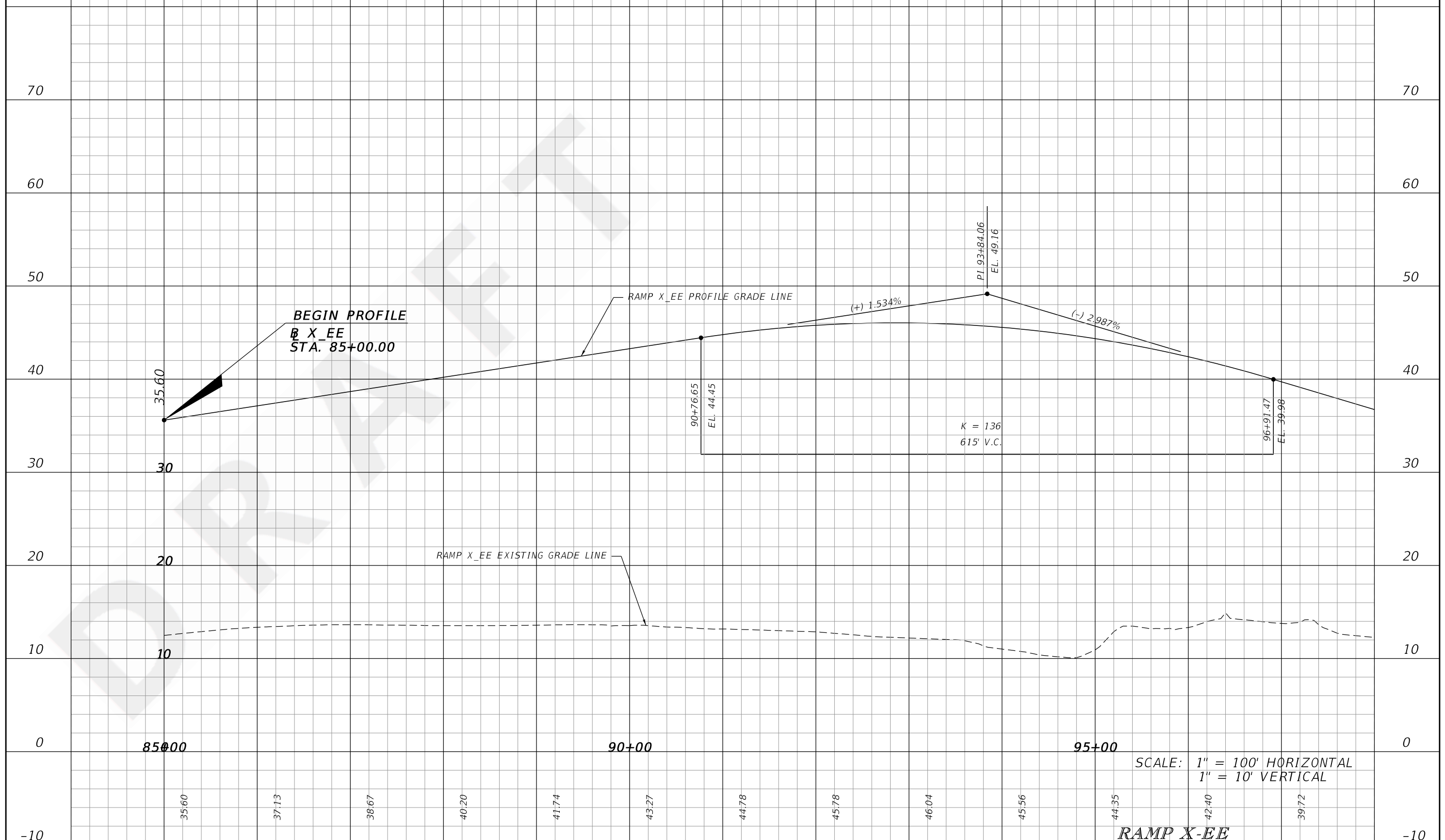


SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

SW 10TH ST WESTBOUND

REVISIONS		DATE		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION		
	Type 2 Categorical Exclusion				

JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROADWAY PROFILE	SHEET NO. 68
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SR 869	BROWARD	436964-1-52-01		



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

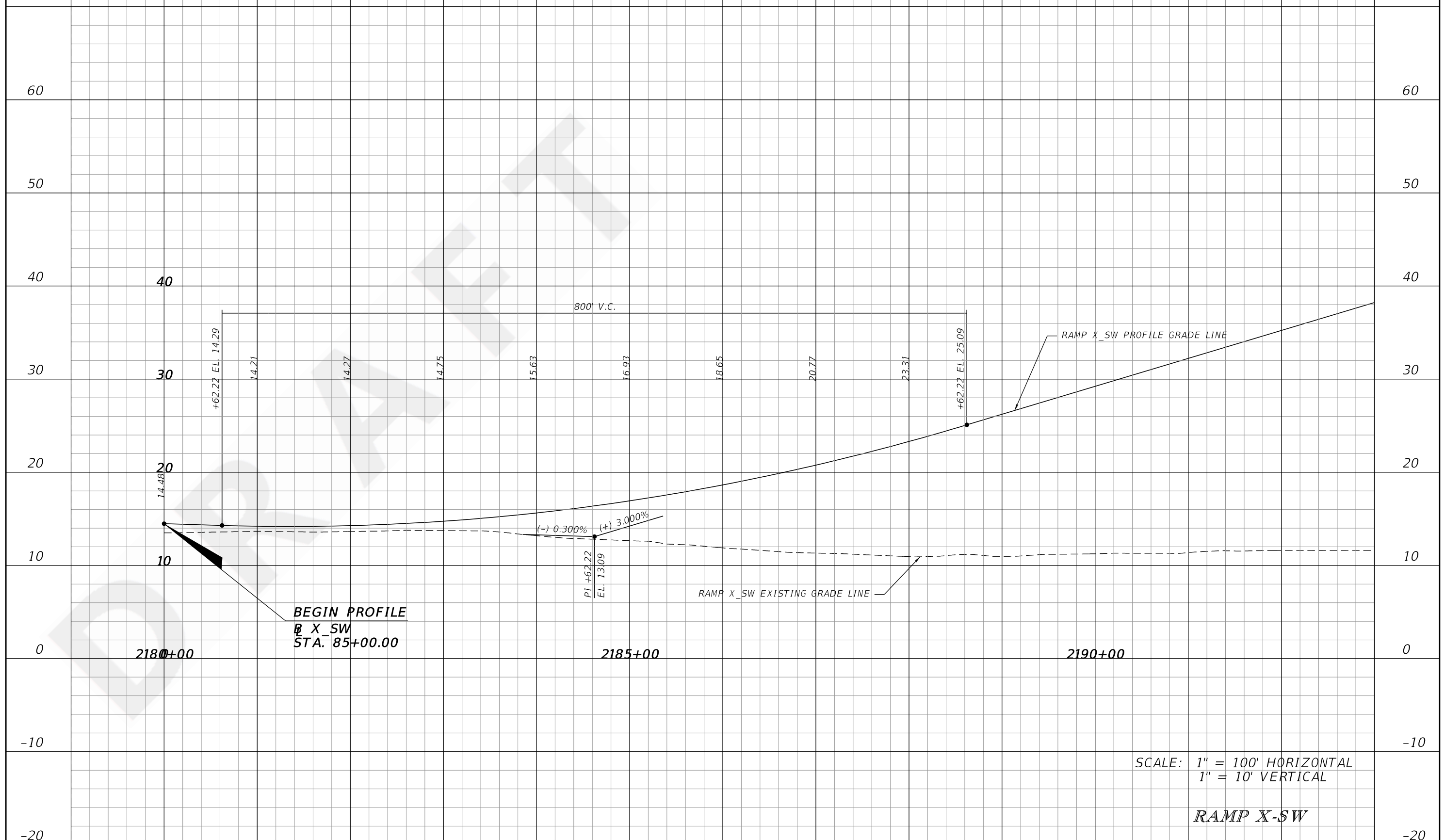
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 69

Page 568 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-SW

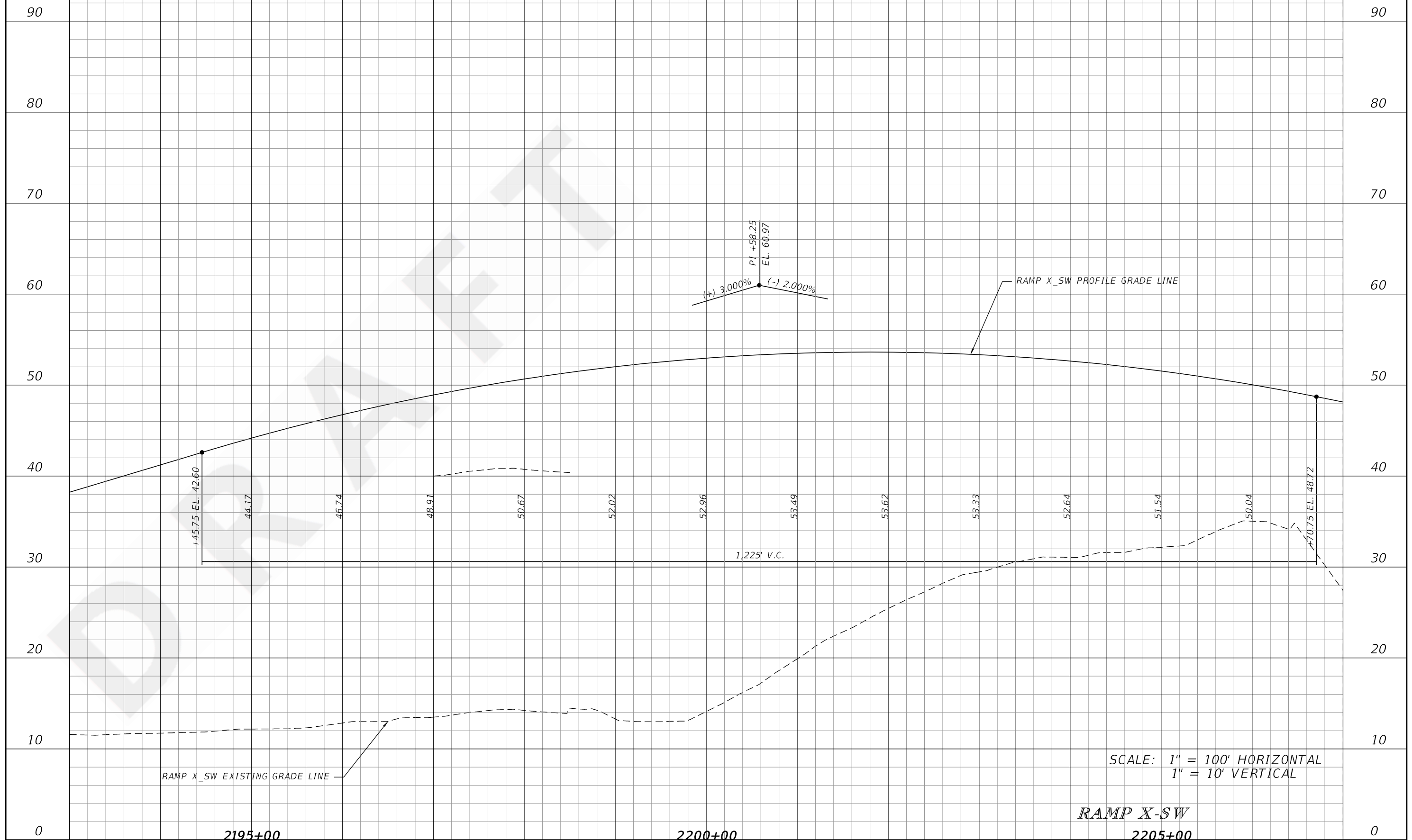
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 71
Page 570 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-SW
2205+00

REVISIONS	
DATE	DESCRIPTION
	Type 2 Categorical Exclusion

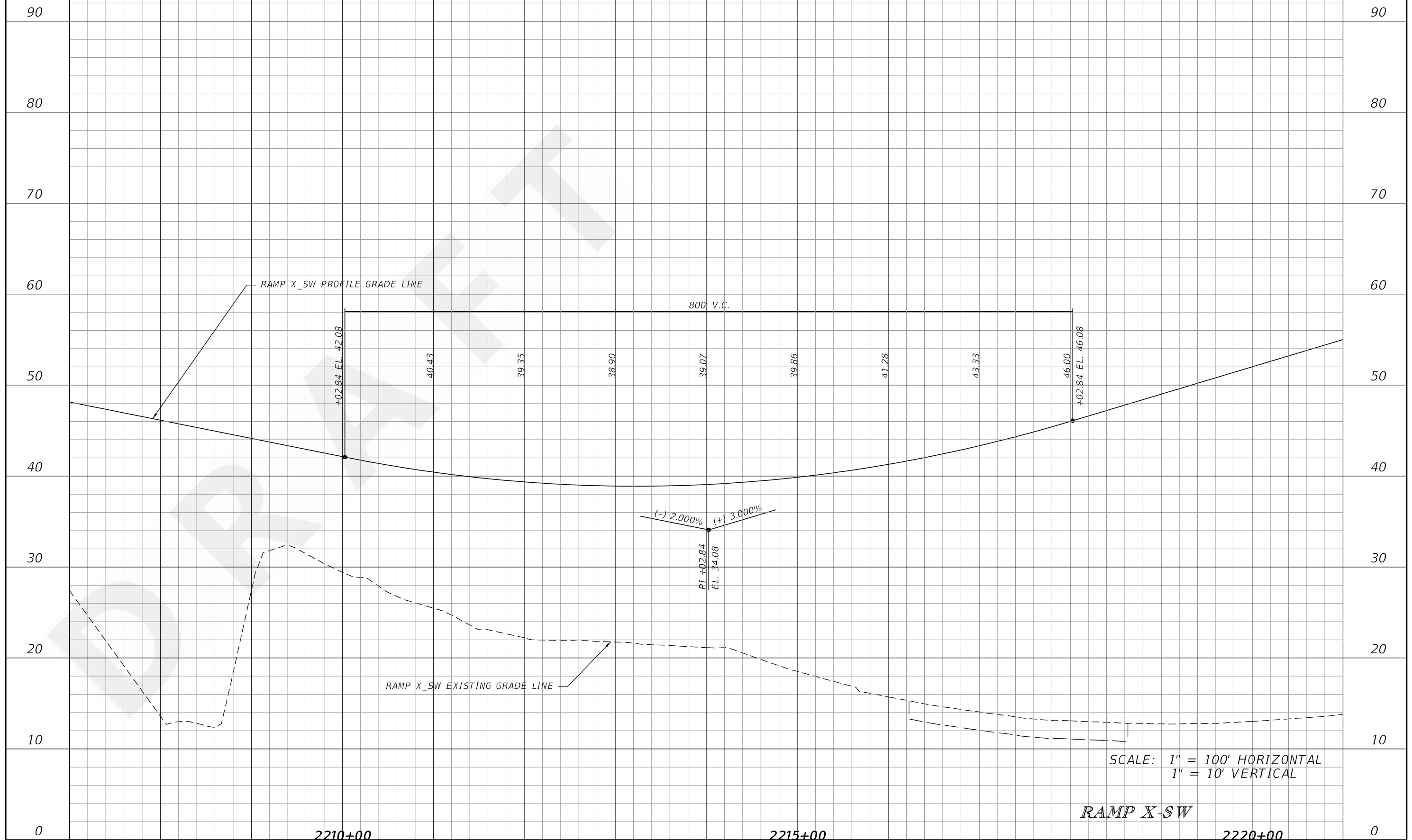
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 72

Page 571 of 795



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

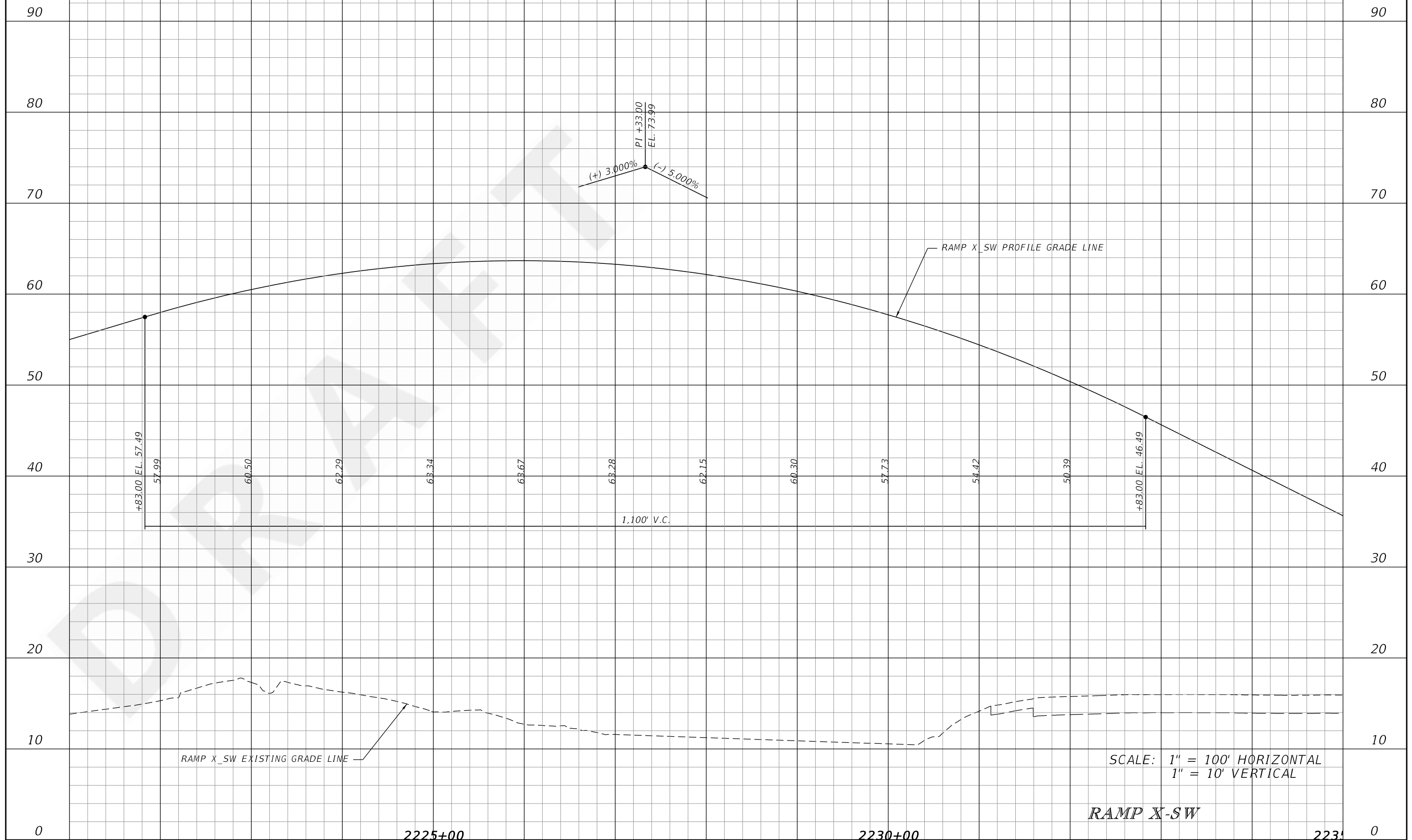
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 73

Page 572 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-SW

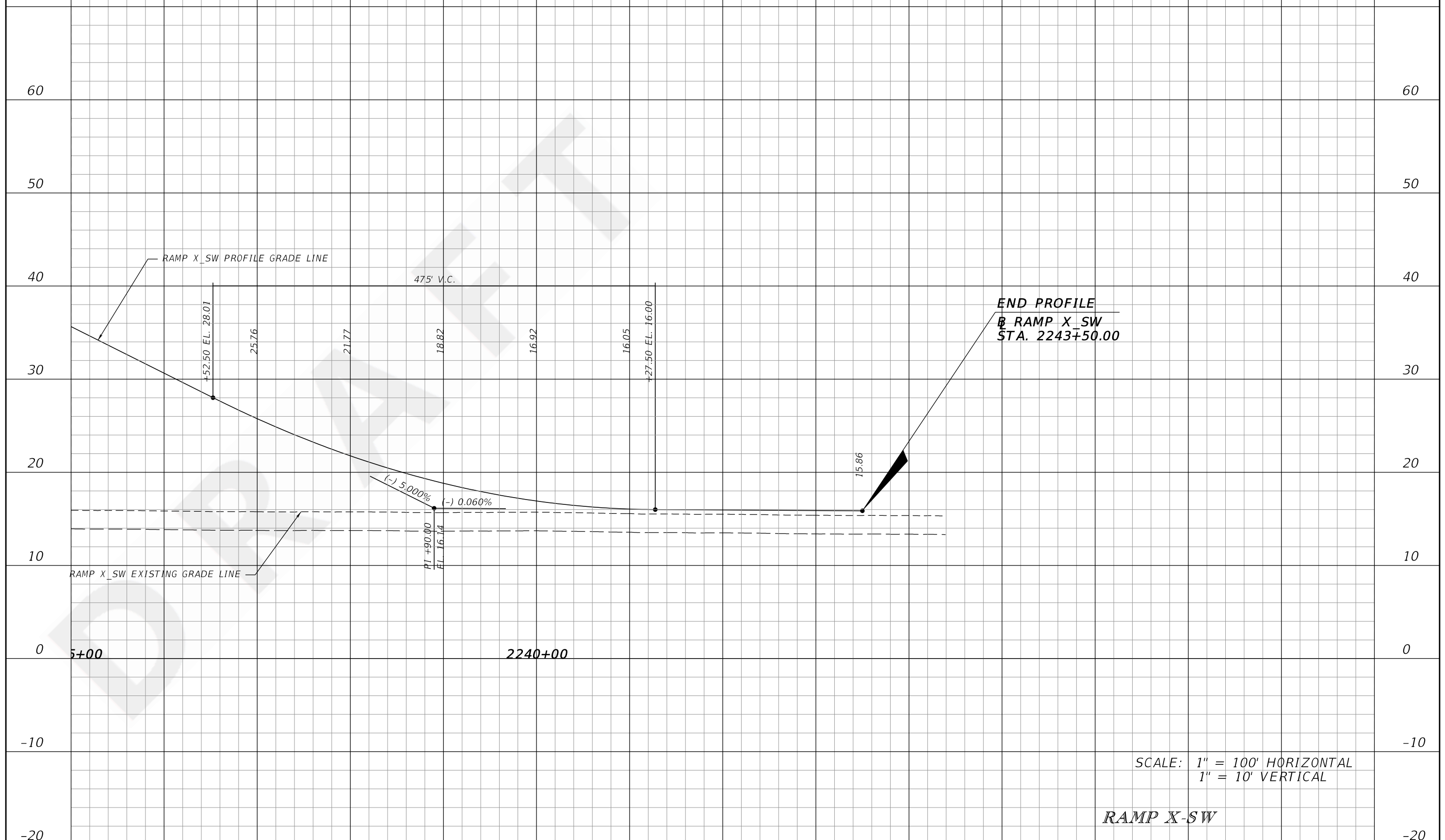
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 74
Page 573 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-SW

ROADWAY PROFILE

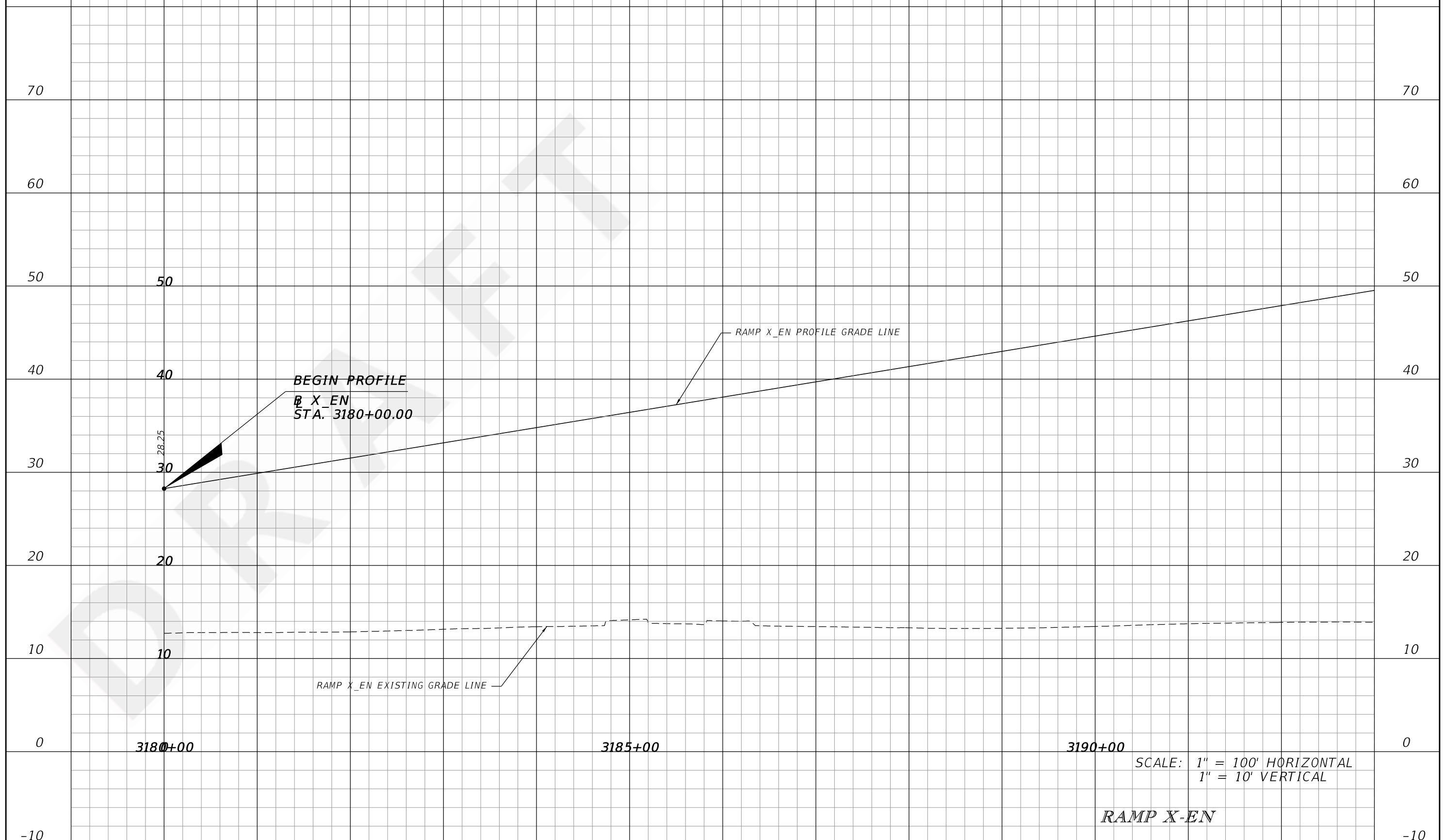
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

SHEET NO.
75

Page 574 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-EN

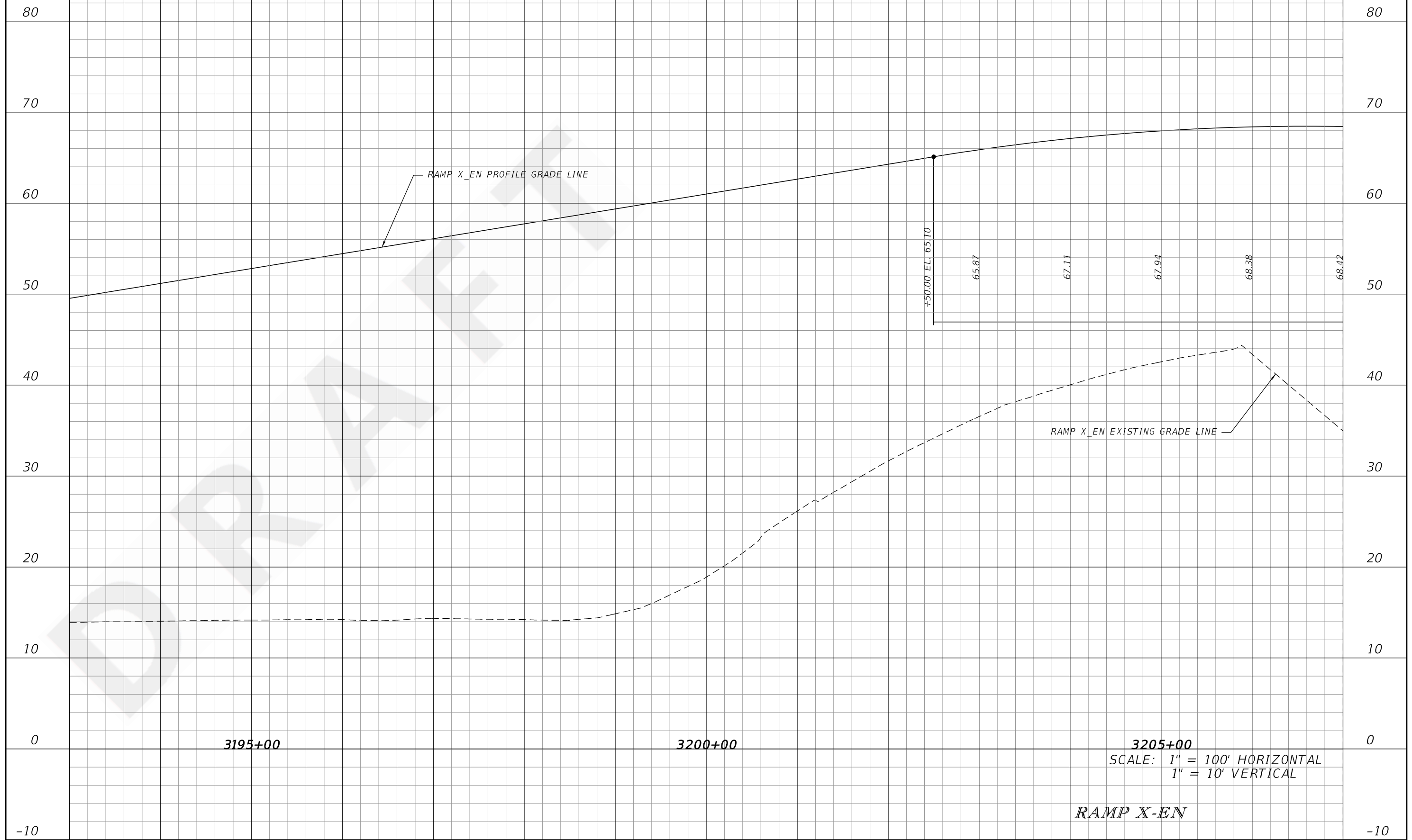
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DATE	DESCRIPTION	DATE	DESCRIPTION
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JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 76
Page 575 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

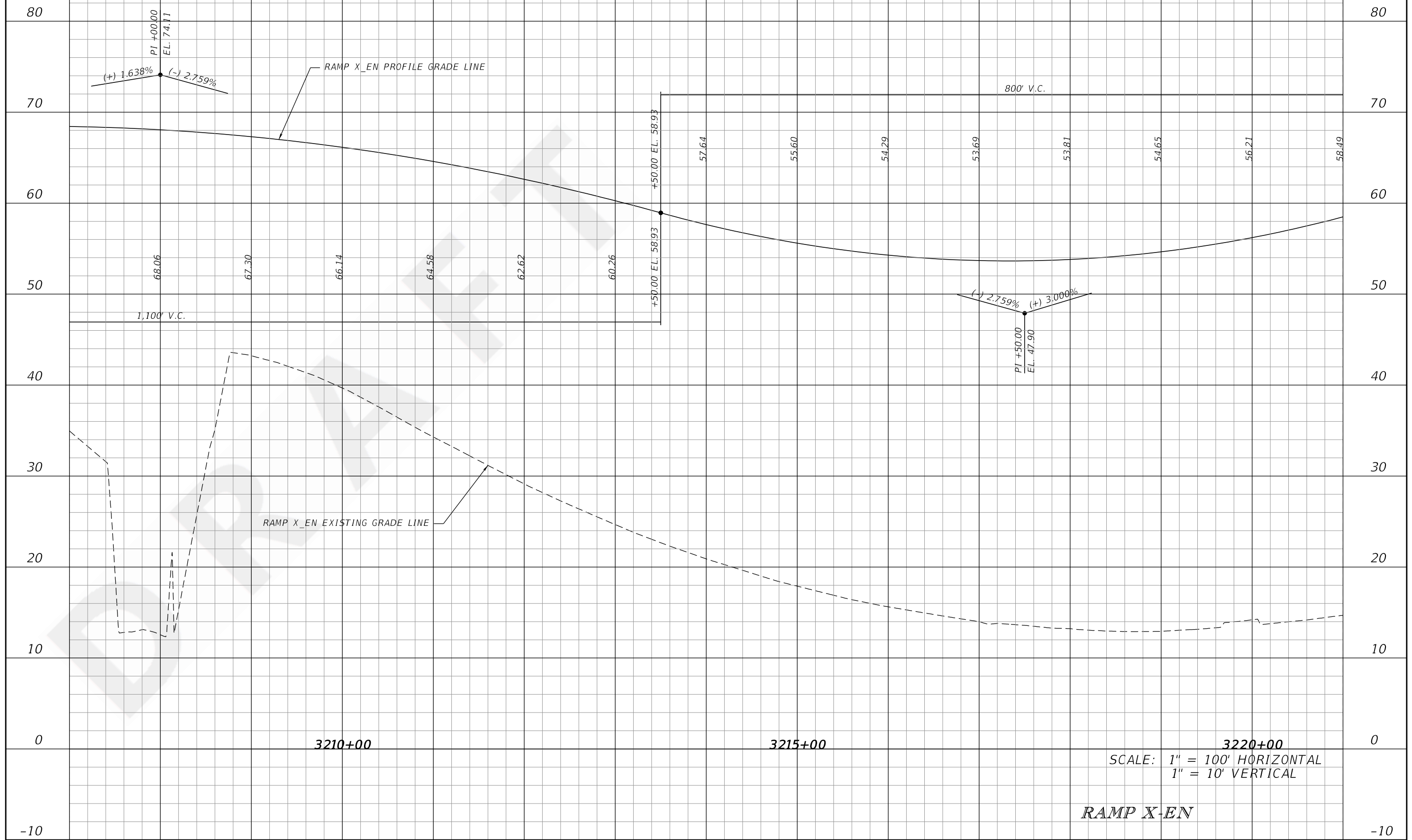
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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE		SHEET NO.
		77



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-EN

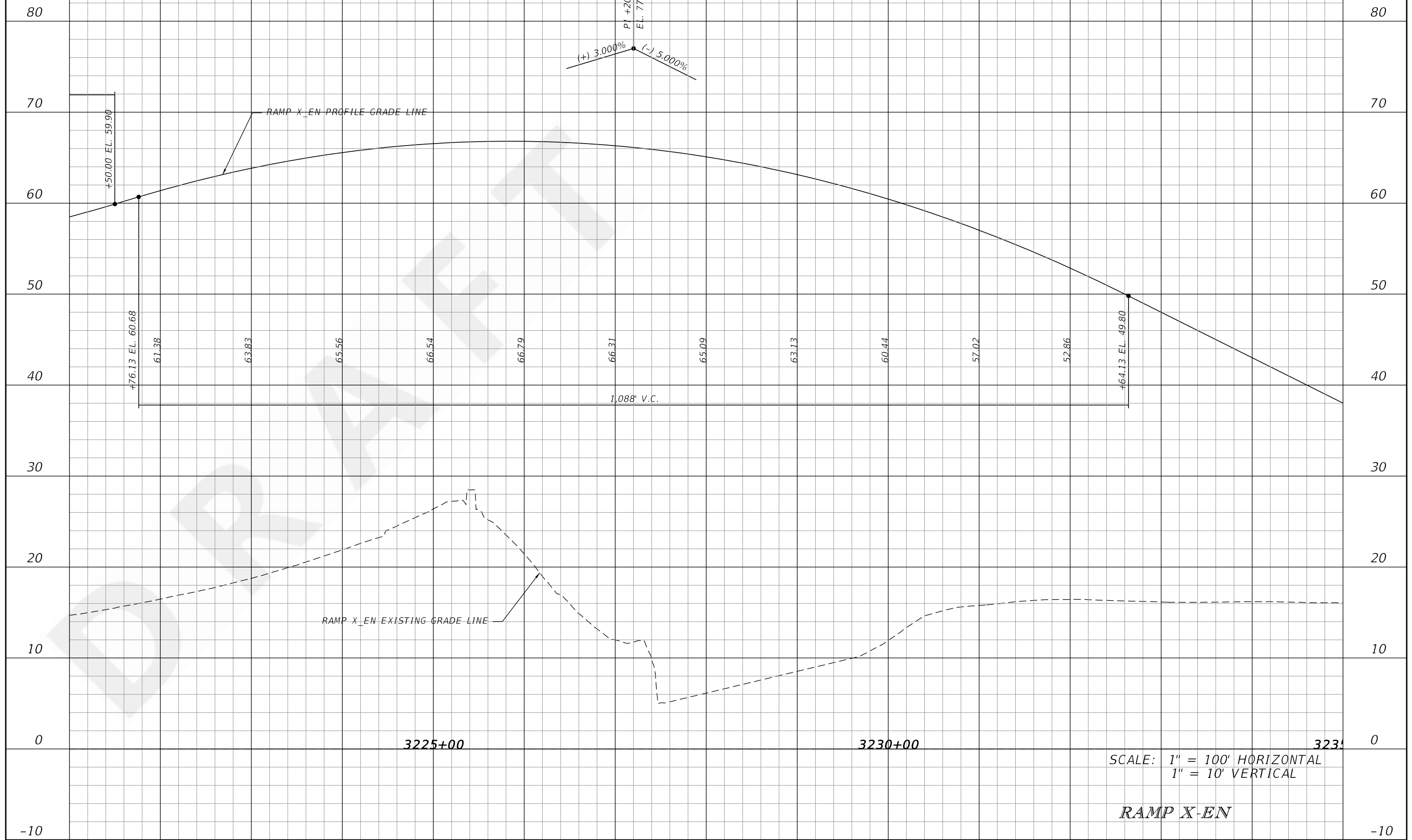
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 78
Page 577 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-EN

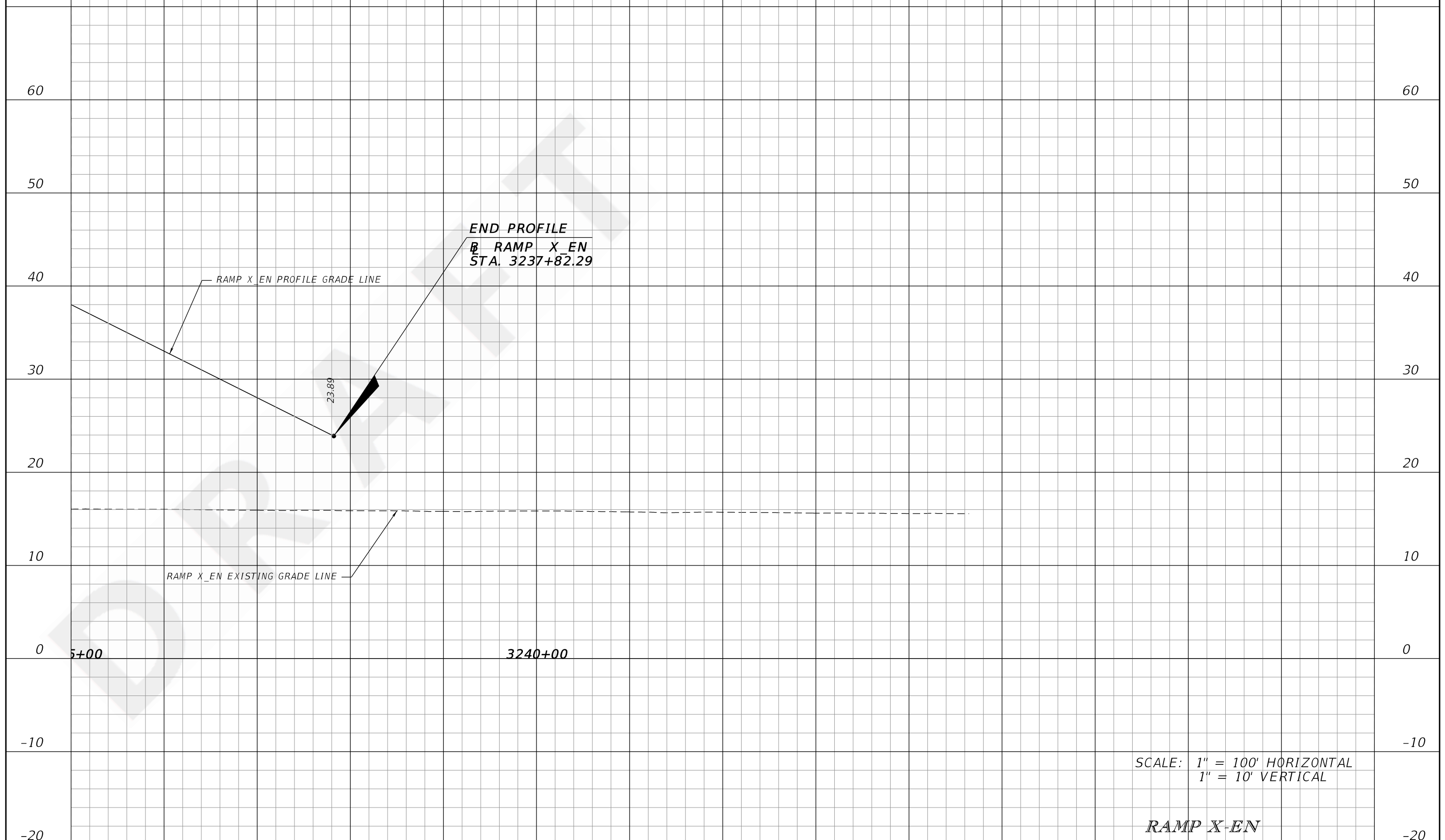
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DATE	DESCRIPTION	DATE	DESCRIPTION
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JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

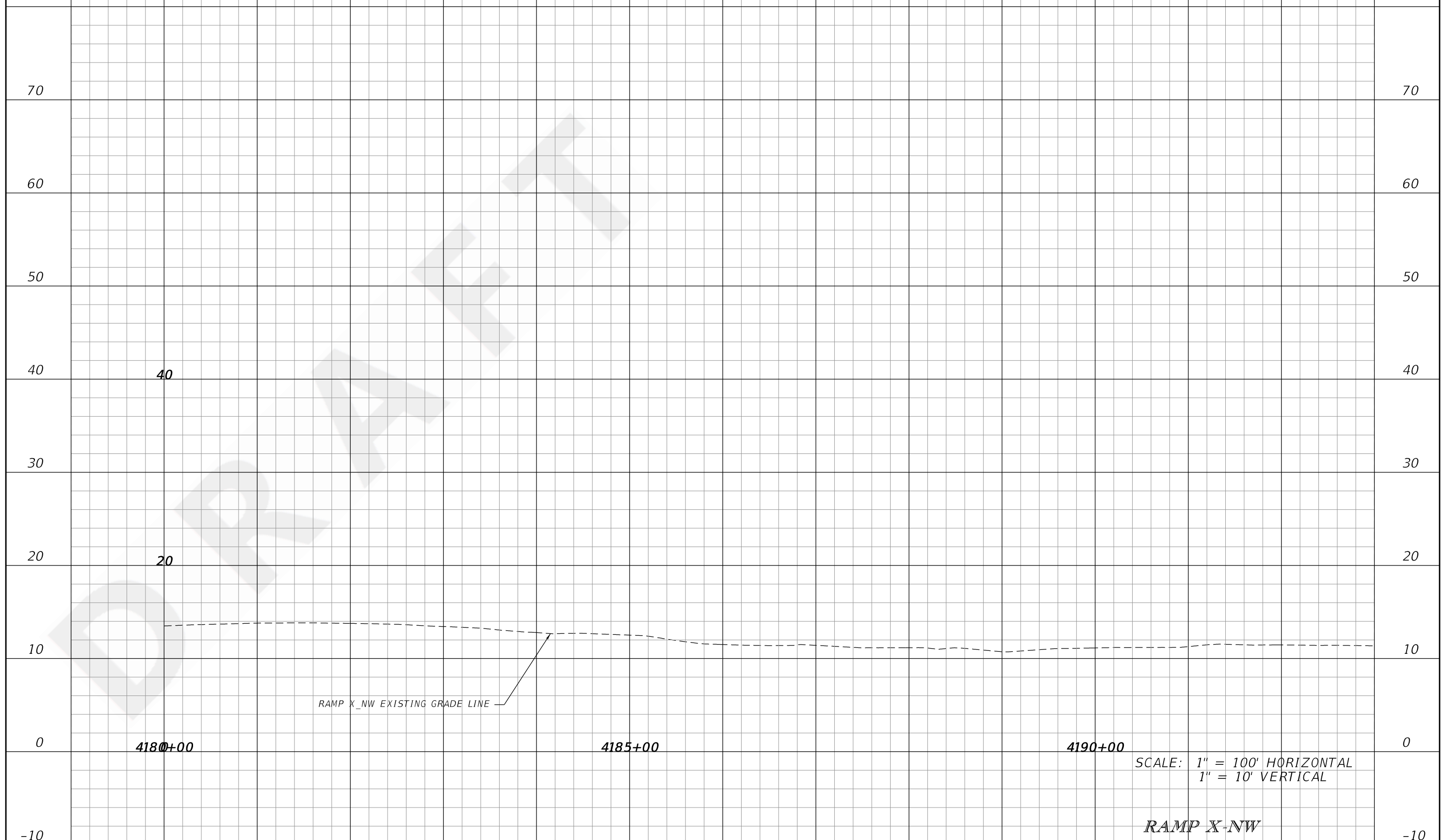
SHEET NO. 79
Page 578 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-EN

