RCS-03-594
ENVIRONMENTAL ASSESSMENT

Eglin Air Force Base
Florida Department of Transportation
Section 6, Township 2 South, Range 26 West
Eglin Air Force Base, Santa Rosa County, Florida
FDOT State Contract Number: BD 506
WRS Project Number: 305702

Submitted to:
Mr. Philip Deal
Florida Department of Transportation
District III
P. O. Box 607
Chipley, Florida 32428

Submitted by:
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June 3, 2005

Report Documentation Page

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	5e. TASK NUMBER
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9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
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FINDING OF NO SIGNIFICANT IMPACT
FOR
INTERSECTION EXPANSION OF STATE ROAD 87 AND BOB TOLBERT ROAD AND CONSTRUCTION OF WET STORMWATER DETENTION POND NUMBER 2
RCS-03-594
EGLIN AIR FORCE BASE, FLORIDA

Pursuant to the Council on Environmental Quality regulations for implementing procedural provisions of the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR]1500-1508), Department of Defense Directive 6050.1 and Air Force Regulation 32 CFR Part 989, Florida Department of Transportation (FDOT) with support from the Air Force has conducted an Environmental Assessment (EA) of probable consequences for improvement to intersection State Road (SR) 87 and Bob Tolbert Road and construction of a stormwater detention pond on Eglin Air Force Base (AFB), Florida.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The FDOT is proposing to implement a roadway improvement project along SR 87 between its intersection with SR 30 and SR 10; a 19.9 mile corridor. This improvement plan would be completed in several phases over a seven-year period and as funding becomes available. At this time Eglin AFB property would be impacted by construction activities associated with improving the intersection at SR 87 and Bob Tolbert Road as well as installing a stormwater detention pond to treat and attenuate roadway-derived runoff. This action would involve approximately 10 acres of Eglin AFB property. By implementing this project, the SR 87 improvement plan would improve travel service, enhance coastal evacuation operations, reduce or eliminate unsafe roadway characteristics and provide effective and efficient service to an area that is expected to continue to grow in the future. (Section 2.1, pages 3-5 and Section 3.1, pages 7-8)

Roadways would be modified from a two-lane to a four-lane configuration and would include construction of bicycle lanes, pedestrian sidewalks and raised medians. Existing bridges at East Bay River, Dean Creek and Yellow River would be upgraded. As part of the improvement project, the stormwater management system for the SR 87 corridor would be updated. A closed drainage system would convey stormwater runoff to three stormwater detention ponds. These ponds would be used to remove pollutants through particulate settling and absorption and nutrient up take by microbes and water-tolerant vegetation. Stormwater Detention Pond Number 2 would be located within undeveloped property of Eglin AFB approximately 1200 feet east of intersection SR 87 and Bob Tolbert Road and would treat runoff from Dean Creek Bridge to station number 3327+50. (Section 2.0, pages 3-6 and Section 3.1, pages 7-8)

Alternatives Considered but Eliminated from Further Analyses: The FDOT and their contractor, Hatch Mott MacDonald (HMM), evaluated a limited number of construction alternatives during the design phase of this project. They determined it was neither cost-effective nor practical to design a new intersection or realign the current roadway. The most cost-effective approach to meet the anticipated growth of the area and provide the highest level of safety to the public was to expand the existing intersection of SR 87 and Bob Tolbert Road.

Thus, new intersection construction and roadway realignments were no longer considered reasonable alternatives. (Section 3.3.1, page 8)

Four watersheds exist within the limits of the SR 87 construction project. Each of these watersheds were analyzed to determine the size of the pond needed to treat the maximum amount of runoff. This investigation consisted of identifying potential pond site locations that could most effectively treat runoff, calculating the required pond size and depth and determining storm sewer locations. Taking this information along with property cost, environmental sensitivity and functional ability, FDOT and HMM developed a matrix, which ranked each site. The selection criteria included:

- Potential to encounter hazardous waste contamination during construction
- Potential impacts to endangered species, cultural resources and local community
- Calculation of stormwater management treatment volumes
- Relative accessibility and ability to provide vegetative buffer for SR 87
- Static groundwater table elevations
- Potential outfall locations
- Estimated drainage patterns
- Soil composition and compatibility
- Locations of utilities

After extensive research, HMM and FDOT concluded the currently proposed location of Stormwater Pond Number 2 was the only reasonable location for treating runoff from Dean Creek Bridge to station number 3327+50; therefore other alternatives within this watershed were no longer options. (Section 3.3.2, page 8)

No Action Alternative: The "no action" alternative would involve no construction of the stormwater detention pond and no expansion of the Bob Tolbert Road intersection. This alternative would make it nearly impossible to continue the SR 87 road construction project. Existing conditions associated with SR 87 would be expected to degrade as the area population grows as anticipated. (Section 3.2, page 8)

AFFECTED ENVIRONMENT

The following environmental resources were analyzed in the EA: soils and geology, water quality and hydrology, biological resources, wetlands, noise, air quality, transportation, cultural resources, occupational health and safety, environmental justice and hazardous materials.

ENVIRONMENTAL RESOURCE CONCLUSIONS AND IMPACT REDUCTION

Soils and geology, water quality and hydrology, biological resources, noise, air quality, transportation and hazardous materials all have the potential to be affected during construction activities at the project sites. However, impacts would be minimal and localized to construction areas (Section 5, pages 27-33). By employing best management practices and engineering controls these impacts could be further reduced. A few examples include dust control during construction to improve air quality, erosion control to protect surface water, use of the District

Noise Specialist to ensure noise levels do not exceed applicable standards and use of traffic maintenance during construction to maintain adequate traffic flow and protect public safety. In addition, the Florida Department of Environmental Protection will require FDOT to submit for approval a dredge and fill permit as well as a National Pollutant Discharge Elimination System permit for the SR 87 improvement project.

It was determined wetlands and cultural resources would not be impacted by the proposed action because applicable resources do not exist within the project site. There is a net improvement with implementing the SR 87 improvement project for occupational health and safety and environmental justice.

No significant cumulative impacts to soils and geology, water quality and hydrology, biological resources, wetlands, noise, air quality, transportation, cultural resources, occupational health and safety and environmental justice would result with implementation of the proposed action. Cumulative impacts associated with implementation of the entire SR 87 improvement plan would be the same as analyzed above: minimal environmental impacts localized to the construction sites. Supplement EAs will be completed on any future real estate actions associated with this improvement plan and will be forwarded to the Air Force for coordination and subsequent signature as funding becomes available within FDOT.

PUBLIC NOTICE

A public notice was published in the Northwest Florida Daily News on 20 Oct 04 inviting the public to review and comment upon the draft EA. The public comment period closed on 5 Nov 04. No comments were received.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and environmental analysis contained in the attached EA and as summarized above, I find the proposed decision of the Air Force to allow FDOT to make improvements to the intersection at SR 87 and Bob Tolbert Road and construction of a stormwater detention pond would not have a significant impact on the human and natural environments, therefore, an Environmental Impact Statement is not required. This analysis fulfills requirements of NEPA, the President's Council on Environmental Quality and 32 CFR Part 989.

James R. Pennino

JAMES R. PENNINO, SES
Command Civil Engineer
Directorate of Installations and Mission Support

21 Oct 05
Date

RCS-03-594
ENVIRONMENTAL ASSESSMENT

Eglin Air Force Base
Florida Department of Transportation
Section 6, Township 2 South, Range 26 West
Eglin Air Force Base, Santa Rosa County, Florida
FDOT State Contract Number: BD 506
WRS Project Number: 303121

Prepared by:

Date:

April Martin
Staff Scientist

Reviewed by:

Mark E. White, P.G.
Florida Registered Professional Geologist No. 2025

LIST OF ACRONYMS

ACC/EMSP	Environmental Management Directorate, Stewardship Division, Analysis Branch
ACOE	Army Corp of Engineers
ACM	Asbestos Containing Material
AFB	Air Force Base
AF	Air Force
AFPD	Air Force Policy Directive
AMSL	Above Mean Sea Level
ASTM	American Society for Testing and Materials
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CR	County Road
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EIAP	Environmental Impact Analysis Process
EO	Executive Order
EPA	Environmental Protection Agency
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FNAI	Florida Natural Areas Inventory
FONSI	Finding of No Significant Impact
HMM	Hatch Mott MacDonald
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NRI	Nationwide Rivers Inventory
OSHA	Occupational Safety and Health Administration
SRCBOCC	Santa Rosa County Board of County Commissioners
SCS	Soil Conservation Survey
SR	State Road
TMDL	Total Maximum Daily Load
US	United States
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

WRS	WRS Infrastructure & Environment, Inc.

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CHAPTER 1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is proposing to implement a roadway improvement project along State Road (SR) 87 between its intersections with SR 30 (United States [US] 98) and SR 10 (US 90), a 19.9 mile corridor. This Environmental Assessment (EA) is being prepared to facilitate lease negotiations of right-of-way lands with Eglin Air Force Base (AFB) and assess potential environmental impacts to Eglin AFB property. The FDOT tasked WRS Infrastructure & Environment, Inc. (WRS) with performance of this EA. This EA document was prepared in accordance with Council on Environmental Quality (CEQ) 40 Code of Regulations (CFR) Part 1500; Environmental Quality, Air Force Policy Directive (AFPD) 32-70; 32 CFR Part 989; and National Environmental Policy Act (NEPA) of 1969. Moreover, this EA satisfies certain conditions set forth in American Society for Testing and Materials (ASTM) standards, as required by FDOT. Following acceptance of this EA, a decision will be made either to conduct an Environmental Impact Statement (EIS) on affected Eglin AFB property or to issue a Finding of No Significant Impact (FONSI).

1.1 Description of SR 87 Improvement Plan

The SR 87 project corridor begins in central Santa Rosa County at the intersection of SR 87 and US 90, continues south through Eglin AFB, and passes through the communities of Holley and Navarre to end at the intersection with US 98 (approximately 19.9 miles total distance). Between SR 10 (US 98) and I-10, the existing roadway features two, 12 feet-wide travel lanes without paved or stabilized shoulders. At the I-10 interchange, the roadway widens to a four-lane highway with stabilized shoulders. Between I-10 and SR 30 (US 98), the roadway features two, 10 feet-wide travel lanes bordered by stabilized shoulders.

The SR 87 Improvement Plan calls for roadways designated as rural to be modified to a four-lane, rural, typical section, which includes 12 feet-wide shoulders (of which 5 feet would be paved and can be used as bicycle lanes); four, 12 feet-wide travel lanes; and a 40 feet-wide depressed median. Roadways designated as urban would be modified to incorporate 4 feet-wide bicycle lanes; four, 12 feet-wide travel lanes; a 22 feet-wide raised median; pedestrian sidewalks; and green space. Existing bridges at East Bay River, Dean Creek, and Yellow River, as well as existing stormwater management systems, would also be upgraded. A map showing the SR 87 project corridor is included as Figure 1-1.

1.2 Summary of Proposed Actions on Eglin AFB property

Eglin AFB property would be impacted by construction activities required to complete the SR 87 Improvement Project. Construction of a stormwater detention pond, required to control roadway-derived runoff and improvement of the SR 87 and Bob Tolbert Road intersection would take place on approximately 10 acres of Eglin AFB property. This fact necessitates execution of a lease agreement between 96 CEG/CERR Eglin AFB and FDOT for the use of these lands.

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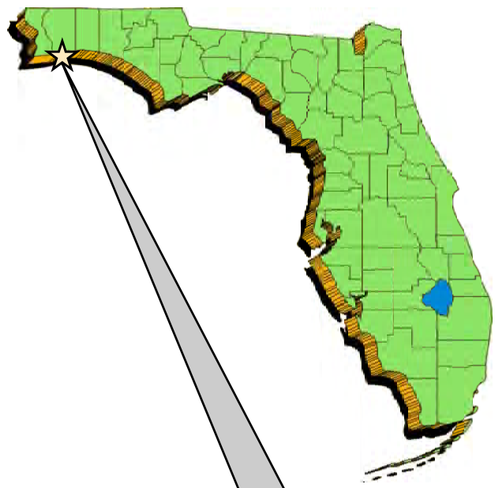
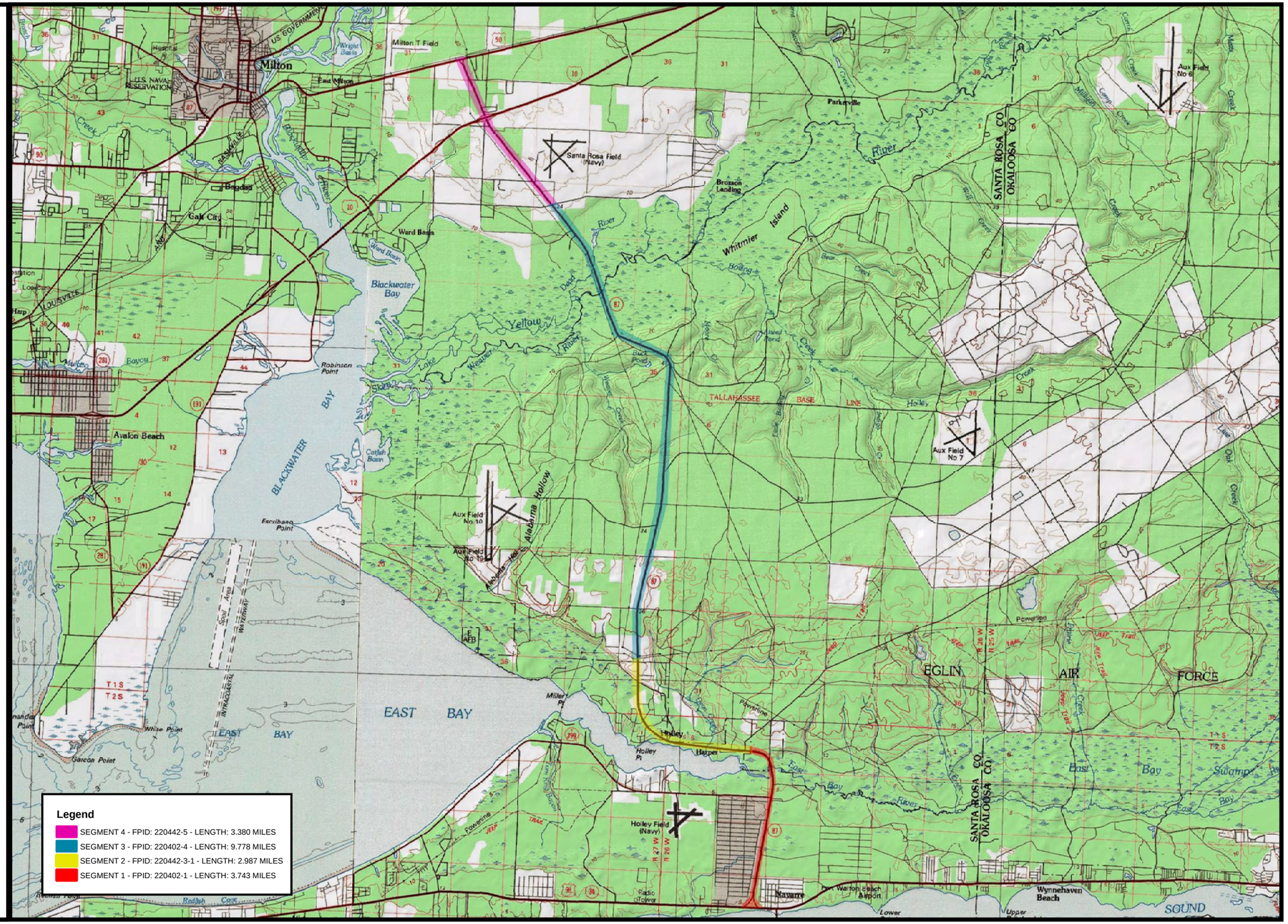


Site Location:
Eglin U.S. Air Force Base,
Santa Rosa County, Florida



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DRAWING STATUS	DRAFT		FINAL ☒
PROJECT NO.: 305702			
PROJECT MANAGER: MARK WHITE			
DRAWN BY: D.K.M.		CHECKED BY: M.W.	
DRAWN DATE: 04/06/05		CHECKED DATE: 03/24/05	
PLOT DATE: 03/24/05		APPROVED BY: M.W.	
CADD ID: 305702A006.MXD		APPROVAL DATE: 04/06/05	

FIGURE 1-1
PROJECT CORRIDOR
ENVIRONMENTAL ASSESSMENT
EGLIN AIR FORCE BASE
SECTION 06, TOWNSHIP 02 SOUTH, RANGE 26 WEST
HOLLEY, SANTA ROSA COUNTY, FLORIDA

CHAPTER 2.0 PURPOSE AND NEED FOR PROPOSED ACTIONS

2.1 Proposed Actions Defined

The SR 87 Improvement Plan calls for expansion of existing two-lane roadways to four-lane roadways with corresponding intersection improvements and geometric alignment improvements along the SR 87 corridor between a spot north of Five Forks Road and the Eglin AFB boundary. In general, roadways designated as rural would be modified to a four-lane rural, typical section, which includes 12 feet-wide shoulders (of which 5 feet would be paved and can be used as bicycle lanes); four, 12 feet-wide travel lanes; and a 40 feet-wide depressed median. Roadways designated as urban would be modified to incorporate 4 feet-wide bicycle lanes, four, 12 feet-wide travel lanes, a 22 feet-wide raised median, pedestrian sidewalks, and green space. Existing bridges at East Bay River, Dean Creek, and Yellow River, as well as existing stormwater management systems, would also be upgraded.

For all actions associated with the SR 87 Improvement Project, the contractor may only disturb the land inside the proposed right-of-way line. This includes removal of all existing plants and trees, extraction of soil, and placement of embankment in some areas. Assuming that all areas inside the proposed FDOT right-of-way line would be impacted, the total project area affected is 76.92 acres. However, only 9.80 acres of Eglin AFB property would be impacted. Maps showing site locations, affected Eglin AFB property, and proposed construction are included in Chapter 3, Figures 3-1 through 3-8.

2.1.1 Construction of Wet Stormwater Detention Pond Number 2

As part of the SR 87 Improvement Project, the stormwater management system for the SR 87 corridor will be updated. The proposed stormwater management system is a closed drainage system that utilizes curb and gutter surface design features, curb inlet storm drains, buried pipes to contain flow, and mitered end sections that would be used to convey roadway runoff derived from SR 87 to a series of three proposed wet stormwater detention ponds. These wet stormwater detention ponds are designed and required to treat and attenuate roadway-derived stormwater according to standards required by FDOT, Florida Department of Environmental Protection (FDEP), Santa Rosa County (SRC), and Florida Statutes. These wet stormwater detention ponds removes pollutants through settling, absorption by soil particulates, and nutrient uptake by microbes and water-tolerant vegetation.

A portion of the proposed location of Stormwater Detention Pond Number 2 (Pond #2) is located within undeveloped Eglin AFB property. The proposed stormwater detention pond would collect roadway runoff from Dean Creek Bridge to approximately station number 3327+50 and some offsite drainage located at the church located just north of Hollanda Trail. The proposed location for the stormwater detention pond affects approximately 9.794 acres of land within Section 6 of Township 2 South, Range 26 West in Holley, Santa Rosa County, Florida and is located at station number 3276+75 on FDOT construction plans. The proposed location of the stormwater pond is approximately 1200 feet east of the Bob Tolbert Road and SR 87 intersection site. Right-of-way dimensions for the proposed stormwater detention pond are approximately 834 feet by 578 feet. Construction for the proposed stormwater detention pond would involve clearing of land, excavation of soil, construction of a gravity wall, drainage structures, and

drainage pipes. Also as part of the SR 87 Improvement Project, a detailed landscaping plan for the pond has been developed, including sodding the area surrounding the pond and wetland plantings set in the pond. See Table 1 for a summary of design parameters to be met during construction of Wet Detention Pond #2. Maps showing proposed construction features are included as Figures 3-5 and 3-6 in Section 3.0.

Table 1. Summary of Wet Detention Pond Design Parameters.	
Top of Pond Elevation (ft)	9.00
Top of Littoral Zone Elevation (ft)	5.90
Permanent Pool Elevation (ft)	4.50
Bottom of Littoral Zone Elevation (ft)	-1.00
Bottom of Pond Elevation (ft)	0.00
Treatment Volume Required (ft^3)	153,115
Treatment Volume Provided (ft^3)	171,061
Total Acreage of Watershed	273.23
Total Acreage Routed to Pond	33.13

2.1.2 Expansion of Intersection of SR 87 and Bob Tolbert Road

In the immediate vicinity of Bob Tolbert Road, the proposed construction features along SR 87 include expansion of the existing two-lane roadway to a divided four-lane roadway. The exterior lanes would have 6 feet wide concrete sidewalks and Type F curb and gutter design features. Interior lanes bounding the median would feature Type E curb and gutter system. South of the intersection, the median would be 22 feet wide; north of the intersection, the median would be 8.5 feet wide. The intersection would feature a directional opening allowing left and right turns (northbound and southbound access) from Bob Tolbert Road. The proposed intersection expansion would affect approximately 0.0367 acres of land within Section 6 of Township 2 South, Range 26 West in Holley, Santa Rosa County, Florida and is located at station number 3288+25 on FDOT construction plans.

Bob Tolbert Road shall remain a two-lane road following construction. Proposed construction would end approximately 110 feet from the current intersection. At 100 feet from the current intersection (approximately 40 feet from proposed intersection), the concrete sidewalk would end with a standard 6.0 feet wide flared design. The pavement tie-in would feature standard friction course feathering involving decreasing thickness of asphalt from 1.0 inch to 0 inch over a 10 foot interval.

Changes to the stormwater management system include removal of the current culvert at the intersection and installation of a new, larger drainage structure (CR 20; ditch bottom inlet type culvert) under Bob Tolbert Road. This culvert would be constructed of 54 feet of 18-inch pipe and would be located approximately 20 feet east of the expanded intersection. Along the eastern and western boundaries of SR 87, a closed drainage system would be installed. Tandem, opposing curb inlet drainage structures would be connected by 18-inch pipe. All curb inlet drainage structures would be connected by 42-inch pipe, which would run parallel to SR 87. This system is designed to funnel all roadway-derived runoff to Stormwater Detention Pond #2. Maps showing proposed construction features are included as Figures 3-7 and 3-8 in Section 3.0.

2.2 Purpose of Proposed Actions

The purpose of the proposed action is to improve SR 87 traffic patterns, flow, and safety through the construction of four-lane improvements to SR 87 from a spot north of Five Forks Road to the Eglin AFB boundary. Because these improvements increase the impervious surface and increase the volume of roadway-derived runoff that requires treatment, plans also include a wet stormwater detention pond, which shall be located on property owned by Eglin AFB.

2.3 Need for Proposed Actions

Justification for the proposed project improvements are based on existing and projected socioeconomic conditions and travel conditions along the SR 87 corridor. Upgrading the SR 87 corridor is needed to improve travel service, enhance coastal evacuation operations, reduce or eliminate unsafe roadway characteristics, and serve the population and economic growth projected for the region in an effective and efficient manner.

State Road 87 is an important north/south arterial highway in Santa Rosa County, which connects Navarre and US 98 from the south with I-10 and US 90 to the north. A vital link between northern and southern portions of the county, SR 87 carries commuter, commercial, vacation, evacuation, and military traffic.

Significant improvements are necessary to correct major existing deficiencies as well as projected future deficiencies in travel service and hurricane evacuation operations along SR 87. SR 87 is the primary north/south hurricane evacuation route for the coastal areas of Navarre, Navarre Beach, and South Central Santa Rosa County. Interstate-110 in Escambia County and SR 85 in Okaloosa County are the closest alternate evacuation routes. Both are located approximately 30 kilometers from the SR 87 corridor. In 1995, two major hurricanes struck the Gulf Coast in the vicinity of SR 87. Hurricane Erin achieved landfall on August 3, 1995, and Hurricane Opal hit land on October 4, 1995. All evacuation routes were heavily congested during both of these storm events. Bumper-to-bumper conditions existed on all three evacuation routes for several hours. State Road 87 experienced similar road conditions during the evacuation for Hurricane Ivan in September 2004. Additional service volume capacity is needed in this corridor to improve efficiency of future evacuation operations.

