Board of
Commissioners Meeting
November 14, 2015

PRELIMINARY AGENDA

FLORIDA INLAND NAVIGATION DISTRICT
Board of Commissioners Meeting

9:00 a.m., Saturday, November 14, 2015

Hutchinson Island Marriott Beach Resort & Marina
555 NE Ocean Boulevard
Stuart, Florida 34996-1620

Item 1. **Call to Order.**

Chair Blow will call the meeting to order.

Item 2. **Pledge of Allegiance.**

Vice-Chair Cuozzo will lead the Pledge of Allegiance to the United States of America.

Item 3. **Roll Call.**

Secretary McCabe will call the roll.

Item 4. **Consent Agenda.**

The consent agenda items are presented for approval. Commissioners may remove any items from this agenda that they have questions on or would like the Board to discuss in depth. Any items removed would then be included in the regular agenda in an order assigned by the Chair.

(Please see back up pages following the **COLOR** page)

RECOMMEND: Approval of the Consent Agenda.

A) Keep Brevard Beautiful, Inc. Waterway Cleanup Program Funding Request, Brevard County, FL.

Item 5. **Additions or Deletions.**

Any additions or deletions to the meeting agenda will be announced.

RECOMMEND: Approval of a final agenda.

Item 6. **Public Comments.**

The public is invited to provide comments on issues that are NOT on today's agenda. All comments regarding a specific agenda item will be considered following Board discussion of that agenda item. *Please note: Individuals who have comments concerning a specific agenda item should fill out a speaker card and communicate with staff prior to that agenda item.*

Item 7. **Board Meeting Minutes.**

The minutes of the following meetings are presented for approval.

- October 16, 2015 - Finance & Budget Committee Mtg. (Please see back up pages 7-10)
- October 16, 2015 - Board Meeting (Please see back up pages 11-37)

RECOMMEND: Approval of the minutes as presented.

Item 8. **Comments from the U.S. Army Corps of Engineers.**

U.S. Army Corps of Engineers (USACE) Intracoastal Waterway Project Manager, Ms. Shelly Trulock is scheduled to present an update on projects and activities.

(Please see back up pages 38-43)

Item 9. **Staff Report on Martin County Area Projects.**

Staff will present a report on the District's Martin County area projects.

(Please see back up pages 44-69)

Item 10. **Agreement with the Marine Industries Association of South Florida for Additional Communication Services for the Broward Intracoastal Waterway Deepening Project, Broward County, FL.**

The Marine Industries Association of South Florida (MIASF) has offered to assist the Navigation District with communication and public coordination for the Broward Intracoastal Waterway (IWW) Deepening Project. The MIASF currently contracts with Starmark, a well-established communication firm in south Florida. Through this agreement, the District would utilize the professional services of Starmark, as well as the MIASF organization.

At the previous meeting in October, the Board requested specific changes to the consultant's scope of work for this effort. Those changes have been incorporated and the original terms of the agreement between the District and the MIASF remain at nine (9) months in duration, for a maximum amount of $5,000 per month.

(Please see back up pages 70-76)

RECOMMEND: Approval of the proposed agreement with MIASF for communication and support services for the Broward IWW Deepening Project, Broward County, FL.

Item 11. **License Agreement with FPL for Property Use to Facilitate the Development of an Alternate Access Road to the Port Everglades Dredged Material Management Area, in Conjunction with the Broward County Intracoastal Waterway Deepening Project, Broward County, FL.**

Staff, our Attorney and the District Engineer have been negotiating with FPL since April 2014 to obtain a license agreement for access to FPL property in the vicinity of Port Everglades. This agreement is necessary to develop an alternate access road to the Port's Dredged Material Management Area (DMMA), which is being utilized for the District's Intracoastal Waterway (IWW) Deepening Project. The project was approved by the Board at the October 16, 2015 meeting.

The development of this road was a condition for access to the Port's DMMA. The details have been finalized and there is an additional estimated cost of $182,520 to implement the specifications of the FPL License Agreement.

(Please see back up pages 77-114)

RECOMMEND: Approval of a License Agreement with FPL and $182,520 in estimated fees to utilize FPL property to develop an alternate access road to the Port Everglade's DMMA facility for the Broward County Intracoastal Waterway Deepening Project, Broward County, FL.

Item 12. **Scope of Services and Fee Proposal for the Okeechobee Cut 1 (Crossroads) Sediment Basin Development and Channel Alignment Alternatives, Martin County, FL.**

Taylor Engineering has been working on the development of a sediment basin in the area of the Okeechobee Waterway (OWW) that intersects the Intracoastal Waterway (IWW) at the St. Lucie Inlet. This area, known as "Crossroads", is one of the District's highest dredging frequencies with a project implemented almost every three years.

The extensive modeling associated with the various alternatives examined for this project has led to a promising and potentially cost-effective alternative for a sediment basin which will allow for "advance maintenance" and decrease dredging frequency and costs.

The District Engineer has provided a scope of work and fee quote to develop this alternative and incorporate channel alignment alternatives to maximize the effectiveness of this effort.

(Please see back up page 115-131)

RECOMMEND: Approval of a proposal and fee quote from Taylor Engineering in the amount of $164,600.06 for design, engineering and permitting of a sediment basin and channel alignment alternatives for the Okeechobee Waterway Cut 1 (Crossroads), Martin County, FL.

Item 13. **Presentation of the St. Lucie and Palm Beach County Seagrass Mitigation Reports, St. Lucie and Palm Beach Counties, FL.**

Dr. Steve Schropp with Taylor Engineering is scheduled to provide a presentation and update on efforts to identify potential seagrass mitigation areas in St. Lucie and Palm Beach counties. The Board may recall that this effort is being undertaken for all counties that have submerged aquatic vegetation (SAV) concerns (i.e. south of, and including Brevard County).

Efforts to work with the regulatory agencies' interpretation of SAV protection rules, including the requirement of mitigation for maintenance projects, has been less than successful. In addition, any new projects or modifications of existing projects (for example deepening or windeners in the IWW) will require mitigation. The effort to identify those areas preliminarily available for mitigation provides an initial assessment of the conditions of a particular county and a direction to pursue for mitigation requirements.

(Please see back up pages 132-149)

RECOMMEND: *(This item is presented for Board review and discussion only.)*

Item 14. **Scope of Services and Fee Proposal for Permitting and Final Design of Dredged Material Management Area BV-24A, Brevard County, FL.**

Taylor Engineering has provided a scope of services and a fee quote for the permitting and final design of Dredged Material Management Area (DMMA) BV-24A. Last year, the Board approved an exchange of property at this location with Brevard County to protect valuable Florida Scrub Jay habitat and provide the District a developable site with less environmental concerns.

This site is necessary for the long-term maintenance and management of the Intracoastal Waterway (IWW) and has been identified and approved in the District's 50-year Dredged Material Management Plan (DMMP). The site will be evaluated in "phases" to determine the most cost-effective methodology of site development.

Of the proposed work, approximately $301,469.00 represents the work performed by the geotechnical sub-contractor on this project. This work is the most important information to gather to determine the final site specifications and design. Staff has reviewed the proposal and found it to be consistent and reasonable for this work. In addition, Brevard County is scheduled to reimburse the District $88,823.38 for this effort as part of the terms of the property exchange agreement.

(Please see back up page 150-176)

RECOMMEND: Approval of a proposal and fee quote from Taylor Engineering up to the amount of $556,108.90 for the design, engineering and permitting of the long-range, permanent facility DMMA BV-24A, Brevard County, FL.

Item 15. **Review and Approval of the Selection Committee Rankings and the Negotiation of a Continuing Services Contract for the Geographic Information System Updates, Initiating with Palm Beach County, FL.**

The effort to update the District's Geographic Information System (GIS) system was approved by the Board at our September 12, 2015 meeting. The District then released a Request for Proposals (RFP) to update the information and mapping data for Palm Beach County.

The District received 15 responses to the RFP. These responses were reviewed and ranked by the review committee and are presented in descending order. Staff recommends the Board approve the final ranking of the review committee, and approve staff to negotiate a continuing services contract with the top three ranked firms. This would preclude repeating the RFP effort should a firm under perform.

(Please see back up page 177-188)

RECOMMEND: Approval of the selection committee's recommended ranking of respondents to a Request for Proposals for GIS services, with approval to negotiate a continuing services contract with the top three ranked firms.

Item 16. **Finance and Budget Committee Report.**

The District's Finance and Budget Committee met prior to the Board meeting and will provide their recommendations concerning items on the Committee's agenda.

(Please refer to the Finance and Budget Committee Agenda Package)

RECOMMEND: Approval of the recommendations of the District's Finance and Budget Committee.

Item 17. **Washington Report.**

The District's federal governmental relations firm has submitted a status report concerning activity on the District's federal issues and is scheduled to provide a brief presentation.

(Please see back up pages 189-191)

Item 18. **Additional Staff Comments and Additional Agenda Items.**

Item 19. **Additional Commissioners Comments.**

Item 20. **Adjournment.**

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

SYNOPSIS OF THE MINUTES OF THE

FLORIDA INLAND NAVIGATION DISTRICT

FINANCE AND BUDGET COMMITTEE MEETING

8:30 a.m., Friday, October 16, 2015

Hyatt Regency Pier Sixty-Six Hotel

2301 S.E. 17th Street Causeway

Fort Lauderdale, Broward County, Florida, 33316-3107

ITEM 1. Call to Order.

Committee Chair Netts called the meeting to order at 8:30 a.m.

ITEM 2. Roll Call.

Assistant Executive Director Janet Zimmerman called the roll and Chair Netts, Vice-Chair Cuozzo, Secretary McCabe, and Commissoner Sansom were present. Ms. Zimmerman stated that a quorum was present.

ITEM 3. Additions or Deletions.

Chair Netts asked if there were any additions or deletions to the meeting agenda. Mr. Crosley stated that there were no additions or deletions to the agenda.

Commissioner Sansom made a motion to approve the agenda as presented. The motion was seconded by Vice-Chair Cuozzo. Chair Netts asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 4. Public Comments.

Chair Netts asked if there were any public comments on issues that are not on today's agenda. There were none.

ITEM 5. **Financial Statements for August of 2015.**

Mr. Crosley presented the District's financial statements for August of 2015. He noted that August is near the end of the District's Fiscal Year and there are not a lot of revenue collections during the month of August.

Mr. Crosley noted that the State of Florida has closed the State Board of Administration Account (SBA) Fund "B" and those funds were transferred to the SBA Fund "A" account. The District has closed SBA Fund "A" and the funds were moved into the District's BB&T checking account. He noted that the District did not lose any funds in these accounts.

Mr. Crosley stated that staff changed the District's tax collections account to Seacoast National and staff has set up that checking account as an ACH (electronic) payment account. He stated that the electronic payments will be e-mailed to the appropriate Officer with signatory capabilities for approval. The Seacoast Money Market account receives 0.60% interest. He noted that staff is diligent about shopping for the best interest rates.

Mr. Crosley stated that the DMMA FL-3 construction project is almost finished. DMMA DU-8 has been completed. He also noted that DMMA BV-4 construction will be starting soon.

Vice-Chair Cuozzo made a motion to approve a recommendation to the full Board of the financial statements for August of 2015. The motion was seconded by Secretary McCabe. Chair Netts asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

ITEM 6. August 2015 Budget Summary and Project Status Expenditure Reports.

Mr. Crosley presented the Expenditure and Project Status Reports for August 2015. He asked for questions, there were none.

ITEM 7. Auditor's Engagement Letter for the FY 2014-2015 Audit.

Mr. Crosley stated that the District's current audit firm, Berger, Toombs, Elam, Gaines & Frank, has submitted an engagement letter for the FY 2014-2015 financial audit, including a proposed cost of $27,000.00, which is the same as last year's proposal. If the engagement letter is approved, this will be the seventh year that Berger et al. will have performed the District's annual audit. He noted, that for publicly traded firms, the Sarbanes-Oxley Act requires that the audit shareholder/partner be rotated every 5 years. It does not require that the firm be rotated. Currently, the Governmental Standards Accounting Board has no such requirement.

Mr. Crosley stated that last year, the Board expressed an interest in retaining the current auditor if the audit shareholder/partner was rotated. The firm has agreed to this condition. If the Board does not approve the engagement letter, the Auditor Selection Committee will need to advertise a Request for Qualifications for a new audit firm. By state law, audit firms are selected by their qualifications and their fees are then negotiated.

Vice-Chair Cuozzo made a motion to approve a recommendation to the full Board to accept the Engagement Letter from Berger, Toombs, Elam, Gaines & Frank for the FY 2014-2015 audit, with rotation of the audit shareholder/partner. The motion was seconded by Commissioner Sansom. Chair Netts asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

ITEM 8. **Delegation of Authority Report.**

Mr. Crosley presented the Executive Director's Delegation of Authority actions and stated that eight (8) actions were taken from September 4, 2015 through October 5, 2015 and is presented for committee review. He asked for any questions. There were none.

ITEM 9. **Additional Agenda Items or Staff Comments.**

Chair Netts asked if there were any additional agenda items or staff comments. There were none.

ITEM 10. **Additional Commissioners Comments.**

Chair Netts asked if there were any additional Commissioner comments. There were none.

ITEM 11. **Adjournment.**

Chair Netts stated that hearing no further business the meeting was adjourned at 8:43 a.m.

SYNOPSIS OF THE MINUTES OF THE

FLORIDA INLAND NAVIGATION DISTRICT

Board of Commissioners Meeting

9:00 a.m., Friday, October 16, 2015

Hyatt Regency Pier Sixty-Six Hotel

2301 S.E. 17th Street Causeway

Fort Lauderdale, Broward County, Florida, 33316-3107

ITEM 1. Call to Order.

Chair Blow called the meeting to order at 9:00 a.m.

ITEM 2. Pledge of Allegiance.

Commissioner Chappell led the Pledge of Allegiance to the Flag of the United States of America.

ITEM 3. Roll Call.

Secretary McCabe called the roll and Chair Blow, Vice-Chair Cuozzo, Treasurer Netts, and Commissioners Chappell, Crowley, Donaldson, Dritenbas, Isiminger, O'Steen, and Sansom were present. Secretary McCabe stated that a quorum was present. Commissioner Williams was absent.

Chair Blow welcomed and introduced Michael O'Steen, the new Duval County Commissioner.

ITEM 4. Consent Agenda.

Chair Blow asked if there were any comments or questions regarding the Consent Agenda. There were none.

Commissioner Chappell made a motion to approve the Consent Agenda as presented. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 5. Additions or Deletions.

Chair Blow asked if there were any additions or deletions to the meeting agenda.

Mr. Crosley stated that there are no formal additions or deletions to the meeting agenda. He noted that he passed out a memo regarding a Public Relations Firm representing the District during the IWW Broward Deeping Project and he would like to discuss this under commissioner Comments.

Treasurer Netts made a motion to approve the final agenda as amended. The motion was seconded by Commissioner Crowley. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 6. Public Comments.

Chair Blow asked if there were any public comments on issues that are not on today's agenda. There were none

ITEM 7. Board Meeting Minutes.

Chair Blow asked if there were any comments or questions regarding the September 11, 2015 First Budget and Tax Hearing Minutes, the September 12, 2015 Finance Committee and Board Meeting Minutes, or the September 23, 2015 Final Public Tax and Budget Hearing Minutes.

Commissioner Isiminger asked staff to make the following correction to Item 6, of the September 23, 2015 Final Tax and Budget Hearing Minutes. Item 6, to read: "District's Budget would be reduced by $1,772,313.00."

Vice-Chair Cuozzo asked staff to make the following corrections to Item 7, of the September 23, 2015 Final Tax and Budget Hearing Minutes. Item 7, to read: "to meet their statutory and rule funding limits in Martin County, reduce Martin County, Phipps Park Shoreline Stabilization and Access project by $17,939.00, and the City of Stuart, Shepard Park Improvements project by $17,937.00."

Chair Blow asked staff to add the discussion from Dr. Taylor to Item 10, of the September 12, 2015 Board Meeting Minutes.

Committee Chair Netts made a motion to approve the September 11 and September 12, and September 23, 2015 Meeting Minutes, as amended. The motion was seconded by Commissioner Crowley. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 8. Comments from the U.S. Army Corps of Engineers.

Chair Blow noted that Ms. Shelley Trulock, the Intracoastal Waterway (IWW) Project Manager with the U.S. Army Corps of Engineers (USACE) is not at today's meeting and he noted that project updates will be presented at the District's November 14th meeting.

ITEM 9. Staff Report on Broward County Area Projects.

Mr. Crosley stated that Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway (IWW) in Broward County was completed in 2003. He stated that Phase II of the DMMP was completed in 2004.