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 80
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 579 of 795	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-NW

REVISIONS		DATE		DESCRIPTION	

JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 81
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SR 9	BROWARD	436964-1-52-01	

Type 2 Categorical Exclusion

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SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-EN

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	Type 2 Categorical Exclusion

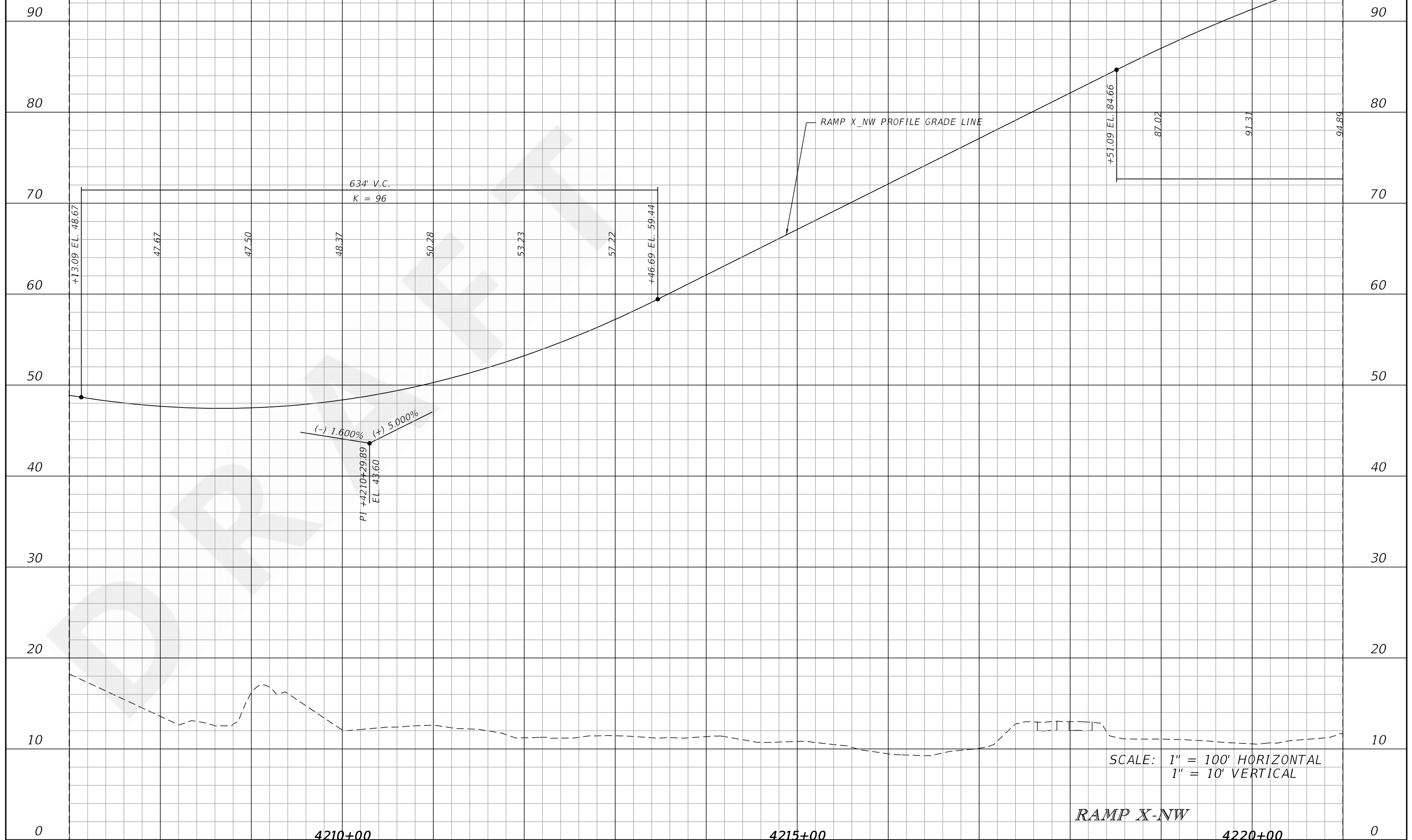
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 82

Page 581 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-NW

4210+00

4215+00

4220+00

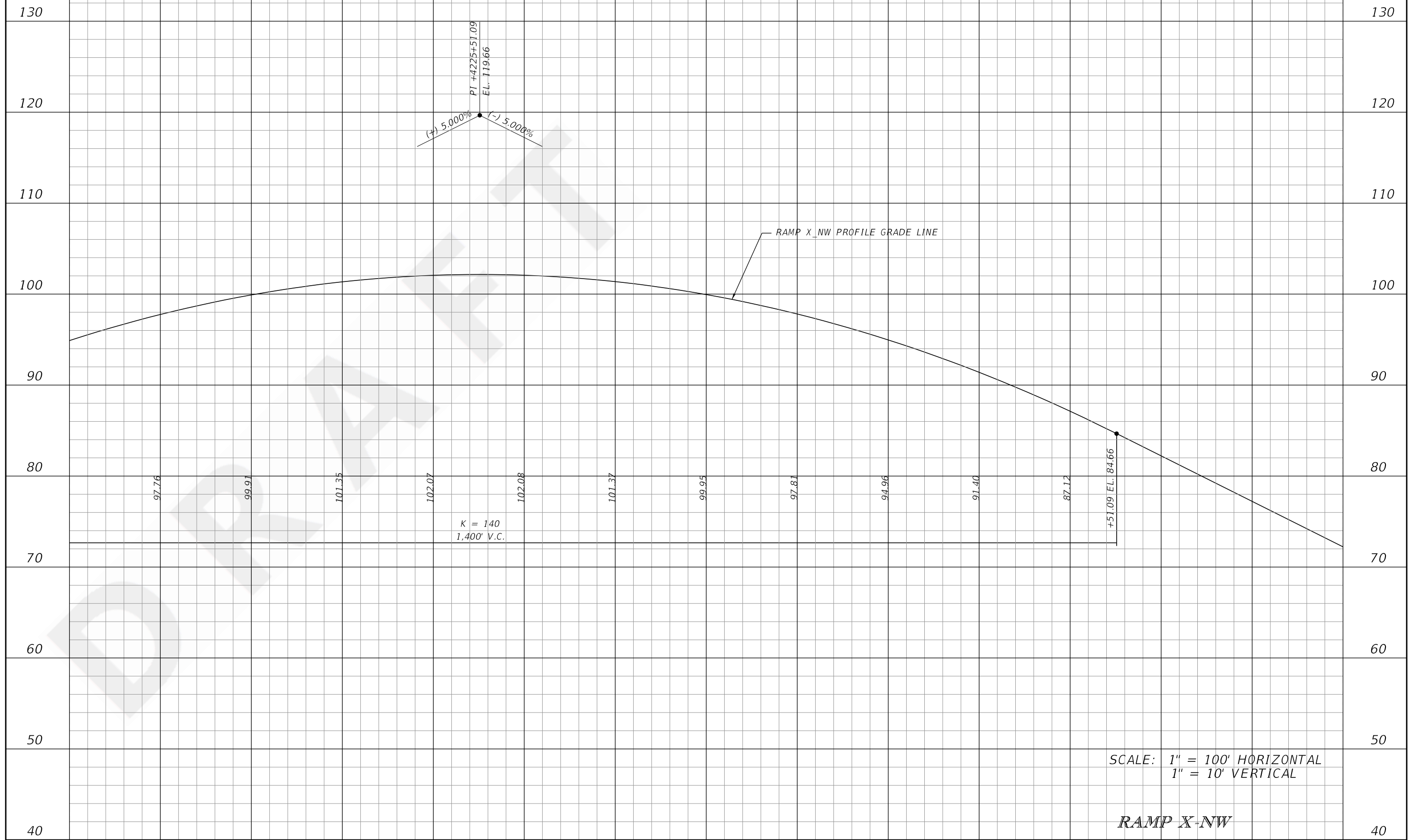
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 83
Page 582 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-NW

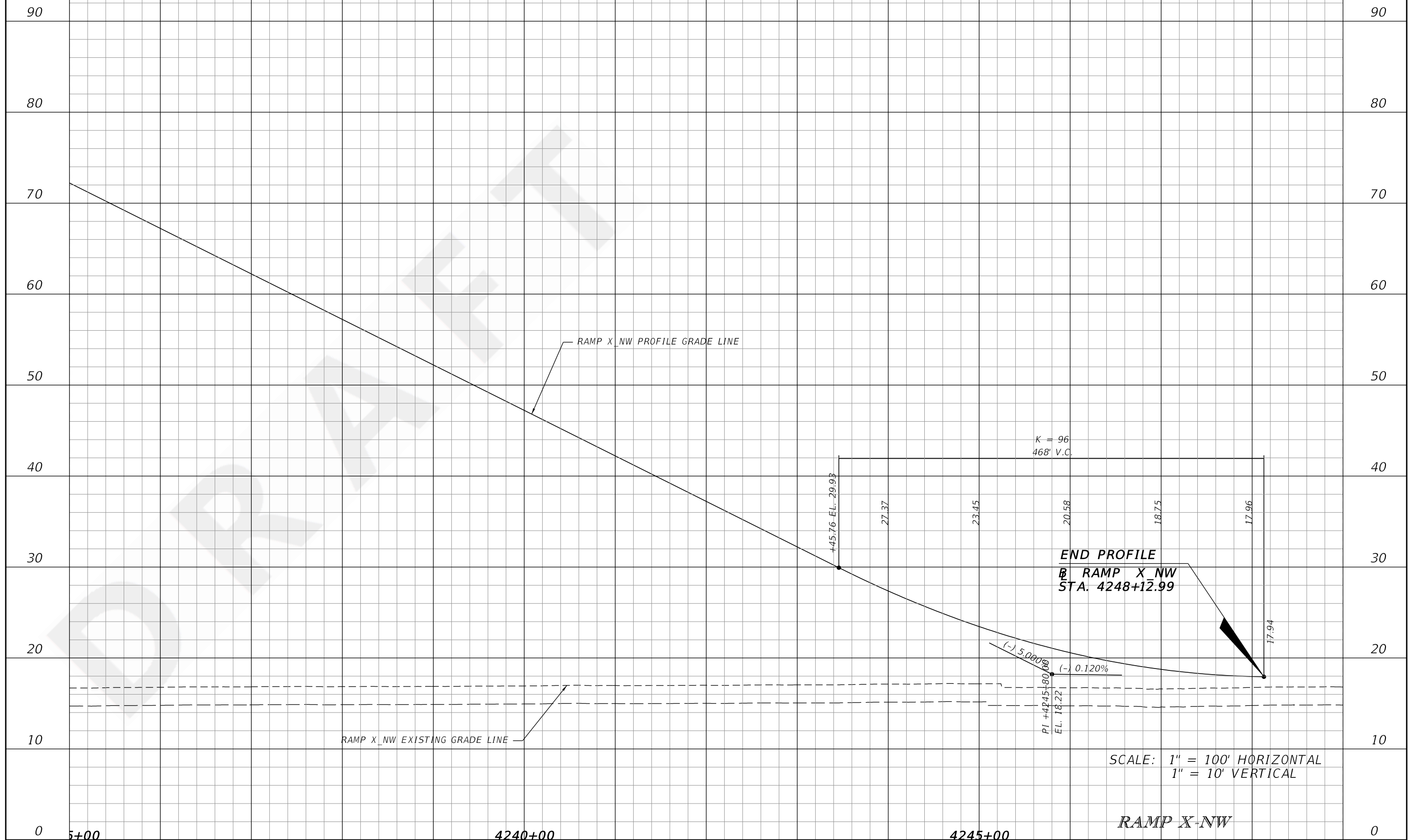
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	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 84
Page 583 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-NW

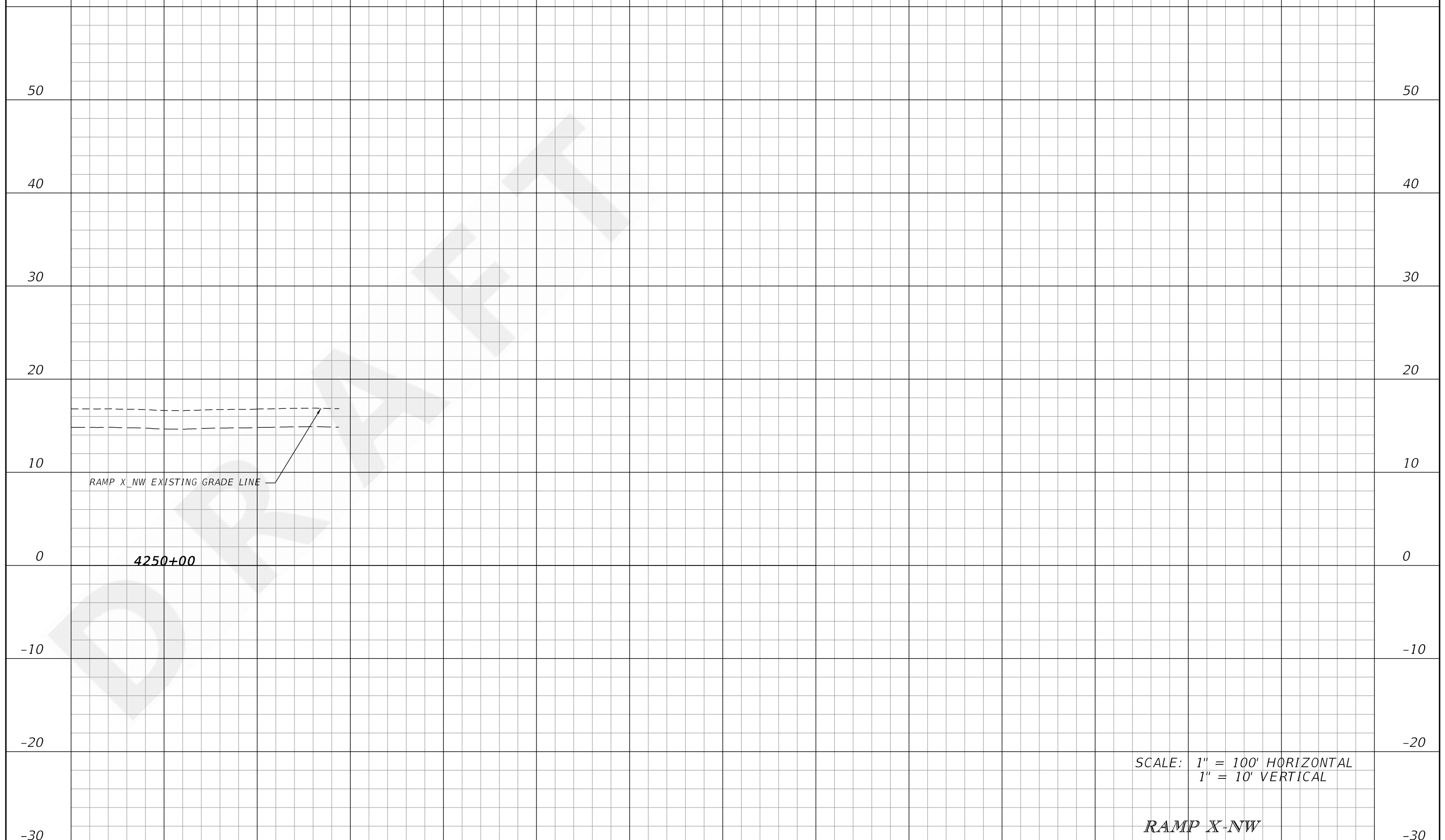
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JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
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CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 85
Page 584 of 795

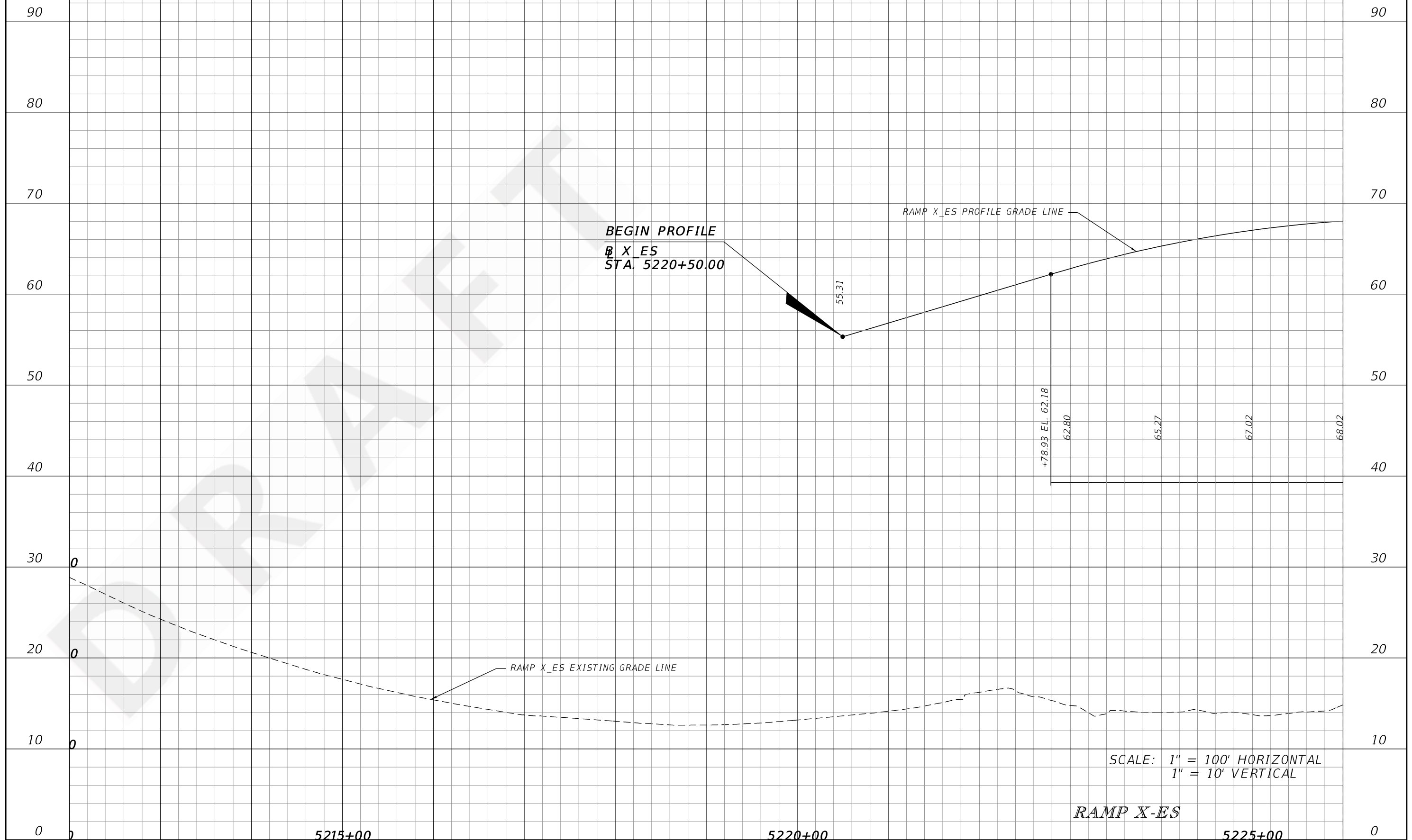


SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-NW

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DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID					
	Type 2 Categorical Exclusion							SR 9	BROWARD	436964-1-52-01	86

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500



REVISIONS	
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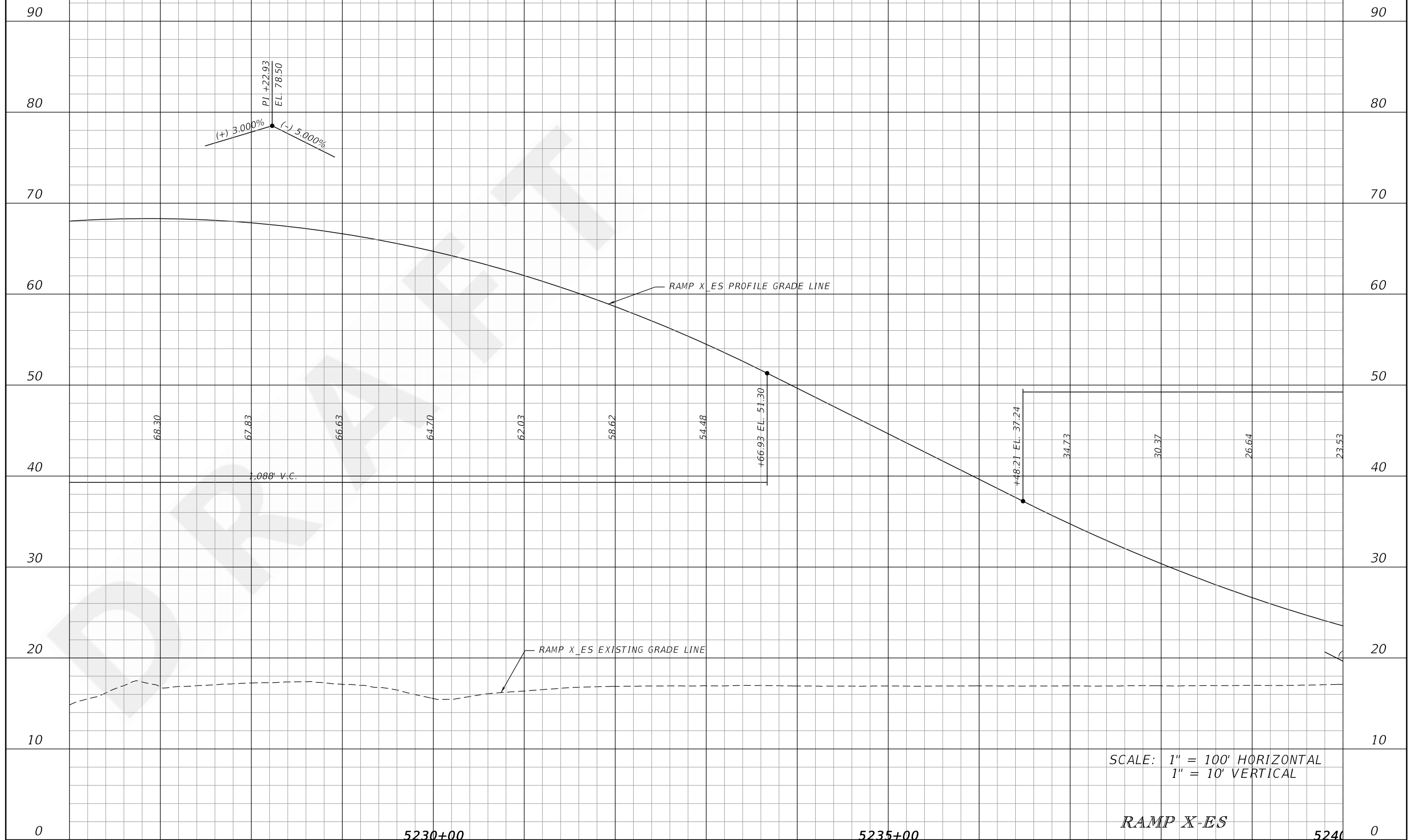
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
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 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 87

Page 586 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-ES

5230+00

5235+00

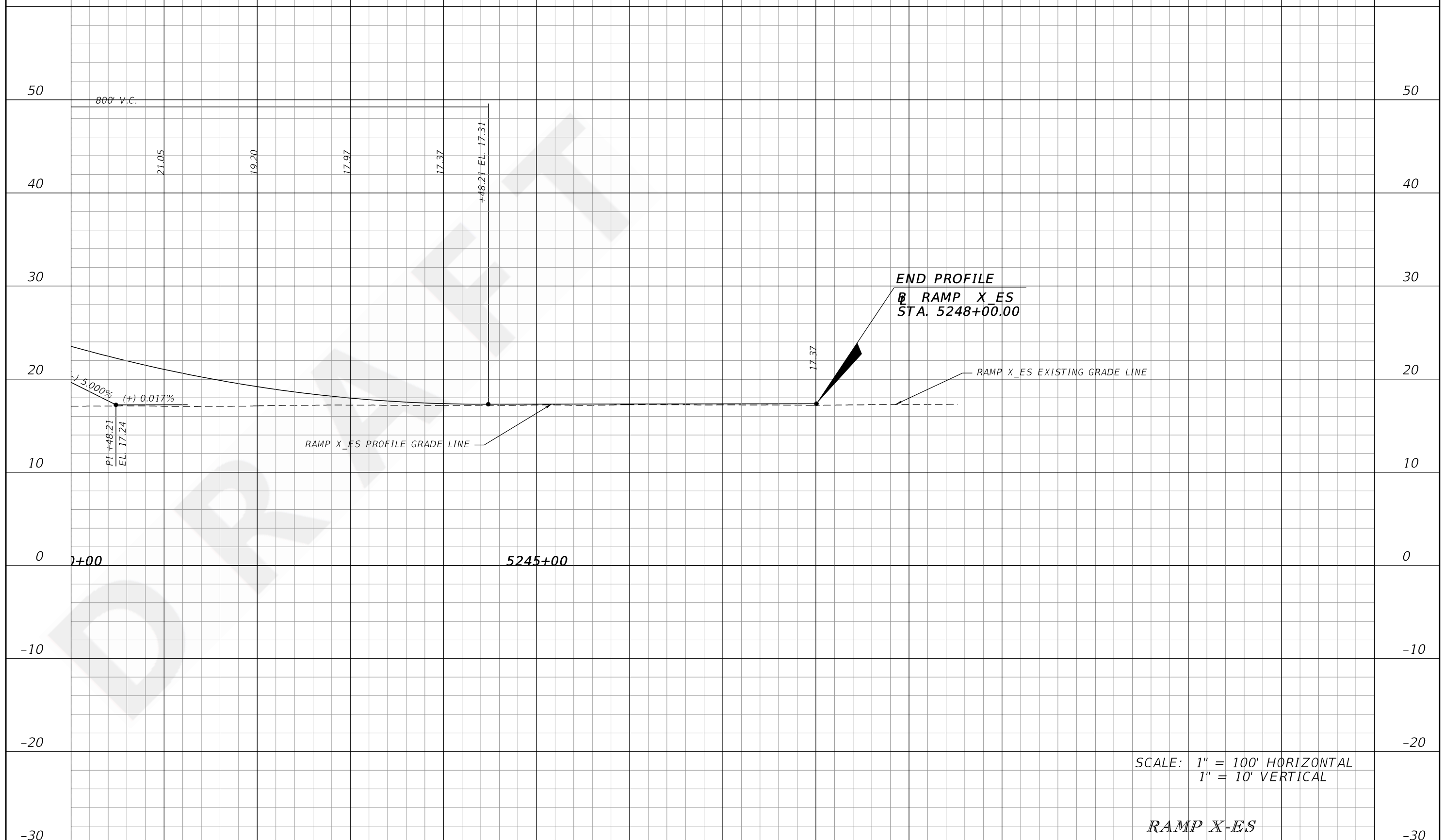
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P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

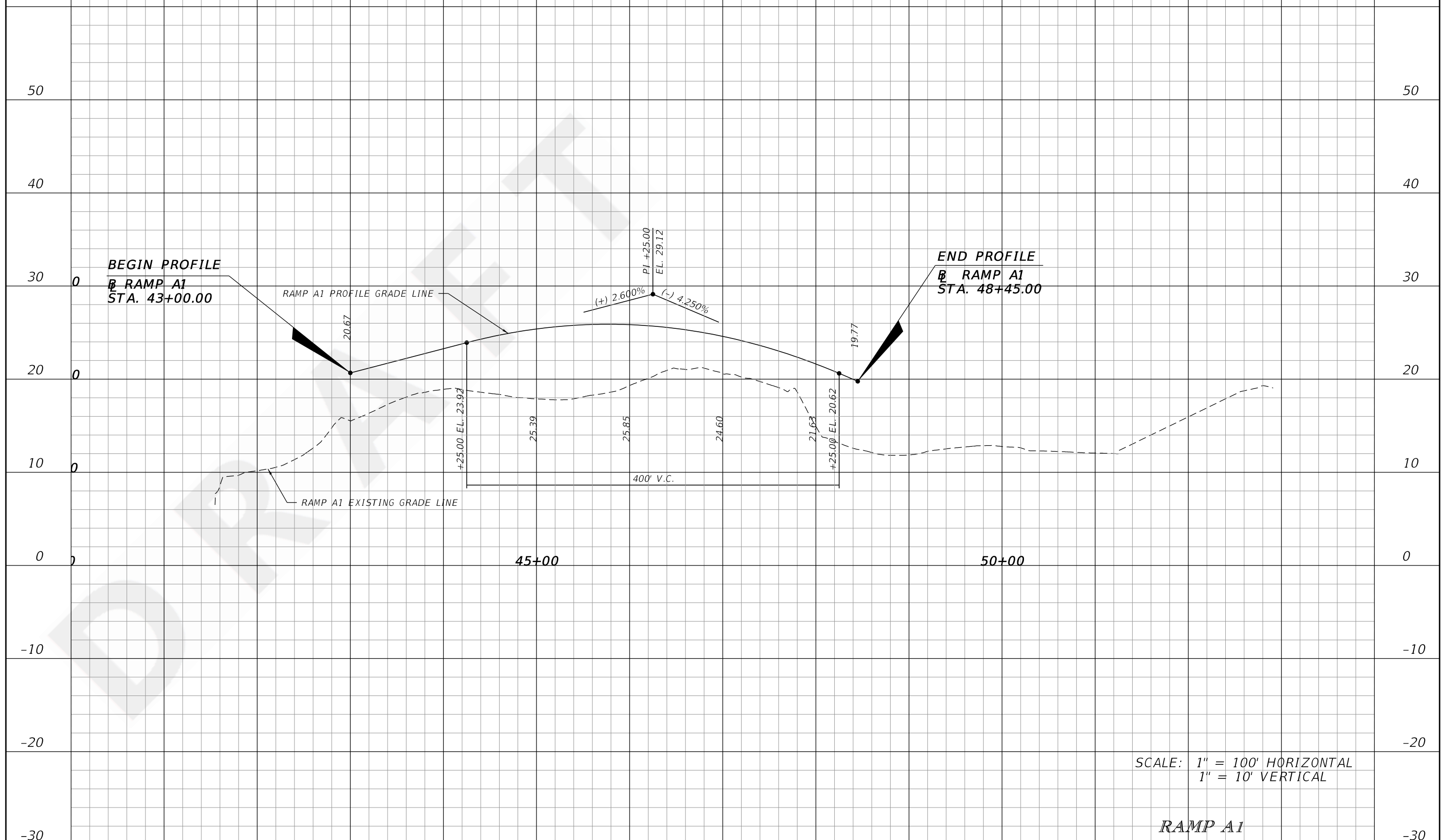
ROADWAY PROFILE		SHEET NO. 88
		Page 587 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP X-ES

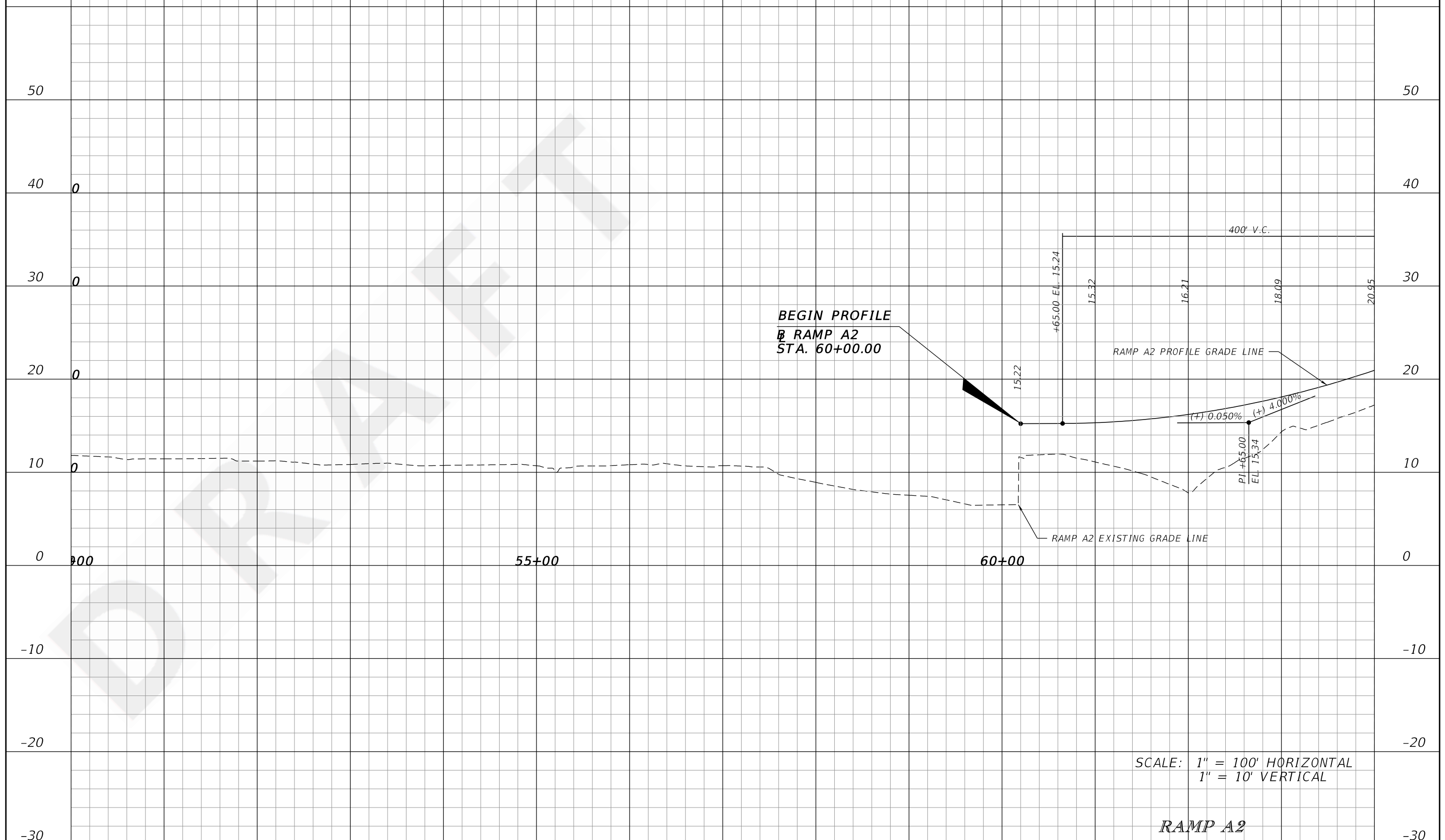
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	89	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP A1

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
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REVISIONS			
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	Type 2 Categorical Exclusion		

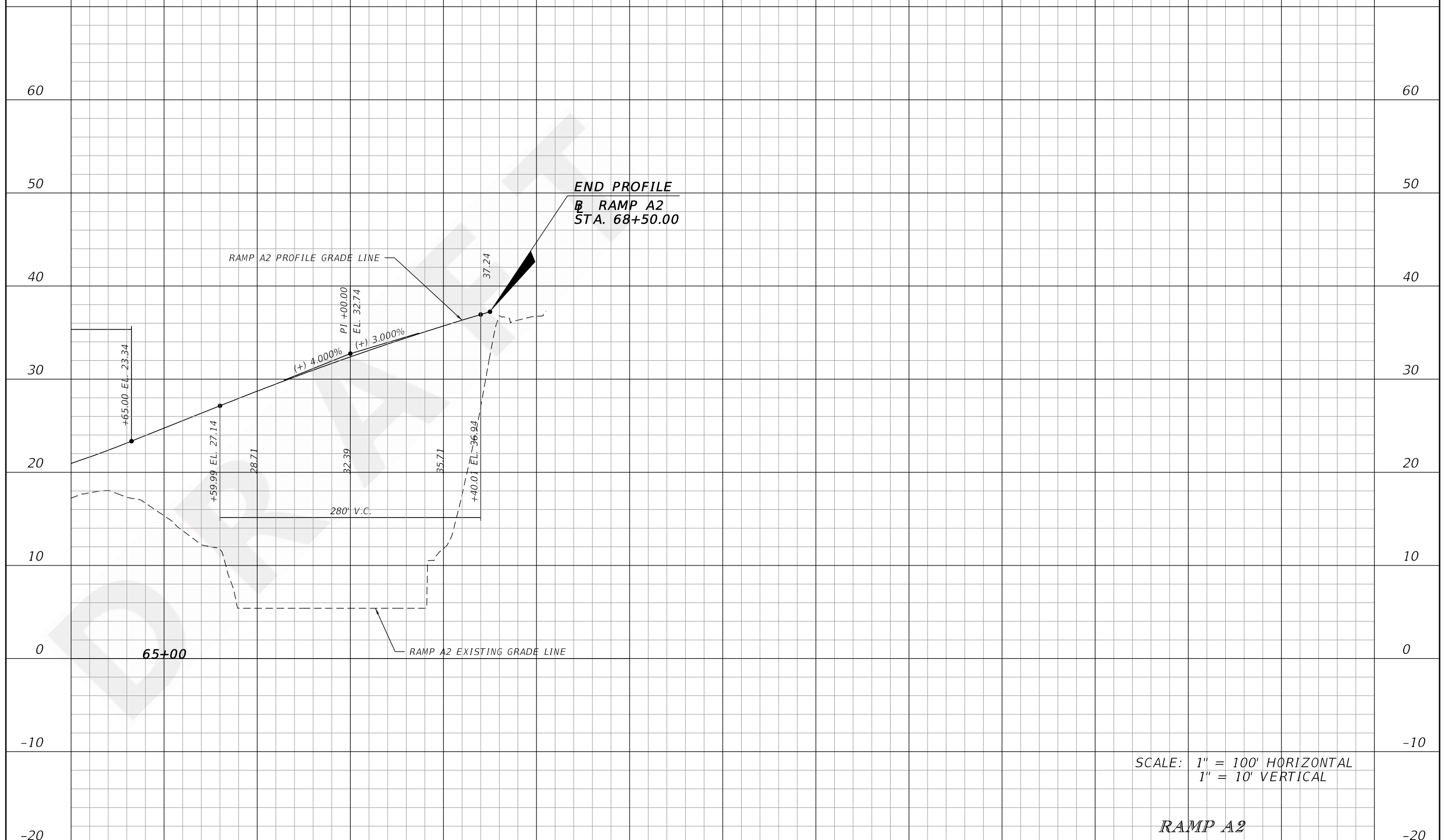
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 91

Page 590 of 795



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

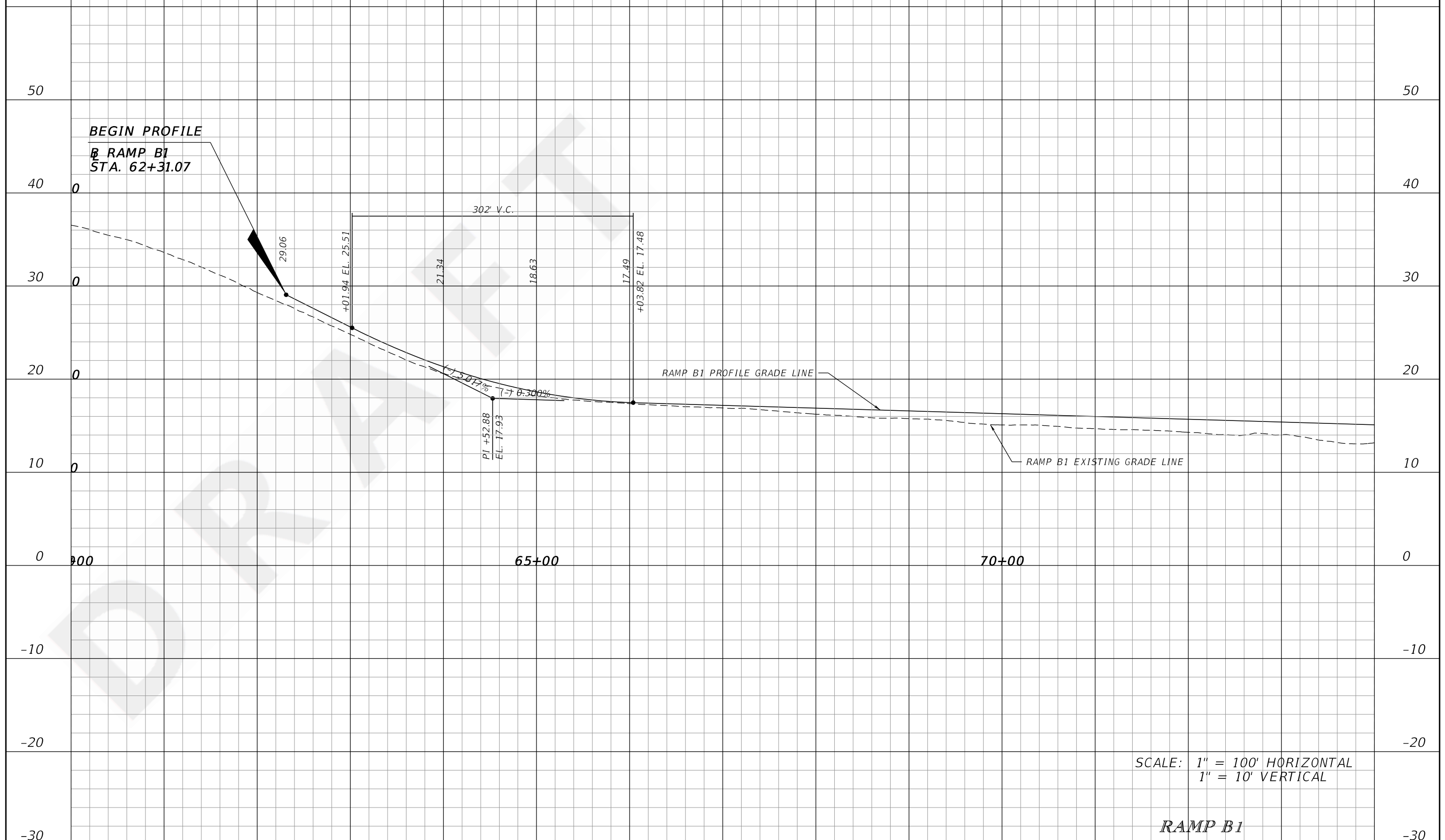
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 92

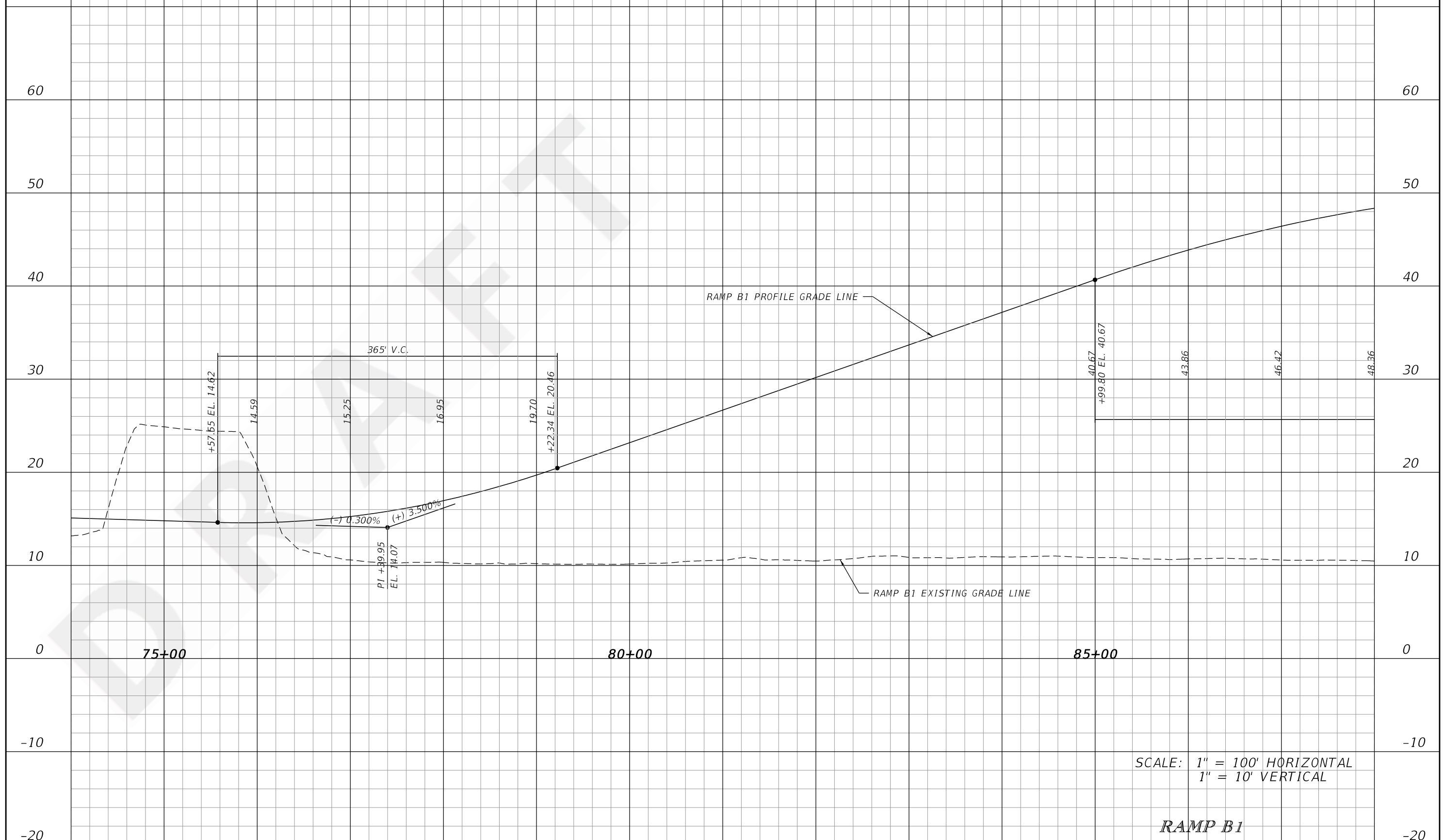
Page 591 of 795



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP B1

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 93
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 592 of 795	

