### **Drainage Design Documentation Report**

# I-75 (SR 93) from MP 33.989 to MP 46.000 Financial Project IDs: 444008-4-52-01 Collier County

### **Prepared For:**

# Florida Department of Transportation District One



**April 2024** 

### PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered engineer in the State of Florida practicing with Faller Davis & Associates, authorized to operate as an engineering business, and that I have reviewed or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

PROJECT: I-75 (SR 93) from MP 33.989 to MP 46.000

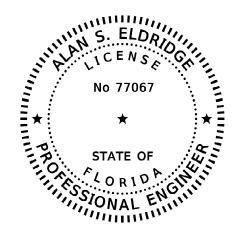
**Collier County** 

FPID NO: 444008-4-52-01

REPORT: Drainage Design Documentation Report

The attached Drainage Documentation contains calculations for hydrologic and hydraulic analyses of the proposed condition for the above referenced project. I acknowledge that the procedures and references used to develop the conclusions contained in this documentation are standard to the professional practice of civil engineering as applied through professional judgment and experience.

### SIGNATURE:



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

FALLER, DAVIS & ASSOCIATES, INC 1150 ASSEMBLY DRIVE, SUITE 400 TAMPA, FLORIDA 33607-4874 ALAN S. ELDRIDGE, P.E. NO.: 77067

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**EXECUTIVE SUMMARY** 

The I-75 (SR 93) RRR project is intended to extend the service life of the existing roadway. The project begins at

mile post 33.989 and ends at mile post 46.000. The project length is approximately 12 miles. See Appendix A.1

for the **Straight-Line Diagram** of the project area.

The Drainage Design Documentation Report serves to document the analysis of the existing drainage system

and the approach to the drainage modifications needed for the proposed roadway work. The proposed roadway

work includes milling and resurfacing the travel lanes and paved shoulders and widening the inside shoulder to

12 feet. Wildlife crossings will be added at various locations along the corridor to enhance existing areas where

wildlife has been known to use.

The existing roadway is a four-lane rural principal arterial interstate with a 70 MPH design and posted speed. It

has one typical section for the entire length of the project with the exception of the 6 bridges where the road

crosses canals. The existing typical section is comprised of two 12-foot travel lanes and has 12-foot outside

shoulders of which 10 feet are paved and 8-foot inside shoulders of which 4 feet are paved. Guardrail is located

along the outside shoulder of the northbound lanes. Roadway runoff sheet flows into roadside ditches that

discharge directly into adjacent canals.

The proposed added impervious area is due to shoulder widening and therefore per F.A.C. 62-330.051 will not

require water quality treatment. Existing SFWMD permit number 11-00396-S spans the length of the project

corridor and details the treatment volume provided in the linear systems in the median. An analysis of the

existing system was performed, and it was determined that there is enough existing overtreatment to

accommodate the impact caused by the proposed median shoulder widening. See Appendix C.1 for Water

**Quality and Attenuation Volume Calculations.** 

The proposed construction activities will cause negligible impact to the floodplain. The impacted floodplain

volume will be offset with the available overtreatment volume provided from existing SFWMD permit number

11-00396-S.

1

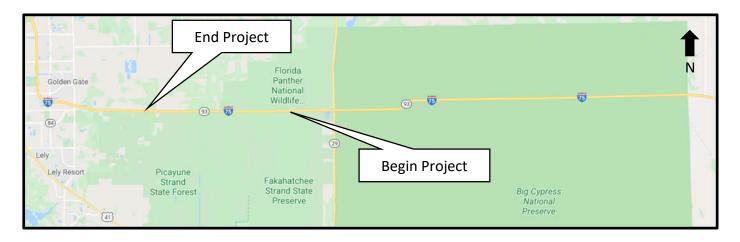
### 1 PROJECT OVERVIEW

### 1.1 <u>Introduction</u>

The purpose of this report is to document the design decisions and calculations that are the basis of the project's stormwater and drainage conveyance design. This report also identifies areas of encroachment to permitted facilities and the course of action taken for the remediation of those encroachments.

### 1.2 Site Location and Description

The project is in Collier County, along I-75 (SR 93) from MP 33.989 to MP 46.000. Refer to **Figure 1** for the **Project Location Map**.



**Figure 1 Project Location Map** 

The project length is approximately 12 miles and runs along the boundary of Townships 49S and 50S, passing through Ranges 27E to 29E. The corridor passes through Sections 31-36 in Township 49S and Sections 1-6 in Township 50S. See **Appendix A.2** for a **General Highway Map of Collier County** and **Appendix A.8** for **USGS Maps**.

The existing typical section is a four-lane rural principal arterial interstate with a 70 MPH design and posted speed. It is comprised of two 12-foot travel lanes and has 12-foot outside shoulders of which 10 feet are paved and 8-foot inside shoulders of which 4 feet are paved. Guardrail is located along the outside northbound shoulder. The southbound section is crowned while the northbound section slopes to the

outside. The vertical alignment is fairly flat with slight rises at the bridges. See **Appendix D** for **Existing Permit** 

Information.

Roadway runoff sheet flows off the road and into roadside ditches that discharge directly into adjacent

canals. In the grass median, open ditches convey runoff to ditch bottom inlets where it is conveyed to the

ditches at the right of way.

The project location falls within five WBIDs: 3278G, 3278I, 3259I, 3278H and 3278V. The only impaired WBID

is 3259I for nutrients (historic Chlorophyll-a) with total phosphorous and total nitrogen as the limiting

nutrients. See Appendix A.6 for WBIDs and Impaired Waterbodies Map and Appendix A.7 for the

**Comprehensive Verified List.** 

1.3 Floodplain Information

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) published in May 2012

are the latest information for the project area. There are seven panel numbers for this project area:

12021C0470H, 12021C0465H, 12021C0445H, and 12021C0440H. According to the FEMA maps, the project

corridor passes through flood zones A, AE and AH. Refer to Appendix A.3 for the FEMA FIRM Maps and

Appendix A.4 for a FEMA Flood Zones Exhibit.

2 DATA COLLECTION AND DOCUMENTATION

2.1 **Coordination** 

The following is a summary of the coordination that has occurred during the preparation of this report.

Specific information is provided in **Appendix B**.

FDOT District 1 Scope Clarification Meeting on July 10, 2019

SFWMD Pre-Application Meeting on May 27, 2020

• Memorandum to Maintenance on July 22, 2020

FDOT District 1 Wildlife Access/North Canal Crossing Design Meeting on January 28, 2021

3

FPID: 444008-4-52-01

### 2.2 Investigations

### 2.2.1 Field Investigations

A field review was conducted on February 19 & 20, 2020 and December 16, 2020 to inspect the physical condition of the drainage infrastructure within the project area. In general, the drainage infrastructure appeared to be in good condition.

### 2.2.2 Existing Drainage Maintenance Needs

During the field review minor issues were identified that can be rectified with routine maintenance. Items that were recommended to maintenance include desilting pipes, clearing overgrown vegetation, fixing erosion, and patching concrete to repair chipped or spalled drainage structures. Inlets missing a grate were considered an immediate safety concern and these locations were also provided to maintenance for replacement. At the areas noted with vegetative growth in the joint separation between the inlet and ditch pavement, patching the joints was recommended to maintenance to prevent water intrusion from causing deterioration to the pavement in the long term. See Appendix B.1 Memorandum to Maintenance for a comprehensive list of all drainage issues found during the field review. The Memorandum to Maintenance was provided to Rolando Carrillo in the Fort Myers Operations Center to coordinate the recommendations with the Asset Management Contractor.

### 2.3 Existing SFWMD Permit

One existing SFWMD permit, ERP number 11-00396-S, spans the length of the project corridor and details the treatment volume provided in the linear systems in the median. The existing permit was originally approved in April 1987 for the section of I-75 from the Naples toll booth east to SR 29. The original permitted improvements consisted of widening I-75 from 2-lanes to 4-lanes with the construction of a drainage canal, cross drain extensions, and spreader swales to discharge into adjacent wetland areas and the Fakahatchee Strand Preserve. A major modification to the original permit was approved in March 1988 for the section of I-75 from SR 29 east to station 1760+00. This major modification permitted improvements consisting of widening I-75 from 2-lanes to 4-lanes with the construction of a drainage canal, cross drain extensions, and spreader swales that discharge into adjacent wetland areas and the Fakahatchee Strand Preserve. A second major modification to the original permit was approved in October 1988 for the section of I-75 from station 1760+00 east to the Broward County Line. This major modification permitted improvements consisting of widening I-75 from 2-lanes to 4-lanes with the construction of a drainage canal, cross drain extensions,

spreader swales, and nine new wildlife crossings that discharge into adjacent wetland areas and the Fakahatchee Strand Preserve. The intent of the drainage canal design was to re-establish sheet flow to the extensive wetland areas south of I-75 that had previously been disrupted by the original roadway construction. To promote an increased southerly flow of water, a variety of methods were utilized including bridge extensions, wildlife crossings, and earthwork plugs left when the drainage canals were excavated. The existing permit acknowledges that water quality was provided by utilizing raised inlets in the median and in the vast wetland areas located south of the spreader waterway system. Water quality treatment in excess of the first inch of runoff was expected to be provided by these mechanisms.

### 3 EXISTING DRAINAGE CHARACTERISTICS

### 3.1 <u>Drainage Patterns</u>

The Everglades West Coast Watershed encompasses the entire project area. Within the watershed the project crosses one basin: Rookery Bay. See **Appendix A.5** for the **Basin Map**.

### 3.2 Conveyance

Roadway runoff sheet flows into side and median ditches that discharge directly into adjacent canals. The median ditches have ditch bottom inlets to collect water and convey via pipes to ditches along the right of way. The bridge decks along the roadway drain runoff through scuppers directly into the canals. Bridge approaches are drained with short segments of shoulder gutter and inlets.

### 3.3 Treatment

Existing SFWMD permit number 06-00670-S spans the length of the project corridor and details the treatment volume for the linear treatment systems in the median. See **Appendix D** for **Existing Permit Information**.

### 3.4 Cross Drains

There are 13 existing cross drains. During the field review, the cross drains appeared to be in good condition and do not require maintenance. The proposed work in this project will not require the extension of any existing cross drains. See **Appendix A.1 Straight Line Diagram** for the locations and sizes of the cross drains.

### 4 PROPOSED CONDITIONS

The proposed roadway work for this project includes milling and resurfacing the travel lanes and paved shoulders and widening the inside shoulder. A 12-foot shoulder with 10-feet of pavement will be constructed along the median. During construction 6-feet of pavement will be added while saving the existing 4-foot shoulder pavement. None of the added impervious will be for travel lanes. According to F.A.C. 62-330.051 the proposed impervious area does not require water quality treatment. See **Appendix A.9** for **Proposed Typical Sections**.

### 4.1 <u>Stormwater Quality/Quantity</u>

An analysis of the existing system was performed and it was determined that there is enough existing overtreatment to accommodate impact caused by the proposed median shoulder widening. See **Appendix C.1** for **Water Quality and Attenuation Volume Calculations and Appendix D** for **Existing Permit Information** for the approved SFWMD permit number 11-105964-P.

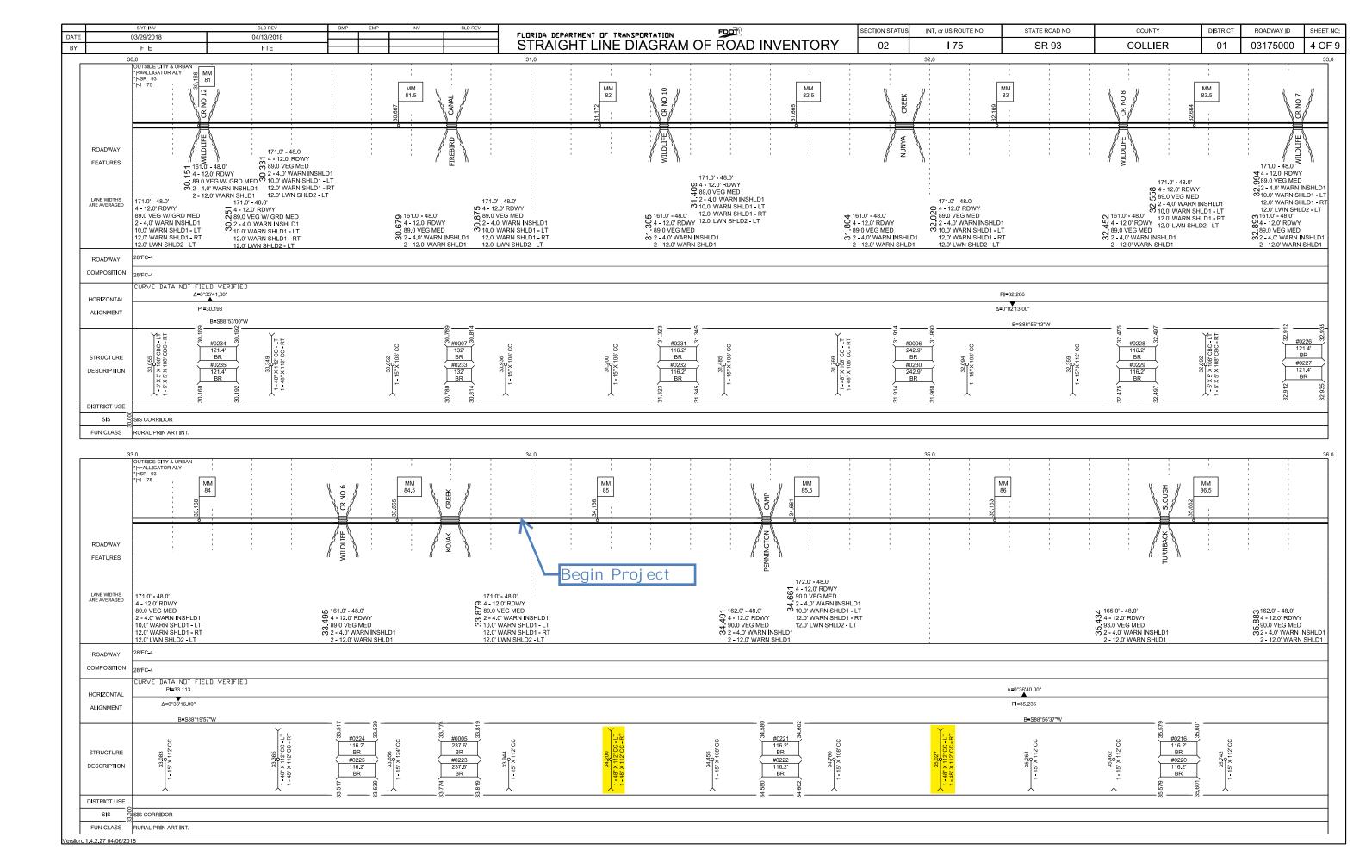
### 4.2 <u>Floodplain Encroachment/Compensation</u>

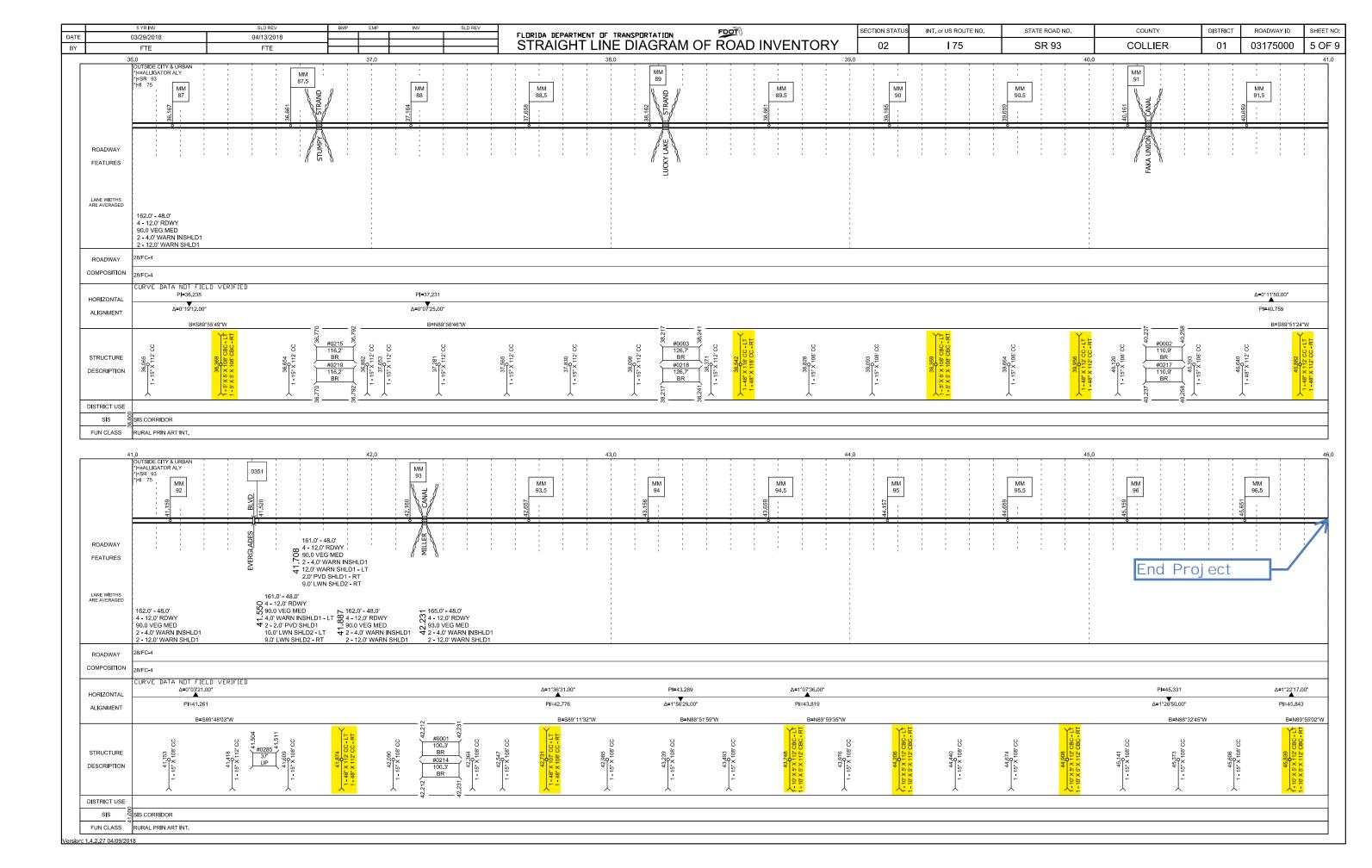
According to the FEMA maps, the project corridor passes through flood zones A, AE and AH. However, due to the nature of the proposed construction activities there will be negligible impact to the floodplain. The proposed shoulder widening will encroach less than 4.5 feet on each side. The impacted floodplain volume will be offset with the available overtreatment volume provided from existing SFWMD permit number 11-00396-S.

Appendix A

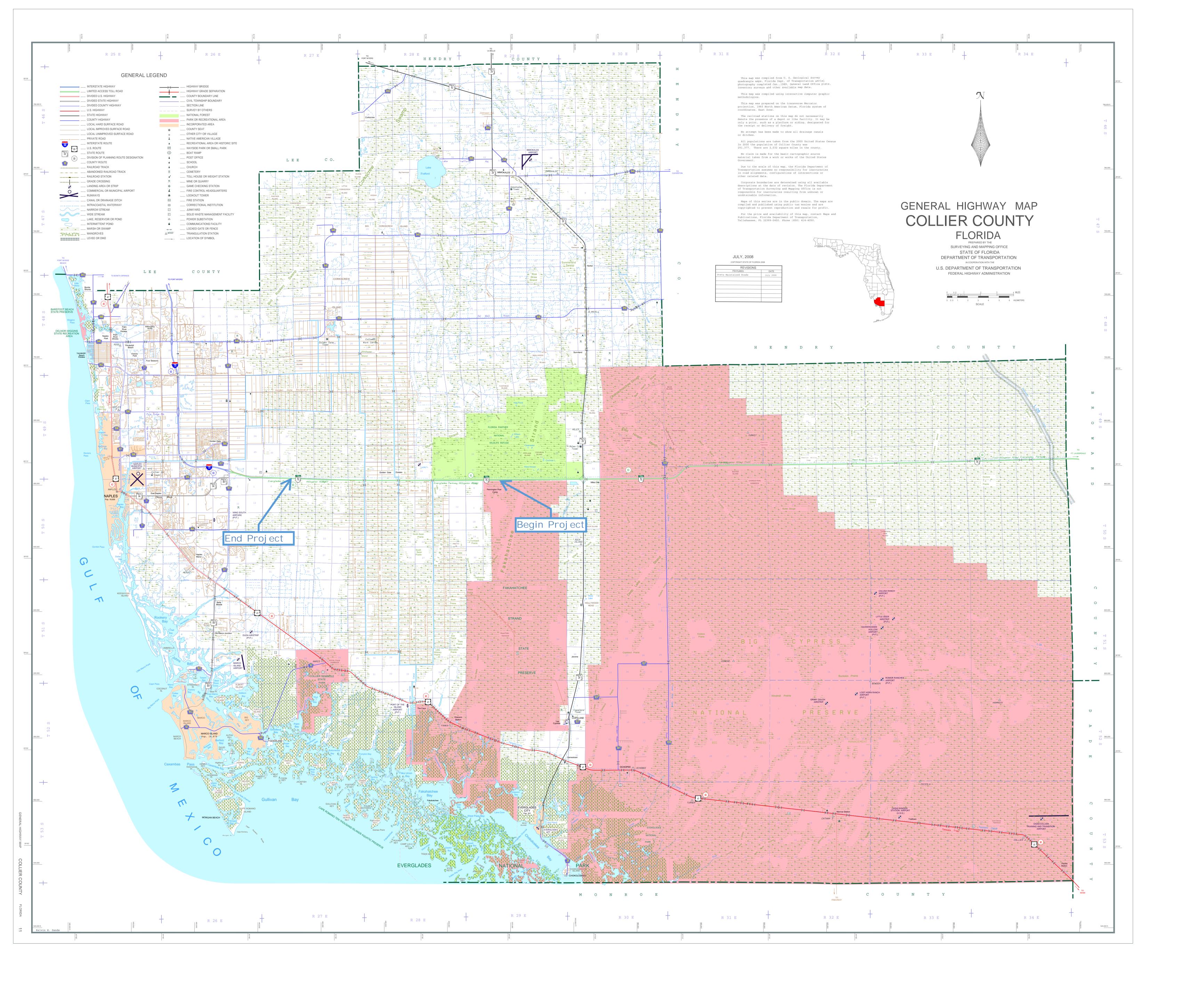
Miscellaneous Maps & Exhibits

### A.1 Straight Line Diagram





### A.2 General Highway Map of Collier County

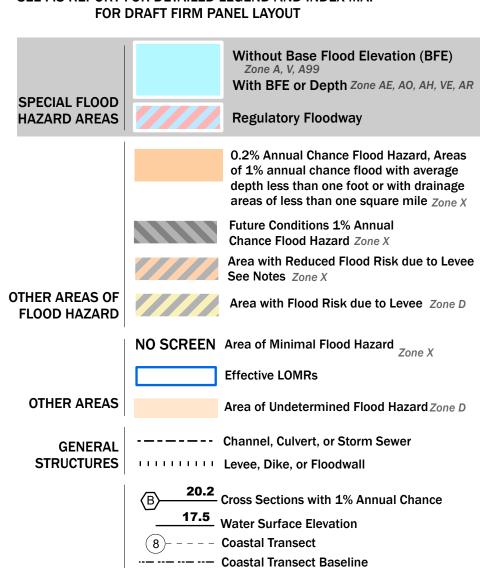


### A.3 FEMA FIRM Maps

### 81°22'29.16"W 26°7'16.84"N

# FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP



--- Profile Baseline

Limit of Study

Jurisdiction Boundary

OTHER

FEATURES

- Hydrographic Feature Base Flood Elevation Line (BFE)

# **NOTES TO USERS**

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 4/5/2021 3:26 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

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# **SCALE**

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National Flood Insurance Program

# NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

**COLLIER COUNTY, FLORIDA** AND INCORPORATED AREAS PANEL 470 OF 1175

**Panel Contains:** 

COMMUNITY **COLLIER COUNTY** 

NUMBER **PANEL** 120067 0470

> MAP NUMBER 12021C0470H **EFFECTIVE DATE**

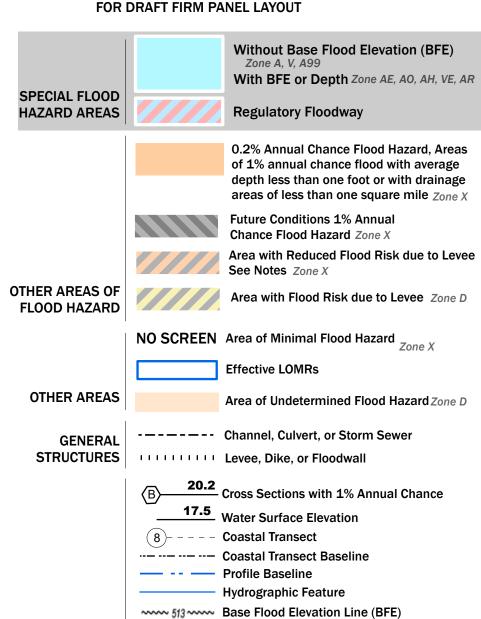
81°26'14.15"W 26°7'16.84"N

T50S R29E S8

# FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

T50S R28E S10



Limit of Study

Jurisdiction Boundary

OTHER

FEATURES

# **NOTES TO USERS**

T50S R28E S11

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Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well

as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction. To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

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# **SCALE**

T50S R28E S12

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For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Penert for your community at https://msc.foma.gov

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# National Flood Insurance Program

T50S R29E S7

# NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

COLLIER COUNTY, FLORIDA AND INCORPORATED AREAS PANEL 465 OF 1175

**Panel Contains:** 

COMMUNITY NUMBER **COLLIER COUNTY** 120067

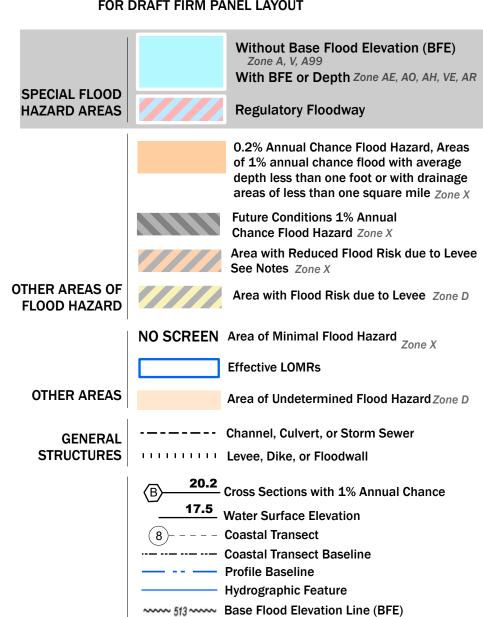
**PANEL** 0465

> MAP NUMBER 12021C0465H **EFFECTIVE DATE** May 16, 2012

# 81°29'59.16"W 26°7'16.84"N

# FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT



Limit of Study

Jurisdiction Boundary

OTHER

FEATURES

# **NOTES TO USERS**

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listed above. For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well

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To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

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# **SCALE**

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	Insurance Study (FIS) Report for your community at https://msc.fe												
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# National Flood Insurance Program

### NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP

COLLIER COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 445 OF 1175

**Panel Contains:** 

COMMUNITY NUMBER **COLLIER COUNTY** 120067

**PANEL** 

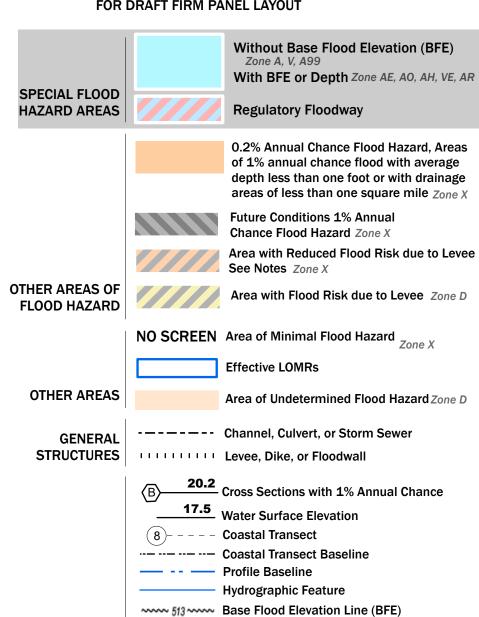
0445

MAP NUMBER 12021C0445H **EFFECTIVE DATE** May 16, 2012

# 81°33'44.16"W 26°7'16.84"N

# FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT



Limit of Study

Jurisdiction Boundary

OTHER

**FEATURES** 

# NOTES TO USERS

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# SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: NAVD88
For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

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# FEMA National Flood Insurance Program

# NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP

COLLIER COUNTY, FLORIDA AND INCORPORATED AREAS PANEL 440 OF 1175

and Contains

Panel Contains:

COMMUNITY

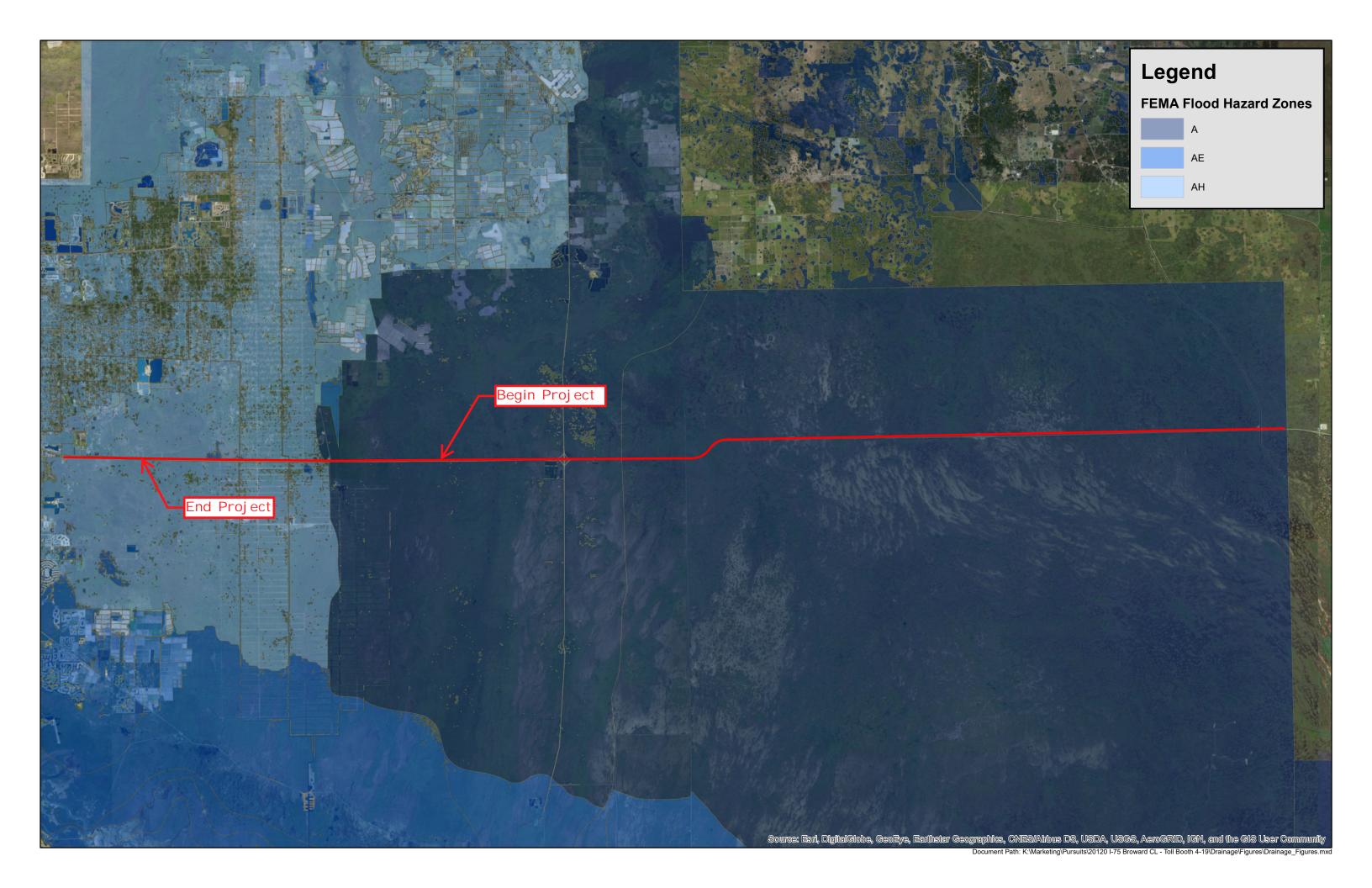
COLLIER COUNTY

NUMBER
PANEL
120067

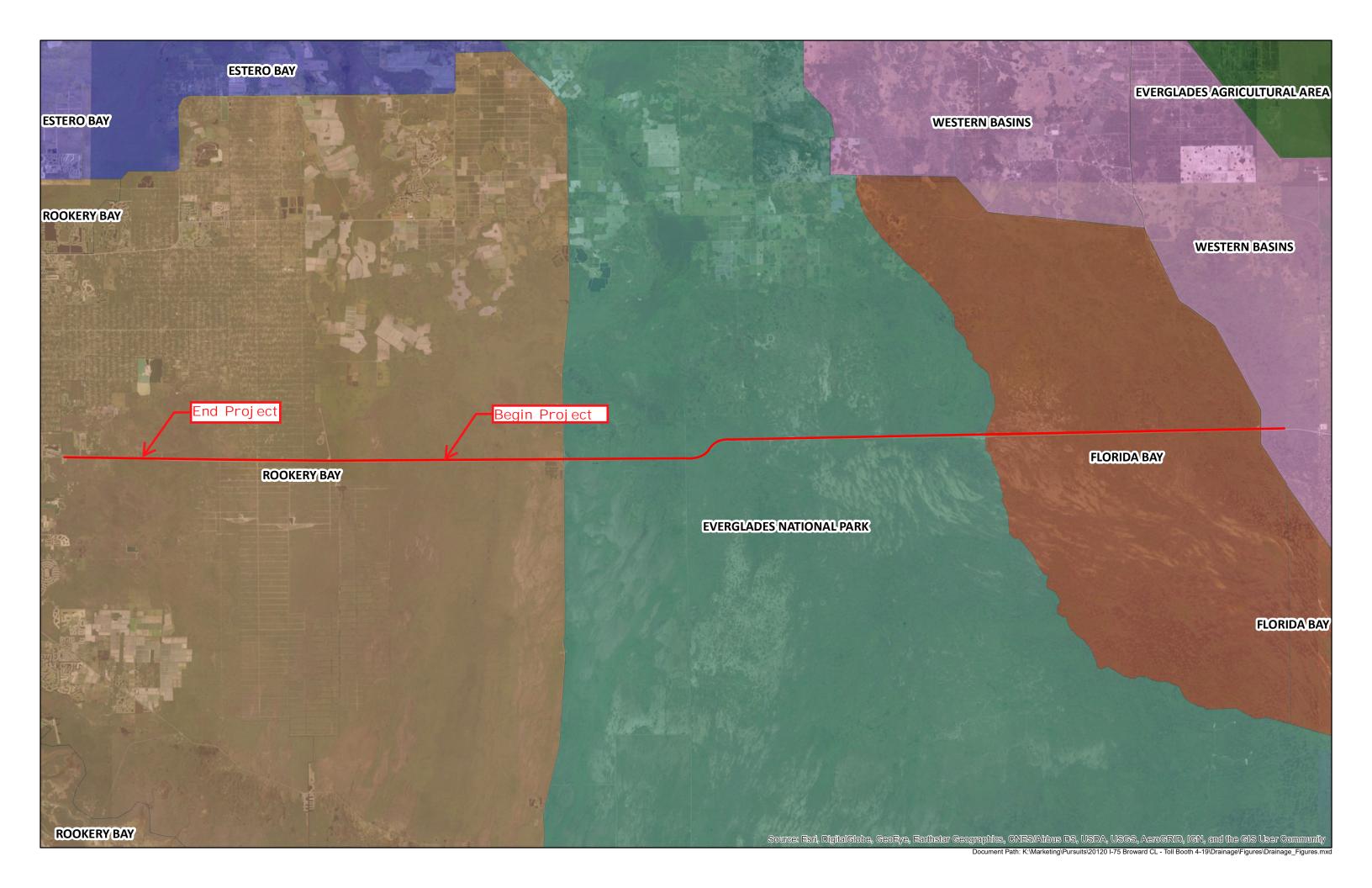
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MAP NUMBER 12021C0440H EFFECTIVE DATE May 16, 2012

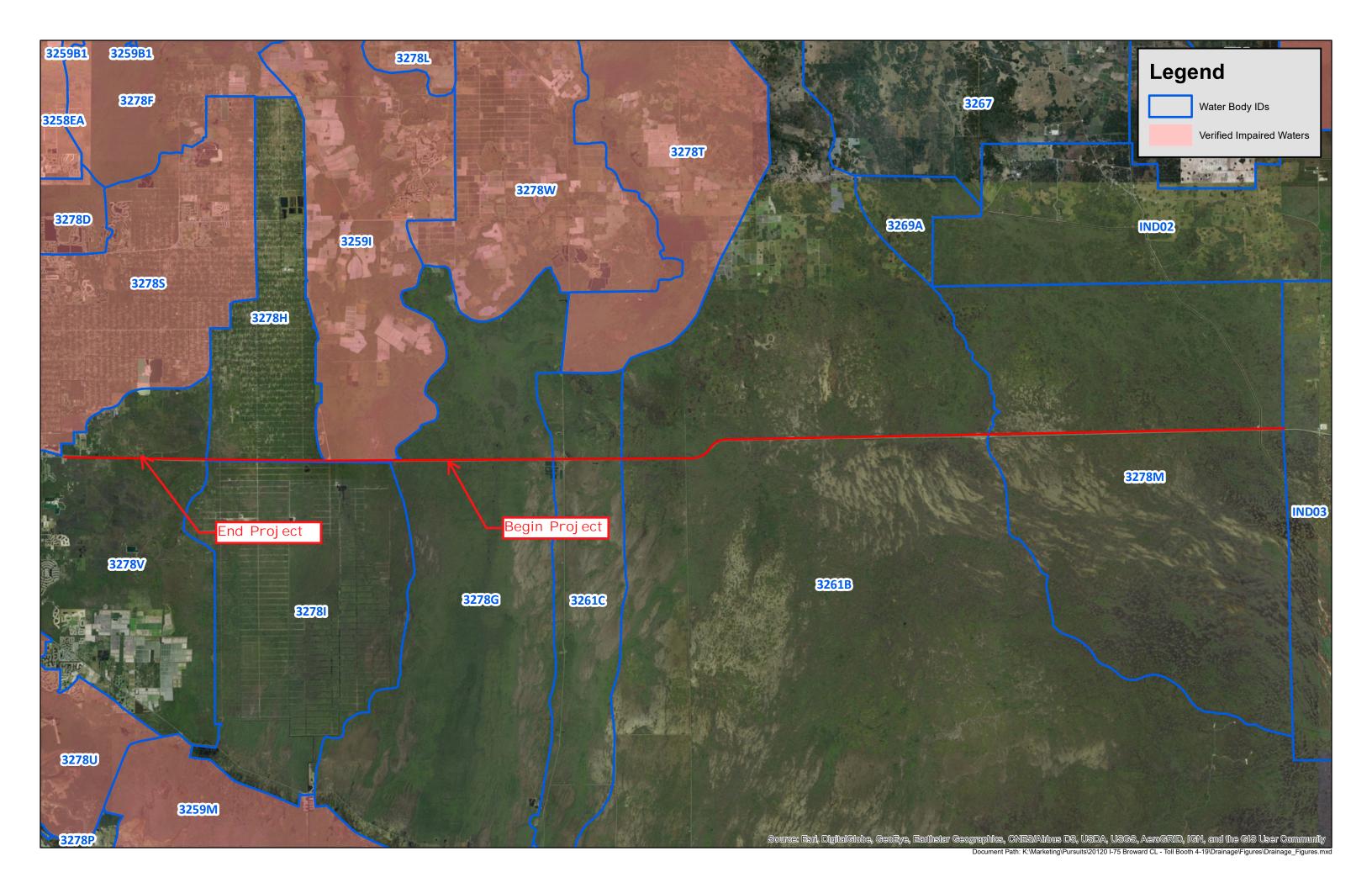
### **A.4 FEMA Flood Zones Exhibit**



### A.5 Basin Map



### A.6 WBIDs and Impaired Waterbodies Map



### **A.7 Comprehensive Verified List**

Comprehensive Verified List includes updates from the Group 5 - Cycle 3 Adoption (June 27, 2018)

(	Cycle Group	OGC Case Number	Group Name	Planning Unit	County (-ies)	WBID	Water Segment Name	Water- body Type	Water- body Class <sup>1</sup>	1998 303(d) Parameters of Concern	Parameters Assessed Using the Impaired Waters Rule (IWR)	Dissolved Oxygen/Biology Pollutant of Concern	Concentration of Criterion or Threshold Not Met	Priority for TMDL Development <sup>3</sup>	Projected Year For TMDL Development <sup>3</sup>	Verified Period Assessment Data <sup>8</sup>	Comments <sup>7,8</sup>
	3 1	13-0259	Everglades West Coast	Southwest Coast	Collier	32591	Camp Keais	Stream	3F		Nutrients (Historic Chlorophyll-a)		≤ 9 µg/L	Medium		2005 (3 µg/L) 2006 (5 µg/L) 2007 (20 µg/L) 2008 (15 µg/L)	This parameter is impaired for this waterbody because annual average chlorophyll-a values exceeded the historic minimum of 6 µg/L by more than 50% in at least two consecutive years. The historic minimum was calculated using data from the period 2000 - 2004. Based on the median TN/T ratio of 19.88, total nitrogen and total phosphorus are co-limiting nutrients. Historic chlorophyll-a is one part of the IWR nutrient assessment and dissolved oxygen is in category 4d and chlorophyll-a is also impaired based on annual average values greater than 20 µg/L. This parameter is being added to the 303(d) list.

<sup>&</sup>lt;sup>1</sup> Florida's waterbody classifications are defined as:

poses a threat to potable water or human health, which have been assigned a "high" priority, and fecal coliform impairments, which have been assigned a "low" priority.

All other listings are prioritized based on the following: it is our intent that listings with a "High" priority be addressed within the next 5 years,

listings with a "Medium" priority be addressed within 5-10 years as resources allow, and listings with a "Low" priority be addressed within the next 10 years.

N/A = Not Applicable, does not apply, or was not assessed in the previous cycle (i.e. it's a new WBID, waterbody type change, etc.).

<sup>1 -</sup> Potable water supplies

<sup>2 -</sup> Shellfish propagation or harvesting

<sup>3</sup>F - Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife in fresh water

<sup>3</sup>M - Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife in marine water

<sup>4 -</sup> Agricultural water supplies

<sup>5 -</sup> Navigation, utility, and industrial use

<sup>&</sup>lt;sup>2</sup> n is equal to the number of samples. When samples are collected at the same location less than 4 days apart, the median of those results represents a single sample for the purpose of determining n.

<sup>3</sup> Where a parameter was identified as impaired under the IWR, a priority of "medium" was assigned. Exceptions are waters where the impairment

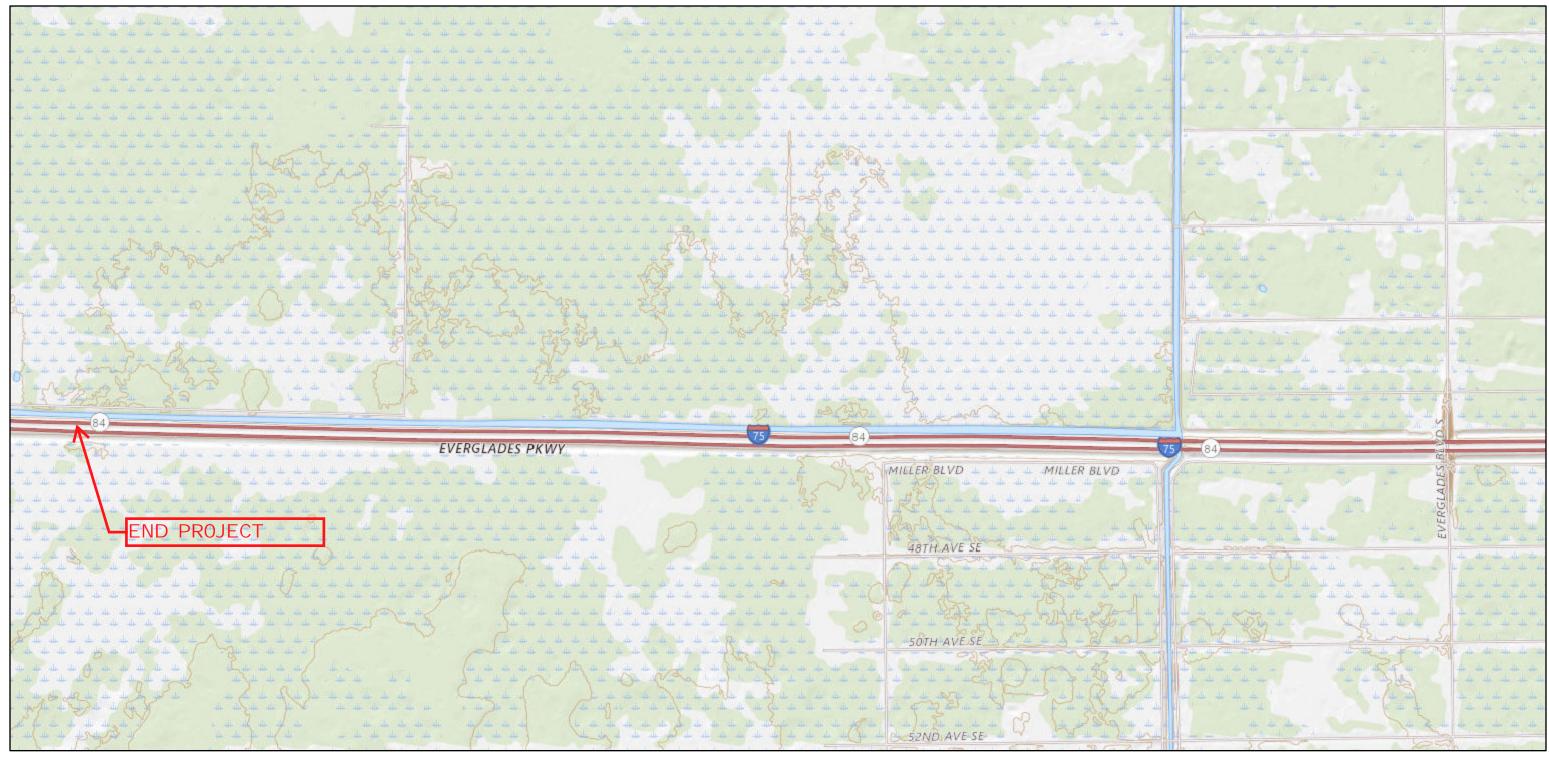
<sup>&</sup>lt;sup>7</sup> PP - Planning Period (10 year period; beginning and ending date vary by group/cycle combination); Where data are presented as xly, x represents the number of exceedances and y represents the total number of samples.

<sup>&</sup>lt;sup>8</sup> VP - Verified Period (7.5 year period; beginning and ending date vary by group/cycle combination); Where data are presented as x/y, x represents the number of exceedances and y represents the total number of samples. A statewide TMDL for mercury, that will address this waterbody, is scheduled to be completed in 2012.

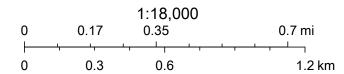
<sup>^</sup> Beach advisories are based on FL Dept of Health Enterococcus criterion of >103 CFU/100mL.

### A.8 USGS Maps

# USGS Map (1)

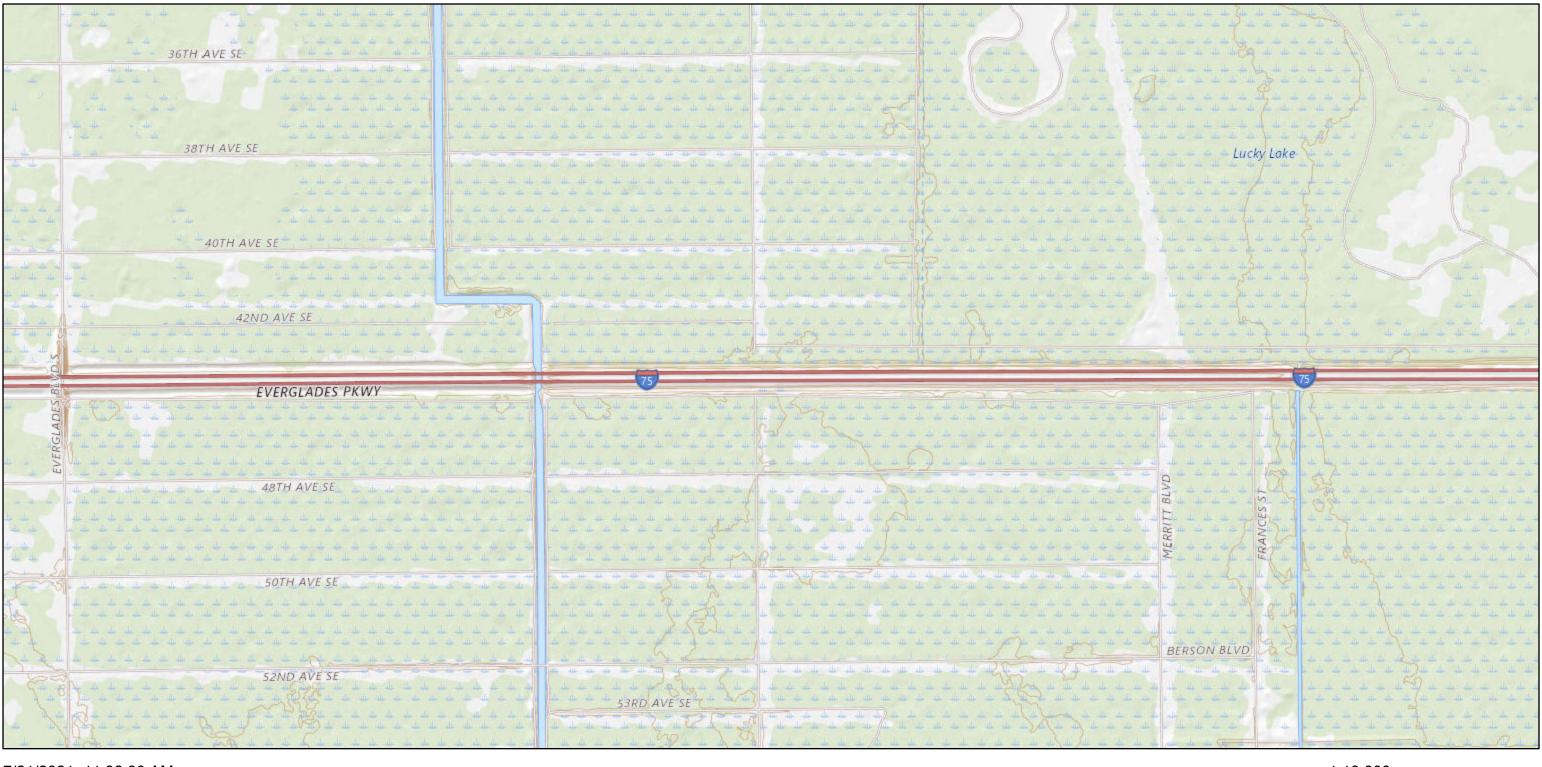


7/21/2021, 11:31:36 AM

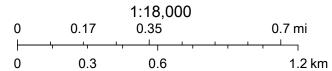


USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset;

# USGS Map (2)

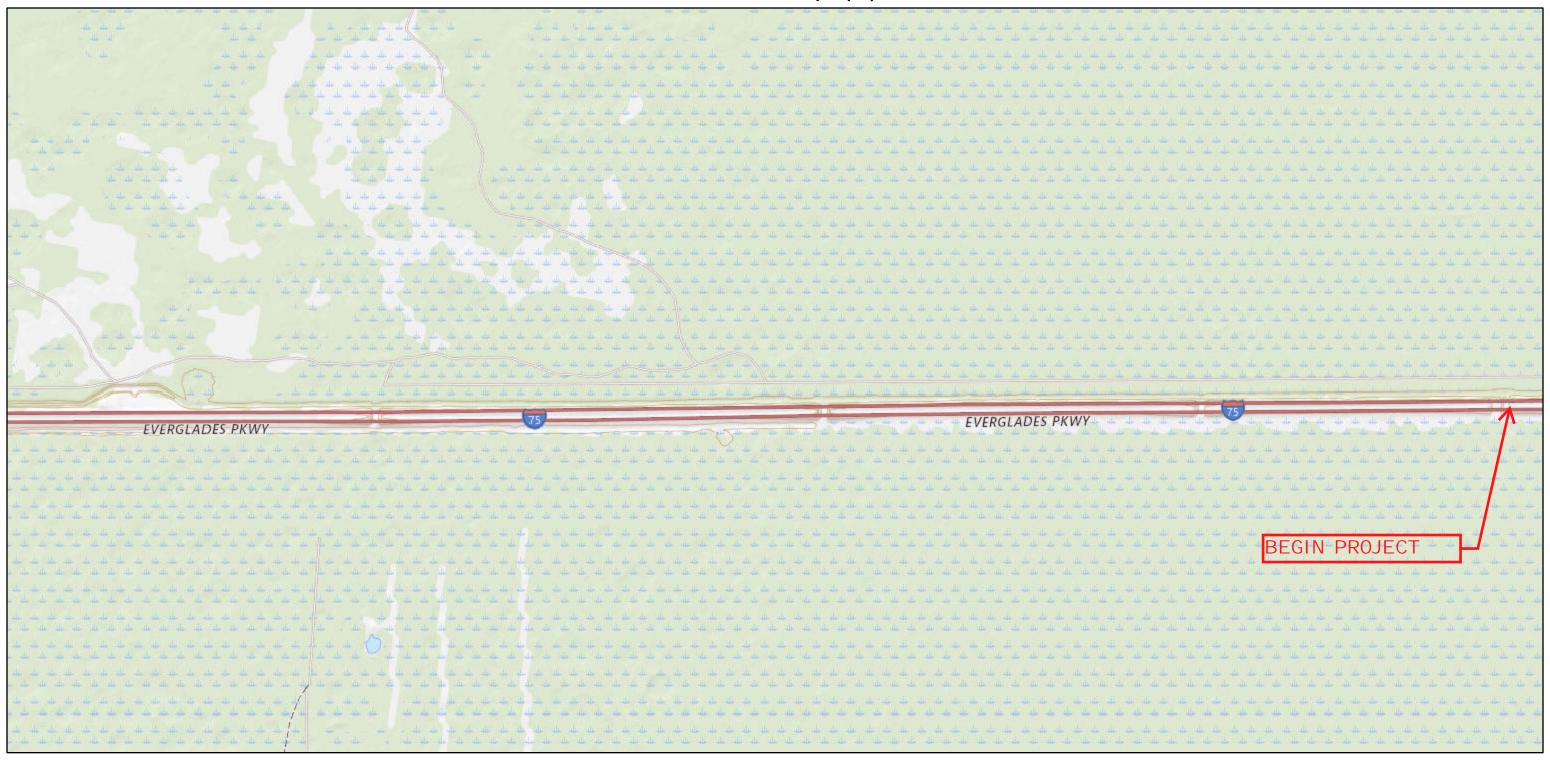


7/21/2021, 11:32:30 AM

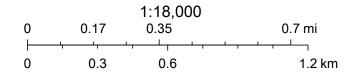


USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset;

# USGS Map (3)



7/21/2021, 11:34:36 AM



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset;

### **A.9 Proposed Typical Sections**

**Appendix B** 

**Project Correspondence & Documentation** 

### **B.1** Memorandum to Maintenance

Faller, Davis & Associates Inc. 4200 W. Cypress Street, Suite 500 Tampa, FL 33607 813.261.5136

### **MEMORANDUM**

TO: Sean Pugh, P.E.

FROM: Alan Eldridge, P.E.

DATE: 7/23/2020

SUBJECT: FPID 444008-1-52-01

I-75 (SR 93) from the Broward County Line to the Toll Booth in Collier County

Maintenance Recommendations

The I-75 (SR 93) RRR project is in Collier County from the Broward County Line to the Toll Booth. The project length is 49.032 miles from MP 0.000 to MP 49.032. The project includes milling and resurfacing the existing pavement, widening the paved median shoulders, adjusting or adding vehicle crossovers, and adding wildlife crossings.

The existing roadway is a four-lane divided interstate with twelve-feet outside shoulder and eight-feet inside shoulders. There are seventeen bridges in total crossing over waterways and wildlife crossings. In the grass median, open ditches convey runoff to ditch bottom inlets where it is conveyed to the ditches at the right of way. The proposed typical includes widening the inside shoulder to twelve-feet with ten-feet paved. The design speed and posted speed is 70 mph.

Field reviews were conducted on February 19 and 20, 2020 to observe the hydraulic function and physical condition of the drainage infrastructure within the project area. During this review, minor issues were identified that can be rectified with routine maintenance. These items include desilting pipes, clearing overgrown vegetation, and patching concrete to repair chipped or spalled drainage structures. Areas of erosion identified at cross drain headwalls and ditch bottom inlets will need to be filled and compacted, with some requiring ditch pavement repairs. At the areas noted with the vegetative growth in the joint separation between the inlet and ditch pavement, patching the joints should be considered to prevent water intrusion from causing deterioration to the pavement in the long term. It is anticipated that the more severely damaged inlets requiring replacement outside of routine maintenance will be fixed as part of the construction plans. Attached is a complete list of recommended maintenance repairs.

### MAINTENANCE SUMMARY TABLE

# I-75 EXISTING CONDITIONS ASSESSMENT CONDUCTED FEBRUARY 19th & 20th, 2020 COLLIER COUNTY FPID 444008-1-52-01 & 444008-1-52-02

Designed By: TT Checked By: ASE Date: 4/27/2020 Date: 5/11/2020

LOCATION	ı			Danilaaa	Bankan	D-4-b	Barraia Carra	D. allelia a	Clear	Maintenance	Replacement		
Station	Side	DESCRIPTION	ISSUE	Replace Inlet Top	Replace Inlet Grate	Patch Inlet Top	Repair Conc. Dt Pavt.	Desilting (LF)	Vegetation and Grout Joint	Replace Eyebolt & Chain	Replace Delineator	Fill & Compact	Remarks
251+00	LT	Headwall	Erosion									1	2'x4' Gap between slope and West side of Headwall
337+00	LT	Headwall	Erosion									1	3'x5' Gap between slope and both side of Headwall
440+00	LT	Shldr. Gutter Inlet	Damaged Grate		1								
577+00	MED.	DBI	Damaged Delineator								1		
736+00	MED.	DBI	No Eyebolt & Chain							1			
767+00	MED.	DBI	No Eyebolt & Chain							1			
795+00	LT	Side Drain	Damaged Delineator								1		
900+00	LT	Shldr. Gutter Inlet	Exposed Rebar			1							Rebar exposed, patch inlet top
1016+00	LT	Shldr. Gutter Inlet	Damaged Top			1							Rebar Exposed, Patch inlet top
1017+00	RT	Scupper	Maintenance Desilt					1					Opening is completely silted
1017+60	RT	Shldr. Gutter Inlet	Damaged Top			1							Inlet top chipped with exposed rebar
1104+00	MED.	DBI	No Delineator								1		No Delineator
1160+00	MED.	DBI	Missing Grate, No Eyebolt & Chain		1					1			
1200+00	MED.	DBI	No Eyebolt & Chain							1			
1298+00	MED.	Side Drain	Silted					72					Opening is completely silted
1501+00	MED.	Side Drain	Silted					46					Opening is completely silted
1557+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1569+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1584+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1597+50	RT	Headwall	Erosion									1	Gap between slope and east side of Headwall
1614+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1628+50	MED.	DBI	Damaged Top			1							2" displacement (west side)
1657+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1684+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1710+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
1723+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1738+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1753+00	MED.	DBI	No Delineator								1		
1768+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
1777+00	MED.	DBI	No Delineator								1		
1806+00	MED.	DBI	Repair cracks in concrete pavement				1						
1819+50	MED.	DBI	No Eyebolt & Chain							1			
1826+00	MED.	DBI	Dt Pavt. has sunk, Repair cracks in concrete pavement				1					1	Depression around inlet
1846+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
1857+50	MED.	DBI	No Eyebolt & Chain							1			
1857+50	LT	Headwall	Vegetation						1				Overgrown vegetation, not accessible
1869+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1880+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
1891+50	MED.	DBI	No Eyebolt & Chain							1			
1898+00	MED.	DBI	No Eyebolt & Chain							1			
1901+00	LT	Shldr. Gutter Inlet	Damaged Top	1						•			Inlet top crack and start to separate on westbound bridge
1906+00	MED.	DBI	No Eyebolt & Chain							1			top order and order to coparate on westbound bridge
1919+00	MED.	DBI	Erosion, Damaged Dt Pavt., No Delineator				1			'	1	1	Depression around inlet
1932+40	MED.	DBI	No Eyebolt & Chain				1			1		,	Depression around filet
1970+00	MED.	DBI	Erosion							<u> </u>		1	2'x4' Erosion hole
1980+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1			,	ZXT Elodioli floto
2002+40	MED.	DBI	No Eyebolt & Chain						'	1			
2048+00	MED.	DBI	No Eyebolt & Chain							1			
2062+00	MED.	DBI	Erosion							<u> </u>		1	Erosion hole 3.5'x5.5'x1.25' deep
2082+00	MED.	DBI	No Eyebolt & Chain							1		1	Liosion noie 5.5 x5.5 x1.25 deep
2098+60	MED.	DBI	No Eyebolt & Chain							1			
2111+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2111+00	MED.	DBI							1				
2125+00	IVIED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth										

### MAINTENANCE SUMMARY TABLE

# I-75 EXISTING CONDITIONS ASSESSMENT CONDUCTED FEBRUARY 19th & 20th, 2020 COLLIER COUNTY FPID 444008-1-52-01 & 444008-1-52-02

Designed By: TT Checked By: ASE 4/27/2020 Date: Date: 5/11/2020

LOCATIO	N			Replace	Replace	Patch	Repair Conc.	Desiltina	Clear Vegetation	ion			
Station	Side	DESCRIPTION	ISSUE	Inlet Top	Inlet Grate	Inlet Top	Dt Pavt.	(LF)	and Grout Joint	Replace Eyebolt & Chain	Replace Delineator	Fill & Compact	Remarks
2129+80	LT	Shldr. Gutter Inlet	Damaged Top	1									
2148+40	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2160+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2173+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2185+00	MED.	DBI	No Eyebolt & Chain							1			
2197+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2209+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
2213+00	LT	Shldr. Gutter Inlet	Damaged Top	1									
2218+00	MED.	DBI	No Eyebolt & Chain, Damaged Delineator							1	1		
2226+00	MED.	DBI	No Eyebolt & Chain							1			
2239+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
2245+00	LT	Shldr. Gutter Inlet	Damaged Top	1									
2255+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth, No Eyebolt & Chain						1	1			
2284+00	MED.	DBI	Joint separation between inlet and Dt Pavt. with vegetative growth						1				
2325+00	MED.	DBI	Siltation of pipe & inlet, Joint separation between inlet and Dt Pavt. with vegetative growth					113	1				Silt build up in inlet, weed growing between inlet and ditch pavement
2339+00	MED.	DBI	Maintenance desilt., Erosion					110				1	Silt build up in inlet & pipe, 12"x12" erosion hole
2353+00	MED.	DBI	Erosion, Damaged Top			1						1	28"x17" Erosion hole south side of inlet
2361+60	LT	Scupper	Maintenance desilt					1					Opening is completely silted
2385+00	MED.	DBI	No Eyebolt & Chain							1			
2517+00	MED.	DBI	No Eyebolt & Chain							1			
2559+00	MED.	DBI	No Eyebolt & Chain							1			
2580+00	MED.	DBI	Damaged Top	1									Top broken & displaced, 54"x52" grate opening
2612+00	MED.	DBI	No Eyebolt & Chain, No Delineator							1	1		
_			Totals	5	2	5	3	343	26	27	8	9	

### **B.2 Scope Meeting Minutes**

### **MEETING MINUTES**

**PROJECT:** I-75 (SR 93) from Broward County Line to Toll Booth (Collier County)

FPID: 444008-1-32-01 & 4440008-1-32-02

**DATE/TIME:** July 30, 2019, 10:00 am

**LOCATION:** Florida Department of Transportation

District One Headquarters 801 N. Broadway Ave Bartow, FL 33830

**SUBJECT:** Scope Clarification Meeting

**WRITTEN BY:** Sarah Wright, P.E.

**ATTENDEES:** Please see attached sign-in sheets

### **DISCUSSION:**

### I. Introductions

### II. Project Overview

- Faller Davis began the meeting with a review of the PowerPoint slides from the oral technical presentation held on July 9.
- The project is a RRR project, and includes the following design components:
  - i. Cross slope correction through variable milling and constant depth resurfacing
  - ii. Milling and resurfacing the outside paved shoulders
  - iii. Widening the inside paved shoulders from 4' to 10'
  - iv. Improved access to multiple access points along corridor
  - v. Relocated and additional median crossovers
  - vi. Median high tension cable barrier installation at the two reverse curves
  - vii. Guardrail replacement
  - viii. Additional mile post signs
  - ix. Loop-activated signs at access points
  - x. Wrong-way interchange signing updates
  - xi. Enhanced wildlife crossings
- There are no separate designated safety funds. All funds are from the Alligator Alley toll funds and will be split into 2 FPID's. "-01" will be used for all RRR improvements and "-02" will be used for all safety improvements.
- The Letting date has been set for July 2021. FDA will adjust their proposed schedule to meet this Letting date. For the audit package, a 24-month schedule will be used.

### III. Additional Discussion by Discipline

### • Public Involvement

• This will include updates or mark-ups to the project website and developing a Level II CAP plan.

### Roadway

• Kevin Ingle stated that the L-28 Canal Boat Ramp cannot be closed. This is a residential access point that had been constructed before the interstate. FDA is proposing to improve the turnout by eliminating the existing erosion and drop-off and provide improved sight distance. The access point will remain open.

### MOT

- TCP will include typical details for the on-ramps, off-ramps, toll booth, guardrail replacement, inside shoulder widening, deep milling depth and analysis of temporary barrier wall.
- Two meetings are anticipated. One with District Construction and one with stakeholders.
- Sean Pugh noted DCE Memo No. 07-19 pertaining to temporary concrete barrier was recently revised.

### Drainage

Hours will include a field review to document the existing drainage, documentation
for any potential drainage improvements, and permits for the proposed median
shoulder widening.

### • Utilities

• FDOT utilities stated that all designates can be obtained up-front. Any level A SUE requests will require a meeting before VVH's can be obtained. FDA will need to provide plan sheets specifying the locations of the test holes to obtain approval.

### Environmental

- Nicole Monies suggested that FDA be prepared to discuss flood plain impacts at the pre-application meeting with SFWMD.
- Nicole suggested that we may be able to use the additional wildlife crossings as justification for mitigation to any wood stork impacts to avoid purchasing credits.
- It was asked how the wetland surface water limits will be determined. The elevation of the existing inlet tops may be used to determine wetland surface water limits. Niki Cribbs will follow up with Nicole Monies in advance of Nicole's August meeting with SFWMD.
- Staff hours will assume a major permit modification.
- Nicole has meeting with SFWMD on August 21 and will discuss this project with them.
- Contamination will be handled in-house. There are no traffic noise impacts anticipated.