Mr. Crosley stated that the 50-year dredging projection for the 25 miles of channel in Broward County is 33,644 cubic yards of material and the storage projection is 72,334 cubic yards of material. He stated that this is the lowest dredging projection of any of the

District's 12 counties. He noted that the Broward County waterway is mostly man-made and stabilized with seawalls. He stated that the majority of dredging (81%) in Broward County is associated with the Hillsboro Inlet.

Mr. Crosley stated that three upland Dredged Material Management Areas (DMMA) and one beach placement area will manage dredged materials from the waterway. He stated that a western long-term storage site was suggested in the DMMP, but that has not been pursued actively because of costs. He stated that if a western site presents itself, through exchange or at a reasonable cost, the District will make the acquisition and add this site to the plan.

Mr. Crosley stated that the District is pursuing the deepening of the Intracoastal Waterway from the 17th Street Causeway north to the Middle River. He stated that the project is in the bid phase and construction is expected to commence by the end of 2015. Funding is being accumulated in the budget to complete project construction. He stated that this project will create navigation and docking opportunities for mega-yachts and an increase in marine-related business. He stated that the District recently completed the deepening of the Dania Cut-Off Canal between the Port and US Route 1, and that the IWW Deepening is scheduled to follow that project. He stated that both of these projects are cooperative efforts with the Marine Industries Association of South Florida, Broward County, Port Everglades, and the cities of Fort Lauderdale and Dania Beach.

Mr. Crosley stated that maintenance dredging of Reach I has currently been scheduled for 2017 with the beach-quality dredged material being placed in the nearshore south of the Hillsboro Inlet. Any non-compatible material would be temporarily placed on MSA 726 for removal.

Mr. Crosley stated that the existing District-owned Dredged Material Management Areas are currently leased to: the City of Pompano Beach, MSA 726, known as Exchange Club Park; MSA 727, known as, Alsdorf Park - 14th Street Boat Ramp; and Broward County, MSA 783 for parks, a boat ramp and port facilities, respectfully.

Mr. Crosley stated that through a series of public meetings, the District notified and coordinated with the citizens and officials of the City of Pompano Beach and the City of Lighthouse Point regarding the clearing of the property of invasive plants, planting of a native plant buffer along the site perimeter, and the preparation of MSA 726 to support the forthcoming dredging of Broward Reach I and future dredging or access needs. He noted that the clearing of MSA 726 is well underway.

Commissioner Isiminger asked about the different names of District-owned sites. Mr. Crosley stated that these properties have been acquired since the early 1900's and over a number of years. Dr. Taylor noted that the sites are also owned by various entities, such as the District, the State of Florida and the Federal Government.

Commissioner Sansom noted that because of the lower dredging frequency in Broward County, the citizens do not receive as much of an annual benefit from their tax contributions as constituents living in other counties. The Waterway Assistance and Cooperative Assistance Programs provide the citizens with a return benefit for their tax contributions.

ITEM 10. Presentation and Discussion of the Economic Analysis Update for the Dania Cut-Off Canal Deepening Post-Project Completion, Broward County, Florida.

Mr. Crosley stated that in October 2014, the Board recommended evaluating the post-project benefits of the District's completed deepening of the Dania Cut-Off Canal

project. Working with the Marine Industries Association of South Florida (MIASF), staff contracted with Thomas J. Murray and Associates, Inc. to conduct this evaluation.

Mr. Crosley introduced Mr. Murray, with Thomas J. Murray and Associates, Inc. who provided a brief summary of the study's findings.

Mr. Murray stated that it is a pleasure to be here to address this Board. He stated that the Florida Inland Navigation District is a model agency for waterway maintenance that other areas wish they had.

Mr. Murray stated that the project goal was to assess and evaluate the Economic Impact of the Dania Cut-Off Canal 2013 deepening project. This evaluation is based upon both primary surveys of the project area water-dependent businesses and secondary economic data collection and analysis.

Mr. Murray noted that the local boatyards are the main recipient of direct impacts of the yacht activity relying on the Dania Cut-Off Canal access. As a result of the dredging, boat yards are servicing 54% more vessels in 2015, compared to the pre-dredging situation in 2013. The work includes more extensive refit and yacht repair and maintenance projects. Boat yard annual service revenues have increased an estimated 59% since 2013, the pre-dredging period. The duration of boat yard projects has increased from an average of 30 days in 2013 to 35 days in the current year. Most firms have experienced a qualitative improvement in the types of jobs, including more "refit" projects in addition to periodic maintenance services. The majority of local boat yards are now reporting a waiting list for service, while none reported waiting lists in 2013, or other recent years prior to the dredging. Broward County has realized a $23.4 million increase in economic output, as a result of the dredging. Associated with the Dania Cut-Off Canal industries growth, 132

additional jobs, $6.6 million in labor income, $9.9 million in value added and nearly $800,000.00 in additional tax revenue have been generated in Broward County.

Commissioner Chappell thanked Mr. Murray for the report and presentation. He stated that it is important to perform these studies after dredging projects and he noted that the District should complete the same study after the Broward County Intracoastal Waterway Deepening project.

Commissioner Donaldson stated that it would be difficult for the private sector to perform these types of dredging projects. He noted that information regarding the government agencies involved in this project should be included in the information.

Commissioner Sansom asked if this report could be summarized in a one page report and include some of the boat yard stories regarding how this dredging project helped increase their equipment and services at their boat yard. Mr. Murray noted that this study did not quantify that the new lift installed at the boat yard was purchased because of this project.

Commissioner Sansom stated that a video of a boat yard owner talking about the equipment purchased for boat repairs because of this dredging project would be beneficial.

Chair Blow asked about the summary including the estimated annual economic impact of Real Estate Tax increases from the Dania Cut-Off Canal Dredging project. Mr. Murray stated that the study did not include that information.

Commissioner Donaldson noted that a white paper could be used to communicate to the Florida Legislature the results of this particular project.

ITEM 11. Acceptance of the Qualified Low Bid for the Broward County Intracoastal Waterway Deepening Project, Broward County, Florida.

Mr. Crosley stated that a Request for Qualifications (RFQ) was distributed for the referenced project and on August 23, 2015, the Board short-listed the respondents to three (3) potential bidders. Bids were received on October 6, 2015 to conduct the deepening of the Intracoastal Waterway (IWW) from Port Everglades north to the Las Olas Bridge. This project will increase the depth of the IWW from the current -10' Mean Low Water (MLW) to -15' MLW. The total length of the dredging area is approximately 11,250 feet in length, with 175,000 cubic yards of material expected to be removed from the existing channel. Included is an alternate bid for an area surrounding the Las Olas Bridge.

Mr. Crosley stated that three (3) bids were received for this project. He announced all three (3) bids to the Board. The low bid, $16,923,550.00 (alternate bid $200,000.00) from Cashman Dredging has been evaluated and qualified by Taylor Engineering. He noted that Cashman Dredging is the company that successfully dredged the Dania Cut-Off Canal project.

Mr. Bruce Woods, with Cashman Dredging, stated that his company recently completed a dredging project at the marina at the Miami Jungle Island facility. He stated that the successful dredging project encountered seagrass, a hard rock bottom and included turbidity issues.

Commissioner Chappell made a motion to approve the qualified low bid from Cashman Dredging in the amount of $16,923,550.00 for the Broward County Intracoastal Waterway Deepening Project, Broward County, Florida. The motion was seconded by Commissioner Crowley. Chair Blow asked for discussion.

Commissioner Sansom asked if there were turbidity issues during the Dania Cut-Off Canal Dredging project. Mr. Crosley answered yes, there were. Commissioner Sansom asked if we will have turbidity issues for the Broward County Intracoastal Waterway Deepening Project. Mr. Crosley stated that there will be turbidity issues but, the District plans to work through them. Commissioner Chappell stated that a lot was learned from the turbidity problem during the Dania Cut-Off Canal project. He noted that staff has worked with Mr. Woods on the digging rhythm and how often the background turbidity was exceeded. The turbidity increased because of the rate of excavation. Decreasing the rate of excavation should keep the turbidity levels down.

Commissioner Dritenbas asked for an update on the outstanding project permitting issues. Mr. Adams stated that the mitigation issues have been resolved. The District does not have the county permit for the temporary access road. Taylor Engineering and staff are working towards a resolution on the Florida Power and Light road easement for that temporary access road. It is anticipated that these items will fall in-line, it is just a matter of timing.

Chair Blow asked if the construction of this temporary access road is included in the Cashman Dredging bid. Mr. Adams answered yes.

Chair Blow asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

ITEM 12. Agreement with the Marine Industries Association of South Florida for Additional Communication Services for the Broward Intracoastal Waterway Deepening, Broward County, Florida.

Mr. Crosley stated that the Marine Industries Association of South Florida (MIASF) has offered to assist the Navigation District with communication and public

coordination for the Broward Intracoastal Waterway (IWW) Deepening Project. The MIASF currently contracts with Starmark, a well-established communication firm in south Florida. The District would utilize the professional services of Starmark, as well as the MIASF organization.

Mr. Crosley stated that the proposed agreement between the District and the MIASF would be for nine (9) months in duration, at a maximum amount of $5,000 per month.

Commissioner Donaldson made a motion to approve the proposed agreement with MIASF for public relations and communication services to support the Broward IWW Deepening Project, Broward County, Florida. The motion was seconded by Commissioner Chappell. Chair Blow asked for discussion.

Commissioner Sansom stated that he was hoping that the MIASF would take the lead to promote this project because it is the Marine Industries that will benefit from the project. He stated that he does not want the District to hire a public relations firm to tout the Broward IWW Deepening project. He is hopeful that the MIASF will go above and beyond and consider the District's needs.

Commissioner Donaldson stated that the District is performing a project that will have an impact on the neighborhood and community. He stated that no matter how much the final project will benefit the community, the citizens will still have to endure the dredging work. He stated that there needs to be communication to keep citizens advised about the project. He stated that the MIASF is supporting this project, but ultimately, it is the District's project. The District needs to advocate our message on a daily basis, squash rumors and provide the truth about the project. This will take a lot of work and there is no

way the MIASF or the District can do that. He stated that partnering with the MIASF and hiring the same public relations firm makes a lot of sense.

Chair Blow noted that when the Department of Transportation (FDOT) replaced the Bridge of Lions, they had a public relations firm. This firm met with key government officials every two weeks to keep everyone apprised of the project. He stated that a lot of what the firm addressed was rumor control.

Secretary McCabe questioned the difference between this project and the Dania Cut-Off Canal post-project comments by Commissioner Sansom. Commissioner Sansom stated that the Dania-Cut-Off Canal study was to prepare a report on the economic impact to the community.

Commissioner Sansom referred to Exhibit A of the Starmark International, Inc., agreement and statement that "These services are provided through an agreement of Starmark International, Inc., with the Marine Industry Association of South Florida." He stated that is not something that this District should be paying for with public money.

Commissioner Isiminger stated that he agrees with Commissioner Sansom and suggested that the agreement be revised to breakout the promotional versus the informational aspects of the project.

Commissioner Chappell noted that Exhibit A is a summary of things that the Board discussed at past meetings. He stated that it is important that the District keep the community informed about this project. He stated that the District is not asking Starmark to promote the project, we are asking Starmark to inform and educate the business community about the project and then the business community will correctly support and

promote the project. This will prevent rumor problems and that is important. He stated that if the Board revises the agreement, he would not want to lose that component.

Chair Blow stated that project education is to make sure that everybody knows what is going on and that is what he sees in this agreement. He asked about the handling of unforeseen events and asked for additional information.

Mr. Crosley stated that staff met with Starmark International, Inc. and staff made it very clear to Starmark that the MIASF is taking the lead on this public relations item. He stated that the MIASF is not just promoting the deepening project, they have many other marine related projects going on. He stated that staff does not look at this as promotion of the project but more as crisis prevention. Starmark will not be retained to promote the project, the MIASF is handling that. He stated that Starmark will handle project damage and crisis control for the District. Also, Starmark will get the local marine industry business leaders together, keep them informed about the project, and the leaders will promote the project.

Commissioner Sansom stated that the District should not be paying for Starmark to meet with the marine industry community leaders about this project. The District is about project management and communication.

Commissioner Crowley stated that the District is about to embark on a complicated project that is very important for Broward County. He noted that this is also an expensive project, $16 million. The idea that the District should spend a little bit of money to help insure that this large project goes smoothly is almost like insurance. If something with the project goes wrong, the District will be prepared and the firm will address the problem quickly so it will not lead to a project cost overrun or timeline change. When the Board

discussed this item several months ago, asked the MIASF to help the District find the right public relations contact and they have done that. He stated that it is important that the Board approve this agreement in some form today, if changes need to be made to the contract, let's do that and move on.

Commissioner Isiminger stated that he agrees, but that the contract does need tweaking. He suggested that the words promotional and reward be change to informational.

Treasurer Netts stated that the District should not be promoting the project. He stated that the project properly presented to the public should promote itself. Factual information and meetings: here's what to expect, here's the progress report, here's when the dredge is going to go away. That is good public relations. You are telling the public what is happening and what to expect. The District will be prepared if something should go wrong. The public relations firm will address the proper news media and state what happened and what remediation will be taken. Anything that has to do with promotion has to come out of the agreement.

Chair Blow noted that the Board does not want to delay the deepening project. Mr. Crosley noted that the project is scheduled to be announced on November 4th during the opening of the Fort Lauderdale Boat Show.

Commissioner Donaldson, Commissioner Sansom, Commissioner Crowley and Treasurer Netts made revision suggestions to the agreement with Starmark International, Inc.

Chair Blow stated that this will be a complicated project. He stated that he is inclined to approve this item today and put his trust in the District staff to review and rewrite the agreement with Starmark International, Inc. Commissioner Isiminger agreed.

Secretary McCabe stated that this agreement tells her that Starmark International, Inc. does not know what this District is about and that is why the agreement is so off message. She does trust staff to re-draft the agreement, but she noted the current agreement is off and she is uncomfortable with it.

Commissioner Chappell stated that staff could make revisions to the agreement and bring it back to the District's November Board Meeting. The MIASF should be able to cover the time between now and the next District Board meeting.

Commissioner Donaldson withdrew his motion.

Mr. Chuck Malkus with Starmark International, Inc. stated that he has heard the Board's concerns. He noted that Starmark works with and for many government agencies. He stated that he will redraft the agreement and his agency will represent the District in three key roles: Public Information; Education; and Emergency response if something goes wrong. He noted that if project problems happen, his agency needs to be available 24 hours a day. He noted that the fee quoted is a very low number for those services. He stated that Starmark will represent the District in any potential scenario that arises.

Mr. Crosley stated that staff will revise the agreement and bring back two scopes of work, for the Broward County IWW Deepening project and the Dania Cut-Off Canal project.

ITEM 13. Washington Report.

Mr. Jim Davenport with Alcalde & Fay, stated the agency was founded in 1973 and is one of the oldest and largest government affairs firms' in Washington. Last September, George Washington University completed a comprehensive analysis of 3,400 firms in Washington and Alcalde & Fay was ranked in the top ten of most influential firms. Alcalde

& Fay mostly represent public entities, such as FIND, cities, counties, airports and seaports. He stated that in Florida, Alcalde & Fay represents over 40 public agencies.

Mr. Davenport stated that Alcalde & Fay is made up of former Executive Branch officials, Members of Congress and Congressional staff. Alcalde & Fay is able to provide efficient, effective representation of the District's views and input to federal decision-makers.

Mr. Davenport stated that Alcalde & Fay has worked with FIND since 2002 and their services include, representation before the agencies, the USACE, Congress, and O&B. Alcalde & Fay works on helping obtain Legislation funding and Policy Authorizations for FIND. Every year, Alcalde & Fay invites the commissioners and FIND staff to Washington and arranges meetings with the District's Congressional Delegation, relative committees, and the USACE. A monthly report of activities is submitted for each District agenda.

Mr. Davenport stated that Alcalde & Fay has represented the District for over 12 years, and have assisted in securing over $36.7 million in federal funding for the Intracoastal Waterway. He asked if there were any questions. There were none.

Mr. Davenport stated that at the end of every calendar year, he works with Mr. Crosley to identify the prime projects that Alcalde & Fay should focus on the upcoming year. Mr. Crosley then develops the agenda and that is what his firm focuses on for the upcoming year. He stated that focus is currently funding for Navigation and Inland Waterways. Those two categories provide funding for maintenance dredging for Inland Waterways. Alcalde & Fay works with the District's Congressional Delegation and the

House Senate Energy & Water Committee as they are developing the Bills. The current Work Plan includes asking the USACE for funding for FIND projects.

Commissioner Donaldson asked if funds are being requested from the USACE for the Atlantic Intracoastal Waterway (AIWW). Mr. Davenport answered yes and stated that the funding is sent to the USACE by the Congressional Delegation. He and Mr. Crosley then meet with the USACE to discuss and coordinate the District's projects and the USACE distributes the funding according to the work plan.