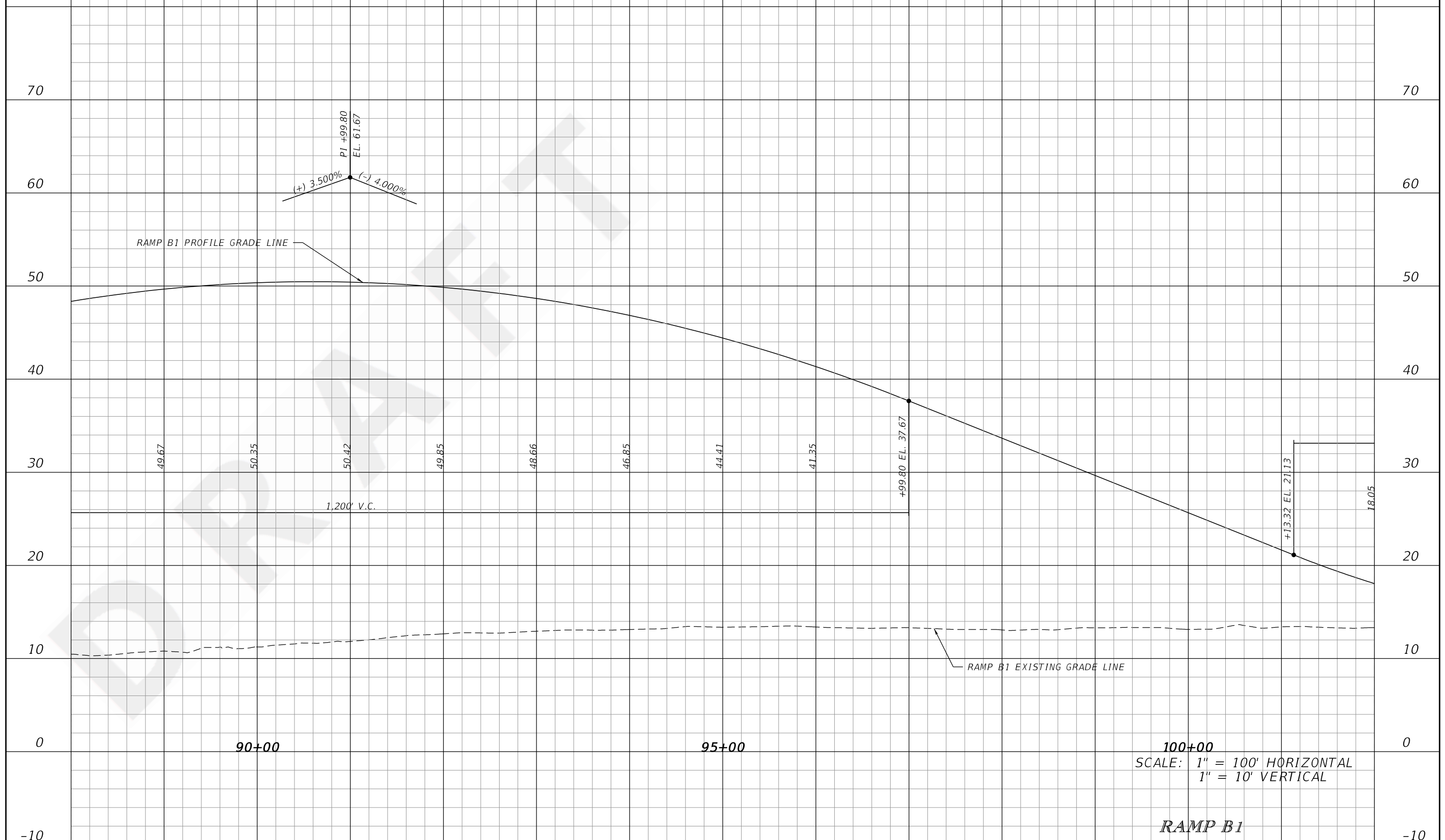


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1" = 10' VERTICAL

RAMP B1

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	

ROADWAY PROFILE



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	Type 2 Categorical Exclusion		

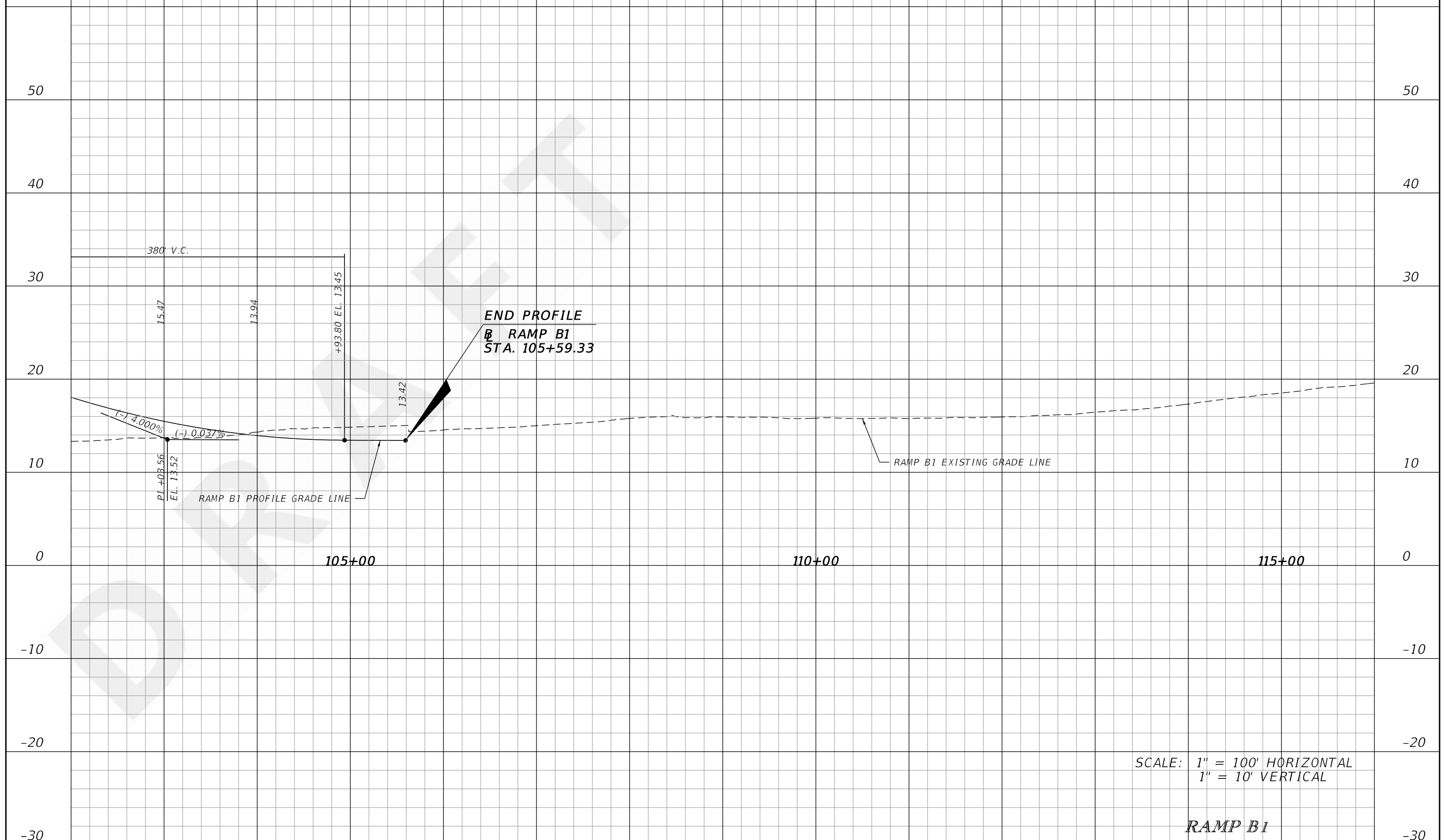
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 95

Page 594 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

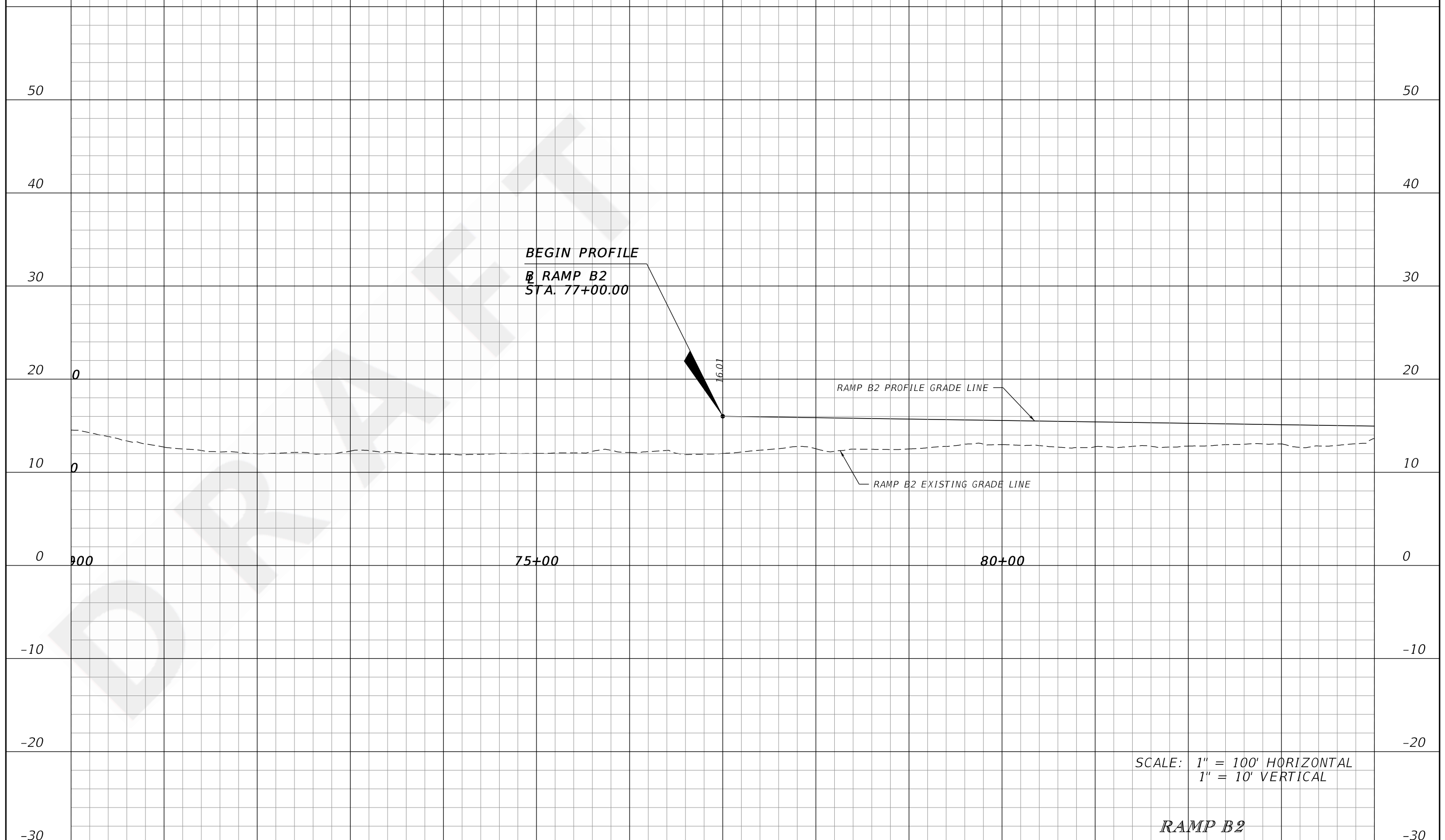
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DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

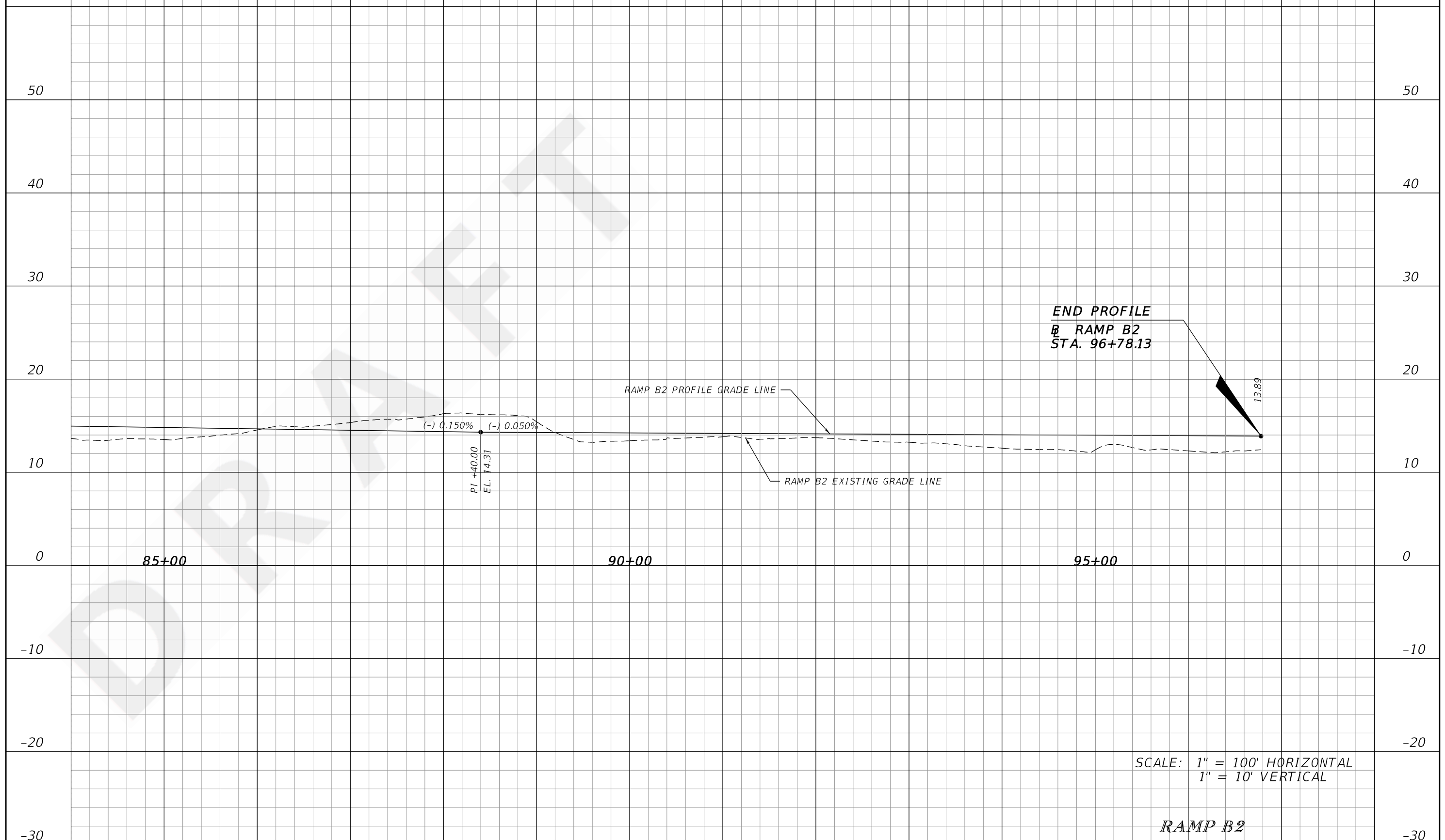
ROADWAY PROFILE		SHEET NO. 96
		Page 595 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP B2

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 596 of 795	



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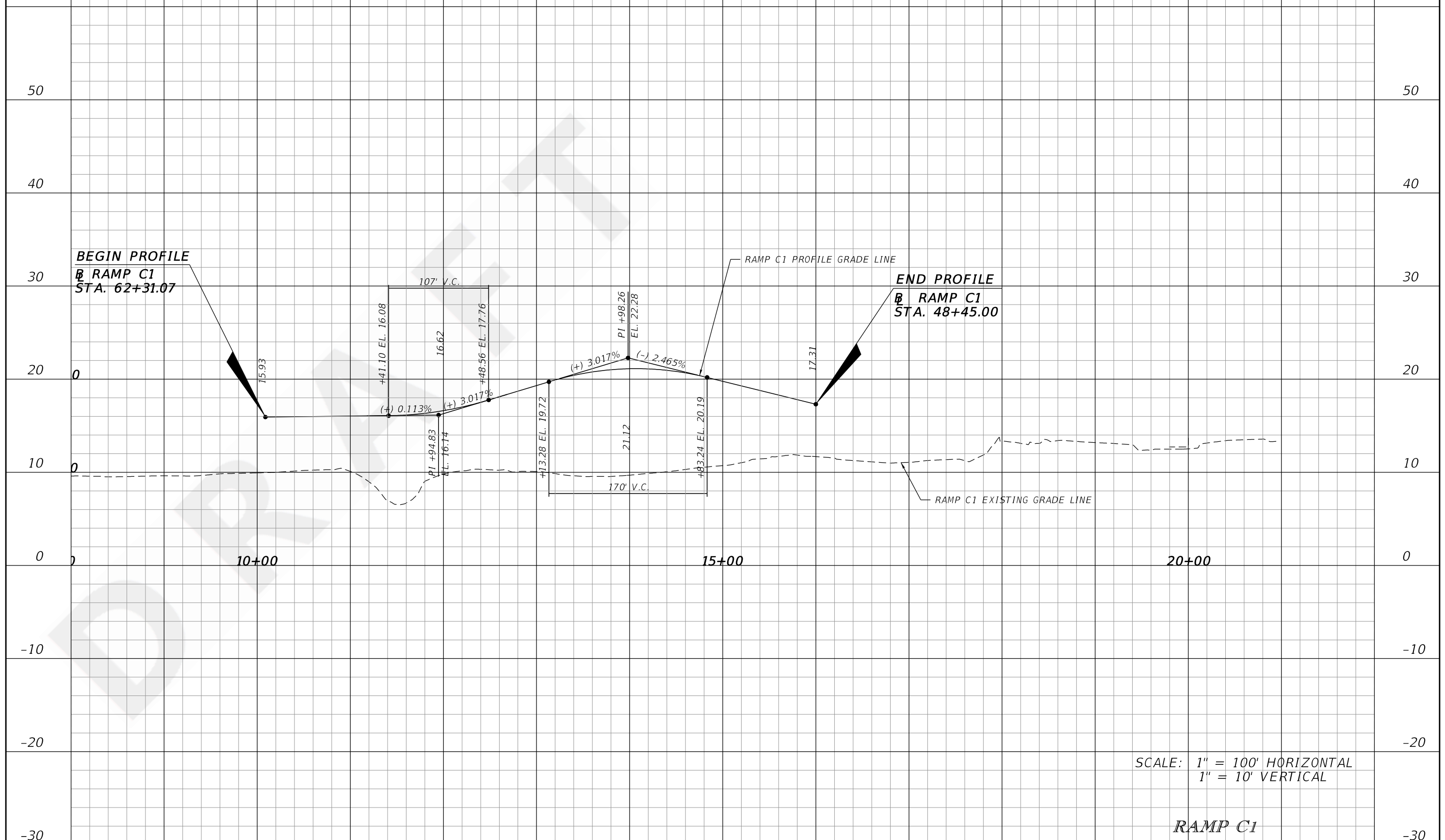
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 98

Page 597 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP C1

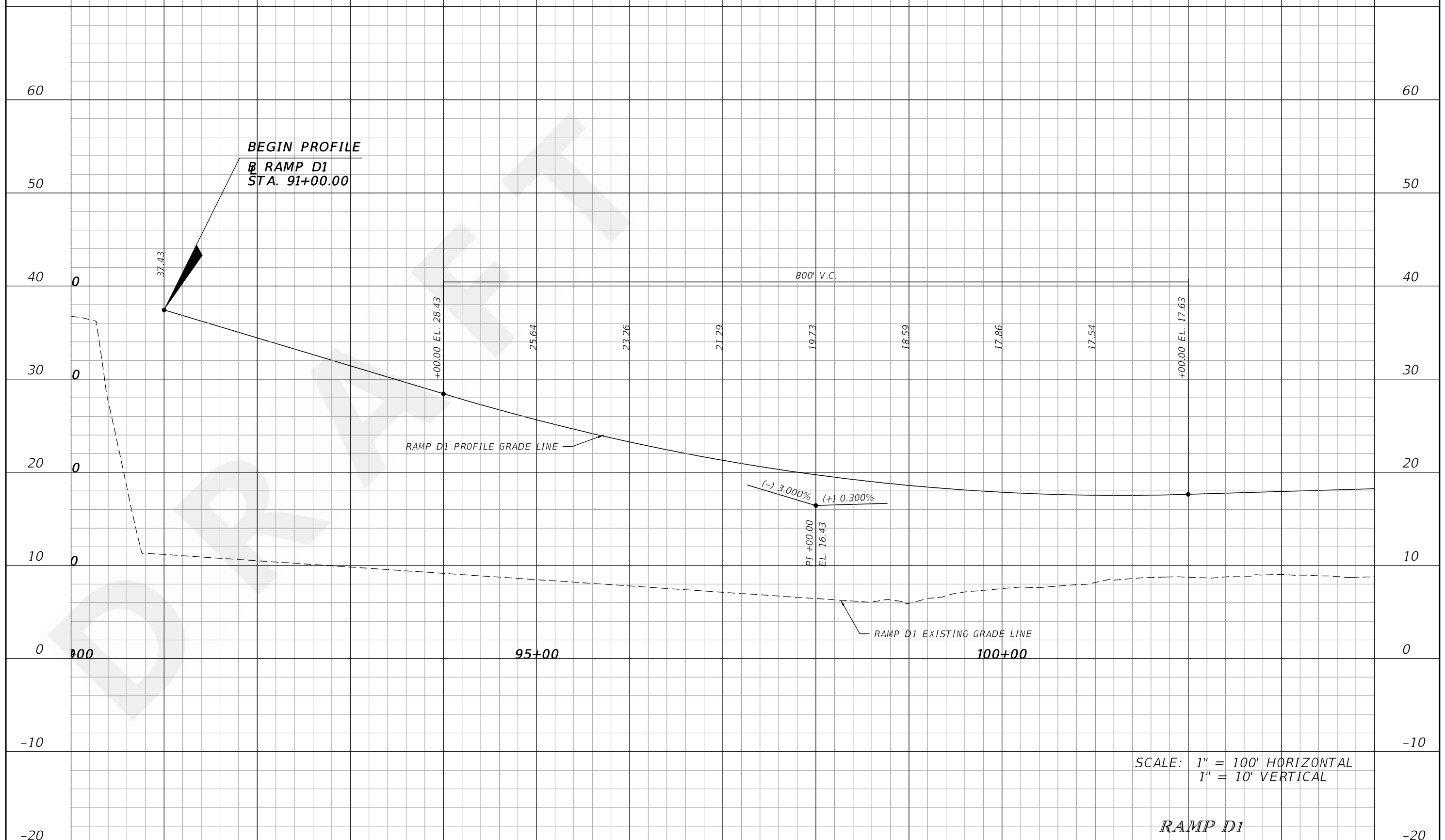
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JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

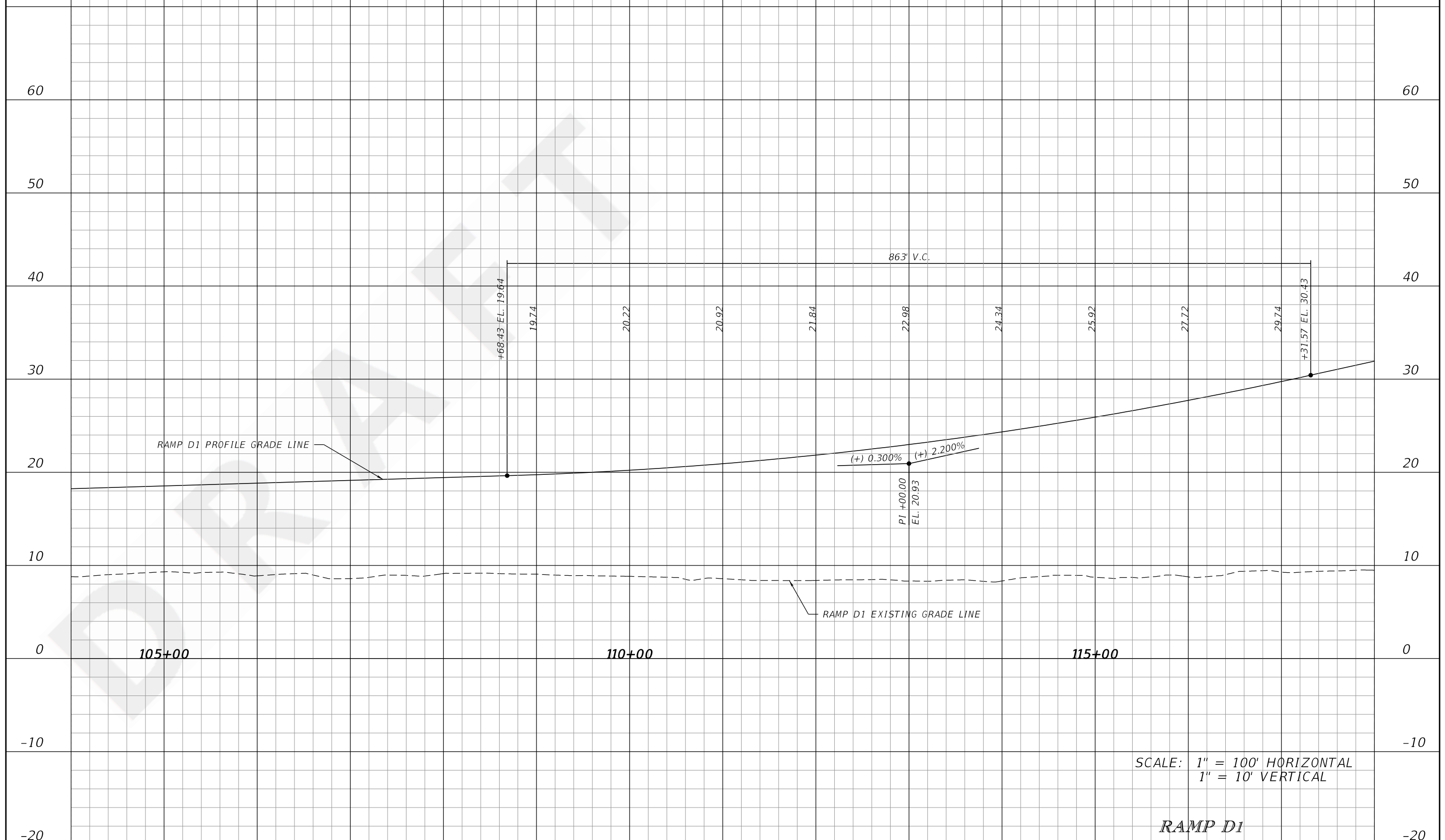
SHEET NO. 99
Page 598 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP D1

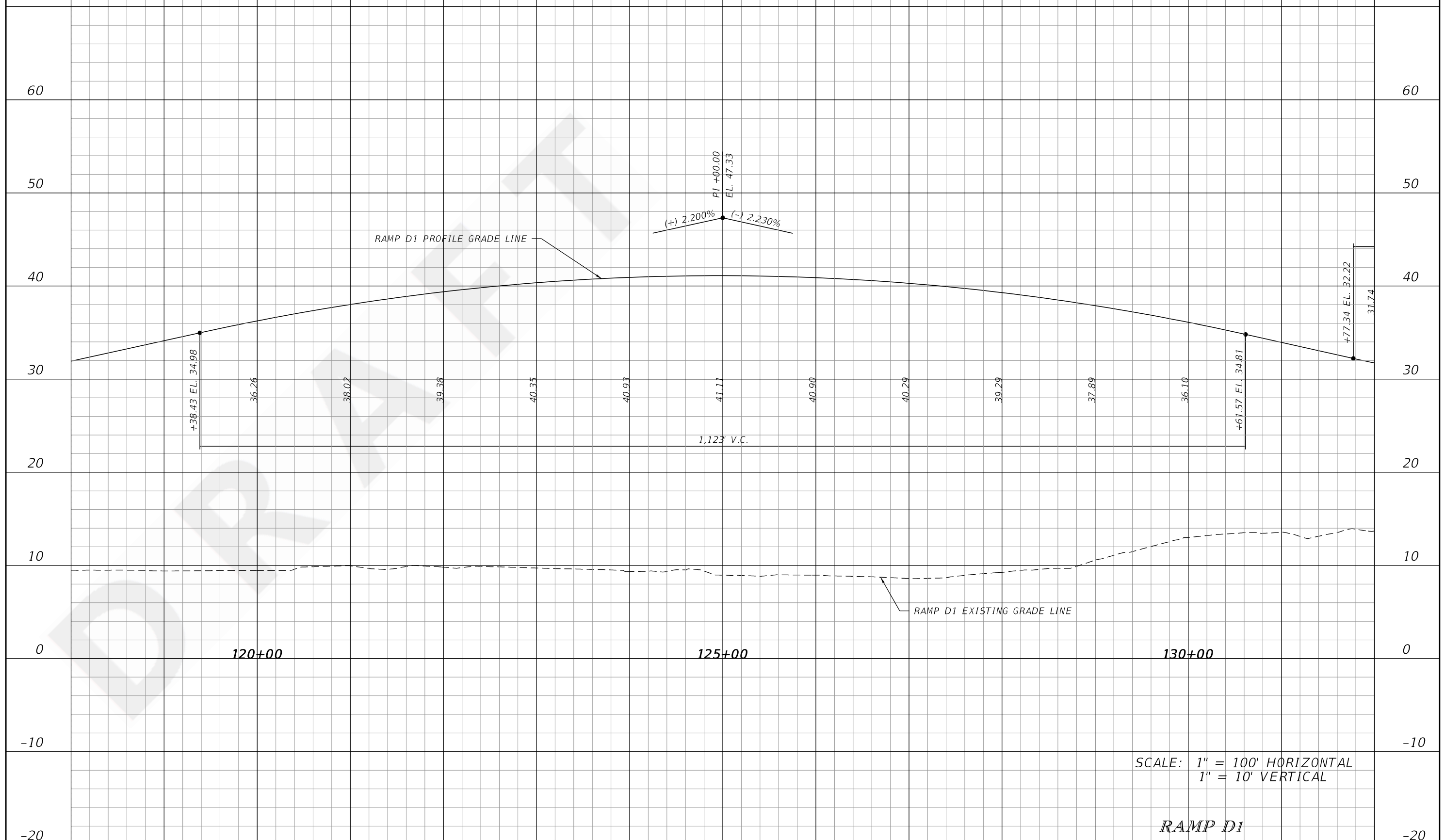
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 599 of 795	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP D1

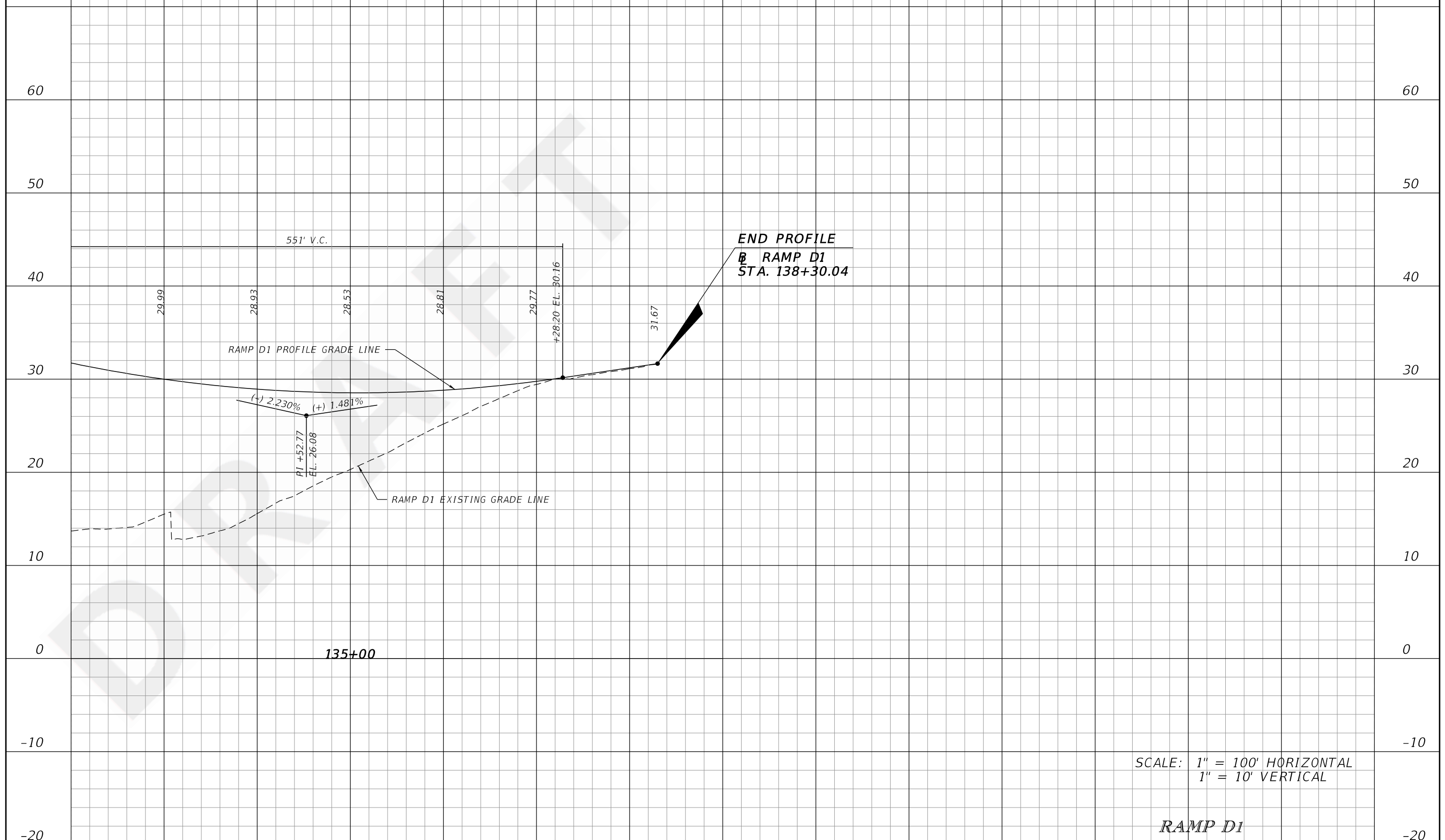
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JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500							



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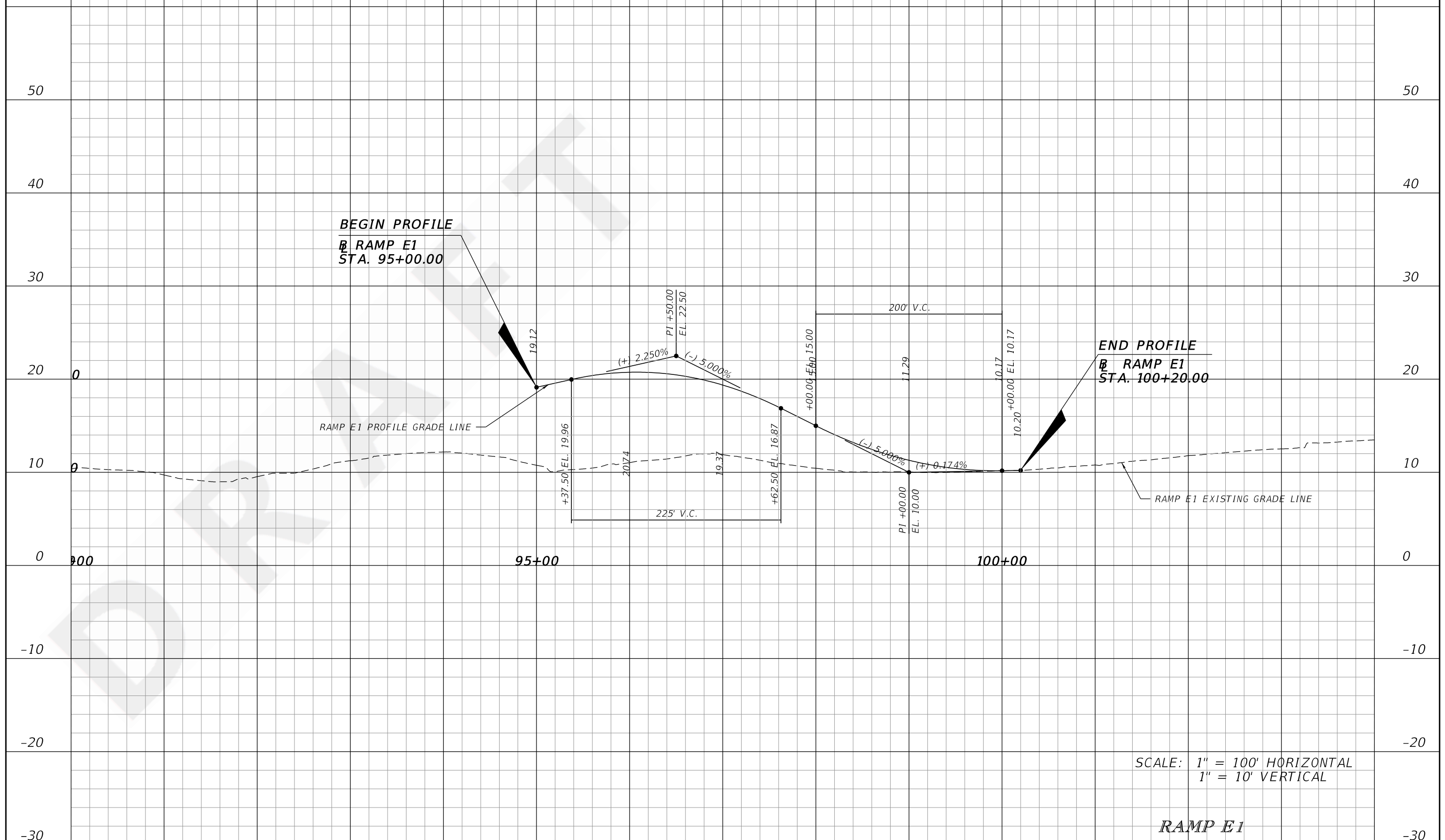
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	102



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RAMP D1

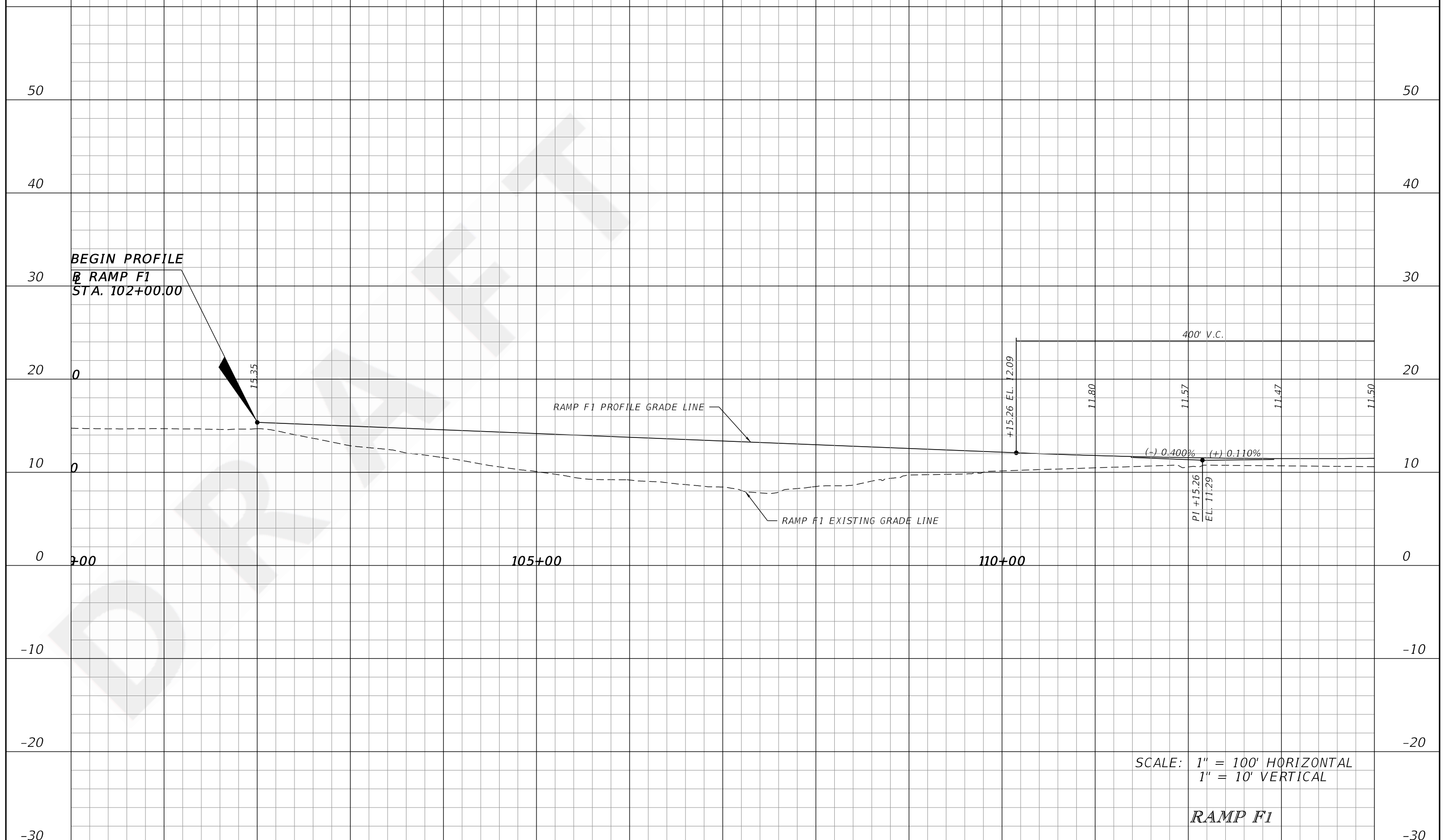
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	103	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

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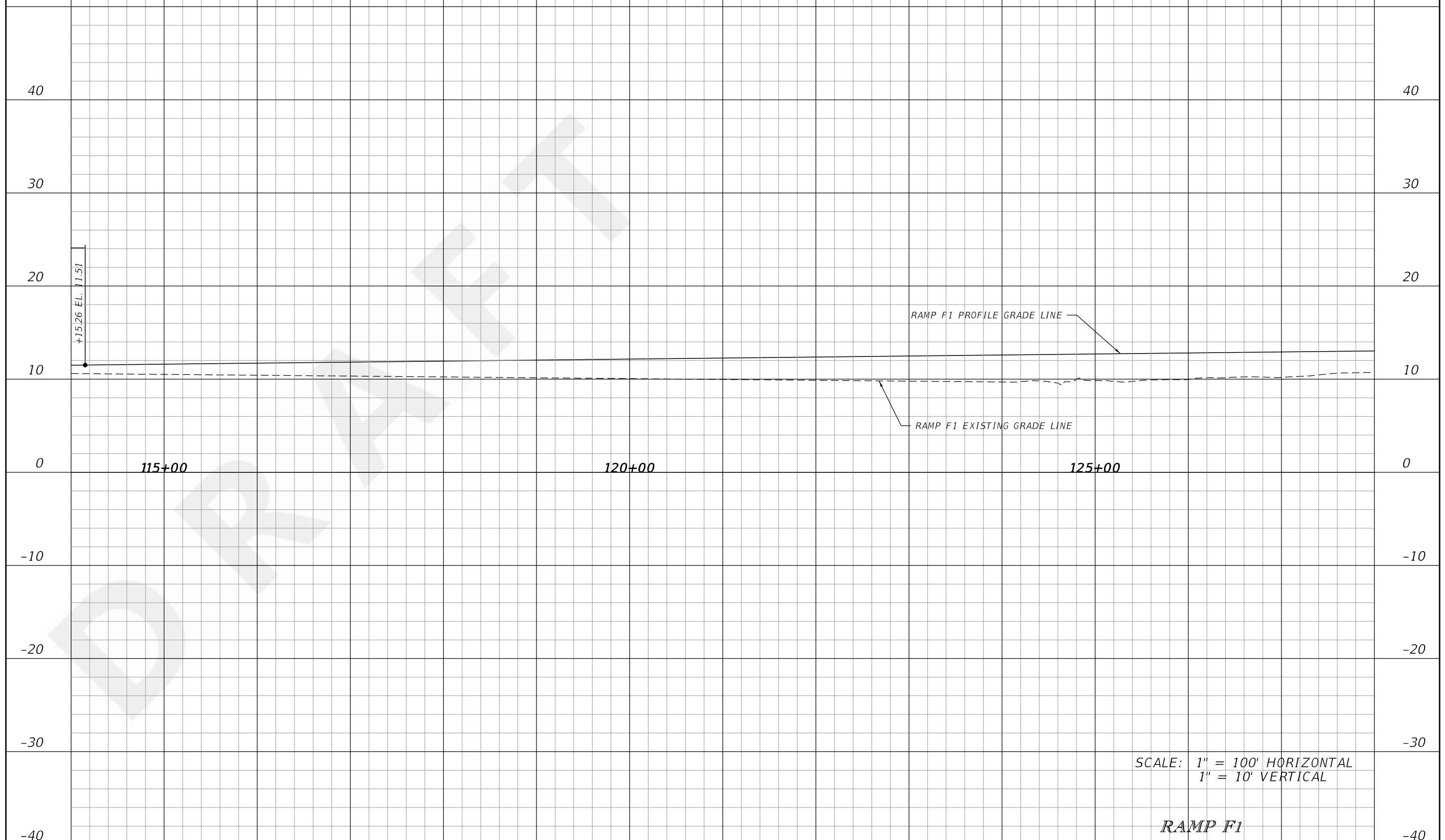
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 603 of 795	



