From:	Richards, Anne
To:	Terry_Cartwright@URSCorp.com
Subject:	FW: Tampa Bay area aerial survey data 1987-1994
Date:	09/24/2010 04:02 PM
Attachments:	TampaBay_Path_1987_1994_FWC.shx TampaBay_1987_1994_FWC_88Flights_One2dayFlight.dbf TampaBay_1987_1994_FWC_88Flights_One2dayFlight.prj TampaBay_1987_1994_FWC_88Flights_One2dayFlight.sbn TampaBay_1987_1994_FWC_88Flights_One2dayFlight.sbx TampaBay_1987_1994_FWC_88Flights_One2dayFlight.shp TampaBay_1987_1994_FWC_88Flights_One2dayFlight.shx TampaBay_Path_1987_1994_FWC.dbf TampaBay_Path_1987_1994_FWC.prj TampaBay_Path_1987_1994_FWC.sbn TampaBay_Path_1987_1994_FWC.sbx TampaBay_Path_1987_1994_FWC.shp WR_MMR_Manatee_DistributionSurvey_TampaBay.htm

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The Manatee County aerial survey data shapefile is attached, along with the flight path.
This survey was from Nov 1987 – May 1994 and had 88 flights.

Metadata for this data set is also attached as:
WR_MMR_Manatee_DistributionSurvey_TampaBay.htm

From:	Richards, Anne
To:	Terry_Cartwright@URSCorp.com
Subject:	FW: Tampa Bay area aerial survey data 1995-97
Date:	09/24/2010 04:02 PM
Attachments:	WR_MMR_Manatee_DistributionSurvey_TampaBay#2.htm TampaBay_1995_1997_FWC_33Flights.dbf TampaBay_1995_1997_FWC_33Flights.prj TampaBay_1995_1997_FWC_33Flights.sbn TampaBay_1995_1997_FWC_33Flights.sbx TampaBay_1995_1997_FWC_33Flights.shp TampaBay_1995_1997_FWC_33Flights.shx

---

The Manatee County aerial survey data shapefile is attached.
This survey was from Jan 1995 – June 1997 and had 33 flights.

Metadata for this data set is also attached as:
WR_MMR_Manatee_DistributionSurvey_TampaBay#2.htm

URS

Date: JANUARY 14, 2011

To: **Marion Almy, ACI**
Willard Steele, Seminole Tribe of Florida, THPO

From: **Marty Peate, URS**

Attendees: **Marty Peate, URS**
Marion Almy, ACI
Willard Steele, Seminole Tribe of Florida, THPO
Paul Backhouse, Seminole Tribe of Florida, Deputy THPO
Julie Labate, Seminole Tribe of Florida, Tribal Archaeologist

RE: **Fort Hamer Bridge EIS**
Reintroduction Meeting
January 7, 2011

A Reintroduction Meeting was held on January 7, 2011 at the Seminole Tribe of Florida's Ah-Tah-Thi-Ki Museum in Big Cypress.

This Reintroduction Meeting was held to re-engage the Seminole Tribe of Florida (STOF) on behalf of Manatee County due to the changes in the project (i.e. lead federal agency change from FHWA to USCG).

Marty Peate, URS, provided an overview of the history from the being of the project in 1999 under FHWA through the cancellation of the project at the request of Manatee County in 2006 and Manatee County restarting the project under USCG in 2009. It was discussed that the previous project consisted of a 4-lane bridge and 4-lane roadway project and the current project had been reduced to a 2-lane bridge and approach connections to the existing roadway system.

Marty Peate noted that the previous project (under FHWA and FDOT) had discussed the potential utilization of a retaining wall on the north side of the river, near Fort Hamer Park as a mural depicting the events that occurred in association with Fort Hamer. Mr. Peate stated that the current project (under USCG and Manatee County) would not have the ability to create the mural but Manatee County was willing to erect a plaque/marker at the Bridge to commemorate the events at Fort Hamer.

Marion Almy, ACI, noted that in May of 2004, George Hadley of FHWA had communicated that a "plaque or marker" would be appropriate in this situation.

Willard Steele, STOF, thanked the group for coming back to the STOF and updating them on the project. Mr. Steele remembered coordinating with George Hadley on this issue and was comfortable with a plaque or marker as long as the STOF was consulted in the development of the language used and information portrayed.

Marty Peate added that this was a commitment that Manatee County was willing to follow through with and that as the project evolved the County would engage the STOF in the development of the plaque or marker.

RICHARD D. HERR
VICE ADMIRAL, U. S. COAST GUARD (RETIRED)
12103 Creole Court
Parrish, Florida 34219
(941) 721 – 6966

26 October 2011

Dear Ms. Smart,

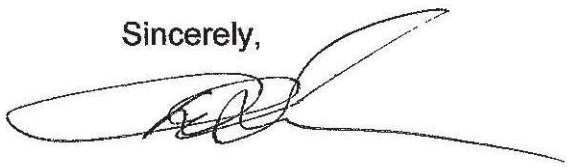
I am writing to express my concern with regard to the proposed Fort Hamer Bridge in Manatee County, Florida. I am a resident of the River Wilderness Community on the north side of the river which will be directly affected by this project. I am asking you to give serious consideration to not approving this project.

I find it difficult to believe that we (the U.S. Coast Guard) would give serious consideration to another impediment to navigation on this river by a bridge that is not required to serve the needs of the citizens of the County. There are three multilane bridges to the west of this proposed span and a brand new bridge (the Rye Road bridge) to the east which can more than adequately handle current traffic needs and those in the foreseeable future.

This proposed bridge is being pushed by developers in the area and will adversely affect thousands of people who have bought homes and settled in this area to enjoy the peace and tranquility it has afforded up until now. In addition, there are grave safety concerns about the projected traffic volume, and size of vehicles on Fort Hamer road. These concerns have been brought to the attention of the County several times and the County refuses to make improvements to the road or provide sidewalks or bike paths which would address these dangers. Simply said, if this project goes forward as proposed, many people – including children who attend the school located on Fort Hamer road – will be endangered - mishaps will occur - and lives may well be lost. All this for a bridge that is not needed.

Bottom line, I request that you not approve the requests of Manatee County to go forward with the proposed Fort Hamer Bridge. Thanking you in advance, I am

Sincerely,



Bridge Administration Branch
Seventh Coast Guard District
Brickell Plaza Federal Building
909 S.E. First Avenue
Miami, Fl 33131-3050

Cc: Captain Richard M. Kenin, USCG

U.S. Department
of Homeland Security

United States
Coast Guard

Commander
Seventh Coast Guard District

909 SE 1st Ave Rm 432
Miami, FL 33131-3050
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

16591/3889
Serial #: 2083
October 31, 2011

Richard D. Herr
Vice Admiral, USCG (Ret)
12103 Creole Court
Parrish, Florida 34219

Dear Admiral Herr:

We have received your letter dated October 26, 2011 regarding the proposed Fort Hamer Road Bridge project across the Manatee River, mile 8.4 at Fort Hamer, Manatee County, Florida.

The Coast Guard is the lead federal agency for the proposed Fort Hamer Road Project. In accordance with the National Environmental Policy Act (NEPA) we are currently reviewing a Draft Environmental Impact Statement (DEIS) for the proposed project. Your comments will be incorporated into the case file and issues raised will be addressed in the DEIS. Upon completion of the DEIS, the Coast Guard will conduct a public meeting and the DEIS will be made available for public review (at public libraries, community centers, etc...). We will inform the public via Public Notice as to when and where the public meeting will be held. Your comments will be considered in our decision making process.

Thank you for your comments. If you have any other questions regarding the proposed project, feel free to call me at (305) 415-6989 or e-mail me at the address noted above.

Sincerely,

Evelyn Smart

EVELYN SMART
Environmental Protection Specialist
Bridge Administration Branch
Seventh Coast Guard District
By direction of the District Commander

Smart, Evelyn

From: wsteele@semtribe.com on behalf of Willard Steele [wsteele@semtribe.com]
Sent: Wednesday, November 17, 2010 3:15 PM
To: Overton, Randall
Subject: Re: Ft. Hamer

Thank you very much. I enjoyed talking to you today. I look forward to working with the Coast Guard on this. Excuse the informal nature of this but I"m on my blackberry which is both good and bad. Not driving at least. Just in a swamp. Thanks again- Bill

----- Original Message -----
From: Overton, Randall [mailto:Randall.D.Overton@uscg.mil]
Sent: Wednesday, November 17, 2010 02:10 PM
To: Martin_Peate@urscorp.com <Martin_Peate@urscorp.com>; Tom_Pride@urscorp.com <Tom_Pride@urscorp.com>
Cc: Dragon, Barry <Barry.Dragon@uscg.mil>; Sugarman, Shelly <Shelly.H.Sugarman@uscg.mil>; Willard Steele
Subject: Ft. Hamer

Good afternoon,
I just got off the phone with Mr. Willard (Bill) Steele, the Seminole Tribe of Florida Tribal Historic Preservation Officer (THPO or STOFTHPO). Mr. Steele stated that he had come to an agreement with the FHWA, during the previous PD&E study, to have a commemorative park area in the vicinity of a storm water pond on the north side of the river; I'm not sure of the exact details. Please ensure that Mr. Smith is contacted during the development EIS / CRAS process to ensure his concerns are properly addressed. I have including Mr. Steele in this correspondence.

Thank you,

Randall Overton
Federal Permit Agent
909 SE 1st Ave
Miami, FL 33131
randall.d.overton@uscg.mil
305-415-6749
Fax: 305-415-6763

MEMORANDUM

Department Public Safety
Division E.M.S
2101 47 Terrace East
Bradenton, FL 34203

MANATEE COUNTY
FLORIDA

Phone: 941-749-3500
Fax: 941-749-3564
www.mymanatee.org

To: Vincent Canna, Project Manager
Public Works Department

From: Ronald J. Koper, Jr., EMS Chief

Date: January 13, 2011

Subject: Fort Hamer Bridge Project

Thank you for the opportunity to comment on the Fort Hamer Bridge project. Manatee County Public Safety Department and Emergency Medical Services Division believe that the key to providing effective and efficient public safety service is rapid response to any emergency. We have an ambulance located north of the river at US301/Colony Drive and another located south of the river at SR 64/Dam Road. In the event of a catastrophic event near I-75 or Rye Bridge, our ability to access the eastern areas of the county (north and south of the river) would be significantly impacted.

East Manatee Fire Rescue, Parrish Fire Control, and North River Fire Districts currently have three (3) fire/rescue stations proximate to the Fort Hamer Bridge project: Parrish Fire Control District station # 1 is located north of the river on US 301; North River Fire Station # 4 is located north of the river on US301; and East Manatee Fire Central Station #1 is located on Lakewood Ranch Blvd at SR64. Each of these stations could provide reasonable response times for areas proximate to the other stations and respective geographic areas north and south of the river; however, in the event of a catastrophe and/or multiple events requiring support from stations from the other side of the river, response times are critically increased.

Therefore, it is the position of the Manatee County Public Safety Department and EMS Division, that an additional crossing connecting the existing Upper Manatee River Road and Fort Hamer Road would improve public safety through decreased emergency response times and more efficient geographic coverage of areas proximate to the river.

Cc: William Hutchison, Public Safety Director
Byron Teates, EMFR Chief
Mike Johnson, Parrish FD Chief
John McGinnis, NRFD Chief

EAST MANATEE FIRE RESCUE DISTRICT
3200 LAKEWOOD RANCH BLVD. • BRADENTON, FL 34211
Office 941-751-5611 • Fax 941-751-5910

EMFR

To: Vincent Canna, Project Manager
Public Works Department

From: Byron J. Teates, Fire Chief
East Manatee Fire Rescue District

Date: 3-7-12

Ref: Fort Hamer Bridge

I would like to take this opportunity to comment on the proposed Fort Hamer bridge construction. As Fire Chief, I believe that a new bridge crossing the Manatee River in the area of Fort Hamer would substantially reduce fire service mutual-aid response times in certain areas of the East Manatee Fire Rescue District as well as those to Parrish and North River Fire Districts.

The construction of the new bridge would also provide an alternate means of travel north or south due to either the I-75 Bridge or Rye Bridge being closed due to flooding, fire, or other emergency. This has occurred on several occasions, sometimes for days, weeks and even months. When this has occurred, emergency response times have been extended due to congestion and further travel distances in order to cross the river.

Currently, there are only three bridges in our district that cross the Manatee River: I-75, Rye, and 675 Bridges. If the proposed bridge were constructed it would provide quicker access to all Manatee emergency responders as well as providing another means to cross the River.

EMFR

U.S. Department
of Homeland Security

**United States
Coast Guard**

Commander
Seventh Coast Guard District

909 SE 1st Ave Rm 432
Miami, FL 33131-3050
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

16591/3886
Serial #: 2141
30 March 2012

MEMORANDUM

From: Barry Dragon
CGD SEVEN (dpb)

Reply to Attn of: D7(dpb)
Evelyn Smart
305-415-6989

To: CG-5512 Permits

Subj: TRANSMITTAL OF DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED CONSTRUCTION OF A HIGHWAY BRIDGE ACROSS THE MANATEE RIVER, MILE 15.0, AT PARRISH, MANATEE COUNTY, FLORIDA

1. We are forwarding the Draft Environmental Impact Statement (DEIS) for the subject bridge action.

2. We have enclosed a hard copy of the DEIS and ten (10) copies of the DEIS on CDs as requested for CG-5512 and DHS review.

#

Encl: (1) USCG DEIS – hard copy
(2) USCG DEIS – 10 CD copies

Smart, Evelyn

From: bradleymueller@semtribe.com on behalf of Bradley Mueller [bradleymueller@semtribe.com]
Sent: Tuesday, November 20, 2012 12:46 PM
To: Smart, Evelyn
Cc: Paul Backhouse; Anne Mullins; Elliott York; Alison Swing
Subject: Fort Hamer Bridge Project, Manatee County, Florida
Attachments: USCG_Fort Hammer_Initial_Consult Ltr.docx; Review-Consultation Required Documents.docx

Dear MS. Smart,

It was good to talk with you on the phone yesterday. I have attached two documents to this email for your files. The first is an "initiation of consultation" letter which you requested and the second is a list of documents required by the Seminole Tribe of Florida – Tribal Historic Preservation Office in order to conduct the review process for the Coast Guards Fort Hamer undertaking. Please let us know if we may be of any further assistance.

Regards,
Bradley M. Mueller, M.A., Supervisor

Compliance Review Section
Tribal Historic Preservation Office
Seminole Tribe of Florida
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 x12245

SEMINOLE TRIBE OF FLORIDA
TRIBAL HISTORIC PRESERVATION OFFICE

TRIBAL HISTORIC
PRESERVATION OFFICE

SEMINOLE TRIBE OF FLORIDA
AH-TAH-THI-KI MUSEUM

30290 JOSIE BILLIE HWY
PMB 1004
CLEWISTON, FL 33440

PHONE: (863) 983-6549
FAX: (863) 902-1117

Ms. Evelyn Smart
Bridge Administration, Bridge Permit Section
U.S. Coast Guard, 7th District
Miami, Florida
PH: (305) 415-6989

THPO #: 011112

November 20, 2012

Subject: Fort Hamer Bridge Project, Manatee County, Florida

Dear Ms. Smart,

The Tribal Historic Preservation Office of the Seminole Tribe of Florida (STOF-THPO) thanks you for initiating National Register of Historic Places, Section 106, government-to-government consultation with the tribe concerning the proposed Fort Hamer Bridge Project. If at any time the U.S. Coast Guard feels that a face-to-face meeting is needed we will be happy to arrange one.

As I understand the situation, based on our telephone conversation of 11/19/2012, a final version of a Cultural Resource Assessment Survey report is currently being prepared and will be sent to the STOF-THPO for review and comments. Also, you will be sending us a copy of the DEIS at the appropriate time. As requested by you, I will be searching our records for any reference to a request made by Mr. Willard Steele while he was serving as the STOF-Tribal Historic Preservation Officer for a "plaque" to be placed in the Fort Hamer area.

The STOF-THPO looks forward to consulting with the U.S. Coast Guard on this project. Feel free to contact us at any time with any questions you may have and please reference THPO # 011112 in any future communications.

Respectfully,

Bradley M. Mueller

Bradley M. Mueller, M.A., Supervisor
STOF – THPO - Compliance Review Section
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440

Office: 863-983-6549 x12245
Fax: 863-902-1117
Email: bradleymueller@semtribe.com

cc: Dr. Paul Backhouse, THPO
Anne Mullins, Deputy THPO

The Seminole Tribe of Florida – Tribal Historic Preservation Office
Required Documents for Consultation:

1. A physical address of the property where the undertaking will occur,
2. A narrative description of the undertaking with special regard for ground disturbing activities (i.e. renovation, demolition, new construction, etc.),
3. A map depicting the subject property or properties (aerial image is preferred) with the Area of Potential Effect (APE) delineated, and
4. Photographs of the subject property as it stands now, if available.

After the above listed documents have been received, the THPO can then begin the review process required by your agency. Additional documents may be requested once the review process has commenced. If you have any questions regarding our consultation protocol please don't hesitate to contact the THPO via email or at the telephone number listed below.

Best Regards,

Bradley M. Mueller, M.A., Supervisor
Compliance Review Section
Tribal Historic Preservation Office
Seminole Tribe of Florida
30290 Josie Billie Highway
PMB 1004
Clewiston, FL 33440
Phone: 863-983-6549 ext: 12245
Fax: 863-902-1117
Email: bradleymueller@semtribe.com

U.S. Department of Homeland Security
United States Coast Guard

Commander
Seventh Coast Guard District

909 SE First Avenue
Miami, Florida 33131
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

16591/3823
2 January 2013

Mr. Robert Bendus
Director, Florida Division of Historical Resources
State Historic Preservation Officer
R. A. Gray Building – 4th Floor
500 South Bronough Street
Tallahassee, Florida 32399-0250

Dear Mr. Bendus:

The United States Coast Guard (USCG), in cooperation with Manatee County, is conducting an environmental study to document potential impacts resulting from proposed improvements to north/south traffic movements in eastern Manatee County, Florida. The widening and linking of Upper Manatee River Road with Fort Hamer Road, via construction of a new bridge across the Manatee River, will result in improved traffic flow, improved emergency response time and coverage, improved hurricane evacuation flow, and provide an alternative to I-75 for north/south travelers. Bicycle lanes and sidewalks will be provided along the corridor and across the river on the bridge to accommodate those forms of transportation. The proposed action is expected to provide some relief to the existing congestion on I-75, particularly between SR 64 and US 301, until such time that separate planned improvements to I-75 can be made. The new bridge will provide county residents an additional emergency evacuation route to the north. At the request of the Coast Guard and Manatee County, ACI in cooperation with URS Corporation South, conducted a Cultural Resource Assessment Survey (CRAS) for the proposed project.

This assessment was designed and implemented to comply with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act of 1966, as amended, as implemented by 36 CFR 800 (Protection of Historic Properties) and Chapter 267 of the Florida Statutes.

This project is comprised of two distinct areas of potential effects (APE): the Fort Hamer Bridge APE and the Rye Road APE. The limits of the Fort Hamer Bridge APE extend from approximately 600 feet (ft) north of Waterlefe Boulevard on Upper Manatee River Road to 2,500 ft south of Mulholland Road on Fort Hamer Road. The limits of the Rye Road APE extend from SR 64 along Rye Road to Golf Course Road, Golf Course Road from Rye Road to Upper Manatee River Road, and Upper Manatee River Road from Golf Course Road to US 301. It should be noted that the Florida SHPO has reviewed six previous CRAS reports which included portions of this undertaking's APE and concurred with the results of each. The Florida SHPO letters are included in Appendix D of the CRAS report.

Archaeological background research, including a review of the Florida Master Site File (FMSF), the NRHP and previous surveys indicated that four (8MA315, 8MA715, 8MA1343, 8MA1344) archaeological sites were recorded within and immediately adjacent to the respective APE. One of these sites, the Fort Hamer Site (8MA315), is a potentially NRHP-eligible resource recorded

partially within the Fort Hamer Bridge APE. Three of the FMSF forms have been prepared/updated within the last five years and no additional updates were necessary. In addition, the FMSF forms were previously submitted when the FHWA was the lead agency but copies of the three forms are included in Appendix B of the CRAS.

- 8MA315, The Fort Hamer Site - This site was originally recorded based on informant information and several surveys have been conducted in the general site area. Most recent testing in 2010 yielded negative results. This site is a potentially NRHP-eligible resource. An updated FMSF form is included in Appendix A of the CRAS.

- 8MA715, the Rye Bridge Mound - This mound site was recorded based on inspection of a private collection and catalogue. Subsequent field surveys found the site to be no longer extant and based on the negative evidence, the SHPO concurred. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

- 8MA1343, The Mitchellville Cemetery - This cemetery, located west of Rye Road, was recorded based on the observance of one grave marker but testing yielded negative evidence. The SHPO determined this site not eligible for listing in the NRHP. However, this site may extend into the Rye Road APE. Thus, the SHPO recommended that if construction activities occur within 20 meters of the legal boundaries of 8MA1343, a professional archaeologist should monitor the construction activities. A copy of the 2007 FMSF form is included in Appendix B of the CRAS.

- 8MA1344, The Waters Edge Historic Scatter - This historic scatter, located north of the Manatee River, was discovered on the surface; shovel tests excavated in the site vicinity failed to produce subsurface artifacts or features. The SHPO determined this site not eligible for listing in the NRHP. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

Historical background research revealed no NRHP-listed or eligible resources. However, fifteen historic resources are recorded within the Rye Road APE and none within the Ft. Hamer Road APE. The SHPO determined that 10 of these are not eligible for listing in the NRHP; and five other structures have not been reviewed by the SHPO, but based on the professional opinion of the recorders, none is considered eligible for the NRHP. Since the FMSF forms have been prepared/updated within the last five years, no additional updates were necessary. In addition, the FMSF forms were previously submitted when the FHWA was the lead agency but copies of the 15 forms are included in Appendix B of the CRAS.

- 8MA1216, Residence at 5432 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1217, Residence at 5909 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1218, Residence at 5925 Fort Hamer Road - has been demolished. A letter indicating this structure is no longer extant is included in appendix B of the CRAS.

- 8MA1220, Residence at 12116 60th Street East - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1222, Residence at 6104 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1223, Residence at 6108 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1224, Residence at 6112 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1225, Residence at 6204 Fort Hamer Road - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1226, Residence at 12129 US 301 - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

- 8MA1472, The Palmetto Pines Golf Course Resource Group - does not appear eligible for listing in the NRHP. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

- 8MA1474, Residence ca. 1956 at 14355 Golf Course Road – does not appear eligible for listing in the NRHP. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

- 8MA1475, Residence at 15450 Golf Course Road - does not appear eligible for listing in the NRHP. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

- 8MA1476, Residence at 3250 Rye Road - does not appear eligible for listing in the NRHP. A copy of the 2006 FMSF form is included in Appendix B of the CRAS.

- 8MA1477, Bridge number 134022 - was recorded in 2006 and did not appear eligible for listing in the NRH; it was replaced in 2008 and its new number is 134114. The FMSF form for the historic bridge recorded in 2006 is included in Appendix B.

- 8MA1524, Residence at 12125 US 301 North - was determined not eligible for listing in the NRHP by the SHPO. A copy of the 2008 FMSF form is included in Appendix B of the CRAS.

Pursuant to 36 CFR 800, we request your opinion and concurrence with the above stated findings of significance.

In accordance with Section 106 of the National Historic Preservation Act, further coordination with your office will take place, and an analysis of the effects the alternatives may have on the significant resources will be prepared and submitted to the SHPO.

The Coast Guard has extended an invitation to the Seminole Nation of Oklahoma and Seminole Tribe of Florida to participate in this dialogue as consulting agents to accurately record the cultural significance of the Second Seminole War and sites like Fort Hamer. The previous Tribal Historic Preservation Officer (THPO), Willard Steele, opened a dialogue with FHWA and requested additional archival research to document the deportation process and, to the extent possible, identify individual Seminoles who were deported from Fort Hamer (established November 28, 1849, abandoned November 24, 1850. There was a tentative agreement with the previous THPO to use this information to develop a historic marker and/or exhibit to educate Florida citizens and school children about Seminole heritage and culture. The Coast Guard will continue coordination with the Seminole Tribe regarding this agreement.

If you have any questions, feel free to call Miss Evelyn Smart at (305) 415-6989.

Sincerely,

BARRY DRAGON
Director, Bridge Program
U. S. Coast Guard
By direction

Encl: (1) Final Cultural Resource Assessment Survey
(2) Florida Master Site File
(3) Survey Log
(4) CD FMSF form and Survey Log
(5) Seminole Tribe of Florida correspondence to the Coast Guard

Copy: Marion Almy, ACI, Seffner, Florida
Martin Peate, P.E., URS Corporation South

U.S. Department
of Homeland Security

**United States
Coast Guard**

Commander
Seventh Coast Guard District

909 SE 1st Ave Rm 432
Miami, FL 33131-3050
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

FILE COPY

16591/3823
Serial # 2238:
2 January 2013

Mr. Leonard M. Harjo, Principal Chief
Seminole Nation of Oklahoma
P. O. Box 1498
Wewoka, OK 74884

Dear Mr. Harjo:

The United States Coast Guard (USCG), in conjunction with Manatee County, is transmitting this letter to inform the Seminole Nation of Oklahoma of the status of the preparation of a Draft Environmental Impact Statement.

Manatee County, in conjunction with the USCG, is developing an environmental study to document potential impacts resulting from proposed improvements to north/south traffic movements in eastern Manatee County, Florida. The widening and linking of Upper Manatee River Road with Fort Hamer Road, via construction of a new bridge across the Manatee River, will result in improved traffic flow, improved emergency response time and coverage, improved hurricane evacuation flow, and provide an alternative to I-75 for north/south travelers. Bicycle lanes and sidewalks will be provided along the corridor and across the river on the bridge to accommodate those forms of transportation. The proposed action is expected to provide some relief to the existing congestion on I-75, particularly between SR 64 and US 301, until such time that separate planned improvements to I-75 can be made. The new bridge will provide county residents an additional emergency evacuation route to the north. At the request of the Coast Guard and Manatee County, Archaeological Consultants, Incorporated in cooperation with URS Corporation South, conducted a Cultural Resource Assessment Survey (CRAS) for the proposed project.

This assessment was designed and implemented to comply with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act of 1966, as amended, as implemented by 36 Code of Federal Regulations Part 800 (Protection of Historic Properties) and Chapter 267 of the Florida Statutes.

This project is comprised of two distinct areas of potential effects (APE): the Fort Hamer Bridge APE and the Rye Road APE. The limits of the Fort Hamer Bridge APE extend from approximately 600 feet (ft) north of Waterlefe Boulevard on Upper Manatee River Road to 2,500 ft south of Mulholland Road on Fort Hamer Road. The limits of the Rye Road APE extend from SR 64 along Rye Road to Golf Course Road, Golf Course Road from Rye Road to Upper Manatee River Road, and Upper Manatee River Road from Golf Course Road to US 301. It should be noted that the Florida SHPO has reviewed six previous CRAS reports, which included portions of this undertaking's APE, and concurred with the results of each. The Florida SHPO letters are included in Appendix D of the CRAS report.

The Coast Guard would like to extend the Seminole Nation of Oklahoma an invitation to participate in this dialogue as consulting agents to accurately record the cultural significance of the Second Seminole War and sites like Fort Hamer. The previous Tribal Historic Preservation Officer (THPO), Willard Steele, opened a dialogue with Federal Highway Administration when they were acting as lead federal agency for the proposed project and requested additional archival research to document the deportation process and, to the extent possible, identify individual Seminoles who were deported from Fort Hamer (established November 28, 1849, abandoned November 24, 1850). There were discussions with the previous THPO to use this information to develop a historic marker and/or exhibit to educate Florida citizens and school children about Seminole heritage and culture. The Coast Guard, as lead federal agency, will continue coordination with the Seminole Tribe regarding these efforts.

We look forward to hearing from you and working with you on this project. If you have any questions related to this project or would like to have more information, please feel free to call Miss Evelyn Smart at (305) 415-6989.

Sincerely,

William D. Baumgartner
Rear Admiral, U.S. Coast Guard

Copy: CG-BRG-2
Marion Almy, ACI, Seffner, Florida
Martin Peate, P.E., URS Corporation South

U.S. Department
of Homeland Security

**United States
Coast Guard**

Commander
Seventh Coast Guard District

909 SE 1st Ave Rm 432
Miami, FL 33131-3050
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

FILE COPY

16591/3823
Serial #: 2239
2 January 2013

Dr. Paul Backhouse, THPO
On behalf of Mr. James E. Billie
Seminole Tribe of Florida
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440

Dear Dr. Backhouse:

The United States Coast Guard (USCG), in conjunction with Manatee County, is transmitting this letter to inform the Seminole Tribe of Florida of the status of the preparation of a Draft Environmental Impact Statement.

Manatee County, in conjunction with the USCG, is developing an environmental study to document potential impacts resulting from proposed improvements to north/south traffic movements in eastern Manatee County, Florida. The widening and linking of Upper Manatee River Road with Fort Hamer Road, via construction of a new bridge across the Manatee River, will result in improved traffic flow, improved emergency response time and coverage, improved hurricane evacuation flow, and provide an alternative to I-75 for north/south travelers. Bicycle lanes and sidewalks will be provided along the corridor and across the river on the bridge to accommodate those forms of transportation. The proposed action is expected to provide some relief to the existing congestion on I-75, particularly between SR 64 and US 301, until such time that separate planned improvements to I-75 can be made. The new bridge will provide county residents an additional emergency evacuation route to the north. At the request of the Coast Guard and Manatee County, Archaeological Consultants, Incorporated in cooperation with URS Corporation South, conducted a Cultural Resource Assessment Survey (CRAS) for the proposed project.

This assessment was designed and implemented to comply with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act of 1966, as amended, as implemented by 36 Code of Federal Regulations Part 800 (Protection of Historic Properties) and Chapter 267 of the Florida Statutes.

This project is comprised of two distinct areas of potential effects (APE): the Fort Hamer Bridge APE and the Rye Road APE. The limits of the Fort Hamer Bridge APE extend from approximately 600 feet (ft) north of Waterlefe Boulevard on Upper Manatee River Road to 2,500 ft south of Mulholland Road on Fort Hamer Road. The limits of the Rye Road APE extend from SR 64 along Rye Road to Golf Course Road, Golf Course Road from Rye Road to Upper Manatee River Road, and Upper Manatee River Road from Golf Course Road to US 301. It should be noted that the Florida SHPO has reviewed six previous CRAS reports, which included portions of this undertaking's APE, and concurred with the results of each. The Florida SHPO letters are included in Appendix D of the CRAS report.

The Coast Guard would like to extend the Seminole Tribe of Florida an invitation to participate in this dialogue as consulting agents to accurately record the cultural significance of the Second Seminole War and sites like Fort Hamer. The previous Tribal Historic Preservation Officer (THPO), Willard Steele, opened a dialogue with Federal Highway Administration when they were acting as lead federal agency for the proposed project and requested additional archival research to document the deportation process and, to the extent possible, identify individual Seminoles who were deported from Fort Hamer (established November 28, 1849, abandoned November 24, 1850). There were discussions with the previous THPO to use this information to develop a historic marker and/or exhibit to educate Florida citizens and school children about Seminole heritage and culture. The Coast Guard, as lead federal agency, will continue coordination with the Seminole Tribe regarding these efforts.

We look forward to hearing from you and working with you on this project. If you have any questions related to this project or would like to have more information, please feel free to call Miss Evelyn Smart at (305) 415-6989.

Sincerely,

William D. Baumgartner
Rear Admiral, U.S. Coast Guard

Copy: CG-BRG-2
Marion Almy, ACI, Seffner, Florida
Martin Peate, P.E., URS Corporation South

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Mr. Barry Dragon
Director, Bridge Program
U.S. Department of Homeland Security
United States Coast Guard
909 SE First Avenue
Miami, Florida 33131

February 6, 2013

Re: DHR Project File No.: 2013-00188 / Received by DHR: January 10, 2013
Draft: *Cultural Resource Assessment Survey, Fort Hamer Bridge EIS, Manatee County, Florida*

Dear Mr. Dragon:

Our office received and reviewed the above referenced survey report in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, and Chapter 267, *Florida Statutes,* for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP).

In 2010 and 2011, Archaeological Consultants, Inc. (ACI) conducted an archaeological and historical survey of the proposed Fort Hamer Bridge project areas on behalf of URS Corporation Southern, Manatee County, and Bradenton. ACI identified three previously recorded archaeological sites (8MA315, 8MA715, and 8MA1344) within or in close proximity to the project area during the investigation. No evidence of the sites, or of the previously recorded Mitchellville Cemetery (8MA1343). ACI determined that the twelve historic buildings adjacent to the project corridor (8MA1216, 8MA1217, 8MA1220, 8MA1222 – 8MA1226, 8MA1474 – 8MA1476, and 8MA1524) do not appear to be eligible for listing in the NRHP. The historic golf course (8MA1472) is also ineligible for listing in the NRHP. The historic bridge (8MA1477) and one historic building (8MA1218) are no longer extant.

Based on the information provided, our office finds the report complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code.*

However, we note that the historic portion of the golf course (8MA1472) is misplotted on the Florida Master Site File form based on historic aerial photographs. Also, we note that monitoring may be appropriate in the vicinity of the historic cemetery. Finally, our office would appreciate that copies of any additional archival research on Fort Hamer or the Seminole deportation process also be provided to our agency.

We note that the US Coast Guard will continue to coordinate with our agency regarding project impacts; we look forward to receipt of the final report and continued consultation.

For any questions concerning our comments, please contact Rudy Westerman, Historic Preservationist, by electronic mail at Rudy.Westerman@DOS.MyFlorida.com, or by phone at 850.245.6333. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely,

Timothy A. Parsons, DSHPO for

Robert F. Bendus, Director
Division of Historical Resources
and State Historic Preservation Officer

Archaeological Consultants, Inc.

From: Marion Almy [aci.malmy@comcast.net]
Sent: Tuesday, March 05, 2013 10:55 AM
To: 'Bradley Mueller'
Cc: 'Evelyn.Smart@uscg.mil'; 'Peate, Martin'
Attachments: SHPO RESPONSE TO CRAS FEB 2013.pdf

Tracking:

Recipient	Read
'Bradley Mueller'	Read: 3/5/2013 11:07 AM
'Evelyn.Smart@uscg.mil'	
'Peate, Martin'	

Dear Bradley:

Good afternoon.

I am contacting you, in your capacity as the Supervisor of the Compliance Section of the Tribal Historic Preservation Office, Seminole Tribe of Florida on behalf of the United States Coast Guard, and at the request of Ms. Evelyn Smart, Environmental Protection Specialists, U.S. Coast Guard 7th District.

We are inquiring about the status of the following two items:

1. Have you been able to locate any files or correspondence concerning former THPO Willard Steele and a proposed plaque/marker focusing on the events that occurred at and in association with Fort Hamer on the Manatee River? As you may know, the FHWA, URS Corporation, ACI, and Mr. Steele explored this avenue as an appropriate means of educating the public and identifying the Seminole presence at the fort as part of the Fort Hamer FHWA commitments in the Section 106 Process. At that time, discussions also focused on possibly placing the plaque/marker on the north side of the Manatee River at Manatee County's Fort Hamer Park so as to attract and educate motorists and boaters using the park. The US Coast Guard would like to document this FHWA/THPO coordination as part of their current efforts as the lead Federal agency for the proposed bridge, which is now a Manatee County project; FHWA is no longer involved. Perhaps the plaque/marker remains a viable opportunity.

2. Has your office completed its review of the Cultural Resource Assessment Survey (CRAS) report by ACI prepared for the Department of Homeland Security U.S. Coast Guard as Appendix C of the Draft Environmental Impact statement? Ms. Smart forwarded a copy of this document in December 2012. We received SHPO concurrence on February 6, 2013 (see attachment) and await your review so we can move forward.

Thank you for taking time to help us, and please let me know if you have questions and/or need additional information.

Best regards,

Marion

Marion M. Almy, RPA
President

Smart, Evelyn CIV

From: bradleymueller@semtribe.com on behalf of Bradley Mueller [bradleymueller@semtribe.com]
Sent: Monday, March 11, 2013 10:47 AM
To: Smart, Evelyn CIV
Subject: Fort Hamer Project

Good Morning Evelyn,

I have reviewed our Fort Hamer file and discussed the matter with Dr. Paul Backhouse (THPO), Anne Mullins (Deputy THPO), and others here. The previous THPO, Mr. Bill Steele, was concerned that the role that Fort Hamer played in Seminole history might be forgotten so he proposed that a memorial plaque be installed in the general area of the Fort. It is still the desire of the Seminole Tribe of Florida (STOF) to have such a plaque. The STOF would be happy to discuss this matter with the U.S Coast Guard and to provide you text for the sign. Feel free to email or call me to discuss this further. Meanwhile, I am reviewing the Draft EIS and will provide you comments later today. Thank you for your time.

Regards,
Bradley M. Mueller, M.A., Supervisor

Compliance Section
Tribal Historic Preservation Office
Seminole Tribe of Florida
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 x12245
Cell: 863-227-3692
Fax: 863-902-1117
Email: bradleymueller@semtribe.com
Website: www.stofthpo.com

From: Evelyn.Smart@uscg.mil on behalf of Smart, Evelyn CIV [Evelyn.Smart@uscg.mil]
Sent: Monday, March 11, 2013 10:56 AM
To: martin.peate@urs.com; tom.pride@urs.com; aci.malmy@comcast.net
Cc: Sugarman, Shelly H CIV; Dragon, Barry CIV; Mullen, Kevin P CTR
Subject: FW: Fort Hamer Project

Here is the latest from the STOF/THPO: It is still the desire of the Seminole Tribe of Florida (STOF) to have a memorial plaque installed in the general area of the Fort.

EVELYN SMART
Environmental Protection Specialist
U.S. Coast Guard Seventh District
Bridge Administration Branch

Tel: (305) 415-6989

From: bradleymueller@semtribe.com [mailto:bradleymueller@semtribe.com]
Sent: Monday, March 11, 2013 10:47 AM
To: Smart, Evelyn CIV
Subject: Fort Hamer Project

Good Morning Evelyn,

I have reviewed our Fort Hamer file and discussed the matter with Dr. Paul Backhouse (THPO), Anne Mullins (Deputy THPO), and others here. The previous THPO, Mr. Bill Steele, was concerned that the role that Fort Hamer played in Seminole history might be forgotten so he proposed that a memorial plaque be installed in the general area of the Fort. It is still the desire of the Seminole Tribe of Florida (STOF) to have such a plaque. The STOF would be happy to discuss this matter with the U.S Coast Guard and to provide you text for the sign. Feel free to email or call me to discuss this further. Meanwhile, I am reviewing the Draft EIS and will provide you comments later today. Thank you for your time.

Regards,
Bradley M. Mueller, M.A., Supervisor

Compliance Section
Tribal Historic Preservation Office
Seminole Tribe of Florida
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 x12245
Cell: 863-227-3692
Fax: 863-902-1117
Email: bradleymueller@semtribe.com
Website: www.stofthpo.com

18 March 2013

Mr. Robert Bendus
Director, Florida Division of Historical Resources
State Historic Preservation Officer
R.A. Gray Building – 4th Floor
500 South Bronough Street
Tallahassee, FL 32399-0250

RE: DHR Project File No.: 2013-00188; *Cultural Resource Assessment Survey, Fort Hamer Bridge EIS, Manatee County, Florida*

Dear Mr. Bendus:

The United States Coast Guard (USCG) received your concurrence letter, dated February 6, 2013, for the Fort Hamer Bridge EIS and your request for additional information. Page 2 of your letter notes the following:

> "However, we note that the historic portion of the golf course (8MA1472) is misplotted on the Florida Master Site File form based on historic aerial photographs. . . Finally our office would appreciate that copies of any additional archival research on Fort Hamer or the Seminole deportation process also be provided to our agency."

In response to this comment, we are providing corrected pages 3c and 4 for the Florida Master Site File (FMSF) form 8MA1472. We are also providing a hard copy of the Seminole deportation documentation and a compact disk (found in a sleeve on the inside back cover of the documentation report) that contains the Fort Hamer archival research.

We are attaching a copy of your concurrence letter for your convenience. If any additional information is needed or you have questions, please do not hesitate to contact Miss Evelyn Smart at (305) 415-6989.

Sincerely,

Barry Dragon
Director, Bridge Program
U.S. Coast Guard

Encl: (1) Page 3c and 4 for FMSF 8MA1472
(2) Documentation Concerning Second Seminole War
(3) CD Fort Hamer Archival Research
(4) SHPO Concurrence Letter February 6, 2013

Copy: Marion Almy, RPA, ACI, Sarasota, Florida
Martin Peate, P.E., URS Corporation South
Bradley M. Mueller, STOF - THPO

U.S. Department of Homeland Security

United States Coast Guard

Commander
Seventh Coast Guard District

909 SE First Avenue
Miami, Florida 33131
Staff Symbol: (dpb)
Phone: (305) 415-6989
Fax: (305) 415-6763
Email: Evelyn.Smart@uscg.mil

16591/3823
Serial: 2275
25 March 2013

Mr. Robert Bendus
Director, Florida Division of Historical Resources
State Historic Preservation Officer
R. A. Gray Building – 4th Floor
500 South Bronough Street
Tallahassee, Florida 32399-0250

Dear Mr. Bendus:

We have received your concurrence letter, dated February 6, 2013, on the Cultural Resource Assessment Survey findings for the proposed construction of a highway bridge across the Manatee River, at Parrish, Manatee County, Florida and your request for additional information. Page 2 of your letter notes the following:

> "However, we note that the historic portion of the golf course (8MA1472) is misplotted on the Florida Master Site File form based on historic aerial photographs. Finally our office would appreciate that copies of any additional archival research on Fort Hamer or the Seminole deportation process also be provided to our agency."

In response to this comment, we are providing corrected pages 3c and 4 for the Florida Master Site File (FMSF) form 8MA1472. We are also providing a hard copy of the Seminole deportation documentation and a compact disk (found in a sleeve on the inside back cover of the documentation report) that contains the Fort Hamer archival research.

We are attaching a copy of your concurrence letter for your convenience. If any additional information is needed or you have questions, please do not hesitate to call me at (305) 415-6989.

Sincerely,

(MISS) EVELYN SMART
Environmental Protection Specialist
U. S. Coast Guard
By direction

Encl: (1) Page 3c and 4 for FMSF 8MA1472
(2) Documentation Concerning Second Seminole War
(3) CD Fort Hamer Archival Research
(4) SHPO Concurrence Letter February 6, 2013

Copy: CG-BRG-2
Dr. Paul Backhouse, STFO - THPO on behalf of Mr. James E. Billie
Martin Peate, P.E., URS Corporation South
Marion Almy, RPA, ACI, Sarasota, Florida

DHR Project File No.: 2013-00188
Cultural Resource Assessment Survey, Fort Hamer Bridge EIS, Manatee County, Florida

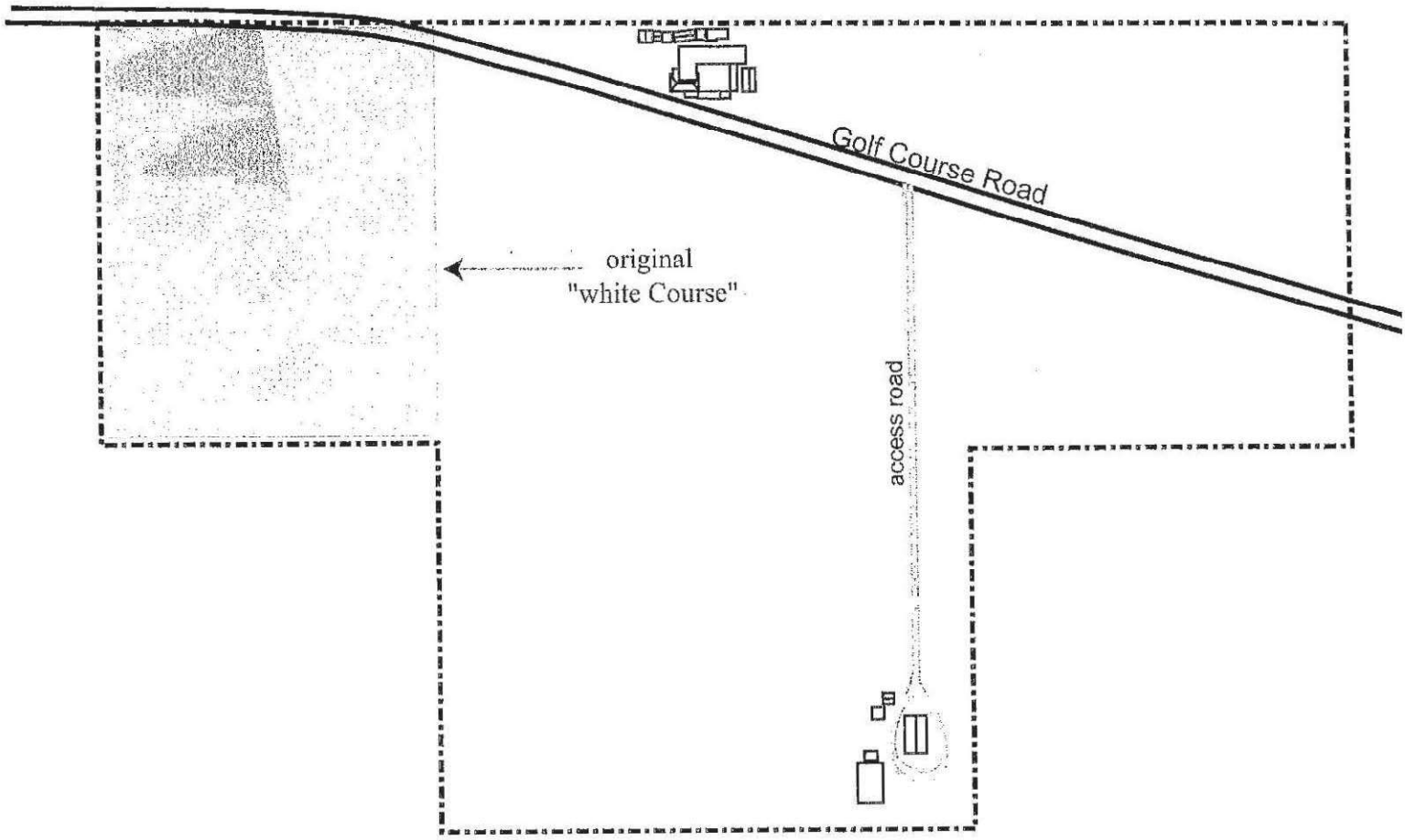
The SHPO requested the two attached pages; they are page corrections for 8MA1472

RESOURCE GROUP FORM

Site #8 MA1472

STREET OR PLAT MAP

14355 Golf Course Road
(Palmetto Pines Golf Course)



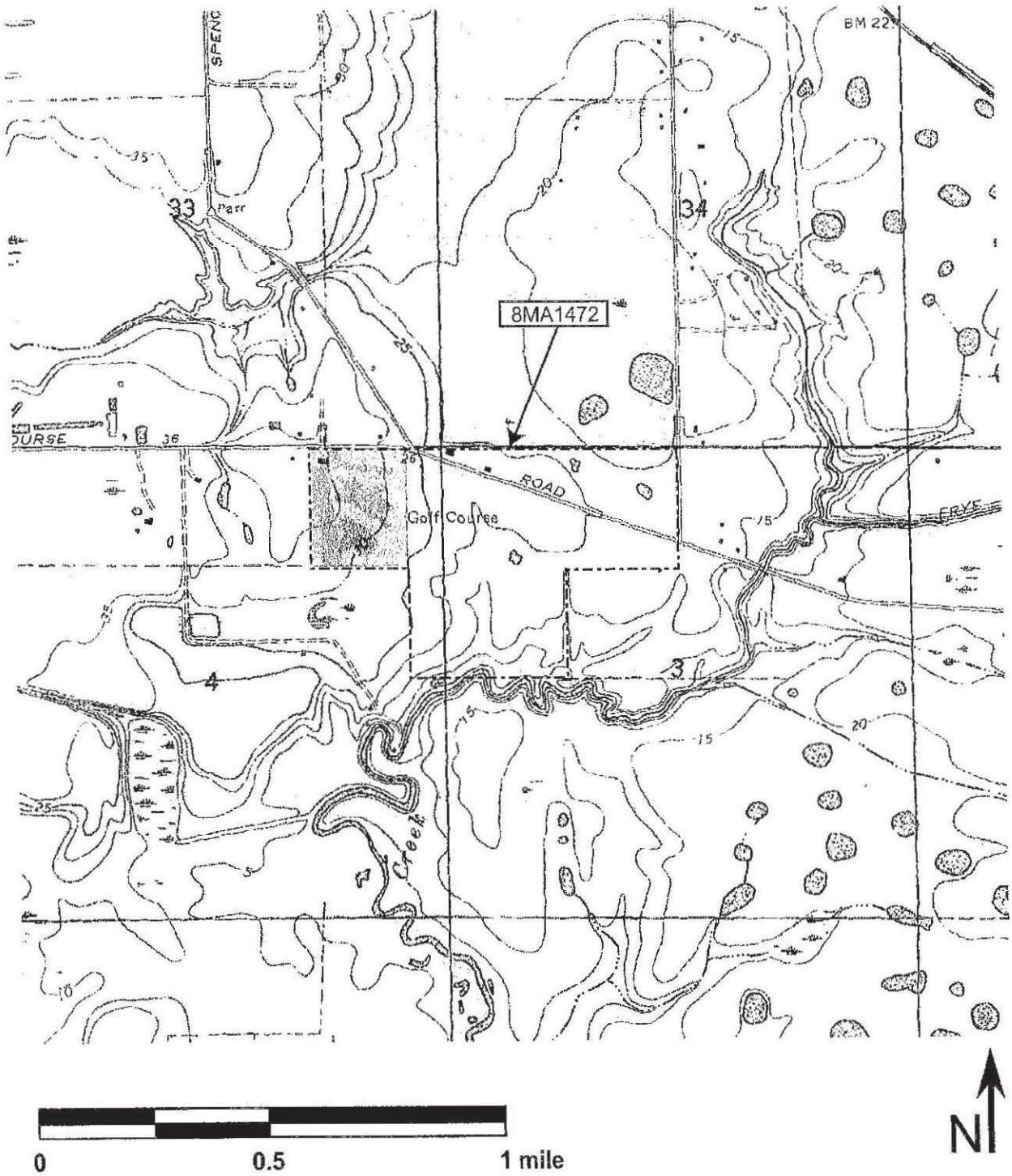
N
Not to scale

RESOURCE GROUP FORM

Site #8 MA1472

USGS MAP

Township 34 South, Range 19 East, Sections 3 and 4
Parrish Fla. 1973



FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Ms. Evelyn Smart
U.S. Department of Homeland Security
United States Coast Guard
909 SE First Avenue
Miami, Florida 33131

April 17, 2013

Re: DHR Project File No.: 2013-01370 / Received by DHR: April 1, 2013
Documentation Concerning Second Seminole War Fort Hamer and the Seminole Deportation, Manatee County, Florida (1849-1850)

Dear Ms. Smart:

Our office received and reviewed the above referenced historical documentation in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, and Chapter 267, *Florida Statutes,* for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP).

Our office would like to thank you and Archaeological Consultants, Inc. (ACI) for forwarding us the Fort Hamer and Seminole Deportation historical documentation that was completed at the request of the Seminole Tribe of Florida during consultation regarding the proposed Fort Hamer Bridge. We have also received the corrected location map for the historic portion of the golf course (8MA1472) recorded during another survey for the bridge project.