Mr. Davenport stated that at the beginning of 2015, a meeting was coordinated with Congresswoman Frankel and Alcalde & Fay, FIND, and the USACE, to discuss the changes Congress adopted to the Magnuson-Stevens Fishery Conservation and Management Act. In 1996, the National Marine Fisheries Service (NMFS) was given the responsibility of consulting with federal agencies, including the USACE, to protect "Essential Fish Habitat" (EFH). This meeting was important because it shows the Congressional Delegation that the District has tried to work directly with the agency before trying to make a policy change.

Mr. Davenport stated that he has also been working with Ms. Tori White of the USACE who is developing a Regional General Permit (RGP) that would exempt certain maintenance dredging from a NMFS consultation. Ms. White will be meeting with the USACE and the NMFS next Friday, October 23rd to discuss the draft RGP. Mr. Davenport stated that on the administrative side, he will be asking the District's Congressional Delegation their opinion about the draft RGP. Hopefully the Delegation will put pressure on the NMFS to agree to the RGP. He stated that Alcalde & Fay is working with Congress to adopt a new policy that FIND will not have to perform mitigation for maintenance

dredging. He briefly discussed additional work that Alcalde & Fay completed for FIND. He asked for questions.

Commissioner Isiminger commented that the Florida Ports Council is also having EFH and NMFS issues and Mr. Davenport may want to contact them.

Commissioner Isiminger stated that he visited Washington D. C. last year and he is impressed with the way that this firm works, the way they work for the District, and the results of that work. It takes a long time to make changes to the Federal Government's rules.

Commissioner Chappell stated that he would like to be cautious about changes to the RGP and also stay on a parallel track to look for alternatives, which is the direction the District is currently investigating. Mr. Crosley stated that the RGP is a necessary tool that is utilized when the District performs maintenance dredging, is project specific, and has parameters and for projects that qualify. The USACE is working on reducing those parameters that will make the RGP more useful for District projects. Also if Legislative changes are made to the RGP for maintenance mitigation, District projects will become easier to perform.

ITEM 14. Agreement Extension – Federal Professional Legislative Services.

Mr. Crosley stated that the District's current agreement with Alcalde & Fay for professional services in federal legislative matters is expiring at the end of October. Last year, the Board requested that Alcalde & Fay provide additional focus on the legislative aspects of the District's federal agenda, particularly federal permitting and review.

Mr. Crosley stated that the firm responded well, and has spent much of their past year's efforts tracking and initiating potential federal legislative changes that could benefit

the District, including Water Resources Development Act (WRDA), the Magnuson-Stevens Act reauthorization, and a Coast Guard bill.

Treasurer Netts made a motion to approve the proposed agreement extension of Alcalde & Fay for federal professional legislative services. The motion was seconded by Commissioner Chappell. Chair Blow asked for discussion.

Commissioner Sansom asked if the new contracted fee remains the same as the previous contracted fee. Chair Blow answered yes and stated that it is a flat rate plus expenses. He noted that the District rarely has any additional expenses billed.

Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 15. Dredged Material Management Area DU-9 Environmental Matters Agreement, Duval County, Florida.

Mr. Crosley stated that in 2000, the Florida Inland Navigation District (District) obtained a permit to construct Dredged Material Management Area (DMMA) DU-9 in Duval County. Initial work on the site uncovered soil and ground water contamination and work was halted. In 2004, the District pursued the construction of that portion of the site not affected by contamination to facilitate a necessary forthcoming dredging project.

Mr. Crosley stated that as the responsible party, the previous property owner worked with FDEP to satisfy a consent order to mitigate the contamination and monitor the site. After 15 years, and seeking to resolve this issue, the previous property owner has received a conditional closure letter from FDEP requiring "institutional controls on the property".

Mr. Crosley stated that in September of 2014, the Board requested that staff work with the previous land owners to construct an agreement that delineated each parties'

responsibilities and limited the District's future exposure and liability for site conditions. Over the course of the past year, the previous land owner, their representatives, staff, the District's Attorney and the District Engineer have negotiated an "Environmental Matters Agreement" which limits the District's liability and allows the previous owners to obtain a Site Rehabilitation Completion Order (SRCO).

Mr. Mike Petrovich, with Estuary LLC, stated that his firm is working to obtain a Site Rehabilitation Completion Order (SRCO) from the Florida Department of Environmental Protection (FDEP).

Attorney Breton referred to the Environmental Matters Agreement and reviewed the documents. He asked if there were any questions.

Chair Blow asked that during construction of the DMMA and during the dewatering process, if contamination is detected, does that mean that Estuary Corporation is responsible for any damages or additional expense. Attorney Breton answered yes.

Chair Blow asked about the existing ditches that were used during the site cleanup, and has the issue with the USACE been resolved. Mr. Petrovich answered that on August 21st, confirmation from the USACE was received stating that wetlands were not observed from the trenches that were dug during remediation activities.

Commissioner Sansom asked if in ten years the USACE could change their determination regarding the wetlands. Mr. Petrovich stated that it was a binding determination for five years. He stated that FIND will obtain permits to fill the ditches and build the DMMA. Once that is done there will no longer be any ditches or the potential of a wetland issue.

Chair Blow referred to Page 3 of the agreement and noted that some of the wording in the Deed Restrictions seems to open up the possibility of a third party to declare that the Deed Restrictions have been violated. Mr. Petrovich stated that the language is required by the FDEP. He noted that he has been successful in getting the wording modified on other agreements to state that the third party has demonstrated the competence to discover and provide additional evidence that they have suffered a specific injury or additional damages that can be contestable in a court action.

Treasurer Netts asked if the contaminates of the site have been enumerated. Attorney Breton stated that the contaminates have been enumerated and listed. The list came from the FDEP Consent Order. Only those contaminates are covered under this agreement.

Commissioner Crowley stated that to sum up this agreement, it allows the District to move forward and build the DMMA site and the restrictions that are in place will in no way inhibit the District's land usage of this DMMA site.

Mr. Crosley stated that he spoke to FEDP on the telephone and asked FDEP about the contaminants found on this property and was told that the contaminants will continue to naturally breakdown, and in fifty years will most likely be gone from this property. In the event that FIND no longer exists and the site is no longer needed for material management, the site could be re-evaluated and the restrictions could be lifted.

Commissioner Crowley made a motion to approve the Environmental Matters Agreement with Estuary Corporation (& BJD Timberlands LLC., a related corporation), including the Executive Director and District Attorney negotiation of minor revisions, for

DMMA DU-9, Duval County, Florida. The motion was seconded by Treasurer Netts. Chair Blow asked for discussion.

Commissioner Sansom asked Chair Blow if he is comfortable with this agreement. Chair Blow answered yes and stated that this has been a difficult situation for both the Estuary Corporation and FIND. He stated that he feels that this is a good agreement.

Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 16. Resolution 2015-08 for Acceptance of Commissioner Registered Mail.

Mr. Crosley stated that on rare occasions, staff receives registered mail for a commissioner at the District office, 1314 Marcinski Road, Jupiter, FL 33477. In order to legally accept this mail on behalf of a commissioner, it is necessary to obtain prior written approval from the individual. Staff has crafted Resolution No. 2015-08 authorizing the acceptance of registered mail addressed to a commissioner at the District office.

Vice-Chair Cuozzo made a motion to approve Resolution No. 2015-08 authorizing the acceptance of registered mail addressed to a commissioner at the Navigation District office, Palm Beach County, Florida. The motion was seconded by Secretary McCabe. Chair Blow asked for discussion.

Commissioner Chappell stated that there is a new Public Records Request scam that is taking place.

Treasurer Netts stated that if anyone requests Public Records, tell the person the information will take staff time to get together and they can come back and pick it up. Do not ask for any personal information from them, in particular do not ask their name, telephone number or e-mail, address. This applies to the District and their sub-contractors.

Commissioner Chappell stated that the Florida Legislature is working on a Bill that will cover this problem but for now, be careful.

Commissioner Sansom asked for clarification, on the resolution and if the Registered Mail was addressed to him or as a commissioner of FIND, does that mean that he has accepted the mail. Attorney Breton answered yes. Commissioner Sansom stated that he may want to refuse the mail and may not want the District staff to sign for certified mail addressed to him.

Chair Blow asked if this applies only to registered mail sent to a FIND Commissioner for FIND business. Attorney Breton stated that right now the resolution is for all Registered Mail sent to the FIND office to a commissioner, but the resolution could be modified.

Commissioner Donaldson asked if this mail is addressed to a commissioner, has it been FIND related business. Mr. Crosley stated that the mail has been FIND-related business.

Commissioner Sansom requested that the mail be addressed to a commissioner and FIND and that staff immediately notify the commissioner about the mail.

Attorney Breton suggested that if the registered mail is addressed only to an individual, it will be rejected, it if is addressed to a commissioner or officer and FIND, staff will sign for the Registered Mail and notify the commissioner.

Treasurer Netts asked why this resolution is necessary. Mr. Crosley stated that occasionally, FIND receives a registered letter addressed to the office and in order for staff to accept the mail, the Post Office is requesting this written authorization. Registered Mail

is usually a bond payment, check or information from a Tax Assessors office. He stated that the document could be scanned and immediately sent to the commissioner.

Vice-Chair Cuozzo amended his motion to approve Resolution No. 2015-08 authorizing the acceptance of registered mail addressed to a Commissioner at the Navigation District office, Palm Beach County, Florida, with changes as discussed. The amended motion was seconded by Secretary McCabe. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 17. Finance and Budget Committee Report.

Committee Chair Netts stated that the District's Finance and Budget Committee met before today's Board meeting. He noted that the Committee reviewed and recommends approval of the July 2015 financial information.

Committee Chair Netts made a motion to approve the recommendations of the District's Finance and Budget Committee. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

Committee Chair Netts stated that the District's Finance and Budget Committee also discussed and recommends approval of the Engagement Letter from Berger, Toombs, Elam, Gaines & Frank for the FY 2014-2015 audit, with rotation of the audit shareholder/partner.

Committee Chair Netts made a motion to approve to accept the Engagement Letter from Berger, Toombs, Elam, Gaines & Frank for the FY 2014-2015 audit, with rotation of the audit shareholder/partner. The motion was seconded by Vice-Chair Cuozzo. Chair

Blow asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

ITEM 18. Additional Staff Comments and Additional Agenda Items.

Chair Blow asked if there were any additional staff comments or additional agenda items.

A. FEC Agreement for Crossing Maintenance at DMMA SL-2.

Mr. Crosley stated that the Florida East Coast Railway, L.L.C. sent a Notice of Intent to re-work the grade crossing at the FIND Kennedy Groves, Inc., Milepost 233+5171' (DMMA SL-2) during their 2016 Grade Crossing Maintenance program. He stated that the FEC Grade Crossing Agreement, dated August 23, 1999, makes this crossing the District's jurisdictional responsibility and fiscal responsibility for the costs of these repairs. The estimated cost will be $83,233.43.

Commissioner Dritenbas asked if Kennedy Groves will also be billed. Mr. Crosley answered yes.

Commissioner Donaldson stated that this letter is an advanced Notice of Intent and is for estimated maintenance costs of an existing crossing. The actual lease fees are controlled for the Real Estate Division of the FEC and that lease fee is based on the type of signal crossing for the property owner. The back bill will be approximately $2,400.00 per year, plus lease increases and cost of living increases. He noted that the lease fees generally go up each year.

Ms. Zimmerman distributed the final FY 2015-2016 Waterways Assistance and Cooperative Assistance programs project and funding listings. The Project Agreements

have been mailed for all but four of the projects. She is waiting for Project Cost revisions on those four projects.

Ms. Zimmerman stated that the District is requesting two to three commissioners who are interested in serving on the Economic Impact Update Review Committee. She stated that staff will put together a Request for Qualifications (RFQ) to update the District's Economic Impact statistics for each county. This committee will review the RFQ's and select the top three companies and those top three companies will submit project fees. Treasurer Netts and Commissioner Donaldson stated that they would like to serve on the committee.

ITEM 19. Additional Commissioners Comments.

Chair Blow asked if there were any additional commissioner comments.

Commissioner Sansom stated that last evening's water taxi ride and outreach was very informative and interesting.

Commissioner Crowley stated that he would like to re-establish a Public Relations Committee. This committee should work to help get the District recognized as partner in waterway projects and raise the public awareness. He stated that the Miami-Dade County River Commission gives out plaques and pictures of the waterway to public officials. He stated that makes these items visible in the office of the public official. He stated that he would like to provide items like that to the District's Washington D.C. representatives when the District visits Washington. He briefly discussed various Public Relations ideas.

Commissioner Sansom suggested presenting plaques to the out-of-state representatives in Washington D. C., and for Florida representatives, making the presentation at the representative's local office.

Commissioner Crowley stated that he has a presentation for Miami-Dade County but it probably needs to be updated. He stated that when the Display was developed, it was thought that a presentation about the District with information for each county would be created. Ms. Zimmerman stated that she has that presentation and when a commissioner is ready to make a presentation on behalf of the District, to let her know, she will update the information pertinent to each county.

Commissioner Sansom noted that the District's display is large and if it is setup, it should be setup and in place for three months or so.

Ms. Zimmerman noted that the smaller popup panel modular display is setup just outside this meeting room. She encouraged commissioners to take a look at it.

Commissioner Crowley stated that the Department of State has failed to live up to the terms of the Miami Circle Park project agreement and they are not maintaining the park. He stated that he worked with the Miami River Commission to try to persuade the Department of State to maintain this park but they have not unsuccessful. He asked staff to draft a letter stating that if the park is not maintained, the District will seek a reimbursement of the District's grant funds. He stated that he has been working on this since 2012 and this is an embarrassing situation.

Mr. Crosley stated that staff would require Board approval, in the form of a motion, to write a letter requesting a return of District grant funds.

Commissioner Sansom suggested sending a letter to the Secretary of State of Florida, Ken Detzner, notifying him of the potential consequences if this maintenance problem of the Miami Circle is not resolved. He suggested attaching a copy of the letter to the City and their response and send the letter Registered Mail.

Commissioner Chappell thanked everyone for attending last evening's Community Outreach Event. He noted that he has Boat Show Tickets for anyone who would like them.

Commissioner O'Steen stated that this meeting was a great introduction to FIND. He is looking forward to learning more about the District.

ITEM 20. Adjournment.

Chair Blow stated that hearing no further business the meeting was adjourned at 11:54 p.m.

US Army Corps of Engineers ®
Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

WORK ACTIVITIES IN FY 16:

1. DMMA O-7 (Martin County)

2. IWW: Broward Reach 1 (Broward County)

3. IWW: St. Augustine and Matanzas (St. Johns County)

4. DMMA O-23 (Martin County)

5. Crossroads (Martin County)

US Army Corps of Engineers ®
Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

AIWW = Atlantic Intracoastal Waterway Norfolk to St. Johns
IWW = Intracoastal Waterway Jacksonville to Miami (12' and 10' projects)
DMMA = Dredge Material Management Area

1. WORK ACTIVITY: DMMA O-7

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Finalization of plans and specifications, environmental coordination, procurement and administration of the construction contract for DMMA O-7.

SCHEDULE O-7:

Contract Advertisement Initiated:	31 March 2016
Bid Opening:	29 April 2016
Contract Award:	27 May 2016

FIND WORK ORDER: Funding for completion of P&S will be funded with 100% federal funding. A work order will be presented to the FIND Board in February 2016 to fund construction of DMMA O-7.

NAME OF CONTRACTOR: TBD

STATUS: P&S for DMMA O-7 are underway and expected to be completed with all reviews by March 2016. Advertisement is currently scheduled for 31 March 2016. The Corps' team is currently working on an issue concerning drainage of the surrounding area. Staff is researching if there were any agreements in place with the property owner as to how they would manage drainage of their farm in the future.

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Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

2. WORK ACTIVITY: IWW Broward Reach 1 (Broward County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: A hydro survey was performed by Morgan and Ecklund and provided to the Corps on 26 June 2014. There is approximately 50k cy of material located within the federal channel down to 10' and 80k cy down to 10'+2'. Given the small quantity, the most cost effective way to pursue the dredging would be utilization of a Corps of Engineers dredge, either the Currituck or Murden, and dispose of in the nearshore.

SCHEDULE: Once the effort is kicked off on 16 November 2015 a schedule will be developed and included within the December update.

FIND WORK ORDER: P&S will be funded 100% with Federal funding in 2016. Dredging will likely be funded with FIND Contributed Funds in 2017.

NAME OF CONTRACTOR: TBD, but anticipate dredging will be performed with a Wilmington District dredge.