Analysis of the SR 87 historical accident data clearly indicates that there are safety deficiencies at several locations within the project limits. During the eight year period between January 1,

1988 and December 31, 1995, 297 accidents resulting in 467 injuries and 22 fatalities were recorded on SR 87 within the boundaries of this project. The majority of recorded accidents involved either rear-end or left turn collisions. More recent FDOT traffic data covering a span of seven years between January 1999 and March 2005 lists 99 accidents/crashes resulting in 153 injuries and 6 fatalities. Widening SR 87 to four lanes and carefully planning and designing upgraded median openings and intersections, should further reduce the frequency of these types of accidents, thereby improving overall roadway safety characteristics.

The SR 87 and Bob Tolbert intersection expansion (proposed action) is one part of the holistic effort to improve public safety by reducing the number of crashes, injuries, and fatalities experienced on SR 87 while improving overall functionality of the roadway system. Intersection improvement would allow more traffic to smoothly flow through the intersection during hurricane evacuations and provide an expanded and upgraded intersection to accommodate current and projected population growth in the local area.

The proposed drainage design of SR 87, which includes Wet Detention Pond #2, would provide stormwater treatment for the area inside of right-of-way where none currently exists. Runoff from roadways contributes significant amounts of litter and debris as well as hydrocarbons and heavy metals to surrounding areas. Stormwater detention ponds are designed to retain and treat stormwater runoff. Stormwater detention ponds are also designed to help prevent flooding. Road improvement projects and elevated levels of traffic lead to increased impervious areas, compaction of natural soils, filling of existing depressions, and introduction of pollutants, which result in less infiltration, more runoff volume, a higher rate of runoff, a reduction in storage capacity, and degradation of stormwater quality. Stormwater ponds are designed to mitigate these changes by providing storage, attenuating peak discharge rates, and improving water quality. These positive affects show the need for the proposed action (construction of Wet Detention Pond #2).

2.4 Permitting Required

Wetland (dredge and fill) and stormwater discharge (National Pollutant Discharge Elimination System) permits were required by FDEP for the SR 87 Project. Both permits also apply to the project sites. FDOT is required to obtain the listed permits. Eglin AFB is not required to obtain any permits for the SR 87 Project or the project sites.

CHAPTER 3.0 DESCRIPTION OF PROPOSED ACTIONS AND ALTERNATIVES

The proposed actions, alternatives considered but eliminated from further analysis, and "no-action" alternative are discussed in Sections 3.1 through 3.3.

3.1 Proposed Action

The proposed action involves construction of a stormwater detention pond (Wet Detention Pond #2) and expansion of the intersection of SR 87 and Bob Tolbert Road (Figures 3-5 through 3-8). The purpose of the proposed action is to assist FDOT in implementing its SR 87 Roadway Improvement Project by permitting FDOT to use a portion of Eglin AFB. FDOT is managing the construction of four-lane improvements to SR 87 from North of Five Forks Road to the Eglin AFB boundary. A portion of property owned by Eglin AFB is located within the proposed right-of-way for a wet stormwater detention pond (Pond #2). In order to complete the SR 87 Improvements (conversion of an undivided two-lane highway to a divided four-lane highway), construction of a stormwater detention pond, and expansion of Bob Tolbert Road are necessary.

The proposed location of the stormwater detention pond is characterized by low, relatively flat topography and the drainage is controlled by natural infiltration. Land elevation at the proposed location is approximately 10 feet above mean sea level (AMSL). The stormwater pond is designed as a wet detention pond and is designed to establish and maintain a permanent pool for biological treatment of water, to provide as a treatment pool as required by FDEP and Santa Rosa County, and to contain all stormwater generated during a 100-year Storm event to ensure that post-development discharge rates do not exceed pre-development discharge rates.

Currently, runoff in the proposed areas travels north to south to a cross drain that discharges into East Bay. The stormwater detention pond would discharge into a proposed ditch that would discharge to the cross drain and then into the East Bay. The proposed roadway widening would employ a typical four-lane urban highway. The drainage design for the road would utilize curb and gutter inlets to transport stormwater to the detention pond. The stormwater pond would collect roadway runoff from Dean Creek Bridge to approximately station number 3327+50 and some offsite drainage located at a church located just north of Holland Trail.

The proposed location for the expansion of Bob Tolbert Road is characterized by low, relatively flat topography and is currently Bob Tolbert Road, which is covered by asphalt. Drainage at the proposed location is controlled by stormwater drainage ditches, which are present along SR 87. Land elevation at the proposed location is approximately 5 to 10 feet above mean sea level (AMSL). The SR 87 Improvement Project includes road widening. Bob Tolbert road would be constructed to match the remainder of SR 87. Expansion of Bob Tolbert Road is a portion of the SR 87 Improvement Project. Roads are expanded to alleviate high-traffic areas, in anticipation of economic development and changing traffic patterns related to construction completion. Expansion of this turn lane would be better suited for high-traffic growth in this area.

The properties that adjoin the selected proposed locations to the east, west, and north consist mainly of undeveloped properties. Miscellaneous trash and debris is located along trail roads

extending throughout these properties. South of the subject property is an abandoned structure, which sits off of SR 87. Residential development exists to the south of SR 87.

3.2 Alternative A – The "No-Action" Alternative

The "no-action" alternative would involve no construction of the stormwater detention pond and no expansion of the Bob Tolbert Road intersection.

3.3 Alternatives Considered But Eliminated From Further Analysis

3.3.1 SR 87 and Bob Tolbert Road Intersection

FDOT and HMMM evaluated a limited number of construction alternatives during the design phase of this project, which included designing a new intersection and realigning the current road. It was determined that these two alternatives were not cost effective or practical to design. The most reasonable, practical and cost effective approach to meet anticipated area growth and provide the highest level of public safety was to expand the existing intersection of SR 87 and Bob Tolbert Road. Thus, new intersection construction and roadway realignment were eliminated from further review.

3.3.2 Stormwater Detention Pond Number 2

Four watersheds or areas where water drains from different rivers or river systems exist within the limits of the SR 87 Construction Project. Each of these watersheds was analyzed to determine the total number of stormwater management sites needed to treat run-off and to estimate required pond size. The investigation consisted of locating potential pond sites in areas that could most effectively treat generated run-off, calculating required pond size and depth and determining storm sewer locations. Taking this information along with property cost, environmental sensitivity and functional ability, FDOT and HMM developed a matrix for comparatively ranking proposed stromwater management facility. In accordance with FDOT requirements, 3 to 4 stormwater management facility alternatives were identified for each watershed. Selection criterion included:

- Potential to encounter hazardous waste contamination during construction
- Potential impacts to endangered species, cultural resources, and residences and businesses
- Calculation of stromwater management treatment volumes
- Relative accessibility and ability to provide vegetative buffer for SR 87
- Static groundwater table elevations
- Potential outfall locations
- Estimated drainage patterns
- Soil composition and compatibility and
- Locations of utilities

After extensive studies and research, HMM and FDOT concluded that the currently proposed location of the Stormwater Pond Number 2 was the only reasonable location for construction

purposes. This location also fulfills the purpose and needs of a wet detention pond while providing the best outcome for the environment. All other alternatives were not a viable option.

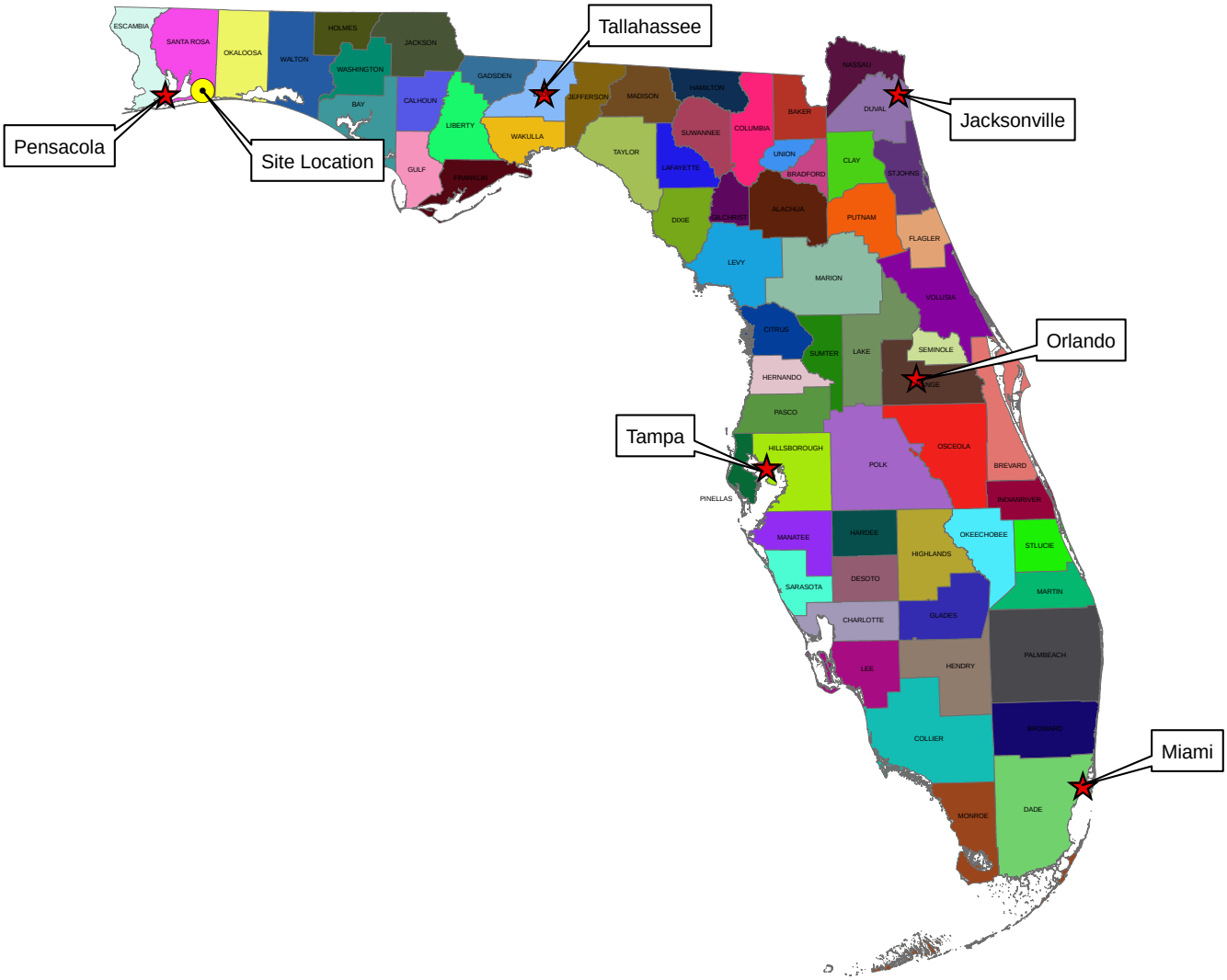

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FIGURE 3-1
STATE OF FLORIDA
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA
WRS PROJECT NO.: 305702
GIS ID: 305702A001

N

ESCAMBIA
SANTA ROSA
OKALOOSA
WALTON
HOLMES
WASHINGTON
JACKSON
CALHOUN
GADSDEN
LIBERTY
GULF
FRANKLIN
WAKULLA
JEFFERSON
TAYLOR
BAY

29
90
87
10
331
98
231
27
319

Eglin AFB

G U L F O F M E X I C O

Legend

- Site Location

Major Roads

- Interstate
- U.S. Road
- Florida County Boundary
- Eglin AFB Boundary
- Wildlife Management Area
- SR87

0 7.5 15 30 Miles

DRAWING STATUS	DRAFT		FINAL	X
PROJECT NO.: 305702				
PROJECT MANAGER: MARK WHITE				
SCALE: AS SHOWN				
CADD ID: 305702A002	PLOT DATE: 04/06/05			
DRN BY: KB	DRN DATE: 02/22/05			
CHK BY: MW	CHK DATE: 02/22/05			
APPVD BY: MW	APPVD DATE: 04/06/05			

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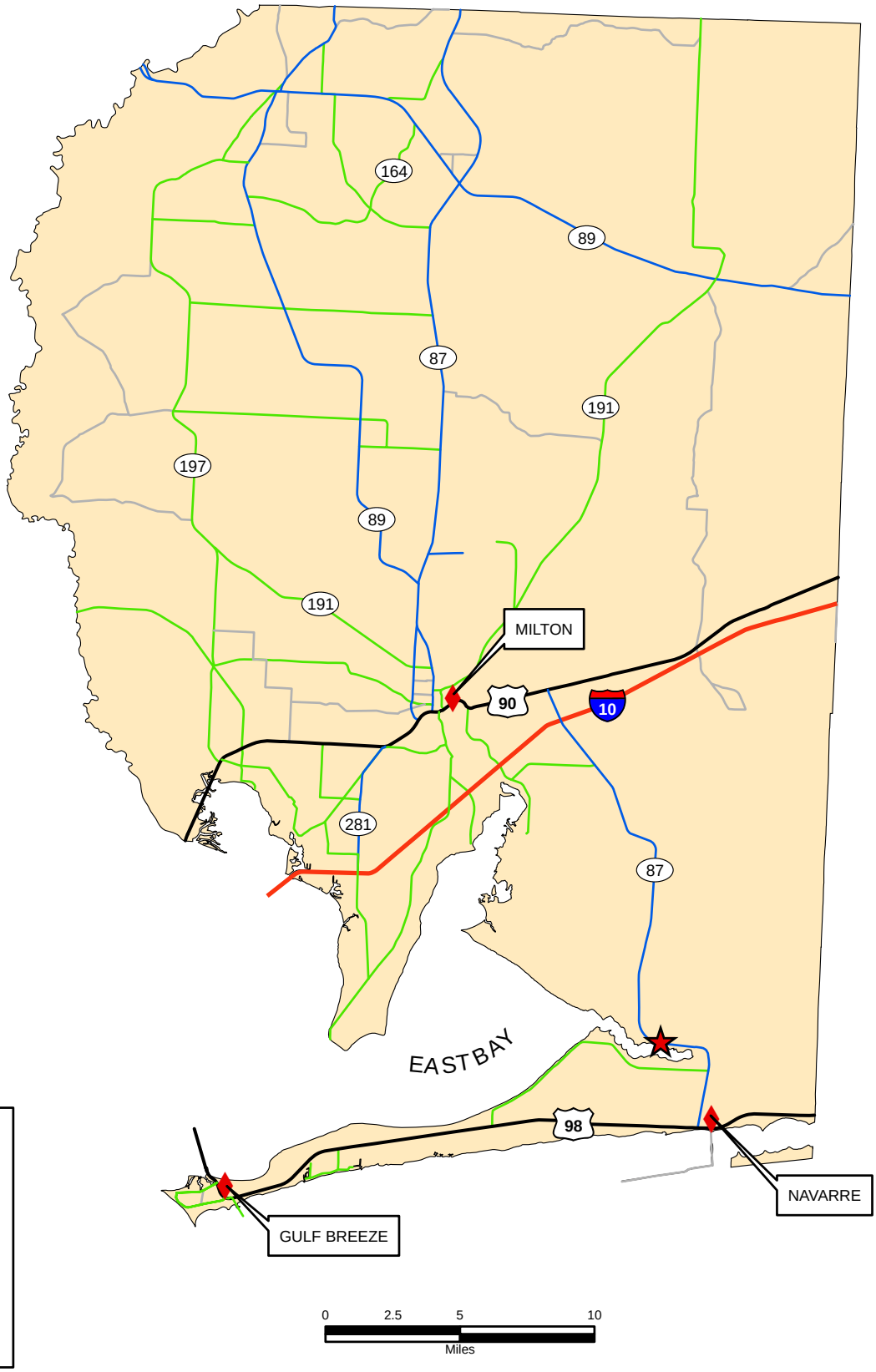
FIGURE 3-2
MAP OF WESTERN FLORIDA PANHANDLE
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA
WRS PROJECT NO.: 305702
GIS ID: 305702A002



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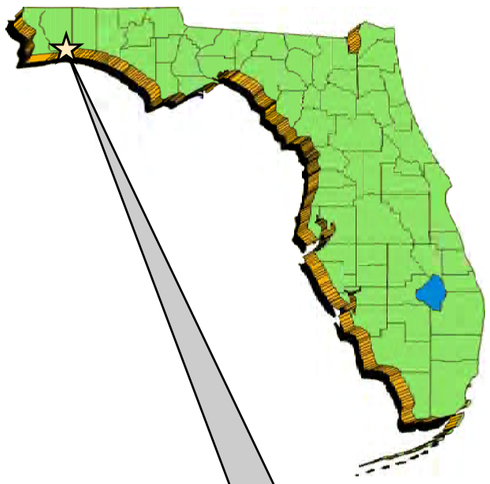
PH:(813) 684-4400 FAX:(813) 684-9917

FIGURE 3-3
MAP OF SANTA ROSA COUNTY
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA
WRS PROJECT NO.: 305702
GIS ID: 305702A003

N

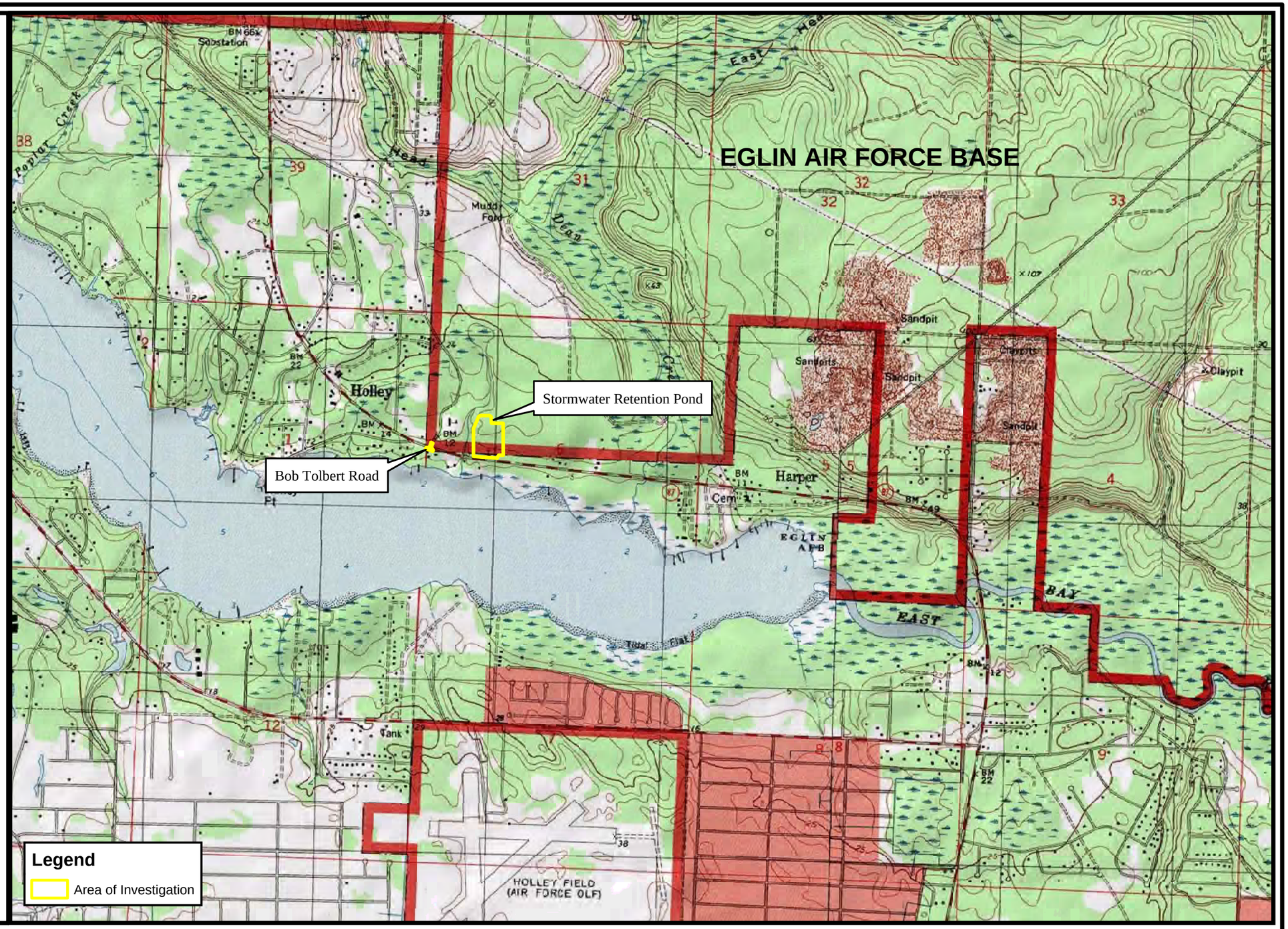
0 1,250 2,500 5,000

Feet



Site Location:
Eglin Air Force Base,
Santa Rosa County, Florida

SOURCE: UNITED STATES GEOLOGICAL SURVEY
HOLLEY QUADRANGLE
(S 06, T 02S, R 26W)



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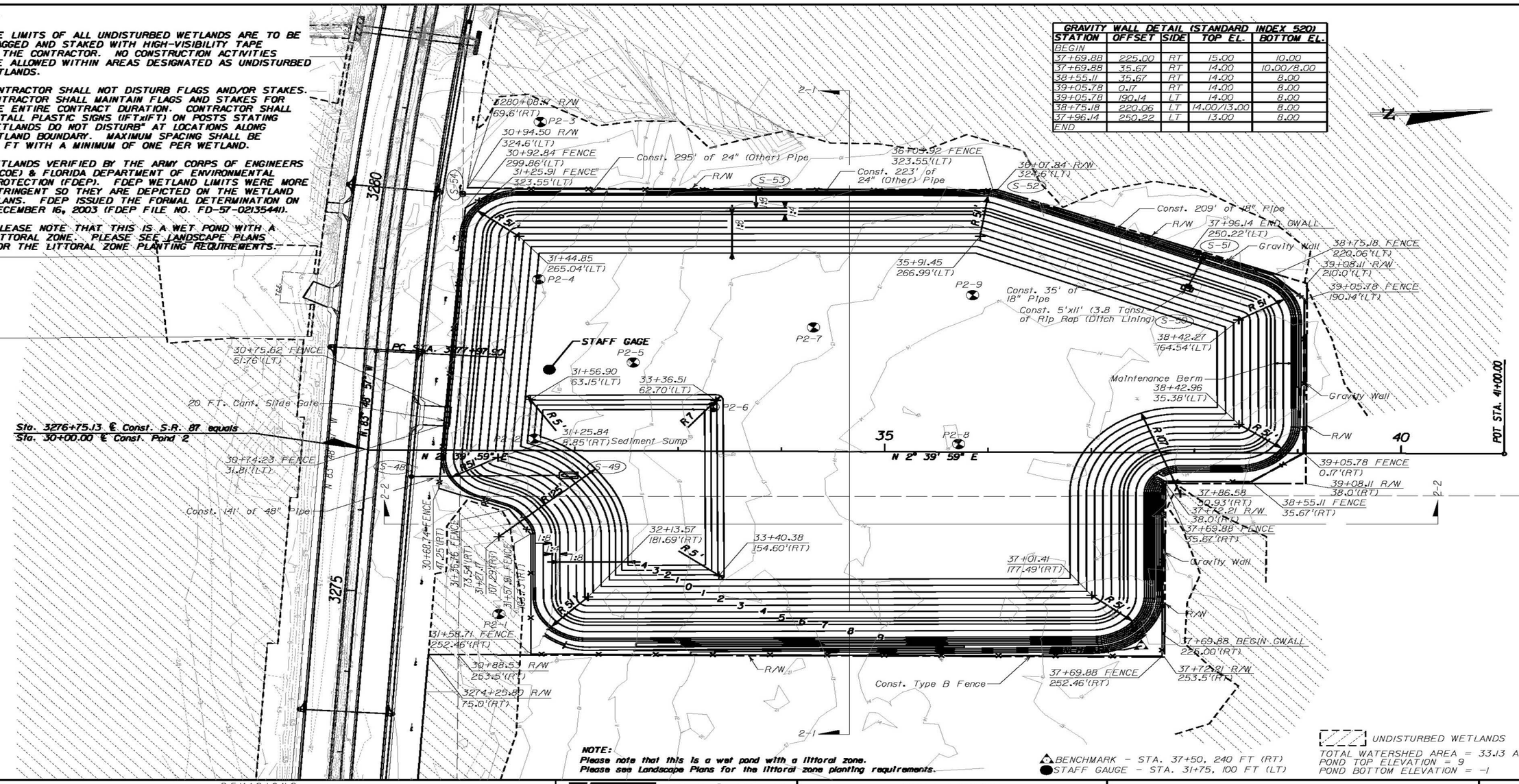
DRAWING STATUS	DRAFT		FINAL ☒
PROJECT NO.: 305702			
PROJECT MANAGER: MARK WHITE			
DRAWN BY: KB	GIS ID: 305702A004.MXD		
DRAWN DATE: 04/06/05	CHECKED DATE: 02/23/05		
PLOT DATE: 02/23/05	APPROVED BY: MW		
SCALE: AS SHOWN	APPROVAL DATE: 04/06/05		

FIGURE 3-4
SITE VICINITY MAP
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA

NOTE:

1. THE LIMITS OF ALL UNDISTURBED WETLANDS ARE TO BE FLAGGED AND STAKED WITH HIGH-VISIBILITY TAPE BY THE CONTRACTOR. NO CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN AREAS DESIGNATED AS UNDISTURBED WETLANDS.
2. CONTRACTOR SHALL NOT DISTURB FLAGS AND/OR STAKES. CONTRACTOR SHALL MAINTAIN FLAGS AND STAKES FOR THE ENTIRE CONTRACT DURATION. CONTRACTOR SHALL INSTALL PLASTIC SIGNS (1FTx1FT) ON POSTS STATING "WETLANDS DO NOT DISTURB" AT LOCATIONS ALONG WETLAND BOUNDARY. MAXIMUM SPACING SHALL BE 100 FT WITH A MINIMUM OF ONE PER WETLAND.
3. WETLANDS VERIFIED BY THE ARMY CORPS OF ENGINEERS (ACOE) & FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). FDEP WETLAND LIMITS WERE MORE STRINGENT SO THEY ARE DEPICTED ON THE WETLAND PLANS. FDEP ISSUED THE FORMAL DETERMINATION ON DECEMBER 16, 2003 (FDEP FILE NO. FD-57-0213544I).
4. PLEASE NOTE THAT THIS IS A WET POND WITH A LITTORAL ZONE. PLEASE SEE LANDSCAPE PLANS FOR THE LITTORAL ZONE PLANTING REQUIREMENTS.