### • Structures

- Per new developmental specifications, the high tension cable barrier is to be placed at a maximum of two mile runs. There are three cable barrier runs and six end anchorages estimated for the proposed high tension cable barrier.
- Staff hours will assume one detail sheet for each proposed wildlife crossing.
- Staff hours will include an ancillary structures report and a bridge evaluation report.
- Richard will assume a percentage of structures that will need to be load rated. Andra
  Diggs suggested to assume 20 structures will need to be load rated as a worst-case
  scenario.

### • Signing and Pavement Marking/ITS

- The signing plans will be 500 scale plan sheets in a straight line diagram format showing existing and proposed signs. Pavement markings for the mainline will be shown as a typical section and plan sheets will be created for details at all interchange/ramp locations.
- An informal sign inventory will be completed for all existing signs.
- Staff hours will include additional time for analysis where any guardrail installation is being proposed to avoid impacts to the existing ITS.
- All existing wrong-way signage will be updated to the recently updated standards at the SR 29 interchange
- Any existing pavement sensors will be replaced in kind with the resurfacing. This will be for the TTMS, RWIS and PTMS as needed.
- A new 96-count fiber cable is being proposed along the project and is to be installed in the spare conduit that was installed with the existing ITS system. The existing fiber within the project limits is a 48-count ITS fiber.
- The ITS as-builts do not appear to be correct for the existing ITS facilities. Nicolas Leon has the latest information on existing ITS lines from the guardrail safety project on which he was the PM.
- DMS signs may be capable of speed feedback. However, FDA is proposing these signs be placed ahead of the curves and rest areas where the most variable traffic speeds are present. FDOT will check on which DMS signs are speed feedback capable and FDA will determine if they would be appropriate to use.
- Truck parking availability signs are currently being installed for the rest area within our project limits. Lulu Pierce in the Fort Myers office is the PM for this project. FDA will contact Lulu Pierce to gain more information.

### Geotechnical

- All geotechnical work will be done in-house.
- The cable barrier will require geotechnical investigation for the six end anchorages.
- Potential locations of caprock will require geotechnical information.
- The requested geotechnical information will be sent after Phase II plans.

### • Survey/Photogrammetry/SUE

• Dan Rutkosky requested that an aerial be provided with all survey limits prior to

the staff hour negotiations. Due to the size of the project, FDA will create a KMZ file to outline all limits of survey. The area for new wrong-way signage will be included.

- Dan asked what survey would be required at the proposed wildlife crossing locations. FDA responded that the low member elevations and a DTM of the ground line are all that will be necessary for the wildlife crossings. Season high water elevations will be required.
- Dan asked if a specific purpose survey for survey waters would be required. Niki Cribbs does not believe this will be needed. The approach to obtaining the surface water limits in the median was discussed. Dan and Niki discussed using surveyed points in combination with DTM to establish a surface water limit. Niki will follow up with Nicole Monies on this approach.
- All fence replacement is currently being handled by maintenance.
- It was agreed that geotech borings can determine borehole elevations from DTM.
- Scott Ellis stated that the current mowing schedule is 10 cycles/year. Scott will obtain a more detailed mowing schedule so the aerial flight can be scheduled immediately after mowing to allow for the most accurate survey data.
- Dan asked what kind of detail would be required for the existing drainage structures. It will be assumed that 43 of the existing median inlets will require survey. However, a field review will be performed to identify any drainage structures to be replaced. Additional survey will be obtained if and when needed.

#### • Maintenance

• It was suggested that any changes to the existing median crossovers may need to be approved by FHWA. FDA will also coordinate with FHP and the maintenance contractor (DBI) during design to obtain confirmation on proposed median crossover locations.

### **IV.** Critical Dates

- Preliminary staff hours due to Caitlin Tanner: August 12th
- Pre-Negotiations can begin: August 19<sup>th</sup> (After an email is received from Caitlin)
- Staff hour negotiations must be completed by: August 27th
- Letting date: July 2021

### SCOPE CLARIFICATION MEETING - ATTENDANCE ROSTER

DATE: July 30, 2019

PROJECT DESCRIPTION: I-75 (SR 93) from Broward County Line to Toll Booth

FP I.D. No.: 444008 1 32 01 & 444008 1 32 02/20120

FP I.D. No.: 444008 1 32 01 & 444008 NAME	TITLE/POSITION	OFFICE/FIRM	TELEPHONE NUMBER
	1111E/1 OSITION	OFFICE/FIRM	TELEFITORE RUNDER
Span Puch	Project Management Engineer	Project Munageneut	(239) 225- AZS
DAN RUTKOSKY	Survey	FDOT	863-519-2354
RAMASHMY VENKATESAN	CHEOTECH ENGINEER	COST	863-519-4241
Patricia Christie	FDA-Traffic	FDA	813-261-5134
Niki Cribbs	FDA - ENV. + Permitting	FDA	to co
Karina Della Sea	Drainage FDCT	FDOT	863-519-2750
NEAL TURNER	FAOT	FDOT	
Scott Ellis	FDOT Mintura	FDOT	863-519-2464
Dennis Carroll	FDOT ULITIES	FOOT	863-519-2537
MALK BAYER	BAYEL UNITED - MOT	BAIGH UNITED	313-460-2199
SARAH WRIGHT	FDA - ROADWAY	FDA	813-241-5136
Swend Pisten	FOOT - EMO	FOOT	763-519-2325
Nicole Monies	Permits	FOOT	663 - 519 - 2359
RichardHunter	Structures	Americal	813-267-4940
Andra Diggs II	Structures Design	FDOT	863-579-2426
	9		

### **ATTENDANCE SHEET**

Date/Location: July 30, 2019 / Bartow

FDOT FPID: 444008-32-01 & 02

Project Description: SR 93 (I-75) from the Broward County Line to Toll Booth

<u>Name</u>	Representing	Telephone No.	E-mail Address
Sean Pugh	FDOT Project Manager	(239) 225-1925	sean.pugh@dot.state.fl.us
Ken Muzyk	FDA PM/Roadway	(813) 261-5136	kmuzyk@fallerdavis.com
Sarah Wright	FDA Deputy PM/Roadway	(813) 261-5136	swright@fallerdavis.com
Patty Christie	FDA Traffic EOR	(813) 261-5136	pchristie@fallerdavis.com
Nicole Cribbs	FDA Environmental	(813) 261-5136	ncribbs@fallerdavis.com
Richard Hunter	American - Structures	(813) 435-2639	rhunter@acp-fl.com
Grant Fichter	AIM - Survey	(239) 332-4569	gfichter@aimengr.com
Mark Holt	McKim & Creed - Survey	(239) 275-8875	mholt@mckimcreed.com
Ike Rooks	IF Rooks - Planimetrics	(813) 752-2113	iker@ifrocks.com
Mark Bayer MG	Bayer United – Traffic Control	(813) 460-2199	mbayer@bayerunited.com
Dennis Cassall	FDOJ ALES	863-519-2537	dennis. Carroll @ Jot. State. Fl. U
Stor Flis	FlotMaintenance	863-519-2464	Scott, ellis adt, State. Alus

<u>Name</u>	Representing	Telephone No.	E-mail Address
Tim Smith	FDOT TSM+0	663-519-2342	Timothy W. Smot e Sot. Stat. fl. US
RAMASAMY		863-519-4241	200
GEAST FICHTER	AIM END. & SURVEY	239-872-2625	gfichter@aimengr.com
Tom Habstead	notin ! creed	727-224-2645	Thatstead a Metimorecol.com
Ike Rooke	I.F. Rooks	F13 152 2113	iker sifrooks.com
Jeffray James	FROT ISCIC	863519-2625	Jeffray . Ismes @ dot-state. A. us
KEVIN INGLE	FDOT PM	863.519.2740	Kevin. ingle @ clot. slate-fl us
Caitlin Tanner	Procurement	863-519-2598	Caitlin. Tannere dot. State. Fl.us
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### **B.3 Pre-Application Meeting Minutes**

# SFWMD Pre-Application Meeting Minutes I-75 Alligator Alley from Broward County Line to Toll Booth FPID: 444008-1-52-01 Collier County

### May 27<sup>th</sup>, 2020 10:30am via GoToMeeting

#### Attendees:

- Angelica Hoffert SFWMD
- Melissa Roberts SFWMD
- Laura Layman SFWMD
- Brent Setchell FDOT
- Nicole Monies FDOT
- Alan Eldridge Faller, Davis and Associates
- Niki Cribbs Faller, Davis and Associates

### **Background**

The meeting began with an overview of the project which is to mill and resurface the existing eastbound and westbound lanes, including paved shoulders for 49 miles. The project will also include the widening of inside paved shoulder, in both directions, from 4-foot to 10-foot. Wildlife crossings will be retrofitted at existing Channels 1, 2, D, A, Harold Strand and Lucky Lake Strand. The proposed typical section includes 4-12' travel lanes, 2-10' paved shoulders and an open conveyance drainage system.

### **Design Criteria**

The project is in the Everglades West Coast Watershed and conveyance patterns are generally from the north to the south. The original SFWMD permit for the widening from 2-lanes to 4-lanes is ERP No. 06-0067-S. From these design calculations, when I-75 was widened to 4-lanes it was permitted to construct 8' of impervious inside shoulder in each direction. However, only an inside shoulder width of 4' was constructed. Water quality is provided in the median swales by flat bottoms and raised inlets. The original permit was modified with SFWMD ERP No. 11-00396-S which was part of a project to improve conveyance to the south by constructing additional cross drains, canal plugs and spreader swales.

The project is surrounded by Floodplain Zone A, however, I-75 appears to be raised above the floodplain in Zone X. There are some short sections of Zone A in the median. Impacts to these median floodplain areas will be minor due to the inside shoulder widening and it will be demonstrated that the overtreatment/retention volume available in the median swales will be sufficient to offset the impacted volume.

The drainage design approach for the impacts due to the median widening will follow how the Broward County section to the east was designed and permitted. A Letter Modification to existing SFWMD ERP will

be submitted along with calculations that demonstrate the overtreatment/over retention volume in the median is significantly greater than the increase in runoff per 1,400' section. This results in no reduction in storage capacity, stormwater treatment, or flood attenuation. The new shoulder pavement does not add capacity and is exempt from treatment and attenuation criteria per the F.A.C.

#### **Environmental Discussion**

The medians are permitted treatment systems and while some may be wet, these are not considered surface waters or wetlands and have not been delineated as such.

Enhancements for wildlife crossings are anticipated at six locations in the project limits (four culverts and two bridges). Jurisdictional limits and seasonal high-water elevations have been set at these locations. About 0.22 acres of impacts to surface waters will occur because of the enhancements. Land bridges are proposed to provide access for wildlife across the canals that parallel I-75 at the four culvert areas. One on the north and one on the south will be provided. The design of the land bridge will allow for water conveyance via a pipe that will be sized appropriately for these locations. In a previous design, 84" pipes were used; sizing will be analyzed for the current locations.

The land bridges will be placed to provide the least environmental impact. Photographs were shown to show that the top of bank conditions are upland where the land bridges will be placed. The canal slopes are very steep sided and there is a little to no littoral zone to support vegetation and minimal environmental impact is anticipated. FLUCCS mapping will be provided with permit documents demonstrating no wetland impacts. Plans notes will be prepared instructing the contractor that the areas adjacent to the land bridges must be left in a natural condition (i.e. returning grades to pre-existing elevations and minimizing vegetation disturbance). It was noted by FDOT staff that Brazilian pepper removal was done at the SR 29 and I-75 interchange area which could be considered as mitigation for minor impacts related to the crossing enhancements.

Permitting for the enhancements could be done separately from the roadway improvements or it could be included in the permit modification with the roadway improvements. Discussions during the meeting indicated it was preferred to prepare one permit modification and include the wildlife enhancements with roadway improvements.

### **B.4 Wildlife Crossing Design Correspondence**

### Alan Eldridge, P.E.

From: Setchell, Brent <Brent.Setchell@dot.state.fl.us>

Sent: Wednesday, March 3, 2021 1:16 PM

**To:** Nicole I. Cribbs, CE; Pugh, Sean; Diggs, Andra; Puckett, Teresa; Blair, Brian

**Cc:** Kenneth R. Muzyk, Jr., P.E.; Richard Hunter; Haunstetter, Francis X.; Alan Eldridge, P.E. **Subject:** RE: [External] Structural Capacity Check of Prestressed Piles for Wildlife Crossing on

I-75/Alligator Alley Project (444008-1)

I think that is the best solution. Once you get an updated concept sketch prepared, I would like to share it with FWC and FWS to make sure they are comfortable with the change.

Thanks,

Brent Setchell, P.E.
District Drainage Design Engineer
Florida Department of Transportation

801 N. Broadway Avenue Bartow, Florida 33830 863-519-2557

From: Nicole I. Cribbs, CE < NCribbs@fallerdavis.com>

Sent: Wednesday, March 3, 2021 10:24 AM

To: Pugh, Sean <Sean.Pugh@dot.state.fl.us>; Diggs, Andra <Andra.Diggs@dot.state.fl.us>; Setchell, Brent

<Brent.Setchell@dot.state.fl.us>; Puckett, Teresa <Teresa.Puckett@dot.state.fl.us>; Blair, Brian

<Brian.Blair@dot.state.fl.us>

Cc: Kenneth R. Muzyk, Jr., P.E. <KMuzyk@fallerdavis.com>; Richard Hunter <rhunter@acp-fl.com>; Haunstetter, Francis

X. <FHaunstetter@acp-fl.com>; Alan Eldridge, P.E. <AEldridge@fallerdavis.com>

Subject: RE: Structural Capacity Check of Prestressed Piles for Wildlife Crossing on I-75/Alligator Alley Project (444008-1)

### **EXTERNAL SENDER:** Use caution with links and attachments.

After consideration of several design options for the wildlife crossing for the north canal, we propose to move forward with the 36-inch pile bridge in place of the land bridges. This design is expected to need less long term maintenance and overall be less expensive than other alternatives discussed recently, including the floating bridge concept. Based on feedback from the team in discussing the floating bridge, we believe that option would have substantially higher maintenance requirements including corrosion of anchor chains or links between floating segments, and debris across the canal that could be trapped by the structures. Other disadvantages we debated involved the cost of aluminum and the increased possibility of vandalism. We felt this design may look more like a pedestrian feature which is not the "wildlife use" we are encouraging.

The pile bridge design is proposed for the following locations to cross the north canal:

- Crossing B (Station 336+50 / MM 95.0 / MP 44.271)
- Crossing A (Station 299+50 / MM 95.7 / MP 44.972)

- Crossing D (Station 250+38 / MM 96.6 / MP 45.902
- Crossing 2 (Station 190+00 / MM 97.8 / MP 47.046)
- Crossing 1 (Station 141+30 / MM 98.7 / MP 47.968)

A timber pole bridge is proposed at Harold Strand/Merritt Canal (Station 1560+55 / MM 71.8 / MP 21.088). The north canal at this location is narrow and the timber pole design will span the canal here. These locations were included in the geotech boring request.

Please feel free to contact me with any questions or comments.

Sincerely, Niki Cribbs, CE o 813.261.5136 | m 813.546.0736 | <u>fallerdavis.com</u>

From: Hunter, Richard A. < <a href="mailto:RHunter@acp-fl.com">RHunter@acp-fl.com</a>>

Sent: Friday, January 29, 2021 4:10 PM

To: 'Brent Setchell' <Brent.Setchell@dot.state.fl.us>; 'nicole.monies@dot.state.fl.us'

<nicole.monies@dot.state.fl.us>; Andra.Diggs@dot.state.fl.us; teresa.puckett@dot.state.fl.us; brian.blair@dot.state.fl.us

Cc: Haunstetter, Francis X. <FHaunstetter@acp-fl.com>; Alan Eldridge, P.E.

<<u>AEldridge@fallerdavis.com</u>>; Kenneth R. Muzyk, Jr., P.E. <<u>KMuzyk@fallerdavis.com</u>>; Nicole I. Cribbs, CE <NCribbs@fallerdavis.com>

**Subject:** [External] RE: Structural Capacity Check of Prestressed Piles for Wildlife Crossing on I-75/Alligator Alley Project (444008-1)

FYI, the unit cost for 24" piles is \$140/LF and not \$170/LF as I listed below. See attached pdf from SDG for more information.

#### Richard Hunter, PE

American Consulting Professionals, LLC 2818 Cypress Ridge Blvd., Suite 200 | Wesley Chapel, FL 33544 813.435.2639 (D) | 813.267.4940 (M) | RHunter@acp-fl.com | acp-americas.com

From: Hunter, Richard A. <RHunter@acp-fl.com>

Sent: Friday, January 29, 2021 3:26 PM

To: 'Brent Setchell' <Brent.Setchell@dot.state.fl.us'; 'nicole.monies@dot.state.fl.us'

<nicole.monies@dot.state.fl.us>; Andra.Diggs@dot.state.fl.us; teresa.puckett@dot.state.fl.us; brian.blair@dot.state.fl.us

**Cc:** Haunstetter, Francis X. < <u>FHaunstetter@acp-fl.com</u>>; Alan Eldridge, P.E.

<<u>AEldridge@fallerdavis.com</u>>; Kenneth R. Muzyk, Jr., P.E. <<u>KMuzyk@fallerdavis.com</u>>; Niki Cribbs (NCribbs@FallerDavis.com) <NCribbs@FallerDavis.com>

**Subject:** Structural Capacity Check of Prestressed Piles for Wildlife Crossing on I-75/Alligator Alley Project (444008-1)

Andra, Terry, Nicole, Brent, Brian,

I did a quick capacity check of the prestressed piles when used as a beam on a 70' span to hold an adult bear (450 lb) at mid-span and 1 cub (100 lb) about 5' away. Unfortunately, the 24" pile ends up being overstressed by about 32%. Note that I was looking at the ultimate loading using a dead load factor of

1.25 and a live load factor of 1.75 as specified by AASHTO but I thought that these may be too high for this structure but I still could not get the 24" pile to work even when setting these load factor to 1.0.

See that this is Friday afternoon, I wanted to start with the bad news above but to help get the weekend off to a good start, I will end on a more positive note . . . the 36" piles work with about 13% reserve capacity! This will cost a little more since 36" piles cost \$170/LF installed while 24" pile cost only \$170/LF installed but it seems like this would still be a better choice than to try to build pile bents in the middle of that canal. I am guessing that at this point, it is probably worthwhile for Terry to send the crews out to get the hand auger borings to make sure we do not hit any cap rock that high up and to confirm the bearing capacity of the end caps.



Richard Hunter, PE

Project Manager

#### American Consulting Professionals, LLC

2818 Cypress Ridge Blvd., Suite 200 | Wesley Chapel, FL 33544 813.435.2639 (D) | 813.267.4940 (M) | RHunter@acp-fl.com | acp-americas.com

**Appendix C** 

**Calculations** 

C.1 Water Quality and Attenuation Volume Calculations

### WATER QUALITY VOLUME CALCULATIONS

Project: I-75 (SR 93) from MP 33.826 to MP 46.000

 FPID No.: 444008-4-52-01
 Designed By: T. Tran
 Date:
 22-Jul-20

 FDA No.: 608.00
 Checked By: A. Eldridge
 Date:
 22-Jul-20

From SFWMD ERP No. 11-00396-S, treatment is provided in the median swale. The swale has a 0.000% longitudinal slope and a typical bottom width of 30'. Ditch bottom inlets are currently placed at regular intervals of 1400'. Inlet openings are set 6" above the swale bottom. The extension of the shoulders will reduce storage volume in the median by filling a small section of swale.

### Required Treatment Volume per 1400 LF of Roadway

	_	Area (ac)			Volume (ac-ft)
Total Basin Area 1400 ft length, 100 ft width	_	3.21	* 1.0"	=	0.27
Impervious Area 1400 ft length, 32 ft width		1.03	* 2.5"	=	0.21
	Required Treatment Volume for (Choose the I	Wet Detention Highest Value)			0.27
	Required Treatment Volume for (50% Wet Detention Required	•			0.14

### Provided Treatment Volume per 1400 LF of Roadway - Swale Bottom = 30 FT

Volume (ac-ft)	
0.53	Exist. Treatment Volume Provided (6" treatment depth, 30 ft width bottom, 1:6 side slopes)
0.06	Proposed Fill Impact per 1400 LF Roadway (6" treatment depth, 30 ft width bottom, 1:6 side slopes)
0.47	Proposed Treatment Volume Provided (6" treatment depth, 30 ft width bottom, 1:6 side slopes)

Overtreatment through retention (per 1400 LF of Roadway) = 0.47 - 0.14 = 0.33 ac-ft

The overtreatment/retention credit shall be applied to the detention requirement for the project if necessary

### **ATTENUATION CALCULATIONS**

Project: I-75 (SR 93) from MP 33.826 to MP 46.000

 FPID No.:
 444008-4-52-01
 Designed By: T. Tran
 Date:
 22-Jul-20

 FDA No.:
 608.00
 Checked By: A. Eldridge
 Date:
 22-Jul-20

Additional Impervious Area per 1400 LF of Roadway (1400 ft length, 2 ft inside shoulder width on each side)

0.13 ac

### Pre-condition Runoff per 1400 LF of Roadway

$$S(in) = \frac{1000}{CN} - 10 = 1.90$$

$$Q_{Pre}(in) = \frac{(P - 0.2S)^2}{(P + 0.8S)} = 9.00$$

$$Q_{Pre}(ac - ft) = (9 in) * (0.13 ac) / 12 (in/ft) =$$

**0.10** ac-ft

### Post-condition Runoff per 1400 LF of Roadway

$$CN = 98$$
 (Paved)

$$S(in) = \frac{1000}{CN} - 10 = 0.20$$

$$Q_{Post}(in) = \frac{(P - 0.2S)^2}{(P + 0.8S)} = 10.76$$

$$Q_{Post}(ac - ft) = (10.76 in) * (0.13 ac) / 12 (in/ft) =$$

**0.12** ac-ft

Increase in stormwater runoff (per 1400 LF of Roadway)= 0.12 - 0.10 = 0.02 ac-ft

The overtreament/retention volume provided (per 1400 LF of Roadway)= I

The overtreament volume is significant greater than the increase in runoff volume.

**Appendix D** 

**Existing Permit Information** 



# FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

January 4, 2023

Florida Department of Transportation, District 1 c/o Nicole Monies 801 North Broadway Avenue Bartow, Florida 33830 Nicole.monies@dot.state.fl.us

File No: 11-0429182-001, Collier County

Dear Ms. Nicole Monies:

On December 7, 2022, we received your request for verification that a State 404 Program permit will not be required for the activity described below.

The Florida Department of Transportation (FDOT) District 1 is proposing to make safety improvements to a total of 12.01-miles of I-75/State Road (SR) 93 also known as Alligator Alley. The project begins about 4.7 miles west of the SR 29/I-75 interchange at Mile Post (MP) 33.989 and extends west for 12.01 miles to MP 46.000. Improvements include milling and resurfacing the roadway, widening the inside shoulders, guardrail replacement, and repair of bridge expansion joints. New fiber optic cable will be installed in existing spare intelligent transportation system (ITS) conduits along the length of the project. These improvements will not impact jurisdictional wetlands or surface waters. Minor changes to the location of wildlife fencing is proposed at Lucky Lake Strand to allow wildlife to use a naturally-occurring dry shelf. The proposed fence improvements at Lucky Lake Strand will not cause wetland or surface water impacts. Project activities that will impact surface waters involve wildlife crossing enhancements that are proposed at three locations known as Crossing A, Crossing B, and Crossing D. No wetland impacts will occur.

- Crossing A is located at survey Station 299+50, MP 44.972 and Mile Marker (MM) 95.7.
- Crossing B is located at survey Station 336+50, MP 44.271 and MM 95.0.
- Crossing D is located at survey Station 250+38, MP 45.902 and MM 96.6.

File Name: I-75 Alligator Alley Improvements

FDEP File No.: 41-0429182-001

Page 2 of 3

The proposed enhancements at these three locations include the addition of wildlife bridges to allow wildlife to pass over the existing canals on the north and south sides of I-75. The design for the north canal will be two 30-inch, square, concrete bridge piles placed side-by-side. The design for the south canal will be four timber poles (telephone poles) placed side-by-side. The canal crossing designs propose the pile and timber poles to be set in a small concrete footer placed at the top of the canal bank. No support structures are proposed within the canals. Approximately 0.003 acres (148 square feet [sf]) of permanent fill impact will occur in WOTUS with about 0.071 acres (3,084 sf) of temporary (vegetation) clearing impact in surface waters:

This impact represents areas along the top of bank centered on the concrete footers to allow for construction equipment to access the area, install the end block and set the timber poles and concrete poles on the end blocks. Minimal clearing of wetland vegetation along the top of bank is anticipated for this area. The vegetation will be allowed to regenerate naturally following construction.

The fill impact is due to the two concrete end blocks for the bridges with some minimal grading for the concrete piles to lay flat across the tops of bank. The bottom of the concrete piles will be slightly below the top of the existing canal banks and represent a technical fill below the surface water line, no fill will be placed directly within the waters of the canals. This segment of I-75 is in an unnamed waterbody within Collier County. Crossing A is in Section 34, Township 49S, Range 27E. Crossing B is in Section 35, Township 49S, Range 27E. Crossing D is in Section 33, Township 49S, Range 27E. Longitude 26°9'19.045 North, Latitude -81°38'46.454 West.

Based on a review of the information submitted by the applicant and aerial interpretation by Department Staff, the activity as proposed (placement of pilings in waters of the United States), does not have the effect of a discharge of fill material, therefore, does not require a permit or other form of authorization under the State 404 Program, as described in Chapter 62-331, Florida Administrative Code (F.A.C.).

This verification reflects current regulations and is only valid for a period of no longer than five years from the date of this letter unless new information warrants a revision of this verification before the expiration date.

Please retain this letter. The activities described above may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to enforcement action and possible penalties.

This letter does not relieve you from the responsibility of obtaining other federal, state (including ERP), or local authorizations that maybe required for this activity.

If you have any questions regarding this letter or permitting requirements, please contact Jennipher Walton by telephone at 407-897-2906 or by e-mail at Jennipher.walton@floridadep.gov.

File Name: I-75 Alligator Alley Improvements

FDEP File No.: 41-0429182-001

Page 3 of 3

Sincerely,

Timothy Rach

Program Administrator

Submerged Lands & Environmental Resources Coordination

Division of Water Resource Management

**Enclosures:** 

Project drawings, 40 pages

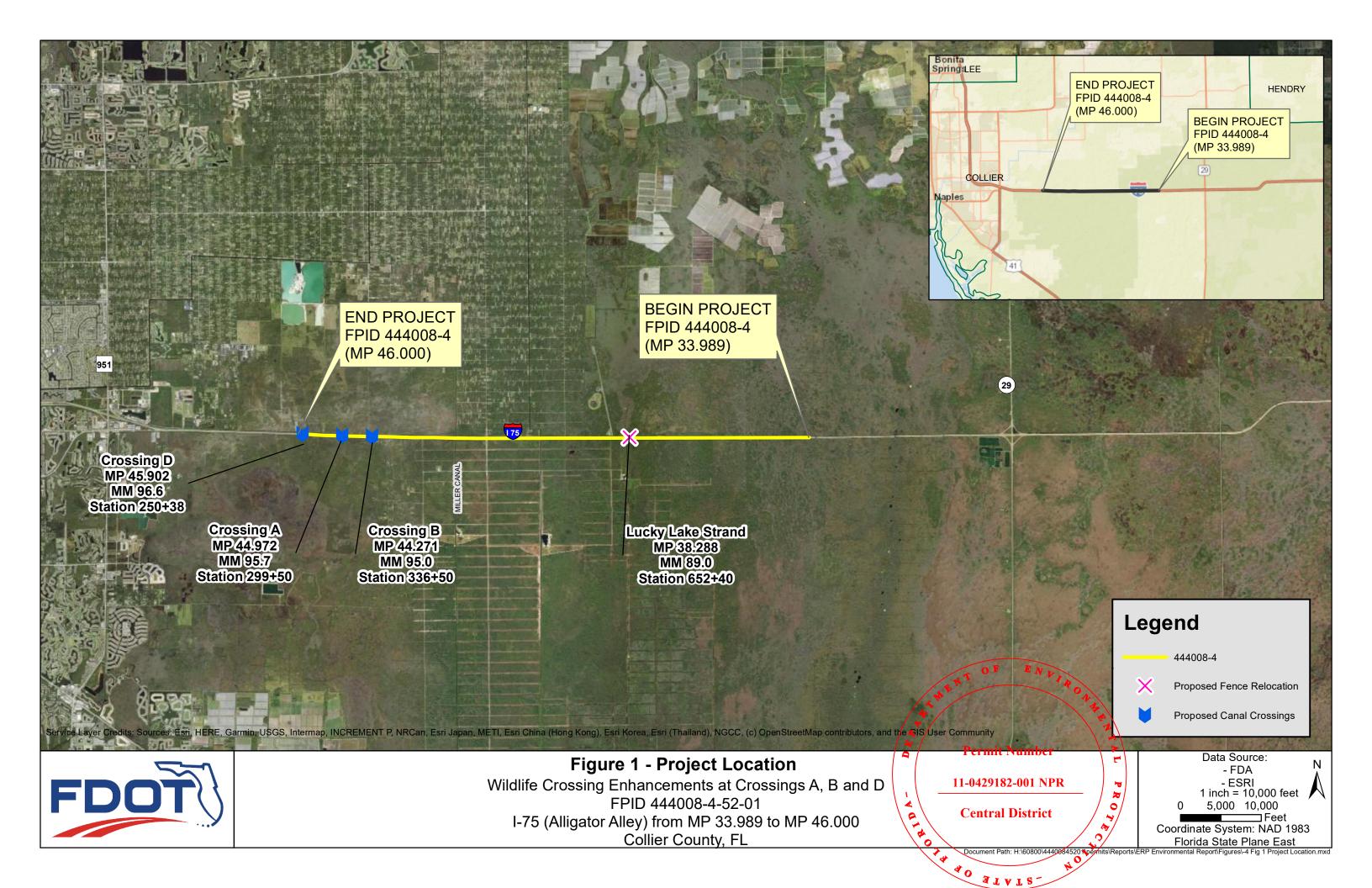
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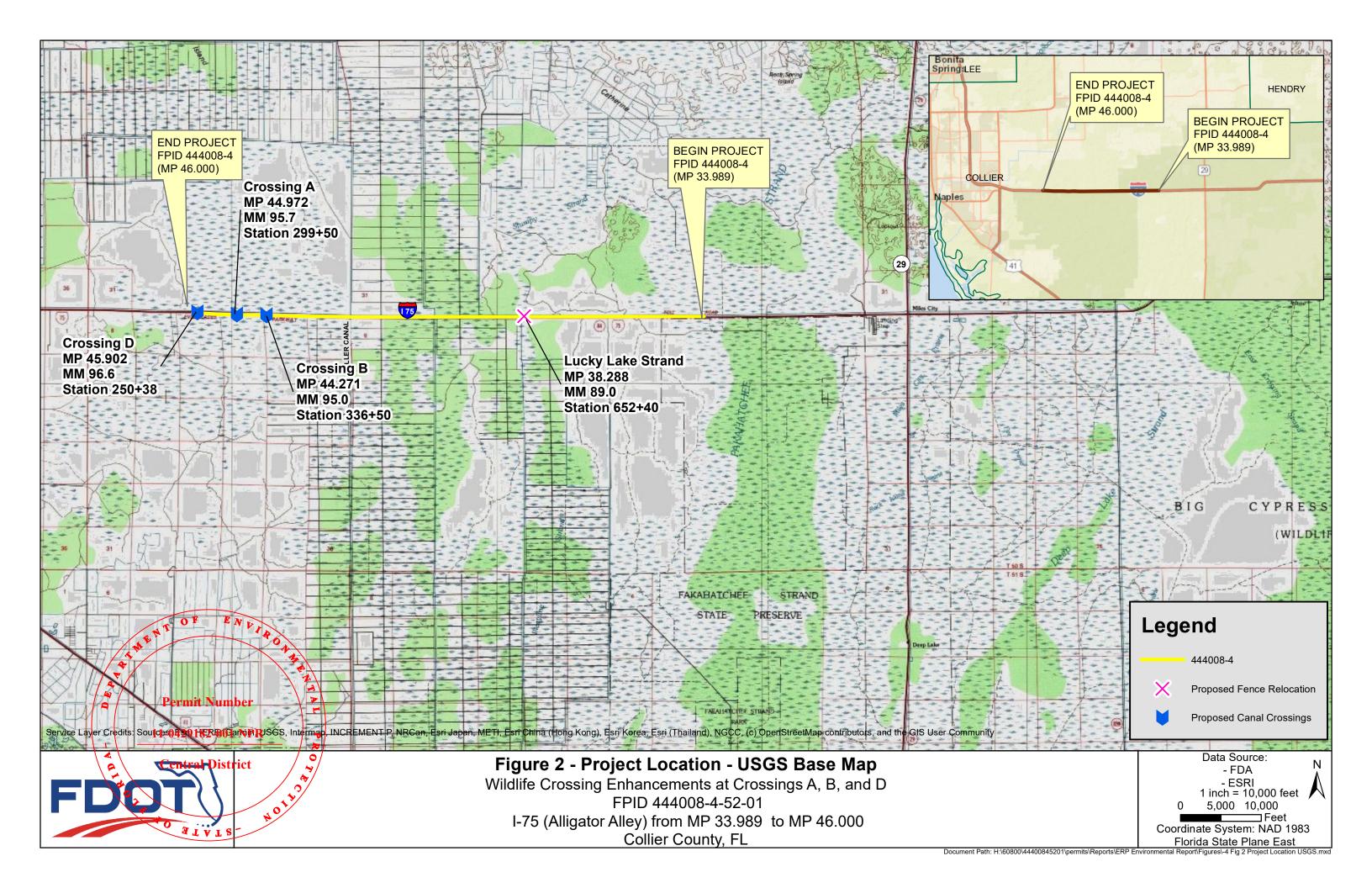
FDEP: Lindsay Furr, Jennipher Walton

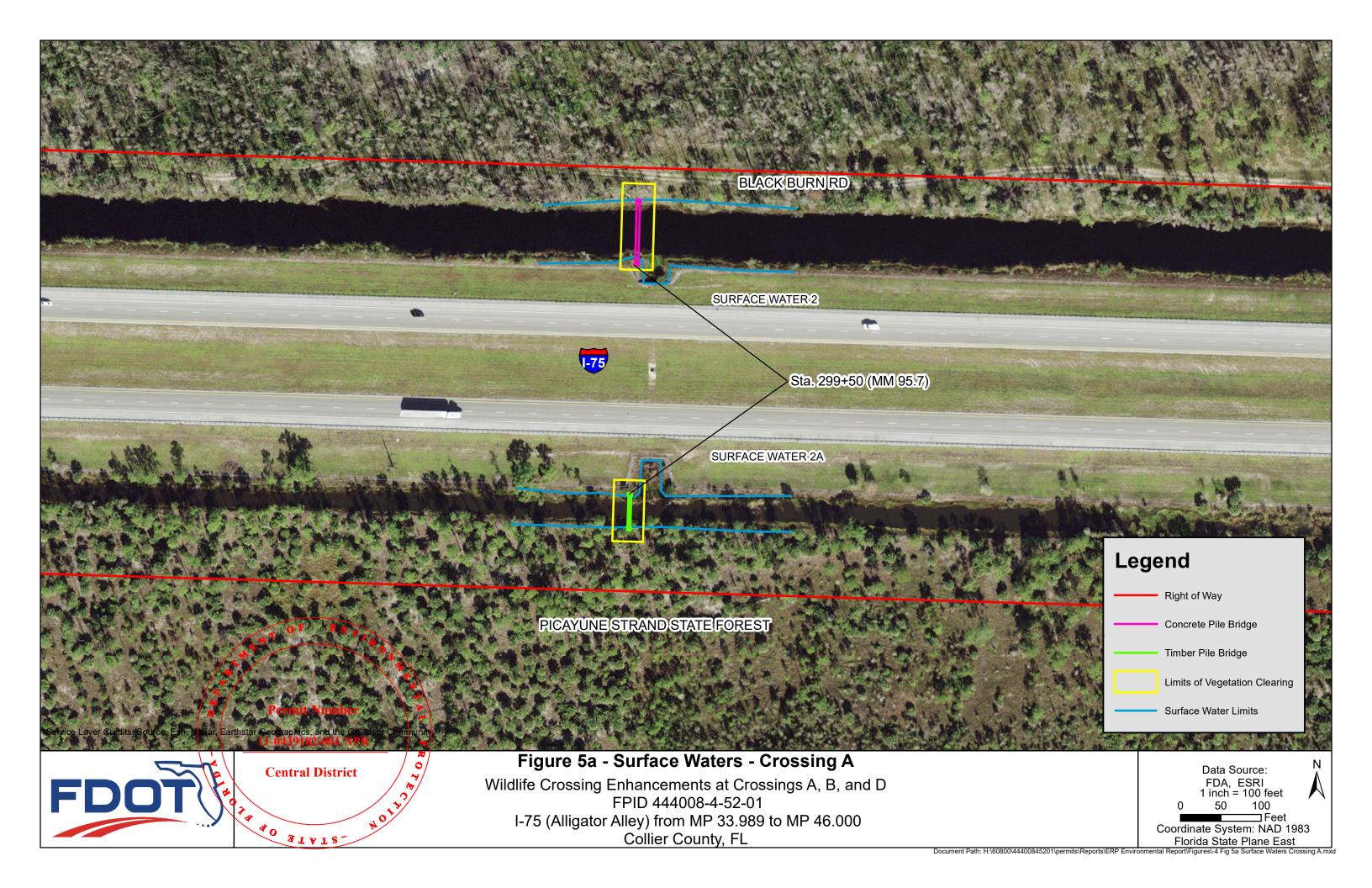
FDOT: Brent Setchell Brent.setchell@dot.state.fl.us, Nicole Monies

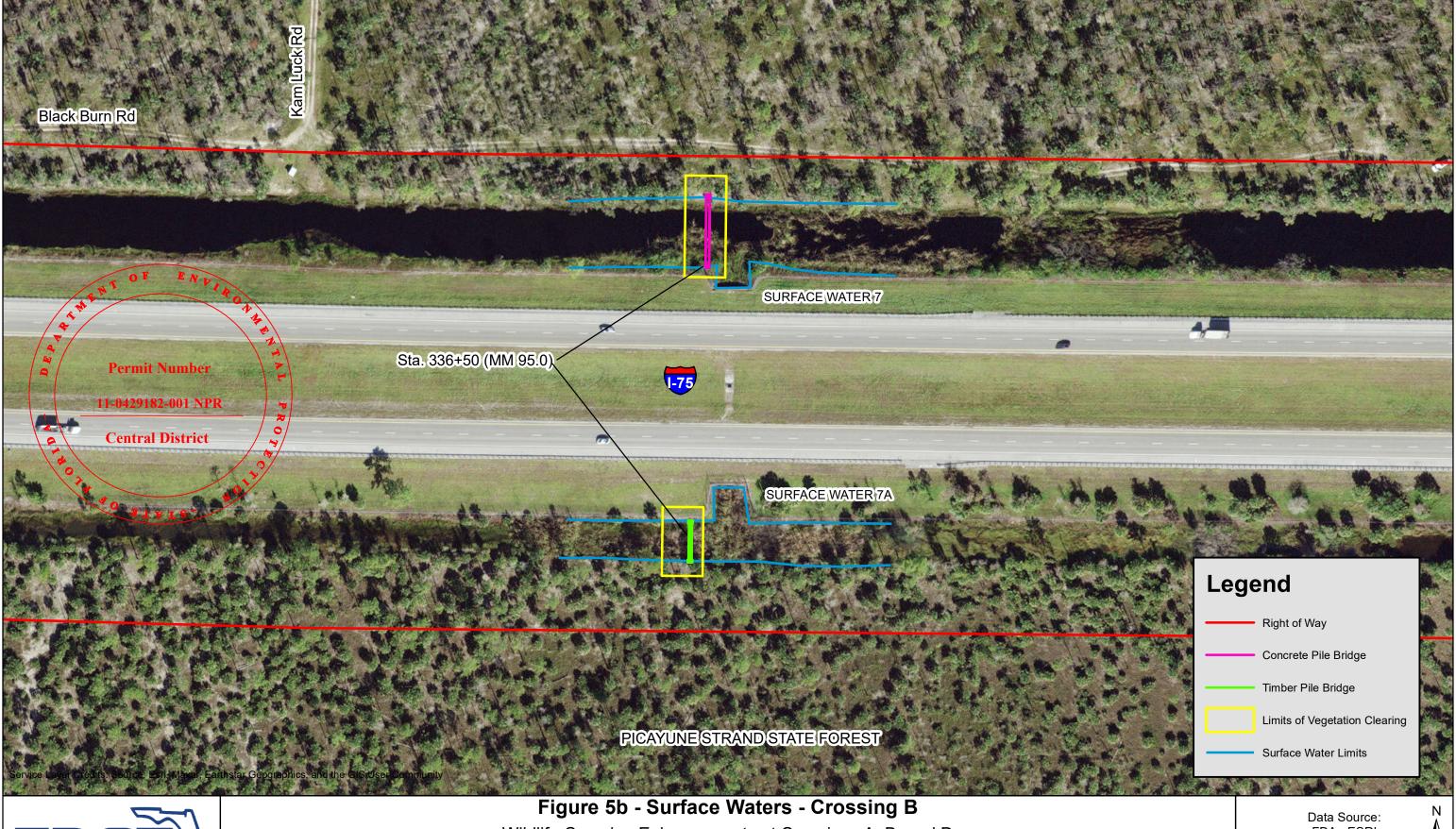
Nicole.monies@dot.state.fl.us

Faller, Davis& Associates, Inc.: Nicole Cribbs <a href="mailto:ncribbs@fallerdavis.com">ncribbs@fallerdavis.com</a>







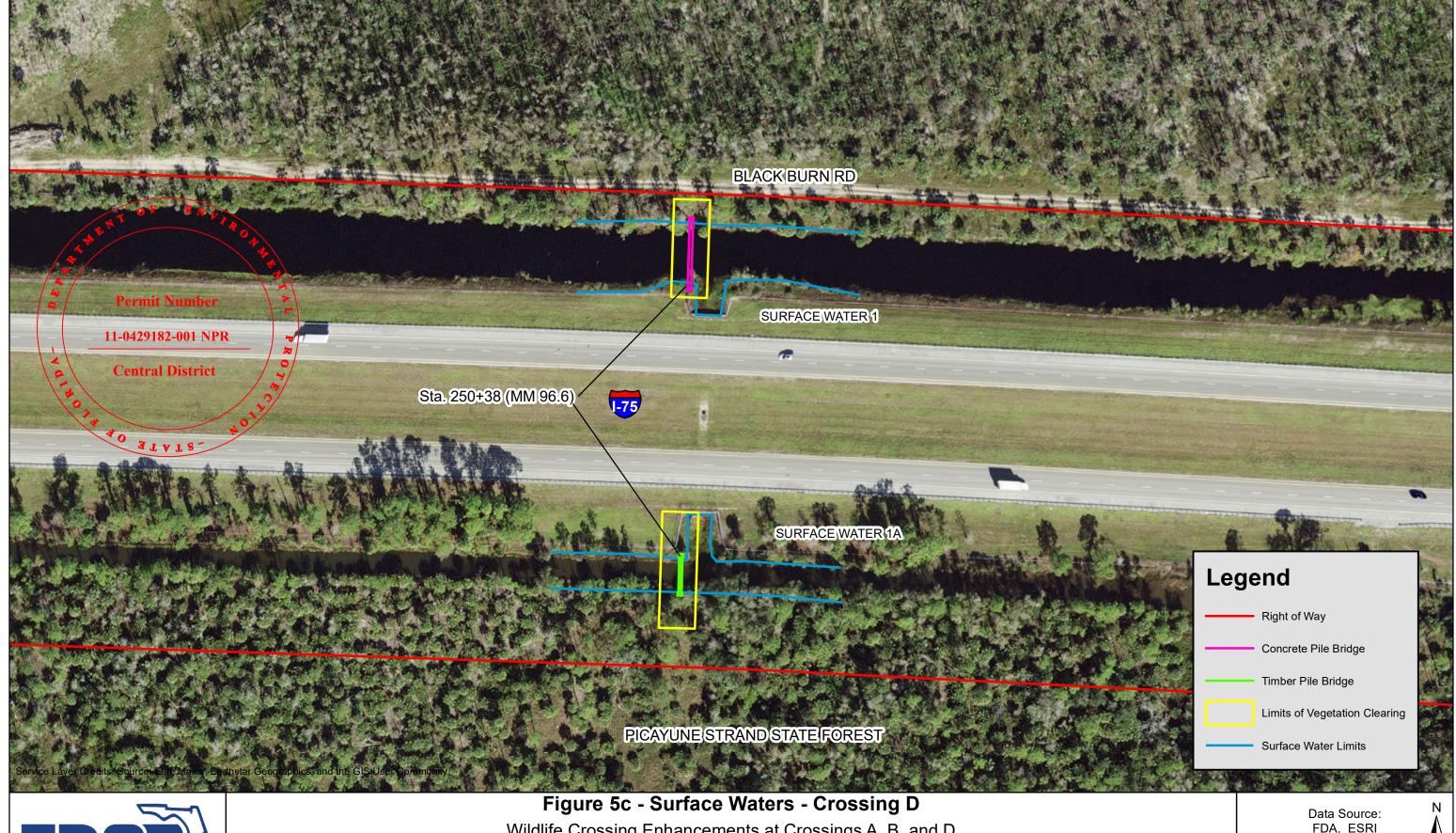




Wildlife Crossing Enhancements at Crossings A, B, and D FPID 444008-4-52-01 I-75 (Alligator Alley) from MP 33.989 to MP 46.000 Collier County, FL Data Source:

FDA, ESRI
1 inch = 100 feet
0 50 100

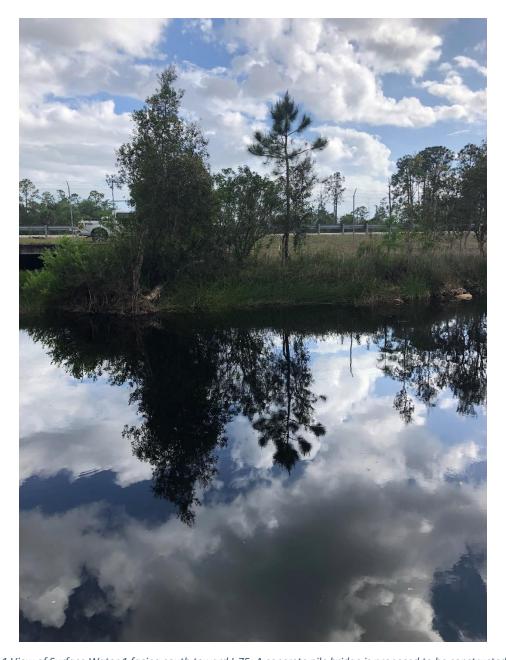
Feet
Coordinate System: NAD 1983
Florida State Plane East
ental Report\Figures\-4 Fig 5b Surface Waters Crossing B.m.



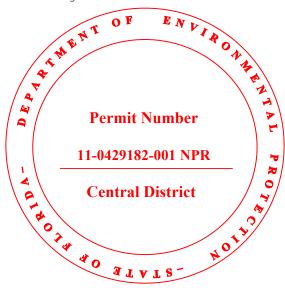


Wildlife Crossing Enhancements at Crossings A, B, and D FPID 444008-4-52-01 I-75 (Alligator Alley) from MP 33.989 to MP 46.000 Collier County, FL Data Source:
FDA, ESRI
1 inch = 100 feet
0 50 100
Feet
Coordinate System: NAD 1983
Florida State Plane East
ental Report\Figures\-4 Fig 5c Surface Waters Crossing

Document Path: H:\60800\44400845201\permits\Reports\ERP Environmental Report\Figures\-4 Fig 5c Surface Waters Crossing D.mxd

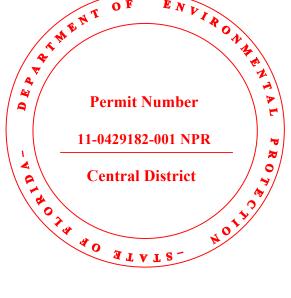


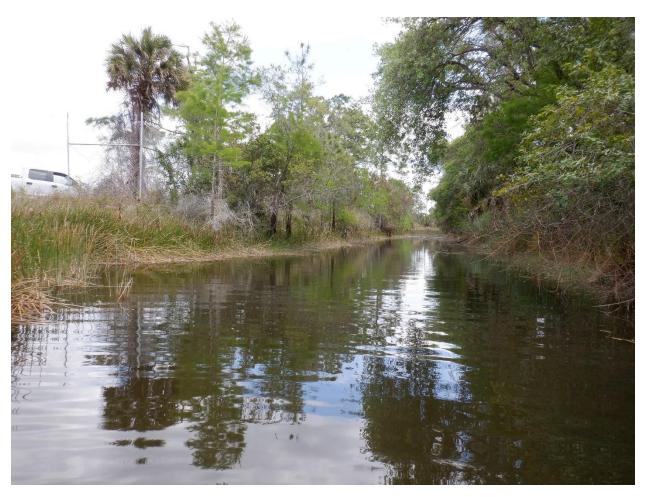
Photograph 1 View of Surface Water 1 facing south toward I-75. A concrete pile bridge is proposed to be constructed west of the box culvert shown which will span Surface Water 1. This crossing location is referred to Crossing D.



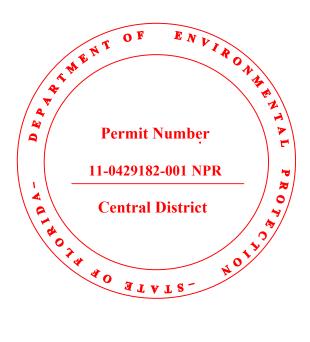


Photograph 2 View of Surface Water 1 facing north from I-75. A concrete pile bridge is proposed to span Surface Water 1. This crossing location is referred to as Crossing D.



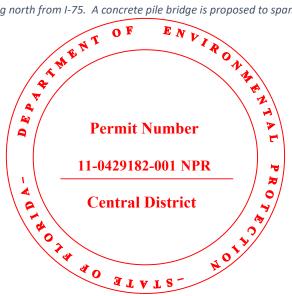


Photograph 3 View of Surface Water 1A facing west from south side of canal. A timber pile bridge is proposed to span Surface Water 1A. This crossing location is referred to as Crossing D.



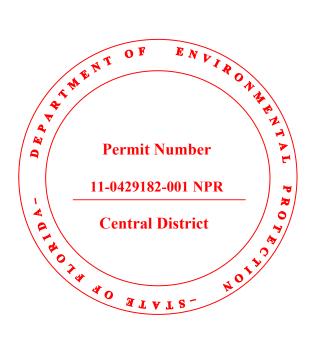


Photograph 4 View of Surface Water 2 facing north from I-75. A concrete pile bridge is proposed to span Surface Water 2. This crossing location is referred to as Crossing A.



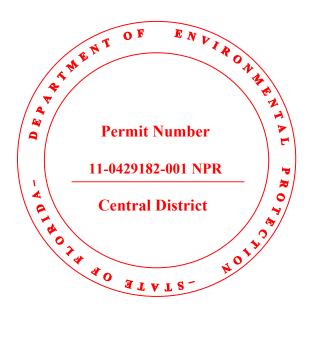


Photograph 5 View of Surface Water 2A facing northeast toward I-75. A timber pile bridge is proposed to span Surface Water 2A. This crossing location is referred to as Crossing A.



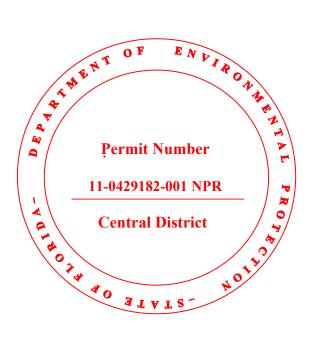


Photograph 6 View of Surface Water 7 facing east from north side of canal. A concrete pile bridge is proposed to span Surface Water 7. This crossing location is referred to as Crossing B.





Photograph 7 View of Surface Water 7A facing south from I-75. A timber pile bridge is proposed to span Surface Water 7A. This crossing location is referred to as Crossing B.



#### PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) SUMMARY

WL & SW ID	UMAM ASSESSMENT AREA NAME(S)	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW		PERMANENT WL & SW IMPACTS		MITIGATION ID
					IMPACT SIZE (acres)	IMPACT TYPE	IMPACT SIZE (acres)	IMPACT TYPE	
Surface Water 1	N/A	5120 and PUBHx	0.060	>0.050	0.009 ac (406 sf)	С	<0.001 ac (22 sf)	F	NO MITIGATION PROPOSED
Surface Water 1A	N/A	5120 and PUBHx	0.050	>0.038	0.011 ac (480 sf)	С	<0.001 ac (6 sf)	F	NO MITIGATION PROPOSED
Surface Water 2	N/A	5120 and PUBHx	0.070	>0.054	0.015 ac (645 sf)	С	<0.001 ac (36 sf)	F	NO MITIGATION PROPOSED
Surface Water 2A	N/A	5120 and PUBHx	0.040	>0.029	0.010 ac (420 sf)	С	<0.001 ac (13 sf)	F	NO MITIGATION PROPOSED
Surface Water 3	N/A	5120 and PUBHx	0.508	0.508	0.00		0.00		NO MITIGATION PROPOSED
Surface Water 7	N/A	5120 and PUBHx	0.080	>0.064	0.015 (658 sf)	С	<0.001 ac (46 sf)	F	NO MITIGATION PROPOSED
Surface Water 7A	N/A	5120 and PUBHx	0.040	>0.028	0.011 ac (475 sf)	С	<0.001 ac (25 sf)	OFF E	No MITIGATION PROPOSED
							THEN		*O1
PROJECT TOTALS:			0.848	0.774	0.071 ac (3,084 sf)		0.003 (148 sf)	rmit Numl	E Z H

COMMENTS:

CODES (multiple entries per cell not allowed)

Wetland & Surface Water ID: Include ID on submitted wetland and surface water impact maps Wetland Type: from an established wetland classification system (FLUCFCS and USFWS used) Impact Type: D=dredge; F=fill; H=change in hydrology; S=shading; C=clearing; O=other

11-0429182-001 NPR

**Central District** 

TAOTA TO STATE-

## CONTRACT PLANS COMPONENTS

ROADWAY PLANS SIGNING AND PAVEMENT MARKING PLANS INTELLIGENT TRANSPORTATION SYSTEMS PLANS STRUCTURE PLANS

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

# CONTRACT PLANS

FINANCIAL PROJECT ID 444008-4-52-01

COLLIER COUNTY (03175) STATE ROAD NO. 93 (INTERSTATE 75)



SEE THE BRIDGE DATA TABLES FOR A LIST OF THE BEGIN AND END BRIDGE LIMITS

> PERMIT SUBMITTAL 2022

# AYTONA BEACH LOCATION OF PROJECT https://goo.gl/maps/MmKGegcwcFxFDCHA6 **Permit Number** A 11-0429182-001 NPR **Central District**

ENGINEER OF RECORD: KENNETH R. MUZYK, IR P.E. NO.: 44076 FALLER, DAVIS & ASSOCIATES, INC. 4200 W. CYPRESS ST., SUITE 500 TAMPA, FLORIDA 33607-4168 (813) 261-5136 CONTRACT NO. CA632 VENDOR NO. F592594956001

ROADWAY PLANS

FDOT PROJECT MANAGER:

SEAN PUGH, P.E.

CONSTRUCTION	FISCAL	SHEET	
CONTRACT NO.	YEAR	NO.	
	22		

#### INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
1A	NOTES TO REVIEWER
2	SIGNATURE SHEET
<del>3 - 5</del>	SUMMARY OF PAY ITEMS
6 - 9	TYPICAL SECTION
<del>- 10 - 30</del>	TYPICAL SECTION DETAILS
31	SUMMARY OF DRAINAGE STRUCTURES
<del>- 32</del>	OPTIONAL MATERIAL TABULATION
<del>- 33 - 45</del>	PROJECT CONTROL
<del>46</del>	GENERAL NOTES
47 - 58	ROADWAY PLAN
<del>59</del>	TELEMETERED TRAFFIC MONITORING SITE
<del>- 60 - 65</del>	SPECIAL DETAILS
<del> 66 - 69</del>	GRADING DETAILS
70 - 73	DRAINAGE SPECIAL DETAILS
<del>74 - 142</del>	CROSS SECTIONS
143 - 144	STORMWATER POLLUTION PREVENTION PLAN
<del>- 145 - 173</del>	TEMPORARY TRAFFIC CONTROL PLAN
<del>- 5Q-1 - 5Q-30</del>	SUMMARY OF QUANTITIES
	VERIFIED UTILITY LOCATE SHEETS
175 - 177	WETLAND IMPACTS
178 - 181	WETLAND IMPACT CROSS SECTIONS

\*THESE SHEETS ARE INCLUDED IN THE INDEX OF ROADWAY PLANS ONLY TO INDICATE THAT THEY ARE PART OF THE ROADWAY PLANS. THESE SHEETS ARE CONTAINED IN A SEPARATE DIGITALLY SIGNED AND SEALED DOCUMENT.

DEVELOPMENTAL STANDARD PLANS:

D540-001 HIGH TENSION CABLE BARRIER

END PROJECT STA. 245+21.56 MP. 46.000

ΤO

NAPLES

#### GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2021-22 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: IR711-001

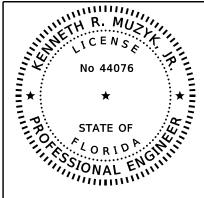
Standard Plans for Bridge Construction are included in the Structures Plans

#### GOVERNING STANDARD SPECIFICATIONS:

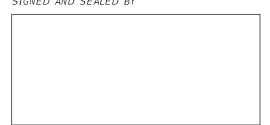
Florida Department of Transportation, July 2021 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

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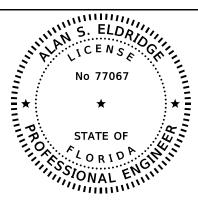
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FALLER, DAVIS & ASSOCIATES, INC 4200 W. CYPRESS ST., SUITE 500 TAMPA, FLORIDA 33607-4168 KENNETH R. MUZYK, JR., P.E. NO.: 44076

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

#### ROADWAY PLANS

1 KEY SHEET
2 SIGNATURE SHEET
47 - 58 ROADWAY PLAN



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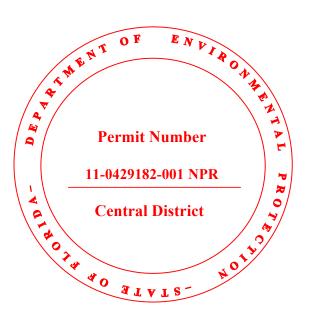
#### ROADWAY PLANS

2 SIGNATURE SHEET
71 - 74 DRAINAGE SPECIAL DETAILS

131 - 132 STORMWATER POLLUTION PREVENTION PLAN

175 - 177 WETLAND IMPACTS

178 - 181 WETLAND IMPACTS CROSS SECTIONS



REVISIONS				
DATE	DESCRIPTION	DATE	DESCRIPTION	
			,	

FALLER, DAVIS & ASSOCIATES, INC. 4200 W. CYPRESS ST., SUITE 500 TAMPA, FLORIDA 33607-4168 KENNETH R. MUZYK, JR., P.E. NO.: 44076 STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO. | COUNTY | FINANCIAL PROJECT ID