For any questions concerning our comments, please contact Rudy Westerman, Historic Preservationist, by electronic mail at Rudy.Westerman@DOS.MyFlorida.com, or by phone at 850.245.6333. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely,

Timothy A. Parsons, DSHPO for

Robert F. Bendus, Director
Division of Historical Resources
and State Historic Preservation Officer

U.S. Department of Homeland Security

United States Coast Guard

Commander
Seventh Coast Guard District

909 S. E. First Avenue
Miami, Fl 33131-3028
Staff Symbol: (dpb)
Phone: (305) 415-6736
Fax: (305) 415-6763
Email: Randall.D.Overton@uscg.mil

16591/3905
Serial: 2296
May 31, 2013

MR. SIA MOLLANAZAR, P.E.
DEPUTY DIRECTOR ENGINEERING SERVICES
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVE. E.
BRADENTON, FL 34208

Mr. Mollanazar:

This letter is to document an Advance Approval determination which was made in 2005 for a bridge built across the Manatee River, mile 21.5, a tributary of the Gulf of Mexico, on Rye Road, Manatee County, Florida.

Based on a determination in 2005, the bridge project across Manatee River did not require a Coast Guard bridge permit and qualified for Advance Approval. In such cases, the clearances provided for high water stages are considered adequate to meet the reasonable needs of navigation (33 CFR 115.70). Although this project did not require a bridge permit other areas of Coast Guard jurisdiction did apply and were complied with; to wit:

a. A waiver for navigational lighting was granted in accordance with 33 CFR 118.

b. "As built" drawings (8 1/2 X 11") showing clearances through the bridge and sufficient data to allow this office to prepare a completion report were submitted to the Coast Guard. Also a photo of the completed bridge was provided for our bridge file and database.

c. The lowest portion of the superstructure of the bridge across the waterway did clear the 100-year flood height elevation.

This exemption does not necessarily apply to future modifications of this bridge or the construction of other bridges along this waterway since waterway usage may change over time.

Increased activity along this waterway could remove the bridge from the Advance Approval category. Please resubmit an updated "Bridge Project Questionnaire" if modification to this bridge is proposed.

Please contact me at 305-415-6736 if you have any questions about this determination.

Sincerely,

RANDALL D OVERTON
Federal Permitting Agent
Bridge Management Specialist
U. S. Coast Guard

U.S. Department of Homeland Security
United States Coast Guard

Commander
Seventh Coast Guard District

909 S. E. First Avenue (Rm 432)
Miami, Fl 33131
Staff Symbol: (dpb)
Phone: (305) 415-6736
Fax: (305) 415-6763
Email: randall.d.overton@uscg.mil

16450
July 24, 2013

U. S. Fish & Wildlife Service
North Florida Ecological Services Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Ms Dawn Jennings:

Through this letter, the U.S. Coast Guard wishes to initiate consultation in accordance with Section 7 of the Endangered Species Act (ESA).

The Coast Guard is the Lead Federal Agency (LFA) for a proposed bridge construction project in Manatee County, Florida. A Wetlands Evaluation Report (WER) and Biological Assessment (BA) were completed in conjunction with the proposed project. The WER and BA were included as appendices D and E of the Draft Environmental Impact Statement (DEIS) for the project (dated June 21, 2013). The DEIS can be found at http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects.asp

Direct link to the WER:
http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects_files/Fort%20Hamer%20DEIS%20June%202013/Appendix_D.pdf
Direct link to the BA:
http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects_files/Fort%20Hamer%20DEIS%20June%202013/Appendix_E.pdf

Subsequent to publication of the DEIS, WER and the BA, in June, further refinements of the project design have necessitated minor revisions to the WER and the BA. The WER supplemental update and BA supplemental update are attached to the email which transmitted this letter.

The DEIS studies three alternatives. In addition to the No Build Alternative, two build alternatives were analyzed; the Fort Hamer Road Alternative, and the Rye Road Alternative. These two build alternatives are depicted on the next page.

Manatee County has submitted a preliminary bridge permit application for the Fort Hamer Alternative as their Locally Preferred Alternative (LPA). Therefore, this consultation request will focus on the impacts reasonably likely to be associated with the Fort Hamer Road Alternative (LPA).

The Fort Hamer Alternative consists of a new two-lane bridge crossing the Manatee River connecting the existing two-lane Upper Manatee River Road with the existing two-lane Fort Hamer Road. The construction limits of this alternative extend from just north of the back entrance of the Waterlefe subdivision to the north side of the Manatee River, a total of approximately 1.4 miles. The proposed bridge length is 2,570 feet. The study area for this alternative extends south to SR 64 and north to US 301 (6 miles) because of the increased traffic between these points that would result from this alternative.

Wetland and Essential Fish Habitat Impact:

Permanent unavoidable wetland impacts of the LPA occur in four wetland sites and total 4.34 acres (ac) (2.05 ac fill, 1.01 ac shading, 1.28 ac secondary); see Supplemental WER Update 2. The impacted wetland types include scrub, mixed hardwood swamp, salt marsh, mangrove, and stream (bottomland).

Temporary impacts to wetlands: It is anticipated that a temporary work trestle would be constructed across portions of the Manatee River to facilitate construction of the new bridge. It is anticipated that the temporary trestle would be 28 feet wide and would temporarily impact approximately 0.62 acres of wetland due to shading. Upon completion of construction the work trestle would be removed in its entirety.

Impacts to Essential Fish Habitat (EFH) with the LPA would total 2.91 ac of EFH (1.01 ac shading and 0.15 ac fill), principally to saltmarsh and bottomland, see Supplemental WER Update 9.

Compensatory wetland mitigation described in the proposed conceptual mitigation plan consists of onsite wetland creation by excavation and planting at three riverbank locations to provide approximately 2.2 ac of mixed hardwood swamp, 2.1 ac of tidal saltmarsh, and 0.2 ac of mangrove wetlands.

Proposed Construction Methodology and Potential Impacts:

(Excerpted from the Supplemental Update to BA– Update 1)
The Manatee River provides suitable habitat for the West Indian manatee in the Fort Hamer Alternative. Although no manatees were observed during field reviews, FNAI, FWS, and FWC have indicated that manatees are known to frequent the Manatee River and local residents have reported sightings of manatees in the vicinity of the Fort Hamer Alternative. The Manatee River within both build alternatives is designated as Critical Habitat for the manatee below the Lake Manatee Dam.

Potential threats to the manatee as a result of implementation of the Fort Hamer Alternative include collision with construction vessels and acoustic impacts during construction. The segment of river immediately downstream of the proposed location of the Fort Hamer Alternative Bridge is a posted "Idle Speed/No Wake" zone. In addition to observing all posted speed zones in the river, all construction vessels will be required to operate at "Idle Speed/No Wake" speeds within 0.5-mile upstream and downstream of the construction site. Additionally, the selected construction contractor will be required to implement the *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the river.

Acoustical effects on marine mammals, including manatees and dolphins – both of which have the potential to occur within the Fort Hamer Alternative Study Area, are an increasing concern with coastal and marine construction activities. Acoustic sources during bridge construction include blasting, boat motors, and installation of bridge piles. Blasting can be a significant acoustic source during bridge demolition; however, since demolition is not part of the Fort Hamer Alternative, no blasting will occur.

The use of motorized tugboats and support vessels will be required for construction of the Fort Hamer Alternative. However, the commitment to operate all vessels at "Idle Speed/No Wake" speeds will minimize potential motorized noise impacts to manatees and other marine fauna present in the river.

The installation of bridge pilings with hydraulic hammers (i.e., pile-driving) can generate acoustic vibrations within the water column. Although detailed construction methodologies for the Fort Hamer Alternative have not been developed, it is likely that many, if not all, of the bridge support pilings would be driven with a hydraulic hammer. A total of 54 24-in^2 pre-

stressed concrete pilings will be installed in the river channel, and an additional 137 24-in^2 concrete pilings will be installed in the adjacent wetlands and shallow embayment between Wetland 3 and Wetland 4 (part of River 1). To minimize potential adverse effects to manatees and dolphins observers will be in place to observe the river during all pile-driving operations. If any manatees or dolphins are observed in the river within a 0.25-mile radius of the hammer location, pile-driving operations will cease until the animal(s) has exited the 0.25-mile buffer on its own. To facilitate observation of manatees and dolphins (and to accommodate nearby human residents), all pile-driving activities will be conducted during daylight hours only. Finally, floating turbidity barriers with skirt lengths sufficient to reach the river bottom (approximately 12 feet maximum) will be placed around each piling during pile-driving operations. In addition to controlling turbidity, the barriers will lessen, though not eliminate, the acoustical vibrations generated during pile driving. With these commitments, it has been determined that the Fort Hamer Alternative "may affect, but is not likely to adversely affect" (MANLAA) the West Indian manatee.

Listed Species Impacts (information excerpted from BA):

Plants

Although federally- and state-listed plant species have been documented within Manatee County, none have been documented within 1 mile of either alternative and none were observed during field reviews. Based on this information, it has been determined that both the will have no effect on any federally- or state-listed plant species.

Fish

Mangrove Rivulus
State Species of Special Concern
While suitable habitat exists for the mangrove rivulus within the LPA, none were observed during the April 2010 field reviews and none have been documented within 1 mile of the alternative. Total impacts (shading, fill, and secondary) to mangrove habitat will be 0.20 acre. The conceptual wetlands mitigation for the project will result in the creation of 0.20 acres of mangrove habitat. (See the Wetlands Evaluation Report in Appendix D of the DEIS for a description of the proposed conceptual mitigation.) Therefore, a determination of MANLAA was made for the mangrove rivulus.

Reptiles and Amphibians:

Eastern Indigo Snake
Federally Threatened
While no eastern indigo snakes were observed during field reviews, suitable habitat for this species does exist within both build alternatives. The FWS and FWC approved standard protection measures for the eastern indigo snake (Appendix E of the BA) will be implemented during the clearing and construction phases for the selected alternative. As a result of this commitment, a determination of MANLAA was made for the eastern indigo snake.

Gopher Tortoise and Commensal Species
State Threatened/Species of Special Concern
Suitable habitat is available within the LPA for the gopher tortoise (state-listed as Threatened), Florida mouse (SSC), gopher frog (SSC), and pine snake (SSC). Gopher tortoise burrows were observed north of the Manatee River adjacent to the. The Florida mouse, gopher frog, and pine snake have not been documented within 1 mile of the LPA and none were observed during field reviews. Approximately 17 acres of suitable habitat (uplands) within the LPA construction limits will need to be surveyed for the presence of gopher tortoise burrows prior to construction. If gopher tortoises or their burrows are found in or within 25 feet of the construction limits of the selected alternative, Manatee County will coordinate with the FWC to secure permits needed to relocate the gopher tortoises and associated commensal species prior to construction. With this commitment, a determination of MANLAA was made for the gopher tortoise, Florida mouse, gopher frog, and pine snake.

Birds

Florida Scrub Jay
Federally Threatened
Suitable habitat for the Florida scrub jay does not exist within the Study Area and no scrub jays are reported within the study area. For these reasons, implementation of the LPA will have no effect on the Florida scrub jay.

Other Wading Birds
State Species of Special Concern
No wading bird rookeries are located within either alternative; however, the little blue heron, reddish egret, snowy egret, limpkin, tricolored heron, white ibis, and roseate spoonbill have the potential to forage in the drainage ditches and wetlands within both of the alternatives. A little blue heron, white ibis, snowy egret, and tricolored heron were observed in the LPA. The primary concern for impacts to these wading birds is the loss of habitat (wetlands) for foraging. All wetland impacts will be mitigated to prevent a net loss of wetland functions and values. Because lost foraging habitat would be replaced through wetland mitigation, a determination of no effect was made for these wading bird species.

Florida Burrowing Owl
State Species of Special Concern
Potentially suitable nesting and foraging habitat for the Florida burrowing owl exists within the limits of both build alternatives. However, no burrowing owls or their burrows were observed during field reviews and none have been documented within 1 mile of the two build alternatives. To avoid potential impacts to this species, Manatee County will resurvey appropriate upland habitats within the study area of the selected alternative for burrowing owls or their burrows prior to construction. If any burrows are located in the study area, Manatee County will coordinate with FWC to develop and implement the appropriate protection criteria prior to construction. With this commitment, a determination of no effect was made for the Florida burrowing owl.

Crested Caracara
Federally Threatened
The LPA is not located within the FWS consultation area for the crested caracara; however, suitable foraging and marginal nesting habitat exist. No crested caracara were observed during field reviews and none have been documented within 1 mile of this alternative. A determination has been made that the LPA will have no effect on the crested caracara.

Southeastern American Kestrel
State Threatened
While suitable nesting and foraging habitat exists for the southeastern American kestrel within the limits of both alternatives, no kestrels were observed during the field reviews. Due to its mobility and ability to use adjacent areas for nesting and foraging, it has been determined that LPA will have no effect the southeastern American kestrel.

Florida Sandhill Crane
State Threatened
Suitable nesting and foraging habitat is available within both build alternatives for the Florida sandhill crane. Sandhill cranes were observed within both build alternatives during field reviews. For both of the alternatives, wetland impacts would be mitigated to prevent a net loss of wetland functions and values. In addition, Manatee County will resurvey the selected alternative's study area for Florida sandhill crane nests prior to construction. If Florida sandhill crane nests are found within the study area, Manatee County will coordinate with the FWC to ensure project construction will not adversely impact this species. With this commitment, a determination of no effect was made for the Florida sandhill crane.

Wood Stork
Federally Endangered
Suitable nesting and foraging habitat for the wood stork is available within both build alternatives. Based on FWS data (2010a), both alternatives are located within the 15-mile CFA of two wood stork rookeries (see Figure 5). In order to make a determination of the build alternatives' potential effects on the wood stork, the construction impacts resulting from both build alternatives were assessed using the Wood Stork Effect Determination Key (FWS, 2010b). A review of FNAI and FWS information indicates that neither alternative is located within 2,500 feet of an active wood stork colony site; however, both alternatives are located within the CFA of two active wood stork nesting colonies. Either build alternative would impact more than 0.5 acre of suitable foraging habitat (SFH) (0.5 acre is the threshold for a "not likely to adversely affect" determination). The LPA would result in fill and shading impacts to 4.68 acres of SFH. To minimize adverse effects to the wood stork, the FWS recommends compensation be provided for impacts to foraging habitat (FWS, 2010b). Wetlands offered as compensation should be of the same hydroperiod and located within the CFAs of the affected wood stork colonies. To compensate for the loss of SFH, implementation of the selected alternative 1) will include creation of habitat and foraging function equal, at a minimum, to that being impacted; 2) will not be contrary to the FWS Habitat Management Guidelines for the Wood Stork in the Southeast Region (Ogden, 1990), and 3) will be in accordance with the Clean Water Act, Section 404(b)1 guidelines. Based on this assessment, and with this commitment, a determination of MANLAA was made for the wood stork.

Brown Pelican
State Species of Special Concern
Suitable nesting and foraging habitat exists for the brown pelican within the LPA and brown pelicans were observed flying over this alternative during the April 2010 field reviews. However, due to its mobility and ability to use adjacent surface waters and proposed mitigation sites for foraging, it has been determined that the LPA will have no effect on the brown pelican. Suitable nesting and foraging habitat does not exist for the brown pelican within the Rye Road Alternative. Therefore, it has been determined that the Rye Road Alternative will have no effect on the brown pelican.

Mammals:

Florida Mouse
See description under Gopher Tortoise and Commensal Species above.

Sherman's Fox Squirrel
State Species of Special Concern
While suitable nesting and foraging habitat exists for the Sherman's fox squirrel within both build alternatives, none were observed during the field reviews and none have been documented within 1 mile of either alternative. Due to its mobility and ability to use adjacent upland habitats for nesting and foraging, it has been determined that both the Fort Hamer Alternative and the Rye Road Alternative will have no effect on the Sherman's fox squirrel.

West Indian Manatee
Federally Endangered
The Manatee River provides suitable habitat for the West Indian manatee in the LPA. Though no manatees were observed during field reviews, FNAI, FWS, and FWC have indicated that manatees are known to frequent the Manatee River and local residents have reported sightings of manatees in the vicinity of the LPA. The Manatee River within both alternatives is designated as Critical Habitat for the manatee below the Lake Manatee Dam. To minimize potential adverse impacts to the manatee as a result of construction of the LPA, Manatee County will utilize the FWS and FWC approved *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the Manatee River. Manatee County will also coordinate with the FWS and the FWC to determine the appropriate, site-specific manatee protection measures to be implemented during construction (see above). With these commitments, a determination of MANLAA was made for the West Indian manatee

Proposed Avoidance, Minimization, Mitigation Measures:

Eastern Indigo Snake
Federally Threatened
While no eastern indigo snakes were observed during field reviews, suitable habitat for this species does exist within both build alternatives. The FWS and FWC approved standard protection measures for the eastern indigo snake (Appendix E-of the BA) will be implemented during the clearing and construction phases for the selected alternative.

West Indian Manatee
Federally Endangered
The Manatee River provides suitable habitat for the West Indian manatee in the LPA. The segment of river immediately downstream of the proposed bridge location is a posted "Idle Speed/No Wake" zone. In addition to observing all posted speed zones in the river, all construction vessels will be required to operate at "Idle Speed/No Wake" speeds within 0.5-mile upstream and downstream of the construction site. Additionally, the selected construction contractor will be required to implement the *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the river.

Acoustical effects on marine mammals, including manatees and dolphins – both of which have the potential to occur within the LPA Study Area, are an increasing concern with coastal and marine construction activities. Acoustic sources during bridge construction may include blasting, boat motors, and installation of bridge supports (pile-driving). Blasting can be a significant acoustic source during bridge demolition; however, since demolition is not part of the proposed action, no blasting will occur.

The use of motorized tugboats and support vessels will be required for construction of the LPA. However, the commitment to operate all vessels at "Idle Speed/No Wake" speeds will minimize potential motorized noise impacts to manatees and other marine fauna present in the river. To minimize potential adverse effects to manatees and dolphins observers will be in place to observe the river during all pile-driving operations. If any manatees or dolphins are observed in the river within a 0.25-mile radius of the hammer location, pile-driving operations will cease until the animal(s) has exited the 0.25-mile buffer on its own. To facilitate observation of manatees and dolphins (and to accommodate nearby human residents), all pile-driving activities will be conducted during daylight hours only. Also, floating turbidity barriers with skirt lengths sufficient to reach the river bottom (approximately 12 feet maximum) will be placed around each piling during pile-driving operations. In addition to controlling turbidity, the barriers will lessen, though not eliminate, the acoustical vibrations generated during pile driving.

Wood Stork
Federally Endangered
To compensate for the loss of SFH, implementation of the selected alternative 1) will include creation of habitat and foraging function equal, at a minimum, to that being impacted; 2) will not be contrary to the FWS Habitat Management Guidelines for the Wood Stork in the Southeast Region (Ogden, 1990), and 3) will be in accordance with the Clean Water Act, Section 404(b)1 guidelines.

Gopher Tortoise and Commensal Species
State Threatened/Species of Special Concern
Suitable habitat is available within the LPA for the gopher tortoise (state-listed as threatened), Florida mouse (SSC), gopher frog (SSC), and pine snake (SSC). Gopher tortoise burrows were observed north of the Manatee River adjacent to the LPA. The Florida mouse, gopher frog, and pine snake have not been documented within 1 mile of the LPA, and none were observed during field reviews. Approximately 17 acres of suitable habitat (uplands) within the LPA construction

limits will need to be surveyed for the presence of gopher tortoise burrows prior to construction. If gopher tortoises or their burrows are found in or within 25 feet of the construction limits of the selected alternative, Manatee County will coordinate with the FWC to secure permits needed to relocate the gopher tortoises and associated commensal species prior to construction

Summary of Coast Guard Determinations:

Based on the information contained in the BA and WER, including the supplemental updates, the Coast Guard determines:

For Federally-listed species, the listed species effect determination for the LPA (Fort Hamer Road Alternative) includes "may affect, but is not likely to adversely affect" or MANLAA, for three Federally-listed faunal species (Eastern indigo snake, West Indian manatee [Critical Habitat], and wood stork). A determination of No Effect was applied to one floral species and three avian species (Florida goldenaster, Florida scrub jay, Florida grasshopper sparrow, and crested caracara). See Appendix E (BA), Table 8, page E-49.

The listed species effect determination for this alternative includes "may affect, but is not likely to adversely affect" MANLAA for four Florida state-listed faunal species (gopher tortoise, pine snake, Florida mouse, and gopher frog). A determination of No Effect was applied to nine floral species and thirteen faunal species. See Appendix E (BA), Table 8, page E-49, 50.

Sincerely,

OVERTON.RANDALL.D.1111176970

RANDALL D. OVERTON
Bridge Management Specialist
U.S. Coast Guard

Enclosure: Wetland Evaluation Report (WER) as an embedded link
Biological Assessment (BA) as an embedded link
WER Supplemental update as an email attachment
BA Supplemental update as an email attachment

Copy: CGHQ-BRG-2 as an email

DEPARTMENT OF HOMELAND SECURITY
U.S. COAST GUARD

PROPOSED NEW BRIDGE ACROSS THE MANATEE RIVER, MILE 15.0,
AT PARRISH, MANATEE COUNTY, FLORIDA

SUPPLEMENTAL UPDATE

TO

BIOLOGICAL ASSESSMENT (JUNE 2013)

SUPPLEMENT UPDATE PREPARED
JULY 19, 2013

OVERVIEW: In June 2013 Manatee County, in conjunction with the United States Coast Guard, prepared a Draft Environmental Impact Statement (DEIS) to document a study of proposed improvements to north/south traffic movements in eastern Manatee County. For the purposes of the DEIS, two build alternatives were evaluated (in addition to a No-Build Alternative). Appendix E of the DEIS contains a Biological Assessment (BA) which describes the habitats and listed species potentially present within each build alternative and the effects that implementation of each build alternative would have on listed species and critical habitat. Since publication of the DEIS and BA, additional design details of the preferred alternative (the Fort Hamer Alternative) have become available and allow refinement of the habitat impacts and effects that would result from implementation of the Fort Hamer Alternative. This Supplemental Update provides construction methodologies (as known to-date) and a revised description of habitat impacts and effects on the West Indian manatee.

Update 1: Section 5.5, page 5-5 and 5-6. The discussion of the West Indian manatee is revised as follows:

West Indian Manatee

Federally Endangered

The Manatee River provides suitable habitat for the West Indian manatee in the Fort Hamer Alternative. Although no manatees were observed during field reviews, FNAI, FWS, and FWC have indicated that manatees are known to frequent the Manatee River and local residents have reported sightings of manatees in the vicinity of the Fort Hamer Alternative. The Manatee River within both build alternatives is designated as Critical Habitat for the manatee below the Lake Manatee Dam.

Potential threats to the manatee as a result of implementation of the Fort Hamer Alternative include collision with construction vessels and acoustic impacts during construction. The segment of river immediately downstream of the proposed location of the Fort Hamer Alternative Bridge is a posted "Idle Speed/No Wake" zone. In addition to observing all posted speed zones in the river, all construction vessels will be required to operate at "Idle Speed/No Wake" speeds within 0.5-mile upstream and downstream of the construction site. Additionally, the selected construction contractor will be required to implement the *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the river.

Acoustical effects on marine mammals, including manatees and dolphins – both of which have the potential to occur within the Fort Hamer Alternative Study Area, are an increasing concern with coastal and marine construction activities. Acoustic sources during bridge construction include blasting, boat motors, and installation of bridge piles. Blasting can be a significant acoustic source during bridge demolition; however, since demolition is not part of the Fort Hamer Alternative, no blasting will occur.

The use of motorized tugboats and support vessels will be required for construction of the Fort Hamer Alternative. However, the commitment to operate all vessels at "Idle Speed/No Wake" speeds will minimize potential motorized noise impacts to manatees and other marine fauna present in the river.

The installation of bridge pilings with hydraulic hammers (i.e., pile-driving) can generate acoustic vibrations within the water column. Although detailed construction methodologies for the Fort Hamer Alternative have not been developed, it is likely that many, if not all, of the bridge support pilings would be driven with a hydraulic hammer. A total of 54 24-in^2 prestressed concrete pilings will be installed in the river channel. An additional 137 24-in^2 concrete pilings will be installed in the adjacent wetlands and shallow embayment between Wetland 3 and Wetland 4. To minimize potential adverse effects to manatees and dolphins observers will be in place to observe the river during all pile-driving operations. If any manatees or dolphins are observed in the river within a 0.25-mile radius of the hammer location, pile-driving operations will cease until the animal(s) has exited the 0.25-mile buffer on its own. To facilitate observation of manatees and dolphins (and to accommodate nearby human residents), all pile-driving activities will be conducted during daylight hours only. Finally, floating turbidity barriers with

skirt lengths sufficient to reach the river bottom (approximately 12 feet maximum) will be placed around each piling during pile-driving operations. In addition to controlling turbidity, the barriers will lesson, though not eliminate, the acoustical vibrations generated during pile driving. With these commitments, it has been determined that the Fort Hamer Alternative "may affect, but is not likely to adversely affect" the West Indian manatee.

With the Rye Road Alternative, it is very unlikely for manatees to inhabit the river adjacent to the Rye Road Bridge due to the shallow nature and narrow confines of the river at this location. Due to these restrictions, no water-borne vessels would be used to construct the Rye Road Alternative Bridge; all construction would be land-based. For these reasons, it has been determined that the Rye Road Alternative "may affect, but is not likely to adversely affect" the West Indian manatee.

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Wednesday, July 24, 2013 10:47 AM
To: Pride, Tom; Peate, Martin
Subject: FW: ESA Section 7 Consultation Request and EFH Consultation Request for proposed bridge construction Manatee River
Attachments: NMFS ESA Section 7and EFH consultation request.pdf; WER Supplemental Update_19July2013.pdf; BA Supplemental Update_19July2013.pdf

FYSA - I sent consultation request to NMFS

-----Original Message-----
From: Overton, Randall D CIV
Sent: Wednesday, July 24, 2013 10:46 AM
To: 'nmfs.ser.esa.consultations@noaa.gov'
Cc: Sugarman, Shelly CIV; Dragon, Barry CIV; Mullen, Kevin P CTR
Subject: ESA Section 7 Consultation Request and EFH Consultation Request for proposed bridge construction Manatee River

Please find attached a request for ESA Section 7 and EFH Consultations for a proposed bridge construction project across the Manatee River. The proposed new bridge would be constructed across the Manatee River approximately 15 miles upstream from the mouth of the river. The bridge and associated roadway would be between Upper Manatee River Road (south of the Manatee River) to Fort Hamer Road (north of the Manatee River), near Parrish, Manatee County, Florida. Latitude 27o 31.165' N, Longitude 82o 25.720' W.

The attached letter " NMFS ESA Section 7and EFH consultation request" contains web links to the Wetland Evaluation Report (WER) and Biological Opinion (BA) prepared for the proposed project. WER and BA supplemental updates which slightly refine the WER and BA are attached to this email.

Randall Overton
Federal Permit Agent USCG
909 SE 1st Ave Suite 432
Miami, Fl 33131
(305) 205-0795 Cell
(305) 415-6736 Office

U.S. Department of Homeland Security
United States Coast Guard

Commander
Seventh Coast Guard District

909 S. E. First Avenue (Rm 432)
Miami, Fl 33131
Staff Symbol: (dpb)
Phone: (305) 415-6736
Fax: (305) 415-6763
Email: randall.d.overtont@uscg.mil

16450
July 24, 2013

National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701-5505

Dear Sir or Madam:

Through this letter, the U.S. Coast Guard wishes to initiate consultation in accordance with Section 7 of the Endangered Species Act (ESA) and to initiate consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) for Essential Fish Habitat.

The Coast Guard is the Lead Federal Agency (LFA) for a proposed bridge construction project in Manatee County, Florida. A Wetlands Evaluation Report (WER) and Biological Assessment (BA) were completed in conjunction with the proposed project. The WER and BA were included as appendices D and E of the Draft Environmental Impact Statement (DEIS) for the project (dated June 21, 2013). The DEIS can be found at http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects.asp

Direct link to the WER:
http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects_files/Fort%20Hamer%20DEIS%20June%202013/Appendix_D.pdf
Direct link to the BA:
http://www.uscg.mil/hq/cg5/cg551/CGLeadProjects_files/Fort%20Hamer%20DEIS%20June%202013/Appendix_E.pdf

Subsequent to publication of the DEIS, WER and the BA, in June, further refinements of the project design have necessitated minor revisions to the WER and the BA. The WER supplemental update and BA supplemental update are attached to the email which transmitted this letter.

The DEIS studies three alternatives. In addition to the No Build Alternative, two build alternatives were analyzed; the Fort Hamer Road Alternative, and the Rye Road Alternative. These two build alternatives are depicted on the next page.

Manatee County has submitted a preliminary bridge permit application for the Fort Hamer Alternative as their Locally Preferred Alternative (LPA). Therefore, this consultation request will focus on the impacts reasonably likely to be associated with the Fort Hamer Road Alternative (LPA).

The Fort Hamer Alternative consists of a new two-lane bridge crossing the Manatee River connecting the existing two-lane Upper Manatee River Road with the existing two-lane Fort Hamer Road. The construction limits of this alternative extend from just north of the back entrance of the Waterlefe subdivision to the north side of the Manatee River, a total of approximately 1.4 miles. The proposed bridge length is 2,570 feet. The study area for this alternative extends south to SR 64 and north to US 301 (6 miles) because of the increased traffic between these points that would result from this alternative.

Wetland and Essential Fish Habitat Impact:

Permanent unavoidable wetland impacts of the LPA occur in four wetland sites and total 4.34 acres (ac) (2.05 ac fill, 1.01 ac shading, 1.28 ac secondary); see Supplemental WER Update 2. The impacted wetland types include scrub, mixed hardwood swamp, salt marsh, mangrove, and stream (bottomland).

Temporary impacts to wetlands: It is anticipated that a temporary work trestle would be constructed across portions of the Manatee River to facilitate construction of the new bridge. It is anticipated that the temporary trestle would be 28 feet wide and would temporarily impact approximately 0.62 acres of wetland due to shading. Upon completion of construction the work trestle would be removed in its entirety.

Impacts to Essential Fish Habitat (EFH) with the LPA would total 2.91 ac of EFH (1.01 ac shading and 0.15 ac fill), principally to saltmarsh and bottomland, see Supplemental WER Update 9.

Compensatory wetland mitigation described in the proposed conceptual mitigation plan consists of onsite wetland creation by excavation and planting at three riverbank locations to provide approximately 2.2 ac of mixed hardwood swamp, 2.1 ac of tidal saltmarsh, and 0.2 ac of mangrove wetlands.

Proposed Construction Methodology and Potential Impacts:

(Excerpted from the Supplemental Update to BA– Update 1)
The Manatee River provides suitable habitat for the West Indian manatee in the Fort Hamer Alternative. Although no manatees were observed during field reviews, FNAI, FWS, and FWC have indicated that manatees are known to frequent the Manatee River and local residents have reported sightings of manatees in the vicinity of the Fort Hamer Alternative. The Manatee River within both build alternatives is designated as Critical Habitat for the manatee below the Lake Manatee Dam.

Potential threats to the manatee as a result of implementation of the Fort Hamer Alternative include collision with construction vessels and acoustic impacts during construction. The segment of river immediately downstream of the proposed location of the Fort Hamer Alternative Bridge is a posted "Idle Speed/No Wake" zone. In addition to observing all posted speed zones in the river, all construction vessels will be required to operate at "Idle Speed/No Wake" speeds within 0.5-mile upstream and downstream of the construction site. Additionally, the selected construction contractor will be required to implement the *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the river.

Acoustical effects on marine mammals, including manatees and dolphins – both of which have the potential to occur within the Fort Hamer Alternative Study Area, are an increasing concern with coastal and marine construction activities. Acoustic sources during bridge construction include blasting, boat motors, and installation of bridge piles. Blasting can be a significant acoustic source during bridge demolition; however, since demolition is not part of the Fort Hamer Alternative, no blasting will occur.

The use of motorized tugboats and support vessels will be required for construction of the Fort Hamer Alternative. However, the commitment to operate all vessels at "Idle Speed/No Wake" speeds will minimize potential motorized noise impacts to manatees and other marine fauna present in the river.

The installation of bridge pilings with hydraulic hammers (i.e., pile-driving) can generate acoustic vibrations within the water column. Although detailed construction methodologies for the Fort Hamer Alternative have not been developed, it is likely that many, if not all, of the bridge support pilings would be driven with a hydraulic hammer. A total of 54 24-in^2 pre-

stressed concrete pilings will be installed in the river channel, and an additional 137 24-in^2 concrete pilings will be installed in the adjacent wetlands and shallow embayment between Wetland 3 and Wetland 4 (part of River 1). To minimize potential adverse effects to manatees and dolphins observers will be in place to observe the river during all pile-driving operations. If any manatees or dolphins are observed in the river within a 0.25-mile radius of the hammer location, pile-driving operations will cease until the animal(s) has exited the 0.25-mile buffer on its own. To facilitate observation of manatees and dolphins (and to accommodate nearby human residents), all pile-driving activities will be conducted during daylight hours only. Finally, floating turbidity barriers with skirt lengths sufficient to reach the river bottom (approximately 12 feet maximum) will be placed around each piling during pile-driving operations. In addition to controlling turbidity, the barriers will lessen, though not eliminate, the acoustical vibrations generated during pile driving. With these commitments, it has been determined that the Fort Hamer Alternative "may affect, but is not likely to adversely affect" (MANLAA) the West Indian manatee.

Listed Species Impacts (information excerpted from BA):

Plants

Although federally- and state-listed plant species have been documented within Manatee County, none have been documented within 1 mile of either alternative and none were observed during field reviews. Based on this information, it has been determined that both the will have no effect on any federally- or state-listed plant species.

Fish

Mangrove Rivulus
State Species of Special Concern
While suitable habitat exists for the mangrove rivulus within the LPA, none were observed during the April 2010 field reviews and none have been documented within 1 mile of the alternative. Total impacts (shading, fill, and secondary) to mangrove habitat will be 0.20 acre. The conceptual wetlands mitigation for the project will result in the creation of 0.20 acres of mangrove habitat. (See the Wetlands Evaluation Report in Appendix D of the DEIS for a description of the proposed conceptual mitigation.) Therefore, a determination of MANLAA was made for the mangrove rivulus.

Reptiles and Amphibians:

Eastern Indigo Snake
Federally Threatened
While no eastern indigo snakes were observed during field reviews, suitable habitat for this species does exist within both build alternatives. The FWS and FWC approved standard protection measures for the eastern indigo snake (Appendix E of the BA) will be implemented during the clearing and construction phases for the selected alternative. As a result of this commitment, a determination of MANLAA was made for the eastern indigo snake.

Gopher Tortoise and Commensal Species
State Threatened/Species of Special Concern
Suitable habitat is available within the LPA for the gopher tortoise (state-listed as Threatened), Florida mouse (SSC), gopher frog (SSC), and pine snake (SSC). Gopher tortoise burrows were observed north of the Manatee River adjacent to the. The Florida mouse, gopher frog, and pine snake have not been documented within 1 mile of the LPA and none were observed during field reviews. Approximately 17 acres of suitable habitat (uplands) within the LPA construction limits will need to be surveyed for the presence of gopher tortoise burrows prior to construction. If gopher tortoises or their burrows are found in or within 25 feet of the construction limits of the selected alternative, Manatee County will coordinate with the FWC to secure permits needed to relocate the gopher tortoises and associated commensal species prior to construction. With this commitment, a determination of MANLAA was made for the gopher tortoise, Florida mouse, gopher frog, and pine snake.

Birds

Florida Scrub Jay
Federally Threatened
Suitable habitat for the Florida scrub jay does not exist within the Study Area and no scrub jays are reported within the study area. For these reasons, implementation of the LPA will have no effect on the Florida scrub jay.

Other Wading Birds
State Species of Special Concern
No wading bird rookeries are located within either alternative; however, the little blue heron, reddish egret, snowy egret, limpkin, tricolored heron, white ibis, and roseate spoonbill have the potential to forage in the drainage ditches and wetlands within both of the alternatives. A little blue heron, white ibis, snowy egret, and tricolored heron were observed in the LPA. The primary concern for impacts to these wading birds is the loss of habitat (wetlands) for foraging. All wetland impacts will be mitigated to prevent a net loss of wetland functions and values. Because lost foraging habitat would be replaced through wetland mitigation, a determination of no effect was made for these wading bird species.

Florida Burrowing Owl
State Species of Special Concern
Potentially suitable nesting and foraging habitat for the Florida burrowing owl exists within the limits of both build alternatives. However, no burrowing owls or their burrows were observed during field reviews and none have been documented within 1 mile of the two build alternatives. To avoid potential impacts to this species, Manatee County will resurvey appropriate upland habitats within the study area of the selected alternative for burrowing owls or their burrows prior to construction. If any burrows are located in the study area, Manatee County will coordinate with FWC to develop and implement the appropriate protection criteria prior to construction. With this commitment, a determination of no effect was made for the Florida burrowing owl.

Crested Caracara
Federally Threatened
The LPA is not located within the FWS consultation area for the crested caracara; however, suitable foraging and marginal nesting habitat exist. No crested caracara were observed during field reviews and none have been documented within 1 mile of this alternative. A determination has been made that the LPA will have no effect on the crested caracara.

Southeastern American Kestrel
State Threatened
While suitable nesting and foraging habitat exists for the southeastern American kestrel within the limits of both alternatives, no kestrels were observed during the field reviews. Due to its mobility and ability to use adjacent areas for nesting and foraging, it has been determined that LPA will have no effect the southeastern American kestrel.

Florida Sandhill Crane
State Threatened
Suitable nesting and foraging habitat is available within both build alternatives for the Florida sandhill crane. Sandhill cranes were observed within both build alternatives during field reviews. For both of the alternatives, wetland impacts would be mitigated to prevent a net loss of wetland functions and values. In addition, Manatee County will resurvey the selected alternative's study area for Florida sandhill crane nests prior to construction. If Florida sandhill crane nests are found within the study area, Manatee County will coordinate with the FWC to ensure project construction will not adversely impact this species. With this commitment, a determination of no effect was made for the Florida sandhill crane.

Wood Stork
Federally Endangered
Suitable nesting and foraging habitat for the wood stork is available within both build alternatives. Based on FWS data (2010a), both alternatives are located within the 15-mile CFA of two wood stork rookeries (see Figure 5). In order to make a determination of the build alternatives' potential effects on the wood stork, the construction impacts resulting from both build alternatives were assessed using the Wood Stork Effect Determination Key (FWS, 2010b). A review of FNAI and FWS information indicates that neither alternative is located within 2,500 feet of an active wood stork colony site; however, both alternatives are located within the CFA of two active wood stork nesting colonies. Either build alternative would impact more than 0.5 acre of suitable foraging habitat (SFH) (0.5 acre is the threshold for a "not likely to adversely affect" determination). The LPA would result in fill and shading impacts to 4.68 acres of SFH. To minimize adverse effects to the wood stork, the FWS recommends compensation be provided for impacts to foraging habitat (FWS, 2010b). Wetlands offered as compensation should be of the same hydroperiod and located within the CFAs of the affected wood stork colonies. To compensate for the loss of SFH, implementation of the selected alternative 1) will include creation of habitat and foraging function equal, at a minimum, to that being impacted; 2) will not be contrary to the FWS Habitat Management Guidelines for the Wood Stork in the Southeast Region (Ogden, 1990), and 3) will be in accordance with the Clean Water Act, Section 404(b)1 guidelines. Based on this assessment, and with this commitment, a determination of MANLAA was made for the wood stork.

Brown Pelican
State Species of Special Concern
Suitable nesting and foraging habitat exists for the brown pelican within the LPA and brown pelicans were observed flying over this alternative during the April 2010 field reviews. However, due to its mobility and ability to use adjacent surface waters and proposed mitigation sites for foraging, it has been determined that the LPA will have no effect on the brown pelican. Suitable nesting and foraging habitat does not exist for the brown pelican within the Rye Road Alternative. Therefore, it has been determined that the Rye Road Alternative will have no effect on the brown pelican.

Mammals:

Florida Mouse
See description under Gopher Tortoise and Commensal Species above.

Sherman's Fox Squirrel
State Species of Special Concern
While suitable nesting and foraging habitat exists for the Sherman's fox squirrel within both build alternatives, none were observed during the field reviews and none have been documented within 1 mile of either alternative. Due to its mobility and ability to use adjacent upland habitats for nesting and foraging, it has been determined that both the Fort Hamer Alternative and the Rye Road Alternative will have no effect on the Sherman's fox squirrel.

West Indian Manatee
Federally Endangered
The Manatee River provides suitable habitat for the West Indian manatee in the LPA. Though no manatees were observed during field reviews, FNAI, FWS, and FWC have indicated that manatees are known to frequent the Manatee River and local residents have reported sightings of manatees in the vicinity of the LPA. The Manatee River within both alternatives is designated as Critical Habitat for the manatee below the Lake Manatee Dam. To minimize potential adverse impacts to the manatee as a result of construction of the LPA, Manatee County will utilize the FWS and FWC approved *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the Manatee River. Manatee County will also coordinate with the FWS and the FWC to determine the appropriate, site-specific manatee protection measures to be implemented during construction (see above). With these commitments, a determination of MANLAA was made for the West Indian manatee

Proposed Avoidance, Minimization, Mitigation Measures:

Eastern Indigo Snake
Federally Threatened
While no eastern indigo snakes were observed during field reviews, suitable habitat for this species does exist within both build alternatives. The FWS and FWC approved standard protection measures for the eastern indigo snake (Appendix E-of the BA) will be implemented during the clearing and construction phases for the selected alternative.

West Indian Manatee
Federally Endangered
The Manatee River provides suitable habitat for the West Indian manatee in the LPA. The segment of river immediately downstream of the proposed bridge location is a posted "Idle Speed/No Wake" zone. In addition to observing all posted speed zones in the river, all construction vessels will be required to operate at "Idle Speed/No Wake" speeds within 0.5-mile upstream and downstream of the construction site. Additionally, the selected construction contractor will be required to implement the *Standard Manatee Conditions for In-Water Work* (Appendix F) for all construction activities within the river.

Acoustical effects on marine mammals, including manatees and dolphins – both of which have the potential to occur within the LPA Study Area, are an increasing concern with coastal and marine construction activities. Acoustic sources during bridge construction may include blasting, boat motors, and installation of bridge supports (pile-driving). Blasting can be a significant acoustic source during bridge demolition; however, since demolition is not part of the proposed action, no blasting will occur.

The use of motorized tugboats and support vessels will be required for construction of the LPA. However, the commitment to operate all vessels at "Idle Speed/No Wake" speeds will minimize potential motorized noise impacts to manatees and other marine fauna present in the river. To minimize potential adverse effects to manatees and dolphins observers will be in place to observe the river during all pile-driving operations. If any manatees or dolphins are observed in the river within a 0.25-mile radius of the hammer location, pile-driving operations will cease until the animal(s) has exited the 0.25-mile buffer on its own. To facilitate observation of manatees and dolphins (and to accommodate nearby human residents), all pile-driving activities will be conducted during daylight hours only. Also, floating turbidity barriers with skirt lengths sufficient to reach the river bottom (approximately 12 feet maximum) will be placed around each piling during pile-driving operations. In addition to controlling turbidity, the barriers will lessen, though not eliminate, the acoustical vibrations generated during pile driving.

Wood Stork
Federally Endangered
To compensate for the loss of SFH, implementation of the selected alternative 1) will include creation of habitat and foraging function equal, at a minimum, to that being impacted; 2) will not be contrary to the FWS Habitat Management Guidelines for the Wood Stork in the Southeast Region (Ogden, 1990), and 3) will be in accordance with the Clean Water Act, Section 404(b)1 guidelines.

Gopher Tortoise and Commensal Species
State Threatened/Species of Special Concern
Suitable habitat is available within the LPA for the gopher tortoise (state-listed as threatened), Florida mouse (SSC), gopher frog (SSC), and pine snake (SSC). Gopher tortoise burrows were observed north of the Manatee River adjacent to the LPA. The Florida mouse, gopher frog, and pine snake have not been documented within 1 mile of the LPA, and none were observed during field reviews. Approximately 17 acres of suitable habitat (uplands) within the LPA construction

limits will need to be surveyed for the presence of gopher tortoise burrows prior to construction. If gopher tortoises or their burrows are found in or within 25 feet of the construction limits of the selected alternative, Manatee County will coordinate with the FWC to secure permits needed to relocate the gopher tortoises and associated commensal species prior to construction

Summary of Coast Guard Determinations:

Based on the information contained in the BA and WER, including the supplemental updates, the Coast Guard determines:

For Federally-listed species, the listed species effect determination for the LPA (Fort Hamer Road Alternative) includes "may affect, but is not likely to adversely affect" or MANLAA, for three Federally-listed faunal species (Eastern indigo snake, West Indian manatee [Critical Habitat], and wood stork). A determination of No Effect was applied to one floral species and three avian species (Florida goldenaster, Florida scrub jay, Florida grasshopper sparrow, and crested caracara). See Appendix E (BA), Table 8, page E-49.

The listed species effect determination for this alternative includes "may affect, but is not likely to adversely affect" MANLAA for four Florida state-listed faunal species (gopher tortoise, pine snake, Florida mouse, and gopher frog). A determination of No Effect was applied to nine floral species and thirteen faunal species. See Appendix E (BA), Table 8, page E-49, 50.

Sincerely,

OVERTON.RANDALL.D.1111176970 Digitally signed by OVERTON.RANDALL.D.1111176970 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USCG, cn=OVERTON.RANDALL.D.1111176970 Date: 2013.07.24 10:41:55 -04'00'

RANDALL D. OVERTON
Bridge Management Specialist
U.S. Coast Guard

Enclosure: Wetland Evaluation Report (WER) as an embedded link
Biological Assessment (BA) as an embedded link
WER Supplemental update as an email attachment
BA Supplemental update as an email attachment

Copy: CGHQ-BRG-2 as an email

DEPARTMENT OF HOMELAND SECURITY
U.S. COAST GUARD

PROPOSED NEW BRIDGE ACROSS THE MANATEE RIVER, MILE 15.0,
AT PARRISH, MANATEE COUNTY, FLORIDA

SUPPLEMENTAL UPDATE

TO

WETLANDS EVALUATION REPORT (JUNE 2013)

SUPPLEMENT UPDATE PREPARED
JULY 19, 2013

OVERVIEW: In June 2013 Manatee County, in conjunction with the United States Coast Guard, prepared a Draft Environmental Impact Statement (DEIS) to document a study of proposed improvements to north/south traffic movements in eastern Manatee County. For the purposes of the DEIS, two build alternatives were evaluated (in addition to a No-Build Alternative). Appendix D of the DEIS contains a Wetlands Evaluation Report (WER) which documents and describes existing wetland and surface water habitats found within the study area for each build alternative and assesses the potential wetland and surface water impacts associated with each build alternative. Since publication of the DEIS and WER, additional design details of the preferred alternative (the Fort Hamer Alternative) have become available and allow refinement of the wetland impacts that would result from implementation of the Fort Hamer Alternative. This Supplemental Update presents the revised wetland impacts, including impacts to Essential Fish Habitat (EFH), and the calculation of functional loss associated with these impacts pursuant to the Uniform Mitigation Assessment Method (UMAM).

Update 1: Section 3.1, page 3-1. The following wetland impact minimization measure is added to the bullet list:

- For the Fort Hamer Alternative, the bridge supports have been consciously located outside of seagrass areas.

Update 2: Section 3.2.1. The entire section is revised as follows:

3.2.1 FORT HAMER ALTERNATIVE

Because a temporary work trestle may be used to construct this alternative, the potential wetland impacts have been separated into permanent and temporary impacts.

Permanent Impacts

Table 7 summarizes the unavoidable permanent wetland impacts that would result from implementation of the Fort Hamer Alternative. A total of 3.06 acres of wetlands would be directly impacted by the construction of this alternative; this includes 2.05 acres of dredge/fill impacts and 1.01 acres of shading impacts (2.05 +1.01 = 3.06). An additional 1.28 acres of wetlands are considered to have secondary impacts based on SWFWMD criteria. Thus, the Fort Hamer Alternative would result in 4.34 acres of permanent wetland impacts (3.06 + 1.28 = 4.34). All of these impacts would require compensatory mitigation.

TABLE 7
PERMANENT WETLAND IMPACT SUMMARY – FORT HAMER ALTERNATIVE

Wetland	FLUCFCS Classification[1]	FWS Classification[2]	Description	Direct Impact Acres		Secondary Impact Acres	Total Impact Acres
				Dredge/ Fill	Shading		
Wetland 1	617	PFO1C	Mixed Wetland Hardwoods	0.50	0.00	0.14	0.64
	631	PSS1C	Wetland Scrub	1.48	0.00	0.05	1.53
	Sub-total Wetland 1			**1.98**	**0.00**	**0.19**	**2.17**
Wetland 2	631	E2SS3A	Wetland Scrub	0.01	0.10	0.04	0.15
	642	E2EM1P	Saltmarsh	0.01	0.12	0.22	0.35
	Sub-total Wetland 2			**0.02**	**0.22**	**0.26**	**0.50**
Wetland 3	612	E2SS3N	Mangroves	0.01	0.05	0.05	0.11
	615	PFO1P	Stream & Lake Swamp (Bottomland)	0.01	0.21	0.22	0.44
	642	E2EM1N	Saltmarsh	0.03	0.50	0.51	1.04
	Sub-total Wetland 3			**0.05**	**0.76**	**0.78**	**1.59**
Wetland 4	642	E2EM1N	Saltmarsh	0.0003	0.03	0.06	0.09
	Sub-total Wetland 4			**0.0003**	**0.03**	**0.06**	**0.09**
			Total	**2.05**	**1.01**	**1.28**	**4.34**

Totals may not add due to rounding.

Shading impacts from low bridges (i.e., bridges with a height to width ratio of less than 0.7) have been shown to result in decreased vegetative growth beneath the bridge (Broome *et al.*, 2005). Approximately 48 percent of the proposed Fort Hamer Alternative bridge would have a height-to-width ratio of 0.7, including the structure over the saltmarsh surrounding the peninsula between the north and south shorelines of the river. The remaining 52 percent of the bridge would have a height-to-width ratio between 0.4 and 0.7. The extent of wetland shading for the Fort Hamer Alternative bridge would be further reduced by the north/south orientation of the bridge, which allows more sunlight beneath the bridge in the early morning and late afternoon hours.

Sparse (less than ten percent cover) patches of widgeon grass occur beneath the proposed Fort Hamer Alternative bridge, along the north bank of the main river channel adjacent to Wetland 3. Reduced productivity of the widgeon grass is possible in this area due to shading; however, the bridge structure would be approximately 32 feet above the water surface at this location. For this reason, and because of the north-south alignment of the structure, the total impact to widgeon grass as a result of shading is expected to be *de minimus*.

Temporary Impacts

It is anticipated that a temporary work trestle would be constructed across the Manatee River as part of this alternative. Design details of the trestle would be determined by the contractor (yet to be selected); however, the typical section would be designed based on the weight bearing capacity needed to support the construction equipment. A similar structure used on a recent construction project consisted of a 28-foot wide timber deck structure supported on steel pipe pilings and steel cross-beam supports. The trestle would be constructed adjacent and parallel to the permanent, two-lane bridge and would remain in place until construction of the bridge deck is completed.

A 28-foot wide trestle would result in 0.62 acre of temporary shading impacts to vegetated wetlands and temporary *de minimus* fill impacts to wetlands and the open water portion of the Manatee River. It is anticipated that a temporary trestle would create the least amount of impacts to the mangroves, saltmarshes, and shallow portions of the Manatee River compared to other construction methodologies. Construction and use of the temporary trestle should result in insignificant, temporary wetland impacts that would restore naturally after the structure is removed.

Update 3: Section 3.3, Table 9, pages 3-6 and 3-7. Table 9 is revised as shown below.