GRAVITY WALL DETAIL (STANDARD INDEX 520)				
STATION	OFFSET	SIDE	TOP EL.	BOTTOM EL.
BEGIN				
37+69.88	225.00	RT	15.00	10.00
37+69.88	35.67	RT	14.00	10.00/8.00
38+55.11	35.67	RT	14.00	8.00
39+05.78	0.17	RT	14.00	8.00
39+05.78	190.14	LT	14.00	8.00
38+75.18	220.06	LT	14.00/13.00	8.00
37+96.14	250.22	LT	13.00	8.00
END				



NOTE:
Please note that this is a wet pond with a littoral zone.
Please see Landscape Plans for the littoral zone planting requirements.

BENCHMARK - STA. 37+50, 240 FT (RT)
STAFF GAUGE - STA. 31+75, 100 FT (LT)

UNDISTURBED WETLANDS
TOTAL WATERSHED AREA = 33.13 Acres
POND TOP ELEVATION = 9
POND BOTTOM ELEVATION = -1

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Hatch Mott MacDonald
Post Office Box 2518 Pensacola, Florida 32513
(850) 484-6011 - License No. 155
Engineer of Record: Gregory S. Allen, P.E. #51858

STATE of FLORIDA
DEPARTMENT of TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	SANTA ROSA	220442-3-52-01

STORMWATER MANAGEMENT SITE 2

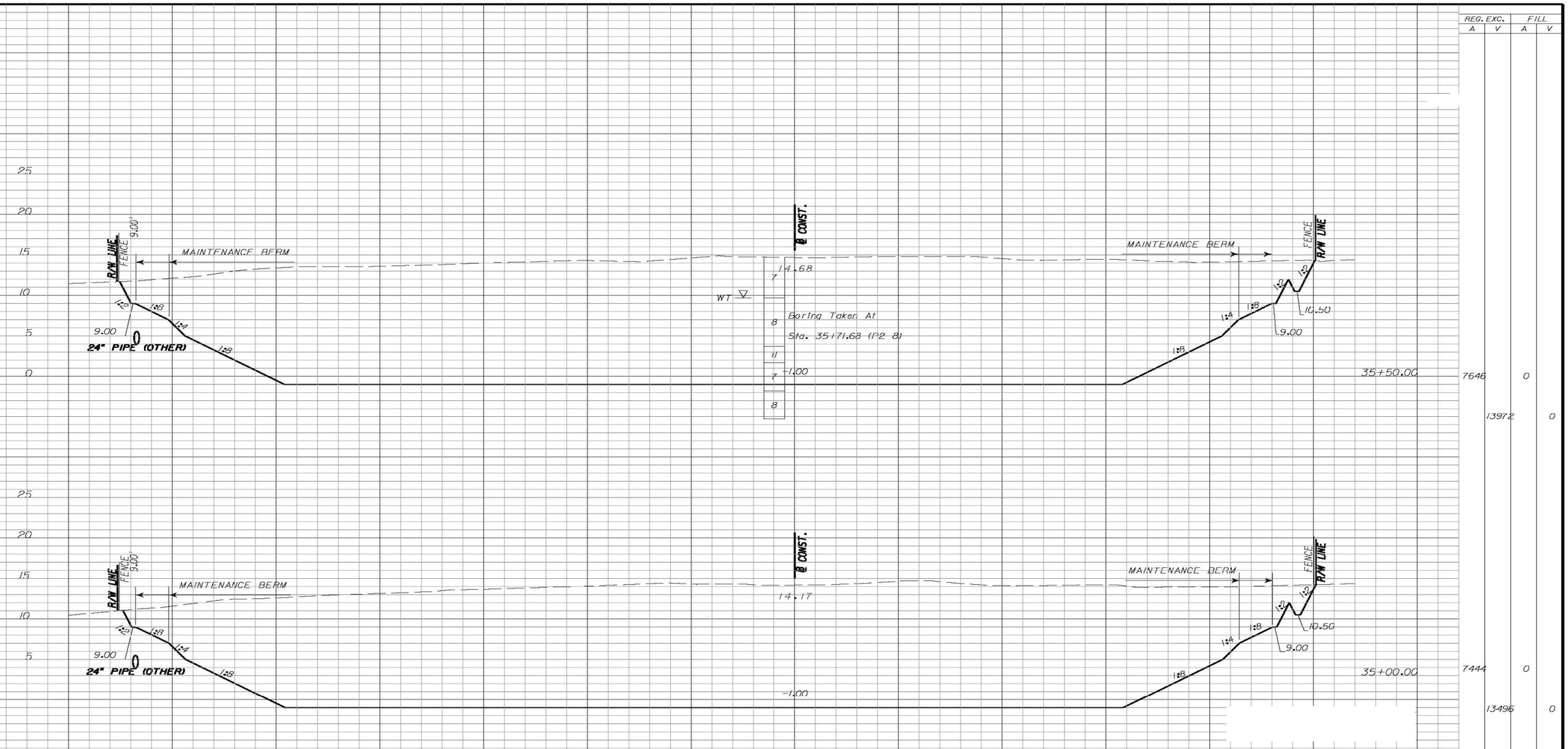
SHEET NO. 143

02/16/2005 02:49:36 PM G:\FDOT\200785\2204423\drainage\DRAWINGS\Pond#2.dgn

WRS Infrastructure & Environment, Inc.
221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619
PH:(813) 684-4400 FAX:(813) 684-9177

PROJECT No: 305702 | ID: 305702A003.PPT | DATE: 04/06/05

FIGURE 3-5
STORMWATER POND PLAN
SR 87 AND BOB TOLBERT ROAD INTERSECTION
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA



REG. EXC.		FILL	
A	V	A	V
	7646		0
	13972		0
	7444		0
	13496		0

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Hatch Mott MacDonald
Post Office Box 2518 Pensacola, Florida 32513
(850) 484-6011 - License No. 155
Engineer of Record: Gregory S. Allen, P.E. #51858

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	SANTA ROSA	220442-3-52-01

CROSS SECTIONS
POND SITE 2

SHEET NO. 329

02/16/2005 02:52:28 PM G:\FDOT\200785\220442\drainage\DRAWINGS\XSECTIONS\pond2_xs.shg

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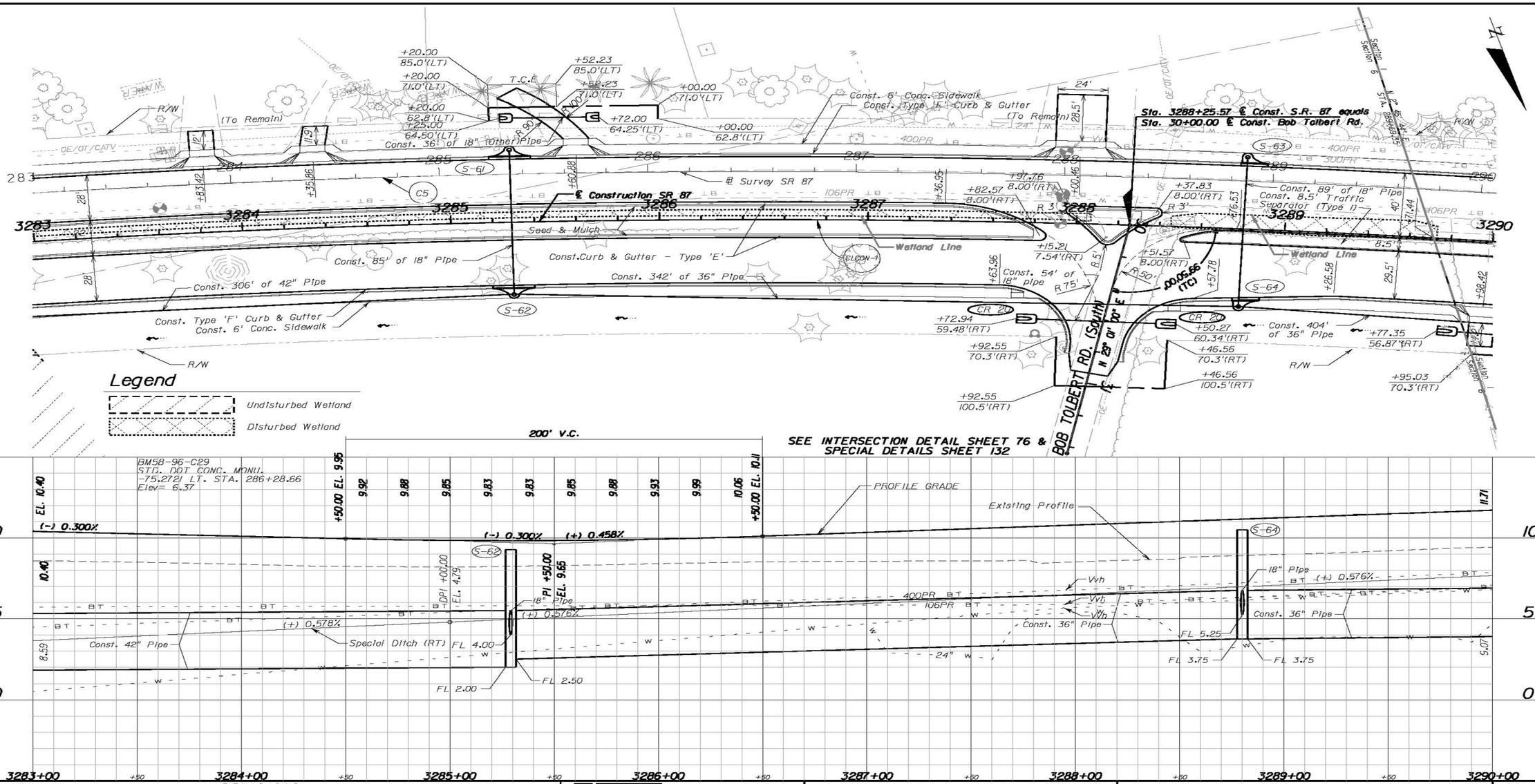
221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619
PH:(813) 684-4400 FAX:(813) 684-9177

PROJECT No: 305702 | ID: 305702A004.PPT | DATE: 04/06/05

FIGURE 3-6
STORMWATER POND CROSS SECTIONS
SR 87 AND BOB TOLBERT ROAD INTERSECTION
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Hatch Mott MacDonald
Post Office Box 2518 Pensacola, Florida 32513
(850) 484-6011 - License No. 155
Engineer of Record: Gregory S. Allen, P.E. #51858

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	Santa Rosa	220442-3-52-01

SR 87
Plan & Profile

SHEET NO. 58

02/16/2005 03:00:44 PM G:\FDOT\200785\2204423\roadway\plprd10.dgn

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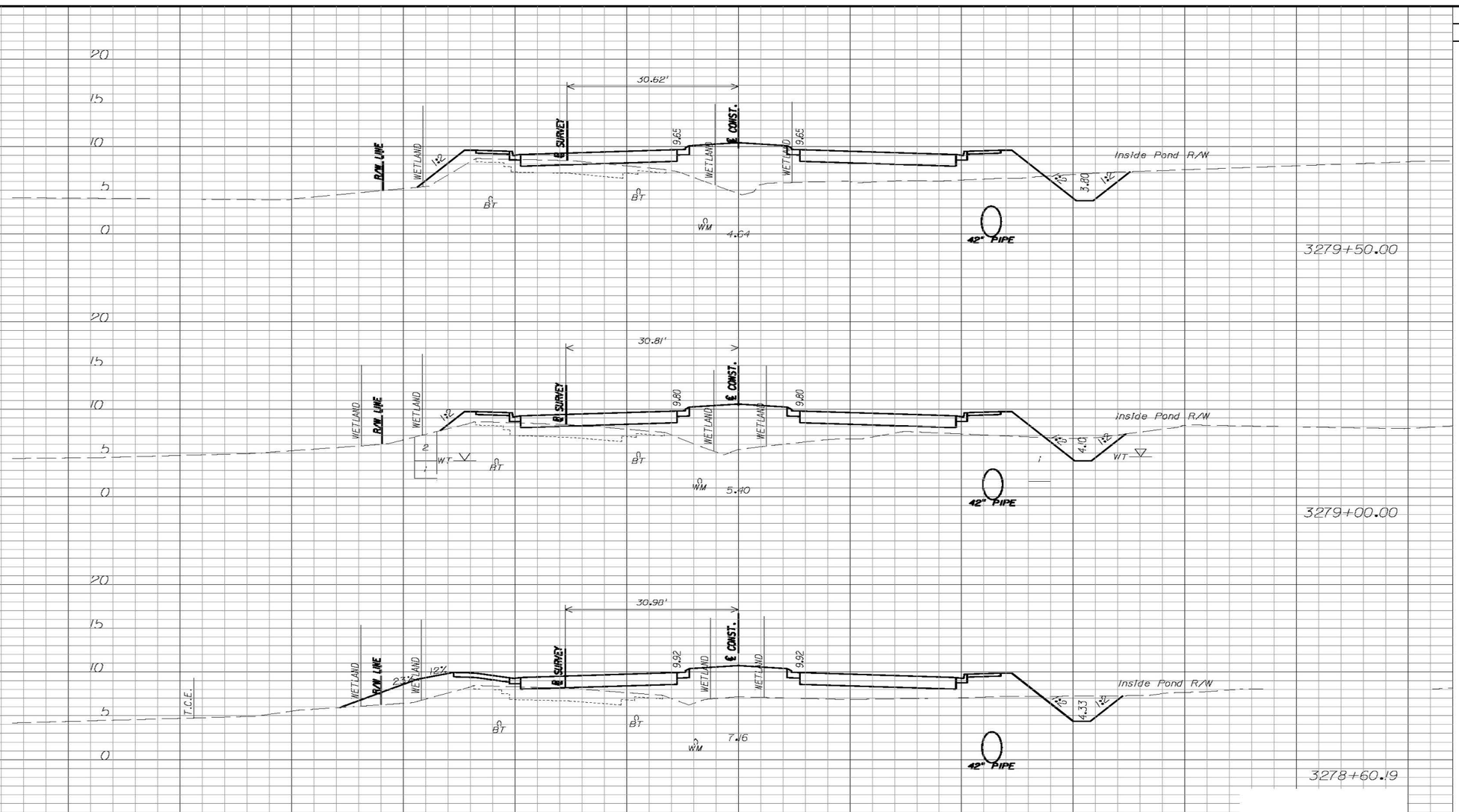
221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619
PH:(813) 684-4400 FAX:(813) 684-9177

PROJECT No: 305702 | ID: 305702A001.PPT | DATE: 04/06/05

FIGURE 3-7
ROADWAY PLAN
SR 87 AND BOB TOLBERT ROAD INTERSECTION
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA



Regular Exc.		Embankment	
A	V	A	V
28.3		242.3	
	47		427
22.5		219.1	
	35		336
25.4		236.8	
	9		87

3279+50.00

3279+00.00

3278+60.19

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Hatch Mott MacDonald
Post Office Box 2518 Pensacola, Florida 32513
(850) 484-6011 - License No. 155
Engineer of Record: Gregory S. Allen, P.E. #51858

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	Santa Rosa	220442-3-52-01

Cross Sections
S.R. 87

SHEET NO. 201

02/16/2005 02:57:41 PM G:\FDOT\200785\220423\roadway\xsections\rdxsrd01.dhg

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PH:(813) 684-4400 FAX:(813) 684-9177

PROJECT No: 305702 | ID: 305702A002.PPT | DATE: 04/06/05

FIGURE 3-8
ROADWAY CROSS SECTIONS
SR 87 AND BOB TOLBERT ROAD INTERSECTION
EGLIN AIR FORCE BASE ENVIRONMENTAL ASSESSMENT
HOLLEY, SANTA ROSA COUNTY, FLORIDA

CHAPTER 4.0 AFFECTED ENVIRONMENT

Located in Santa Rosa, Okaloosa, and Walton Counties of Florida, Eglin AFB is eight miles northeast of Fort Walton Beach and 60 miles east of Pensacola. Eglin AFB's mission includes the research, development, acquisition, test and evaluation of non-nuclear munitions and navigation/guidance systems. Eglin AFB is home of the Air Armament Center, which conducts a full spectrum of planning, directing, and conducting the test and evaluation of munitions, electronic combat, and navigation/guidance systems. Eglin AFB is also home of extensive support services including civil engineering, social actions, transportation, supply, and disaster preparedness. The base contains 724 square miles of land area and controls airspace overlying 3226 square miles of land and 124,642 square miles of the Gulf of Mexico. Natural areas on the Eglin Reservation are classified into seven distinct areas: sandhills, wetlands/riparian, sand pine, flatwoods, pine/mixed hardwoods, the barrier island ecological associations, and the administrative areas.

4.1 Soils and Geology

The proposed actions involve construction of a stormwater detention pond on 9.794 acres and 0.0367 of an acre for Bob Tolbert Road.

Three soil map units were identified in the area of proposed construction for the stormwater detention pond, based on a review of the Soil Survey of Santa Rosa County, Florida, Soil Conservation Survey 1980 (SCS, 1980). Soil types identified at the subject property are Ortega Sand (map unit 33), Pactolus Loamy Sand (map unit 34), and Rutlege Loamy Sand (map unit 40). These units are briefly described below.

(33) – Ortega Sand – This moderately well drained soil is found on broad areas that are slightly higher than adjacent flatwoods. Slopes are smooth to concave and are between 0 and 5 percent. Permeability is very rapid and erosion hazard is slight.

(34) – Pactolus Loamy Sand – This moderately well drained to somewhat poorly drained soil is found on low positions in the uplands. Slopes are smooth to concave and are between 0 and 5 percent. Permeability is rapid, runoff is slow, and erosion hazard is slight.

(40) – Rutlege Loamy Sand – This very poorly drained soil is found along small stream bottoms, in ponded areas, and on low upland flats. Slopes are less than 2 percent. Permeability is rapid throughout and runoff is very slow or ponded.

One soil map unit was identified in the area of the proposed action for the expansion of Bob Tolbert Road, based on a review of the Soil Survey of Santa Rosa County, Florida, Soil Conservation Survey 1980 (SCS, 1980). The soil type identified at the subject property is Rutlege Loamy Sand (map unit 40). This unit is briefly described below.

(40) – Rutlege Loamy Sand – This very poorly, drained soil is found along small stream bottoms, in ponded areas, and on low upland flats. Slopes are less than 2 percent. Permeability is rapid throughout and runoff is very slow or ponded.

A map identifying the sites and the soil types underlying each site is included as Figure 4-1.

4.2 Water Quality and Hydrology

Land elevation of the proposed location of the stormwater detention pond is approximately 10 to 25 feet above mean sea level (AMSL). Land elevation in the area for the road expansion is approximately 5 to 10 feet AMSL. Both areas are characterized by low, relatively flat topography. Drainage in the area of the stormwater pond is controlled by natural infiltration and the area around Bob Tolbert Road is controlled by stormwater drainage ditches, which have been constructed along SR 87. Topography in the areas of the proposed action has a slight slope to the southwest.

The proposed drainage system would be designed to maintain the flow of water to, and between, disconnected wetlands, thereby preserving natural and beneficial flood plain values. Stormwater runoff would be treated in the stormwater detention pond to improve water quality before it is discharged. In December 1996, a Location Hydraulic Report was performed for SR 87 from US 98 to US 90 by Carlan Consulting Group, Incorporated. It stated that there would be a less than 0.3 meter (one foot) rise in the backwater elevations resulting from the proposed cross drain improvements.

4.2.1 Surface Water Classification of Santa Rosa County

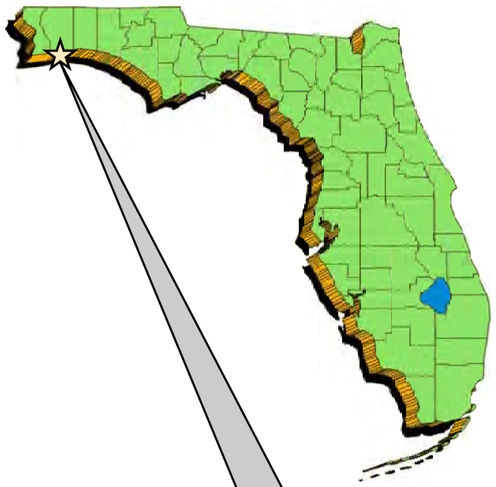
Surface waters in the State of Florida are characterized under five classifications. Class I include surface water bodies used for potable water supplies. Class II includes surface water bodies used for shellfish propagation and harvesting areas. Class III contains all surface water bodies utilized for recreations and propagation and maintenance of a healthy well-balanced population of fish and wildlife. Class IV includes all surface water bodies utilized for agricultural water supplies. Class V includes all surface water bodies used for navigation, utility, and industrial use.

In Santa Rosa County, designated segments of Blackwater Bay, East Bay, Escambia Bay, Pensacola Bay, and Santa Rosa Sound are classified as Class II-Shellfish Propagation and Harvesting Waters, and should follow Class II-Shellfish Propagation and Harvesting Water Criteria as established in Chapter 62-302.400 of Florida Administrative Code (FAC) (FDEP, 1996). All other surface waters are classified as Class III-Freshwater or Marine Water, and should follow Class III-Freshwater or Marine Water Criteria as established in Chapter 62-302.400, FAC (FDEP, 1996). All surface waters located at or near the proposed location of the stormwater detention pond and the SR 87-Bob Tolbert Road intersection are classified as Class III-Freshwater or Marine Water.