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP F1

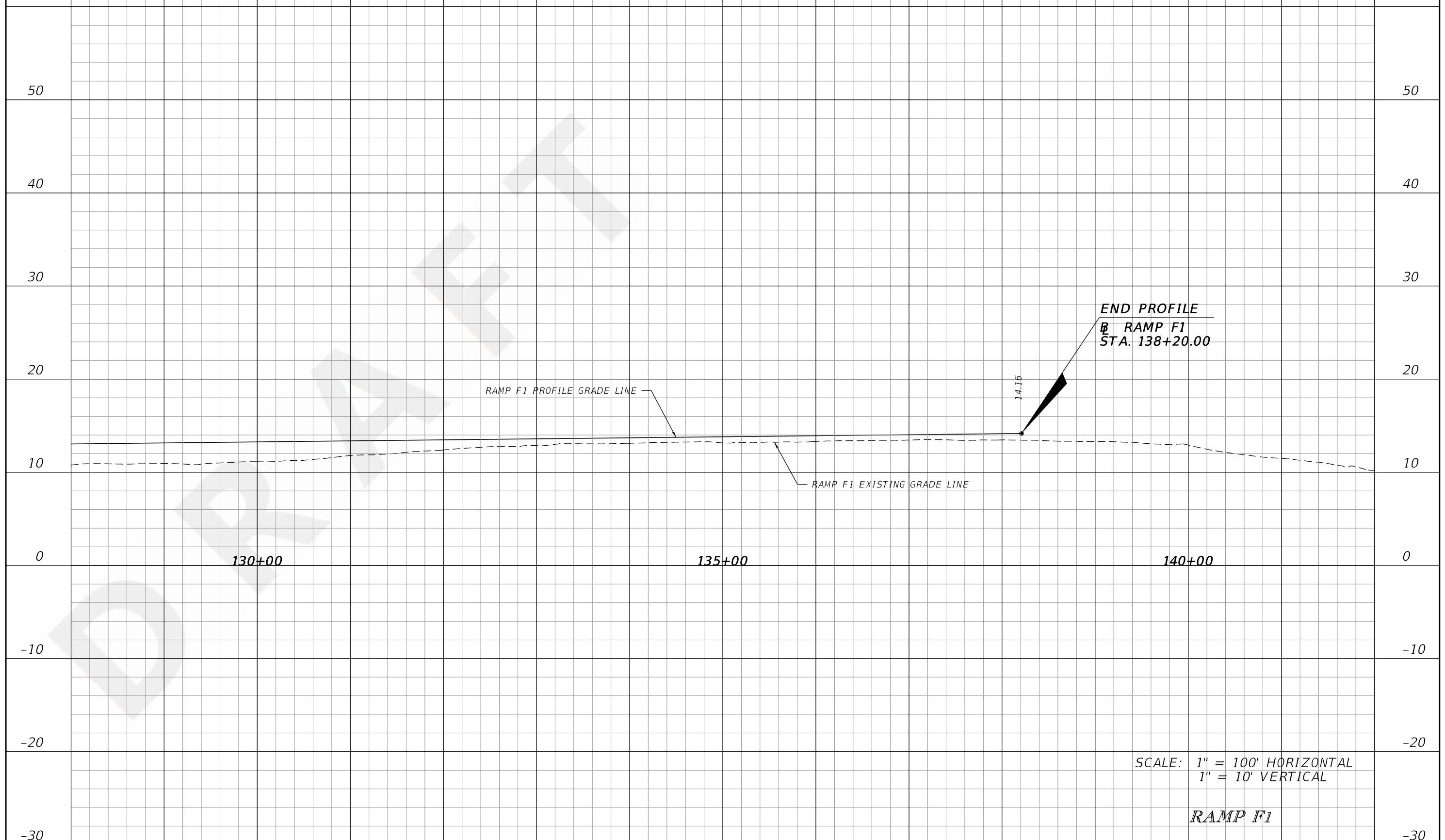
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	ROADWAY PROFILE Page 604 of 795	



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP F1

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DATE	DESCRIPTION																								
	Type 2 Categorical Exclusion																								
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION																									
ROAD NO.	COUNTY	FINANCIAL PROJECT ID																							
SR 9	BROWARD	436964-1-52-01																							
ROADWAY PROFILE																									
SHEET NO.																									
106																									



END PROFILE
 RAMP F1
 STA. 138+20.00

RAMP F1 PROFILE GRADE LINE

RAMP F1 EXISTING GRADE LINE

14.16

130+00

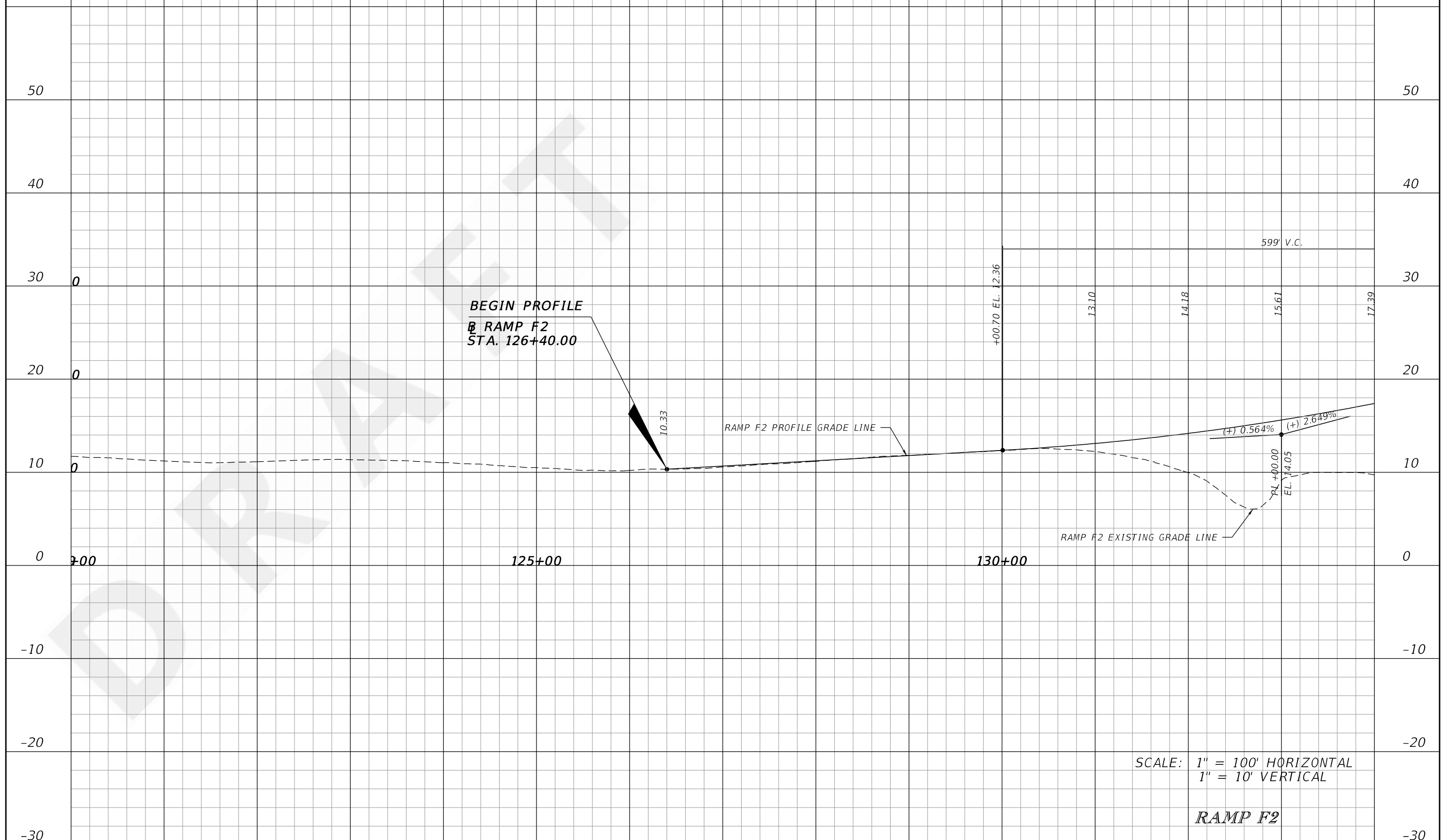
135+00

140+00

SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP F1

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REVISIONS		DATE	DESCRIPTION													
Type 2 Categorical Exclusion																
ROAD NO.	COUNTY	FINANCIAL PROJECT ID														
SR 9	BROWARD	436964-1-52-01														



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP F2

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

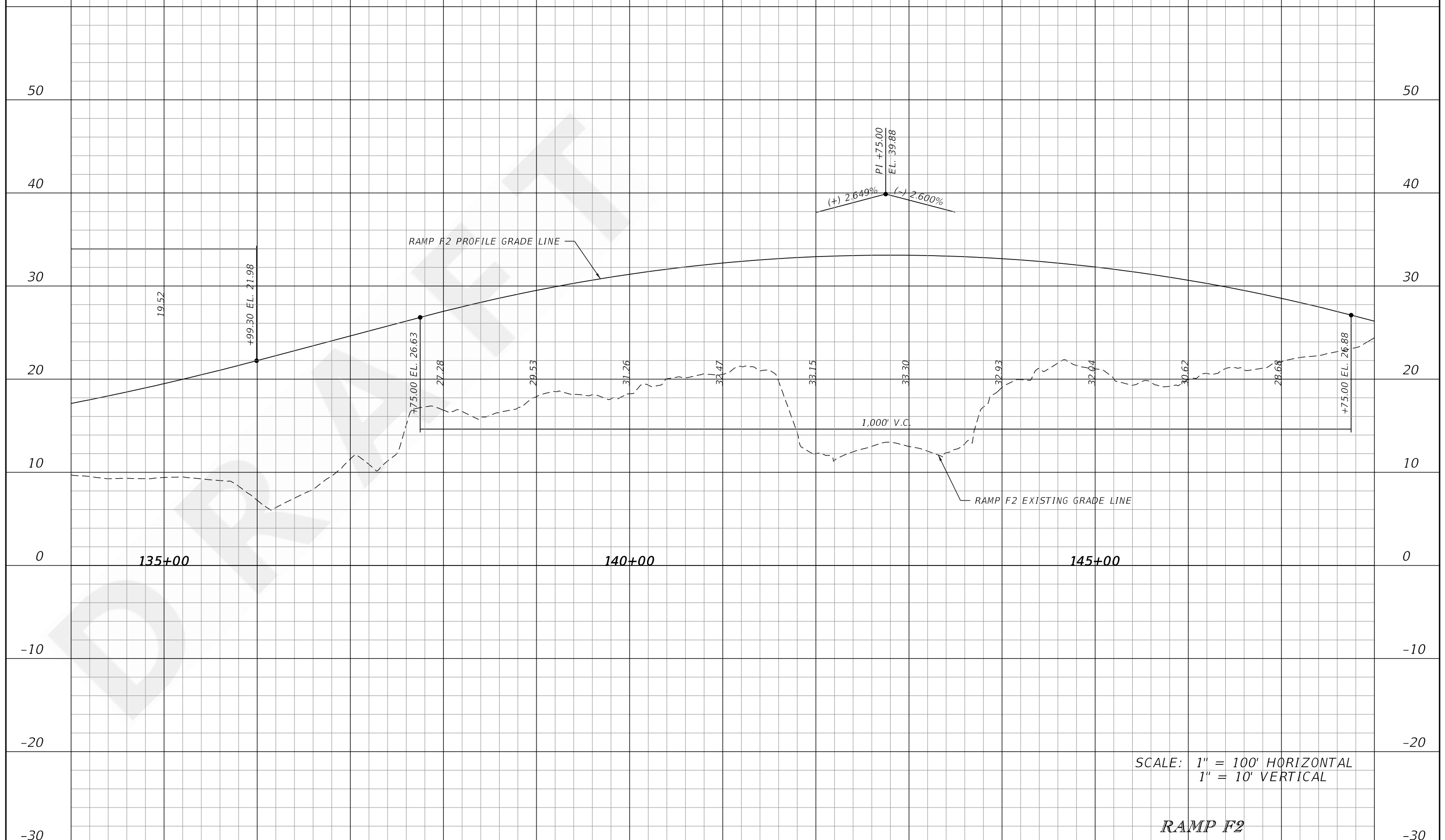
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 108

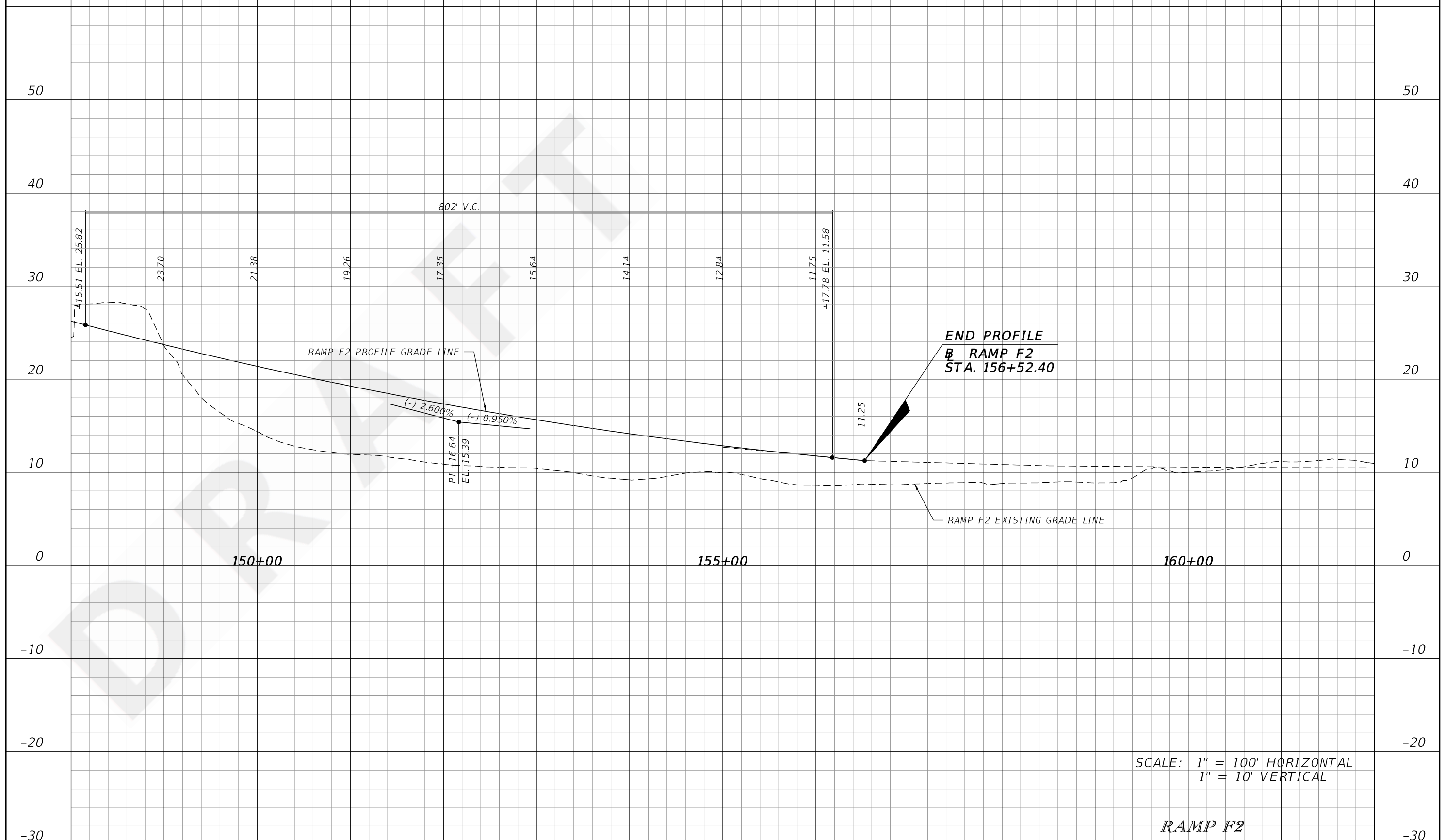
Page 607 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP F2

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 109
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	Page 608 of 795	



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

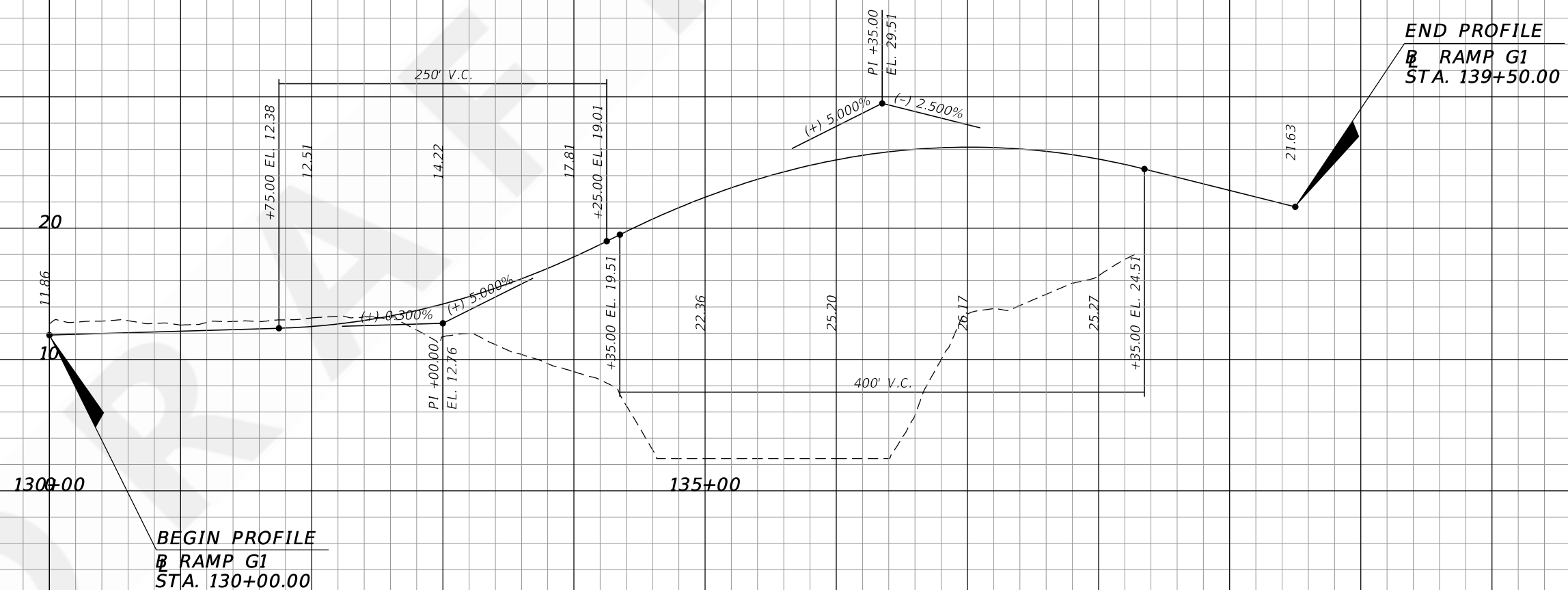
RAMP F2

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE		SHEET NO.
		110



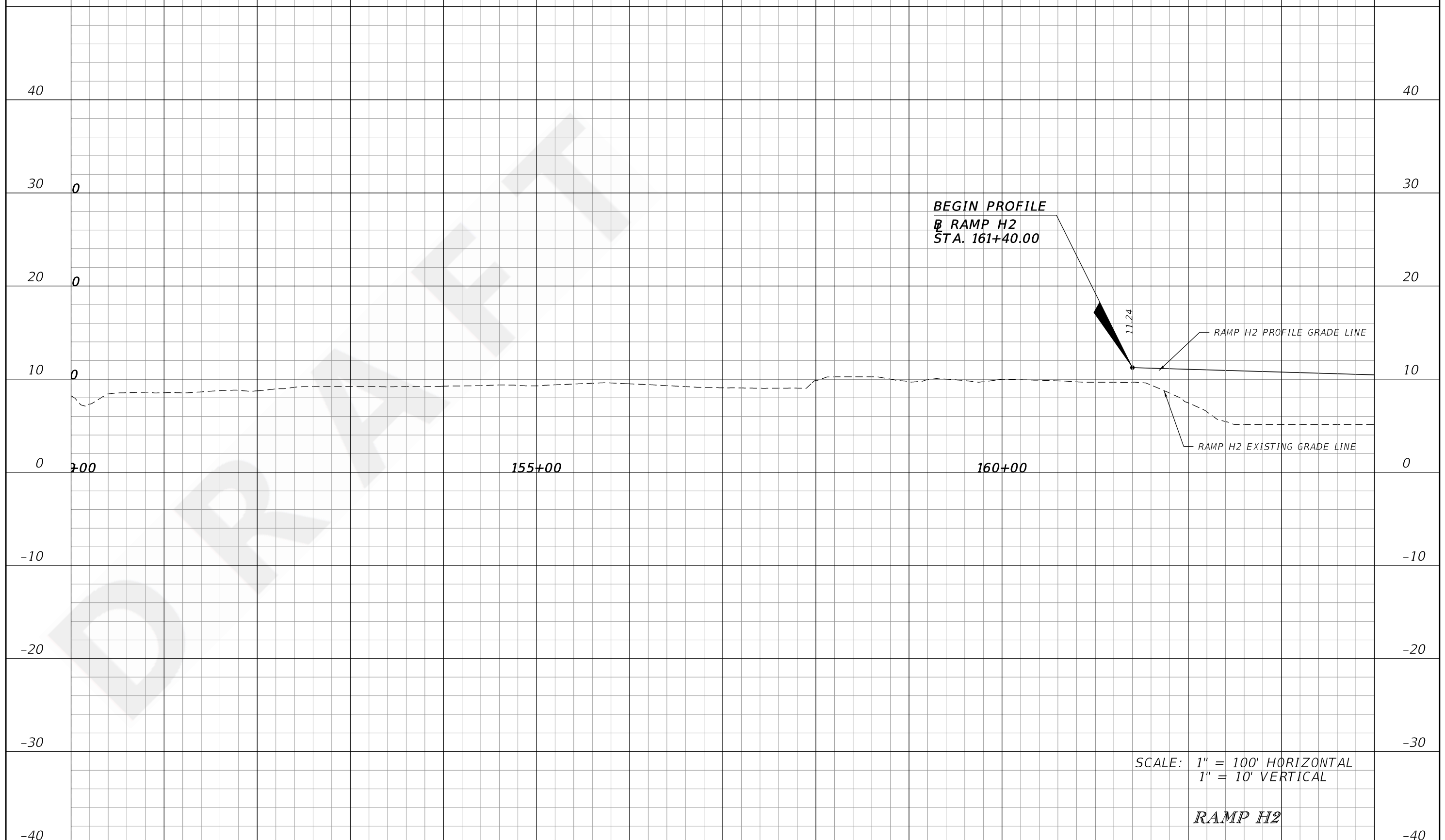
END PROFILE
RAMP G1
STA. 139+50.00

BEGIN PROFILE
RAMP G1
STA. 130+00.00

SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP G1

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. ROADWAY PROFILE
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion			SR 9	BROWARD	436964-1-52-01	111	



SCALE: 1" = 100' HORIZONTAL
 1" = 10' VERTICAL

RAMP H2

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

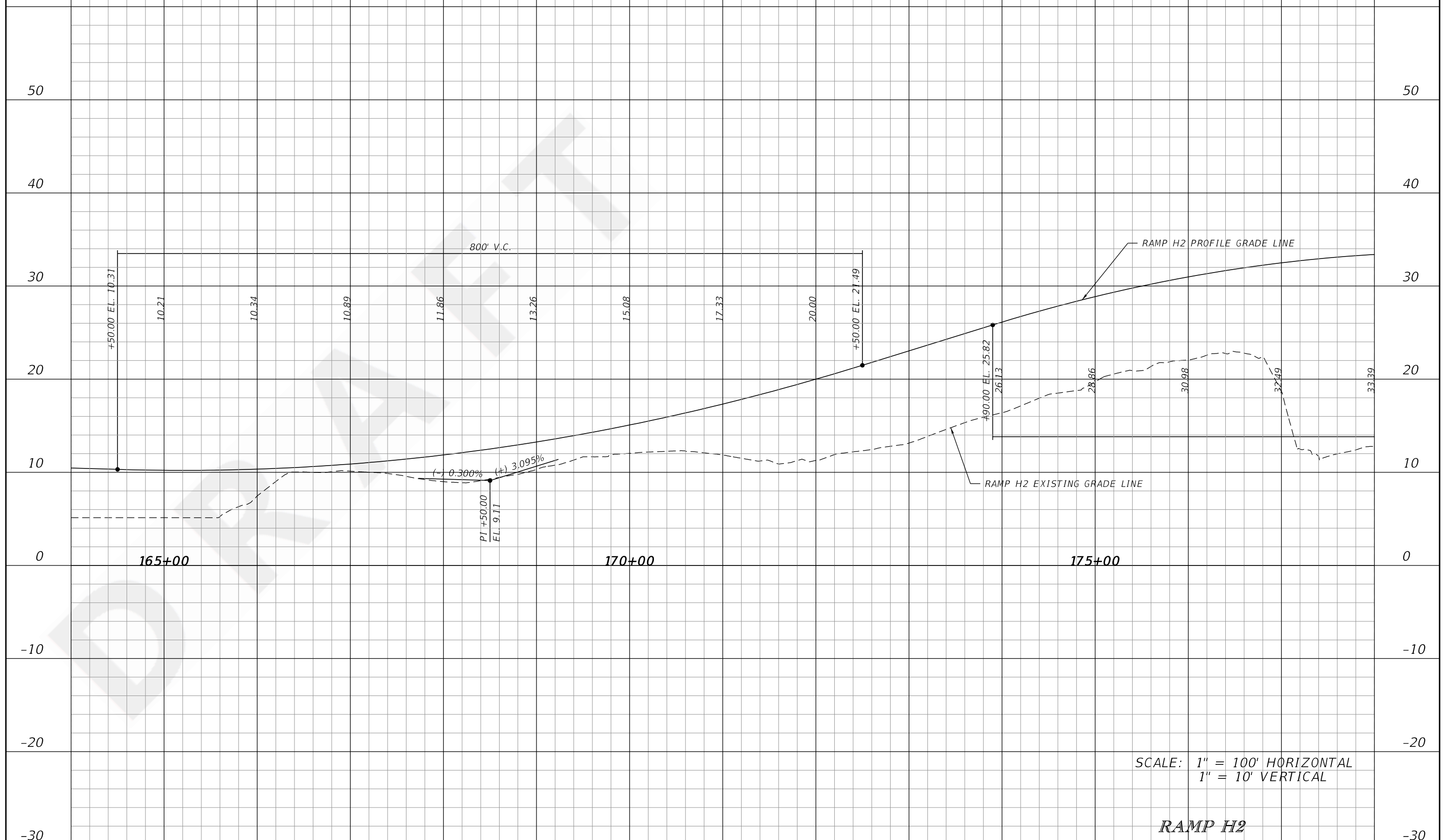
JAMES E. FORD P.E.
 P.E. LICENSE NUMBER 47526
 HNTB CORPORATION
 5900 NORTH ANDREWS AVENUE, SUITE 400
 FT. LAUDERDALE, FLORIDA 33309
 CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 112

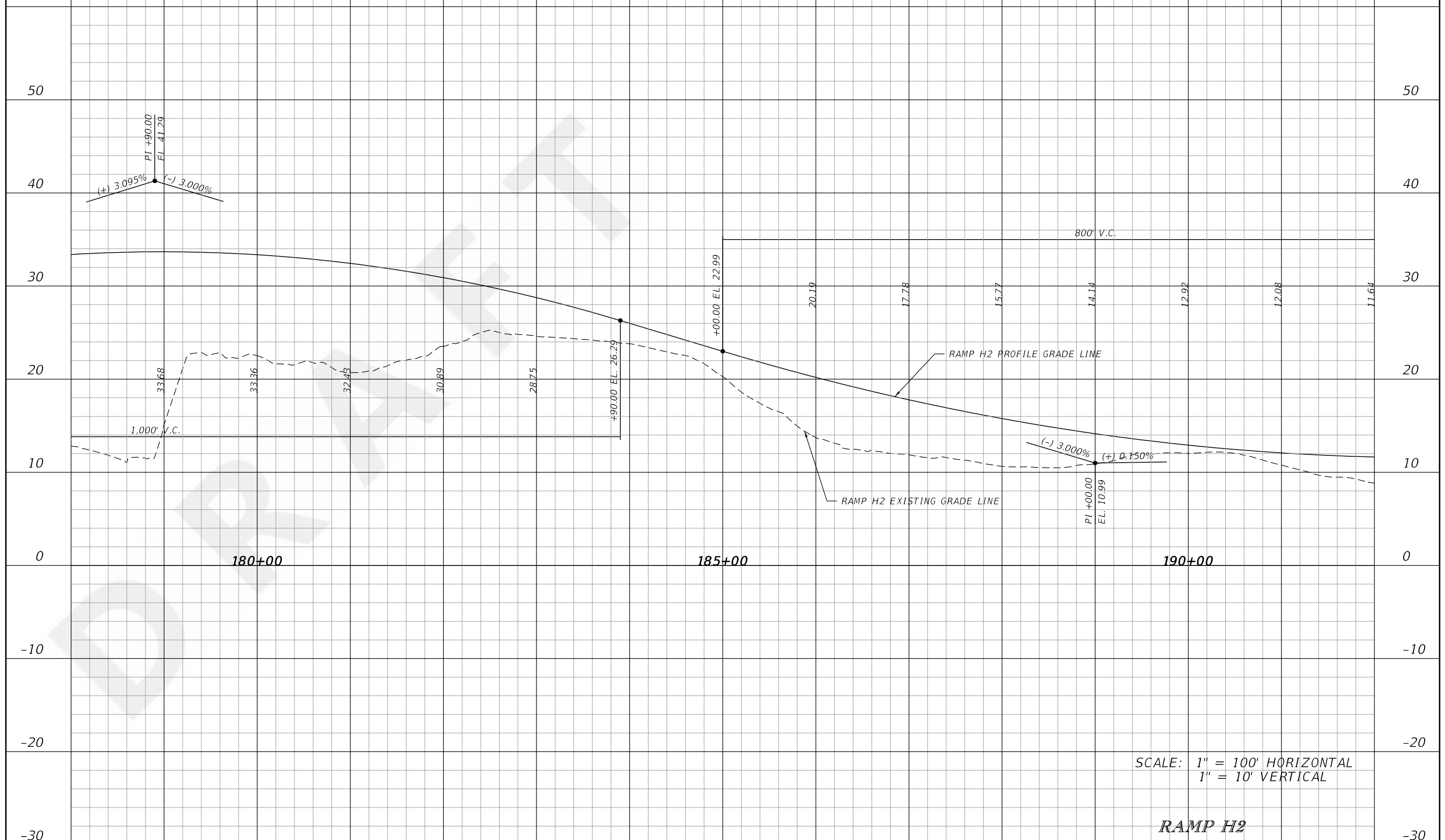
Page 611 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP H2

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 113
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 9	BROWARD	436964-1-52-01	Page 612 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

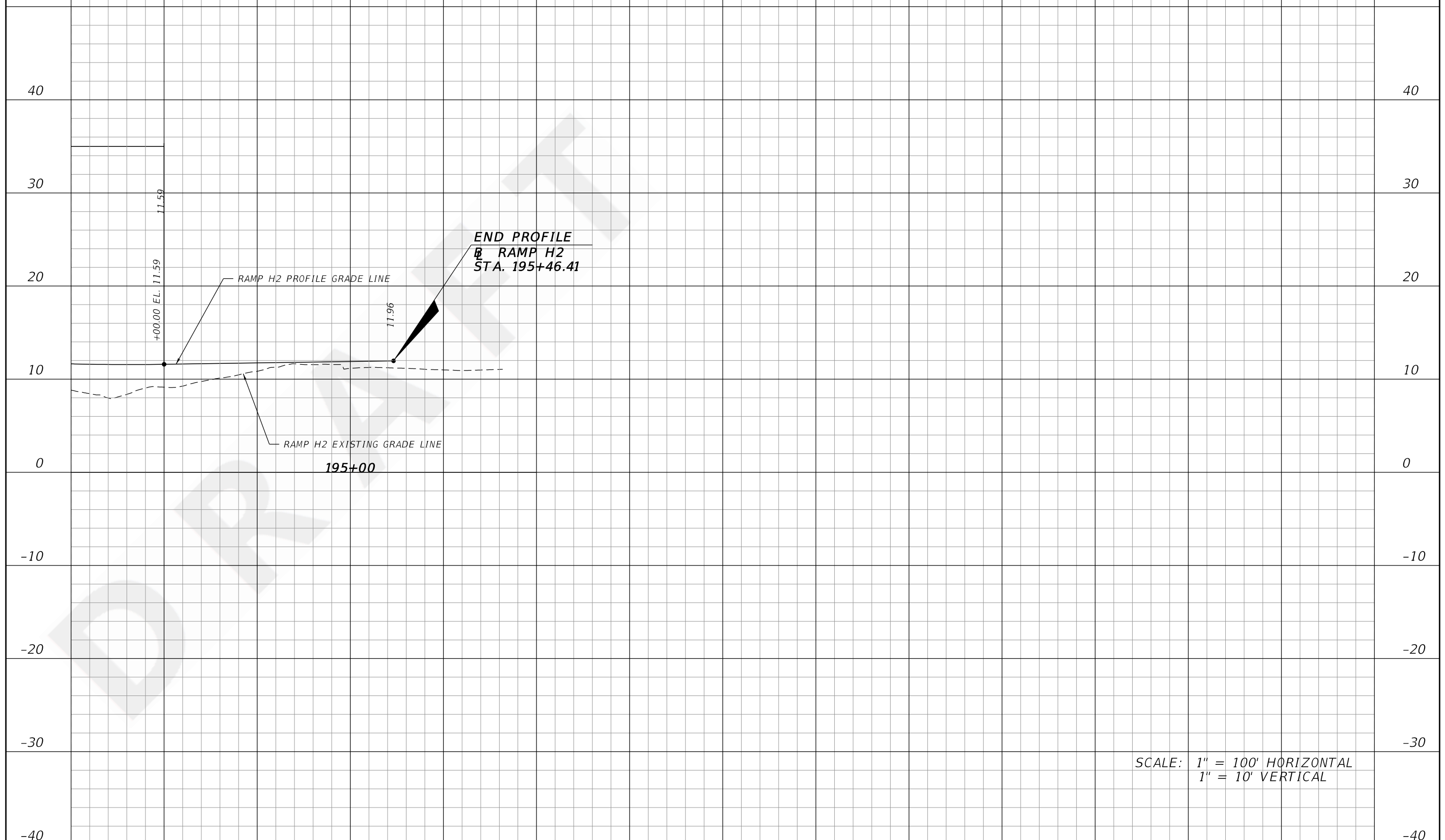
RAMP H2

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE		SHEET NO.
		114



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

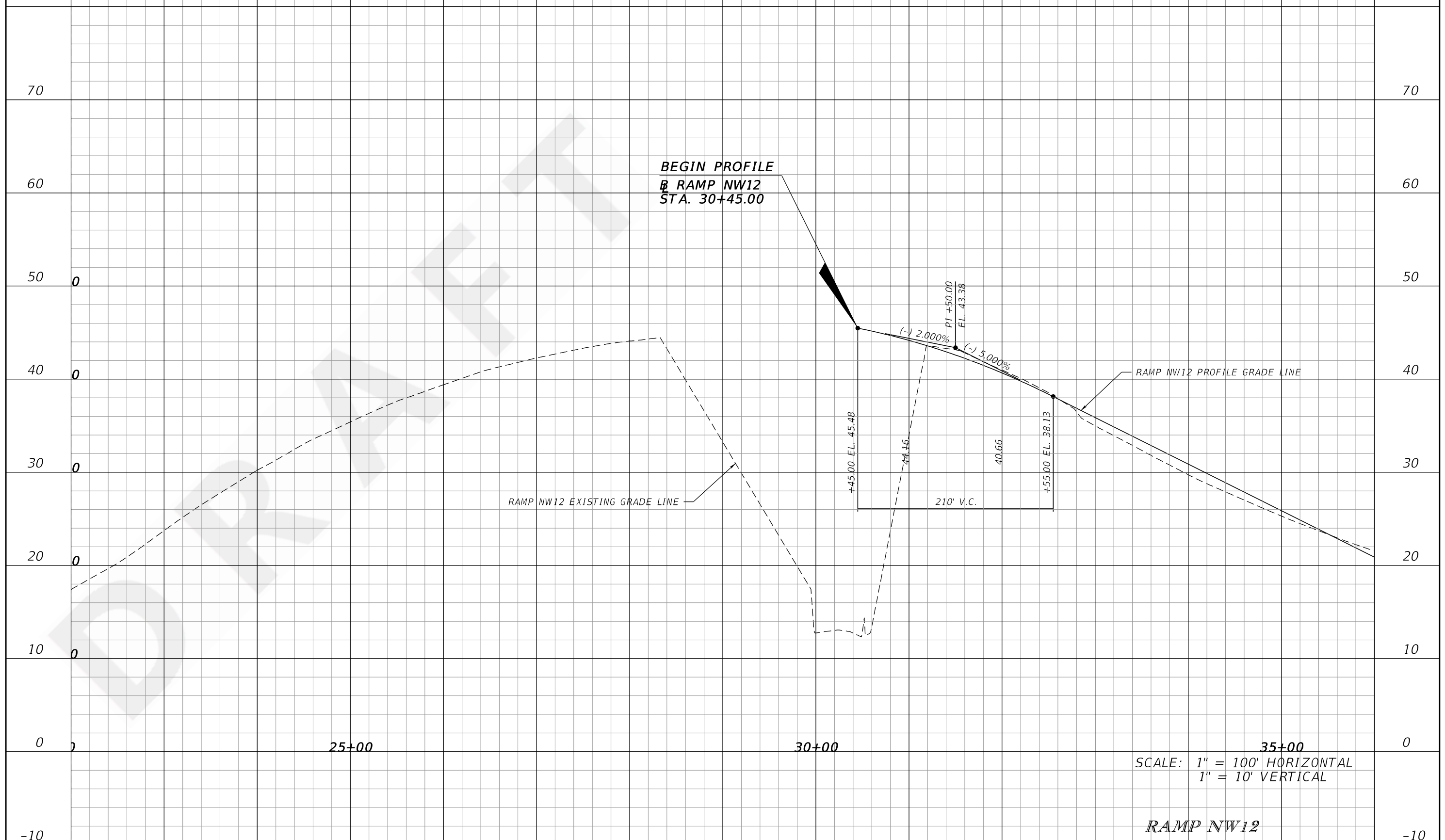
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

JAMES E. FORD P.E.
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5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 115
Page 614 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP NW12

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	Type 2 Categorical Exclusion		

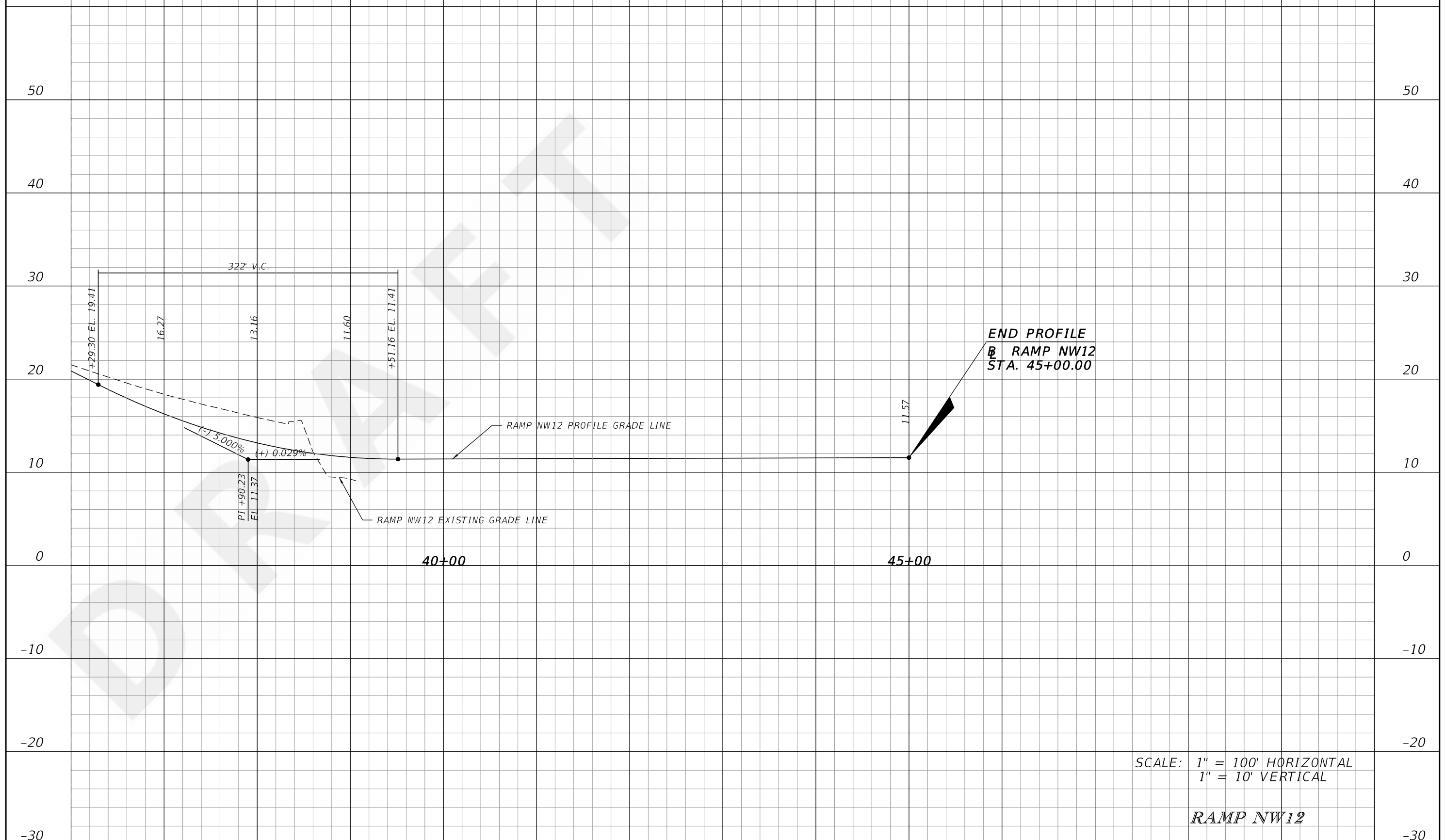
JAMES E. FORD P.E.
P.E. LICENSE NUMBER 47526
HNTB CORPORATION
5900 NORTH ANDREWS AVENUE, SUITE 400
FT. LAUDERDALE, FLORIDA 33309
CERTIFICATE OF AUTHORIZATION 6500

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 869	BROWARD	436964-1-52-01

ROADWAY PROFILE

SHEET NO. 116

Page 615 of 795



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

RAMP NW12

REVISIONS				JAMES E. FORD P.E. P.E. LICENSE NUMBER 47526 HNTB CORPORATION 5900 NORTH ANDREWS AVENUE, SUITE 400 FT. LAUDERDALE, FLORIDA 33309 CERTIFICATE OF AUTHORIZATION 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. ROADWAY PROFILE
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
	Type 2 Categorical Exclusion				SR 869	BROWARD	436964-1-52-01	

APPENDIX B

(Preliminary Cost Estimates)

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Date: 8/26/2019 3:22:59 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 436964-2-52-01

Letting Date: 07/2024

Description: SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.