TABLE 9
REPRESENTATIVE UMAM SCORES[1] FOR WETLANDS (FOR FILL/SHADE IMPACTS)

Wetland	FLUCFCS Classification[2]	FWS Classification[3]	Description	Location and Landscape Support		Water Environment		Community Structure		Score (sum/30)		Delta
				Current	With	Current	With	Current	With	Current	With	
Fort Hamer Alternative												
Wetland 1[4]	617 (Fill)	PFO1C	Mixed Wetland Hardwoods	4	0	7	0	8	0	0.63	0	0.63
	631 (Fill)	PSS1C	Wetland Scrub	4	0	6	0	7	0	0.57	0	0.57
Wetland 2	631 (Fill) 631 (Shade)	E2SS3A	Wetland Scrub	6 6	0 5	4 4	0 3	4 4	0 0	0.47 0.47	0 0.27	0.47 0.20
	642 (Fill) 642 (Shade)	E2EM1P	Saltmarsh	6 6	0 5	8 8	0 7	7 7	0 0	0.70 0.70	0 0.40	0.70 0.30
Wetland 3	612 (Fill) 612 (Shade)	E2SS3N	Mangroves	7 7	0 6	8 8	0 6	8 8	0 0	0.77 0.77	0 0.40	0.77 0.37
	615 (Fill) 615 (Shade)	PFO1P	Stream Swamp (Bottomland)	7 7	0 6	8 8	0 6	7 7	0 0	0.73 0.73	0 0.40	0.73 0.33
	642 (Fill) 642 (Shade)	E2EM1N	Saltmarsh	7 7	0 6	8 8	0 6	8 8	0 0	0.77 0.77	0 0.40	0.77 0.37
Wetland 4	642 (Fill) 642 (Shade)	E2EM1N	Saltmarsh (Shoreline)	5 5	0 4	8 8	0 7	6 6	0 0	0.63 0.63	0 0.37	0.63 0.27
Rye Road Alternative												
Wetland 5	510	PUB2Jx	Stream (Channelized)	5	4	7	6	4	0	0.53	0.33	0.20
Wetland 6	618	PSS1C	Willow	3	0	5	0	5	0	0.43	0.00	0.43
Wetland 7	510	PUB2Jx	Stream (Channelized)	5	4	4	3	4	0	0.43	0.23	0.20
Wetland 8	510	PUB2Jx	Stream (Channelized)	5	4	7	6	6	0	0.60	0.33	0.27
Wetland 9	615	PFO1C	Stream Swamp (Bottomland)	5	4	4	3	7	0	0.53	0.23	0.30
Wetland 10	615	PFO1C	Stream Swamp (Bottomland)	7	0	7	0	7	0	0.70	0.00	0.70
Wetland 11	510/615	R2UB2/PFO1C	Stream and Stream Swamp (Bottomland)	3	2	7	6	7	0	0.57	0.27	0.30
Wetland 12	510/615	R2UB2/PFO1C	Stream and Stream Swamp (Bottomland)	3	2	7	6	7	0	0.57	0.27	0.30
Wetland 13	510/615	R2UB2/PFO1J	Stream and Stream Swamp (Bottomland)	3	2	6	5	6	0	0.50	0.23	0.27

Continued on next page

Wetland	FLUCFCS Classification[2]	FWS Classification[3]	Description	Location and Landscape Support		Water Environment		Community Structure		Score (sum/30)		Delta
				Current	With	Current	With	Current	With	Current	With	
Wetland 14	615	PFO1J	Stream and Stream Swamp (Bottomland)	7	0	7	0	6	0	0.67	0.00	0.67
Wetland 15	630	PFO1C	Wetland Forested Mixed	7	0	8	0	7	0	0.73	0.00	0.73

[1] UMAM scores have not been approved by permitting agencies and are subject to change during the permitting process.
[2] FDOT, 1999.
[3] Cowardin, *et al.*, 1979.
[4] Assumes no mitigation required for impacts to open water portion of Wetland 1 (FLUCFCS 530 – Pond) because this pond is being incorporated into the proposed surface water management system. No mitigation is required for shading to unvegetated open surface waters.

Update 4: Section 3.3, Table 10, page 3-8. Table 10 is revised as shown below.

TABLE 10
REPRESENTATIVE UMAM SCORES[1] FOR WETLANDS
(FOR SECONDARY IMPACTS)

Wetland	FLUCFCS[2]	FWS Classification[3]	Description	Location & Landscape Support		Water Environment		Community Structure		Score (sum/30)		Delta
				Current	With	Current	With	Current	With	Current	With	
Wetland 1	617	PFO1C	Mixed Wetland Hardwoods	4	3	7	7	8	8	0.63	0.60	0.03
	631	PSS1C	Wetland Scrub	4	3	6	6	7	7	0.57	0.54	0.03
Wetland 2	631	E2SS3A	Wetland Scrub	6	5	4	4	4	4	0.46	0.43	0.04
	642	E2EM1P	Saltmarsh	6	5	8	8	7	7	0.70	0.67	0.03
Wetland 3	612	E2SS3N	Mangroves	7	6	8	8	8	8	0.77	0.73	0.04
	615	PFO1P	Stream & Lake Swamp (Bottomland)	7	6	8	8	7	7	0.73	0.70	0.03
	642	E2EM1N	Saltmarsh	7	6	8	8	8	8	0.77	0.73	0.04
Wetland 4	642	E2EM1N	Saltmarsh (Shoreline)	5	4	8	8	6	6	0.63	0.60	0.03

1 - UMAM scores have not been approved by permitting agencies and are subject to change during the permitting process.
2 - Florida Department of Transportation (FDOT), *Florida Land Use, Cover and Forms Classification System Handbook* (FLUCFCS) (Third edition, 1999).
3 - U.S. Fish and Wildlife Service (FWS), *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, *et al.*, 1979).

Update 5: Section 3.3, Table 11, page 3-9 and 3-10. Table 11 is revised as shown below.

TABLE 11
UMAM SUMMARY FOR DREDGE/FILL/SHADE WETLAND IMPACTS

Wetland	FLUCFCS Classification[1]	FWS Classification[2]	Description	Delta	Impact Acres	Functional Loss
Fort Hamer Alternative						
Wetland 1	617	PFO1C	Mixed Wetland Hardwoods	0.63 fill	0.50	0.32
	631	PSS1C	Wetland Scrub	0.57 fill	1.48	0.84
			Sub-total – Wetland 1		***1.98***	***1.16***
Wetland 2	631	E2SS3A	Wetland Scrub	0.47 fill 0.20 shade	0.009 0.103	0.004 0.021
	642	E2EM1P	Saltmarsh	0.70 fill 0.30 shade	0.009 0.116	0.006 0.035
			Sub-total – Wetland 2		***0.24***	***0.07***
Wetland 3	612	E2SS3N	Mangroves	0.77 fill 0.37 shade	0.005 0.054	0.004 0.020
	615	PFO1P	Stream & Lake Swamp (Bottomland)	0.73 fill 0.33 shade	0.009 0.214	0.007 0.071
	642	E2EM1N	Saltmarsh	0.77 fill 0.37 shade	0.034 0.497	0.026 0.184
			Sub-total – Wetland 3		***0.81***	***0.31***
Wetland 4	642	E2EM1N	Saltmarsh (Shoreline)	0.63 fill 0.27 shade	0.0003 0.027	0.0002 0.007
			Sub-total – Wetland 4		***0.03***	***0.01***
			Total – Fort Hamer Alternative		**3.06**	**1.56**
Rye Road Alternative						
Wetland 5	510	PUB2Jx	Stream (Channelized)	0.20	0.06	0.01
Wetland 6	618	PSS1C	Willow	0.43	0.19	0.08
Wetland 7	510	PUB2Jx	Stream (Channelized)	0.20	0.03	0.01
Wetland 8	510	PUB2Jx	Stream (Channelized)	0.27	0.08	0.02
Wetland 9	615	PFO1C	Stream Swamp (Bottomland)	0.30	0.07	0.02
Wetland 10	615	PFO1C	Stream Swamp (Bottomland)	0.70	0.61	0.43
Wetland 11	510/615	R2UB2/PFO1C	Stream and Stream Swamp (Bottomland)	0.30	0.20	0.06
Wetland 12	510/615	R2UB2/PFO1C	Stream and Stream Swamp (Bottomland)	0.30	0.40	0.12

Continued on next page

Wetland	FLUCFCS Classification[1]	FWS Classification[2]	Description	Delta	Impact Acres	Functional Loss
Wetland 13	510/615	R2UB2/PFO1J	Stream and Stream Swamp (Bottomland)	0.27	0.22	0.06
Wetland 14	615	PFO1J	Stream and Stream Swamp (Bottomland)	0.67	0.14	0.09
Wetland 15	630	PFO1C	Wetland Forested Mixed	0.73	0.52	0.38
			Total Functional Loss – Rye Road Alternative		**2.52**	**1.28**

[1] FDOT, 1999.
[2] Cowardin, *et al.*, 1979.

Update 6: Section 3.3, Table 12, page 3-11. Table 12 is revised as shown below.

TABLE 12
UMAM SUMMARY FOR FORT HAMER ALTERNATIVE SECONDARY WETLAND IMPACTS

Wetland	FLUCFCS Classification[1]	FWS Classification[2]	Description	Delta	Impact Acres	Functional Loss
Wetland 1	617	PFO1C	Mixed Wetland Hardwoods	0.03	0.14	0.004
	631	PSS1C	Wetland Scrub	0.03	0.046	0.001
			Sub-total – Wetland 1		**0.19**	**0.005**
Wetland 2	631	E2SS3A	Wetland Scrub	0.03	0.036	0.001
	642	E2EM1P	Saltmarsh	0.03	0.215	0.006
			Sub-total – Wetland 2		**0.25**	**0.007**
Wetland 3	612	E2SS3N	Mangroves	0.04	0.054	0.002
	615	PFO1P	Stream & Lake Swamp (Bottomland)	0.03	0.219	0.007
	642	E2EM1N	Saltmarsh	0.04	0.508	0.02
			Sub-total – Wetland 3		**0.78**	**0.03**
Wetland 4	642	E2EM1N	Saltmarsh (Shoreline)	0.03	0.063	0.002
			Sub-total – Wetland 4		**0.06**	**0.002**
			Totals (rounded)		**1.28**	**0.04**

[1] FDOT, 1999.
[2] Cowardin, *et al.*, 1979.

Update 7: Section 3.3, page 3-11. The second paragraph is revised as follows:

Table 13 summarizes the wetland impacts and UMAM functional loss for each build alternative. A total of 4.34 acres of unavoidable wetland impacts for the Fort Hamer Alternative would require mitigation. As shown in Table 13, these 4.34 acres of wetland impacts would result in a UMAM functional loss of 1.60.

Update 8: Section 3.3, Table 13, page 3-12. Table 13 is revised as shown below.

TABLE 13
WETLAND IMPACTS AND UMAM FUNCTIONAL LOSS

Wetland	Fill/Shade		Secondary		Total	
	Acres	Functional Loss	Acres	Functional Loss	Acres	Functional Loss
Fort Hamer Alternative						
Wetland 1	1.98	1.16	0.19	0.005	2.17	1.16
Wetland 2	0.24	0.07	0.25	0.007	0.49	0.08
Wetland 3	0.81	0.32	0.78	0.03	1.59	0.34
Wetland 4	0.03	0.01	0.06	0.002	0.09	0.01
Totals (rounded)	**3.06**	**1.56**	**1.28**	**0.04**	**4.34**	**1.60**
Rye Road Alternative						
Wetland 5	0.06	0.01	No Secondary Impacts for Rye Road Alternative		0.06	0.01
Wetland 6	0.19	0.08			0.19	0.08
Wetland 7	0.03	0.01			0.03	0.01
Wetland 8	0.08	0.02			0.08	0.02
Wetland 9	0.07	0.02			0.07	0.02
Wetland 10	0.61	0.43			0.61	0.43
Wetland 11	0.20	0.06			0.20	0.06
Wetland 12	0.40	0.12			0.40	0.12
Wetland 13	0.22	0.06			0.21	0.06
Wetland 14	0.14	0.09			0.14	0.09
Wetland 15	0.52	0.38			0.52	0.38
Totals (rounded)	**2.52**	**1.28**			**2.52**	**1.28**

Note: Numbers may not add due to rounding.

Update 9: Section 4.5, page 4-4. The first paragraph of Section 4.5 is revised as follows:

As described previously, Wetlands 2, 3, 4, and River 1 (Manatee River) within the Fort Hamer Alternative qualify as EFH. As shown in **Table 15**, the Fort Hamer Alternative would impact 0.15 acre of EFH due to fill and 1.01 acres of EFH due to shading. The Rye Road Alternative would not affect habitats designated as EFH.

Update 10: Section 4.5.1, pages 4-4 and 4-5. This section is revised as follows:

4.5.1 FORT HAMER ALTERNATIVE

The presence of bridge pilings/footings within the wetlands and open water portion of the Manatee River would result in 0.15 acre of fill. These impacts are not expected to adversely affect populations of red drum, gray snapper, pink shrimp, stone crab, and their prey populations.

A total of 1.01 acres of Wetlands 2, 3, and 4 would be subjected to permanent shading impacts from the bridge (all of which qualifies as designated EFH). These impacts would not affect the hydrology of the affected wetlands but would likely result in a decrease of vegetation beneath the bridge. As stated previously, approximately 48 percent of the structure would have a height-width ratio of 0.7, including that portion of the structure over the saltmarsh in Wetland 3. Because of the bridge height in this area and the north-south orientation of the bridge, the 1.01 acres of shading impacts are expected to have minimal adverse effects to red drum, gray snapper, pink shrimp, and stone crab populations and their prey species.

The temporary work trestle described previously would result in 0.62 acre of temporary shading impacts to wetlands. These impacts are expected to be minimal and should restore naturally following removal of the structure.

Water quality degradation could affect designated EFH within the Fort Hamer Alternative Study Area. To minimize potential water quality impacts, the project would be constructed in accordance with all permit conditions for maintaining water quality during construction and during operation of the facility. All stormwater runoff from the roadway and bridge structure would be directed to stormwater treatment ponds; no stormwater runoff would be directly discharged to the Manatee River or adjacent wetlands. For these reasons, no water quality induced adverse impacts to EFH or EFH-dependent species are anticipated for the Fort Hamer Alternative.

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Friday, August 09, 2013 9:34 AM
To: Peate, Martin; Pride, Tom
Subject: FW: NMFS comments on the Fort Hamer Road Bridge DEIS (Docket # USCG -2010-0455)
Attachments: Ft Hamer Rd Bridge_NMFS Proposed Alternative Alignments.docx; NMFS response to Ft Hamer Bridge 2013 DEIS.docx

Please take a look at the NMFS commits attached and below. The issue concerning alignment was raised by NMFS in the past; we should take a closer look and discuss

From: david.rydene@noaa.gov [mailto:david.rydene@noaa.gov]
Sent: Thursday, August 08, 2013 12:14 PM
To: Overton, Randall D CIV
Subject: NMFS comments on the Fort Hamer Road Bridge DEIS (Docket # USCG -2010-0455)

Hi Randy,

The two attached documents represent NMFS comments on the Draft Environmental Impact Statement regarding the proposed new Fort Hamer Road Bridge crossing the Manatee River in Manatee County, Florida. I can provide the comments in a letter format if you prefer.

I had a couple of editorial comments that are not included in our response. In "Section 1.2 PURPOSE AND NEED FOR ACTION", the first sentence reads "The purpose of this Proposed Action **it** to provide...", but it should be "The purpose of this Proposed Action **is** to provide...".

Also, they use both the terms "secondary impacts" and "indirect impacts" in the document. They should probably just stick with "indirect impacts" throughout the document.

Give me a call or email if you have any questions.

Thanks, Dave

--

David Rydene, Ph.D.
Fish Biologist
National Marine Fisheries Service
Habitat Conservation Division
263 13th Avenue South
St. Petersburg, FL 33701
Office (727) 824-5379
Cell (813) 992-5730
Fax (727) 824-5300

NMFS response to 2013 Fort Hamer Bridge DEIS (Docket Number USCG-2010-0455)

NOAA's National Marine Fisheries Service (NMFS) staff has reviewed the Draft Environmental Impact Statement (DEIS) published on July 5, 2013, for the proposed new bridge crossing the Manatee River in the vicinity of Fort Hamer Road in Manatee County, Florida. NMFS offers the following comments on the DEIS.

Cited studies (i.e. the Sarasota/Manatee Metropolitan Planning Organization's Long Range Transportation Needs Plan) indicate that a total of 28 lanes crossing the Manatee River will be needed to meet the area's transportation needs by 2035. At present only 16 lanes cross the river and the addition of the proposed bridge would only bring the total number of lanes to 18. This will only marginally improve the envisioned 2035 traffic situation. Another 10 lanes crossing the river would be needed to meet the predicted 2035 traffic needs, as either the construction of new bridges or the widening of existing bridges. The DEIS states that even if the proposed Fort Hamer Bridge is built, two more lanes east of I-75 will be needed by 2035 (Section 1.2.1). The DEIS does not indicate whether these two additional lanes would be added to the Rye Road Bridge or the Fort Hamer Bridge.

NMFS continues to believe that impacts to the salt marsh/mangrove peninsula are avoidable, and that the Fort Hamer Alternative, as proposed, does not represent the Least Environmentally Damaging Practicable Alternative. In addition, if the bridge (as proposed) is built and then widened at some point in the future, even further impacts to these important estuarine wetlands would result. NMFS proposes two slightly different alignments that would avoid direct impacts to the salt marsh/mangrove peninsula (see attached document).

NMFS recommends that an Endangered Species Act Section 7 consultation on smalltooth sawfish (*Pristis pectinata*) be conducted. This listed species has the potential to occur in the project area. The use of smalltooth sawfish construction conditions should required during construction activities. A section on this smalltooth sawfish should be added to the Biological Assessment portion of the DEIS.

The bridge should be designed to convey all stormwater off the bridge and into appropriate stormwater treatment systems. This will prevent degraded water from being discharged into the Manatee River and reaching estuarine habitats at the project site and downstream. A commitment to convey stormwater off the bridge for treatment at upland facilities is made in Section 4.3.7 of the DEIS.

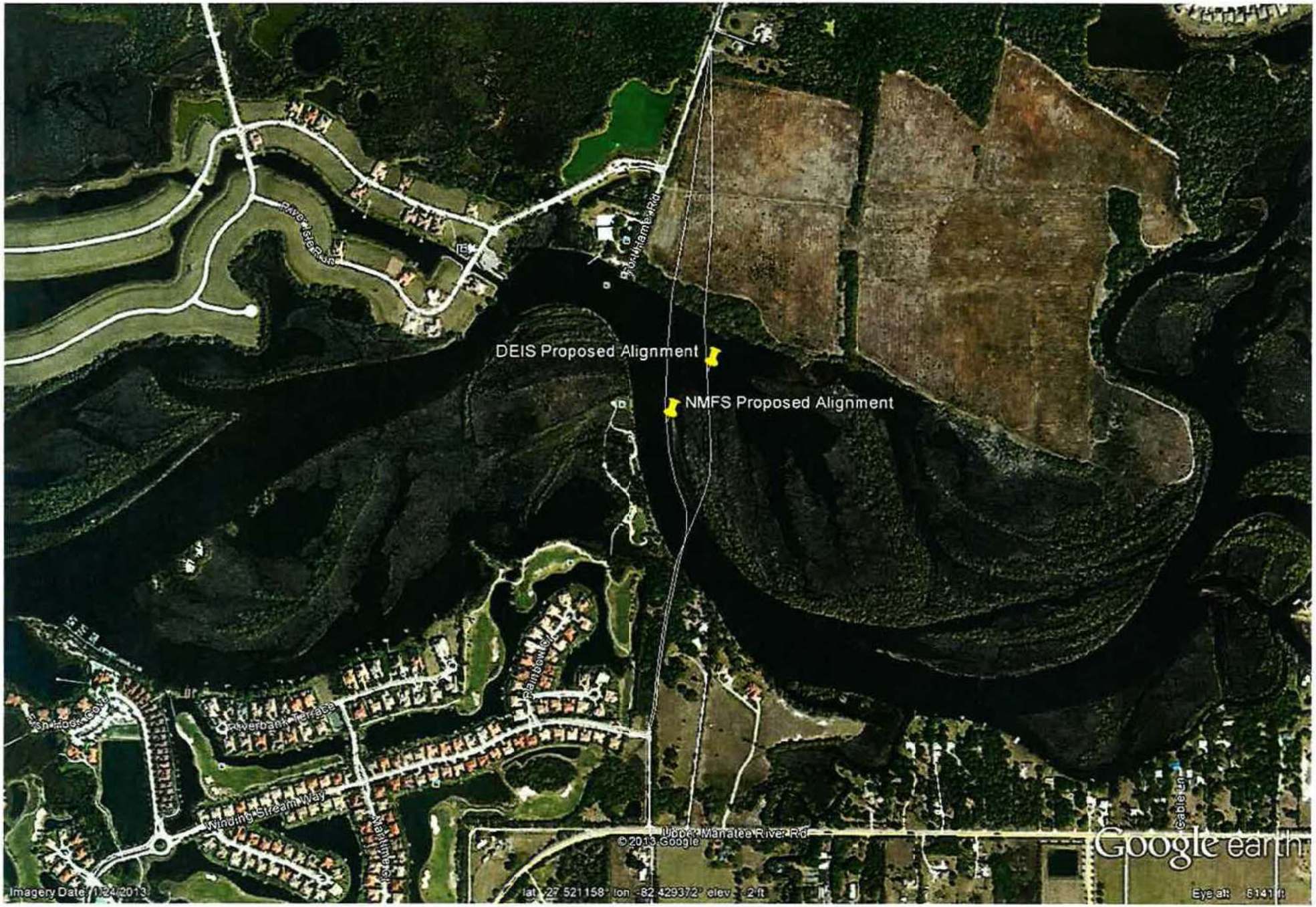
Before mitigation is finalized and permits are issued, a better effort must be made to quantify the amount of mangroves that are interspersed within those areas identified now (in the DEIS Wetland Evaluation Report) as simply salt marshes (FLUCFCS code 642). These mixed salt marsh/mangrove areas are found on both the peninsular area and on the southern shore of the river where the bridge would make landfall.

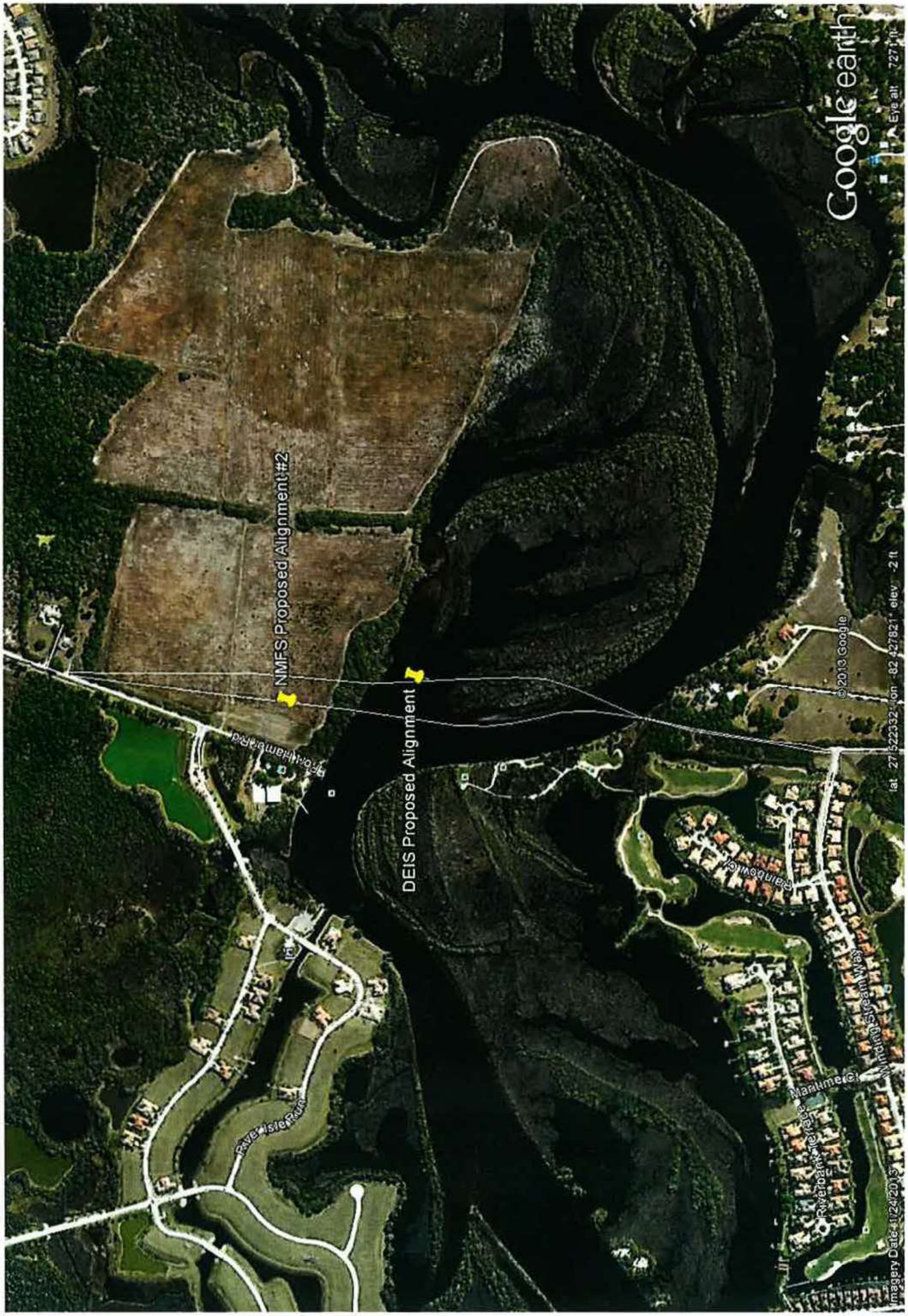
Although some wetland impacts will be temporary (e.g. from the work trestle) and these wetlands may recover after some period of time, the loss of ecological function during this recovery period should be factored into the compensatory mitigation scheme as a time lag metric. A thorough review of the UMAM scores and proposed compensatory mitigation should be conducted with all involved resource

and permitting agencies in an effort to reach consensus on the final scores and compensatory mitigation scenario.

A statement is made in Section 4.5.1 of the Essential Fish Habitat portion of the Wetland Evaluation Report (Appendix D) that the project will result in "*de minimus* to minimal adverse impacts to red drum, gray snapper, pink shrimp, and stone crab populations and their prey species." with no explanation of how the conclusion was reached. Some explanation of the analysis used to reach the conclusion should be provided.

Thank you for the opportunity to review the DEIS and provide comments related to NMFS trust resources.


DEIS Proposed Alignment
NMFS Proposed Alignment
Upper Manatee River Rd
© 2013 Google
Google earth
Imagery Date: 1/24/2013
lat 27.521158° lon -82.429372° elev 2 ft
Eye alt 6141 ft


NMFS Proposed Alignment #2
DEIS Proposed Alignment
Fort Hamer Rd
Rainbow Ct
Winding Stream Way
River Isle Run
Google earth
© 2013 Google

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

August 19, 2013

Randall Overton, Bridge Management Specialist
Environmental Project Manager and Reviewer
Seventh Coast Guard District
909 SE 1st Avenue –Suite 432
Miami. FL 33131-3050

Subject: Proposed New Bridge Across the Manatee River, Manatee County, Florida, Draft Environmental Impact Statement (DEIS)
Docket Number: USCG-2010-0455, CEQ Number: 20130195
ERP Number: CGD-E50294-FL

Dear Mr. Overton:

Thank you for your interagency coordination efforts on a proposed project. Pursuant to Section 309 of the Clean Air Act and Section 102(2)(c) of the National Environmental Policy Act (NEPA), the US EPA Region 4 has evaluated the consequences of the US Coast Guard proposal to construct a new bridge across the Manatee River, in Manatee County, Florida. The project proposes constructing a two lane bridge to cross the Manatee River.

The proposed project examines three alternatives, including a no build. The two build alternatives include one new two-lane bridge, mid-level fixed span at Fort Hamer Road, and a second with two-lane addition to an existing bridge on Rye Road.

Enclosed are comments on the DEIS. Based on our review of the DEIS, EPA assigned a rating of "EC-2" to the document. Our review has identified some environmental concerns with the need for some additional information in the DEIS. With either build alternative the USEPA will further evaluate the wetland mitigation through the federal permitting process.

Thank you for the opportunity to comment on the DEIS. If you have questions on our comments or need further assistance, please do not hesitate to contact Maher Budeir at (404) 562-9514 or budeir.maher@epa.gov .

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Environmental Accountability

Enclosure 1: Comments on the Proposed New Bridge Across the Manatee River DEIS.

Enclosure 1: EPA Detailed Comments

Proposed New Bridge Across the Manatee River, Draft Environmental Impact Statement (DEIS)

Based on our review of the DEIS, US EPA's environmental concerns are related to the footprint of the Rye Road alternative evaluated, and the construction methods and BMPs implemented during the construction of the bridge.

Rye Road Alternative:

This Alternative proposes a widening of a 10+ mile segment of a road and the addition of a two-lane bridge across the Manatee River. The conceptual design and typical section shows a total width of 110'of ROW. Since this alternative widens a road segment that is more than 10 mile, minimizing the foot print can significantly reduce the impact. It is recommended to examine other alternate sections that can accommodate a 4-lane road. Alternate sections may include ones with narrower median. It is recommended to investigate the possibility of reducing the footprint of this proposed roadway while keeping the capacity near the target VMTs .

Construction Method and BMPs for the Fort Hamer Alternative:

EPA recommends including more details and specifics regarding construction methods and protection measures, especially for the Fort Hamer Road new bridge Alternative. Since the new bridge will be significantly longer (2,570 feet), it is necessary to elaborate on the construction methods and techniques, on how materials will be transported to the site, and what additional specific measures and BMPs will be in place to minimize impact on the wetlands and aquatic resources in the area. Quantifying impacts on these resources can differ significantly with different construction techniques.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
10117 PRINCESS PALM DRIVE, SUITE 120
TAMPA, FLORIDA 33610

REPLY TO
ATTENTION OF

August 23, 2013

Tampa Section
SAJ-2010-02223 (IP-JPF)
USCG-2010-0455

Docket Management Facility (M-30)
Via Facsimile: 202-493-2251

To Whom It May Concern:

This letter refers to the Draft Environmental Impact Statement for a proposed new bridge across the Manatee River in Manatee County, Florida, USCG Docket Number 2010-0455.

The United States Army Corps of Engineers, Jacksonville District, offers the following comments in response to the Draft EIS, and the 19 July 2013 Supplemental Update.

Chapter 1: No comments on purpose and need. The stated project purpose, "…to provide an alternative north/south transportation route between high-growth areas of Manatee County located east of Interstate 75 (I-75), separated by the Manatee River and to improve regional mobility" is acceptable to the Corps. The documentation of the need for the project is also acceptable.

Chapter 2: The Corps offers the following comment on Chapter 2:

1. Please provide additional details on the alternative alignments considered by Manatee County for the Fort Hamer Bridge, including a comparison of impacts to waters of the United States associated with each alignment. If there is an alternative alignment that has less impact than the proposed alignment, please explain why that alignment is not reasonable or practicable.

2. Chapter 2 should offer an explanation as to why the Fort Hamer Alternative does not require any road expansions to accommodate the proposed two-lane bridge, yet the Rye Road Alternative requires the expansion of approximately 10 miles of roads from two lanes to four lanes, including a section of Fort Hamer Road that is within both alternatives' study areas. If the Fort Hamer Alternative does require road expansions, the impacts associated with the expansions, especially to wetlands and other surface waters, need to be identified and considered in the EIS.

Chapter 3: No comments on Chapter 3.

Chapter 4: The Corps offers the following comments on Chapter 4:

1. Section 4.3.2.1: Please note that the Corps also considers the consideration of offsite alternatives to be part of avoidance. Also, consideration of alternate on-site alignments as described in the comment on Chapter 2 above, should also be part of the consideration of minimization.

2. In Section 4.3.2.4, the DEIS states "In Florida, the USACE has also adopted UMAM for assessment of wetland impacts and mitigation." Although the Jacksonville District accepts UMAM, and recommends that it be used to allow consistency with state and local functional assessments of wetland impacts and mitigation, we cannot and do not require or prohibit any assessment methodology. The Corps recommends revising this sentence to say ""In Florida, the USACE also accepts UMAM for assessment of wetland impacts and mitigation, with some changes from the state implementation."

3. The Corps accepts the wetland impact acreages, functional assessments, and conceptual mitigation for the purpose of comparing alternatives. We reserve the right to review and approve future avoidance and minimization measures, the applicant's wetland delineations and determinations, the final impact acreages including secondary impacts, functional assessments, and mitigation plans pursuant to the Corps permitting process. The Corps has provided information about the Corps' mitigation plan requirements to Manatee County.

4. The Corps acknowledges the 'may affect, not likely to adversely affect' determination for the wood stork. The statement that Manatee County will mitigate all impacts to wood stork suitable foraging habitat should be revised to state that the County will provide suitable foraging habitat compensation within the Core Foraging Area of the affected colony site(s) equivalent to the impacted SFH in accordance with the *Wood Stork Foraging Assessment Procedure*, and that is not contrary to the USFWS's *Habitat Management Guidelines for the Wood Stork in the Southeast Region*. Otherwise, based on the September 2008 effect determination for the wood stork in central and north peninsular Florida, as developed by the Corps and the USFWS, either of the action alternatives would appear to result in a 'may affect' determination for the wood stork.

5. Section 4.3.5.1 should provide additional explanation on how the 'may affect, not likely to adversely affect' determination was made for the eastern indigo snake for both action alternatives, and for the Florida scrub jay and crested caracara for the Rye Road alternative.

6. The Corps' 404(b)1 Guidelines state that the Corps can only approve the Least Environmentally Damaging Practicable Alternative (LEDPA). In addition, both the 404(b)1 Guidelines and the 404(b)1 Mitigation Memorandum of Agreement between the

Corps and EPA state that compensatory mitigation cannot be used in the alternatives analysis and the determination of the LEDPA.

Section 4.7 states "The Fort Hamer Alternative would have larger impacts on natural resources compared to the Rye Road Alternative. A greater amount of wetlands and floodplains would be affected by the construction of the new bridge for the Fort Hamer Alternative than would be impacted by the Rye Road Alternative. Chapter 4 describes the following impact figures for the two alternatives (based on a 25-foot buffer as described in Section 4.3.2.2):

Fort Hamer Alternative: 2.71 acres fill, 2.61 acres shading, 1.12 acres secondary

Rye Road Alternative: 2.51 acres fill, 0.01 acre shading, 0.00 acre secondary

However, Table 2-4 describes the following potential impacts (presumably direct and secondary) to wetlands based on a 200-foot buffer:

Alternative 2 (Fort Hamer Alternative): 73.8 acres

Alternative 3 (Rye Road Alternative): 86.5 acres

And Table 2-8 describes potential impacts to wetlands based on a 110-foot buffer:

Alternative 2 (Fort Hamer Alternative): 7.5 acres

Alternative 3 (Rye Road Alternative): 12.28 acres

The Corps requests that the USCG include discussion of the area of potential wetland impact within these greater buffer distances in its Chapter 4 discussion of comparative impacts between alternatives.

7. The comment for Chapter 2 about impacts associated with road expansions for the Fort Hamer Alternative applies to Chapter 4 as well.

8. It should be noted that some of the wetlands potentially impacted by the proposed project may be areas used as mitigation for wetland impacts in previous Corps permits. For example, wetlands 1 and 2 within the Fort Hamer Alternative appear to have been mitigation areas for the adjacent Waterlefe project. If it is determined that mitigation areas will be impacted, then either the Corps will require in its permit review, or ask the USCG to require its permit review, that mitigation for these impacts include additional compensation to replace the lost mitigation value.

Chapter 5: As described elsewhere in the Draft EIS, the Corps accepted the invitation to become a cooperating agency. On page 5-6, there is a statement that we declined.

Chapter 6: No comments on Chapter 6

Chapter 7: No comments on Chapter 7

Chapter 8: No comments on Chapter 8

Chapter 9: No comments on Chapter 9

Appendix A: No comments on Appendix A

Appendix B: No comments on Appendix B

Appendix C: No comments on Appendix C

Appendix D: The Corps offers the following comments on Appendix D:

1. The comment for Chapter 2 about impacts associated with road expansions for the Fort Hamer Alternative applies to Appendix D as well.

2. The Corps' comments for Chapter 4 about wetlands apply to Appendix D as well.

Appendix E: The Corps offers the following comments on Appendix E:

1. The Corps recommends including the comparative information on potential impacts to listed species habitat, such as the 17 acres of upland habitat within the Fort Hamer Alternative and the 38 acres of upland habitat within the Rye Road Alternative, in the Chapter 4 discussion of the alternatives.

2. The Corps recommends including additional information on what types of "suitable habitat" are present within the two alternatives in the discussion of potential impacts to the eastern indigo snake. For example, the discussion of impacts to the gopher tortoise describes 37 acres of upland habitat within the Rye Road alignment. How much of this is pasture, how much is undisturbed, how much is xeric, etc.

Appendix F: No comments on Appendix F

Appendix G: No comments on Appendix F

Appendix H: No comments on Appendix H

Appendix I: No comments on Appendix I

Appendix J: No comments on Appendix J

Appendix K: No comments on Appendix K

Thank you for the opportunity to comment on this project and to be a cooperating agency for the EIS process. If there have any questions regarding this letter, please contact the Corps project manager, John Fellows at the letterhead address, by telephone at 813-769-7070, or by electronic mail at john.p.fellows@usace.army.mil.

Sincerely,

John Fellows
Project Manager

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Tuesday, August 27, 2013 7:28 AM
To: Pride, Tom
Cc: Peate, Martin; Sugarman, Shelly CIV; Mullen, Kevin P CTR
Subject: FW: ESA Section 7 Consultation Request -Fort Hamer Bridge

Initial response from FWS concerning ESA consultation.

-----Original Message-----
From: peter_plage@fws.gov [mailto:peter_plage@fws.gov]
Sent: Friday, August 23, 2013 2:45 PM
To: Overton, Randall D CIV
Cc: Teresa Calleson
Subject: RE: ESA Section 7 Consultation Request -Fort Hamer Bridge

Randal,

I have been working on your ESA request as well as getting some project background through the Draft EIS. In addition, I have spoken to the Corps and FWC. The Corps in regard to how their permit process will relate to yours (they have a permit application from the County). My assumption is that formal ESA consultation for all of our (FWS) species will be through USCG and not through the Corps permit. On the other hand, the Corps 404 permit may provide us a more straightforward way of FWS influencing impacts to wetlands and non-ESA species.

I have a call scheduled Monday with FWC to discuss potential for additional manatee conditions. In Appendix K (2007) FWC requested a manatee observer be present for all in-water work. FDOT agreed to that condition, but it is not in the current plans. The BA addendum added an observer during pile driving, but I'm not sure that is a condition FWS or FWC regularly asks for. Was it prompted by NMFS? FWS and FWC will discuss this Monday as well. Eastern Indigo Snake, and Wood Stork may require additional information for our concurrence. Realize that gopher tortoise is a federal candidate species under the ESA. This affords no special protection, but it should be recognized.

As an aside, I don't see reference to sawfish or swimming marine turtles that are under NMFS ESA jurisdiction. If there are dolphin concerns this far up river, I assume that these marine species should be addressed in some fashion.

Once I get a better perspective on some of these issues we will move toward a formal response. Thanks for your patience and please get in touch if you have questions.

Peter Plage
U.S. Fish and Wildlife Service

600 Fourth Street South
St. Petersburg, FL 33701
904-731-3085
727-803-8747, ex. 3107 (Office)
www.fws.gov/northflorida

-----Original Message-----

From: Teresa Calleson [mailto:teresa_calleson@fws.gov]
Sent: Wednesday, July 24, 2013 3:40 PM
To: Randall.D.Overton@uscg.mil
Cc: Dawn Jennings; Peter Plage
Subject: RE: ESA Section 7 Consultation Request

Hi Randall,

Thank you very much for the recent submittal! I will be taking a look at this one myself but it will be formally assigned to Pete Plage in our office (who is located down in this general geographic area). He will be on leave for the next week or so but we will discuss this one when he returns. What is your timeline for review? Thanks.

Terri Calleson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
7915 Baymeadows Way, Suite 200
Jacksonville, Florida 32256-7517
904-731-3286 (office)
850-922-4330 (main)
850-922-4338 (fax)
Email: Teresa_Calleson@fws.gov
http:/www.fws.gov/northflorida

-----Original Message-----
From: Randall.D.Overton@uscg.mil [mailto:Randall.D.Overton@uscg.mil]
Sent: Wednesday, July 24, 2013 10:39 AM
To: dawn_jennings@fws.gov; teresa_calleson@fws.gov
Cc: Sugarman, Shelly CIV; Dragon, Barry CIV; Mullen, Kevin P CTR
Subject: ESA Section 7 Consultation Request

Please find attached a request for ESA Section 7 Consultation for a proposed bridge construction project across the Manatee River. The proposed new bridge would be constructed across the Manatee River approximately 15 miles upstream from the mouth of the river. The bridge and associated roadway would be between Upper Manatee River Road (south of the Manatee River) to Fort Hamer Road (north of the Manatee River), near Parrish, Manatee County, Florida. Latitude 27o 31.165' N, Longitude 82o 25.720' W.

The attached letter "USFWS ESA Section 7consultation request" contains web links to the Wetland Evaluation Report (WER) and Biological Opinion (BA) prepared for the proposed project. WER and BA supplemental updates which slightly refine the WER and BA are attached to this email.

I look forward to hearing from you.

Thank you,

Randall Overton
Federal Permit Agent USCG
909 SE 1st Ave Suite 432
Miami, Fl 33131
(305) 205-0795 Cell
(305) 415-6736 Office

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Thursday, August 29, 2013 1:25 PM
To: david.rydene@noaa.gov
Cc: Pride, Tom
Subject: RE: NMFS comments on the Fort Hamer Road Bridge DEIS (Docket # USCG -2010-0455)

Dave,
I will send a new consultation letter and included the smalltooth sawfish. I will also get the pile driving information for the temporary work trestle and incorporate the information into the new letter.

Thanks,
Randy

From: david.rydene@noaa.gov [mailto:david.rydene@noaa.gov]
Sent: Thursday, August 29, 2013 11:52 AM
To: Overton, Randall D CIV
Subject: Re: NMFS comments on the Fort Hamer Road Bridge DEIS (Docket # USCG -2010-0455)

Hi Randy,

I was looking at the USCG Section 7 consultation request letter again today and noticed that it does not include a determination or request for smalltooth sawfish consultation. Could you send a modified letter or addendum ?

Also, I will need pile driving information for the temporary work trestle, as was provided for the actual bridge pile driving.

Thanks, Dave

On Thu, Aug 22, 2013 at 1:42 PM, Overton, Randall D CIV <Randall.D.Overton@uscg.mil> wrote:

Dave,

Here's what I got from the project consultants:

The installation of bridge pilings with hydraulic hammers (i.e., pile-driving) can generate acoustic vibrations within the water column. Although detailed construction methodologies for the Fort Hamer Alternative have not been developed, it is likely that many, if not all, of the bridge support pilings would be driven with a hydraulic hammer. A total of 54 24-in^2 pre-stressed concrete pilings will be installed in the river channel, and an additional 137 24-in^2 concrete pilings will be installed in the adjacent wetlands and shallow embayment between Wetland 3 and Wetland 4 (part of River 1).

Thanks,

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Thursday, September 19, 2013 9:39 AM
To: Pride, Tom
Cc: Mullen, Kevin P CTR
Subject: FW: ESA Section 7 Consultation Request -Fort Hamer Bridge
Attachments: Consultation ESA & CH reasoning and decisions chart Manatee River Ft Hamer.pdf

FYI - I responded to FWS initial comments to the consultation request. Please read at your convenience. One item of note is the gopher tortoise, FWS pointed out that the gopher tortoise is a candidate species under ESA. FWS stated that while being a candidate species does not necessarily afford special protection, we should recognize that it is a candidate species; perhaps a shout-out in the FEIS.

-----Original Message-----
From: Overton, Randall D CIV
Sent: Friday, September 13, 2013 11:09 AM
To: 'peter_plage@fws.gov'
Cc: Teresa Calleson
Subject: RE: ESA Section 7 Consultation Request -Fort Hamer Bridge

Peter,
I apologize for the delay in getting back to you but I was working through some wetland delineation and permitting issues with the ACOE and my headquarters office; looks like we have everything resolved. You are correct concerning consultation; the Coast Guard is the Lead Federal Agency (LFA) and is responsible for ensuring all consultations are completed (ESA, EFH, Section 106 etc.), but as you appropriately point out in your email the Corps 404 permit may provide a more straightforward approach to wetland and other impacts. A question that has come-up is whether the consultation will be "formal or informal" and the expected timeline on consultation in either case.

I have attached a very basic flow chart which I pulled from a ESA consultation workshop slide presentation. I understand that the chart is elementary and certainly not the determining factor but if I applied the chart correctly it appears that the consultation would be informal. Again, I will defer to your expertise in making the determination as to the level of consultation but I wanted to at least start the dialog. Please let me know your thoughts.

Concerning the BA addendum adding an observer during pile driving, this was added to the BA addendum by the consultant, URS, unilaterally and not was not requested from NMFS.
Concerning the gopher tortoise as a federal candidate species under the ESA, the state has the gopher tortoise listed as a "State Threatened/Species of Special Concern" which has prompted a commitment from the applicant (Manatee County) to survey approximately 17 acres of suitable upland habitat within the project limits and if burrows are found within 25 feet of construction limits the county will coordinate with the FWC to secure permits to relocate the gopher tortoise and associated commensal species (Florida mouse (SSC), gopher frog (SSC) and pine snake (SSC). You state that it should be recognized that the gopher tortoise is a candidate species under the ESA. I'm not sure exactly how to officially make this recognition, I could send an addendum or revision to the consultation letter which makes this recognition if desired. Or, it may be that you wanted to call my attention to the candidate species status for future project if/when the tortoise is listed.
Concerning the smalltooth sawfish and sea turtles, I am coordinating these species with NMFS (David Rydene). We have added the construction conditions for these species.
Concerning dolphins, to my knowledge there are no dolphin concerns this far up the river (15 miles), but I will touch base with the consultants and research a bit deeper (salinity level at the project location, possible past observations etc.)

Please let me know if you any addition information needed concerning the Eastern Indigo Snake, and Wood Stork.

Thank you and please call or email at any time, Randy

Randall Overton
Federal Permit Agent USCG
909 SE 1st Ave Suite 432
Miami, Fl 33131
(305) 205-0795 Cell
(305) 415-6736 Office

-----Original Message-----
From: peter_plage@fws.gov [mailto:peter_plage@fws.gov]
Sent: Friday, August 23, 2013 2:45 PM
To: Overton, Randall D CIV
Cc: Teresa Calleson
Subject: RE: ESA Section 7 Consultation Request -Fort Hamer Bridge

Randal,

I have been working on your ESA request as well as getting some project background through the Draft EIS. In addition, I have spoken to the Corps and FWC. The Corps in regard to how their permit process will relate to yours (they have a permit application from the County). My assumption is that formal ESA consultation for all of our (FWS) species will be through USCG and not through the Corps permit. On the other hand, the Corps 404 permit may provide us a more straightforward way of FWS influencing impacts to wetlands and non-ESA species.

I have a call scheduled Monday with FWC to discuss potential for additional manatee conditions. In Appendix K (2007) FWC requested a manatee observer be present for all in-water work. FDOT agreed to that condition, but it is not in the current plans. The BA addendum added an observer during pile driving, but I'm not sure that is a condition FWS or FWC regularly asks for. Was it prompted by NMFS? FWS and FWC will discuss this Monday as well. Eastern Indigo Snake, and Wood Stork may require additional information for our concurrence. Realize that gopher tortoise is a federal candidate species under the ESA. This affords no special protection, but it should be recognized.

As an aside, I don't see reference to sawfish or swimming marine turtles that are under NMFS ESA jurisdiction. If there are dolphin concerns this far up river, I assume that these marine species should be addressed in some fashion.

Once I get a better perspective on some of these issues we will move toward a formal response. Thanks for your patience and please get in touch if you have questions.

Peter Plage
U.S. Fish and Wildlife Service

600 Fourth Street South
St. Petersburg, FL 33701
904-731-3085
727-803-8747, ex. 3107 (Office)
www.fws.gov/northflorida

-----Original Message-----

From: Teresa Calleson [mailto:teresa_calleson@fws.gov]
Sent: Wednesday, July 24, 2013 3:40 PM
To: Randall.D.Overton@uscg.mil
Cc: Dawn Jennings; Peter Plage
Subject: RE: ESA Section 7 Consultation Request

Hi Randall,

Thank you very much for the recent submittal! I will be taking a look at this one myself but it will be formally assigned to Pete Plage in our office (who is located down in this general geographic area). He will be on leave for the next week or so but we will discuss this one when he returns. What is your timeline for review? Thanks.

Terri Calleson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
7915 Baymeadows Way, Suite 200
Jacksonville, Florida 32256-7517
904-731-3286 (office)
850-922-4330 (main)
850-922-4338 (fax)
Email: Teresa_Calleson@fws.gov
http:/www.fws.gov/northflorida

-----Original Message-----
From: Randall.D.Overton@uscg.mil [mailto:Randall.D.Overton@uscg.mil]
Sent: Wednesday, July 24, 2013 10:39 AM
To: dawn_jennings@fws.gov; teresa_calleson@fws.gov
Cc: Sugarman, Shelly CIV; Dragon, Barry CIV; Mullen, Kevin P CTR
Subject: ESA Section 7 Consultation Request

Please find attached a request for ESA Section 7 Consultation for a proposed bridge construction project across the Manatee River. The proposed new bridge would be constructed across the Manatee River approximately 15 miles upstream from the mouth of the river. The bridge and associated roadway would be between Upper Manatee River Road (south of the Manatee River) to Fort Hamer Road (north of the Manatee River), near Parrish, Manatee County, Florida. Latitude 27o 31.165' N, Longitude 82o 25.720' W.

The attached letter "USFWS ESA Section 7consultation request" contains web links to the Wetland Evaluation Report (WER) and Biological Opinion (BA) prepared for the proposed project. WER and BA supplemental updates which slightly refine the WER and BA are attached to this email.

I look forward to hearing from you.

Thank you,

Randall Overton
Federal Permit Agent USCG
909 SE 1st Ave Suite 432
Miami, Fl 33131
(305) 205-0795 Cell
(305) 415-6736 Office

Informal Consultation: Reasoning and Decision - Listed Species

81

Step	Apply the available evidence to determine if	Is the Statement...	Action
A	The Action is not an attempt to engage in any form of "take" or it does not represent an intentional act that would otherwise violate section 9 of the ESA	True	Go to B
		False	Formal
B	The Action is not likely to produce stressors that have direct or indirect adverse consequence on the environment	True	End
		False	Go to C
C	Listed individuals are not likely be exposed to one or more of those stressors or one or more of the direct or indirect consequences of the Action	True	NLAA (1)
		False	Go to D
D	Listed Individuals are not likely to respond upon being exposed to one or more of the stressors produced by the Action	True	NLAA (2)
		False	Go to E
E	Any responses are not likely to constitute "take" or reduce the fitness of the individuals that have been exposed	True	NLAA (3)
		False	Go to F

w/ manatee conditions standard + any special conditions

Informal Consultation: Reasoning and Decision - Critical Habitat

82

Step	Apply the available evidence to determine if	Is the Statement...	Action
A	The Action is not likely to produce stressors that have direct or indirect adverse consequence on the environment	True	End
		False	Go to B
B	Areas of designated critical habitat are not likely be exposed to one or more of those stressors or one or more of the direct or Indirect consequences of the Action	True	NLAA (1)
		False	Go to C
C	The quantity, quality, or availability of one or more Constituent Elements of critical habitat are not likely to be reduced upon being exposed to one or more of the stressors produced by the Action	True	NLAA (2)
		False	Go to D
D	Any reductions in the quantity, quality, or availability of one or more Constituent Elements of critical habitat are not likely to reduce the Conservation Value of the exposed area	True	-
		False	Go to E
E	Any reductions in the Conservation Value of the exposed area of critical habitat are not likely to reduce the Conservation Value of the Critical Habitat designation	True	No AD MOD
		False	AD MOD

I'm not clear ON Constituent Elements of the CH

However I think that the minor Reduction to CE may Reduce CV of exposed Area but NOT The CV of the CH as a whole

Pride, Tom

From: Randall.D.Overton@uscg.mil on behalf of Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Wednesday, October 09, 2013 10:13 AM
To: Pride, Tom
Cc: Peate, Martin
Subject: FW: Consultation letter for Ft. Hamer and response to NMFS Comments to DEIS
Attachments: NMFS ESA Section 7and EFHrevisedconsultation request - SEP2013.pdf; Sea Turtle and Smalltooth Sawfish Construction Conditions.pdf

This is the email that transmitted the revised NMFS consultation letter

-----Original Message-----
From: Overton, Randall D CIV
Sent: Wednesday, September 18, 2013 2:58 PM
To: 'david.rydene@noaa.gov'
Subject: Consultation letter for Ft. Hamer and response to NMFS Comments to DEIS

Dave,
I have attached a revised consultation letter for the Ft Hamer project.
Included in the attached letter is consultation request for the smalltooth sawfish, as requested. I've learned a lot about the smalltooth sawfish from this project and research after our discussion.