N

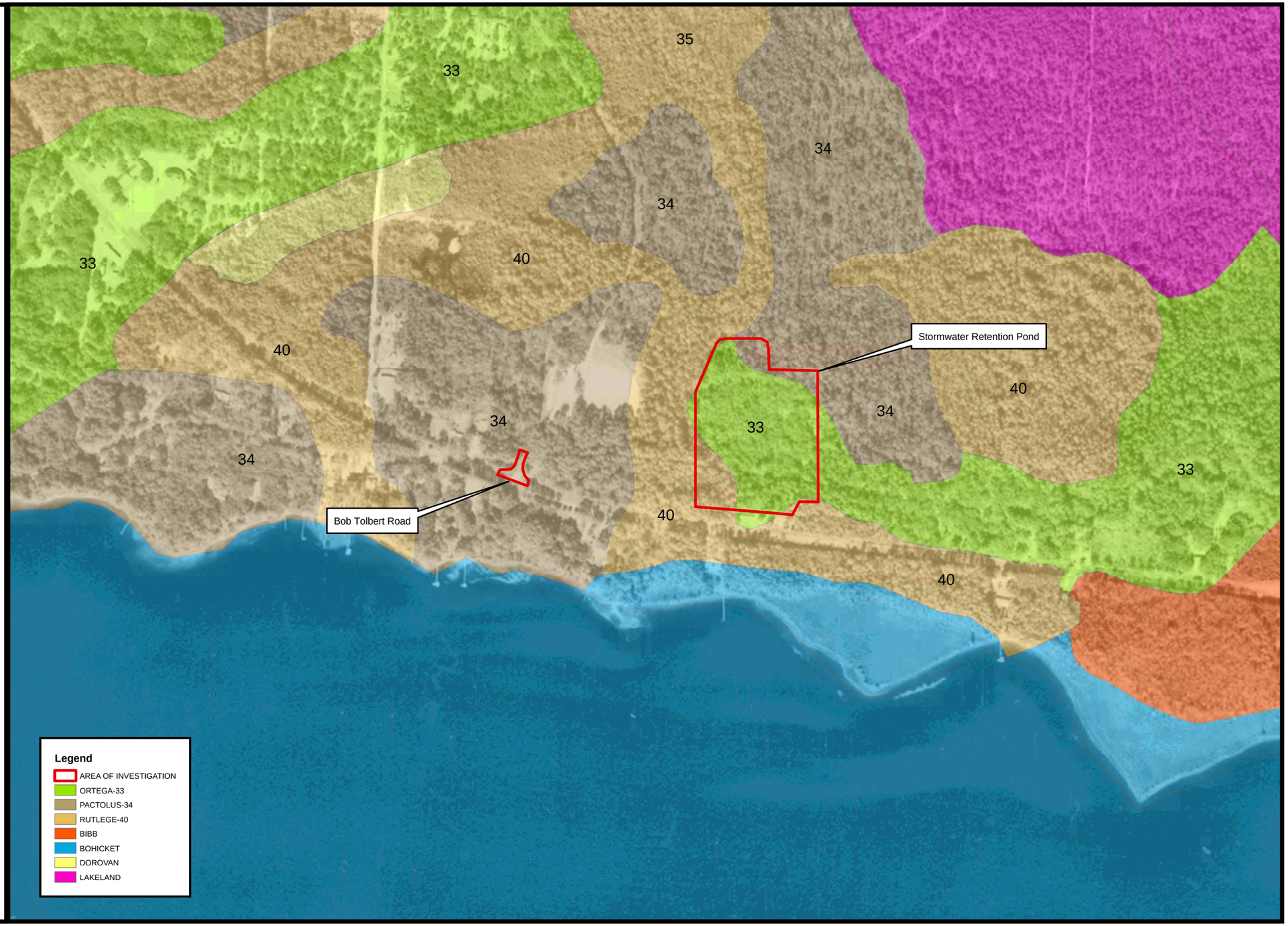
0 125 250 500 750 1,000

Feet



Site Location:
Eglin U.S. Air Force Base,
Santa Rosa County, Florida

SOURCE: UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICES -SURVEY OF SANTA ROSA COUNTY, SOIL SERVICE GEOGRAPHIC DATASET



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DRAWING STATUS	DRAFT		FINAL	☒
PROJECT NO.: 305702				
PROJECT MANAGER: MARK WHITE				
DRAWN BY: D.K.M.		CHECKED BY: M.W.		
DRAWN DATE: 04/06/05		CHECKED DATE: 03/24/05		
PLOT DATE: 03/24/05		APPROVED BY: M.W.		
CADD ID: 305702A005.MXD		APPROVAL DATE: 04/06/05		

FIGURE 4-1
SOILS MAP
ENVIRONMENTAL ASSESSMENT
EGLIN AIR FORCE BASE
SECTION 06, TOWNSHIP 02 SOUTH, RANGE 26 WEST
HOLLEY, SANTA ROSA COUNTY, FLORIDA

The Nationwide Rivers Inventory (NRI) identifies the Yellow River, Escambia River, Boiling Creek, Blackwater River, and Big Coldwater Creek as free-flowing river segments in the United States, believed to possess one or more "outstandingly remarkable" natural or cultural values and judged as having a more than local or regional significance (NRI, 2001).

Blackwater River and Yellow River Marsh are considered Outstanding Florida Waters in Santa Rosa County. All waters in National Parks, State Parks, preserves, memorials, wildlife refuge, and wilderness areas are classified as Outstanding Florida Waters as established in Chapter 62-302.700, FAC.

4.2.2 Surface Water Quality of Santa Rosa County

Five watersheds are present within Santa Rosa County. These watersheds are the Yellow, Blackwater, Pensacola Bay, Lower Conecuh, and Escambia. Potentially affected areas addressed by this EA are encompassed within the Pensacola Bay watershed located in southern Santa Rosa County (United States Environmental Protection Agency [USEPA], 2001), specifically East River Bay.

In accordance with Section 303(d) of the Federal Clean Water Act, every two years each state must identify its polluted water bodies and submit this list to USEPA. Water bodies included in this list are estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. These standards are the criteria used to ensure that our waters can be used for recreational purposes (fishing, swimming, boating, and drinking) and industrial and agricultural purposes (USEPA, 2002).

USEPA requires states to set priorities for improving threatened waters and to establish a Total Maximum Daily Load (TMDL) for each. A TMDL plan entails an analysis of how much pollution a waterbody can take and still remain suitable for its intended uses. The TMDL plan includes recommendations for controlling pollution and a monitoring program to test the plan's effectiveness (USEPA, 2002). Eglin AFB has no responsibility or obligations under the TMDL plan.

There are nineteen waterbodies, which are segments of major surface waters, located in the Pensacola Bay watershed cited in the 1998 303(d) list (FDEP, 2003). The 1998 303(d) map and 303(d) table illustrating water segments of concern in Santa Rosa County are included in Appendix A.

4.2.3 Aquifer Classification of Santa Rosa County

The hydrostratigraphic section in the area of the subject properties is comprised of three units. From shallowest to deepest unit, the hydrostratigraphic section consists of the Surficial Aquifer System, the Intermediate Aquifer System, and the Floridian Aquifer System.

The Surficial Aquifer System (also known as the Sand and Gravel Aquifer) is comprised of approximately 300 feet of Pleistocene Age clastic deposits of the Citronelle Formation (Schmidt, 1978). The Surficial Aquifer System is typically an unconfined aquifer system, which is open to infiltration from the ground surface. The Surficial Aquifer System is the primary source of groundwater in Santa Rosa County.

The Intermediate Aquifer system is comprised of clays of the Upper Miocene Age Pensacola Clay. A sand layer, approximately 40 feet thick, divides the Pensacola Clay into an upper unit and a lower unit (O. T. Marsh, 1966). This sand unit is referred to as Escambia Sand Member. The Intermediate Aquifer System is approximately 600 feet thick in the area of the subject properties. The Intermediate Aquifer System acts as a confining unit to the underlying Floridian Aquifer System. The Intermediate Aquifer System is typically a non-water-bearing unit. Local occurrences of groundwater are present in sand layers in this unit.

The Floridian Aquifer System is comprised of limestone formations of Upper Eocene to Lower Miocene Ages. Limestone formations comprising the Floridian Aquifer System in Santa Rosa County include, from oldest to youngest, the Ocala Group, the Bucatunna Clay, the Chickasaway Limestone, and Tampa Formations undifferentiated (O. T. Marsh, 1966). The Floridian Aquifer System is approximately 600 feet in thickness in the area of the proposed locations. In general, salinity of the Floridian Aquifer System increases with depth.

4.3 Biological Resources

The Eglin Wildlife Management Area (Figure 3.2) encompasses 445,000 acres of Eglin AFB (464,448 total acres) and includes 67 rare plant species, 34 rare animal species, 11 Federally-listed threatened and endangered species, and 81 Florida State listed threatened and endangered species. The project site is located within the scrub ecological community and the Flatwoods Salamander is the only threatened or endangered species present within the scrub ecological community at the site.

The scrub ecological community was observed at the proposed locations of the wet detention Pond #2 site and the Bob Tolbert Road intersection. The scrub ecological community is characterized by closed to open canopy forest of sand pines; dense clumps to vast thickets of scrub oaks and other shrubs dominate the understory. Typical trees in scrub communities include sand pine, sand live oak, myrtle oak, scrub oak, and saw palmetto. The loose sands drain rapidly, creating very xeric conditions, for which plants appear to have evolved several water conservation strategies. Ground cover is generally very sparse, being dominated by ground lichens or, rarely, herbs. Open patches of barren sand are common. Because ground cover in a scrub community is primarily delicate, easily disturbed ground lichens that can take more than 50 years to recover from a disruption, disturbance of this loose, sand soil can lead to erosion. Thus, scrub is readily damaged by off-road vehicle traffic or even foot traffic (FNAI, 1990).

In 2000, a coalition composed of the United States Air Force (USAF), the Legacy Program and the Nature Conservancy/FNAI conducted a survey and habitat evaluation for the federally threatened flatwoods salamander (*Ambystoma cingulatum*) at Eglin AFB. The goal of the project was to identify the geographic extent and character of flatwoods salamander breeding sites and surrounding adult habitat. Analysis of Eglin AFB land cover identified that dome swamps and depression marshes are associated with flatwoods salamanders. The U.S. Fish and Wildlife Service defined a 450-meter area measured from the edge of these wetlands as an appropriate buffer to protect the majority of the flatwoods salamander population. The flatwoods salamander buffer zone would not be impacted by the proposed actions.

A Preliminary Engineering Report was prepared for the area of the SR 87 Improvement Project by CarlanKillam Consulting Group, Inc. in June of 1997. The report stated that a literature search was conducted, numerous field surveys completed, and coordination with the United States Fish and Wildlife Service and Florida Game and Fresh Water Fish Commission were accomplished. Based upon those efforts, it was determined that no endangered/threatened species or critical habitat would impact the project. Field reconnaissance and coordination with Eglin AFB biological staff identified cavity tress for the red cockaded woodpecker in the vicinity of Buck Pond. A Biological Assessment was prepared to assess any potential impacts to this species. No cavity trees would be affected by the project. It was also determined that the Gulf Sturgeon was documented in the Yellow River. It was decided that all construction within the Yellow River would be halted to avoid potential impacts to the site. The proposed location of Wet Detention Pond #2 and expansion activities at Bob Tolbert Road would not impact the red cockaded woodpecker or the Gulf Sturgeon. The referenced public documents (the 2000 survey, the Preliminary Engineering Report, and the Biological Assessment) are too voluminous to be included as an attachment to this document. As public documents these reports/studies are readily available upon request to the appropriate party.

The United States Fish and Wildlife Service concurred on January 15, 1997 that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et. seq.). FDOT also received a letter from the United States Fish and Wildlife Service dated July 9, 2001. The letter stated that the U.S. Fish and Wildlife Service had determined that proposed actions for the southern phase of the project (area containing the subject parcels) may affect, but were not likely to adversely affect, the flatwoods salamander. The flatwoods salamander is the only known threatened or endangered species located in the area. Copies of each of the referenced letters are included in Appendix A.

4.4 Wetlands

A wetland is defined as a land surface flooded by groundwater or surface water to such an extent that organisms requiring saturated soils for growth and reproduction can be supported. Wetlands include such habitats as swamps, marshes, bogs, wet meadows, river overflow, mud flats, and natural ponds. In May of 1977, the president of the United States of America issued Executive Order (EO) 11990, “Protection of Wetlands.” The purpose of the EO is to avoid long and short term adverse impacts associated with destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands, wherever there is a practicable alternative.

Permits to destroy or modify wetlands are required at federal, state, and local levels. For instance, Section 404 of the Clean Water Act regulates activities in wetlands. Under this law, placement of dredged or fill material into national wetlands requires a permit from the Army Corp of Engineers. These permits are evaluated based on environmental criteria and consideration of the public’s best interests. Eglin AFB wetlands are protected as a result of defense needs and proactive stewardship.

The project sites are located near, but not within, wetlands as defined above.

4.5 Noise

A noise analysis performed by J. W. Dorzback & Associates, Inc. classified all potential noise-receiving locations in the construction corridor as Activity Category B, which includes picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. Noise abatement procedures are considered necessary at all Activity Category B locations expected to experience traffic noise conditions more than 65 decibels on the A-scale at design year 2020. Four noise barrier locations were proposed (north side of SR 87, 0.3 miles east of Five Forks Road; north side of SR 87, 0.9 miles east of Five Forks Road; north side of SR 87, 0.2 miles West of Bob Tolbert Road; west side of SR 87 at Burton Circle). However, these barriers were not considered reasonable solutions because in most cases the cost exceeded the reasonable cost per benefited receiver. Of the proposed action locations, only Independent Full Gospel Church was considered affected. However, right-of-way required for construction of the proposed SR 87 improvements would acquire this site, thus eliminating the only benefited receiver in the area. It should be noted that the only other areas that could be impacted are a recreational park located adjacent to the pond site, three to four houses located in the general vicinity of the pond site, and the SR 87 and Bob Tolbert Road intersection site.

4.6 Air Quality

During construction, the project would have two effects on air quality: an increase in emissions by heavy construction equipment and an increase in dust by construction activities. Because this project would require use of material-handling and earth-moving equipment, dust and exhaust particulate emissions from heavy equipment operations could temporarily degrade air quality in the immediate construction zone.

4.7 Transportation

The Pond #2 site currently exists as an undeveloped land parcel that is covered with a scrubby, dense, low canopy forest with little under story other than palmetto and various shrubs. State road 87 is located adjacent and to the north of the Pond #2 site. The interior of the subject property is accessible by foot and by vehicle via trail roads. The site is characterized by low, relatively flat topography that is approximately 10 feet above mean sea level (AMSL). Stormwater drainage is by natural infiltration.

The Bob Tolbert Road Intersection site is composed of the current intersection of SR 87 and Bob Tolbert Road and small amount of contiguous, undeveloped, grassed land. Both SR 87 and Bob Tolbert Road are two-lane asphalt paved roads. The site is characterized by low, relatively flat topography that is approximately 5 to 10 feet AMSL. Stormwater runoff in the area is controlled by drainage ditches located adjacent to the roadways.

The SR 87 Improvement Roadway Project would affect local traffic flow and patterns during construction. Construction activities at the pond site should not greatly affect local traffic flow and patterns as most of the construction activities would be occurring well off SR 87. However, traffic flow and patterns would be impacted periodically by truck traffic entering and exiting the

pond site from SR 87. Construction activities would affect local traffic patterns at the intersection of SR 87 and Bob Tolbert Road during intersection construction. Disruption to normal traffic flow and patterns would likely be experienced periodically during lane and shoulder closures and other associated intersection construction activities.

4.8 Cultural Resources

Eglin AFB, as a Department of Defense (DoD) agency, manages resources according to federal law and regulations. Cultural Resources Division (96 CEG/CEVH) at Eglin AFB is responsible for protecting and managing resources according to the National Historic Preservation Act (NHPA), Air Force Instruction (AFI) 32-7065, and various DoD directives. AAC/EMH in consultation with the Florida State Historic Preservation Officer (SHPO) is responsible for management of approximately 1600 archeological sites and 125 historic structures and finding and identifying previously unknown resources. Investigations conducted within the project area have revealed that archeological sites eligible for inclusion in The National Register of Historic Places (NRHP) are located in the vicinity of the construction area of the Pond #2. However, research has verified that none of the sites are located on the property to be leased (project sites).

4.9 Safety and Occupational Health

Accident data was reviewed by HMM during the design process of this project. State Road 87 accident data for a seven year period from January 1, 1988 through December 31, 1994 was provided to HMM by the FDOT Safety Office. Accident data from 1995 was also provided to HMM by the Florida Highway Patrol. Analysis of this data shows that 302 accidents involving 445 injuries and 21 fatalities occurred on SR 87 during this period. Rear-end, angle and left turn collisions accounted for the vast majority of these accidents. More recent FDOT traffic data covering a span of seven years between January 1999 and March 2005 lists 99 accidents/crashes resulting in 153 injuries and 6 fatalities. Rear-end and angle collisions accounted for a majority of these accidents. New FDOT accident data is included in Appendix A. Accident data specific to the SR 87 and Bob Tolbert Road intersection site was not available.

The Occupational Safety and Health Act (OSHA) through the U.S. Department of Labor Occupational Safety and Health Administration sets forth a series of standards under which labor activities must be performed in order to promote and protect the health of workers. These are in Code of Federal Regulations (CFR), Parts 1900-1999.

4.10 Socioeconomics

Santa Rosa County has experienced dramatic growth during the past 10 years. According to latest census figures, the County's population grew by 44 percent from 1990 to 2000. In the Midway/Fairpoint/Peninsula/Navarre Beach area, however, population growth has been even more rapid, at 70 percent. The 1990 census reported a total population of 81,608 in Santa Rosa County. This number is expected to increase to approximately 150,000 by the year 2020, as reported in the Pensacola Urbanized Area Transportation Study 2020 Plan Update.

A large percentage of this growth is expected to occur within the coastal region of the county in the vicinity of this proposed project. Accompanying this population growth would be an increase in commercial and residential development on currently vacant and undeveloped property adjacent to SR 87. Two major features, which would have an immediate and dramatic influence on growth and travel patterns in the region, are the new State Correctional Facility and the Santa Rosa County Jail currently under construction at the northern terminus of the SR 87 corridor and the new Navarre High School located adjacent to SR 87 between SR 30 (US 98) and CR 399. The Fairpoint Peninsula and the Navarre Beach areas are geographically limited in the capacity they can support for these services, especially during hurricane evacuation activities, which overwhelm current highway capacities for this area.

Growth is expected to continue to place more demands on existing roadway systems. Proposed improvements to the SR 87 corridor are critical to the continued growth and development of local communities and the Santa Rosa County Region. Construction to widen SR 87 would provide long-term increased traffic capacity for northbound egress from the hurricane prone Gulf of Mexico Coastline. Failure to provide for reliable and effective stormwater management systems associated with the expansion of hurricane excavation routes could have a negative impact on the local economy, military personnel, government contractors, and private businesses and the environment.

State Road 87 is critical to the continued growth of the Holley and Navarre areas. It is a direct route between I-10 and SR 10 (US 90) and the coastal areas of the Gulf of Mexico. It links coastal areas of the county with the City of Milton, the Santa Rosa County Seat. This route is heavily used by both commuters (daily users) and vacationers (seasonal users). The large volume of daily traffic provides an enormous customer base for businesses located along SR 87.

4.11 Environmental Justice

On February 11, 1994, President Clinton issued EO 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." The purpose of the EO is to avoid disproportional placement of any adverse environmental, economic, social, or health impacts from federal actions and policies on minority and low-income populations. The President directed USEPA to ensure that agencies analyze the human health, social, environmental, and economic effects of proposed construction and development on minority and low-income communities. Disproportionate environmental impact occurs when the risk or the rate for a minority population or low-income population from exposure to an environmental hazard exceeds the risk or rate of the general population, and where available, to another appropriate comparison group. For the purposes of environmental justice analysis in this EA, the appropriate comparison group is Santa Rosa County.

Executive Order 13405, "Protection of Children from Environmental Health Risks and Safety Risks", mandates that federal agencies identify and assess environmental and health risks that may disproportionately affect children as a result of the implementation of federal policies, programs, activities and standards (62 Federal Register 19,883-19,888). The project sites are located in the Santa Rosa County School District and the closest public schools are located in Navarre, Florida, approximately 5 miles southeast of the site.

4.12 Hazardous Waste Materials

Hazardous waste materials such as gasoline, diesel fuel, oil, hydraulic fluid, and other lubricants have the potential to impact the environment at each of the sites. These hazardous materials are generally associated with heavy equipment, support vehicles, pickup trucks, and cars being used to facilitate construction. The impact, if it occurs, is usually localized, small in scale, and associated with a discharge from a piece of heavy equipment (a hydraulic line break) and/or vehicles (overfill or spill).

CHAPTER 5.0 ENVIRONMENTAL CONSEQUENCES, CONCLUSIONS, AND IMPACT MITIGATION

5.1 Soils and Geology

The elevation of the bottom of Pond 2 is -1 feet National Geodetic Vertical Datum (NGVD) and the elevation of the top is 9 feet NGVD. This equates to a total pond depth of 10 feet below land surface.

Impact-Proposed Actions: Construction of the stormwater detention pond is anticipated to involve breaching the soil interface. The soil profile created by HMM showed granular soils with varying amounts of silt to the maximum boring termination depth of 20 feet below land surface (approximate elevation -11.1 feet NGVD). Field permeability testing performed by HMM indicated a horizontal permeability rate of 28 feet per day.

Standard erosion control measures would be implemented during construction of the stormwater pond as well as expansion of Bob Tolbert Road. These could include planting native vegetation, sodding, rock placement, weed free hay bales, or other measures. Improperly designed ponds may result in stratification and anoxic conditions that can promote resuspension of solids and release of nutrients and metals from trapped sediments. All vegetated areas disturbed during construction activities would be graded and contoured. The aforementioned permits would be obtained prior to commencement of construction activities.

Impact-No-action: Because current conditions in a No-Action scenario would remain the same, no impacts are anticipated. Site conditions would remain unchanged.

As only surface soils would be disturbed at the Bob Tolbert Road site, proposed actions at the project sites (Pond 2 and Bob Tolbert Road) should not significantly impact soil and geological resources. As soil would be disturbed to approximately ten feet below land surface (bls) at the pond site, the amount of soil removed from this area should not significantly impact surface and subsurface soil conditions at the site.

5.2 Water Quality and Hydrology

At the proposed location of the stormwater detention pond site, groundwater was encountered at an approximate elevation of 3.0 to 10.0 feet NGVD. Seasonal high groundwater levels are estimated at approximate elevations of 4.0 to 12.0 feet NGVD.

Impact Reduction – Proposed Action: Construction of the stormwater wet detention pond would involve breaching the groundwater interface (approximate elevation of +3.0 to +10.0 feet NGVD). The site for the proposed location has been tested for stormwater pond conditions. Field permeability testing performed by HMM indicated a horizontal permeability rate of 28 feet per day. Construction of the detention pond should not significantly impact water quality or hydrology at the project site.
The proposed stormwater facility design would meet water quality requirements and design standards presented in Rules 62-25, 62-40 and 62-312 of the FAC.

Impact–No-action: Because the current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Water quality and hydrology would remain the same if proposed actions are not implemented.

The proposed action at the project sites (Pond 2 and Bob Tolbert Road) should not significantly impact water quality and hydrology. The proposed action at the Bob Tolbert site would not intersect the static water table at the site. Additionally, stormwater generated in this area would be routed to the Pond #2 site, improving water quality in the area. The proposed action at the Pond #2 site would extend to approximately three feet into the water table. However, net water quality in the area would ultimately be improved due to the pond. The stormwater facility design and operation would comply with water quality rules listed in FDEP and Chapters 62-25, 62-40, and 62-312 of the FAC. Stormwater runoff during construction would be managed in accordance with a Stormwater Pollution Prevention Plan that outlines use of various erosion control measures and other Best Management Practicies. This document and associated general notes are included in Appendix A.