District: 04 County: 86 BROWARD

Market Area: 12 Units: English

Contract Class: 9 Lump Sum Project: N

Design/Build: Y Project Length: 8.953 MI

Project Manager: BOSTIAN

Version 6 Project Grand Total

\$288,877,170.63

Description: Updated for unit cost adjustment versus other alternatives. 8-26-19

Sequence: 1 WDR - Widen/Resurface, Divided, Rural

Net Length: 0.413 MI
2,183 LF

Description: I-95 Resurfacing/Widening from Begin Project Limits to Start of Direct Connect Ramps

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.413
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
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	3.50	AC	\$38,512.13	\$134,792.45
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	2,687.84	CY	\$29.56	\$79,452.55

Earthwork Component Total

\$214,245.01

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Existing Roadway Pavement Width L/R	50.00 / 50.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	12.00 / 12.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	18,757.12	SY	\$6.41	\$120,233.14
285-709	OPTIONAL BASE,BASE GROUP 09	5,980.74	SY	\$27.13	\$162,257.48
327-70-13	MILLING EXIST ASPH PAVT,1 3/4" AVG DEPTH	24,252.80	SY	\$2.85	\$69,120.48
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,333.90	TN	\$158.68	\$211,663.25
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	800.34	TN	\$158.68	\$126,997.95
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	970.11	TN	\$155.87	\$151,211.05
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	232.83	TN	\$155.87	\$36,291.21

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: SB: 609 SY + 2022 SY = 2631 SY NB: 2975 SY	5,606.00	SY	\$6.41	\$35,934.46
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: SB: 609 SY + 2022 SY = 2631 SY NB: 2975 SY	5,606.00	SY	\$27.13	\$152,090.78
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: 5606 SY x 275 LB/SY / 2000 LB	770.83	TN	\$158.68	\$122,315.30
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22 Comment: 5606 SY x 80 LB/SY / 2000 LB	224.24	TN	\$155.87	\$34,952.29

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	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	279.00	EA	\$4.68	\$1,305.72
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.31	GM	\$864.36	\$2,861.03
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.31	GM	\$385.62	\$1,276.40

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Roadway Component Total

\$1,228,510.54

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{i} $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	5,980.74	SY	\$17.50	\$104,662.95
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	640.27	TN	\$158.68	\$101,598.04
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	232.83	TN	\$155.87	\$36,291.21
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	0.83	PM	\$967.33	\$802.88
570-1-1	PERFORMANCE TURF	1,295.10	SY	\$2.54	\$3,289.55

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,020.33	LF	\$1.84	\$9,237.41
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	41.34	LF	\$5.90	\$243.91
107-1	LITTER REMOVAL	3.01	AC	\$37.84	\$113.90
107-2	MOWING	3.01	AC	\$74.05	\$222.89

Shoulder Component Total

\$256,462.74

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips \bar{i} $\frac{1}{2}$ No. of Sides	2

Pay Items

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	5,980.74	SY	\$17.50	\$104,662.95
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	640.27	TN	\$158.68	\$101,598.04
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	12.81	TN	\$155.87	\$1,996.69
521-1	MEDIAN CONC BARRIER WALL	2,183.00	LF	\$155.00	\$338,365.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.00	PM	\$967.33	\$967.33
Median Component Total					\$547,590.01

DRAINAGE COMPONENT

Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	7.44	CY	\$2,160.00	\$16,070.40
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	336.00	LF	\$100.00	\$33,600.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	\$144.65	\$5,786.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	17.00	EA	\$1,579.93	\$26,858.81
570-1-1	PERFORMANCE TURF	291.03	SY	\$2.54	\$739.22
Drainage Component Total					\$83,054.43

SIGNING COMPONENT

Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	10.00	AS	\$1,059.29	\$10,592.90
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	\$274.02	\$274.02
700-1-60	SINGLE POST SIGN, REMOVE	10.00	AS	\$20.96	\$209.60
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,250.00	\$4,250.00
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	\$514.21	\$514.21
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	1.00	EA	\$75,000.00	\$75,000.00
Comment: I-95 NB Off ramp to SW 10th Street (adv. warning)					
Signing Component Total					\$91,189.14

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value
Multiplier (Number of Poles)	22
Pay Items	

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	4,400.00	LF	\$8.00	\$35,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	\$618.33	\$13,603.26
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	13,200.00	LF	\$2.28	\$30,096.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	22.00	EA	\$6,500.00	\$143,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	22.00	EA	\$618.53	\$13,607.66
	Subcomponent Total				\$235,506.92
	Lighting Component Total				\$235,506.92
Sequence 1 Total					\$2,656,558.79

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 2 NDR - New Construction, Divided, Rural**Net Length:** 0.096 MI
506 LF**Description:** I-95 Mainline Reconstruction from Start of Direct Connect Ramps to Beginning of I-95 NB Off Ramp**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	135.00 / 135.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.199
Top of Structural Course For Begin Section	105.00
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	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	3.14	AC	\$38,512.13	\$120,928.09
120-6	EMBANKMENT	27,231.55	CY	\$15.00	\$408,473.25
Earthwork Component Total					\$529,401.34

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	76.00 / 76.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,540.66	SY	\$6.41	\$73,975.63
285-709	OPTIONAL BASE,BASE GROUP 09	8,616.99	SY	\$27.13	\$233,778.94
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,409.56	TN	\$158.68	\$223,668.98
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	341.71	TN	\$155.87	\$53,262.34

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,651.00	SY	\$6.41	\$42,632.91
	Comment: Beginning of NB Off Ramp: 351 SY Direct Connects: 15+8+4' x 1050' / 9 SF/SY = 3150 SY x 2 (NB/SB) = 6300 SY				
285-704	OPTIONAL BASE,BASE GROUP 04	2,800.00	SY	\$17.50	\$49,000.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: Direct Connects: 4+8' x 1050' / 9 SF/SY = 1400 SY x 2 (NB/SB) = 2800 SY			
285-709	OPTIONAL BASE,BASE GROUP 09	3,851.00 SY	\$27.13	\$104,477.63
	Comment: Beginning of NB Off Ramp: 351 SY Direct Connects: 15' x 1050' / 9 SF/SY = 1750 SY x 2 (NB/SB) = 3500 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	914.51 TN	\$158.68	\$145,114.45
	Comment: Beginning of NB Off Ramp: 351 SY Direct Connects: 15'+8'+4' x 1050' / 9 SF/SY = 3150 SY x 2 (NB/SB) = 6300 SY = 6651 SY x 275 LB/SY / 2000 LB			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	266.04 TN	\$155.87	\$41,467.65
	Comment: Beginning of NB Off Ramp: 351 SY Direct Connects: 15'+8'+4' x 1050' / 9 SF/SY = 3150 SY x 2 (NB/SB) = 6300 SY = 6651 SY x 80 LB/SY / 2000 LB			

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	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	65.00 EA	\$4.68	\$304.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.77 GM	\$864.36	\$665.56
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.77 GM	\$385.62	\$296.93
Roadway Component Total				\$968,645.22

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,385.96 SY	\$17.50	\$24,254.30
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	148.38 TN	\$158.68	\$23,544.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.97 TN	\$155.87	\$462.93

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	0.19 PM	\$967.33	\$183.79
570-1-1	PERFORMANCE TURF	300.12 SY	\$2.54	\$762.30

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,315.14 LF	\$1.84	\$2,419.86
104-11	FLOATING TURBIDITY BARRIER	23.95 LF	\$11.66	\$279.26
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	23.95 LF	\$5.90	\$141.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	1.00 EA	\$99.37	\$99.37
107-1	LITTER REMOVAL	2.32 AC	\$37.84	\$87.79
107-2	MOWING	2.32 AC	\$74.05	\$171.80
Shoulder Component Total				\$54,421.49

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	26.00
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	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{y}_i 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,385.96 SY	\$17.50	\$24,254.30
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	148.38 TN	\$158.68	\$23,544.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	53.95 TN	\$155.87	\$8,409.19
521-1	MEDIAN CONC BARRIER WALL	1,050.00 LF	\$155.00	\$162,750.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-1	MEDIAN CONC BARRIER WALL	1,050.00 LF	\$155.00	\$162,750.00
Comment: Account for second barrier wall				

Median Component Total**\$381,708.43****DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.72 CY	\$2,160.00	\$3,715.20
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00 EA	\$4,686.24	\$4,686.24

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	80.00 LF	\$100.00	\$8,000.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00 LF	\$105.86	\$3,387.52
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	\$144.65	\$4,628.80
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00 EA	\$1,579.93	\$6,319.72
524-1-1	CONCRETE DITCH PAVT, NR, 3"	191.60 SY	\$67.10	\$12,856.36
570-1-1	PERFORMANCE TURF	67.44 SY	\$2.54	\$171.30
Drainage Component Total				\$43,765.14

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	\$1,059.29	\$3,177.87
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	1.00 AS	\$7,250.00	\$7,250.00
Signing Component Total				\$15,026.28

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value			
Multiplier (Number of Poles)	11			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,200.00 LF	\$8.00	\$17,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00 EA	\$618.33	\$6,801.63
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,600.00 LF	\$2.28	\$15,048.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	11.00 EA	\$6,500.00	\$71,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00 EA	\$618.53	\$6,803.83
Subcomponent Total				\$117,753.46
Lighting Component Total				\$117,753.46

Sequence 2 Total	\$2,110,721.36
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SR-91-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 3 NDR - New Construction, Divided, Rural**Net Length:** 0.657 MI
3,469 LF**Description:** I-95 Northbound Mainline Reconstruction from Start of NB Off Ramp to SW 10th Street to just North of NB Braided Ramps**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 80.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.657
Top of Structural Course For Begin Section	105.00
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	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	6.37	AC	\$38,512.13	\$245,322.27
120-6	EMBANKMENT	38,764.99	CY	\$15.00	\$581,474.85
Earthwork Component Total					\$826,797.12

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	5
Roadway Pavement Width L/R	0.00 / 64.00
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	34,947.84	SY	\$6.41	\$224,015.65
285-709	OPTIONAL BASE,BASE GROUP 09	24,922.55	SY	\$27.13	\$676,148.78
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,391.87	TN	\$158.68	\$538,221.93
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	986.73	TN	\$155.87	\$153,801.61

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	250.00	SY	\$6.41	\$1,602.50
	Comment: NB Off Ramp to Hillsboro Blvd: 250 SY				
285-704	OPTIONAL BASE,BASE GROUP 04	167.00	SY	\$17.50	\$2,922.50
	Comment: NB Direct Connect Shoulder: 80 + 87 = 167 SY				

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-709	OPTIONAL BASE,BASE GROUP 09 Comment: NB Off Ramp to Hillsboro Blvd: 250 SY	250.00 SY	\$27.13	\$6,782.50
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: NB Off Ramp to Hillsboro Blvd: 250 + 167 SY x 275 lb/sy	23.00 TN	\$158.68	\$3,649.64
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22 Comment: NB Off Ramp to Hillsboro Blvd: 250+ 167 SY x 80 lb/sy/2000 Lb/tn = 17 TN	17.00 TN	\$155.87	\$2,649.79

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	3

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	355.00 EA	\$4.68	\$1,661.40
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	5.26 GM	\$864.36	\$4,546.53
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.94 GM	\$385.62	\$1,519.34
Roadway Component Total				\$1,617,522.17

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.67
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	4,752.48 SY	\$17.50	\$83,168.40
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	508.78 TN	\$158.68	\$80,733.21
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	10.18 TN	\$155.87	\$1,586.76
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.31 PM	\$967.33	\$1,267.20
570-1-1	PERFORMANCE TURF	1,029.12 SY	\$2.54	\$2,613.96

Erosion Control

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,019.30	LF	\$1.84	\$16,595.51
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	164.25	LF	\$5.90	\$969.08
104-18	INLET PROTECTION SYSTEM	4.00	EA	\$99.37	\$397.48
107-1	LITTER REMOVAL	15.93	AC	\$37.84	\$602.79
107-2	MOWING	15.93	AC	\$74.05	\$1,179.62
Shoulder Component Total					\$189,114.01

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	14.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 12.00
Paved Median Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{i} ; $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	4,752.48	SY	\$17.50	\$83,168.40
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	635.98	TN	\$158.68	\$100,917.31
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	185.01	TN	\$155.87	\$28,837.51
521-1	MEDIAN CONC BARRIER WALL	3,469.00	LF	\$155.00	\$537,695.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.00	PM	\$967.33	\$967.33
Median Component Total					\$751,585.55

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	11.83	CY	\$2,160.00	\$25,552.80
425-1-551	INLETS, DT BOT, TYPE E, <10'	4.00	EA	\$4,686.24	\$18,744.96
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	528.00	LF	\$100.00	\$52,800.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	232.00	LF	\$105.86	\$24,559.52
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	200.00	LF	\$144.65	\$28,930.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	27.00	EA	\$1,579.93	\$42,658.11
524-1-1	CONCRETE DITCH PAVT, NR, 3"	1,314.00	SY	\$67.10	\$88,169.40
570-1-1	PERFORMANCE TURF	462.53	SY	\$2.54	\$1,174.83
Drainage Component Total					\$282,589.62

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	16.00	AS	\$1,059.29	\$16,948.64
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,250.00	\$8,500.00
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	4.00	AS	\$7,250.00	\$29,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT Comment: I-95 NB Off Ramp to Hillsboro Blvd (Adv. Warn)	1.00	EA	\$75,000.00	\$75,000.00

Signing Component Total \$130,145.46

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	35				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,000.00	LF	\$8.00	\$56,000.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	35.00	EA	\$618.33	\$21,641.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	21,000.00	LF	\$2.28	\$47,880.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	35.00	EA	\$6,500.00	\$227,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	35.00	EA	\$618.53	\$21,648.55
Subcomponent Total					\$374,670.10
Lighting Component Total					\$374,670.10

Sequence 3 Total \$4,172,424.03

SR-91-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 4 NDR - New Construction, Divided, Rural**Net Length:** 0.489 MI
2,584 LF**Description:** I-95 Southbound Mainline Reconstruction from Start of NB Off Ramp to SW 10th Street to just North of NB Braided Ramps**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.679
Top of Structural Course For Begin Section	105.00
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	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	11.85	AC	\$38,512.13	\$456,368.74
120-6	EMBANKMENT	42,479.69	CY	\$15.00	\$637,195.35
Earthwork Component Total					\$1,093,564.09

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	76.00 / 0.00
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	31,008.38	SY	\$6.41	\$198,763.72
285-709	OPTIONAL BASE,BASE GROUP 09	22,010.21	SY	\$27.13	\$597,137.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	3,000.35	TN	\$158.68	\$476,095.54
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	872.83	TN	\$155.87	\$136,048.01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,173.00	SY	\$6.41	\$20,338.93
	Comment: SB On ramp from Hillsboro (partial): 245 SY SB Direct Connect Travel Lane: 1117 SY SB Direct Connect Shoulders: 700 + 1111 SY				
285-704	OPTIONAL BASE,BASE GROUP 04	1,811.00	SY	\$17.50	\$31,692.50

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-709	Comment: SB Direct Connect Shoulders: 700 + 1111 SY OPTIONAL BASE,BASE GROUP 09	1,362.00 SY	\$27.13	\$36,951.06
334-1-13	Comment: SB Direct Connect Travel Lane: 1117 SY SB On ramp from Hillsboro (partial): 245 SY SUPERPAVE ASPHALTIC CONC, TRAFFIC C	436.29 TN	\$158.68	\$69,230.50
337-7-25	Comment: SB On ramp from Hillsboro (partial): 245 SY SB Direct Connect Travel Lane: 1117 SY SB Direct Connect Shoulders: 700 + 1111 SY => 3173 SY x 275 LB/SY / 2000 LB ASPH CONC FC,INC BIT,FC-5,PG76-22	126.92 TN	\$155.87	\$19,783.02
	Comment: SB On ramp from Hillsboro (partial): 245 SY SB Direct Connect Travel Lane: 1117 SY SB Direct Connect Shoulders: 700 + 1111 SY => 3173 SY x 80 LB/SY / 2000 LB			

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/RAISED PAVEMENT MARKERS	198.00	EA	\$4.68	\$926.64
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.92	GM	\$864.36	\$3,388.29
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.96	GM	\$385.62	\$755.82
Roadway Component Total					\$1,591,111.03

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	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	3,060.64	SY	\$17.50	\$53,561.20
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	315.83	TN	\$158.68	\$50,115.90
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	15.16	TN	\$155.87	\$2,362.99

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

570-1-1	PERFORMANCE TURF	1,533.19 SY	\$2.54	\$3,894.30
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Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,718.48 LF	\$1.84	\$12,362.00
104-11	FLOATING TURBIDITY BARRIER	122.35 LF	\$11.66	\$1,426.60
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	122.35 LF	\$5.90	\$721.86
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	3.00 EA	\$99.37	\$298.11
107-1	LITTER REMOVAL	11.86 AC	\$37.84	\$448.78
107-2	MOWING	11.86 AC	\$74.05	\$878.23

Shoulder Component Total

\$128,083.82

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	14.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 0.00
Paved Median Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	0
Rumble Strips \bar{y}_i 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	3,540.12 SY	\$17.50	\$61,952.10
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	378.99 TN	\$158.68	\$60,138.13
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.58 TN	\$155.87	\$1,181.49
521-1	MEDIAN CONC BARRIER WALL	3,584.00 LF	\$155.00	\$555,520.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.00 PM	\$967.33	\$967.33

Median Component Total

\$679,759.05

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	8.81 CY	\$2,160.00	\$19,029.60
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00 EA	\$4,686.24	\$14,058.72
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	392.00 LF	\$100.00	\$39,200.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	176.00 LF	\$105.86	\$18,631.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	144.00 LF	\$144.65	\$20,829.60

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	20.00 EA	\$1,579.93	\$31,598.60
524-1-1	CONCRETE DITCH PAVT, NR, 3"	978.80 SY	\$67.10	\$65,677.48
570-1-1	PERFORMANCE TURF	344.54 SY	\$2.54	\$875.13
Drainage Component Total				\$209,900.49

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	12.00 AS	\$1,059.29	\$12,711.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	3.00 AS	\$7,250.00	\$21,750.00
Signing Component Total				\$39,059.89

Sequence 4 Total	\$3,741,478.37
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 5 NDR - New Construction, Divided, Rural**Net Length:** 0.808 MI
4,264 LF**Description:** I-95 Mainline (NB & SB) Reconstruction from just North of NB Braided Ramp to End of Bridge
over Hillsboro Blvd (includes NB Bridge Widening over Hillsboro Blvd)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	110.00 / 110.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.091
Top of Structural Course For Begin Section	105.00
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	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	21.55	AC	\$38,512.13	\$829,936.40
120-6	EMBANKMENT	140,350.89	CY	\$15.00	\$2,105,263.35
Earthwork Component Total					\$2,935,199.75

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	64.00 / 64.00
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	85,917.44	SY	\$6.41	\$550,730.79
285-709	OPTIONAL BASE,BASE GROUP 09	61,270.78	SY	\$27.13	\$1,662,276.26
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	8,338.74	TN	\$158.68	\$1,323,191.26
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2,425.82	TN	\$155.87	\$378,112.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,217.00	SY	\$6.41	\$33,440.97
	Comment: NB Direct Connect Lane (portion): 1035 SY NB On Ramp (SW 10th Street) Travel Lane & Shoulders (portion): 1333 SY + 1683 SY SB Aux Lane before SB Off ramp to Hillsboro: 1166 SY				
285-704	OPTIONAL BASE,BASE GROUP 04	1,683.00	SY	\$17.50	\$29,452.50

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: NB On Ramp (SW 10th Street) Shoulders (portion): 1683 SY			
285-709	OPTIONAL BASE,BASE GROUP 09	3,534.00 SY	\$27.13	\$95,877.42
	Comment: NB On Ramp (SW 10th Street) Travel Lane (portion): 1333 SY SB Aux Lane before SB Off ramp to Hillsboro: 1166 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	717.34 TN	\$158.68	\$113,827.51
	Comment: Stabilization areas x 275 LB/SY / 2000 LB			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	208.68 TN	\$155.87	\$32,526.95
	Comment: Stabilization areas x 80 LB/SY / 2000 LB			

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	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	545.00 EA	\$4.68	\$2,550.60
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	6.46 GM	\$864.36	\$5,583.77
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	6.46 GM	\$385.62	\$2,491.11
Roadway Component Total				\$4,230,061.70

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{i}_c 1/2No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	11,683.71 SY	\$17.50	\$204,464.92
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,563.51 TN	\$158.68	\$248,097.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	454.84 TN	\$155.87	\$70,895.91
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	1.62 PM	\$967.33	\$1,567.07
570-1-1	PERFORMANCE TURF	2,530.05 SY	\$2.54	\$6,426.33

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	11,086.73	LF	\$1.84	\$20,399.58
104-11	FLOATING TURBIDITY BARRIER	201.90	LF	\$11.66	\$2,354.15
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	201.90	LF	\$5.90	\$1,191.21
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	5.00	EA	\$99.37	\$496.85
107-1	LITTER REMOVAL	19.58	AC	\$37.84	\$740.91
107-2	MOWING	19.58	AC	\$74.05	\$1,449.90
Shoulder Component Total					\$560,098.45

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	26.00
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	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	11,683.71	SY	\$17.50	\$204,464.92
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,250.81	TN	\$158.68	\$198,478.53
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	25.02	TN	\$155.87	\$3,899.87
521-1	MEDIAN CONC BARRIER WALL	5,764.00	LF	\$155.00	\$893,420.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	2.00	PM	\$967.33	\$1,934.66
Median Component Total					\$1,302,197.99

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	14.54	CY	\$2,160.00	\$31,406.40
425-1-551	INLETS, DT BOT, TYPE E, <10'	5.00	EA	\$4,686.24	\$23,431.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	648.00	LF	\$100.00	\$64,800.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	280.00	LF	\$105.86	\$29,640.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	240.00	LF	\$144.65	\$34,716.00
430-984-129		33.00	EA	\$1,579.93	\$52,137.69

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	MITERED END SECT, OPTIONAL RD, 24" SD			
524-1-1	CONCRETE DITCH PAVT, NR, 3"	1,615.20 SY	\$67.10	\$108,379.92
570-1-1	PERFORMANCE TURF	568.55 SY	\$2.54	\$1,444.12
Drainage Component Total				\$345,956.13

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	20.00 AS	\$1,059.29	\$21,185.80
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$4,250.00	\$8,500.00
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	5.00 AS	\$7,250.00	\$36,250.00
Signing Component Total				\$66,632.62

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value			
Multiplier (Number of Poles)	58			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	11,600.00 LF	\$8.00	\$92,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	58.00 EA	\$618.33	\$35,863.14
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	34,800.00 LF	\$2.28	\$79,344.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	58.00 EA	\$6,500.00	\$377,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	58.00 EA	\$618.53	\$35,874.74
Subcomponent Total				\$620,881.88
Lighting Component Total				\$620,881.88

BRIDGES COMPONENT

Bridge NBHILS

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	228.00
Width (LF)	45.00
Type	Low Level
Cost Factor	1.30
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$156.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Final Cost per SF	\$161.15
Basic Bridge Cost	\$1,600,560.00
Description	I-95 NB BRIDGE WIDENING OVER HILLSBORO BLVD (INCLUDES WIDENING FOR RAMP)

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	100.00	CY	\$351.19	\$35,119.00
415-1-9	REINF STEEL- APPROACH SLABS	17,500.00	LB	\$1.01	\$17,675.00
Bridge NBHILS Total					\$1,653,354.00
Bridges Component Total					\$1,653,354.00
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Sequence 5 Total					\$11,714,382.52
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 6 NUR - New Construction, Undivided, Rural**Net Length:** 0.142 MI
750 LF**Description:** I-95 Northbound Off Ramp Reconstruction to SW 10th Street**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	40.00 / 40.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.322
Top of Structural Course For Begin Section	105.00
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	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	1.38	AC	\$38,512.13	\$53,146.74
120-6	EMBANKMENT	18,478.85	CY	\$15.00	\$277,182.75
Earthwork Component Total					\$330,329.49

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,443.58	SY	\$6.41	\$28,483.35
285-709	OPTIONAL BASE,BASE GROUP 09	2,054.34	SY	\$27.13	\$55,734.24
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	329.89	TN	\$158.68	\$52,346.95
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	79.97	TN	\$155.87	\$12,464.92

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,423.00	SY	\$6.41	\$21,941.43
	Comment: Left Turn Lanes: 2726 SY Right Turn Lane: 697 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	3,423.00	SY	\$27.13	\$92,865.99
	Comment: Left Turn Lanes: 2726 SY Right Turn Lane: 697 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	470.66	TN	\$158.68	\$74,684.33

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Comment: Left Turn Lanes: 2726 SY Right Turn Lane:
697 SY 3423 SY x 275 LB/SY / 2000 LB

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	136.92 TN	\$155.87	\$21,341.72
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Comment: Left Turn Lanes: 2726 SY Right Turn Lane:
697 SY 3423 SY x 80 LB/SY / 2000 LB

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	19.00 EA	\$4.68	\$88.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.57 GM	\$864.36	\$492.69
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.28 GM	\$396.46	\$111.01

Roadway Component Total

\$360,555.55

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{y}_i 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	2,054.34 SY	\$17.50	\$35,950.95
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	274.91 TN	\$158.68	\$43,622.72
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	79.97 TN	\$155.87	\$12,464.92
570-1-1	PERFORMANCE TURF	444.86 SY	\$2.54	\$1,129.94

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,949.38 LF	\$1.84	\$3,586.86
104-11	FLOATING TURBIDITY BARRIER	35.50 LF	\$11.66	\$413.93
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	35.50 LF	\$5.90	\$209.45

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	1.72 AC	\$37.84	\$65.08
107-2	MOWING	1.72 AC	\$74.05	\$127.37
Shoulder Component Total				\$99,585.06

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.56 CY	\$2,160.00	\$5,529.60
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	120.00 LF	\$100.00	\$12,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00 LF	\$144.65	\$3,471.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00 EA	\$1,579.93	\$9,479.58
570-1-1	PERFORMANCE TURF	99.97 SY	\$2.54	\$253.92
Drainage Component Total				\$30,734.70

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	\$1,059.29	\$3,177.87
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$7,776.28

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value			
Multiplier (Number of Poles)	18			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,600.00 LF	\$8.00	\$28,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	18.00 EA	\$618.33	\$11,129.94
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	10,800.00 LF	\$2.28	\$24,624.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	18.00 EA	\$6,500.00	\$117,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	18.00 EA	\$618.53	\$11,133.54
Subcomponent Total				\$192,687.48
Lighting Component Total				\$192,687.48

Sequence 6 Total

\$1,021,668.56

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 7 NUR - New Construction, Undivided, Rural**Net Length:** 0.298 MI
1,575 LF**Description:** I-95 Northbound on ramp (Loop)reconstruction from EB SW 10th Street to Merge with SW 10th Street WB On Ramp**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.298
Top of Structural Course For Begin Section	105.00
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	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	2.53	AC	\$38,512.13	\$97,435.69
120-6	EMBANKMENT	8,871.29	CY	\$15.00	\$133,069.35
Earthwork Component Total					\$230,505.04

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	0.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,234.61	SY	\$6.41	\$46,373.85
285-709	OPTIONAL BASE,BASE GROUP 09	2,157.78	SY	\$27.13	\$58,540.57
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	173.25	TN	\$158.68	\$27,491.31
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	115.50	TN	\$160.00	\$18,480.00

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	40.00	EA	\$4.68	\$187.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.19	GM	\$864.36	\$1,028.59
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.60	GM	\$396.46	\$237.88

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
521-1	MEDIAN CONC BARRIER WALL	226.00	LF	\$155.00	\$35,030.00
Roadway Component Total					\$187,369.40

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips i ₂ 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,107.77	SY	\$17.50	\$19,385.97
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	86.63	TN	\$158.68	\$13,746.45
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	42.00	TN	\$160.00	\$6,720.00
570-1-1	PERFORMANCE TURF	934.51	SY	\$2.54	\$2,373.66

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,095.06	LF	\$1.84	\$7,534.91
104-12		74.58	LF	\$5.90	\$440.02

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	STAKED TURBIDITY BARRIER- NYL REINF PVC			
107-1	LITTER REMOVAL	3.62 AC	\$37.84	\$136.98
107-2	MOWING	3.62 AC	\$74.05	\$268.06
Shoulder Component Total				\$50,606.06

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.37 CY	\$2,160.00	\$11,599.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	240.00 LF	\$100.00	\$24,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00 LF	\$144.65	\$8,100.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00 EA	\$1,579.93	\$18,959.16
570-1-1	PERFORMANCE TURF	210.00 SY	\$2.54	\$533.40
Drainage Component Total				\$63,192.16

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00 AS	\$1,059.29	\$6,355.74
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$10,954.15

LIGHTING COMPONENT**Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

Value

17

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,400.00 LF	\$8.00	\$27,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	17.00 EA	\$618.33	\$10,511.61
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	10,200.00 LF	\$2.28	\$23,256.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	17.00 EA	\$6,500.00	\$110,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	17.00 EA	\$618.53	\$10,515.01
Subcomponent Total				\$181,982.62
Lighting Component Total				\$181,982.62

Sequence 7 Total

\$724,609.43

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 8 NUR - New Construction, Undivided, Rural**Net Length:** 0.216 MI
1,140 LF**Description:** I-95 Northbound On Ramp Reconstruction from WB SW 10th Street to beginning of Braided Ramps (includes Merge with EB to NB on Ramp)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.216
Top of Structural Course For Begin Section	105.00
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	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	1.57	AC	\$38,512.13	\$60,464.04
120-6	EMBANKMENT	5,728.17	CY	\$15.00	\$85,922.55
Earthwork Component Total					\$146,386.59

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,378.06	SY	\$6.41	\$21,653.36
285-709	OPTIONAL BASE,BASE GROUP 09	1,561.73	SY	\$27.13	\$42,369.73
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	167.19	TN	\$158.68	\$26,529.71
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	60.80	TN	\$155.87	\$9,476.90

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Merge Travel Lanes: 775 SY	775.00	SY	\$6.41	\$4,967.75
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Merge Travel Lanes: 775 SY	775.00	SY	\$27.13	\$21,025.75

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	106.56 TN	\$158.68	\$16,908.94
	Comment: Merge Travel Lanes: 775 SY * 275 LB/SY / 2000 LB			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	31.00 TN	\$155.87	\$4,831.97
	Comment: Merge Travel Lanes: 775 SY * 80 LB/SY / 2000 LB			

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.86	GM	\$864.36	\$743.35

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
521-1	MEDIAN CONC BARRIER WALL	361.00	LF	\$155.00	\$55,955.00

Roadway Component Total

\$204,462.46

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-704	OPTIONAL BASE,BASE GROUP 04	1,603.53 SY	\$17.50	\$28,061.78
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	208.99 TN	\$158.68	\$33,162.53
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.69 TN	\$155.87	\$1,042.77
570-1-1	PERFORMANCE TURF	338.19 SY	\$2.54	\$859.00

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,963.88 LF	\$1.84	\$5,453.54
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	53.98 LF	\$5.90	\$318.48
107-1	LITTER REMOVAL	2.62 AC	\$37.84	\$99.14
107-2	MOWING	2.62 AC	\$74.05	\$194.01
Shoulder Component Total				\$69,191.25

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.89 CY	\$2,160.00	\$8,402.40
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	176.00 LF	\$100.00	\$17,600.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00 LF	\$144.65	\$5,786.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	\$1,579.93	\$14,219.37
570-1-1	PERFORMANCE TURF	151.99 SY	\$2.54	\$386.05
Drainage Component Total				\$46,393.82

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	\$1,059.29	\$5,296.45
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$9,894.86

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity Unit	Extended Amount
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

			Unit Price	
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00 LF	\$8.00	\$19,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00 EA	\$618.33	\$7,419.96
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00 LF	\$2.28	\$16,416.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	12.00 EA	\$6,500.00	\$78,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00 EA	\$618.53	\$7,422.36
	Subcomponent Total			\$128,458.32
	Lighting Component Total			\$128,458.32
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	Sequence 8 Total			\$604,787.30
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 9NUR - New Construction, Undivided, Rural**Net Length:** 0.707 MI
3,732 LF**Description:** I-95 Northbound Off Ramp Reconstruction to Hillsboro Blvd (includes Hillsboro Blvd Median Modification)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.779
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
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	5.14	AC	\$38,512.13	\$197,952.35
120-6	EMBANKMENT	14,111.05	CY	\$15.00	\$211,665.75
Earthwork Component Total					\$409,618.10

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	11,195.71	SY	\$6.41	\$71,764.50
285-709	OPTIONAL BASE,BASE GROUP 09	6,356.68	SY	\$27.13	\$172,456.73
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	855.23	TN	\$158.68	\$135,707.90
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	248.79	TN	\$155.87	\$38,778.90

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Additional travel lanes: 1874 SY + 1528 SY Hillsboro Median Mod: 282 SY	3,684.00	SY	\$6.41	\$23,614.44
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Additional travel lanes: 1874 SY + 1528 SY Hillsboro Median Mod: 282 SY	3,684.00	SY	\$27.13	\$99,946.92
334-1-13		506.55	TN	\$158.68	\$80,379.35

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

SUPERPAVE ASPHALTIC CONC,
TRAFFIC C

Comment: Additional travel lanes: 1874 SY + 1528 SY
Hillsboro Median Mod: 282 SY 3684 SY * 275 LB/SY /
2000 LB

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	147.36 TN	\$155.87	\$22,969.00
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Comment: Additional travel lanes: 1874 SY + 1528 SY
Hillsboro Median Mod: 282 SY 3684 SY * 80 LB/SY / 2000
LB

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.83	GM	\$864.36	\$2,446.14

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
521-1	MEDIAN CONC BARRIER WALL	2,661.00	LF	\$155.00	\$412,455.00
544-75-1	CRASH CUSHION	1.00	EA	\$18,119.10	\$18,119.10

Roadway Component Total \$1,078,637.98

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	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-704	OPTIONAL BASE,BASE GROUP 04	5,249.54 SY	\$17.50	\$91,866.95
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	684.18 TN	\$158.68	\$108,565.68
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	21.89 TN	\$155.87	\$3,411.99

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Additional Shoulder Width: 6' x 1219' = 7314 SF / 9 SY/SF = 812.66 SY x 2 (Left/Right)	1,625.32 SY	\$6.41	\$10,418.30
285-704	OPTIONAL BASE,BASE GROUP 04 Comment: Additional Shoulder Width: 6' x 1219' = 7314 SF / 9 SY/SF = 812.66 SY x 2 (Left/Right)	1,625.32 SY	\$17.50	\$28,443.10
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Additional Shoulder Width: 6' x 1219' = 7314 SF / 9 SY/SF = 812.66 SY x 2 (Left/Right) = 1625.32 SY * 275 LB/SY / 2000 LB	223.48 TN	\$158.68	\$35,461.81
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: Additional Shoulder Width: 6' x 1219' = 7314 SF / 9 SY/SF = 812.66 SY x 2 (Left/Right) = 1625.32 SY * 80 LB/SY / 2000 LB	65.01 TN	\$160.00	\$10,401.60

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,702.95 LF	\$1.84	\$17,853.43
104-11	FLOATING TURBIDITY BARRIER	176.70 LF	\$11.66	\$2,060.32
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	176.70 LF	\$5.90	\$1,042.53
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	8.57 AC	\$37.84	\$324.29
107-2	MOWING	8.57 AC	\$74.05	\$634.61
Shoulder Component Total				\$312,498.45

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	12.72 CY	\$2,160.00	\$27,475.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	568.00 LF	\$100.00	\$56,800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	120.00 LF	\$144.65	\$17,358.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	29.00 EA	\$1,579.93	\$45,817.97
570-1-1	PERFORMANCE TURF	497.59 SY	\$2.54	\$1,263.88
Drainage Component Total				\$148,715.05

SIGNING COMPONENT

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	15.00	AS	\$1,059.29	\$15,889.35
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,250.00	\$8,500.00
Signing Component Total					\$25,086.17

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	42				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	8,400.00	LF	\$8.00	\$67,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	42.00	EA	\$618.33	\$25,969.86
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	25,200.00	LF	\$2.28	\$57,456.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	42.00	EA	\$6,500.00	\$273,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	42.00	EA	\$618.53	\$25,978.26
Subcomponent Total					\$449,604.12
Lighting Component Total					\$449,604.12
Sequence 9 Total					\$2,424,159.87

SR-91-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 10 NUR - New Construction, Undivided, Rural**Net Length:** 0.152 MI
800 LF**Description:** I-95 Northbound On Ramp Reconstruction from SW 10th Street (just after the EB/WB merge, includes Braided Ramp Bridge)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 30.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.017
Top of Structural Course For Begin Section	38.80
Top of Structural Course For End Section	44.50
Horizontal Elevation For Begin Section	16.00
Horizontal Elevation For End Section	16.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %
Alignment Number	2
Distance	0.179
Top of Structural Course For Begin Section	44.50
Top of Structural Course For End Section	16.00
Horizontal Elevation For Begin Section	16.00
Horizontal Elevation For End Section	16.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
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	1.11	AC	\$38,512.13	\$42,748.46
120-1	REGULAR EXCAVATION	11,787.75	CY	\$10.00	\$117,877.50
120-6	EMBANKMENT	1,712.22	CY	\$15.00	\$25,683.30
Earthwork Component Total					\$186,309.26

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	2,399.76	SY	\$6.41	\$15,382.46
285-709	OPTIONAL BASE,BASE GROUP 09	1,362.53	SY	\$27.13	\$36,965.44
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	183.31	TN	\$158.68	\$29,087.63
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	53.33	TN	\$155.87	\$8,312.55

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.61	GM	\$864.36	\$527.26

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

Roadway Component Total

\$90,275.34

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	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,125.22	SY	\$17.50	\$19,691.35
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	146.65	TN	\$158.68	\$23,270.42
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.69	TN	\$155.87	\$731.03

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,079.79	LF	\$1.84	\$3,826.81
104-11	FLOATING TURBIDITY BARRIER	37.88	LF	\$11.66	\$441.68
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	37.88	LF	\$5.90	\$223.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

107-1	LITTER REMOVAL	1.84 AC	\$37.84	\$69.63
107-2	MOWING	1.84 AC	\$74.05	\$136.25
Shoulder Component Total				\$50,404.50

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.73 CY	\$2,160.00	\$5,896.80
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	128.00 LF	\$100.00	\$12,800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	\$144.65	\$4,628.80
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00 EA	\$1,579.93	\$11,059.51
570-1-1	PERFORMANCE TURF	106.66 SY	\$2.54	\$270.92
Drainage Component Total				\$34,656.03

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00 AS	\$1,059.29	\$4,237.16
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$8,835.57

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value			
Multiplier (Number of Poles)	11			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,200.00 LF	\$8.00	\$17,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00 EA	\$618.33	\$6,801.63
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,600.00 LF	\$2.28	\$15,048.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	11.00 EA	\$6,500.00	\$71,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00 EA	\$618.53	\$6,803.83
Subcomponent Total				\$117,753.46
Lighting Component Total				\$117,753.46

BRIDGES COMPONENT**Bridge NBRAID**

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	500.00
Width (LF)	38.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
Final Cost per SF	\$152.35
Basic Bridge Cost	\$2,850,000.00
Description	I-95 NORTHBOUND BRAIDED RAMP BRIDGE

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	84.44	CY	\$351.19	\$29,654.48
415-1-9	REINF STEEL- APPROACH SLABS	14,777.00	LB	\$1.01	\$14,924.77
Bridge NBRAID Total					\$2,894,579.25
Bridges Component Total					\$2,894,579.25

RETAINING WALLS COMPONENT**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	2,077.00	LF	\$260.00	\$540,020.00
Comment: One for each wall length 2 x 91.5 LF + 2 x 1197 LF = 2577 LF					

Retaining Wall 1

Description	Value
Length	91.50
Begin height	14.00
End Height	38.80
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,415.60	SF	\$28.00	\$67,636.80

Retaining Wall 2

Description	Value
Length	91.50
Begin height	14.00
End Height	38.80
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,415.60 SF	\$28.00	\$67,636.80
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Retaining Wall 3

Description	Value
Length	1,197.00
Begin height	40.00
End Height	14.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	32,319.00	SF	\$28.00	\$904,932.00

Retaining Wall 4

Description	Value
Length	1,197.00
Begin height	40.00
End Height	14.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	32,319.00	SF	\$28.00	\$904,932.00

Retaining Walls Component Total	\$2,485,157.60
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Sequence 10 Total	\$5,867,971.01
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 11 NUR - New Construction, Undivided, Rural**Net Length:** 0.352 MI
1,858 LF**Description:** I-95 Northbound On Ramp Reconstruction from EB Hillsboro Blvd (note: Ramp Bridge widening, included in Sequence 5)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.060
Top of Structural Course For Begin Section	16.00
Top of Structural Course For End Section	27.00
Horizontal Elevation For Begin Section	16.00
Horizontal Elevation For End Section	14.00
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 %
Alignment Number	2
Distance	0.060
Top of Structural Course For Begin Section	27.00
Top of Structural Course For End Section	38.50
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	38.50
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	1.28	AC	\$38,512.13	\$49,295.53
120-1	REGULAR EXCAVATION	5,414.64	CY	\$10.00	\$54,146.40
120-6	EMBANKMENT	5,414.64	CY	\$15.00	\$81,219.60

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.47	AC	\$38,512.13	\$18,100.70
	Comment: Additional Clear and Grubbing - Removal of Existing Lane: 2266 SY / 4840 SY/AC = .4681 AC				

Earthwork Component Total

\$202,762.23

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
Structural Spread Rate	275
Friction Course Spread Rate	80

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,778.96	SY	\$6.41	\$49,863.13
285-709	OPTIONAL BASE,BASE GROUP 09	3,164.85	SY	\$27.13	\$85,862.38
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	425.80	TN	\$158.68	\$67,565.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	123.87	TN	\$155.87	\$19,307.62

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.41	GM	\$864.36	\$1,218.75
Roadway Component Total					\$223,817.82

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	11.34 / 11.34
Total Outside Shoulder Perf. Turf Width L/R	5.34 / 5.34
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	2,613.63	SY	\$17.50	\$45,738.52
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	340.64	TN	\$158.68	\$54,052.76
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	10.90	TN	\$155.87	\$1,698.98
570-1-1	PERFORMANCE TURF	2,204.86	SY	\$2.54	\$5,600.34

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,830.88	LF	\$1.84	\$8,888.82
104-12		87.98	LF	\$5.90	\$519.08

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	STAKED TURBIDITY BARRIER- NYL REINF PVC			
107-1	LITTER REMOVAL	4.27 AC	\$37.84	\$161.58
107-2	MOWING	4.27 AC	\$74.05	\$316.19
Shoulder Component Total				\$116,976.28

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	6.33 CY	\$2,160.00	\$13,672.80
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	288.00 LF	\$100.00	\$28,800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	\$144.65	\$9,257.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	15.00 EA	\$1,579.93	\$23,698.95
570-1-1	PERFORMANCE TURF	247.74 SY	\$2.54	\$629.26
Drainage Component Total				\$76,058.61

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00 AS	\$1,059.29	\$8,474.32
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT Comment: NB I-95 On Ramp from EB Hillsboro Blvd	1.00 EA	\$75,000.00	\$75,000.00
Signing Component Total				\$88,072.73

LIGHTING COMPONENT**Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

Value

19

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,800.00 LF	\$8.00	\$30,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	19.00 EA	\$618.33	\$11,748.27
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	11,400.00 LF	\$2.28	\$25,992.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	19.00 EA	\$6,500.00	\$123,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	19.00 EA	\$618.53	\$11,752.07
	Subcomponent Total			\$203,392.34
	Lighting Component Total			\$203,392.34
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	Sequence 11 Total			\$911,080.01
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 12 NUR - New Construction, Undivided, Rural**Net Length:** 0.179 MI
944 LF**Description:** I-95 Northbound On Ramp Reconstruction from WB Hillsboro Blvd (includes removal of existing NB to WB off ramp)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.129
Top of Structural Course For Begin Section	105.00
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	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	0.65	AC	\$38,512.13	\$25,032.88
120-6	EMBANKMENT	3,631.38	CY	\$15.00	\$54,470.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.67	AC	\$38,512.13	\$25,803.13
	Comment: Removal of existing off ramp: 3212 SY 3212 SY / 4808 SY/AC				

Earthwork Component Total \$105,306.71**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	3,392.34	SY	\$6.41	\$21,744.90
285-709	OPTIONAL BASE,BASE GROUP 09	1,608.06	SY	\$27.13	\$43,626.67
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	216.35	TN	\$158.68	\$34,330.42
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	62.94	TN	\$155.87	\$9,810.46

X-Items

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Additional Lane: 871 SY	871.00	SY	\$6.41	\$5,583.11
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Additional Lane: 871 SY	871.00	SY	\$27.13	\$23,630.23
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Additional Lane: 871 SY * 275 LB/SY / 2000 LB	119.76	TN	\$158.68	\$19,003.52
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22 Comment: Additional Lane: 871 SY * 80 LB/SY / 2000 LB	34.84	TN	\$155.87	\$5,430.51