Also included as an attachment to the letter is a response to your comments to the DEIS for the project.

Please let me know if I can provide anything else.

Thank you,

Randall Overton
Federal Permit Agent USCG
909 SE 1st Ave Suite 432
Miami, Fl 33131
(305) 205-0795 Cell
(305) 415-6736 Office

U.S. Department of Homeland Security
United States Coast Guard

Commander
Seventh Coast Guard District

909 S. E. First Avenue (Rm 432)
Miami, Fl 33131
Staff Symbol: (dpb)
Phone: (305) 415-6736
Fax: (305) 415-6763
Email: randall.d.overtont@uscg.mil

16450
September 18, 2013

David Rydene, Ph.D.
National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701-5505

Dear Dr. Rydene,

On July 24, 2013, the U.S. Coast Guard requested initiation of consultation in accordance with Section 7 of the Endangered Species Act (ESA) and to initiate consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) for Essential Fish Habitat for the proposed new bridge over the Manatee River in Manatee County, Florida. Project related documents made available to the NMFS included the Draft Environmental Impact Statement (DEIS), Wetlands Evaluation Report (WER) and subsequent update, and Biological Assessment (BA) and subsequent update.

On August 8, 2013, your office provided comments on the above-referenced documents and requested additional information for NMFS' review. Attachment A to this letter contains a copy of your comments and responses to those comments as prepared by the project consultant.

Comment No. 3 of the NMFS comments recommends that an ESA Section 7 consultation on smalltooth sawfish (*Pristis pectinata*) be conducted as the species has the potential to occur in the project area. Also, in an email dated August 29, 2013 the NMFS requested a modified consultation request that addresses the smalltooth sawfish. Through this letter the Coast Guard requests initiation of ESA Section 7 consultation for the smalltooth sawfish. We have included the following information regarding the smalltooth sawfish to facilitate your review of the project and to further the consultation process. This same information is being incorporated into the revised BA which will be included in the Final EIS.

Smalltooth Sawfish *(Pristis pectinata):*
ESA Endangered [U.S. - Distinct Population Segment (DPS) listed April 1, 2003]
Smalltooth sawfish inhabit shallow coastal waters of tropical seas and estuaries throughout the world. They are usually found in shallow waters (less than 32 ft (10 m)), very close to shore over muddy and sandy bottoms. They are often found in sheltered bays, on shallow banks, and in estuaries or river mouths. They prefer warmer water temperature of 22-28 degrees Celsius. They are known to ascend inland in river systems, and have been shown to have a salinity preference of 18-24 parts per thousand. In September 2009 NMFS issued a Final Rule (74 FR 45353) to designate critical habitat for the U.S. distinct population segment (DPS) of smalltooth sawfish (*Pristis pectinata*). The critical habitat consists of two units: the Charlotte Harbor

Estuary Unit, which comprises approximately 221,459 acres of coastal habitat; and the Ten Thousand Islands/Everglades Unit (TTI/E), which comprises approximately 619,013 acres of coastal habitat. The two units are located along the southwestern coast of Florida between Charlotte Harbor and Florida Bay (*NMFS OPR website*). Neither the Fort Hamer Alternative nor the Rye Road Alternative occurs within the vicinity of designated critical habitat for the smalltooth sawfish.

Potentially suitable habitat for the smalltooth sawfish occurs along the sandy bottom of the Manatee River within the Fort Hamer Alternative. No smalltooth sawfish have been documented in the Manatee River by the Florida Natural Areas Inventory (FNAI) and none were observed during field reviews for the project. Potential threats to the smalltooth sawfish as a result of implementation of the Fort Hamer Alternative include collision with construction vessels and entanglement in lines and floating turbidity barriers.

Due to the very shallow depths and narrow confines of the river at the Rye Road Alternative, potentially suitable habitat for the smalltooth sawfish is considered non-existent within the Rye Road Alternative. As a result, the Coast Guard has determined that implementation of the Rye Road Alternative will have no effect on the smalltooth sawfish.

Other species under NMFS purview (Sea turtles, Shortnose and Gulf sturgeon, North Atlantic right whales and other whales, Johnson seagrass, Elkhorn and Staghorn Coral): The Coast Guard has made a No-Effect determination for the above-listed species because the project is being proposed outside the known range and habitat of these species. A note will be made to the project files documenting the no-effect determination.

Proposed Avoidance, Minimization, Mitigation Measures:

To minimize potential impacts and interaction with the smalltooth sawfish the applicant (Manatee County) has committed to the implementation of standard NMFS (SERO) approved Sea Turtle and Smalltooth Sawfish Construction Conditions (Revised: March 23, 2006). – Attached to transmittal email.

Summary of Coast Guard Determinations:

Based on the information and commitments contained in this consultation letter, the BA and WER, including the supplemental updates, the Coast Guard determines:

The LPA (Fort Hamer Bridge Alternative) May Affect, but is not Likely to Adversely Affect (MANLAA) the smalltooth sawfish.

Additional Information Regarding Proposed Construction Methodology and Potential Impacts:

16450
18 September 2013

In emails dated August 27 and 29, 2013 the NMFS requested additional information regarding the length of work and the temporary work trestle. The following information is provided in response to these requests.

It is anticipated that construction of the proposed bridge for the Fort Hamer Alternative will take a total of twenty (20) months, including approximately six (6) months of in-water work for pile-driving and construction of the pile caps.

The design of the temporary work trestle is dependent upon contractor needs and will be finalized following selection of the construction contractor. However, for such work platforms contractors typically use steel pipe piles, 18 to 24 inches in diameter, driven in place with a hydraulic hammer. Based on the consultant's preliminary layout of the temporary work trestle, approximately 136 steel piles would be needed to support the structure. It is expected that the temporary structure would remain in place for 14 to 18 months during construction of the bridge.

Sincerely,

RANDALL D. OVERTON
Bridge Management Specialist
U.S. Coast Guard

Enclosure: 1) Attachment A – Responses to NMFS comments dated August 8, 2013
2) Sea Turtle and Smalltooth Sawfish Construction Conditions (Revised: March 23, 2006) as an email attachment

Copy: CGHQ-BRG-2 as an email

ATTACHMENT A

NMFS response to 2013 Fort Hamer Bridge DEIS (Docket Number USCG-2010-0455)

Transmitted via email on 8 August 2013 by David Rydene (NMFS) to Randy Overton (USCG)

URS responses to NMFS comments are shown in **Bold.**

NOAA's National Marine Fisheries Service (NMFS) staff has reviewed the Draft Environmental Impact Statement (DEIS) published on July 5, 2013, for the proposed new bridge crossing the Manatee River in the vicinity of Fort Hamer Road in Manatee County, Florida. NMFS offers the following comments on the DEIS.

Comment No. 1: Cited studies (i.e. the Sarasota/Manatee Metropolitan Planning Organization's Long Range Transportation Needs Plan) indicate that a total of 28 lanes crossing the Manatee River will be needed to meet the area's transportation needs by 2035. At present only 16 lanes cross the river and the addition of the proposed bridge would only bring the total number of lanes to 18. This will only marginally improve the envisioned 2035 traffic situation. Another 10 lanes crossing the river would be needed to meet the predicted 2035 traffic needs, as either the construction of new bridges or the widening of existing bridges. The DEIS states that even if the proposed Fort Hamer Bridge is built, two more lanes east of I-75 will be needed by 2035 (Section 1.2.1). The DEIS does not indicate whether these two additional lanes would be added to the Rye Road Bridge or the Fort Hamer Bridge.

Response: At this time it is unknown where additional lanes would be added in the future. The current project is funded solely by Manatee County and the County currently does not have additional lanes funded. Likewise, the FDOT currently has no plans to add additional lanes east of I-75. The addition of any lanes across the river following construction of the Fort Hamer Alternative would require additional studies and documentation in accordance with NEPA.

Comment No. 2: NMFS continues to believe that impacts to the salt marsh/mangrove peninsula are avoidable, and that the Fort Hamer Alternative, as proposed, does not represent the Least Environmentally Damaging Practicable Alternative. In addition, if the bridge (as proposed) is built and then widened at some point in the future, even further impacts to these important estuarine wetlands would result. NMFS proposes two slightly different alignments that would avoid direct impacts to the salt marsh/mangrove peninsula (see attached document).

Response: With any design it is best to have the bridge as perpendicular to the river as possible for several reasons:

1. **There are fewer piers in the water which provides a better "line-of-sight" between piers for the boaters;**
2. **In consideration of line-of-sight, currents, and wind, it is easier and safer to navigate between piers that are arranged perpendicular to the river, thus providing a safer condition for boaters;**
3. **With fewer piers there will be less scour and degradation of the river bottom;**
4. **A greater number of piers is more likely to result in a tailwater condition, i.e., upstream flooding due to greater restriction;**

5. **The channel span length is shorter, which provides for a more economical bridge;**

6. **The vertical profile is lower due to a shallower superstructure depth;**

7. **Long-term maintenance costs are reduced due to simpler geometrics and materials.**

The alignments suggested by NMFS will require a longer channel span due to the heavy skew at the centerline of river in order to provide the USCG minimum 75-foot horizontal clearance. The channel span length will increase from approximately 145 feet to 260 feet. Longer and heavier beams at large skews are much more complicated and difficult to erect. These longer lengths will require steel to be used for the beams which requires constant maintenance painting due to the close proximity of the brackish water. The increase in bridge costs for the NMFS alignment will be approximately $6 million dollars. In addition there will be approximately twice as many piers in the water compared to the Fort Hamer alignment shown in the DEIS. Although not currently planned, if the bridge is ever widened to four lanes, it will effectively obstruct one third of the river width for a length of almost one thousand feet. Finally, a relatively sharp curve on the bridge as suggested by the NMFS proposed alignment would introduce additional safety concerns for bridge users and would require substantial vehicle speed restrictions. As a result of these considerations, alternative bridge alignments are not considered practicable.

Comment No. 3: NMFS recommends that an Endangered Species Act Section 7 consultation on smalltooth sawfish (*Pristis pectinata*) be conducted. This listed species has the potential to occur in the project area. The use of smalltooth sawfish construction conditions should required during construction activities. A section on this smalltooth sawfish should be added to the Biological Assessment portion of the DEIS.

Response: We have conducted an evaluation of the potential project effects on the smalltooth sawfish. The Coast Guard is submitting this information to the NMFS along with a request for ESA Section 7 consultation on the species. The use of NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions during construction will be a commitment in the Final EIS.

Comment No. 4: The bridge should be designed to convey all stormwater off the bridge and into appropriate stormwater treatment systems. This will prevent degraded water from being discharged into the Manatee River and reaching estuarine habitats at the project site and downstream. A commitment to convey stormwater off the bridge for treatment at upland facilities is made in Section 4.3.7 of the DEIS.

Response: The stormwater conveyance system has been designed to capture and treat all stormwater from the bridge. No water will be discharged from the bridge to the Manatee River.

Comment No. 5: Before mitigation is finalized and permits are issued, a better effort must be made to quantify the amount of mangroves that are interspersed within those areas identified now (in the DEIS Wetland Evaluation Report) as simply salt marshes (FLUCFCS code 642). These mixed salt marsh/mangrove areas are found on both the peninsular area and on the southern shore of the river where the bridge would make landfall.

Response: We have revisited the project area in an effort to further quantify the extent of mangroves in these areas. Within Wetland 2 both red and black mangroves occur within the 0.59-acre area identified as wetland scrub. The mangroves occur sporadically in this area and are interspersed with

salt bush, wax myrtle, and Brazilian pepper. The total area occupied by mangroves within this area is estimated at 0.1 acre.

The saltmarsh portion of the peninsula north of the river contains very widely scattered red mangrove trees with most being less than three feet tall. Of the 1.58 acres of saltmarsh identified in this area, less than 200 square feet is estimated to consist of mangroves.

Comment No. 6: Although some wetland impacts will be temporary (e.g. from the work trestle) and these wetlands may recover after some period of time, the loss of ecological function during this recovery period should be factored into the compensatory mitigation scheme as a time lag metric. A thorough review of the UMAM scores and proposed compensatory mitigation should be conducted with all involved resource and permitting agencies in an effort to reach consensus on the final scores and compensatory mitigation scenario.

Response: We will factor a time lag into the UMAM scoring for the temporary wetland impacts. Application has been made for environmental permits from the SWFWMD and USACE; both of these agencies are reviewing the UMAM scoring for the proposed impact and mitigation areas and the acceptability of the proposed mitigation.

Comment No. 7: A statement is made in Section 4.5.1 of the Essential Fish Habitat portion of the Wetland Evaluation Report (Appendix D) that the project will result in "*de minimus* to minimal adverse impacts to red drum, gray snapper, pink shrimp, and stone crab populations and their prey species." with no explanation of how the conclusion was reached. Some explanation of the analysis used to reach the conclusion should be provided.

Response: The first paragraph of Section 4.5.1 is being revised as follows and as an explanation of the analysis used to reach the conclusion referenced above:

4.5.1 FORT HAMER ALTERNATIVE

The presence of bridge pilings/footings within the wetlands and open water portion of the Manatee River would result in 0.15 acre of fill. These impacts are not expected to adversely affect populations of red drum, gray snapper, pink shrimp, stone crab, and their prey populations.

A total of 1.01 acres of Wetlands 2, 3, and 4 would be subjected to permanent shading impacts from the bridge (all of which qualifies as designated EFH). These impacts would not affect the hydrology of the affected wetlands but may result in a decrease of vegetation and secondary productivity beneath the bridge. As stated previously, approximately 48 percent of the structure would have a height-width ratio of 0.7 or greater, including that portion of the structure over the saltmarsh and mangroves in Wetland 3. The mid-point of the bridge, and consequently the highest part of the bridge, occurs over these marsh/mangrove habitats and allows stormwater to flow in equal volumes from the bridge to the stormwater ponds located at each end of the structure. Thus, 75 percent of the total permanent shading area (0.76 acre of the 1.01 acres) occurs beneath that portion of the bridge with a height-width ratio of 0.7 or greater. The remaining 25 percent of shading area (0.25 acre) occurs beneath portions of the bridge with a height-width ratio of less than 0.7.

Broome et al. (2005) report that above-ground biomass, stem height, stem count, number of flowers, and basal area were greatly reduced beneath bridges at height-width ratios less than 0.5. At a height-width ratio of 0.68 adverse bridge shading effects on vegetation were still detected although greatly

diminished. Likewise, they showed a strong correlation of bridge height-width ratio with secondary productivity with benthic invertebrate density and diversity significantly lower beneath bridges with a height-width ratio less than 0.7. Broome et al. (2005) concluded, "Data indicates that shading by bridges having height-width ratios greater than 0.7 do not adversely impact the productivity or function of the underlying marsh…" Based on this analysis, the 0.25 acre of permanent shading area beneath the proposed bridge would be expected to result in reduced productivity and ecological function beneath the bridge. The remaining 0.76 acre of shading would have minimally reduced productivity and function. Shading beneath the bridge may be further reduced due to the north-south orientation of the bridge; more sunlight will be present under the bridge during the morning and late afternoon hours compared to a bridge with an east-west axis. Based on this information, we conclude that the 1.01 acres of permanent shading beneath the bridge will have minimal adverse effects to red drum, gray snapper, pink shrimp, and stone crab populations and their prey species.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.

b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.

c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.

e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.

f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.

g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006
O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc

Pride, Tom

From: David Rydene - NOAA Federal <david.rydene@noaa.gov>
Sent: Wednesday, October 09, 2013 10:04 AM
To: Pride, Tom
Subject: Re: Bridge over Manatee River at Ft Hamer - additional NMFS questions

Thanks Tom !

On Wed, Oct 9, 2013 at 7:52 AM, Pride, Tom <tom.pride@urs.com> wrote:

David,

On October 2 you had called and asked for clarifying information regarding the temporary trestle and pile-driving associated with the proposed bridge over the Manatee River at Fort Hamer. Each question is listed below followed by our response:

- What is the length of the temporary trestle on the south side of the river and the length of the temporary trestle on the north side of the river? **Response: The south side trestle is approximately 270 feet and the north side trestle is approximately 1,650 feet.**

- Other than the pilings/piers are there any other structures or rip-rap to be placed in the river or wetlands adjacent to the river? **Response: There are no other structures planned in the river. At the end bents, the Preliminary Bridge Hydraulic Report recommends sod or equivalent geotextile/armoring for the slope at the wetland/upland interface. The current design does not include any rip-rap or other armoring below the wetland boundary. If, during construction, it is determined that riprap armoring is required below the wetland boundary a permit modification for the additional impact and required mitigation will be submitted.**

- How long (approximately) will it take to drive each concrete pile for the main bridge and how long will it take to drive each pipe pile for the temporary trestle? How many of each can be driven each day? **Response: It varies throughout Florida depending on the soil conditions and hammer used by the contractor. Concrete piles can be driven in as quickly as 15 minutes or as long as 45-90 minutes. Assuming 60 minutes per pile, approximately 6 to 8 concrete piles could be driven in one day. The steel pipe piles are vibrated in place and take between 15 and 45 minutes each. Assuming 30 minutes for each pile, approximately 14 to 16 steel pipe piles can be driven per day.**

- Is there a potential for the contractor to use water jetting to start the piles? **Response: The Geotechnical Report recommends preformed pile holes to start the piles, but there is always the potential that the contractor may want to use water jetting to start the piles.**

I hope this information is helpful for your review. Please do not hesitate to contact me with any questions or if you need additional information.

Thank you,

Tom Pride

Manager, Environmental Sciences

URS Corporation

7650 W Courtney Campbell Causeway

Tampa, FL 33607-1462

Direct: 813-636-2154

Cell: 813-748-7315

Tom.pride@urs.com

--

David Rydene, Ph.D.
Fish Biologist
National Marine Fisheries Service
Habitat Conservation Division
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United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:
FWS Log No. 41910-2013-1-0229

November 29, 2013

Rear Admiral John H. Korn, Commander
Seventh U.S. Coast Guard District
909 SE 1st Avenue
Miami, Florida 33131
(Attn.: Randall Overton)

Dear Commander:

The Fish and Wildlife Service (Service) received the U.S. Coast Guard's (USCG's) letter dated July 24, 2013, regarding a bridge construction project proposed by Manatee County, Florida. You stated that, as lead federal agency for the project, the USCG wished to initiate consultation with the Service under section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.).* Included in the letter were links to a Biological Assessment (BA) and Wetland Evaluation Report (WER) that are appendices to a July 5, 2013, Draft Environmental Impact Statement (DEIS) for the project. In addition, supplemental updates to the BA and WER were submitted with your letter. You provided determinations of "may affect, not likely to adversely affect" for the West Indian (Florida) manatee *(Trichechus manatus latirostris),* wood stork *(Mycteria americana), and* for the eastern indigo snake *(Drymarchon corais couperi).* In an email dated November 20, 2013, the USCG informed the Service of additional site-specific manatee protection measures to be implemented during construction. We provide the following comments in accordance with the Act, the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 *et seq.),* and the Marine Mammal Protection Act of 1972 (MMPA), as amended (16 U.S.C. 1461 *et seq.).*

The proposed bridge, referred to in the DEIS as the Fort Hamer Alternative, consists of a new, two-lane, mid-level, fixed span bridge crossing the Manatee River and approaches that would connect the existing Manatee River Road with the existing Fort Hamer Road. The proposed bridge would cross the Manatee River approximately 15 miles upstream of its mouth, near Parish, Manatee County (27.5194N, -82.4286 W). The proposed bridge length is 2,570 feet. The construction limits for the project extend 1.4 miles and the study area (described as the area of potentially increased traffic) extends for 6 miles and 0.5 mile outward from the proposed center line.

West Indian manatees utilize the Manatee River for calving, mating, foraging, resting, and as a travel corridor. The Manatee River from the Manatee Lake Dam to Tampa Bay, including waters at the project site, is designated as manatee critical habitat. Aerial surveys by the Florida Fish and Wildlife Conservation Commission indicate that the Manatee River receives substantial use by manatees year-round.

Potential project threats to the West Indian manatee include collision with construction vessels and acoustic impacts of pile driving with hydraulic hammers during construction. In order to reduce the effects of the project on the manatee, Manatee County has committed to implementing the "Standard Manatee Conditions for In-Water Activities" developed by the FWC. In addition to observing all posted speed zones on the Manatee River, construction vehicles will be required to operate at "slow speed/no wake" within 0.5 mile upstream and downstream of the construction site. Qualified manatee observers will be stationed in place to observe the river during all in-water construction and have authority to cease project operations when appropriate. All pile driving will occur during daylight hours. If a manatee or a dolphin is observed within 0.25-mile buffer of a pile driving operation, work will cease until the animal leaves the area on its own. Additional conservation measures include; movement of barges and other vessels will be minimized during nighttime hours; grating will be installed over any existing or proposed pipes or culverts 8 inches to 8 feet in diameter that may be accessible to manatees; and, mooring bumpers (fenders) will be in place between vessels where there is a possibility of a manatee being crushed between two moored vessels.

With the incorporation of standard manatee construction conditions and other conditions committed to in the USCG's email of November 20, 2013, above, it is our position that the likelihood of take of a manatee or its habitat is insignificant or discountable. As such, we concur with any revised USCG's determination that the project "may affect, but is not likely to adversely affect," the manatee or its designated critical habitat. In addition, because no incidental take of manatees is anticipated, no such authorizations under the MMPA will be needed.

While no wood stork rookeries are located within 2,500 feet of the project site, two active wood stork rookeries are located within 15 miles. Therefore, suitable foraging habitat on the project site is within the Core Foraging Area of these two colonies. The Fort Hamer Bridge project as currently proposed would impact an estimated 4.34 acre of wetlands, including suitable foraging habitat for the wood stork. It appears that some of the wetland types potentially impacted would not constitute suitable foraging habitat for wood storks. Wetlands offered as compensation for suitable foraging habitat impacted will include, at minimum, foraging function for wood storks equal to those habitats impacted. Given this commitment, we concur with a "may affect, but not likely to adversely affect" determination for the wood stork.

Minimal habitat suitable to support the eastern indigo snake is present within the project area. However, gopher tortoise *(Gopherus polyphemus)* burrows have been observed north of the Manatee River within the project area. Wherever the eastern indigo snake occurs in xeric habitats, it is closely associated with gopher tortoise burrows, which provide shelter from winter cold and summer heat. Suitable gopher tortoise habitat is limited in the project area and only 17 acres of uplands are present within the proposed construction limits. We note that standard construction precautions for the eastern indigo snake (Appendix of the BA) are proposed. These precautions should be updated to conform to conform to the Service's August 12, 2013, Standard Protection Measures for the Eastern Indigo Snake (available at http://www.fws.gov/nmihflorida/Tools2Use/consult-landowner-refs.htm). Evaluation based on the Service's 2010 Eastern Indigo Snake Programmatic Effect Determination Key (as modified

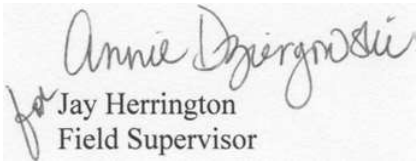
in 2013) indicates a "may affect, not likely to adversely affect" determination for the eastern indigo snake is appropriate, since the proposed project appears unlikely to impact more than 25 active and inactive gopher tortoise burrows or 25 acres of scrub habitat. Based on the information provided, we concur on the "may affect, not likely to adversely affect" determination for the eastern indigo snake.

Although this does not represent a biological opinion as described in section 7 of the Act, it does fulfill the requirements of the Act and no further action is required unless modifications are made to the project that affect listed species; additional information involving potential effects to listed species becomes available; the applicant fails to comply with the permit conditions; or if take of a listed species occurs during the construction of this facility, in which case consultation will be reinitiated.

The U.S. Army Corps of Engineers has received an application for the Fort Hamer Bridge project. We anticipate additional Service review of some aspects of the proposed project and its impacts to fish and wildlife, and potentially providing comments to the Corps consistent with provisions of the FWCA.

We appreciate commitments by Manatee County to conserve fish and wildlife. If you have any questions regarding this letter or to further coordinate with the Service regarding this matter, please contact Peter Plage at (904)731-3085.

Sincerely,



cc: John Fellows, Corps (Tampa Regulatory Office)
Mary Duncan, FWC (Tallahassee)

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

F/SER46:DR
SER-2013-11912

DEC 11 2013

Commander (dpb)
United States Coast Guard
Seventh Coast Guard District
Bridge Administration Branch
909 SE 1st Avenue, Suite 432
Miami, Florida 33131-3050

Attn: Randall D. Overton, Bridge Management Specialist

Ref.: US Coast Guard Public Notice (11-13) Fort Hamer Road Bridge (new bridge), Manatee County, Florida

Dear Mr. Overton:

This responds to your letter dated September 18, 2013, requesting National Marine Fisheries Service (NMFS) concurrence with your project-effect determinations under Section 7 of the Endangered Species Act (ESA) for the above-referenced project. You determined that the project may affect, but is not likely to adversely affect, smalltooth sawfish. Our findings on the project's potential effects are based on the project descriptions in this response. Changes to the proposed action for the project may negate our findings and may require reinitiating consultation.

After reviewing the project's Draft Environmental Impact Statement (DEIS), NMFS sent comments to the U.S. Coast Guard (USCG) on August 8, 2013, including a recommendation that smalltooth sawfish be consulted on under Section 7 of the ESA and that a supplemental section on that species be added to the DEIS's Biological Assessment. NMFS requested information on pile driving activities on August 22, 2013, and received the information that day. NMFS requested additional information on pile driving related to the installation of a temporary work trestle on August 29, 2013. NMFS received a revised ESA/Essential Fish Habitat consultation request letter from the USCG on September 19, 2013, that included a "Not Likely to Adversely Affect" determination for smalltooth sawfish. The letter also included information on temporary work trestle pile driving activities.

The proposed new bridge project site is located at 27.522423°N, 82.428585°W over the Manatee River in Manatee County, Florida (Figure 1). This portion of the Manatee River is tidally influenced, and salt marsh and mangroves are present within the limits of proposed construction. Some submerged aquatic vegetation (widgeon grass, *Ruppia maritima*), a salt-tolerant freshwater species, also occurs in the area. There is currently no bridge structure at the site. Manatee County (the applicant) proposes the construction of a new two-lane bridge. The northern end of the bridge would connect with existing Fort Hamer Road, and the southern end would tie into Upper Manatee Road/Lakewood Ranch Boulevard. The project length would be approximately 2,318 feet. At its highest point the bridge would be 26 feet above Mean High Water.

Figure 1. Proposed Fort Hamer Road Bridge location.

Two temporary work trestles would be installed as part of the project. Each trestle would be 28 feet wide. The southside trestle would be about 270 feet long, and the northside trestle about 1,650 feet long. The trestles would be supported by steel pipe piles in the range of 18-24 inches in diameter. A total of 136 pipe piles would be installed. The pipe piles would be vibrated into place. It will take an average of 30 minutes to install each pipe pile, and about 14-16 pipe piles could be installed each day. Therefore, active pipe pile installation would take about 9-10 days. The trestle components, including the pipe piles, would be removed following completion of the new bridge. The work trestles are estimated to be in place for 14-18 months.

Construction of the bridge itself would require driving 191 pre-cast, pre-stressed 24-inch square concrete piles using a hydraulic impact hammer. These piles would be driven in the river bed and also in the salt marsh peninsula that juts into the river. The piles would initially be placed into pre-formed holes in the river bed, and it is possible that water jetting may also be used to seat the piles before driving begins. The majority of the pile driving would be done from the work trestles, although pile driving at the river channel may require the use of barges. In this instance, two barges would be used: one barge would store materials and the other would carry the pile driving equipment. It is estimated that each pile would take approximately 60 minutes to drive, and that about 6-8 piles could be driven per day. This would translate to about 24-32 days of active pile driving. Overall pile driving-related activities are estimated to take 6 months to complete. Pile driving will only occur during daylight hours.

Heavy equipment such as cranes, backhoes, and dump trucks will be used to accomplish land-based construction activities. There are no plans to place riprap or other armoring components on the river's shorelines. The entire project is expected to take approximately 20 months to complete. The applicant will use turbidity controls and comply with NMFS's *Sea Turtle and Smalltooth Sawfish*

Construction Conditions dated March 23, 2006. Mangrove losses due to the project are estimated to be less than 0.3 acre.

We believe that smalltooth sawfish could be present in the action area and may be affected by the project. However, there are no records of smalltooth sawfish (adults or juveniles) in the vicinity of the project area in the National Sawfish Encounter Database (1999 to 2008). The closest record of a sawfish to the project area occurs 6 miles downstream. There are only three records of smalltooth sawfish in the entire Manatee River in the encounter database. While this does not necessarily preclude the possibility of sawfish occurring near the project, it suggests that they are very uncommon in this part of the Manatee River, if they occur there at all. The project area is not located in critical habitat for this listed species. We have identified the following potential effects to the species and concluded the species are not likely to be adversely affected.

1. Effects to smalltooth sawfish include the risk of injury from in-water construction machinery (e.g., pile driving and jetting equipment, barges and work boats, anchors, etc.) or piling installation, which will be discountable due to the species' ability to move away from the project site if disturbed. The applicant's compliance with NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* will provide an additional measure of protection.

2. Smalltooth sawfish may be affected by daytime pile driving noise associated with the bridge construction. The project involves the installation of 18-to 24-inch steel pipe piles and 24-inch square concrete piles using a vibratory hammer and an impact hammer, respectively. Based on data from the Federal Highway Administration (2012)[1] on vibratory and impact hammer pile driving noise threshold levels for fish, this project's noise levels should be below the threshold for injury. However, maximum pile driving noise levels at the source (approximately 185 dB Root Mean Square or RMS) will likely exceed the threshold for potential behavioral effects to fish (150 dB RMS for fish). Based on this information, fish may exhibit behavioral changes when within a 215-meter radius of the project's active pile driving.

   Due to their expected avoidance of project noise and activity, we would not expect a sawfish to remain stationary within 215 meters of a pile during installation operations. The project has adequate avenues for a sawfish to escape or avoid the project area during pile driving activities, and the project area could still be used by the species during early evening and night hours when pile driving will not occur. Also, the likelihood that smalltooth sawfish will be present in the project area is low since the highest densities of the smalltooth sawfish in the Gulf of Mexico occur from Charlotte Harbor and southward, and smalltooth sawfish are relatively rare in the Manatee River system. In addition, the USCG will require the applicants (as a permit condition) to adhere to NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions,* which require them to stop work if a sawfish is spotted within 50 feet of construction activities. We believe that piling installation noise generated by this project will have insignificant effects on smalltooth sawfish.

3. The loss of 0.3 acre of mangroves as potential refuge and foraging habitat for juvenile smalltooth sawfish in the area does lessen the overall available habitat to the species. However, the loss of red and black mangroves will have an insignificant effect given the

[1] Federal Highway Administration. 2012. Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish. Final. February (ICF 645.10). Prepared by ICF International, Seattle, WA.

extensive mangrove habitat available around the project area and elsewhere in the Manatee River system.

In conclusion, we concur with your determinations that the proposed actions are unlikely to adversely affect the listed species or their critical habitat. This concludes the USCG's consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

Additional relevant information is enclosed for your review. We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions on this consultation, please contact Dr. Dave Rydene, consultation biologist, at (727) 824-5379, or by e-mail at David.Rydene@noaa.gov.

Sincerely,

Miles M. Croom

for Roy E. Crabtree, Ph.D.
Regional Administrator

Enc.: 1. *Sea Turtle and Smalltooth Sawfish Construction Conditions* (Revised March 23, 2006)
2. *PCTS Access and Additional Considerations for ESA Section 7 Consultations* (Revised June 11, 2013)

File: 1514-22.H

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.

b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.

c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.

e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.

f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.

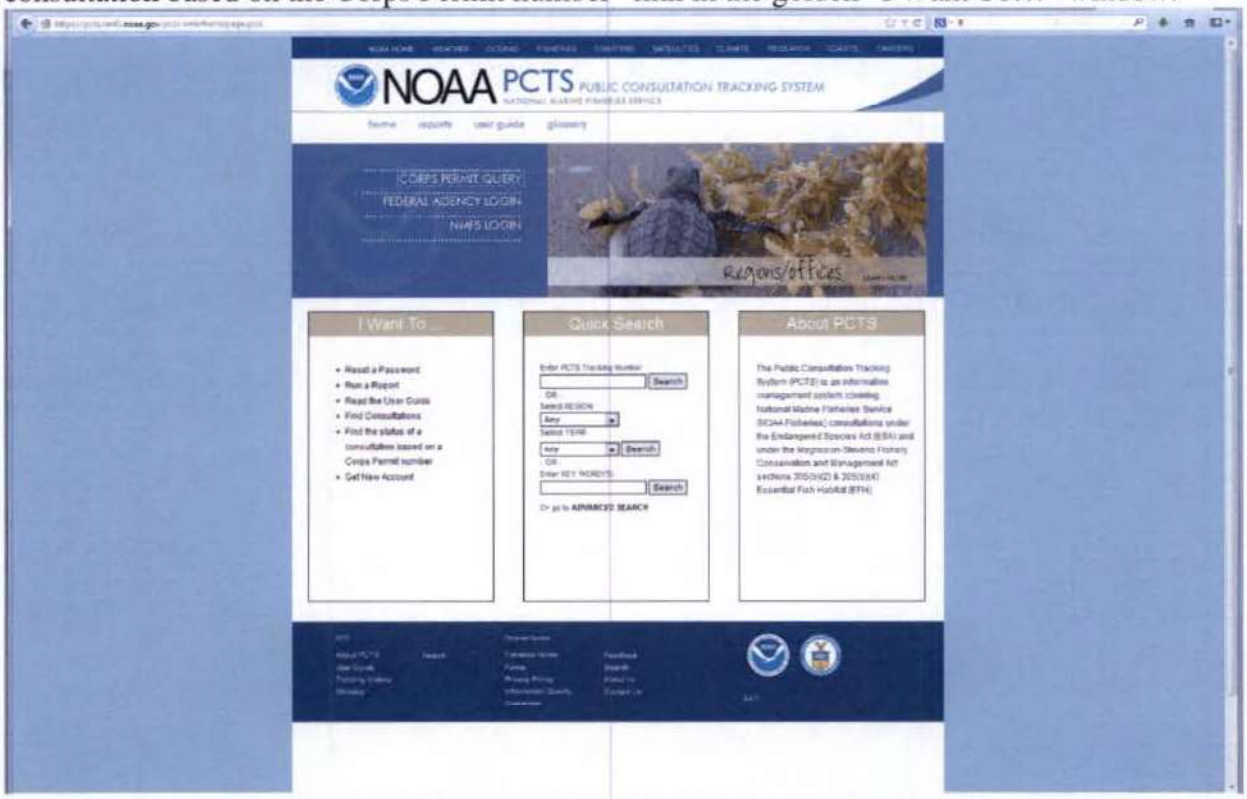
g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

PCTS Access and Additional Considerations for ESA Section 7 Consultations
(Revised 6-11-2013)

Public Consultation Tracking System (PCTS) Guidance: PCTS is a Web-based query system at **https://pcts.nmfs.noaa.gov/** that allows all federal agencies (e.g., U.S. Army Corps of Engineers - USACE), project managers, permit applicants, consultants, and the general public to find the current status of NMFS's Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations which are being conducted (or have been completed) pursuant to ESA Section 7 and the Magnuson-Stevens Fishery Conservation and Management Act's (MSA) Sections 305(b)2 and 305(b)(4). Basic information including access to documents is available to all.

The PCTS Home Page is shown below. For USACE-permitted projects, the easiest and quickest way to look up a project's status, or review completed ESA/EFH consultations, is to click on either the "Corps Permit Query" link (top left); or, below it, click the "Find the status of a consultation based on the Corps Permit number" link in the golden "I Want To…" window.



Then, from the "Corps District Office" list pick the appropriate USACE district. In the "Corps Permit #" box, type in the 9-digit USACE permit number identifier, with no hyphens or letters. Simply enter the year and the permit number, joined together, using preceding zeros if necessary after the year to obtain the necessary 9-digit (no more, no less) number. For example, the USACE Jacksonville District's issued permit number SAJ-2013-0235 (LP-CMW) must be typed in as 201300235 for PCTS to run a proper search and provide complete and accurate results. For querying permit applications submitted for ESA/EFH consultation by other USACE districts, the procedure is the same. For example, an inquiry on Mobile District's permit MVN201301412 is entered as 201301412 after selecting the Mobile District from the "Corps District Office" list. PCTS questions should be directed to Eric Hawk at Eric.Hawk@noaa.gov or (727) 551-5773.

EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to Section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA Section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA Section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
(727) 824-5317; FAX 824-5300

December 16, 2013 F/SER46:DR

Office of the Commander (dpb)
Seventh Coast Guard District
Brickell Plaza Federal Building
909 Southeast First Avenue (Room 432)
Miami, Florida 33131-3028

Dear Commander:

NOAA's National Marine Fisheries Service, Habitat Conservation Division (NMFS), has reviewed the documents (Public Notice 11-13, Draft Environmental Impact Statement, and supplemental updates to the Biological Assessment and Wetland Evaluation Report) provided by the United States Coast Guard regarding the construction of a new bridge spanning the Manatee River in Manatee County, Florida.

The proposed new bridge project site is located at 27.522423°N, 82.428585°W over the Manatee River in Manatee County, Florida. This portion of the Manatee River is tidally influenced and salt marsh and mangroves are present within the limits of proposed construction. Some submerged aquatic vegetation (widgeon grass, *Ruppia maritima*), a salt-tolerant freshwater species, also occurs in the area. There is currently no bridge structure at the site. Manatee County (the applicant) proposes the construction of a new two-lane bridge. The northern end of the bridge would connect with existing Fort Hamer Road, and the southern end would tie into Upper Manatee Road/Lakewood Ranch Boulevard. The project length would be approximately 2,318 feet. At its highest point the bridge would be 26 feet above Mean High Water. The project is expected to take 20 months to complete.

Construction of the bridge is expected to result in permanent and temporary impacts to salt marsh and mangrove habitats. These habitats are utilized by federally-managed fish species and their prey, and are considered Essential Fish Habitat under Magnuson-Stevens Fishery Conservation and Management Act. Permanent loss of salt marsh due to the project is estimated at 1.48 acres and permanent loss of mangroves is estimated at 0.11 acres. Temporary impacts to salt marsh due to the installation of two temporary work trestles is estimated at 0.62 acres. The work trestles will be in place for 14-18 months.

NMFS staff has reviewed the Conceptual Mitigation Plan contained in Appendix D (Wetland Evaluation Report) of the Draft Environmental Impact Statement. Compensatory mitigation to offset wetland impacts will be undertaken in the vicinity of the project and involve wetland creation efforts. NMFS believes that the proposed compensatory mitigation for salt marsh and mangrove impacts due to the project will be adequate to offset the loss of ecological function provided by these habitats. The final compensatory mitigation plan should include a monitoring component to ensure that the compensatory mitigation is successful. In the event that mitigation is not successful, a contingency

mitigation plan will need to be developed to offset the loss of ecological function and include a time lag factor to account for the time period that those lost functions have not been present.

If you have questions regarding our views on this project, please contact Dr. Dave Rydene in our St. Petersburg, Florida office. Dr. Rydene may be reached at the letterhead address or by calling (727) 824-5379.

Sincerely,

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc:
F/SER4
F/SER46 - Rydene

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
10117 PRINCESS PALM AVENUE, SUITE 120
TAMPA, FLORIDA 33610-8302

February 25, 2014

REPLY TO
ATTENTION OF

Tampa Section
SAJ-2010-02223 (IP-JPF)

Kent Bontrager, P.E.
Project Manager, Manatee County Public Works
Via electronic mail: kent.bontrager@mymanatee.org

Dear Mr. Bontrager:

This is in reference to your permit application received on July 31, 203, requesting Department of the Army (DA) authorization to impact waters of the United States in association with the proposed Fort Hamer Bridge. The project site is located at the south end of Fort Hamer Road, in Section 20, Township 34 South, Range 19 East, and Section 17, Township 34 South, Range 19 East, Bradenton, Manatee County, Florida. This project has been assigned permit application number SAJ-2010-02223, which should be referenced on all future correspondence.

The purpose of this letter is to convey comments received in response to the public notice issued on January 22, 2014. A copy of this letter is being sent to all of the commenting agencies to acknowledge receipt of their letters. In response to the public notice, the following comments were received:

1. The National Marine Fisheries Service, by letter dated February 4, 2014, stated that they had reviewed the proposed mitigation plan, that the plan is adequate to offset impacts to salt marsh and mangrove habitats, and that the final plan should include monitoring, a contingency plan, and a time lag factor. The United States Fish and Wildlife Service (USFWS), by letter dated November 29, 2013, stated that they concurred with the 'may affect, not likely to adversely affect' determinations for the eastern indigo snake, wood stork and for the West Indian manatee that were made in the United States Coast Guard's (USCG) July 24, 2013, effect determination letter for the overall project. The Corps accepts the USFWS letter as assurance that there are no concerns with the effect determinations for the wood stork and indigo snake made in the public notice.

   No response to either of these comment letters is necessary.

2. The State Historic Preservation Officer (SHPO) did not respond to the public notice, however the Corps has noted that the October 1, 2013, letter from the SHPO to the USCG states that monitoring may be appropriate in the vicinity of the historic cemetery and within the boundaries of 8MA315. Please indicate if monitoring is proposed as suggested by the SHPO, and provide any more recent correspondence on this issue if available.

3. The Draft EIS for this project states that USCG coordination with Seminole Tribe of Florida's Tribal Historic Preservation Office (THPO) is ongoing. Although the THPO did not provide comments on the public notice, the Corps will coordinate the proposed activity with them to address any concerns. Please provide the current status of the USCG's coordination with the THPO, including any project numbers used by the THPO for the coordination.

4. Although your project is not within the service area of any Corps-approved mitigation banks, there is a bank in the vicinity of the project (Tampa Bay Mitigation Bank) that allows linear projects outside of the bank service area to use the bank.

   Since your mitigation plan deviates from the Corps mitigation hierarchy in CFR §332.3(b) (i.e. permittee responsible), please submit a narrative demonstrating the mitigation plan is:
   a. An environmentally preferable mitigation option
      1. Assess likelihood for ecological success
      2. Evaluate sustainability
      3. Locations of the compensatory mitigation project and the impact site; significance to the watershed
   b. Practicable,
   c. Managing risk and uncertainty, and
   d. Likely to successfully offset impacts.

5. The following comments relate to specific components of the mitigation plan dated November 21, 2013:
   a. Please revise Section 1, "Goals and Objectives", to reference only the Corp impacts and mitigation. If approved, the mitigation plan will be attached to and become part of the Department of the Army permit, and discrepancies between acreages and other information in the main body of the permit and the plan will complicate compliance verification later.

   b. In Section 2, "Site Selection", please provide additional details on the surrounding land uses, including the adjacent FDOT mitigation areas and the use of much of the Hidden Harbour Tract as a county park, including drawings showing the location of the mitigation areas and park facilities (parking lots, buildings, etc.).

   c. In Section 4, "Baseline Conditions", please provide additional details about adjacent natural communities that the proposed mitigation areas may be modeled after, to provide additional assurance that the target communities are obtainable and sustainable.

d. In Section 5, “Mitigation Work Plan”, please provide additional information on what other measures will be undertaken during construction of the mitigation areas to ensure initial success and long-term sustainability, such as use of donor muck or other organic material to improve soil conditions and encourage natural recruitment.

e. Please revise Section 6, “Determination of Credits”, to acknowledge that the Corps will only accept sufficient mitigation to offset the proposed functional losses, and that any ‘left over’ functional gain is not being banked for future use.

f. The Corps has provided specific comments about the UMAM scoring for the proposed mitigation in Item 6, below.

g. Please provide additional information in Section 7, “Maintenance Plan”:
   i. Please include information on how feral hogs will be excluded or managed.
   ii. Please explain if temporary irrigation is proposed.
   iii. How will the weir structure between the two sites be maintained?

h. For Section 8, “Site Protection”, please provide additional documentation – regulations, agreements, etc. –on how the need for Florida Communities Trust approval before changing land use plans in the Hidden Harbour Tract provides sufficient site protection for the mitigation areas.

i. The following are the Corps’ standard performance standards for wetland mitigation:

   Performance Standards: To meet the objectives of the approved compensatory mitigation plan, the Permittee shall achieve the following performance standards:
   a. At least 80 percent cover by appropriate wetland species (i.e., FAC or wetter).
   b. Cover of Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council at http://www.fleppc.org, and the nuisance species, dogfennel (Eupatorium capillifolium), Bermudagrass (Cynodon spp.), Bahiagrass (Paspalum notatum), and cattail (Typha spp.). shall total less than 5 percent.
   c. Less than 20 percent mortality of planted wetland species.
   d. Hydrologic enhancement will result in soils that are, at a minimum, inundated between 12.5 and 25 percent of the growing season.

Please use these in Section 9, “Performance Standards”.

j. The following are the Corps’ standard monitoring requirements for wetland mitigation:

Monitoring and Reporting Timeframes: To show compliance with the performance standards the Permittee shall complete the following:

a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of the compensatory mitigation objectives identified in the **Compensatory Mitigation** Special Condition of this permit.

b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.

c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first 3 years and annual monitoring thereafter for a total of no less than 5 years of monitoring.

d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event. Semi-annual monitoring will be combined into one annual monitoring report.

e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the **Mitigation Release** Special Condition of this permit.

Reporting Format: Annual monitoring reports shall follow a 10-page maximum report format for assessing compensatory mitigation sites. The Permittee shall submit all documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

a. Project Overview (1 Page):

(1) Department of the Army Permit Number

(2) Name and contact information of Permittee and consultant

(3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted

(4) A brief paragraph describing the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.

(5) Written description of the location, any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s), and coordinates of the mitigation site (expressed as latitude, longitudes, UTMs, state plane coordinate system, etc.).

(6) Dates compensatory mitigation commenced and/or was completed

(7) Short statement on whether the performance standards are being met

(8) Dates of any recent corrective or maintenance activities conducted since the previous report submission

(9) Specific recommendations for any additional corrective or remedial actions.

b. Requirements (1 page): List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.

c. Summary Data (maximum of 4 pages): Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the PM in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be formatted to print on a standard 8 ½" x 11" piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

d. Maps and Plans (maximum of 3 pages): Maps shall be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s). Each map or diagram should be formatted to print on a standard 8 ½" x 11" piece of paper and include a legend and the location of any photos submitted for review. As-built plans may be included.

e. Conclusions (1 page): A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Commander will ultimately determine if the mitigation site is successful for a given monitoring period.

Please use these in Section 11, "Mitigation Monitoring".

k. In Section 12, "Long Term Management", please include a plan for the financing of the long-term management of the site.

6. The following are comments about the UMAM scoring for this project. Please note that the Corps may have additional comments following review of information submitted in response to the mitigation comments above or in this section, or following a site visit of the mitigation area, if conducted.
   a. The description of the 'with' conditions for Location and Landscape Support for both mitigation areas will be relatively isolated, yet the score of 8 for this category is relatively high. Please either revise the scoring, or provide additional justification for the proposed score.

   b. Please provide a description of the 'with' conditions for Community Structure that describes each of the two mitigation areas, and supports the score of 8 for this category.

   c. Please use the Corps' time lag table, not the state table, for the t-factor: http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/Mitigation/timelag%20table.pdf

d. Please provide justification for the proposed 3-year time lag for the marsh creation area to replace the lost wetland functions, especially considering the mangrove component for this mitigation area.

e. Please provide an explanation for the 'risk' score of 1.25, especially for the forested wetland mitigation.

7. Please provide a copy of the issued Environmental Resource Permit for the proposed actions, as the water quality and coastal zone management compliance certification for the Corps review.

8. Please note that because the Corps is a cooperating agency for the EIS for this project, the EIS process will need to be finalized, including the waiting period after the Final EIS is noticed in the Federal Register, before the Corps can prepare its decision document.

The above information must be provided for us to complete our public interest review. Your application will be held in abeyance for 60 days pending receipt of your response. If we do not hear from you within 60 days, we will take final action on your Department of the Army permit application, based on the information presently available to us. Failure to provide project specific information will result in the Corps completing its application review with the information available, which may result in an unfavorable permit decision.

You are cautioned that work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands, without a Department of the Army permit could subject you to enforcement action. Receipt of a State permit does not obviate the requirement for obtaining a Department of the Army permit for the work described above prior to commencing work.

Should you have any questions or comments regarding this request for additional information, please contact the project manager, John Fellows at the letterhead

address, by phone at 813-769-7070, or by electronic mail at john.p.fellows@usace.army.mil.

Sincerely,

for
Kevin O'Kane
Chief, Tampa Regulatory Section

Copies Furnished:

Tom Pride
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DEPARTMENT OF HOMELAND SECURITY

U.S. COAST GUARD FINAL ENVIRONMENTAL IMPACT STATEMENT

FOR

PROPOSED CONSTRUCTION OF A HIGHWAY BRIDGE ACROSS THE MANATEE RIVER,

MILE 15.0, AT PARRISH, MANATEE COUNTY, FLORIDA

APPENDIX B

TRAFFIC TECHNICAL MEMORANDUM

NOVEMBER 2012

CERTIFICATION BY URS CORPORATION

TRAFFIC TECHNICAL MEMORANDUM FOR
FT. HAMER ROAD & RYE ROAD ALTERNATIVES
SR 64 TO US 301 - MANATEE COUNTY

I, Domingo Noriega, Florida P.E. Number 42019, have either prepared or reviewed/supervised the traffic analysis contained in this study. The study has been prepared in accordance and following guidelines and methodologies consistent with Florida Department of Transportation current policies, including the Project Forecasting Handbook and project traffic forecasting procedures 525-030-120. Based on traffic count information, general data sources, and other pertinent information, this traffic analysis was prepared using current traffic engineering, transportation planning, and Florida Department of Transportation practices and procedures.

Domingo Noriega, PE # 42019
URS CORPORATION SOUTHERN

Date

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EXECUTIVE SUMMARY

This Traffic Technical Memorandum documents existing and future conditions along Fort Hamer Road, Upper Manatee River Road, Rye Road, and Golf Course Road within eastern Manatee County. The Sarasota/Manatee Metropolitan Planning Organization (MPO) recognizes the need for corridor improvements in its 2035 Long Range Transportation Plan (LRTP) documented in Appendix A-1. Manatee County's Capital Improvement Program (CIP) has funded a two-lane bridge crossing the Manatee River connecting Upper Manatee River Road and Fort Hamer Road. In this report, three alternatives were evaluated:

- **No-Build Alternative –** The existing Interstate 75 (I-75) six-lane freeway does not include a Fort Hamer bridge crossing the Manatee River nor does it include separate turn-lane improvements with traffic signalization along Upper Manatee River Road and Fort Hamer Road.

- **Fort Hamer Alternative –** This build alternative consists of a new two-lane bridge crossing the Manatee River connecting the existing two-lane Upper Manatee River Road with the existing two-lane Fort Hamer Road. The construction limits of this alternative begin just north of the main entrance of the Waterlefe subdivision and terminate on the north side of the Manatee River approximately 2,000 feet south of Mulholland Drive, a total of approximately 1.4 miles. The study area for this alternative extends south to State Road (SR) 64 and north to U.S. Highway (US) 301 because of the increased traffic between these points that would result from this alternative.