5.3 Biological Resources

The Eglin Wildlife Management Area encompasses 445,000 acres of Eglin AFB (464,448 total acres) and includes 67 rare plant species, 34 rare animal species, 11 Federally-listed threatened and endangered species, and 81 Florida State listed threatened and endangered species. The project sites are located within the scrub ecological community and the Flatwoods Salamander is the only threatened or endangered species present within the scrub ecological community at the site.

Impact– Proposed Action: Approximately 9.794 acres of vegetation would be removed by the proposed construction of the stormwater detention pond. Live oak, sand live oak, laurel oak, turkey oak, blackjack oak, red oak, sand post oak, long leaf pine, staggerbush, saw palmetto, sparkleberry, pignut hickory, southern magnolia, redbay, American holly, wild olive, black cherry, fox grape, beauty berry, bluejack oak, Chapman's oak, persimmon, grass and yaupon are the types of vegetation that would be removed by construction of the pond. The expansion of Bob Tolbert Road would take place on approximately 0.0367 acres. Grass is the only type of vegetation that would be removed by the road expansion. These areas would be reseeded following completion of the construction. All landscaping would use local native vegetation.

The United States Fish and Wildlife Service concurred on January 15, 1997 that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et. seq.). FDOT also received a letter from the U.S. Fish and Wildlife Service dated July 9, 2001. The letter stated that the United States Fish and Wildlife Service had determined that proposed actions for the southern phase of the project (area containing the subject parcels) may affect, but were not likely to adversely affect, the flatwoods salamander. The flatwoods salamander is the only known threatened or endangered species located in the area. Copies of each of the referenced letters are included in Appendix A.

A literature search was also conducted, numerous field surveys were completed, and coordination with United States Fish and Wildlife Service and the Florida Game and Fresh Water Fish Commission (now known as Florida Fish and Wildlife Conservation Commission) was accomplished. Based upon these efforts it was determined that no endangered/threatened species or critical habitat would be impacted by the proposed action.

Impact–No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. The site location would remain the same.

5.4 Wetlands

Impact– Proposed Action: As referenced in Section 4.4, project sites are located near, but not within, wetland areas. Thus, proposed actions at the project sites (Pond #2 and Bob Tolbert Road) should not significantly impact any wetland areas.

Impact–No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. The site location would remain the same.

5.5 Noise

A noise analysis performed by J. W. Dorzback & Associates, Inc. classified all potential noise-receiving locations in the construction corridor as Activity Category B, which includes picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. Noise abatement procedures are considered necessary at all Activity Category B locations expected to experience traffic noise conditions more than 65 decibels on the A-scale at design year 2020. Noise temporarily generated during construction would only affect a few residences located in the site area, visitors to the recreational park near the pond site, and motorists driving through the SR 87 and Bob Tolbert Road intersection site.

Impact–Proposed Action: Temporary noise effects to residents, the recreational park, and church located in the immediate vicinity of proposed construction activities should not increase more than 5 dBA due to the presence of 100 feet or more of thick vegetation along the construction corridor. The Construction Engineer in cooperation with the District Noise Specialist are tasked with controlling the temporary effects of construction noise and vibration according to controls listed in the most recent edition of *FDOT Standard Specifications for Road and Bridge Construction*.

Impact–No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Current noise conditions would be unaffected.

Based on information and data provided in this EA, the proposed actions should not significantly impact this resource. Any noise generated during construction would be temporary and controlled by the District Noise Specialist.

5.6 Air Quality

Air quality in the vicinity of each project site may be affected on a temporary basis during construction. The effects would mainly be caused by air emissions created by heavy equipment combustion engines and dust created by construction activities. The only receptors in the area that should be affected by air quality fluctuations are a few residences located in the site area, visitors to the recreational park near the pond site, and motorists driving through the SR 87 and Bob Tolbert Road intersection site.

Impact–Proposed Action: During construction, the project would have two short-term effects on air quality: an increase in air emissions created by heavy construction equipment and an increase in dust generated by construction activities. Because this project would require use of material-handling and earth-moving equipment, dust and exhaust particulate emissions from heavy equipment operations could temporarily degrade air quality in the immediate construction zone. Fugitive particle emissions would be controlled using standard construction practices and dust control procedures.

Impact–No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Air quality conditions would remain the same.

Based on information and data provided in this EA, proposed actions should not significantly impact this resource. Air emissions from combustion engines and dust generated by operation of heavy equipment would be temporary and should not adversely impact the atmosphere. In addition, the impacts would be localized to the construction zones.

5.7 Transportation

Transportation through the project sites would be intermittently impacted during construction activities. Motorist would experience short delays and traffic volumes that may be slightly higher than normal.

Impact–Proposed Action: Traffic flow and patterns would be impacted periodically by truck traffic entering and exiting the pond site from SR 87. Construction activities would affect local traffic patterns at the intersection of SR 87 and Bob Tolbert Road during intersection construction. Disruption to normal traffic flow and patterns would likely be experienced periodically during lane and shoulder closures and other associated intersection construction activities. FDOT contractors would provide personnel to manage and direct traffic (motorists) for the duration of the construction at the project sites. All maintenance of traffic would be performed in accordance with applicable FDOT specifications.

Impact-No-action: Becasue current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Traffic conditions would remain the same short term but continue to degrade as population growth in the area increases. The ability to evacuate area citizens in advance of a hurricane would also degrade as the population increases.

Based on information and data provided in this EA, proposed actions should not significantly impact this resource. Traffic patterns and flow would be periodically impacted at each project

site. However, FDOT contractors would provide personnel to manage and direct traffic (motorists) for the duration of the construction at the project sites.

5.8 Cultural Resources

Impact–Proposed Action: The only cultural resource site located in the area of the project sites was Site 8SR01649. Site 8SR01649 has been identified as a historical homestead site. This site was physically located by WRS and Eglin AFB personnel. It is located close to, but not within, the leased area. Thus, proposed actions at the project sites (Pond 2 and Bob Tolbert Road) should not significantly impact cultural resources. Consultation with the SHPO is not required prior to initiation of the project.

Impact-No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Site conditions would remain unchanged.

5.9 Safety and Occupational Health

***Impact–Proposed Action*:** The proposed actions at the project sites (Pond #2 and Bob Tolbert Road) should not significantly impact safety and occupational health. Traffic safety conditions on SR 87 would be moderately impacted during construction but would greatly improve following construction. All construction activities would be conducted in accordance with applicable public safety requirements to comply with OSHA and FDOT standards.

Impact-No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. Site conditions would remain unchanged. However, traffic safety and hurricane evacuation conditions can be expected to degrade as the area's population continues to increase if the SR 87 roadway improvements are not completed.

5.10 Socioeconomics

Santa Rosa County has experienced dramatic growth during the past 10 years. According to latest census figures, the County's population grew by 44 percent from 1990 to 2000. In the Midway/Fairpoint/Peninsula/Navarre Beach area, however, population growth has been even more rapid, at 70 percent. The current population (81,608) of Santa Rosa County is expected to double by the year 2020 with most of the growth occurring in the coastal areas.

***Impact–Proposed Action*:** Growth is expected to continue to place more demands on existing roadway systems. The proposed improvements to the SR 87 corridor are critical to the continued growth and development of the local communities and the Santa Rosa County Region. Construction to widen SR 87 would also provide long-term increased traffic capacity for north bound egress from the hurricane prone Gulf of Mexico Coastline.

State Road 87 is critical to the continued growth of the Holley and Navarre areas. It is a direct route between I-10 and SR 10 (US 90) and the coastal areas of the Gulf of Mexico. This route is heavily used by both commuters (daily users) and vacationers (seasonal users). The large volume of daily traffic provides an enormous customer base for businesses located along SR 87.

Based upon information and data provided in this EA, the proposed actions at the project sites (Pond #2 and Bob Tolbert Road) should not significantly impact socioeconomic conditions. In fact, proposed action would likely improve socioeconomic conditions in the local area.

Impact-No-action: Because current conditions in the No-Action scenario would remain the same, adverse socioeconomic impacts would be likely. As the area population continues to expand, the current socioeconomic structure would not be able to effectively handle the growth and current conditions would likely degrade.

5.11 Environmental Justice

***Impact–Proposed Action*:** There would not be a disproportional placement of any adverse environmental, economic, social, or health impacts placed upon minority and low-income populations or children as a result of the proposed action. In addition, the area of the pond site is unoccupied and the intersection site is already an active roadway intersection. In fact, economic, social, and environmental conditions would likely improve upon completion of the SR 87 Roadway Improvement Project.

Impact-No-action: Because current conditions in the No-Action scenario would remain the same, significant impacts to environmental justice conditions are not anticipated. Site conditions would remain unchanged.

5.12 Cumulative Affects Analysis

Cumulative impacts are those changes to the physical, biological, and socioeconomic environments that would result from the combination of construction, operation and associated impacts resulting from the proposed action when added to past, present, and reasonably foreseeable actions. Past projects, or those implemented or built before 2006, can be considered to be part of the existing conditions for this EA.

No significant cumulative impacts to soils and geology, water quality and hydrology, biological resources, wetlands, noise, air quality, transportation, cultural resources, safety and occupational health and environmental justice are expected as a result of the proposed action. In addition, WRS personnel are not aware of any reasonably foreseeable actions that would cumulatively impact the project area. It is anticipated that there will be additional real estate actions to support the SR 87 widening project. These actions, will be analyzed in detail before any additional real estate actionsments required for additional widening of SR 87 as funding becomes available. Additional NEPA analysis will completed in a suppemental to this EA as funding be becomes available. Analysis findings are expected to be similar to those identified in this document. Potential minor cumulative impacts associated with the proposed action are identified below:

Localized soil disturbance. Embankment construction activities would affect 125,945 cubic yards (cyds) of soil on the entire SR 87 Project. Excavation constructio n would

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Localized vegetatie disturbance. Removal of existing trees and plants (clearing and grubbing) would affect approximately 76 acres on the entire SR 87 Project. Of this, less than one acre of Eglin AFB property would be affected by construction at the SR 87 and Bob Tolbert Road intersection site. Construction at the Pond #2 site wuld affect approximately nine acres. Most of the affected vegetation is composed of pine, scrub oak and palmetto

Slight beneficial impact to the local community as a result of proposed action impact to the local community as a result of proposed action.

Minor, localized, and temporary noise and air quality impacts associated with proposed action.

Minor impacts would be mitigated as discussed in proceeding text.

5.13 Hazardous Waste Materials and Handling

Hazardous waste materials such as gasoline, diesel fuel, oil, hydraulic fluid, and other lubricants have the potential to impact the environment at each of the sites. These hazardous materials are generally associated with heavy equipment, support vehicles, pickup trucks, and cars being used to facilitate construction.

Impact –Proposed Action: The impact, if it occurs, is usually localized, small in scale, and associated with a discharge from a piece of heavy equipment (a hydraulic line break) and or vehicles (overfill or spill). The discharges usually impact the soil, groundwater, surface water and vegetation in the general area. FDOT requires designated roadway contractors to prepare a Spill Prevention Plan prior to initiation of construction that would be implemented in case of a spill or release. The contractor is also directed to contact FDOT's District Contamination Impact Coordinator or local agencies as well.

Impact–No-action: Because current conditions in the No-Action scenario would remain the same, no impacts are anticipated. If no construction occurs, a release or spill of a hazardous material would not occur.

Based on information and data included in this report, the proposed actions should not significantly impact the above referenced resources.

CHAPTER 6.0 MANAGEMENT REQUIREMENTS AND PERMITS

6.1 Management Requirements

The irretrievable commitment of resources would be limited to approximately 9.8307 acres of property. Laydown areas and areas disturbed by construction equipment would be graded to original contours and reseeded, if necessary.

All soil removed from the sites would be removed and utilized by FDOT. Sediments removed from construction of detention ponds are generally considered clean fill and typically used for other FDOT road construction projects or in another area of the same project.

All routine maintenance would be performed and managed by FDOT. Maintenance of the stormwater wet detention pond would consist of mowing of the side slopes and embankment at least twice a year to prevent woody growth and control weeds. Annual inspections will be conducted during wet weather to determine if the pond is functioning properly. Embankments would be checked for subsidence, erosion, leakage, and tree growth. The inlet and outlet pipe would be checked for clogging. Debris and litter would be removed as part of mowing operations. Sedimentation removal would be done as needed and shall be inspected as part of mowing operations

6.2 Permits

Wetland (dredge and fill) and stormwater discharge (National Pollutant Discharge Elimination System) permits were required by FDEP for the SR 87 Project. Both permits also apply to the project sites. The proponent (FDOT) is required to obtain the listed permits. Eglin AFB is not required to obtain any permits for the SR 87 Project or the project sites. The Federal Agency Coastal Zone Management Act (CZMA) Consistency Determination is included in Appendix B.

CHAPTER 7.0 CONCLUSIONS

FDOT is planning to implement a roadway improvement project along SR 87 between its intersections with SR 30 (US 98) and SR 10 (US 90), a 19.9 mile corridor. Eglin AFB property would be impacted by construction activities required to complete parts of the SR 87 Improvement Project. Specifically, construction of a stormwater detention pond required to control roadway-derived runoff and of an intersection improvement at SR 87 and Bob Tolbert Road would take place on approximately 10 acres of Eglin AFB property. This EA was prepared to facilitate lease negotiations of right-of-way lands with 96 CEG/CERR Eglin AFB and FDOT (the proponent) for the use of these lands and assess potential environmental impacts to Eglin AFB property. This EA document was prepared in accordance with CEQ 40 CFR Part 1500; Environmental Quality, AFPD 32-70; 32 CFR Part 989; and NEPA of 1969.

The SR 87 project corridor begins north of the project sites at the intersection of SR 87 and US 90, continues south through Eglin AFB, and passes through the communities of Holley and Navarre to end at the intersection with US 98. The SR 87 Improvement Plan would upgrade the current two-land road to a typical four-lane rural roadway with median and paved bicycle lanes. Existing bridges at East Bay River, Dean Creek, and Yellow River as well as existing stormwater management systems would also be upgraded.

The proposed actions involve construction of a stormwater detention pond (Pond #2) and expansion of the intersection of SR 87 and Bob Tolbert Road. FDOT would be managing the construction of the four-lane improvements to SR 87 from North of Five Forks Road to the Eglin AFB boundary. In order to complete the SR 87 Improvements (conversion of an undivided two-lane highway to a divided four-lane highway), construction of Pond #2 and expansion of the intersection of SR 87 and Bob Tolbert Road are necessary.

Justification for proposed actions, which would ultimately result in the improvement of the entire SR 87 corridor, are based on existing and projected socioeconomic conditions and travel conditions along the SR 87 corridor. Upgrading the SR 87 corridor is needed to improve travel service, enhance coastal evacuation routes and operations, reduce or eliminate unsafe roadway characteristics, and serve the population and economic growth projected for the region in an effective and efficient manner. In addition, State Road 87 is an important north/south arterial highway in Santa Rosa County, which connects Navarre and US 98 from the south with I-10 and US 90 to the north. This creates a vital link between northern and southern portions of the county, which carries commuter, commercial, vacation, evacuation, and military traffic.

Alternatives considered but eliminated from further analysis and the “no-action” alternative were also reviewed and discussed in this EA. Stormwater management (pond) sites were located, analyzed and ranked by HMM based on property cost, environmental sensitivity, functional ability, potential hazardous waste contamination, impacts to endangered species, cultural resources, residences and businesses. After extensive studies and research, HMM and FDOT concluded that the currently proposed location of Stormwater Pond Number 2 was the only reasonable location for construction purposes. FDOT and HMM also determined that it was not cost effective and practical to design a new intersection or realign the current roadway alignment. Expansion of the existing intersection would prove to be the most reasonable and

cost effective approach. The "no-action" alternative would involve no construction of the stormwater detention pond and no expansion of the Bob Tolbert Road intersection. This was determined not to be practical because it would not accomplish the goals of improving the roadway infrastructure to serve the area community.

After selection of the proposed actions, focus was placed on evaluation of the affects construction would have on area resources. Area resources were identified, verified for applicability, and evaluated for the affects that different construction activities/methodologies could potentially have on the resource. The end result was to determine if proposed actions and related construction activities would create a significant impact to a particular resource. Soils and geology, water qualities and hydrology, biological resources, wetlands, noise, air quality, transportation, cultural resources, safety and occupational health, socioeconomics, environmental justice, and hazardous waste materials were reviewed.

Soils and geology, water quality and hydrology, biological resources, noise, air quality, transportation, and hazardous materials resources all have the potential to be affected during construction activities at the project sites. However, their respective impacts would appear to be minimal and the impact reduced (impact reduction) by use of Best Management Practices and engineering controls discussed in previous chapters. A few examples presented in this EA within Chapter 5.0 are: use of dust control during construction to improve air quality, use of erosion control measures to protect surface water receptors, use of the District Noise Specialist to ensure that noise levels do not exceed applicable standards, and use of maintenance of traffic during construction to maintain adequate traffic flow and protect public safety. Ultimately, it was determined that all of these resources should not be significantly impacted by the proposed action.

The other remaining resources (wetlands, cultural resources, safety and occupational health, socioeconomics, and environmental justice) were evaluated using the same principals outlined above. It was determined that wetland and cultural resources would not be impacted by the proposed actions because applicable resources do not exist on the project sites. The remaining resources have the potential to be indirectly affected by proposed actions. However, in each instance a net improvement to the resource would be realized following completion of the SR 87 Roadway Improvement Project. It was determined that all of these resources should not be significantly impacted by the proposed action.

Based on review and analysis of available data and information presented in this EA, the proposed actions should not have a significant impact to the human and natural environment and the resources reviewed in this EA; therefore, an environmental impact statement is not required. This document and analysis fulfill the requirements of the National Environmental Policy Act, the President's Council on Environmental Quality and 32 CFR Part 989.

CHAPTER 8.0 LIST OF PREPARERS

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CHAPTER 9.0 PERSONS CONTACTED AND REFERENCES

Contamination Screening Evaluation Report, Florida Department of Transportation, Carlan Consulting Group, Incorporated. October, 1996.

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American Society for Testing and Materials, 2000, Environmental Site Assessments for Commercial Real Estate, E 1527-00 and E 1528-00, Fourth Edition, West Conshohocken, PA.

Environmental Data Resources, Incorporated. *The EDR-Radius Map with GeoCheck, Escambia County, Pensacola, Florida 32130*. Southport, CT, 2003.

Florida Department of Environmental Protection. *Florida Administrative Codes: Chapter 62-302.400 and 62-302.700*. Tallahassee, Florida. URL: **http://www.dep.state.fl.us.** (18 October 2003).

Florida Department of Environmental Protection. *Water Resource Management*. Tallahassee, Florida. URL: **http://www.dep.state.fl.us/water/division/tmdl/default.htm**. (18 October 2003).

Florida Department of Transportation. Historical Aerial Photographs, Tallahassee, Florida. (18 October 2003).

Location Hydraulic Report SR 87 PD&E Study from US 98 (SR 30) to US 90 (SR 10). Florida Department of Transportation. Carlan Consulting Group, Incorporated. December, 1996.

National Wetlands Inventory. Retrieved February 20, 2004, from the World Wide Web: URL - http://wetlands.fws.gov

Nationwide Rivers Inventory. Natural Resource Conservation Service. Retrieved May, 2002, from the World Wide Web: **http://www.ncrc.nps.gov/rtca/nri/.**

Preliminary Engineering Report. Carlan Killam Consulting Group, Incorporated. June 1997

Scott, T. M., 1992, *A Geological Overview of Florida*. Open File Report No. 50, Florida Geological Survey, Tallahassee.

Soil Conservation Service, 1980, *Soil Survey Santa Rosa County, Florida*. United States Department of Agriculture, Washington D.C.

State Road 87 Over Dean Creel Bridge Development Report, Florida Department of Transportation, CarlanKillam Consulting Group, Incorporated. November, 2001.

United States Geological Survey. Santa Rosa Quadrangle, FGDL:q5150.

United States Environmental Protection Agency. Surf Your Watershed, July 2003. Washington, DC: Retrieved July 10, 2003, from the World Wide Web:
http://www.epa.gov/surf3/locate/.

APPENDIX A

Project Related Documentation

a.) State of Florida Clearinghouse Information
b.) Public Notification Information
c.) 303d Water Segment Table
d.) U.S. Fish and Wildlife Service Letter – January 15, 1997
e.) U.S. Fish and Wildlife Service Letter – July 9, 2001
f.) FDOT Traffic Data January 1999 to February 2005
g.) FDOT Best Management Practices

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

September 28, 2004

Mr. Dan Nichols, Chief
Environmental Stewardship Division
Department of the Air Force
96 ABW/EMS
501 DeLeon Street, Suite 101
Eglin AFB, FL 32542-5133

RE: Department of the Air Force and Florida Department of Transportation – Environmental Assessment, RSC-03-594, for SR 87 Improvements on Eglin Air Force Base – Holley, Santa Rosa County, Florida.
SAI #: FL200407308420C

Dear Mr. Nichols:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335,4341-4347, as amended, has coordinated a review of the above-referenced project.

The Department of Environmental Protection (DEP) notes that the proposed activities will require a stormwater permit pursuant to Chapter 62-25, *Florida Administrative Code (F.A.C.)*, and a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Chapter 62-621, *F.A.C.* The applicant is advised to contact the DEP NPDES section in Tallahassee at (850) 245-7522 regarding NPDES permitting requirements and the DEP Northwest District Office at (850) 595-8300 regarding stormwater permitting requirements.

Based on the information contained in the referenced project and the comments provided by our reviewing agencies, the state has determined that, at this stage, the proposed project is consistent with the Florida Coastal Management Program. The state's continued concurrence with the project will be based, in part, on the adequate resolution of any issues identified during this and subsequent permitting reviews.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Mr. Daniel Lawson at (850) 245-2174.

Sincerely,

Sally B. Mann

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/dl
Enclosures

cc: Dick Fancher, DEP, Northwest District

Project Information	
Project:	FL200407308420C
Comments Due:	August 29, 2004
Letter Due:	September 28, 2004
Description:	DEPARTMENT OF THE AIR FORCE AND FLORIDA DEPARTMENT OF TRANSPORTATION - ENVIRONMENTAL ASSESSMENT, RSC-03-594, FOR SR 87 IMPROVEMENTS ON EGLIN AIR FORCE BASE - HOLLEY, SANTA ROSA COUNTY, FLORIDA.
Keywords:	USAF/FDOT - EA FOR SR 87 IMPROVEMENTS ON EGLIN AFB - HOLLEY, SANTA ROSA CO.
CFDA #:	12.200

Agency Comments:
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS
Released Without Comment
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
The DEP notes that the activities will require a stormwater permit pursuant to Chapter 62-25, F.A.C., and a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Chapter 62-621, F.A.C. The applicant is advised to contact the DEP NPDES section in Tallahassee at (850) 245-7522 regarding NPDES permitting requirements and the DEP Northwest District Office at (850) 595-8300 regarding stormwater permitting requirements.
STATE - FLORIDA DEPARTMENT OF STATE
No comment/Consistent
NORTHWEST FLORIDA WMD - NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
No comment.
ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT
No Comment
WEST FLORIDA RPC - WEST FLORIDA REGIONAL PLANNING COUNCIL
No Comments - Generally consistent with the West Florida Strategic Regional Policy Plan.
SANTA ROSA - SANTA ROSA COUNTY

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

Visit the Clearinghouse Home Page to query other projects.