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.72	GM	\$864.36	\$622.34

Roadway Component Total

\$163,782.16

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.67 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,327.98	SY	\$17.50	\$23,239.65
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	173.08	TN	\$158.68	\$27,464.33
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	50.35	TN	\$155.87	\$7,848.05
570-1-1	PERFORMANCE TURF	560.14	SY	\$2.54	\$1,422.76

X-Items

Pay item	Description	Quantity	Unit	Unit Price
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

				Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	744.00 SY	\$41.68	\$31,009.92
	Comment: 6' x 1069' = 6414 SF + 6' x 47' = 282 SF / 9 SF/SY			

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,454.57 LF	\$1.84	\$4,516.41
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	44.70 LF	\$5.90	\$263.73
107-1	LITTER REMOVAL	2.17 AC	\$37.84	\$82.11
107-2	MOWING	2.17 AC	\$74.05	\$160.69
Shoulder Component Total				\$96,007.65

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.22 CY	\$2,160.00	\$6,955.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	144.00 LF	\$100.00	\$14,400.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	\$144.65	\$4,628.80
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00 EA	\$1,579.93	\$12,639.44
570-1-1	PERFORMANCE TURF	125.88 SY	\$2.54	\$319.74
Drainage Component Total				\$38,943.18

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00 AS	\$1,059.29	\$4,237.16
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	1.00 EA	\$75,000.00	\$75,000.00
	Comment: I-95 NB On Ramp from WB Hillsboro Blvd			
Signing Component Total				\$83,835.57

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$8.00	\$16,000.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00	EA	\$618.33	\$6,183.30
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	\$2.28	\$13,680.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	10.00	EA	\$6,500.00	\$65,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	10.00	EA	\$618.53	\$6,185.30
Subcomponent Total					\$107,048.60
Lighting Component Total					\$107,048.60
Sequence 12 Total					\$594,923.87

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 13 NUR - New Construction, Undivided, Rural**Net Length:** 0.594 MI
3,136 LF**Description:** I-95 Northbound On Ramp Reconstruction from EB/WB Hillsboro Blvd (include removal of existing WB to NB on ramp)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.000
Top of Structural Course For Begin Section	105.00
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	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	2.16	AC	\$38,512.13	\$83,186.20

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.99	AC	\$38,512.13	\$38,127.01
	Comment: Removal of existing on ramp: 4745 SY / 4808 SY/AC				

Earthwork Component Total \$121,313.21**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	10,337.66	SY	\$6.41	\$66,264.40
285-709	OPTIONAL BASE,BASE GROUP 09	5,341.30	SY	\$27.13	\$144,909.47
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	718.62	TN	\$158.68	\$114,030.62
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	209.05	TN	\$155.87	\$32,584.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	466.00	SY	\$6.41	\$2,987.06
	Comment: Additional Lane (On Ramp): 466 SY				

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Additional Lane (On Ramp): 466 SY	466.00 SY	\$27.13	\$12,642.58
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Additional Lane (On Ramp): 466 SY x 275 LB/SY / 2000 LB	64.08 TN	\$158.68	\$10,168.21
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22 Comment: Additional Lane (On Ramp): 466 SY x 80 LB/SY / 2000 LB	18.64 TN	\$155.87	\$2,905.42

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.38 GM	\$864.36	\$2,057.18
Roadway Component Total				\$388,549.56

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	4,411.01 SY	\$17.50	\$77,192.68
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	574.90 TN	\$158.68	\$91,225.13
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	18.40 TN	\$155.87	\$2,868.01
570-1-1	PERFORMANCE TURF	930.28 SY	\$2.54	\$2,362.91

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Additional Shoulder width: 6' x 2000' = 12000 / 9 = 1333.33 SY	1,333.33 SY	\$6.41	\$8,546.65
285-704	OPTIONAL BASE,BASE GROUP 04	1,333.33 SY	\$17.50	\$23,333.28

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: Additional Shoulder width: 6' x 2000' = 12000 / 9 = 1333.33 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	183.33 TN	\$158.68	\$29,090.80
	Comment: Additional Shoulder width: 6' x 2000' = 12000 / 9 = 1333.33 SY x 275 LB/SY x 2000 LB			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	53.33 TN	\$155.87	\$8,312.55
	Comment: Additional Shoulder width: 6' x 2000' = 12000 / 9 = 1333.33 SY x 80 LB/SY x 2000 LB			

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	8,153.06 LF	\$1.84	\$15,001.63
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	148.48 LF	\$5.90	\$876.03
107-1	LITTER REMOVAL	7.20 AC	\$37.84	\$272.45
107-2	MOWING	7.20 AC	\$74.05	\$533.16
Shoulder Component Total				\$259,615.28

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	10.69 CY	\$2,160.00	\$23,090.40
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	480.00 LF	\$100.00	\$48,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	104.00 LF	\$144.65	\$15,043.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	24.00 EA	\$1,579.93	\$37,918.32
570-1-1	PERFORMANCE TURF	418.11 SY	\$2.54	\$1,062.00
Drainage Component Total				\$125,114.32

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	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	12.00 AS	\$1,059.29	\$12,711.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$4,250.00	\$8,500.00
Signing Component Total				\$21,908.30

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	32
Pay Items	

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	6,400.00	LF	\$8.00	\$51,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	32.00	EA	\$618.33	\$19,786.56
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	19,200.00	LF	\$2.28	\$43,776.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	32.00	EA	\$6,500.00	\$208,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	32.00	EA	\$618.53	\$19,792.96
	Subcomponent Total				\$342,555.52
	Lighting Component Total				\$342,555.52
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Sequence 13 Total					\$1,259,056.19
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 14 NUR - New Construction, Undivided, Rural**Net Length:** 0.207 MI
1,092 LF**Description:** I-95 Southbound Off Ramp Reconstruction to EB/WB Hillsboro Blvd**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.207
Top of Structural Course For Begin Section	105.00
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	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	0.75	AC	\$38,512.13	\$28,884.10
120-6	EMBANKMENT	5,827.10	CY	\$15.00	\$87,406.50
Earthwork Component Total					\$116,290.60

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	3,923.58	SY	\$6.41	\$25,150.15
285-709	OPTIONAL BASE,BASE GROUP 09	1,859.88	SY	\$27.13	\$50,458.54
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	250.23	TN	\$158.68	\$39,706.50
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	72.79	TN	\$155.87	\$11,345.78

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.83	GM	\$864.36	\$717.42
Roadway Component Total					\$127,378.39

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.67 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,535.94	SY	\$17.50	\$26,878.95
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	200.18	TN	\$158.68	\$31,764.56
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	58.23	TN	\$155.87	\$9,076.31
570-1-1	PERFORMANCE TURF	647.86	SY	\$2.54	\$1,645.56

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,838.95	LF	\$1.84	\$5,223.67
104-11	FLOATING TURBIDITY BARRIER	51.70	LF	\$11.66	\$602.82
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	51.70	LF	\$5.90	\$305.03
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	2.51	AC	\$37.84	\$94.98
107-2	MOWING	2.51	AC	\$74.05	\$185.87
Shoulder Component Total					\$77,791.59

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.72	CY	\$2,160.00	\$8,035.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	168.00	LF	\$100.00	\$16,800.00
430-175-136		40.00	LF	\$144.65	\$5,786.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	PIPE CULV, OPT MATL, ROUND, 36"S/CD			
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	\$1,579.93	\$14,219.37
570-1-1	PERFORMANCE TURF	145.59 SY	\$2.54	\$369.80
Drainage Component Total				\$45,210.37

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	\$1,059.29	\$5,296.45
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,250.00	\$4,250.00
Signing Component Total					\$9,894.86

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	11				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,200.00	LF	\$8.00	\$17,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00	EA	\$618.33	\$6,801.63
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,600.00	LF	\$2.28	\$15,048.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	11.00	EA	\$6,500.00	\$71,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00	EA	\$618.53	\$6,803.83
Subcomponent Total					\$117,753.46
Lighting Component Total					\$117,753.46
Sequence 14 Total					\$494,319.27

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 15 NUR - New Construction, Undivided, Rural**Net Length:** 0.384 MI
2,029 LF**Description:** I-95 Southbound On Ramp Reconstruction from WB Hillsboro Blvd (includes new bridge over Hillsboro Blvd)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.044
Top of Structural Course For Begin Section	25.69
Top of Structural Course For End Section	30.60
Horizontal Elevation For Begin Section	16.00
Horizontal Elevation For End Section	16.00
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 %
Alignment Number	2
Distance	0.440
Top of Structural Course For Begin Section	30.60
Top of Structural Course For End Section	35.55
Horizontal Elevation For Begin Section	16.00
Horizontal Elevation For End Section	16.00
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	3.26	AC	\$38,512.13	\$125,549.54
120-6	EMBANKMENT	107,962.94	CY	\$15.00	\$1,619,444.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.49	AC	\$38,512.13	\$18,870.94
	Comment: Removal of existing on ramp: 635 SY + 1739 SY = 2374 SY / 4808 SY/AC				

Earthwork Component Total \$1,763,864.58**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	7,291.25	SY	\$6.41	\$46,736.91

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

285-709	OPTIONAL BASE,BASE GROUP 09	3,456.24 SY	\$27.13	\$93,767.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	465.00 TN	\$158.68	\$73,786.20
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	135.27 TN	\$155.87	\$21,084.53

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.54	GM	\$864.36	\$1,331.11

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
521-1	MEDIAN CONC BARRIER WALL	161.00	LF	\$155.00	\$24,955.00

Roadway Component Total

\$261,661.54

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.67 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	2,854.27	SY	\$17.50	\$49,949.72
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	372.00	TN	\$158.68	\$59,028.96
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	108.22	TN	\$155.87	\$16,868.25

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

570-1-1	PERFORMANCE TURF	1,203.94 SY	\$2.54	\$3,058.01
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Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,275.67 LF	\$1.84	\$9,707.23
104-11	FLOATING TURBIDITY BARRIER	96.07 LF	\$11.66	\$1,120.18
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	96.07 LF	\$5.90	\$566.81
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	4.66 AC	\$37.84	\$176.33
107-2	MOWING	4.66 AC	\$74.05	\$345.07

Shoulder Component Total

\$142,834.41

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	6.92 CY	\$2,160.00	\$14,947.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	312.00 LF	\$100.00	\$31,200.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	\$144.65	\$9,257.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	16.00 EA	\$1,579.93	\$25,278.88
570-1-1	PERFORMANCE TURF	270.55 SY	\$2.54	\$687.20

Drainage Component Total

\$81,370.88

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00 AS	\$1,059.29	\$8,474.32
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	1.00 EA	\$75,000.00	\$75,000.00

Comment: SB I-95 On Ramp from WB Hillsboro Blvd**Signing Component Total**

\$88,072.73

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value
Multiplier (Number of Poles)	21

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	4,200.00 LF	\$8.00	\$33,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	21.00 EA	\$618.33	\$12,984.93
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	12,600.00 LF	\$2.28	\$28,728.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	21.00 EA	\$6,500.00	\$136,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	21.00 EA	\$618.53	\$12,989.13
Subcomponent Total				\$224,802.06
Lighting Component Total				\$224,802.06

BRIDGES COMPONENT**Bridge SBHILS**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	185.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.05
Structure No.	860124
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$126.00
Final Cost per SF	\$132.34
Basic Bridge Cost	\$699,300.00
Description	I-95 SB ON RAMP BRIDGE OVER HILLSBORO BLVD

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$351.19	\$23,413.84
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$1.01	\$11,783.92
Bridge SBHILS Total				\$734,497.76
Bridges Component Total				\$734,497.76

RETAINING WALLS COMPONENT**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	1,182.00 LF	\$260.00	\$307,320.00
Comment: One for each wall 2x 228 FT + 2x 363FT = 1182 FT				

Retaining Wall 1

Description	Value
Length	363.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Begin height	44.50
End Height	44.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	16,153.50	SF	\$28.00	\$452,298.00

Retaining Wall 2

Description	Value
Length	363.00
Begin height	44.50
End Height	44.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	16,153.50	SF	\$28.00	\$452,298.00

Retaining Wall 3

Description	Value
Length	228.00
Begin height	44.50
End Height	39.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,519.00	SF	\$28.00	\$266,532.00

Retaining Wall 4

Description	Value
Length	228.00
Begin height	44.50
End Height	38.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,405.00	SF	\$28.00	\$263,340.00

Retaining Walls Component Total \$1,741,788.00

Sequence 15 Total \$5,038,891.96

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 16 NUR - New Construction, Undivided, Rural**Net Length:** 0.535 MI
2,825 LF**Description:** I-95 Southbound On Ramp Reconstruction from EB Hillsboro Blvd**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.535
Top of Structural Course For Begin Section	105.00
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	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	1.95	AC	\$38,512.13	\$75,098.65
120-6	EMBANKMENT	32,631.67	CY	\$15.00	\$489,475.05
Earthwork Component Total					\$564,573.70

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	15.00 / 15.00
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	18,624.85	SY	\$6.41	\$119,385.29
285-709	OPTIONAL BASE,BASE GROUP 09	9,623.15	SY	\$27.13	\$261,076.06
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,294.70	TN	\$158.68	\$205,443.00
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	376.64	TN	\$155.87	\$58,706.88

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	72.00	EA	\$4.68	\$336.96
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.14	GM	\$864.36	\$1,849.73
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	1.07	GM	\$396.46	\$424.21
Roadway Component Total					\$647,222.13

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	14.67 / 14.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips $\bar{y}_i \frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	7,739.95	SY	\$17.50	\$135,449.12
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,035.76	TN	\$158.68	\$164,354.40
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	301.31	TN	\$155.87	\$46,965.19
570-1-1	PERFORMANCE TURF	1,676.05	SY	\$2.54	\$4,257.17

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,344.48	LF	\$1.84	\$13,513.84
104-11	FLOATING TURBIDITY BARRIER	133.75	LF	\$11.66	\$1,559.52
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	133.75	LF	\$5.90	\$789.12
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	6.48	AC	\$37.84	\$245.20
107-2	MOWING	6.48	AC	\$74.05	\$479.84
Shoulder Component Total					\$369,627.27

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	9.63	CY	\$2,160.00	\$20,800.80
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	432.00	LF	\$100.00	\$43,200.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	\$144.65	\$13,886.40
430-984-129		22.00	EA	\$1,579.93	\$34,758.46

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	MITERED END SECT, OPTIONAL RD, 24" SD			
570-1-1	PERFORMANCE TURF	376.64 SY	\$2.54	\$956.67
Drainage Component Total				\$113,602.33

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	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	11.00 AS	\$1,059.29	\$11,652.19
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$4,250.00	\$8,500.00
Signing Component Total				\$20,849.01

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value			
Multiplier (Number of Poles)	29			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	5,800.00 LF	\$8.00	\$46,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	29.00 EA	\$618.33	\$17,931.57
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	17,400.00 LF	\$2.28	\$39,672.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	29.00 EA	\$6,500.00	\$188,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	29.00 EA	\$618.53	\$17,937.37
Subcomponent Total				\$310,440.94
Lighting Component Total				\$310,440.94

Sequence 16 Total	\$2,026,315.38
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 17 NUR - New Construction, Undivided, Rural**Net Length:** 0.596 MI
3,146 LF**Description:** I-95 Southbound Off Ramp Reconstruction from Hillsboro Blvd (includes braided ramp bridge & Box culvert for canal)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.100
Top of Structural Course For Begin Section	44.50
Top of Structural Course For End Section	44.50
Horizontal Elevation For Begin Section	44.50
Horizontal Elevation For End Section	16.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %
Alignment Number	2
Distance	0.100
Top of Structural Course For Begin Section	44.50
Top of Structural Course For End Section	16.00
Horizontal Elevation For Begin Section	10.00
Horizontal Elevation For End Section	10.00
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 %
Alignment Number	3
Distance	0.100
Top of Structural Course For Begin Section	16.00
Top of Structural Course For End Section	44.50
Horizontal Elevation For Begin Section	10.00
Horizontal Elevation For End Section	10.00
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
110-1-1	CLEARING & GRUBBING	5.06	AC	\$38,512.13	\$194,871.38
120-6	EMBANKMENT	22,245.81	CY	\$15.00	\$333,687.15
Earthwork Component Total					\$528,558.53

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
Structural Spread Rate	275
Friction Course Spread Rate	80

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,437.47 SY	\$6.41	\$60,494.18
285-709	OPTIONAL BASE,BASE GROUP 09	5,358.39 SY	\$27.13	\$145,373.12
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	720.92 TN	\$158.68	\$114,395.59
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	209.72 TN	\$155.87	\$32,689.06

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.38 GM	\$864.36	\$2,057.18

Roadway Component Total

\$355,009.13

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	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{i} $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	4,425.13 SY	\$17.50	\$77,439.77
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	576.73 TN	\$158.68	\$91,515.52
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	167.78 TN	\$155.87	\$26,151.87

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	8,179.14 LF	\$1.84	\$15,049.62
104-11	FLOATING TURBIDITY BARRIER	148.95 LF	\$11.66	\$1,736.76
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	148.95 LF	\$5.90	\$878.80
104-15		1.00 EA	\$2,013.84	\$2,013.84

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	SOIL TRACKING PREVENTION DEVICE			
107-1	LITTER REMOVAL	7.22 AC	\$37.84	\$273.20
107-2	MOWING	7.22 AC	\$74.05	\$534.64
Shoulder Component Total				\$215,594.04

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	10.72 CY	\$2,160.00	\$23,155.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	480.00 LF	\$100.00	\$48,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	104.00 LF	\$144.65	\$15,043.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	24.00 EA	\$1,579.93	\$37,918.32
570-1-1	PERFORMANCE TURF	419.44 SY	\$2.54	\$1,065.38
Drainage Component Total				\$125,182.50

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	\$348.41	\$696.82
700-1-12	SINGLE POST SIGN, F&I GM, 12- 20 SF	12.00 AS	\$1,059.29	\$12,711.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$4,250.00	\$8,500.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41- 50 FT	1.00 EA	\$75,000.00	\$75,000.00
Comment: I-95 SB Off Ramp to SW 10th Street				
Signing Component Total				\$96,908.30

LIGHTING COMPONENT**Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

Value

32

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	6,400.00 LF	\$8.00	\$51,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	32.00 EA	\$618.33	\$19,786.56
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	19,200.00 LF	\$2.28	\$43,776.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	32.00 EA	\$6,500.00	\$208,000.00
715-500-1		32.00 EA	\$618.53	\$19,792.96

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

POLE CABLE DIST SYS,
CONVENTIONAL**Subcomponent Total** \$342,555.52**Lighting Component Total** \$342,555.52**BRIDGES COMPONENT****Bridge SBRAID**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	643.92
Width (LF)	42.67
Type	Low Level
Cost Factor	1.10
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$132.00
Final Cost per SF	\$133.82
Basic Bridge Cost	\$3,626,840.76
Description	I-95 SOUTHBOUND BRAIDED RAMP BRIDGE

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	94.82	CY	\$351.19	\$33,299.84
415-1-9	REINF STEEL- APPROACH SLABS	16,593.50	LB	\$1.01	\$16,759.44
Bridge SBRAID Total					\$3,676,900.04

Bridge BOX_C1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	750.00
Width (LF)	30.00
Type	Low Level
Cost Factor	0.50
Structure No.	
Removal of Existing Structures area	32,000.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$60.00
Final Cost per SF	\$61.56
Basic Bridge Cost	\$1,350,000.00
Description	BOX CULVERT TRIPLE 10X8.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	32,000.00	SF	\$28.66	\$917,120.00
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$351.19	\$23,413.84
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$1.01	\$11,783.92

Bridge BOX_C1 Total \$2,302,317.76

Bridges Component Total \$5,979,217.80

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	5,828.00	LF	\$260.00	\$1,515,280.00
	Comment: 559 LF + 95 LF (before braided rmp LT/RT) + 2x 570 LF(ramp down from braided rmp) + 2x 1447 LF (wall between SW 10th St off ramp bridge and braid rmp) 2x 570 LF(ramp up to SW 10th St rmp bridge)				

Retaining Wall 1

Description	Value
Length	559.00
Begin height	2.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,524.75	SF	\$28.00	\$238,693.00

Retaining Wall 2

Description	Value
Length	95.00
Begin height	28.50
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,707.50	SF	\$28.00	\$75,810.00

Retaining Wall 3

Description	Value
Length	570.00
Begin height	28.50
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,547.50	SF	\$28.00	\$267,330.00

Retaining Wall 4

Description	Value
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Length	570.00
Begin height	28.50
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,547.50	SF	\$28.00	\$267,330.00

Retaining Wall 5

Description	Value
Length	1,447.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,235.00	SF	\$28.00	\$202,580.00

Retaining Wall 6

Description	Value
Length	1,447.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,235.00	SF	\$28.00	\$202,580.00

Retaining Wall 7

Description	Value
Length	570.00
Begin height	5.00
End Height	28.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,547.50	SF	\$28.00	\$267,330.00

Retaining Wall 8

Description	Value
Length	570.00
Begin height	5.00
End Height	28.50
Multiplier	1

Pay Items

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,547.50	SF	\$28.00	\$267,330.00
Retaining Walls Component Total					\$3,304,263.00
Sequence 17 Total					\$10,947,288.82

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 18 NUR - New Construction, Undivided, Rural**Net Length:** 0.124 MI
652 LF**Description:** I-95 Southbound On Ramp Reconstruction from EB/WB SW 10th Street**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.100
Top of Structural Course For Begin Section	35.00
Top of Structural Course For End Section	25.00
Horizontal Elevation For Begin Section	10.00
Horizontal Elevation For End Section	10.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
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	1.05	AC	\$38,512.13	\$40,437.74
120-6	EMBANKMENT	10,995.89	CY	\$15.00	\$164,938.35

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.47	AC	\$38,512.13	\$18,100.70
	Comment: Additional C&G: Lane & Shoulders (EB to SB): 1025 SY + (12' x 512') / 9 = 1707.67 SY Merge to SB I-95: 278 SY + 300 SY = 578 SY 2285.67 SY / 4808 SY/AC = 0.47 AC				

Earthwork Component Total \$223,476.79**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 24.00
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	2,608.32	SY	\$6.41	\$16,719.33
285-709	OPTIONAL BASE,BASE GROUP 09	1,762.79	SY	\$27.13	\$47,824.49
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	239.10	TN	\$158.68	\$37,940.39
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.56	TN	\$155.87	\$10,842.32

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

160-4	TYPE B STABILIZATION	2,300.00 SY	\$6.41	\$14,743.00
	Comment: On Ramp Lane: 1025 SY On Ramp Shoulders: 2x6'x 512 = 6144SF/9 = 682.66 SY On Ramp Additional Shldr: 166 SY Merge Area (Lane): 278 SY Merge Area (Shoulders): 148 SY			
285-704	OPTIONAL BASE,BASE GROUP 04	997.00 SY	\$17.50	\$17,447.50
	Comment: Additional Shoulders: 682.66 + 166 + 148			
285-709	OPTIONAL BASE,BASE GROUP 09	1,303.00 SY	\$27.13	\$35,350.39
	Comment: Additional Lanes: 1025 + 278			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	316.25 TN	\$158.68	\$50,182.55
	Comment: All Additional Pavement (2.5" Thickness) : 2300 SY * 275 LB/SY / 2000			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	92.00 TN	\$155.87	\$14,340.04
	Comment: All Additional Pavement (.75" Thickness) : 2300 SY * 80 LB/SY / 2000			

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.49	GM	\$864.36	\$423.54

Roadway Component Total

\$245,813.55

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	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips i ₂ ½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	917.26	SY	\$17.50	\$16,052.05
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	119.55	TN	\$158.68	\$18,970.19
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	34.78	TN	\$155.87	\$5,421.16

Shoulder Component Total

\$40,443.40

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.22 CY	\$2,160.00	\$4,795.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00 LF	\$100.00	\$10,400.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00 LF	\$144.65	\$3,471.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00 EA	\$1,579.93	\$7,899.65
570-1-1	PERFORMANCE TURF	86.94 SY	\$2.54	\$220.83

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-196	PIPE CULV, OPT MATL, ROUND, 96"S/CD	600.00 LF	\$524.11	\$314,466.00
	Comment: 3x 200 FT -- Pipe Culvert Extension			

Drainage Component Total**\$341,253.28****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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	\$1,059.29	\$3,177.87
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00

Signing Component Total**\$7,776.28****LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

Value

6

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00 LF	\$8.00	\$9,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00 EA	\$618.33	\$3,709.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00 LF	\$2.28	\$8,208.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	6.00 EA	\$6,500.00	\$39,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00 EA	\$618.53	\$3,711.18
	Subcomponent Total			\$64,229.16

Lighting Component Total**\$64,229.16****RETAINING WALLS COMPONENT**

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 19NDR - New Construction, Divided, Rural**Net Length:** 0.143 MI
753 LF**Description:** I-95 Direct Connect (SB to WB) and (EB to NB) Includes Flyover Bridge**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.143
Top of Structural Course For Begin Section	105.00
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	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	1.21	AC	\$38,512.13	\$46,599.68
120-6	EMBANKMENT	9,294.54	CY	\$15.00	\$139,418.10
Earthwork Component Total					\$186,017.78

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	15.00 / 15.00
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	4,517.57	SY	\$6.41	\$28,957.62
285-709	OPTIONAL BASE,BASE GROUP 09	2,620.19	SY	\$27.13	\$71,085.75
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	345.09	TN	\$158.68	\$54,758.88
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	100.39	TN	\$155.87	\$15,647.79

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	0

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	19.00 EA	\$4.68	\$88.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.14 GM	\$864.36	\$985.37
Roadway Component Total				\$171,524.33

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 4.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 4.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,059.12 SY	\$17.50	\$18,534.60
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	138.04 TN	\$158.68	\$21,904.19
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	40.16 TN	\$155.87	\$6,259.74
Shoulder Component Total				\$46,698.53

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	14.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	4.00 / 8.00
Paved Median Shoulder Width L/R	4.00 / 8.00
Structural Spread Rate	220
Friction Course Spread Rate	110
Total Width (T) / 8" Overlap (O)	T
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,059.12 SY	\$17.50	\$18,534.60
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	110.43 TN	\$158.68	\$17,523.03
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	55.21 TN	\$160.00	\$8,833.60
521-1	MEDIAN CONC BARRIER WALL	753.00 LF	\$155.00	\$116,715.00
Median Component Total				\$161,606.23

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.57 CY	\$2,160.00	\$5,551.20
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00 EA	\$4,686.24	\$4,686.24
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	120.00 LF	\$100.00	\$12,000.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00 LF	\$105.86	\$5,928.16
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00 LF	\$144.65	\$6,943.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00 EA	\$1,579.93	\$9,479.58
524-1-1	CONCRETE DITCH PAVT, NR, 3"	285.20 SY	\$67.10	\$19,136.92
570-1-1	PERFORMANCE TURF	100.39 SY	\$2.54	\$254.99
Drainage Component Total				\$63,980.29

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12- 20 SF	4.00 AS	\$1,059.29	\$4,237.16
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	1.00 AS	\$7,250.00	\$7,250.00
Signing Component Total				\$16,085.57

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value			
Multiplier (Number of Poles)	8			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00 LF	\$8.00	\$12,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$618.33	\$4,946.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00 LF	\$2.28	\$10,944.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	8.00 EA	\$6,500.00	\$52,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00 EA	\$618.53	\$4,948.24
Subcomponent Total				\$85,638.88
Lighting Component Total				\$85,638.88

BRIDGES COMPONENT

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Bridge NS_DC

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,285.00
Width (LF)	58.00
Type	Low Level
Cost Factor	1.30
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$156.00
Final Cost per SF	\$156.91
Basic Bridge Cost	\$11,626,680.00
Description	I_95 DIRECT CONNECT RAMPS (EB TO NB) AND (SB TO WB)

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	128.89	CY	\$351.19	\$45,264.88
415-1-9	REINF STEEL- APPROACH SLABS	22,555.75	LB	\$1.01	\$22,781.31
Bridge NS_DC Total					\$11,694,726.19
Bridges Component Total					\$11,694,726.19

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	752.00
Begin height	5.00
End Height	53.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	21,996.00	SF	\$28.00	\$615,888.00

Retaining Wall 2

Description	Value
Length	752.00
Begin height	5.00
End Height	53.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	21,996.00	SF	\$28.00	\$615,888.00

Retaining Walls Component Total	\$1,231,776.00
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Sequence 19 Total

\$13,658,053.80

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 20 NUR - New Construction, Undivided, Rural**Net Length:** 0.099 MI
520 LF**Description:** I-95 Direct Connect (NB to WB) (4th Level) (includes fly over bridge)**Special** 520 LF roadway + 900 LF single lane bridge**Conditions:****EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.098
Top of Structural Course For Begin Section	105.00
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	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	0.83	AC	\$38,512.13	\$31,965.07
120-6	EMBANKMENT	2,532.77	CY	\$15.00	\$37,991.55
Earthwork Component Total					\$69,956.62

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	1,560.24	SY	\$6.41	\$10,001.14
285-709	OPTIONAL BASE,BASE GROUP 09	885.87	SY	\$27.13	\$24,033.65
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	119.18	TN	\$158.68	\$18,911.48
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	34.67	TN	\$155.87	\$5,404.01

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.39	GM	\$864.36	\$337.10

Roadway Component Total

\$58,687.38

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 4.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 4.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	731.58	SY	\$17.50	\$12,802.65
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	95.35	TN	\$158.68	\$15,130.14
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	27.74	TN	\$155.87	\$4,323.83

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,352.21	LF	\$1.84	\$2,488.07
104-11	FLOATING TURBIDITY BARRIER	24.62	LF	\$11.66	\$287.07
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	24.62	LF	\$5.90	\$145.26
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	1.19	AC	\$37.84	\$45.03
107-2	MOWING	1.19	AC	\$74.05	\$88.12

Shoulder Component Total

\$37,324.01

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.77	CY	\$2,160.00	\$3,823.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	80.00	LF	\$100.00	\$8,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	\$144.65	\$2,314.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	\$1,579.93	\$6,319.72
570-1-1	PERFORMANCE TURF	69.34	SY	\$2.54	\$176.12

Drainage Component Total

\$20,633.44

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	\$1,059.29	\$2,118.58
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,250.00	\$4,250.00

Signing Component Total

\$6,716.99

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	\$8.00	\$9,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	\$618.33	\$3,709.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	\$2.28	\$8,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	\$6,500.00	\$39,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	\$618.53	\$3,711.18
Subcomponent Total					\$64,229.16

Lighting Component Total

\$64,229.16

BRIDGES COMPONENT

Bridge NB_DC

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	900.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.67
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$200.40
Final Cost per SF	\$201.70
Basic Bridge Cost	\$5,410,800.00
Description	I-95 DIRECT CONNECT RAMP (NB TO WB) (4TH LEVEL)

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10		66.67	CY	\$351.19	\$23,413.84

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	CONC CLASS II, APPROACH SLABS			
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$1.01	\$11,783.92
Bridge NB_DC Total				\$5,445,997.76
Bridges Component Total				\$5,445,997.76

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	1,040.00 LF	\$260.00	\$270,400.00
	Comment: 2x 520' (one for each side)			

Retaining Wall 1

Description	Value
Length	520.00
Begin height	25.00
End Height	51.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	19,760.00 SF	\$28.00	\$553,280.00

Retaining Wall 2

Description	Value
Length	520.00
Begin height	25.00
End Height	51.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	19,760.00 SF	\$28.00	\$553,280.00

Retaining Walls Component Total \$1,376,960.00

Sequence 20 Total \$7,080,505.36

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 21 NUR - New Construction, Undivided, Rural**Net Length:** 0.079 MI
418 LF**Description:** I-95 Direct Connect (EB to SB) (includes fly over bridge)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 35.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.079
Top of Structural Course For Begin Section	105.00
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	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	0.67	AC	\$38,512.13	\$25,803.13
120-6	EMBANKMENT	2,178.76	CY	\$15.00	\$32,681.40
Earthwork Component Total					\$58,484.53

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 15.00
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	1,254.53	SY	\$6.41	\$8,041.54
285-709	OPTIONAL BASE,BASE GROUP 09	712.29	SY	\$27.13	\$19,324.43
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	95.83	TN	\$158.68	\$15,206.30
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	27.88	TN	\$155.87	\$4,345.66

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.32 GM	\$864.36	\$276.60
Roadway Component Total				\$47,194.53

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	4.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 8.00
Structural Spread Rate	275
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	588.23 SY	\$17.50	\$10,294.02
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	76.67 TN	\$158.68	\$12,166.00
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	22.30 TN	\$155.87	\$3,475.90

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,087.26 LF	\$1.84	\$2,000.56
104-11	FLOATING TURBIDITY BARRIER	19.80 LF	\$11.66	\$230.87
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	19.80 LF	\$5.90	\$116.82
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
107-1	LITTER REMOVAL	0.96 AC	\$37.84	\$36.33
107-2	MOWING	0.96 AC	\$74.05	\$71.09
Shoulder Component Total				\$30,405.44

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.43 CY	\$2,160.00	\$3,088.80
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	64.00 LF	\$100.00	\$6,400.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00 LF	\$144.65	\$2,314.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00 EA	\$1,579.93	\$6,319.72
570-1-1	PERFORMANCE TURF	55.76 SY	\$2.54	\$141.63
Drainage Component Total				\$18,264.55

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	\$1,059.29	\$2,118.58
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,250.00	\$4,250.00
Signing Component Total					\$6,716.99

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	5				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	\$8.00	\$8,000.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	\$618.33	\$3,091.65
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	\$2.28	\$6,840.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	\$6,500.00	\$32,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	\$618.53	\$3,092.65
Subcomponent Total					\$53,524.30
Lighting Component Total					\$53,524.30

BRIDGES COMPONENT**Bridge SB_DC**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	800.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.30
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$156.00
Final Cost per SF	\$157.47
Basic Bridge Cost	\$3,744,000.00
Description	I-95 DIRECT CONNECT (EB TO SB)

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$351.19	\$23,413.84

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$1.01	\$11,783.92
Bridge SB_DC Total				\$3,779,197.76
Bridges Component Total				\$3,779,197.76

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	1,334.00	LF	\$260.00	\$346,840.00
Comment: 2x 667 (one for each side)					

Retaining Wall 1

Description	Value
Length	667.00
Begin height	5.00
End Height	26.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	10,338.50	SF	\$28.00	\$289,478.00

Retaining Wall 2

Description	Value
Length	667.00
Begin height	5.00
End Height	26.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	10,338.50	SF	\$28.00	\$289,478.00

Retaining Walls Component Total \$925,796.00

Sequence 21 Total \$4,919,584.10

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 22 NDR - New Construction, Divided, Rural**Net Length:** 0.328 MI
1,730 LF**Description:** SW 10th Street - General Purpose - Reconstruction from Begin Project Limits to West of Military Trail**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 125.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.328
Top of Structural Course For Begin Section	105.00
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	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	9.94	AC	\$38,512.13	\$382,810.57
120-6	EMBANKMENT	20,761.55	CY	\$15.00	\$311,423.25
Earthwork Component Total					\$694,233.82

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	28.00 / 28.00
Structural Spread Rate	220
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,766.04	SY	\$6.41	\$69,010.32
285-709	OPTIONAL BASE,BASE GROUP 09	11,019.81	SY	\$27.13	\$298,967.45
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,184.26	TN	\$158.68	\$187,918.38
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	592.13	TN	\$160.00	\$94,740.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,212.00	SY	\$6.41	\$20,588.92
Comment: Additional Pavement - EB Right Turn Lane into Walmart 1196 SY + EB Right Turn Lanes to SB Military Trail - 576 SY - EB Left Turn Lanes to NB Military Trail - 1440 SY					
285-709	OPTIONAL BASE,BASE GROUP 09	3,212.00	SY	\$27.13	\$87,141.56

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: Additional Pavement - EB Right Turn Lane into Walmart 1196 SY + EB Right Turn Lanes to SB Military Trail - 576 SY - EB Left Turn Lanes to NB Military Trail - 1440 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	353.32 TN	\$158.68	\$56,064.82
	Comment: Same Areas at OBG9 (3212 SY) -- 2" Thick - 3212 SY x 220 LB/SY / 2000 LB			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	176.66 TN	\$160.00	\$28,265.60
	Comment: Same Areas at OBG9 (3212 SY) -- 2" Thick - 3212 SY x 110 LB/SY / 2000 LB			

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/RAISED PAVEMENT MARKERS	133.00 EA	\$4.68	\$622.44
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.62 GM	\$864.36	\$2,264.62
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.31 GM	\$385.62	\$505.16

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

Roadway Component Total \$846,090.07

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

520-1-10	CONCRETE CURB & GUTTER, TYPE F	7,648.00 LF	\$23.00	\$175,904.00
	Comment: 1730 x 4 (both directions of travel, both sides of road) + 364 x 2 (displaced left turn lanes)			
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	2,613.00 SY	\$41.68	\$108,909.84
	Comment: Multiple areas (see PDF) 22 + 283 + 118 + 13 + 155 + 395 (All right side) + 1627 (Left side) =			
570-1-1	PERFORMANCE TURF	6,012.00 SY	\$2.54	\$15,270.48
	Comment: Various Areas (See PDF): 317 + 80 (right) + 4310 + 1305 (median)			

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,498.67 LF	\$1.84	\$8,277.55
104-11	FLOATING TURBIDITY BARRIER	81.92 LF	\$11.66	\$955.19
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	81.92 LF	\$5.90	\$483.33
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	2.00 EA	\$99.37	\$198.74
107-1	LITTER REMOVAL	7.94 AC	\$37.84	\$300.45
107-2	MOWING	7.94 AC	\$74.05	\$587.96
Shoulder Component Total				\$312,901.38

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.90 CY	\$2,160.00	\$12,744.00
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00 EA	\$4,686.24	\$9,372.48
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	264.00 LF	\$100.00	\$26,400.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00 LF	\$105.86	\$11,856.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00 LF	\$144.65	\$13,886.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	14.00 EA	\$1,579.93	\$22,119.02
524-1-1	CONCRETE DITCH PAVT, NR, 3"	655.40 SY	\$67.10	\$43,977.34
570-1-1	PERFORMANCE TURF	230.70 SY	\$2.54	\$585.98
Drainage Component Total				\$140,941.54

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00 AS	\$1,059.29	\$8,474.32
700-2-14		1.00 AS	\$4,250.00	\$4,250.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	MULTI- POST SIGN, F&I GM, 31-50 SF			
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00 AS	\$7,250.00	\$14,500.00
Signing Component Total				\$27,572.73

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description				Value	
Multiplier (Number of Poles)				36	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,200.00	LF	\$8.00	\$57,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	36.00	EA	\$618.33	\$22,259.88
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	21,600.00	LF	\$2.28	\$49,248.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	36.00	EA	\$6,500.00	\$234,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	36.00	EA	\$618.53	\$22,267.08
	Subcomponent Total				\$385,374.96
	Lighting Component Total				\$385,374.96
Sequence 22 Total					\$2,407,114.50

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 23 NUR - New Construction, Undivided, Rural**Net Length:** 0.000 MI
1 LF**Description:** SW 10th Street - General Purpose - Reconstruction Military Trail Intersection (including North and South Legs)**Special Conditions:** This entire sequence is composed of X-Items.**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	0.000
Top of Structural Course For Begin Section	105.00
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	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 %

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING Comment: 140 ft (Military Trail width RW to RW) x 1400 ft (length along Military Trail) = 196000 SF / 9 SF/SY = 21777.78 SY / 4808 SY/AC = 4.53 AC/2 = 2.21 AC	2.21	AC	\$38,512.13	\$85,111.81
Earthwork Component Total					\$85,111.81

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	0
Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	275
Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Southern Leg: 586 SY + 944 SY + 494 SY Intersection: 2896 SY Northern Leg: 858 SY + 1519 SY + 132 SY + 250 SY Area 7679 sy x 1/2	3,840.00	SY	\$6.41	\$24,614.40
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Same as Type B Stabilization	3,840.00	SY	\$27.13	\$104,179.20
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Same as Type B Stabilization (2" Thick) 3840 SY x 220 LB/SY / 2000 LB	422.40	TN	\$158.68	\$67,026.43
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	211.20	TN	\$160.00	\$33,792.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Comment: Same as Type B Stabilization (1" Thick) 3840
SY x 110 LB/SY / 2000 LB

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

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

\$229,612.03

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: South Leg: 626' x 4 = 2504 LF North Leg: 727' x 4 = 2908 LF	5,412.00	LF	\$23.00	\$124,476.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" Comment: South Leg: 210 SY (LT) + 218 SY (RT) North Leg: 412 SY (LT) + 173 SY (RT) Ped Islands: 46 SY (South) + 54 SY (North)	1,113.00	SY	\$41.68	\$46,389.84
570-1-1	PERFORMANCE TURF Comment: South Leg: 851 SY North Leg: 1133 SY + 165 SY + 540 SY	2,689.00	SY	\$2.54	\$6,830.06

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2.75	LF	\$1.84	\$5.06
104-11	FLOATING TURBIDITY BARRIER	0.05	LF	\$11.66	\$0.58

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	0.05 LF	\$5.90	\$0.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
Shoulder Component Total				\$179,715.68

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	8.00 LF	\$100.00	\$800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00 LF	\$144.65	\$1,157.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	1.00 EA	\$1,579.93	\$1,579.93
570-1-1	PERFORMANCE TURF	0.14 SY	\$2.54	\$0.36
Drainage Component Total				\$3,537.49

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$1,059.29	\$1,059.29
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$5,657.70

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	Military Trail Intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00 LF	\$20.00	\$20,000.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,033.14	\$5,033.14
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00 EA	\$618.33	\$22,878.21
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$1,795.00	\$1,795.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00 LF	\$4.62	\$924.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00 AS	\$971.18	\$23,308.32
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	\$704.72	\$5,637.76

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00 EA	\$1,710.44	\$13,683.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$29,375.31	\$29,375.31
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00 EA	\$2,616.52	\$10,466.08
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00 EA	\$2,968.95	\$11,875.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: FPL Service Point (end to end)	2.00	EA	\$1,255.96	\$2,511.92
649-21-27	STEEL MAST ARM ASSEMBLY, F&I, 78-78 Comment: One for each corner	4.00	EA	\$72,000.00	\$288,000.00
Signalizations Component Total					\$435,489.06

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description		Value			
Multiplier (Number of Poles)		6			
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	\$8.00	\$9,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	\$618.33	\$3,709.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	\$2.28	\$8,208.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	6.00	EA	\$6,500.00	\$39,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	\$618.53	\$3,711.18
Subcomponent Total					\$64,229.16
Lighting Component Total					\$64,229.16

Sequence 23 Total	\$1,003,352.93
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 24 NDU - New Construction, Divided, Urban**Net Length:** 0.152 MI
800 LF**Description:** SW 10th Street - General Purpose - Reconstruction East of Military Trail to West of R/R Bridge**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 125.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.152
Top of Structural Course For Begin Section	14.00
Top of Structural Course For End Section	57.50
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	14.00
Front Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	2.00 % / 2.00 %
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	4.61	AC	\$38,512.13	\$177,540.92
120-6	EMBANKMENT	61,161.61	CY	\$15.00	\$917,424.15
Earthwork Component Total					\$1,094,965.07

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	28.00 / 28.00
Structural Spread Rate	220
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,894.52	SY	\$6.41	\$37,783.87
285-709	OPTIONAL BASE,BASE GROUP 09	4,977.28	SY	\$27.13	\$135,033.61
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	547.50	TN	\$158.68	\$86,877.30
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	273.75	TN	\$160.00	\$43,800.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Under Eastbound Egress: 500SY Off Ramp from Eastbound Egress: 492 SY Westbound Left Turn Lanes: 1200 SY Westbound Right Turn Lane: 933 SY	3,125.00	SY	\$6.41	\$20,031.25
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Same as Type B Stabilization: 3125 SY	3,125.00	SY	\$27.13	\$84,781.25
334-1-13		343.75	TN	\$158.68	\$54,546.25

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	SUPERPAVE ASPHALTIC CONC, TRAFFIC C			
	Comment: Same as Type B Stabilization: 3125 SY (2" Thick) 3125 SY * 220 LB/SY / 2000 LB			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	171.88 TN	\$160.00	\$27,500.80
	Comment: Same as Type B Stabilization: 3125 SY (1" Thick) 3125 SY * 110 LB/SY / 2000 LB			

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/RAISED PAVEMENT MARKERS	61.00 EA	\$4.68	\$285.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.21 GM	\$864.36	\$1,045.88
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.61 GM	\$385.62	\$235.23
Roadway Component Total				\$491,920.92

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.25 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	799.92 LF	\$23.00	\$18,398.16
520-1-10	CONCRETE CURB & GUTTER, TYPE F	799.92 LF	\$23.00	\$18,398.16
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,066.56 SY	\$41.68	\$44,454.22

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	674.00 LF	\$23.00	\$15,502.00
	Comment: Left Turn Lane: 337' x 2 = 674 LF			
570-1-1	PERFORMANCE TURF	3,767.00 SY	\$2.54	\$9,568.18
	Comment: North side (under Managed Lanes): 3767 SY			

Erosion Control

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,599.84	LF	\$1.84	\$2,943.71
104-11	FLOATING TURBIDITY BARRIER	37.88	LF	\$11.66	\$441.68
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	37.88	LF	\$5.90	\$223.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	8.00	EA	\$99.37	\$794.96
107-1	LITTER REMOVAL	3.86	AC	\$37.84	\$146.06
107-2	MOWING	3.86	AC	\$74.05	\$285.83
Shoulder Component Total					\$113,170.29