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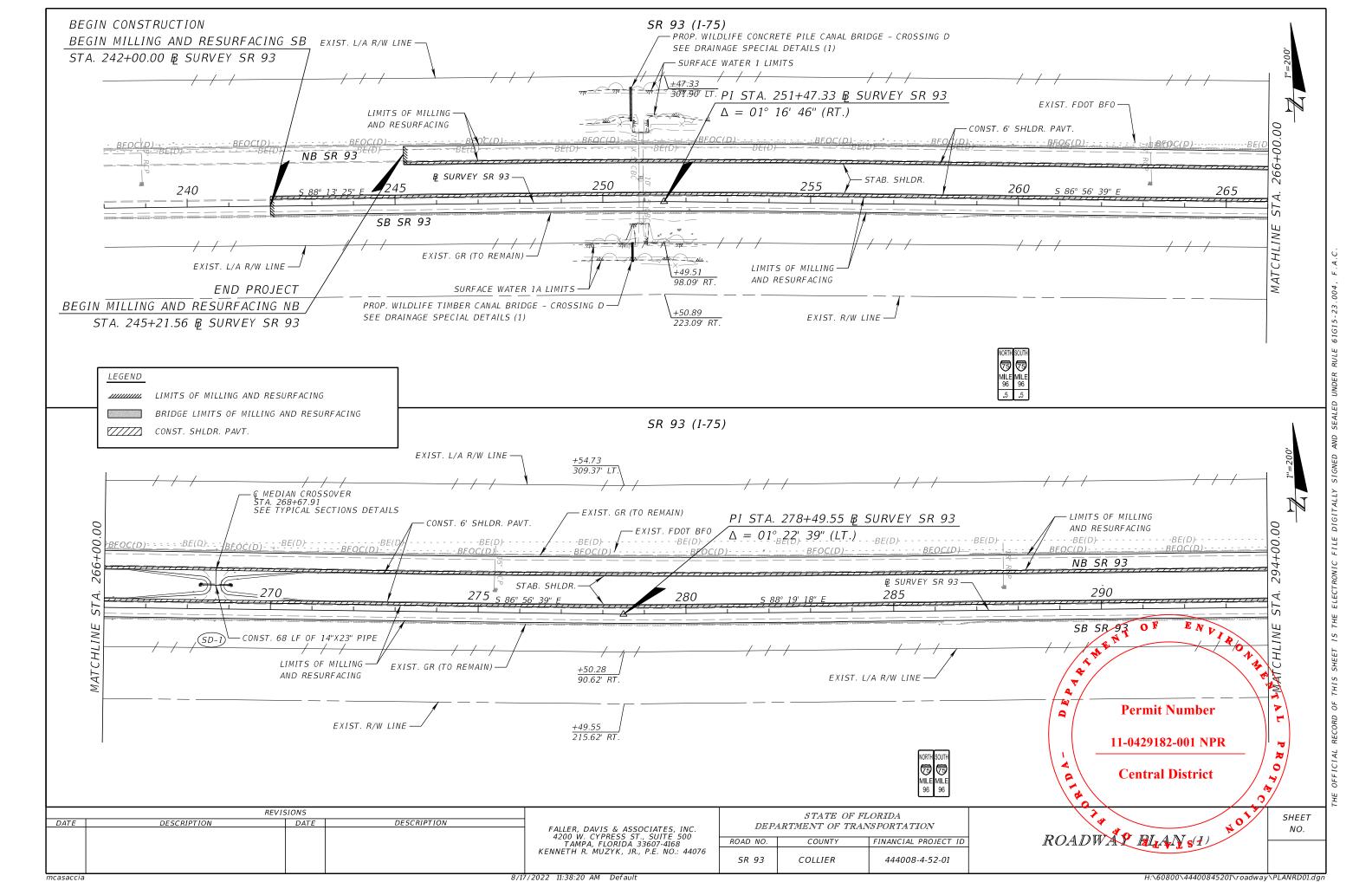
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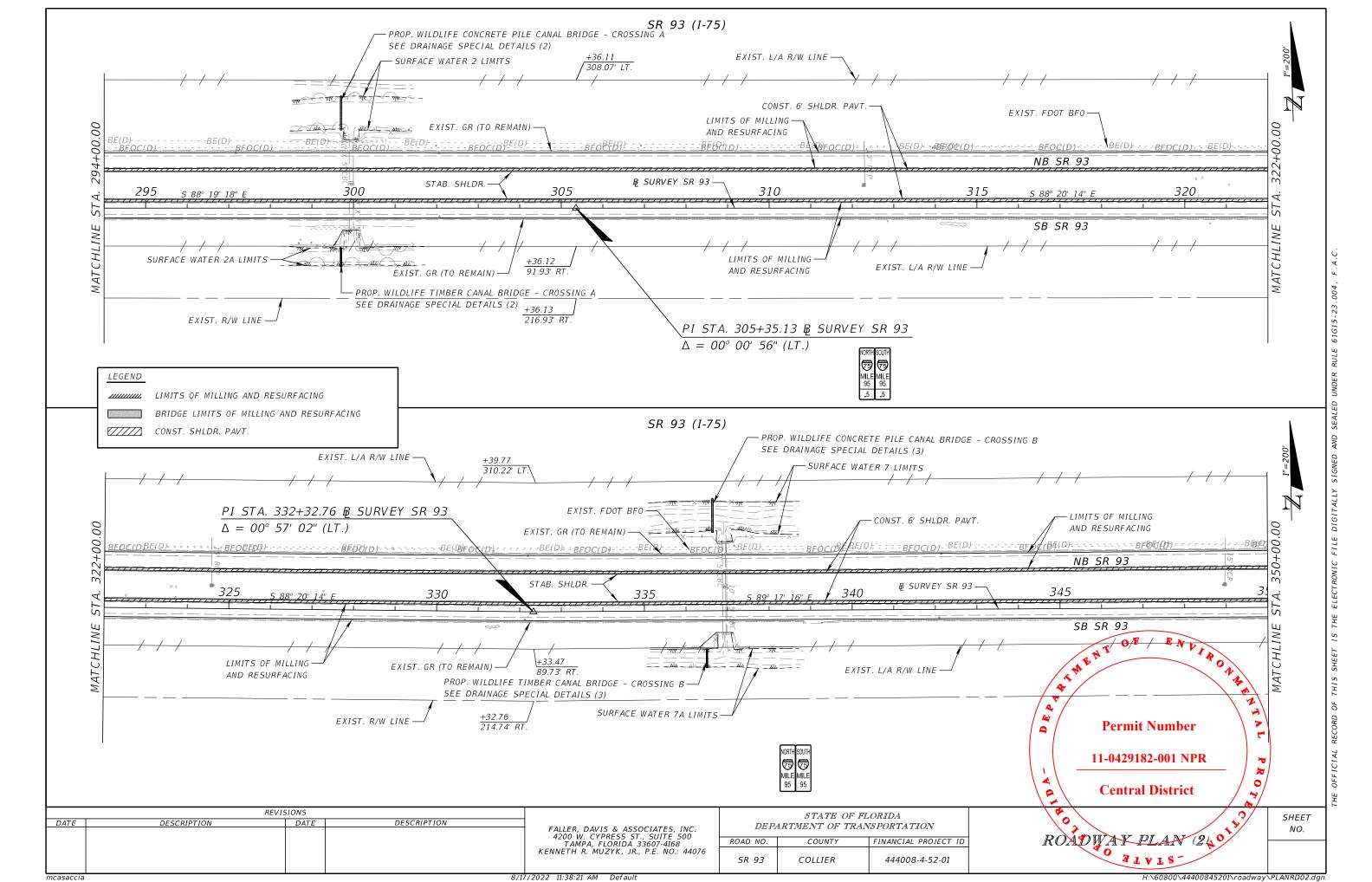
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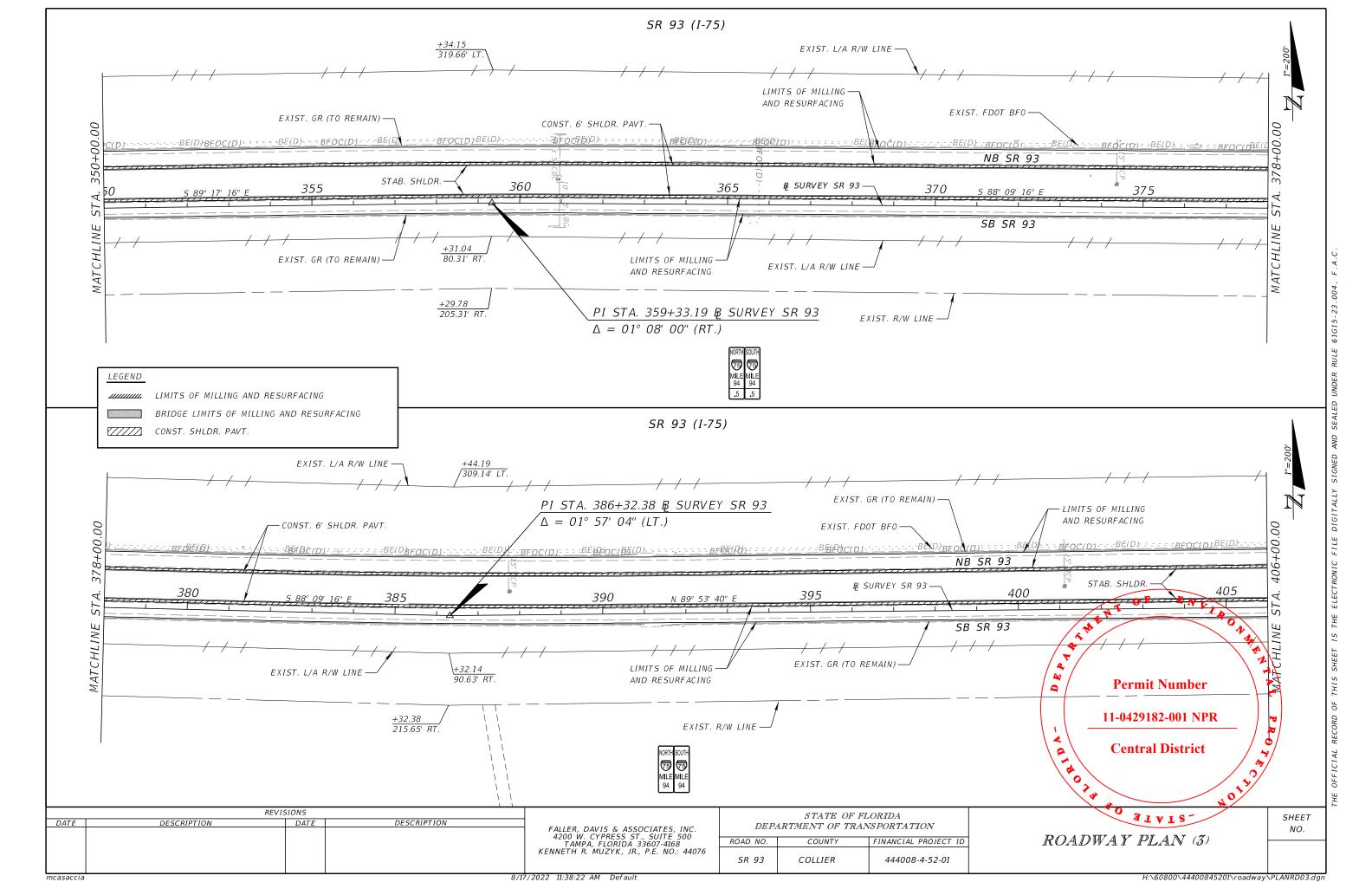
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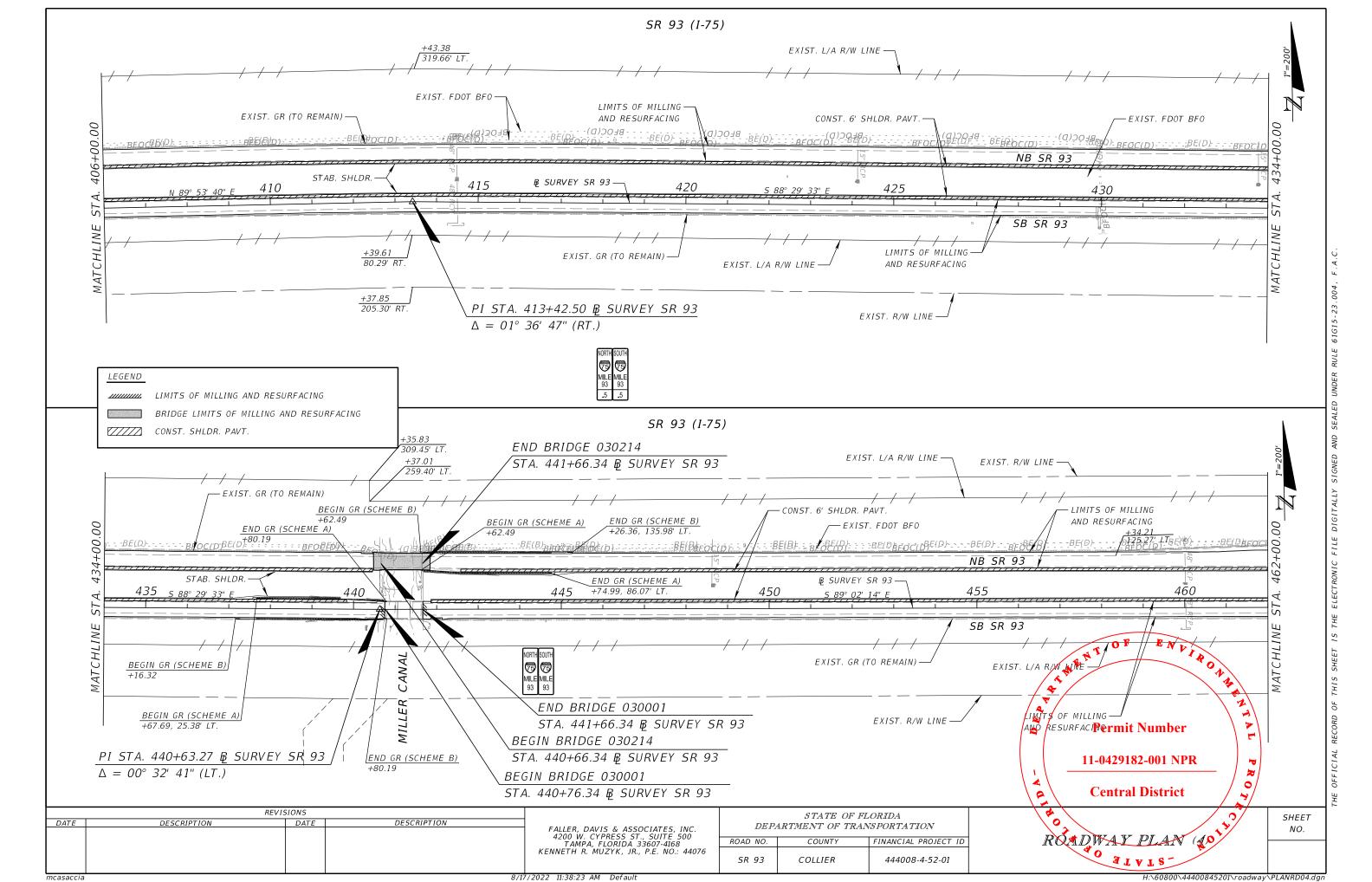
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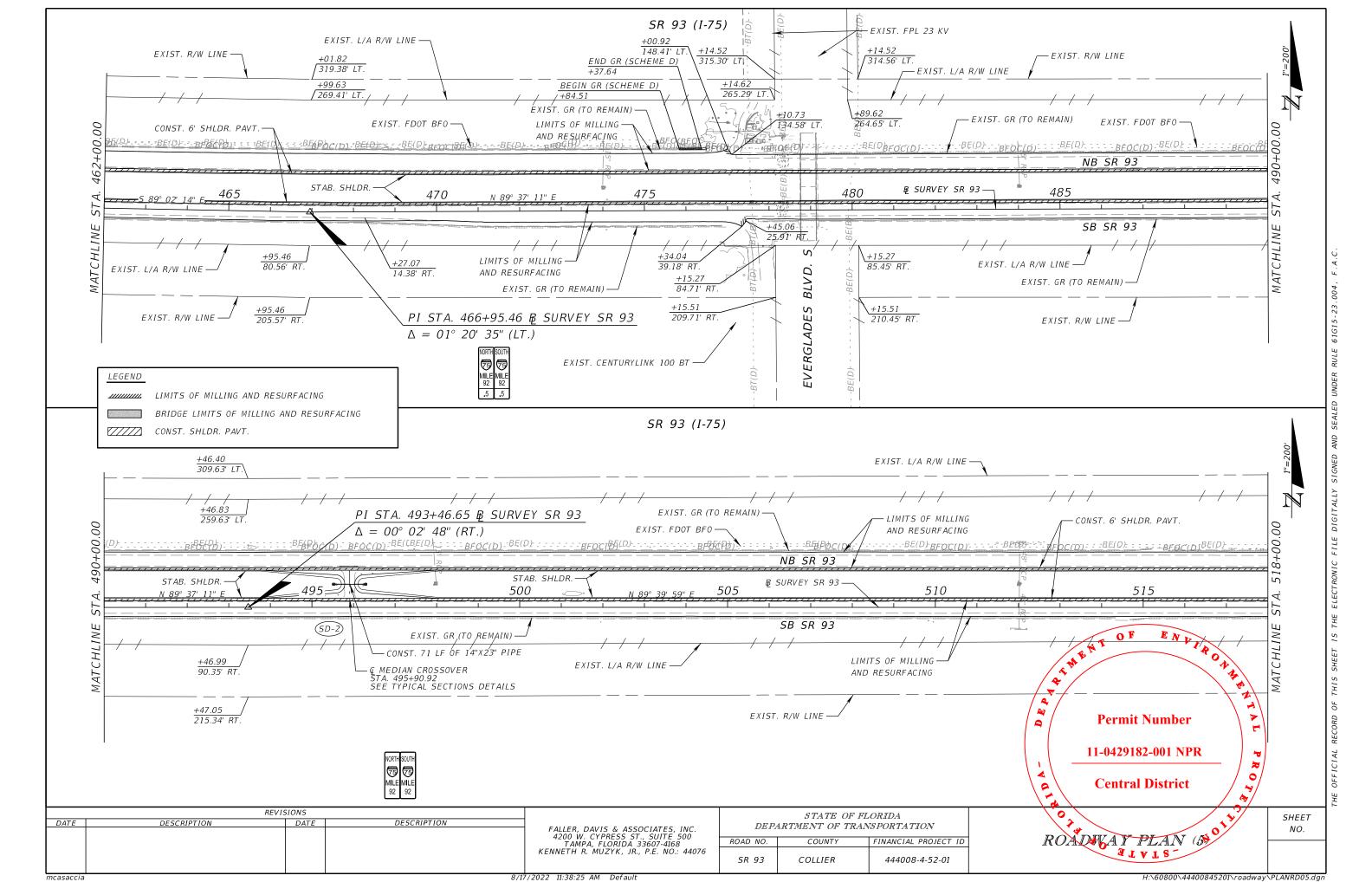
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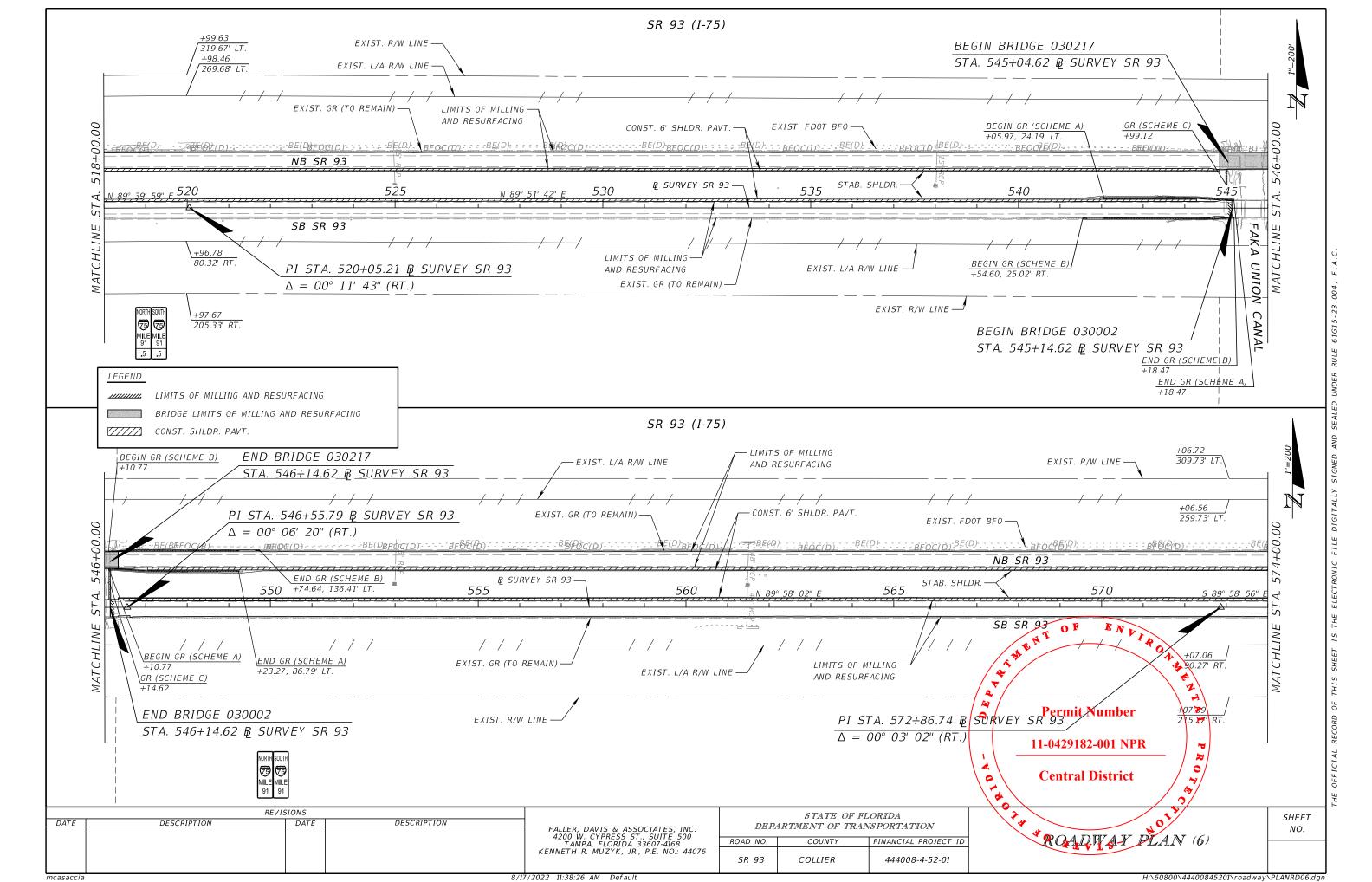


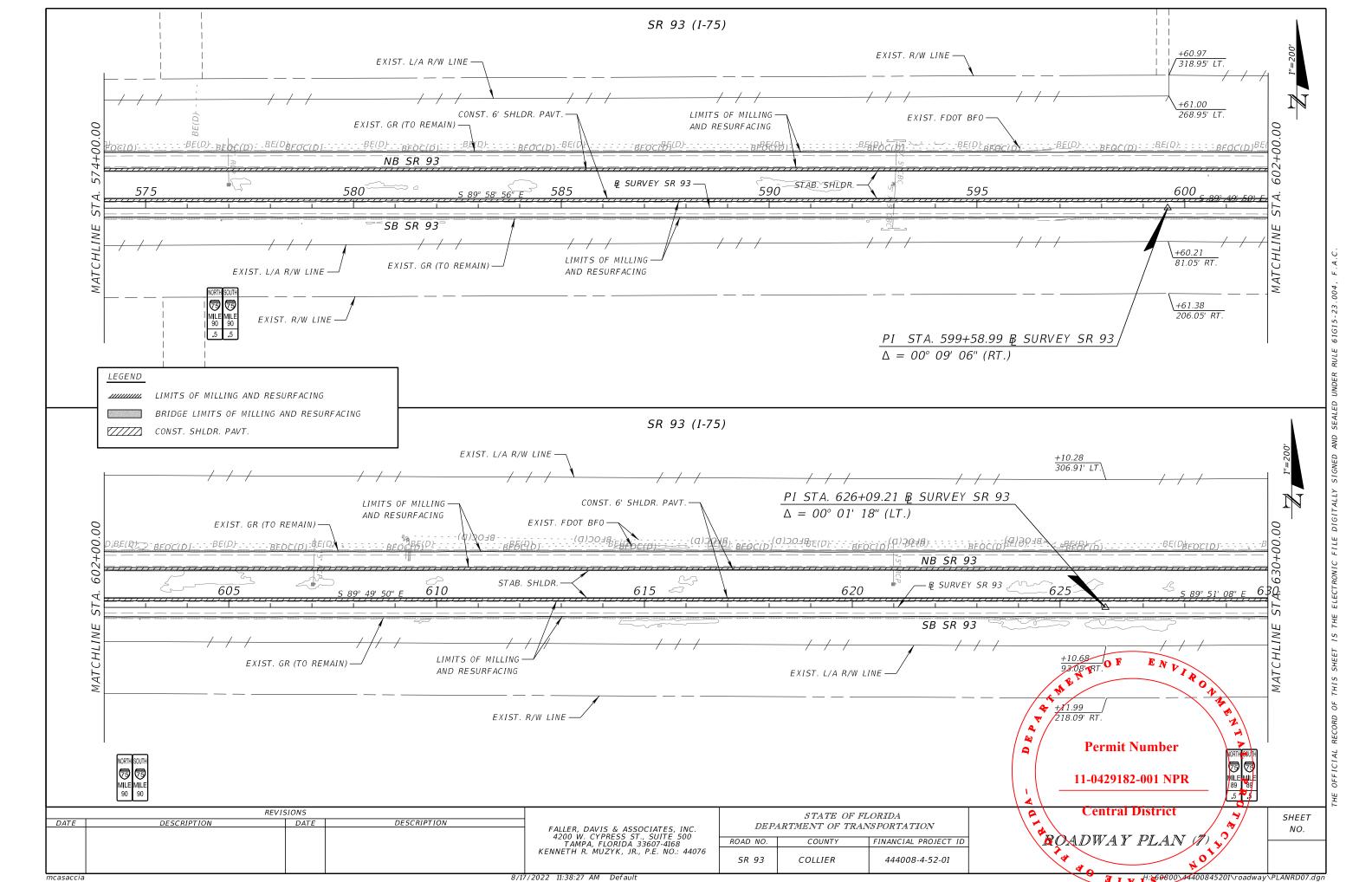


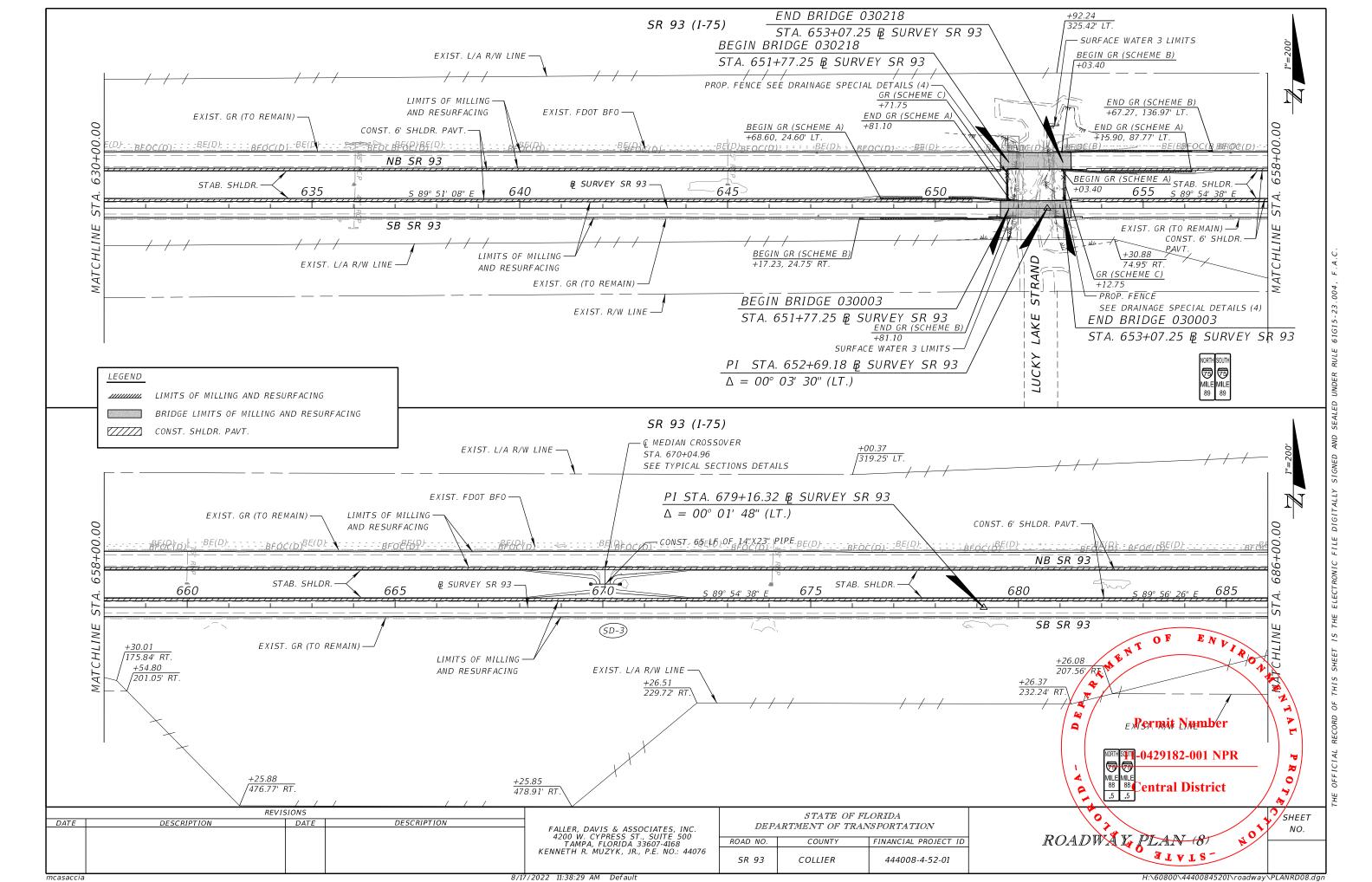


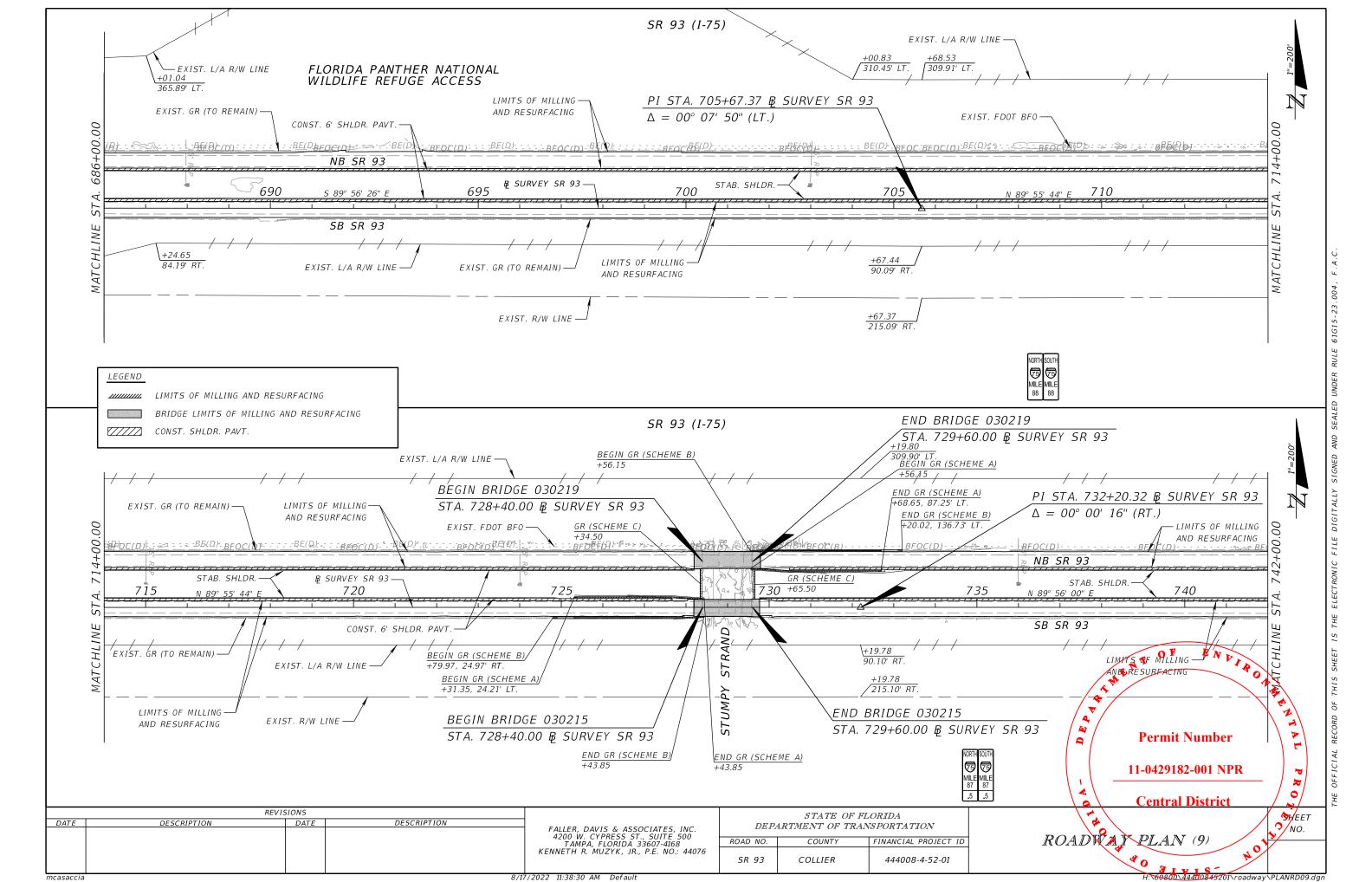


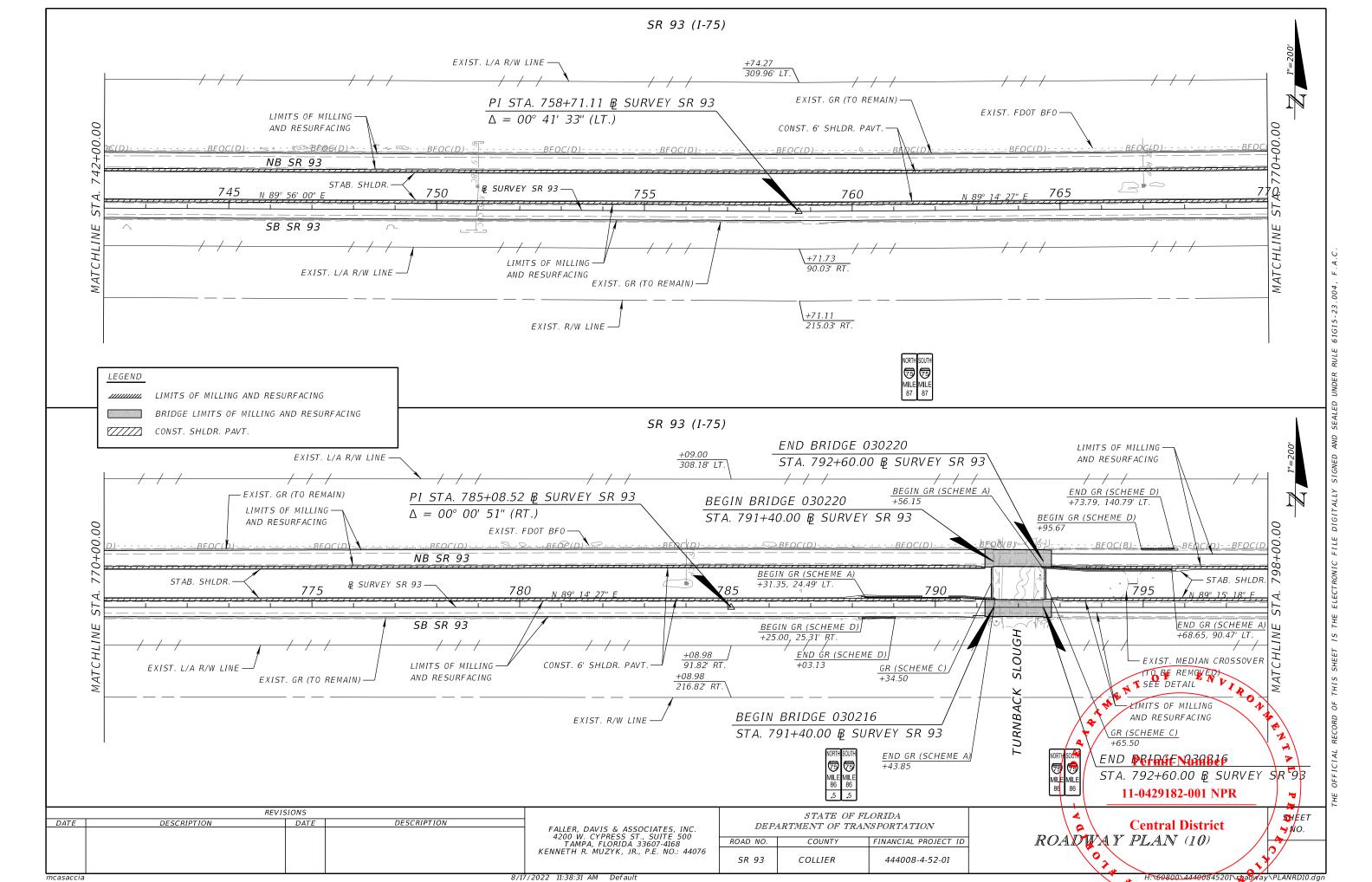


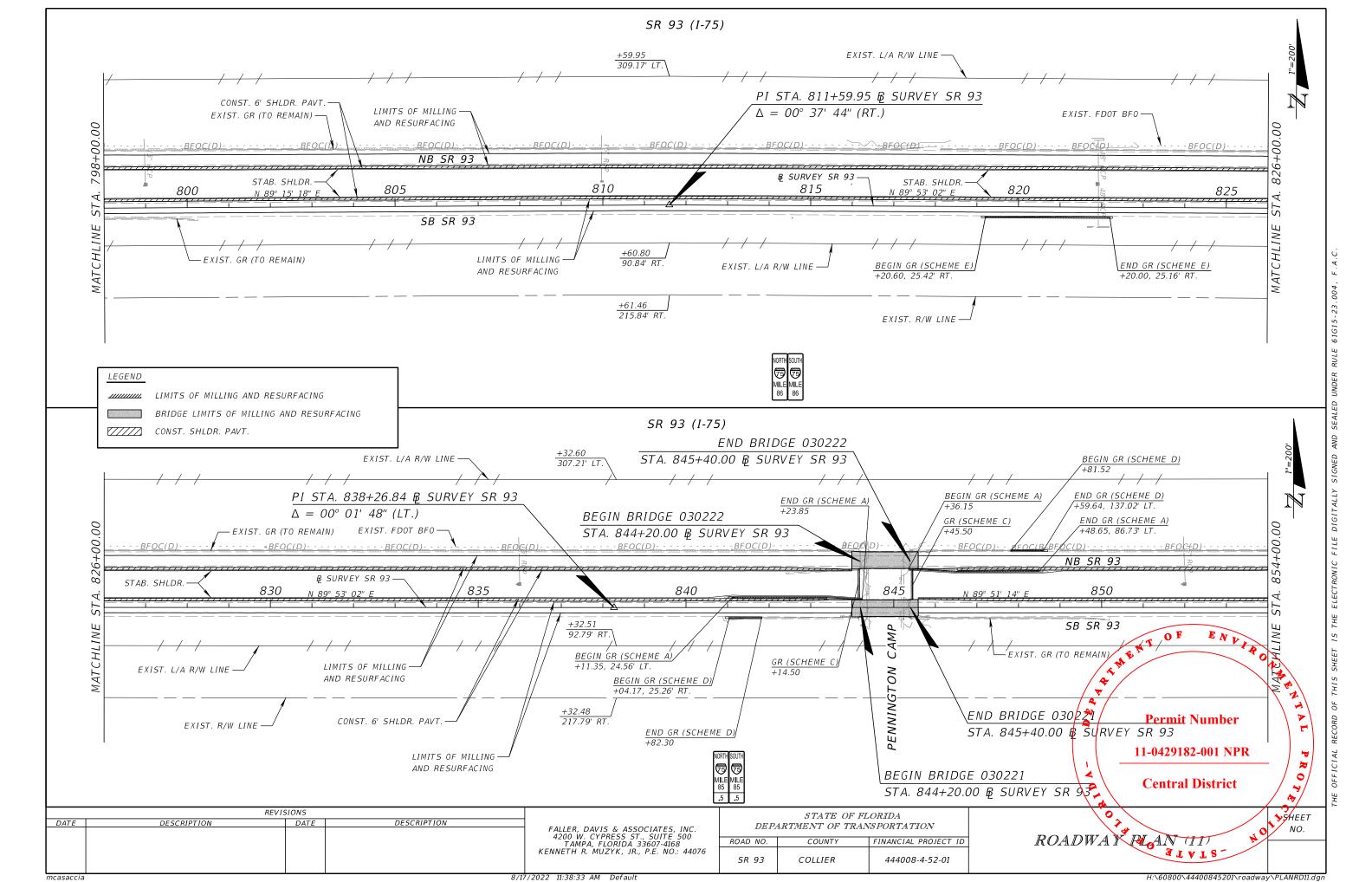


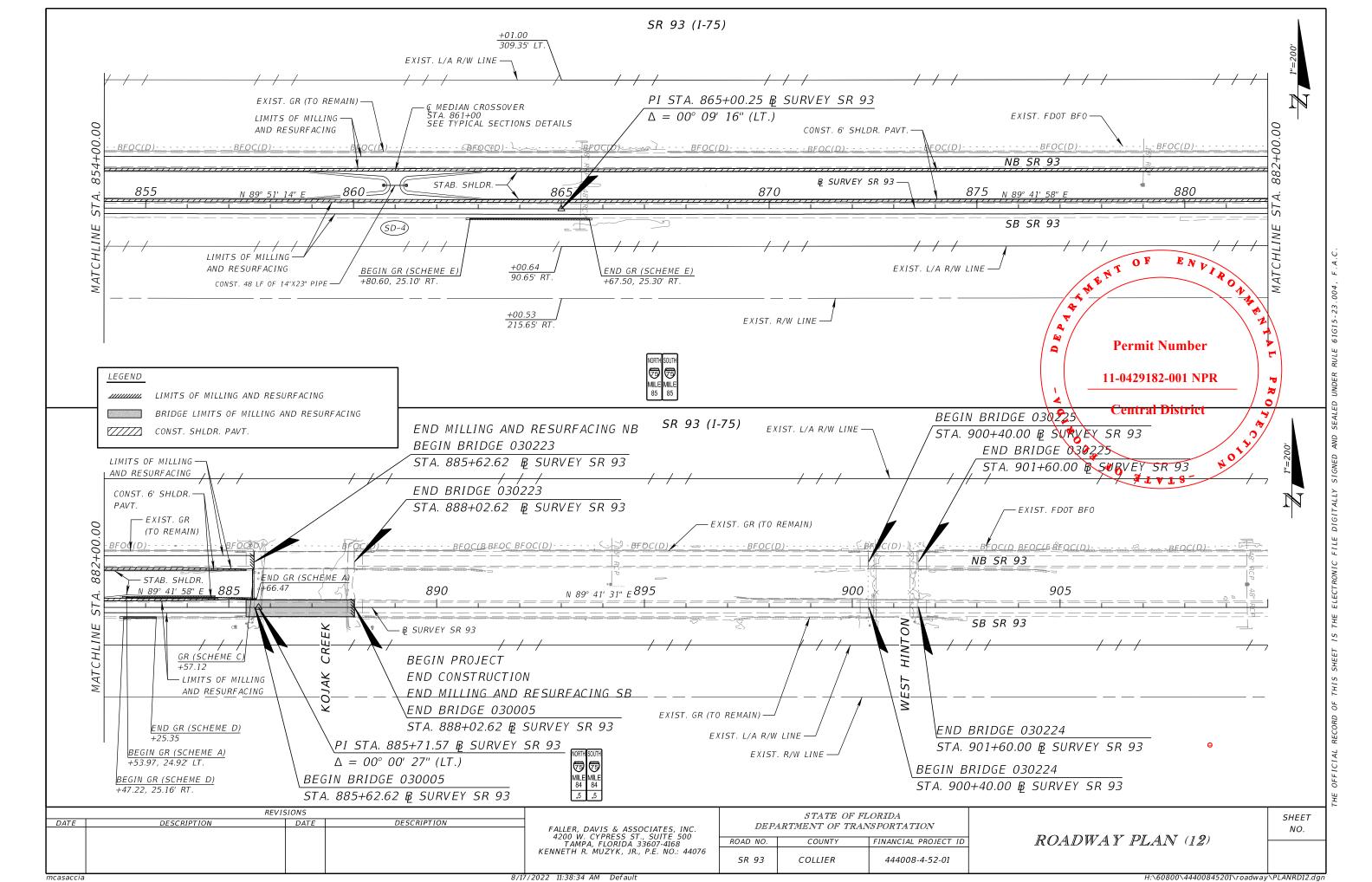


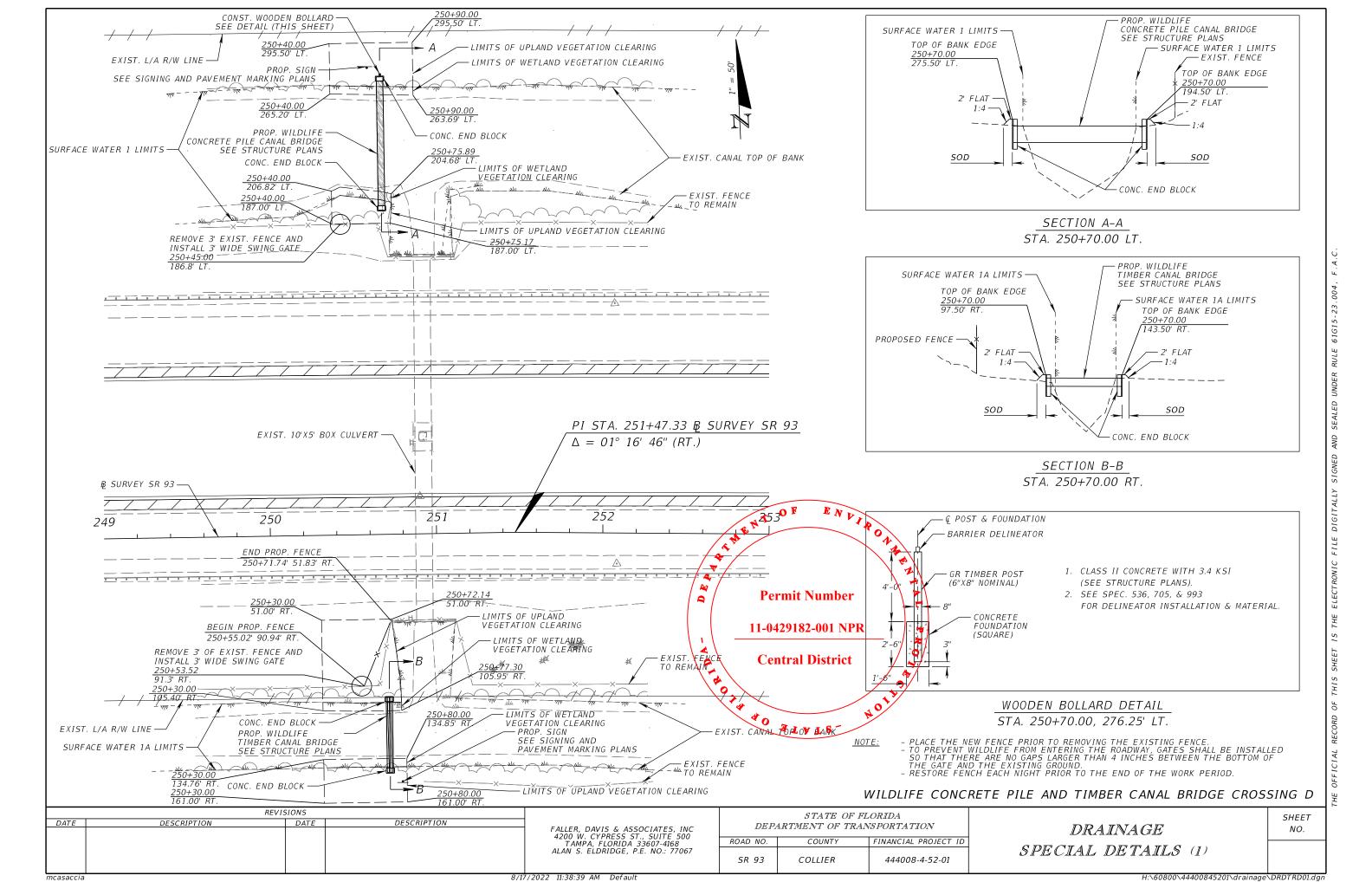


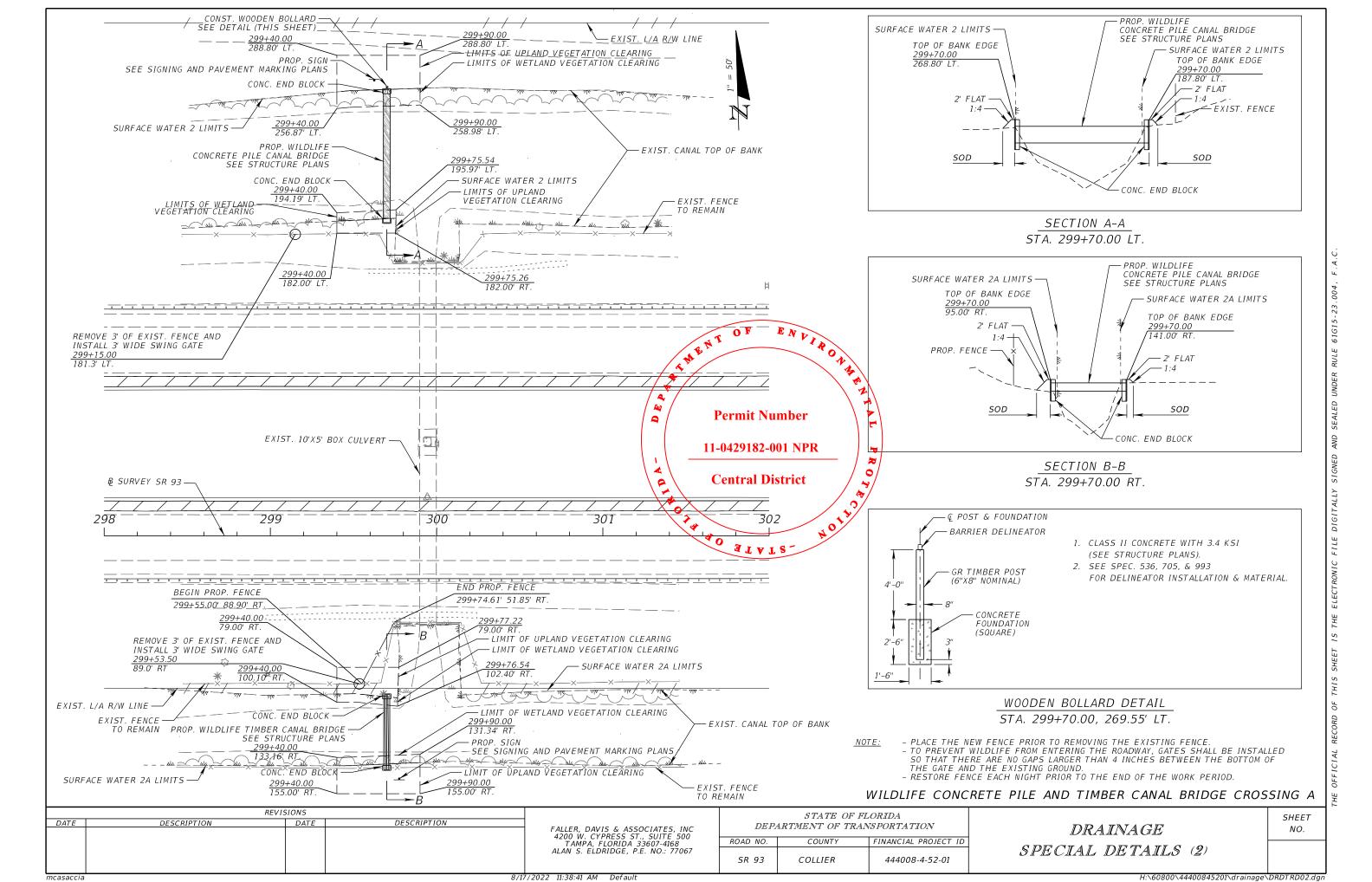


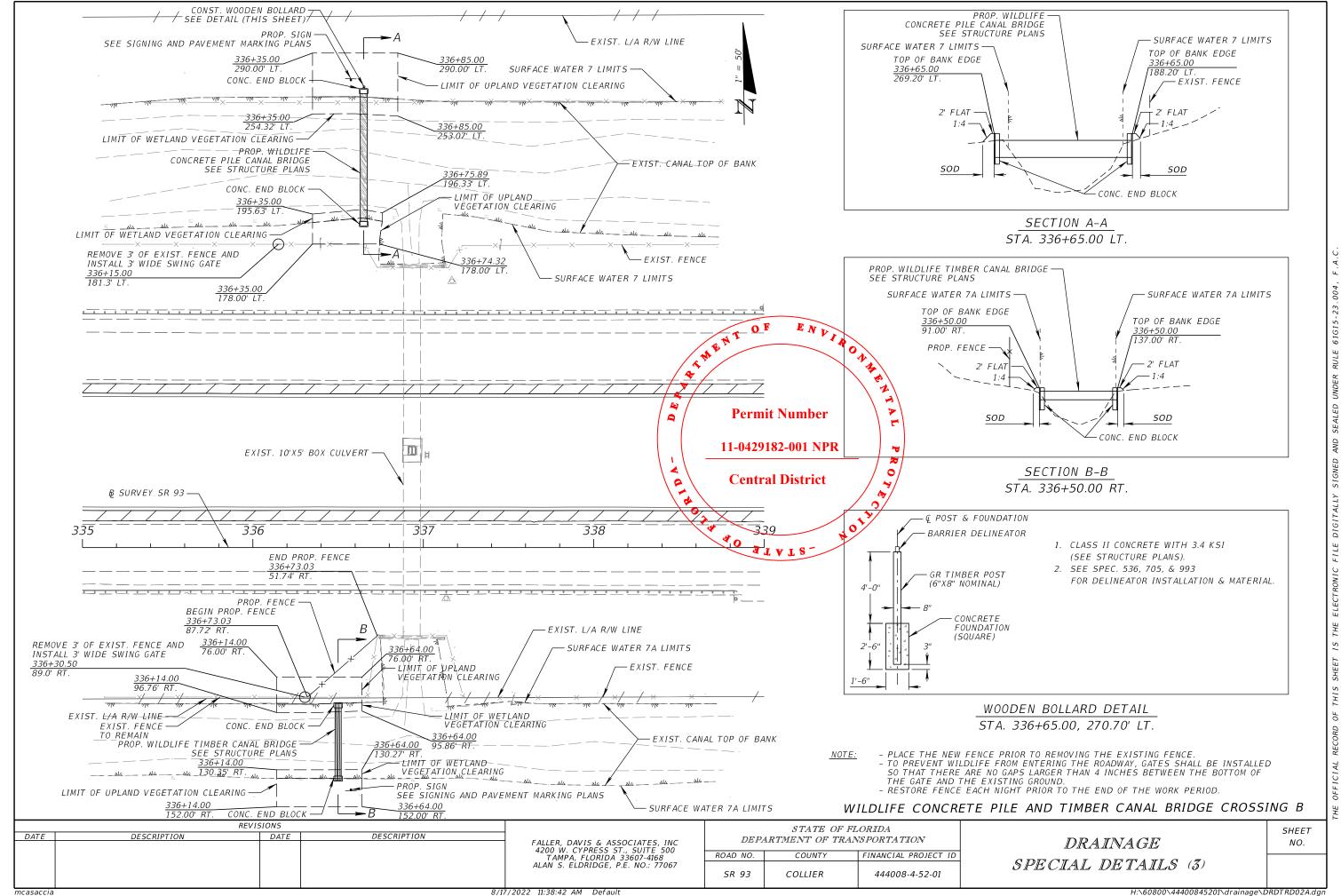


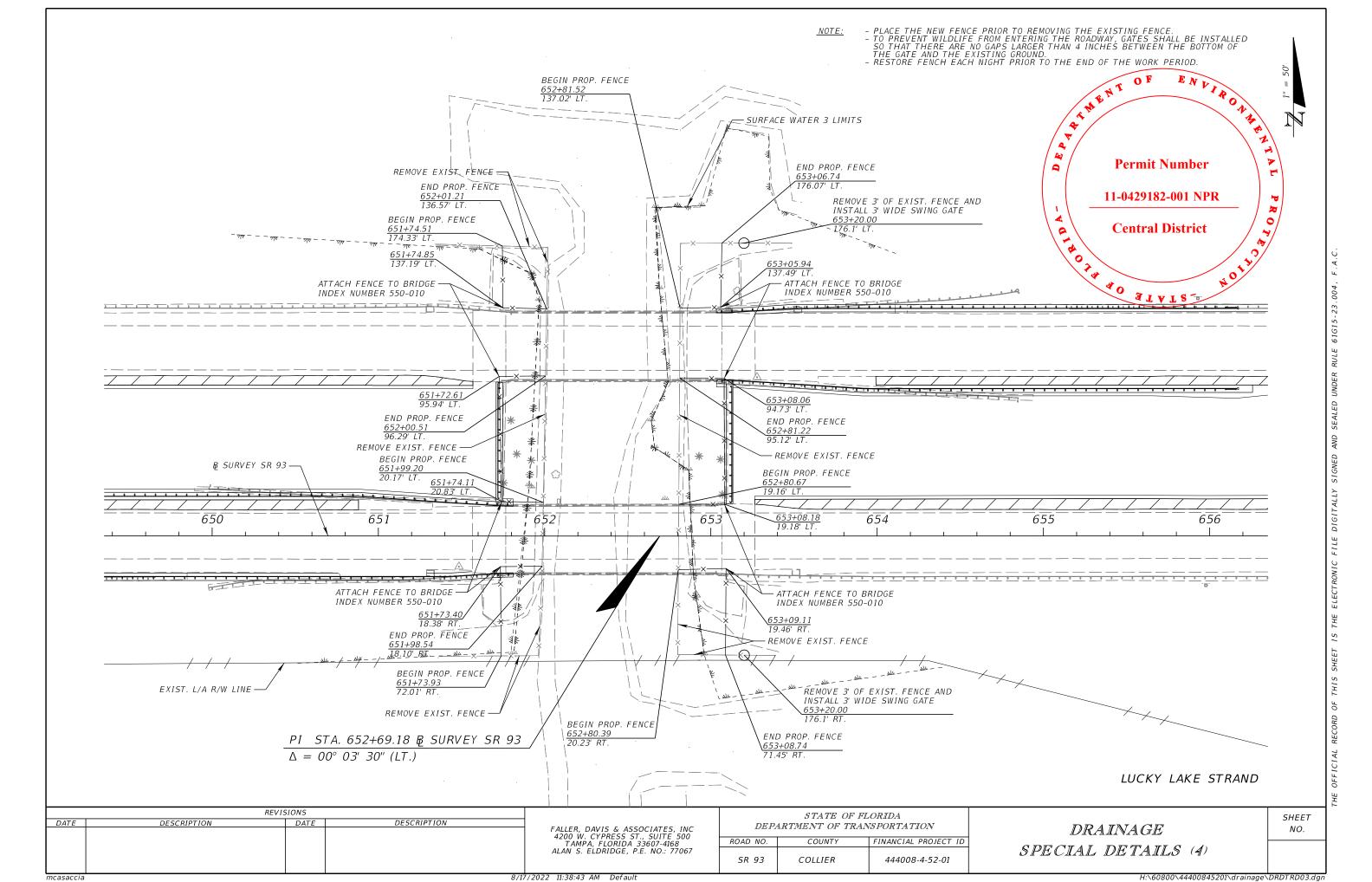












THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS PROVIDED TO ASSIST THE CONTRACTOR IN DEVELOPING THE REQUIRED SITE SPECIFIC EROSION CONTROL PLAN AND OTHER ITEMS NECESSARY TO OBTAIN COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERIC PERMIT (CGP). REFER TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL FOR ADDITIONAL REQUIREMENTS.

#### I. SITE DESCRIPTION:

(1) NATURE OF CONSTRUCTION ACTIVITY:

DISTRICT ONE OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) IS PROPOSING A RESURFACING, RESTORATION AND REHABILITATION (RRR) PROJECT ON I-75 (SR 93) FROM END BRIDGE 0302.23 / 030005 (KOJAK CREEK) MP 33.826 TO MP 46.000. THE EXISTING ROADWAY IS A FOUR-LANE RURAL ARTERIAL INTERSTATE WITH A 70 MPH DESIGN AND POSTED SPEED. THE EXISTING TYPICAL SECTION IS COMPRISED OF TWO 12-FOOT TRAVEL LANES AND HAS 12-FOOT OUTSIDE SHOULDERS OF WHICH 10 FEET ARE PAVED AND 8-FOOT INSIDE SHOULDERS OF WHIHC 4 FEET ARE PAVED. THE PROPOSED ROADWAY WORK INCLUDES MILLING AND RESURFACING THE TRAVEL LANES AND PAVED SHOULDERS AND WIDENING THE INSIDE SHOULDER TO 12 FEET WHILE SAVING THE EXISTING 4-FOOT INSIDE SHOULDER PAVEMENT.

- (2) INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:
  - IN THE SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN PREPARE A DETAILED CONSTRUCTION SCHEDULE TO INDICATE DATES OF MAJOR GRADING ACTIVITIES AND DETERMINE SEQUENCES OF TEMPORARY AND PERMANENT SOIL DISTURBING ACTIVITIES ON ALL PORTIONS OF THE PROJECT
  - MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS, CONSTRUCTION ACTIVITY VARIATIONS, OR AS DIRECTED BY THE ENGINEER.
  - APPLICABLE EROSION AND SEDIMENT CONTROL DEVICES AND IMPLEMENTATION PROCEDURES ARE SUPPLIED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEW MANUAL (E&SC MANUAL) LATEST EDITION
  - DETERMINE IF ANY MODIFICATIONS OR ADDITIONAL CONTROLS ARE REQUIRED AND TO OBTAIN DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES FROM THE ENGINEER.
- (3) LIST OF INTENDED ACTIVITIES
  - ALL EROSION AND SEDIMENT CONTROL DEVICES FOR EACH PHASE OF WORK ARE TO BE INSTALLED PRIOR TO BEGINNING WORK ON THAT PHASE
  - (B) COVER OR STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
  - (C) DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
  - (D) TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS.
  - DO NOT REMOVE PERIMETER CONTROLS UNTIL ALL UPSTREAM AREAS ARE FULLY STABILIZED AND PERMANENT VEGETATION IS ESTABLISHED
  - (F) PROVIDE POLLUTION CONTROL BY IMPLEMENTING DUST CONTROL DURING ALL PHASES OF CONSTRUCTION.
- PROJECT AREAS

THE ESTIMATED TOTAL PROJECT AREA IS 791 ACRES. THE ESTIMATED AREA TO BE DISTURBED DURING CONSTRUCTION ACTIVITIES IS XXX ACRES

RUNOFF COEFFICIENTS BEFORE Cw (B), DURING Cw (D) AND AFTER Cw (A) CONSTRUCTION.

RUNOFF COEFFICIENTS FOR: GRASSED SHOULDERS ADJACENT TO ROADWAY: C=0.35 IMPERVIOUS ROADWAYS AND PAVED SHOULDER: C=0.95 DISTURBED AREAS, EXPOSED SOIL, ETC., DURING CONSTRUCTION: C=0.40

WEIGHTED RUN-OFF COEFFICIENT:

DESCR

BEF0RF: 0.48 DURING: 0.49

DATE

mcasaccia

THE RUN-OFF COEFFICIENT DURING CONSTRUCTION, Cw (D), IS CALCULATED ASSUMING THAT THE MAXIMUM ALLOWABLE AREA OF SOIL IS DISTURBED DURING CONSTRUCTION AND THE REMAINING AMOUNT IS THE EXISTING IMPERVIOUS AND GRASSED SHOULDER AREAS.

DESCRIPTION OF SOIL OR QUALITY OF DISCHARGE:

ACCORDING TO THE COLLIER COUNTY SOIL SURVEY, SOILS WITHIN THE PROJECT LIMITS INCLUDE.

SOIL TYPE	HYDROLOGIC GROUP	DEPTH TO SHWE
HOLOPAW FINE SAND HALLANDALE FINE SAND PINEDA FINE SAND RIVIERA FINE SAND BOCA FINE SAND BOCA-RIVIERA-COPELAND FI HALLANDALE-BOCA FINE SAN OCHOPEE FINE SANDY LOAM JUPITER-BOCA COMPLEX		0' 0.5'-1.5' 0.25'-1.5' 0' 0.25'-1.5' 0' 0.5'-1.5' 0'-0.5' 0'-0.5'

REFERENCE: USDA SOIL SURVEY OF COLLIER COUNTY FLORIDA

- (7) ESTIMATED DRAINAGE FLOW DIRECTION AND AVERAGE SLOPE OF DRAINAGE AREA FOR EACH OUTFALL.
  - (A) SITE MAP: SEE ROADWAY PLAN SHEETS
  - (B) DRAINAGE MAPS OR MAPS WITH APPROPRIATE CONTOURS: INCLUDED IN THE DRAINAGE DOCUMENTATION.
- RECEIVING WATERS:

THE PROJECT AREA IS WITHIN THE EVERGLADES WEST COAST WATERSHED AND CROSSES FOUR BASINS: ROOKERY BAY, EVERGLADES NATIONAL PARK, FLORIDA BAY AND WESTERN BASINS. ROADWAY RUNOFF SHEET FLOWS OFF THE ROAD AND INTO ROADSIDE DITCHES THAT DISCHARGE DIRECTLY INTO ADJACENT CANALS. SEVERAL CROSS DRAINS ALONG THE LENGTH OF THE PROJECT PRIMARILY CONVEY NORTH TO SOUTH.

(9) OUTFALL LOCATIONS: (TEMPORARY AND PERMANENT)

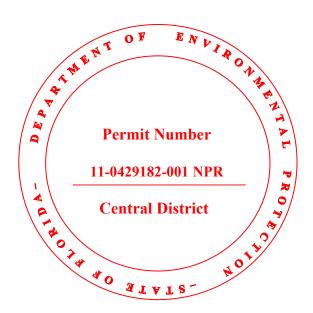
#1 PICAYUNE STRAND (WBID: 32781) RECEIVING WATER NAME: GULF OF MEXICO

#2 FAKAHATCHEE STRAND (WBID: 3278G) RECEIVING WATER NAME: GULF OF MEXICO

- (10) WETLAND AND/OR SURFACE WATER IMPACTS ARE LIMITED TO THE AREAS DESCRIBED IN THE APPROVED PERMITS FOR THE PROJECT
- (11) DESCRIPTION OF STORMWATER MANAGEMENT: (EXISTING/PROPOSED)
  - THE RUNOFF FROM THE EXISTING ROADWAY IS TYPICALLY CONVEYED IN A CURB AND GUTTER SYSTEM AND COLLECTED IN CLOSED FLUME INLETS THAT DISCHARGE TO ROADSIDE DITCHES THAT CONVEY TO THE OUTFALL MOST OF THE ROADSIDE DITCHES ARE WELL DRAINED. THE PROPOSED ROADWAY IMPROVEMENTS SHALL NOT MODIFY OR AFFECT THE EXISTING OFFSITE FLOW PATTERNS UNLESS SPECIFICALLY AUTHORIZED BY THE PERMITS.
  - OFFSITE RUNOFF SHOULD BE DIVERTED AWAY OR THROUGH THE CONSTRUCTION AREA, IF POSSIBLE. THIS ADDTIONAL FLOW, IF NOT DIVERTED, CAN ADD VOLUME AND SIZE TO STRUCTURAL PRACTICES, REQUIRING MORE FREQUENT MAINTENANCE AND LIMITING EFFECTIVNESS OF EROSION AND SEDIMENT CONTROLS.
  - LOCATION OF PERMANENT CONTROLS: THE CONVEYANCE SWALES ARE THE PRIMARY PERMANENT STORMWATER MANAGEMENT CONTROLS. THESE ARE SHOWN ON THE ROADWAY PLANS.
  - STORMWATER RUNOFF SHALL BE CONVEYED TO EITHER TEMPORARY SEDIMENT BASINS, CONTAINMENT SYSTEMS AND/OR TO PERMANENT STORMWATER MANAGEMENT FACILITIES (TREATMENT AND ATTENUATION PONDS). THE PROPOSED SEDIMENT BASINS, CONTAINMENT SYSTEMS AND/OR STORMWATER MANAGEMENT FACILITIES SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND USED DURING CONSTRUCTION OF THE
  - PREVENT UNAUTHORIZED MATERIALS FROM ENTERING WETLANDS, WATERWAYS, OTHER SURFACE WATERS OR WATERS OF THE U.S.
- (12) STATE AND FEDERAL REGULATIONS: PERMITS WILL BE REQUIRED FROM THE FOLLOWING AGENCIES.

SFWMD: TBD

FDEP: TBD



REV.	ISIONS		
RIPTION	DATE	DESCRIPTION	
			FALLER, DAVIS & ASSOCIATES, INC 4200 W. CYPRESS ST., SUITE 500 TAMPA, FLORIDA 33607-4168 ALAN S. ELDRIDGE, P.E. NO.: 77067

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID SR 93 COLLIER 444008-4-52-01

STORMWATER POLLUTION PREVENTION PLAN (1)

SHEET NO.

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#### SEDIMENT AND EROSION CONTROLS

- (1) WATER QUALITY MONITORING:
  - (A) WATER QUALITY MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH THE SPECIAL CONDITIONS OF ANY ENVIRONMENTAL PERMIT OR BY THE CONTRACTOR UPON THE OBSERVATION THAT WATER QUALITY STANDARDS MAY BE VIOLATED BY THE CONTRACTOR'S ACTIVITIES. MONITORING LOCATIONS MAY BE SPECIFIED IN THE ENVIRONMENTAL PERMIT OR MAY BE DESIGNATED BY THE CONTRACTOR AND APPROVED BY THE PROJECT ADMINISTRATOR.
  - (B) MONITOR ALL ACTIVITIES FOR VIOLATION OF WATER QUALITY STANDARDS AS THEY RELATE TO TURBIDITY (NO GREATER THAN 29 NTU'S ABOVE BACKGROUND OR GREATER THAN 0 NTU'S ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OFW'S)
  - (C) IF WATER QUALITY STANDARDS ARE VIOLATED, CONSTRUCTION SHALL BE STOPPED IMMEDIATELY, THE ENVIRONMENTAL PERMIT CONDITIONS FOLLOWED AND EROSION AND SEDIMENT CONTROL DEVICES REEVALUATED AND APPROVED BY THE ENGINEER PRIOR TO ANY CONTINUATION OF ACTIVITY. MONITORING ACTIVITIES AND TURBIDITY READINGS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION REPORT AND CONTINUED UNTIL TURBIDITY READINGS FALL BELOW AN ACCEPTABLE LEVEL (LESS THAN 29 NTU'S ABOVE BACKGROUND OR LESS THAN 0 NTU'S ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OFW'S).
  - (D) WATER QUALITY MONITORING MAY BE CONDUCTED DURING ANY PHASES OF CONSTRUCTION AS DIRECTED BY THE PROJECT ENGINEER.
- (2) STABILIZATION PRACTICES:
  - (A) STABILIZATION MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO MAINTAINING, ESTABLISHING AND USING VEGETATION, APPLYING MULCHES, SODDING, SEEDING, BMP'S AND THE USE OF ROLLED EROSION CONTROL PRODUCTS. WHEN CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SIDE SLOPES SHALL BE STABILIZED WITH PERFORMANCE SODDING OR SEEDING OR ANY OTHER APPROVED METHODS OF STABILIZATION INCLUDED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEW MANUAL (E&SC MANUAL), LATEST EDITION.
  - (B) STABILIZATION SHALL TAKE PLACE AS SOON AS PRACTICAL IN PORTIONS OF THE PROJECT WHERE CONSTRUCTION ACTIVITIES HAVE CEASED, BUT NO LATER THAN 7 DAYS AFTER ANY CONSTRUCTION ACTIVITY CEASES EITHER TEMPORARILY OR PERMANENTLY.
  - (C) ANY TEMPORARY MATERIAL USED FOR POLLUTION OR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT AND FINAL STABILIZATION OF THE PROJECT HAS BEEN ACHIEVED.
- (3) STRUCTURAL PRACTICES FOR EROSION AND SEDIMENT CONTROL
  - (A) ROLLED EROSION CONTROL PRODUCTS (ARTIFICIAL COVERINGS)

PURPOSE: TO PROTECT DISTURBED SLOPE SURFACES AGAINST EROSION DUE TO RAINFALL OR FLOWING WATER.

- (1) USED FOR PAUSES IN CONSTRUCTION DUE TO INCLEMENT WEATHER OR OTHER CIRCUMSTANCES. COULD INCLUDE NATURAL OR SYTHETIC FIBER MATS, PLASTIC SHEETING OR NETS.
- (2) USED FOR EROSION CONTROL THAT FACILITATES PLANT GROWTH WHILE PERMANENT GRASS IS ESTABLISHED. COULD INCLUDE BIODEGRADABLE EROSION CONTROL BLANKETS INSTALLED ON A SEEDED AREA, ON FILL SLOPES OR DITCHES.
- (3) USED TO STABILIZE DRAINAGE CHANNELS. CONSULT E&SC MANUAL TO DETERMINE CORRECT PRODUCT TYPE FOR CHANNEL STABILIZATION.
- (B) SEDIMENT BARRIERS (TEMPORARY CONSTRUCTION SITE BMP'S)

PURPOSE: SEDIMENT BARRIERS EITHER OBSTRUCT FLOW OR PREVENT THE PASSAGE OF WATER WHILE CONSTRUCTION ACTIVITIES OCCUR. SMALLER SEDIMENT BARRIERS MAY FUNCTION AS A SMALL SEDIMENT CONTAINMENT SYSTEM OR AS A METHOD TO REDUCE FLOW VELOCITY.