COUNTY: SANTA ROSA
SAI-USAF -DOT
2004-7785

DATE: 7/30/2004
COMMENTS DUE DATE: 8/29/2004
CLEARANCE DUE DATE: 9/28/2004
SAI#: FL200407308420C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
COMMUNITY AFFAIRS	NORTHWEST FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
X STATE			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- _ **Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.**
- X **Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.**
- _ **Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.**
- _ **Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.**

Project Description:

DEPARTMENT OF THE AIR FORCE AND FLORIDA DEPARTMENT OF TRANSPORTATION - ENVIRONMENTAL ASSESSMENT, RSC-03-594, FOR SR 87 IMPROVEMENTS ON EGLIN AIR FORCE BASE - HOLLEY, SANTA ROSA COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA
- ☑ No Comment
- ☐ Comment Attached
- ☐ Not Applicable

Federal Consistency
- ☑ No Comment/Consistent
- ☐ Consistent/Comments Attached
- ☐ Inconsistent/Comments Attached
- ☐ Not Applicable

From:
Division/Bureau: Division of Historical Resources / Bureau of Historic Preservation
Reviewer: S. Edwards — Laura b. Kammerer, Deputy SHPO
Date: 8-16-04 — 8.16.04

RECEIVED
AUG 20 2004
OIP/OLGA

RECEIVED
BUREAU OF
HISTORIC PRESERVATION
04 AUG -5 PM 2:31

COUNTY: SANTA ROSA

DATE: 7/30/2004

COMMENTS DUE DATE: 8/29/2004

CLEARANCE DUE DATE: 9/28/2004

SAI#: FL200407308420C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
COMMUNITY AFFAIRS	X NORTHWEST FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
STATE			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

_ **Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.**

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Project Description:

DEPARTMENT OF THE AIR FORCE AND FLORIDA DEPARTMENT OF TRANSPORTATION - ENVIRONMENTAL ASSESSMENT, RSC-03-594, FOR SR 87 IMPROVEMENTS ON EGLIN AIR FORCE BASE - HOLLEY, SANTA ROSA COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA

☑ No Comment
☐ Comment Attached
☐ Not Applicable

Federal Consistency

☐ No Comment/Consistent
☐ Consistent/Comments Attached
☐ Inconsistent/Comments Attached
☐ Not Applicable

NO COMMENTS

From:

Division/Bureau: NWFWMD Resource Management Div.
Reviewer: Duncan J. Cairns
Date: Date 17 AUGUST 2004

MEMO

8 November 2004

FROM: 96th ABW/EM-PAV

TO: EMSP

SUBJECT: **PUBLIC NOTICE Environmental Assessment For "Veterans Administration Community Based Outpatient Clinic on Eglin Air Force Base, and the Construction of Wet Stormwater Detention Pond Number 2 and Intersection Expansion of State Road 87 and Bob Tolbert Road" Eglin AFB, Florida**

A public notice was published in the *Northwest Florida Daily News* on Oct. 20th, 2004 to disclose completion of the Draft EA, selection of the preferred alternative, and request comments during the 15-day pre-decisional comment period.

The 15-day comment period ended on Nov. 5th, with the comments required to this office not later than Nov. 8th, 2004.

No comments were received during this period.

//SIGNED//
Mike Spaits
Public Information Specialist

NW FL DAILY NEWS, 22.OCT.04, p B6

PUBLIC NOTIFICATION

In compliance with the National Environmental Policy Act, Eglin Air Force Base announces the availability of the draft Environmental Assessments and Findings of No Significant Impact for the Veterans Administration Community Based Outpatient Clinic on Eglin Air Force Base, and the Construction of Wet Stormwater Detention Pond Number 2 and Intersection Expansion of State Road 87 and Bob Tolbert Road for public review and comment.

The Proposed Action of Veterans Administration Community Based Outpatient Clinic on Eglin Air Force Base. The Proposed Actionconsists of constructing a 116,200 square foot community-based outpatient clinic on a 10-acre parcel of land adjacent to the Eglin Regional Hospital. In addition to the facility, parking lots, sidewalks, and access road and a stormwater retention pond would be built.

The Proposed Action of Construction of Wet Stormwater Detention Pond Number 2 and Intersection Expansion of State Road 87 and Bob Tolbert Road, involves construction of a stormwater detention pond and expansion of the intersection of SR 87 and Bob Tolbert Road. The stormwater detention pond is designed to establish and maintain a permanent pool for biological treatment of the water, provide a treatment pool as required by FDEP and Santa Rosa County, and attenuate all storm durations through a 100-year storm to ensure that the post development discharge rates do not exceed the pre-development discharge rates. Bob Tolbert Road will be expanded to include a turn lane to alleviate high traffic.

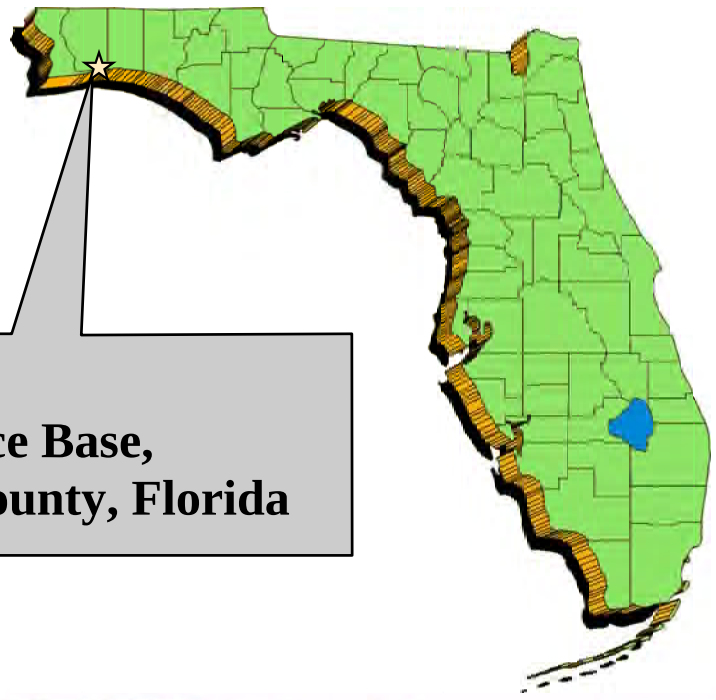
Your comments on these draft Environmental Assessments are requested. Letters or other written or oral comments provided may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the final EA. However, only the names and respective comments of respondent individuals will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA. Copies of the Veterans Administration Community Based Outpatient Clinic on Eglin Air Force Base Environmental Assessment and Finding of No Significant Impact may be reviewed at the Fort Walton Public Library and Shalimar Public Library. Copies of the Construction of Wet Stormwater Detention Pond Number 2 and Intersection Expansion of State Road 87 and Bob Tolbert Road Finding of No Significant Impact may be reviewed at the Navarre Public Library. Both copies will be available to review from Oct. 22 through Nov. 6, 2004. Comments must be received by Nov. 8, 2004.

For more information or to comment on these proposed actions, contact: Mr. Mike Spaits, AAC/EM PAV, 501 De Leon Street, Suite 101, Eglin AFB, Florida 32542-5133 or email mike.spaits@eglin.af.mil <mailto:spaits@eglin.af.mil> Tel: (850) 882-2878 Fax: (850) 882-6284.

HUC Name	Water Segment	[2] MAPID	[1] WBID	Parameters of Concern	Comments	Priority	Basin Rotation Group	Projected Year of TMDL Development	*Special TMDL development year	Parameter for special TMDL development
PEACE RIVER	LAKE MIRROR	99	1521G	Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	LAKE CANNON	100	1521H	Dissolved Oxygen, Coliforms, Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	LAKE BONNY	101	1497E	Nutrients		High	Group 3	2004		
PEACE RIVER	LAKE SMART	102	1488A	Dissolved Oxygen, Un-Ionized Ammonia, Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	SADDLE CREEK	104	1497	Dissolved Oxygen, Coliforms, Nutrients		High	Group 3	2004		
PEACE RIVER	LAKE HOWARD	105	1521F	Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	LAKE JESSIE	108	1521K	Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	LAKE PARKER	109	1497B	Nutrients		High	Group 3	2004		
PEACE RIVER	LAKE LENA	110	1501	Nutrients		High	Group 3	2004		
PEACE RIVER	LAKE HAINES	113	1488C	Dissolved Oxygen, Coliforms, Nutrients	SWIM Waterbody. Part of Winter Haven Chain of Lakes. SWFWMD performing modeling.	High	Group 3	2004		
PEACE RIVER	LAKE ARIANNA	116	1501B	Nutrients		Low	Group 3	2008		
PEACE RIVER	LAKE TENOROC	117	1497C	Dissolved Oxygen		Low	Group 3	2008		
PEACE RIVER	LAKE ALFRED	118	1488D	Dissolved Oxygen, Nutrients		Low	Group 3	2008		
PENSACOLA BAY	BAYOU GARCON	0	987	Dissolved Oxygen, Color	Low Transparency	High	Group 4 & 5	2006		

HUC Name	Water Segment	[2] MAPID	[1] WBID	Parameters of Concern	Comments	Priority	Basin Rotation Group	Projected Year of TMDL Development	*Special TMDL development year	Parameter for special TMDL development
PENSACOLA BAY	PENSACOLA BAY	2	548E	Copper, Lead, Biochemical Oxygen Demand, Nutrients, Turbidity, Total Suspended Solids	Various studies by USGS, US Minerals Management Services, NOAA, EPA, Champion International on Escambia Bay and Santa Rosa Sound.	High	Group 4 & 5	2006		
PENSACOLA BAY	JONES CREEK	8	846A	Coliforms, Dissolved Oxygen, Nutrients, Turbidity		Low	Group 4 & 5	2011		
PENSACOLA BAY	BAYOU CHICO	12	846	Coliforms, Dissolved Oxygen, Nutrients		High	Group 4 & 5	2006		
PENSACOLA BAY	PENSACOLA BAY	13	548C	Coliforms		High	Group 4 & 5	2006		
PENSACOLA BAY	JACKSON CREEK	14	846B	Dissolved Oxygen, Coliforms, Nutrients, Total Suspended Solids, Turbidity	Poor water quality due to urbanized nature. Generally low priority.	Low	Group 4 & 5	2011		
PENSACOLA BAY	BAYOU GRANDE	17	740	Coliforms, Dissolved Oxygen		High	Group 4 & 5	2006		
PENSACOLA BAY	EAST RIVER BAY (East River Bay)	18	701	Coliforms, Turbidity		Low	Group 4 & 5	2011		
PENSACOLA BAY	TEXAR BAYOU	21	738	Coliforms	NPS poor.	Low	Group 4 & 5	2011		
PENSACOLA BAY	ESCAMBIA BAY (S)	23	548B	Dissolved Oxygen, Coliforms, Nutrients, Total Suspended Solids, Turbidity	Bayou Chico has sedimentation and water quality problems. Bayou Texar the same plus chemical pollution from EPA Superfund site. Bayou Grande OK but future development may affect it. Gulf Breeze peninsular has sprayfield problems.	High	Group 4 & 5	2006		
PENSACOLA BAY	DIRECT RUNOFF TO BAY (Escambia Bay, Mulatto Bayou, Indian Bayou)	26	639		Listing of the water was based on the NPS Survey.	High	Group 4 & 5	2006		
PENSACOLA BAY	CARPENTER CREEK	28	878	Coliforms		Low	Group 4 & 5	2011		
PENSACOLA BAY	TROUT BAYOU	29	694	Coliforms, Dissolved Oxygen		Low	Group 4 & 5	2011		
PENSACOLA BAY	INDIAN BAYOU	32	649	Coliforms, Dissolved Oxygen		Low	Group 4 & 5	2011		

HUC Name	Water Segment	[2] MAPID	[1] WBID	Parameters of Concern	Comments	Priority	Basin Rotation Group	Projected Year of TMDL Development	*Special TMDL development year	Parameter for special TMDL development
PENSACOLA BAY	DIRECT RUNOFF TO BAY (Mulatto Bayou, Escambia Bay)	33	666		Listing of the water was based on the NPS Survey.	High	Group 4 & 5	2006		
PENSACOLA BAY	ESCAMBIA BAY	36	548A	Dissolved Oxygen, Coliforms, Nutrients, Total Suspended Solids, Turbidity		High	Group 4 & 5	2006		
PENSACOLA BAY	MULATTO BAYOU	41	539	Coliforms, Dissolved Oxygen, Nutrients		Low	Group 4 & 5	2011		
PENSACOLA BAY	JUDGES BAYOU	43	493	Dissolved Oxygen, Nutrients		Low	Group 4 & 5	2011		
PENSACOLA BAY	PACE MILL CREEK (Escambia River)	46	420	Coliforms, Dissolved Oxygen, Total Suspended Solids, Turbidity		Low	Group 4 & 5	2011		
PERDIDO BAY	DIRECT RUNOFF TO BAY (Big Lagoon)	4	991	Dissolved Oxygen		Low	Group 4 & 5	2011		
PERDIDO BAY	UNNAMED STREAM (Weekly Bayou Creek)	9	935	Dissolved Oxygen		Low	Group 4 & 5	2011		
PERDIDO BAY	PERDIDO BAY	12	797	Dissolved Oxygen, Nutrients		Low	Group 4 & 5	2011		
PERDIDO BAY	MARCUS CREEK	14	697	Coliforms		Low	Group 4 & 5	2011		
PERDIDO BAY	DIRECT RUNOFF TO BAY (Tee Lake/Perdido Bay)	17	784		The is a potential we will delist this segment as it is actually just a contributing area to Perdido Bay and will be addressed in the TMDL for the bay. Listing of this segment is based on the non-point source qualitative assessment.	Low	Group 4 & 5	2011		
PERDIDO BAY	UNNAMED BRANCH (Marcus Creek-East Arm)	19	725	Coliforms		Low	Group 4 & 5	2011		
PERDIDO BAY	EIGHTMILE CREEK	21	624	Coliforms, Turbidity		Low	Group 4 & 5	2011		
PERDIDO BAY	ELEVENMILE CREEK	22	489	Nutrients, Turbidity, Total Suspended Solids, Biochemical Oxygen Demand, Dissolved Oxygen, Coliforms, Un-ionized Ammonia	BioRecon data available (most tributaries were poor).	High	Group 4 & 5	2006		



Site Location:
Eglin Air Force Base,
Santa Rosa County, Florida

Basin	Wbid
BIG COLDWATER CREEK	18
BIG JUNIPER CREEK	19
BLACKWATER RIVER	24A
BLACKWATER RIVER	24B
BRAY MILL CREEK	36
BUCKET BRANCH	356
DIRECT RUNOFF TO BAY	666
EAST FORK	18A
EAST RIVER BAY	701
ESCAMBIA BAY (N)	548A
ESCAMBIA BAY (S)	548B
ESCAMBIA RIVER	10 C-
INDIAN BAYOU	649
JUDGES BAYOU	493
MANNING CREEK	127
MULATTO BAYOU	539
PACE MILL CREEK	420
PENSACOLA BAY (MOUTH)	548E
PENSACOLA BAY (N)	548C
TROUT BAYOU	694
WEST FORK	11A
YELLOW RIVER	30A

WRS Infrastructure & Environment, Inc.
221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619
PH:(813) 684-4400 FAX:(813) 684-9177

DRAWING STATUS	DRAFT		FINAL ☒
PROJECT NO.: 305702			
PROJECT MANAGER: MARK WHITE			
SCALE: AS SHOWN			
CADD ID: 305702A007	PLOT DATE: 04/06/05		
DRN BY: D.B.H.	DRN DATE: 03/25/05		
CHK BY: M.W.	CHK DATE: 03/25/05		
APPVD BY: M.W.	APPVD DATE: 04/06/05		

303(d) LISTED WATER SEGMENT IN ESCAMBIA COUNTY
ENVIRONMENTAL ASSESSMENT
EGLIN AIR FORCE BASE
SECTION 06, TOWNSHIP 02 SOUTH, RANGE 26 WEST
HOLLEY, SANTA ROSA COUNTY, FLORIDA

U.S. Fish and Wildlife Service
1612 June Avenue
Panama City, Florida 32405
(904) 769-0552 Fax (904) 763-2177

January 10, 1997

FWS Log No. 4-P-96-073

The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act.

Gail A. Carmody 1/15/97
Gail A. Carmody, Project Leader Date

Gail A. Carmody
Project Leader
U.S. Fish and Wildlife Service
1612 June Avenue
Panama City, Florida 32405-3721

JAN 14 1997

Subject: Threatened and Endangered Species Coordination

SPN: 58040-1507
WPI: 3118043
SR 87 from SR 30 (US 98) to SR 10 (US 90), Santa Rosa

Dear Ms. Carmody:

On behalf of Carlan Consulting Group and the Florida Department of Transportation, District III, HDR Engineering, Inc. is acting as the environmental consultant for the above referenced PD&E project. **I would like to request from your office concurrence with our determination that the proposed project is not likely to adversely affect federally listed endangered or threatened species, or critical habitats protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1513 et. Seq.).**

In order to evaluate the potential for the presence of listed species, a literature search was conducted as well as several field investigations over the past two years. Element occurrence records provided by the Florida Natural Areas Inventory (FNAI) were reviewed as well as data available through Eglin AFB Natural Resources Division, and the Florida Game and Freshwater Fish Commission's Eagle Nest and Wildlife Observations (WILDOB) Data.

As a result of a coordination meeting with Mr. Hildreth Cooper and Mr. Lloyd Stith on January 8, 1997, two federally listed species were identified which are known to occur within the project limits; the gulf sturgeon (*Acipenser oxyrhynchus desotoii*) and the Red-cockaded woodpecker (*Picoides borealis*). The sturgeon is known to utilize the Yellow River system as it moves into freshwater for purposes of spawning. This typically occurs during the months of March through May. During this period, any construction within the Yellow River will be halted to avoid the potential for impacts to this species.

With regard to the Red-cockaded Woodpecker, I have attached a Biological Assessment (BA) for two active clusters occurring within 0.5 miles of the proposed project. As stated in the BA, we have determined that the project is not likely to adversely affect this species. The BA also provides project details including location, need, and proposed concept.

HDR Engineering, Inc.
Suite 300
5100 W. Kennedy Boulevard
Tampa, Florida
33609-1840
Telephone
813 282-2300
Fax
813 282-2449

Your review and concurrence with these findings is appreciated. Should you have any questions or comments concerning the proposed project, please do not hesitate to call me in Tampa at (813) 282-2358.

Sincerely,

HDR ENGINEERING, INC.
Natural Sciences Section

George T. Eliason, P.W.S.
Sr. Environmental Scientist

Enclosures

cc: File
Mr. Jeff Helms, Carlan Consulting Group
Mr. Jimmy Bush, FDOT District III

HDR

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Field Office
1601 Balboa Avenue
Panama City, Florida 32405

Tel: (850) 769-0552
Fax: (850) 763-2177

July 9, 2001

Betsy Davis
Environmental Scientist
HDR Engineering, Inc.
2202 N. Westshore Boulevard
Suite 250
Tampa, Florida 33607-5711

Re: FWS# 4-P-01-220
Draft Biological Assessment
Highway 87 Four-lane
Navarre-to-Eglin Boundary
Santa Rosa County, Florida

FP 220402-1
220422-3

Dear Ms Davis:

This letter acknowledges the Fish and Wildlife Service's (Service) receipt of your draft biological assessment (BA). The BA concerns the possible effects to federally listed species of widening Highway 87 from two lanes to four lanes. Our assistance is provided in accordance with provisions of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.).

The draft BA is dated May 2001, and was informally transmitted to this office by the U.S. Army Corps of Engineers (Corps). We understand that the Corps anticipates review of the project for dredge and fill activities in wetlands. Previous correspondence from the Service on the project included early coordination in 1994 regarding the entire corridor from Highway 98 to Highway 90. In correspondence dated January 15, 1997, the Service provided a determination that the project may affect, but was not likely to adversely affect, listed species. The subject BA was prepared subsequent to the Service recommendation to revisit the project following the 1999 listing of the flatwoods salamander (*Ambystoma cingulatum*). The BA addresses only the southern phase of the project extending from Highway 98 northward to the Eglin Air Force Base boundary.

Based on the information provided in the BA, we have determined that the southern phase of the project may affect, but is not likely to adversely affect, the flatwoods salamander. We do not have sufficient information at this time to make a determination for this species for the remainder

of the corridor. However, we are available to assist you, the Florida Department of Transportation, or the Corps with further project evaluations.

Thank you for your thorough and timely evaluation of this project. If you have any questions or concerns, please contact Mr. Hildreth Cooper of this office at extension 221.

Sincerely yours,

Martin Miller

For Gail A. Carmody
Field Supervisor

cc:
Corps, Panama City, FL (Don Hambrick)
Corps, Pensacola, FL (Clif Payne)
FWCC, Tallahassee, FL (David Cook)

hc/kh/c:\endspp/4p01220.wpd

REPORT..CARPJ12-1 FLORIDA - DEPARTMENT OF TRANSPORTATION PAGE NO 1
DATE....2005-03-10 (CAR) CRASH ANALYSIS REPORTING SYSTEM
TIME....08:45:33:5 CRASH LOCATION SUMMARY FOR STATE ROADS I/O... CAR0112
COMMENT: *** SEGMENT RATES SELECTED *** FORMAT: 2 - TOP LINE ALL BREAKS
FROM: 01/01/1999 TO 03/10/2005 RAMPS EXCL OVERRIDE VALUES: MAX # OF BREAKS => 6
FROM CO/SEC/SUB: 58 040 000 MP: 003.434 INFL EXCL CRASH RATE CATEGORY =>
TO CO/SEC/SUB: 58 040 000 MP: 016.444 AVG DAILY TRAFFIC =>

DST	CO	SEC	SUB	BEG-MP	END-MP	ROUTE	ID	LENGTH	CATG	CRASHES	ADT	ACTUAL	AVERAGE	%CONF	#FTL	#INJ	#PDO	ECON LOSS
03	58	040	000	3.434	16.272	SR	87	12.838	18	69	6733	0.353	0.000	50.00	6	84	16 $	18,075,171
03	58	040	000	16.272	16.444	SR	87	0.172	17	30	6733	11.457	0.000	50.00	0	69	2 $	4,688,460
03	58	040	000	3.434	16.444	SR	87	13.010	18	99	6733	0.500	0.000	50.00	6	153	18 $	25,933,941

Phillip
Crash data is not complete for 04 & 05

DST	CO	SEC	SUB	BEG-MP	END-MP	ROUTE ID	LENGTH	CATG	CRASHES	ADT	ACTUAL AVERAGE	%CONF	#FTL	#INJ	#PDO	ECON LOSS
03	58	040	000	3.434	16.444	SR 87	13.010	18	99	6733	0.500	0.000 50.00	6	153	18	$ 25,933,941

CRASHES PER MONTH

9 JANUARY	7 FEBRUARY	7 MARCH	11 APRIL	9 MAY	7 JUNE
13 JULY	6 AUGUST	9 SEPTEMBER	8 OCTOBER	7 NOVEMBER	6 DECEMBER

NUMBER OF CRASHES PER HARMFUL EVENT 1ST

#	%	CATEGORY DESCRIPTION
	0.00	UNKNOWN/NOT CODED
14	14.14	COLL. W/MV IN TRANS. REAR-END
3	3.03	COLL. W/MV IN TRANS. HEAD-ON
35	35.35	COLL. W/MV IN TRANS. ANGLE
5	5.05	COLL. W/MV IN TRANS. LFT-TURN
1	1.01	COLL. W/MV IN TRANS. RGT-TURN
4	4.04	COLL. W/MV IN TRANS. SIDESWIP
	0.00	COLL. W/MV IN TRANS. BAKD INTO
	0.00	COLL. W/PARKED CAR
	0.00	COLLISION WITH MV ON ROADWAY
	0.00	COLL. W/ PEDESTRIAN
	0.00	COLL. W/ BICYCLE
	0.00	COLL. W/ BICYCLE (BIKE LANE)
	0.00	COLL. W/ MOPED
	0.00	COLL. W/ TRAIN
	0.00	COLL. W/ ANIMAL
4	4.04	MV HIT SIGN/SIGN POST
1	1.01	MV HIT UTILITY POLE/LIGHT POLE
	0.00	MV HIT GUARDRAIL
	0.00	MV HIT FENCE
	0.00	MV HIT CONCRETE BARRIER WALL
	0.00	MV HIT BRDGE/PIER/ABUTMNT/RAIL
10	10.10	MV HIT TREE/SHRUBBERY
	0.00	COLL. W/CONSTRCTN BARRICDE/SGN
	0.00	COLL. W/TRAFFIC GATE
	0.00	COLL. W/CRASH ATTENUATORS
	0.00	COLL. W/FIXED OBJCT ABOVE ROAD
4	4.04	MV HIT OTHER FIXED OBJECT
	0.00	COLL. W/MOVEABLE OBJCT ON ROAD
7	7.07	MV RAN INTO DITCH/CULVERT
	0.00	RAN OFF ROAD INTO WATER
6	6.06	OVERTURNED
	0.00	OCCUPANT FELL FROM VEHICLE
	0.00	TRACTOR/TRAILER JACKNIFED
	0.00	FIRE
	0.00	EXPLOSION
	0.00	DOWNHILL RUNAWAY
1	1.01	CARGO LOSS OR SHIFT
	0.00	SEPARATION OF UNITS
	0.00	MEDIAN CROSSOVER
4	4.04	ALL OTHER (EXPLAIN)