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	22.00
Performance Turf Width	5.34

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,599.84	LF	\$24.86	\$39,772.02
570-1-1	PERFORMANCE TURF	474.62	SY	\$2.54	\$1,205.53
Median Component Total					\$40,977.55

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.73	CY	\$2,160.00	\$5,896.80
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	\$5,377.56	\$32,265.36
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	\$8,552.96	\$17,105.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	\$2,905.39	\$2,905.39
425-2-41	MANHOLES, P-7, <10'	1.00	EA	\$4,437.53	\$4,437.53
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	400.00	LF	\$105.86	\$42,344.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	\$144.65	\$5,786.00
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	760.00	LF	\$347.62	\$264,191.20
570-1-1	PERFORMANCE TURF	46.06	SY	\$2.54	\$116.99
Drainage Component Total					\$375,049.19

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	\$348.41	\$1,393.64
700-1-12		1.00	AS	\$1,059.29	\$1,059.29

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	SINGLE POST SIGN, F&I GM, 12-20 SF			
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00 AS	\$7,250.00	\$7,250.00
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00 AS	\$10,000.00	\$10,000.00
Signing Component Total				\$19,702.93

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description		Value		
Spacing		MIN		
Pay Items				
Pay item	Description	Quantity	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	799.92 LF	\$8.00	\$6,399.36
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	158.77 LF	\$20.00	\$3,175.40
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00 EA	\$618.33	\$3,709.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,921.53 LF	\$2.28	\$6,661.09
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00 EA	\$5,500.00	\$33,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00 EA	\$618.53	\$3,711.18
Subcomponent Total				\$56,657.01
Lighting Component Total				\$56,657.01

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	840.00
Begin height	5.00
End Height	43.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	20,370.00 SF	\$28.00	\$570,360.00

Retaining Wall 2

Description	Value
Length	840.00
Begin height	5.00
End Height	43.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit Price	Extended Amount
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

548-12	RET WALL SYSTEM, PERM, EX BARRIER	20,370.00 SF	\$28.00	\$570,360.00
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Retaining Wall 3

Description	Value
Length	840.00
Begin height	5.00
End Height	43.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	20,370.00	SF	\$28.00	\$570,360.00

Retaining Wall 4

Description	Value
Length	840.00
Begin height	5.00
End Height	43.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	20,370.00	SF	\$28.00	\$570,360.00

Retaining Walls Component Total	\$2,281,440.00
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Sequence 24 Total	\$4,473,882.96
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 25 NDU - New Construction, Divided, Urban**Net Length:** 0.165 MI
871 LF**Description:** SW 10th Street - General Purpose - West of R/R Bridge to West of Newport Center Drive
Intersection (includes R/R Bridge)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 125.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.165
Top of Structural Course For Begin Section	57.50
Top of Structural Course For End Section	14.00
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	14.00
Front Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	2.00 % / 2.00 %
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	5.00	AC	\$38,512.13	\$192,560.65
120-1	REGULAR EXCAVATION	62,041.54	CY	\$10.00	\$620,415.40

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	15,064.50	CY	\$15.00	\$225,967.50
	Comment: $1/2 \times b \times h \times w \Rightarrow .5 \times 870 \times 43.5 \times (11+24) = 331,143.75 \text{ CF} / 27 \text{ CF/CY} = 12264.58 \text{ CY}$ On Ramp to Managed Lanes: $.5 \times b \times h \times w = .5 \times 280' \times 20' \times 27' = 75600 \text{ CF} / 27 \text{ CY/CF} = 2800 \text{ CY}$				

Earthwork Component Total \$1,038,943.55**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	40.00 / 40.00
Structural Spread Rate	220
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,742.98	SY	\$6.41	\$56,042.50
285-709	OPTIONAL BASE,BASE GROUP 09	7,744.00	SY	\$27.13	\$210,094.72
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	851.84	TN	\$158.68	\$135,169.97
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	425.92	TN	\$160.00	\$68,147.20

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: EB Right Turn Lane: 1098 SY EB Left Turn Lanes: 1778 SY WB On-Ramp to Managed Lanes (Lane): 355 SY WB On-Ramp to Managed Lanes (Shldr): 150SY x 2	3,531.00 SY	\$6.41	\$22,633.71
285-704	OPTIONAL BASE,BASE GROUP 04 Comment: Shoulder Stabilization = 300 SY	300.00 SY	\$17.50	\$5,250.00
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Total Stabilization - Shoulder Stabilization = 3531 - 300 = 3231 SY	3,231.00 SY	\$27.13	\$87,657.03
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Total Stabilization: 3531 SY * 220 LB/SY / 2000 SY	388.41 TN	\$158.68	\$61,632.90
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: Total Stabilization: 3531 SY * 110 LB/SY / 2000 SY	194.21 TN	\$160.00	\$31,073.60

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	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	111.00 EA	\$4.68	\$519.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.32 GM	\$864.36	\$1,140.96
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.32 GM	\$385.62	\$509.02
Roadway Component Total				\$679,871.09

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	871.20 LF	\$23.00	\$20,037.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	580.80 SY	\$41.68	\$24,207.74

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: WB Outside: 270 + 319 = 589 LF EB Left Turn Lane: 394' x 2 = 788 LF	589.00 LF	\$23.00	\$13,547.00
570-1-1	PERFORMANCE TURF Comment: Median: 1534 SY + 4322 SY Westbound: 282 SY + 1033 SY	7,171.00 SY	\$2.54	\$18,214.34

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,742.40 LF	\$1.84	\$3,206.02
104-11	FLOATING TURBIDITY BARRIER	41.25 LF	\$11.66	\$480.98
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	41.25 LF	\$5.90	\$243.38
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,013.84	\$2,013.84
104-18	INLET PROTECTION SYSTEM	9.00 EA	\$99.37	\$894.33
107-1	LITTER REMOVAL	4.20 AC	\$37.84	\$158.93
107-2	MOWING	4.20 AC	\$74.05	\$311.01
Shoulder Component Total				\$83,315.17

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,742.40 LF	\$23.00	\$40,075.20
520-5-16	TRAF SEP CONC-TYPE I, 8.5' WIDE	624.00 LF	\$60.37	\$37,670.88
Median Component Total				\$77,746.08

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.97 CY	\$2,160.00	\$6,415.20
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00 EA	\$5,377.56	\$32,265.36
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00 EA	\$8,552.96	\$17,105.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00 EA	\$2,905.39	\$2,905.39
425-2-41	MANHOLES, P-7, <10'	1.00 EA	\$4,437.53	\$4,437.53
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	440.00 LF	\$105.86	\$46,578.40
430-175-136		40.00 LF	\$144.65	\$5,786.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	PIPE CULV, OPT MATL, ROUND, 36"S/CD			
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	832.00 LF	\$347.62	\$289,219.84
570-1-1	PERFORMANCE TURF	50.16 SY	\$2.54	\$127.41
Drainage Component Total				\$404,841.05

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	\$348.41	\$1,393.64
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$1,059.29	\$1,059.29
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00 AS	\$7,250.00	\$7,250.00
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00 AS	\$10,000.00	\$10,000.00
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	2.00 EA	\$75,000.00	\$150,000.00
Signing Component Total				\$169,702.93

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value			
Spacing	MIN			
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	871.20 LF	\$8.00	\$6,969.60
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	172.92 LF	\$20.00	\$3,458.40
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00 EA	\$618.33	\$3,709.98
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,181.86 LF	\$2.28	\$7,254.64
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00 EA	\$5,500.00	\$33,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00 EA	\$618.53	\$3,711.18
Subcomponent Total				\$58,103.80
Lighting Component Total				\$58,103.80

BRIDGES COMPONENT

Bridge EB_RR

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	225.00
Width (LF)	60.00
Type	Low Level

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Cost Factor	1.20
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$144.00
Final Cost per SF	\$149.21
Basic Bridge Cost	\$1,944,000.00

Description SW 10TH STREET - EAST BOUND BRIDGE OVER R/R TRACKS

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	133.33 CY	\$351.19	\$46,824.16
415-1-9	REINF STEEL- APPROACH SLABS	23,332.75 LB	\$1.01	\$23,566.08
Bridge EB_RR Total				\$2,014,390.24

Bridge WB_RR

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	225.00
Width (LF)	57.00
Type	Low Level
Cost Factor	1.20
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$144.00
Final Cost per SF	\$149.21
Basic Bridge Cost	\$1,846,800.00

Description SW 10TH STREET - WEST BOUND BRIDGE OVER R/R TRACKS

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	126.67 CY	\$351.19	\$44,485.24
415-1-9	REINF STEEL- APPROACH SLABS	22,167.25 LB	\$1.01	\$22,388.92
Bridge WB_RR Total				\$1,913,674.16

Bridges Component Total \$3,928,064.40

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	3,199.00 LF	\$260.00	\$831,740.00
Comment: One for each Wall: 3199 LF				

Retaining Wall 1

Description	Value
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Length	870.00
Begin height	43.50
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	21,097.50	SF	\$28.00	\$590,730.00

Retaining Wall 2

Description	Value
Length	870.00
Begin height	43.50
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	21,097.50	SF	\$28.00	\$590,730.00

Retaining Wall 3

Description	Value
Length	870.00
Begin height	43.50
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	21,097.50	SF	\$28.00	\$590,730.00

Retaining Wall 4

Description	Value
Length	270.00
Begin height	43.50
End Height	30.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,922.50	SF	\$28.00	\$277,830.00

Retaining Wall 5

Description	Value
Length	319.00
Begin height	21.00
End Height	5.00
Multiplier	1

Pay Items

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,147.00	SF	\$28.00	\$116,116.00
Retaining Walls Component Total					\$2,997,876.00
Sequence 25 Total					\$9,438,464.07

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 26 NUR - New Construction, Undivided, Rural**Net Length:** 0.000 MI
1 LF**Description:** SW 10th Street - General Purpose - Reconstruction of Newport Center Drive Intersection**Special** This entire sequence is composed of X-Items.**Conditions:****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	0.000
Top of Structural Course For Begin Section	105.00
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	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 %

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING Comment: 600' x 100' = 60000 SF / 9 SY/SF / 4808 SY/AC	1.39	AC	\$38,512.13	\$53,531.86
Earthwork Component Total					\$53,531.86

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	0
Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	275
Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: Entire Intersection (see PDF): 5241 SY	5,241.00	SY	\$6.41	\$33,594.81
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: Entire Intersection (see PDF): 5241 SY	5,241.00	SY	\$27.13	\$142,188.33
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: Entire Intersection (see PDF): 5241 SY x 220 LB/SY / 2000 LB	576.51	TN	\$158.68	\$91,480.61
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: Entire Intersection (see PDF): 5241 SY x 110 LB/SY / 2000 LB	288.26	TN	\$160.00	\$46,121.60

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$313,385.35

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: South Leg: 383 LF North Leg: 219 LF NW Corner: 157 LF NE Corner: 70 LF SE Corner: 56 LF SW Corner: 82 LF	967.00	LF	\$23.00	\$22,241.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" Comment: 157+70+56+82 x 6' = 2190 SF / 9 SY/SF	243.33	SY	\$41.68	\$10,141.99
570-1-1	PERFORMANCE TURF Comment: South Leg: 271 SY North Leg: 240 SY	511.00	SY	\$2.54	\$1,297.94

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2.75	LF	\$1.84	\$5.06
104-11	FLOATING TURBIDITY BARRIER	0.05	LF	\$11.66	\$0.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	0.05	LF	\$5.90	\$0.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84
Shoulder Component Total					\$35,700.71

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124		8.00	LF	\$100.00	\$800.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	PIPE CULV, OPT MATL, ROUND,24"SD			
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00 LF	\$144.65	\$1,157.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	1.00 EA	\$1,579.93	\$1,579.93
570-1-1	PERFORMANCE TURF	0.14 SY	\$2.54	\$0.36
Drainage Component Total				\$3,537.49

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$1,059.29	\$1,059.29
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00
Signing Component Total				\$5,657.70

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	Newport Center Drive Intersection

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00 LF	\$20.00	\$20,000.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,033.14	\$5,033.14
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00 EA	\$618.33	\$22,878.21
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$1,795.00	\$1,795.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00 LF	\$4.62	\$924.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00 AS	\$971.18	\$23,308.32
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	\$704.72	\$5,637.76
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00 EA	\$1,710.44	\$13,683.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$29,375.31	\$29,375.31
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00 EA	\$2,616.52	\$10,466.08
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00 EA	\$2,968.95	\$11,875.80

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: FPL Service Point (end to end)	2.00	EA	\$1,255.96	\$2,511.92
649-21-27	STEEL MAST ARM ASSEMBLY, F&I, 78-78 Comment: One for each corner	4.00	EA	\$72,000.00	\$288,000.00
Signalizations Component Total					\$435,489.06

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	4				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$8.00	\$6,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	\$618.33	\$2,473.32
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	\$2.28	\$5,472.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	\$6,500.00	\$26,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	\$618.53	\$2,474.12
Subcomponent Total					\$42,819.44
Lighting Component Total					\$42,819.44
Sequence 26 Total					\$890,121.61

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 27 NUR - New Construction, Undivided, Rural**Net Length:** 0.000 MI
1 LF**Description:** SW 10th Street - General Purpose - Roundabout (South of Newport Center Drive)**Special** This sequence is composed entirely of X-Items.**Conditions:****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	0.000
Top of Structural Course For Begin Section	105.00
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	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 %

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.13	AC	\$38,512.13	\$82,030.84
	Comment: NW Leg: 1007 SY + 1135 SY NE Leg: 609 SY + 631 SY SE Leg: 1176 SY + 1007 SY SW Leg: 1549 SY + 1289 SY Center: 1374 SY + 299 SY + 153 SY => 10229 SY / 4808 AC/SY = 2.127 AC				
	Earthwork Component Total				\$82,030.84

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	0
Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	275
Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,076.00	SY	\$6.41	\$64,587.16
	Comment: NW Leg: 1135 + 1007 = 2142 NE Leg: 609 + 631 = 1240 SE Leg: 1176 + 1007 = 2183 SW Leg: 1549 + 1289 = 2838 Middle: 1374 + 299 = 1673 ==> 10076 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	10,076.00	SY	\$27.13	\$273,361.88
	Comment: Same as Type B Stabilization: 10076 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	1,083.17	TN	\$158.68	\$171,877.42
	Comment: (2" Thick) Type B Stabilization Area - Truck Apron = 10076 - 229 = 9847 SY * 220 LB/SY / 2000 LB				
337-7-82	ASPH CONC FC, TRAFFIC C, FC-9.5, PG 76-22	541.59	TN	\$160.00	\$86,654.40

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: (1" Thick) Type B Stabilization Area - Truck Apron = 10076 - 229 = 9847 SY * 110 LB/SY / 2000 LB			
350-3-13	PLAIN CEMENT CONC PAVT, 12"	229.00 SY	\$161.11	\$36,894.19
	Comment: Truck Apron: 229 SY			

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$633,375.05

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,318.00	LF	\$23.00	\$30,314.00
	Comment: 4 splitter islands: NW: 381' NE: 484' SE: 237' SW: 216'				
520-2-4	CONCRETE CURB, TYPE D	139.00	LF	\$20.58	\$2,860.62
	Comment: 139' around central island				
520-2-8	CONCRETE CURB, TYPE RA	238.00	LF	\$27.50	\$6,545.00
	Comment: 238' between circulatory roadway and truck apron				

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2.75	LF	\$1.84	\$5.06
104-11	FLOATING TURBIDITY BARRIER	0.05	LF	\$11.66	\$0.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	0.05	LF	\$5.90	\$0.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,013.84	\$2,013.84

Shoulder Component Total

\$41,739.40

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	\$1,059.29	\$1,059.29
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,250.00	\$4,250.00
Signing Component Total					\$5,657.70
<hr/>					
Sequence 27 Total					\$762,802.99
<hr/>					

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 28 NUR - New Construction, Undivided, Rural**Net Length:** 0.304 MI
1,607 LF**Description:** SW 10th Street - General Purpose - SW 12th Avenue Loop (including WB Slip Ramp)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.180
Top of Structural Course For Begin Section	14.00
Top of Structural Course For End Section	46.00
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	14.00
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
110-1-1	CLEARING & GRUBBING	1.84	AC	\$38,512.13	\$70,862.32
120-6	EMBANKMENT	11,271.74	CY	\$15.00	\$169,076.10
Earthwork Component Total					\$239,938.42

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	11.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,346.67	SY	\$6.41	\$27,862.15
285-709	OPTIONAL BASE,BASE GROUP 09	2,023.33	SY	\$27.13	\$54,892.94
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	162.06	TN	\$158.68	\$25,715.68
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	108.04	TN	\$160.00	\$17,286.40

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: (W of Publix) EB Rt Turn Ln: 1186 SY EB Lt Turn Ln: 385 SY WB Aux Ln: 371 SY infront: 1421 SY (E of Publix) WB Lns: 972 SY EB Lns: 822 SY (Slip Ramp) Ln: 2877 SY Shldr: 1140 SY +1440 SY	10,614.00	SY	\$6.41	\$68,035.74
285-704	OPTIONAL BASE,BASE GROUP 04 Comment: Same as Shoulder Stabilization: 2580 SY	2,580.00	SY	\$17.50	\$45,150.00
285-709	OPTIONAL BASE,BASE GROUP 09	8,034.00	SY	\$27.13	\$217,962.42

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: Same as Type B Stabilization - Shldr: 10614 - 2580 SY			
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,167.54 TN	\$140.00	\$163,455.60
	Comment: (2" Thick) Same as Type B Stabilization: 10614 SY x 220 LB/SY / 2000 LB			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	583.77 TN	\$160.00	\$93,403.20
	Comment: (1" Thick) Same as Type B Stabilization: 10614 SY x 110 LB/SY / 2000 LB			

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	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	41.00 EA	\$4.68	\$191.88
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.22 GM	\$864.36	\$1,054.52
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.61 GM	\$396.46	\$241.84
Roadway Component Total				\$715,252.37

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.67 / 6.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	4.00 / 4.00
Structural Spread Rate	220
Friction Course Spread Rate	110
Total Width (T) / 8" Overlap (O)	O
Rumble Strips 1/2No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,546.51 SY	\$17.50	\$27,063.92
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	157.15 TN	\$158.68	\$24,936.56
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	12.97 TN	\$160.00	\$2,075.20
570-1-1	PERFORMANCE TURF	953.62 SY	\$2.54	\$2,422.19

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	417.33 SY	\$6.41	\$2,675.09

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: (east of Publix): WB: 313' x 6' / 9 SY/SF => 208.67 SY EB: 313' x 6' / 9 SY/SF => 208.67 SY			
285-704	OPTIONAL BASE,BASE GROUP 04	417.33 SY	\$17.50	\$7,303.28
	Comment: (east of Publix): WB: 313' x 6' / 9 SY/SF => 208.67 SY EB: 313' x 6' / 9 SY/SF => 208.67 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	45.91 TN	\$158.68	\$7,285.00
	Comment: (east of Publix - 2" Thick): WB: 313' x 6' / 9 SY/SF => 208.67 SY EB: 313' x 6' / 9 SY/SF => 208.67 SY => 417.33 SY x 220 LB/SY / 2000 LB =			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	2.56 TN	\$160.00	\$409.60
	Comment: (east of Publix: 8" overlap - 1" Thick) WB: 313' x .67' / 9 SY/SF => 23.30 SY EB: 313' x .67' / 9 SY/SF => 23.30 SY => 46.6 SY x 110 LB/SY / 2000 LB			

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,178.80 LF	\$1.84	\$7,688.99
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	76.10 LF	\$5.90	\$448.99
Shoulder Component Total				\$82,308.83

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.48 CY	\$2,160.00	\$11,836.80
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	248.00 LF	\$100.00	\$24,800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00 LF	\$144.65	\$8,100.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	13.00 EA	\$1,579.93	\$20,539.09
570-1-1	PERFORMANCE TURF	214.30 SY	\$2.54	\$544.32
Drainage Component Total				\$65,820.61

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00 AS	\$1,059.29	\$7,415.03
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,250.00	\$4,250.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	1.00 EA	\$75,000.00	\$75,000.00
	Comment: 2x for WB Slip Ramp			

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Signing Component Total

\$87,013.44

LIGHTING COMPONENT**Rural Lighting Subcomponent****Description****Value**

Multiplier (Number of Poles)

39

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,800.00	LF	\$8.00	\$62,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	39.00	EA	\$618.33	\$24,114.87
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	23,400.00	LF	\$2.28	\$53,352.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	39.00	EA	\$6,500.00	\$253,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	39.00	EA	\$618.53	\$24,122.67
Subcomponent Total					\$417,489.54
Lighting Component Total					\$417,489.54

RETAINING WALLS COMPONENT**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	3,016.00	LF	\$260.00	\$784,160.00
Comment: On top of the two walls: 1656 LF + 1360 LF					

Retaining Wall 1**Description****Value**

Length	967.00
Begin height	10.00
End Height	43.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	25,867.25	SF	\$28.00	\$724,283.00
Retaining Walls Component Total					\$1,508,443.00

Sequence 28 Total

\$3,116,266.21

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 29 NDU - New Construction, Divided, Urban**Net Length:** 0.174 MI
920 LF**Description:** SW 10th Street - General Purpose - From Newport Center Intersection to west of Bridge over I-95**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 125.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.174
Top of Structural Course For Begin Section	14.00
Top of Structural Course For End Section	35.00
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	14.00
Front Slope L/R	6 to 1 / 0 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	5.27	AC	\$38,512.13	\$202,958.93
120-6	EMBANKMENT	58,497.79	CY	\$15.00	\$877,466.85
Earthwork Component Total					\$1,080,425.78

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	40.00 / 40.00
Structural Spread Rate	220
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,230.46	SY	\$6.41	\$59,167.25
285-709	OPTIONAL BASE,BASE GROUP 09	8,175.79	SY	\$27.13	\$221,809.18
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	899.34	TN	\$158.68	\$142,707.27
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	449.67	TN	\$160.00	\$71,947.20

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,577.00	SY	\$6.41	\$42,158.57
Comment: EB Turbo Lanes: 2547 SY WB Right Turn: 920 SY WB Left Turn: 1936 SY Intersection SB Off Ramp/SB On Ramp: 1174 SY					
285-709	OPTIONAL BASE,BASE GROUP 09	6,577.00	SY	\$27.13	\$178,434.01

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: EB Turbo Lanes: 2547 SY WB Right Turn: 920 SY WB Left Turn: 1936 SY Intersection SB Off Ramp/SB On Ramp: 1174 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	723.47 TN	\$158.68	\$114,800.22
	Comment: (2" Thick) - Same as Type B Stabilization: 6577 SY x 220 LB/SY / 2000 LB			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	361.74 TN	\$160.00	\$57,878.40
	Comment: (1" Thick) - Same as Type B Stabilization: 6577 SY x 110 LB/SY / 2000 LB			

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	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	118.00 EA	\$4.68	\$552.24
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.39 GM	\$864.36	\$1,201.46
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.39 GM	\$385.62	\$536.01
Roadway Component Total				\$891,191.81

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.25 / 13.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 5.00
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	919.78 LF	\$23.00	\$21,154.94
520-1-10	CONCRETE CURB & GUTTER, TYPE F	919.78 LF	\$23.00	\$21,154.94
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,226.37 SY	\$41.68	\$51,115.10
570-1-1	PERFORMANCE TURF	510.99 SY	\$2.54	\$1,297.91

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	6,128.00 SY	\$2.54	\$15,565.12
	Comment: Northern Side: 4206 SY Median: 1692 SY + 230 SY			

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,839.55	LF	\$1.84	\$3,384.77
104-18	INLET PROTECTION SYSTEM	9.00	EA	\$99.37	\$894.33

Shoulder Component Total

\$114,567.11

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,839.55	LF	\$23.00	\$42,309.65
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	826.00	LF	\$43.11	\$35,608.86

Median Component Total

\$77,918.51

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.14	CY	\$2,160.00	\$6,782.40
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00	EA	\$5,377.56	\$37,642.92
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	\$8,552.96	\$17,105.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	\$2,905.39	\$2,905.39
425-2-41	MANHOLES, P-7, <10'	1.00	EA	\$4,437.53	\$4,437.53
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	464.00	LF	\$105.86	\$49,119.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	\$144.65	\$6,943.20

Drainage Component Total

\$124,936.40

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	\$348.41	\$1,742.05
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	\$1,059.29	\$1,059.29
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	\$7,250.00	\$7,250.00
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	\$10,000.00	\$10,000.00
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	3.00	EA	\$75,000.00	\$225,000.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Signing Component Total

\$245,051.34

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SW 10th Street @ SB I-95 On/Off Ramp

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00	LF	\$20.00	\$20,000.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,033.14	\$5,033.14
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00	EA	\$618.33	\$22,878.21
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,795.00	\$1,795.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00	LF	\$4.62	\$924.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00	AS	\$971.18	\$23,308.32
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	\$704.72	\$5,637.76
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	\$1,710.44	\$13,683.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$29,375.31	\$29,375.31
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	\$2,616.52	\$10,466.08
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00	EA	\$2,968.95	\$11,875.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: FPL Service Point (end to end)	2.00	EA	\$1,255.96	\$2,511.92
649-21-27	STEEL MAST ARM ASSEMBLY, F&I, 78-78 Comment: one for each corner	4.00	EA	\$72,000.00	\$288,000.00

Signalizations Component Total

\$435,489.06

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description	Value				
Spacing	MIN				
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	919.78	LF	\$8.00	\$7,358.24
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	182.56	LF	\$20.00	\$3,651.20
635-2-11		7.00	EA	\$618.33	\$4,328.31

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	PULL & SPLICE BOX, F&I, 13" x 24"				
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,359.27 LF	\$2.28		\$7,659.14
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	7.00 EA	\$5,500.00		\$38,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00 EA	\$618.53		\$4,329.71
	Subcomponent Total				\$65,826.60
	Lighting Component Total				\$65,826.60

RETAINING WALLS COMPONENT**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	220.00	LF	\$260.00	\$57,200.00
	Comment: On top of wall				

Retaining Wall 1

Description	Value
Length	220.00
Begin height	11.00
End Height	21.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,520.00	SF	\$28.00	\$98,560.00
	Retaining Walls Component Total				\$155,760.00

Sequence 29 Total					\$3,191,166.61
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SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 30 NDU - New Construction, Divided, Urban**Net Length:** 0.187 MI
985 LF**Description:** SW 10th Street - General Purpose - just west of Bridge over I-95 to Natura Blvd Intersection
(includes Bridge over I-95)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 125.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.187
Top of Structural Course For Begin Section	35.00
Top of Structural Course For End Section	14.00
Horizontal Elevation For Begin Section	14.00
Horizontal Elevation For End Section	14.00
Front Slope L/R	0 to 1 / 0 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	5.67	AC	\$38,512.13	\$218,363.78
120-1	REGULAR EXCAVATION	47,668.64	CY	\$10.00	\$476,686.40
Earthwork Component Total					\$695,050.18

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	40.00 / 40.00
Structural Spread Rate	220
Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,887.51	SY	\$6.41	\$63,378.94
285-709	OPTIONAL BASE,BASE GROUP 09	8,757.76	SY	\$27.13	\$237,598.03
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	963.35	TN	\$158.68	\$152,864.38
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	481.68	TN	\$160.00	\$77,068.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,401.00	SY	\$6.41	\$28,210.41
	Comment: EB I-95 NB On Ramp: 629 SY EB Right @ Natura: 443 SY EB Left @ Natura: 692 SY WB I-95 NB On-Ramp: 1088 SY WB Left Turn @ SB On-Ramp: 1549 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	4,401.00	SY	\$27.13	\$119,399.13

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

	Comment: Same as Type B Stabilization: 4401 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	484.11 TN	\$158.68	\$76,818.57
	Comment: (2" Thick) Same as Type B Stabilization: 4401 SY x 220 LB/SY / 2000 LB			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	242.06 TN	\$160.00	\$38,729.60
	Comment: (1" Thick) Same as Type B Stabilization: 4401 SY x 110 LB/SY / 2000 LB			

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	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	126.00 EA	\$4.68	\$589.68
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.49 GM	\$864.36	\$1,287.90
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.49 GM	\$385.62	\$574.57
Roadway Component Total				\$796,520.01

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.92 / 10.92
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Sidewalk Width L/R	6.00 / 6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	985.25 LF	\$23.00	\$22,660.75
520-1-10	CONCRETE CURB & GUTTER, TYPE F	985.25 LF	\$23.00	\$22,660.75
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,313.66 SY	\$41.68	\$54,753.35
570-1-1	PERFORMANCE TURF	584.58 SY	\$2.54	\$1,484.83

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,970.50 LF	\$1.84	\$3,625.72
104-18	INLET PROTECTION SYSTEM	10.00 EA	\$99.37	\$993.70

Shoulder Component Total **\$106,179.10**

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	22.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,970.50 LF	\$24.86	\$48,986.63
520-5-16	TRAF SEP CONC-TYPE I, 8.5' WIDE	670.00 LF	\$60.37	\$40,447.90

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	284.00 SY	\$2.54	\$721.36
	Comment: Median Location: WB Left Turn to SB I-95 On-Ramp			

Median Component Total \$90,155.89

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.36 CY	\$2,160.00	\$7,257.60
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00 EA	\$5,377.56	\$37,642.92
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00 EA	\$8,552.96	\$17,105.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00 EA	\$2,905.39	\$2,905.39
425-2-41	MANHOLES, P-7, <10'	1.00 EA	\$4,437.53	\$4,437.53
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	496.00 LF	\$105.86	\$52,506.56
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00 LF	\$144.65	\$6,943.20
570-1-1	PERFORMANCE TURF	56.73 SY	\$2.54	\$144.09

Drainage Component Total \$128,943.21

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	\$348.41	\$1,742.05
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$1,059.29	\$1,059.29
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00 AS	\$7,250.00	\$7,250.00
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00 AS	\$10,000.00	\$10,000.00
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	3.00 EA	\$75,000.00	\$225,000.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-127	OH STATIC SIGN STR, F&I, S 151-200 FT Comment: Overhead truss spanning bridge structure on SW 10th Street over I-95	1.00	EA	\$235,000.00	\$235,000.00
Signing Component Total					\$480,051.34

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SW 10th Street @ I-95 NB Off Ramp Intersection

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00	LF	\$20.00	\$20,000.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,033.14	\$5,033.14
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00	EA	\$618.33	\$22,878.21
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,795.00	\$1,795.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00	LF	\$4.62	\$924.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00	AS	\$971.18	\$23,308.32
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	\$704.72	\$5,637.76
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	\$1,710.44	\$13,683.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$29,375.31	\$29,375.31
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	\$2,616.52	\$10,466.08
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00	EA	\$2,968.95	\$11,875.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: FPL Service Point (end to end)	2.00	EA	\$1,255.96	\$2,511.92
649-21-27	STEEL MAST ARM ASSEMBLY, F&I, 78-78 Comment: one for each corner	4.00	EA	\$72,000.00	\$288,000.00
Signalizations Component Total					\$435,489.06

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description	Value
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Spacing		MIN		
Pay Items				
Pay item	Description	Quantity	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	985.25	LF \$8.00	\$7,882.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	195.56	LF \$20.00	\$3,911.20
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA \$618.33	\$4,328.31
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,598.39	LF \$2.28	\$8,204.33
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	7.00	EA \$5,500.00	\$38,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA \$618.53	\$4,329.71
Subcomponent Total				\$67,155.55
Lighting Component Total				\$67,155.55

BRIDGES COMPONENT

Bridge OVER95

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	300.00
Width (LF)	158.00
Type	Low Level
Cost Factor	1.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$168.00
Final Cost per SF	\$171.91
Basic Bridge Cost	\$7,963,200.00

Description SW 10TH STREET BRIDGE OVER I-95

Bridge Pay Items

Pay item	Description	Quantity	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	351.11	CY \$351.19	\$123,306.32
415-1-9	REINF STEEL- APPROACH SLABS	61,444.25	LB \$1.01	\$62,058.69
Bridge OVER95 Total				\$8,148,565.01
Bridges Component Total				\$8,148,565.01

RETAINING WALLS COMPONENT

X-Items

Pay item	Description	Quantity	Unit Price	Extended Amount
521-8-3	CONC TRAF RAIL BAR,JCT SLAB,32"V SHP	453.00	LF \$260.00	\$117,780.00
Comment: on top of the walls				

Retaining Wall 1

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Description	Value
Length	198.00
Begin height	21.00
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	3,712.50	SF	\$28.00	\$103,950.00

Retaining Wall 2

Description	Value
Length	255.00
Begin height	21.00
End Height	15.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,590.00	SF	\$28.00	\$128,520.00

Retaining Walls Component Total \$350,250.00

Sequence 30 Total \$11,298,359.35

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 31 NUR - New Construction, Undivided, Rural **Net Length:** 0.000 MI
1 LF

Description: SW 10th Street - General Purpose - from Natura Blvd Intersection to End of Project Limits
(includes southern leg of Natura Intersection)

Special Conditions: This entire sequence is composed of X-Items

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	0.000
Top of Structural Course For Begin Section	105.00
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	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 %

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.46	AC	\$38,512.13	\$94,739.84
	Comment: All lanes: See PDF 11814 SY / 4808 SY/AC = 2.46				
Earthwork Component Total					\$94,739.84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	0
Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	275
Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,814.00	SY	\$6.41	\$75,727.74
	Comment: All Lanes: 11814 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	11,814.00	SY	\$27.13	\$320,513.82
	Comment: All Lanes: 11814 SY				
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,299.54	TN	\$140.00	\$181,935.60
	Comment: (2" Thick) - 11814 SY x 220 LB/SY / 2000 LB				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	649.77	TN	\$160.00	\$103,963.20
	Comment: (1" Thick) - 11814 SY x 110 LB/SY / 2000 LB				

Pavement Marking Subcomponent

Description	Value
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SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$682,140.36

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,900.00	LF	\$23.00	\$43,700.00
	Comment: NW: 58 LF NE: 678 LF SW: 67 LF SE: 51 LF Median (east of Natura): 585 LF + 581 LF = 1166				
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	569.33	SY	\$41.68	\$23,729.67
	Comment: [Total Type F C&G (2020) - Median (1166)] x 6' / 9 SF/SY				

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2.75	LF	\$1.84	\$5.06
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	0.05	LF	\$5.90	\$0.30

Shoulder Component Total

\$67,435.03

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	8.00	LF	\$100.00	\$800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00	LF	\$144.65	\$1,157.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	1.00	EA	\$1,579.93	\$1,579.93
570-1-1	PERFORMANCE TURF	0.14	SY	\$2.54	\$0.36

Drainage Component Total

\$3,537.49

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

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	\$348.41	\$348.41
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	\$1,059.29	\$1,059.29
Signing Component Total					\$1,407.70

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SW 10th Street @ Natura Blvd Intersection

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00	LF	\$20.00	\$20,000.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,033.14	\$5,033.14
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00	EA	\$618.33	\$22,878.21
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,795.00	\$1,795.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00	LF	\$4.62	\$924.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00	AS	\$971.18	\$23,308.32
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	\$704.72	\$5,637.76
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	\$1,710.44	\$13,683.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$29,375.31	\$29,375.31
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	\$2,616.52	\$10,466.08
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00	EA	\$2,968.95	\$11,875.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36"	2.00	EA	\$1,255.96	\$2,511.92
	Comment: FPL Service Point (end to end)				
649-21-27	STEEL MAST ARM ASSEMBLY, F&I, 78-78	4.00	EA	\$72,000.00	\$288,000.00
	Comment: One for each corner				
Signalizations Component Total					\$435,489.06

LIGHTING COMPONENT**Rural Lighting Subcomponent**

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Description					Value
Multiplier (Number of Poles)					36
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,200.00	LF	\$8.00	\$57,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	20.00	EA	\$618.33	\$12,366.60
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	21,600.00	LF	\$2.28	\$49,248.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	20.00	EA	\$6,500.00	\$130,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	20.00	EA	\$618.53	\$12,370.60
Subcomponent Total					\$261,585.20
Lighting Component Total					\$261,585.20
<hr/>					
Sequence 31 Total					\$1,546,334.68
<hr/>					

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 32 NUR - New Construction, Undivided, Rural**Net Length:** 0.000 MI
1 LF**Description:** SW 10th Street - Managed Lanes**Special** Consists of only Bridge Components**Conditions:****LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

Value

51

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	30,600.00	LF	\$2.28	\$69,768.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	51.00	EA	\$6,500.00	\$331,500.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	51.00	EA	\$618.53	\$31,545.03
Subcomponent Total					\$432,813.03
Lighting Component Total					\$432,813.03

BRIDGES COMPONENT**Bridge LEVEL4****Description**

Estimate Type

Primary Estimate

Length (LF)

Width (LF)

Type

Cost Factor

Structure No.

Removal of Existing Structures area

Default Cost per SF

Factored Cost per SF

Final Cost per SF**Basic Bridge Cost**

Description

Value

SF Estimate

YES

496.00

37.00

Low Level

1.50

0.00

\$120.00

\$180.00

\$182.37**\$3,303,360.00**

LEVEL 4 - I-95 DIRECT CONNECT NB TO EB

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	82.22	CY	\$351.19	\$28,874.84
415-1-9	REINF STEEL- APPROACH SLABS	14,388.50	LB	\$1.01	\$14,532.38
Bridge LEVEL4 Total					\$3,346,767.23

Bridge LEVEL3**Description**

Estimate Type

Primary Estimate

Length (LF)

Width (LF)

Value

SF Estimate

YES

496.00

84.00

SR-9/1-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Type	Low Level
Cost Factor	1.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$168.00
Final Cost per SF	\$170.37
Basic Bridge Cost	\$6,999,552.00

Description LEVEL 3 - I-95 DIRECT CONNECT (CONNECTOR FOR BOTH SB DC AND WB->NB)

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	186.67 CY	\$351.19	\$65,556.64
415-1-9	REINF STEEL- APPROACH SLABS	32,667.25 LB	\$1.01	\$32,993.92
Bridge LEVEL3 Total				\$7,098,102.56

Bridge MLMAIN

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	3,100.00
Width (LF)	94.00
Type	Low Level
Cost Factor	1.40
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$168.00
Final Cost per SF	\$168.38
Basic Bridge Cost	\$48,955,200.00

Description SW 10TH STREET - MANAGED LANES (SEE PDF)

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	208.89 CY	\$351.19	\$73,360.08
415-1-9	REINF STEEL- APPROACH SLABS	36,555.75 LB	\$1.01	\$36,921.31
Bridge MLMAIN Total				\$49,065,481.39

Bridge EBRAMP

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,541.00
Width (LF)	28.25
Type	Low Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Default Cost per SF	\$120.00
Factored Cost per SF	\$180.00
Final Cost per SF	\$180.76
Basic Bridge Cost	\$7,835,985.00
Description	SW 10TH STREET - MANAGED LANES - EASTBOUND EGRESS RAMP

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	62.78 CY	\$351.19	\$22,047.71
415-1-9	REINF STEEL- APPROACH SLABS	10,986.50 LB	\$1.01	\$11,096.36
Bridge EBRAMP Total				\$7,869,129.08
Bridges Component Total				\$67,379,480.26
<hr/>				
Sequence 32 Total				\$67,812,293.29
<hr/>				

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 33 MIS - Miscellaneous Construction**Net Length:** 0.000 MI
1 LF**Description:** ITS Related Components**Special** ITS - I-95 from begin project (North of 48th Street) to South of Hillsboro Blvd. Also includes ITS**Conditions:** along SW 10th Street from West of Military Trail to East of I-95.**INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT****Description of Work****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	10,624.00	LF	\$8.00	\$84,992.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	3,541.00	LF	\$20.00	\$70,820.00
633-1-122	FIBER OPTIC CABLE, F&I, UG,13-48	6,439.00	LF	\$3.42	\$22,021.38
633-1-124	FIBER OPTIC CABLE, F&I, UG,97-144	12,878.00	LF	\$3.83	\$49,322.74
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	484.00	EA	\$49.37	\$23,895.08
633-3-11	FIBER OPTIC CONN HDWR, SPLICE ENCLOSURE	30.00	EA	\$931.81	\$27,954.30
633-3-12	FIBER OPTIC CONN HDWR, SPLICE TRAY	30.00	EA	\$67.90	\$2,037.00
633-3-13	FIBER OPTIC CONN HDWR, PRETERM CONNECT A	30.00	EA	\$72.93	\$2,187.90
633-3-15	FIBER OPTIC CONN HDWR, PRETERM PATCH PAN	30.00	EA	\$1,770.27	\$53,108.10
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, F&I	9,059.00	LF	\$4.41	\$39,950.19
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	30.00	EA	\$618.33	\$18,549.90
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36"	30.00	EA	\$1,255.96	\$37,678.80
635-3-40	JUNCTION BOX, RELOCATE	6.00	EA	\$422.50	\$2,535.00
639-1-122	ELECTRICAL POWER SRV,F&I, UG,PUR CONT	1.00	AS	\$2,461.09	\$2,461.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	42,497.00	LF	\$4.62	\$196,336.14
641-3-169	CONCRETE CCTV POLE, FUR & INS W/LOW	6.00	EA	\$31,920.78	\$191,524.68
660-3-11	VEHICLE DETECTION SYSTEM-MICRO,F&I, CAB	10.00	EA	\$1,620.12	\$16,201.20
660-3-12	VEHICLE DETECTION SYSTEM-MICRO,F&I, ABO	10.00	EA	\$12,646.66	\$126,466.60
676-2-122	ITS CABINET- F&I, POLE, 336S	15.00	EA	\$6,300.36	\$94,505.40
676-2-143	ITS CABINET- F&I, BASE, 334	15.00	EA	\$11,629.90	\$174,448.50
676-2-400	ITS CABINET- RELOCATE	3.00	EA	\$2,615.86	\$7,847.58
682-1-113	ITS CCTV CAMERA, F&I, DOME ENCL-PRESS	6.00	EA	\$8,571.99	\$51,431.94
682-1-400	ITS CCTV CAMERA, RELOCATE	1.00	EA	\$2,591.08	\$2,591.08
684-1-1	MANAGED FIELD ETHERNET SWITCH, F&I	30.00	EA	\$3,710.97	\$111,329.10
684-1-3	MANAGED FIELD ETHERNET SWITCH, INSTALL	1.00	EA	\$720.00	\$720.00
684-2-1	DEVICE SERVER, F&I	10.00	EA	\$1,468.18	\$14,681.80
684-3-11	DIGITAL VIDEO ENC W SO, F&I HARD ENCODER	6.00	EA	\$3,653.42	\$21,920.52

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
639-5-1	EMERGENCY GENERATOR- PERMANENT, UP TO 25 KW	1.00	EA	\$39,679.10	\$39,679.10
641-2-13	PREST CONCRETE POLE, TYPE P-III	10.00	EA	\$8,000.00	\$80,000.00
78X-XX-XXX	TOLL GANTRY SYSTEM, 2 LANE	2.00	EA	\$800,000.00	\$1,600,000.00
Intelligent Traffic System (ITS) Component Total					\$3,167,197.12
Sequence 33 Total					\$3,167,197.12

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 34 MIS - Miscellaneous Construction**Net Length:** 0.000 MI
0 LF**Description:** Noise Wall * Along I-95 East side between SW 10th Street and Hillsboro Blvd * Barrier Mounted on Managed Lanes

ROADWAY COMPONENT**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-72-23	SHLDR CONC BAR WALL,F SHAPE,14' SND WALL Comment: Along I-95 (east side) between SW 10th Street and Hillsboro Blvd and SB along west side of I-95 near 48th Street overpass	1,400.00 LF	\$480.54	\$672,756.00
Roadway Component Total				\$672,756.00
Sequence 34 Total				\$672,756.00

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Sequence: 35 MIS - Miscellaneous Construction**Net Length:** 0.000 MI
0 LF**Description:** Project Risk & Disputes Review Board**ROADWAY COMPONENT****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-20-1	DISPUTES REVIEW BD, MEETING- DO NOT BID Comment: 48 Meetings (based on estimate of 48 months)	48.00	DA	\$3,300.00	\$158,400.00
999-20-2	DISPUTES REVIEW BD, HEARING- DO NOT BID Comment: 2 Hearings	2.00	EA	\$4,000.00	\$8,000.00

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
RISK	PROJECT RISK Comment: \$314.9 M - \$285.7 M = \$29.20 M 70% of Construction Cost	1.00	LS	\$29,200,000.00	\$29,200,000.00

Roadway Component Total	\$29,366,400.00
--------------------------------	------------------------

Sequence 35 Total	\$29,366,400.00
--------------------------	------------------------

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

Date: 8/26/2019 3:23:08 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 436964-2-52-01

Letting Date: 07/2024

Description: SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.