- **Rye Road Alternative –** This build alternative consists of a new two-lane crossing the Manatee River adjacent to the existing Rye Road Bridge and the expansion of Rye Road from two to four lanes from SR 64 north to Golf Course Road, Golf Course Road from two to four lanes from Rye Road to Fort Hamer Road, and Fort Hamer Road from two to four lanes from Golf Course Road to US 301, a total of 10.2 miles.

Table ES-1 summarizes the annual average daily traffic (AADT) bridge volumes and levels of service (LOS) crossing the Manatee River for the baseline (2011) and the future (2035). The LOS criteria is documented in Appendix A-2. As this table summarizes, there is a need for more lanes crossing the Manatee River in 2035 for the No-Build Alternative, the MPO's Needs Plan, the Fort Hamer Alternative, and the Rye Road Alternative.

Table ES-2 summarizes the future (2035) travel statistics in terms of future daily traffic, vehicle miles traveled (VMT), and vehicle hours traveled (VHT) across the Manatee River.

TABLE ES-1
AADT/LOS COMPARISON

Bridge	Existing Lanes	2011 (AADT/LOS)	2035 No-Build (AADT/LOS)	2035 Needs Plan (AADT/LOS)	Fort Hamer Alternative (AADT/LOS)	Rye Road Alternative (AADT/LOS)
US 41	4	31,500/C	71,900/F	46,100/F	70,000/F	80,700/F
US 301	4	55,000/F	80,500/F	59,400/F	79,300/F	67,600/F
CR 683	---	---	---	62,300/F (four-lanes)	---	---
I-75	6	90,500/C	164,700/F	158,300/E (10-lanes)	163,300/F	165,200/F
Fort Hamer Road	---	---	---	33,500/D (four-lanes)	23,600/F	---
Rye Road	2	2,800/B	7,400/C	4,000/B	7,400/F	23,200

--- No bridge

TABLE ES-2
PROJECT AREA VMT AND VHT CHARACTERISTICS

Alternative	Bridge Location	AADT	Change	Total VMT	Total VHT
No-Build Alternative	I-75	164,700	----	13,762,689	736,049
	Fort Hamer Road	----	----		
	Rye Road	19,800	----		
Fort Hamer Alternative	I-75	163,300	-1,400	13,664,913 or 138,316 less miles compared to the No-Build Alternative	730,046 or 6,003 less hours compared to the No-Build Alternative
	Fort Hamer Road	23,600	23,600		
	Rye Road	7,400	-12,400		
Rye Road Alternative	I-75	165,200	+500	13,815,741 or increase of 50,052 miles compared to the No-Build Alternative	729,202 or 6,847 less hours compared to the No-Build Alternative
	Fort Hamer Road	----	----		
	Rye Road	24,000	+4,200		

--- No bridge

As seen in the above tables, the Fort Hamer Alternative will result in the lowest VMT for vehicles travelling this section of eastern Manatee County. The Rye Road Alternative is anticipated to have greater VMT due to its location within Manatee County compared with the No-Build Alternative and the Fort Hamer Alternative. With a two-lane Fort Hamer Alternative, the total VHT is greater than the Rye Road Alternative due to only including a two-lane bridge and a two-lane Upper Manatee River Road and a two-lane Fort Hamer Road anticipated to operate with LOS F conditions. The proposed river crossing at Fort Hamer Road is anticipated to generate 23,600 trips a day by 2035, demonstrating the need for a roadway connection over the Manatee River east of I-75. The Sarasota/Manatee/Charlotte (SMC) Travel Demand Model (TDM) HEVAL (Highway Evaluation) module reports are documented in Appendix A-3. All traffic projections are based on the latest available version of the SMC TDM, which at that time, has taken into consideration the current economic downturn in the State of Florida.

Section 1.0
INTRODUCTION

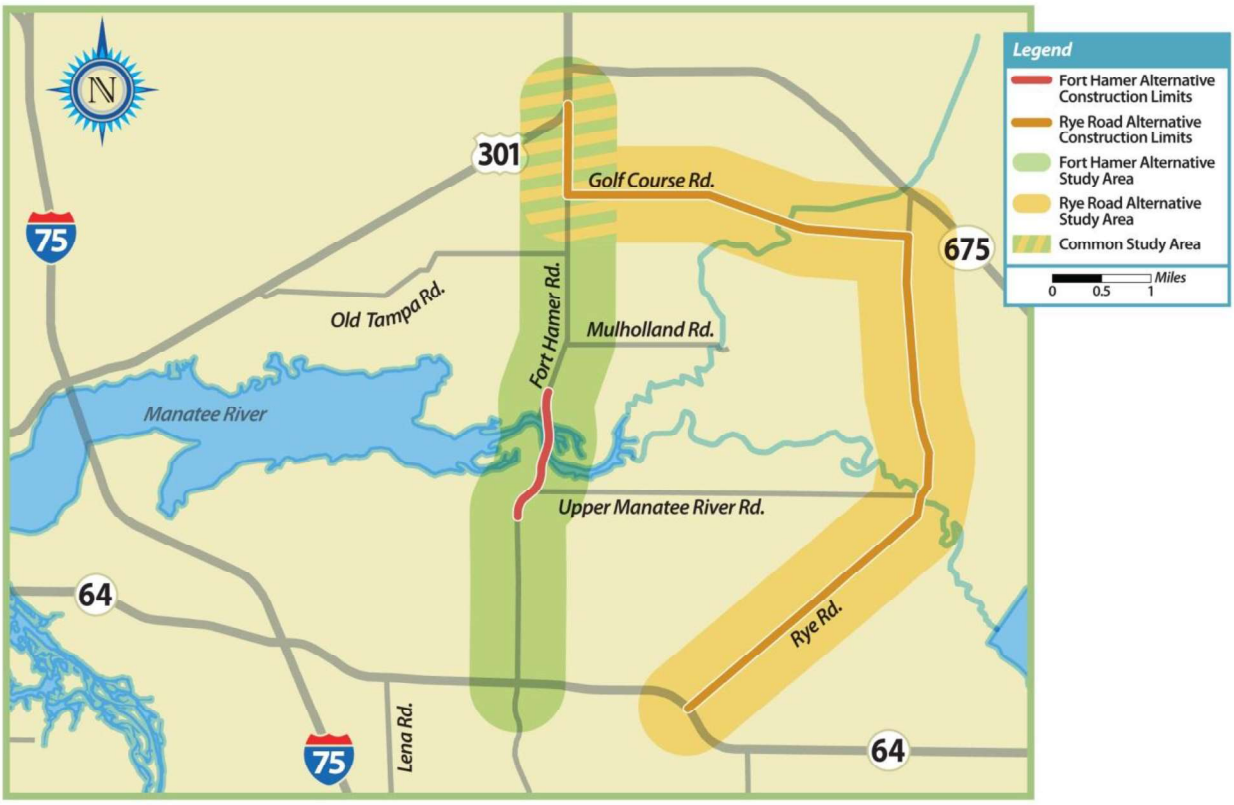
Manatee County (the County) has prepared a Draft Environmental Impact Statement (DEIS), in conjunction with the United States Coast Guard (USCG), to document a study of proposed improvements to north/south traffic movements in eastern Manatee County, Florida and to evaluate the potential impacts associated with those improvements. The objective of this transportation study is to identify the type, conceptual design, and location of improvements necessary to provide additional capacity for the projected north/south travel demand. The DEIS has been developed to satisfy the requirements of the *National Environmental Policy Act of 1969* (NEPA) and other related federal and state laws, rules, and regulations that apply to the Proposed Action.

For the purpose of the DEIS, two build alternatives are being evaluated. **Figure 1-1** shows the location, study areas, and construction limits of these alternatives. The study area of each alternative is defined as the area contained within a 0.5-mile buffer of the centerline. The two build alternatives are described below.

- **Fort Hamer Alternative –** This build alternative consists of a new two-lane bridge crossing the Manatee River connecting the existing two-lane Upper Manatee River Road with the existing two-lane Fort Hamer Road. The construction limits of this alternative begin just north of the main entrance of the Waterlefe subdivision and terminate on the north side of the Manatee River approximately 2,000 feet south of Mulholland Drive, a total of approximately 1.4 miles. The study area for this alternative extends south to State Road (SR) 64 and north to U.S. Highway (US) 301 because of the increased traffic between these points that would result from this alternative.

- **Rye Road Alternative –** This build alternative consists of a new two-lane crossing the Manatee River adjacent to the existing Rye Road Bridge and the expansion of Rye Road from two to four lanes from SR 64 north to Golf Course Road, Golf Course Road from two to four lanes from Rye Road to Fort Hamer Road, and Fort Hamer Road from two to four lanes from Golf Course Road to US 301, a total of 10.2 miles.

FIGURE 1-1
PROJECT AREA MAP



1.1 PROJECT NEED

Manatee County is proposing to add additional travel lanes across the Manatee River in eastern Manatee County. The purpose of the Proposed Action is to improve regional mobility by providing an alternative north/south transportation route between high-growth areas of Manatee County located east of Interstate 75 (I-75) and separated by the Manatee River. Studies have shown that there is a strong demand for multiple crossings over this waterway to alleviate the traffic burden on I-75. Several specific factors demonstrate the need for the Proposed Action, including:

- Accommodate existing and projected growth in eastern Manatee County,
- Improve the Level of Service (LOS) of the local roadway network,
- Improve emergency response times, and
- Improve evacuation capacity across the Manatee River.

The current river crossings located at I-75 and Rye Road create a circuitous route in eastern Manatee County that increases travel time/distance, reduces LOS, increases emergency response times, and are at capacity for evacuation scenarios.

1.2 ALTERNATIVES CONSIDERED

The Proposed Action is intended to service the demand for two additional lanes of capacity across the Manatee River east of I-75 and the other elements of the Purpose and Need statement noted in Chapter 1 of the DEIS. East of I-75, opportunities exist where existing roadways can be connected with a new crossing (Fort Hamer Alternative) or an existing bridge and roadway can be expanded (Rye Road Alternative). Other alternatives were considered preliminarily, but were discounted due to their obvious impacts to the natural and human environment or failure to meet the project's Purpose and Need.

For example, new crossing locations between I-75 and Fort Hamer Road would require not only a new crossing of the Manatee River, but miles of new roadway traversing established and growing residential developments, thus, displacing hundreds of residents. Natural environment impacts in this area were also obviously greater than those utilizing existing transportation corridors. A crossing location between Fort Hamer Road and Rye Road had similar issues related to residential developments, but substantially greater natural environment impacts due to the curvilinear nature of this section of the Manatee River, width of the 100-year floodplain, and habitats found along the river. For these reasons, alternatives that either did not utilize or expand existing transportation corridors were considered to be unreasonable and were not carried forward in the DEIS for further analysis.

Within the Fort Hamer Alternative, three bridge concept alternatives were evaluated:

- Bascule Concept
  - Single leaf bascule (moveable) bridge with a 10-foot vertical clearance
- Mid-Level Fixed Concept
  - Fixed span bridge with a 26-foot vertical clearance
- High-Level Fixed Concept
  - Fixed span bridge with a 40-foot vertical clearance

A vessel survey was conducted during the Memorial Day weekend 1999 to determine vessel type, size, and usage along this portion of the Manatee River. At the time it was determined that a vertical clearance (air draft) of 26 feet would accommodate all vessels in this portion of the Manatee River. These results were presented to the USCG and a vertical clearance of 26 feet was found acceptable.

Due to the length of time since that survey was conducted, a second vessel survey was conducted in spring 2011. All property owners with water access between Fort Hamer Road and Rye Road were identified using the Manatee County Property Appraisers Office database and mailed a

questionnaire. Based on the response of that survey, three respondents noted they had vessels that exceeded 26 feet in height. A subsequent field review in December 2011 indicated that one of these vessels (a small sailboat) was sunk in place at the owner's dock. The second vessel consisted of a houseboat with a flagpole that exceeded 26 feet in height; however, it was noted that the houseboat required less than 26 feet vertical clearance if the flagpole was lowered. The third vessel was a sailboat with a permanently mounted mast exceeding 26 feet in height. The results of both vessel surveys are provided in Appendix A of the DEIS.

Based on the estimated total lifetime cost (construction, maintenance, and operations) of the Bascule Bridge Concept ($106,142,880 - $111,083,600) and the very low number of vessels needing unlimited vertical clearance, it was recommended the Bascule Bridge Concept for the Fort Hamer Alternative be eliminated for further consideration.

The bridge height is the basis for the controversy related to the Waterlefe subdivision located immediately southwest of the proposed Fort Hamer Alternative crossing. The High-Level Fixed Bridge would increase the vertical clearance to 40 feet and be contradictory to the issues raised by that community. Additionally, because of the estimated total lifetime cost (construction, maintenance, and operations) of the High-Level Fixed Bridge Concept ($14,906,580 - $26,016,350) and the very low number of vessels needing a 40-foot vertical clearance, it was recommended the High-Level Fixed Bridge Concept for the Fort Hamer Alternative be eliminated for further consideration.

1.3 ALTERNATIVES RECOMMENDED FOR FURTHER EVALUATION

As a result of the preliminary evaluation of alternatives discussed above, it was determined that three alternatives would be considered "reasonable" for further, detailed analysis and evaluation in the DEIS:

- No-Build Alternative,
- Fort Hamer Alternative, and
- Rye Road Alternative.

The No-Build Alternative does not include any road capacity improvements other than the road safety improvements and scheduled maintenance already funded to be constructed in the Manatee County Capital Improvement Program (CIP), or improvements provided by private nongovernment entities, such as developers. For comparative purposes, the No-Build Alternative was retained and evaluated against the two build alternatives throughout the EIS process. The results of the No-Build Alternative analyses are presented in Chapter 2 of the DEIS. This BA only addresses the two build alternatives.

The Fort Hamer Alternative consists of a new two-lane bridge crossing the Manatee River connecting the existing two-lane Upper Manatee River Road with the existing two-lane Fort Hamer Road. The construction limits of this alternative extend from just north of the main entrance of the Waterlefe subdivision to the north side of the Manatee River, a total of approximately 1.4 miles. The length of the proposed bridge is approximately 2,570 feet. A conceptual plan view of the bridge, bridge approaches, and stormwater/floodplain features are shown on **Figure 1-2**. The proposed roadway and bridge typical sections for the Fort Hamer Alternative are shown in **Figure 1-3**.

The Rye Road Alternative consists of a new two-lane, 350-foot-long bridge crossing the Manatee River parallel to the existing Rye Road Bridge. To accommodate the two new lanes over the river, this alternative also includes the expansion of Rye Road from two to four lanes from SR 64 north to Golf Course Road, Golf Course Road from two to four lanes from Rye Road to Fort Hamer Road, and Fort Hamer Road from two to four lanes from Golf Course Road to US 301, a total of approximately 10.2 miles. Unlike the Fort Hamer Alternative, conceptual locations of the stormwater/floodplain compensation ponds have not been developed for the Rye Road Alternative since this alternative has not been advanced to preliminary designs. The proposed roadway and bridge typical sections for the Rye Road Alternative are shown in **Figure 1-4**.

1.4 PREFERRED ALTERNATIVE

The analysis presented in Chapter 2 of the DEIS resulted in the determination that the No-Build Alternative does not meet the stated Purpose and Need. The analysis further showed the Rye Road Alternative only minimally improves the local roadway network LOS and only minimally accommodates planned and approved growth in the area. The Rye Road Alternative does not improve emergency response times. After consideration of each alternative's ability to meet the stated Purpose and Need and the social, cultural, natural environment, and physical impacts of the No-Build Alternative and the two build alternatives, **the Fort Hamer Alternative has been selected as the preferred alternative**.

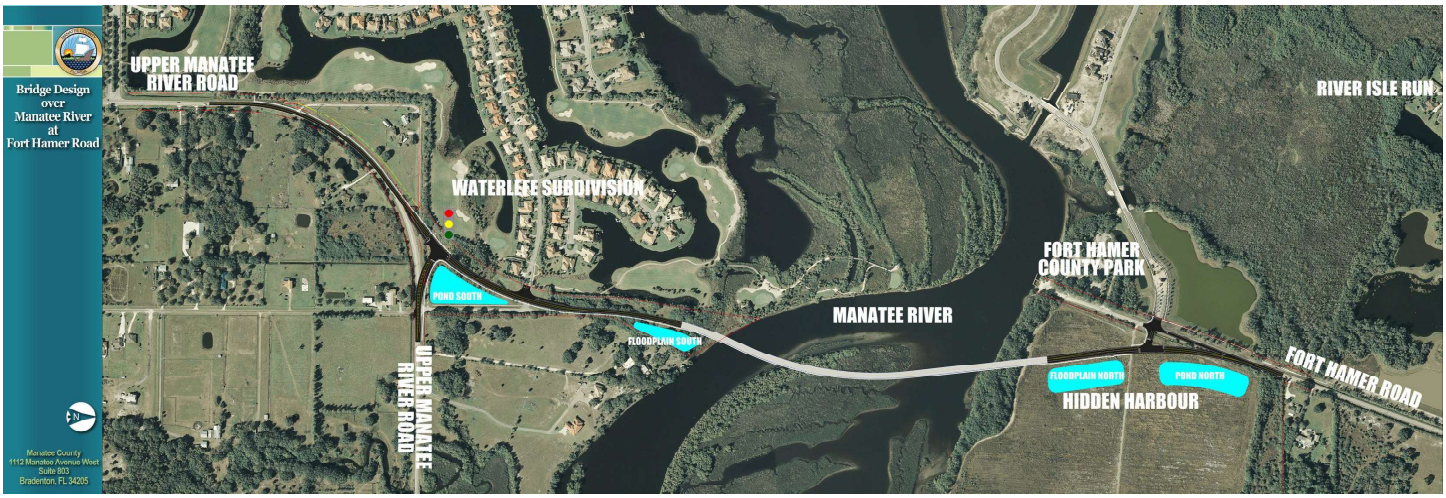
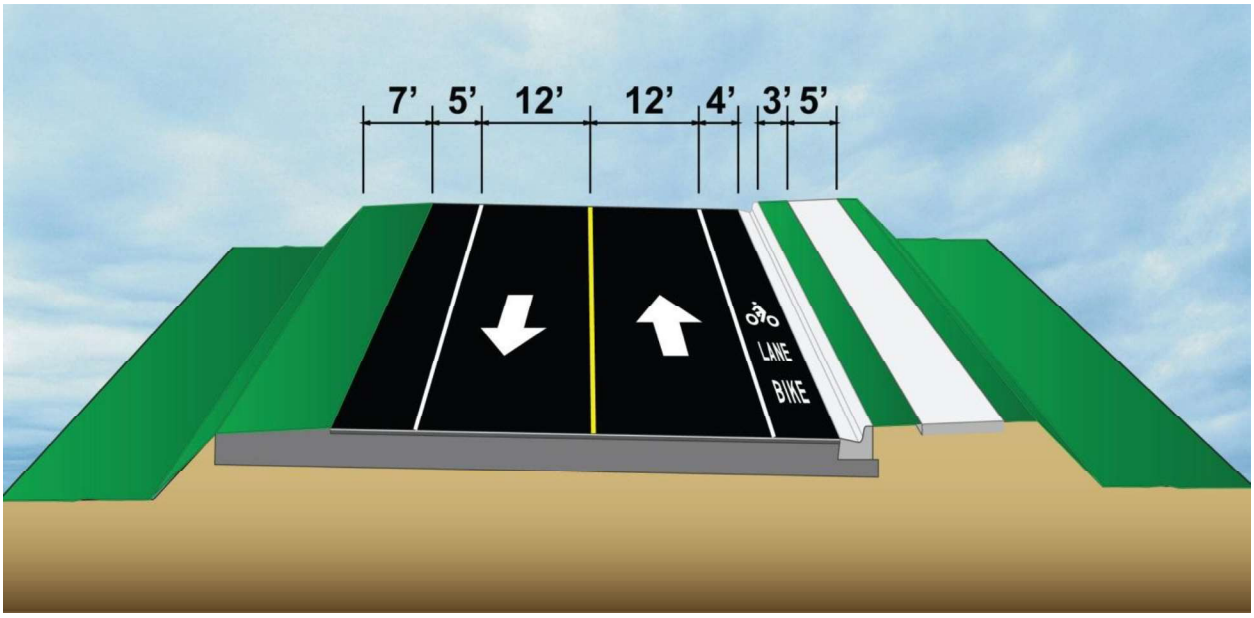


FIGURE 1-2
FORT HAMER ALTERNATIVE
CONCEPTUAL PLAN VIEW OF
BRIDGE AND APPROACHES

FIGURE 1-3
FORT HAMER ALTERNATIVE TYPICAL SECTIONS

ROADWAY TYPICAL SECTION



BRIDGE TYPICAL SECTION

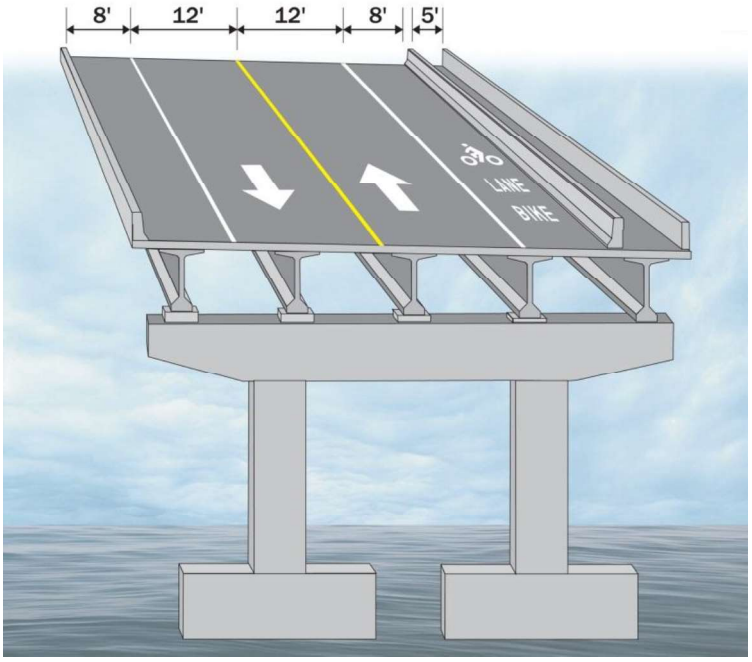
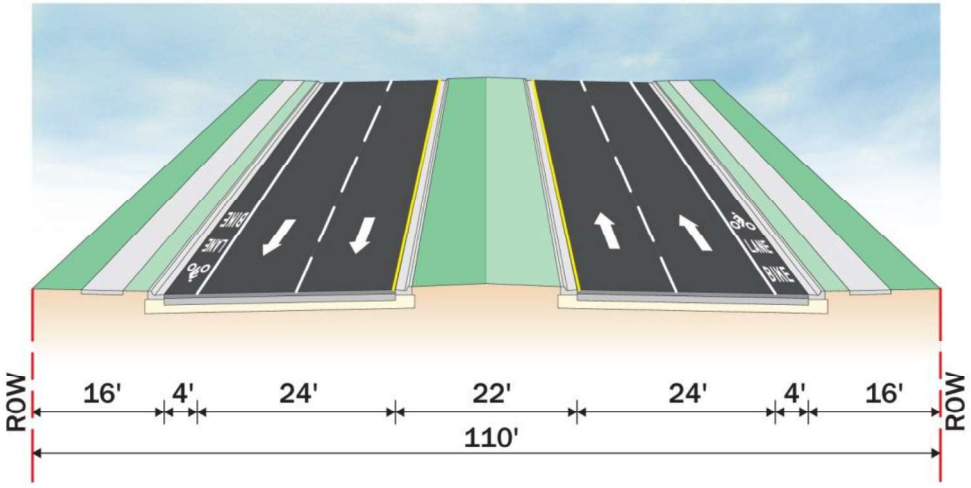
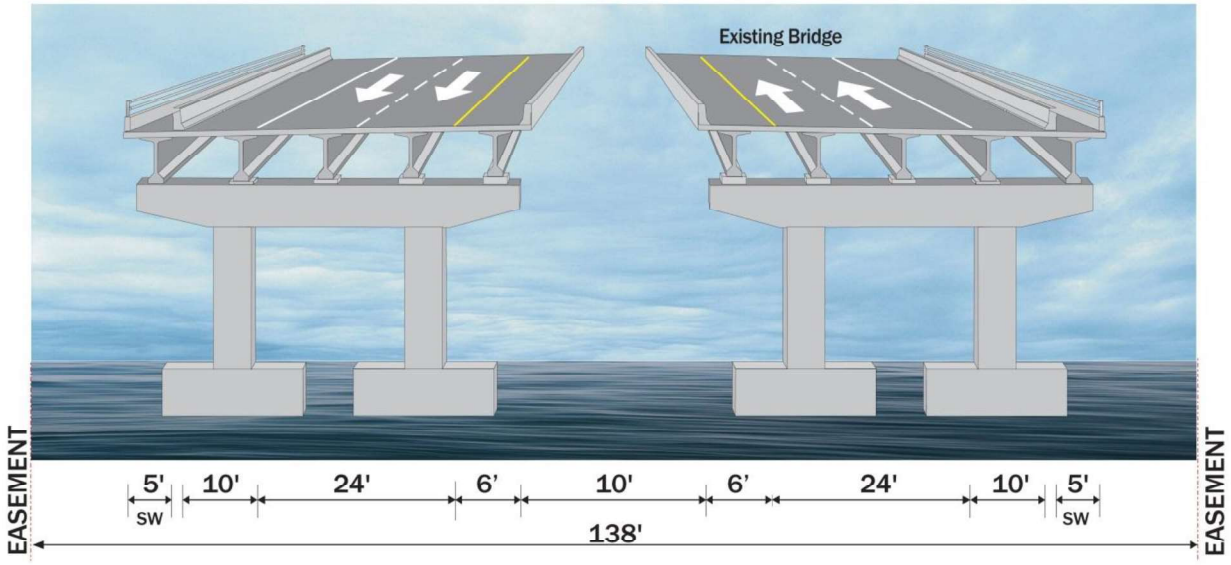


FIGURE 1-4
RYE ROAD ALTERNATIVE TYPICAL SECTIONS

ROADWAY TYPICAL SECTION



BRIDGE TYPICAL SECTION



Section 2.0
BASELINE (2011) TRAFFIC CONDITIONS

2.1 BASELINE TRAFFIC CONDITIONS

The purpose of this section is to document the existing geometry, recently-constructed roadway improvements, historical and current traffic characteristics, and current traffic conditions along Upper Manatee River Road, Fort Hamer Road, Rye Road, and Golf Course Road within the project area.

2.1.1 BASELINE AND COMMITTED GEOMETRICS

Upper Manatee River Road is an existing two-lane (one lane in each direction) roadway from north of SR 64 to its eastward terminus at Rye Road. East of Upper Manatee River Road, SR 64 continues eastward to Rye Road as a four-lane roadway. All other cross streets along Upper Manatee River Road/Fort Hamer Road are unsignalized (controlled by stop signs) and have two lanes (one lane in each direction).

The existing Fort Hamer Road is a two-lane (one lane in each direction) roadway from Fort Hamer County Park, located on the north side of the Manatee River, continuing north and terminating at US 301. The Florida Department of Transportation (FDOT) has constructed four through lanes (two through lanes in each direction) along US 301 from Old Tampa Road to CR 675. The existing geometry south of the Manatee River along Upper Manatee River Road and Rye Road is illustrated on **Figure 2-1**. Similarly, **Figure 2-2** illustrates the existing geometry north of the Manatee River along Fort Hamer Road and Rye Road. Fort Hamer Road, Upper Manatee River Road, Rye Road, and Golf Course Road are two-lane (one lane per direction), County-maintained roadways.

2.1.2 BASELINE TRAFFIC VOLUMES

Twenty-four hour traffic counts were conducted by URS Corporation (URS) for the following locations during March 2011:

- SR 64, west of Upper Manatee River Road;
- Fort Hamer Road, south of Old Tampa Road/Cross Creek Parkway;
- Rye Road, north of SR 64;
- Rye Road, north of Waterline Road;
- Rye Road, north of Upper Manatee River Road; and
- Rye Road, north of Golf Course Road.

FIGURE 2-1
BASELINE (2011) GEOMETRY – SOUTH SECTION

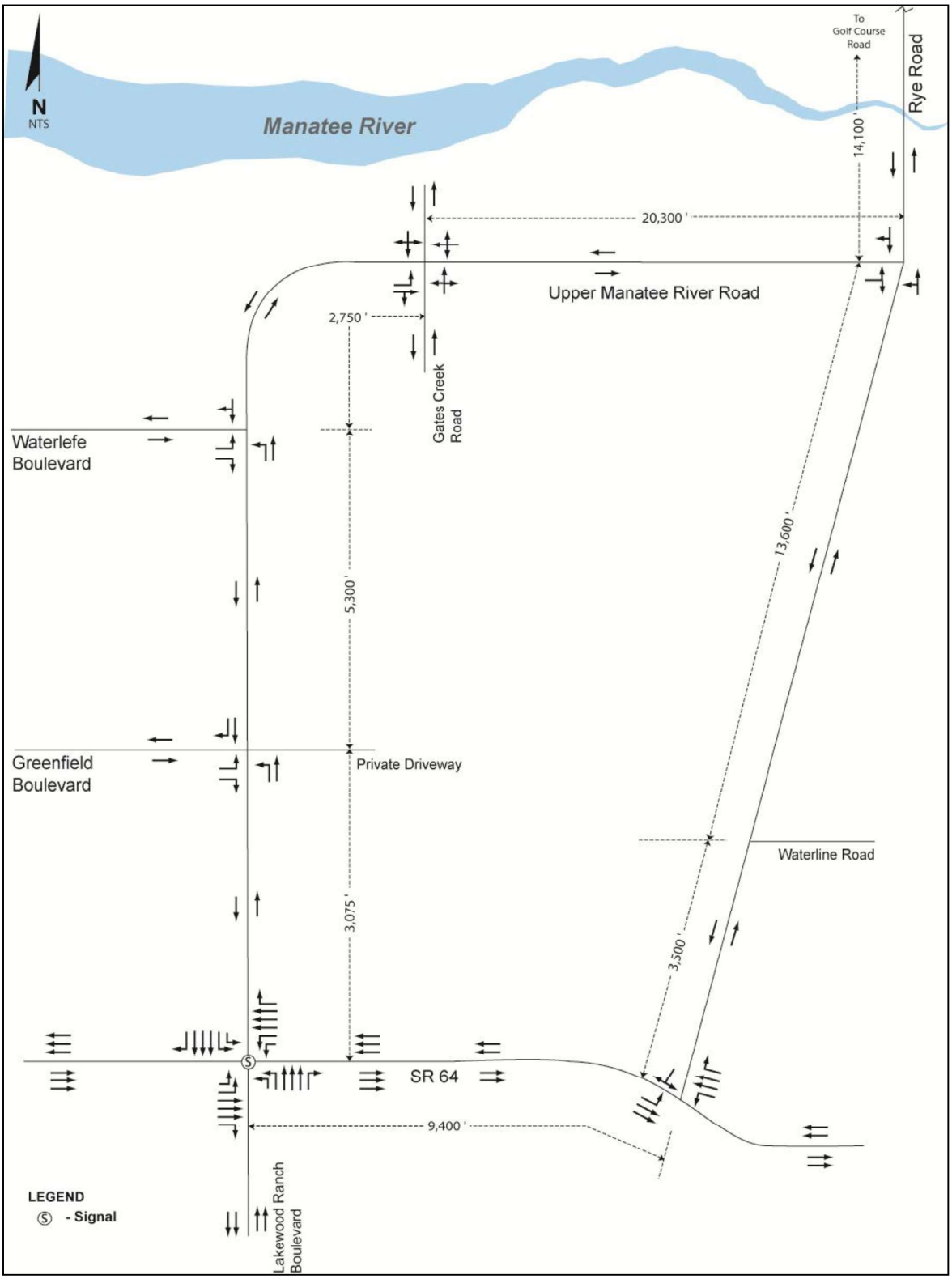
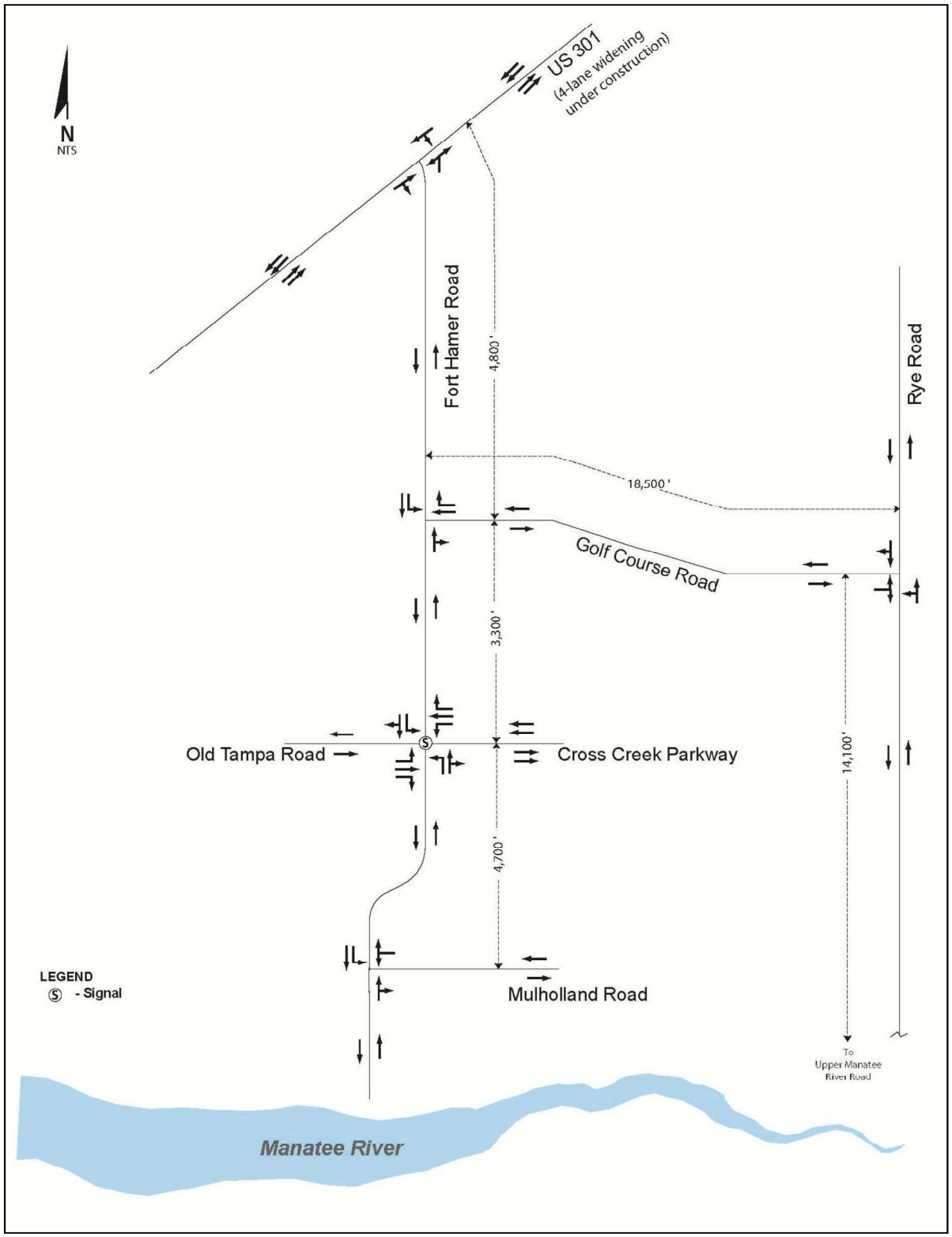


FIGURE 2-2
BASELINE (2011) GEOMETRY – NORTH SECTION



In April 2010 for:

- Fort Hamer Road, south of Mulholland Road and
- Upper Manatee River Road, north of Waterlefe Boulevard.

Similarly, consecutive 2-day traffic counts were conducted in April 2010 by URS along Fort Hamer Road, south of Mulholland Road and along Upper Manatee River Road from Waterlefe Boulevard to Gates Creek Road.

Morning (a.m.) and evening (p.m.) peak hour turning movement counts were obtained for the following intersections:

- Upper Manatee River Road/SR 64,
- Upper Manatee River Road/Greenfield Boulevard,
- Upper Manatee River Road/Waterlefe Boulevard,
- Upper Manatee River Road/Gates Creek Road,
- Fort Hamer Road/Mulholland Road,
- Fort Hamer Road/Old Tampa Road,
- Fort Hamer Road/Golf Course Road,
- Fort Hamer Road/US 301,
- Rye Road/SR 64,
- Rye Road/Upper Manatee River Road, and
- Rye Road/Golf Course Road.

This peak hour turning movement counts were conducted by URS from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. and are included in **Appendix A-4**. The 24-hour traffic counts were adjusted to AADT volumes using the County-wide weekly seasonal adjustment factors for Manatee County. For consistency, the peak hour turning movement counts were also adjusted using the seasonal adjustment factors. The AADTs in the project area are shown on **Figures 2-3** and **2-4**.

FIGURE 2-3
BASELIEN (2011) AADT VOLUMES – SOUTH SECTION

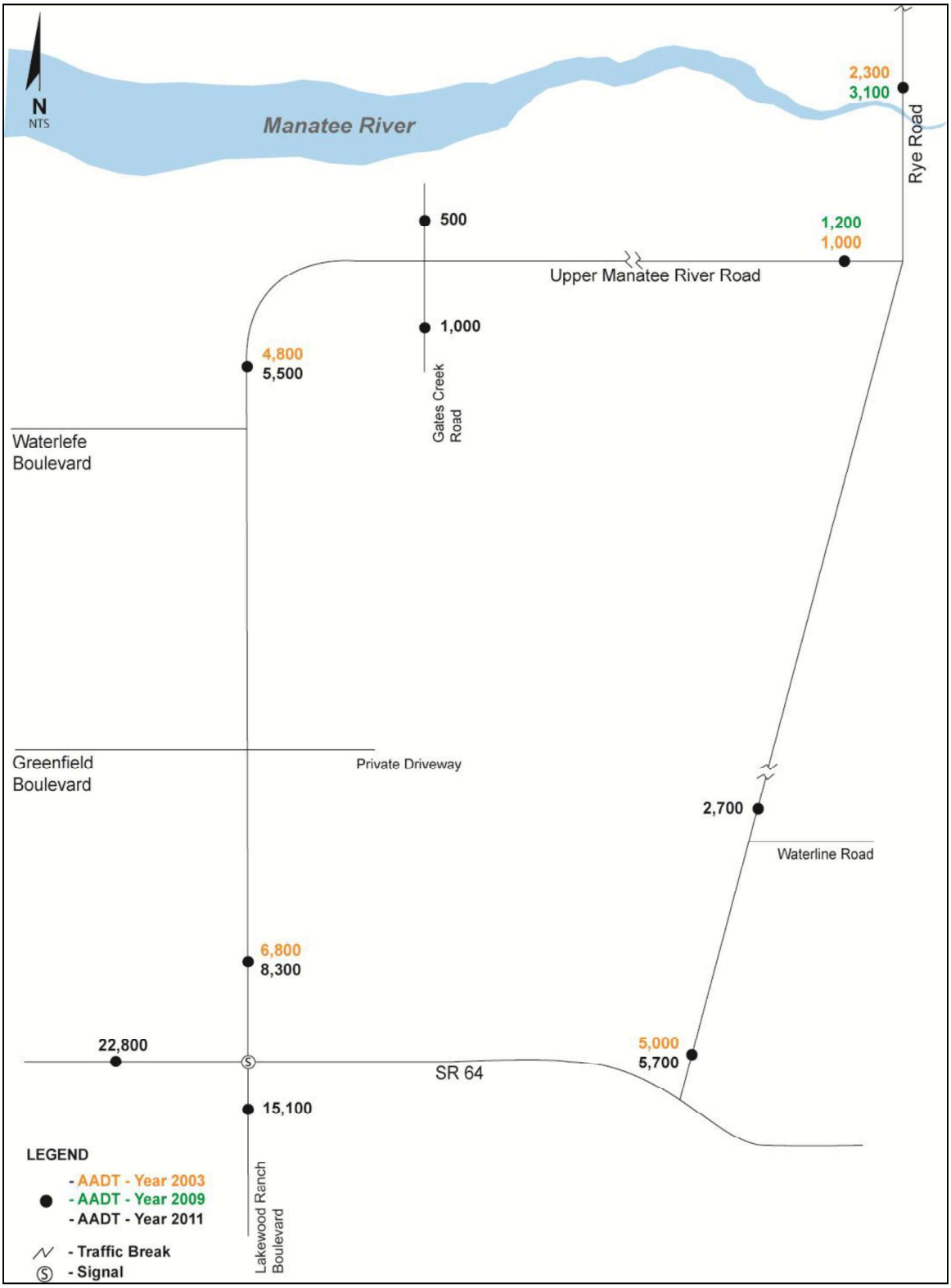


FIGURE 2-4
BASELINE (2011) AADT VOLUMES – NORTH SECTION

2.1.3 HISTORICAL TRAFFIC TRENDS

Along Upper Manatee River Road, an approximate 7 percent annual increase in daily traffic volumes has occurred since the previous daily traffic counts conducted in 2003, as illustrated in Figure 2-3. Upper Manatee River Road, west of Rye Road, has increased by approximately 3 percent annually between 2003 and 2009 as illustrated in Figure 2-3. Since 2003, additional development has taken place along Upper Manatee River Road, contributing to this increase in traffic volumes.

Rye Road has increased in traffic from 2003 to 2009/2011 as illustrated in Figures 2-3 and 2-4. Rye Road, north of SR 64, has increased by approximately a 2 percent annual rate from 2003 to 2011. At the Rye Road Bridge over Manatee River, the traffic has increased by approximately 4 percent annually. Golf Course Road has similarly experienced an increase in daily traffic. Since 2003 to 2009, Golf Course Road has experienced approximately a 9 percent increase in traffic as illustrated in Figure 2-4.

The greatest increase in daily traffic has occurred along Fort Hamer Road, Golf Course Road, and Upper Manatee River Road. Rye Road north of Upper Manatee River Road has shown an increase in traffic at a lesser amount. The historical traffic trends and traffic counts are documented in **Appendix A-4**.

2.1.4 BASELINE TRAFFIC CHARACTERISTICS

Existing peak hour traffic characteristics, including the peak hour-to-daily volume ratio, the directional distribution, and the percentage of trucks were obtained from the traffic count data. **Table 2-1** summarizes the baseline (2011) peak hour traffic characteristics.

TABLE 2-1
BASELINE (2011) PEAK HOUR TRAFFIC CHARACTERISTICS

Roadway	Location	AM Peak Hour			PM Peak Hour		
		Peak to Daily Ratio[1]	Directional Distribution[2]	% Heavy Vehicles	Peak to Daily Ratio[1]	Directional Distribution[2]	% Heavy Vehicles
Upper Manatee River Road	North of SR 64	0.083	0.805	2.0	0.089	0.595	2.0
	North of Waterlefe Boulevard	0.126	0.684	N/A	0.100	0.609	N/A
Fort Hamer Road	South of Old Tampa Road	0.094	0.578	1.4	0.100	0.596	2.4
	South of US 301	0.129	0.667	2.4	0.101	0.573	1.6
Rye Road	North of SR 64	0.106	0.691	1.8	0.101	0.649	4.2
	North of Upper Manatee River Road	0.097	0.671	3.7	0.099	0.609	2.2
	North of Golf Course Road	0.098	0.605	2.7	0.087	0.641	1.5
Corridor Average		**0.105**	**0.671**	**--**	**0.097**	**0.610**	**--**

[1] Peak hour volume divided by 24-hour volume.
[2] Peak direction volume divided by two-way peak hour volume.

The design traffic factors (K_{30} and D_{30}) used in the development of design hour volumes were established in the previous approved version of the Upper Manatee Traffic Study (December 2005). These factors are a K_{30} of 10 percent and a D_{30} of 0.60 (60 percent northbound in the p.m. peak hour). These factors appear reasonable after reviewing the traffic characteristics from the updated traffic counts. The percentage of heavy vehicles ranged between 1.5 and 4.2 percent during the a.m. and p.m. peak hours based upon the amount of heavy vehicles traveling along Upper Manatee River Road, Fort Hamer Road, and Rye Road. Heavy vehicles are defined by Federal Highway Administration's (FHWA's) vehicle classification of Class 4 through Class 13 that consists of buses, single-unit trucks, and combination (tractor-trailer) trucks. The future percentage of heavy vehicles along Upper Manatee River Road and Fort Hamer Road was assumed to increase to four percent in the p.m. peak hour. This heavy vehicle increase is based upon truck activity along similar near-by facilities, such as SR 64 and US 301, where currently approximately 4 percent truck trips occur during the p.m. peak hour.

2.1.5 BASELINE TRAFFIC CONDITIONS ANALYSIS

Intersection analyses were performed at 11 intersections based on the traffic counts conducted in April 2010 and March 2011. Existing traffic operations for these signalized and unsignalized intersections were determined using the Transportation Research Board's (TRB) Highway Capacity Manual (HCM 2000), Version 5.5 software [(Highway Capacity Software (HCS)]. The LOS standard for the roadways within and abutting the study area is LOS D on all roads except on US 301 north of SR 64, which is LOS C.

LOS is a measure of the operating conditions of roadways based on six service flow rates: LOS A through LOS F. LOS A through LOS C represents stable flow with the least delay (LOS A) to moderate delay (LOS C). LOS D is representative of road operating conditions approaching unstable flow where many vehicles must stop and there are noticeable delays at intersections with vehicles having to wait more than one cycle to proceed through the intersection. LOS E is representative of operating conditions with more frequent delays with most vehicles having to stop. LOS F conditions are representative of forced flow operating conditions with the most delay occurring where vehicles are stopped at intersections for extended periods of time.

The intersection analyses were conducted using the peak hour volumes, as illustrated on **Figures 2-5 and 2-6**. Unsignalized intersection analyses were conducted along Fort Hamer Road, Upper Manatee River Road, Rye Road, and Golf Course Road, which are summarized in **Table 2-2** for the baseline (2011).

All of the unsignalized intersections on Fort Hamer Road are currently operating at LOS B or better during the p.m. peak hour. Along Upper Manatee River Road, all unsignalized intersections are operating at LOS C or better during the p.m. peak period. The signalized and unsignalized HCS analyses are provided in **Appendix B**. SR 64/Upper Manatee River Road currently operates at LOS D during the p.m. peak hour. The signalized intersection's volume-to-capacity (v/c) ratio average delay [seconds per vehicle (sec/veh)] and LOS for the baseline (2011) are summarized in **Table 2-3**.