- (1) THESE CONSTRUCTION BMP'S CAN INCLUDE SYNTHETIC BALES, STAKED SILT FENCE, TURBIDITY BARRIER, STORM SEWER INLET BARRIERS, ROCK BARRIERS, GEOSYNTHETIC BARRIERS, ETC.
- (2) APPROPRIATE LOCATIONS INCLUDE SITE PERIMETER, BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION, BELOW THE TOE OF EXPOSED AND ERODIBLE SLOPES, ALONG THE TOE OF STREAM AND CHANNEL BANKS, AROUND DRAINS AND INLETS LOCATED IN LOWPOINTS OR THE DOWNSTREAM EDGE OF AREAS UNDERGOING VERTICAL OR BOX CULVERT CONSTRUCTION ACTIVITIES.
- (3) INAPPROPRIATE LOCATIONS FOR THESE SAME MEASURES INCLUDE PARALLEL TO A HILLSIDE CONTOUR, IN CHANNELS WITH CONCENTRATED FLOW (UNLESS PROPERLY REINFORCED), UPSTREAM OR DOWNSTREAM OF CULVERTS WITH CONCENTRATED FLOW, IN FRONT OF OR AROUND INLETS ON A GRADE WITH CONCENTRATED FLOW OR IN FLOWING STREAMS
- (C) INLET PROTECTION SYSTEM

DATE

PURPOSE: ANY OF A NUMBER OF SEDIMENT BARRIERS THAT EITHER PREVENT SEDIMENT FROM ENTERING AN INLET OR TRAP THE SEDIMENTS ONCE THEY ENTER THE INLET.

(1) TYPICAL APPLICATIONS INCLUDE ROCK BARRIERS, FRAME AND FILTER BARRIERS, CURB INLET "SUMP" BARRIER, CURB INLET DIVERSION BERM, CURB AND GUTTER SEDIMENT CONTAINMENT SYSTEM OR CURB INLET INSET.

DESCRIPTION

(2) SHOULD BE INSTALLED ONLY WHEN CONSTRUCTION ACTIVITIES ARE ON-GOING AND ONLY WHERE SUMP CONDITIONS EXIST.

3) SHOULD NOT BE USED WHEN CONSTRUCTION IS COMPLETE AND SHOULD NOT BE USED IN AREAS WHERE FLOODING COULD ENCROACH INTO THE TRAVEL LANES.

(D) STAKED TURBIDITY BARRIER

PURPOSE: THIS ITEM IS COMMONLY USED IN AREAS WHERE CONTINUOUS CONSTRUCTION ACTIVITIES CHANGE THE NATURAL CONTOURS AND DRAINAGE RUNOFF PATTERNS.

- (1) COMMONLY USED IN LAKES AND STREAMS AS A SEDIMENT CONTAINMENT SYSTEM. SHOULD NOT BE USED WHERE WATER CURRENTS MOVE THE CURTAIN AND DISLODGE COLLECTED SEDIMENTS.
- (2) MAXIMUM DEPTH OF PANEL IS 3'-8".
- (3) POST MUST BE A MINIMUM LENGTH OF 5.0' AND A MINIMUM OF 10" OF FABRIC MUST BE EMBEDDED IN THE GROUND.
- (E) SOIL TRACKING PREVENTION DEVICE

PURPOSE: TEMPORARY STRUCTURES TO ASSIST WITH THE REMOVAL OF SOIL MATERIAL CAPTURED ON VEHICLE TIRES BEFORE VEHICLES ENTER THE ROADWAY.

- (1) USE ONE DEVICE PER MILE WITH A MINIMUM OF TWO PER PROJECT.
- (2) USE ADDITIONAL DEVICES FOR CONSTRUCTION AREAS THAT ARE NOT ADJACENT TO THE ROAD RIGHT OF WAY AND NO ACCESS IS PROVIDED THROUGH A SOIL TRACKING PREVENTION DEVICE.
- (3) RRR PROJECTS SHOULD BE HANDLED ON A CASE BY CASE BASIS.
- (4) PROVIDING SOIL TRACKING PREVENTION DEVICES AT ALL INGRESS/EGRESS LOCATIONS.
- (4) DEWATERING OPERATIONS

DESCRIPTION: DEWATERING OPERATIONS ARE PRACTICES THAT MANAGE THE DISCHARGE OF TURBID WATER WHEN WATERS OTHER THAN STORMWATER AND ACCUMULATED SURFACE WATERS MUST BE REMOVED FROM A LOCATION SO THAT CONSTRUCTION WORK MAY BE ACCOMPLISHED. THESE WATERS CAN INCLUDE GROUNDWATER, WATER FROM COFFERDAMS, WATER DIVERSIONS AND WATER USED DURING CONSTRUCTION THAT MUST BE REMOVED FROM A WORK AREA.

- (A) ENVIRONMENTAL AGENCIES ARE ESPECIALLY CONCERNED WITH THE PROTECTION OF WETLANDS FROM DRAWDOWN EFFECTS, PROTECTING RECEIVING BODIES FROM SEDIMENTATION AND POSSIBLE CAPACITY LIMITATIONS.
- (B) THREE PRIMARY METHODS OF DEWATERING COMMONLY USED IN FLORIDA ARE RIM-DITCHING, SOCK/PIPE/HORIZONTAL WELLS AND WELL-POINT SYSTEMS.
- (C) METHODS FOR CONTAINING SEDIMENTATION CAN INCLUDE A COMBINATION OF BMP'S AND SEDIMENT TRAPS, SEDIMENT BASINS, GRAVITY BAG FILTERS, WEIR TANKS, DEWATERING TANKS, SAND MEDIA/PRESSURIZED BAGS AND CHEMICAL TREATMENTS
- (5) OFFSITE VEHICLE TRACKING WILL BE CONTROLLED BY THE FOLLOWING METHODS:
  - (A) LOADED HAUL TRUCKS ARE TO BE COVERED BY A TARPAULIN AT ALL TIMES.
  - (B) EXCESS DIRT ON ROAD WILL BE REMOVED DAILY.
  - (C) USING WATER TRUCKS DURING DUST GENERATING ACTIVITIES.
- (6) NON-STORMWATER (INCLUDING SPILL REPORTING)

PROVIDE THE FDOT WITH AN EROSION AND SEDIMENT CONTROL PLAN THAT WILL INCLUDE SPILL CONTAINMENT, REPORTING, AND RESPONSES. THE PLAN SHALL SPECIFY WHAT MANAGEMENT PRACTICES AND CONTAINMENT METHODS WILL BE USED TO PREVENT POTENTIAL POLLUTANTS (FUEL, LUBRICANTS, HERBICIDES, ETC.) FROM SPILLING ONTO THE SOIL OR INTO THE SURFACE WATERS. IF A SPILL DOES OCCUR, OR IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE DISTRICT CONTAMINATION IMPACT COORDINATOR AT (813) 975-6923 AND THE ENGINEER.

#### III. MAINTENANCE.

MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES WHEN NOTICE OF TERMINATION IS MAILED. PROPERLY DISPOSE OF SEDIMENT BUILD-UP THROUGH THE LIVE OF THE INSTALLED EROSION AND SEDIMENT CONTROL DEVICES.

- 1) SYNTHETIC BALES SHALL BE MAINTAINED TO ENSURE THEIR USEFULNESS AND NOT BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.
- (2) SOIL TRACKING PREVENTION DEVICES SHALL BE MAINTAINED TO PREVENT CLOSSING OF ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.
- IV. INSPECTION:

1) ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED DAILY BY THE CONTRACTOR'S PERSONNEL WHO ARE F.D.E.P. CERTIFIED STORMWATER MANAGEMENT INSPECTORS.

11-0429182-001 NPR

- V. TRACKING AND REPORTING:
  - (1) SUBMIT A WEEKLY REPORT TO THE DEPARTMENT DOCUMENTING THE DAILY INSPECTIONS AND WAINTENANCE OF REPAIRS TO THE EROSION AND SEDIMENT CONTROL DEVICES. MAINTAIN ALL REQUIRED REPORTS AND COMPLETE ALL SWPPP INSPECTION FORMS.
  - (2) PREPARATION OF ALL THE CONTRACTOR'S REPORTS OF INSPECTION, MAINTENANCE AND REPAIRS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION, SHALL BE INCLUDED IN THE INDIVIDUAL COSTS OF THE EROSION AND SEDIMENT CONTROL DEVICES OR LUMP SUM COST OF THE PROJECT.
  - (3) USE THE SWPPP CONSTRUCTION INSPECTION REPORT FORM # 650-040-03, FOR DAILY INSPECTIONS.

444008-4-52-01

FALLER, DAVIS & ASSOCIATES, INC
4200 W. CYPRESS ST., SUITE 500
TAMPA, FLORIDA 33607-4168
ALAN S. ELDRIDGE, P.E. NO.: 77067

SR 93

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO. | COUNTY | FINANCIAL PROJECT ID

COLLIER

 $STORMWATER\ POLLUTION \ PREVENTION\ PLAN\ (2)$ 

**Permit Number** 

SHEET NO.

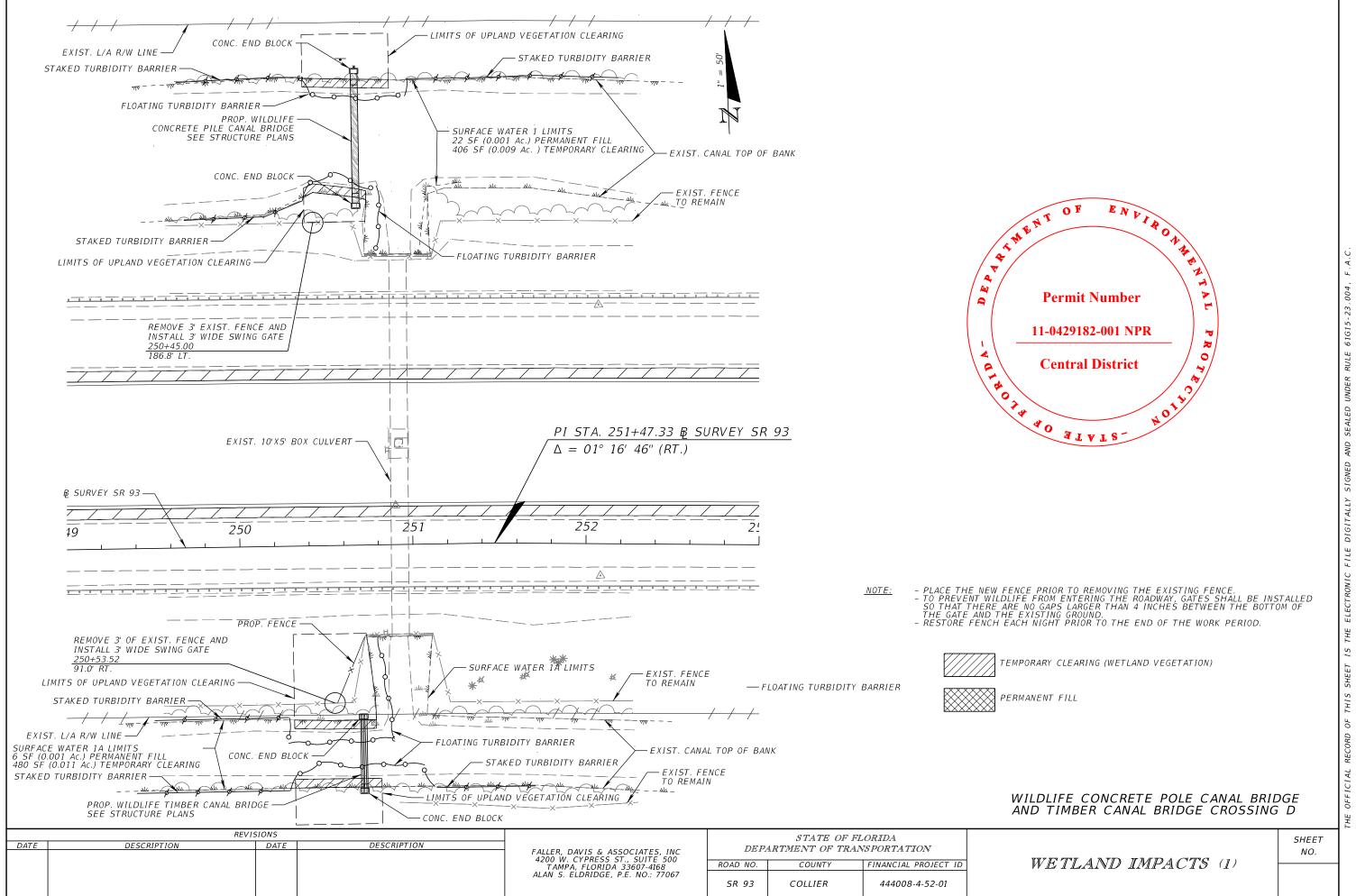
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REVISIONS

DATE

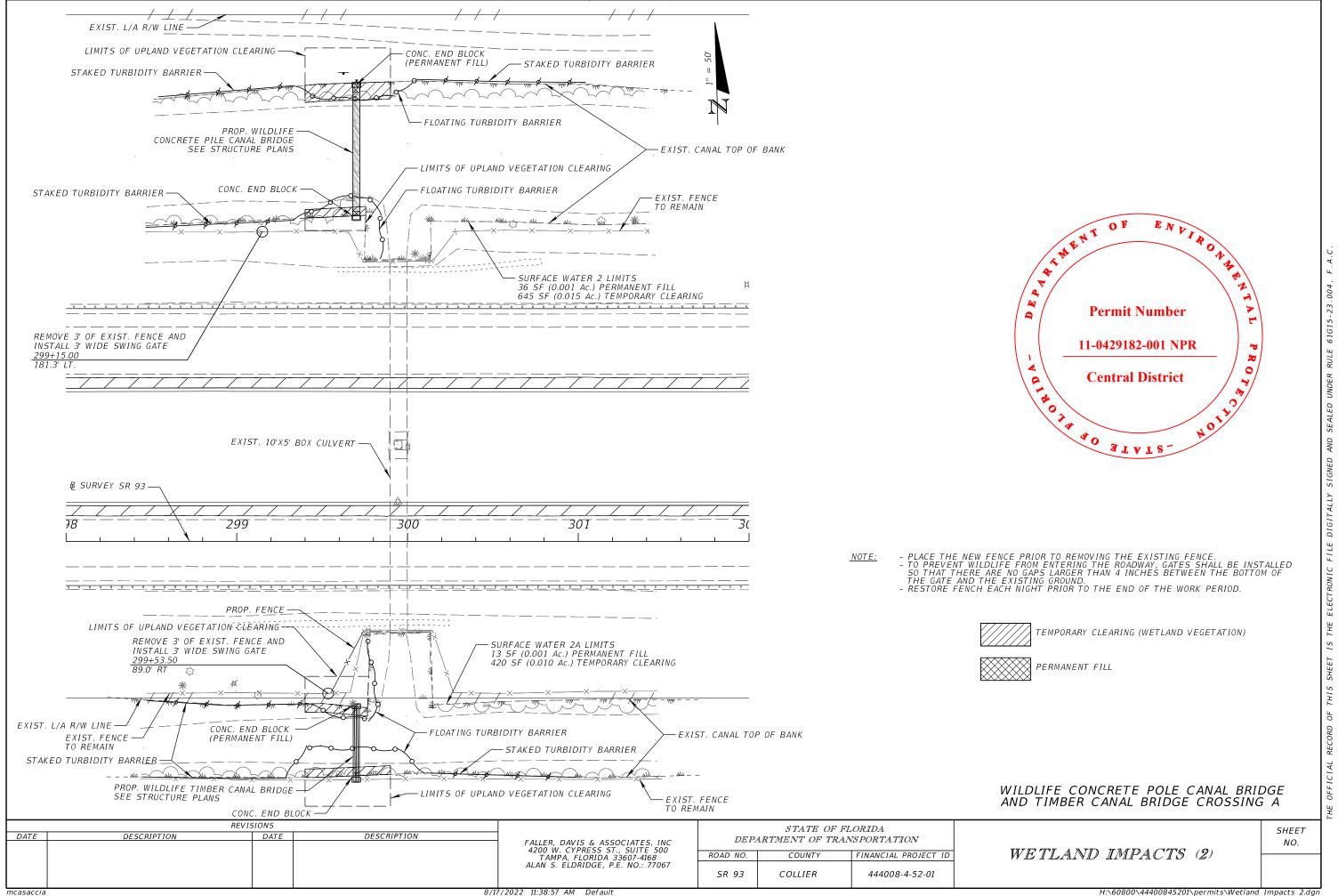
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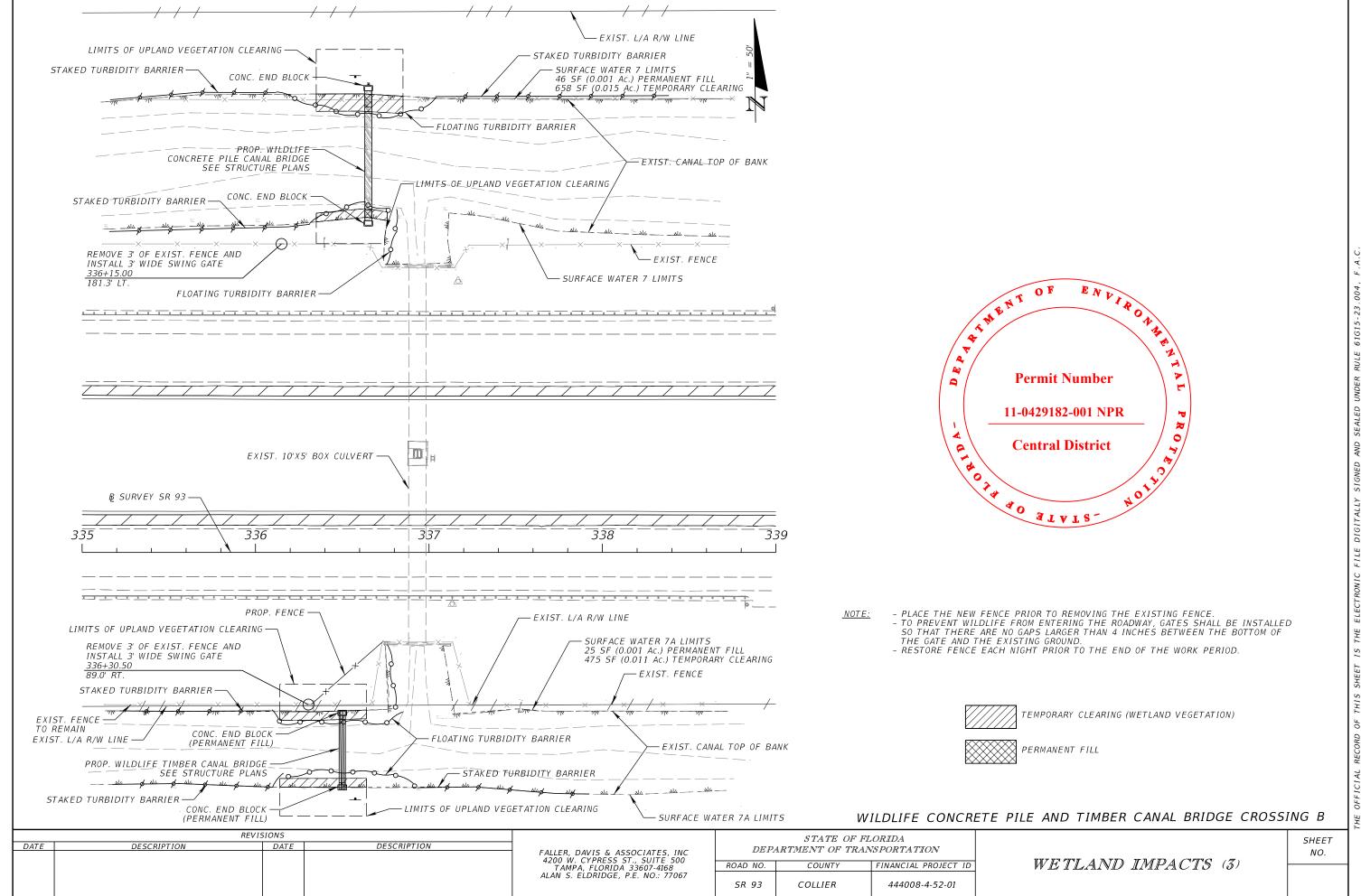
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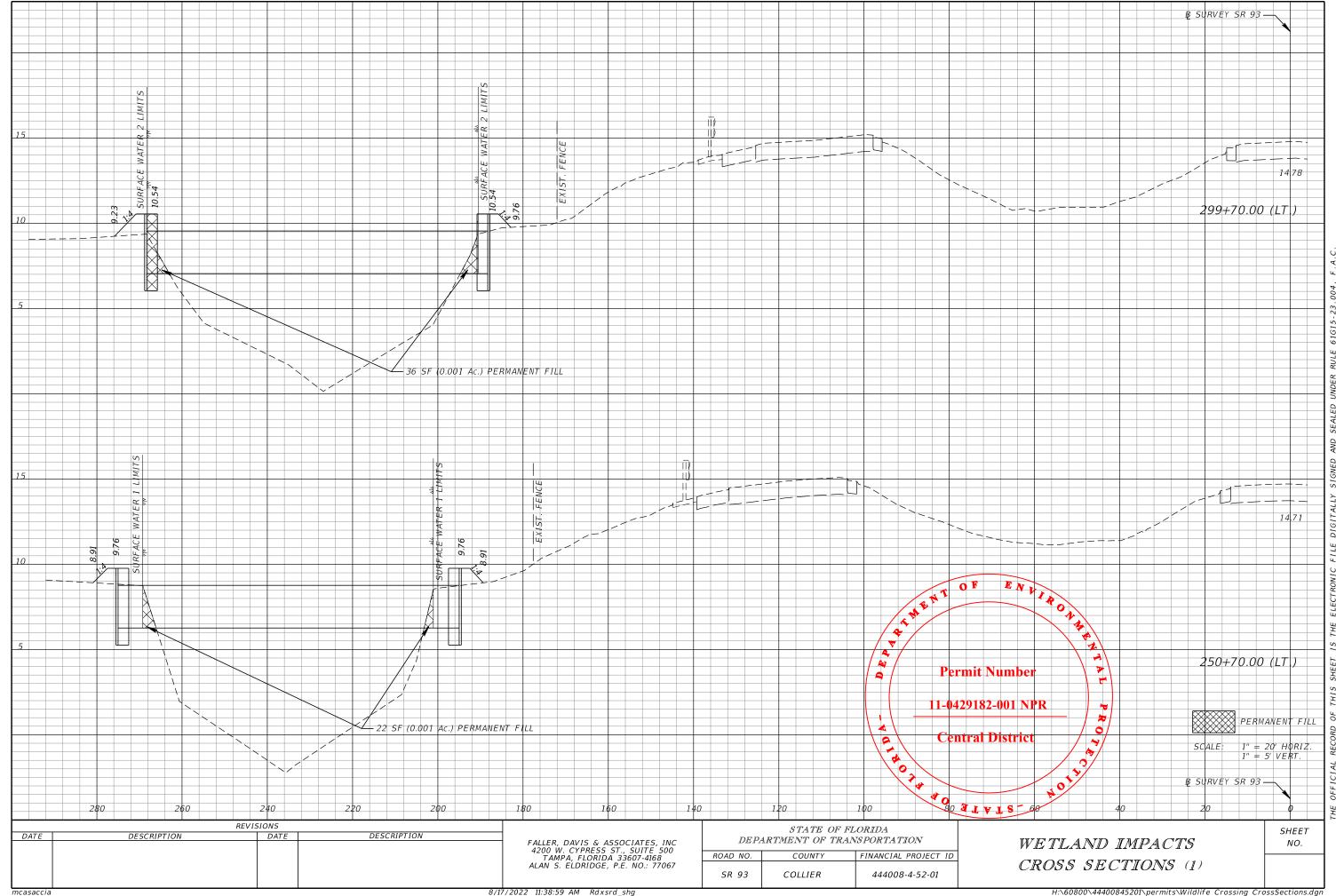
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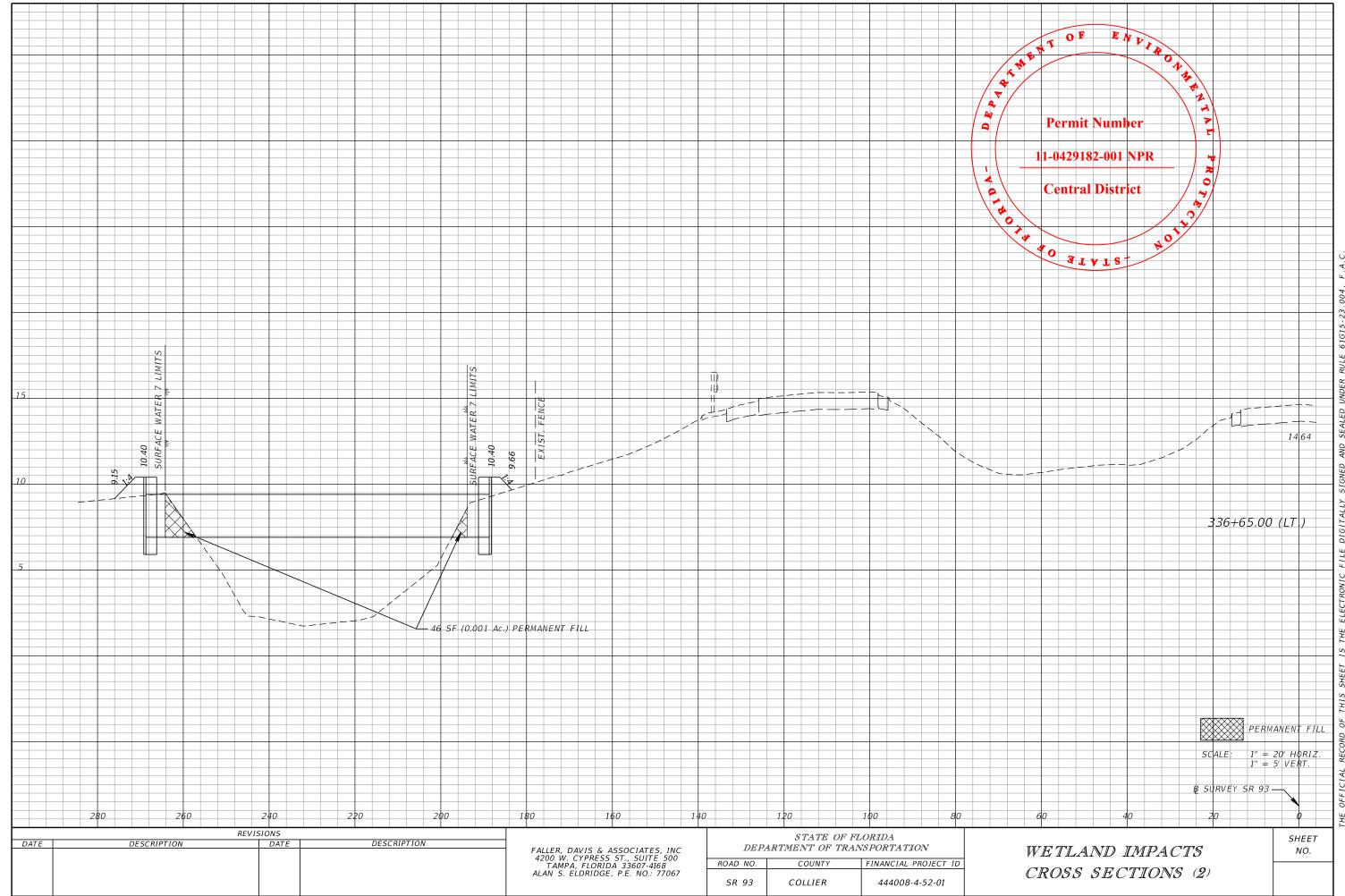


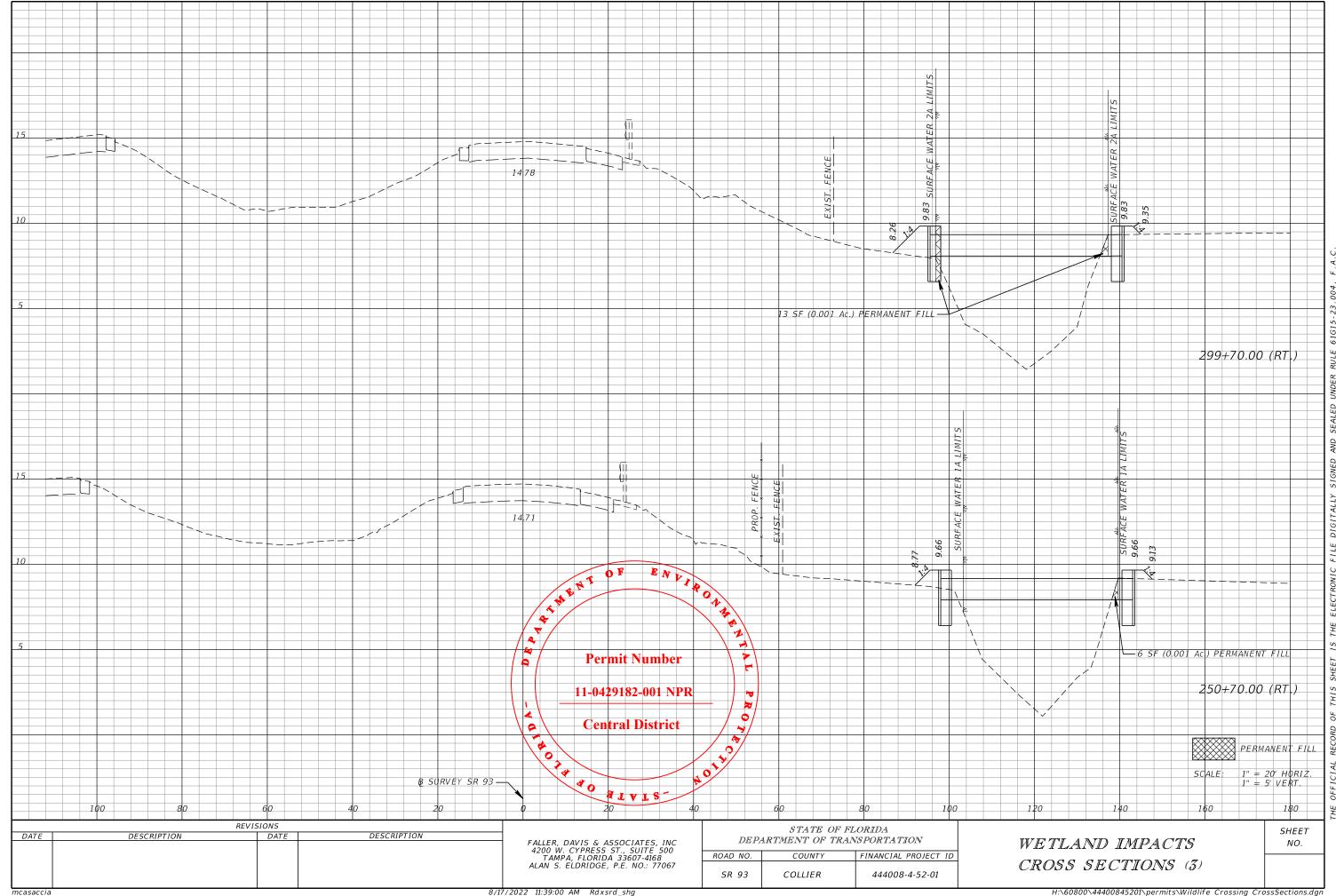
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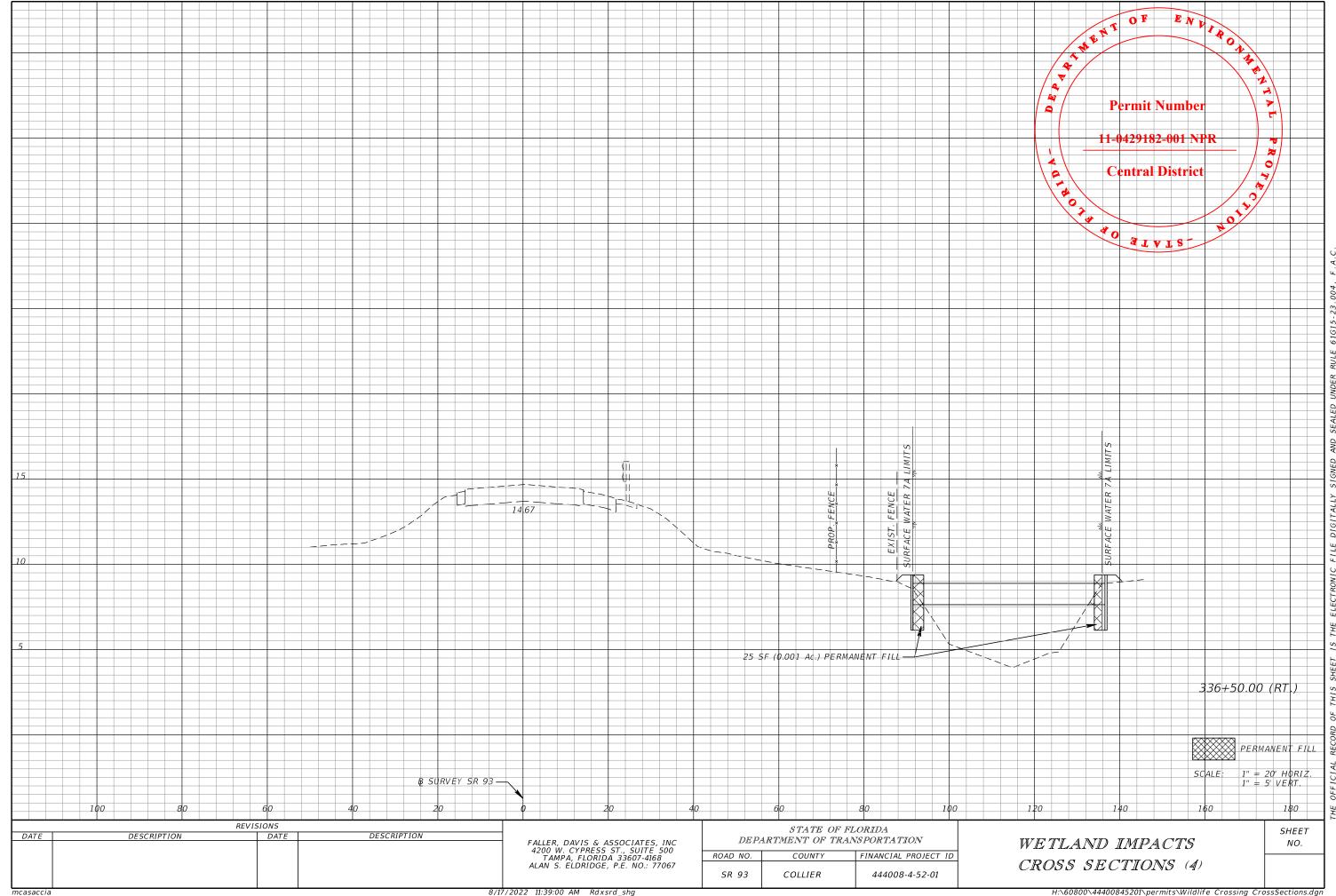
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## South Florida Water Management District Individual Environmental Resource Permit No. 11-108194-P Date Issued: February 7, 2023

**Permittee:** Florida Department Of Transportation - District 1

801 North Broadway Avenue

Bartow, FL 338301249

**Project:** I-75 (SR 93) From Mile Post (MP 33.989) to MP 46.000

**Application No.** 221209-36834

**Location:** Collier County, See Exhibit 1

Your application for an Individual Environmental Resource Permit is approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Unless otherwise stated, this permit constitutes certification of compliance with state water quality standards under section 401 of the Clean Water Act, 33 U.S.C. 1341, and a finding of consistency with the Florida Coastal Management Program. Please read this entire agency action thoroughly and understand its contents.

#### This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource Permits.
- The attached Special Conditions.
- · All referenced Exhibits.

All documents are available online through the District's ePermitting site at <a href="www.sfwmd.gov/ePermitting">www.sfwmd.gov/ePermitting</a>.

If you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

The District does not publish notices of action. If you wish to limit the time within which a person may request an administrative hearing regarding this action, you are encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Legal requirements and instructions for publishing a notice of agency action, as well as a noticing format that can be used, are available upon request. If you publish a notice of agency action, please send a copy of the affidavit of publication provided by the newspaper to the District's West Palm Beach office for retention in this file.

If you have any questions regarding your permit or need any other information, please call us at 1-800-432-2045 or email <a href="mailto:epermits@sfwmd.gov">epermits@sfwmd.gov</a>.

Gary R. Priest, P.E.

Engineering Section Administrator, Environmental Resource Bureau

# South Florida Water Management District Individual Environmental Resource Permit No. 11-108194-P

**Date Issued:** February 7, 2023 **Expiration Date:** February 7, 2028

Project Name: I-75 (SR 93) From Mile Post (MP 33.989) to MP 46.000

Permittee: Florida Department Of Transportation - District 1

801 North Broadway Avenue

Bartow, FL 338301249

Operating Entity: Florida Department Of Transportation - District 1

801 North Broadway Avenue

Bartow, FL 338301249

Location: Collier County

Permit Acres: 13.10 acres

Project Land Use: Transportation

Special Drainage District: N/A

Water Body Classification: CLASS III

**CLASS III** 

FDEP Water Body ID: 3261C

3261B

Wetland and Surface Water Impacts: 0.074 acres

Conservation Easement to District: No

Sovereign Submerged Lands: No.

## **Project Summary**

District Staff has reviewed the information submitted December 9, 2022 for the permitted development known as I-75 (SR 93) from mile post (MP) 33.989 to MP 46.000, which was originally authorized under Permit No. 11-00396-S. This permit authorizes milling, resurfacing and shoulder paving. The proposed added impervious area is due to shoulder widening. Please refer to Exhibit No 1.0 for a location map and Exhibit Nos. 2.0 and 2.1 for SWM plans and calculations respectively.

Issuance of this permit constitutes certification of compliance with state water quality standards in accordance with Rule 62-330.062, F.A.C.

#### **Background**

Permit No. 11-00396-S, Application No. 04148-B, issued October 6, 1988 was a modification authorizing construction and operation of a SWM system serving the I-75 (Alligator Alley) corridor four-lane highway and associated facilities improvements.

Permit No: 11-108194-P, Page 2 of 17

## **Ownership, Operation and Maintenance**

Perpetual operation and maintenance of the stormwater management system will be the responsibility of Florida Department Of Transportation (FDOT) District 1. Upon conveyance or division of ownership or control of the property or the system, the permittee must notify the Agency in writing within 30 days, and the new owner must request transfer of the permit.

Permit No: 11-108194-P, Page 3 of 17

#### **Engineering Evaluation:**

#### **Land Use**

The project area consists of the entire Interstate 75 Right-of-Way (ROW) between Mile Post 33,989 to Mile Post 46.000. Refer to exhibit No. 1.0 for a location map.

#### **Stormwater Management System Design Parameters**

An analysis of the existing system was performed, and it was determined there is enough existing treatment to accommodate the impact caused by the proposed median shoulder widening. The stormwater management system complies with Section 4.2.1 of the Environmental Resource Permit Applicant's handbook Volume II.

The project includes implementation of a Turbidity and Erosion Control Plan (Exhibit 2.0) as additional reasonable assurance of compliance with the water quality criteria during construction and operation.

### Flood Plain/Compensating Storage

The proposed construction activities will cause negligible impacts to the floodplain. The impacted floodplain volume will be off set with the available treatment volume provided from Permit No. 11-00396-S.

## **Certification, Operation, and Maintenance**

Pursuant to Chapter 62-330.310, F.A.C., Individual Permits will not be converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1 - 12.3, ERP AH Vol. I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all SWM systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of SWM systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity is responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4, ERP AH Vol. I for Minimum Operation and Maintenance Standards.

Notable project components requiring routine inspection and maintenance may include but are not limited to:

- Side slopes for stormwater lakes and ponds maintain side slopes no steeper than 4:1 (horizontal:vertical) to a depth of 2.0 feet below the control elevation and nurtured or planted from 2.0 feet below to 1.0 feet above the control elevation pursuant to Section 5.4.2, ERP AH Vol. II.
- Conveyance pipes, conveyance structures and discharge structures all pipes and structures must be inspected for structural integrity and be maintained clear of trash, sediment and vegetative debris.

Permit No: 11-108194-P, Page 4 of 17

- Exfiltration trenches all pipes and structures must be inspected for structural integrity and be maintained clear of trash, sediment and vegetative debris.
- Swales maintain the permitted cross-section and vegetative cover.
- Underground storage facilities all facilities must be inspected for structural integrity and be maintained clear of trash, sediment and vegetative debris.
- Pumps float switches should be inspected and any obstructions removed to ensure proper operation; intake and discharge pipes should be maintained clear of trash, sediment and vegetative debris; motors should be maintained to ensure proper operation.

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#### **Environmental Evaluation:**

#### **Wetlands and Other Surface Waters**

The project site contains 0.26 acres of wetlands and 0.19 acres of other surface waters totaling 0.45 acres. The wetlands can generally be described as mixed wetland hardwoods, wetland coniferous forests, mixed shrub, and hydric pine. No wetlands will be affected by this project. The project will result in 0.074 acres of other surface water impacts as described in the table below. These unavoidable impacts are related to the construction of wildlife bridges to allow wildlife to pass over the existing canals on the north and south sides of I-75. Exhibit No. 3.0 identifies the locations of the other surface waters being impacted.

The project has been designed to result in minimal impacts to other surface waters. (Section 10.2.1 of the Applicant's Handbook Volume I). No secondary wetland impacts are anticipated with this project. (Section 10.2.7 of Volume I).

#### Wildlife issues

The project site does contain preferred habitat for wetland-dependent endangered or threatened wildlife species or species of special concern. The project is located within the core foraging area of the wood stork, and is within the known range of red cockaded woodpecker, gopher tortoise, bald eagle, and other wading birds. The project is also within designated critical habitat of the Florida Panther, Florida Bonneted Bat, and Eastern Indigo Snake. No adverse impacts to these species are anticipated with this project.

This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site

Permit No: 11-108194-P, Page 6 of 17

## **Environmental Evaluation Tables:**

# **Summary**

Wetlands and Other

Surface Waters: 0.074 acres

Direct Impacts: 0.074 acres Secondary impacts: 0 acres

Net UMAM Functional Loss/0

Gain: units

Total Onsite Mitigation O acres

Total Offsite Mitigation

Area: 0 acres

# **Total Mitigation Bank Credits Provided**

Mitigation Bank	Туре	Total Credits
		0
Total:		0

# **Group 1**

# **Group 2**

Activities in Wetlands or Other Surface Waters, Not Including Mitigation at a Bank

ID	Acres	Action	<b>Community Description</b>	Current Score	With Project Score	UMAM Loss
OSW1	0.071	Direct Impact	Ditches and Canals			0.000
OSW2	0.003	Direct Impact	Ditches and Canals			0.000
Total:	0.074					0.000

Permit No: 11-108194-P, Page 7 of 17

## **Related Concerns:**

#### **Water Use Permit Status**

The applicant has indicated that irrigation and dewatering are not required for construction of this project

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

## **Historical/ Archeological Resources**

No information has been received that indicates the presence of archaeological or historical resources on the project site or indicating that the project will have any effect upon significant historic properties listed, or eligible for listing in the National Register of Historic Places.

This permit does not release the permittee from complying with any other agencies requirements in the event that historical and/or archaeological resources are found on the site.

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## General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

- 1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
- 3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
- 4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," (October 1, 2013), (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505), incorporated by reference herein, indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C., and shall be submitted electronically or by mail to the Agency. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.300(4)(b), shall also serve as notice of commencement of construction under this chapter and, in such a case, submittal of Form 62-330.350(1) is not required.
- 5. Unless the permit is transferred under rule 62-330.340, F.A.C., or transferred to an operating entity under rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms, and conditions of the permit for the life of the project or activity.
- 6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
  - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex-"Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)]; or
  - b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
  - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
- 7. If the final operation and maintenance entity is a third party:
  - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.4 of Volume I) as filed with the Florida Department of State, Division of Corporations, and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the

Permit No: 11-108194-P, Page 9 of 17

County in which the activity is located.

- b. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation and Maintenance Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
- 8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
- 9. This permit does not:
  - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
  - b. Convey to the permittee or create in the permittee any interest in real property;
  - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
  - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
- 10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
- 11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
- 12. The permittee shall notify the Agency in writing:
  - a. Immediately if any previously submitted information is discovered to be inaccurate; and
  - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
- 13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
- 14. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S. For project activities subject to prior consultation with the DHR and as an alternative to the above requirements, the permittee may follow procedures for unanticipated discoveries as set forth within a cultural resources assessment survey determined complete and sufficient by DHR and included as a specific permit condition herein.

Permit No: 11-108194-P, Page 10 of 17

- 15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
- 16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
- 17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
- 18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

Permit No: 11-108194-P, Page 11 of 17

## Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

- 1. The construction authorization for this permit shall expire on the date shown on page 2.
- 2. Operation and maintenance of the stormwater management system shall be the responsibility of Florida Department Of Transportation (FDOT) District 1. The permittee shall notify the Agency in writing within 30 days of any conveyance or division of ownership or control of the property of the system, and the new owner must request transfer of the permit in accordance with Rule 62-330.340, F.A.C.
- 3. Prior to initiating construction activities associated with this Environmental Resource Permit (ERP), the permittee is required to hold a pre-construction meeting with field representatives, consultants, contractors, District Environmental Resource Bureau (ERB) staff, and any other local government entities as necessary. The purpose of the pre-construction meeting is to discuss construction methods, sequencing, best management practices, identify work areas, staking and roping of preserves where applicable, and to facilitate coordination and assistance amongst relevant parties. To schedule a pre-construction meeting, please contact ERB staff from the Fort Myers Service Center at (239) 338-2929 or via e-mail at: precon@sfwmd.gov. When sending a request for a pre-construction meeting, please include the application number, permit number, and contact name and phone number.
- 4. This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to: FWCConservationPlanningServices@MyFWC.com.

Permit No: 11-108194-P, Page 12 of 17

# Project Work Schedule for Permit No. 11-108194-P

The following activities are requirements of this Permit and shall be completed in accordance with the Project Work Schedule below. Please refer to General Conditions, Special Conditions and/or Specific Conditions for more information. Any deviation from these time frames will require prior approval from the District's Environmental Resources Bureau and may require a modification to this permit. Such requests must be made in writing and shall include: (1) reason for the change, (2) proposed start/finish and/or completion dates, and (3) progress report on the status of the project.

Condition No.	Date Added	Description (Application Number)	Due Date	Date Satisfied
GC 4	02/07/2023	Construction Commencement Notice	Prior to Construction	
GC 6	02/07/2023	Submit Certification	30 Days After Construction Completion	
GC 7	02/07/2023	Submit Operation Transfer Request	Within 30 days of Certification	
SC 3	02/07/2023	Pre-Construction Meeting	Prior to Construction	

GC = General Condition

SC = Special Condition

Permit No: 11-108194-P, Page 13 of 17

# **Distribution List**

Tia Norman, Faller, Davis & Assoc, Inc

Audubon of Florida

Div of Recreation and Park - District 4

US Army Corps of Engineers - Permit Section

Permit No: 11-108194-P, Page 14 of 17

## **Exhibits**

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website at <a href="http://my.sfwmd.gov/ePermitting">http://my.sfwmd.gov/ePermitting</a> and searching under this application number 221209-36834.

Exhibit No. 1.0 Location Map

Exhibit No. 2.0 SWM Plans

Exhibit No. 2.1 Calculations

Exhibit No. 3.0 OSW Impacts

Permit No: 11-108194-P, Page 15 of 17

#### **NOTICE OF RIGHTS**

As required by Chapter 120, Florida Statutes, the following provides notice of the opportunities which may be available for administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, or judicial review pursuant to Section 120.68, Florida Statutes, when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Some of the legal proceedings detailed below may not be applicable or appropriate for your situation. You may wish to consult an attorney regarding your legal rights.

## RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Florida Statutes. Persons seeking a hearing on a District decision which affects or may affect their substantial interests shall file a petition for hearing in accordance with the filing instructions set forth herein within 21 days of receipt of written notice of the decision unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Florida Statutes; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Florida Statutes. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, posting, or publication that the District has taken or intends to take final agency action. Any person who receives written notice of a District decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action that materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional point of entry pursuant to Rule 28-106.111, Florida Administrative Code.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Florida Statutes, shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The District may grant the request for good cause. Requests for extension of time must be filed with the District prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and whether the District and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

#### **FILING INSTRUCTIONS**

A petition for administrative hearing must be filed with the Office of the District Clerk. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at the District's headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

• Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.

- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the District's security desk does not constitute filing. It will be necessary to request that the District's security officer contact the Office of the District Clerk. An employee of the District's Clerk's office will receive and process the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document.

#### INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Rules 28-106.201 and 28-106.301, Florida Administrative Code, initiation of an administrative hearing shall be made by written petition to the District in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

- 1. Identification of the action being contested, including the permit number, application number, District file number or any other District identification number, if known.
- 2. The name, address, any email address, any facsimile number, and telephone number of the petitioner, petitioner's attorney or qualified representative, if any.
- 3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
- 4. A statement of when and how the petitioner received notice of the District's decision.
- 5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
- 6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the District's proposed action.
- 7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the District's proposed action.
- 8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
- 9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the District to take with respect to the District's proposed action.

#### **MEDIATION**

The procedures for pursuing mediation are set forth in Section 120.573, Florida Statutes, and Rules 28-106.111 and 28-106.401–.405, Florida Administrative Code. The District is not proposing mediation for this agency action under Section 120.573, Florida Statutes, at this time.

## **RIGHT TO SEEK JUDICIAL REVIEW**

Pursuant to Section 120.68, Florida Statutes, and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final District action may seek judicial review of the District's final decision by filing a notice of appeal with the Office of the District Clerk in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the appropriate district court of appeals via the Florida Courts E-Filing Portal.

THIS PERMIT MODIFICATION IS APPROVED PURSUANT TO A REQUEST DATED APP. 13,19 88 PERMITEE AGREES TO HOLD AND SAVE THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND ITS SUCCESSORS HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION. OPERATION, MAINTENANCE, OR USE OF ANY WORK OR STRUCTURE INVOLVED IN THE PERMIT. THE ORIGINAL PERMIT, INCLUDING ALL PLANS AND SPECIFICATIONS ATTACHED THERETO, AS ADDRESSED BY THE STAFF REPORT AND THOSE ADDRESSED BY THE MODIFICATION STAFF REPORT, ARE BY REFERENCE MADE A PART

ALL SPECIFICATIONS, SPECIAL AND LIMITING CONDITIONS ATTENDANT TO THE ORIGINAL PERMIT, UNLESS SPECIFICALLY RECINDED BY THIS OR PREVIOUS MODIFICATIONS, REMAIN IN EFFECT.

SPECIAL CONDITIONS:

SEE SHEET 2 OF 3 - 7 PROJECT SPECIAL CONDITIONS.

SEE SHEET 3 OF 3 - 12 LIMITING CONDITIONS.

ORIGINAL PERMIT ISSUED: April 9, 1987.

PERMIT MODIFICATION APPROVED BY THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

ORIGINAL SIGNED BY: JAMES T. SHOW, P.E.

Original signed by: ON Vern Kaiser **DEPUTY CLERK** 

JAMES T. SHOW, P.E., DIRECTOR WATER MANAGEMENT DIVISION RESOURCE CONTROL DEPARTMENT

FORM 0157 Rev. 8/84

# SPECIAL CONDITIONS (FOR THIS PHASE ONLY)

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- 3. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
- 4. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 5. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
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- 2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
- 3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.
- 4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.
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- 8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE CISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION. THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.
- 9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
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- 11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
- 12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL, INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.





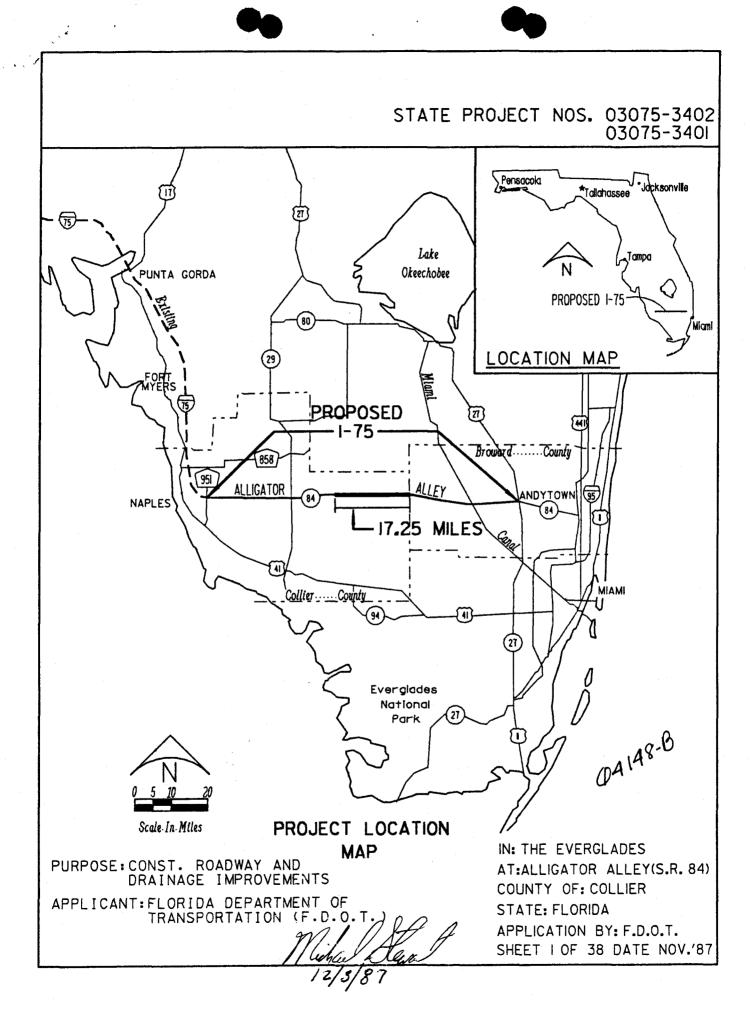
# SOUTH FLORIDA WATER MANAGEMENT DISTRICT P.O. BOX "V"

WEST PALM BEACH, FL. 33402

RECEIVED

\*\*\*\*\*NOTICE OF INTENT TO CONSTRUCT WORKS PURSUANT TO GENERAL PERMIT\*\*\*\*\*
(CHAPTER 40E-40, FLORIDA ADMINISTRATIVE CODE) APR 1 4 1988

Dissile Description of Tract	anartation	04140 B
OWNER'S NAME: Florida Department of Tran		<u> 04148-B</u>
MAILING ADDRESS: 605 Suwannee Street Ma		OURCE CONTROL DEPARTMENT
		4/487-2780
(CITY) (STAT DESCRIPTION OF THE PROPOSED PROJECT:		(PHONE)
LOCATION: SEC(S) see attached	TWP(S) 50S	IGE(S)
COUNTY <u>Collier</u>	TOTAL ACREAGE:	N/A ACRES
NUMBER OF DWELLING UNITS OR SQUA		The state of the s
EVIDENCE VERIFYING ZONING COMPAT	10.001	j
PROPOSED MINIMUM ROAD ELEVATION	37/4	NGVD
PROPOSED MINIMUM FLOOR ELEVATIO		NGVD
BRIEF DESCRIPTION OF THE WORKS TO BE CONS lanes and misc. structures in upgrade	STRUCTED OR ALTERED: Const ing SR 84 to Interstate 75	ruct two new traffic
ACREAGE OF IMPERVIOUS COVER:	29 total, 83 acres new	ACRES
ACREAGE OF WATER MANAGEMENT AR		ACRES
INCLUDE PAVING, GRADING & DRAINAC USING AN EXFILTRATION SYSTEM, PER	GE PLANS, CALCULATIONS, AN	
BRIEF STATEMENT OF FACTS WHICH SHOW WHY GENERAL PERMIT: This is a public raod p	project which has undergor	ne NEPA requirements.
It is being constructed within DOT r	ight-of-way and will util:	ize grassed median
areas, grassed slope areas, closed c	anal systems and existing	wetlands for
stormwater treatment.		
(ADD EXTRA SHEET IF NECESSARY)	•	
DATE CONSTRUCTION OR ALTERATION IS EXPEC	CTED TO COMMENCE: March	, 1989
I HEREBY CERTIFY THAT ALL NECE LOCAL AND SPECIAL DISTRICT AU		CEIVED.
OWNER'S SIGNATURE:(IF NOT THE OWNER, CERTIFY BELOW)	· · · · · · · · · · · · · · · · · · ·	
I HEREBY CERTIFY THAT I AM AN AUTHORIZED A	GENT OF THE OWNER	
SIGNATURE Para Q Q Qale Q	· · · · · · · · · · · · · · · · · · ·	ortation Specialist/
Raymond A. Ashe Jr.  DATE: April 13, 1988	Permits	
FORM RP-63 Rev. 12/82		



LAST DATE FOR GOVERNING BOARD ACTION: November 4, 1988

ORAFT
Subject to Governing
Board Approval

Application No. 04148-B

Permit (MOD) No. 11-00396-S

I-75, ALLIGATOR ALLEY

Collier County, S1-6&31-36/T50S/R32-34E

STAFF REPORT

# **ABSTRACT**

This application is a request to modify the construction and operation permit for a 17.25 mile stretch of I-75/Alligator Alley from Sta. 1760+00.00 to Sta. 2670+70.48 (the Broward/Collier County line) by expanding the previously permitted 2-lane roadway to 4-lanes. This 17.25 mile stretch of highway will be the last phase of SR 84 to receive this upgrade. Staff recommendation is for approval with conditions.

## THE APPLICATION

- A. Existing Facilities: Existing is a 2-lane highway, Alligator Alley (SR 84), with an adjacent borrow canal located on the north side of the roadway. Drainage structures include 74-15" diameter median inlets which direct runoff into the north borrow canal, 14-10' by 5' box culverts which provide flow under the existing 2-lane roadway, 14 canal plugs located within the north borrow canal (see Exhibits 35 & 36 for locations) and 7 bridges.
- B. Proposed Facilities: Expansion of the 2-lane roadway to a 4-lane Interstate Highway number 75 with design changes to re-establish sheetflow to the south is proposed. The 14 existing 10' by 5' box culverts are to be extended south to proposed spreader canals located on the south side of the roadway. Five additional 48" diameter culverts will be added to improve flow through capabilities from the north to the south. Ten of the existing 14 canal plugs are to be removed and 32 additional plugs are proposed (see Exhibits 35 & 36 for dimensions and locations). Seven bridges labeled, Y,Z,AA (see Exhibits 19-22), BB, CC, DD and H (see Exhibits 24-28) are proposed for this section of the roadway.

## **EVALUATION**

The plug and bridge locations throughout the project have been chosen to correspond with recommendations in the Greiner Engineering Study compiled for the Florida Department of Transportation (FDOT). The design intent of the study was to re-establish sheetflow to the extensive wetland areas south of Alligator Alley which had been previously disrupted by the original roadway construction (Alligator Alley/SR 84). It appears that the proposed roadway modification will be consistent with the above intent. Southerly flows will be enhanced through plug, bridge and wildlife crossing placement and hydraulic gradient of the existing and proposed canal.

## ENVIRONMENTAL CONSIDERATIONS

The application includes the construction and operation of water management facilities to serve 17.25 miles of improvements to Interstate 75 in eastern Collier County. The improvements include the construction of two additional traffic lanes. The works include installation of numerous canal plugs and additional culverts to promote sheetflow to the south. A borrow/distributor canal will be constructed along portions of the southern side of the highway. The improvements also include the construction of nine new wildlife crossings and five bridge extensions which will also serve as wildlife crossings.

The project as proposed will impact 341.2 acres of wetlands. An additional 52.5 acres will be temporarily disturbed during actual construction. The wetlands to be impacted include cypress and mixed hardwood swamp, marshes and wet prairies. Some of these wetlands had been previously disturbed during the original highway construction. In order to minimize potential adverse impacts, the following items and modifications have been incorporated into the project design. The installation of additional culvert openings will promote and enhance sheetflow to the south. The construction of additional wildlife crossings will provide a greater degree of protection to the Florida panther. Additional activities associated with the project, but not directly related to the actual construction, include negotiating the purchase of over 30,000 acres of lands adjacent to the project to be placed in FDNR ownership. This purchase is part of a larger acquisition program through which over 100,000 acres will be purchased and set aside for conservation purposes.

In review of the project proposal, District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project.

#### WATER QUALITY

Water quality impacts from this project should be minimal. Raised inlets are provided in the grassed center median area of the roadway and vast wetland areas located south of the proposed spreader waterway system provide nutrient removal. Water quality treatment in excess of the first inch of runoff should be provided by these mechanisms.

## OPERATION AND MAINTENANCE

The operation and maintenance of the surface water management system shall be the responsibility of Florida Department of Transportation.

## RECOMMENDATION

APPLICATION REVIEWER:

SUPERVISOR/CHECKER:

TECHNICAL:

M. Clemente

E. Yaun/J.Hiscock

WATER QUALITY:

M. Clemente

K. Landers

**ENVIRONMENTAL:** 

R. Boylan

S. Bradow

MAJOR ISSUES: WETLAND PRESERVATION.

Based on the information provided, District rules have been adhered to.

SECTION SUPERVISOR:

DATE: 9/14/84

Supervising Professional

West Section

Staff recommendation is for approval subject to the following 12 standard Limiting Conditions and 7 Special Conditions (for conceptual approvals only, these conditions as a minimum will apply to subsequent construction permitting).

DIVISION DIRECTOR:

James T. Show, P.E.