CRASHES PER DAY AND HOUR

	MON	TUE	WED	THU	FRI	SAT	SUN	TOT	%
** AM **									
MIDNT - 1:59			1	1			2	4	4.04
2:00 - 3:59		1		2		2	3	8	8.08
4:00 - 5:59	1	1				1		3	3.03
6:00 - 7:59	3	2	2	2	3			12	12.12
8:00 - 9:59	2		1	1	3	1	3	11	11.11
10:00 - 11:59	1				2		2	5	5.05
AM TOTAL	7	4	4	6	8	4	10	43	43.43
** PM **									
NOON - 1:59	1	3	1	3	1	3	1	13	13.13
2:00 - 3:59	1	1	3		1	5	1	12	12.12
4:00 - 5:59	1	3	3	2	1	4		14	14.14
6:00 - 7:59	2			3	3	2	1	11	11.11
8:00 - 9:59	2	2					1	5	5.05
10:00 - 11:59			1					1	1.01
PM TOTAL	7	9	8	8	6	14	4	56	56.56
UNKNOWN									0.00
** TOTAL **	14	13	12	14	14	18	14	99	100.00
** % **	14.14	13.13	12.12	14.14	14.14	18.18	14.14	100.00	

CRASHES BY LIGHTING CONDITION

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
65	65.65	DAYLIGHT	1	1.01	DARK (STREET LIGHT)
3	3.03	DUSK	28	28.28	DARK (NO STREET LIGHT)
2	2.02	DAWN	0	0.00	UNKNOWN

CRASHES BY ROAD SURFACE CONDITION

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
89	89.89	DRY	10	10.10	WET
0	0.00	SLIPPERY	0	0.00	ICY
0	0.00	ALL OTHER	0	0.00	UNKNOWN

CRASHES BY WEATHER CONDITION

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
60	60.60	CLEAR	32	32.32	CLOUDY
7	7.07	RAIN	0	0.00	FOG
0	0.00	ALL OTHER	0	0.00	UNKNOWN

COMMENT:
FROM: 01/01/1999 TO 03/10/2005 *** SEGMENT RATES SELECTED *** FORMAT: 2 - TOP LINE ALL BREAKS
FROM CO/SEC/SUB: 58 040 000 MP: 003.434 RAMPS EXCL OVERRIDE VALUES: MAX # OF BREAKS => 6
TO CO/SEC/SUB: 58 040 000 MP: 016.444 INFL EXCL CRASH RATE CATEGORY =>
AVG DAILY TRAFFIC =>

DST	CO	SEC	SUB	BEG-MP	END-MP	ROUTE ID	LENGTH	CATG	CRASHES	ADJ	ACTUAL	AVERAGE	%CONF	#FTL	#INJ	#PDO	ECON LOSS
03	58	040	000	3.434	16.444	SR 87	13.010	18	99	6733	0.500	0.000	50.00	6	153	18	$ 25,933,941

TRAFFICWAY CHARACTER (PER CRASH)

TOTAL	%	DESCRIPTION
65	65.65	STRAIGHT-LEVEL
13	13.13	STRAIGHT-UPGRADE/DOWNGRADE
18	18.18	CURVE-LEVEL
3	3.03	CURVE-UPGRADE/DOWNGRADE

DIRECTION OF TRAVEL (PER VEHICLE)

TOTAL	%	DESCRIPTION
23	13.21	EAST
73	41.95	SOUTH
11	6.32	WEST

%	DESCRIPTION
62	35.63 NORTH
0	0.00 UNKWN

ROAD CONDITIONS AT TIME OF CRASH (PER CRASH)

1ST	%	2ND	%	DESCRIPTION
0	0.00	98	98.98	UNKNOWN/NOT CODED
96	96.96	0	0.00	NO DEFECTS
0	0.00	0	0.00	OBSTRUCTION WITH WARNING
1	1.01	0	0.00	OBSTRUCTION WITHOUT WARNING
0	0.00	0	0.00	ROAD UNDER REPAIR/CONSTRUCTI
0	0.00	0	0.00	LOOSE SURFACE MATERIALS
0	0.00	0	0.00	SHOULDERS SOFT/LOW/HIGH
0	0.00	0	0.00	HOLES/RUTS/UNSAFE PAVED EDGE
1	1.01	0	0.00	STANDING WATER
0	0.00	0	0.00	WORN/POLISHED/ROAD SURFACE
1	1.01	0	0.00	ALL OTHER(EXPLAIN)

VISION OBSTRUCTEED (PER CRASH)

1ST	%	2ND	%	DESCRIPTION
0	0.00	98	98.98	UNKNOWN/NOT CODED
94	94.94	0	0.00	VISION NOT OBSCURED
2	2.02	0	0.00	INCLEMENT WEATHER
0	0.00	0	0.00	PARKED/STOPPED VEHICLE
0	0.00	0	0.00	TREES/CROPS/BUSHES
0	0.00	0	0.00	LOAD ON VEHICLE
0	0.00	0	0.00	BUILDING/FIXED OBJECT
1	1.01	0	0.00	SIGNS/BILLBOARDS
0	0.00	0	0.00	FOG
0	0.00	0	0.00	SMOKE
0	0.00	0	0.00	GLARE
1	1.01	0	0.00	ALL OTHER (EXPLAIN)

SITE LOCATION (PER CRASH)

TOTAL	%	DESCRIPTION
42	42.42	NOT AT INTERSECTION/RRX/BRIDGE
50	50.50	AT INTERSECTION
2	2.02	INFLUENCED BY INTERSECTION
3	3.03	DRIVEWAY ACCESS
0	0.00	RAILROAD CROSSING
2	2.02	BRIDGE
0	0.00	ENTRANCE RAMP
0	0.00	EXIT RAMP
0	0.00	PARKING LOT/TRAFFIC WAY
0	0.00	PARKING LOT AISLE OR STALL
0	0.00	PRIVATE PROPERTY
0	0.00	TOLL BOOTH
0	0.00	PUBLIC BUS STOP ZONE
0	0.00	ALL OTHER

TRAFFIC CONTROL (PER CRASH)

1ST	%	2ND	%	DESCRIPTION
0	0.00	1	1.01	NOT APPLICABLE
45	45.45	0	0.00	NO CONTROL
2	2.02	0	0.00	SPECIAL SPEED ZONE
17	17.17	0	0.00	SPEED CONTROL SIGN
3	3.03	2	2.02	SCHOOL ZONE
2	2.02	0	0.00	TRAFFIC SIGNAL
15	15.15	16	16.16	STOP SIGN
0	0.00	0	0.00	YIELD SIGN
13	13.13	12	12.12	FLASHING LIGHT
0	0.00	0	0.00	RAILROAD SIGNAL
0	0.00	0	0.00	OFFICER/GUARD/FLAGMAN
0	0.00	0	0.00	POSTED NO U-TURN
2	2.02	3	3.03	NO PASSING ZONE
0	0.00	0	0.00	ALL OTHER

SIDE OF ROAD (PER CRASH)

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
0	0.00	END OF ST RD	2	2.02	INTERSECTION
49	49.49	LEFT	0	0.00	MEDIAN
47	47.47	RIGHT	1	1.01	SIDE RD RIGH
0	0.00	SIDE RD LEFT	0	0.00	UNKNOWN

WORK AREA (PER VEHICLE)

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
88	50.57	NONE	8	4.59	NEARBY
2	1.14	ENTERED			

ALCOHOL/DRUG USE (PER DRIVER/PEDESTRIAN)

TOTAL	%	DESCRIPTION
55	31.60	UNKNOWN/NOT CODED
111	63.79	NOT DRINKING OR USING DRUGS
4	2.29	ALCOHOL-UNDER INFLUENCE
1	0.57	DRUGS-UNDER INFLUENCE
1	0.57	ALCOHOL & DRUGS-UNDER INFLUEN
0	0.00	HAD BEEN DRINKING
0	0.00	PENDING BAC TEST RESULTS

REPORT..CARPJ12-1
DATE....2005-03-10
TIME....08:45:33:5
COMMENT:
FROM: 01/01/1999 TO 03/10/2005
FROM CO/SEC/SUB: 58 040 000 MP: 003.434
TO CO/SEC/SUB: 58 040 000 MP: 016.444

FLORIDA - DEPARTMENT OF TRANSPORTATION
(CAR) CRASH ANALYSIS REPORTING SYSTEM
CRASH LOCATION SUMMARY FOR STATE ROADS
*** SEGMENT RATES SELECTED *** FORMAT: 2 - TOP LINE ALL BREAKS
RAMPS EXCL OVERRIDE VALUES: MAX # OF BREAKS => 6
INFL EXCL CRASH RATE CATEGORY =>
AVG DAILY TRAFFIC =>

I/O... CAR0112

DST	CO	SEC	SUB	BEG-MP	END-MP	ROUTE ID	LENGTH	CATG	CRASHES	ADT	ACTUAL	AVERAGE	%CONF	#FTL	#INJ	#PDO	ECON LOSS
03	58	040	000	3.434	16.444	SR 87	13.010	18	99	6733	0.500	0.000	50.00	6	153	18	$ 25,933,941

VEHICLE MOVEMENT (PER VEHICLE)

TOTAL	%	DESCRIPTION
133	76.43	STRAIGHT AHEAD
19	10.91	SLOWING/STOPPED/STALLED
6	3.44	MAKING LEFT TURN
0	0.00	BACKING
3	1.72	MAKING RIGHT TURN
2	1.14	CHANGING LANES
0	0.00	ENTERING/LEAVING PARKING SPACE
3	1.72	PROPERLY PARKED
0	0.00	IMPROPERLY PARKED
3	1.72	MAKING U-TURN
3	1.72	PASSING
0	0.00	DRIVERLESS OR RUNAWAY VEH.
1	0.57	ALL OTHERS
1	0.57	UNKNOWN

CONTRIBUTING CAUSES - VEHICLE

1ST	%	2ND	%	DESCRIPTION
168	96.55	0	0.00	NO DEFECTS
1	0.57	0	0.00	DEFECTIVE BRAKES
1	0.57	1	0.57	WORN/SMOOTH TIRES
0	0.00	0	0.00	DEFECTIVE/IMPROPER LIGHTS
1	0.57	0	0.00	PUNCTURE/BLOWOUT
0	0.00	0	0.00	STEERING MECH.
0	0.00	0	0.00	WINDSHIELD WIPERS
0	0.00	0	0.00	EQUIPMENT/VEHCILE DEFECT
2	1.14	0	0.00	ALL OTHER
1	0.57	0	0.00	UNKNOWN

VEHICLE SPEED (BEFORE CRASH)

TOTAL	%	DESCRIPTION	TOTAL	%	DESCRIPTION
1	0.57	UNKNOWN	40	22.98	41-50
23	13.21	STOPPED	42	24.13	51-60
9	5.17	0-5	9	5.17	61-70
23	13.21	6-10	0	0.00	71-80
2	1.14	11-15	1	0.57	81-90
3	1.72	16-20	0	0.00	91-100
4	2.29	21-30	6	3.44	100+
9	5.17	31-40	2	1.14	PARKED

RESIDENCE (DRIVER AND PEDESTRIAN)

TOTAL	%	DESCRIPTION
98	56.32	CNTY OF CR
45	25.86	ELSEWHERE
22	12.64	NON-RES
0	0.00	FOREIGN
3	1.72	UNKNOWN

SAFETY EQUIPMENT IN USE (PER PERSON)

1ST	%	2ND	%	DESCRIPTION
9	3.55	180	71.14	UNKNOWN
26	10.27	0	0.00	NOT IN USE
203	80.23	6	2.37	SEAT BELT/SHOULDER HARNESS
12	4.74	1	0.39	CHILD RESTRAINT
1	0.39	41	16.20	AIR BAG - DEPLOYED
0	0.00	25	9.88	AIR BAG - DEPLOYED
2	0.79	0	0.00	SAFETY HELMENT
0	0.00	0	0.00	EYE PROTECTION
0	0.00	0	0.00	OTHER

CONTRIBUTING CAUSES - DRIVER/PEDESTRIAN

1ST	2ND	3RD	DESCRIPTION
0	157	170	UNKNOWN/NOT CODED
84	0	0	NO IMPROPER DRIVING/ACTION
36	1	0	CARELESS DRIVING
30	1	0	FAILED TO YEILD RIGHT OF WAY
0	0	0	IMPROPER BACKING
1	0	0	IMPROPER LANE CHANGE
5	0	0	IMPROPER TURN
0	4	0	ALCOHOL-UNDER INFLUENCE
1	0	0	DRUGS-UNDER INFLUENCE
0	1	0	ALCOHOL DRUGS-UNDER INFLUENC
3	0	0	FOLLOWED TOO CLOSELY
0	0	0	DISREGARDED TRAFFIC SIGNAL
1	1	0	EXCEEDED SAFE SPEED LIMIT
1	1	0	DISREGARDED STOP SIGN
0	0	0	FAILED TO MAINTAIN EQUIP/VEH
2	1	0	IMPROPER PASSING
3	0	0	DROVE LEFT OF CENTER
0	3	1	EXCEEDED STATED SPEED LIMIT
0	1	0	OBSTRUCTING TRAFFIC
1	0	0	IMPROPER LOAD
0	0	0	DISREGARDED OTHER TRAFFIC CO
0	0	0	DRIVING WRONG SIDE/WAY
1	0	0	FLEEING POLICE
0	0	0	VEHICLE MODIFIED
0	0	0	DRIVER DISTRACTION
5	1	1	ALL OTHER (EXPLAIN)

TOTAL # OF VEHICLES: 174 TOTAL # OF DRIVERS: 174 TOTAL # OF PEDESTRIANS: 0
TOTAL # OF PERSONS (PEDESTRIANS, DRIVERS, PASSENGERS): 253

REPORT...CARPJ12-01
DATE...03/10/2005
TIME...08:45:34

FLORIDA - DEPARTMENT OF TRANSPORTATION
C A R - CRASH ANALYSIS REPORTING SYSTEM
CRASH DATA DETAIL AND EXTRACT FOR STATE-MAINTAINED ROADS

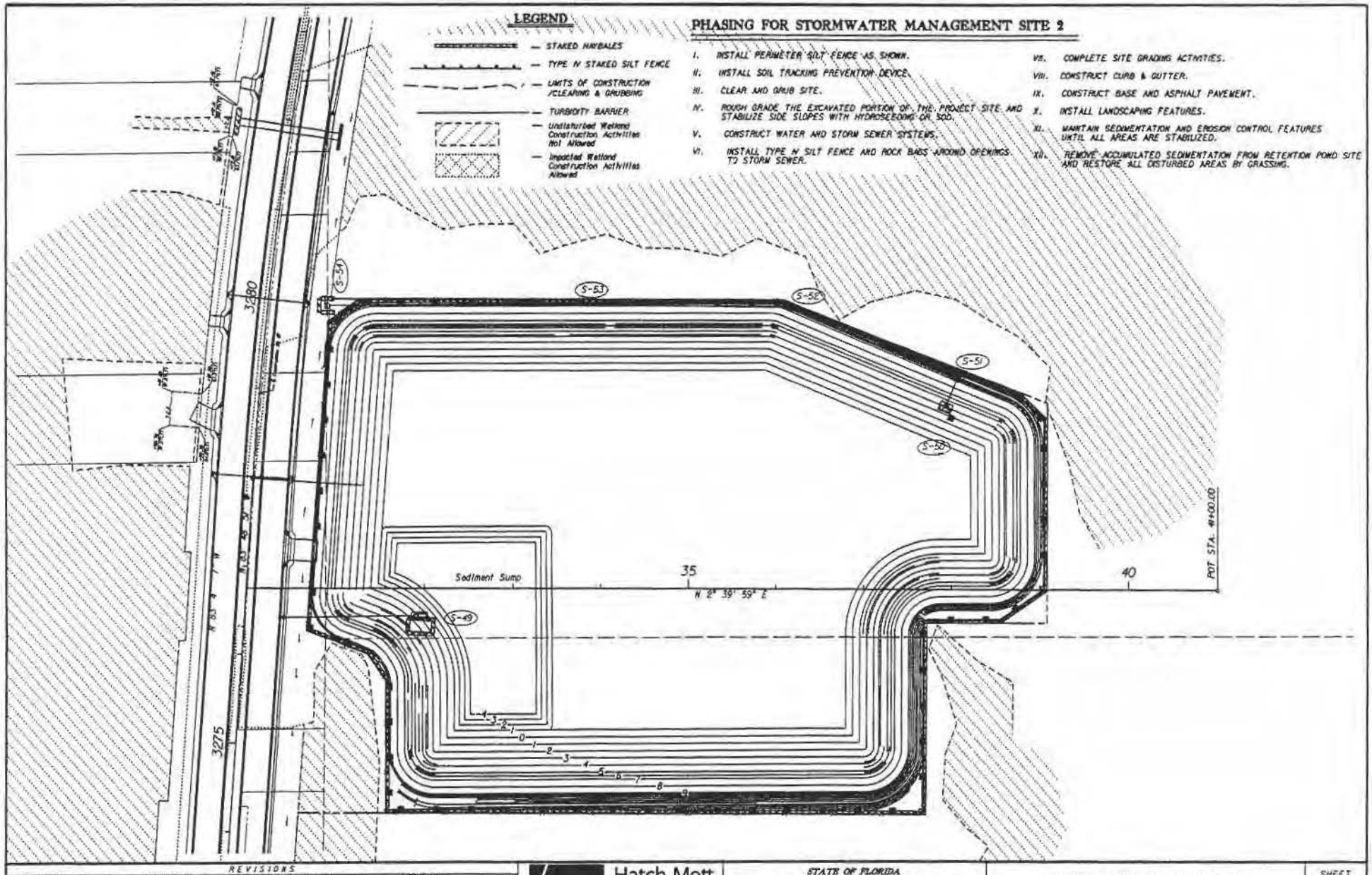
USERID: PL33ORL
I/O.... CARO112

COMMENT:
FROM: 01/01/1999 TO 03/10/2005
FROM CO/SEC/SUB: 58 040 000 MP: 003.434
TO CO/SEC/SUB: 58 040 000 MP: 016.444
RAMPS EXCL
INFL EXCL

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
1999	1	4	0	10	27	2	13	4	27	0	0
2000	0	0	0	11	20	4	15	0	20	0	0
2001	0	0	0	15	23	1	16	0	23	1	0
2002	0	0	0	10	16	5	15	0	16	0	0
2003	1	1	2	20	38	2	23	1	40	0	0
2004	1	1	1	12	26	4	17	1	27	0	0
TOTAL	3	6	3	78	150	18	99	6	153	1	0

CUMULATIVE TOTALS FOR ALL LOCATIONS SUBMITTED - OVERLAPPING LOCATIONS MAY RESULT IN CRASHES COUNTED MORE THAN ONCE

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
1999	1	4	0	10	27	2	13	4	27	0	0
2000	0	0	0	11	20	4	15	0	20	0	0
2001	0	0	0	15	23	1	16	0	23	1	0
2002	0	0	0	10	16	5	15	0	16	0	0
2003	1	1	2	20	38	2	23	1	40	0	0
2004	1	1	1	12	26	4	17	1	27	0	0
TOTAL	3	6	3	78	150	18	99	6	153	1	0



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Hatch Mott MacDonald
Post Office Box 2546 Pensacola, Florida 32513
(850) 484-601 - License No. 155
Engineer of Records Gregory S. Allen, P.E. #51858

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	SANTA ROSA	220442-3-52-01

STORMWATER MANAGEMENT
SITE 2
STORMWATER POLLUTION PREVENTION PLAN

SHEET NO. 341

02/16/2006 08:45:02 PM G:\FDOT\820785\820442\3\drainage\DRAWINGS\SWPP\SWPP_Pond#2.dgn

STORMWATER POLLUTION PREVENTION PLAN

1.0 INTRODUCTION:

1.1 Nature of Construction Activities:

This project involves the upgrade of State Road 87 from two to four lanes along the existing alignment. The upgrade will involve new construction of the roadway (stabilization, base, structural and friction courses), curb and gutter, sidewalks, underground storm sewer systems, stormwater management facilities, utility relocation/installation, bridge construction, signing, pavement marking, and ditches. The project limits extend from just north of Five Forks Road to the Eglin Air Force Base Boundary, a distance of approximately 3.0 miles.

The project will be constructed utilizing 4 phases. The first phase includes the construction of all stormwater management sites. Please refer to the Traffic Control Plans for a detailed phasing plan.

1.2 Sequence of Major Soil Disturbing Activities:

The following sequence of major activities shall be followed unless the Contractor can propose an alternative that is equal to or better at controlling erosion and sedimentation, subject to the approval of the Project Administrator. The detailed sequence for the entire project can vary significantly from Contractor to Contractor. The Contractor is also responsible for providing a detailed sequence of construction for all construction activities in accordance with Standard Index 104, Erosion Control Plan.

1. Clearing and Grubbing, erosion control installation, temporary stabilization and utility adjustment.
2. Clearing and Grubbing and earthwork for pond construction, and stormsewer construction for the outfall for the ponds.
3. Cross drain replacements and storm sewer construction. All stormsewer shall be constructed in upstream direction.
4. Earthwork associated with construction of the roadway components including curb, subgrade, base, pavement, sidewalk and landscaping.

1.3 Area Estimates:

Onsite Area:	62.78 acres
Offsite Area (flowing to offsite ditches):	658.53 acres
Total Area:	721.31 acres
Total Area to be Disturbed:	62.78 acres

1.4 Runoff Data:

Runoff Coefficients:

Before: Varies between 0.15 and 0.83
Total Composite Coefficient = 0.22 (including offsite area)

During: Varies between 0.15 and 0.85

After: Varies between 0.73 and 0.85
Total Composite Coefficient = 0.77 (not including offsite area)

Soils Data: The soil survey is included in the construction plans. The results of the soil borings at the proposed pond sites are located in the stormwater design documentation. The sheet numbers for the soil survey and stormwater management site plans previously noted are identified on the key sheet of the construction plans. In general, the majority of the project lies within low-lying areas with soils that are poorly drained. The seasonal high groundwater level in this soil ranges from 0.5 ft to 5.5 ft below existing ground elevation. The stormwater management sites should function well as wet detention/retention ponds. The soil is predominately Rutlege sand and Ortega sand, with Pactolus loamy sand and Lakeland sand located in the northern portion.

Drainage Areas for Each Outfall:

Outfall Location	Total Area Flowing to Pond	'C' coefficient
Pond 1:	8.38 acres	0.79
Pond 2:	33.13 acres	0.73
Pond 3:	6.87 acres	0.85

Along the project corridor of SR 87 there exists fourteen cross drains that allow runoff to pass under the roadway. Of these fourteen cross drains, one is to be removed, one to be added, with the remaining twelve cross drains to be replaced.

1.5 Site Map

The construction plans are to be used as the site maps. In addition, the plans have been supplemented with SWPPP plan sheets for the three pond sites. The location of the required information is described below. The sheet numbers for all the items discussed below are identified on the Key Sheet of the construction plans.