STATUS: On 16 Nov 2015 a team meeting is being held to kick off this effort. The team will proceed with the appropriate NEPA documentation as well as obtaining an FDEP permit for the dredging action and placement in the nearshore. The team will utilize seagrass mapping that Regulatory has performed to assist in our coordination activities with NMFS. Mapping does not show seagrasses in the channel within this reach nor hard bottoms. There does appear to be sparse seagrass within the anchor zones that we will address.

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Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

3. WORK ACTIVITY: IWW St. Augustine / Matanzas

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Development of Plans and Specifications for St. Augustine and Matanzas reach of the IWW. Plan is to combine these two reaches to save in mobilization cost since both require the same equipment and have the same placement method.

SCHEDULE: (Tentative)

- Obtain Survey 6 Nov 2015
- Initiate P&S 16 Nov 2015
- Verify NEPA/FDEP permit 16 Nov 2015
- Complete Draft P&S 14 Jan 2016
- Advertise Contract 24 Feb 2016
- Contract Award: 18 April 2016

FIND WORK ORDER: P&S will be funded 100% with Federal funding in 2016. Anticipate a work order for dredging at the January 2016 FIND Board Meeting.

NAME OF CONTRACTOR: TBD

STATUS: Plans and specifications will kick off for this effort on 16 November 2015. The team is fast tracking these plans and specifications to get us to an April award of the contract…which will allow for utilization of the small business MATOC. The hydro survey obtained by FIND will be used as the basis for the plans and specifications. The Corps PM has been in touch with the residents at Vilano regarding their request to place material north of the Inlet in lieu of our established placement area within Anastasia State Park. Once a FDEP permit is obtained for this northern placement area, we can consider placing the dredge material at this location. In the meantime, we will continue down the established path with dredging and placing within the State Park.

US Army Corps of Engineers ®
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IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

4. WORK ACTIVITY: DMMA O-23 (Martin County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Development of Plans and Specifications for the construction of DMMA O-23 which is located in Martin County, Florida.

SCHEDULE: (Tentative)

- NEPA Kick off 16 Nov 2015
- Initiate P&S 15 March 2016
- Complete NEPA 27 Oct 2016
- Complete Draft P&S 12 Jan 2017
- Advertise Contract 26 Jan 2017
- Contract Award: 24 March 2017

FIND WORK ORDER: P&S will be funded 100% with Federal funding in 2016. Construction of DMMA O-23 will be with FIND Contributed Funds. A work order requesting funding will be presented to the FIND Board in December 2016.

NAME OF CONTRACTOR: TBD

STATUS: NEPA activities for DMMA O-23 will kick off on 16 Nov 2015 and P&S will kick off on 15 March 2016. NEPA will be extensive. A FDEP exemption will be obtained since this is upland construction. Design concepts will be the same as DMMA O-7, with the use of the same weir system.

US Army Corps of Engineers ®
Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
November 14, 2015

5. WORK ACTIVITY: IWW Crossroads

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Staff has identified a small problematic shoal within IWW Crossroads and has asked that the Corps investigate the most efficient way to remove it.

FIND WORK ORDER:

NAME OF CONTRACTOR: TBD

STATUS: It is estimated that it is no more than 10k cubic yards located within this shoal. With this small quantity comes the possibility of utilizing a Corps dredge. Martin County has come forward and offered up the settling basin north of St. Lucie Inlet as a location to dispose of the material. On 16 Nov 2015 the team will meet and establish the path forward. The team will need to determine if we utilize a Corps dredge and dispose of in Martin County in the settling basin, what NEPA/FDEP permit actions are needed. Modify the existing Crossroads permit to add this settling basin as a disposal option seems to be the most likely path forward….minor modification?

MARTIN COUNTY
PROJECT STATUS UPDATE

November 2015

Dredged Material Management Plan - Intracoastal Waterway (IWW) Project:
Phase I of the Dredged Material Management Plan (DMMP) for the 21 miles of Intracoastal Waterway in Martin County was completed in 1993. Phase II of the DMMP was also completed in 1993 and all major land acquisition was completed in 2001. *(Please see the attached maps).*

The 50-year dredging projection for the IWW in this area is 1.4 million cu/yds. and the storage projection is 2.7 million cu/yds. Maintenance Dredging in Reach II of the Crossroads area is 85% of the dredging volume and occurs approximately every 3 years, including this forthcoming year.

Okeechobee Waterway (OWW) Project:
The District is also the local sponsor for navigation of the 97 miles of the Okeechobee Waterway (OWW) in Martin County. Phase I of the Dredged Material Management Plan (DMMP) for the Okeechobee Waterway from the Crossroads to the St. Lucie Lock was completed in 1998, and from the St. Lucie Lock to the western Martin County line was completed in 2007. Phase II of the DMMP from the Crossroads to the St. Lucie Lock was completed in 2001 and Phase II of the Plan, from the St. Lucie Lock to the western county line, was completed in 2009. *(Please see the attached maps).*

The 50-year dredging projection for the OWW is 1.5 million cu/yds. and the storage projection is 3 million cu/yds.

Dredged Material Management Area Development - IWW:
To date, one of the seven upland Dredged Material Management Areas (MSA M-5) in Martin County has been fully constructed. Sites MSA 524B and MSA 504 were cleared in 2010. Site DMMA O-7 was undergoing permitting and a final design by Taylor Engineering. Development of the site in 2016 will be undertaken with the assistance of the U.S. Army Corps of Engineers (USACE).

The other sites in Martin County are in various phases of pre-construction, environmental permitting, engineering, or design. An offloading of MSA M-5 by Lucas Marine in association with the Ft. Pierce Waterfront Protection Project was completed in 2013. Approximately 110,000 cu/yds of material was offloaded at no expense to the District to assist with the construction of barrier islands offshore of the Fort Pierce Marina. Some minimal damage to the existing gabion mats at MSA M-5 that occurred during the offloading was repaired by the contractor. A full replacement of these mats will be forthcoming in the next few years.

MARTIN COUNTY
PROJECT STATUS UPDATE

November 2015

OWW:
Acquisition of four Dredged Material Management Areas to serve the section of the OWW from the Crossroads to the St. Lucie Lock was completed in 2006. Acquisition of two sites to serve the section of the OWW from the St. Lucie Lock to the western Martin County line is ongoing: DMMA LT-4A was purchased in 2008. The initial condemnation of a proposed site near OWW Route 2 (DMMA LT-13) has been temporarily suspended to evaluate more cost-effective alternatives for the low dredging volumes associated with this waterway. *(Please see the attached maps).*

Waterway Dredging
Dredging of a portion of Routes 1 & 2 of the Okeechobee Waterway within the Lake was completed in 2012, removing some small but critical shoals totaling about 6,700 cu/yds. Dredging of the Crossroads Area of the IWW and OWW was completed in 2010, again in the summer of 2013, and is scheduled for dredging in 2016. The District is coordinating with the USACE to determine the feasibility of limited hopper dredging of the area in the near-term. Reach IV of the OWW will be dredged in 2017 following the construction of DMMA O-7.

Waterways Economic Study
The Martin County Waterways Economic Study was completed in 2000 and updated in 2011. The update found that the recessional depression of the economic output of waterway related businesses in the county decreased by $443.1 million, employment decreased by 2,601 jobs, and $18.8 million in waterway related tax revenue was lost. The latest economic output of waterway related businesses is $639.9 million, with 3,750 jobs, wages of $156.5 million and $28 million in tax revenues. Property values were determined to be increased by $588 by the presence of the IWW channel. These numbers are expected to increase significantly following the economic updates scheduled for 2016. The initial study shows that these economic benefits would be reduced by over half if maintenance dredging of the waterways in the county ceased. (*Please see the attached study excerpt and business location map).*

Waterways Assistance Program
Since 1986, the District has provided $8.7 million in Waterways Assistance Program funding to 74 projects in the County having a total constructed value of $56.9 million. The County, the County Sheriff's Office, the City of Stuart and the Town of Jupiter Island have participated in the program. (Please see attached listing).

Notable projects funded include: Manatee Pocket Dredging, Sandsprit Park, Twin Rivers Park, the Stuart Riverwalk, the Southpoint Anchorage, MC-2 Bird Island Restoration, and the South County Boat Ramp.

MARTIN COUNTY
PROJECT STATUS UPDATE

November 2015

Cooperative Assistance Program

The District's Cooperative Assistance Program has provided funding assistance for 26 state and regional agency projects with elements in Martin County: the Indian River Lagoon Spoil Island Management Program; Florida Clean Marina Program; Florida Clean Vessel Act Program; Florida Marine Patrol Officer Funding; Manatee Pocket Dredging and Jonathan Dickinson Park Boardwalk and Canoe Launch Improvements. The District's funding assistance for the Martin County portion of these projects was approximately $4 million.

Interlocal Agreement Program

The District's Interlocal Agreement Program has provided funding assistance to 4 projects in Martin County. These include Clean Marina and Clean Vessel Act projects as well as environmental improvements at Peck's Lake Park. The District's funding assistance for these projects was approximately $175,000 and the projects had a constructed value of $918,000.

Waterway Clean Up Program

The District has partnered with both Keep Martin Beautiful and the Marine Industries Association of the Treasure Coast for several years to assist with their programs to remove trash and debris from Martin County's waterways. The District provides up to $10,000 year for this program.

Public Information Program

The District currently prints and distributes the following brochures with specific information about Martin County Waterways: the Economic Impact of Martin County Waterways; Spoil Island of the Indian River Lagoon; IWW Channel Conditions; and the IWW Moveable Bridge Guide.

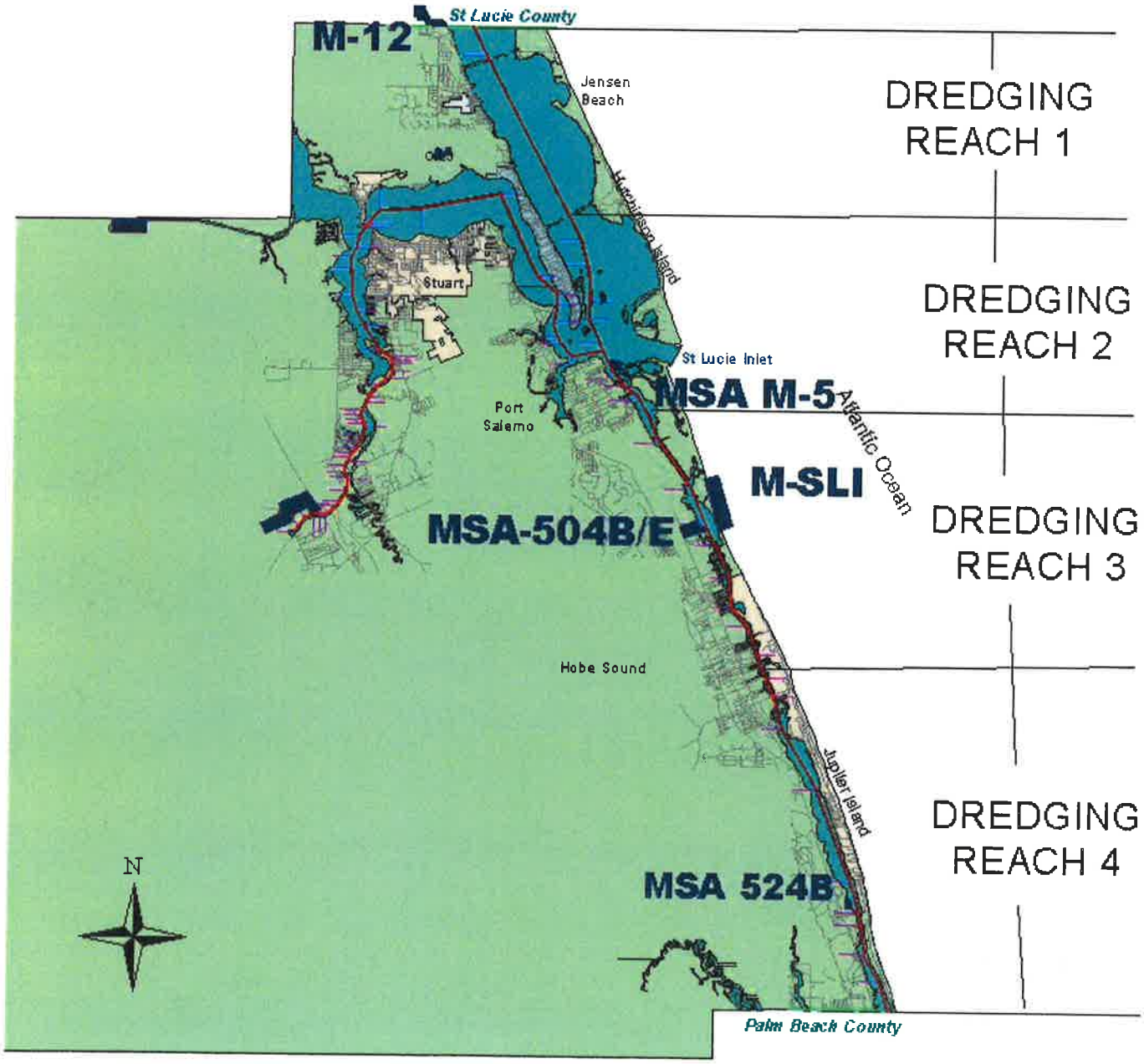
Small-Scale Derelict Vessel Removal Program

Martin County has participated in this program with the removal of several vessels.

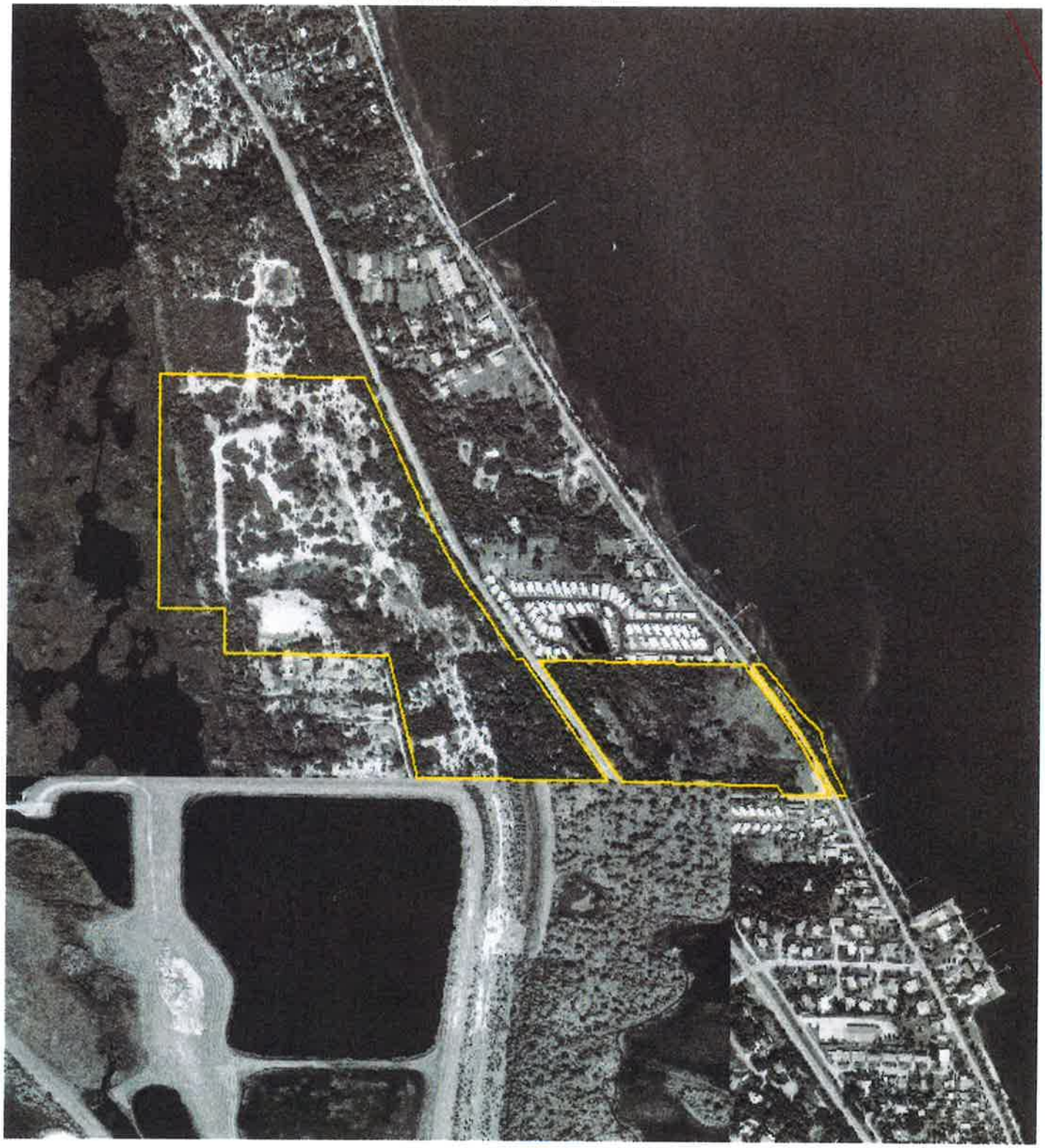
Small-Scale Spoil Island Enhancement and Restoration Program

No projects have been funded yet in Martin County through this program, although restoration to MC-2 (Bird Island) in 2012 was completed through the WAP program.