Surface Water Management

DATE: 9/14

DRAFT

Subject to Governing

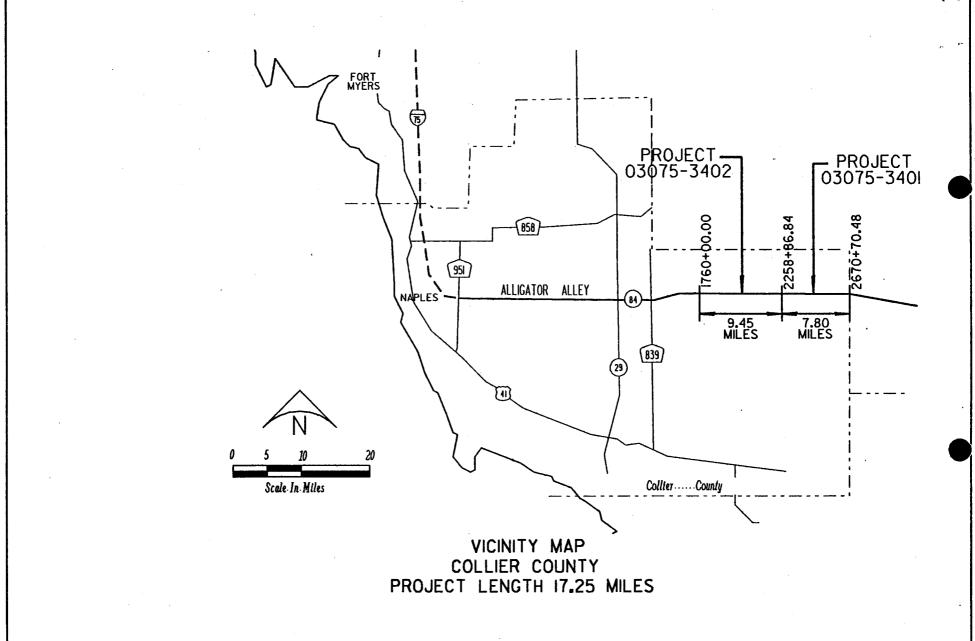
Board Approval

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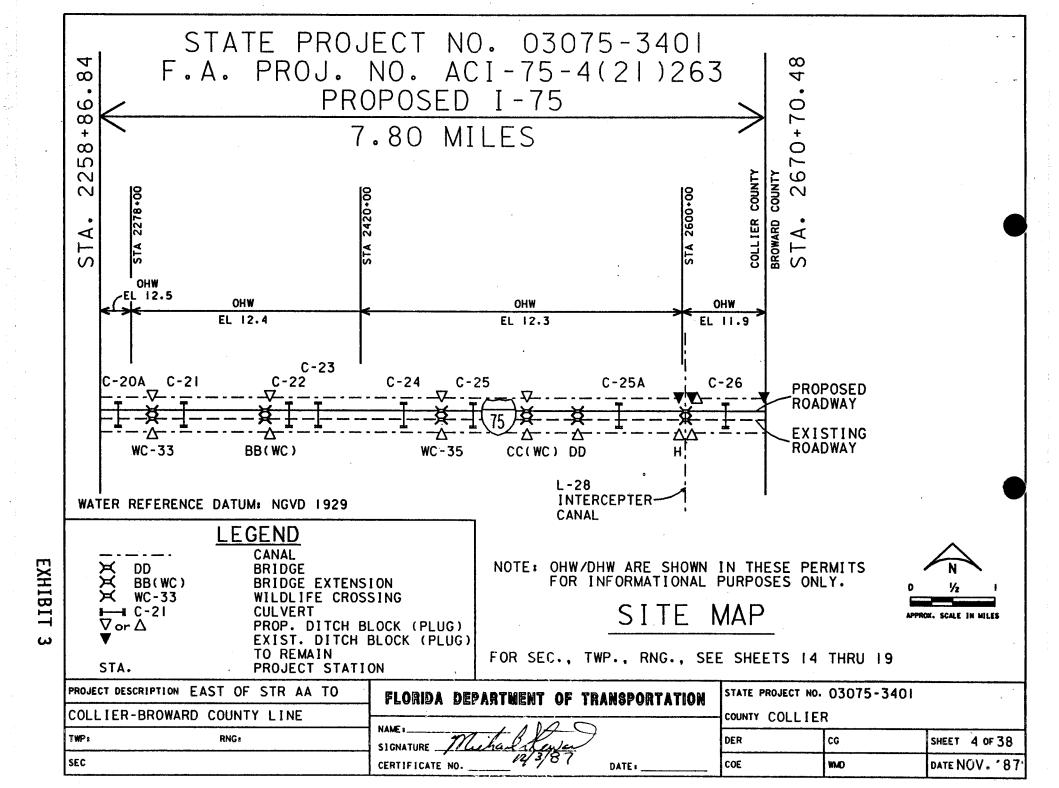
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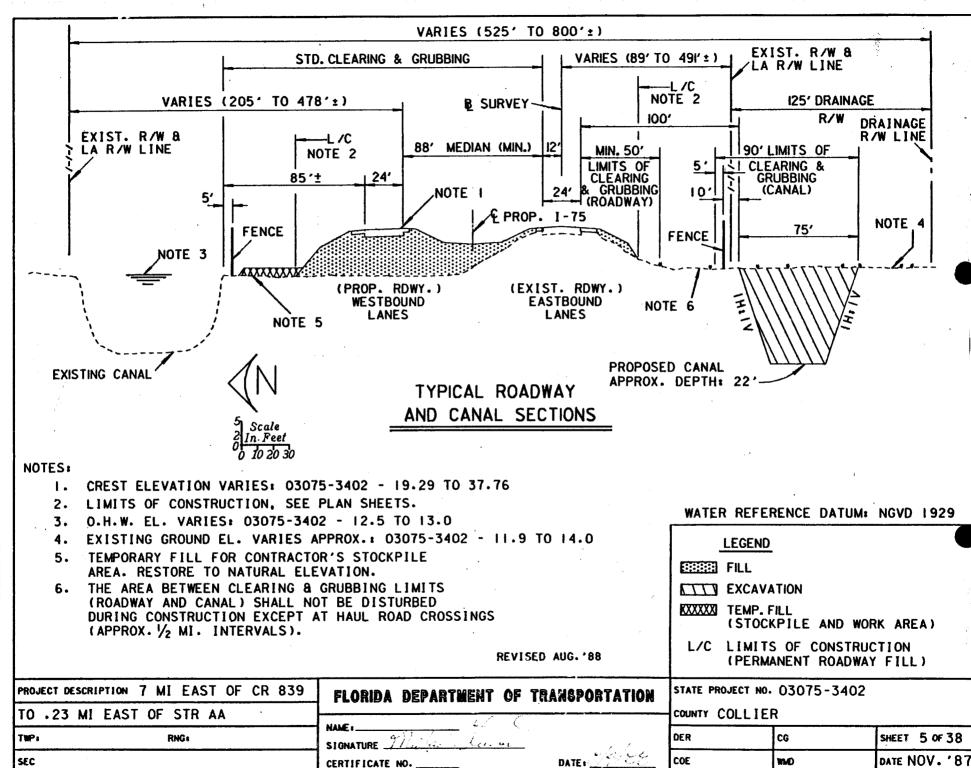
PROJECT DESCRIPTION 7 MI EAST OF CR 839	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3402 8	k 03075-3401
TO COLLIER-BROWARD COUNTY LINE.	101-7	COUNTY COLLIER		
TWP: RNG:	SIGNATURE Missae of Current	DER	cG	SHEET 2 OF 38
SEC	CERTIFICATE NO DATE:	COE	WMD	DATE NOV. 187

STATE PROJECT NO. 03075-3402

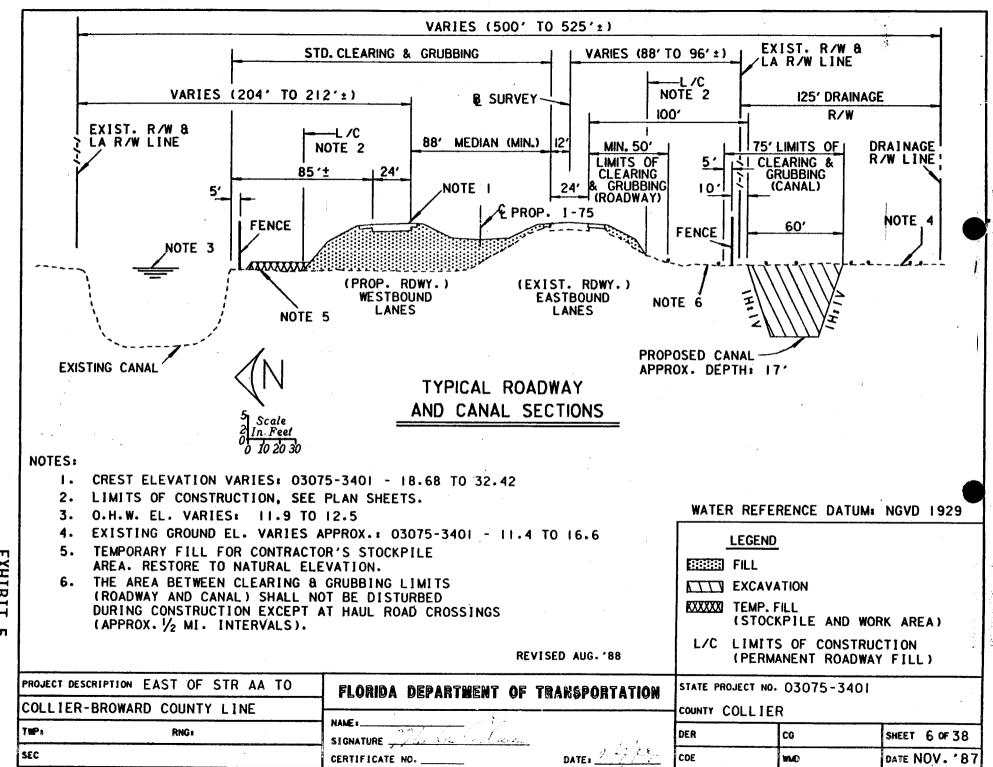












WILDLIFE CROSSING NO. 23

SEC. LINE ->

(102)

SEC. 32

EXHIBIT S

SCANNED

SEC. 33

C-14 EXTEND 10' X 5' BOX

CULVERT & CONST. MEDIAN INLET

EXHIBIT

SEC. LINE

SEC. 34

SEC. 35

EXHIBIT 8

SEC. 36

CULVERT & CONST. MEDIAN INLET

C-17 EXTEND 10' X 5' BOX

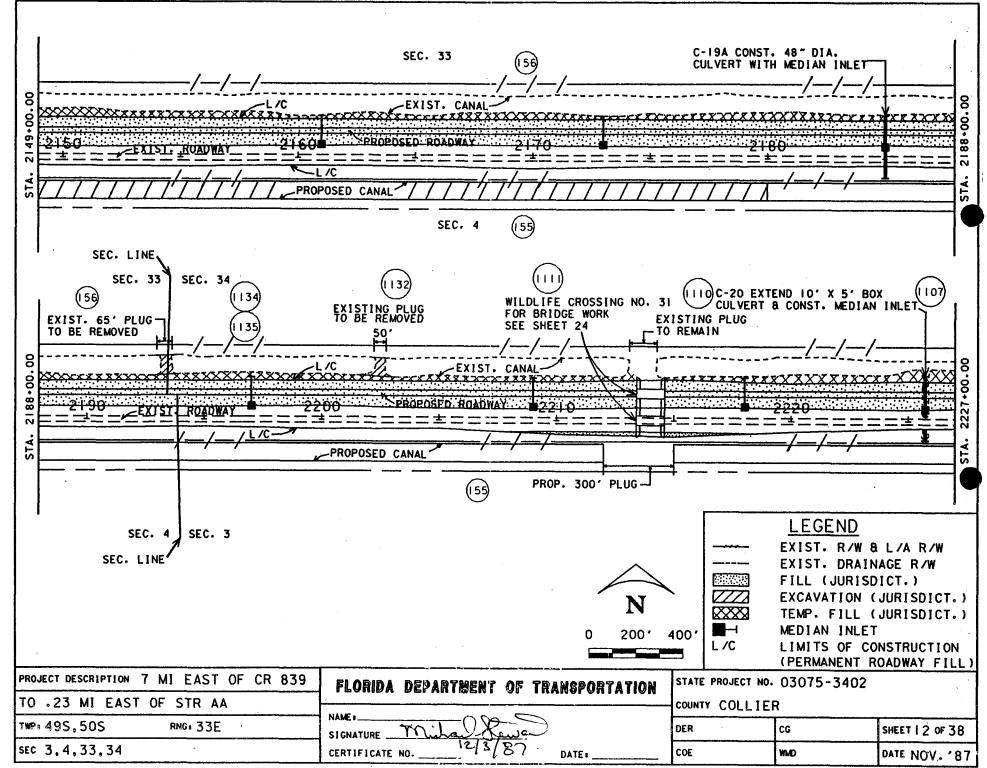
**STRUCTURE** 

FOR FUTURE

REST AREA

(REST AREA

(155)

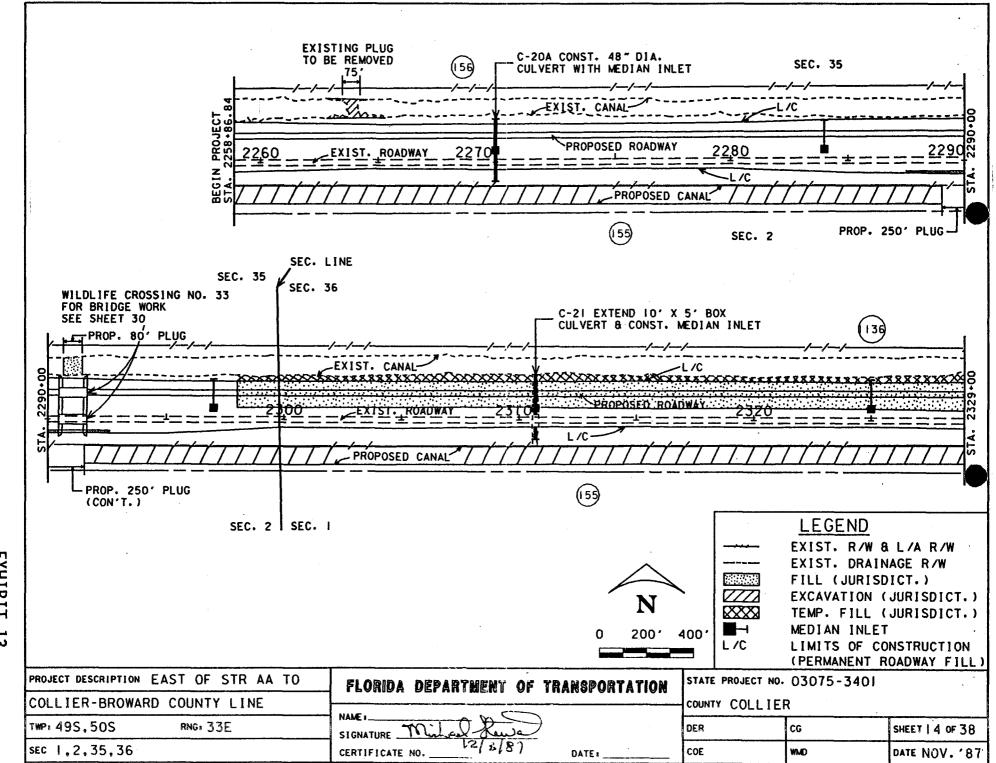


SEC. LINE -->

SEC. 34

SEC. 35

EXHIBIT



PROPOSED CANAL (55) PROP. 100' PLUG (156)RNG. 33E RNG. 34E SEC. I SEC. 6 SEC. LINE 1SEC. 32 SEC. 31 C-22 EXTEND 10' X 5' BOX C-23 EXTEND 10' X 5' BOX CULVERT & CONST. MEDIAN INLET (156) CULVERT & CONST. MEDIAN INLET EXIST. CANAL-SEC. 6 SEC. 5 LEGEND EXIST. R/W & L/A R/W EXIST. DRAINAGE R/W FILL (JURISDICT.) **EXCAVATION (JURISDICT.)** XXX TEMP. FILL (JURISDICT.) MEDIAN INLET LIMITS OF CONSTRUCTION (PERMANENT ROADWAY FILL: STATE PROJECT NO. 03075-3401 COUNTY COLLIER RNG: 33E.34E TWP: 495.50S DER CG SHEET | 5 OF 38 SIGNATURE \_\_ SEC 1,5,6,31,32,36 COE WMD DATE NOV. '87 CERTIFICATE NO. DATE:

RNG. 8 SEC. LINE -

**SEC. 36** 

SEC. 31

50'

EXISTING PLUG

TO BE REMOVED

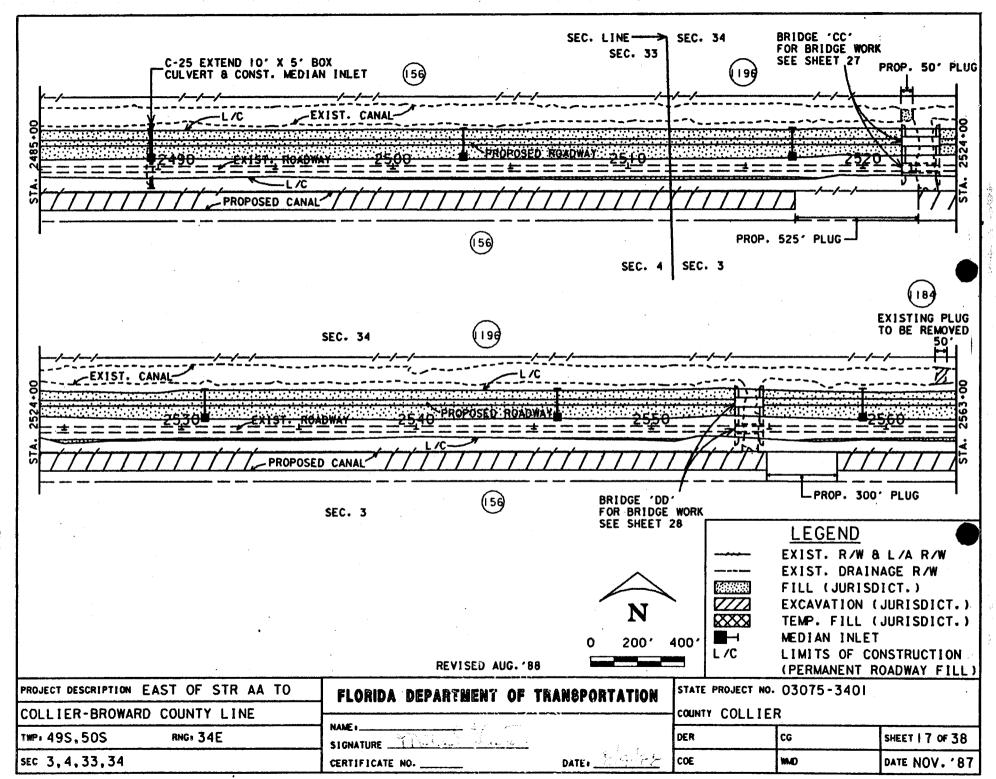
(156)

PROP. 50' PLUG

BRIDGE 'BB'

SEE SHEET 26

FOR BRIDGE WORK



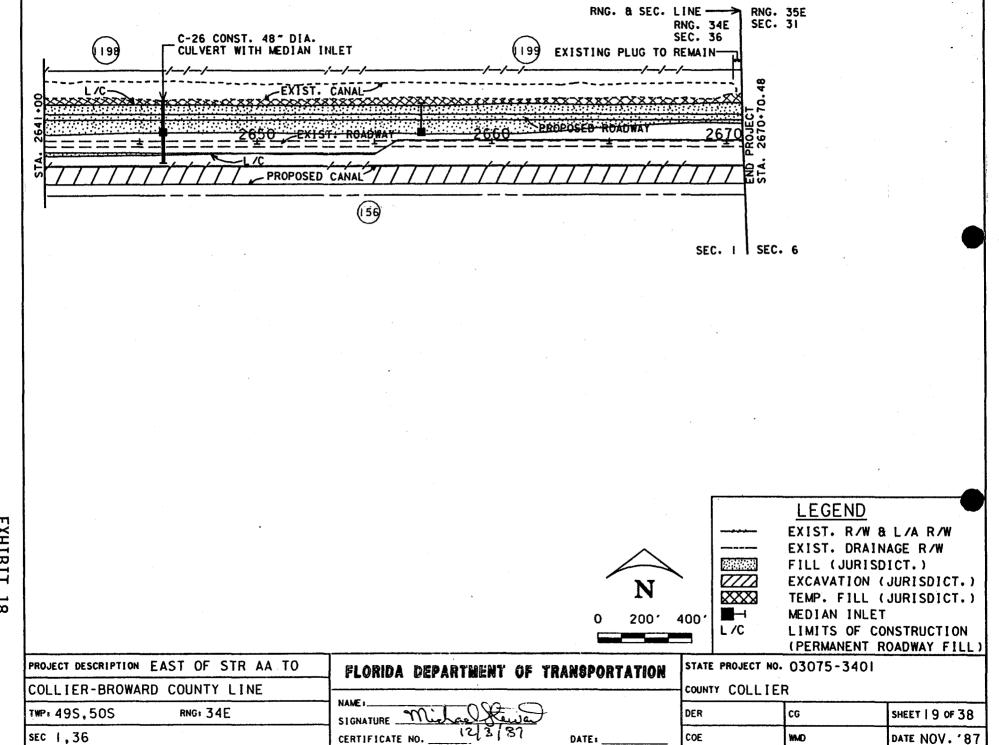
**EXHIBIT** 

SEC. 34 ←

(184

- SEC. LINE

SEC. 35



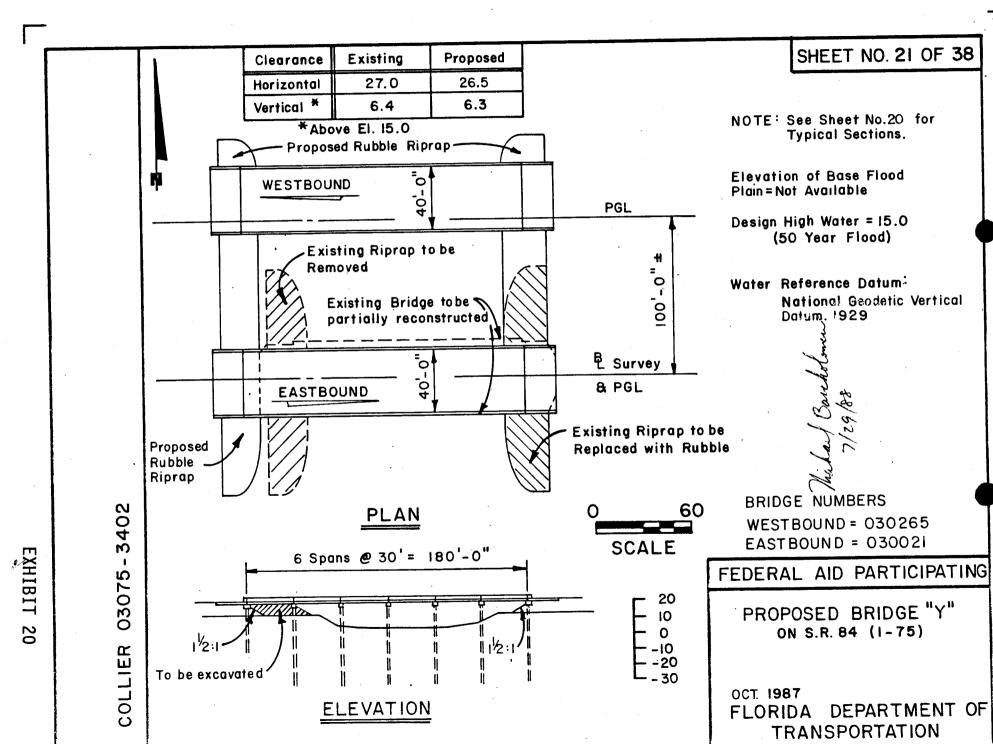


EXHIBIT 21

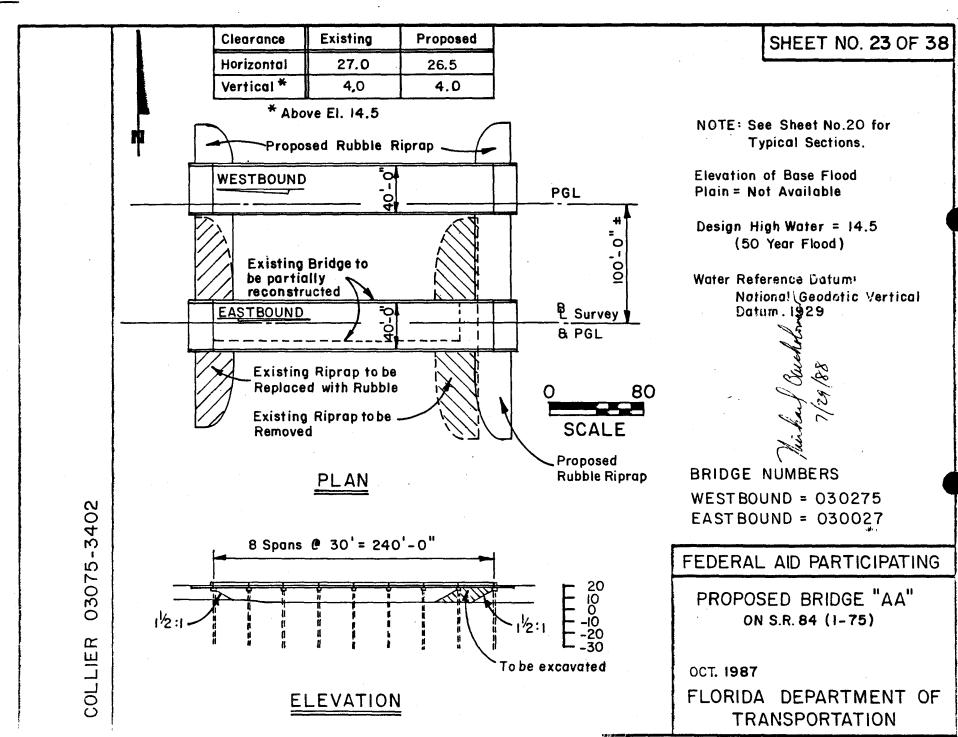


EXHIBIT 22

NOTE: See Sheet No.20 for Typical Section.

WILDLI	FE CROSSING	NUMBERS
W.L. NO.	WESTBOUND	EASTBOUND
23	030256	030257
24	030258	030259
25	030260	030261
26	030262	030263
28	030268	030269
29	030270	030271
31	030273	030274

FEDERAL AID PARTICIPATION

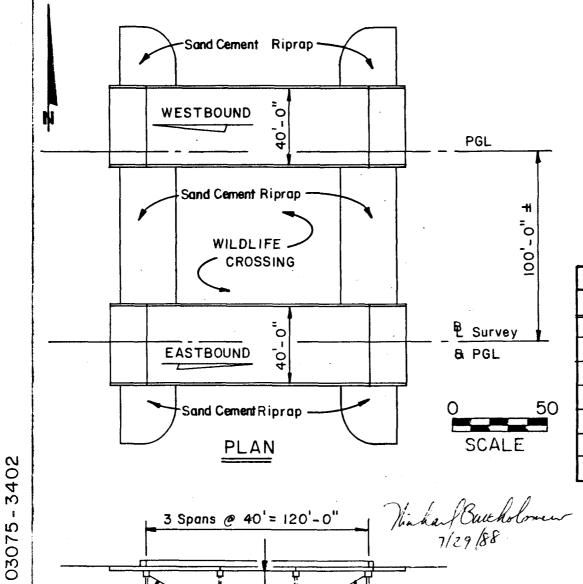
PROPOSED WILDLIFE CROSSING 23, 24,25,26,28,29,31

OCT. 1987

Proposed Vertical Clearance = 8 Above

Natural Ground.

FLORIDA DEPARTMENT OF TRANSPORTATION



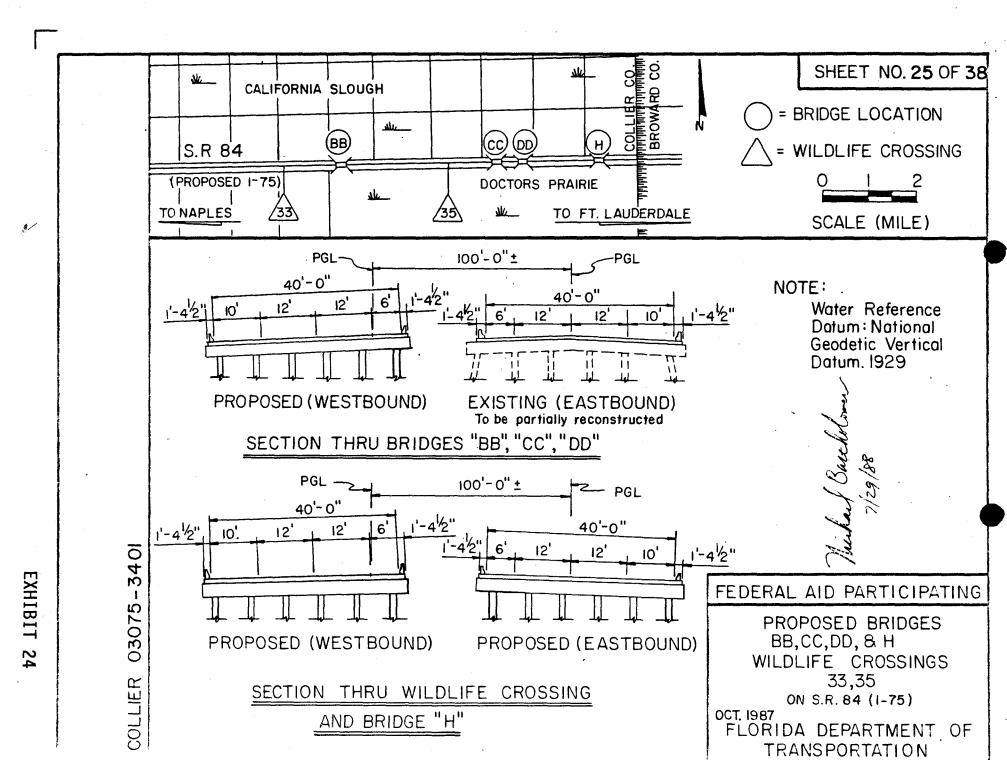
1/2:1

**ELEVATION** 

1/2:1

EXHIBIT 23

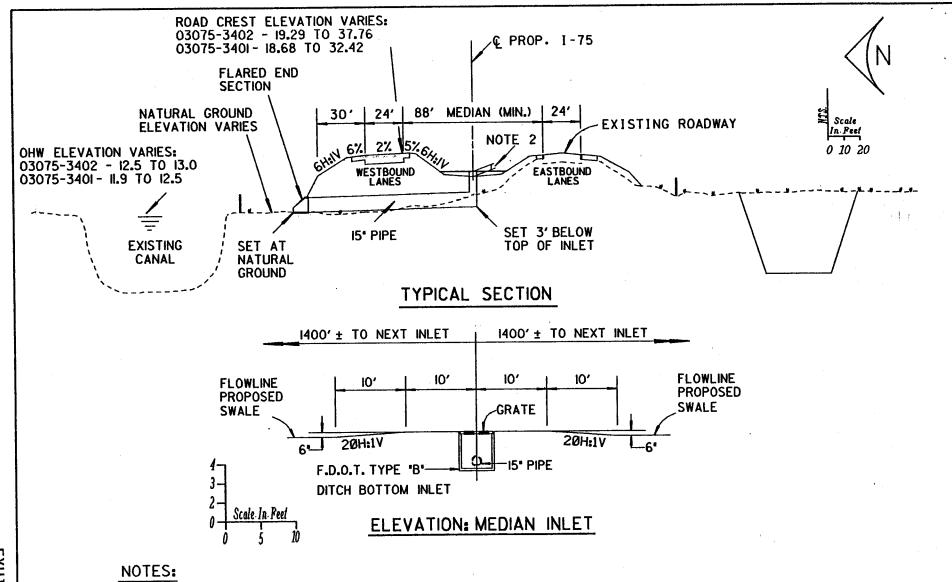
COLLIER



 $\checkmark$ 

EXHIBIT 26

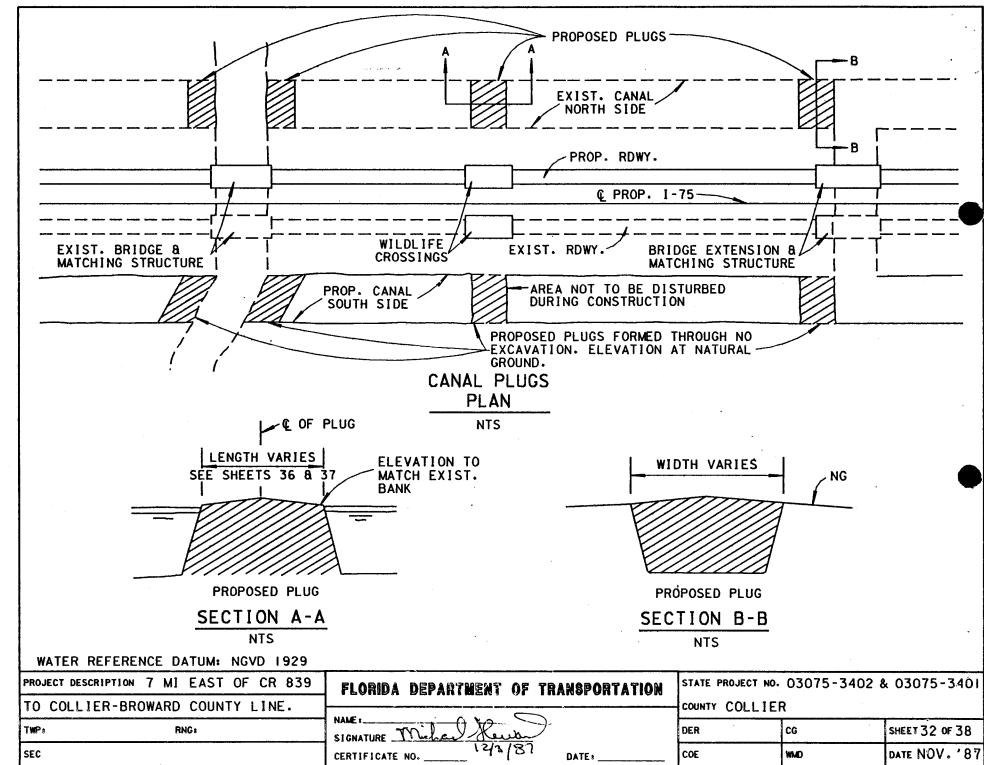
EXHIBIT 28



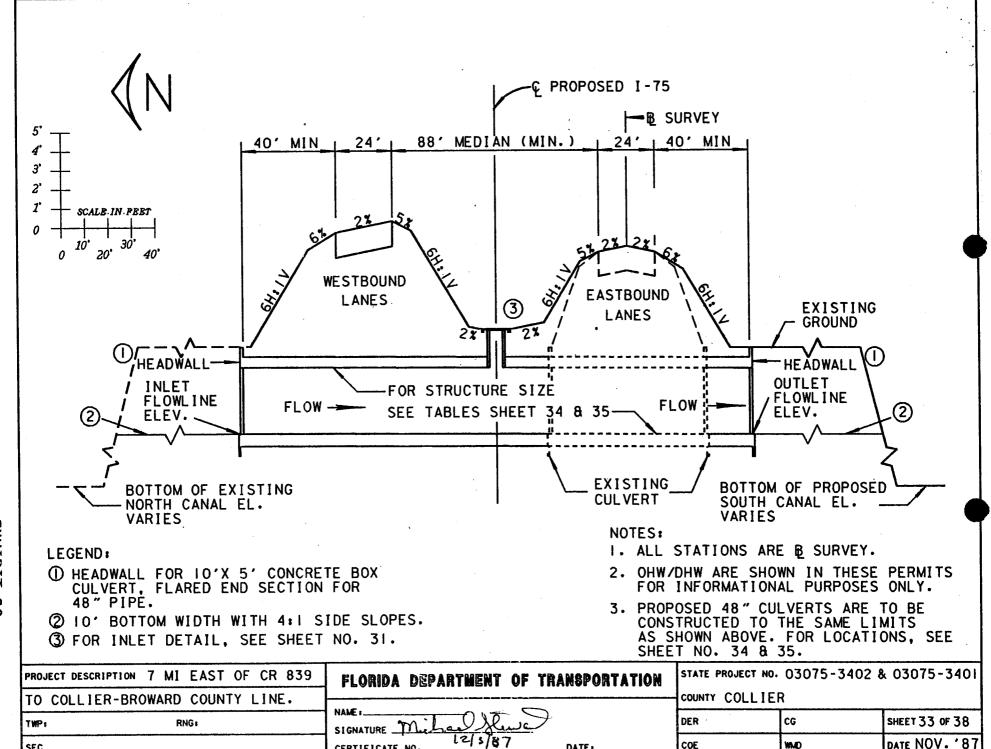
I. THE NUMBER OF MEDIAN INLETS IN THIS SECTION IS BASED ON AN INLET SPACING OF 1400 FEET C. TO C.

2. DITCH BOTTOM ELEVATION VARIES. TOP OF INLET SET 6" ABOVE DITCH BOTTOM.

PROJECT DESCRIPTION 7 MI EAST OF CR 839	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3402 8	03075-3401
TO COLLIER-BROWARD COUNTY LINE.		COUNTY COLLIER		
TWP: RNG:	SIGNATURE MUCH CONTROL	DER	cc	SHEET 3   OF 38
SEC	73/3/22	COE	WND	DATE NOV. 187



SEC



DATE:

CERTIFICATE NO.

## TABULATION OF CULVERTS

STRUCT.	PROJECT STATION	SIZE	DESCRIPTION	INLET FL EL.	OUTLET FL EL.	ОНW	DHW	
	03075-3402							
C-12	1768+40	10'X 5'	EXTENDED	9.5	9.2	13.0	15.0	
C-13	1819+40	10'X 5'	EXTENDED	9.7	9.4	13.0	15.0	
C-14	1857+50	10'X 5'	EXTENDED	. 9.6	9.3	13.0	15.0	
C-15	1891+40	10'X 5'	EXTENDED	9.5	9.2	13.0	15.0	
C-16	1932+40	10'X 5'	EXTENDED	10.5	10.2	13.0	15.0	
C-16A	1960+00	48 "	PROPOSED	8.5	8.1	13.0	15.0	
C-17	2007+70	10'X 5'	EXTENDED	8.8	8.6	13.0	15.0	
C-18	2047+70	10'X 5'	EXTENDED	9.4	9.1	13.0	15.0	
C-19	2098+65	10'X 5'	EXTENDED	10.3	10.0	12.9	14.9	
C-19A	2185+00	48 "	PROPOSED	8.4	8.0	12.9	14.9	
C-20	2225+70	10'X 5'	EXTENDED	9.1	8.8	12.5	14.5	

PROJECT DESCRIPTION 7 MI EAST OF CR 839	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3402	•
TO .23 MI EAST OF STR AA		COUNTY COLLIE	R	
TWPs RNGs	SIGNATURE MILLS TIME	DER	cG	SHEET 34 OF 38
SEC	CERTIFICATE NO. 12/3/87 DATE:	COE	WMD	DATE NOV. '87

# TABULATION OF CULVERTS

STRUCT.	PROJECT STATION	SIZE	DESCRIPTION	INLET FL EL.	OUTLET FL EL.	ОН₩	DHW
03075-3401							
C-20A	2270+00	48"	PROPOSED	8.1	7.7	12.5	14.5
C-21	2310+70	10'X 5'	EXTENDED	8.9	8.6	12.4	14.4
C-22	2375+70	10'X 5'	EXTENDED	8.8	8.5	12.4	14.4
C-23	2393+70	10'X 5'	EXTENDED	8.8	8.5	12.4	14.4
C-24	2446+70	10'X 5'	EXTENDED	8.9	8.6	12.3	14.3
C-25	2489+70	10'X 5'	EXTENDED	8.8	8.5	12.3	14.3
C-25A	2580+00	48"	PROPOSED	7.8	7.4	12.3	14.3
C-26	2646+00	48"	PROPOSED	7.9	7.5	11.9	13.9

PROJECT DESCRIPTION EAST OF STR AA TO	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3401	
COLLIER-BROWARD COUNTY LINE		COUNTY COLLIE	R	
TWP: RNG:	SIGNATURE Milal Rente	DER	CG ·	SHEET 35 OF 38
SEC	CERTIFICATE NO. 12/3/87 DATE:	COE	WWD	DATE NOV. 187

T	ABULATIC	N OF DITCH	BLOCK	S (PLU	JGS)	
PROJECT NO.	STATION	LOCATION/ MILE POST	LENGTH (FT.)	APPROX. TOP ELEV.	DHW	/ OHW
03075-3402	3/7/1011	MILL 1031	(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	101 2221		
03015-3402						
	1771+00	NORTH / 33.5	80	13.6	15.0	/ 13.0
	1830+00	NORTH / 34.7	80	12.8		/ 13.0
	1838+50 <sup>⊕</sup>	SOUTH / 34.9	3700	13.4		/ 13.0
	1902+00	NORTH / 36.0	80	12.7		/ 13.0
	1904+25 <sup>©</sup>	SOUTH / 36.0	550	13.1		/ 13.0
	1934+00	NORTH / 36.6	80	, 14.6	15.0	/ 13.0
	1934+45 <sup>©</sup>	SOUTH / 36.6	310	12.9	15.0	/ 13.0
	1984+15 <sup>©</sup>	SOUTH / 37.6	125	13.4	15.0	/ 13.0
	1984+25	NORTH / 37.6	50	13.9	15.0	/ 13.0
,	2012+95 <sup>Φ</sup>	SOUTH / 38.1	5410	13.4	15.0	/ 13.0
	2027+50	NORTH / 38.4	500	13.4	15.0	/ 13.0
	2068+25 <sup>Φ</sup>	SOUTH / 39.2	550	12.7	14.9	/ 12.9
0	2069+00	NORTH / 39.2	80	13.7		/ 12.9
DITCH BLOCK	2104+50 Φ	SOUTH / 39.8	700	12.2	14.9	/ 12.9
CONSTRUCTED	2106+00	NORTH / 39.9	80	13.0	14.9	/ 12.9
THROUGH NO	2131+55	NORTH / 40.4	50	13.1	14.9	1 12.9
EXCAVATION	2131+80 <sup>©</sup>	SOUTH / 40.4	100	13.7	14.9	/ 12.9
2	2213+50 <sup>©</sup>	SOUTH / 41.9	300	13.4	14.9	/ 12.9
EXIST. PLUG	2213+70 <sup>©</sup>	NORTH / 41.9	120	12.0	14.9	/ 12.9
	2247+70	NORTH / 42.6	50	14.7	14.5	/ 12.5
	2248+45 <sup>©</sup>	SOUTH / 42.6	200	12.9	14.5	/ 12.5
				WATED DEE	ERENCE DATUM	L NOVO LO
NOTES:					- <del> </del>	
AT & DITCH	<del></del>	' 2. NORTH/SOUTH DES LOCATION RELATI ROADWAYS.	VE TO	OHW/DHW ARE PERMITS FOR PURPOSES ON	INFORMAT	
PROJECT DESCRIPTION 7	MI EAST OF CR 839	FLORIDA DEPARTMENT OF	MOITATEGERMAET	STATE PROJECT NO.	<del></del>	,
TO .23 MI EAST O	F STR AA	i Palliau api Wil Mariai Ai	THE SALES OF THE SALES	COUNTY COLLIE	R	
TWP a	RMGs	SIGNATURE	_	DER	CG	SHEET 36 OF 3
SEC .		CERTIFICATE NO.	DATE: 2 11 12	COE	<b>MO</b>	DATE NOV.

TA	BULATI	ON OF	DITCH	BLOCK	(S (PLUC	SS)	
PROJECT NO.	STATION		TION/ POST	LENGTH (FT.)	APPROX. TOP ELEV.	DHW /	OHW
03075-3401 ①	2290+25	NORTH NORTH SOUTH NORTH NORTH SOUTH SOUTH NORTH NORTH NORTH	/ 43.4 / 43.4 / 44.7 / 44.7 / 46.8 / 46.8 / 47.8 / 47.8 / 47.8 / 49.6 / 49.6 / 49.6 / 49.7 / 49.7 / 49.7 / 50.6	250 80 50 100 300 80 50 525 300 160 150 285 380 170 50	12.2 13.2 12.3 13.3 12.2 13.8 12.1 12.3 11.0 12.5 16.7 14.1 16.6 12.8	14.4 / 14.4 / 14.4 / 14.3 / 14.3 / 14.3 / 14.3 / 13.9 / 13.9 / 13.9 / 13.9 / 13.9 /	12.4 12.4 12.3 12.3 12.3 12.3 11.9 11.9
DITCH BLOCK CONSTRUCTED THROUGH NO EXCAVATION  ② EXIST. PLUG		2.	ALL STATIONS AT & DITCH BE NORTH/SOUTH E LOCATION RELA ROADWAYS. OHW/DHW ARE S PERMITS FOR	LOCK. T DESIGNATES ATIVE TO SHOWN IN THI	ESE		•
③ PLUG TO BE LO STA. 2625+80 OF EXISTING P STA. 2623+60.	IS EXTENSION LUG AT		PURPOSES ONL'		· · · · · · · · · · · · · · · · · · ·	NCE DATUM: N	GVD 1929

PROJECT DESCRIPTION EAST OF STR AA TO STATE PROJECT NO. 03075-3401 FLORIDA DEPARTMENT OF TRANSPORTATION COLLIER-BROWARD COUNTY LINE COUNTY COLLIER SIGNATURE TIL TWP DER RNG: CG SHEET 37 OF 38 SEC COE DATE NOV. 187 CERTIFICATE NO. WAD

INVOLVEMENT		PERMAI	TEMPORARY			
	EXCAVATION		FILL		FILL	
	AREA	VOLUME	AREA	VOLUME	ARE A	I VOLUME
03075-3402 JURISDICTIONAL WETLANDS	52.8	1,324,785	127.7	933,427	30.0	NC
03075-3401 JURISDICTIONAL WETLANDS	54.2	1,064,787	106.5	614,646	22.5	NC
TOTAL JURISDICTIONAL WETLANDS	107.0	12,389,572	234.2	1,548,073	52.5	NC NC

NOTES: AREA IN ACRES; VOLUME IN CUBIC YARDS

\*TEMPORARY FILL AREA IS WITHIN EXISTING RIGHT OF WAY AND WILL BE USED BY THE CONTRACTOR DURING CONSTRUCTION FOR STOCKPILING MATERIAL.

IT WILL BE RESTORED TO NATURAL ELEVATION UPON COMPLETION OF CONSTRUCTION.

NC - NOT COMPUTED BECAUSE IT WILL BE REMOVED.

REVISED AUG. '88

PROJECT DESCRIPTION 7 MI EAST OF CR 839	FLORIDA DEPARTMENT OF TR	MOITATROGRAM	STATE PROJECT NO.	03075 - 3402 8	03075-3401
TO COLLIER-BROWARD COUNTY LINE.			COUNTY COLLIER		
TWPs RNGs	NAME: SIGNATURE		DER	СС	SHEET 38, OF 38
SEC	CERTIFICATE NO.	DATE:	COE	WMD	DATE NOV. 187

#### STAFF REPORT DISTRIBUTION LIST

#### PROJECT I-75/Alligator Alley

#### APPLICATION NUMBER 04148-B

### INTERNAL DISTRIBUTION

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X S. Lamb

J. Mang

X C. McCray

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P. Walker

J. Wodraska

X E. Yaun

X File

X Field Representative

X Area Engineer

X Enforcement

X Office of Counsel

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X Mr. Oscar M. Corbin

Mr. James F. Garner

Mr. Doran A. Jason

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Mr. Nathaniel P. Reed

Ms. Nancy H. Roen

Mr. Fritz Stein

Mr. Mike Stout

Mr. J.D. York

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**REGULATION:** 

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West Palm Beach

### **EXTERNAL DISTRIBUTION CONTINUED**

X Applicant:

Florida Department of Transportation

Applicant's Consultant:

Applicant's Agent:

X Engineer, County of:

Collier

Engineer, City of:

Local Drainage District:

### **BUILDING AND ZONING**

Boca Raton

Boynton Beach

Royal Palm Beach

Tequesta

West Palm Beach

#### COUNTY

Broward -Director, Water Mgmt. Div.

X Collier -Agricultural Agent

Dade - DERM

Lee -Long Range Planning

-Mosquito Control

-E.P.S.

Martin -Attorney

-Board of County Commissioners

-Community Development Director

Palm Beach -Building Dept.

-School Brd., Plant Planning

Polk -Water Resources Dept.

#### **OTHER**

X Fred Vidzes, Big Cypress Basin Kissimmee River Coordinating Council

X COE-Jacksonville

X Department of Natural Resources

X Florida Audubon Society

X Florida Game & Fresh Water Fish Commission

X National Park Service

X U.S. Fish & Wildlife Service

EXHIBIT 38



# South Porida

John R. Wodraska, Executive Director Tilford C. Creel, Deputy Executive Director

## Water Management District

Post Office Box 24680 3301 Gun Club Road West Palm Beach, Florida 33416-4680 Telephone (407) 686-8800 Florida WATS Line 1-800-432-2045

Post Office Box 8325 3504 Radio Road Naples, Florida 33941 Telephone (813) 643-1585

October 3, 1988

Mr. Jose S. Garcia Post Office Box 789

Fort Myers, Florida 33902

Dear Mr. Garcia:

Subject: Permit No. 11-00396-S, I-75/SR 84

Alligator Alley

Collier County, S-/T50S/R26 thru 30E

The proposed animal crossing changes, as discussed in our meeting on September 27, 1988, will require a permit modification from the South Florida Water Management District.

Additional information will be required to obtain a permit modification. Please provide the following information:

- A cover letter describing the proposed change and why it is necessary.
- A project location map showing the locations of the animal crossings.
- A drawing depicting the animal crossings (plan and crosssectional view).

This submittal should be made to the attention of Mr. Ed Yaun, Supervising Professional, Surface Water Management Division in our West Palm Beach Office. If you have any questions, do not hesitate to call.

Sincerely,

Margaret A. Kincaid

Regulatory Professional - Naples

Field Engineering Division

Margaret a. Kineard

cc: DER - Fort Myers

COE - Fort Myers

bcc: A. Castro/J. Urquhart/E. Yaun/Insp

Nancy H. Roen Chairman - Plantation

Plantation Vice Chairman - Palm City

J.D. York

Nathaniel P. Reed Hobe Sound Oscar M. Corbin, Jr. Ft. Myers

Arsenio Milian Miami Fritz Stein Belle Glade James F. Garner Ft. Myers

Mike Stout Windermere Doran A. Jason Key Biscayne BOB MARTINEZ
GOVERNOR

Post Office Box 789 Fort Myers, Florida 33902 (813) 995-5403 September 26, 1988

RECEIVED SEP 2 8 1988

SECRETARY

Southwest Florida Water Management District Post Office Box 8325 Naples, Florida 33941

Attention: Margaret Kincaid

Re: Alligator Alley

W.P.I. Nos: 4141408 & 4141414 State Job Nos: 03175-3405 & 03175-3407

F.A.P. Nos: ACI-75-4(93)93 & ACI-75-4(91)80

County: Collier

Dear Ms. Kincaid:

As per our phone discussion, find attached a cross-section of the required animal accesses into the south canal at Alligator Alley. The section shows a twenty-four (24) foot opening that will allow permanent flow in the canals.

The method of installation required this extended ramp on the north side in order to allow the installation at the south side of the canal. Twenty-four feet is the canal required minimum section.

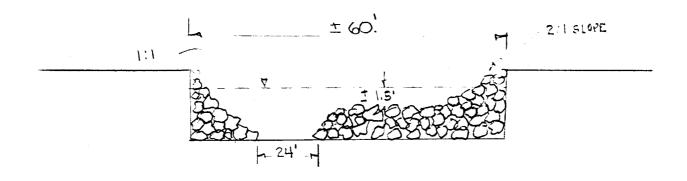
We would like to know if it meets with your approval before we instruct the contractor to proceed.

Jose S. Garcia, P. E. Ass't. Resident Engineer

JSG:1f

Attachment

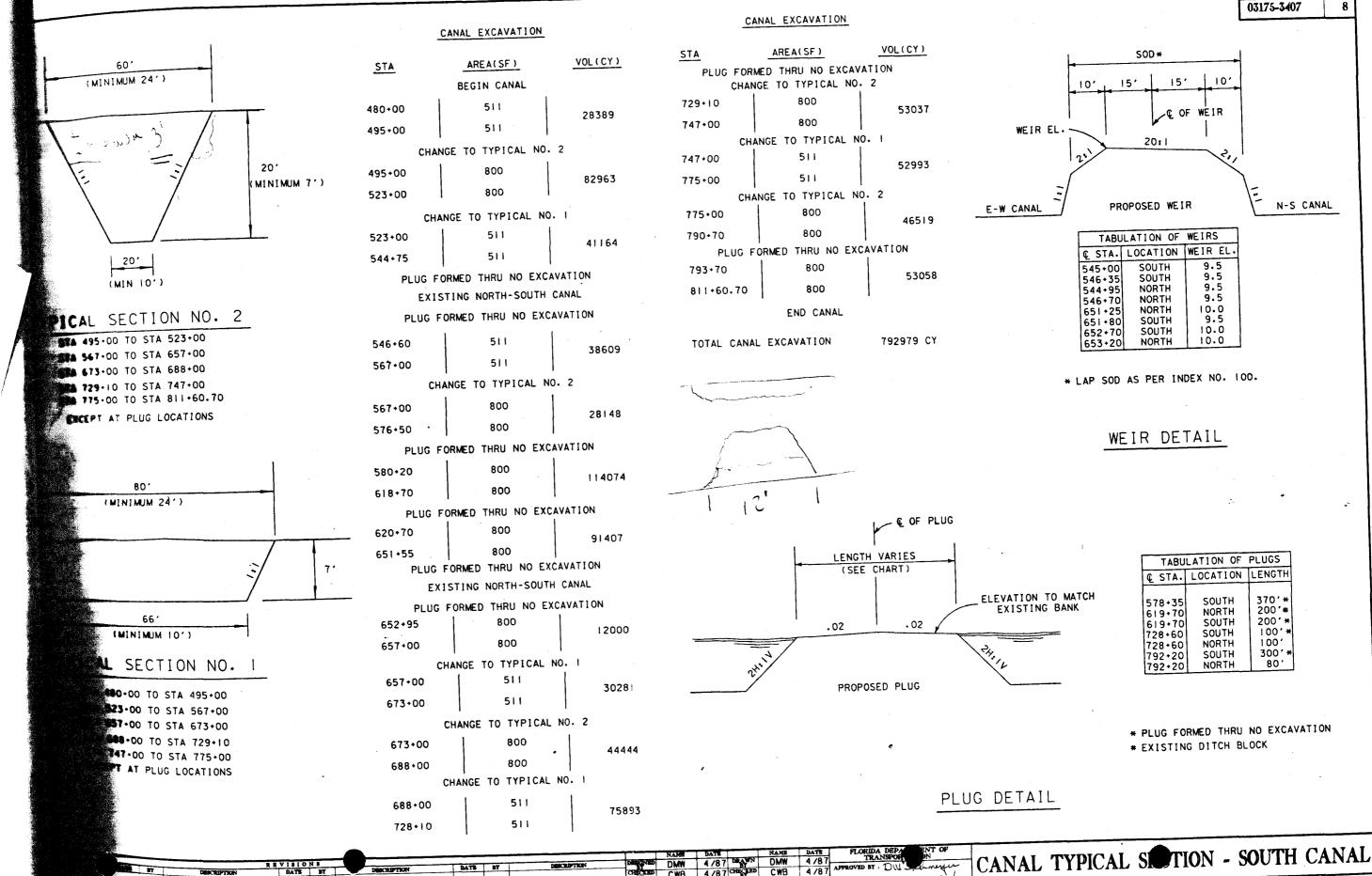
cc: T. M. Rosseter
C. L. Carner
Raymond Ashe
Ray Ann Boyland, DER Fort Myers
Herb Moon
C. J. Deese
File



FLORIDA DEPARTMENT OF TRANSPORTATION

CHOSSECTION OF CANAL ANIMAL ACCESS

STATE JOB NOS: 03175-3405 & 03175-3407



SUPERVISED BY : JWC

SCANNED

STATE PROJ. NO. SHEET NO.



TOM GARDNER

Executive Director

# State of Florida DEPARTMENT OF NATURAL RESOURCES

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399 BOB MARTINEZ Governor

JIM SMITH Secretary of State

BOR BUTTERWORTH Attorney General

> GERALD LEWIS State Comptroller

BILL GUNTER State Treasurer

DOYLE CONNER Commissioner of Agriculture'

BETTY CASTOR
Commissioner of Education

PLEASE ADDRESS REPLY TO:

September 16, 1988

03115 3405

3406

n 3407

Mr. Carson Carner Resident Engineer

P.O. Box 789 Ft. Myers, FL. 33902

Dear Mr. Carmer:

In reference to our telephone conversation of September 14, 1988 concerning the (8) eight feet minimum clearance requirement under the wildlife crossings constructed on the portion of I-75 within Collier County.

I have reviewed the approved construction plans being used by the contractors and find that the (8) eight feet minimum clearance requirement stipulated in the DER permit was not intergated into the plans. The only way to achieve the eight feet clearance at this point would be to dig out the area under each crossing, there by creating an unsatisfactory condition of standing water at these locations.

I have discussed this situation with my DNR chain of command and we feel that a standing water situation would be detrimental to any wildlife using the crossings. Therefore, we are requesting that the natural grade elevation as indicated on the approved constructed plans be used at these locations.

If I can provide any additional assistance please contact me at Fakahatchee Strand State Preserve.

Sincerely,

Buff Wiley, Park Manager

Fakahatchee Strand State Preserve

cc: Robert Dye, District Manager



# South Florida

## Water Management District

Post Office Box 24680 3301 Gun Club Road West Palm Beach, Florida 33416-4680 Telephone (407) 686-8800 Florida WATS Line 1-800-432-2045

IN REPLY REFER TO:

Application Number: 04148-B Permit (Mod.) No. 11-00396-S Resource Control Department

September 14, 1988

Raymond A. Ashe, Jr. Florida Department of Transportation 605 Suwannee Street, Mail Station 37 Tallahassee, FL 32399-0450

Dear Applicant:

Subject: I-75/Alligator Alley, Collier County, S---/T50S/R32-34E

Pursuant to Rule 40E-1.603, Florida Administrative Code, this is to advise you that the requested additional information regarding the above referenced application received August 22, 1988 was sufficient to constitute a complete application.

District staff recommendations will be presented to the Governing Board of this District at a regularly scheduled meeting not later than November 4, 1988. A copy of the staff report with the staff recommendations for approval or denial will be provided to you upon completion and in advance of presentation to the Governing Board.

Should you have any questions in this matter please feel free to contact this office.

Sincerely,

Edward W. Yaun

Supervising Professional

Surface Water Management Division

EWY/mc

cc: DER

Collier County Engineer

Mr. Oscar Corbin

bcc: M.Clemente/B.Colevecchio/Field Rep/Area Engineer/Enforcement/J.Morgan

Nancy H. Roen Chairman - Plantation J.D. York Vice Chairman - Palm City

Nathaniel P. Reed Hobe Sound

Oscar M. Corbin, Jr. Ft. Myers

Arsenio Milian

Fritz Stein Belle Glade James F. Garner Ft, Myers Mike Stout Windermere Doran A. Jason Key Biscayne

#### MEMORANDUM

TO: Maria Clemente

FROM: Rae Ann Boylan Ross

DATE: September 12, 1988

SUBJECT: 04148-B, SR 84 to Interstate 75

Collier County, --/T50S/R32E-34E

Environmental Comments

The application includes the construction and operation of water management facilities to serve 17.25 miles of improvements to Interstate 75 in eastern Collier County. The improvements include the construction of two additional traffic lanes. The works include installation of numerous canal plugs and additional culverts to promote sheetflow to the south. A borrow / distributor canal will be constructed along portions of the southern side of the highway. The improvements also include the construction of nine new wildlife crossings and five bridge extensions which will also serve as wildlife crossings.

The project as proposed will impact 341.2 acres of wetlands. additional 52.5 acres will be temporarily disturbed during actual construction. The wetlands to be impacted include cypress and mixed hardwood swamp, marshes and wet prairies. Some of these wetlands had been previously disturbed during the original highway construction. In order to minimize potential adverse impacts, the following items and modifications have been incorporated into the project design. The installation of additional culvert openings will promote and enhance sheetflow to The construction of additional wildlife crossings will provide a greater degree of protection to the Florida panther. Additional activities associated with the project, but not directly related to the actual construction, include negotiating the purchase of over 30,000 acres of lands adjacent to the project to be placed in FDNR ownership. This purchase is part of a larger aquisition program through which over 100,000 acres will be purchased and set aside for conservation purposes.

In review of the project proposal, District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project.

RAB/rab

cc: S. Bradow/ E. Yaun/ M. Kincaid/ K. Dryden

CEIVED MAY 2 7 1988

ORIDA
BOB MARTINEZ
GOVERNOR

# DEPARTMENT OF TRANSPORTATION

605 Suwannee Street, Tallahassee, Florida 32399-0450, Telephone (904) 488-8541

SECRETARY

May 19, 1988

RECEIVED

Mr. Edward W. Yaun, P.E. Surface Water Management Division South Florida Water Management Division 3301 Gun Club Road West Palm Beach, Florida 33402-9958

MAY 2 4 1988

RESOURCE CONTROL DEPARTMENT

Dear Mr. Yaun:

Re: SFWMD application No. 04148-B, State Projects 03075-3402 and 3401, Work Program Items 1142185 and 1142190, I-75/ Alligator Alley from 12 miles east of SR 29 to the Broward County line, Collier County, Florida

The following information is submitted in response to your May 13, 1988 request for additional information. The numbered items correspond to the items in that request.

- 1. This project is not within an OFW. This project is located to the east of the Big Cypress National Preserve. A map of the Preserve is attached with the project boundary noted.
- 2. The total acreage for the project corridor is approximately 1100 acres. Within this area, approximately 46 acres is presently impervious. The proposed construction will add approximately 83 acres, for a total impervious area of 129 acres.
- 3. The median will provide treatment for one of the existing lanes, runoff from the remaining lanes will flow across grassed areas and into the closed canal system.
- 4. The same type of treatment for stormwater will be provided for this 12 mile project as was provided for the 32 miles of project to the west and 25 miles of project to the east that have been permitted and are under construction. This provides for all stormwater to flow across grassed areas and into the closed canal system and then sheetflow across the adjacent lands during periods of high water.
- 5. The flow patterns existing are not "natural", but are a result of the openings that were constructed when the original SR 84/Alligator Alley was constructed. As described in General Note 4 in the permit application, the southern canal will serve to reestablish the flow that existed prior to the SR 84 construction. All the canal banks and canal blocks or plugs will be left at a natural ground elevation.

Additional bridges and culverts are being constructed. Therefore, no flows are being intercepted and the current flow patterns, which discharge at isolated points, are being enhanced by allowing for a uniform flow pattern.

- 6. The Department of Environmental Regulation (DER) will conduct a biological review of this project as they review the permit application. The Department is not routinely copied in on this report, however, a copy can be obtained from Ms. Trudy Bell, DER, Tallahassee when it is available.
- 7. Eliminating the canal sections that were identified will result in increasing the size of the remaining canal. These sections of canal will provide approximately 314,000 cubic yards of material or 13 per cent of the fill required. To eliminate this 2 miles of canal, the remaining canal section will have to be widened by an additional 5 to 10 feet. The Department is in the process of obtaining soil boring data to determine the type of material that exists in the area of this canal. We will further evaluate the feasibility of eliminating these canal sections when we have reviewed the soil data.
- 8. The land purchase is progressing at a steady rate. A total of 100,000 acres are being acquired. All acquisitions are scheduled to be completed by June 1989.

This information should allow you to continue with your review and processing of this application. We will inform you of our decision to eliminate sections of the canal through the larger forested wetland systems as soon as we review the soil data.

If you need any additional information or clarification, please call me at 904/487-2780.

Sincerely,

Raymond A. Ashe Jr.

Transportation Specialist

Permits

Attachment

cc: Jim Wilt
Jim Cunningham

Bill Laufman





## Water Management District

Post Office Box 24680 3301 Gun Club Road West Palm Beach, Florida 33416-4680 Telephone (407) 686-8800 Florida WATS Line 1-800-432-2045

IN REPLY REFER TO:

Application No. 04148-B
Resource Control Department

June 23, 1988

Raymond A. Ashe, Jr.
Florida Department of Transportation
605 Suwannee Street Mail Station 37
Tallahassee, FL 32399-0450

Dear Mr. Ashe:

Subject: I-75/Alligator Alley from 12 miles east of SR 29 to the Broward

County Line, Collier County S1-6 & 31-36/T50S/R32-34E

The data you submitted on May 24, 1988 has been reviewed. The information received was incomplete and did not adequately address the following items. According to Rule 40E-40, Florida Administrative Code (FAC), review of this project cannot be completed without this information.

Please provide a copy of the results of the soil boring data and the results of your evaluation of the feasibility of the elimination of the southern borrow/distributor canal. Please be advised that additional comments may be forthcoming following a review of this material, when submitted.

In accordance with 40E-1.603(5) FAC, if the information is not received within 30 days of this date, to render the application complete, the application may be processed for denial if not withdrawn by the applicant. Please submit FOUR copies of the information.

Should you have any questions, please call Maria Clemente (ext. 88-404), of this office. Also, please direct any response to the above comment to Ms. Clemente.

Sincerely,

Edward W. Yaun, P.E. Supervising Professional

EWY/mc

cc: Collier County Engineer

DER

bcc: M.Clemente/B.Colevecchio/R.Boylan/Area Engineer/Field Representative/

Nancy H. Roen Chairman - Plantation J.D. York Vice Chairman - Palm City



John R. Wodraska, Executive Director
Tilford C. Creel, Deputy Executive Director



# Water Management District

Post Office Box 24680 3301 Gun Club Road West Palm Beach, Florida 33416-4680 Telephone (407) 686-8800 Florida WATS Line 1-800-432-2045

IN REPLY REFER TO:

Application No. 04148-B Resource Control Department

May 13, 1988

Raymond A. Ashe, Jr.
Florida Department of Transportation
605 Suwannee Street Mail Station 37
Tallahassee. FL 32399-0450

Dear Mr. Ashe:

Subject: I-75/Alligator Alley from 12 miles east of \$R 29 to the Broward County Line, Collier County \$1-6 & 31-36/T50S/R32-34E

The staff has completed a preliminary review of the above. According to Rule 40E-40, Florida Administrative Code (FAC), the following items must be addressed before our review can continue.

- 1. It appears that this project discharges to an Outstanding Florida Water (OFW). Please be advised that all projects discharging to an OFW are required to provide dry pretreatment. Please address.
- 2. Please provide the total acreage figure for this project, including pervious and impervious area for both the existing and proposed project area.
- 3. It appears that water quality is being provided in the median. How will runoff from the roadway be directed toward the median?
- 4. Please provide water quality calculations for this project which include the volume of water quality being provided for both the proposed and existing roadway.
- 5. Please document how the natural flow patterns entering and exiting under the roadway will be impacted as a result of the excavation of the southern borrow/distribution canal. Staff is concerned that flows will be intercepted and patterns will be disturbed.
- 6. The information submitted indicates a more detailed review of existing vegetation type was being prepared. Please submit a copy of this report, once completed for staff's review.

Nancy H. Roen Chairman - Plantation J.D. York Vice Chairman - Palm City Raymond A. Ashe, Jr. May 13, 1988
Page 2

- 7. It appears a majority of the wetland impacts will result from excavation of the southern borrow / distributor canal. In order to minimize impacts staff recommends elimination of the canal and extension of the proposed natural grade plugs through the larger forested wetland systems. Such areas include but are not limited to Stations 1810 1840, 1851 1862, 1884 1907, 2045 2055, 2100 2107, 2140 2155 and 2517 2527.
- 8. The information indicates the purchase of approximately 30,000 acres of lands adjacent to the site is currently being negotiated. What is the status of this land acquisition?

In accordance with 40E-1.603(5) FAC, if the information is not received within 90 days of this date, the application may be processed for denial if not withdrawn by the applicant. Please submit FOUR copies of the information.

Should you have any questions, please call Maria Clemente (extension 88404) of this office. For questions concerning environmental issues, please contact Rae Ann Boylan of our Ft. Myers office at (813)332-0399.

Sincerely,

Edward W. Yaun, P.E.

Supervising Professional

Surface Water Management Division

EWY/mc

cc: DER

Collier County Engineer

bcc: M.Clemente/Inspection/B.Colevecchio/F.Vidzes/Ft.Myers

#### MEMORANDUM

TO:

Maria Clemente

FROM:

Rae Ann Boylan NOW

DATE:

May 11, 1988

SUBJECT:

04148-B, SR-84 to Interstate 75 Collier County, S--/T50S/R32-34E

Environmental Review (Flight 4/28/88)

The project as proposed includes the construction 17.25 miles of interstate highway improvements. The improvements include two additional traffic lanes. The works include the installation of numerous canal plugs and additional culverts to promote sheetflow to the south. A borrow / distributor canal will be constructed along the southern side of highway. The improvements also include construction of nine new wildlife crossings and five bridge extensions will also serve as wildlife crossings.

The project as proposed will impact 342.7 acres of wetlands. An additional 52.5 acres of wetlands will be temporarily disturbed during actual construction. The wetlands to be impacted include cypress and mixed hardwood swamp, marshes and wet prairies.

Prior to completion of an environmental review the following information is requested:

- 1. The information submitted indicates a more detailed review of existing vegetation type was being prepared. Please submit a copy of this report, once completed for staff's review.
- 2. It appears a majority of the wetland impacts will result from excavation of the southern borrow / distributor canal. In order to minimize impacts staff recommends elimination of the canal and extension of the proposed natural grade plugs through the larger forested wetland systems. Such areas include but are not limited to Stations 1810 1840, 1851-1862, 1884 1907, 2045 2055, 2100 2107, 2140 2155 and 2517 2527.
- 3. The information indicates the purchase of approximately 30,000 acres of lands adjacent to the site is currently being negotiated. What is the status of this land acquisition?

RAB/jr

cc: S. Bradow/E. Yaun/M. Kincaid/K. Dryden

#### MEMORANDUM

TO:

Marie Zwicker

FROM:

Rae Ann Boylan Caco

DATE:

May 9, 1988

SUBJECT: 04158-F, Shaarda & Company Collier County, S8/T51S/R27E

Environmental Review (Flight 4/28/88)

The project site includes improved agricultural lands used for vegetable production. The site is bordered on the north and west by farm lands. An undeveloped tract of land, primarily cypress forest, is located east of the site.

The application includes the withdrawal of supplemental irrigation water from the lower Tamiami aquifer. Adverse environmental impacts are not anticipated as a result of the proposed allocation.

RAB/jr

cc: S. Bradow

M. Kincaid





John R. Wodraska, Executive Director Tilford C. Creel, Deputy Executive Cirector



IN REPLY REFER TO:

## Water Management District

Post Office Box 24680 3301 Gun Club Road West Palm Beach, Florida 33416-4680 Telephone (305) 686-8800 Florida WATS Line 1-800-432-2045

DIS CYPRESS BASIN SO. FLA. WATER MANAGEMENT DISTRIET

P. O. BGX 8325 NAPLES, FL 33941

RECEIVED SEP 3 0 1987

September 25, 1987

Elnes

Mr. Raymond A. Ashe, Jr. Florida Department of Transportation 605 Suwannee Street, Mail Station 37 Tallahassee, Florida 32399-0450

Our Application No. 08267-B

Resource Control Department

Dear Mr. Ashe:

Subject: Permit (MOD) No. 11-00396-S, I-75/SR 84 From SR 29 West 11.93 Miles, Collier County, S--/T49-50S/R30-32E

The staff has completed a preliminary review of the above. According to Rule 40E-4, Florida Administrative Code (FAC), the following items must be addressed before our review can continue.

- 1. Please provide an additional set of aerial photographs with the project superimposed on it for the West Palm Beach office. The set which was supplied originally was sent to the Fort Myers office for the environmental review.
- From review of the plans, it appears that water quality may only be provided 2. for 12' of the existing roadway. Water quality criteria must be met for the new pavement. Please address this issue.
- 3. Please provide soil borings to confirm that no confining layers will be breached by the proposed canal excavation which may adversely affect the wetland community.
- Please describe the plans for the intersection of the proposed project at SR 4. 29 and at CR 839 (Turner River Road).
- How were the culvert dimensions determined? 5.
- The application states 23 bridges, yet Staff could only locate 11 bridges on 6. the plans. Please clarify.
- 7. Please supply plans depicting the structures (culverts, bridges, ditch blocks, etc.) presently existing.

Nancy H. Roen Chairman - Plantation J.D. York Vice Chairman - Palm City I-75/SR 84 From SR 29 West 11.93 Miles September 25, 1987 Page 2

- 8. Does the proposed relocated SR 29 canal have sufficient capacity to convey the runoff presently being routed through the existing canal? Please provide calculation and cross section of the existing and proposed canals to verify this. Please document that downstream property will not be adversely impacted by rerouting the canal or increasing drainage.
- 9. Will velocities through the culverts be erosive? If so, what method of dissipating energy will be utilized?
- 10. Comments from the District's Resource Planning Staff are not available at this time. Please be advised that additional comments may be forthcoming.

The following questions pertain to the environmental review of the project. Questions should be directed to Rae Ann Boylan of the Fort Myers office, (813) 332-0399.