FIGURE 2-5
BASELINE (2011) PEAK HOUR TRAFFIC VOLUMES – SOUTH SECTION

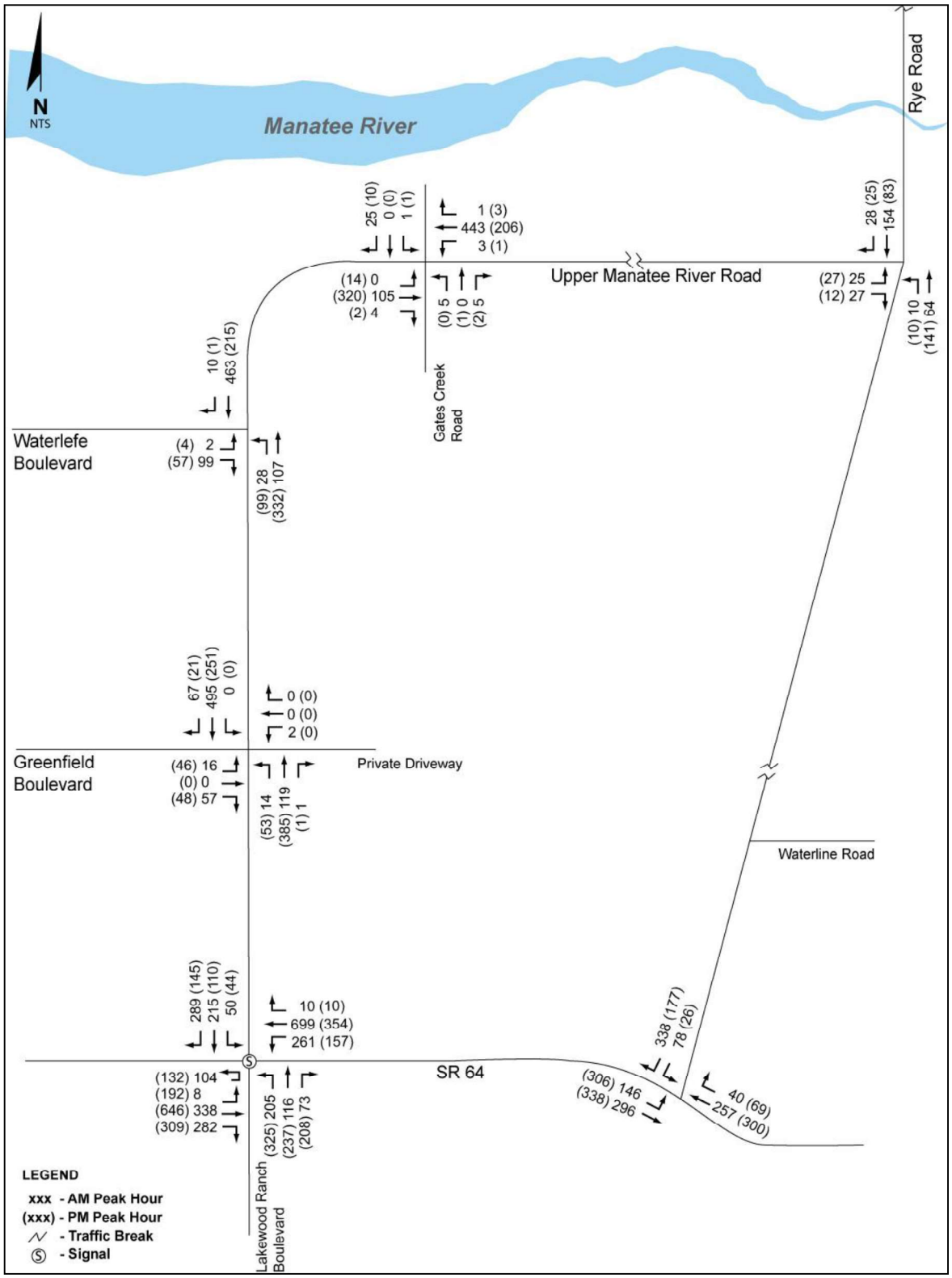


FIGURE 2-6
BASELINE (2011) PEAK HOUR TRAFFIC VOLUMES – NORTH SECTION

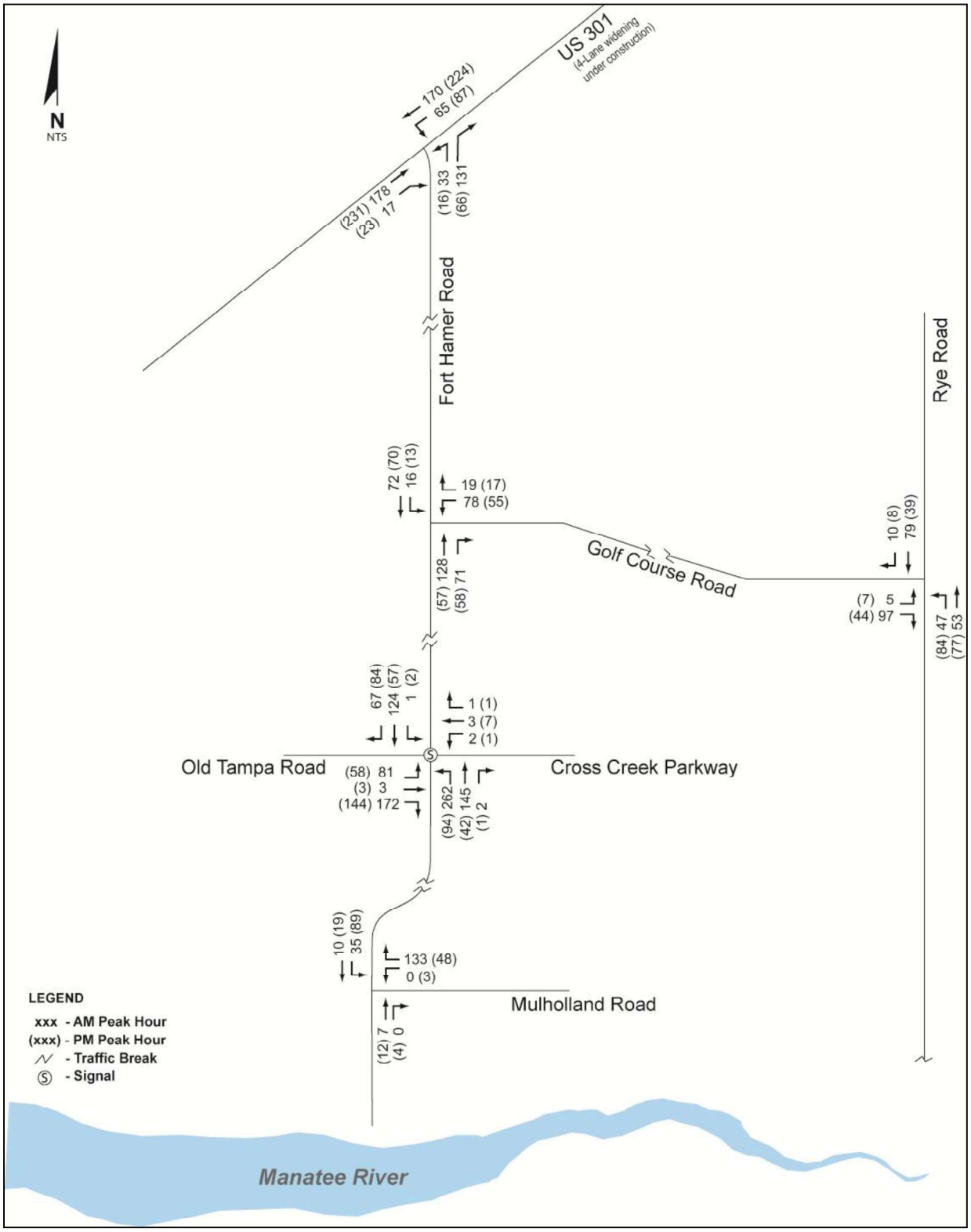


TABLE 2-2
BASELINE (2011) UNSIGNALIZED INTERSECTION PEAK HOUR LOS

Intersection	Approach	Movement	AM Peak Hour			PM Peak Hour		
			V/C Ratio	Average Delay (sec/veh)	LOS	V/C Ratio	Average Delay (sec/veh)	LOS
Upper Manatee River Road								
Greenfield Boulevard (Two-way Stop Sign Controlled)	Northbound	Left/Through FF	0.02	8.9	A	0.04	7.9	A
	Southbound	Through FF/Right	0.00	7.5	A	0.00	8.1	A
	Eastbound	Left	0.05	13.4	B	0.19	14.6	B
		Right	0.14			0.08		
	Westbound	Left/Right	0.01	16.4	C	--	--	--
Waterlefe Boulevard (Two-way Stop Sign Controlled)	Northbound	Left/Through FF	0.04	8.6	A	0.10	8.1	A
	Southbound	Through FF/Right FF	--	--	--	--	--	--
	Eastbound	Left	0.01	13.2	B	0.02	10.5	B
		Right	0.23			0.08		
Gates Creek Road (Two-way Stop Sign Controlled)	Northbound	Left/Through/Right	0.02	12.5	B	0.01	12.5	B
	Southbound	Left/Through/Right	0.08	11.7	B	0.02	10.2	B
	Eastbound	Left	0.00	8.3	A	0.02	7.8	A
		Through FF/Right FF	--	--	--	--	--	--
	Westbound	Left/Through FF/Right FF	0.00	7.6	A	0.00	8.2	A
Fort Hamer Road								
Mulholland Road (Two-way Stop Sign Controlled)	Northbound	Through FF/Right FF	--	--	--	--	--	--
	Southbound	Left/Through FF	0.03	7.3	A	0.06	7.4	A
	Westbound	Left/Right	0.17	9.1	A	0.07	8.8	A
Old Tampa Road (Flashing Beacon Controlled in the PM Peak Hour)	Northbound	Left	Signal Controlled During AM Peak See Table 2-3			0.2	7.4	A
		Through FF/Right FF				--	--	--
	Southbound	Left				0.00	7.2	A
		Through FF/Right FF				--	--	--
	Eastbound	Left				0.03	8.9	A
		Through				0.00		
		Right				0.09		
	Westbound	Left				0.00	9.9	A
		Through				0.01		
		Right				0.00		
Golf Course Road (Two-way Stop Sign Controlled)	Northbound	Through FF/Right FF	--	--	--	--	--	--
	Southbound	Left/Through FF	0.02	7.9	A	0.01	7.5	A
	Westbound	Left	0.18	11.7	B	0.08	9.7	A
		Right	0.03			0.02		
US 301 (Two-way Stop Sign Controlled)	Northbound	Left/Right	0.31	12.2	B	0.14	11.6	B
	Eastbound	Through FF/Right FF	--	--	--	--	--	--
	Westbound	Left/Through	0.05	7.8	A	0.08	8.0	A
Rye Road								
SR 64	Southbound	Left/Right	0.79	27.0	D	0.38	14.7	B
	Eastbound	Left/Through FF	0.15	8.6	A	0.30	9.5	A
Upper Manatee River Road	Northbound	Left/Through FF	0.01	7.8	A	0.01	7.5	A
	Eastbound	Left/Right	0.09	10.3	B	0.06	10.2	B
Golf Course Road	Northbound	Left/Through FF	0.05	7.6	A	0.07	7.5	A
	Eastbound	Left/Right	0.14	9.5	A	0.07	9.2	A

FF = Free flow movement not reported in HSC+ for Unsignalized Intersection.

TABLE 2-3
BASELINE (2011) SIGNALIZED INTERSECTION PEAK HOUR LOS

Intersection	Approach	Movement	AM Peak Hour			PM Peak Hour		
			V/C Ratio	Average Delay (sec/veh)	LOS	V/C Ratio	Average Delay (sec/veh)	LOS
Upper Manatee River Road								
SR 64 (Signal Controlled)	Eastbound	Left	0.25	43.7	D	0.55	43.3	D
		Through	0.33	37.0	D	0.62	40.8	D
		Right	0.34	8.8	A	0.35	8.9	A
		Overall	--	27.2	C	--	33.7	C
	Westbound	Left	0.49	46.0	D	0.23	39.6	D
		Through	0.56	39.9	D	0.29	36.5	D
		Right	0.01	6.7	A	0.01	6.7	A
		Overall	--	41.3	D	--	36.9	D
	Northbound	Left	0.43	45.5	D	0.82	63.3	E
		Through	0.11	34.7	C	0.20	35.6	D
		Right	0.08	7.1	A	0.21	7.9	A
		Overall	--	35.2	D	--	39.8	D
	Southbound	Left	0.10	42.5	D	0.12	46.8	D
		Through	0.20	35.6	D	0.10	34.7	C
		Right	0.48	23.1	C	0.22	17.0	B
		Overall	--	29.7	C	--	27.8	C
Overall Intersection			--	33.5	C		35.2	D
Fort Hamer Road								
Old Tampa Road (Signal Controlled in AM Peak Hour)	Eastbound	Left	0.16	14.4	B	Operates as a Flashing Beacon Controlled intersection during PM Peak Hour See Table 2-2		
		Through	0.01	24.1	C			
		Right	0.33	15.9	B			
		Overall	--	15.5	B			
	Westbound	Left	0.01	13.5	B			
		Through	0.02	24.1	C			
		Right	0.00	13.5	B			
		Overall	--	18.8	B			
	Northbound	Left	0.77	25.0	C			
		Through/Right	0.44	23.4	C			
		Overall	--	24.4	C			
	Southbound	Left	0.00	11.0	B			
		Through/Right	0.48	23.9	C			
		Overall	--	23.9	C			
Overall Intersection			--	21.8	C			

Section 3.0
OPENING YEAR (2015) TRAFFIC

3.1 OPENING YEAR (2015) TRAFFIC PROJECTIONS

The Opening Year (2015) daily volumes estimated with the SMC TDM were converted from peak season weekday average daily traffic (PSWADT) volumes to AADT volumes by applying a model output conversion factor (MOCF) of 0.89 applicable to Manatee County. The AADT volumes were then converted to directional design hour volumes (DDHV), by applying the design traffic factors.

The peak direction on the cross streets generally were assumed to be inbound in the p.m. peak hour if the land use was primarily residential. Conversely, if the land uses adjacent to the cross streets were primarily retail/office, then the peak direction was assumed to be outbound in the p.m. peak hour.

The total inbound and outbound peak hour volumes entering and exiting Upper Manatee River Road and Fort Hamer Road were adjusted by the turning movements at the locations where traffic counts were conducted. The a.m. peak hour volumes were obtained by reversing the reciprocal movements for p.m. peak hour.

The Opening Year (2015) AADT volumes generated for the traffic analysis zones (TAZs) located immediately adjacent to Upper Manatee River Road and Fort Hamer Road were checked for reasonableness. The 2015 AADT volumes for the Fort Hamer Alternative are illustrated on **Figures 3-1 and 3-2**. The 2015 AADT volume projected for the new bridge across the Manatee River is 17,400 vehicles per day (vpd). **Figures 3-3 and 3-4** illustrate the peak hour traffic volumes for the Opening Year (2015) for the Fort Hamer Alternative. Similarly, the 2015 AADT volumes estimated for Rye Road Alternative are illustrated on **Figures 3-5 and 3-6**. The 2015 AADT volume projected for the bridge across the Manatee River along Rye Road is 14,500 vpd. **Figures 3-7 and 3-8** illustrate the peak hour traffic volumes for the Opening Year (2015) for the Rye Road Alternative.

3.3 OPENING YEAR (2015) TRAFFIC ANALYSIS

Intersection analyses for Opening Year (2015) were conducted using 2015 projected volumes and a combination of Synchro and HCS software. The results of the analysis are summarized in **Table 3-1** for the Fort Hamer Alternative and **Table 3-2** for the Rye Road Alternative. The analysis worksheets are provided in **Appendix C**. The No-Build Alternative is evaluated for the Design Year (2035) only.

FIGURE 3-1
OPENING YEAR (2015) AADT VOLUMES
FORT HAMER ALTERNATIVE - SOUTH SECTION

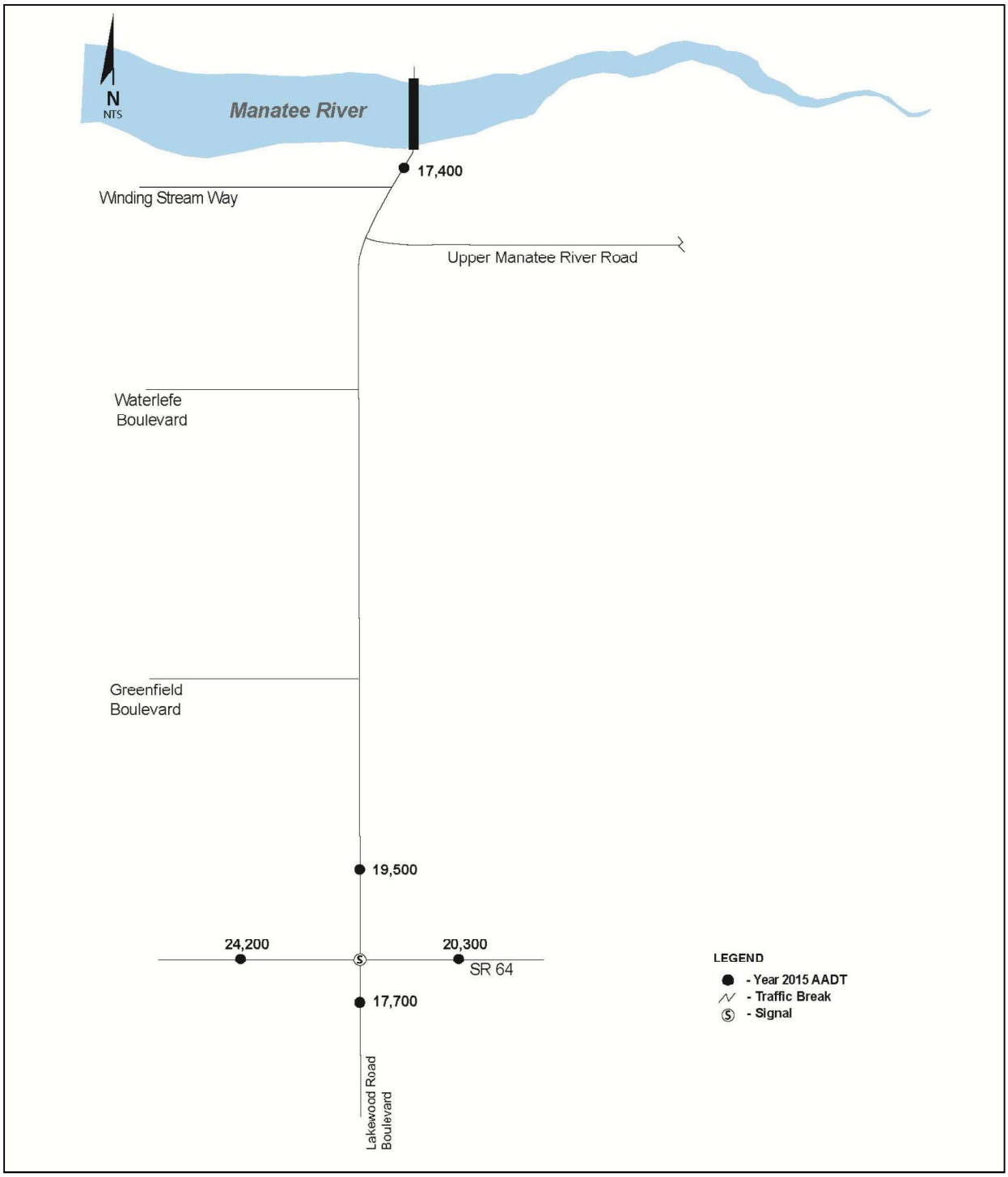


FIGURE 3-2
OPENING YEAR (2015) AADT VOLUMES
FORT HAMER ALTERNATIVE - NORTH SECTION

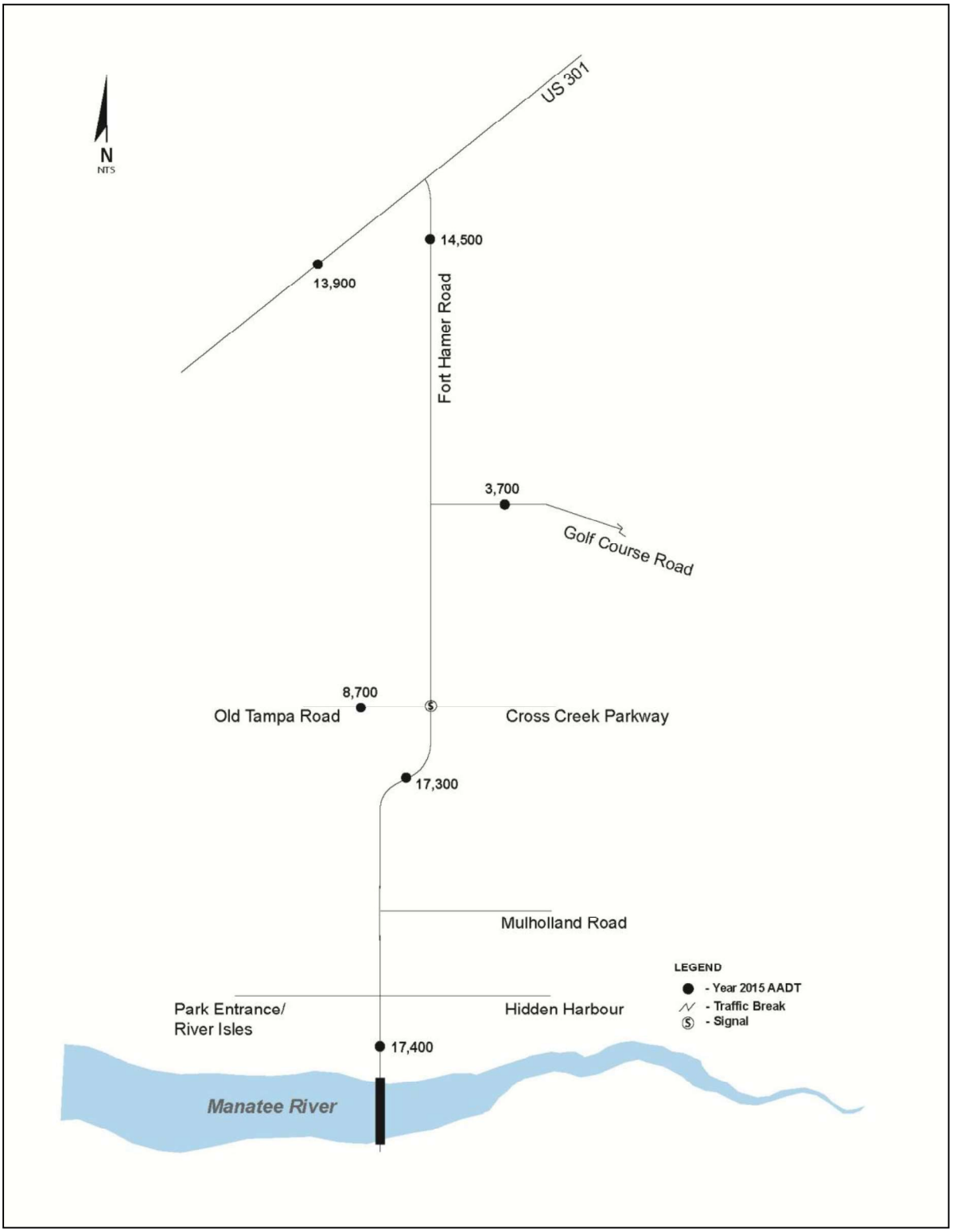


FIGURE 3-3
OPENING YEAR (2015) PEAK HOUR TRAFFIC VOLUMES
FORT HAMER ALTERNATIVE - SOUTH SECTION

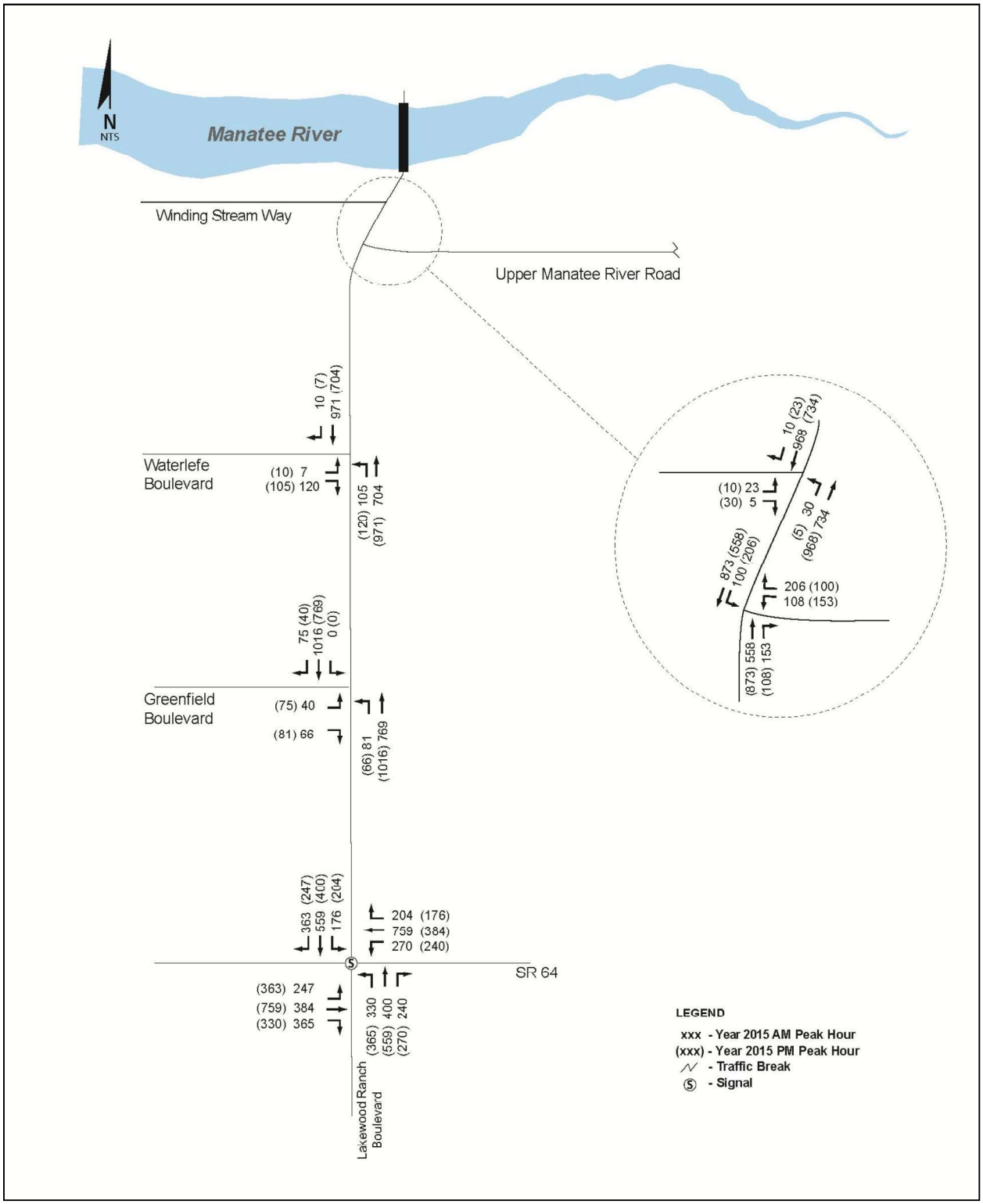


FIGURE 3-4
OPENING YEAR (2015) PEAK HOUR TRAFFIC VOLUMES
FORT HAMER ALTERNATIVE - NORTH SECTION

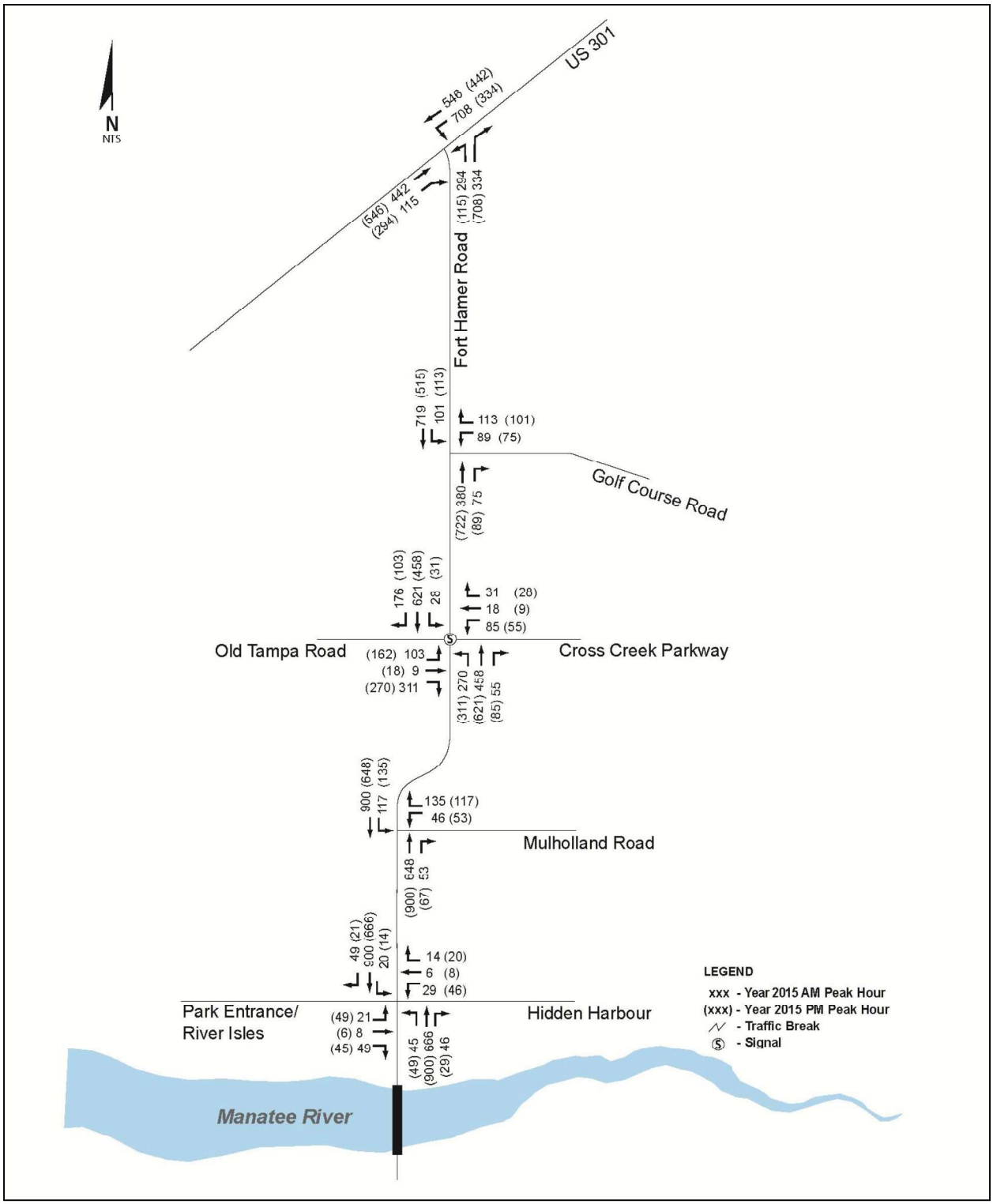


FIGURE 3-5
OPENING YEAR (2015) AADT VOLUMES
RYE ROAD ALTERNATIVE - SOUTH SECTION

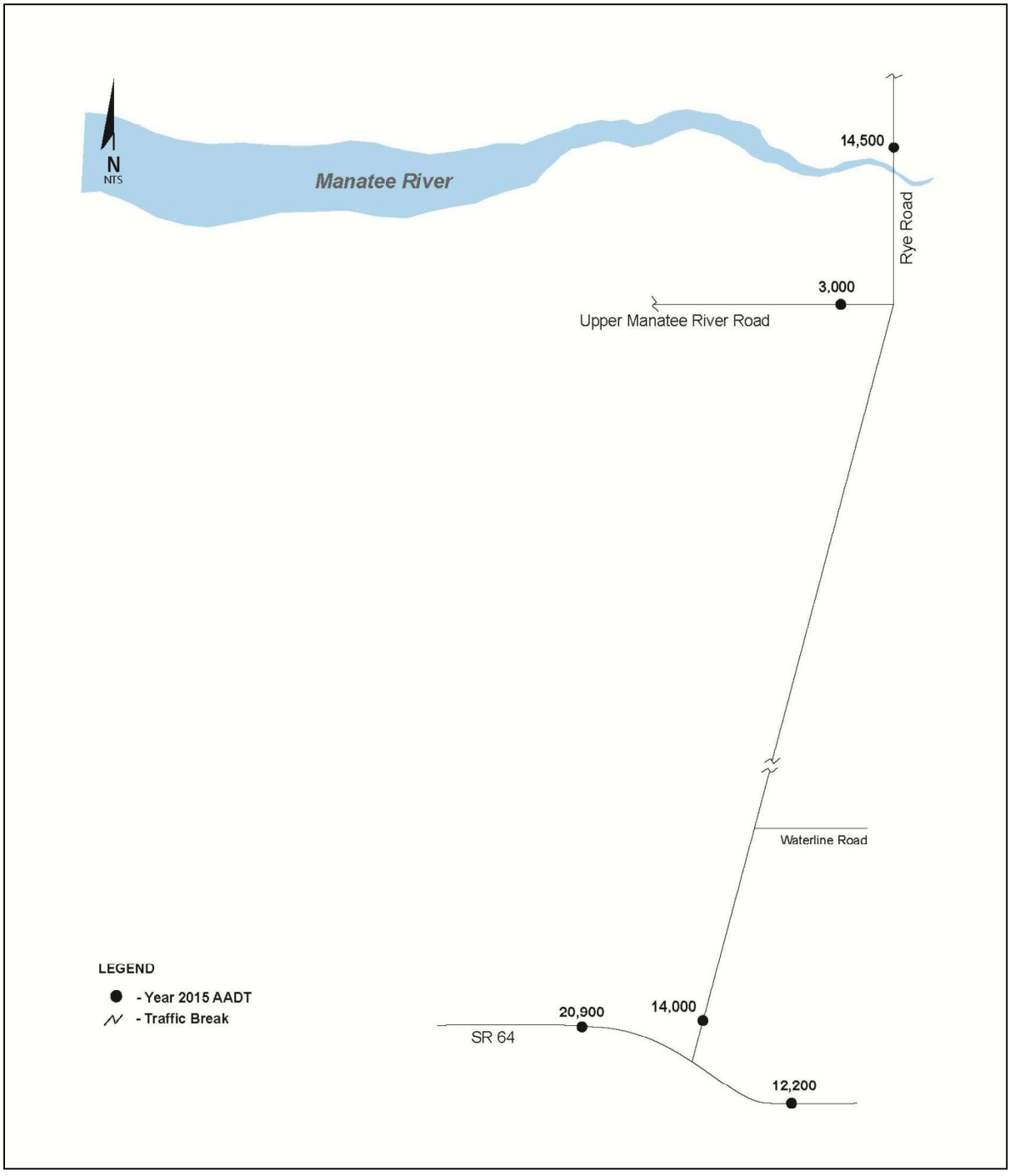


FIGURE 3-6
OPENING YEAR (2015) AADT VOLUMES
RYE ROAD ALTERNATIVE - NORTH SECTION

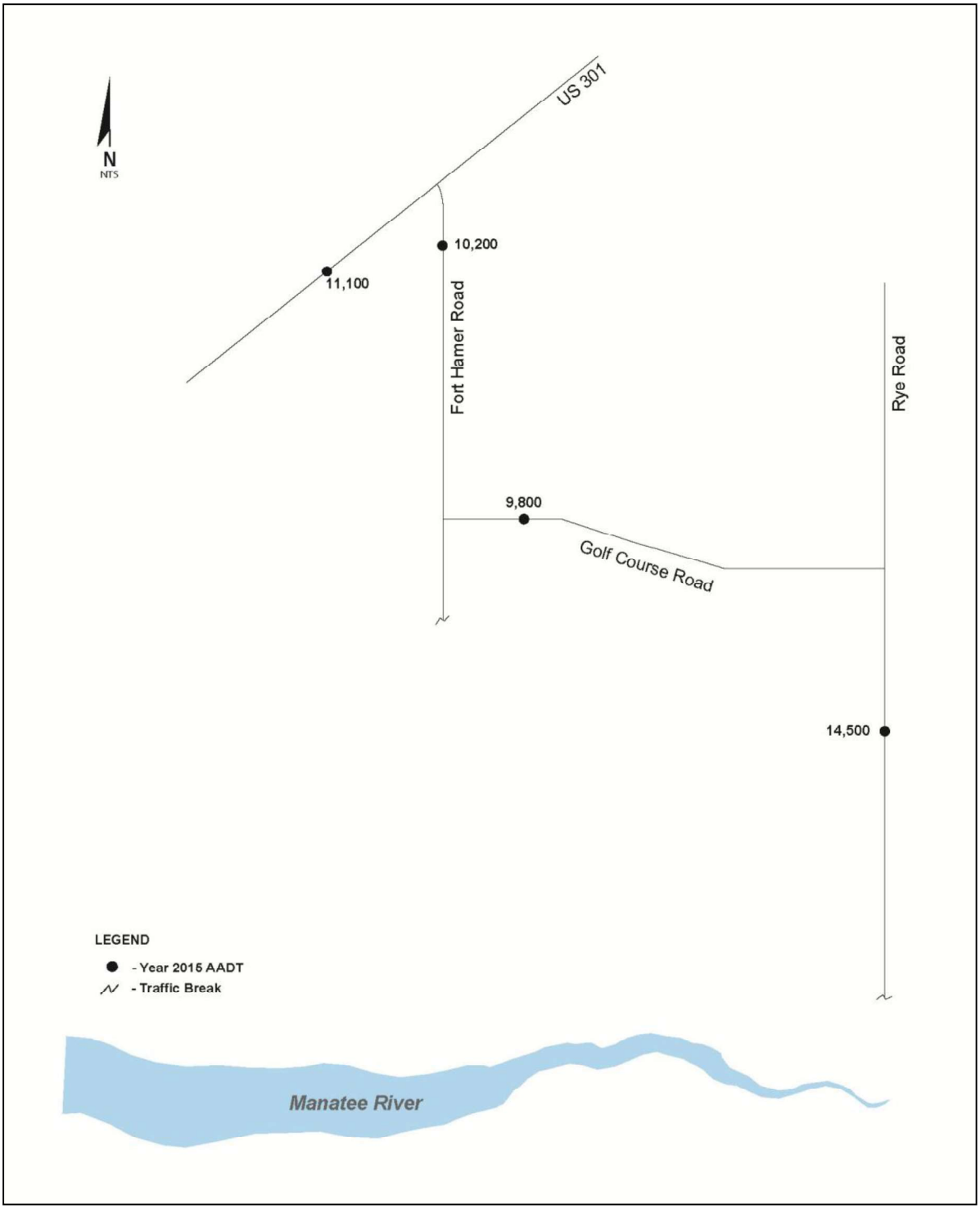


FIGURE 3-7
OPENING YEAR (2015) PEAK HOUR TRAFFIC VOLUMES
RYE ROAD ALTERNATIVE - SOUTH SECTION

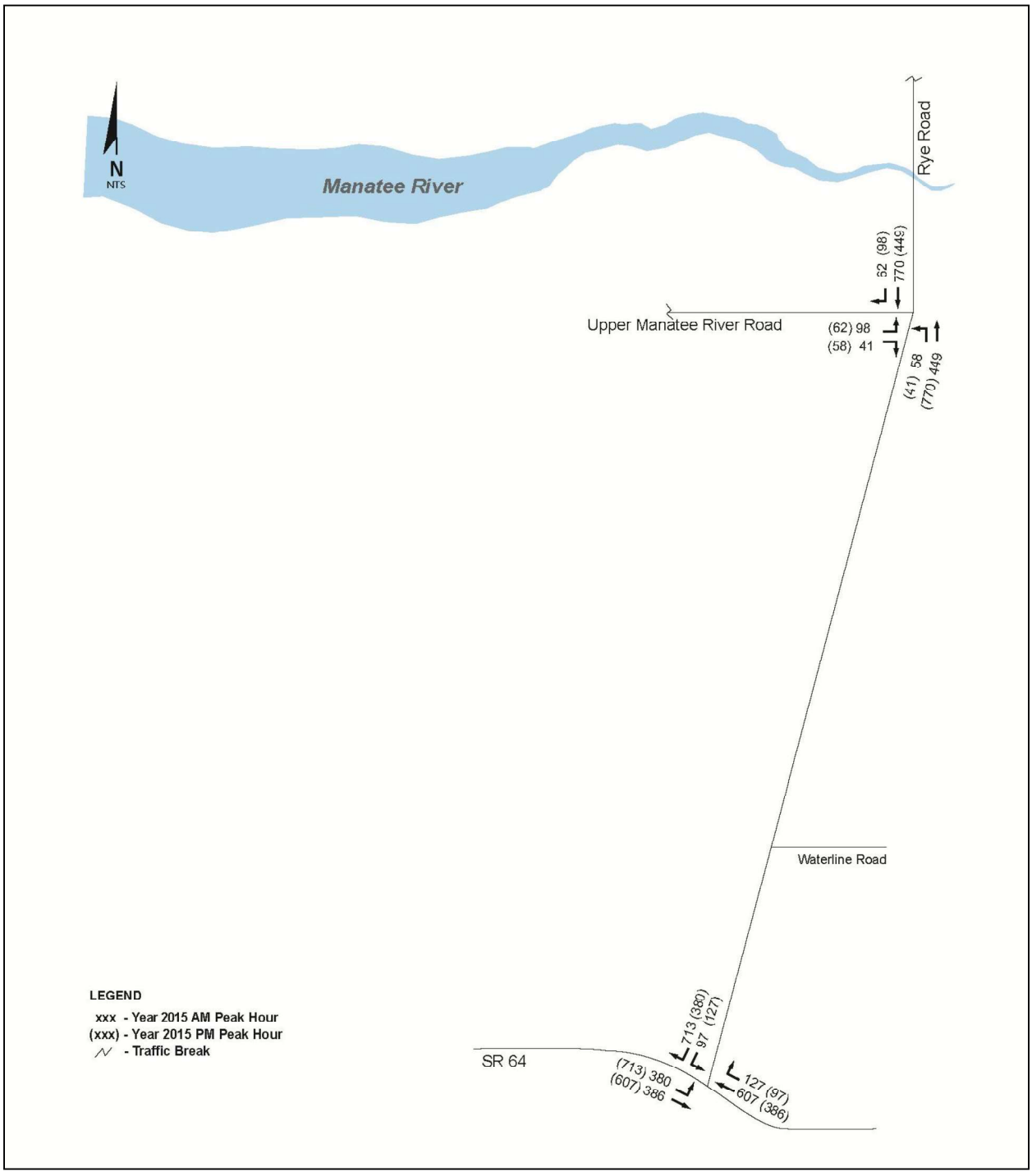


FIGURE 3-8
OPENING YEAR (2015) PEAK HOUR TRAFFIC VOLUMES
RYE ROAD ALTERNATIVE - NORTH SECTION

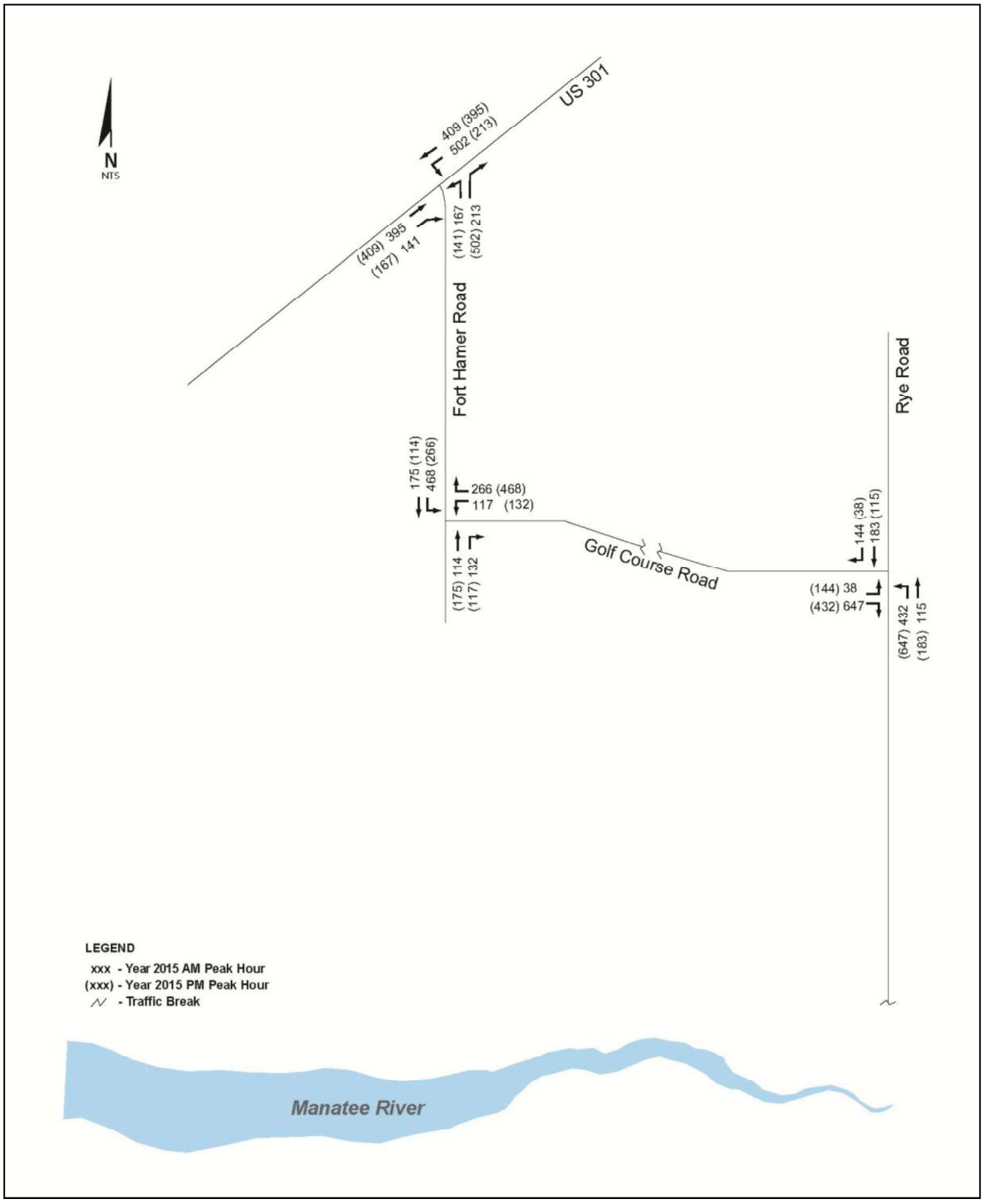


TABLE 3-1
OPENING YEAR (2015) UNSIGNALIZED INTERSECTION PEAK HOUR LOS
FORT HAMER ALTERNATIVE

Intersection	Approach	Movement	AM / (PM) Peak Hour	
			V/C Ratio	LOS
US 301	Northbound	Left	38.42 / (0.14)	F / (A)
		Right	0.46 / (2.10)	B / (F)
	Westbound	Left	0.77 / (0.47)	C / (B)
	Eastbound	Right	0.07 / (0.18)	A / (B)
Golf Course Road	Southbound	Left	0.12 / (0.32)	A / (B)
	Westbound	Left	0.83 / (0.74)	F / (F)
		Right	0.83 / (0.74)	F / (F)
Mulholland Road	Southbound	Left	0.14 / (0.21)	A /(B)
	Westbound	Left	0.73 /(0.96)	E / (F)
		Right	0.73 / (0.96)	E / (F)
Rive Isles/ Hidden Harbour entrances	Northbound	Left	0.07 / (0.06)	B / (A)
	Southbound	Left	0.02 / (0/02)	A / (B)
	Westbound	Left	0.13 / (1.10)	D / (F)
		Through/Right	0.80 / (0.19)	F / (D)
	Eastbound	Left	0.46 / (1.09)	F / (F)
		Through/Right	0.30 / (1.10)	D / (F)
Winding Stream Boulevard	Eastbound	Left	0.32 / (0.12)	F / (C)
		Right	0.32 / (0.45)	F / (C)
Upper Manatee River Road	Southbound	Left	0.12 / (0.33)	A / (B)
	Westbound	Left	1.33 / (3.37)	F / (F)
		Right	0.43 / (0.32)	C / (C)
Waterlefe Boulevard	Northbound	Left	0.17 / (0.15)	B / (C)
	Eastbound	Left	0.13 / (0.19)	F / (F)
		Right	0.44 / (1.27)	D / (C)
Greenfield Boulevard	Northbound	Left	0.14 / (0.63)	B / (B)
	Eastbound	Left	0.81 / (1.37)	F / (F)
		Right	0.14 / (0.09)	B / (B)

TABLE 3-2
OPENING YEAR (2015) UNSIGNALIZED INTERSECTION PEAK HOUR LOS
RYE ROAD ALTERNATIVE 3

Intersection	Approach	Movement	AM / (PM) Peak Hour[1]	
			V/C Ratio	LOS
US 301/Fort Hamer Road	Northbound	Left	4.55 / (0.94)	F / (F)
		Right	0.28 / (0.67)	B / (C)
	Westbound	Left	0.53 / (0.23)	B / (A)
	Eastbound	Right	0.09 / (0.13)	A / (A)
Golf Course Road/ Fort Hamer Road	Southbound	Left	0.38 / (0.23)	A / (A)
	Westbound	Left	1.11 / (0.58)	F / (C)
		Right	0.07/ (0.11)	A / (A)
Rye Road/Golf Course Road	Northbound	Left	0.38 / (0.48)	A /(A)
	Eastbound	Left	0.81 / (3.08)	D / (F)
		Right	0.81 / (0.48)	D / (A)
Rye Road/ Upper Manatee River Road	Northbound	Left	0.08 / (0.48)	B / (B)
	Eastbound	Left	0.74 / (0.43)	F / (D)
		Right	0.74 /(0.04)	F / (A)
Rye Road/SR 64	Southbound	Left	0.82 / (4.75)	F / (F)
		Right	1.05 / (0.48)	F / (B)
	Eastbound	Left	0.48 / (0.72)	B / (C)

The results indicate that the Upper Manatee River Road and Fort Hamer Road are anticipated to operate at acceptable LOS (LOS B) or better during the p.m. peak hour.

The unsignalized intersection analysis results also indicated that many of the cross street movements that are projected to operate at LOS E/F are also projected to have v/c ratios less than 1.00. Therefore, even though the magnitude of the estimated vehicle delays exceeds the maximum LOS E value (50.0 sec/veh), the cross street volumes are not expected to exceed the available movement capacities. Following intersections are projected to have cross street v/c ratios greater than 1.00 in either the a.m. peak hour or the p.m. peak hour:

Fort Hamer Alternative

- Upper Manatee River Road/Fort Hamer Road
- Upper Manatee River Road/Rive Isles Entrance/Hidden Harbour Park Entrance
- Fort Hamer Road/US 301

Rye Road Alternative

- Fort Hamer Road/Golf Course Road
- Fort Hamer Road/US 301
- Rye Road/Golf Course Road
- Rye Road/SR 64

Although these intersections may initially not require (or warrant) signalization and may operate adequately as unsignalized intersections for a period of time after the roadway improvements are implemented, the 2015 peak hour unsignalized intersection analysis results indicate that traffic signals will be required at three locations by the Opening Year (2015) in the Fort Hamer Alternative and four locations in the Rye Road Alternative. This is needed to provide sufficient capacity for the cross street movements to operate at acceptable LOS. Based on these results, these intersections were re-analyzed as signalized intersections.

Signalized intersection analyses were conducted in the Fort Hamer Alternative for the Fort Hamer Road/US 301, Fort Hamer Road/Rive Isles Entrance/Hidden Harbour Entrance, and the Upper Manatee River Road/Fort Hamer Road intersections. Analyses were also conducted in the Rye Road Alternative for the Fort Hamer Road/Golf Course Road, Fort Hamer Road/US 301, Rye Road/Golf Course Road, and the Rye Road/SR 64 intersections.

If traffic signals were implemented at these intersections by the year 2015 with intersection improvements, all of these intersections would be expected to operate at LOS D or better overall in the a.m. and p.m. peak hours. In addition, all of the northbound and southbound approaches on Upper Manatee River Road and Fort Hamer Road are projected to operate at LOS C or better at these intersections.

Table 3-3 summarizes the results of the Opening Year (2015) signalized intersection analyses for the Fort Hamer Alternative assuming four through lanes (two through lanes per direction) on Upper Manatee River Road from Upper Manatee River Road to Waterlefe Boulevard. The remaining sections of Upper Manatee River Road and Fort Hamer Road can remain as a two-lane (one lane per direction) roadway.

Table 3-4 summarizes the Opening Year (2015) signalized intersection analyses for the Rye Road Alternative. With signalization, the four intersections along this corridor are anticipated to operate at an acceptable LOS.

The HCS signalized intersection analyses are provided in **Appendix D** for both build alternatives.

TABLE 3-3
OPENING YEAR (2015) SIGNALIZED INTERSECTION PEAK HOUR
LOS WITH RECOMMENDED IMPROVEMENTS[1]
FORT HAMER ALTERNATIVE

Intersection	Approach	Lane Group	AM / (PM) Peak Hour	
			Average Delay (in sec/veh)	LOS
Fort Hamer Road/US 301	Eastbound	Through	41.2 / (24.2)	D / (C)
		Right	31.0 / (20.2)	C / (C)
		Overall	39.1 / (22.8)	D / (C)
	Westbound	Left	32.6 / (24.2)	C / (C)
		Through	6.6 / (13.0)	A / (B)
		Overall	21.3 / (22.8)	C / (C)
	Northbound	Left	42.4 / (19.5)	D / (B)
		Right	28.5 / (31.8)	C / (C)
		Overall	35.0 / (30.1)	C / (C)
	Overall		28.9 / (21.2)	C / (C)
Fort Hamer Road/Old Tampa Road/Cross Creek Parkway	Eastbound	Left	37.8 / (34.7)	D / (C)
		Through	39.2 / (34.5)	D / (C)
		Right	40.8 / (35.1)	D / (C)
		Overall	40.1 / (34.9)	D / (C)
	Westbound	Left	43.5 / (37.1)	D / (D)
		Through	41.8 / (38.9)	D / (D)
		Right	40.9 / (38.5)	D / (D)
		Overall	42.9 / (37.7)	D / (D)
	Northbound	Left	53.3 / (20.2)	D / (C)
		Through/Right	11.1 / (17.2)	B / (B)
		Overall	25.6 / (18.1)	C / (B)
	Southbound	Left	10.9 / (15.4)	B / (B)
		Through/Right	41.8 / (32.4)	D / (C)
		Overall	40.7 / (31.5)	D / (C)
	Overall		35.2 / (26.1)	C / (C)
Fort Hamer Road/Rive Isles Entrance/Hidden Harbour Entrance	Eastbound	Left	26.2 / (32.0)	C / (C)
		Through/Right	25.6 / (29.2)	C / (C)
		Overall	25.7 /(30.6)	C / (C)
	Westbound	Left	26.8 / (31.7)	C / (C)
		Through/Right	25.4 / (29.2)	C / (C)
		Overall	26.2 / (30.8)	C / (C)
	Northbound	Left	3.0 / (5.0)	A / (A)
		Through/Right	4.5 / (13.1)	A / (B)
		Overall	4.4 / (12.7)	A / (B)
	Southbound	Left	2.4 / (8.0)	A / (A)
		Through/Right	7.6 / (8.9)	A / (A)
		Overall	7.5 /(8.8)	A / (A)
	Overall		7.5 /(12.9	A / (B)

TABLE 3-3 (CONTINUED)
OPENING YEAR (2015) SIGNALIZED INTERSECTION PEAK HOUR
LOS WITH RECOMMENDED IMPROVEMENTS[1]
FORT HAMER ALTERNATIVE

Intersection	Approach	Lane Group	AM / (PM) Peak Hour	
			Average Delay (in sec/veh)	LOS
Upper Manatee River Road/ Fort Hamer Road	Westbound	Left	37.7/ (39.2)	D / (D)
		Right	34.3 / (31.7)	C / (C)
		Overall	35.5 / (36.3)	D / (D)
	Northbound	Through	37.1 / (49.6)	D / (D)
		Right	18.2 / (11.0)	B / (B)
		Overall	33.1 / (45.4)	C / (D)
	Southbound	Left	22.2 / (37.0)	C / (D)
		Through	34.2 /(47.9)	C / (D)
		Overall	33.0 / (45.0)	C / (D)
	Overall		33.4 / (44.1)	C / (D)
Upper Manatee River Road/SR 64	Eastbound	Left	50.2 / (47.5)	D / (D)
		Through	37.1 / (40.3)	D / (D)
		Right	38.6 / (34.4)	D / (C)
		Overall	40.9 / (40.7)	D / (D)
	Westbound	Left	49.9 /(48.5)	D / (D)
		Through	41.7 / (39.2)	D / (D)
		Right	34.5 / (36.8)	C / (D)
		Overall	42.3 / (41.5)	D / (D)
	Northbound	Left	49.6 / (47.6)	D / (D)
		Through	25.0 / (27.9)	C / (C)
		Right	24.7 / (26.5)	C / (C)
		Overall	33.3 / (33.6)	C / (C)
	Southbound	Left	50.4 /(48.7)	D / (D)
		Through	30.6 / (31.2)	C / (C)
		Right	31.6 / (30.3)	C / (C)
		Overall	34.1 / (35.1)	C / (D)
	Overall		37.8 / (37.8)	D / (D)

[1] Recommended geometric improvements are shown on Figures 4-9 and 4-10.