DREDGED MATERIAL MANAGEMENT PLAN FOR THE INTRACOASTAL WATERWAY IN MARTIN COUNTY

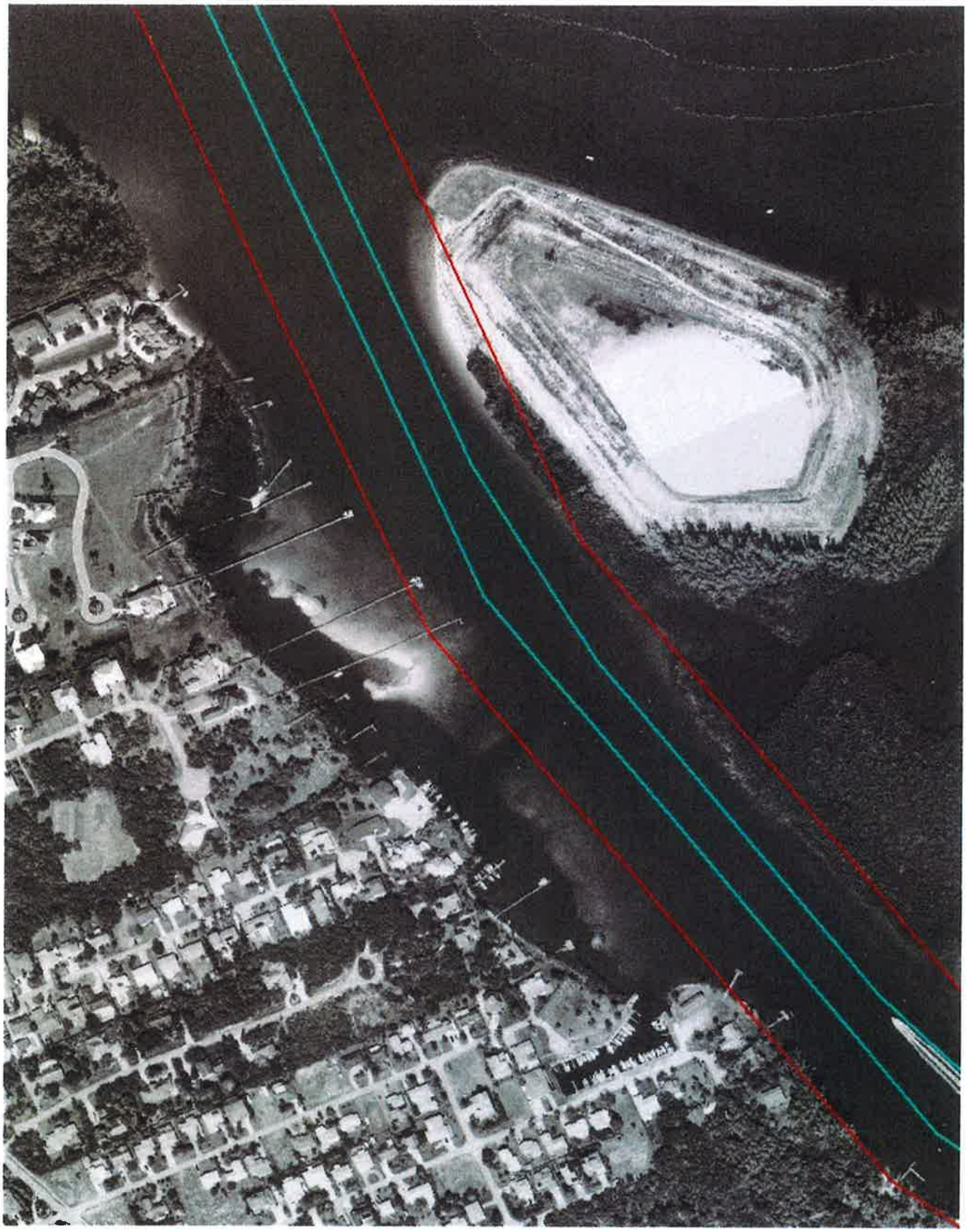


DMMA M-12




DMMA M-12
Martin/SLC border
Legend
M-12
Eden Creek Ln
707
Wetland Way
County Line Rd
NE County Line Rd
NE Blue Heron Ln
Google earth
N

DMMA M-5




MSA M-5
St. Lucie Inlet
Legend
MSA M-5
Google earth
N
400 ft

M-SLB

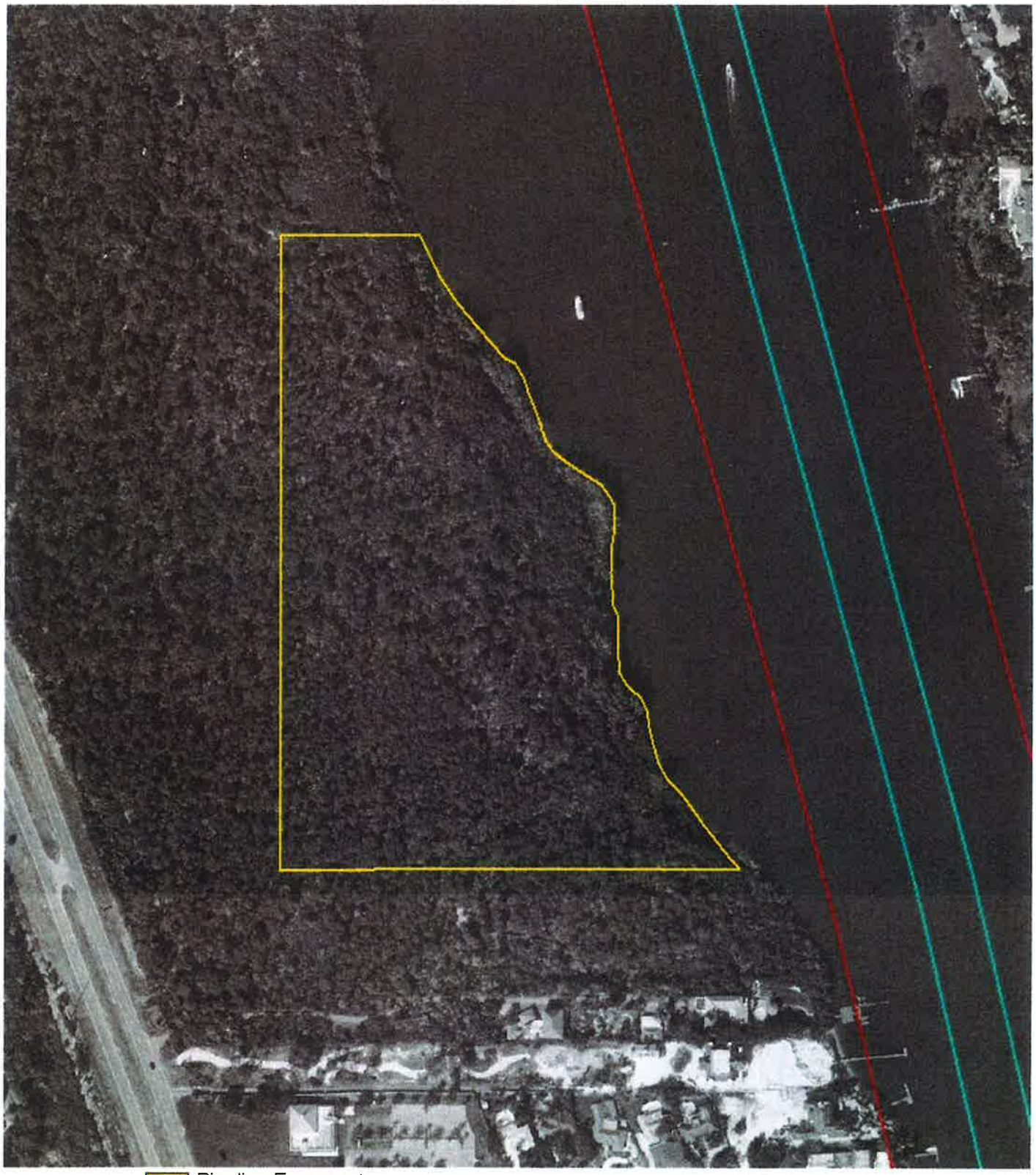
SITE MSA 504B/E

FIND Owned
Channel
ICW Right-of-Way

N


MSA-504 B&E & M-SLI
Legend
M-SLI
MSA-504B/E
Morning Dove Way
SE Yorktown Dr
SE Shenandoah Dr
SE Wren Ave
SE Swan Ave
SE Skylark
SE Gomez Ave
SE Gothouse
SE Dory St
SE Little Harbor Dr
1A
5
Google earth
N
2000 ft

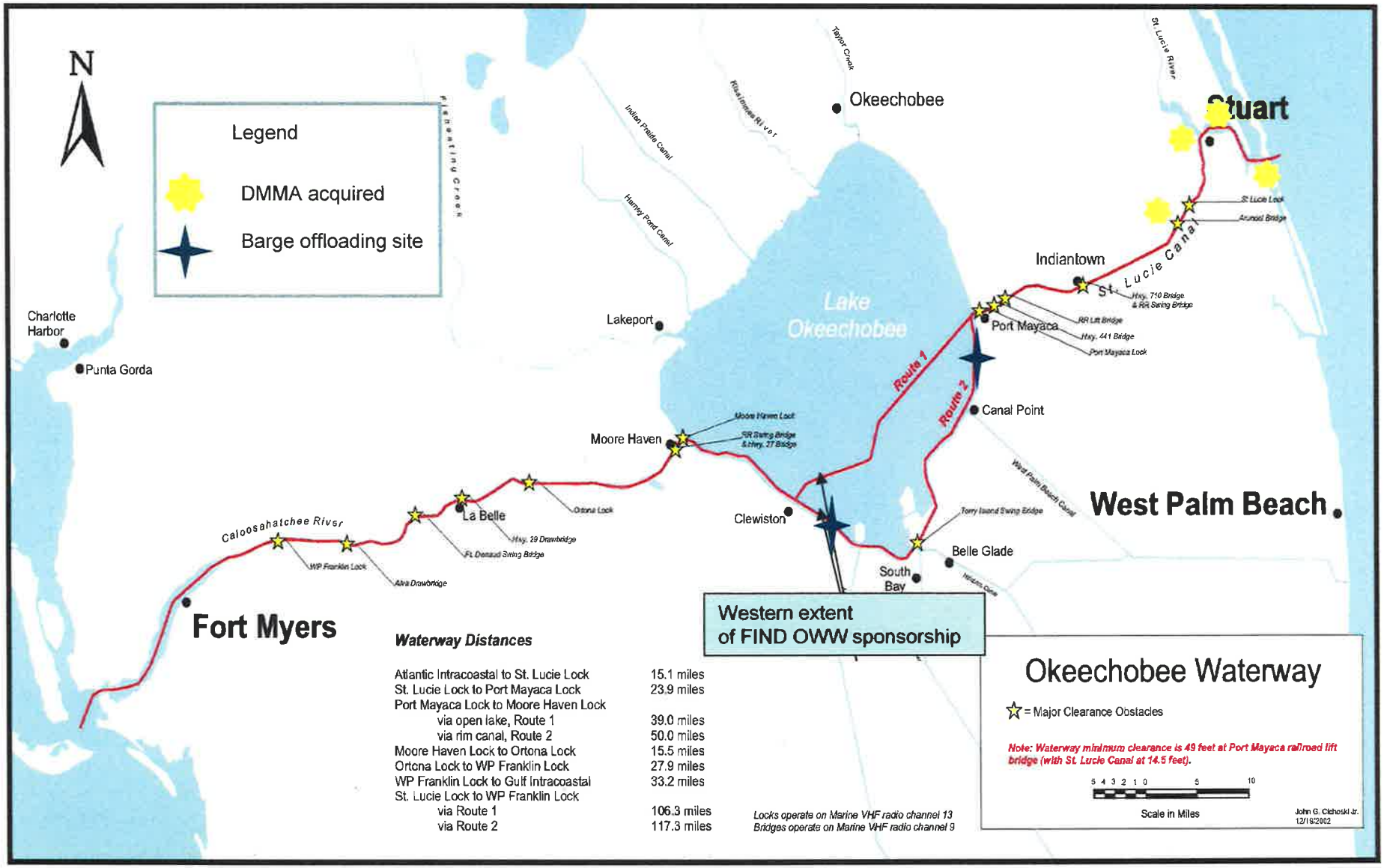
MSA-524B



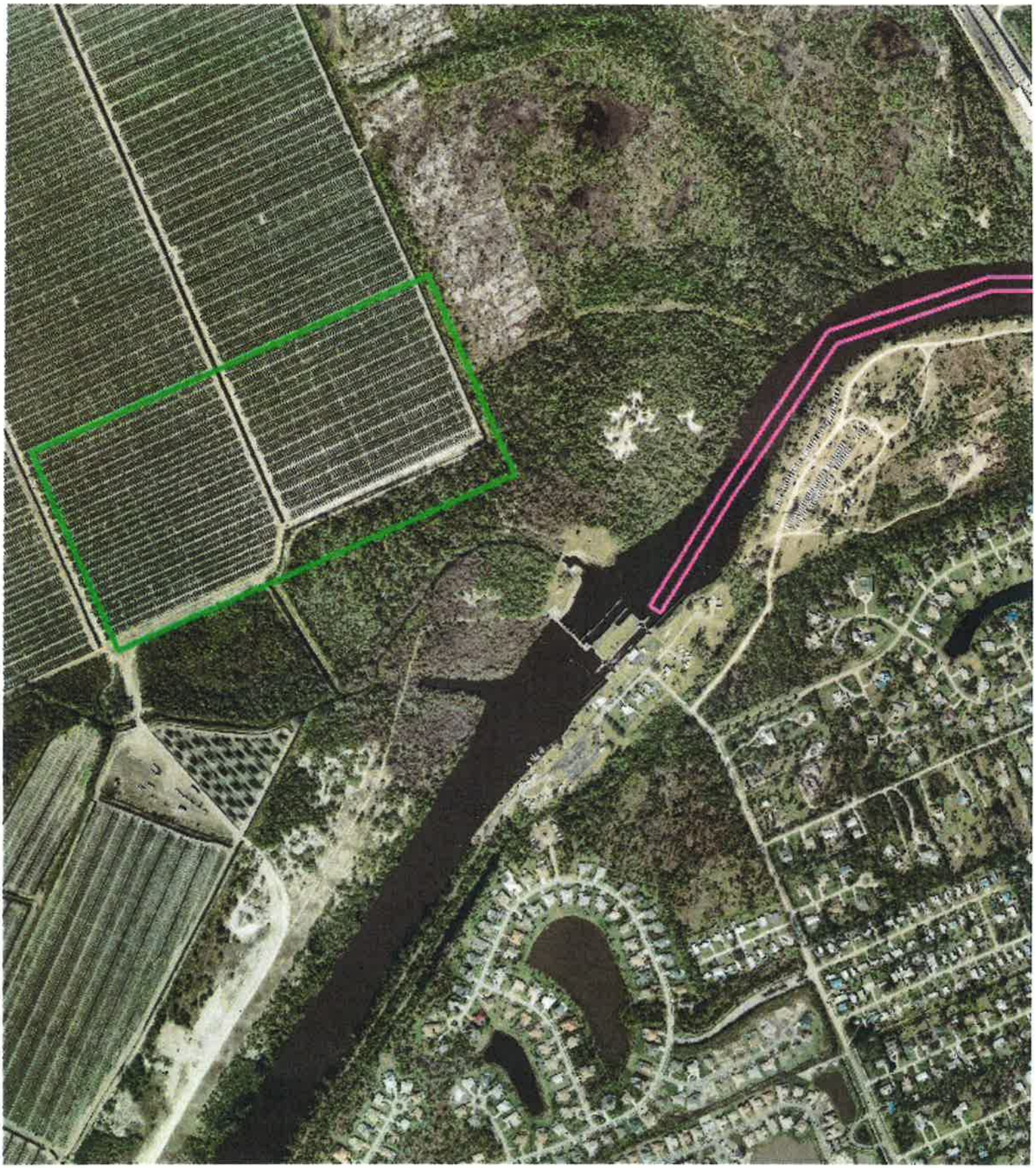
Pipeline Easement
FIND Owned
Channel
ICW Right-of-Way