- 11. The plans indicate 147 acres of wetlands will be impacted. Since wetland impacts are involved please provide details of a mitigation or compensation proposal to off-set the potential adverse environmental impacts.
- 12. Please provide a typical cross-section of the proposed canal to be excavated to replace that portion of the S.R. 29 canal which will be filled.
- 13. Will any improvements be made to the existing S.R. 29 canal south of where the new canal will tie back into the system?
- 14. Pursuant to staff's conversation with Raymond Ashe (Florida D.O.T.) it was indicated Bridge T will be replaced with a box culvert and control structure. If details of this proposed modification are available please submit a copy to the District.
- 15. Please provide additional information which indicates how the locations of the northern canal plugs were selected.
- 16. The original set of aerials submitted with the application did not contain Sheet 48 of 91. Please submit this sheet.

I-75/SR 84 From SR 29 West 11.93 Miles September 25, 1987 Page 3

In accordance with 40E-1.603(5) FAC, if the information is not received within 30 days of this date, the application may be processed for denial if not withdrawn by the applicant. Please submit FOUR copies of the information. Should you have any questions, please call.

Sincerely,

Jennifer K. Barone, E.I. Water Management Engineer 2

Cay

JKB/jkb

cc: Mr. Oscar Corbin

Mr. James Garner Mr. Fred Fagergren

DER

Collier County Engineer

bcc: Inspection, Ryan, Daron, Fort Myers, Boylan, Vidzes, Milleson

# South Florida Water Management District



# SURFACE WATER MANAGEMENT PERMIT NO. 11-00396-5

(NON-ASSIGNABLE)

		DATE ISSUED: April 9, 1987
AUTHORIZING:	20.0 MILES OF 4-LANE INTERSTATE	
LOCATED IN:	COLLIER COUNTY, SECTION	TWP 50SRGE 26 THRU 30E
save the South Florida V	Nater Management District and its successors harmless fro	164 16-B and 08116-F) 19 86. Permittee agrees to hold and one and and all damages, claims, or liabilities which may
arise by reason of the co	onstruction, operation, maintenance, or use of any work of specifications attached thereto, as addressed by the staff	report, is by reference made a part hereof.
	oked or modified at anytime pursuant to the appropriate	
complying with any law Permittee hereunder sha Within thirty (30) days	y, regulation, or requirement affecting the rights of other all remain the property of the Permittee.	than those specified herein, nor relieve the Permittee from bodies or agencies. All structures and works installed by structure relative to this permit, the Permittee shall file with by the Board.
	ITIONS ARE AS FOLLOWS:	
SEE SHEET 2 AF	73 - 9 PROJECT SPECIAL CONDITIONS 3 - 12 LIMITING CONDITIONS.	S.
	Post 6-9-87	POSTED  QUADRANGLES 3,4,8,24  ITEM NUMBER 8,56,6,  DATE 5-21-87  SIGNED KRUPILIU
FLORIDA WATER ON <u>5-18-87</u> BY	RE CLERK OF THE SOUTH R MANAGEMENT DISTRICT Original signed by: Vern Kaiser PUTY CLERK	SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD  Original Signed By Shomas & Huser  By Assistant Secretary

SHEET 1 OF 3

#### SPECIAL CONDITIONS

- 1. WITHIN NINE MONTHS FROM THE DATE OF PERMIT ISSUANCE, THE PERMITTEE SHALL COMPLETE A DRAINAGE STUDY TO DETERMINE THE APPROPRIATE WEIR CREST ELEVATIONS FOR ALL PROPOSED WEIR STRUCTURES. THE STUDY SHALL BE PRESENTED TO BOTH THE DISTRICT AND COLLIER COUNTY STAFF FOR REVIEW AND APPROVAL.
- 2. THE PERMITTEE IS RESPONSIBLE FOR ITS CONTRACTOR'S MAINTENANCE OF HISTORIC DRAINAGE DURING CONSTRUCTION.
- 3. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 4. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
- 5. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 6. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
- 7. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.
- 8. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.
- 9. LAKE SIDE SLOPES SHALL BE 6:1 (HORIZONTAL: VERTICAL) AS SHOWN ON EXHIBIT 4H. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.

#### **LIMITING CONDITIONS**

- 1. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
- 2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
- 3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.
- 4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.
- 5. ALL ROADS SHALL BE SET AT OR ABOVE ELEVATIONS REQUIRED BY THE APPLICABLE LOCAL GOVERNMENT FLOOD CRITERIA.
- 6. ALL BUILDING FLOORS SHALL BE SET AT OR ABOVE ELEVATIONS ACCEPTABLE TO THE APPLICABLE LOCAL GOVERNMENT.
- 7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.
- 8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE DISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION, THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.
- 9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
- 10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.
- 11. THIS PERMIT IS ISSIJED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
- 12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL. INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.

SPECIAL CONDITIONS

Jap

- 1. WITHIN NINE MONTHS FROM THE DATE OF PERMIT ISSUANCE, THE PERMITTEE SHALL COMPLETE A DRAINAGE STUDY TO DETERMINE THE APPROPRIATE WEIR CREST ELEVATIONS FOR ALL PROPOSED WEIR STRUCTURES. THE STUDY SHALL BE PRESENTED TO BOTH THE DISTRICT AND COLLIER COUNTY STAFF FOR REVIEW AND APPROVAL.
- 2. THE PERMITTEE IS RESPONSIBLE FOR ITS CONTRACTOR'S MAINTENANCE OF HISTORIC DRAINAGE DURING CONSTRUCTION.
- 3. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 4. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
- 5. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 6. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
- 7. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF GOLLIER COUNTY WITHIN THE PLATTED SUBDIVISION OF GOLDEN-CATE ESTATES AND THE FLORIDA DEPARTMENT OF TRANSPORTATION. ELSEWHERE:
- 8. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.
- 9. LAKE SIDE SLOPES SHALL BE 6:1 (HORIZONTAL: VERTICAL) AS SHOWN ON EXHIBIT 4H. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.

Wern-Condition 7 revised at Hoverning Board Meeting on 4-9-87.

cc: Dyan

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LAST DATE FOR GOVERNING BOARD ACTION: April 14, 1988

DRAFT
Subject to Governing
Board Approval

---- Application No. 08267-B-

Modification No. 11-00396-S

I-75, ALLIGATOR ALLEY...

Collier County, S5/T49&50S/R30E to S6/T49&50S/R32E

STAFF REPORT

#### **ABSTRACT**

This application is a request to modify the construct and operate permit for I-75/Alligator Alley (permit # 11-00396-S) to include and an additional 12.4 miles of interstate highway and associated drainage facilities from SR 29 (Station 1105+00.00) east to Station 1760+00.00 (see Exhibit 1). Staff recommendation is for approval.

#### THE APPLICATION

- A. Existing Facilities: Existing is a 2-lane highway, Alligator Alley (SR 84), with an adjacent borrow canal located on the north side of the roadway alignment with 14-15" diameter median inlets which direct runoff into the north borrow canal, 3-10' by 5' box culverts which provide flow under the existing 2-lane roadway, 1 plug (to be removed) in the north borrow canal located approximately at station 1247 and 2 bridges located approximately at stations 1130 (to be replaced) and 1247 (refer to Exhibits 2F 2I).
- B. Proposed Facilities: Expansion of the 2-lane roadway to a 4-lane interstate highway number 75. The 3 existing 10' by 5' box culverts are to be extended south to spreader swales with 8 additional 48" diameter culverts, 1 additional double 9' by 8.5' box culvert and 3 additional 10' by 5' box culverts (see Exhibit 2U) to improve flow through capabilities from the north to the south. The existing plug in the north borrow canal is to be removed and replaced with 13 plugs (see Exhibits 2B and 2C for location and Exhibit 2V for dimensions). Four bridges, U, V, W and X, are proposed for this section of the roadway (see Exhibits 2N and 2Q-2S).

Relocation of the State Route 29 roadside canal is also proposed in this application. The canal requires relocation to allow for a future interchange between I-75 and State Route 29.

#### **EVALUATION**

The plug and bridge locations throughout the project have been chosen to correspond with recommendations in the Greiner Engineering Study compiled for the Florida Department of Transportation (FDOT). The design intent of the study was to re-establish sheetflow to the extensive wetland areas south of Alligator Alley which had been previously disrupted by the original roadway construction (Alligator Alley/SR 84). It appears that the proposed roadway modification will be consistent with the above intent. Southerly flows will be enhanced through plug, bridge and wildlife crossing placement and hydraulic gradient of the existing and proposed canal. Big Cypress Basin has recommended placing a control structure located at the State Route 29 crossing with the stipulation that the Big Cypress Basin procure responsibility for operation of the structure. Details of the structure are not available at this time (see Special Condition No. 8).

#### ENVIRONMENTAL CONSIDERATIONS

The project as proposed includes the construction of 12.4 miles of interstate highway improvements located east of SR 29 and will transect the Big Cypress National Preserve.

The improvements include two additional traffic lanes. The works include the installation of numerous canal plugs and additional culverts to promote historic sheetflow to the south. The southern borrow/distribution canal has been deleted from this segment of the highway. Smaller spreader swales will be constructed at the culverts to distribute the water. The borrow lake at the southwestern corner of the SR 29 and I-75 will be expanded to provide the necessary fill material. The works also include construction of six new wildlife crossings and three bridge extensions which will also serve as wildlife crossings.

The project as proposed will impact 146.2 acres of wetlands. An additional 49.2 acres of wetlands will be temporarily disturbed during actual construction. The wetlands to be impacted were previously altered during the original alley construction. The wetlands to be impacted are primarily cypress and mixed hardwood swamp and freshwater marshes. In order to minimize potential adverse environmental impacts, the following items and modifications have been incorporated into the project design. The overall project has been designed to promote and re-establish historic sheetflow in the area. Processing is underway to purchase a 640-acre parcel of wetlands adjacent to the highway. These lands will then be preserved under state ownership. A portion of these wetlands (the northern half section) have been impacted by altered drainage and subsequent wildfires. The re-establishment of sheetflow should enhance these wetlands. In order to minimize potential impacts to the Big Cypress National Preserve, the southern distributor canal has been deleted. The borrow lake will be expanded. Also, this segment of highway will include six new wildlife crossings and three bridge extensions. Since automobile accidents represent the cause of significant mortalities of the Florida panther, these wildlife crossings will provide an additional degree of protection for the panther.

Additional activities associated with the project, but not directly related to the actual construction, include combining FDOT right-of-way monies with Department of Interior and Department of Natural Resources' funds to add an additional 128,000 acres of land to the Big Cypress National Preserve. An additional 2,000 acres of land have been purchased at the intersection of I-75 and S.R. 29. A majority of these lands will be set aside for preservation purposes.

In review of the project proposal, District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project.

#### WATER QUALITY

Water quality impacts from this project should be minimal. Raised inlets are provided in the grassed center median area of the roadway and vast wetland areas located south of the proposed spreader waterway system provide nutrient removal. Water quality treatment in excess of the first inch of runoff should be provided by these mechanisms.

#### OPERATION AND MAINTENANCE

The operation and maintenance of the surface water management system shall be the responsibility of Florida Department of Transportation.

#### RECOMMENDATION

The Staff recommends approval of Permit (MOD) No. 11-00396-S subject to the following 12 Standard Limiting Conditions, 9 Special Conditions and 3 Exhibits.

APPLICATION REVIEWER: SUP

SUPERVISOR/CHECKER:

TECHNICAL:

J. Barone

E. Yaun

WATER QUALITY:

J. Barone

D. Watt

**ENVIRONMENTAL:** 

R.A. Bovlan

C. Padera

APPROVED:

DIVISION DIRECTOR:

L

DEPARTMENT DIRECTOR:

Richard A. Rogers, P.E.

Resource Control Department

DATE: 3/24/45

Subject to Governing

Board Approval

AGENDA DESCRIPTION: MODIFICATION OF PERMIT FOR CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM SERVING AN ADDITIONAL SEGMENT, 12.4 MILES, OF 4-LANE INTERSTATE HIGHWAY FROM SR 29 EAST TO STATION 1760+00.00 WHICH DISCHARGES SOUTH TO EXISTING WETLAND AREAS AND THE FAKAHATCHEE STRAND STATE PRESERVE VIA

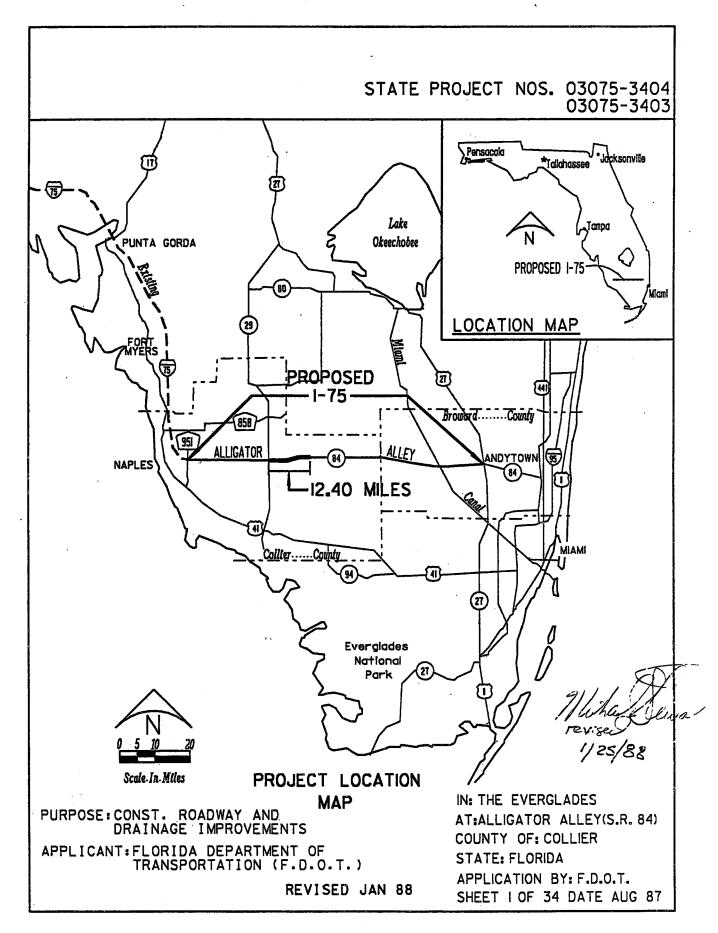
SPREADER SWALES.

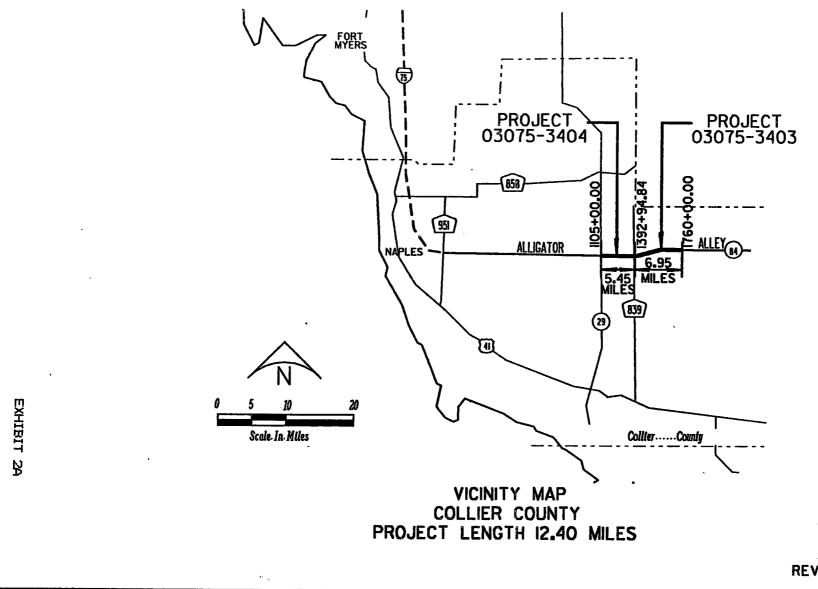
#### LIMITING CONDITIONS

- 1. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH. WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
- 2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
- 3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.
- 4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.
- 5. ALL ROADS SHALL BE SET AT OR ABOVE ELEVATIONS REQUIRED BY THE APPLICABLE LOCAL GOVERNMENT FLOOD CRITERIA.
- 6. ALL BUILDING FLOORS SHALL BE SET AT OR ABOVE ELEVATIONS ACCEPTABLE TO THE APPLICABLE LOCAL GOVERNMENT.
- 7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.
- 8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE DISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION, THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.
- 9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
- 10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES. CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.
- 11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
- 12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL, INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.

### SPECIAL CONDITIONS (FOR THIS PHASE ONLY)

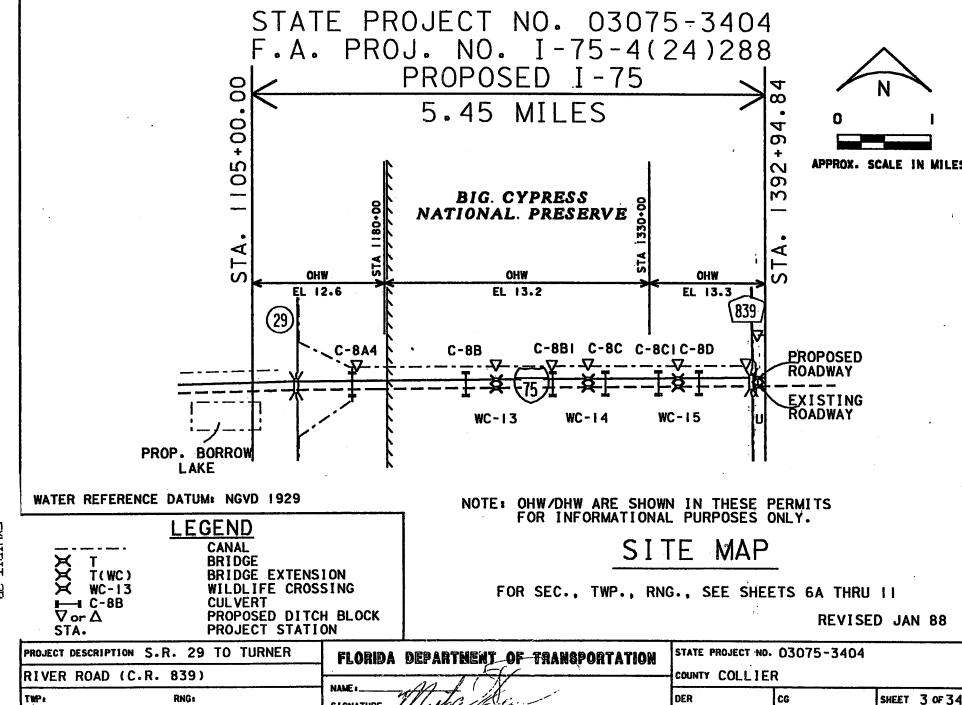
- 1. THE PERMITTEE IS RESPONSIBLE FOR ITS CONTRACTOR'S MAINTENANCE OF HISTORIC DRAINAGE DURING CONSTRUCTION.
- 2. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 3. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS. ARE NOT CREATED IN THE RECEIVING WATER.
- 4. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 5. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
- 6. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.
- 7. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.
- 8. MODIFICATION OF THIS PERMIT IS REQUIRED PRIOR TO INSTALLATION OF THE CONTROL STRUCTURE PROPOSED FOR THE CROSSING AT STATE ROUTE 29 CANAL.
- 9. LAKE SIDE SLOPES SHALL BE 6:1 (HORIZONTAL: VERTICAL) TO A DEPTH OF TWO FEET BELOW THE CONTROL ELEVATION. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.



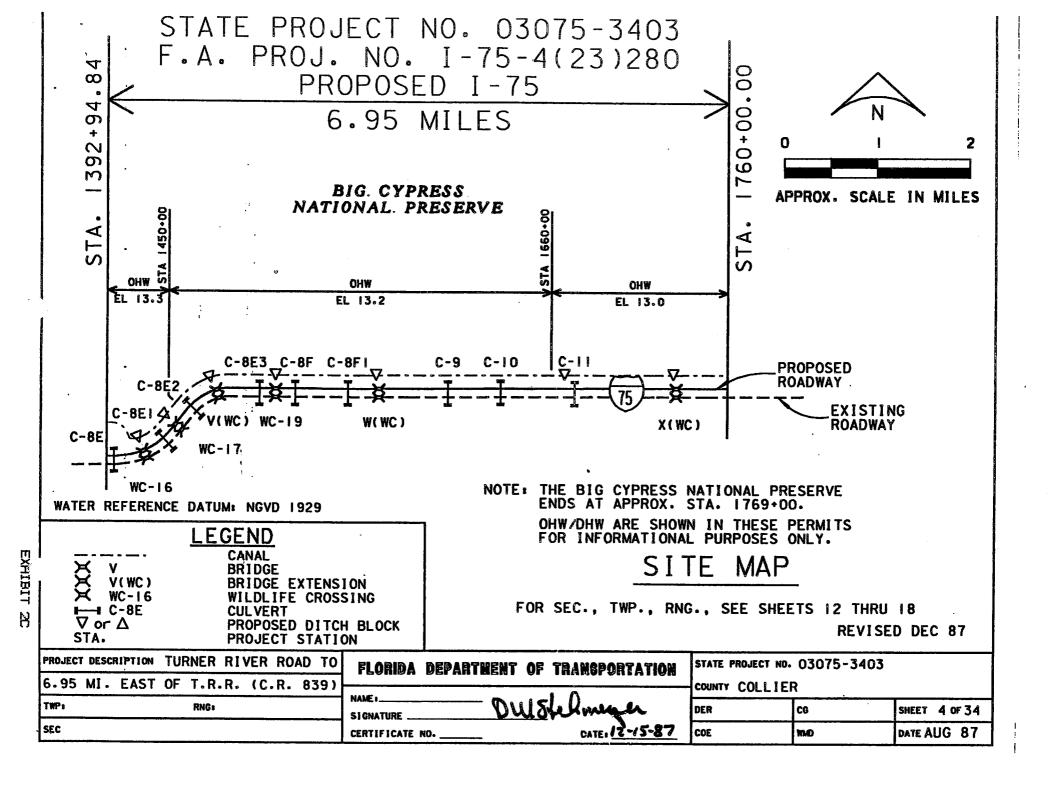


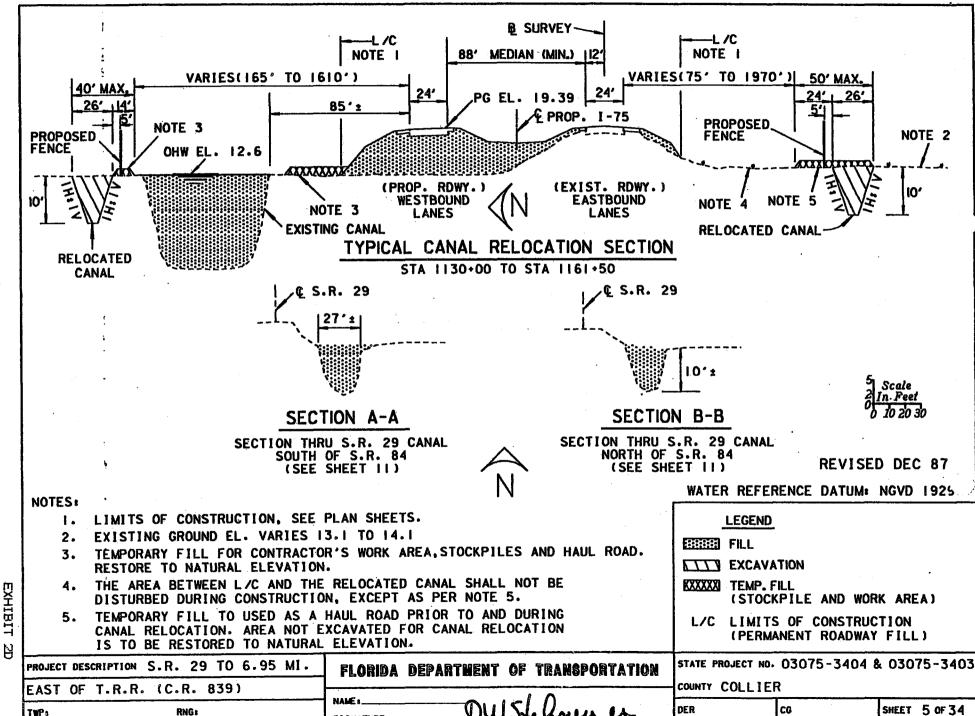
REVISED JAN 88

PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3404	k 03075-3403
EAST OF T.R.R. (C.R. 839)	100	COUNTY COLLIE	R	
TWPs RNGs	SIGNATURE	DER	ce	SHEET 2 OF 34
sec	CERTIFICATE NO	COE	WMO	DATE AUG 87

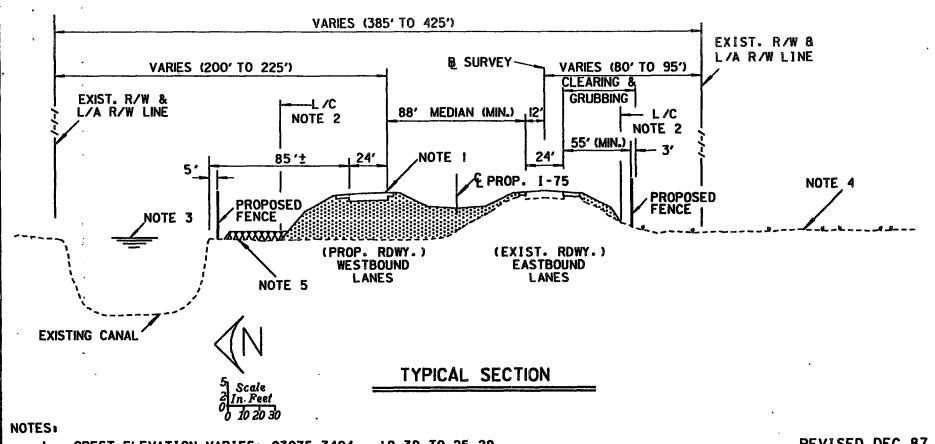


SIGNATURE





SIGNATURE



I. CREST ELEVATION VARIES: 03075-3404 - 19.39 TO 25.29 03075-3403 - 19.79 TO 23.89

2. LIMITS OF CONSTRUCTION, SEE PLAN SHEETS.

3. O.H.W. EL. VARIES: 03075-3404 - 12.6 TO 13.3 03075-3403 - 13.0 TO 13.3

4. EXISTING GROUND EL. VARIES APPROX.: 03075-3404 - 13.1 TO 15.6 03075-3403 - 11.5 TO 16.0

5. TEMPORARY FILL FOR CONTRACTOR'S WORK AREA, STOCKPILES AND HAUL ROAD. RESTORE TO NATURAL ELEVATION.

REVISED DEC 87

WATER REFERENCE DATUM: NGVD 1929

**LEGEND** 

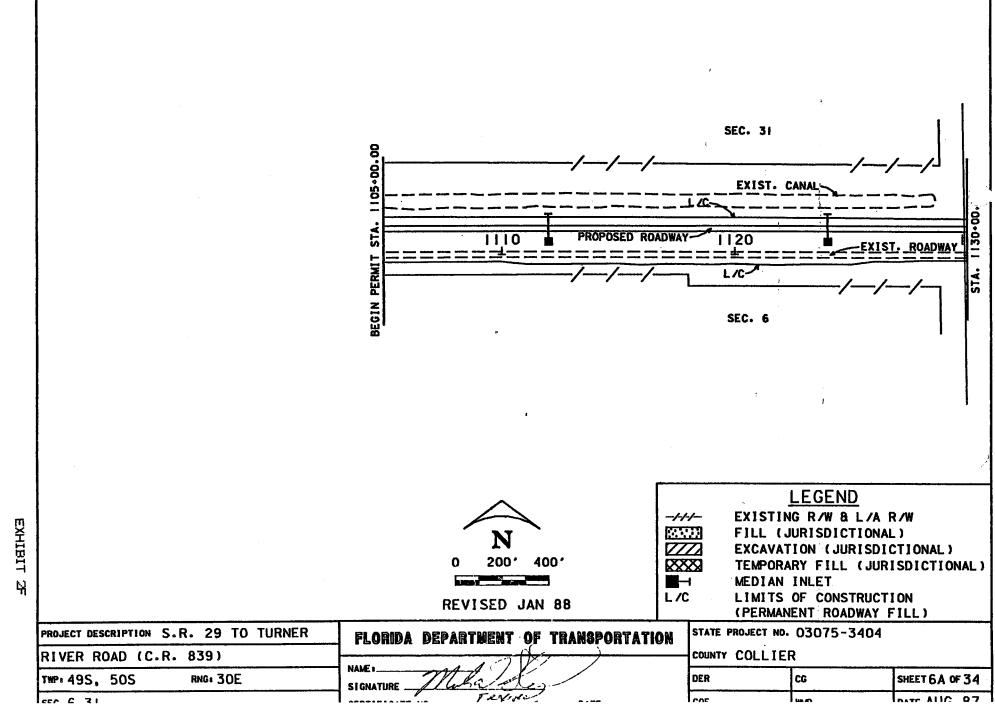
FILL

XXXXXX TEMP. FILL

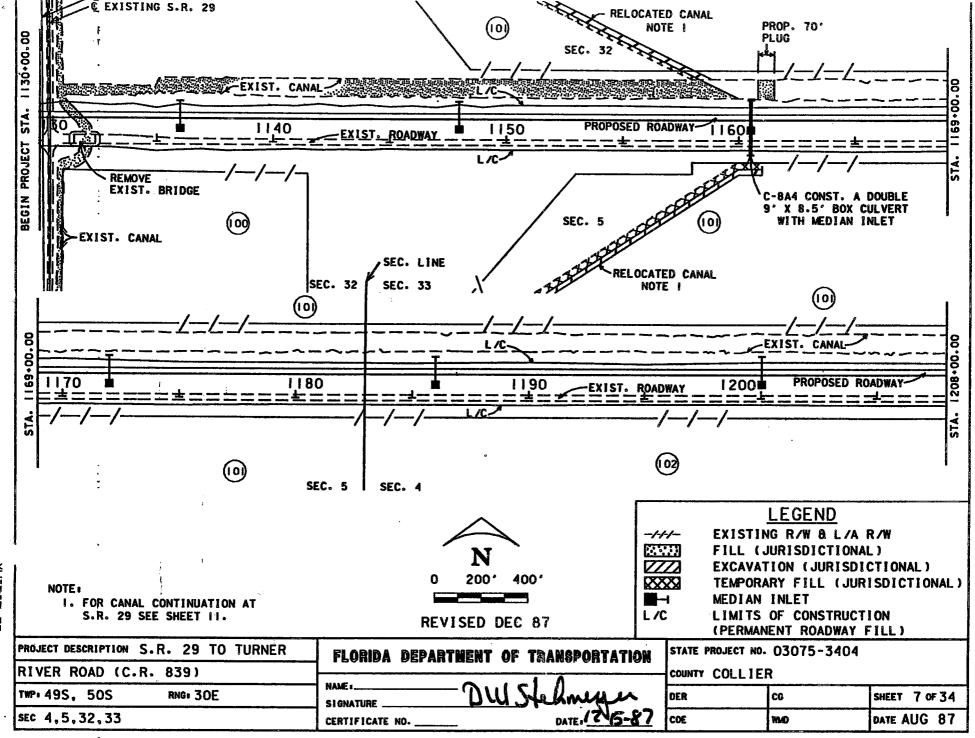
(STOCKPILE AND WORK AREA)

L/C LIMITS OF CONSTRUCTION (PERMANENT ROADWAY FILL)

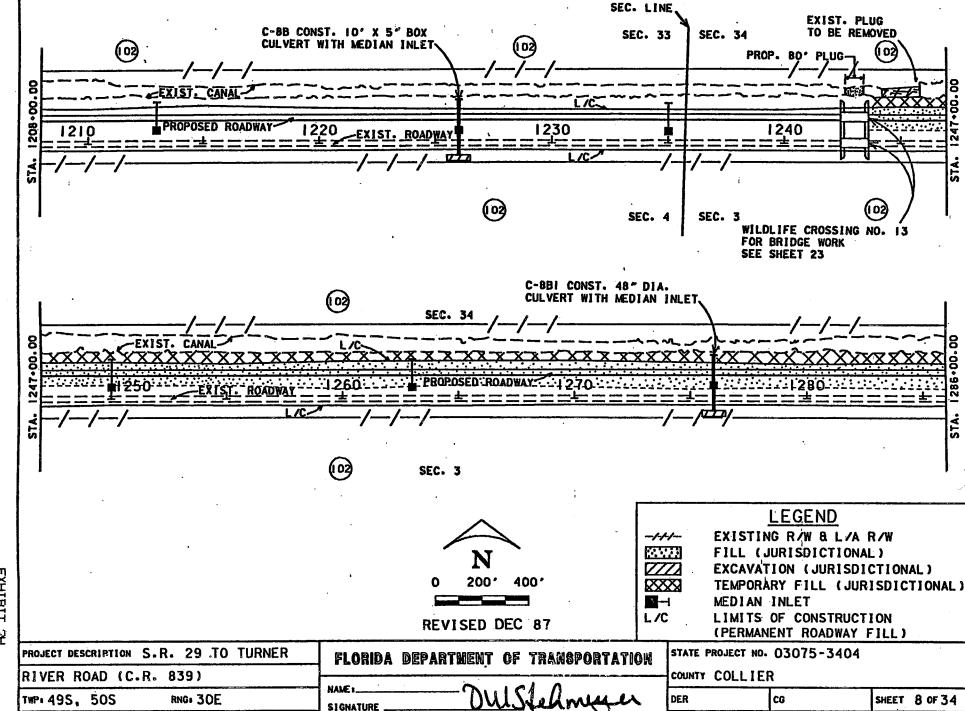
PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3404 &	03075-3403
TWP: RNG:	SIGNATURE DUSTAMES DATE: 23-15-87	DER COLLIE		SHEET 6 OF 34
SEC	CERTIFICATE NO DATE: 24-15-87	COE	mo	DATE AUG 87



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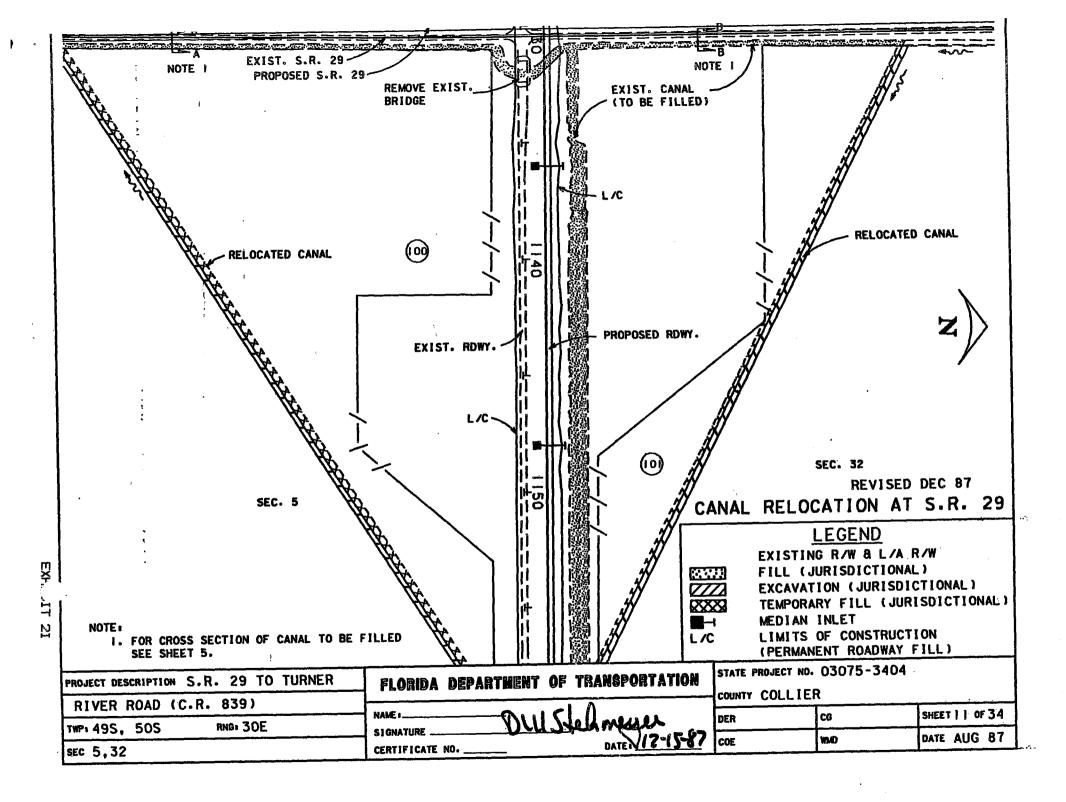


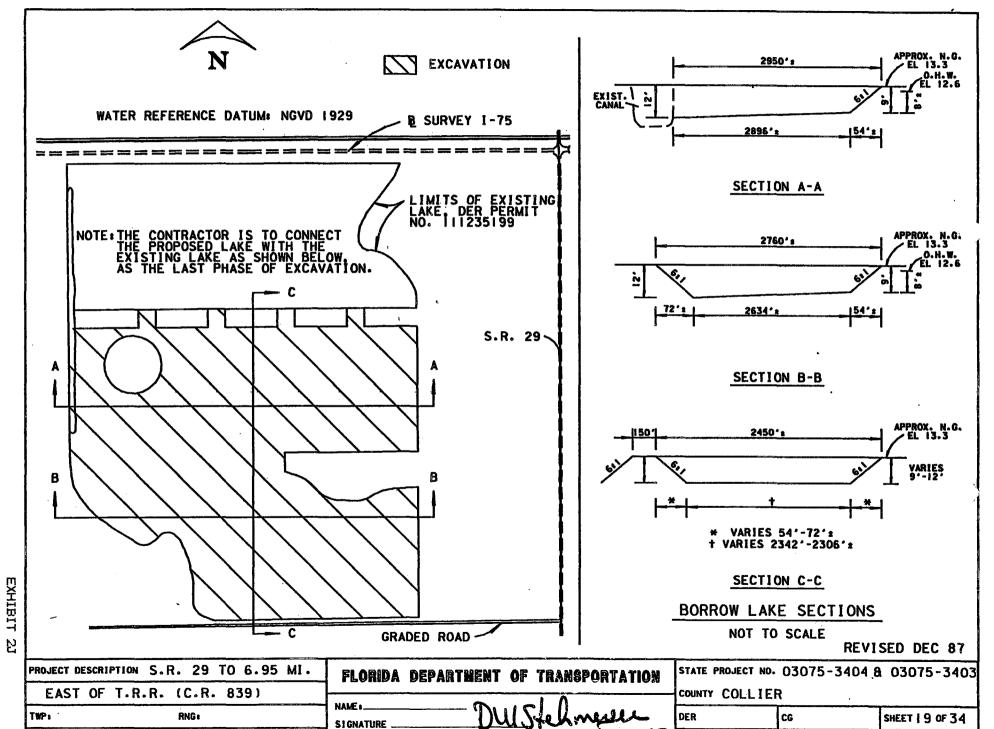
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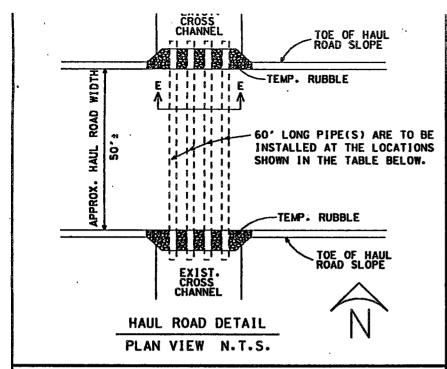
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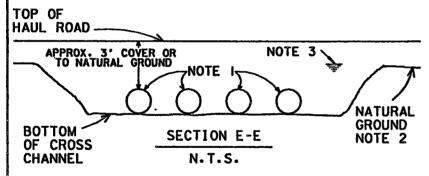
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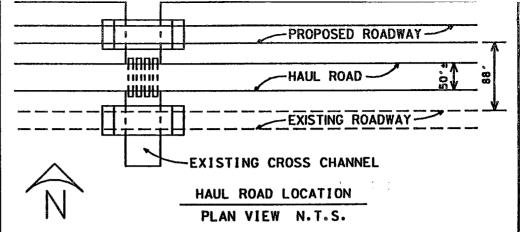


SCANNED





- I. THE CONTRACTOR MAY USE WHATEVER PIPE SIZE HE CHOOSES IN SUFFICIENT NUMBERS TO PROVIDE THE SPECIFIED SQUARE FEET OF OPENING.
- 2. EXIST. GROUND VARIES EL. APPROX. II TO 14.
- 3. O.H.W. VARIES EL. 12.6 TO 13.3.

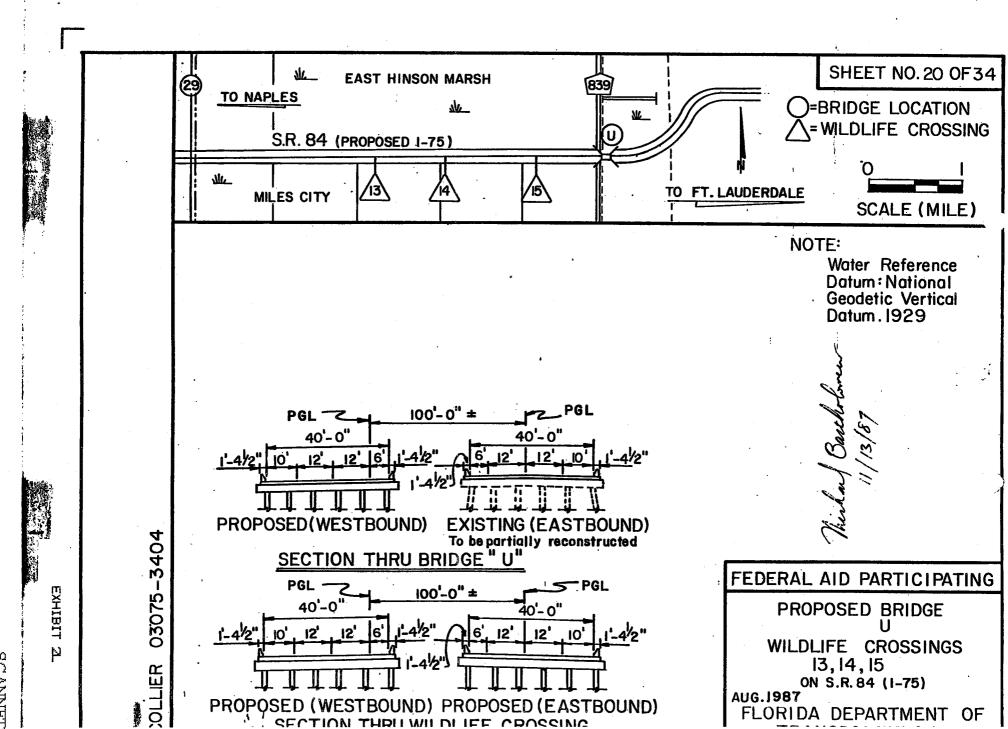


STRUCTURE (LOCATION)	STATION	APPROX. FLOW ELEVATION	MINIMUM OPENING (S.F.)	TEMP. AREA (ACRES)	FILL VOLUME (C.Y.)
S.R. 29	80+00	3.0	13.90	0.04	533
U	1389+69	8.0	12.73	0.09	508
٧	1470+40	6.0	28.07	0.12	652
W	1562+74	6.0	7.97	0.10	75 I
C-9	1598+80	9.2	5.00	0.06	416
C-10	1628+75	9.2	5.00	0.06	336
C-11	1670+70	9.4	5.00	0.06	364
X	1730+37	5.5	7.10	0.18	1553
		T01	AL	0.71	5113

THE CONTRACTOR SHALL PROVIDE THE MINIMUM OPENING, AS SHOWN ABOVE, BETWEEN O.H.W. AND THE FLOW ELEVATION. THE WATER ELEVATION NORTH AND SOUTH OF THE EXISTING ROADWAY SHALL BE MONITORED REGULARLY AND THE TEMPORARY FILL FOR THE HAUL ROAD CROSSING REMOVED WHEN THE DIFFERENCE IN WATER ELEVATIONS IS ONE FOOT OR GREATER AND RISING.

WATER REFERENCE DATUM NGVD 1929

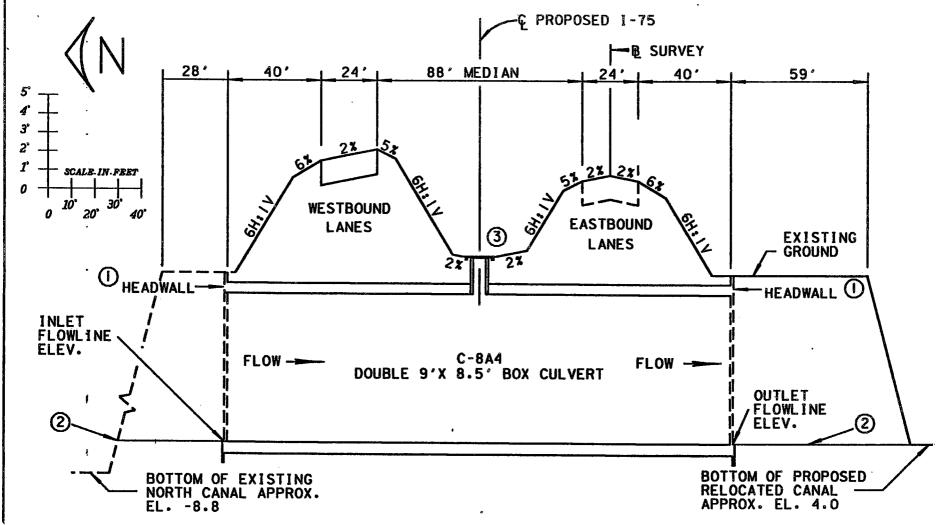
PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3404 &	03075-3403
EAST OF T.R.R. (C.R. 839)	NAME: Kay E. Keissener, P.E.	COUNTY COLLIE	R	
TWP: RNG:	SIGNATURE LOLEKCONSINE, F.E.	DER	cc s	HEET 19AOF 34
SEC	CERTIFICATE NO. 33724 DATE: 12/15/87	COE	WAD D	ATE DEC 87



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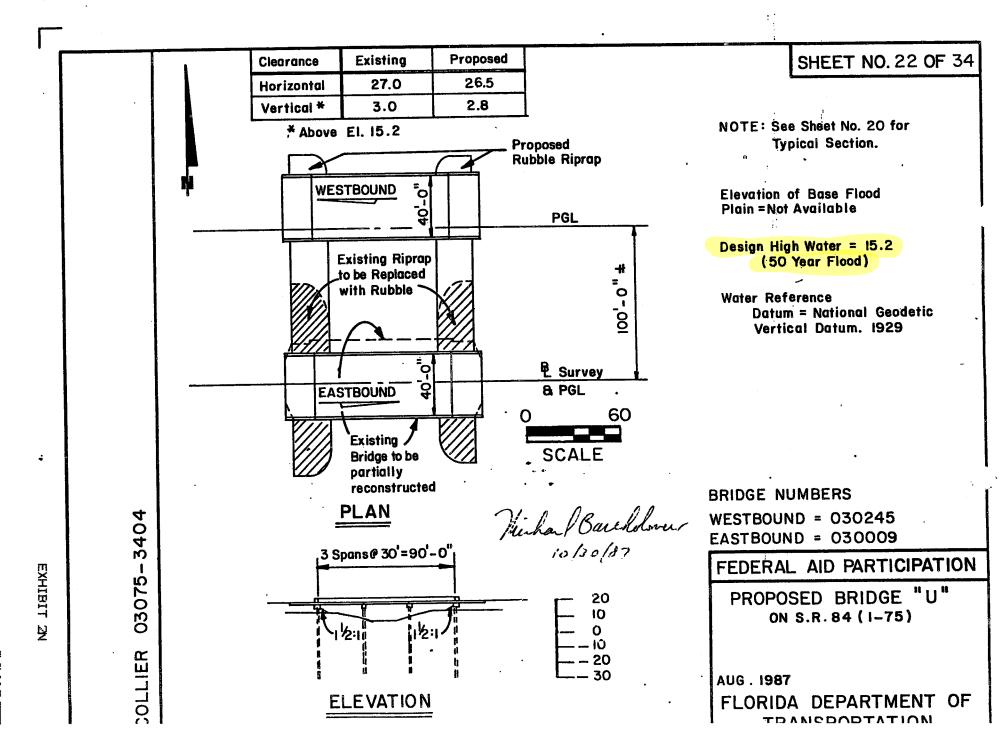
LEGEND:

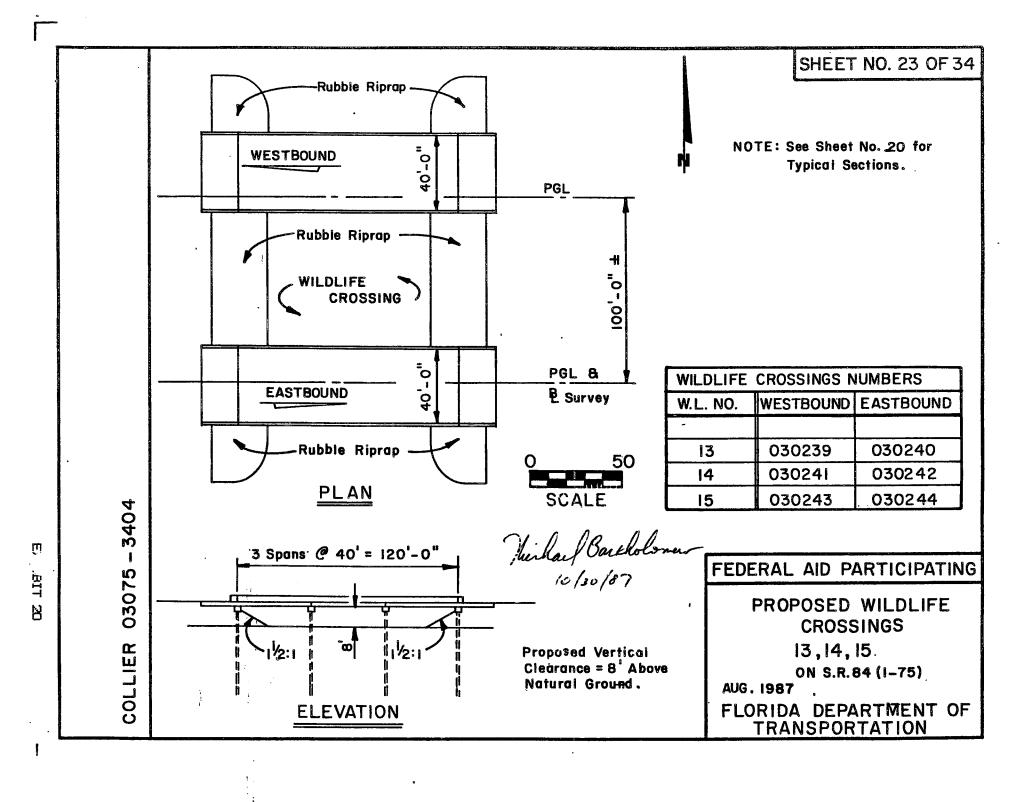
- ① HEADWALL FOR DOUBLE 9'X 8.5' CONCRETE BOX CULVERT.
- 2 20' BOTTOM WIDTH WITH 4:1 SIDE SLOPES.
- 3 FOR INLET DETAIL, SEE SHEET NO. 29.

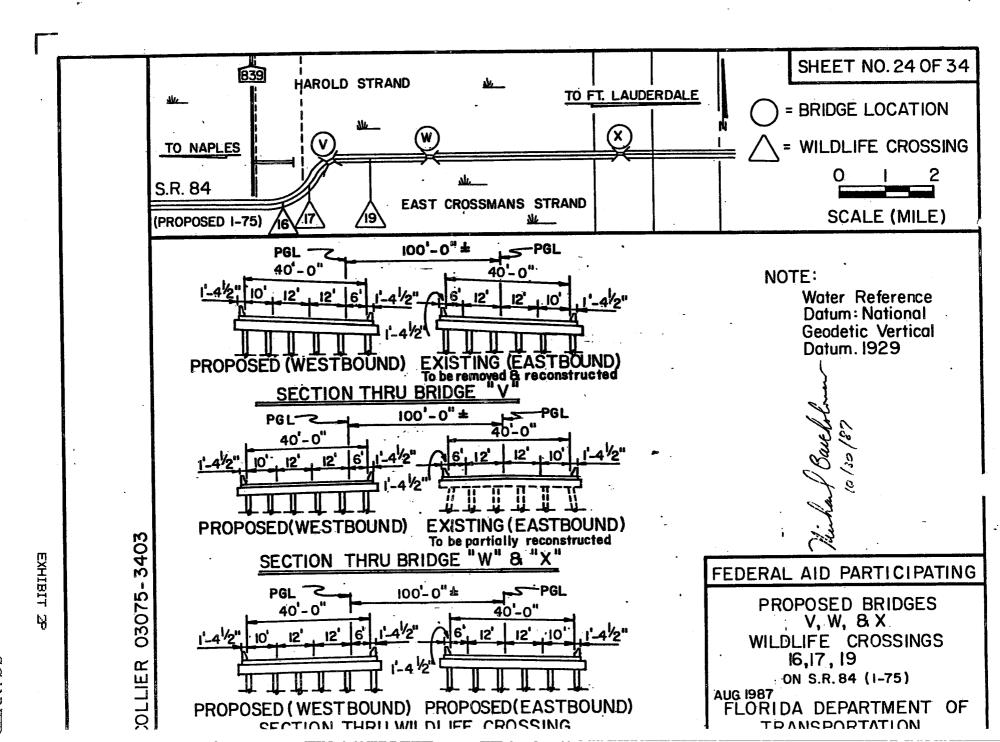
#### NOTES:

- I. ALL STATIONS ARE & SURVEY.
- 2. OHW/DHW ARE SHOWN IN THESE PERMITS FOR INFORMATIONAL PURPOSES ONLY.

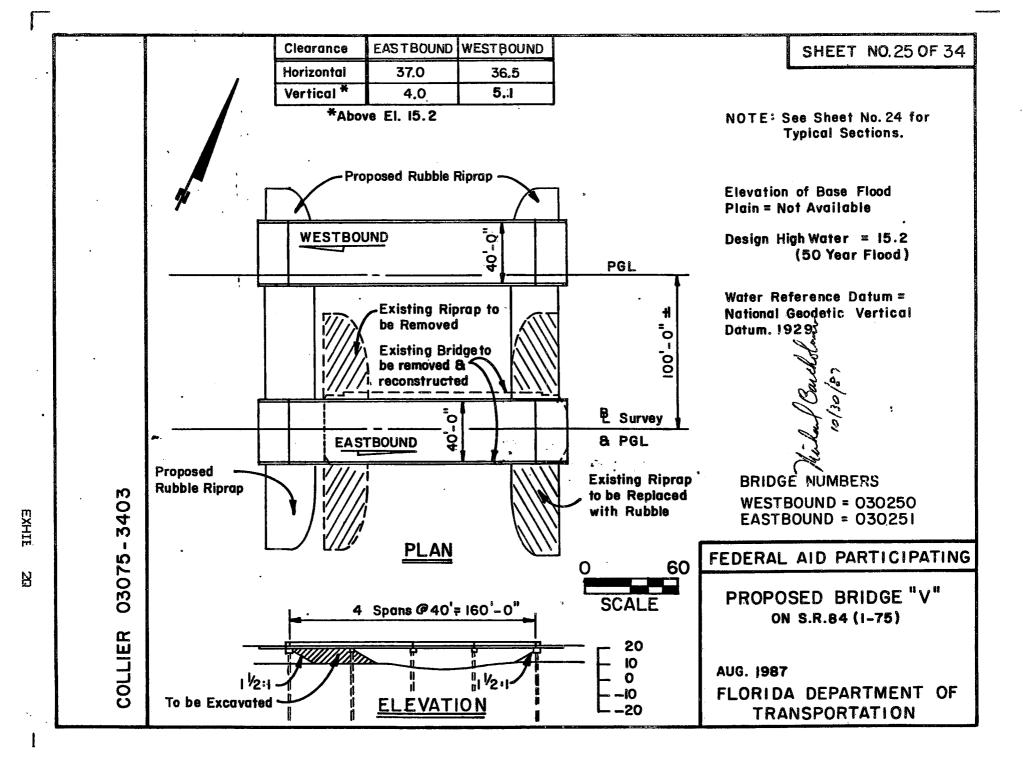
PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	Florida department of transportation	STATE PROJECT NO.	03075-3404 8	03075-3403
EAST OF T.R.R. (C.R. 839)	NAME: Dist 51	COUNTY COLLIE	R	
TWP: RNG:	SIGNATURE JULIANISTA	DER	'cc	SHEET 21 OF 34
SEC	CERTIFICATE NO DATE: 18415-87	COE	MAD	DATE DEC 87

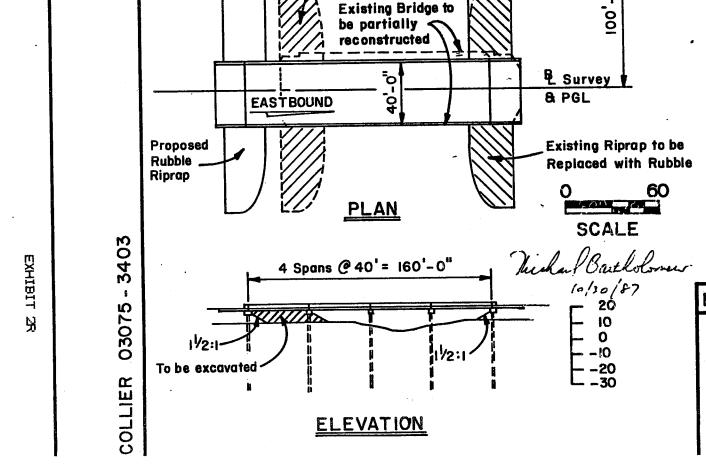






SCANNED





Proposed Rubble Riprap

WESTBOUND

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**Existing Riprap to** 

be Removed

PGL

**SHEET NO. 26 OF 34** 

NOTE: See Sheet No. 24 for Typical Sections.

Elevation of Base Flood
Plain = Not Available

Design High Water = 15.2 (50 Year Flood)

Water Reference Datum:
National Geodetic Vertical
Datum. 1929

Clearance	Existing	Proposed		
Horizontal	37.0	36,5		
Vertical *	4.3	4.2		

\* Above El. 15.2

**BRIDGE NUMBERS ·** 

WESTBOUND = 030254

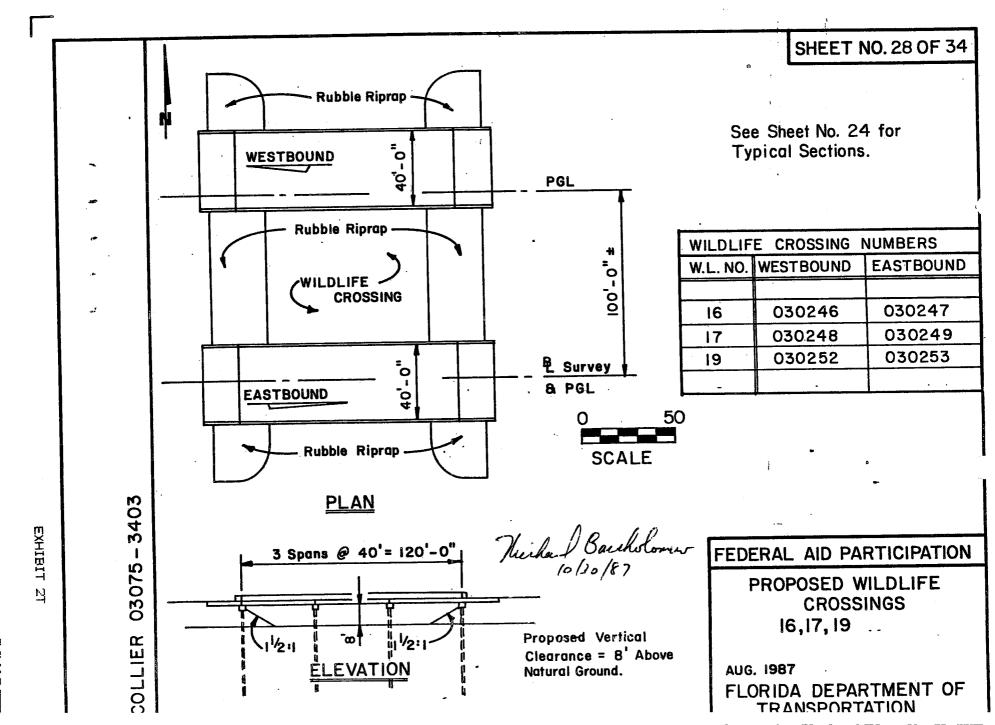
EASTBOUND = 030011

#### FEDERAL AID PARTICIPATING

PROPOSED BRIDGE "W" on s.r. 84 (1-75)

AUG. 1987
FLORIDA DEPARTMENT OF

LIBIHXA



SCANNED

# TABULATION OF CULVERTS

STRUCT.	PROJECT STATION	SIZE	DESCRIPTION	INLET FL EL.	OUTLET FL EL.	ОН₩	DHW
			3075-3404				
C-8A4	1160+50	DOUBLE 9'X 8.5'	PROPOSED	4.0	4.0	13.2	15.2
C-8B	1226+00	10'X 5'	PROPOSED	7.0	6.6	13.2	15.2
C-8B1	1276+00	48"	PROPOSED	8.6	8.2	13.2	15.2
C-8C	1305+00	10'X 5'	PROPOSED	7.3	6.9	13.2	15.2
:C-8C1	1335+00	48 "	PROPOSED	8.9	8.5	13.3	15.3
C-8D	1358+00	10'X 5'	PROPOSED	7.6	7.2	13.3	15.3
		C	3075-3403				
-C-8E	1409+00	48"	PROPOSED	9.3	8.9	13.3	15.3
C-8EI	1434+00	48"	PROPOSED	8.6	8.2	13.3	15.3
·C-8E2	1456+00	48"	PROPOSED	9.3	8.9	13.2	15.2
C-8E3	1495+00	48 "	PROPOSED	9.0	8.6	13.2	15.2
·C-8F	1512+00	48 "	PROPOSED	8.6	8.2	13.2	15.2
.C-8FI	1546+00	48 <i>"</i>	PROPOSED	8.7	8.3	13.2	15.2
.C-9	1598+80	10'X 5'	EXTENDED	9.4	9.1	13.2	15.2
.C-10	1628+75	10'X 5'	EXTENDED	9.5	9.2	13.2	15.2
C-11	1670+70	10'X 5'	EXTENDED	9.6	9.2	13.0	15.0

REVISED DEC 87

PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03075-3404 8	k 03075-3403
EAST OF T.R.R. (C.R. 839)		COUNTY COLLIE	R	
TWP: RNG:	SIGNATURE DU Steh mesqu	DER	ce	SHEET 32 OF 34
SEC :	CERTIFICATE NO DATE: (2-45-87	COE	MAD	DATE AUG 87

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T,	ABULATI	ON OF DITCH	BLOCK	S (PLUG	S)
PROJECT NO.	STATION	LOCATION/ MILE POST	LENGTH (FT.)	APPROX. TOP ELEV.	DHW / OHW
03075-3404	1161+15 1243+00 1295+00 1346+00 1387+80 1390+55	NORTH / 22.0 NORTH / 23.5 NORTH / 24.5 NORTH / 25.5 NORTH / 26.3 NORTH / 26.3	70 80 80 80 200 110	14.0 14.4 14.0 15.2 13.0 13.0	14.6 / 12.6 15.2 / 13.2 15.2 / 13.2 15.3 / 13.3 15.3 / 13.3 15.3 / 13.3
03075-3403	1416+00 1442+00 1469+60 1504+00 1560+80 1667+40 1729+20	NORTH / 26.8 NORTH / 27.3 NORTH / 27.8 NORTH / 28.4 NORTH / 29.5 NORTH / 31.5 NORTH / 32.7	80 80 50 80 50 50	13.2 12.3 13.5 13.0 10.9 13.0	15.3 / 13.3 15.3 / 13.3 15.2 / 13.2 15.2 / 13.2 15.2 / 13.2 15.0 / 13.0 15.0 / 13.0

## NOTES:

- 1. ALL STATIONS ARE & SURVEY AT & OF DITCH BLOCK.
- 2. OHW/DHW SHOWN IN THESE PERMITS FOR INFORMATIONAL PURPOSES ONLY.

REVISED DEC 87

	PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.	FLORIDA DEPARTMENT OF YRANSPORTATION	STATE PROJECT NO.	03075-3404 8	k 03075-340
	EAST OF T.R.R. (C.R. 839)	- 1 A	COUNTY COLLIE	R	
	TWP: RNG:	SIGNATURE DUI Stehmester	DER	CG	SHEET 33 OF 34
1					

		PERMA	NENT		TEMPORARY	
INVOLVEMENT	EXCAVATION		FILL		FILL	
	AREA	I VOLUME	I AREA	I VOLUME	AREA*	I VOLUME
03075-3404.03 JURISDICTIONAL WETLANDS	6.5	 	       139.7 	991742	49.2	I I NC
03075-3404,03 BORROW LAKE	125.0	     1906872 	  -  -	-	-	     _ 
TOTAL JURISDICTIONAL INVOLVEMENT	131.5	  -   1973002  -	139.7	991742	49.2	I NC

NOTES: AREA IN ACRES; VOLUME IN CUBIC YARDS

\* TEMPORARY FILL AREA IS WITHIN EXISTING RIGHT OF WAY AND WILL BE USED BY THE CONTRACTOR DURING CONSTRUCTION FOR STOCKPILING MATERIAL.

IT WILL BE RESTORED TO NATURAL ELEVATION UPON COMPLETION OF CONSTRUCTION.

NC - NOT COMPUTED BECAUSE IT WILL BE REMOVED.

REVISED DEC 87

PROJECT DESCRIPTION S.R. 29 TO 6.95 MI.  EAST OF T.R.R. (C.R. 839)	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.		k 03075-3403
TWP: RNG:	I SIGNATURE	DER		SHEET 34 OF 34
SEC .	19/10	COE	MAD	DATE AUG 87

## STAFF REPORT DISTRIBUTION LIST

PROJECT_I-75/Alligator_Alley_	APPLICATION NUMBER 08267-B
INTERNAL DISTRIBUTION  X Reviewer: J. Barone R.A. Boylan  X B. Colavecchio  X M. Cruz C. de Rojas K. Dickson C. Drew  X M. Johnson  X V. Katilius  X S. Lamb J. Mang  X C. McCray P. Millar J. Morgan H. Schloss T. Waterhouse  X C. Padera  X P. Rhoads J. Show M. Slayton  X D. Slyfield W. Stimmel  X D. Unsell P. Walker	EXTERNAL DISTRIBUTION CONTINUED  X Applicant:     Florida Department of Transportation  X Applicant's Consultant:  Applicant's Agent:  X Engineer, County of:     Collier  Engineer, City of:  Local Drainage District:  BUILDING AND ZONING Boca Raton Boynton Beach Royal Palm Beach Tequesta West Palm Beach
J. Wodraska X E. Yaun X File X Ft. Myers X Inspection Kissimmee X Office of Counsel	COUNTY  Broward -Director, Water Mgmt. Div. X Collier -Agricultural Agent Dade -DERM Lee -Long Range Planning
GOVERNING BOARD MEMBERS  X Mr. Oscar M. Corbin Mr. James F. Garner Mr. Doran A. Jason Mr. Arsenio Milian Mr. Nathaniel P. Reed Ms. Nancy H. Roen	-Mosquito Control -E.P.S. Martin -Attorney -Board of County Commissioners -Community Development Director Palm Beach -Building DeptSchool Brd., Plant Planning Polk -Water Resources Dept.
Mr. Fritz Stein Mr. Mike Stout Mr. J.D. York  EXTERNAL DISTRIBUTION DEPT. OF ENVIRONMENTAL REGULATION: X Ft. Myers Orlando Port St. Lucie Tallahassee West Palm Beach	OTHER X Fred Vidzes, Big Cypress Basin Kissimmee River Coordinating Council  X COE-Jacksonville X Department of Natural Resources X Florida Audubon Society X Florida Game & Fresh Water Fish Commission X National Park Service X U.S. Fish & Wildlife Service

EXHIBIT\_3

#### MEMORANDUM

TO: Jennifer Barone

FROM: Rae Ann Boylan Que

DATE: March 18, 1988

SUBJECT: 08267-B (11-00396-S), I-75

Collier County, S--/T49-50S/R30-32E

Environmental Comments

The project as proposed includes the construction of 12.4 miles of interstate highway and associated water management facilities. This segment of highway improvements is located east of SR 29 and will transect the Big Cypress National Preserve.