TABLE 3-4
OPENING YEAR (2015) SIGNALIZED INTERSECTION PEAK HOUR
LOS WITH RECOMMENDED IMPROVEMENTS[1]
RYE ROAD ALTERNATIVE

Intersection	Approach	Lane Group	AM / (PM) Peak Hour	
			Average Delay (in sec/veh)	LOS
Fort Hamer Road/ Golf Course Road	Westbound	Left	17.9 / (17.8)	B / (B)
		Right	24.5 / (17.4)	C / (B)
		Overall	22.5 / (17.5)	C / (B)
	Northbound	Through	3.2 / (4.5)	A / (A)
		Right	3.2 / (4.1)	A / (A)
		Overall	3.2 / (4.3)	A / (A)
	Southbound	Left	7.5 / (6.5)	A / (A)
		Through	3.4/ (4.2)	A / (A)
		Overall	6.4 / (5.8)	A / (A)
	Overall		**10.6 / (11.0)**	**B / (A)**
Fort Hamer Road/US 301	Eastbound	Through	22.1 / (15.7)	C / (B)
		Right	19.1 / (13.9)	B / (B)
		Overall	21.3 / (15.2)	C / (B)
	Westbound	Left	28.0 / (6.4)	C / (A)
		Through	7.7 / (5.5)	A / (A)
		Overall	18.9 / (5.9)	B / (A)
	Northbound	Left	15.5 / (16.7)	B / B)
		Right	14.4 / (16.5)	B / (B)
		Overall	14.9 / (16.5)	B / (B)
	Overall		**18.8 / (12.6)**	**B / (B)**
Rye Road/Golf Course Road	Eastbound	Left	19.3 / (43.8)	B / (D)
		Right	12.6 / (16.9)	B / (B)
		Overall	13.0 / (23.7)	B / (C)
	Northbound	Left	6.8 / (7.7)	A / (A)
		Right	4.3 / (3.7)	A / (A)
		Overall	6.3 / (6.8)	A / (A)
	Southbound	Through	14.3 / (16.8)	B / (B)
		Right	3.8 / (6.6)	A / (A)
		Overall	9.7 / (14.3)	A / (B)
	Overall		**9.9 / (13.8)**	**A / (B)**
Rye Road/SR 64	Eastbound	Left	26.7 / (25.3)	C / (C)
		Through	3.5 / (3.1)	A / (A)
		Overall	15.0 / (15.1)	B / (B)
	Westbound	Through	30.0 / (31.4)	C / (C)
		Right	23.8 / (26.5)	C / (C)
		Overall	28.9 / (30.4)	C / (C)
	Southbound	Left	38.2 / (32.0)	D / (C)
		Right	21.6 / (4.6)	C / (A)
		Overall	23.5 / (11.4)	C / (B)
	Overall		**22.4 / (17.5)**	**C / (B)**

[1] Recommended geometric improvements are shown on Figures 3-11 and 3-12.

From the analyses above, it was determined that two through lanes (one lane per direction) should be provided in the northbound and southbound directions of the Fort Hamer Alternative. The recommended Opening Year (2015) intersection geometry for the Fort Hamer Alternative is illustrated on **Figures 3-9 and 3-10**.

Similarly, **Figures 3-11 and 3-12** illustrate recommended Opening Year (2015) intersection geometry for Rye Road Alternative.

The roadway segment LOS analyses for the Fort Hamer Alternative and Rye Road Alternative with the proposed improvements were conducted using the Synchro software for an arterial analysis methodology. This is based on the recommended lane geometry of two through lanes (one lane per direction) from the existing four-lane terminus located north of SR 64 along Upper Manatee River Road and Fort Hamer Road north to US 301. For Opening Year (2015), a two-lane roadway with the intersection improvements described in **Table 3-4** is anticipated to operate at LOS D or better for the Fort Hamer Alternative. The arterial analysis is provided in **Appendix E**.

Similarly, the Rye Road Alternative, a two-lane facility with the intersection improvements described in **Table 3-5** is anticipated to operate at LOS D or better. The arterial analysis is documented in **Appendix E**.

The recommended storage lane lengths for the exclusive left- and right-turn lanes at intersections were determined using the 95th percentile queue length from the Synchro analyses. The recommended turn-lane storage lengths are summarized in Table 3-5 for the Fort Hamer Alternative and relevant information is provided in **Appendix F**. Although, US 301 will have separate turn lanes as part of the US 301 widening; the turn lane storage lengths are included in the summary table. Similarly, **Table 3-6** summarizes the Rye Road Alternative recommended turn-lane storage length improvements and relevant information is provided in **Appendix G**.

FIGURE 3-9
OPENING YEAR (2015) RECOMMENDED INTERSECTION GEOMETRY
FORT HAMER ALTERNATIVE - SOUTH SECTION

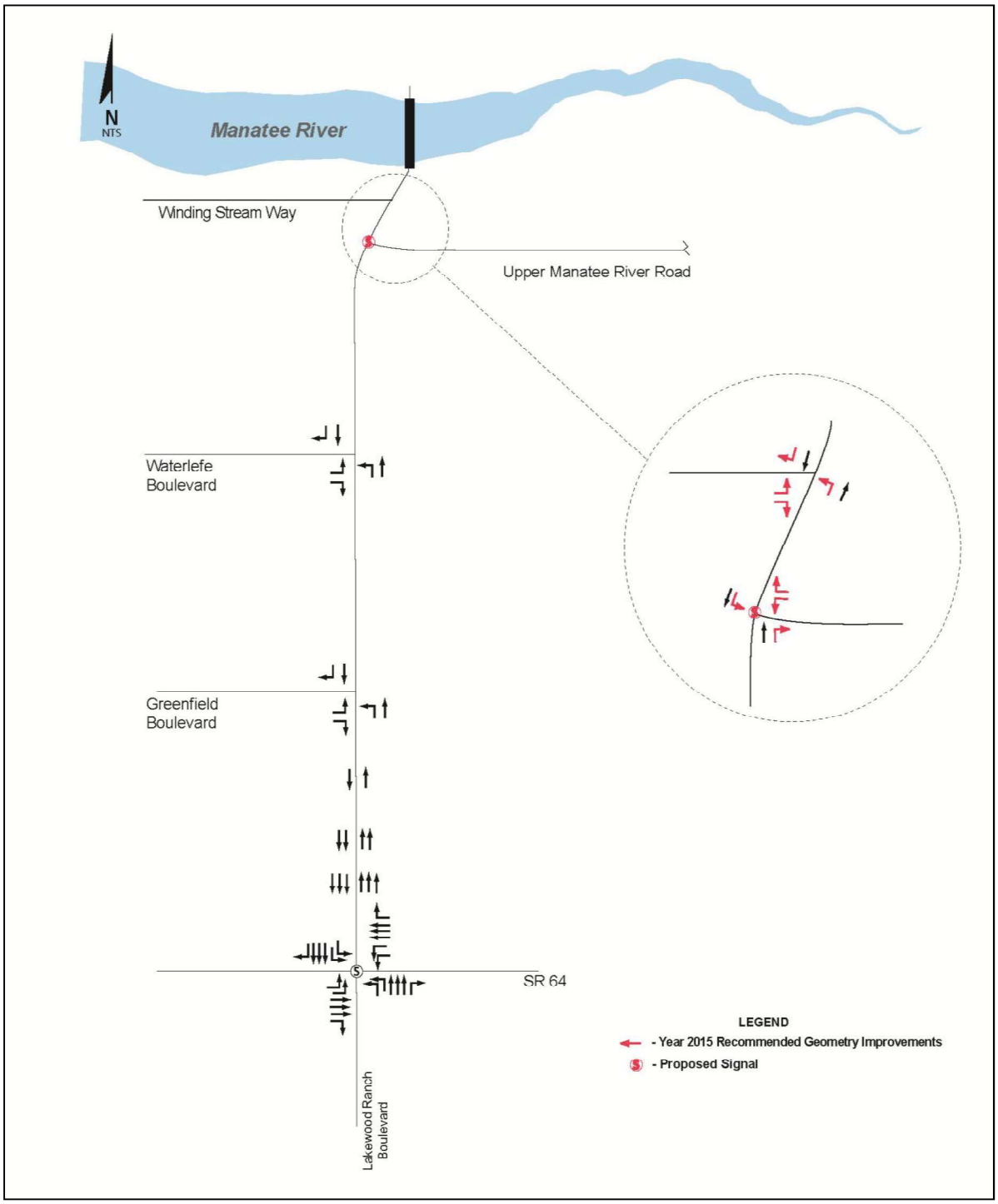


FIGURE 3-10
OPENING YEAR (2015) RECOMMENDED INTERSECTION GEOMETRY
FORT HAMER ALTERNATIVE - NORTH SECTION

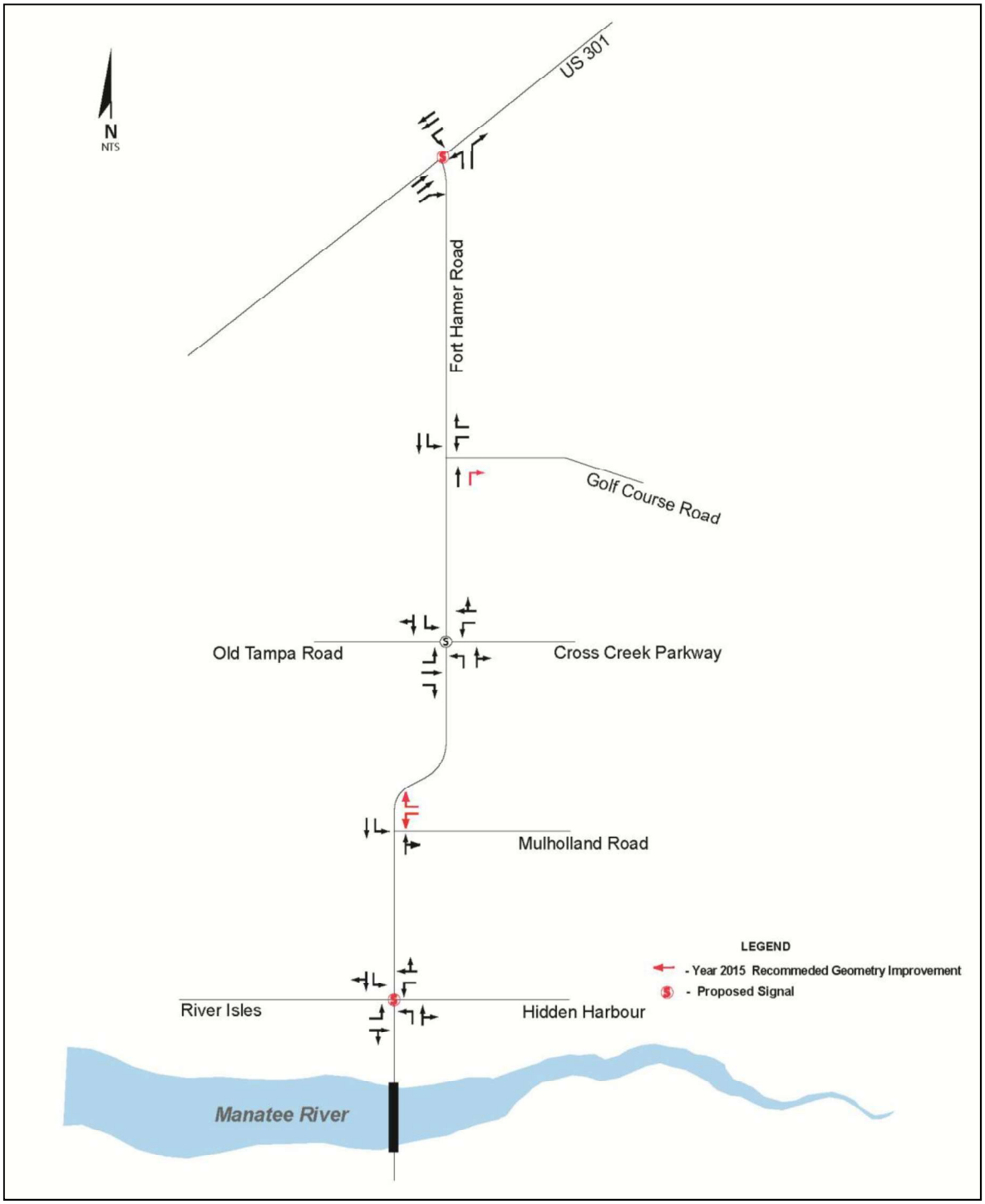


FIGURE 3-11
OPENING YEAR (2015) RECOMMENDED INTERSECTION GEOMETRY
RYE ROAD ALTERNATIVE - SOUTH SECTION

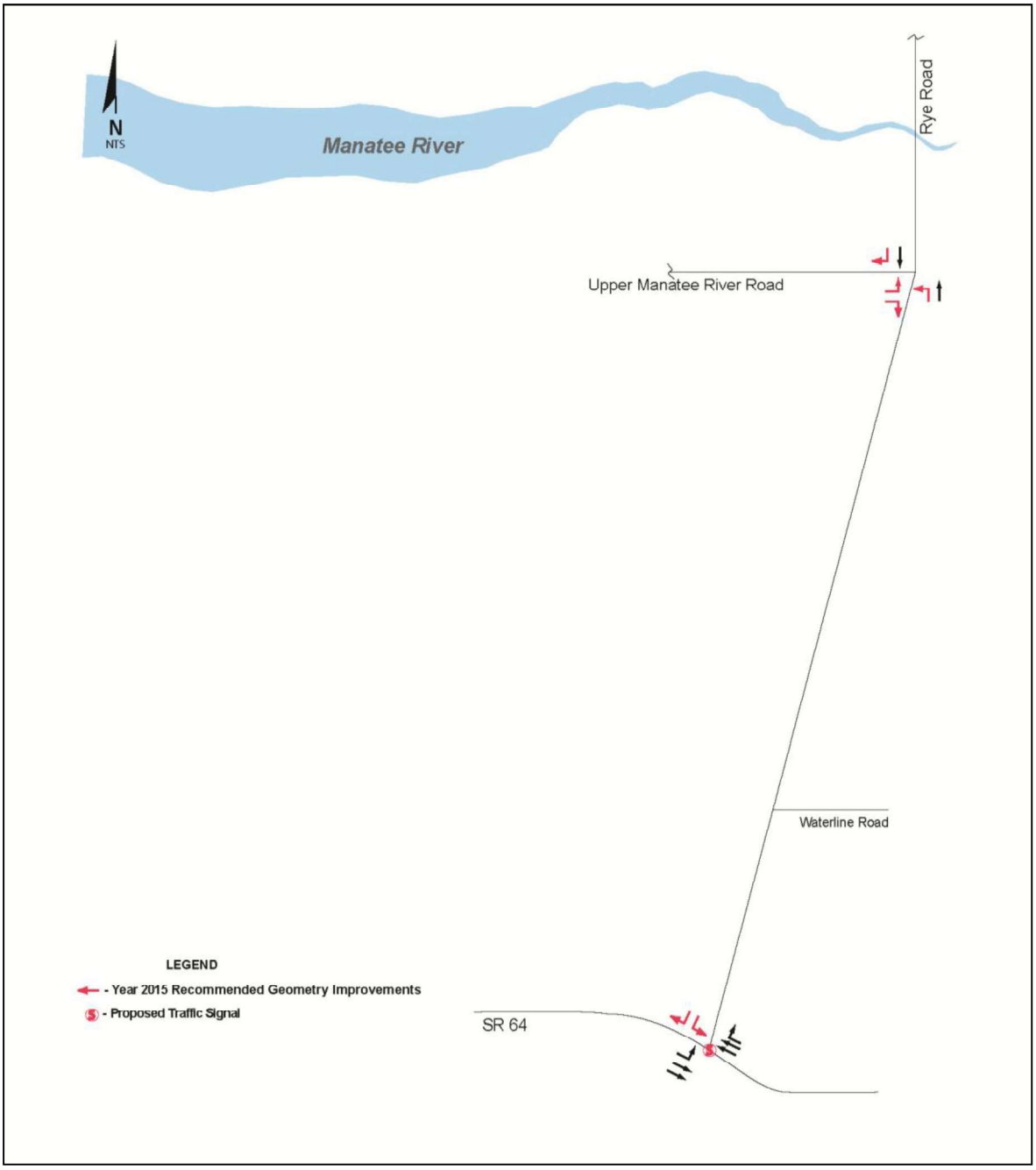


FIGURE 3-12
OPENING YEAR (2015) RECOMMENDED INTERSECTION GEOMETRY
RYE ROAD ALTERNATIVE - NORTH SECTION

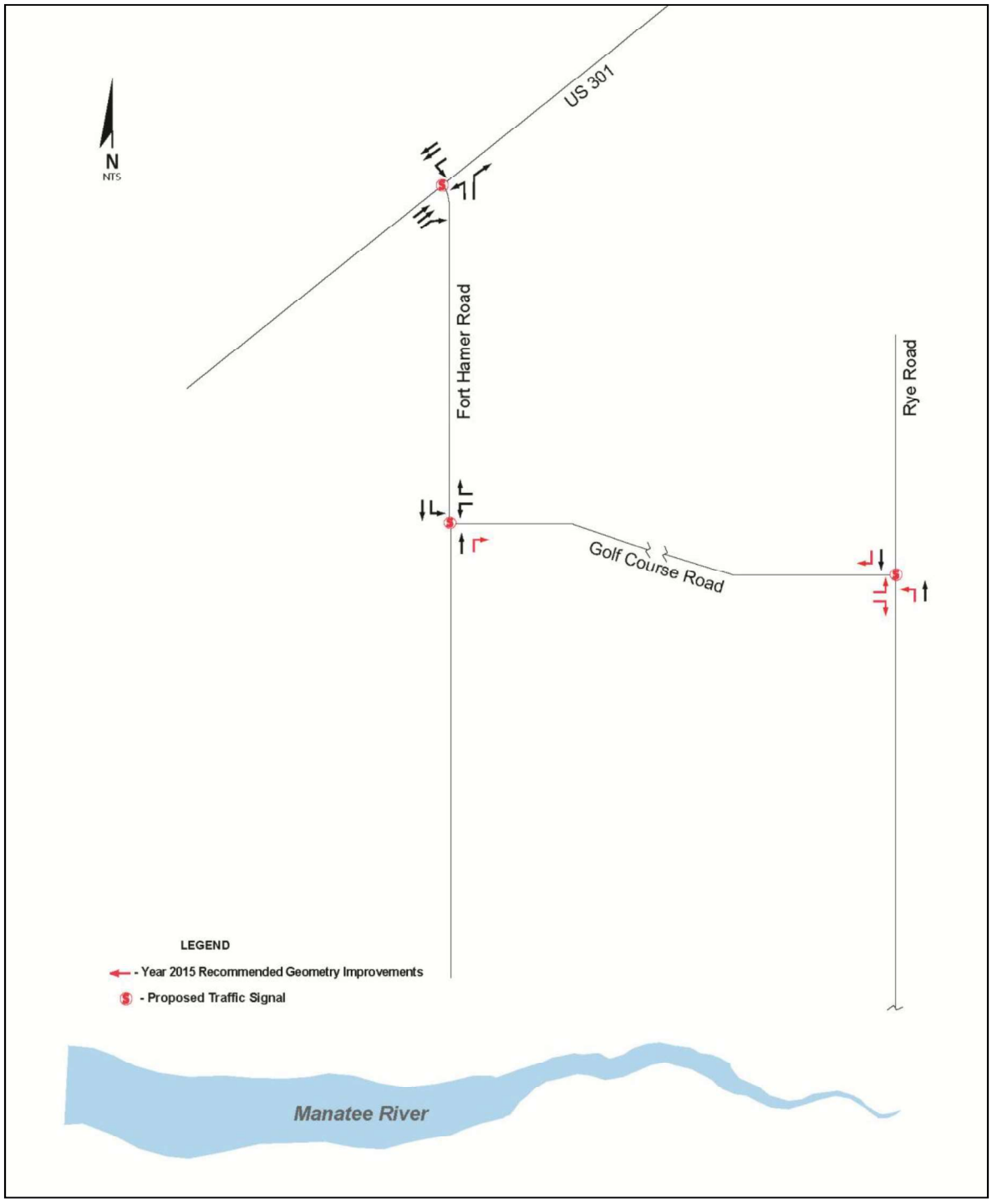


TABLE 3-5
OPENING YEAR (2015) RECOMMENDED STORAGE LANE LENGTH IMPROVEMENTS
FORT HAMER ALTERNATIVE

Intersection	Approach	Turn Lane	Storage Length[1] (in feet per lane)
Fort Hamer Road/US 301	Northbound	Left	300
		Right	275
	Westbound	Left	625
	Eastbound	Right	100
Fort Hamer Road/ Golf Course Road	Northbound	Right	25
	Southbound	Left	50
	Westbound	Left	175
		Right	25
		Left	225
		Right	25
Upper Manatee River Road/ Fort Hamer Road	Northbound	Right	50
	Southbound	Left	250
	Westbound	Left	150
		Right	75

[1] Storage length rounded to 25-foot average vehicle length and does not include deceleration or taper distance.

TABLE 3-6
OPENING YEAR (2015) RECOMMENDED STORAGE LANE LENGTH IMPROVEMENTS
RYE ROAD ALTERNATIVE

Intersection	Approach	Turn Lane	Storage Length[1] (in feet per lane)
Fort Hamer Road/US 301	Northbound	Left	125
		Right	75
	Westbound	Left	275
	Eastbound	Right	50
Fort Hamer Road/ Golf Course Road	Northbound	Right	25
	Southbound	Left	125
	Westbound	Left	75
		Right	75
Rye Road/Golf Course Road	Northbound	Left	275
	Southbound	Right	25
	Eastbound	Left	175
		Right	150
Rye Road/ Upper Manatee River Road	Northbound	Left	50
	Southbound	Right	50
	Eastbound	Left	125
		Right	25
Rye Road/SR 64	Westbound	Right	50
	Eastbound	Left	550
	Southbound	Left	150
		Right	450

[1] Storage length rounded to 25-foot average vehicle length and does not include deceleration or taper distance.

Section 4.0
DESIGN YEAR (2035) CONDITIONS

This section documents the traffic projections and traffic analysis for the Design Year (2035). The traffic projections are based on the Sarasota/Manatee MPO socioeconomic data and the more recently approved developments provided by Manatee County Planning Department located in the vicinity of the project.

4.1 DESIGN YEAR (2035) TRAFFIC

The Design Year (2035) AADT volumes were obtained from the updated SMC TDM and were checked for reasonableness.

The 2035 AADT volumes estimated for the Upper Manatee River Road/Fort Hamer Road corridor for No-Build Alternative, Fort Hamer Alternative, and Rye Road Alternative are illustrated on **Figures 4-1 through 4-6**. The 2035 design hour volumes for these alternatives were derived by multiplying the 2035 AADT volumes by a K_{30}-factor of 0.10 and a D factor of 0.60.

For the No-Build Alternative, the 2035 AADT volumes across Upper Manatee River Road and Rye Road are projected to be 14,500 vpd on Upper Manatee River Road and 15,600 vpd on Rye Road. The Rye Road two-lane bridge over the Manatee River is projected to have 19,800 vpd. Golf Course Road is projected to have 11,500 vpd. Fort Hamer Road, from Golf Course Road north to US 301 is projected to have 10,600 vpd. South of Golf Course Road along Fort Hamer Road is projected to have 3,300 vpd. The No-Build Alternative is based upon a two-lane collector road while the Fort Hamer Alternative and Rye Road Alternative are based upon arterial roadways with improved roadway design geometrics.

The proposed Fort Hamer Bridge over the Manatee River is projected to have 23,600 vpd. The proposed Rye Road Bridge is anticipated to have 24,000 vpd.

4.2 DESIGN YEAR (2035) TRAFFIC OPERATIONS

The Design Year (2035) LOS analyses were conducted for the mainline roadway segments on Upper Manatee River Road and Fort Hamer Road, as well as for signalized and unsignalized intersections using the Synchro software HCM analyses. The following sections discuss the results of these analyses.

FIGURE 4-1
DESIGN YEAR (2035) AADT VOLUMES
NO-BUILD ALTERNATIVE - SOUTH SECTION

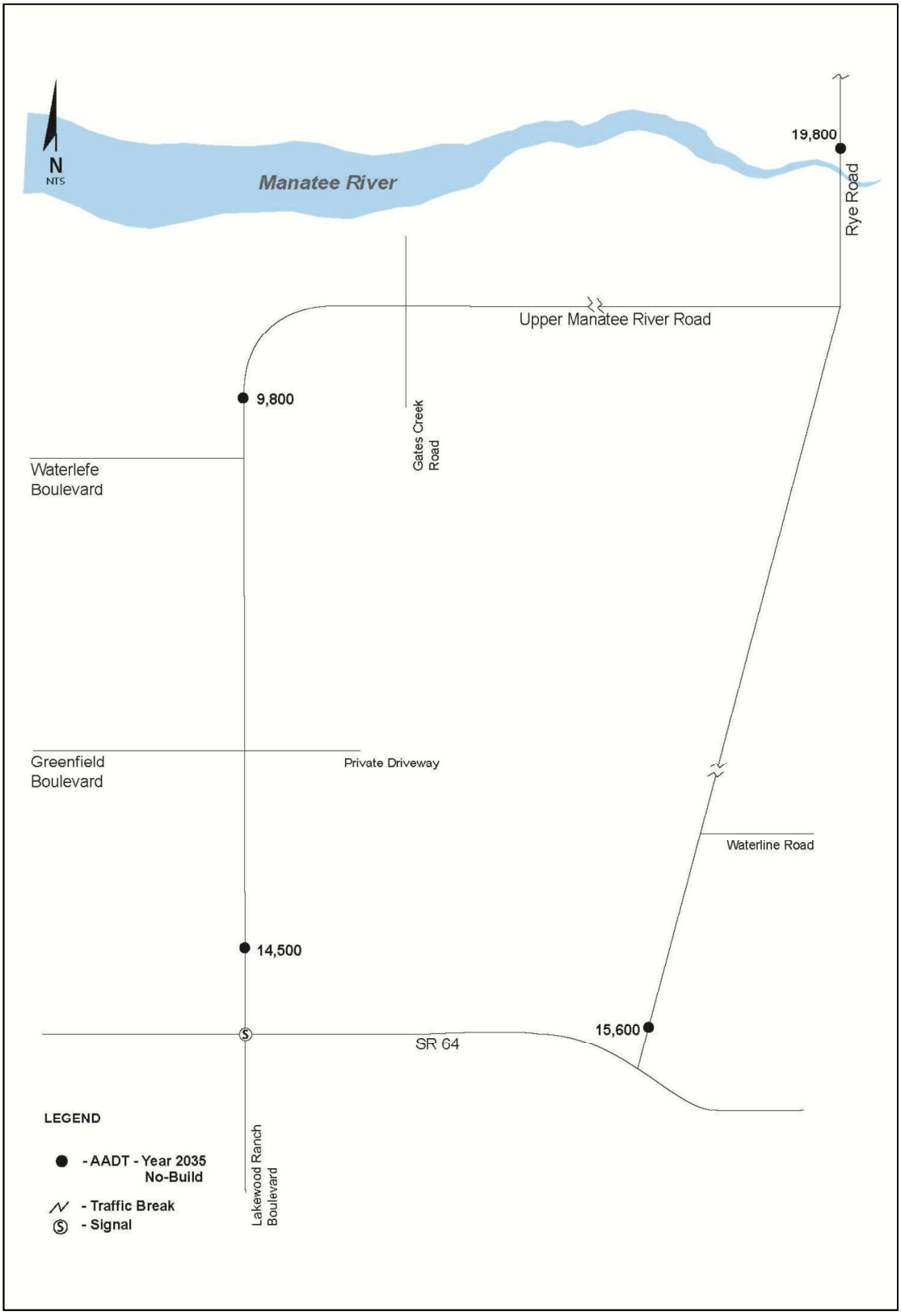


FIGURE 4-2
DESIGN YEAR (2035) AADT VOLUMES
NO-BUILD ALTERNATIVE - NORTH SECTION

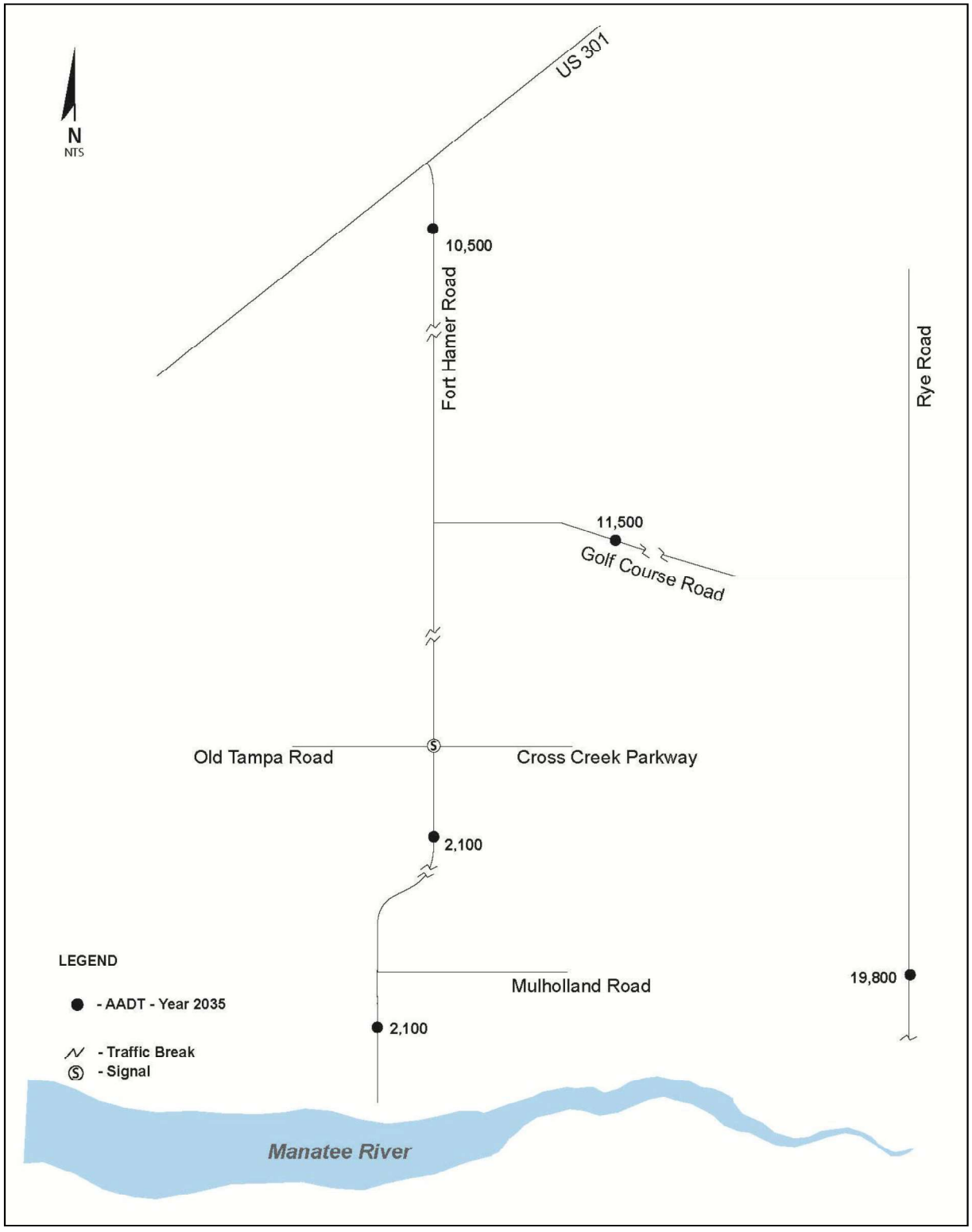


FIGURE 4-3
DESIGN YEAR (2035) AADT VOLUMES
FORT HAMER ALTERNATIVE - SOUTH SECTION

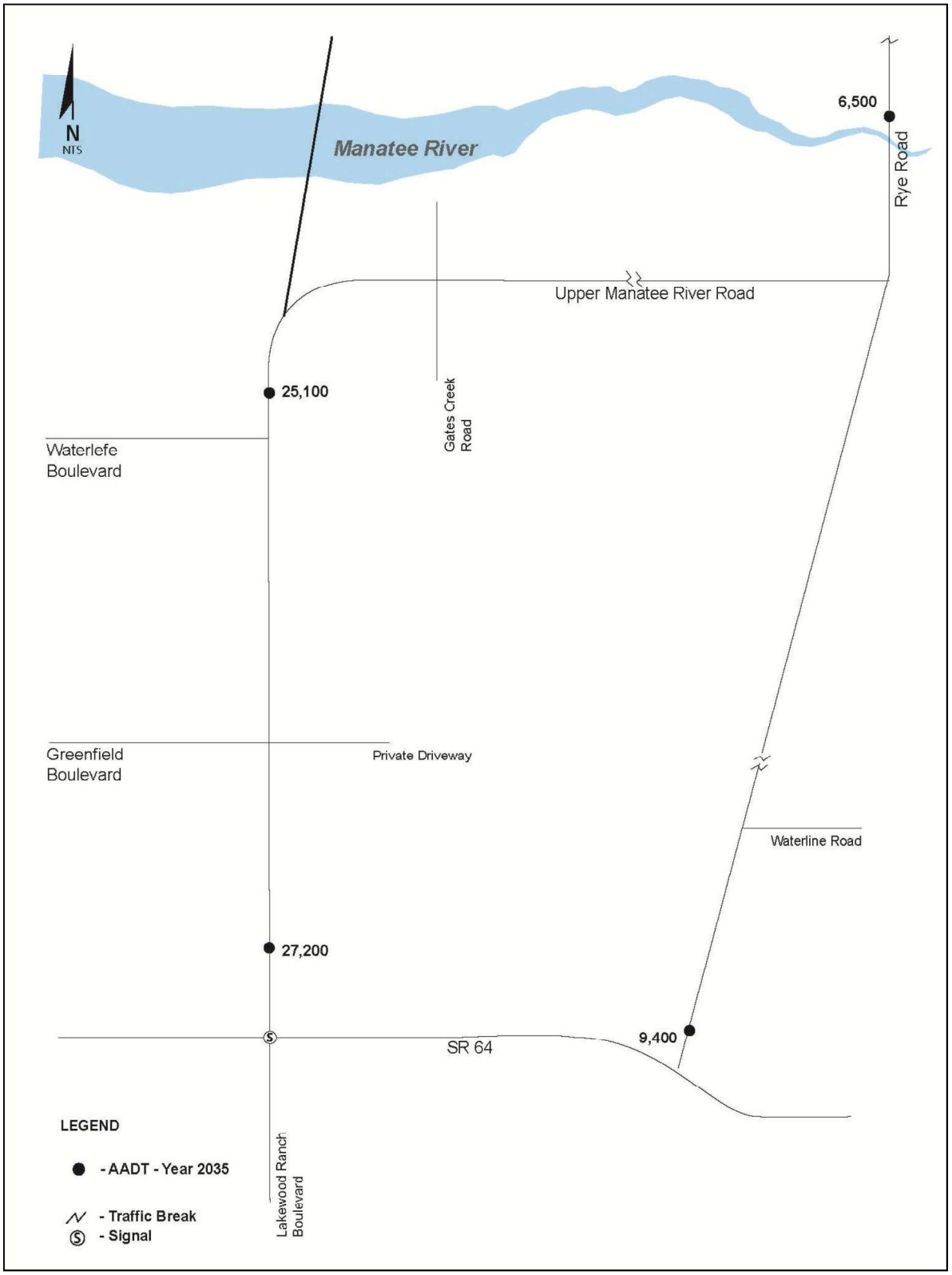


FIGURE 4-4
DESIGN YEAR (2035) AADT VOLUMES
FORT HAMER ALTERNATIVE - NORTH SECTION

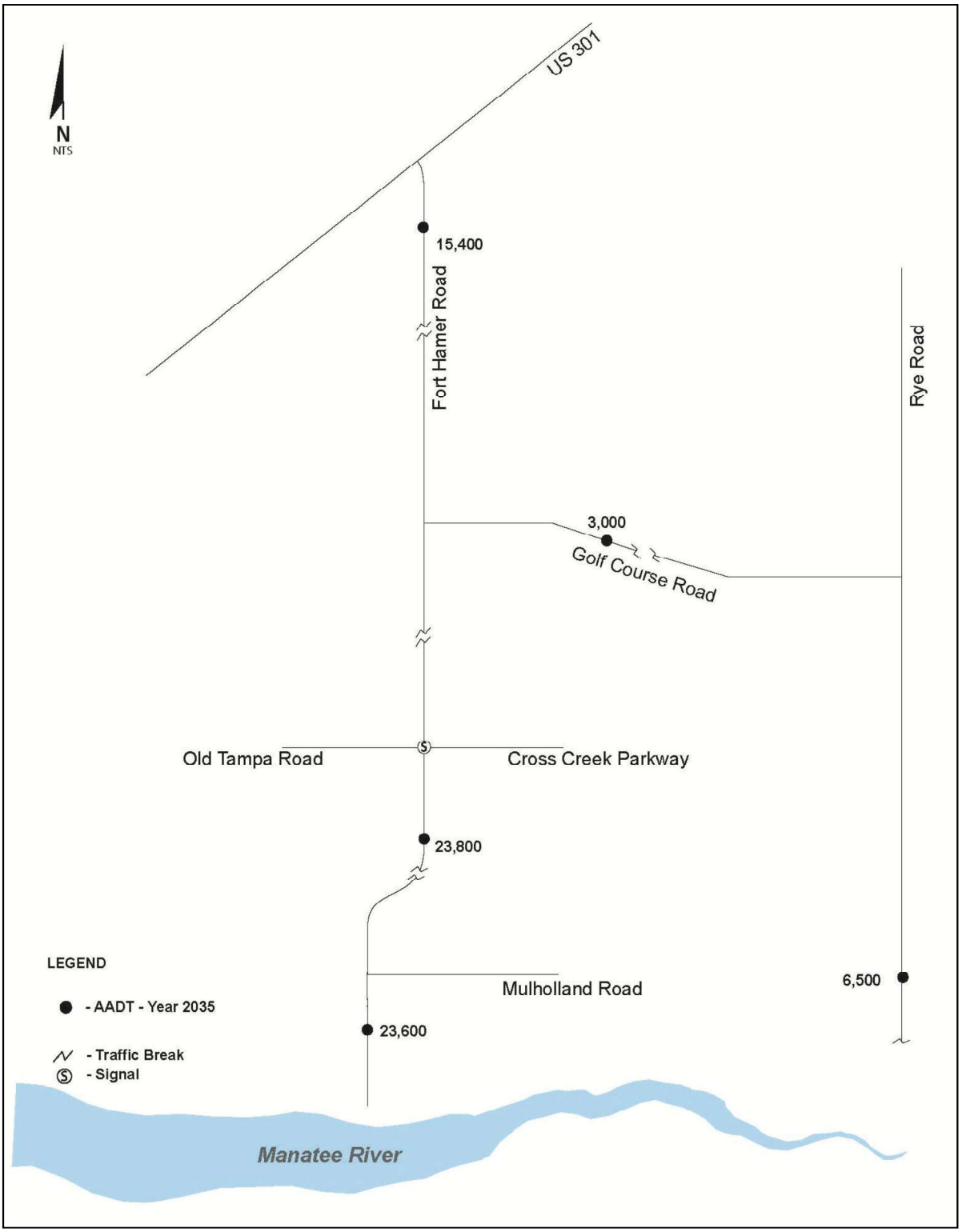


FIGURE 4-5
DESIGN YEAR (2035) AADT VOLUMES
RYE ROAD ALTERNATIVE - SOUTH SECTION

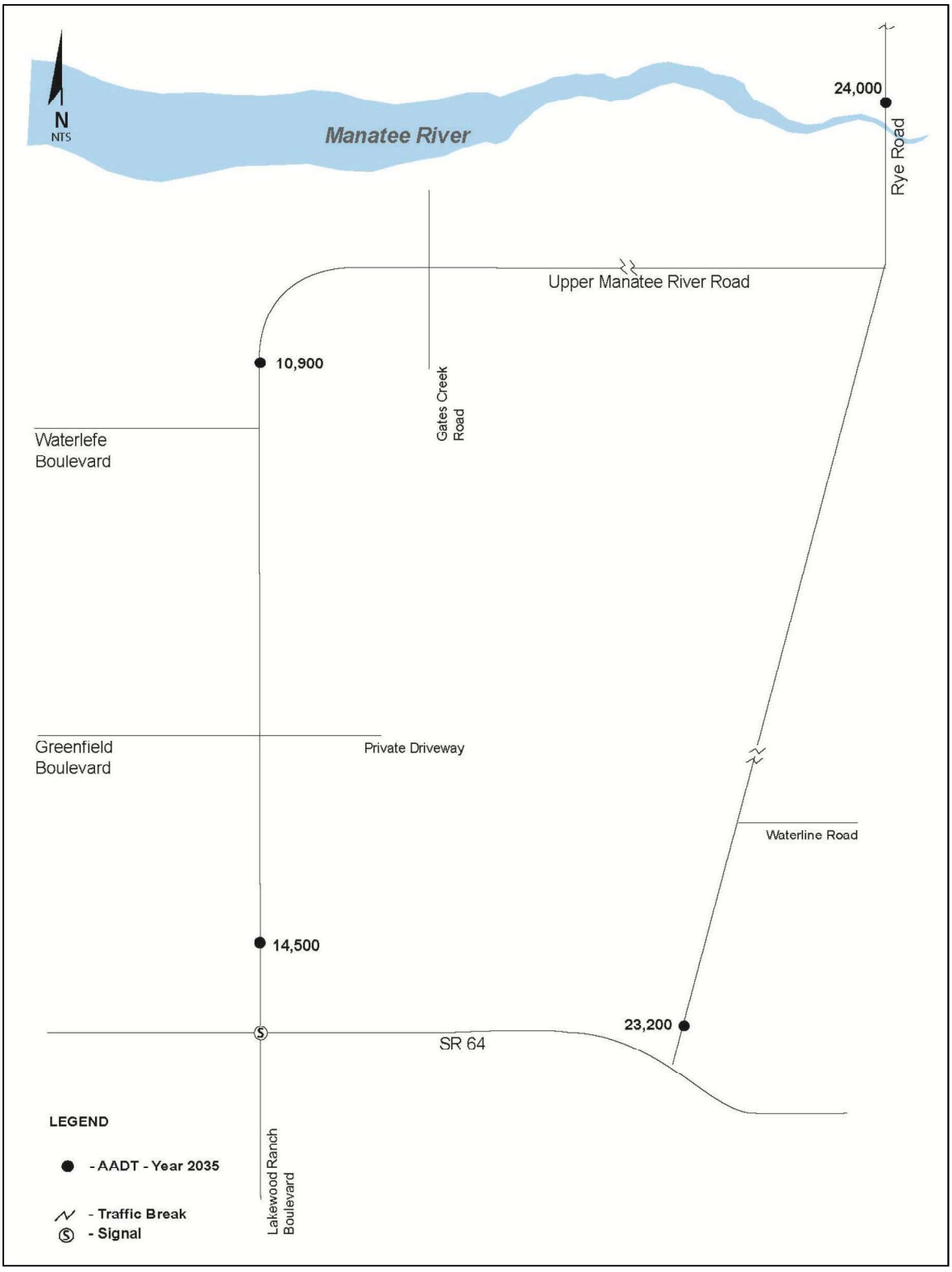
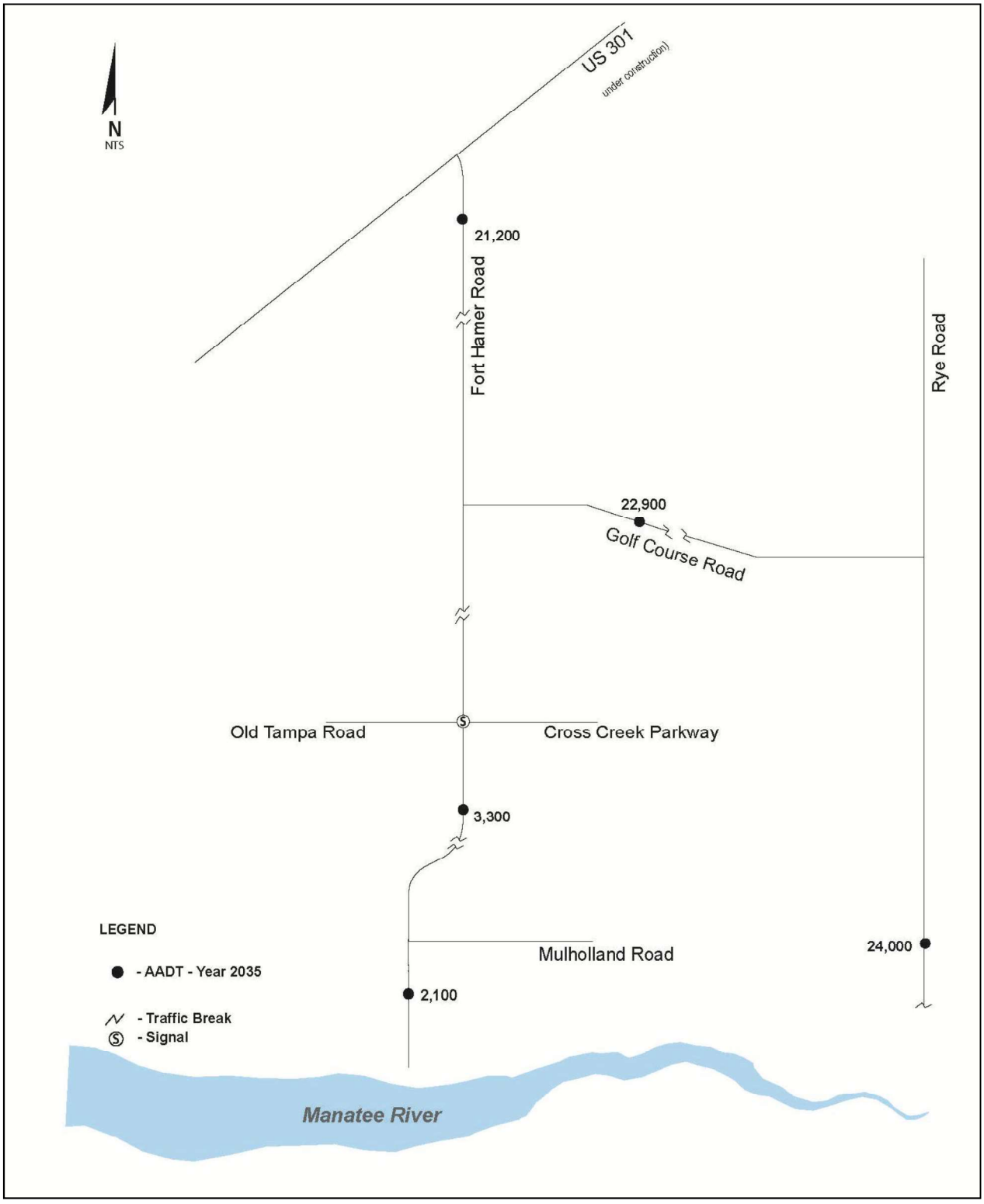


FIGURE 4-6
DESIGN YEAR (2035) AADT VOLUMES
RYE ROAD ALTERNATIVE - NORTH SECTION



4.2.1 NO-BUILD ALTERNATIVE

A No-Build Alternative (no bridge over the Manatee River) with the existing two-lane bridge along Rye Road analysis with the existing two lanes along Rye Road, Golf Course Road, and Fort Hamer Road was conducted to document the LOS that would be expected to occur in the year 2035, if no improvements were made in the corridor. The roadway segment LOS analyses were conducted using the current FDOT Generalized LOS tables accepted for two-lane collector roadways. The results are summarized in **Table 4-1** for Upper Manatee River Road and Fort Hamer Road and **Table 4-2** for Rye Road and Golf Course Road.

TABLE 4-1
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
NO-BUILD ALTERNATIVE
UPPER MANATEE RIVER ROAD/FORT HAMER ROAD

From	To	AADT/Capacity	LOS
SR 64	Waterlefe Boulevard	14,500/14,200	F
Upper Manatee River Road	Gates Creek Road	9,800/14,200	D
Gates Creek Road	Manatee River	---	No Bridge
Manatee River	Mulholland Road	---	No Bridge
Mulholland Road	Golf Course Road	2,100/14,200	B
Golf Course Road	US 301	10,500/14,200	C

--- No bridge.

TABLE 4-2
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
NO-BUILD ALTERNATIVE
RYE ROAD/GOLF COURSE ROAD

From	To	AADT/Capacity	LOS
Rye Road at SR 64	Upper Manatee River Road	15,600/14,200	F
Upper Manatee River Road	Golf Course Road	19,800/14,200	F
Golf Course Road at Rye Road	Fort Hamer Road	11,500/14,200	C

In the No-Build Alternative for 2035, Upper Manatee River Road south of Manatee River and Rye Road from SR 64 north to Golf Course Road including the existing two-lane bridge across the Manatee River is projected to operate at LOS F. Golf Course Road is projected to operate at acceptable LOS.

4.2.2 FORT HAMER ALTERNATIVE

The Fort Hamer Alternative is analyzed with a two-lane bridge with a two-lane with separate turn lane and signalization improvements**.** **Table 4-3** and **Table 4-4** summarizes the two-lane Fort Hamer Alternative AADT, two-lane road with separate turn lane and signalization improvements road capacities, and the LOS analyzed using the FDOT's Art Plan 2009 Planning Analysis documented in **Appendix H**.

TABLE 4-3
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
FORT HAMER ALTERNATIVE
UPPER MANATEE RIVER ROAD/FORT HAMER ROAD

From	To	AADT/Capacity	LOS
SR 64	Waterlefe Boulevard	27,200/17,400	F
Upper Manatee River Road	Gates Creek Road	25,100/17,400	D
Gates Creek Road	Manatee River	23,600/17,400	F
Manatee River	Mulholland Road	23,600/17,400	F
Mulholland Road	Golf Course Road	23,800/17,400	F
Golf Course Road	US 301	15,400/17,400	B

TABLE 4-4
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
FORT HAMER ALTERNATIVE
RYE ROAD/GOLF COURSE ROAD

From	To	AADT/Capacity	LOS
Rye Road at SR 64	Upper Manatee River Road	9,400/14,200	B
Upper Manatee River Road	Golf Course Road	6,500/14,200	B
Golf Course Road at Rye Road	Fort Hamer Road	3,000/14,200	B

As Tables 4-3 and 4-4 illustrates, in 2035, there is a need to widen the Fort Hamer Alternative to more than two through lanes with separate turn lane and signalization improvements. The Fort Hamer Alternative is anticipated to re-distribute the future 2035 traffic from Rye Road and Golf Course Road, thereby improving the LOS F conditions to acceptable level of LOS B.

The lane geometry and traffic signalization recommended for the Design Year (2035) is illustrated on **Figures 4-7** and **4-8**. The Fort Hamer Road/Winding Stream Way intersection would operate with a v/c ratio greater than 1.0 and LOS F. It is recommended that the left-turn in and the left-turn out movements at this intersection be closed due to the close proximity of the Fort Hamer Road/Winding Stream Way to the bridge. This intersection is a second driveway into the Waterlefe subdivision and closing of the left-turn movement at this intersection can be accommodated at the Upper River Road/Waterlefe Boulevard intersection.