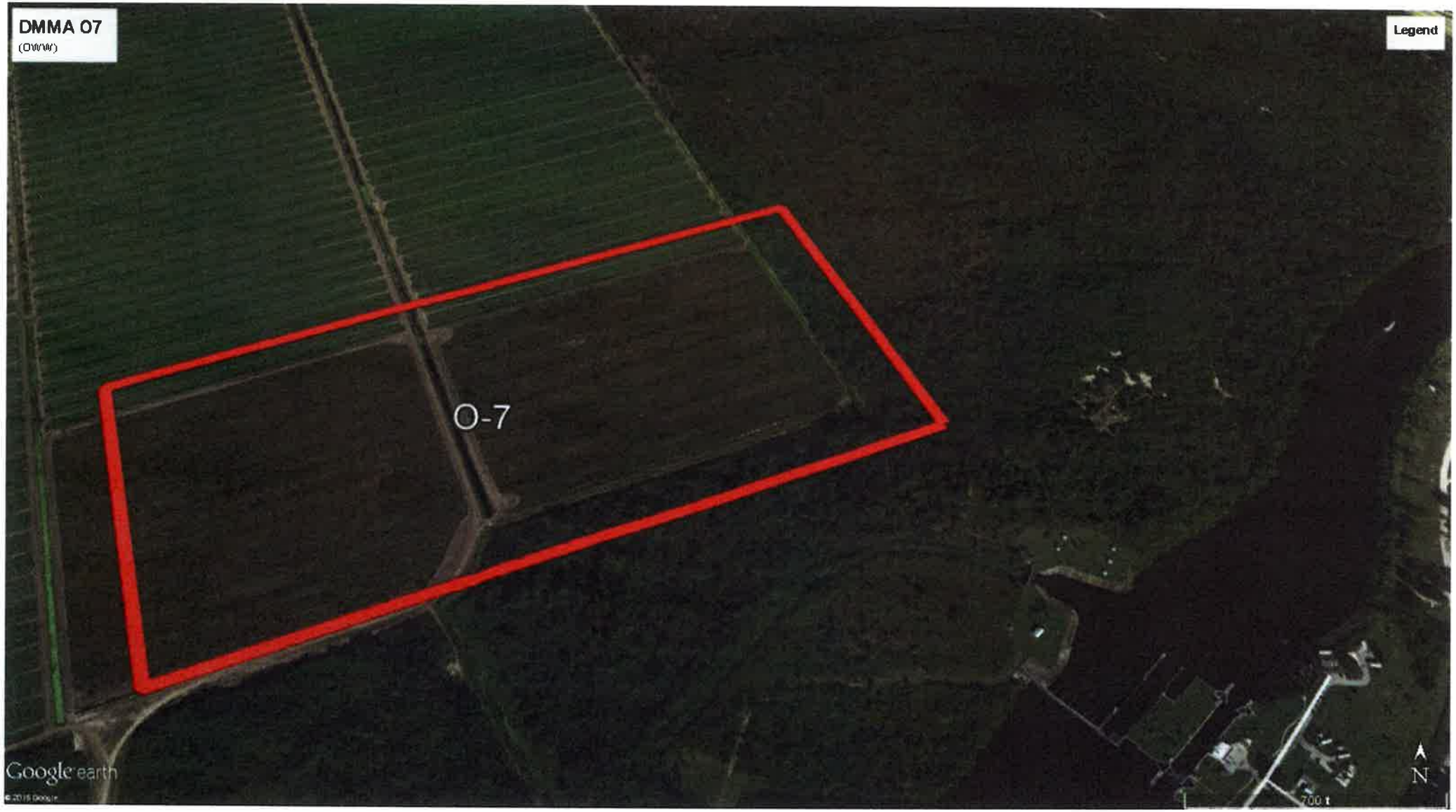
N

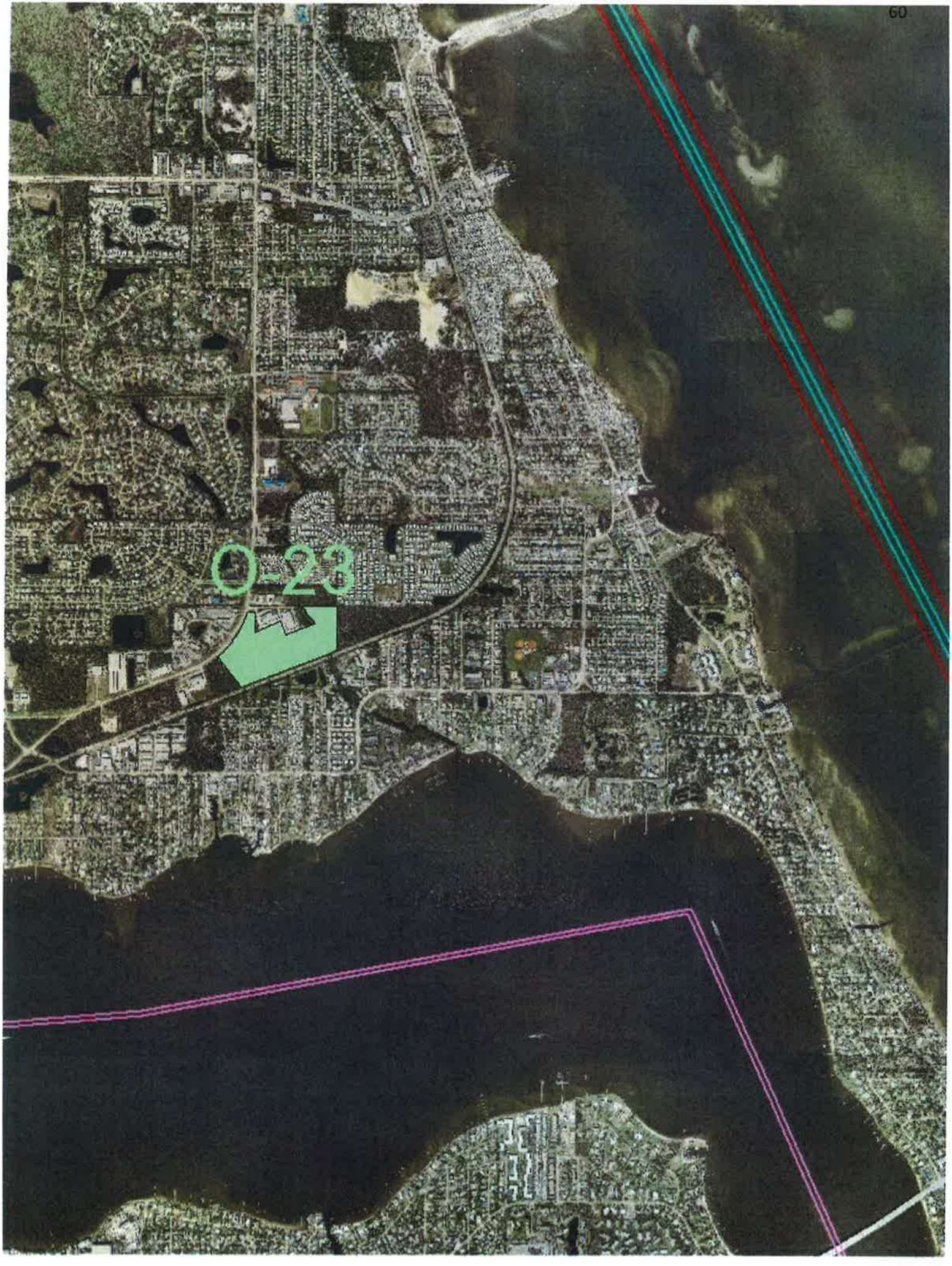

MSA 524B
Martin/PBC border
Legend
1
MSA 524B
SE Federal Hwy
Google earth
N
400 ft


N
Legend
DMMA acquired
Barge offloading site
Okeechobee
Stuart
Indiantown
St. Lucie Canal
St. Lucie Lock
Arundel Bridge
Hwy. 710 Bridge & RR Swing Bridge
RR Lift Bridge
Hwy. 441 Bridge
Port Mayaca Lock
Port Mayaca
Lake Okeechobee
Lakeport
Charlotte Harbor
Punta Gorda
Route 1
Route 2
Canal Point
Moore Haven
Moore Haven Lock
RR Swing Bridge & Hwy. 27 Bridge
Ortona Lock
La Belle
Hwy. 29 Drawbridge
Ft. Denaud Swing Bridge
Caloosahatchee River
WP Franklin Lock
Alva Drawbridge
Fort Myers
Clewiston
Torry Island Swing Bridge
West Palm Beach Canal
West Palm Beach
Belle Glade
South Bay
Western extent of FIND OWW sponsorship
Waterway Distances
Atlantic Intracoastal to St. Lucie Lock 15.1 miles
St. Lucie Lock to Port Mayaca Lock 23.9 miles
Port Mayaca Lock to Moore Haven Lock
via open lake, Route 1 39.0 miles
via rim canal, Route 2 50.0 miles
Moore Haven Lock to Ortona Lock 15.5 miles
Ortona Lock to WP Franklin Lock 27.9 miles
WP Franklin Lock to Gulf Intracoastal 33.2 miles
St. Lucie Lock to WP Franklin Lock
via Route 1 106.3 miles
via Route 2 117.3 miles
Locks operate on Marine VHF radio channel 13
Bridges operate on Marine VHF radio channel 9
Okeechobee Waterway
= Major Clearance Obstacles
Note: Waterway minimum clearance is 49 feet at Port Mayaca railroad lift bridge (with St. Lucie Canal at 14.5 feet).
5 4 3 2 1 0 5 10
Scale in Miles
John G. Cichoski Jr. 12/19/2002

SITE O-7




DMMA 07
(DMMA)
Legend
O-7
Google earth
© 2015 Google
700 ft
N


O-23


DMMA O-23
(DWW)
Legend
O-23
NE-Railroad-St
NE-Haven-Ln
Arco-Dr
NE-Oak-Ln
NE-14th-St
NE-Peace-Dr
NE-Avery-Ave
N
Google earth


DMMA O-35A
Legend
91
SW Bridgeport Ave
O-35A
Google earth
N
500 ft

ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

Purpose

To update economic benefits in Martin County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Martin County*, June 2001, and to provide the general public and Federal, State, and local officials with a clear understanding of the importance of maintaining the waterways.

Scenarios Evaluated

1. Current Existing Conditions
2. Cessation of Waterways Maintenance
3. Increase in Waterways Maintenance
4. Estimated impact of the 2007-2009 U.S. economic recession

ECONOMIC IMPACTS

Current Existing Impacts

- $639.9 million in business volume
- $156.5 million in personal income
- 3,750 jobs
- $28.0 million in tax revenue

Impacts of Cessation of Waterways Maintenance

- Decrease of $354.6 million in business volume
- Decrease of $80.1 million in personal income
- Decrease of 2,014 jobs
- Decrease of $15.5 million in tax revenue

Impacts of an Increase in Waterways Maintenance

- Increase of $160.0 million in business volume
- Increase of $26.8 million in personal income
- Increase of 664 jobs
- Increase of $5.2 million in tax revenue

Impact of the 2007-2009 U.S. Economic Recession

- Decrease of $443.1 million in business volume
- Decrease of $108.2 million in personal income
- Decrease of 2,601 jobs
- Decrease of $18.8 million in tax revenue

Economic Benefits as of April 2011

MARTIN COUNTY

ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

MARTIN COUNTY

The Intracoastal Waterway

The Atlantic Intracoastal Waterway (AICW) is a 1,391-mile channel between Trenton, New Jersey, and Miami, Florida. The Waterway along Florida's eastern seaboard is 406 miles long and follows coastal rivers and lagoons past numerous tourism-oriented communities. The channel is authorized to a depth of 12 feet from Nassau County to Fort Pierce, and a 10 foot depth south through Miami-Dade County. Boating activities on the waterways contribute to the existence of numerous marine-related businesses such as marinas and boatyards and have stimulated development of residential properties on the Waterways.

The Navigation District

The Florida Inland Navigation District, created in 1927, is the local sponsor for the AICW in Florida. In cooperation with the Jacksonville District of the U.S. Army Corps of Engineers, the Navigation District is responsible for maintenance of the AICW in Florida. To maintain navigation, the waterways need to be periodically dredged due to shoaling from currents, upland soil erosion, and the movement of offshore sands through the ocean inlets. Maintenance dredging is projected to cost approximately $12 to $16 million annually during the next 50 years, of which 50 percent of the costs are expected to be borne by property owners within the Navigation District's jurisdiction.

The Navigation District also partners with other governments to provide waterway access and improvement facilities for our mutual constituents. These projects include public boat ramps, marinas, side channels, parks, fishing piers, boardwalks, navigation aids, derelict vessel removal, shoreline stabilization, and waterway cleanups.

Source of Data Used in This Analysis

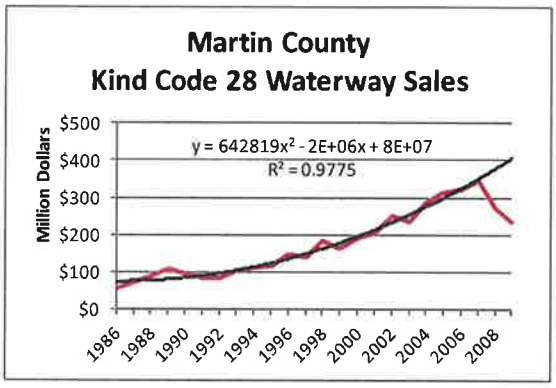
The economic benefits of the Waterways were estimated in June 2001 in *An Economic Analysis of the District's Waterways in Martin County.*

Updating of Previously Estimated Benefits

The benefits presented in this analysis were estimated by updating the direct marine-business impacts in the original analysis to current values using the change in gross sales reported by boat dealers to the Florida Department of Revenue (FDOR). The updated direct impacts were used in conjunction with an IMPLAN input/output model to estimate total economic benefits.

Estimating the Impact of the Recession

The impact of the recession was estimated by determining the trend in gross sales of boat dealers over the 20-year period prior to the onset of the recession. This trend was used to estimate the theoretical gross sales if sales had continued to increase at the rates previously experienced. The red line in the figure below illustrates reported actual gross sales of boat dealers and the black line illustrates the trend of those sales. From 2007 to 2009 gross boat dealer sales in Martin County decreased by 32 percent; if the recession had not occurred, it is estimated that gross sales from 2007 to 2009 would have increased by 16 percent.