The improvements include two additional traffic lanes. The works include the installation of numerous canal plugs and additional culverts to promote sheet-flow. A portion of the SR 29 Canal is to be relocated. The southern borrow / distribution canal has been deleted from this segment of the highway. Smaller spreader swales will be constructed at the culverts to distribute the water. The borrow lake at the southwestern corner of the SR 29 and I-75 will be expanded to provide the necessary fill material. The works also include construction of six new wildlife crossings and three bridge extensions to serve as wildlife crossings.

The project as proposed will impact 146.2 acres of wetlands. An additional 49.2 acres of wetlands will be temporarily disturbed during actual construction. The wetlands to be impacted for the most part were previously altered during the original alley construction. The wetlands to be impacted are primarily cypress and mixed hardwood swamp and freshwater marshes. In order to minimize potential adverse environmental impacts, the following items and modifications have been incorporated into the project design. The overall project has been designed to promote and reestablish historic sheetflow in the area. Processing is underway to purchase a 640 acre parcel of wetlands adjacent to the highway. These lands will then be preserved under ownership. A portion of these wetlands (the northern half section) have been impacted by altered drainage and subsequent wildfires. The re-establishment of sheetflow should enhance these wetlands. In order to minimize potential impacts to the Big Cypress National, Preserve. The southern distributor canal has been deleted. The borrow lake will be expanded. Also, this segment of highway will include 6 new wildlife crossings and 3 bridge extensions. Since automobile accidents represent the cause of significant mortalities of the Florida panther, these wildlife crossings will provide an additional degree of protection for the panther.

Jennifer Barone (08267-B, 11-00396-S) March 18, 1988 Page 2

Additional activities associated with the project, but not directly related to the actual construction, include combining FDOT right-of-way monies with Department of Interior and Department of Natural Resources' funds to add an additional 128,000 acres of land to the Big Cypress National Preserve. An additional 2,000 acres of land have been purchased at the intersection of I-75 and SR 29. A majority of these lands will be set aside for preservation purposes.

In review of the project proposal, District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project.

#### RAB/jr

cc: C. Padera

E. Yaun

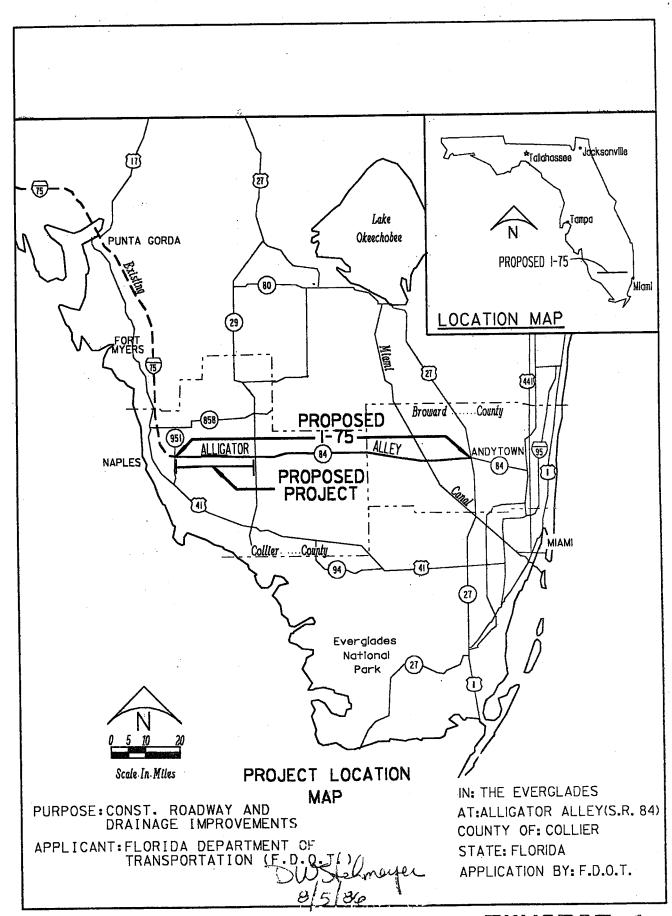
M. Kincaid

## SOUTH FLORIDA WATER MANAGEMENT DISTRICT P.O. BOX "V"

#### WEST PALM BEACH, FL. 33402

\*\*\*\*\*NOTICE OF INTENT TO CONSTRUCT WORKS PURSUANT TO GENERAL PERMIT\*\*\*\*\*
(CHAPTER 40E-40, FLORIDA ADMINISTRATIVE CODE)

OWNER'	S NAME: Florida Departm	ment of Transpo	rtation		
MAILING	ADDRESS: 605 Suwannee St	reet		<del></del>	
	Tallahassee				780
DESCRI	(CITY) PTION OF THE PROPOSED PRO	(STATE)	(ZIP)	(PHONE)	
	LOCATION: SEC(S) 1-5, 6		S) 50S	RGE(S) . 29E,	30E
• •	COUNTY Collier				
	NUMBER OF DWELLING UNI		•		
	EVIDENCE VERIFYING ZONII				
	PROPOSED MINIMUM ROAD				1
•	PROPOSED MINIMUM FLOO				
	ESCRIPTION OF THE WORKS				
<u>lanes r</u>	orth of existing SR 84 i	<u>roadway, excava</u>	te canal 25' dee	p. 70-90' wide s	outh of
<u>existir</u>	g roadway.				<del></del>
	ACREAGE OF IMPERVIOUS	OOVER:55.	6		ACRES
	ACREAGE OF WATER MANA	GEMENT AREA: _		*	ACRES
	INCLUDE PAVING, GRADING			S, AND, IF	
	USING AN EXFILTRATION S	YSTEM, PERCOLA	TION TESTS.		
	TATEMENT OF FACTS WHICH		PROPOSED WORKS	QUALIFY FOR A	·
GENERA	AL PERMIT: See atta	ached letter	-		
			•		<del></del>
<u></u>					
•	(TRA SHEET IF NECESSARY)				
DATE C	ONSTRUCTION OR ALTERATION	ON IS EXPECTED	TO COMMENCE:	July 1987	
	I HEREBY CERTIFY THA	T ALL NECESSAD	V FEDERAL STATE		
	LOCAL AND SPECIAL D			EN RECEIVED.	
					·
	'S SIGNATURE:	A/\	*		
(IF NOT	THE OWNER, CERTIFY BELOV	(V)			
I HEREE	BY CERTIFY THAT I AM AN AU	THORIZED AGENT	OF THE OWNER		
SIGNAT	TIPE X	alas.		ansportation Speci	alist/Perm t
	Raymond A. Ashe, Jr			: ,	
DATE:	August 4, 1987	<del></del>			
Papis ac	•				ĺ
FORM RP-6 Rev. 12/82	3				



#### SPECIAL CONDITIONS

- 1. WITHIN NINE MONTHS FROM THE DATE OF PERMIT ISSUANCE, THE PERMITTEE SHALL COMPLETE A DRAINAGE STUDY TO DETERMINE THE APPROPRIATE WEIR CREST ELEVATIONS FOR ALL PROPOSED WEIR STRUCTURES. THE STUDY SHALL BE PRESENTED TO BOTH THE DISTRICT AND COLLIER COUNTY STAFF FOR REVIEW AND APPROVAL.
- 2. THE PERMITTEE IS RESPONSIBLE FOR ITS CONTRACTOR'S MAINTENANCE OF HISTORIC DRAINAGE DURING CONSTRUCTION.
- 3. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 4. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
- 5. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
- 6. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
- 7. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF COLLIER COUNTY WITHIN THE PLATTED SUBDIVISION OF GOLDEN GATE ESTATES AND THE FLORIDA DEPARTMENT OF TRANSPORTATION ELSEWHERE.
- 8. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.
- 9. LAKE SIDE SLOPES SHALL BE 6:1 (HORIZONTAL:VERTICAL) AS SHOWN ON EXHIBIT 4H. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.

#### LIMITING CONDITIONS

- 1. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
- 2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
- 3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.
- 4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.
- 5. ALL ROADS SHALL BE SET AT OR ABOVE ELEVATIONS REQUIRED BY THE APPLICABLE LOCAL GOVERNMENT FLOOD CRITERIA.
- 6. ALL BUILDING FLOORS SHALL BE SET AT OR ABOVE ELEVATIONS ACCEPTABLE TO THE APPLICABLE LOCAL GOVERNMENT.
- 7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.
- 8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE DISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION, THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.
- 9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
- 10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.
- 11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
- 12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL. INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.

#### WATER QUALITY

Water quality impacts from this project should be minimal. Raised inlets are provided in the grassed center median area of the roadway and vast wetland areas located south of the proposed spreader waterway system provide nutrient removal. Water quality treatment in excess of the first inch of runoff should be provided by these mechanisms.

#### OPERATION AND MAINTENANCE

The operation and maintenance of the surface water management system shall be the responsibility of Florida Department of Transportation.

#### RECOMMENDATION

The Staff recommends approval of Application Nos. 08076-K, 08116-B and 08116-F subject to the following 12 Standard Limiting Conditions, 9 Special Conditions and 5 Exhibits.

APPLICATION REVIEWER:

SUPERVISOR/CHECKER:

TECHNICAL:

J. Mang

E. Yaun

WATER QUALITY:

J. Mang

D. Watt

ENVIRONMENTAL:

R.A. Boylan

C. Padera

APPROVED:

DIVISION DIRECTOR:

Charles W. Femb

DEPARTMENT DIRECTOR:

Richard A. Rogers, P.E. Resource Control Department

DATE: 4/2/87

AGENDA DESCRIPTION:

CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM SERVING THREE SEGMENTS, 20.0 MILES, OF 4-LANE INTERSTATE HIGHWAY FROM THE NAPLES TOLL BOOTH EAST TO SR 29 WHICH DISCHARGES SOUTH TO EXISTING WETLAND AREAS AND THE FAKAHATCHEE STRAND STATE PRESERVE VIA A CANAL SPREADER WATERWAY.

#### **ENVIRONMENTAL CONSIDERATIONS**

The proposed works include the construction of twenty miles of interstate highway and associated drainage facilities from S.R. 29 west to the toll booth. The improvements include two additional traffic lanes. A southern borrow/distributor canal will be constructed along with numerous canal plugs, additional culverts and weir structures to promote historic sheetflow to the south. The works also include construction of eight new wildlife crossings and 4 bridge extensions which will also serve as wildlife crossings.

The project as proposed will impact 192.9 acres of wetlands. An additional 44.5 acres of wetlands will be temporarily disturbed during actual The wetlands to be impacted are primarily cypress forest and mixed hardwood swamp. The eastern segment of these improvements will transect the Fakahatchee Strand. In order to minimize potential adverse environmental impacts, the following items and modifications have been incorporated into the The overall project has been designed to promote and reproject design. establish historic sheetflow in the area. At the present time, processing is underway to purchase approximately 150 acres remaining of a total 640-acre parcel of wetlands adjacent to the highway. These lands will then be preserved under state ownership. A portion of these wetlands (the northern half section) have been impacted by altered drainage and subsequent wildfires. establishment of sheetflow should enhance these wetlands. In order to minimize potential impacts to the Fakahatchee Strand State Preserve, the southern distributor canal has been significantly reduced in size. A borrow lake has been included in the design to provide the necessary fill material. This lake is to be located in the southwestern section of the S.R. 29 and I-75 intersection. Also, this segment of highway will include eight new wildlife crossings and 4 bridge extensions. Since automobile accidents represent the cause of significant mortalities of the Florida panther, these wildlife crossings will provide an additional degree of protection for the panther.

Additional activities associated with the project, but not directly related to the actual construction, include combining FDOT right-of-way monies with Department of Interior and Department of Natural Resources' funds to add an additional 128,000 acres of land to the Big Cypress National Preserve. An additional 2,000 acres of land have been purchased

at the intersection of I-75 and S.R. 29. A majority of these lands will be set aside for preservation purposes.

District staff has expressed concern over the proposed weir control elevations. These elevations are temporary in nature and are subject to change once the drainage study agreed to by FDOT has been completed (see Special Condition No. 1) and assurances have been provided that no adverse environmental impacts will result from these control elevations.

In review of the project proposal, District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project.

In the east section, a new south borrow canal is to be excavated to a maximum top width of 24 feet and a depth of 7 feet. A 73.1-acre borrow lake is to be excavated from station 1089.50 to 1115.50 (see Exhibits 4G and 4H for details). The existing 10' by 5' box culvert and 48" diameter culvert are to be extended to the south borrow canal (stations 945.00 and 1104.00). Five 48" diameter culverts and 1-10' by 5' box culvert (located at stations 821.90, 865.50, 909.50, 994.00, 1069.50 and 1085.00 respectively - see Exhibit 40) are proposed to improve flow through capabilities from the north borrow canal to the south borrow canal. The two existing plugs in the north borrow canal are to be removed and 5 plugs constructed (refer to Exhibits 4C - 4F for location and details).

Three bridges, D, E and F, are proposed for this section of the roadway (see Exhibits 4I and 4K - 4M).

Two canal crossings south of the I-75/Alligator Alley alignment are also proposed in these applications. The first is a crossing over GGE canal #1 which is approximately three fourths of a mile south of Bridge A (refer to Exhibits 2I and 2K for location and details). The second crossing is located at the western end of Berson Blvd. over GGE canal #2 and is approximately three fourths of a mile south of Bridge B (refer to Exhibits 3H and 3J for location and details).

#### **EVALUATION**

The plug and bridge locations throughout the project have been chosen to correspond with recommendations in the Greiner Engineering Study compiled for the Florida Department of Transportation (FDOT). The design intent of the study was to re-establish sheetflow to the extensive wetland areas south of Alligator Alley which had been previously disrupted by the original roadway construction (Alligator Alley/SR 84). It appears that the proposed roadway modification will be consistent with the above intent. Southerly flows will be enhanced through plug, bridge and wildlife crossing placement and hydraulic gradient of the existing and proposed canal. Since the Greiner Study did not address control elevations for the system, an additional drainage study will be necessary to determine the final overflow elevations of the weirs associated with Bridges A, B and C. Temporary elevations have been set as previously described in the proposed facilities section above and are subject to modification once the study has been completed. FDOT selected these temporary elevations to continue to provide drainage for the GGE platted subdivision. Staff is concerned with preventing over drainage of these lands.

The canal width and depth through the Fakahatchee Strand was reduced to the current design of a maximum 24' top width and 7' depth at the request of the Department of Environmental Regulation (DER). The additional fill necessary to construct the additional 2 lanes of roadway will be obtained from the 73.1-acre borrow lake located at the southwest corner of the intersection of SR 29 and Alligator Alley. Approximately 907,512 cubic yards of fill will be excavated from the borrow lake. The lake's side slopes of 6:1 (H:V) and maximum depth of 9.7' were also recommended by DER.

Proposed Facilities: Expansion of the 2-lane roadway to a 4-lane interstate highway number 75. In the west section, the existing north borrow canal is to be excavated to a maximum depth of 10 feet below existing ground and a new south borrow canal to be excavated in the following manner, from station 90.00 to 399.70 - maximum top width of 40' and depth of 15', from station 399.70 to 476.70 - maximum top width of 60' and depth of 7'. The 6-10' by 5' box culverts are to be extended south to the new borrow canal with two additional 48" diameter culverts installed (stations 414.50 and 460.00, see Exhibit 2M) to improve flow through capabilities from the north to the south borrow canal. The 6 existing plugs in the north borrow canal are to be removed and replaced with 3-50' wide plugs, two of which will function as overflow weirs to Golden Gate Estate's (GGE) canal 1 adjacent to proposed Bridge A (see Exhibit 2G). Five plugs are proposed for the south borrow canal, two of which are located due to archeological sites and two are associated with Bridge A and function as overflow weirs (refer to Exhibits 2C, 2E, 2G and 2N for location and details). One bridge, A, is proposed for this section of the roadway (see Exhibits 2G and 2I-2K). The 4 overflow weirs adjacent to Bridge A will consist of earthen sodded spillways and will be set according to the following schedule: the northwest quadrant set at natural ground with the northeast, southeast and southwest quadrant set at 1 foot below natural grade in order to provide drainage to the platted GGE system. Once the drainage study to be conducted by the permittee is completed, the weir elevations may be modified (refer to Special Condition No. 1).

In the middle section, a new south borrow canal is to be excavated in the following manner, maximum top width of 80' and depth of 7' from station 480.00 to 495.00, from station 523.00 to 544.75, from station 546.60 to 567.00, from station 657.00 to 673.00, from station 688.00 to 728.00 and from station 747.50 to 775.00. Elsewhere, the south borrow canal is to have a maximum top width of 60' with an approximate depth of 20'. The existing 10' by 5' box culvert (station 593.00) is to be extended south to the new borrow canal with the addition of 1-10' by 5' box culvert (station 751.00) and 3-48" diameter culverts (stations 512.00, 561.50 and 636.00) to improve flow through capabilities from the north to south (refer to Exhibit 30). Three of the existing plugs are to be removed (stations 500.00, 577.00 and 780.00) with 6 new plugs proposed in the north borrow canal, 4 of which are associated with Bridges B and C and will also function as overflow weirs to GGE canals 2 and 3 (refer to Exhibits 3C, 3E - 3G). Eight plugs are proposed in the south borrow canal, 4 of which function as overflow weirs in association with Bridges B and C (refer to Exhibits 3C - 3G for location and size). Two bridges, B and C, are proposed for this section of the roadway (see Exhibits 3H, 3I and 3K). Eight overflow weirs, earthen sodded spillways, are associated with Bridges B and C and will be set according to the following schedule: Bridge B - weirs to be set 1 foot below natural ground in all four quadrants, Bridge C - weir set 0.5' below natural ground in the northeast, northwest and southeast quadrants and 1.0' below natural ground in the southwest quadrant. Once the drainage study conducted by the applicant is completed, these weir elevations may be modified (refer to Special Condition No. 1).

LAST DATE FOR GOVERNING BOARD ACTION: June 11. 1987

Application Nos. 08076-K, 08116-B, and 08116-F

#### I-75, ALLIGATOR ALLEY

Collier County, S--/T50S/R26-30E

STAFF REPORT

#### **ABSTRACT**

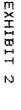
The applications, listed above, are a request to construct and operate a surface water management system to serve 20.0 miles of interstate highway and associated drainage facilities from the toll booth in Naples east to SR 29 (see Exhibit 1). Staff recommendation is for approval.

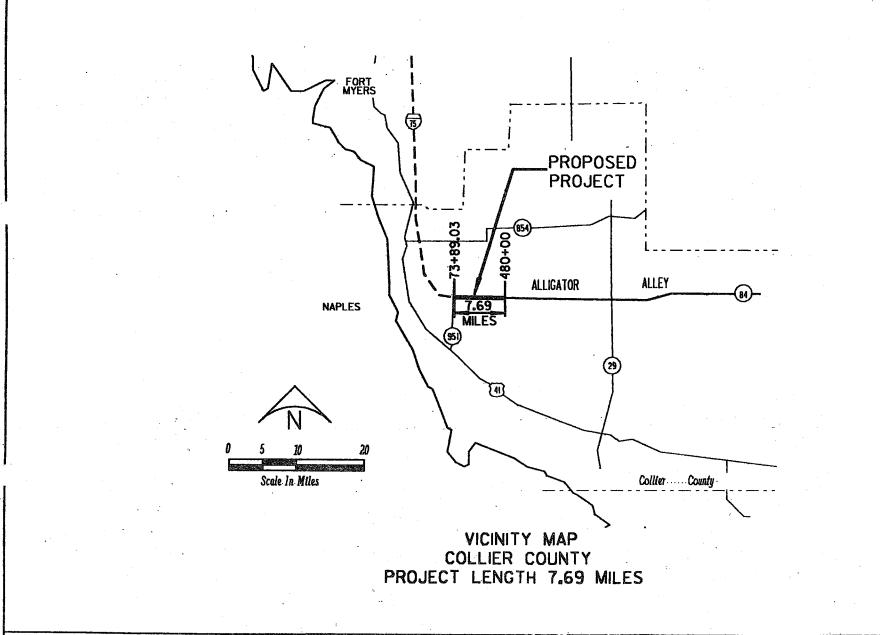
#### THE APPLICATION

A. Existing Facilities: The 2-lane Alligator Alley (SR 84) with an adjacent borrow canal located on the north side of the roadway alignment. In the west section, 7.69 miles (A#08076-K, State Project No. 03175-3405, see Exhibit 2), there exists 24-15" diameter median inlets which direct runoff into the north borrow canal, 6-10' by 5' box culverts which provide flow under the existing 2-lane roadway and 6 plugs in the north borrow canal (located approximately at stations 225, 273, 305, 333, 360 and 430 respectively - refer to exhibits 2C - 2H).

In the middle section, 6.28 miles (A#08116-B, State Project No. 03175-3407, see Exhibit 3), there exists 16-15" diameter median inlets which direct runoff into the north borrow canal, 1-10' by 5' box culvert which provides flow under the existing 2-lane roadway and 4 plugs in the north borrow canal (located approximately at stations 500, 577, 620 and 780 respectively - refer to Exhibits 3C, 3D, and 3F)

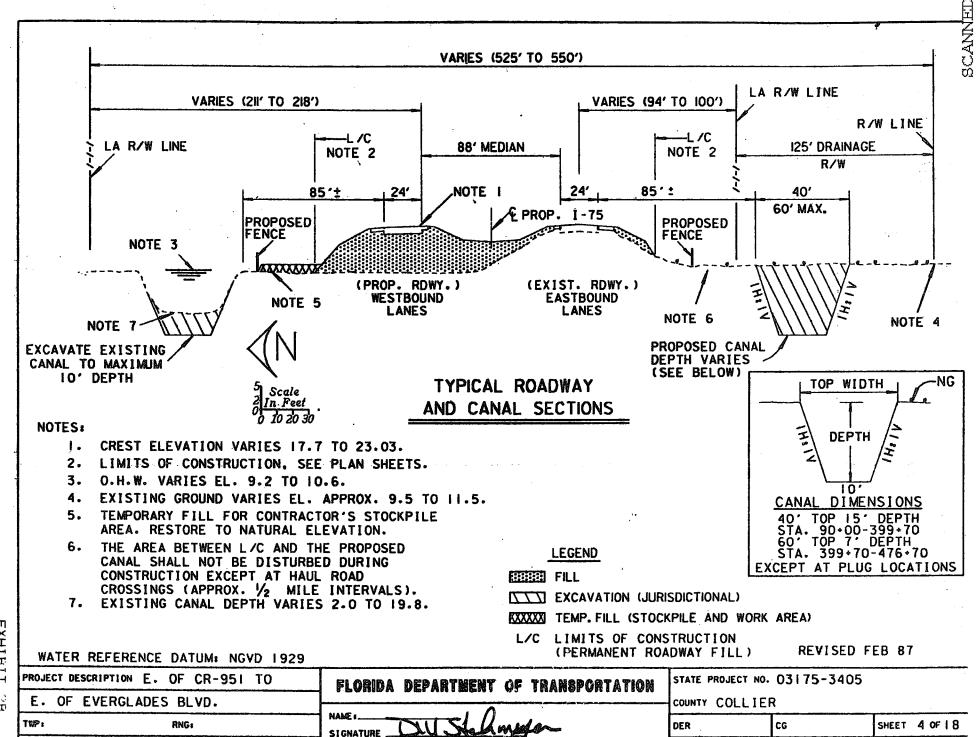
In the east section, 6.03 miles (A#08116-F, State Project No. 03175-3406, see Exhibit 4), there exists 11-15" diameter median inlets which direct runoff into the north borrow canal, 2-10' by 5' box culverts which provide flow under the existing 2-lane roadway and 2 plugs in the north borrow canal (located approximately at stations 866 and 972 respectively - refer to Exhibits 4C and 4E).





PROJECT DESCRIPTION E. OF CR-951 TO STATE PROJECT NO. 03175-3405 E. OF EVERGLADES BLVD. COUNTY COLLIER TWP: RNG DER CG SHEET 2 OF 18 SIGNATURE . SEC DATE AUG 86 COE CERTIFICATE NO. WD.

EXHIBIT 2A



CERTIFICATE NO.

DATE: 2-17-87

COE

MAD

DATE AUG 86

EXHIBIT.

SEC

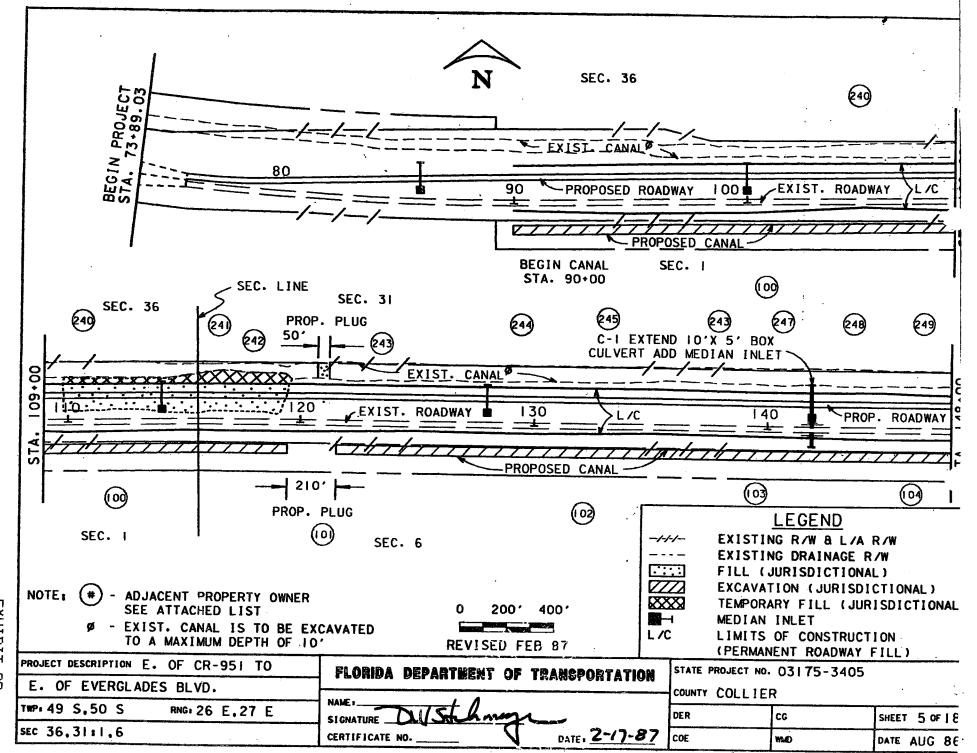


EXHIBIT 20

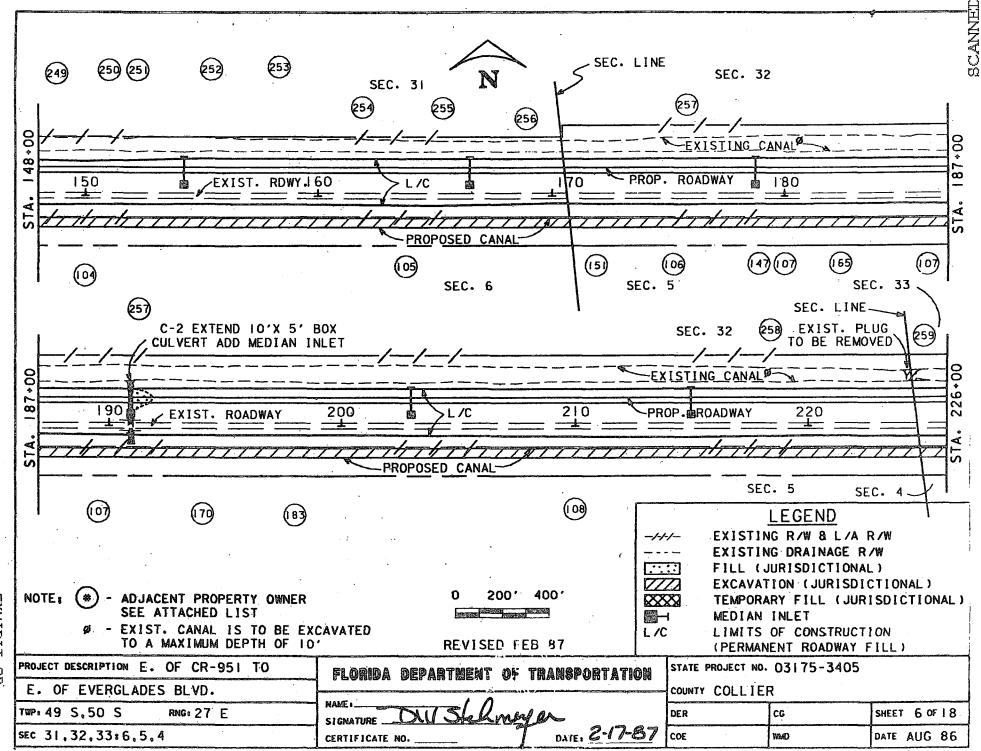
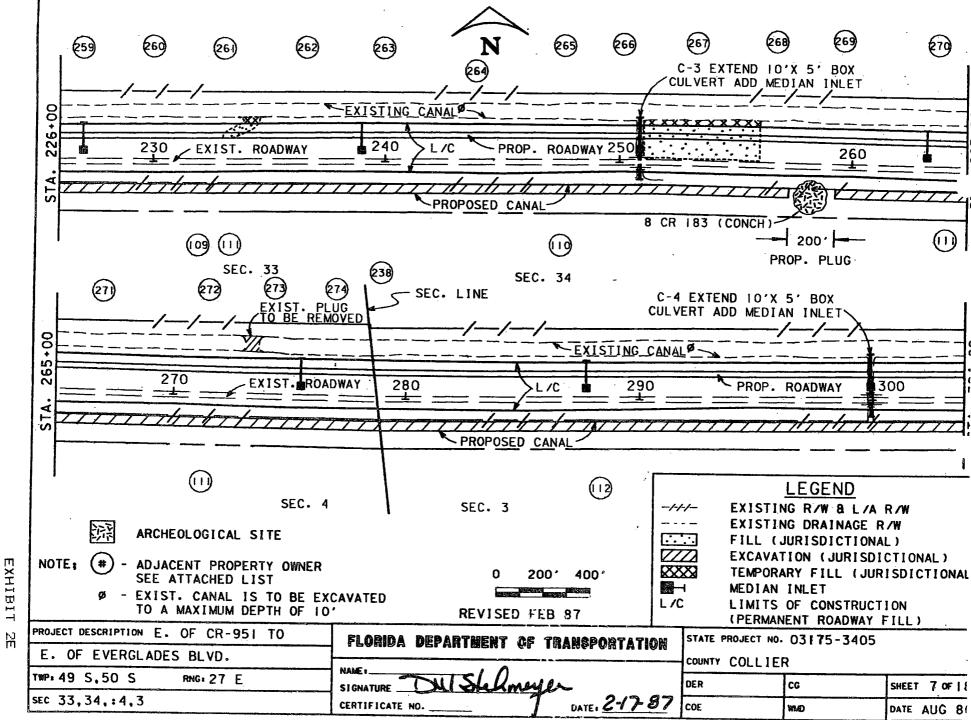


EXHIBIT 2



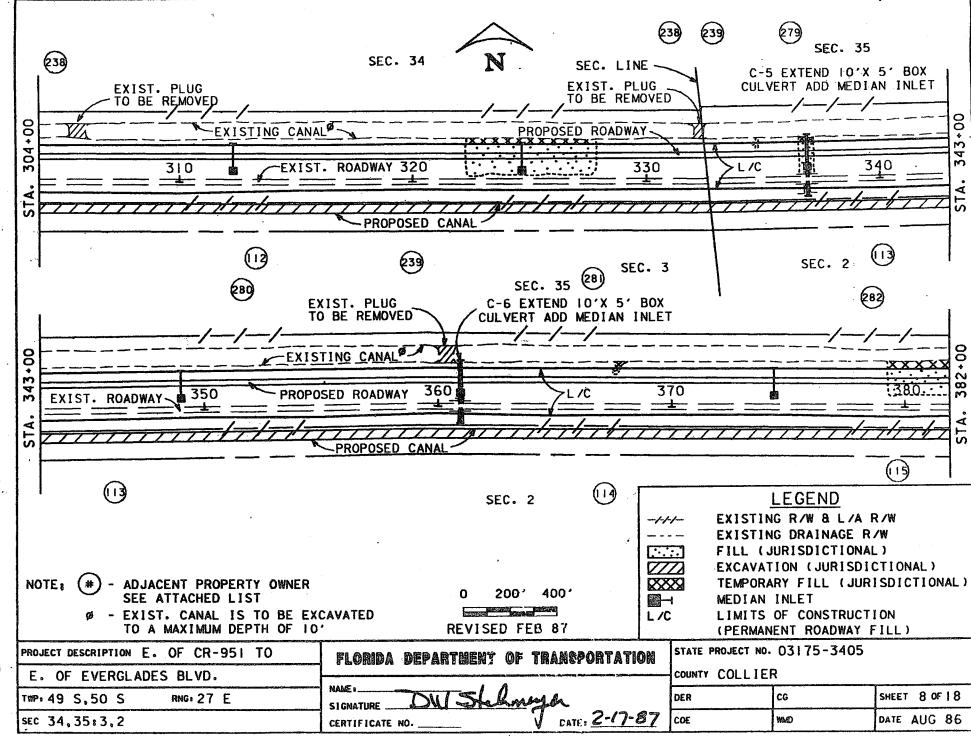
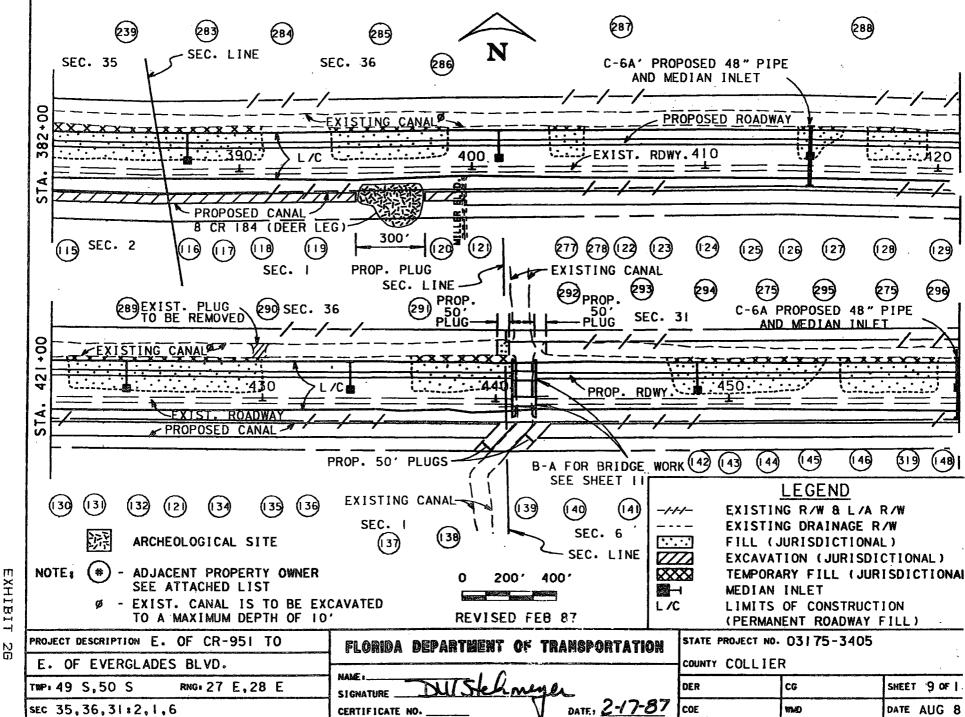
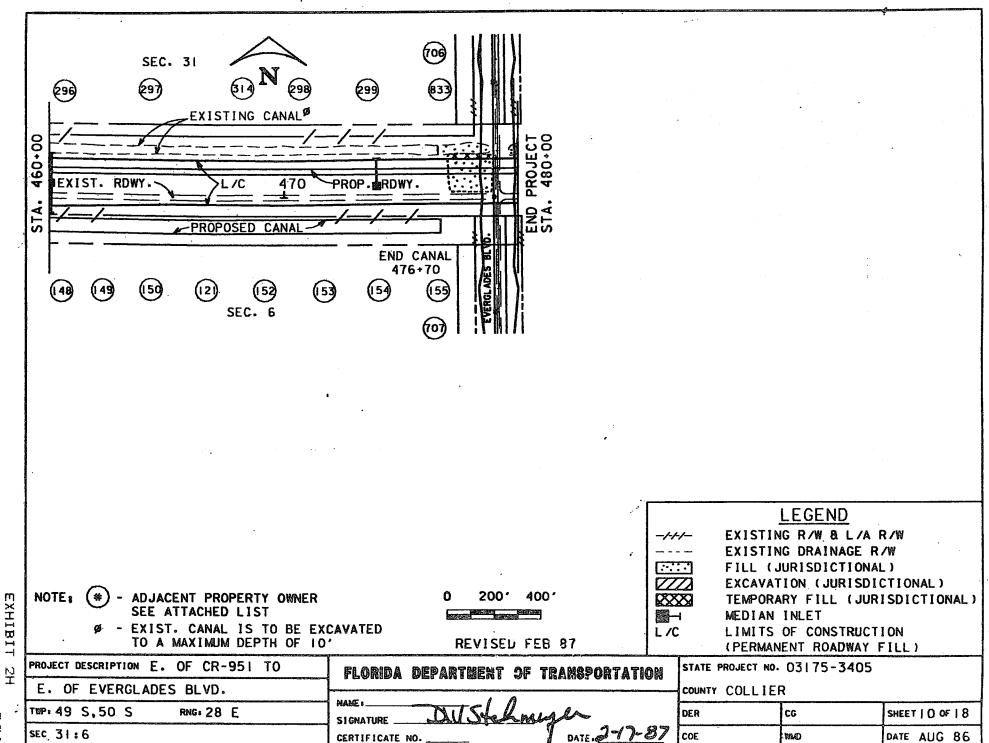


EXHIBIT 2F

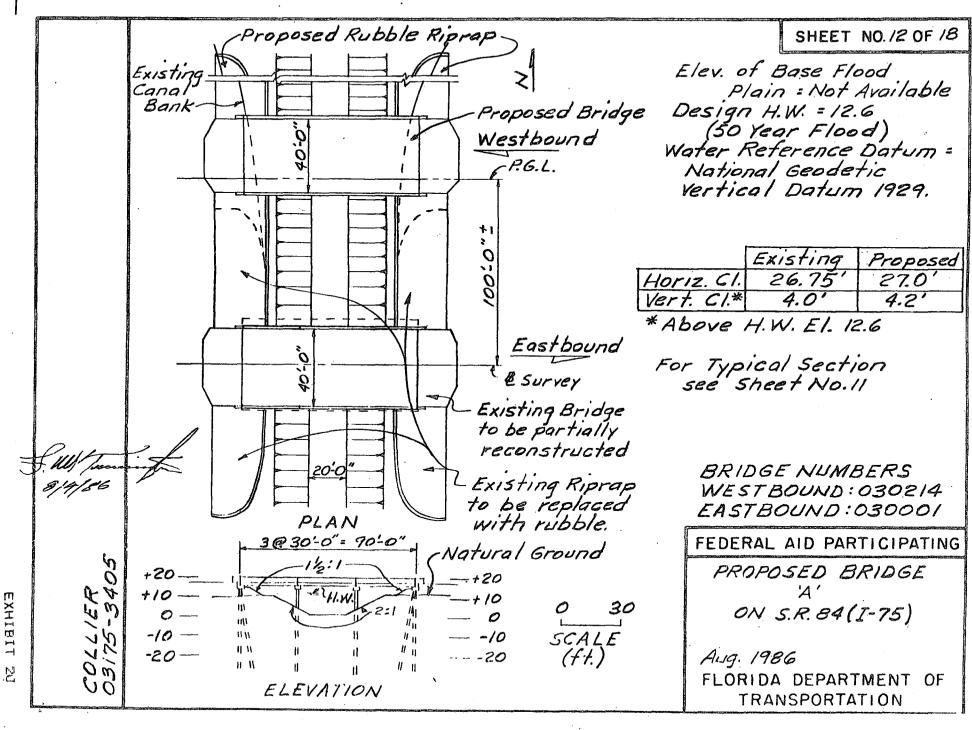
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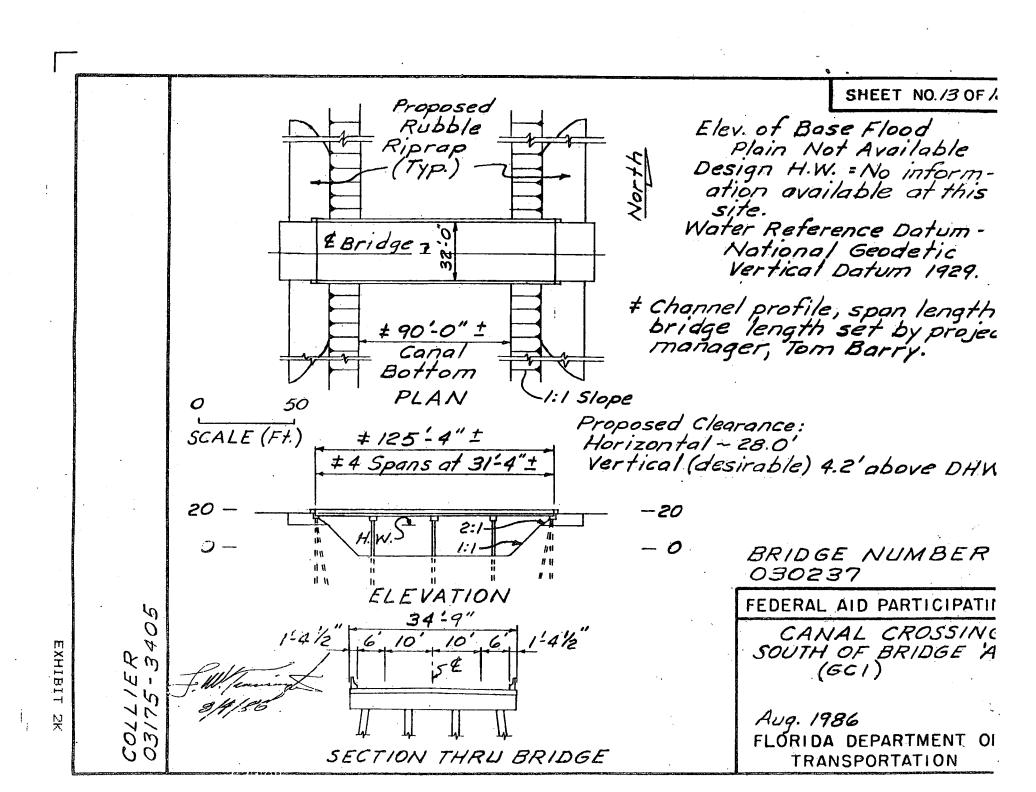


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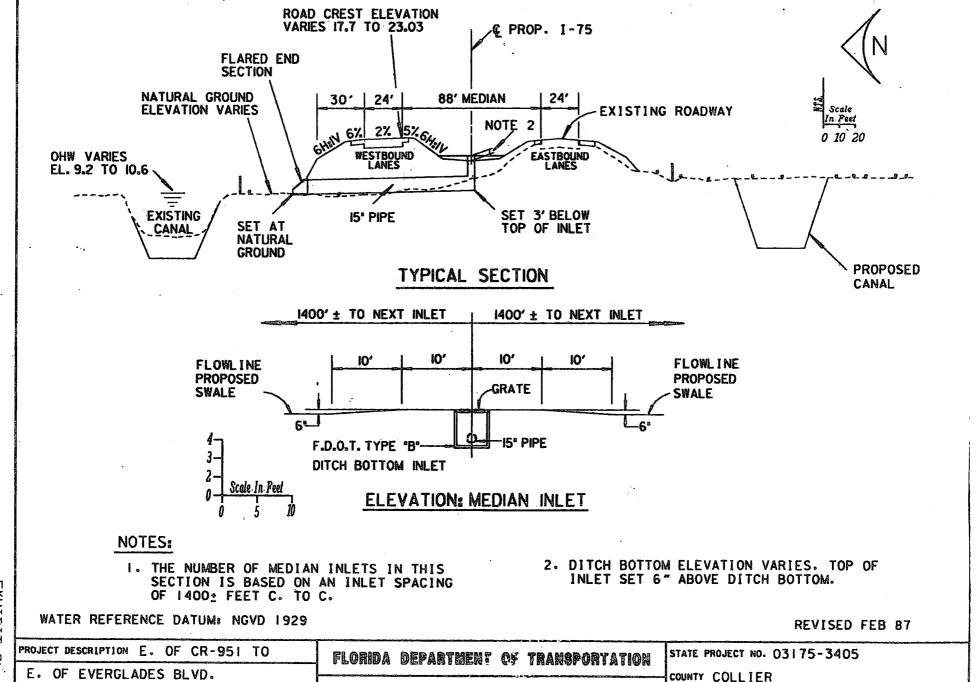




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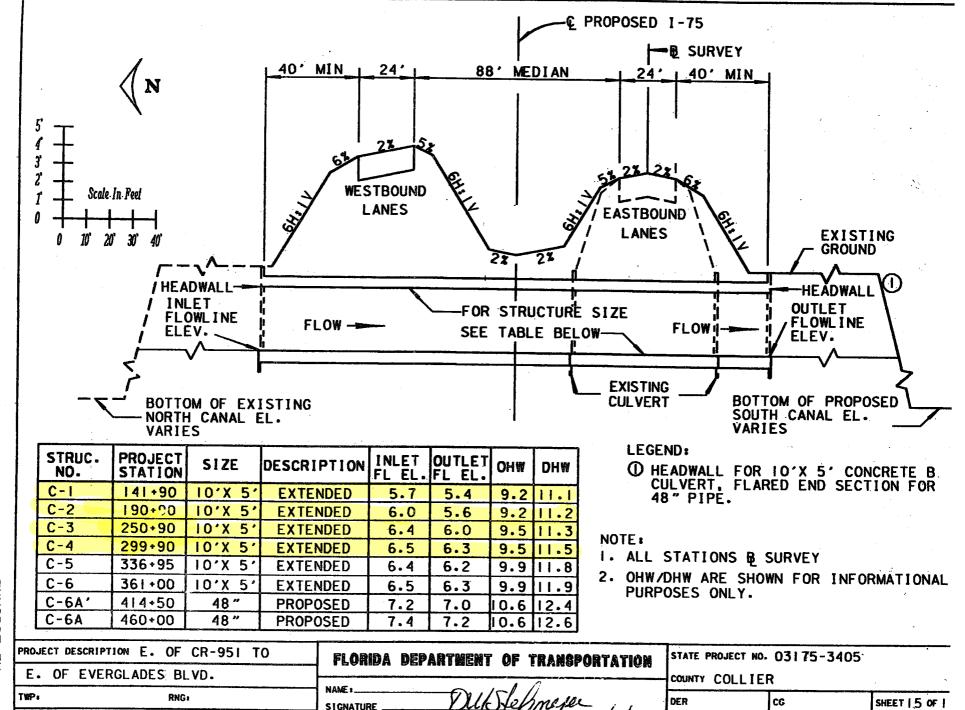
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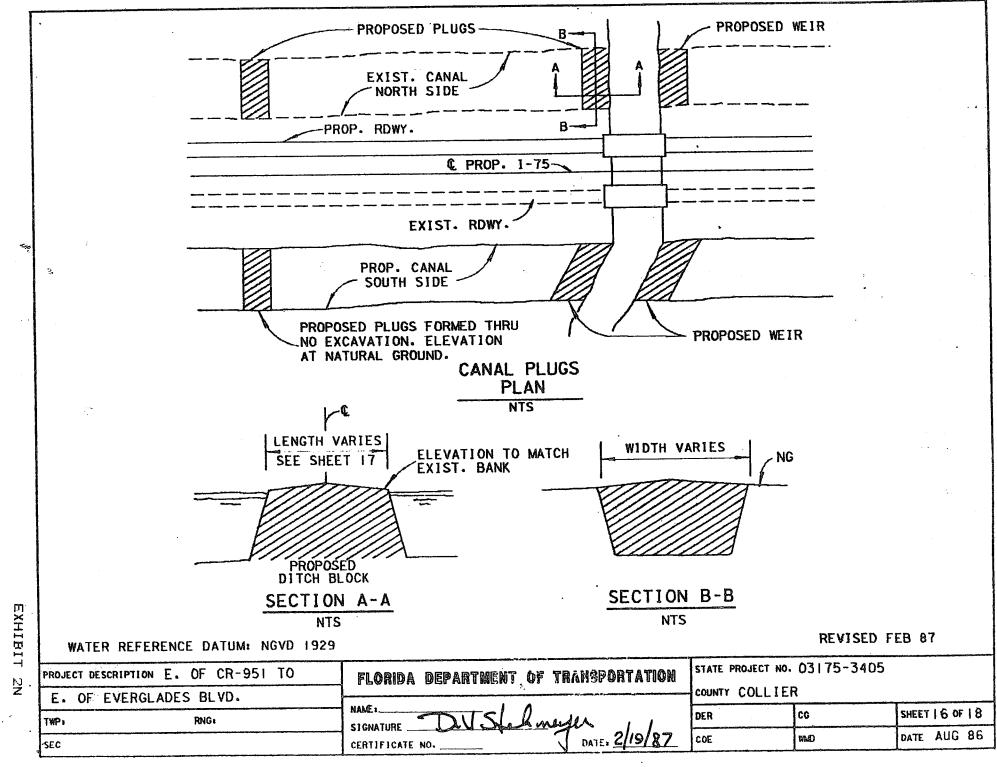
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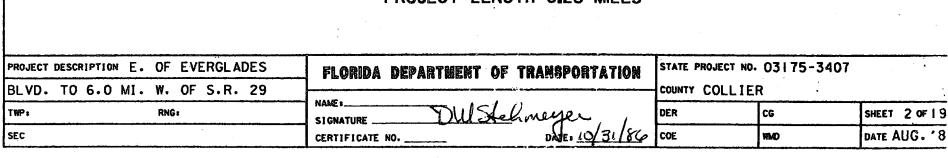
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120+50 <sup>©</sup> 121+00 258+30 <sup>©</sup> 396+50 <sup>©</sup> 440+50 <sup>©</sup> 440+30 441+90 <sup>©</sup> 442+00 478+70	SOUTH / 2.1 NORTH / 2.1 SOUTH / 4.9 SOUTH / 7.5 SOUTH / 8.2 NORTH / 8.2 NORTH / 8.2 SOUTH / 8.2 NORTH / 8.2	210 50 200 300 50 50 50 50 260	10.5 9.8 10.5 10.7 10.8 10.4 10.3 9.9	
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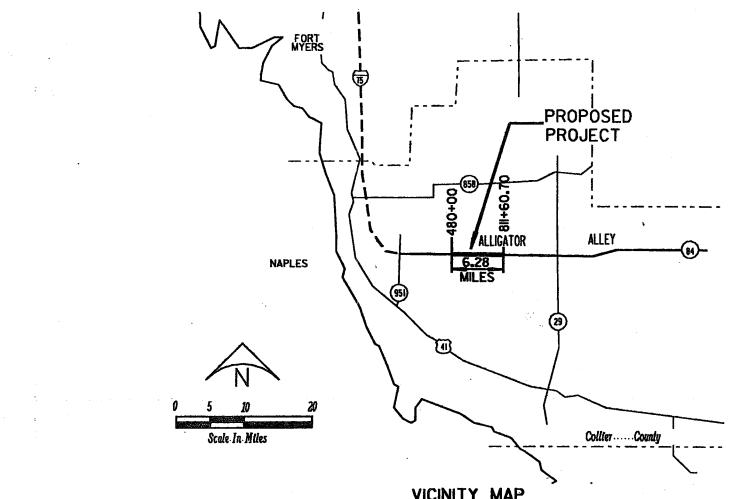
3. OHW/DHW ARE SHOWN FOR INFORMATION/ PURPOSES ONLY.

REVISED FEB 87

PROJECT DESCRIPTION E. OF CR-951 TO	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03175-3405	<del></del>
E. OF EVERGLADES BLVD.	NAME.	COUNTY COLLIE	R	
TWP: RNG:	SIGNATURE DUSKKmeffer	DER	ce	SHEET   7 OF
SEC	CERTIFICATE NO DATE: 2-17-87	COE	mp	DATE AUG

EXHIBIT 20





VICINITY MAP
COLLIER COUNTY
PROJECT LENGTH 6.28 MILES

;	PERMANENT				TEMPORARY		
INVOLVEMENT	EXCAVATION		FILL		FILL		
	AREA	I VOLUME	I I AREA	VOLUME	AREA	I VOLUME	
JURISDICTIONAL WETLAND	27.8	1   420,278 	21.4	116,272	3.4	I I NC	
EXISTING NORTH	NA	192,952		·			

NOTES: AREA IN ACRES: VOLUME IN CUBIC YARDS

TEMPORARY FILL AREA IS WITHIN EXISTING R/W AND WILL BE USED BY THE CONTRACTOR DURING CONSTRUCTION AS A WORK AREA FOR STOCKPILING MATERIAL. IT WILL BE RESTORED TO NATURAL ELEVATION UPON COMPLETION OF CONSTRUCTION.

- NC NOT COMPUTED BECAUSE IT WILL BE REMOVED.
- NA NOT COMPUTED BECAUSE THE CANAL WILL NOT BE WIDENED, ONLY THE DEPTH CHANGE.

REVISED OCT 86

PROJECT DESCRIPTION E. OF CR-951 TO  E. OF EVERGLADES BLVD.	Pluniur veparimeri of Iranspuriation	STATE PROJECT NO.		
TWP: RNG:	NAME!	DER	_	SHEET   8 OF   8
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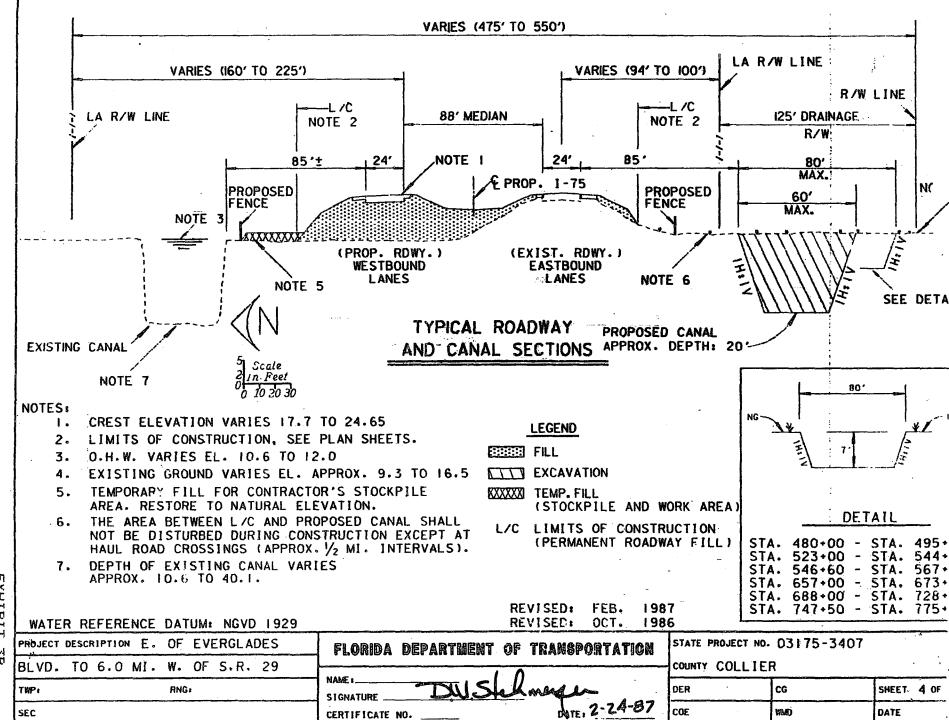
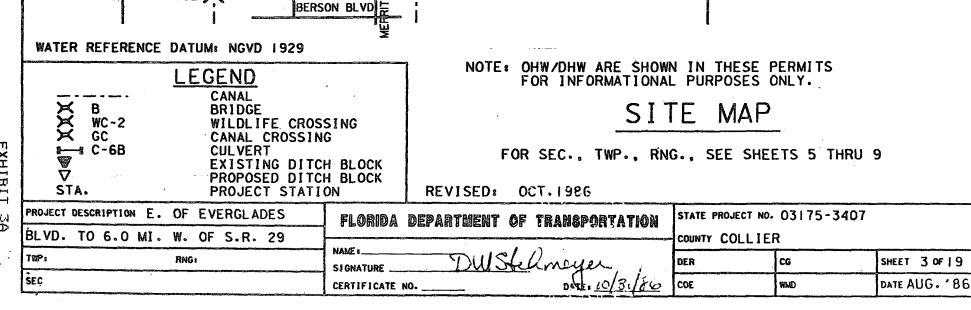


EXHIBIT 3



OHM

EL 11.6

F.A. PROJ. NO. I-75-4(26)299

PROPOSED PROJECT (I-75)

6.28 MILES

OHW

EL 11.1

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**PROPOSED** ROADWAY

EXISTING

ROADWAY

OHM

EL 12.0

C-7B

2

APPROX. SCALE IN MILES

0

ō

80.00.

OHM ?

C-68

GC2 XX

OHW

EL 10.9

C-6C

**GOLDEN GATE** ESTATES .

EXHIBIT 3D

C-6C CONST. 48" DIA.