- Drainage Patterns: The drainage basin divides and flow directions are shown on the Drainage Maps of the construction plans. Existing and proposed ditch grades are shown on the Cross Sections and the Plan and Profile Sheets.
- Approximate Slopes: The slopes of the site can be seen in the Cross Sections and the Plan and Profile Sheets of the construction plans. There are pond cross sections located with the Stormwater Management Site Plans.
- Areas of Soil Disturbance: The areas to be disturbed are indicated on the Plan and Profile, the Cross Sections, the Stormwater Management Site Typical Sections, and the Stormwater Management Site Plan Sheets. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.
- Areas not to be Disturbed: For the purpose of this plan, it is reasonable to say that all areas within the proposed right-of-way of the project will be disturbed during some phase of the construction. Areas outside of the proposed right of way limits and the temporary construction easements will not be disturbed.
- Locations of Controls: The temporary controls are shown on the Traffic Control Sheets. Tables providing summaries of temporary erosion and sediment control items are provided in the Summary of Quantity Sheets. The stormwater ponds are the primary permanent stormwater management controls, and are shown on the Stormwater Management Site Plan Sheets.
- Areas to be Stabilized: Temporary stabilization practices are shown in the Traffic Control Notes and Plan Sheets. Permanent stabilization is shown on the Typical Section, the Plan and Profile and the Stormwater Management Site Plan Sheets.
- Surface Waters: East Bay is located just south of the project.
- Discharge Points:

Pond Discharges:

Pond 1 discharges through structure S-18 (30° 26' 42"N, 86° 53' 00" W) into an existing ditch. This ditch discharges into East Bay, which is considered Class III.

Pond 2 discharges through structure S-54 (30° 28' 50"N, 86° 53' 47" W) to an existing ditch. The external outfall is a wetland adjacent to East Bay, which is considered Class III.

Pond 3 discharges through structure S-104 (30° 27' 15"N, 86° 54' 42" W) to a county drainage easement located in a low-lying wooded area, which is considered Class III.

Offsite Stormwater Issues at Cross Drain Replacements

The culvert at Station 3262+80 is to be removed. Drainage will be carried in a ditch to structure S-45. Drainage will continue to flow along an existing drainage path to a wooded low-lying area.

The culvert at Station 3315+20 is to be removed. Drainage will be carried in a ditch to structure S-86. Drainage will continue to flow along an existing drainage path to a wooded low-lying area.

1.6 Receiving Waters

East Bay is the only receiving waters of stormwater runoff from this project.

2.0 CONTROLS

2.1 Erosion and Sediment Controls

The following discussion defines general guidelines for the sequence of construction and the use of stabilization and structural practices. The Contractor is also responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

Phase I

Outfalls of Ponds: For the construction of each outfall pipe, install a 12 ft. section of silt fence downstream and perpendicular to the flow until the area is permanently stabilized as outlined in Standard Index 102. The end structure of the pond outfall shall be constructed prior to or in conjunction with the construction of the outfall pipe. Construct the outfall pipe beginning at the downstream end and working towards the pond. The Contractor shall have sand bags available at all times during the pipe construction to substantially block the trench runoff from entering the pipe. Construct pipe to the pond and then construct outlet structure of the pond.

Pond Construction: Install silt fence or straw bales on all slopes draining away from the pond site. Install Soil Tracking Prevention Device(s) (STPD) (Standard Index 106) at the locations where traffic will be entering and leaving pond sites, or as directed by the Project Administrator. Clear and grub pond site, initially excavate the ponds only enough to construct fence and erosion control fabric as detailed in the Traffic Control Plans (TCP). Excavate the pond to the approximate proposed dimensions. The Contractor should secure slopes with sod or hydroseeding as soon as constructed. Final grading is to be done at the completion of Phase I.

Roadway: The construction of the storm sewer for Phase I will proceed from the pond to the roadway and then in the upstream direction. Standard curb inlet protection (Standard Index 102) shall be used on all inlets after the roadway base and curb are constructed. Silt fence will be required, prior to commencing work, in all areas where fill slopes are to be constructed adjacent to the right-of-way during Phase I (refer to the TCP for locations). Type IV or Type III silt fence will be used adjacent to the right-of-way, specifically in the areas of construction where surcharge use Type IV (refer to the construction plans). A STPD shall be constructed at locations designated by the Project Administrator for points of egress from unstabilized areas of construction to public roads where offsite tracking could occur. Locations of STPD's to be determined by contractor to best fit actual construction operations and schedule. Temporary drainage inlets shall be constructed to accommodate any stormwater runoff between areas under construction and the existing roadway (refer to TCP for locations).

Cross Drain Replacements: Install hay bales at each cross drain on both the upstream and downstream side. Silt fence should be placed downstream and perpendicular to the flow of each cross drain as designated in Standard Index 102.

Bridge Construction: To minimize the amount of sediment that could enter Dean Creek, a floating turbidity barrier (Standard Index 103) will be required at each bridge and around areas where pile driving operations will occur.

Side street: Construct the storm sewer, in the upstream direction, from the last structure on the side street to where it either connects to, or crosses, the mainline trunkline and then to the Phase II limits. Standard curb inlet protection (Standard Index 102) shall be used on all the inlets after the roadway base and curb are constructed. Prior to commencing work on the side street, silt fence will be required in all areas where additional pavement is needed for temporary lanes or where fill slopes are to be constructed adjacent to the existing or proposed right-of-way for Phase I.

Utility Relocation: Prior to utility relocation the FDOT Contractor shall have the right-of-way cleared and grubbed, stabilized with hydroseeding and silt fence/hay bales installed. The contractor will be responsible for maintenance of all the erosion control items. The utility companies shall install additional measures as required.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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Engineer of Record: Gregory S. Allen, P.E. #[illegible]

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
87	SANTA ROSA	220442-3-52-01

STORMWATER POLLUTION PREVENTION PLAN
GENERAL NOTES

SHEET NO. 338

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Phase II

Roadway: Construct the storm sewer including the feeder pipes and inlets (in the upstream direction) located within the limits of Phase II. Standard curb inlet protection (Standard Index 102) shall be used on all inlets after the roadway base and curb are constructed. Silt fence will be required, prior to commencing work, in all areas where fill slopes are to be located adjacent to the proposed right-of-way during Phase II (refer to the TCP for locations).

Side street: Construct the storm sewer, in the upstream direction, from the last structure on the side street to the connection into the mainline of the pipe constructed during Phase I. Standard curb inlet protection (Standard Index 102) shall be used on all the inlets after the roadway base and curb are constructed. Prior to commencing work on the side street, silt fence will be required in all areas where additional pavement is needed for temporary lanes or where fill slopes are to be constructed adjacent to the existing or proposed right-of-way for Phase II.

Bridge Construction: To minimize the amount of sediment that could enter Dean Creek, a floating turbidity barrier (Standard Index 103) will be required at each bridge and around areas where pile driving operations will occur.

Phase III

Roadway & Median: Maintain erosion control measures as required from Phases I & II. Standard curb inlet protection (Standard Index 102) shall be used on all inlets after the roadway base and curb are constructed. Silt fence shall be maintained in areas where fill slopes are to be located adjacent to the proposed right-of-way as constructed in Phases I & II (refer to the TCP for locations).

Phase IV

Roadway: Maintain erosion control measures as required from all previous phases. Standard curb inlet protection (Standard Index 102) shall be used on all inlets after the roadway base and curb are constructed. Silt fence shall be maintained in areas where fill slopes are to be located adjacent to the proposed right-of-way as constructed in Phases I & II (refer to the TCP for locations). Erosion control measures shall not be removed until construction is completed and upon the approval of the Project Administrator.

2.1.1 Stabilization Practices:

Temporary:
- Seed and mulch, and sod in accordance with Standard Specification Section 104.
- Hydroseeding in accordance with Standard Specification Section 104 and 105.

Permanent:
- Seed and mulch, and sod in accordance with Standard Specification Section 104.
- Sod in accordance with Standard Specification Section 575.
- Asphalt or concrete surface.

All stabilization practices shall be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. The Contractor is also responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

2.1.2 Structural Practices:

Temporary:
- Install Silt fence in accordance with Standard Index 102 and Standard Specification Section 104.
- Install Straw bales in accordance with Standard Index 102 and Standard Specification Section 104.
- Construct inlet protection in accordance with Standard Index 102 and special details shown in the plans.
- Install Staked turbidity barrier in accordance with Standard Index 103 and Standard Specification Section 104.
- Place Sandbagging in accordance with Standard Index 102 and Standard Specification Section 104.
- Construct Sediment Basin - The permanent stormwater ponds as shown in the plans. However, before placing permanent sodding in pond bottom, remove accumulated sediment in ponds.
- Construct Soil Tracking Prevention Device in accordance with Standard Index 106 and Standard Specification Section 104.
- Construct Temporary Drainage Inlets in accordance with the Standard Index.

Permanent:
- Stormwater Ponds are to be equipped with permanent sediment sumps as detailed in the plans.

The Contractor is also responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

2.2 Stormwater Management

Stormwater will be conveyed through several storm sewer systems into three stormwater to accuracy from the required runoff in this areas. The calculations for the treatment in this area are retention/detention ponds. Due to impractical conveyance requirements at the end of the project, a small amount of onsite stormwater will not be directed to the stormwater retention/detention ponds. This stormwater will be directed to natural discharge courses and earthen ditch blocks, will be used to treat the required runoff in this area. The calculations for this area are included in the drainage calculations of the design documentation, in accordance with the state and local requirements.

2.3 Other Controls

2.3.1 Waste Disposal:

The Contractor is solely responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

2.3.2 Offsite Vehicle Tracking:

One (1) Soil Tracking Prevention Device (STPD) is required for each stormwater retention/detention pond constructed. Three (3) additional STPD's are included in the summary of quantities and shall be placed at the discretion of the Project Administrator. The Contractor is also responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

2.3.3 State and Local Regulations for Waste Disposal, Sanitary Sewer, and Septic Tank:

The Contractor is solely responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

2.3.4 Fertilizers and Pesticides:

Fertilizer will be applied according to applicable subsections of either Standard Specification Section 570. The Contractor is solely responsible for documenting the use of pesticides in accordance with Standard Specification Section 104, Erosion Control Plan.

2.3.5 Toxic Substances

The Contractor is solely responsible for documenting the use of pesticides in accordance with Standard Specification Section 104, Erosion Control Plan.

2.4 Approved State and Local Plans and Permits:
- FDEP Rule Chapter 17-25 FAC

3.0 MAINTENANCE

ITEM	MAINTENANCE	PROPOSED REPLACEMENT INTERVAL
Silt Fence	In accordance with Standard Specification Section 104.	1 year
Straw Bales	Remove sediment when it reaches one half the height of the bales.	3 mos.
Rock Bags	In accordance with Standard Specification Section 104.	As Needed
Staked Turbidity Barrier	In accordance with Standard Specification Section 104.	1 year
Soil Tracking Prevention Device	In accordance with Standard Specification Section 104.	As Needed
Ponds (Temporary Sediment Basins)	Remove sediment when it becomes 20" deep	As Needed

The Contractor is also responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan.

4.0 INSPECTIONS

Qualified personnel shall inspect the following items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.25 inches or greater. Where sites have been finally stabilized, inspections shall be conducted at least once every month.

- Points of discharge to waters of the United States.
- Points of discharge to municipal separate storm sewer systems.
- Disturbed areas of the site that have not been finally stabilized.
- Areas used for storage of materials that are exposed to precipitation.
- Structural controls.
- Stormwater management systems.
- Locations where vehicles enter or exit the site.

5.0 NON-STORMWATER DISCHARGES

The Contractor is solely responsible for documenting this portion of the SWPPP in accordance with Standard Specification Section 104, Erosion Control Plan. If contaminated soil or groundwater is encountered, contact Jimmy Bailey, District Hazardous Materials Coordinator at (850) 638-0250.

STORMWATER POLLUTION PREVENTION GENERAL NOTES

1. STORMWATER POLLUTION PREVENTION PLAN - THE STORMWATER POLLUTION PROTECTION PLAN SUBMITTED BY THE CONTRACTOR DESCRIBES IN DETAIL HOW THE CONSTRUCTION EFFORT WILL BE PHASED WITH REGARDS TO MINIMIZING EROSION PROBLEMS BY THE USE OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES FOR THE VARIOUS SEQUENCES OF CONSTRUCTION OPERATIONS. MODIFICATIONS TO THIS PLAN MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. SUBSTANTIAL DEVIATIONS SHALL BE COORDINATED WITH THE PERMITTING AGENCY.

2. OUTFALL PROTECTION - STORMWATER PIPE OR DITCH DISCHARGES INTO OFF-SITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR TRANSPORT. OUTFALLS SHALL BE PROTECTED THROUGH USE OF ENVIRONMENTAL CONTROL FEATURES AS NECESSARY TO CONTAIN ANY SEDIMENT LOSS TO THE IMMEDIATE AREA OF THE PROJECT. ANY SEDIMENT BUILDUP OR TRANSPORT OFF-SITE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY. THE CONTRACTOR SHALL USE APPROPRIATE FEATURES AS DIRECTED BY THE PROJECT ADMINISTRATOR.

3. SLOPE PROTECTION - ANY DISTURBED OR REWORKED SLOPES 1:3 OR GREATER SHALL BE ADEQUATELY PROTECTED FROM EROSION THROUGH THE USE OF TEMPORARY SLOPE DRAINS, TEMPORARY GRASSING, SODDING, OR EROSION CONTROL MATS UNTIL PERMANENTLY STABILIZED. SUCH SLOPES SHALL NOT BE LEFT UNPROTECTED MORE THAN 24 HOURS OR DURING RAINFALL EVENTS.

4. HAY BALES - THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. HAY BALES SHALL BE DOUBLE STAKED IN ACCORDANCE WITH STANDARD INDICES. IF EROSION DEPOSITS REACH ONE HALF THE TOP ELEVATION OF EXISTING BALES, THEN SEDIMENTS SHOULD BE REMOVED. ANY DAMAGED OR INEFFECTIVE HAY BALES ARE TO BE REPLACED WITH NEW ONES. THE LOCATION OF HAY BALE INSTALLATION IS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN. THE PROJECT ADMINISTRATOR MAY SPECIFY OTHER AREAS AS NECESSARY.

5. A. CURB INLETS - THESE SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF BAGS TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF BAGS TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.

   B. DITCH BOTTOM INLETS - SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. A SILT FENCE (TYPE III) OR STAKED HAY BALES SHALL BE PLACED AROUND THE PERIMETER OF THE INLET OPENING IMMEDIATELY ADJACENT TO THE EDGE OF THE INLET. ALL EXPOSED SLOPED MATERIAL ADJACENT TO INLET SHALL BE COVERED WITH THE EROSION CONTROL MATTING WITH OUTER LIMITS PROTECTED BY A SINGLE ROW OF HAY BALES.

6. STOCKPILED MATERIALS - THIS MATERIAL SHALL NOT BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER OR HAY BALES.

7. INSPECTION - OF ALL EROSION CONTROL MEASURES AND CONDITIONS OF ADJACENT PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR REPRESENTATIVE AND THE DEPARTMENT CEI PROJECT ADMINISTRATOR OR HIS DESIGNATE. DEFICIENCIES SHALL BE NOTED AND CORRECTED.

8. SWALES AND STORMWATER TREATMENT AREAS - THESE SHALL BE CONSTRUCTED EARLY IN THE PROJECT AND PRIOR TO ACTIVITIES THAT MAY CAUSE EROSION. THESE FACILITIES ARE TO BE CONSTRUCTED TO COMPLETION ACCORDING TO PLANS AND SPECIFICATIONS TO PREVENT EROSION OF THE FACILITY ITSELF. ENVIRONMENTAL CONTROL FEATURES ARE TO BE INSTALLED THROUGHOUT THE PROJECT AS DESCRIBED IN OTHER AREAS OF THE STORMWATER POLLUTION PREVENTION PLAN TO PREVENT SEDIMENTATION OF THESE FACILITIES. IF SEDIMENTATION DOES OCCUR, THESE FACILITIES ARE TO BE CLEANED AS NECESSARY TO ENSURE PROPER OPERATION DURING CONSTRUCTION.

9. ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS OR PROJECT SEGMENT LIMITS.

APPENDIX B
FEDERAL AGENCY COASTAL ZONE MANAGEMENT ACT CONSISTENCY DETERMINATION

FEDERAL AGENCY COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY DETERMINATION

Introduction

This document provides the State of Florida with the U.S. Air Force's Consistency Determination under CZMA Section 307 and 15 C.F.R. Part 930 sub-part C. The information in this Consistency Determination is provided pursuant to 15 C.F.R. Section 930.39.

Pursuant to Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456, as amended, its implementing regulations at 15 C.F.R. Part 930, this is a Federal Consistency Determination for activities described within Chapter 3 of the Environmental Assessment (EA) for the Florida Department of Transportation (FDOT) and Eglin AFB, Florida.

Proposed Federal agency action:

The SR 87 Improvement Plan calls for the expansion of existing two-lane roadways to four-lane roadways with corresponding intersection improvements and geometric alignment improvements along the SR 87 corridor between a spot north of Five Forks Road and the Eglin Air Force Base Boundary. In general, roadways designated as rural will be modified to a four-lane rural typical section, which includes 12 feet-wide shoulders (of which 5 feet will be paved and can be used as bicycle lanes), four 12 feet-wide travel lanes, and a 40 feet-wide depressed median. Roadways designated as urban will be modified to incorporate 4 feet-wide bicycle lanes, four 12 feet-wide travel lanes, a 22 feet-wide raised median, pedestrian sidewalks, and green space. Existing bridges at East Bay River, Dean Creek, and Yellow River as well as existing stormwater management systems will also be upgraded.

The proposed action addressed in the EA involves construction of a stormwater detention pond and expansion of the intersection of SR 87 and Bob Tolbert Road (Figure 1 of the EA). The FDOT is managing the construction of the four-lane improvements to SR 87 from North of Five Forks Road to the Eglin Air Force Base Boundary. A portion of property owned by Eglin AFB is located within the proposed right-of-way for a wet stormwater detention pond. In order the complete the SR 87 improvements (the conversion of an undivided two-lane highway to a divided four-lane highway), the construction of a stormwater detention pond and expansion of Bob Tolbert are necessary.

Federal Consistency Review

Statutes addressed as part of the Florida Coastal Zone Management Program consistency review and considered in the analysis of the proposed action are discussed in the following table.

Pursuant to 15 C.F.R. § 930.41, the Florida State Clearinghouse has 60 days from receipt of this document in which to concur with or object to this Consistency Determination, or to request an extension, in writing, under 15 C.F.R. § 930.41(b). Florida's concurrence will be presumed if Eglin AFB does not receive its response on the 60th day from receipt of this determination.

Florida Coastal Management Program Consistency Review

Statute	Consistency	Scope
Chapter 161 *Beach and Shore Preservation*	The proposed project would not adversely affect beach and shore management, specifically as it pertains to: -The Coastal Construction Permit Program. -The Coastal Construction Control Line (CCCL) Permit Program. -The Coastal Zone Protection Program. All land activities would occur on federal property.	Authorizes the Bureau of Beaches and Coastal Systems within DEP to regulate construction on or seaward of the states' beaches.
Chapter 163, Part II *Growth Policy; County and Municipal Planning; Land Development Regulation*	The proposed action would not have an affect on local government comprehensive plans.	Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest.
Chapter 186 *State and Regional Planning*	The proposed action would not have an affect on state planning requirements.	Details state-level planning requirements. Requires the development of special statewide plans governing water use, land development, and transportation.
Chapter 252 *Emergency Management*	The proposed action would not increase the state's vulnerability to natural disasters. Emergency response and evacuation procedures would not be impacted by the proposed action. There will be temporary impacts to traffic flow along SR 87 during the construction phase; however improvements made from the expansion of SR 87 will eventually facilitate better hurricane evacuation routes.	Provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of natural and manmade disasters.
Chapter 253 *State Lands*	The proposed action will not have an impact on the acquisition, disposal, or management of state lands.	Addresses the state's administration of public lands and property of this state and provides direction regarding the acquisition, disposal, and management of all state lands.
Chapter 258 *State Parks and Preserves* Chapter 259 *Land Acquisition for Conservation or Recreation* Chapter 260	State parks, recreational areas and aquatic preserves would not be affected by the proposed action. Construction would not occur within any aquatic preserves. Tourism and outdoor recreation would not be affected. Opportunities for recreation on state lands would not be affected.	Addresses administration and management of state parks and preserves (Chapter 258). Authorizes acquisition of environmentally endangered lands and outdoor recreation lands (Chapter 259). Authorizes acquisition of land to create a recreational trails system and to facilitate

Recreational Trails System Chapter 375 *Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation*		management of the system (Chapter 260). Develops comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate need for additional recreational opportunities, and propose means to meet the identified needs (Chapter 375).
Chapter 267 *Historical Resources*	There would be no impacts to cultural resources as a result of the proposed action. The SHPO has concurred that all significant resources listed as eligible for the National Register of Historic Places will not be affected by the expansion of the highway or by the construction of the stormwater detention pond. Chapter 5, Section 5.6 further addresses the SHPO concurrence on this project.	Addresses management and preservation of the state's archaeological and historical resources.
Chapter 288 *Commercial Development and Capital Improvements*	The proposed action is not anticipated to have any effect on future business opportunities on state lands, or the promotion of tourism in the region.	Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy.
Chapter 334 *Transportation Administration* Chapter 339 *Transportation Finance and Planning*	Improvements to SR 87 (traffic patterns, flow, and safety) will occur as a result of the proposed action. Minor and short-term impacts will occur to traffic flow during the construction/renovation phase; however these impacts are not significant. The FDOT is responsible for the planning and allocation of funds responsible for this project and therefore, there would be no effect to the state's transportation finance and planning needs.	Addresses the state's policy concerning transportation administration (Chapter 334). Addresses the finance and planning needs of the state's transportation system (Chapter 339).
Chapter 370 *Saltwater Fisheries*	The proposed action would not affect saltwater fisheries.	Addresses management and protection of the state's saltwater fisheries.
Chapter 372 *Wildlife*	There will be no impact to threatened/endangered species as a result of this project.	Addresses the management of the wildlife resources of the state.
Chapter 373 *Water Resources*	The stormwater facility will be designed in accordance with F.A.C. 62-25, 62-40, and 62-312. Federal Wetlands are located in the proximity of the proposed location of the Stormwater Detention Pond; however, the proposed location is not designated as Federal Wetlands. No wetland impacts are anticipated as a result of the proposed action.	Addresses the state's policy concerning water resources.

Chapter 376 *Pollutant Discharge Prevention and Removal*	The proposed action does not involve the transfer, storage, or transportation of pollutants.	Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges.
Chapter 377 *Energy Resources*	Energy resource production, including oil and gas, and the transportation of oil and gas, would not be affected by the proposed action.	Addresses regulation, planning, and development of energy resources of the state.
Chapter 380 *Land and Water Management*	Under the proposed action, development of state lands with regional (i.e. more than one county) impacts would not occur. Areas of Critical State Concern or areas with approved state resource management plans such as the Northwest Florida Coast would not be affected. Changes to coastal infrastructure such as bridge construction, capacity increases of existing coastal infrastructure, or use of state funds for infrastructure planning, designing or construction would not occur.	Establishes land and water management policies to guide and coordinate local decisions relating to growth and development.
Chapter 381 *Public Health, General Provisions*	The proposed action does not involve the construction of an on-site sewage treatment and disposal system.	Establishes public policy concerning the state's public health system.
Chapter 388 *Mosquito Control*	The proposed action would not affect mosquito control efforts.	Addresses mosquito control effort in the state.
Chapter 403 *Environmental Control*	The proposed action would not affect ecological systems and water quality of state waters. Combustive emissions and fugitive dust from construction would be temporary. Air quality criteria would not be exceeded and the impacts would not be significant. A notice of Intent to use the General NPDES Permit for new stormwater discharge facility construction has been obtained.	Establishes public policy concerning environmental control in the state.
Chapter 582 *Soil and Water Conservation*	The proposed action is not anticipated to have an effect on soils. Standard erosion control measures will be implemented during construction of the stormwater pond as well as expansion of Bob Tolbert Road. These could include planting native vegetation, sodding, rock placement, weed free hay bales, or other measures. Improperly designed ponds may result in stratification and anoxic conditions that can promote the re-suspension of solids and the release of nutrients and metals from the trapped sediments. All vegetated areas disturbed during construction activities will be graded and contoured. Any needed permits will be obtained prior to the commencement of construction activities.	Provides for the control and prevention of soil erosion.