Annual Boater Spending on Gas, Food, and Drinks at Non-Marine-Related Establishments

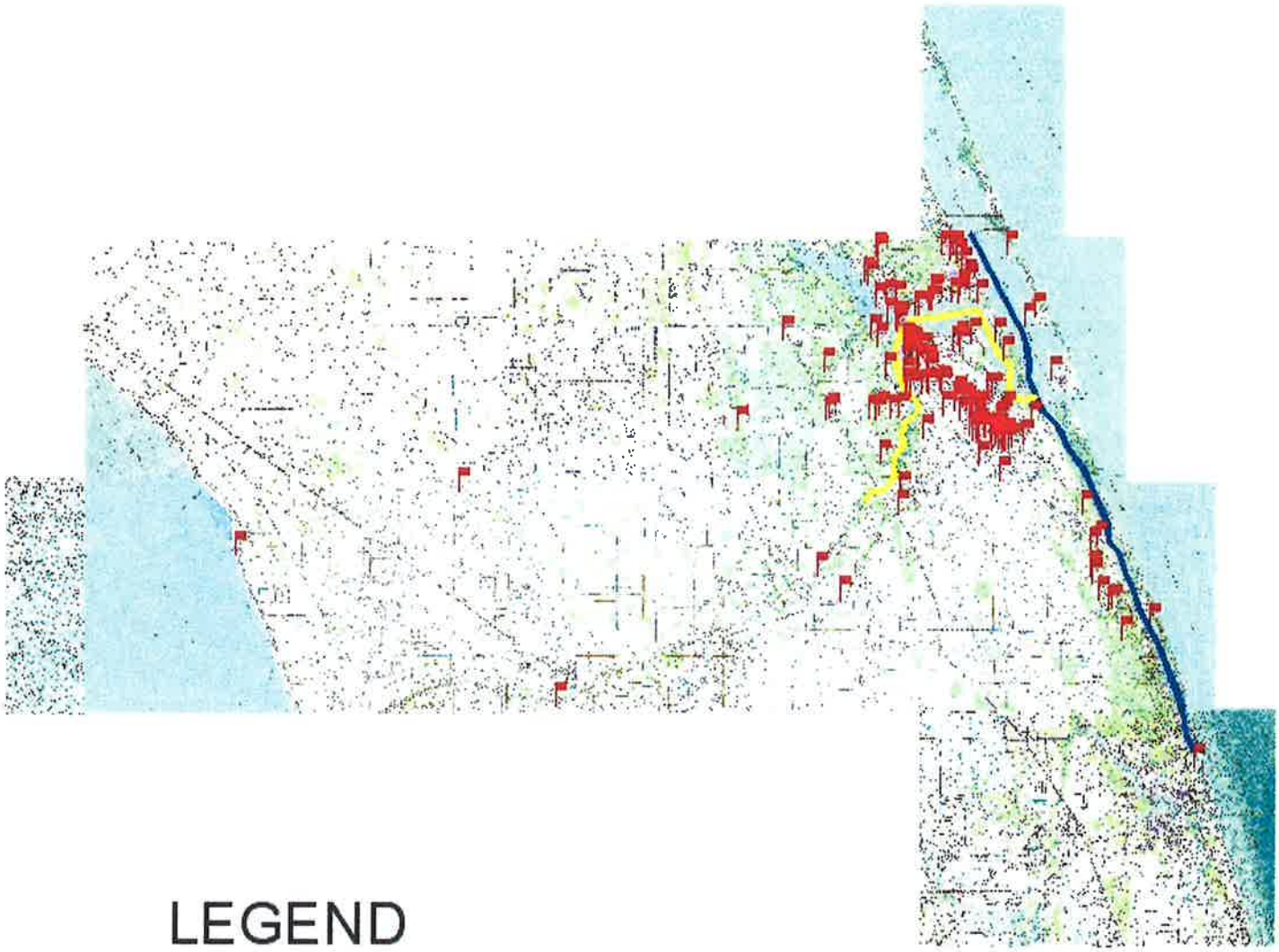
- Current existing conditions: $24.9 million
- Cessation of maintenance: $12.7 million
- Increased maintenance: $24.9 million
- Assuming no recession: $25.6 million

Vessel Draft Restrictions Assumed for Each Scenario

- Current existing conditions: 6.5 feet MLW
- Cessation of maintenance: 3 feet MLW
- Increased maintenance: 10 feet MLW
- Assuming no recession: 6.5 feet MLW

LOCATION MAP

MARTIN COUNTY WATERWAY RELATED BUSINESSES



FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM IN MARTIN COUNTY
1986 - 2015

PROJECT NAME	PROJECT #	PROJECTS SPONSER	TOTAL COST	GRANT AMOUNT
City Of Stuart Riverwalk Expansion - Phase I	MA-ST-13-68	City Of Stuart	$80,000.00	$40,000.00
Construction Of Stuart Anchorage - Phase I	MA-ST-98-36	City Of Stuart	$50,000.00	$25,000.00
Courtesy Dock At City Hall Pier (Withdrawn)	MA-ST-96-29	City Of Stuart	$22,000.00	$11,000.00
Courtesy Dock Impr.&Riverwalk Enhancements-phase III	MA-ST-08-59	City Of Stuart	$295,945.00	$107,973.00
Day Markers For Channel At Southpoint (Withdrawn)	MA-ST-03-50	City Of Stuart	$12,000.00	$6,000.00
Floating Courtesy Dock At City Hall Pier	MA-ST-01-42	City Of Stuart	$275,000.00	$137,500.00
Floating Courtesy Dock At City Hall Pier - Phase II	MA-ST-04-52	City Of Stuart	$300,000.00	$150,000.00
Floating Docks Fire Protection	MA-ST-11-66	City Of Stuart	$50,000.00	$25,000.00
Rehabilitation Of Anchorage T-dock	MA-ST-01-43	City Of Stuart	$50,000.00	$12,500.00
River Boardwalk - Phase VI	MA-ST-91-16	City of Stuart	$150,000.00	$67,500.00
Riverwalk & Pier	MA-ST-87-7	City of Stuart	$191,400.00	$50,000.00
Riverwalk Expansion - Phase II	MA-ST-14-72	City of Stuart	$464,668.00	$232,334.00
Shepard Park Improvements	MA-ST-15-75	City of Stuart	$464,316.00	$232,158.00
Shepard Park Boat Ramp Reconstruction & Dredging	MA-ST-09-62	City Of Stuart	$160,000.00	$80,000.00
Shepard Park Fishwalk	MA-ST-87-8	City of Stuart	$40,000.00	$20,000.00
South Municipal Marina - Phase I (Expired)	MA-ST-02-46	City Of Stuart	$55,000.00	$27,000.00
Southpoint Anchorage & Marina Seawall Restoration	MA-ST-02-45	City Of Stuart	$150,000.00	$75,000.00
Stuart Riverwalk	MA-ST-88-9	City of Stuart	$329,400.00	$50,000.00
Stuart Riverwalk	MA-ST-90-13	City of Stuart	$350,000.00	$175,000.00
Stuart Southpoint Anchorage - Phase II	MA-ST-99-37	City Of Stuart	$625,500.00	$312,750.00
Riverwalk	MA-ST-89-12	City of Stuart	$917,270.00	$200,000.00
Cove Road Boat Dock (Project Expired)	MA-97-31	Martin County	$74,000.00	$37,000.00
Cross Roads Regional Artificial Reef - Phase I	MA-01-40	Martin County	$30,000.00	$15,000.00
Indian Riverside Park - Day Use Boat Slip Construction	MA-01-41	Martin County	$175,000.00	$87,500.00
Jensen Beach Boat Ramp Park	MA-06-54	Martin County	$1,500,000.00	$325,000.00
Jensen Beach Causeway Fishing Pier	MA-3	Martin County	$76,050.00	$38,000.00
Jensen Beach Causeway Park	MA-95-26	Martin County	$197,900.00	$77,000.00
Jensen Beach Managed Mooring Field (Withdrawn)	MA-12-67	Martin County	$879,390.00	$439,695.00
Jensen Causeway Relief Channel Dredging	MA-89-11	Martin County	$36,300.00	$5,000.00
Law Enforcement Marine Unit	MA-07-56	Martin County	$85,000.00	$30,000.00
Leighton Park	MA-08-57	Martin County	$210,000.00	$95,000.00
Manatee Pocket Channel Dredging	MA-10-63	Martin County	$13,300,000.00	$200,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM IN MARTIN COUNTY
1986 - 2015

PROJECT NAME	PROJECT #	PROJECTS SPONSER	TOTAL COST	GRANT AMOUNT
Manatee Pocket Channel Dredging - Phase I	MA-06-55	Martin County	$220,000.00	$165,000.00
Manatee Pocket Commercial Dock Repl.-phase I (Expired)	MA-10-64	Martin County	$24,000.00	$12,000.00
Manatee Pocket Dredging (Grant Cancelled)	MA-1	Martin County	$360,000.00	$70,000.00
Mc-2 (Bird Island) Shoreline Stabilization - Phase I	MA-09-60	Martin County	$150,000.00	$75,000.00
Mc-2 Bird Island Shoreline Stabilization - Phase II	MA-11-65	Martin County	$500,000.00	$150,000.00
Pecks Lake Park - Phase I	MA-4	Martin County	$425,700.00	$62,000.00
Pecks Lake Park - Phase II	MA-87-5	Martin County	$258,500.00	$75,000.00
Pecks Lake Park - Phase III (Withdrawn)	MA-91-15	Martin County	$867,000.00	$135,000.00
Pendarvis Cove Park Improvements	MA-88-10	Martin County	$227,700.00	$90,000.00
Sandsprit Park - Phase I	MA-91-14	Martin County	$1,000,000.00	$76,500.00
Sandsprit Park - Phase II	MA-92-17	Martin County	$1,000,000.00	$92,000.00
Sandsprit Park Addition	MA-02-44	Martin County	$492,000.00	$200,000.00
St. Lucie Inlet Interior Shoal Dredging	MA-95-23	Martin County	$160,000.00	$75,000.00
St. Lucie Inlet Maintenance	MA-09-61	Martin County	$6,339,035.00	$339,035.00
St. Lucie Inlet Maintenance	MA-13-69	Martin County	$780,000.00	$386,361.00
St. Lucie Inlet Maintenance	MA-14-71	Martin County	$475,210.00	$237,605.00
Phipps Park Shoreline Stabilization	MA-15-73	Martin County	$334,122.00	$167,061.00
Charlie Leighton Park Floating Dock	MA-15-74	Martin County	$120,000.00	$60,000.00
St. Lucie Inlet North Jetty Improvements	MA-08-58	Martin County	$5,400,000.00	$300,000.00
Timer Powers Park	MA-92-18	Martin County	$435,000.00	$217,500.00
Twin Rivers Park Shoreline Stabilization	MA-00-38	Martin County	$626,000.00	$299,000.00
Twin Rivers Park Shoreline Stabilization - Phase I	MA-03-49	Martin County	$130,000.00	$65,000.00
Twin Rivers Park Shoreline Stabilization - Phase II	MA-04-51	Martin County	$850,000.00	$240,575.00
Twin Rivers Park Shoreline Stabilization - Phase III	MA-05-53	Martin County	$650,000.00	$300,000.00
Willoughby Creek Dredging	MA-2	Martin County	$498,288.00	$10,000.00
Willoughby Creek Dredging - Phase II	MA-87-6	Martin County	$465,000.00	$23,500.00
Cross Roads Regional River Reefs Artificial Reef	MA-03-47	Martin County	$50,000.00	$25,000.00
Mangrove Marsh Educ. Nature Trail & Observation Tower	MA-97-33	Martin County	$118,600.00	$90,450.00
Maritime Hammock Educational Boardwalk	MA-95-24	Martin County	$150,547.07	$107,000.00
Leighton Park Improvements - Phase I	MA-96-27	Martin County	$479,150.00	$198,575.00
Peck Lake Park Environmental Education Signage	MA-96-28	Martin County	$33,000.00	$33,000.00
Pendarvis Cove Park	MA-93-20	Martin County	$68,000.00	$34,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM IN MARTIN COUNTY
1986 - 2015

PROJECT NAME	PROJECT #	PROJECTS SPONSER	TOTAL COST	GRANT AMOUNT
Secondary Channel Marking For Nav. Aid & Res Protection	MA-93-19	Martin County	$22,535.00	$12,555.00
South County Boat Ramp - Phase I	MA-93-21	Martin County	$60,000.00	$30,000.00
South County Boat Ramp Park - Phase I	MA-98-35	Martin County	$940,000.00	$220,000.00
South County Boat Ramp Park - Phase I (Cancelled)	MA-94-22	Martin County	$660,033.00	$220,000.00
St. Lucie Inlet Flood Shoal Dredging	MA-97-32	Martin County	$4,897,500.00	$250,000.00
St. Lucie Inlet Mgmt. Plan - Flood Shoal Dredging	MA-98-34	Martin County	$4,897,500.00	$79,336.00
Law Enforcement Marine Unit	MA-03-48	Martin County Sheriff's Office	$66,100.00	$33,050.00
Law Enforcement Patrol And Rescue Vessel	MA-95-25	Martin County Sheriff's Office	$54,919.00	$34,000.00
Jupiter Island Marine Patrol Waterway Safety	MA-JI-13-70	Town Of Jupiter Island	$60,000.00	$30,000.00
Safe Waterways	MA-JI-01-39	Town Of Jupiter Island	$25,000.00	$12,500.00
		TOTALS:	**$56,966,578.07**	**$8,718,513.00**

LOCATION MAP

WATERWAYS ASSISTANCE PROGRAM PROJECTS IN MARTIN COUNTY

FLORIDA INLAND NAVIGATION DISTRICT
INTERLOCAL AGREEMENT

PROJECT NUMBER: ICW- BR-MIASF-15-02

This INTERLOCAL AGREEMENT ("Agreement") made and entered into this _____ day of _____, 20____ by and between the Florida Inland Navigation District (hereinafter the "DISTRICT"), and the Marine Industries Association of South Florida, (hereinafter the "SPONSOR").

In consideration of the mutual promises and covenants contained herein, the parties agree as follows:

1. **PROJECT** - Subject to the provisions of this Agreement, the DISTRICT has determined to provide assistance funding to the SPONSOR to participate in an effort to provide additional public relations and communication services for the Broward Intracoastal Waterway (IWW) Deepening Project, Fort Lauderdale, Florida (Broward County), (hereinafter the "PROJECT"). Said PROJECT is more specifically described in the SPONSOR'S consultant scope of services and cost estimate, which is attached as Exhibit "A" in this agreement ("Scope of Services").

Any modifications to the Scope of Services shall require written advance notice and justification from the SPONSOR and the prior written approval of the DISTRICT. The SPONSOR is also required to review all available correspondence and press to ensure accurate and timely communications are achieved. In addition, the SPONSOR shall delineate between commercial and recreational vessel traffic in the study and include these findings in the final report.

2. **TERM** - The SPONSOR shall commence work on the PROJECT immediately upon the execution of this Agreement and **shall complete the PROJECT and submit all required payment reimbursement information on or before August 30, 2015,** unless the PROJECT period has been extended with the prior written approval of the DISTRICT. In no event other than a declared state of emergency that affects the completion shall the PROJECT period extend beyond 2 year(s) from **November 14, 2016**. The SPONSOR acknowledges this is the only provision to carry over the DISTRICT assistance funding under this Agreement beyond **November 14, 2016**, and that any extension of funding beyond this date shall be at the sole discretion of the DISTRICT.

Any request for extension of funding beyond the dates set forth in the preceding paragraph shall require submittal by the SPONSOR of a request for extension to the DISTRICT no later than 60 days prior to the original project agreement expiration. This request will then be considered by the DISTRICT Board, whose decision shall be final.

3. **ASSISTANCE AMOUNT** - The DISTRICT shall contribute no more than the SPONSOR'S out-of-pocket costs for completion of this PROJECT ("PROJECT AMOUNT"). Payment of funds by the DISTRICT to the SPONSOR (the "ASSISTANCE AMOUNT") will be on a reimbursement basis only, and only for those authorized PROJECT COSTS as shown in and consistent with, Exhibit A and meeting the requirements of Paragraph 5 below and shall not, in any event, exceed $50,000.00.

Any modifications to the PROJECT'S Cost Estimate (within Exhibit A) shall require written advance notice and justification from the SPONSOR and the prior written approval of the DISTRICT.

4. *(Omitted)*

5. **PROJECT COSTS** - To be eligible for reimbursement under the Agreement, PROJECT COSTS must be necessary and reasonable for the effective and efficient accomplishment of the PROJECT and must be directly allocable thereto. PROJECT COSTS are generally described in Exhibit A. PROJECT COSTS must be incurred and work performed within the PROJECT period, with the exception of pre-agreement costs, if any, consistent with Paragraph 6 below, which are also eligible for reimbursement by the DISTRICT.

6. **PRE-AGREEMENT COSTS** - The DISTRICT and the SPONSOR fully understand and agree that there shall be no reimbursement of funds by the DISTRICT for any obligation or expenditure made prior to the execution of this Agreement unless previously delineated in Exhibit A, and previously approved by the DISTRICT Board at a regularly scheduled meeting. An exception shall be made for preliminary costs within the Executive Director's Authority (Resolution No. 2015-01)

7. **REIMBURSEMENT PROCEDURES** - PROJECT COSTS shall be reported to the DISTRICT and summarized on the Payment Reimbursement Request Form (Exhibit B - Form #90-24) attached as Exhibit B. Supporting documentation including bills and canceled payment vouchers for expenditures shall be provided to the DISTRICT by the SPONSOR or LIAISON AGENT with any payment request. All records in support of the PROJECT COSTS included in payment requests shall be subject to review and approval by the DISTRICT or by an auditor selected by the DISTRICT. Audit expenses shall be borne by the SPONSOR.

Reimbursements may be released in installments, at the discretion of the DISTRICT, upon submittal of a payment request by the SPONSOR or LIAISON AGENT. The DISTRICT may retain up to ten percent of the total project costs until the completion of the PROJECT.

The DISTRICT shall have the right to withhold any payment hereunder, either in whole or part, for non-compliance with the terms of this Agreement.

8. **FINAL REIMBURSEMENT** - The SPONSOR, upon completion of the PROJECT, shall submit to the DISTRICT a request for final reimbursement of the ASSISTANCE AMOUNT less any prior installment payments. The retainage amounts (if any) previously retained by the DISTRICT shall be paid upon (1) receipt of expenses incurred on the PROJECT by the DISTRICT, (2) full completion of the PROJECT to the reasonable satisfaction of the DISTRICT, and (3) submission of Project Completion Certification Form No. 90-13a (Exhibit C). Full completion of the PROJECT shall include the final report, and all reports, findings, copies of data and pictures developed or analyzed by this PROJECT as requested by the DISTRICT. Unless otherwise determined by the DISTRICT, the final reimbursement check shall be presented by a DISTRICT representative to the SPONSOR during a public commission meeting or public dedication ceremony.

9. **RECORDS RETENTION** - The SPONSOR shall retain all records supporting the PROJECT COSTS for three (3) years after the end of the fiscal year in which the Final Payment is released by the DISTRICT, except that such records shall be retained by the SPONSOR until final resolution of matters resulting from any litigation, claim, or special audit that starts prior to the expiration of the three-year retention period.