District: 04 County: 86 BROWARD

Market Area: 12 Units: English

Contract Class: 9 Lump Sum Project: N

Design/Build: Y Project Length: 8.953 MI

Project Manager: BOSTIAN

Version 6 Project Grand Total**\$288,877,170.63**

Description: Updated for unit cost adjustment versus other alternatives. 8-26-19

Project Sequences Subtotal **\$222,964,484.78**

102-1	Maintenance of Traffic	8.00 %	\$17,837,158.78
101-1	Mobilization	10.00 %	\$24,080,164.36

Project Sequences Total **\$264,881,807.92**

Project Unknowns	0.00 %	\$0.00
Design/Build	9.00 %	\$23,839,362.71

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	\$3,000.00	\$6,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

Project Non-Bid Subtotal **\$156,000.00**
Version 6 Project Grand Total**\$288,877,170.63**

Planning Consistency Appendix

Contents:

Project Plan Consistency Documentation

DRAFT

DRAFT

Attachment A
Planning Consistency Documentation

Commitment 2045 Metropolitan Transportation Plan

Final Report
Adopted December 12, 2019

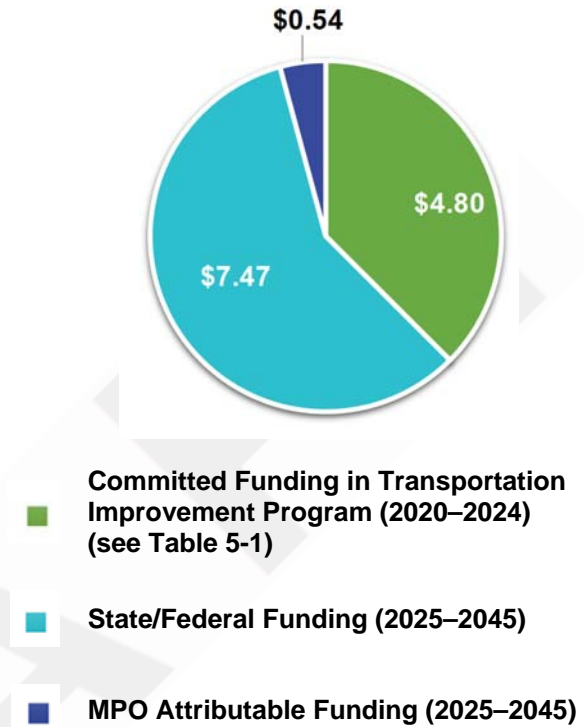


The remaining 21 years of the plan (2025–2045) reflect the transportation improvements that can be funded with revenues that are reasonably expected to be available over this time period.

Total revenues for *Commitment 2045* (2020–2045) are illustrated in Figure 5-2. Key observations about these revenues are highlighted as follows:

- \$4.8 billion in transportation improvements is programmed in the TIP for implementation over the next five years (2020–2024). Table 5-1 is a summary of funding sources for this five-year time period. The following links to the MPO’s TIP: http://www.browardmpo.org/images/TIP_FY_20-24_revision_9-5-2019.pdf.
- An estimated \$8.0 billion in revenues is forecast to be available from 2025–2045.
- Of the \$8.0 billion in revenues, \$7.5 billion is designated by law or policy for specific types of transportation improvements with little flexibility to change uses.
- The remaining \$538 million has the flexibility to be allocated according to the technical analyses and the policy decisions of the Broward MPO.
- Table 5-2 provides the roadway capacity projects in the MPO’s TIP (2020-2024).

Figure 5-2: MTP Revenues (2020–2045)



*Year-of-expenditure (YOE) dollars adjusted for inflation from present time to expected year of construction for more accurate cost estimate for each project.

Table 5-1: Transportation Improvement Program (FY 2020–2024) (in YOE dollars)

Funding Source	Costs/Revenues in Year of Expenditure					
	2020	2021	2022	2023	2024	Total
Revenue Summary						
Federal	\$183,568,858	\$159,373,840	\$110,261,432	\$149,535,721	\$215,482,780	\$818,222,631
Federal Earmark	\$13,066,343	\$0	\$0	\$0	\$0	\$13,066,343
Local	\$301,102,621	\$210,131,974	\$124,260,963	\$111,616,686	\$216,370,678	\$963,482,922
R/W & Bridge Bonds	\$2,449,348	\$0	\$1,000,000	\$0	\$0	\$3,449,348
State	\$11,325,581	\$26,378,291	\$55,526,116	\$7,210,988	\$7,210,988	\$107,651,964
State 100%	\$346,068,724	\$343,685,432	\$340,262,805	\$362,668,184	\$493,101,198	\$1,885,786,343
Toll/Turnpike	\$95,274,202	\$118,612,824	\$315,339,278	\$306,111,475	\$193,261,749	\$1,028,599,528
TOTAL FUNDING	\$952,855,677	\$858,182,361	\$946,650,594	\$937,143,054	\$1,125,427,393	\$4,820,259,079
Total Project Cost						
TOTAL COST	\$952,855,677	\$858,182,361	\$946,650,594	\$937,143,054	\$1,125,427,393	\$4,820,259,079

**Table 5-2: Transportation Improvement Program: Roadway Capacity Projects
(FY 2020–2024) (in YOE dollars) (cont'd)**

FM	Description	Work Mix	PE	ROW	Construction	Total
4433091	SR-842/Broward Blvd from NW/SW 7th Ave to E of SR-5/US-1/Fed Hwy	Intersection Improvement	\$5,000	\$55,000	\$672,767	\$732,767
4361111	SR-858/Hallandale Beach Blvd E of RR Crossing #628290-Y to W of Ansin Blvd	Add Right Turn Lane(s)	-	-	\$27,103	\$27,103
4398911	SR-869/SW 10th St from W of SR-845/Powerline Rd to W of Military Trail	Add Managed Lanes	\$2,875,000	\$35,069,253	\$396,431,698	\$434,375,951
4358086	SR-9/1-95 at Cypress Creek Rd Interchange (East Side)	Interchange Improvement	-	\$1,570,260	-	\$1,570,260
4369581	SR-9/1-95 at SR-834/Sample Rd from S of NB Exit ramp to N of NB Entrance Ramp	Interchange Justification/Modification	\$10,227	\$824,615	\$21,203,079	\$22,037,921
4355131	SR-9/1-95 at SR-842/Broward Blvd	Interchange - Add Lanes	\$8,670,000	\$12,401,102	-	\$21,071,102
4355141	SR-9/1-95 at Sunrise Blvd Interchange Improvement	Interchange Improvement	\$610,412	\$2,994,603	\$28,012,539	\$31,617,554
4369621	SR-9/1-95 at Copans Rd from S of NB exit ramp to N of SB to WB exit ramp	Interchange Justification/Modification	\$218	\$1,286,600	\$22,512,892	\$23,799,710
4391711	SR-9/1-95 at Davie Blvd	Interchange - Add Lanes	\$2,585,000	-	-	\$2,585,000
4391721	SR-9/1-95 at SR-816/Oakland Park Blvd	Interchange - Add Lanes	\$2,585,000	-	-	\$2,585,000
4331088	SR-9/1-95 from Miami-Dade/Broward County Line to Palm Beach County Line	Preliminary Engineering for Future Capacity	-	-	\$4,250,000	\$4,250,000
4309321	SR-9/1-95 from N of SW 10th St to S of Hillsboro Blvd	Interchange Improvement	-	-	\$1,548	\$1,548
4331084	SR-9/1-95 from S of SR-842/Broward Blvd to N of SR-870/Commercial Blvd	Add Special Use Lane	-	\$290	\$393,610	\$393,900
4369031	SR-9/1-95 from S of SR-858/Hallandale Bch Blvd to N of Hollywood Blvd	PD&E/EMO Study	\$13,267,907	-	-	\$13,267,907
4331086	SR-9/1-95 from S of SW 10th St to Broward/Palm Beach County Line	Add Special Use Lane	-	-	\$2,725,500	\$2,725,500
4391701	SR-9/1-95 from S of Sheridan St to N of Griffin Rd	Interchange - Add Lanes	\$3,030,000	-	-	\$3,030,000
4369641	SR-9/1-95 from S of SW 10th St to N of Hillsboro Blvd	Interchange - Add Lanes	\$3,289,385	\$31,144,373	-	\$34,433,758
4417231	SR-9/1-95 NB off-ramp to EB I-595	Add Lanes and Rehabilitate Pavement	\$288,722	-	-	\$288,722
4358082	SR-9/1-95 SB C/D Rd from Cypress Creek Rd to SR-817/Commercial Blvd	Widen/Resurface Existing Lanes	-	\$5,905,101	-	\$5,905,101
4378324	SR-93/1-75 from Sheridan St to Griffin Rd Aux Lanes	Add Auxiliary Lane(s)	\$655,183	-	\$3,973,651	\$4,628,834
4151521	SR-93/1-75 Interchange @ SR-820 Pines Blvd from N of Miramar Pkwy to N of Pines Blvd	Interchange - Add Lanes	\$1,992,342	\$150,000	-	\$2,142,342
4215481	SR-93/1-75 Interchange @ Royal Palm Blvd from Griffin Rd to N of SW 14 St	Add Lanes and Reconstruct	\$20,000	-	\$2,104,600	\$2,124,600
4215486	SR-93/1-75 Interchange @ Royal Palm Blvd from Griffin Rd to Royal Palm Blvd	Add Lanes and Reconstruct	-	-	\$15,636,640	\$15,636,640
4215487	SR-93/1-75 Interchange @ Royal Palm Blvd from S Royal Palm Blvd to S SW 14 St	Add Lanes and Reconstruct	-	-	\$8,801,398	\$8,801,398
4307635	SR-93/1-75 Miami-Dade/Broward County Line to I-595	Preliminary Engineering for Future Capacity	\$25,000	-	-	\$25,000
4061031	Sunrise Blvd / TPK Interchange Modification (SR 838 / SR 91) (MP 58)	Interchange Improvement	\$3,283	\$17,141	\$16,676	\$37,100
4317571	SW 30th Ave from Griffin Rd to SW 45th St	Add Lanes and Reconstruct	-	-	\$63,259	\$63,259
4061561	SW 10th St/TPK (SR91) Interchange Modification (MP 71)	Interchange Justification/Modification	\$2,318	-	-	\$2,318
4193361	TPK ramps from I-595 to Griffin Rd SB Work	Add Lanes and Reconstruct	-	\$386,000	-	\$386,000



TRANSPORTATION IMPROVEMENT PROGRAM

FY 2020 - 2024

Note: Revisions / amendments to this document can be found at the website below.

**Adopted: July 11, 2019 | Revised: August 15, 2019 | Revised: September 5, 2019 |
Revised: October 10, 2019 | Revised: October 25, 2019 | Revised: November 26, 2019 |
December 16, 2019 | January 16, 2020 | April 8, 2020 | MAY 14, 2020**

Please find us at:

<http://www.browardmpo.org/index.php/core-products/transportation-improvement-program-tip>

For complaints, questions or concerns about civil rights or nondiscrimination; or for special requests under the Americans with Disabilities Act, please contact: Erica Lychak, Communications Manager/Title VI Coordinator at (954) 876-0058 or lychake@browardmpo.org

Broward MPO
Metropolitan Planning Organization

BrowardMPO.org
100 West Cypress Creek Road,
6th Floor, Suite 650
Fort Lauderdale, FL 33309-2112

Project #	Project Name	2020	2021	2022	2023	2024	Total
DER - EMERGENCY RELIEF - STATE FUNDS							
Total		4,862	0	0	0	0	4,862
DFTA - FED PASS-THROUGH \$ FROM FTA							
4111894	SR-862/I-595 E/W CENTRAL BROWARD TRANSIT ANALYSIS	2,500,896	0	0	0	0	2,500,896
Total		2,500,896	0	0	0	0	2,500,896
DI - ST. - S/W INTER/INTRASTATE HWY							
4208093	I-595/SR-862/ P3 FROM E. OF I-75 TO W. OF I-95	0	0	6,918,654	5,356,592	3,448,941	15,724,187
4355141	SR-9/I-95 @ SUNRISE BLVD. INTERCHANGE IMPROVEMENT	0	0	0	22,207,240	25,000	22,232,240
4369581	SR-9/I-95 @ SR-834/SAMPLE RD FR S OF NB EXIT RAMP TO N OF NB ENT. RAMP	0	0	590,000	18,231,723	0	18,821,723
4369641	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	0	0	2,750,000	0	0	2,750,000
4369642	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	0	0	0	0	3,000,000	3,000,000
4398911	SR-869/SW 10 ST FROM W OF SR-845/POWERLINE RD TO WEST OF MILITARY TRL	0	0	0	0	78,862,222	78,862,222
Total		0	0	10,258,654	45,795,555	85,336,163	141,390,372
DIH - STATE IN-HOUSE PRODUCT SUPPORT							
2277745	SR-7/US-441 FROM N OF HALLANDALE BCH TO N. OF FILLMORE STREET	38,924	0	0	0	0	38,924
2277754	SR-7/US-441 FR N. OF FILLMORE TO S. OF STIRLING RD	82,514	0	0	0	0	82,514
2281041	DISTRICT WIDE/COMMUNITY SAFETY PROGRAM/SECTION 402	50,000	50,000	0	50,000	0	150,000
2297658	D/W TRAFFIC OPS TRANSPORTATION SYSTEM MANAGEMENT SUPPORT SVCS.	0	5,000	5,000	5,000	0	15,000

Phase	Fund Source	2020	2021	2022	2023	2024	Total
SR-9/I-95 FROM SOUTH OF SHERIDAN STREET TO NORTH OF GRIFFIN ROAD - FM# 4391701					Length: 4.480	*SIS*	
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 47		
SIS 2ND FIVE YEARS; INTERCHANGE IMPROVEMENTS							
PDE	ACNP	0	0	500,000	2,500,000	0	3,000,000
ENV	DS	0	0	0	0	30,000	30,000
Total		0	0	500,000	2,500,000	30,000	3,030,000
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		51,651,695	<i>Total Project Cost</i>		54,681,695
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369641					Length: 7.250	*SIS*	
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 47		
2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONSTRUCTION ON 436964-2							
PE	DI	0	0	2,750,000	0	0	2,750,000
Total		0	0	2,750,000	0	0	2,750,000
<i>Prior Years Cost</i>		37,783,208	<i>Future Years Cost</i>		<i>Total Project Cost</i>		40,533,208
SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. - FM# 4369642					Length: 5.084	*SIS*	
Type of Work: INTERCHANGE - ADD LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 46		
2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD DESIGN & R/W ON SEG 1							
RRU	DI	0	0	0	0	3,000,000	3,000,000
Total		0	0	0	0	3,000,000	3,000,000
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		402,971,121	<i>Total Project Cost</i>		405,971,121
SR-9/I-95 MOBILITY HUB AT CYPRESS CREEK ROAD - FM# 4358085					Length: .880	*Non-SIS*	
Type of Work: WIDEN/RESURFACE EXIST LANES					Lead Agency: MANAGED BY FDOT		
					LRTP#: Pg. 6		
WIDENING FOR ADDITIONAL TURN LANE AND BIKE LANES, SIDEWALK CONSTRUCTION, RESURFACING. WEST CYPRESS CREEK RD FROM POWER LINE RD TO W OF SFRC; NW 59TH CT; N ANDREWS WAY. NO RIGHT OF WAY REQUIRED SEE WP45 FOR ADDITIONAL COMMENTS PRIOR YEAR MPO PRIORITY							
CST	SU	0	0	0	0	2,817,494	2,817,494
CST	SA	0	0	0	0	150,000	150,000
Total		0	0	0	0	2,967,494	2,967,494
<i>Prior Years Cost</i>		<i>Future Years Cost</i>		<i>Total Project Cost</i>		2,967,494	

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. // 436964-1-22-01

PAGE 25

FLORIDA DEPARTMENT OF TRANSPORTATION
 OFFICE OF WORK PROGRAM
 MPO ROLLFORWARD REPORT
 =====
HIGHWAYS
 =====

DATE RUN: 07/05/2019

TIME RUN: 07.32.35

MBRMPOTP

BROWARD MPO

ITEM NUMBER:436962 1 PROJECT DESCRIPTION:SR-9/I-95 @COPANS RD FR S OF NB EXIT RAMP TO N OF SB TO WB EXIT RAMP *SIS*
 DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE JUSTIFICA/MODIFICA
 EX DESC:COMBINE THE SB TO EB EXIT, SB TO WB EXIT AND WB TO SB ENTRANCE RAMPS ONTO A SINGLE RAMP, PHYSICALLY SEPARATED FACIL
 ITY FROM THE THE MAINLINE. PROVIDE A TWO-LANE SB EXIT RAMP WITH A CHOICE LANE FOR THE OUTSIDE GP LANE. COMBINE THE
 NB ENTRANCE RAMPS ONTO A SINGLE RAMP, PHYSICALLY SEPARATED FACILITY FROM THE THE MAINLINE.
 ROADWAY ID:86070000 PROJECT LENGTH: 3.466MI LANES EXIST/IMPROVED/ADDED: 5/ 5/ 0

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	2024	GREATER THAN 2024	ALL YEARS
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	2,450,000	0	0	0	0	0	0	2,450,000
DIH	38,803	218	0	0	0	0	0	39,021
PHASE: RAILROAD & UTILITIES / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,286,600	0	0	0	0	0	1,286,600
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	21,240,994	0	0	0	0	0	21,240,994
ACSA	0	245,898	0	0	0	0	0	245,898
DDR	0	1,026,000	0	0	0	0	0	1,026,000
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DS	8,510	0	0	0	0	0	0	8,510
TOTAL 436962 1	2,497,313	23,799,710	0	0	0	0	0	26,297,023
TOTAL PROJECT:	2,497,313	23,799,710	0	0	0	0	0	26,297,023

ITEM NUMBER:436964 1 PROJECT DESCRIPTION:SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. *SIS*
 DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE - ADD LANES
 EX DESC:2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD;
 SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONS
 TRUCTION ON 436964-2
 ROADWAY ID:86070000 PROJECT LENGTH: 7.250MI LANES EXIST/IMPROVED/ADDED: 8/ 8/ 1

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	2024	GREATER THAN 2024	ALL YEARS
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	947,996	0	0	0	0	0	0	947,996
DI	1,626,166	0	0	0	0	0	0	1,626,166
DIH	57,346	16,130	0	0	0	0	0	73,476
DS	1,852,553	0	0	0	0	0	0	1,852,553
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DI	42,407	0	0	2,750,000	0	0	0	2,792,407
DIH	17,349	3,255	0	0	0	0	0	20,604
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,000,000	25,617,598	0	0	0	0	26,617,598
DI	726,393	164,727	1,294,500	0	0	0	0	2,185,620
DIH	181	67,548	0	0	0	0	0	67,729
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	9,979	20,000	0	0	0	0	0	29,979
TOTAL 436964 1	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128
TOTAL PROJECT:	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128



Florida Department of Transportation

RON DESANTIS
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

KEVIN J. THIBAUT
SECRETARY

October 23, 2019

Mr. Gregory Stuart, Executive Director
Broward Metropolitan Planning Organization
100 West Cypress Creek Road
Suite 850
Fort Lauderdale, FL 33309

**SUBJECT: Broward Metropolitan Planning Organization (MPO)
TIP Modification FY 2019/20 – 2023/24
FM# 436964-1, SR-9/I-95 from South of SW 10th Street to North of Hillsboro Blvd.**

Dear Mr. Stuart:

The purpose of this letter is to inform you of FY 2019/20 - 2023/24 Transportation Improvement Program (TIP) modifications to the Broward Metropolitan Planning Organization TIP that are needed to reconcile differences between the TIP and the Department's Adopted Five-Year Work Program. Broward Metropolitan Planning Organization FY 2019/20 TIP modification is as follows:

EXISTING	FM#	Project Title	Limits		Description	Project Length
	436964-1	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.		INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD	7.250
	Phase	Fund	FY 2020	FY 2021	FY 2022	FY 2023
	PD&E	DIH	16,130	0	0	0
	PE	DI	0	0	2,750,000	0
	PE	DIH	3,255	0	0	0
	ROW	ACNP	1,000,000	25,617,598	0	0
	ROW	DI	164,727	1,294,500	0	0
	ROW	DIH	67,548	0	0	0

ENV	DDR	20,000	0	0	0
TOTAL		1,271,660	26,912,098	2,750,000	0

PROPOSED	FM#	Project Title	Limits		Description	Project Length
	436964-1	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.		INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD	7.250
	Phase	Fund	FY 2020	FY 2021	FY 2022	FY 2023
	PD&E	DIH	16,130	0	0	0
	PE	DI	0	0	2,750,000	0
	PE	DIH	3,255	0	0	0
	ROW	ACNP	1,000,000	25,617,598	0	0
	ROW	DI	164,727	1,294,500	0	0
	ROW	DIH	67,548	0	0	0
	ENV	DDR	20,000	0	0	0
PE	ACNP	500,000	0	0	0	
TOTAL		1,771,660	26,912,098	2,750,000	0	

If you have any questions or need additional information, please contact me at (954) 777-4561.

Sincerely,



John M. Podczerwinsky, AICP, CTP
 Planning Supervisor
 District Four

GA/jp

HIGHWAYS

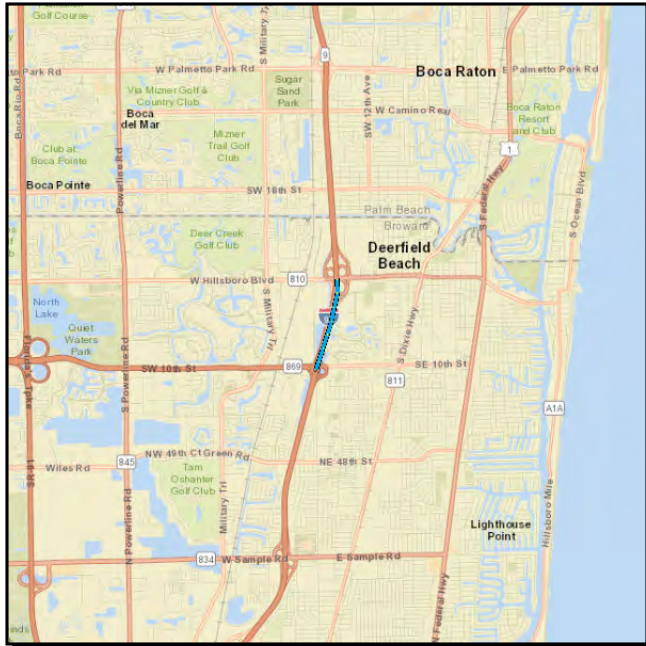
Superseded
Amended October 10, 2019

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	2024	GREATER THAN 2024	ALL YEARS
ITEM NUMBER:436964 1 PROJECT DESCRIPTION:SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. *SIS*								
DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE - ADD LANES								
EX DESC:2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD;								
SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOOLSBY BLVD TO SW NATURA BLVD CONS								
TRUCTION ON 436964-2								
ROADWAY ID:86070000 PROJECT LENGTH: 7.250MI LANES EXIST/IMPROVED/ADDED: 8/ 8/ 1								
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	947,996	0	0	0	0	0	0	947,996
DI	1,626,166	0	0	0	0	0	0	1,626,166
DIH	57,346	16,130	0	0	0	0	0	73,476
DS	1,852,553	0	0	0	0	0	0	1,852,553
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DI	42,407	0	0	2,750,000	0	0	0	2,792,407
DIH	17,349	3,255	0	0	0	0	0	20,604
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,000,000	25,617,598	0	0	0	0	26,617,598
DI	726,393	164,727	1,294,500	0	0	0	0	2,185,620
DIH	181	67,548	0	0	0	0	0	67,729
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	9,979	20,000	0	0	0	0	0	29,979
TOTAL 436964 1	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128
TOTAL PROJECT:	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128

4369641

SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.

Non-SIS



Work Summary: INTERCHANGE - ADD LANES

From:

To:

Lead Agency: MANAGED BY FDOT

Length: 7.250

LRTP #: Pg. 47

Phase	Fund Source	2020	2021	2022	2023	2024	Total
PE	DIH	3,255	0	0	0	0	3,255
ROW	ACNP	1,000,000	25,617,598	0	0	0	26,617,598
ROW	DI	164,727	1,294,500	0	0	0	1,459,227
PD&E	DIH	16,130	0	0	0	0	16,130
ROW	DIH	67,548	0	0	0	0	67,548
PE	ACNP	500,000	0	0	0	0	500,000
ENV	DDR	20,000	0	0	0	0	20,000
PE	DI	0	0	2,750,000	0	0	2,750,000
Total		1,771,660	26,912,098	2,750,000	0	0	31,433,758

Prior Year Cost: 5,280,370

Future Year Cost:

Total Project Cost: 36,714,128

Project Description: 2019 MPO PRIORITY #5 SYSTEM INTERCHANGE IMPROVEMENT PLUS CROSS STREET IMPROVEMENT INCLUDES WORK ON HILLSBORO BLVD; SW 10TH ST. FROM W. OF MILITARY TRL TO E. OF SW NATURA BLVD HILLSBORO BLVD FROM GOULSBY BLVD TO SW NATURA BLVD CONSTRUCTION ON 436964-2

PAGE 131
AS-OF DATE: 07/01/2019

FLORIDA DEPARTMENT OF TRANSPORTATION
OFFICE OF WORK PROGRAM
STIP REPORT
=====

DATE RUN: 07/10/2019
TIME RUN: 07.17.39
MBRSTIP-1

HIGHWAYS
=====

ITEM NUMBER:436962 1 PROJECT DESCRIPTION:SR-9/I-95 @COPANS RD FR S OF NB EXIT RAMP TO N OF SB TO WB EXIT RAMP *SIS*
DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE JUSTIFICA/MODIFICA
PROJECT LENGTH: 3.466MI

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	GREATER THAN 2023	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DDR	2,450,000	0	0	0	0	0	2,450,000
DIH	38,803	218	0	0	0	0	39,021
PHASE: RAILROAD & UTILITIES / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACNP	0	1,286,600	0	0	0	0	1,286,600
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACNP	0	21,240,994	0	0	0	0	21,240,994
ACSA	0	245,898	0	0	0	0	245,898
DDR	0	1,026,000	0	0	0	0	1,026,000
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DS	8,510	0	0	0	0	0	8,510
TOTAL <N/A>	2,497,313	23,799,710	0	0	0	0	26,297,023
TOTAL 436962 1	2,497,313	23,799,710	0	0	0	0	26,297,023
TOTAL Project:	2,497,313	23,799,710	0	0	0	0	26,297,023

ITEM NUMBER:436964 1 PROJECT DESCRIPTION:SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. *SIS*
DISTRICT:04 COUNTY:BROWARD TYPE OF WORK:INTERCHANGE - ADD LANES
PROJECT LENGTH: 7.250MI

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	GREATER THAN 2023	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DDR	947,996	0	0	0	0	0	947,996
DI	1,626,166	0	0	0	0	0	1,626,166
DIH	57,346	16,130	0	0	0	0	73,476
DS	1,852,553	0	0	0	0	0	1,852,553

PAGE 132
AS-OF DATE: 07/01/2019

FLORIDA DEPARTMENT OF TRANSPORTATION
OFFICE OF WORK PROGRAM
STIP REPORT

DATE RUN: 07/10/2019
TIME RUN: 07.17.39
MBRSTIP-1

=====

PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DI	42,407	0	0	2,750,000	0	0	0	2,792,407
DIH	17,349	3,255	0	0	0	0	0	20,604
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ACNP	0	1,000,000	25,617,598	0	0	0	0	26,617,598
DI	726,393	164,727	1,294,500	0	0	0	0	2,185,620
DIH	181	67,548	0	0	0	0	0	67,729
PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	9,979	20,000	0	0	0	0	0	29,979
TOTAL <N/A>	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128
TOTAL 436964 1	5,280,370	1,271,660	26,912,098	2,750,000	0	0	0	36,214,128

ITEM NUMBER: 436964 2 PROJECT DESCRIPTION: SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD. *SIS*
DISTRICT: 04 COUNTY: BROWARD TYPE OF WORK: INTERCHANGE - ADD LANES
PROJECT LENGTH: 5.084MI

FUND CODE	LESS THAN 2020	2020	2021	2022	2023	GREATER THAN 2023	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: RAILROAD & UTILITIES / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DI	0	0	0	0	0	4,000,000	4,000,000
PHASE: DESIGN BUILD / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACNP	0	0	0	0	0	276,404,163	276,404,163
DI	0	0	0	0	0	2,000,000	2,000,000
STED	0	0	0	0	0	123,566,958	123,566,958
TOTAL <N/A>	0	0	0	0	0	405,971,121	405,971,121
TOTAL 436964 2	0	0	0	0	0	405,971,121	405,971,121
TOTAL Project:	5,280,370	1,271,660	26,912,098	2,750,000	0	405,971,121	442,185,249

Cultural Resources Appendix

Contents:

SHPO Concurrence Letter

DRAFT

DRAFT

Attachment B

*SHPO Concurrence Request Letter and SHPO
Concurrence Letter*



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Blvd.
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

November 13, 2018

Dr. Timothy Parsons, Director and
State Historic Preservation Officer
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32301

2018 NOV 19 P 3:29
STATE HISTORIC PRESERVATION DIVISION

Subject: **Request for Review**
Cultural Resource Assessment Survey
SR 9/I-95 from SW 10th Street to Hillsboro Boulevard
Financial Management #: 436964-1-22-01
Broward County, Florida

Attention: Adrienne Daggett

Dear Ms. Daggett;

The Florida Department of Transportation (FDOT), District Four, is currently conducting a Project Development & Environment (PD&E) Study to evaluate alternatives for improvements to SR-9/I-95 from SW 10th Street to Hillsboro Boulevard in Broward County, Florida. The limits of the project include I-95 from just south of SW 10th Street to just north of Hillsboro Boulevard and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard, and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the city of Deerfield Beach. This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. In addition, the project proposes improvements along both SW 10th Street and Hillsboro Boulevard near I-95. This project will evaluate the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, consider the replacement of the existing SW 10th Street bridge over I-95 and the provision of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard.

No newly or previously recorded archaeological sites were identified within the archaeological area of potential effect (APE). Two shovel tests were excavated within the archaeological APE. No cultural material was recovered. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, berms, and buried utilities.

The historic resources survey resulted in the identification of one linear resource within the project APE, the Seaboard Air Line (CSX) Railroad (8BD4649). While the current segment within the APE has not been previously recorded, a segment to the north, at Hillsboro Boulevard, was determined eligible by the SHPO. This segment was determined National Register-eligible under Criterion A in the categories of Transportation and Community Planning and Development. The segment within the current APE,

*Cultural Resources Assessment Survey
I-95 from SW 10th Street to Hillsboro Blvd.
FM 436964.1*

spanning approximately 1,225 feet and extending both to the north and south from SW 10th Street, is consistent with nearby segments, and accordingly, is considered eligible for listing in the National Register under Criterion A in the categories of Transportation and Community Planning and Development.

No impacts to the CSX Railroad are anticipated to result from proposed improvements. The rail line will continue to operate in its current alignment. Therefore, the District has determined that no historic properties will be affected by the proposed project. I respectfully request your concurrence with this determination.

If there are any questions, please feel free to contact me at (954) 777-4324 or Lynn Kelley at (954) 777-4334.

Sincerely,




Ann Broadwell
Environmental Administrator
FDOT - District 4

Enclosures
cc. file

Cultural Resources Assessment Survey
I-95 from SW 10th Street to Hillsboro Blvd.
FM 436964.1

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Report complete and sufficient and concurs with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number 2015-4758C.

SHPO Comments:

For  Deputy SHPO
Timothy A. Parsons
State Historic Preservation Officer
Florida Division of Historical Resources

12/3/18
Date

Natural Resources Appendix

Contents:

WQIE Checklist_Signed

Species Concurrence Letter

Species Concurrence Letter

Sole Source Aquifer Coordination Letter

DRAFT

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
WATER QUALITY IMPACT EVALUATION CHECKLIST

PART 1: PROJECT INFORMATION

Project Name:	I-95 from SW 10 th Street to Hillsboro Boulevard Project Development & Environment (PD&E) Study
County:	Broward
FM Number:	436964-1-22-01
Federal Aid Project No:	0202-054-P
Brief Project Description:	This project proposes improvements to the I-95 partial cloverleaf interchanges at SW 10 th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10 th Street interchange to just north of the Hillsboro Boulevard. The project also proposes improvements along both SW 10 th Street and Hillsboro Boulevard near Interstate 95.

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or ground water? Yes No

Does project alter the drainage system? Yes No

Is the project located within a permitted MS4? Yes No

Name: South Florida Water Management District and Broward County

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS

Surface Water

Receiving water(s) names: Hillsboro Canal and Broward County Water Control District #2 C-1 Canal

Water Management District: South Florida Water Management District

Environmental Look Around meeting date: 12/7/2017

Attach meeting minutes/notes to the checklist.

Water Control District Name (list all that apply): Broward County. Water Control District #2

Groundwater

Sole Source Aquifer (SSA)? Yes No

Name Biscayne Aquifer

If yes, complete Part 5, D and complete SSA Checklist shown in Part 2, Chapter 11 of the PD&E Manual

Other Aquifer? Yes No

Name _____

Springs vents? Yes No
 Name _____

Well head protection area? Yes No
 Name Broward County North Regional Wellfield and City of Deerfield Beach
 Groundwater recharge? Yes No
 Name _____

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: [Click here to enter a date.](#)

PART 4: WATER QUALITY CRITERIA

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in Table 1. This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in Table 1, Table 2 must also be completed. Attach notes or minutes from all coordination meetings identified in Table 2.

EST recommendations confirmed with agencies? Yes No

BMAP Stakeholders contacted: Yes No

TMDL program contacted: _____ Yes No

RAP Stakeholders contacted: Yes No

Regional water quality projects identified in the ELA Yes No

If yes, describe:
 Wellfield Protection Areas: Broward County North Regional Wellfield and City of Deerfield Beach

Potential direct effects associated with project construction and/or operation identified? Yes No

If yes, describe:

As a result of a review of all available data, such as agency file reviews at Broward County, the Florida Department of Environmental Protection; and available local/regional database reports; historic data reviews including aerial photography; and the site reconnaissance; eight (8) sites were identified to pose potential contamination concerns to the proposed project. Of these, three (3) sites are rated as Medium risk, two (2) sites are rated as Low risk, and three (3) sites are rated as No risk. Details for each of these sites can be found in the Contamination Screening Evaluation Report (CSER) prepared as part of the PD&E Study. The report is available at the FDOT, District IV, offices in Fort Lauderdale, FL. These potential risks will be addressed by the FDOT prior to project construction. No adverse impacts to the underlying aquifer/water quality are anticipated to occur.

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements.

Along SW 10th Street, from east of Military Trail to west of the railroad tracks, the proposed roadway improvements are within the Broward County Water Control District #2 C-2 canal basin. Drainage for this portion is incorporated in the adjacent SW 10th Street Connector PD&E Study from Florida's Turnpike/Sawgrass Expressway to SR 9/I-95 (FM 439891-1-22-02). Drainage improvements include collection and conveyance of runoff and proposed stormwater management facilities (SMF) within the C-2 canal basin.

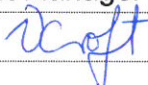
Along SW 10th Street, east of the railroad tracks to I-95 and the remaining portion of the study along I-95, from south of SW 10th Street to north of Hillsboro Boulevard, the proposed I-95 improvements are within the Broward County Water Control District #2 C-1 canal basin. Drainage improvements include collection and conveyance of runoff, proposed SMFs and floodplain compensation (FPC) sites within the C-1 canal basin. New SMFs (wet and/or dry retention areas) are proposed within the FDOT right-of-way along SW 10th Street and I-95 as well as regrading/modifying existing infield ponds at the interchanges to accommodate treatment and attenuation requirements. In addition, to compensate for impacts to existing floodplains, offsite (outside the limits of I-95 right-of-way) FPC sites may be required. The final locations and configurations of the SMF and FPC sites will be determined during the Final Design Phase of the project.

The South Florida Water Management District (SFWMD) and the Florida Department of Transportation require that the post-development discharge rates not exceed the pre-development discharge rates. The proposed design will be analyzed with the SFWMD 25 year - 72 hour storm event. The SFWMD and FDOT criteria will be met with the new stormwater management system. In addition, SFWMD and FDOT storm water quality criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

PART 5: WQIE DOCUMENTATION

- A. No involvement with water quality
- B. No water quality regulatory requirements apply.
- C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- D. EPA Ground/Drinking Water Branch review required. Yes No
Concurrence received? Yes No
If Yes, Date of EPA Concurrence: [Click here to enter a date..](#)
Attach the concurrence letter

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Evaluator Name (print): Vilma Croft, P.E.	
Title: Project Manager	
Signature: 	Date: 1/3/2019

DRAFT

Attachment D
ESA Section 7 Consultation/Concurrence Request Letter



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

ERIK R. FENNIMAN
INTERIM SECRETARY

December 5, 2018

Via Electronic Mail

Roxanna Hinzman
Field Supervisor
South Florida Ecological Services Office
US Fish and Wildlife Service
1339 20th Street
Vero Beach, FL 32960

Attn: John Wrublik

Subject: ESA Section 7 Consultation/Concurrence Request Letter
Project Name: State Road 9 / Interstate 95
From South of SW 10th Street to North of Hillsboro Boulevard
Financial Management No.: 436964-1-22-02
Federal Aid Project No.: 0202-054-P
ETDM No.: 14244
County: Broward

Dear John:

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment Study (PD&E) for the referenced project. The project extends along I-95 from just south of SW 10th Street (MP 22.00) to just north of Hillsboro Boulevard (MP 25.10) and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the City of Deerfield Beach.

The PD&E Study evaluated improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. SW 10th Street provides a direct connection between I-95 and the Sawgrass Expressway. The study is also evaluating improvements along both SW 10th Street and Hillsboro Boulevard near I-95. Additionally, this study evaluates the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, considers the replacement of the existing SW 10th Street bridge over I-95 and provisions of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard. This project connects into the State Road 869 / SW 10th Street Connector Project to the west along SW 10th Street (FM#

439891-1-22-02), which is being conducted as a separate PD&E Study by the FDOT concurrent with this project.

This project, along State Road 9 / Interstate 95 from south of SW 10th Street to north of Hillsboro Boulevard, was screened through the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) and the final programming screen was published July 11, 2016 (ETDM #14244 - <https://etdmpub.flas-etat.org/est/>).

A Natural Resource Evaluation (NRE) has been prepared for the project and is attached. The project results in no wetland impacts and 1.99 acres of fill impacts in man-made surface waters (swales, ditches and stormwater retention ponds). The project corridor is located within the Core Foraging Areas of four active wood stork nesting colonies and the US Fish and Wildlife Service (USFWS) Consultation Area for the Everglade snail kite. The project is not within any USFWS designated critical habitat.

Twelve federally listed animal species and four federally listed plant species were identified as potentially occurring within the limits of the viable Build Alternatives. Based on the review of available data (species habitat needs, past known occurrence, species range, etc.), field surveys, and an assessment of the proposed construction elements associated with each of the viable build alternatives, the following effects determinations have been made:

	Scientific Name	Common Name	Effect Determination
Federally Listed Wildlife Species	<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	No Effect
	<i>Calidris canutus rufa</i>	Red Knot	No Effect
	<i>Charadrius melodus</i>	Piping Plover	No Effect
	<i>Crocodylus acutus</i>	American Crocodile	May Affect, Not Likely to Adversely Affect
	<i>Drymarchon corais couperi</i>	Eastern Indigo Snake	May Affect, Not Likely to Adversely Affect
	<i>Grus americana</i>	Whooping Crane	May Affect, Not Likely to Adversely Affect
	<i>Mycteria americana</i>	Wood Stork	May Affect, Not Likely to Adversely Affect
	<i>Picoides borealis</i>	Red-cockaded Woodpecker	No Effect
	<i>Peromyscus polionotus niveiventris</i>	Beach Mouse	No Effect
	<i>Puma concolor</i>	Puma	No Effect
	<i>Puma concolor coryi</i>	Florida panther	No Effect
	<i>Rostrhamus sociabilis plumbeus</i>	Everglade Snail Kite	No Effect

	Scientific Name	Common Name	Effect Determination
Federally Listed Plant Species	<i>Cucurbita okeechobeensis</i> ssp. <i>Okeechobeensis</i>	Okeechobee Gourd	No Effect
	<i>Dalia carthagenensis floridana</i>	Florida Prairie-clover	No Effect
	<i>Jacquemontia reclinata</i>	Beach Jacquemontia	No Effect
	<i>Polygala smallii</i>	Tiny Polygala	No Effect

As part of the standard specifications, FDOT incorporates the most current versions of the Standard Protection Measures for the Eastern Indigo Snake during construction.

The purpose of this letter is to request written concurrence on the effects to listed species. Enclosed is the NRE for your review. Please call me at 954-777-4325 if you have any questions.

Sincerely,

Ann Broadwell
 Environmental Administrator
 FDOT – District 4

cc: Robert E. Bostian, Jr. P.E., FDOT
 Lynn Kelley, FDOT
 Vilma Croft, P.E. HNTB
 Keith Stannard, AECOM

DRAFT

Attachment E
FWS Effect Determination Concurrence Letter

www.fdot.gov

The PD&E Study evaluated improvements to the I-95 partial cloverleaf interchanges at SW 10th Street and Hillsboro Boulevard and along I-95 from just south of the SW 10th Street interchange to just north of the Hillsboro Boulevard. SW 10th Street provides a direct connection between I-95 and the Sawgrass Expressway. The study is also evaluating improvements along both SW 10th Street and Hillsboro Boulevard near I-95. Additionally, this study evaluates the potential modification of the existing merge and diverge ramp areas at the SW 10th Street and Hillsboro Boulevard interchanges, considers the replacement of the existing SW 10th Street bridge over I-95 and provisions of a grade separation at the existing at-grade CSX Railroad crossing at Hillsboro Boulevard. This project connects into the State Road 869 / SW 10th Street Connector Project to the west along SW 10th Street (FM#

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment Study (PD&E) for the referenced project. The project extends along I-95 from just south of SW 10th Street (MP 22.00) to just north of Hillsboro Boulevard (MP 25.10) and along both SW 10th Street from just west of Military Trail east to SW Natura Boulevard and along Hillsboro Boulevard from Goolsby Boulevard east to SW Natura Boulevard. The entire project lies within the City of Deerfield Beach.

Dear John:

Subject: ESA Section 7 Consultation/Concurrence Request Letter
Project Name: State Road 9 / Interstate 95
From South of SW 10th Street to North of Hillsboro Boulevard
Financial Management No.: 436964-1-22-02
Federal Aid Project No.: 0202-054-P
ETDM No.: 14244
County: Broward

Attn: John Wrublik

Vero Beach, FL 32960

1339 20th Street

US Fish and Wildlife Service

South Florida Ecological Services Office

Field Supervisor

Roxanna Hinzman

Via Electronic Mail

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Roxanna Hinzman, Field Supervisor

Date 2/22/15

December 5,

3400 West Comm
Fort Lauderdale,

Florida Department of



RICK SCOTT
GOVERNOR



U.S. Fish and Wildlife Service
1339 20th Street
Vero Beach, Florida 32960
772-562-3909 Fax 772-562-4288
FWS Log No. 04EF2000-2015-I-0322
2015-CVA-0417

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the South Florida Ecological Service Office.

DRAFT

Attachment F
EPA Sole Source Aquifer Concurrence Letter

The project has been determined to lie inside the designated boundaries of the Biscayne Aquifer and based on the information provided, is not expected to cause a significant impact to the aquifer system. However, it is requested that all debris from any demolition of the existing structures are properly contained and removed from the site prior to construction of the new structure. If applicable, all county flood plain management plans and public notification processes should be followed. During construction, it is the EPA's understanding and expectation that those responsible for the project will strictly adhere to all Federal, State and local government permits, ordinances, planning designs, construction codes, operation & maintenance requirements, and engineering as well as any contaminant mitigation recommendations outlined by Federal and State agency reviews. All best management practices for erosion and sedimentation control should be followed. State and County environmental offices should be contacted to address proper drainage and storm water designs. Additionally, the project manager should contact State and local environmental officials to obtain a copy of any local Wellhead Protection Plans. <http://www.dep.state.fl.us/swapp/Default.htm>

The U.S. Environmental Protection Agency (EPA) Region 4, received your January 4, 2019 request to assess the above referenced projects and we reviewed it pursuant to Section 1424(e) of the Safe Drinking Water Act. The assessment is to determine if the project lies within the boundaries (recharge and streamflow source zones) of an EPA designated Sole Source Aquifer (SSA); and to determine if the project poses potential, adverse health or environmental impacts. A SSA is the sole or principal water source for a designated area. If the aquifer is contaminated, there would be a significant hazard to public health and an economic burden for those using the aquifer as a drinking water source.

Dear Ms. Broadwell:

Subject: Sole Source Aquifer Review for the FDOT, District 4 - Project Development and Environment (PD&E) study along I-95 from SW 10th Street to Hillsboro Boulevard in the City of Deerfield Beach, Broward County, Florida – FM No. 436964-1-22-01; Federal Aid Project Number: 0202-054-P

Ms. Ann Broadwell
Environmental Administrator
Florida Department of Transportation – District 4
3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960
MAY 20 2019



Please note that this “no significant impact” finding has been determined based on the information provided and under Section 1424(e) of the Safe Drinking Water Act only. If there are any significant changes to the project, it is requested that the EPA Region 4 office be notified for further review. Other regulatory groups within the EPA responsible for administering other programs may, at their own discretion and under separate cover, provide additional comments

Thank you for your concern with the environmental impacts of this project. If you have any questions, please contact Mr. Larry Cole at 404-562-9474 or cole.larry@epa.gov or Mr. Khurram Rafi at 404-562-9283 or rafi.khurram@epa.gov.

Sincerely,



Tara L. Houda
Lieutenant Commander, U.S. Public Health Service
Acting Chief, Ground Water/UIC & GIS Section
Safe Drinking Water Branch