FIGURE 4-7
DESIGN YEAR (2035) RECOMMENDED INTERSECTION AND THROUGH LANE GEOMETRY
FORT HAMER ALTERNATIVE - SOUTH SECTION

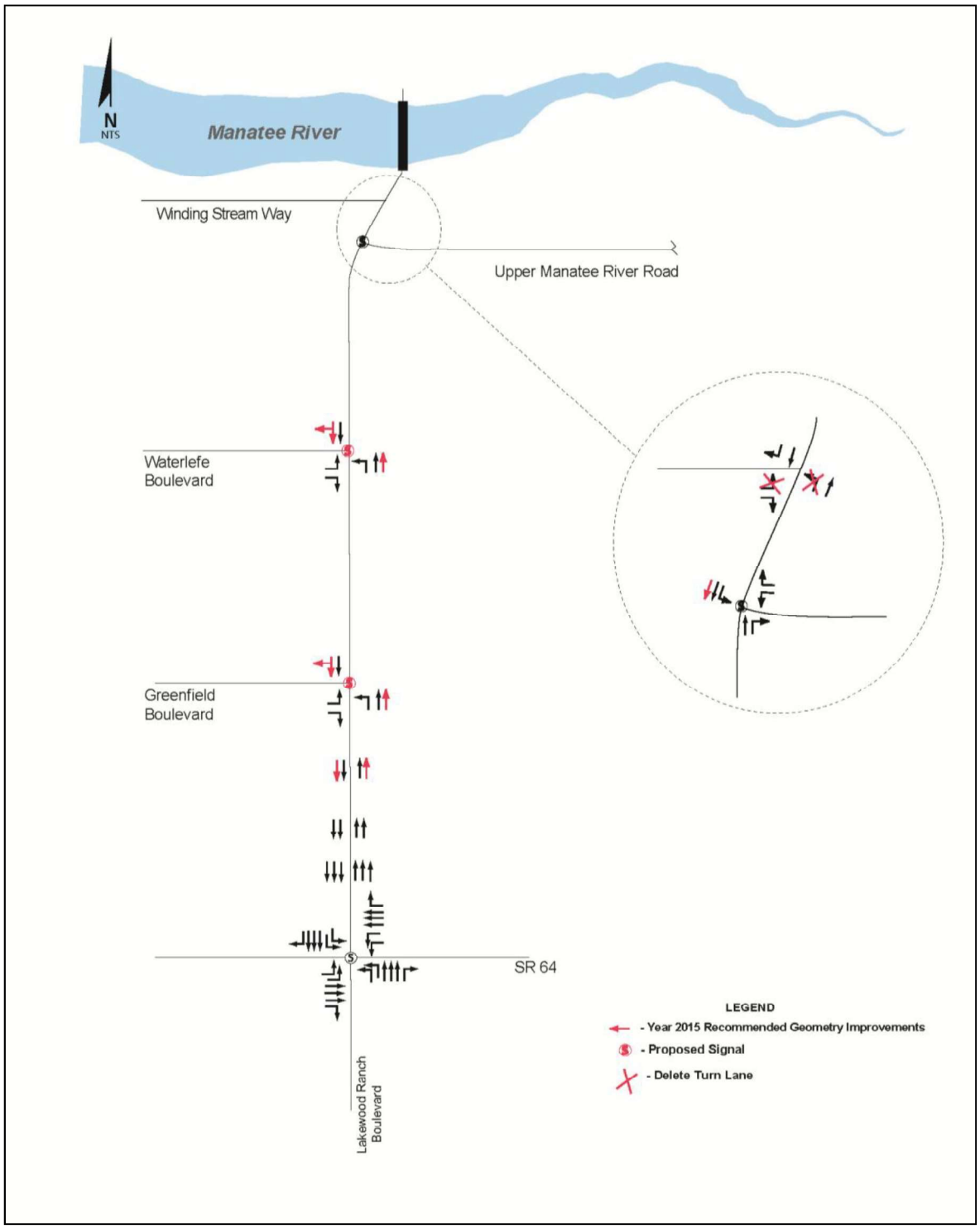
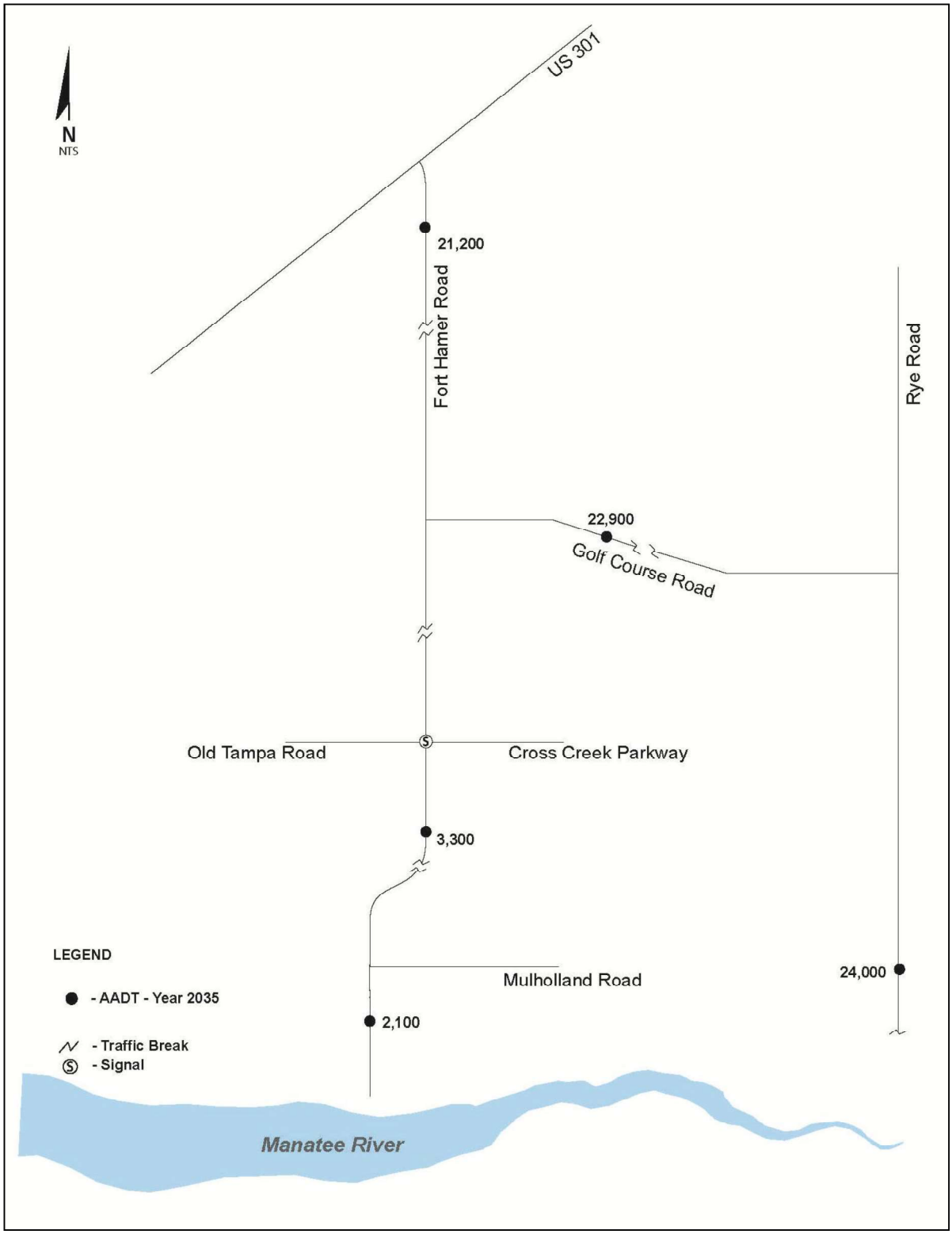


FIGURE 4-8
DESIGN YEAR (2035) RECOMMENDED INTERSECTION AND THROUGH LANE GEOMETRY
FORT HAMER ALTERNATIVE - NORTH SECTION



4.2.3 RYE ROAD ALTERNATIVE

The Rye Road Alternative is analyzed with a adding an additional two-lane bridge for a total of four lanes crossing the Manatee River. Rye Road, from SR 64 to Golf Course Road, Golf Course Road, from Rye Road to Fort Hamer Road, and Fort Hamer Road, from Golf Course Road to US 301 is widened to four through lanes with separate turn lane and signalization improvements. No improvements are included along Upper Manatee River Road. **Tables 4-5** and **4-6** summarizes the two-lane Fort Hamer Alternative AADT, two-lane road with separate turn lane and signalization improvements road capacities, and the LOS analyzed using the FDOT's Art Plan 2009 Planning Analysis documented in **Appendix H**.

TABLE 4-5
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
RYE ROAD ALTERNATIVE
UPPER MANATEE RIVER ROAD/FORT HAMER ROAD

From	To	AADT/Capacity	LOS
SR 64	Waterlefe Boulevard	14,500/14,200	F
Upper Manatee River Road	Gates Creek Road	10,900/14,200	B
Gates Creek Road	Manatee River	---	No Bridge
Manatee River	Mulholland Road	2,100/14,200	B
Mulholland Road	Golf Course Road	3,300/14,200	B
Golf Course Road	US 301	22,900/39,400[1]	B

--- No bridge.
[1] – Fort Hamer Road, from Golf Course Road to US 301 is four-lanes,

TABLE 4-6
DESIGN YEAR (2035) ROADWAY SEGMENT DAILY LOS
RYE ROAD ALTERNATIVE
RYE ROAD/GOLF COURSE ROAD

From	To	AADT/Capacity	LOS
Rye Road at SR 64	Upper Manatee River Road	23,200/39,400	B
Upper Manatee River Road	Golf Course Road	24,000/39,400	B
Golf Course Road at Rye Road	Fort Hamer Road	22,900/39,400	B

As Tables 4-5 and 4-6 illustrate, in 2035, there is a need to widen Upper Manatee River Road, from SR 64 to Waterlefe Boulevard, to more than two through lanes with separate turn lane and signalization improvements. The Rye Road Alternative is anticipated to re-distribute the future 2035 traffic from Fort Hamer Road, from the Manatee River to Golf Course Road, thereby improving the LOS B conditions to acceptable LOS. **Figures 4-9** and **4-10** illustrate the intersection geometry for the Rye Road Alternative.

FIGURE 4-9
DESIGN YEAR (2035) RECOMMENDED INTERSECTION GEOMETRY
RYE ROAD ALTERNATIVE - SOUTH SECTION

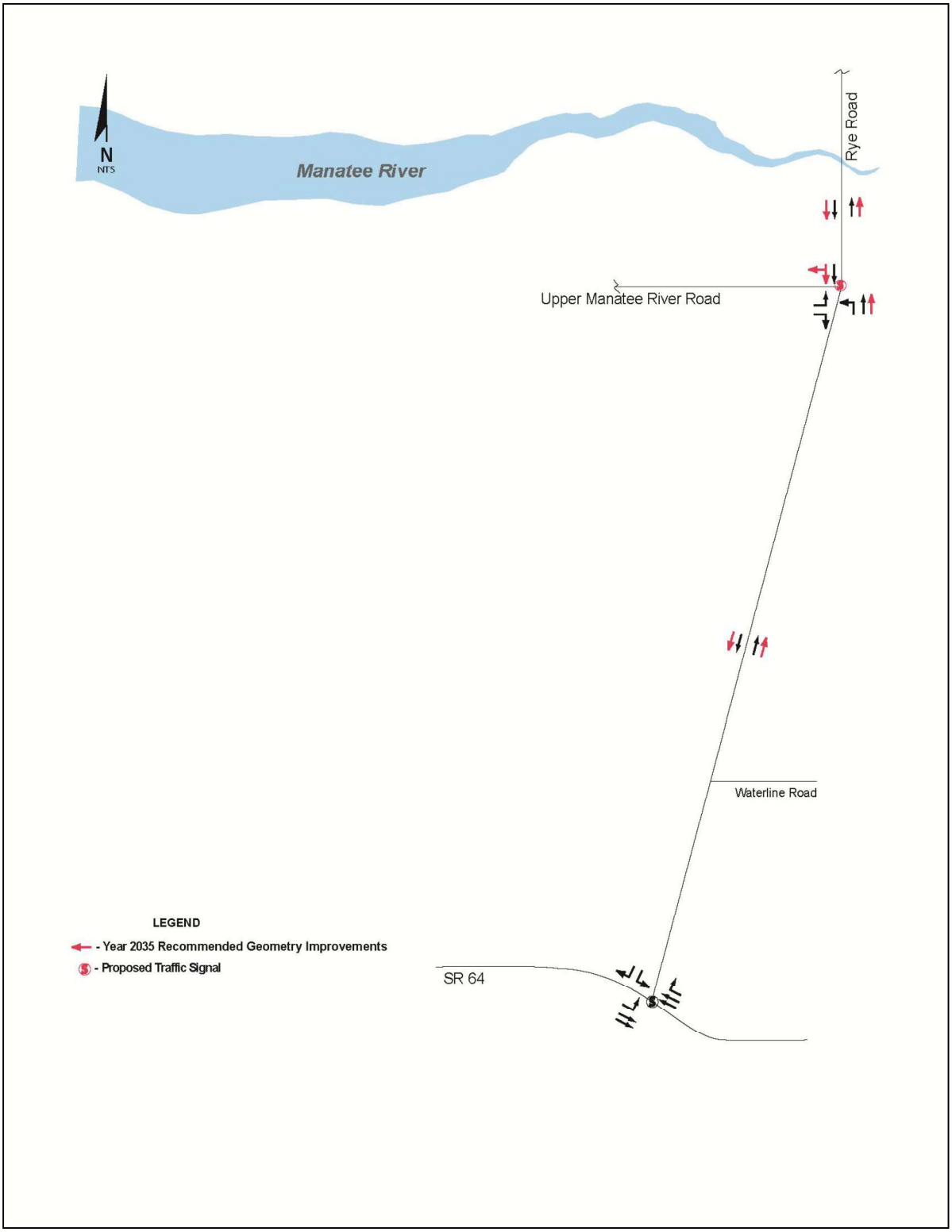
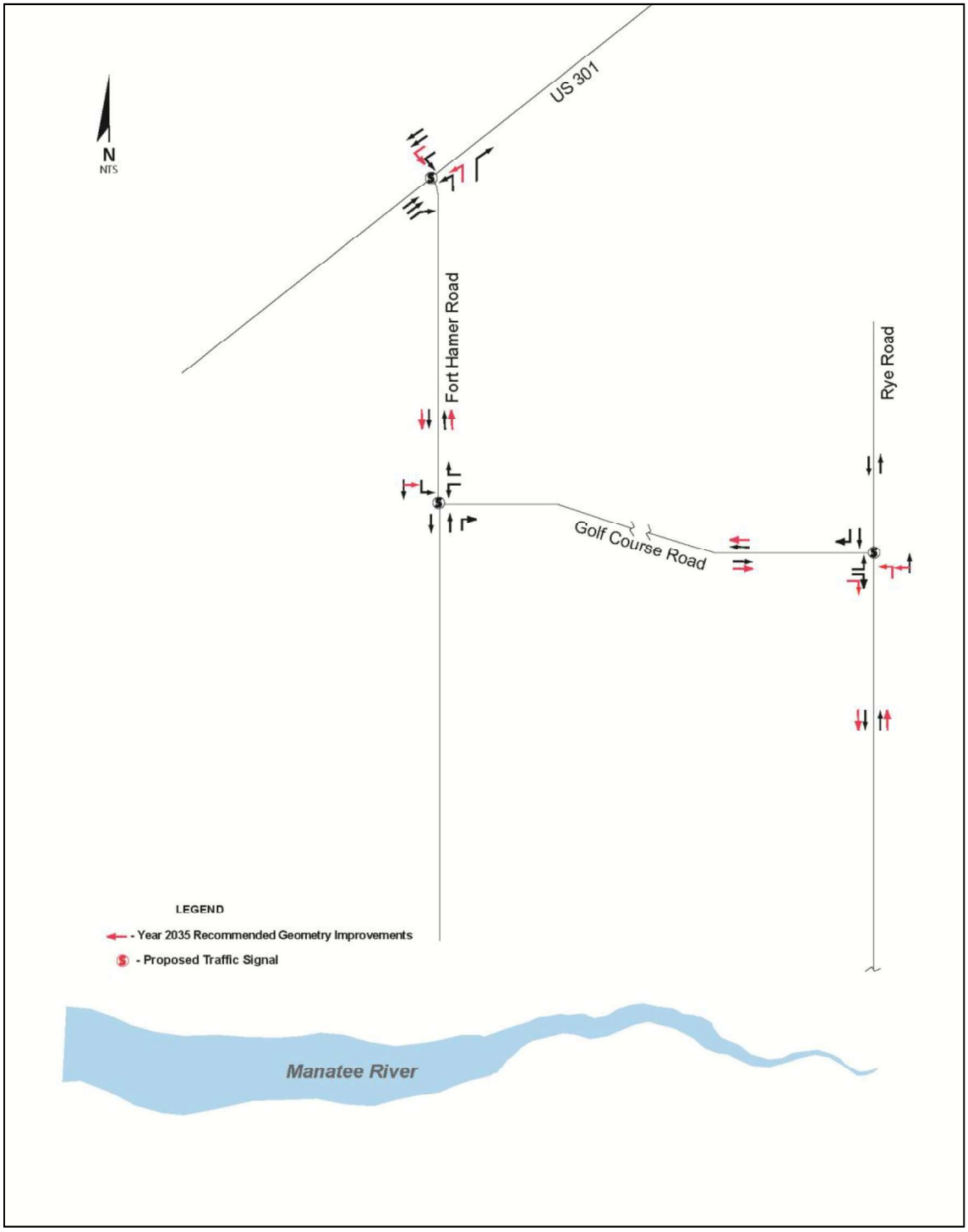


FIGURE 4-10
DESIGN YEAR (2035) RECOMMENDED INTERSECTION GEOMETRY
RYE ROAD ALTERNATIVE - NORTH SECTION



Section 5.0
COMPARATIVE ANALYSIS OF ALTERNATIVES

The HEVAL module was run for Manatee County using the SMC TDM for each alternative. HEVAL is a component of the Florida Standard Urban Transportation Modeling System (FSUTMS)/Cube model that takes a specific study area or region and evaluates the results of the highway assignment for that particular area. The HEVAL calculates daily system performance measures such as daily VMT and daily VHT. Those alternatives with lower overall VMT and VHT are deemed superior to those with higher totals, since they result in lower fuel and operating costs and also lower congestion. These measures reflect weekday conditions and provide a quantitative source for statistical comparison of the three alternatives for the year 2035 for the existing six lanes of I-75. AADT volumes were obtained for roadways depicted in **Table 5-1** each of the three alternatives. The LOS is based on the FDOT Generalized LOS Tables provided in **Appendix A-2**. The HEVAL output files are documented in **Appendix A-3**.

TABLE 5-1
DESIGN YEAR (2035) AADT VOLUMES BY ALTERNATIVE

Road	Manatee River Bridge Crossing	No-Build Alternative	Fort Hamer Alternative	Rye Road Alternative
I-75	At Manatee River	164,700	163,300	165,200
Rye Road	At Manatee River	19,800	7,400	23,200
Fort Hamer Road	At Manatee River	---	23,600	---

--- No-bridge included.

5.1 NO-BUILD ALTERNATIVE

The No-Build Alternative does not include the new Fort Hamer Bridge crossing the Manatee River connecting Fort Hamer Road with Upper Manatee River Road. The No-Build Alternative does not include any additional road capacity improvements other than the road safety improvements and scheduled maintenance already funded to be constructed in Manatee County's CIP, or improvements provided by private non-government entities, such as developers. This alternative is evaluated for the Design Year (2035) only.

This alternative does not adequately address travel demand needs within the project area for the following reasons:

- Both the I-75 and Rye Road bridges spanning the Manatee River are anticipated to operate at LOS F and LOS E, respectfully;

- The total VMT is 13,762,689 miles, the second highest of the three alternatives;
- This alternative has the highest VHT at 736,049 hours; and
- The southern section of Upper Manatee River Road and Rye Road are anticipated to operate at LOS F for the two-lane collector road.

5.2 FORT HAMER ALTERNATIVE

This alternative includes a two-lane bridge crossing over the Manatee River connecting Fort Hamer Road with Upper Manatee River Road. Additional turn lanes improvements along with signalization of intersections along Upper Manatee River Road and Fort Hamer Road are included in this alternative. Due to funding, only a two-lane bridge and a two-lane with separate turn-lane and signalization improvements along Upper Manatee River Road and Fort Hamer Road were analyzed. The study area is from south of SR 64 to north of US 301.

- Results in a reduction of 1,400 vpd on I-75 over the Manatee River and a reduction of 12,400 vpd on Rye Road Bridge when compared to the No-Build Alternative. This alternative is projected to have 23,600 vpd traveling in the new two-lane Fort Hamer Bridge over the Manatee River. This alternative shows a reduction in the total VMT to 13,664,913 miles or 138,316 miles less than the No-Build Alternative.
- Results in a VHT at 730,046 hours with a reduction of 6,003 VHT compared to the No-Build Alternative.
- This corridor is consistent with the Sarasota/Manatee MPO's 2035 LRTP and is currently funded for design, right-of-way (ROW) acquisition, and construction of a two-lane bridge over the Manatee River in Manatee County's CIP.

5.3 RYE ROAD ALTERNATIVE

The Rye Road Alternative includes four through lanes on Rye Road, from SR 64 to Upper Manatee River Road, four through lanes along Golf Course Road, and four through lanes along Fort Hamer Road, from Golf Course Road north to US 301. An additional two-lane bridge over the Manatee River paralleling the existing two-lane Rye Road Bridge is included in the Rye Road Alternative. This alternative:

- Results in the highest total VMT at 13,815,741 miles out of the three alternatives;
- The Rye Road bridge is projected to carry 24,000 vpd;
- Provides little or no relief to I-75;

- Results in higher VHT than the Fort Hamer Alternative;
- The existing two-lane bridge would need to be widened to a four-lane bridge spanning the Manatee River and along Rye Road/Golf Course Road/Fort Hamer Road corridor to maintain acceptable LOS; and
- Four-lane improvements to Rye Road Alternative are not consistent with the Sarasota/Manatee MPO's 2035 LRTP.

Section 6.0
CONCLUSIONS

The Fort Hamer Alternative, which includes a new Fort Hamer two-lane bridge, is anticipated to result in the lowest VMT within Manatee County. The travel demand forecasts also indicate that the proposed river crossing is anticipated to have almost 23,600 trips a day by the year 2035 for the Fort Hamer Alternative two-lane bridge with separate turn lane and signalization improvements. The Rye Road Alternative consists of an additional two-lane bridge paralleling the existing two-lane Rye Road Bridge together with widening to four lanes of Rye Road, from SR 64 to Golf Course Road, Golf Course Road, and Fort Hamer Road from Golf Course Road to US 301. In 2035, Rye Road Bridge is anticipated to have 23,200 vpd. Both build alternatives clearly demonstrate the need for a new roadway connection (i.e., a new bridge crossing) at either of these locations. All traffic projections are based on the latest version of the SMC TDM, which has taken into consideration the current economic downturn in the State of Florida.

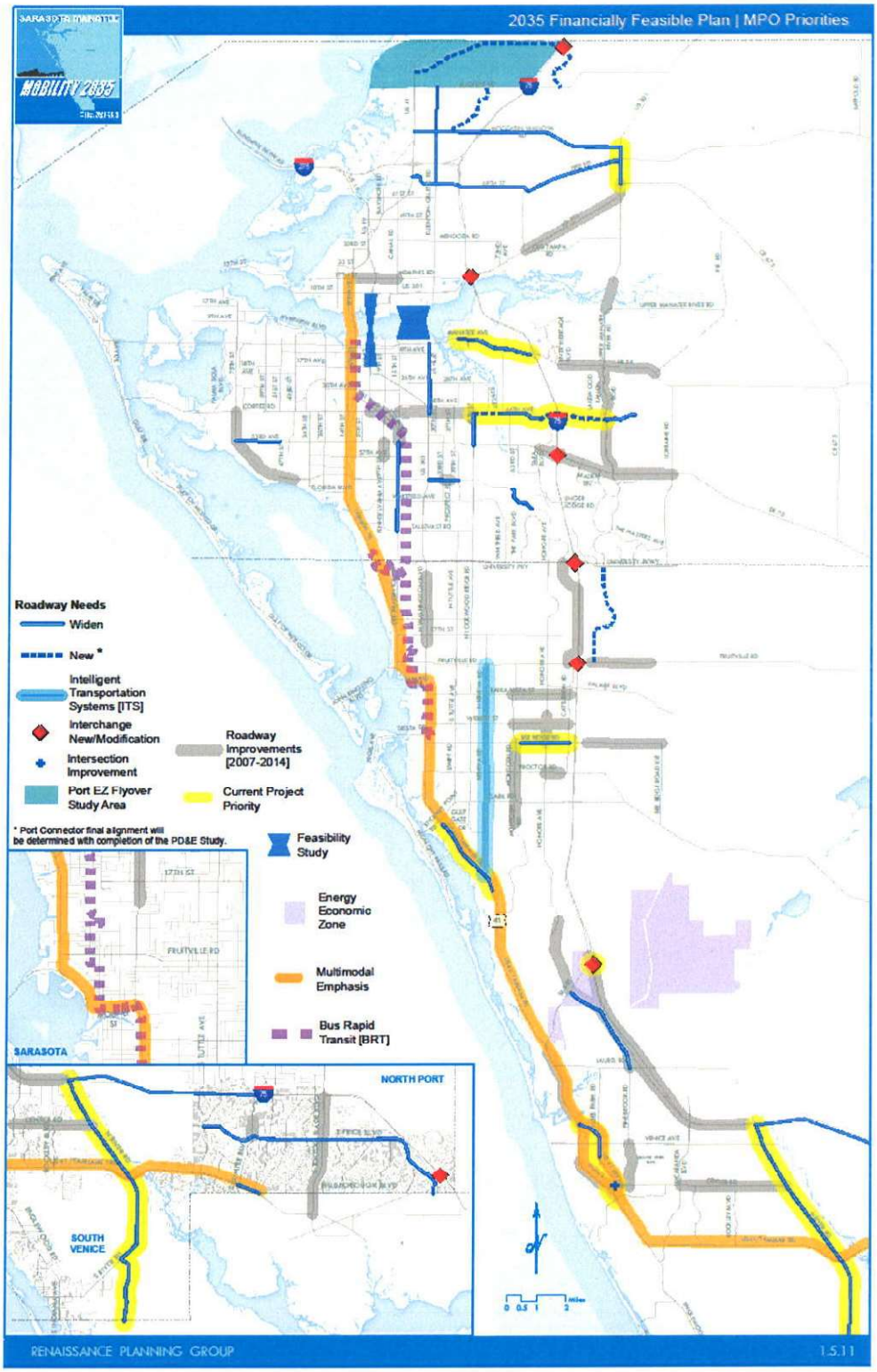
APPENDIX A

Traffic Analysis Data

APPENDIX A-1

Manatee County 2035 Financially Feasible Plan

Map 3: 2035 Financially Feasible Plan Projects



APPENDIX A-2

Florida Department of Transportation
Generalized Level of Service Tables

TABLE 1

Generalized **Annual Average Daily** Volumes for Florida's **Urbanized Areas**[1]

10/4/10

STATE SIGNALIZED ARTERIALS

Class I (>0.00 to 1.99 signalized intersections per mile)

Lanes	Median	B	C	D	E
2	Undivided	9,600	15,400	16,500	***
4	Divided	29,300	35,500	36,700	***
6	Divided	45,000	53,700	55,300	***
8	Divided	60,800	71,800	73,800	***

Class II (2.00 to 4.50 signalized intersections per mile)

Lanes	Median	B	C	D	E
2	Undivided	**	10,500	15,200	16,200
4	Divided	**	25,000	33,200	35,100
6	Divided	**	39,000	50,300	53,100
8	Divided	**	53,100	67,300	70,900

Class III/IV (more than 4.5 signalized intersections per mile)

Lanes	Median	B	C	D	E
2	Undivided	**	5,100	11,900	14,900
4	Divided	**	12,600	28,200	31,900
6	Divided	**	19,700	43,700	48,200
8	Divided	**	27,000	59,500	64,700

FREEWAYS

Lanes	B	C	D	E
4	43,500	59,800	73,600	79,400
6	65,300	90,500	110,300	122,700
8	87,000	120,100	146,500	166,000
10	108,700	151,700	184,000	209,200
12	149,300	202,100	238,600	252,500

Freeway Adjustments

Auxiliary Lanes	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	7,800	15,600	22,200	27,900
4	Divided	34,300	49,600	64,300	72,800
6	Divided	51,500	74,400	96,400	109,400

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Major City/County Roadways	- 10%
Other Signalized Roadways	- 35%

State & Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Divided/Undivided & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6.

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/ Bicycle Lane

Coverage	B	C	D	E
0-49%	**	3,200	12,100	>12,100
50-84%	2,400	3,700	>3,700	***
85-100%	6,300	>6,300	***	***

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	**	**	5,000	14,400
50-84%	**	**	11,300	18,800
85-100%	**	11,400	18,800	>18,800

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	>5	≥4	≥3	≥2
85-100%	>4	≥3	≥2	≥1

[1] Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as daily volumes, they actually represent peak hour direction conditions with applicable K and D factors applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

APPENDIX A-3

Statistical Comparison of Alternatives Using HEVAL Output

```
NETWORK START: Tue 03/22/2011  9:02:30.67
DISTRIB START: Tue 03/22/2011  9:03:02.11
TR PREP START: Tue 03/22/2011  9:07:48.14
   MODE START: Tue 03/22/2011  9:11:54.11
TR ASGN START: Tue 03/22/2011  9:20:36.70
HASSIGN START: Tue 03/22/2011  9:20:59.95
POST PR START: Tue 03/22/2011  9:34:36.26

HEVAL for Manatee County in C:\FSUTMS\D1\SMC.C_3-1-11\SMC.C\YR2007\FF_Plan - 2035 No-BUILD - ALT 1
************************ VOLUME AND COUNT SUMMARY BY SCREENLINE **********************
             Summary for SL= 99 VOL=    128,105 CNT=    128,350 VOL/CNT= 1.00    N=11
---------------------------------------------------------------------------------------
                      Total  VOL=    128,105 CNT=    128,350 VOL/CNT= 1.00    N=11


*************************** ROOT MEAN SQUARE ERROR SUMMARY ****************************
  Percent RMSE for Volume Group  1       1-  5,000:   4.3%  (<55.00% acceptable) N=7
  Percent RMSE for Volume Group  2   5,000- 10,000:   5.3%  (<45.00% acceptable) N=2
  Percent RMSE for Volume Group  6  40,000- 50,000:   0.9%  (<22.00% acceptable) N=2
---------------------------------------------------------------------------------------
                          Total       1-500,000:   2.3%  (<39.00% acceptable) N=11


********************* VOLUME AND COUNT SUMMARY BY FACILITY TYPE *********************
Facility Type Summary for FT= 35 VOL=     30,249 CNT=     30,800 VOL/CNT= 0.98    N=6
Facility Type Summary for FT= 46 VOL=      1,542 CNT=      1,150 VOL/CNT= 1.34    N=2
Facility Type Summary for FT= 52 VOL=     96,314 CNT=     96,400 VOL/CNT= 1.00    N=3
---------------------------------------------------------------------------------------
                      Total  VOL=    128,105 CNT=    128,350 VOL/CNT= 1.00    N=11


*********************** VOLUME AND COUNT SUMMARY BY AREA TYPE **********************
    Area Type Summary for AT= 31 VOL=     14,416 CNT=     15,000 VOL/CNT= 0.96    N=2
    Area Type Summary for AT= 52 VOL=    113,690 CNT=    113,350 VOL/CNT= 1.00    N=9
---------------------------------------------------------------------------------------
                      Total  VOL=    128,105 CNT=    128,350 VOL/CNT= 1.00    N=11

*************************************************************************************************
******************************
*
*
*                                                Overall Summary
*
*
*
*************************************************************************************************
******************************

Total Number of Links:                4,506
Total Centerline Miles:            1,092.19
Total Lane Miles:                  1,747.13
Total Directional Miles:           1,249.61
Total VMT using Volumes:            150,796    (Links With Counts)
Total VMT using Counts:             150,574    (Links With Counts)
Total VMT Volume over Counts:          1.00    (Links With Counts)
Total VHT using Volumes:              5,071    (Links With Counts)
Total VHT using Counts:               5,068    (Links With Counts)
Total VHT Volume over Counts:          1.00    (Links With Counts)
Total Volumes All Links:         51,942,397
Total VMT All Links:             13,762,689
Total VHT All Links:                736,049
Original Speed (MPH):                 35.20
Congested Speed (MPH):                28.33
```

SUMMARY

POST PR START: Wed 04/10/2013 6:08:49.56

HEVAL for Manatee County in C:\FSUTMS\D1\SMC.C_3_1_11\SMC.C\YR2007\FF_Plan\FF_UMMR
-
ALternative 2 2-lane Ft Hamer Bridge with turn lane improvements
on Upper Manatee River Rd & Ft Hamer Rd.

********** VOLUME AND COUNT SUMMARY BY SCREENLINE **********

Summary for SL= 99 VOL= 129,110 CNT= 128,350 VOL/CNT= 1.01 N=11

Total VOL= 129,110 CNT= 128,350 VOL/CNT= 1.01 N=11

********** ROOT MEAN SQUARE ERROR SUMMARY **********

Percent RMSE for Volume Group	1	1- 5,000:	4.2%	(<55.00% acceptable)	N=7
Percent RMSE for Volume Group	2	5,000- 10,000:	3.6%	(<45.00% acceptable)	N=2
Percent RMSE for Volume Group	6	40,000- 50,000:	0.9%	(<22.00% acceptable)	N=2

Total 1-500,000: 2.0% (<39.00% acceptable) N=11

********** VOLUME AND COUNT SUMMARY BY FACILITY TYPE **********

Facility Type Summary for FT= 35	VOL=	31,295	CNT=	30,800 VOL/CNT= 1.02	N=6
Facility Type Summary for FT= 46	VOL=	1,497	CNT=	1,150 VOL/CNT= 1.30	N=2
Facility Type Summary for FT= 52	VOL=	96,318	CNT=	96,400 VOL/CNT= 1.00	N=3

Total VOL= 129,110 CNT= 128,350 VOL/CNT= 1.01 N=11

********** VOLUME AND COUNT SUMMARY BY AREA TYPE **********

Area Type Summary for AT= 31	VOL=	15,518	CNT=	15,000 VOL/CNT= 1.03	N=2
Area Type Summary for AT= 52	VOL=	113,591	CNT=	113,350 VOL/CNT= 1.00	N=9

Total VOL= 129,110 CNT= 128,350 VOL/CNT= 1.01 N=11

****

Overall Summary

****

Total Number of Links:	4,508	
Total Centerline Miles:	1,095.16	
Total Lane Miles:	1,749.21	
Total Directional Miles:	1,251.68	
Total VMT using Volumes:	151,152	(Links With Counts)
Total VMT using Counts:	150,574	(Links With Counts)
Total VMT Volume over Counts:	1.00	(Links With Counts)
Total VHT using Volumes:	5,116	(Links With Counts)
Total VHT using Counts:	5,094	(Links With Counts)
Total VHT Volume over Counts:	1.00	(Links With Counts)
Total Volumes All Links:	51,744,828	
Total VMT All Links:	13,664,913	
Total VHT All Links:	730,046	
Original Speed (MPH):	35.22	
Congested Speed (MPH):	28.35	

```
     GEN START: Tue 05/31/2011  7:57:48.93
 NETWORK START: Tue 05/31/2011  7:57:50.66
 DISTRIB START: Tue 05/31/2011  7:58:20.90
 TR PREP START: Tue 05/31/2011  8:02:48.24
    MODE START: Tue 05/31/2011  8:06:57.92
 TR ASGN START: Tue 05/31/2011  8:15:25.26
 HASSIGN START: Tue 05/31/2011  8:15:47.31
 POST PR START: Tue 05/31/2011  8:27:22.57

 HEVAL for Manatee County in C:\FSUTMS\D1\SMC.C_3-1-11_first\SMC.C\YR2007\FF_Plan-Alternative 3
 ************************ VOLUME AND COUNT SUMMARY BY SCREENLINE **********************
              Summary for SL= 99 VOL=     129,133 CNT=     128,350 VOL/CNT= 1.01    N=11
--------------------------------------------------------------------------------------
                        Total  VOL=     129,133 CNT=     128,350 VOL/CNT= 1.01    N=11


 *************************** ROOT MEAN SQUARE ERROR SUMMARY ***************************
  Percent RMSE for Volume Group  1      1-  5,000:   5.9%  (<55.00% acceptable) N=7
  Percent RMSE for Volume Group  2   5,000- 10,000:  4.0%  (<45.00% acceptable) N=2
  Percent RMSE for Volume Group  6  40,000- 50,000:  0.9%  (<22.00% acceptable) N=2
--------------------------------------------------------------------------------------
                          Total      1-500,000:   2.2%  (<39.00% acceptable) N=11


 ********************* VOLUME AND COUNT SUMMARY BY FACILITY TYPE *********************
Facility Type Summary for FT= 35 VOL=     31,111 CNT=     30,800 VOL/CNT= 1.01    N=6
Facility Type Summary for FT= 46 VOL=      1,703 CNT=      1,150 VOL/CNT= 1.48    N=2
Facility Type Summary for FT= 52 VOL=     96,319 CNT=     96,400 VOL/CNT= 1.00    N=3
--------------------------------------------------------------------------------------
                       Total  VOL=     129,133 CNT=     128,350 VOL/CNT= 1.01    N=11


 ************************ VOLUME AND COUNT SUMMARY BY AREA TYPE **********************
    Area Type Summary for AT= 31 VOL=     15,336 CNT=     15,000 VOL/CNT= 1.02    N=2
    Area Type Summary for AT= 52 VOL=    113,797 CNT=    113,350 VOL/CNT= 1.00    N=9
--------------------------------------------------------------------------------------
                       Total  VOL=     129,133 CNT=     128,350 VOL/CNT= 1.01    N=11

***********************************************************************************************
********************************
*
*
*                                                   Overall Summary
*
*
*
***********************************************************************************************
********************************

Total Number of Links:                   4,506
Total Centerline Miles:              1,071.46
Total Lane Miles:                    1,767.86
Total Directional Miles:             1,249.61
Total VMT using Volumes:               151,307      (Links With Counts)
Total VMT using Counts:                150,574      (Links With Counts)
Total VMT Volume over Counts:             1.00      (Links With Counts)
Total VHT using Volumes:                 5,116      (Links With Counts)
Total VHT using Counts:                  5,090      (Links With Counts)
Total VHT Volume over Counts:             1.01      (Links With Counts)
Total Volumes All Links:            52,100,864
Total VMT All Links:                13,815,741
Total VHT All Links:                   729,202
Original Speed (MPH):                    35.47
Congested Speed (MPH):                   28.63
```

APPENDIX A-4

Existing Traffic Counts

URS Corporation
7650 W. Courtney Campbell Cswy
Tampa, Fl 33607 813-286-1711

Counter: 0378
Counted By: URS
Weather: Sunny
Other:

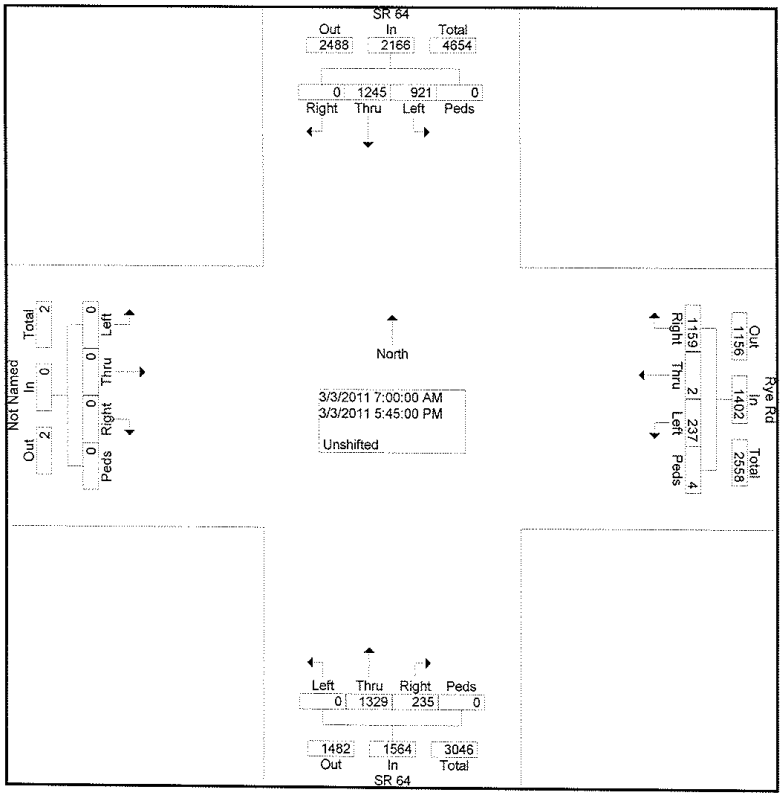
File Name : RYE Rd_SR 64
Site Code : 00000378
Start Date : 3/3/2011
Page No : 1

Groups Printed- Unshifted

	SR 64 South Bound				Rye Rd West Bound				SR 64 North Bound				East Bound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	18	38	0	0	15	0	91	0	0	81	5	0	0	0	0	0	248
07:15 AM	24	58	0	0	14	0	146	0	0	98	8	0	0	0	0	0	348
07:30 AM	31	58	0	0	35	2	75	0	0	86	7	0	0	0	0	0	294
07:45 AM	44	57	0	0	30	0	81	0	0	71	9	0	0	0	0	0	292
Total	117	211	0	0	94	2	393	0	0	336	29	0	0	0	0	0	1182
08:00 AM	42	61	0	0	31	0	120	0	0	86	19	0	0	0	0	0	359
08:15 AM	58	64	0	0	34	0	121	4	0	38	8	0	0	0	0	0	327
08:30 AM	35	91	0	0	15	0	92	0	0	100	11	0	0	0	0	0	344
08:45 AM	33	124	0	0	10	0	55	0	0	71	8	0	0	0	0	0	301
Total	168	340	0	0	90	0	388	4	0	295	46	0	0	0	0	0	1331
04:00 PM	79	65	0	0	5	0	47	0	0	105	29	0	0	0	0	0	330
04:15 PM	77	78	0	0	7	0	50	0	0	67	24	0	0	0	0	0	303
04:30 PM	56	88	0	0	3	0	36	0	0	105	12	0	0	0	0	0	300
04:45 PM	72	74	0	0	8	0	42	0	0	76	16	0	0	0	0	0	288
Total	284	305	0	0	23	0	175	0	0	353	81	0	0	0	0	0	1221
05:00 PM	70	105	0	0	6	0	49	0	0	98	25	0	0	0	0	0	353
05:15 PM	91	102	0	0	8	0	43	0	0	70	16	0	0	0	0	0	330
05:30 PM	89	79	0	0	7	0	56	0	0	85	24	0	0	0	0	0	340
05:45 PM	102	103	0	0	9	0	55	0	0	92	14	0	0	0	0	0	375
Total	352	389	0	0	30	0	203	0	0	345	79	0	0	0	0	0	1398
Grand Total	921	1245	0	0	237	2	1159	4	0	1329	235	0	0	0	0	0	5132
Apprch %	42.5	57.5	0.0	0.0	16.9	0.1	82.7	0.3	0.0	85.0	15.0	0.0	0.0	0.0	0.0	0.0	
Total %	17.9	24.3	0.0	0.0	4.6	0.0	22.6	0.1	0.0	25.9	4.6	0.0	0.0	0.0	0.0	0.0	

URS Corporation
7650 W. Courtney Campbell Cswy
Tampa, Fl 33607 813-286-1711

File Name : RYE Rd_SR 64
Site Code : 00000378
Start Date : 3/3/2011
Page No : 2



URS Corporation
7650 W. Courtney Campbell Cswy
Tampa, Fl 33607 813-286-1711

File Name : RYE Rd_SR 64
Site Code : 00000378
Start Date : 3/3/2011
Page No : 3

	SR 64 South Bound EB					Rye Rd West Bound SB					SR 64 North Bound WB					East Bound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 12:30 PM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	168	340	0	0	508	90	0	388	4	482	0	295	46	0	341	0	0	0	0	0	1331
Percent	33.1	66.9	0.0	0.0		18.7	0.0	80.5	0.8		0.0	86.5	13.5	0.0		0.0	0.0	0.0	0.0		
08:00 Volume	42	61	0	0	103	31	0	120	0	151	0	86	19	0	105	0	0	0	0	0	359
Peak Factor																					0.927
High Int.	08:45 AM					08:15 AM					08:30 AM					6:45:00 AM					
Volume	33	124	0	0	157	34	0	121	4	159	0	100	11	0	111						
Peak Factor	0	35			0.809	2		8		0.758		50	1		0.768						
		10.29				2.22		2.06				1.69	2.17								
Peak Hour From 12:45 PM to 05:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	352	389	0	0	741	30	0	203	0	233	0	345	79	0	424	0	0	0	0	0	1398
Percent	47.5	52.5	0.0	0.0		12.9	0.0	87.1	0.0		0.0	81.4	18.6	0.0		0.0	0.0	0.0	0.0		
05:45 Volume	102	103	0	0	205	9	0	55	0	64	0	92	14	0	106	0	0	0	0	0	375
Peak Factor																					0.932
High Int.	05:45 PM					05:45 PM					05:00 PM										
Volume	102	103	0	0	205	9	0	55	0	64	0	98	25	0	123						
Peak Factor					0.904					0.910					0.862						
pm HV Vol	4	12				7		6				46	7								
pm % HV	1.0	18.5				23.3		2.95				13.3	8.86								

No. 7 Rye Rd @ SR64

Heavy Vehicle Percentages

Interval 7:00 to 7:15 am

	Trucks	School Buses
WBT	19	2
WBR		
EBT	12	5
EBL		
SBL		
SBR	3	1

Heavy Vehicle Percentages

Interval 7:15 to 7:30 am

	Trucks	School Buses
WBT	18	1
WBR	2	
EBT	10	4
EBL	1	
SBL		
SBR	3	

Heavy Vehicle Percentages

Interval 7:30 to 7:45 am

	Trucks	School Buses
WBT	15	3
WBR		
EBT	10	4
EBL		
SBL		
SBR	2	2

Heavy Vehicle Percentages

Interval 7:45 to 8:00 am

	Trucks	School Buses
WBT	21	3
WBR		
EBT	17	5
EBL	1	
SBL	1	
SBR		

No.7 Rye Rd @SR64

Heavy Vehicle Percentages

Interval 8:00 to 8:15 am

	Trucks	School Buses
WBT	14	1
WBR	1	
EBT	10	4
EBL		
SBL	1	
SBR	3	1

No.7 Rye Rd @SR64

Heavy Vehicle Percentages

Interval 8:15 to 8:30 am

	Trucks	School Buses
WBT	10	
WBR		
EBT	6	
EBL		
SBL	1	
SBR	3	1

No.7 Rye Rd @SR64

Heavy Vehicle Percentages

Interval 8:30 to 8:45 am

	Trucks	School Buses
WBT	8	
WBR		
EBT	4	
EBL		
SBL		
SBR		

No.7 Rye Rd @SR64

Heavy Vehicle Percentages

Interval 8:45 to 9:00 am

	Trucks	School Buses
WBT	15	2
WBR		
EBT	8	3
EBL		
SBL		
SBR		

50
1
35
0
2
8

Heavy Vehicle Percentages

Interval 4:00 to 4:15 pm

	Trucks	School Buses
WBT	10	4
WBR	2	
EBT	18	1
EBL		
SBL		
SBR	1	

Heavy Vehicle Percentages

Interval 4:15 to 4:30 pm

	Trucks	School Buses
WBT	12	5
WBR	1	
EBT	19	2
EBL		
SBL	1	
SBR		

Heavy Vehicle Percentages

Interval 4:30 to 4:45 pm

	Trucks	School Buses
WBT	13	6
WBR	4	
EBT	22	1
EBL	1	
SBL	1	
SBR		

Heavy Vehicle Percentages

Interval 4:45 to 5:00 pm

	Trucks	School Buses
WBT	11	3
WBR	1	
EBT	18	2
EBL	1	
SBL		
SBR	1	

Heavy Vehicle Percentages

Interval 5:00 to 5:15 pm

	Trucks	School Buses
WBT	8	5
WBR	1	1
EBT	10	2
EBL	2	
SBT	1	2
SBR	1	

Heavy Vehicle Percentages

Interval 5:15 to 5:30 pm

	Trucks	School Buses
WBT	9	3
WBR	3	
EBT	23	
EBL	1	
SBT		2
SBR	1	1

Heavy Vehicle Percentages

Interval 5:30 to 5:45 pm

	Trucks	School Buses
WBT	11	
WBR	1	
EBT	19	
EBL		1
SBT	1	
SBR	1	1

Heavy Vehicle Percentages

Interval 5:45 to 6:00 pm

	Trucks	School Buses
WBT	10	
WBR	3	
EBT	18	
EBL		
SBT	1	
SBR	1	

46
7
72
4
7
6

URS Corporation
7650 W. Courtney Campbell Cswy
Tampa, Fl 33607 813-286-1711

Counter: 1102
Counted By: URS
Weather: Cloudy
Other:

File Name : FTHAME~1
Site Code : 00001102
Start Date : 3/1/2011
Page No : 1

Groups Printed- Unshifted

	Ft Hamer South Bound				Golf Course Rd West Bound				Ft Hamer North Bound				East Bound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:30 AM	6	14	0	0	13	0	6	0	0	30	19	0	0	0	0	0	88
07:45 AM	6	21	0	0	20	0	4	0	0	18	17	0	0	0	0	0	86
Total	12	35	0	0	33	0	10	0	0	48	36	0	0	0	0	0	174
08:00 AM	3	31	0	0	33	0	7	0	0	43	18	0	0	0	0	0	135
08:15 AM	3	17	0	0	24	0	5	0	0	56	28	0	0	0	0	0	133
08:30 AM	3	10	0	0	10	0	2	0	0	27	15	0	0	0	0	0	67
08:45 AM	7	6	0	0	8	1	6	0	0	22	14	0	0	0	0	0	64
Total	16	64	0	0	75	1	20	0	0	148	75	0	0	0	0	0	399
09:00 AM	12	14	0	0	15	0	4	0	0	15	16	0	0	0	0	0	76
09:15 AM	12	6	0	0	8	0	3	0	0	19	20	0	0	0	0	0	68
Total	24	20	0	0	23	0	7	0	0	34	36	0	0	0	0	0	144
04:00 PM	4	20	0	0	15	0	3	0	0	15	21	0	0	0	0	0	78
04:15 PM	6	22	0	0	17	0	6	0	0	18	15	0	0	0	0	0	84
04:30 PM	1	18	0	0	16	0	2	1	0	21	14	0	0	0	0	0	73
04:45 PM	4	20	0	0	15	0	9	0	0	12	17	0	0	0	0	0	77
Total	15	80	0	0	63	0	20	1	0	66	67	0	0	0	0	0	312
05:00 PM	5	22	0	0	20	0	2	0	0	10	10	0	0	0	0	0	69
05:15 PM	3	22	0	0	15	0	6	0	0	12	20	0	0	0	0	0	78
05:30 PM	6	19	0	0	9	0	8	0	0	12	13	0	0	0	0	0	67
05:45 PM	2	23	1	0	14	0	9	0	0	20	16	0	0	0	0	0	85
Total	16	86	1	0	58	0	25	0	0	54	59	0	0	0	0	0	299
Grand Total	83	285	1	0	252	1	82	1	0	350	273	0	0	0	0	0	1328
Apprch %	22.5	77.2	0.3	0.0	75.0	0.3	24.4	0.3	0.0	56.2	43.8	0.0	0.0	0.0	0.0	0.0	
Total %	6.3	21.5	0.1	0.0	19.0	0.1	6.2	0.1	0.0	26.4	20.6	0.0	0.0	0.0	0.0	0.0	

URS Corporation
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