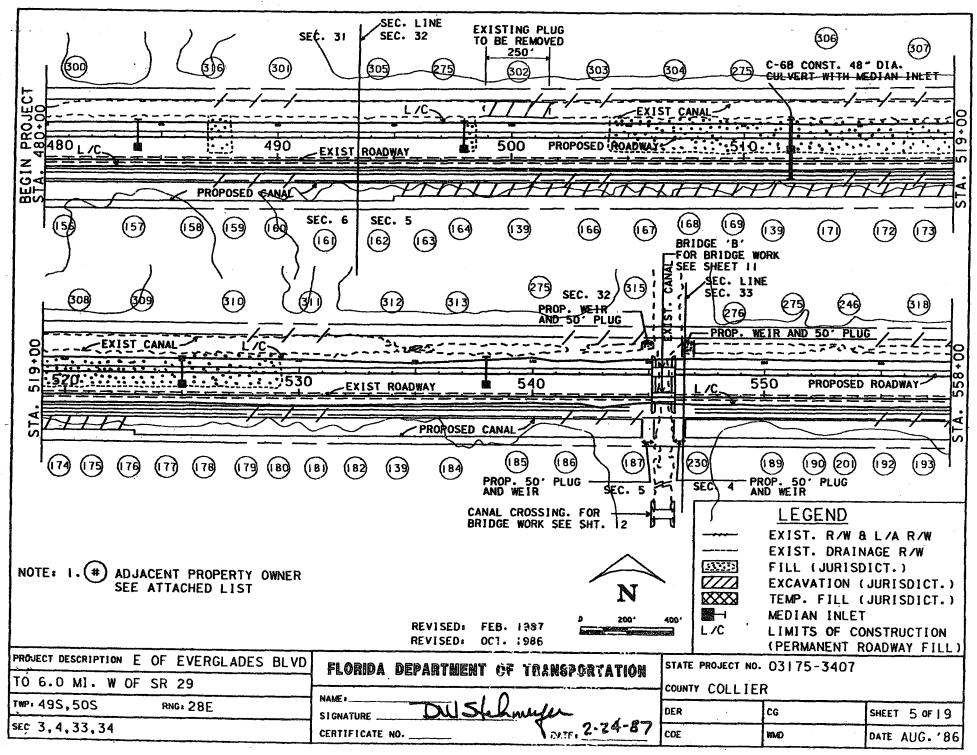
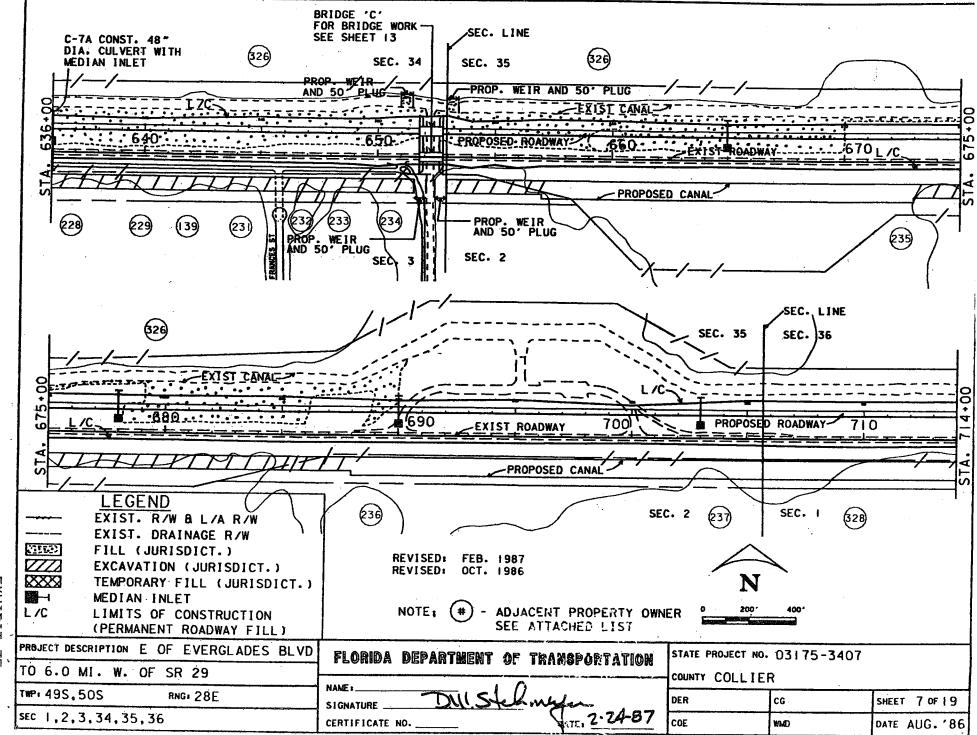
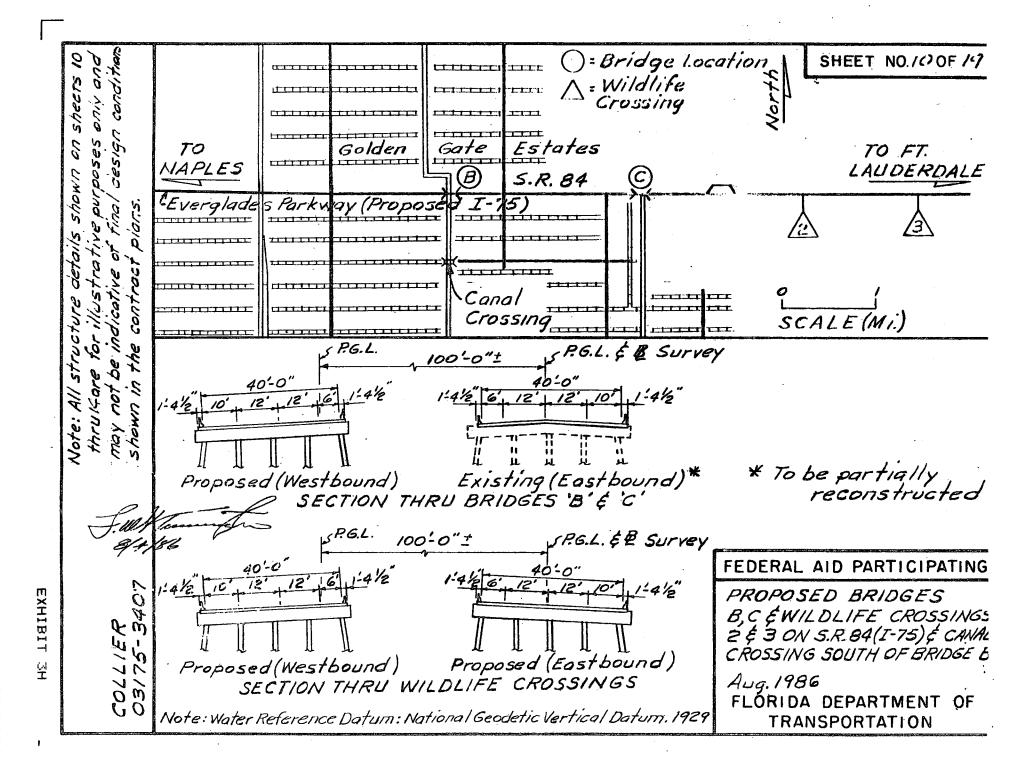


EXHIBIT 3F

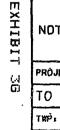
SCANNED

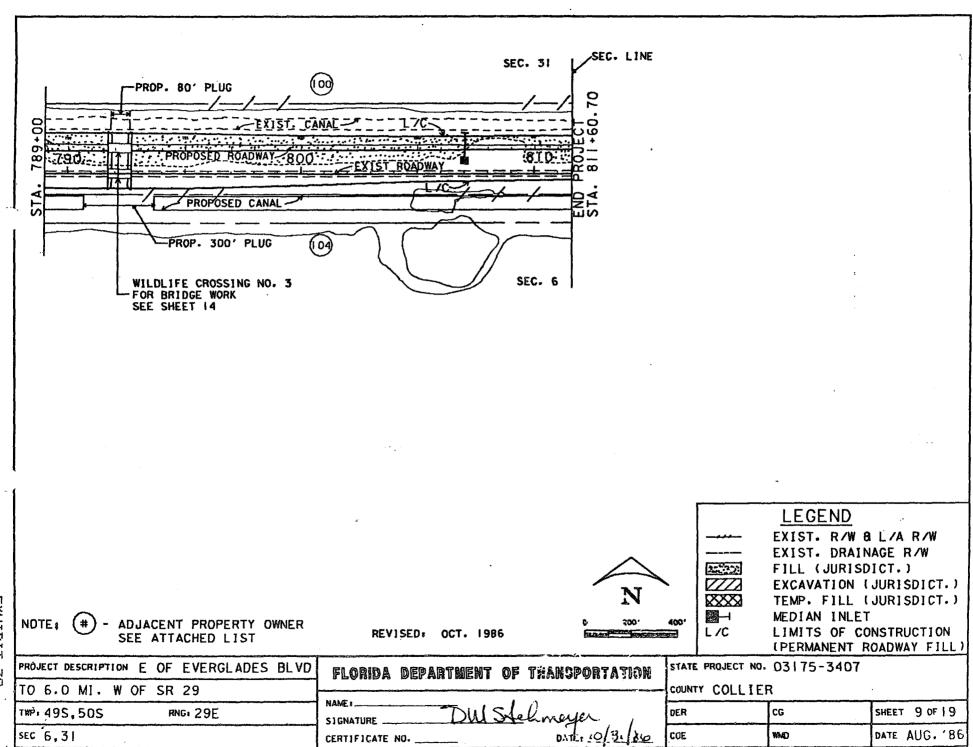


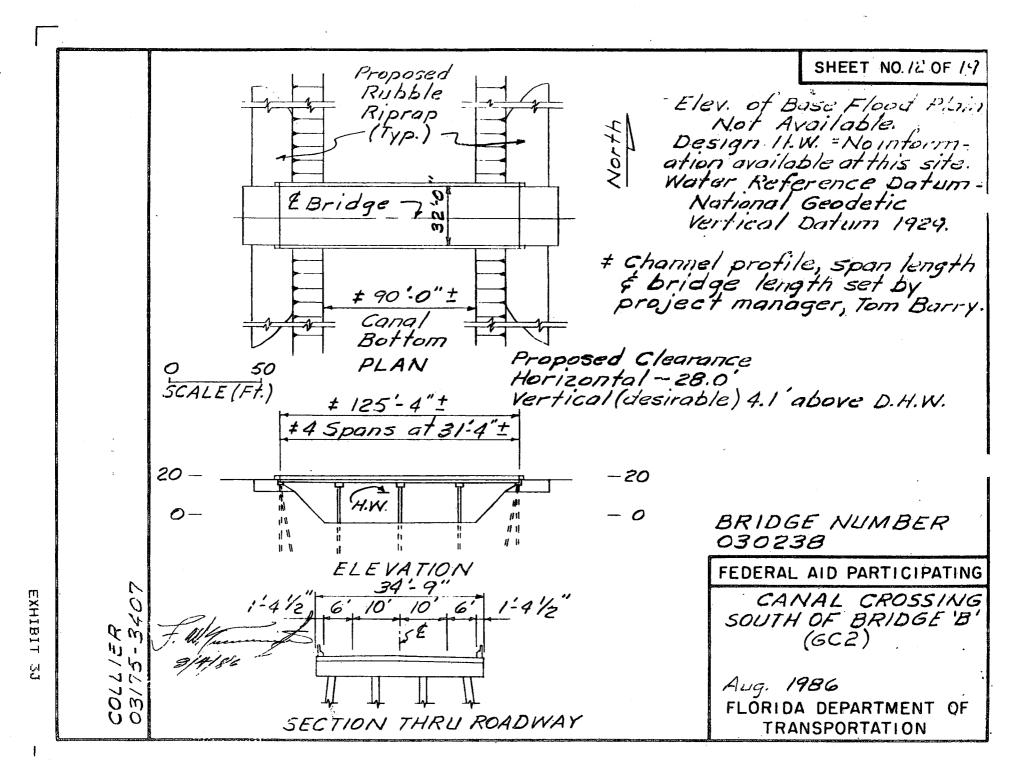
XHIBIT OF

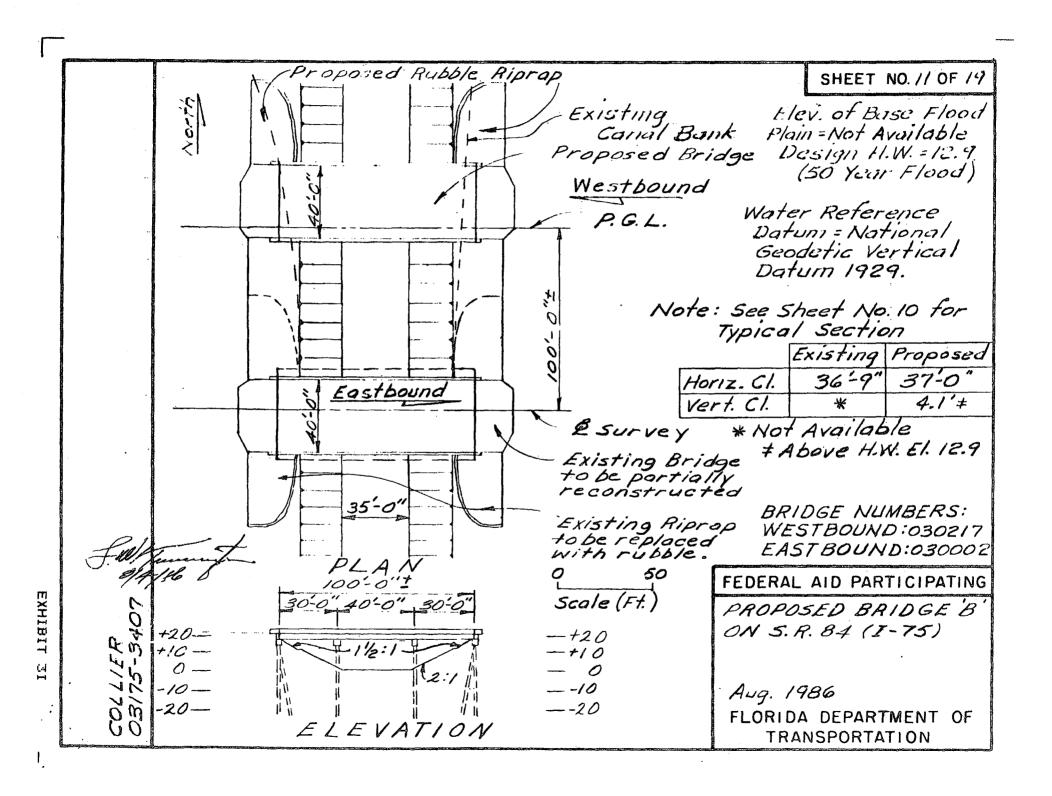


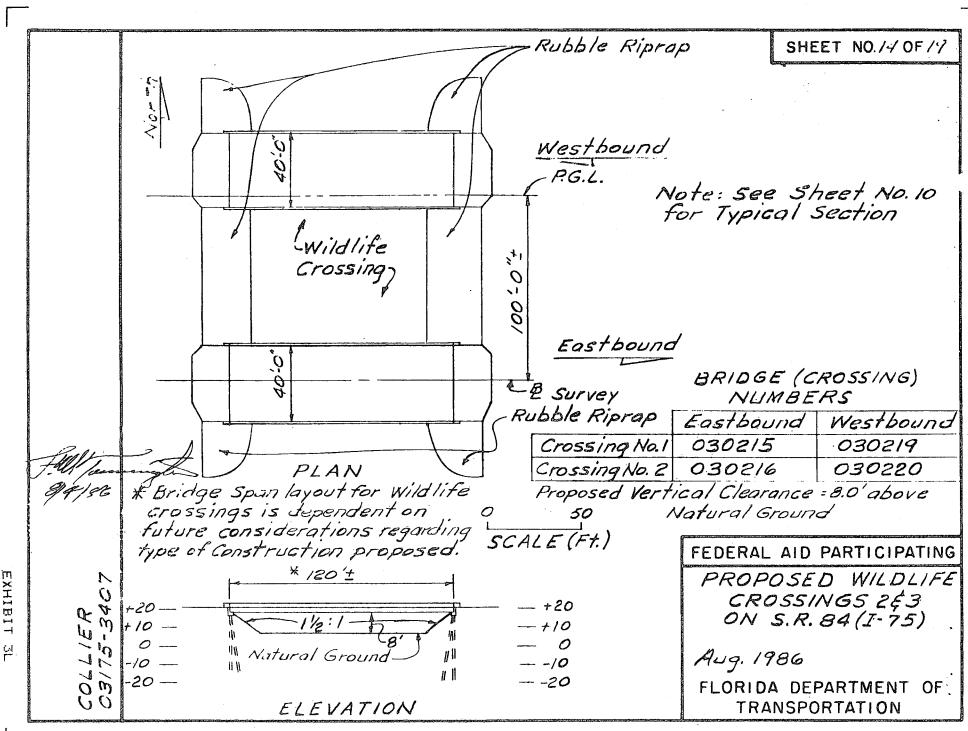
SCANED











EXHIBIT

SCANNED

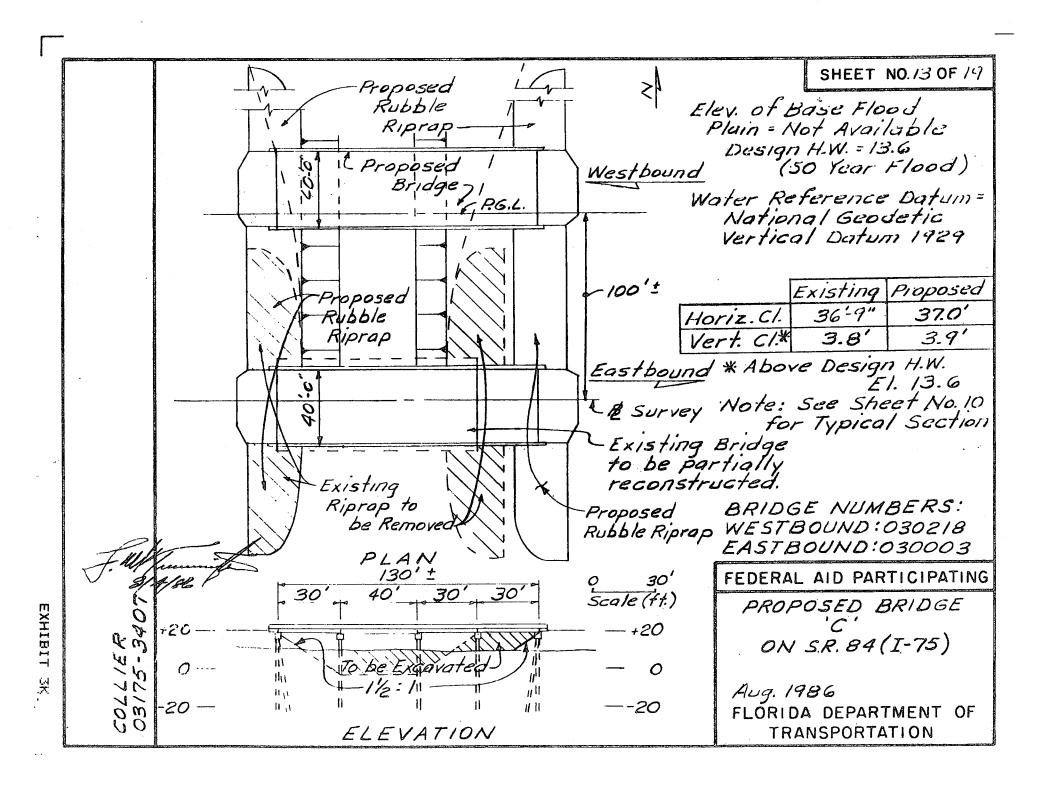
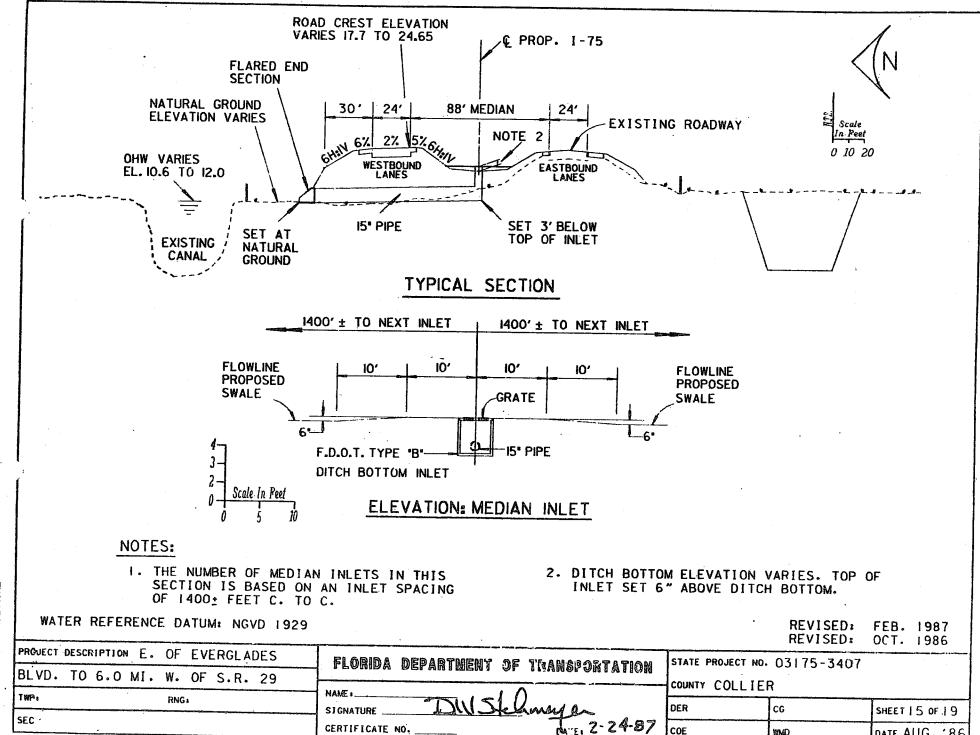


EXHIBIT 3N



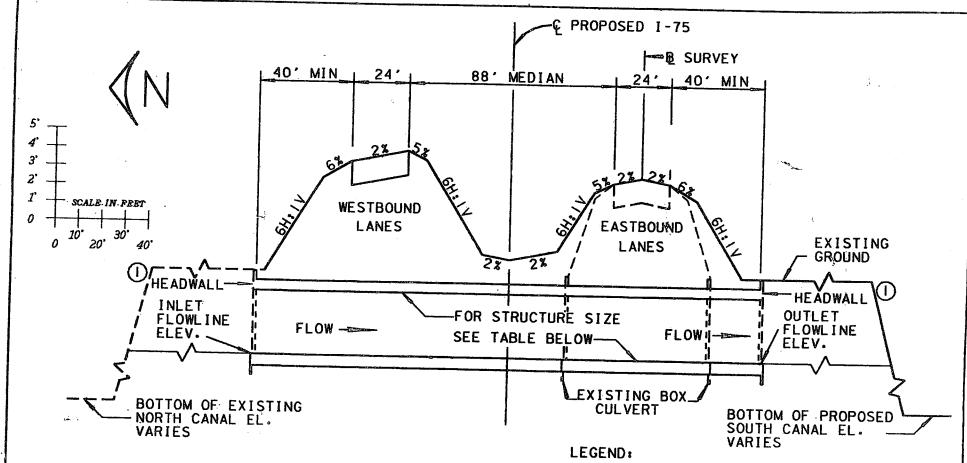
WMD

DATE AUG. '86

TABUI	_ATION OF	DITCH E	BLOCKS (	PLUGS)
	LOCATION/	LENGTH	APPROX.	: ·
STATION	MILE POST	(FT.)	TOP ELEV.	DHW / OHW
545+00 ① 544+95 ② 546+70 ① 546+35 ① 578+35 ② 619+70 ② 619+70 ① 651+25 ① 651+80 ③ 653+20 ④ 652+70 ① 652+70 ① 728+60 ③ 728+60 ③ 792+20 792+20	SOUTH / 10.1 NORTH / 10.1 NORTH / 10.1 SOUTH / 11.0 NORTH / 11.5 SOUTH / 11.4 NORTH / 12.2 SOUTH / 12.2 NORTH / 12.2 SOUTH / 12.2 SOUTH / 12.2 SOUTH / 13.7 NORTH / 13.7 NORTH / 14.9 NORTH / 14.9	50 50 50 370 200 200 50 50 50 100 100 300 80	12.5 11.7 11.1 11.8 10.1 12.8 11.3 10.1 10.1 10.1 12.2 11.8 12.4 NOTES: 13.0	12.9 / 10.9 12.9 / 10.9 12.9 / 10.9 12.9 / 10.9 13.1 / 11.1 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6 13.6 / 11.6
			I. ALL STAT	IONS ARE & SURVEY
① DITCH B	LOCK CONSTRUCTED NO EXCAVATION			CH BLOCK. UTH DESIGNATES
	IG DITCH BLOCK		LOCATION	RELATIVE TO
3 84" PIP			ROADWAYS	ARE SHOWN IN THESE
@ WEIR	·		PERMITS	FOR INFORMATIONAL
<b>4</b> . – 4	RE	VISED: FEB. 1987	7 PURPOSES	UNL Y .

		REVISED: OCT. 1986		
PROJECT DESCRIPTION E.	OF EVERGLADES	FLORIDA DEPARTMENT OF TRANSPORTATION STATE PROJECT NO.	03175-3407	
BLVD. TO 6.0 MI.	W. OF S.R. 29	COUNTY COLLIER		ï
TWP:	RNG:	SIGNATURE DU STER OUTE 2-24-87 COE	CG SI	HEET ! 8 OF I
SEC		CERTIFICATE NO COE	MMD DA	ATE AUG.





NO.	PROJECT STATION	SIZE	DESCRIPTION	INLET FL EL.	OUTLET FL FL	OHW	DHW
C-6B	512+00	48 "	PROPOSED	6.2	5.8	10.9	12.9
C-6C.	561+50	48 "	PROPOSED	6.0	5.6	10.9	12.9
C-7	593+00	10'X 5'	EXTENDED	7.0	6.8	11 1	12.3
C-7A	636+00	48"	PROPOSED	6.4	6.0		13 1
C-7B	751+00	10'X 5'	PROPOSED	7.1	6.9	12.0	14.0

1 HEADWALL FOR 10'X 5' CONCRETE BOX CULVERT, FLARED END SECTION FOR 48" PIPE.

#### NOTE:

- 1. ALL STATIONS ARE & SURVEY.
- 2. OHW/DHW ARE SHOWN IN THESE PERMITS FOR INFORMATIONAL PURPOSES ONLY.

REVISED. FER 1007

	PROJECT DESCRIPTION E OF EVEROLADES	REVISED: OCT. 1986  TO 6.0 MI. W. OF S.R. 29  RAME:  SIGNATURE  CERTIFICATE NO.  STATE PROJECT NO. 03175-3407  COUNTY COLLIER  DER  COL SHEET 17 OF 19  DATE AUG. '86			
. 5		Florida department of transportation	STATE PROJECT NO.	03175-3407	
ſ	TWO.	NAME:	COUNTY COLLIE	R	
Ì	SEC	SIGNATURE OW NEW PROPERTY 321 87	DER	CG	SHEET   7 OF   9
_		CERTIFICATE NODETE: 6. C. C. C.	COE	WAD	DATE AUG. 186

PROJECT DESCRIPTION	6.0 MI.	W. OF	SR	29	FLORIDA DEPARTMENT	CF TRAKSPORTATIO	STATE PROJEC	T NO. 03175-3	406
TO SR 29	RNG	<u></u>	<del></del>		NAME : DUIS	Jehnster 2-24		CG	SHEET 2 0 20
SEC		·· · · · · · · · · · · · · · · · · · ·			CERTIFICATE NO.	DATE: 2-24-	<b>§7</b> COE	WWD	DATE AUG. '86

		PERMA	RMANENT TEMPORAF					
INVOLVEMENT	EXCAVATION   FILL				FILL			
	AREA	I VOLUME	AREA	I VOLUME	AREA	I VOLUME		
JURISDICTIONAL WETLANDS	24.1	     517,351   	39.9	273,532	12.3	NC		

NOTES: AREA IN ACRES; VOLUME IN CUBIC YARDS

TEMPORARY FILL AREA IS WITHIN EXISTING RIGHT OF WAY AND WILL BE USED BY THE CONTRACTOR DURING CONSTRUCTION FOR STOCKPILING MATERIAL.

IT WILL BE RESTORED TO NATURAL ELEVATION UPON COMPLETION OF CONSTRUCTION.

NC - NOT COMPUTED BECAUSE IT WILL BE REMOVED.

PROJECT DESCRIPTION E. OF EVERGLADES	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03175-3407	
BLVD. TO 6.0 MI. W. OF S.R. 29		COUNTY COLLIE		
	** NANC.	COOKIT COLLIE	n .	
TWP: RNG:	SIGNATURE DU Stelementer	DÉR	CG	SHEET 19 OF 19
SEC	CERTIFICATE NO DATE: 10/3./86	COE	NAO :	DATE AUG. 186
			I	DATE AUG. 00

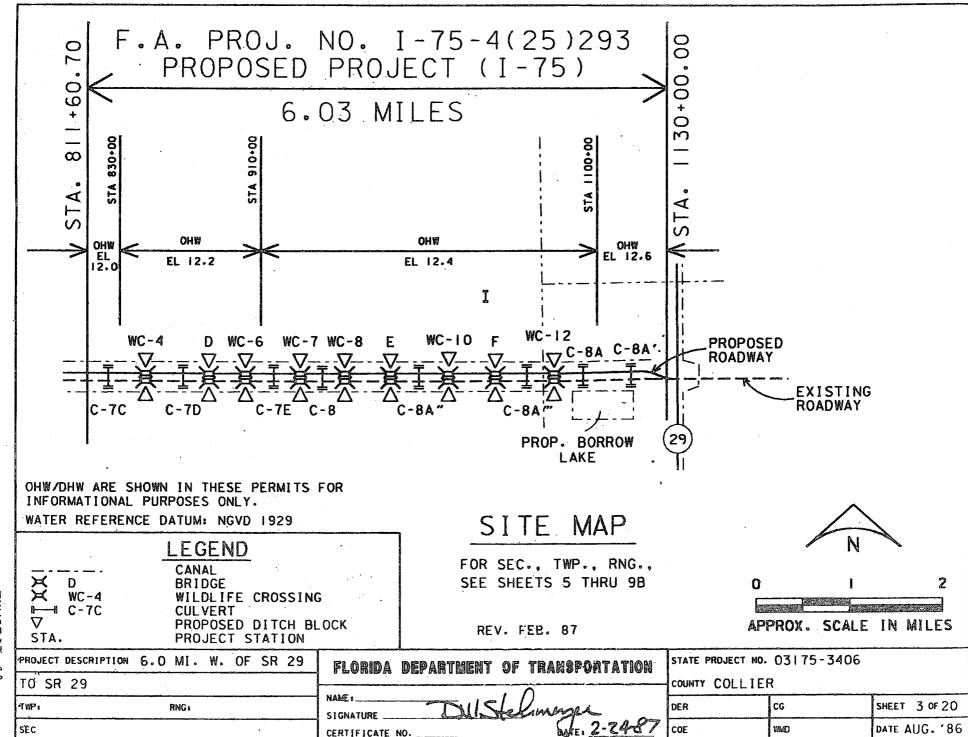


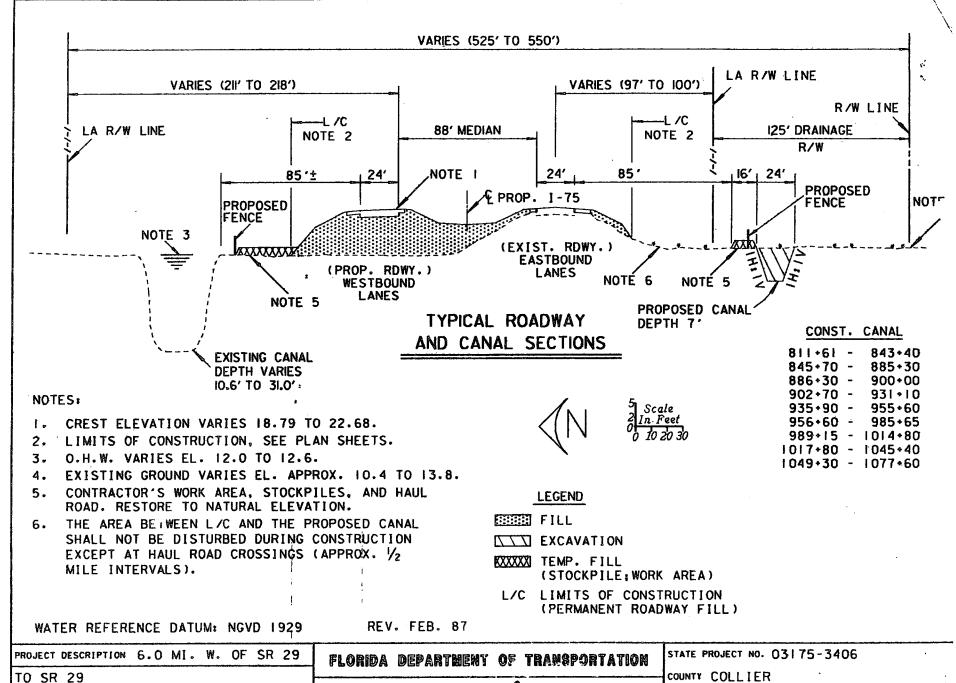
EXHIBIT 4A



TWP:

SEC

RNG:



DER

CG

CMAY

SHEET 4 OF 2C

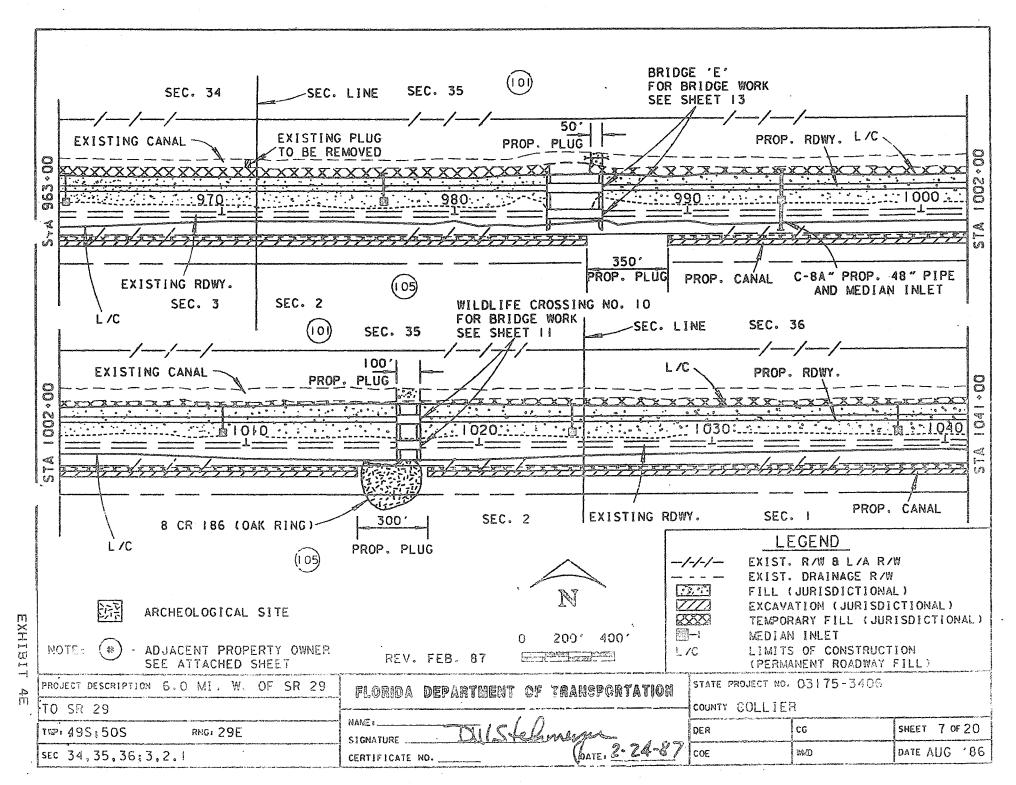
DATE AUG. '8

NAME:

SIGNATURE

CERTIFICATE NO.

EXHIBIT 4C



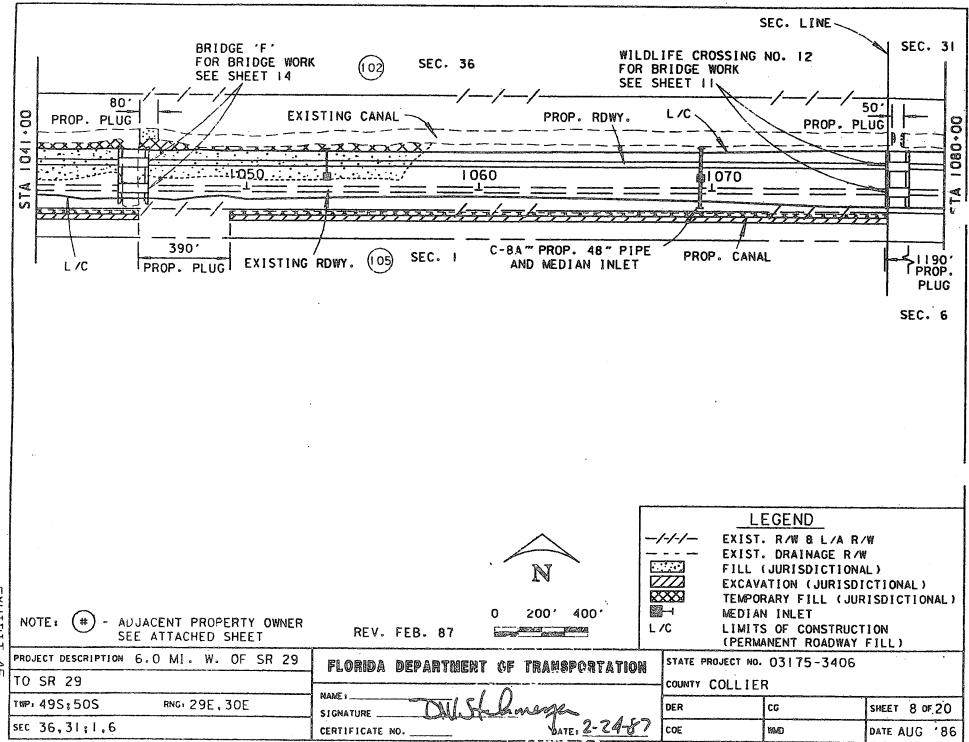
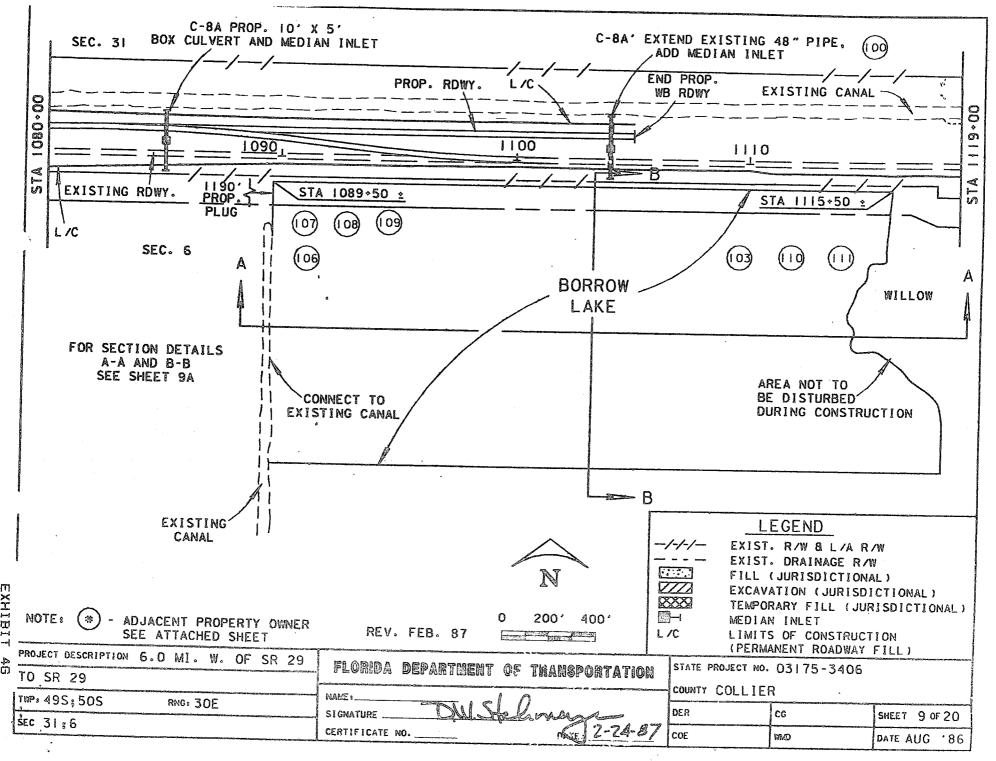
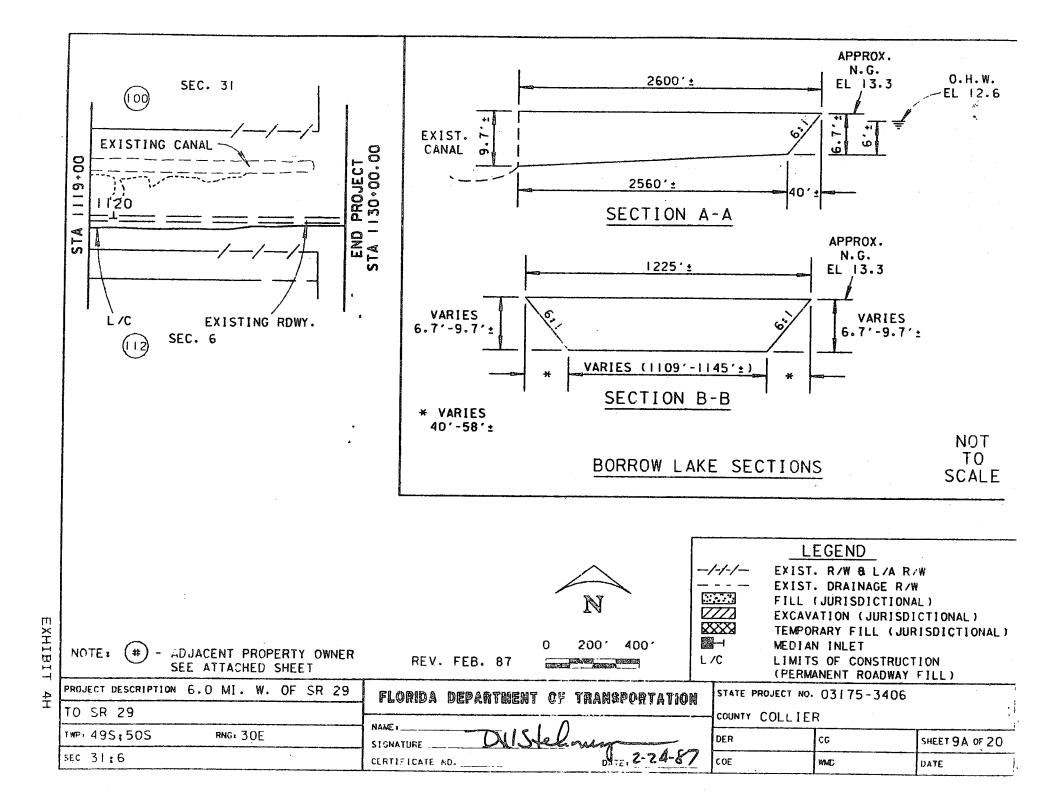


EXHIBIT 4F





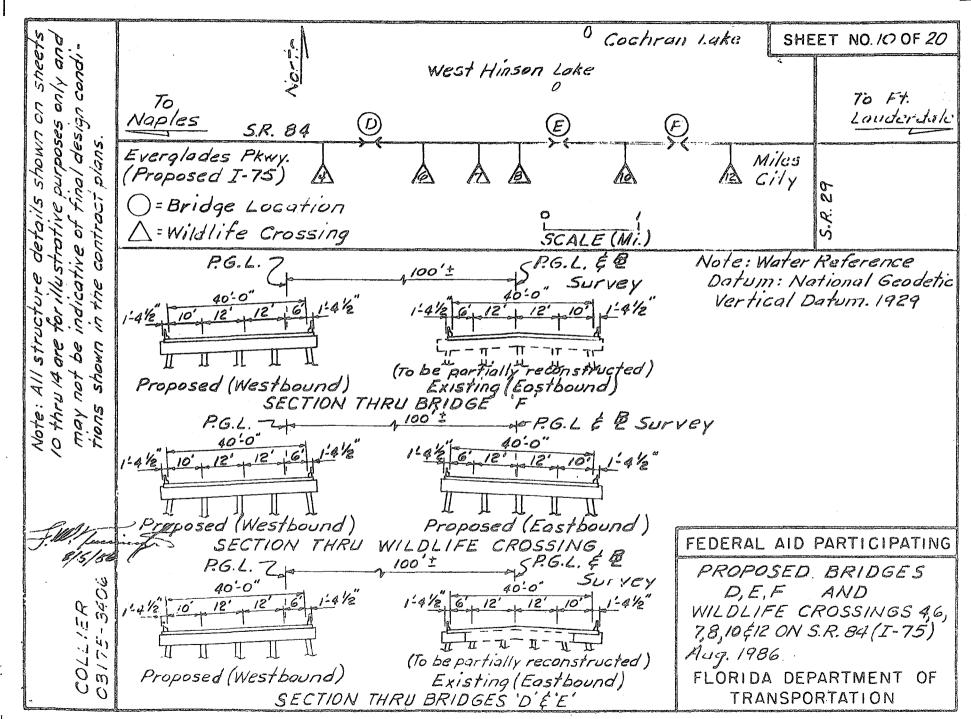
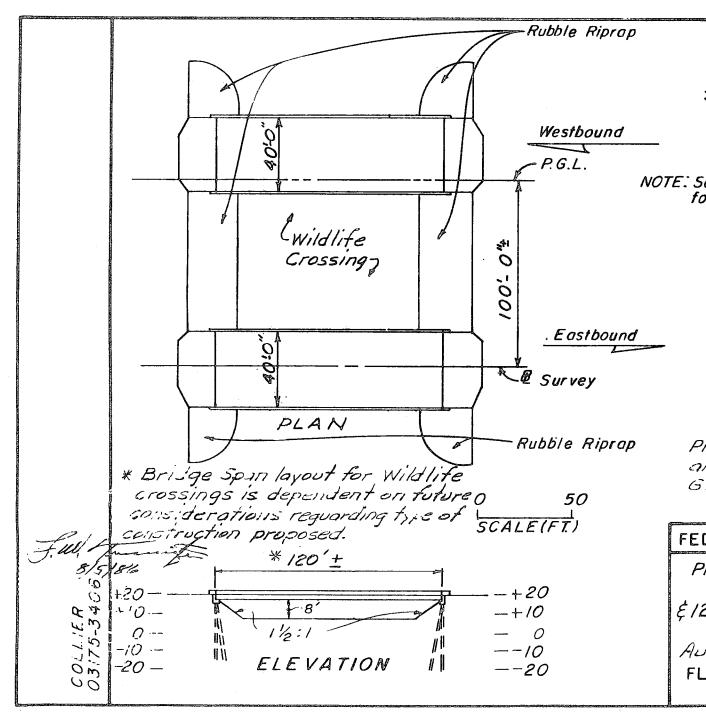


EXHIBIT 41





SHEET NO. 1/ OF 20

NOTE: See sheef No. 10 for Typical Section.

BA	RIDGE (CRC	SSING)
	NUMBERS	5
No.	Eastbound	Westbound
4	030221	030222
6	030224	030225
7	030226	030227
8	030228	030229
10	03 0231	030232
12	030234	030235

Proposed Vertical Clear ance so , we Natural Ground

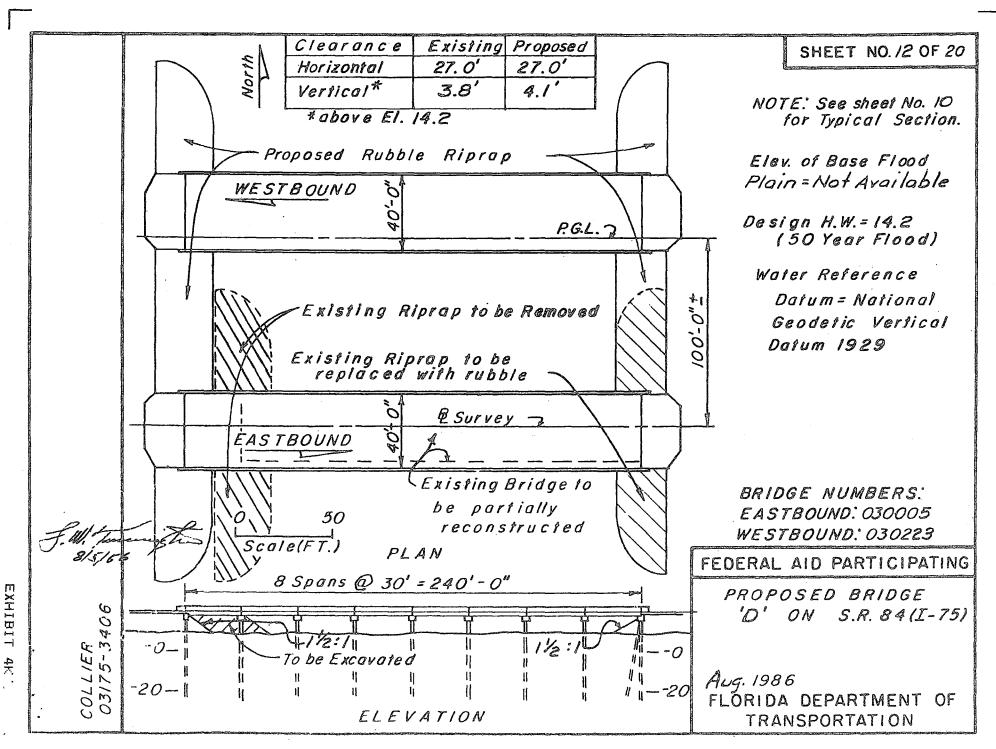
## FEDERAL AID PARTICIPATING

PROPOSED WILDLIFE CROSSINGS 4,6,7,8,10 \$12 ON S.R. 84(I-75)

Aug. 1986

FLORIDA DEPARTMENT OF

TRANSPORTATION



Proposed

27.0'

1.4'

>h

SHEET NO. /3 OF 20

Notal See Sheet

Existing

27.0

4.0

Clearance

Horizontal

Vertical\*

LIBIHXE

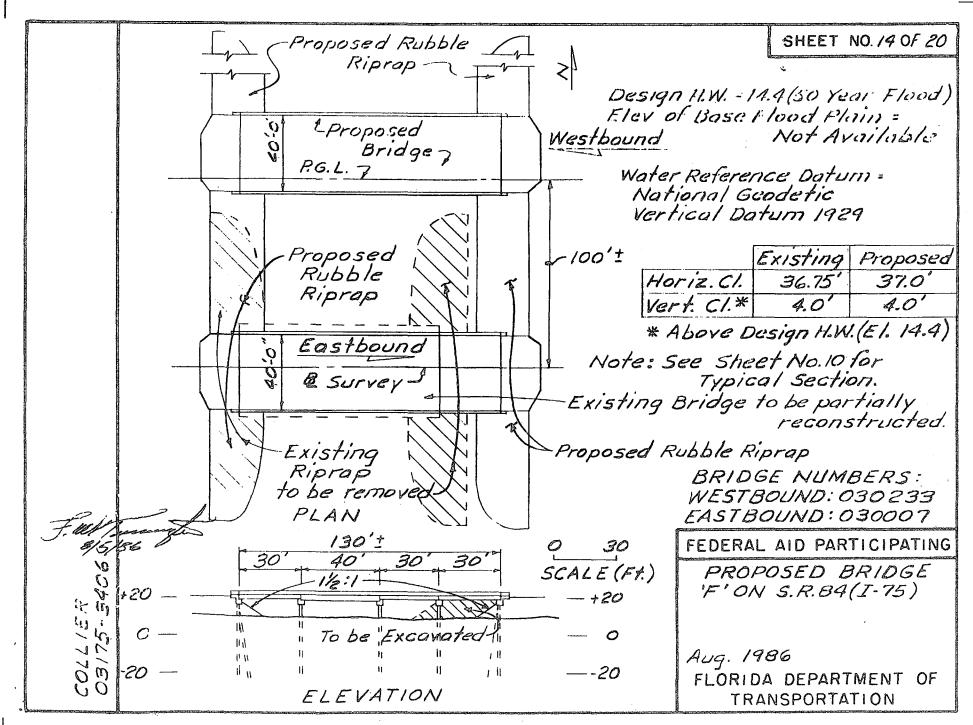
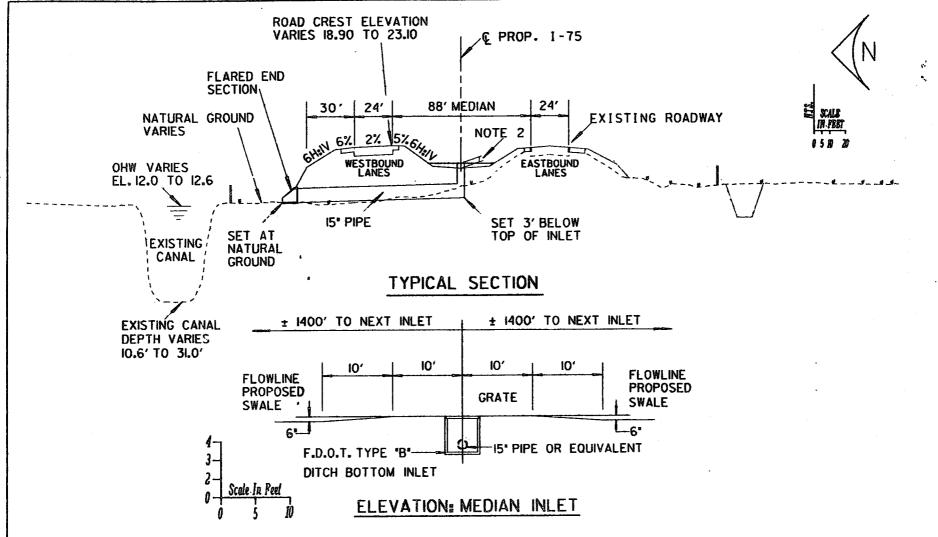


EXHIBIT 4M.





### NOTES:

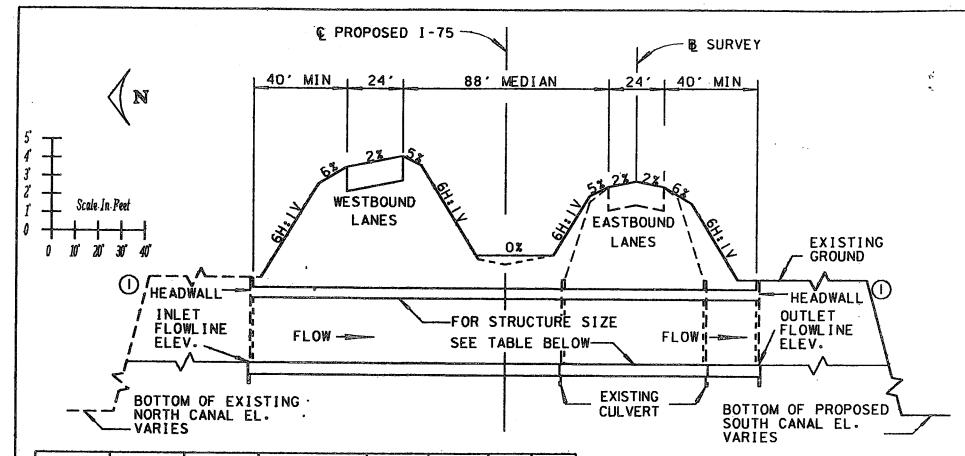
I. THE NUMBER OF MEDIAN INLETS IN THIS SECTION IS BASED ON AN INLET SPACING OF 1400: FEET C. TO C.

2. DITCH BOTTOM ELEVATION VARIES. TOP OF INLET SET 6" ABOVE DITCH BOTTOM.

WATER REFERENCE DATUM: NGVD 1929

REV. FEB. 87

- 1					·						<del> </del>		
PF	OJECT DESCRIPTION	6.0 MI.	₩.	OF	SR	29	FLORIDA	DEPARTMENT	of trai	nsportation	STATE PROJECT NO.	03175-3406	•
T	D SR 29										COUNTY COLLIE	R ·	
TV	P ı	RNG:				-	NAME :	NO.	line	se-	DER	cc	SHEET 15 OF 20
36	C						CERTIFICATE	NO		BATE. 2-24-87	COE	WMD	DATE AUG: '8



STRUC. NO.	PROJECT STATION		DESCRIPTION	INLET FL EL.	OUTLET FL EL.	ОНЮ	DHW
C-7C	821+90	48"	PROPOSED	8.7	8.5	12.0	14.1
C-7D	865+50	48"	PROPOSED	8.8	8.6	12.2	14.2
C-7E	909+50	48"	PROPOSED	8.9	8.7	12.4	14.4
C-8	945+00	10'X 5'	EXTENDED	8.3	8.1	12.4	14.4
C-8A"	994+00	48"	PROPOSED	9.0	8.8	12.4	14.4
C-8A"	1069+50	48"	PROPOSED	9.2	9.0	12.4	14.4
C-8A	1085+00	10'X 5'	PROPOSED	6.9	6.7	12.4	14.4
C-8A'	1104∻00	48 "	EXTENDED	9.5	9.3	12.6	14.6

#### LEGEND:

① HEADWALL FOR 10'X 5' CONCRETE BOX CULVERT, FLARED END SECTION FOR 48" PIPE.

### NOTE:

- I. ALL STATIONS & SURVEY
- 2. OHW/DHW SHOWN FOR INFORMATIONAL PURPOSES ONLY.

REV. FEB. 87

PROJECT DESCRIPTION 6.0 MI. W. OF SR 29	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03175-3406	
TO SR 29		COUNTY COLLIE	R	
TISP: RNG:	CICMATURE LANGE DESCRIPTION	DER	cG	SHEET 16 OF 20
SEC	CERTIFICATE NO. DATE: 2-24-87	COE	WAD :	DATE AUG. 186

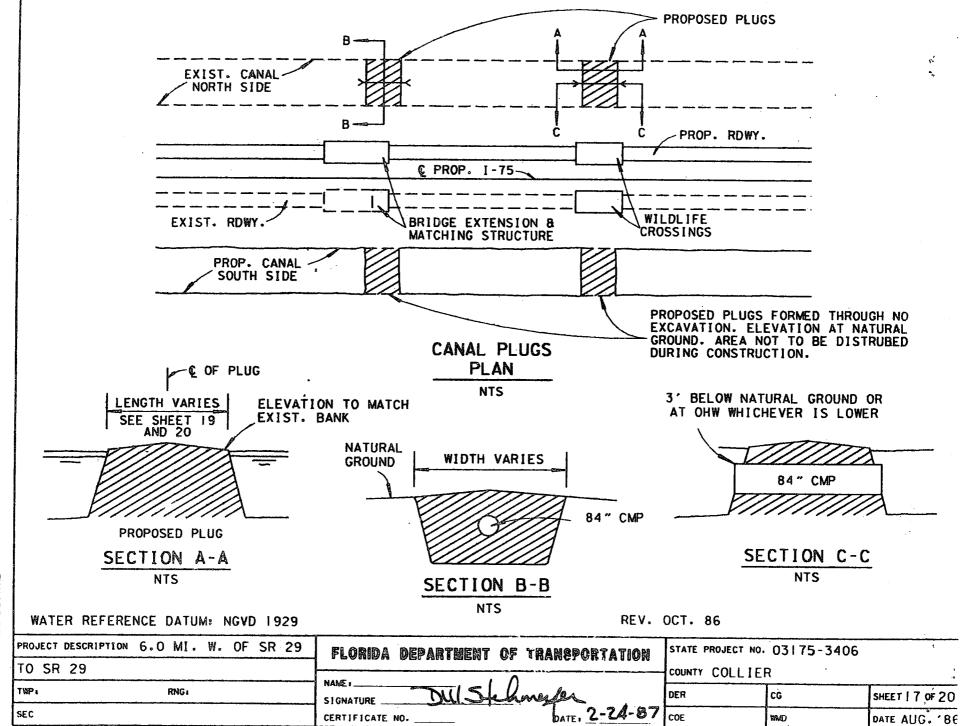


EXHIBIT 4P

TABUL	<u> 10 I T A .</u>	1 OF	DITCH	BLOCK	(S (P	LUGS	)
STATION	LOCATION MILE PO		LENGTH (FT.)		APPROX. P ELEV.	DHW	∧о́Н́ Мٍ
844+80②	NORTH /	15.8	50		12.0	14.1	/ 12.2
844+55 <sup>①</sup>	SOUTH /	15.8	230	;	12.3	14.1	/ 12.2
885+80 <sup>②</sup>	NORTH /	16.6	50	•	12.0	14.1	/ 12.2
<sub>885+80</sub> ⊕	SOUTH /	16.6	100		13.1	14.1	/ 12.2
901+00	NORTH /	16.9	50		13.2	14.1	/ 12.2
901+35 <sup>①</sup>	SOUTH /	16.9	270		12.1	14.1	/ 12.2
933+00 <sup>②</sup>	NORTH /	17.5	50		11.3	14.4	/ 12.4
933+50 <sup>①</sup>	SOUTH /	17.5	480	•	13.1	14.4	/ 12.4
956+10 <sup>②</sup>	NORTH /	17.9	50		12.2	14.4	/ 12.4
956+10 <sup>①</sup>	SOUTH /	17.9	100		12.0	14.4	/ 12.4
986+10 <sup>②</sup>	NORTH /	18.5	. 50		11.5	14.4	/ 12.4
987+40 <sup>①</sup>	SOUTH /	18.5	350		12.0	14.4	/ 12.4
1017+00	NORTH /	19.1	100		11.0	14.4	/ 12.4
1016+30 <sup>①</sup>	SOUTH /	19.1	300		12.1	14.4	/ 12.4
1045+80	NORTH /	19.6	80		12.4	14.4	/ 12.4
1047+35 <sup>①</sup>	SOUTH /	19.6	390		11.1	14.4	/ 12.4
						REV. OC	T. 86
PROJECT DESCRIPTION 6.0 MI.	W. OF SR 29	Florida department of transportation			STATE PROJECT NO. 03175-3406		
TÓ SR 29		NAME 8	Du Stelm	a.A.	COUNTY COLLIE	R Ice	SHEET   8 OF 20
SEC .		SIGNATURE CERTIFICATE N		0: 2-24-87	COE	WWD	DATE AUG. '86

EXHIBIT 40

STATION	LOCATION/ MILE POST	LENGTH (FT.)	APPROX. TOP ELEV.	DHW/OHW
1078+00	NORTH / 20.2	50	13.0	14.4 / 12.
1078+10 <sup>(1)</sup>	SOUTH / 20.2	1190	13.4	14.4 / 12.

# LEGEND:

- ① DITCH BLOCK CONSTRUCTED THROUGH NO EXCAVATION
- ② 84" PIPE CULVERT

## NOTE:

- THE Q OF DITCH BLOCK (PLUG).
- 2. NORTH/SOUTH DESIGNATES LOCATION RELATIVE TO ROADWAYS.
- 3. OHW/DHW SHOWN FOR INFORMATIONAL PUPOSES ONLY.

REV. FEB. 87

PROJECT DESCRIPTION	6.0 MI. W.	OF	SR 2	9	FLORIDA DEPARTMENT OF TRA	MSPORTATION	STATE PROJECT NO.	03175-3406	,
TO SR 29							COUNTY COLLIE	R ·	
TWP:	RNG:				SIGNATURE DU Schmer	per.	DER	cG	SHEET 1,9 OF
SEC					CERTIFICATE NO.	DATE: 2-24-87	COE	WMD	DATE AUG.

EXHIBIT 4R

   		PERMA	I TEMPORARY			
INVOLVEMENT	EXCAV	ATION	FILL		FILL	
	AREA	I VOLUME	I I AREA	I VOLUME I	AREA	I I VOLUME I
JURISDICTIONAL WETLANDS	12.7	     101,719 	i !   67.0 	     536,684   	28.8	I I NC
BORROW LAKE	73.1	907.512	I I NA I	NA	NA	NA

NOTES: AREA IN ACRES, VOLUME IN CUBIC YARDS

TEMPORARY FILL IS WITHIN EXISTING RIGHT-OF-WAY AND WILL BE USED BY THE CONTRACTOR DURING CONSTRUCTION AS A WORK AREA AND FOR STOCKPILING MATERIAL. IT WILL BE RESTORED TO NATURAL ELEVATION UPON COMPLETION OF CONSTRUCTION.

NC - NOT COMPUTED BECAUSE IT WILL BE REMOVED.

REV. FEB. 87

PROJECT DESCRIPTION 6.0 Ml. W. OF SR 29	FLORIDA DEPARTMENT OF TRANSPORTATION	STATE PROJECT NO.	03175-3406	
TO SR 29		COUNTY COLLIE	R ·	
TWP: RNG:	SIGNATURE DU Ste America Pate. 2-24-87	DER	ce	SHEET 2D OF 20
SEC	CERTIFICATE NO TATE. 2-24-87	COE	RIMED	DATE AUG. 186

# STAFF REPORT DISTRIBUTION LIST

PROJECT <u>I-75/Alligator Alley</u> APPLICATION NUMBER 08076-K, 08116-B, 08116-F

	NAL DISTRIBUTION	EXT	FERNAL DISTRIBUTION CONTINUED
	eviewer: <u>J. Mang</u>		Ingineer, City of
X	<u>R.A. Boylan</u>		·
	. Davis	ļ	_ocal Drainage District
	. Pemble	_	
-	. Lamb		•
	. Hursh	<u>BU</u>	ILDING AND ZONING
	. de Rojas		Boca Raton
	. Nichols		Boynton Beach
	. Yaun		Royal Palm Beach
	issimmee Office		Tequesta
	ort Myers Office		West Palm Beach
	nspection		
	. Padera		
	. Hall		
	egal	COL	INTY
	. Wodraska		Broward-Dir. Water Mgmt Division
	. Brannen	X	
	. Hall		Dade-DERM
	. Schweigart		Lee-Long Range Planning
	NAL DISTRIBUTION		-Mosquito Control
	RTMENT OF ENVIRONMENTAL		-E.P.S.
	LATION		Martin-Planning and Zoning
	.P.B.		Palm Beach-Building Department
	t. Myers		-Area Planning Board
	rlando		-School Brd, Plant Planning
	allahassee		Polk-Water Resources Department
	ort St. Lucie		
	VING BOARD MEMBERS	X	Fred Vidzes, Big Cypress Basin
Ms	s. Nancy Roen		Kissimmee River Coordinating Council
Mr	. J. Neil Gallagher		
	r. William E. Sadowski		Other:
	r. Timer E. Powers		
	. Nathaniel P. Reed	X	Corps of Engineers
	. John F. Flanigan	X	Department of Natural Resources
	. Kathleen Abrams	X	Florida Audubon Society
	. Stanley W. Hole	X	Florida Game and Fresh Water
	. Oscar Corbin		Fish Commission
	plicant	Х	National Park Service
<u>F1</u>	orida Dept. of Trans.	Х	U.S. Fish and Wildlife Service
Ap	plicant's Consultant:		
Ap	plicant's Agent:		
	gineer, County of		
	<u>ollier</u>		EXHIBIT 5

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

### P.O. BOX "V"

WEST PALM BEACH, FL. 33402

\*\*\*\*\*NOTICE OF INTENT TO CONSTRUCT WORKS PURSUANT TO GENERAL PERMIT\*\*\*\*\*
(CHAPTER 40E-40, FLORIDA ADMINISTRATIVE CODE)

	Florida Departme	nt of Transport	ation	08076-K
MAILING ADDRES	S: 605 Suwannee St	reet, MS-37	•.	
			32301-8064	904/487-2780
	(CITY)		(ZIP)	(PHONE)
	THE PROPOSED PRO		505	naryo, 26F, 27E, 28E
				RGE(S) <u>26E</u> , 27E, 28E 470(Right-of-Way) ACRES
NUMBEI	R OF DWELLING UNITS	S OR SQUARE FEE	I OF COMMERCIAL	- AREA:
	OF VEDIEVING 70NUM	O COMPATIBILITY	/ATTACLI DOCUM	- I
	CE VERIFYING ZONING			NGV
				•
PROPOS	SED MINIMUM FLOOR	ELEVATION:		onstruct two 12 travel
BRIEF DESCRIPTI	ON OF THE WOHKS TO Feyisting SR 84 r	O-BE CONSTRUCTE Oadway excavat	e canal 15º dee	onstruct two 12' travel p, 60'-80' wide south
	padway.			
				ACRE
•	_			ACRE
USING	E PAVING, GRADING & AN EXFILTRATION SYS	& DHAINAGE PLAN STEM, PERCOLATION	S, CALCULATIONS ON TESTS.	, AND, IF
BRIEF STATEMEN	T OF FACTS WHICH S	HOW WHY THE PR	OPOSED WORKS G	UALIFY FOR A
GENERAL PERMIT	See attach	ed letter		RECEIVED
				44.
				AUG 0 7 1986
				RESOURCE CONTROL DEPARTME
(ADD EXTRA SHE	ET IF NECESSARY)			RESOURCE CONTROL DEPARTM
•	_	N IS EXPECTED TO	COMMENCE:JL	
DATE CONSTRUC	CTION OR ALTERATION	na del Corone e Mario del proposo del Corone del Proposito del Corone del Proposito del Corone del Proposito d	redistre state to commisse to respondentally enter trace. In think when we wishe	
DATE CONSTRUC	CTION OR ALTERATION	ALL NECESSARY I	EDERAL, STATE,	ily 1987
DATE CONSTRUC	CTION OR ALTERATION	ALL NECESSARY I	EDERAL, STATE,	
DATE CONSTRUC	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS	ALL NECESSARY I	EDERAL, STATE,	ily 1987
DATE CONSTRUC	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS	ALL NECESSARY I	EDERAL, STATE,	ily 1987
DATE CONSTRUCTION  I HIS LOCATION  OWNER'S SIGNAT  (IF NOT THE OWN	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS	ALL NECESSARY F STRICT AUTHORIZA	FEDERAL, STATE, ATIONS HAVE BEE	ily 1987
DATE CONSTRUCTION  I HI LO  OWNER'S SIGNAT (IF NOT THE OWN  I HEREBY CERTIF	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS TURE: NER, CERTIFY BELOW) THAT I AM AN AUTH	ALL NECESSARY FOR THE PROPERTY OF THE PROPERTY	FEDERAL, STATE, ATIONS HAVE BEE	ily 1987
OWNER'S SIGNAT (IF NOT THE OWN I HEREBY CERTIF	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS TURE: NER, CERTIFY BELOW) THAT I AM AN AUTH	ALL NECESSARY FOR THE STRICT AUTHORIZA	FEDERAL, STATE, ATIONS HAVE BEE	nly 1987
OWNER'S SIGNAT (IF NOT THE OWN I HEREBY CERTIF	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS TURE: NER, CERTIFY BELOW) TY THAT I AM AN AUTH ymond A. Ashe, Jr.	ALL NECESSARY FOR THE STRICT AUTHORIZA	FEDERAL, STATE, ATIONS HAVE BEE	nly 1987
OWNER'S SIGNAT (IF NOT THE OWN I HEREBY CERTIF SIGNATURE: Ra	ETION OR ALTERATION EREBY CERTIFY THAT CAL AND SPECIAL DIS TURE: NER, CERTIFY BELOW) TY THAT I AM AN AUTH ymond A. Ashe, Jr.	ALL NECESSARY FOR THE STRICT AUTHORIZA	FEDERAL, STATE, ATIONS HAVE BEE	nly 1987

#### MEMORANDUM

TO: Jenni Mang, Regulatory Supervisor

FROM: Rae Ann Boylan, Environmental Analyst Rous

DATE: April 1, 1987

SUBJECT: 08076-K, 08116-B, 08116-F; I-75/Alligator Alley

Collier County

Environmental Comments

The proposed works include the construction of twenty miles of interstate highway and associated drainage facilities from S.R. 29 west to the toll booth. The improvements include two additional traffic lanes. A southern borrow/distributor canal will be constructed along with numerous canal plugs, additional culverting and weir structures to promote historic sheetflow to the south. The works also include construction of eight new wildlife crossings.

The project as proposed will impact 192.9 acres of wetlands. An additional 44.5 acres of wetlands will be temporarily disturbed during actual construction. The wetlands to be impacted are primarily cypress forest and mixed hardwood swamp. The eastern' segment of these improvements will transect the Fakahatchee Strand. In order to minimize potential adverse environmental impacts, the following items and modifications have been incorporated into the project design. The overall project has been designed to promote and reestablish historic sheetflow in the area. At the present time, processing is underway to purchase approximately 640 acres of wetlands adjacent to the highway. These lands will then be preserved under state ownership. A portion of these wetlands (the northern half section) have been impacted by altered drainage and subsequent wildfires. The reestablishment of sheetflow should enhance these wetlands. In order to minimize potential impacts to the Fakahatchee Strand State Preserve, the southern distributor canal has been significantly reduced in size. A borrow lake has been included in the design to provide the necessary fill material. This lake is to be located in the southwestern section of the S.R. 29 and I-75 intersection. Also, this segment of highway will include eight wildlife crossings. Since automobile accidents represent the cause of significant mortalities of the Florida panther, these wildlife crossings will provide an additional degree of protection for the panther.

Additional activities associated with the project, but not directly related to the actual construction, include combining DOT ROW monies with DOI and DNR funds to add an additional 128,000 acres of lands to the Big Cypress National Preserve. An additional 2,000 acres of lands have been purchased at the

Jenni Mang (I-75/Alligator Alley) April 1, 1987 Page 2

intersection of I-75 and S.R. 29. A majority of these lands will be set aside for preservation purposes.

In review of the project proposal District staff acknowledges the wetland impacts, the constraints under which DOT must operate, the items and revisions included in the project design to minimize environmental impacts and the general public interest aspects associated with the highway project. In light of these issues the overall project as proposed should have a fair environmental impact.

### Recommended Special Condition:

1. Prior to construction activities, detailed plans of the weir structures and appropriate documentation to support the control elevations shall be submitted to District staff for review and approval.

#### RAB/jr

cc: C. Padera

J. Hall

E. Yaun

√R. Edenfield Inspection

Samples

#### MEMORANDUM

Files TO:

Rae Ann Boylan, Environmental Analyst FROM:

September 5, 1986 DATE:

#08076-K, 08116-F, FDOT Alligator SUBJECT:

Collier County Toll Booth to S.R. 29

Environmental Review (Flight 8/22/86, Field 9/4/86)

The proposed project includes the 4-laning of Alligator Alley from the toll booth east to S.R. 29 (20.0 miles). The proposal includes the excavation of a borrow canal south of the existing road, installation of 8 new wildlife crossings, 4 bridge expansions with adjacent canal plugs, the installation of 8 control structures in the two north-south canals adjacent to Everglades Boulevard, and construction of two east-west bridges south of the Alley.

The project site includes uplands, primarily pine flatwoods and extensive wetlands, primarily cypress systems and mixed hardwood swamps. The project as proposed will impact approximately 165.7 acres of wetlands through excavation of the canal and 165.3 acres through filling. These figures are estimates and need to be verified. As mitigation for these wetland losses the applicant proposes the construction of approximately 14 acres of littoral shelves.

Prior to completion of an environmental review the following information is requested:

- Please provide an acreage figure for the amount of wetlands to be impacted through excavation. Please provide details of 1. any mitigation proposals to compensate for the total wetland losses, through both excavation and filling.
- Please provide soil boring data to document that no 2. confining layers will be breached through the canal excavation adjacent to the wetlands.
- Please provide details of the 8 control structures. Please 3. provide information regarding how the control elevations are to be determined.
- Please provide a location sketch for the two bridges to be 4. located south of Alligator Alley.

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5. Please provide relevant portions of the Griner Study regarding the selection of the canal plug locations in relationship to the re-establishment of sheetflow to the south.

### RAB/jr

cc: C. Padera

J. Hall

F. Vidzes

E. Yaun

J. Mang

R. Edenfield

✓Inspection