10. **NONCOMPLIANCE** - The DISTRICT shall have the right to reimbursement, either in whole or part as it may determine, of the funds provided hereunder for noncompliance by the SPONSOR with any of the terms of this Agreement. Upon notification from the DISTRICT, the SPONSOR shall reimburse such funds directly to the DISTRICT. The provisions of this paragraph shall survive completion of the PROJECT.

11. **DISTRICT PROJECT MANAGER** - The Executive Director, or his designee, is hereby designated as the DISTRICT's Project Manager for the purpose of this Agreement and shall be responsible for monitoring performance of its terms and conditions and for approving all reimbursement requests prior to payment.

12. **SPONSOR'S LIAISON AGENT** - The SPONSOR shall appoint a LIAISON AGENT, whose name and title shall be submitted to the DISTRICT upon execution of the Agreement, to act on behalf of the SPONSOR relative to the provisions of the Project Agreement.

13. **STATUS REPORTS** - The SPONSOR or LIAISON AGENT shall submit to the DISTRICT project status reports during the PROJECT term. These Quarterly Reports are to be on Form #95-02a (Exhibit E). NON-COMPLIANCE by the SPONSOR with the reporting schedule in Exhibit E may result in revocation of this Agreement.

14. **LAWS** - The SPONSOR agrees to obtain and to abide by all federal, state and local permits and proprietary authorizations, and all applicable laws and regulations in the development of the PROJECT.

15. **ACKNOWLEDGMENT** - The DISTRICT shall be recognized in all applicable correspondence, presentations and acknowledged in the final PROJECT as a contributor. The DISTRICT'S logo (Exhibit D) shall be included as applicable.

16. **SOVEREIGN IMMUNITY** - Each party hereto agrees that it shall be solely responsible for the wrongful acts of its employees, contractors and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity under Section 768.28, Florida Statutes. The SPONSOR acknowledges that the DISTRICT, its employees, commissioners and agents are solely providing funding assistance for the PROJECT and are not involved in the future design, construction, operation or maintenance of any facilities or improvements resulting from implementation of the PROJECT.

17. **INSPECTIONS** - The DISTRICT reserves the right, upon reasonable request, to inspect said PROJECT and any and all records related thereto at any time.

18. **RIGHTS AND DUTIES** - The rights and duties arising under this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, and shall, unless the context clearly requires otherwise, survive completion of the PROJECT. The SPONSOR may not assign this Agreement nor any interest hereunder without the express prior written consent of the DISTRICT.

19. **WAIVERS** - Waiver of a breach of any provision of this Agreement shall not be deemed a waiver of any other breach of the same or different provision.

20. **NOTICE** - Any notice required to be given pursuant to the terms and provisions of this Agreement shall be in writing, postage paid, and shall be sent by certified mail, return receipt requested, to the DISTRICT or SPONSOR at the addresses below. The notice shall be effective on the date indicated on the return receipt.

To the DISTRICT at:

Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Florida 33477-9498
Attn: Executive Director

To the PROJECT SPONSOR at:

Marine Industries Association of South Florida
2312 South Andrews Avenue
Fort Lauderdale FL 33316
Attn: Project Manager

21. **NO JOINT VENTURE** - The DISTRICT's role with respect to the PROJECT is that of a funding assistance authority only and the DISTRICT is not, and shall not be considered to be, an agent, partner, or joint venturer with the SPONSOR.

22. **GOVERNING LAW** - The validity, interpretation and performance of this Agreement shall be controlled and construed according to the laws of the State of Florida.

23. **ENTIRE UNDERSTANDING** - This Agreement, including any exhibits made a part hereof, embodies the entire Agreement and understanding of the parties and supersedes all prior oral and written communications between them. The terms hereof may be modified only by a written amendment signed by both parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed the day, month and year aforesaid.

WITNESSES: FLORIDA INLAND NAVIGATION DISTRICT

_____ By: _____
Executive Director

_____ DATE: _____

WITNESSES: SPONSOR

_____ By: _____

Title: _____

_____ DATE: _____

EXHIBIT A

MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA | ESTIMATE

Estimate No. 32792
October 30, 2015

Marine Industries Association of South Florida
Broward IWW Deepening Project Outreach
Attn: Phil Purcell

Starmark's scope of services could include some or all of the following based on monthly priority calls with FIND representatives:

Preparation of a Public Information Plan to include key messages to stakeholders in Fort Lauderdale/Broward County;

Assist with any media messaging/management as directed by FIND staff;

Development of a Crisis Plan to include draft responses to potential media scenarios;

Serving as key contact with designated internal/external contacts for news media outreach;

Creation of a presentation to provide information facts for public outreach;

Development of responses in event of adverse situation that could arise from the deep-water dredge;

Work with designated representatives who would be receiving calls associated with any environmental issues;

Help to monitor developments and serve as public information counsel;

Starmark will be available to take on additional tasks, which may arise as part of the deep-water dredge.

Additional tasks to be determined and executed associated with any unexpected activities.

Client Responsibility

Starmark is hereby authorized to commence the project herein defined or any part thereof upon the client's approval of this Estimate. This approval hereby authorizes Starmark to undertake, at client's expense, all necessary commitments, including expenditures to outside suppliers, toward the completion of the project, or any part thereof, on behalf of the client.

If the client requests changes or alterations, or if there are changes in the specifications or scope of the project outlined herein and those changes or alterations cause the actual cost to exceed the agreed upon Estimate by more than ten (10%) percent, then and in that event, Starmark shall revise said Estimate and issue an Estimate Change Order advising client of the amount of the cost increase.

In the event any stage of the project requires more than (30) days for completion, then the client hereby agrees to compensate Starmark for the services rendered during said stage.

Statement of Terms

The undersigned hereby acknowledges and agrees that:

1. Payments will be made according to the agreed upon terms as outlined above.
2. 1.5% interest/month will be charged on all accounts over 45 days past due from invoice date.
3. In the event that payment of any outstanding balance is not received within 75 days from date of invoice, Starmark services will be interrupted and all work will be placed on a COD basis until the account is brought up to date. Reinstatement fees may apply.
4. Client agrees to pay all costs, expenses and attorney fees incurred in the collection of any past due indebtedness whether or not suit is filed.
5. Client agrees to pay all applicable sales tax as required by law.

EXHIBIT A

MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA | ESTIMATE

Estimate No. 32792
October 30, 2015

Monthly Agency Service Retainer (Based on Monthly Average of 32 Executive Hours for 9 Months*):

$5,000.00

*Hours will be reported on a quarterly basis.

These services are anticipated to be provided through an agreement of Starmark International, Inc., with the Marine Industry Association of South Florida.

Estimate Total: $45,000.00

Terms: Monthly fees will be invoiced on the 15th of the month prior. November 2015 - July 2016 monthly fees will be $5,000 each month. All monthly fees are payable in 30 days. Changes require 60 days written notice.

Approved _____ **Date** _____

Client Responsibility

Starmark is hereby authorized to commence the project herein defined or any part thereof upon the client's approval of this Estimate. This approval hereby authorizes Starmark to undertake, at client's expense, all necessary commitments, including expenditures to outside suppliers, toward the completion of the project, or any part thereof, on behalf of the client.

If the client requests changes or alterations, or if there are changes in the specifications or scope of the project outlined herein and those changes or alterations cause the actual cost to exceed the agreed upon Estimate by more than ten (10%) percent, then and in that event, Starmark shall revise said Estimate and issue an Estimate Change Order advising client of the amount of the cost increase.

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2. 1.5% interest/month will be charged on all accounts over 45 days past due from invoice date.
3. In the event that payment of any outstanding balance is not received within 75 days from date of invoice, Starmark services will be interrupted and all work will be placed on a COD basis until the account is brought up to date. Reinstatement fees may apply.
4. Client agrees to pay all costs, expenses and attorney fees incurred in the collection of any past due indebtedness whether or not suit is filed.
5. Client agrees to pay all applicable sales tax as required by law.

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**License**") is made this 1st day of December, 2015 ("**Effective Date**") by and between Florida Power & Light Company ("**Licensor**"), a Florida corporation, and Florida Inland Navigation District ("**Licensee**"), an independent special taxing district of the State of Florida.

WITNESSETH

WHEREAS, Licensor is the owner of title in fee simple to certain real property described as being approximately the East six hundred and sixty-seven (667) feet of the South sixty (60) feet of the North two hundred and ninety-five (295) feet of the West Half (W ½) of the Northeast Quarter (NE ¼) of the Northwest Quarter (NW ¼) of Section 35, Township 50 South, Range 42 East in Broward County, Florida ("**Licensed Premises**"), which is further shown and described by the **Exhibit A** that is attached hereto and incorporated herein by this reference; and

WHEREAS, Licensee desires to occupy and use the Licensed Premises as stated herein.

NOW, THEREFORE, in consideration of the mutual benefits, covenants, agreements, promises, obligations, requirements, duties, and required payments contained in this License, Licensor hereby grants to Licensee and Licensee hereby accepts from Licensor, this non-exclusive License and privilege to occupy and use the Licensed Premises according to the following terms, conditions and provisions:

TERMS, CONDITIONS, AND PROVISIONS

1. Recitals. The foregoing recitals are true and correct and are incorporated herein by this reference.

2. Use. Licensee may occupy and use the Licensed Premises solely for the construction, maintenance, repair and operation of a private roadway ("**Haul Road**") to facilitate passage of motorized vehicles and equipment directly related to Licensee's Broward Intracoastal Waterway Deepening Project, but not for any other purpose.

3. Term. This License is for a term of fifteen (15) months beginning the 1st day of March, 2016 and ending the 31st day of May, 2017 ("**Term**"), unless earlier terminated as provided by this License, or extended by a mutual agreement of Licensor and Licensee.

4. License Fee. During the Term, Licensee shall pay a License Fee to Licensor in lawful currency of the United States of America in the amount of six thousand and three hundred and seventy dollars and zero cents ($6,370.00) plus sales tax if applicable, in the form of a regular bank check, cashier's check, or money order on the first 1st day of March, 2016 and on the 1st day of each month thereafter until and including the date this License becomes terminated and no longer in effect.

5. Licensor Rights. Licensor is the owner of fee simple title to the Licensed Premises. Licensor keeps, saves, preserves, maintains, and reserves unto itself and unto each and all of its successors and assigns, all of Licensor's rights and interests in and to the Licensed Premises, including without limitation, the right to grant unto other persons and entities, ownership, licenses, leases, and easements over, upon, across, through, within and under the surface of the Licensed Premises. Licensor, along with its successors, assigns, licensees, lessees, and grantees, may at Licensor's sole discretion, construct, install, operate, use, maintain, repair, alter, modify, change, replace, and remove facilities and improvements over, upon, across, through, within and under the surface of the Licensed Premises, and occupy and use the Licensed Premises for various purposes, except that Licensor shall not unreasonably interfere with or prevent Grantee's use of the Licensed Premises for the purpose described and authorized by this License. Licensor and its successors, assigns, licensees, lessees, grantees and invitees may enter the Licensed Premises at any time and for any reason without further notice to Licensee, and Licensee shall notify its employees, agents, contractors, subcontractors, vendors and invitees accordingly.

6. **Condition of Licensed Premises**. Licensee acknowledges, understands, agrees and accepts that Licensor will continuously at all times occupy, utilize, operate and maintain the Licensed Premises as an active high-voltage electric service transmission corridor and for each and all of Licensor's purposes and that there exists the risk of injury to persons and damage to property associated with Licensee's occupancy, use and maintenance of the Licensed Premises by Licensee and by Licensee's employees, contractors, subcontractors, vendors and invitees. Licensee has inspected the Licensed Premises and understands, acknowledges, accepts and agrees that Licensee's use of the Licensed Premises is and always shall be on an "as is" basis and that Licensor does not in any way make, offer, extend, deliver, give or provide unto Licensee or any other person or entity, any form of explicit, express or implied warranty, guarantee, promise, commitment, or representation concerning the safety, condition, quality or fitness of the Licensed Premises for any particular occupancy, use or purpose. Licensee may perform a Phase I and/or Phase II environmental site assessment as per American Society for Testing and Materials ("**ASTM**") criteria to investigate the existing environmental condition of the Licensed Premises. The performance or the failure to perform an environmental site assessment does not relieve the Licensee from compliance with any other provision of this section.

7. **Safety Notices and Restrictions**

(7.1) Licensee shall at all times during the Term, ensure that each of its employees, agents, contractors, subcontractors, vendors and invitees who will occupy or use the Licensed Premises is notified and aware that electrical equipment and appurtenances (which includes, but is not limited to utility poles, overhead and underground wires, cables, circuits, insulators, transformers, guy wires, and guy wire anchors which are singularly and collectively referred to as "**Licensor Facilities**") are installed or may be installed, operated and maintained over, upon and under the surface of the Licensed Premises and are conductors of high-voltage electricity, and that the presence of Licensor Facilities can be hazardous and cause fatality and bodily injury to persons and damage to property. Licensee shall exercise extraordinary precautions to prevent injury to persons and damage to property that could result from contact with, disturbance of, or entering into proximity of Licensor Facilities. Licensee shall make available and deliver to each of its employees, agents, contractors, subcontractors, vendors and invitees who will occupy and/or use the Licensed Premises, the Licensor's "**Safety Six**" cautionary and warning notice which is described by the **Exhibit B** that is attached hereto and incorporated herein by this reference. Licensee and its employees, agents, contractors, subcontractors shall be responsible for immediately reporting to Licensor in accordance with Licensor's "Safety Six" notice, all emergencies, bodily injuries and damage to property within the Licensed Premises.

(7.2) Licensee shall never interfere with Licensor Facilities, or with Licensor's occupancy and use of the Licensed Premises, or with facilities or use of the Licensed Premises by any person or entity which has a right or permission to use the Licensed Premises.

(7.3) Licensee shall never use the Licensed Premises in any manner which Licensor believes could restrict, impair or interfere with Licensor's existing or future use of the Licensed Premises or could cause a hazard or threat of injury to persons or damage to property.

(7.4) Licensee shall never cause or allow any equipment or object to exceed fourteen (14) feet in height above the surface of the Licensed Premises, nor allow any equipment capable of extending greater than fourteen (14) feet above the surface of the Licensed Premises to be brought upon the Licensed Premises, except that this provision shall not apply to equipment and objects brought onto the Licensed Premises by Licensor or by Licensor's employees, agents, contractors and vendors.

(7.5) Licensee shall at all times during the Term at its sole expense, ensure that each fence, gate, lighting apparatus and other object(s) containing metallic substance(s) and installed by Licensee within the Licensed Premises is electrically grounded according to Licensor's specifications in compliance with the **Exhibit C** attached hereto and incorporated herein by this reference.

(7.6) Licensee shall at all times during the Term at its sole expense, utilize effective dust control measures to prevent airborne dust contamination of Licensor's high-voltage circuit insulators while ensuring sufficient drainage by creating and maintaining the entire Haul Road with crushed lime rock at no less than eight (8) inches of depth as a sub-roadbed, and with #4 size crushed rock at no less than two (inches) of depth atop the lime rock sub-roadbed, except that Licensee shall install and maintain a contiguous solid concrete and/or asphalt pavement apron from the East edge-of-pavement of 7th Avenue to a point no less than twenty (20) feet East of the East edge-of-pavement of 7th Avenue as described by the **Exhibit D** attached hereto and incorporated herein by this reference. Licensee shall spray water on the Haul Road at least once each day when vehicles are expected to transit the Haul Road, unless the Haul Road is already sufficiently wet from rain or other water application. Licensee shall apply only enough water necessary to prevent airborne dust, but so as to not cause unnecessary soil erosion or excess water runoff.

(7.7) Licensee shall install and at all times during the Term at its sole expense, maintain a system of "Type K" concrete traffic barriers and sand-filled plastic barrels to protect Licensor Facilities from impact in compliance with the **Exhibit D** attached hereto.

(7.8) Licensee shall apply and at all times during the Term at its sole expense, maintain yellow high visibility paint on all portions of all Licensor Facilities within the Licensed Premises from the ground surface of the Licensed Premises to an elevation six (6) feet above the ground surface of the Licensed Premises.

(7.9) Licensee shall at all times during the Term at its sole expense, comply with the vehicle schedule, traffic flow, and traffic control requirements contained in the Maintenance of Traffic Plan ("MOTP") as shown and described by the **Exhibit E** attached hereto and incorporated herein by this reference, including, but not limited to employment of a person to function as a "**Traffic Coordinator**" to safely control all vehicular traffic entering and exiting the Licensed Premises at 7th Avenue and Taylor Lane. If any crushed rock, soil, dredged material, and/or other material related to Licensee's operations enters onto 7th Avenue and/or Taylor Lane, then the Traffic Coordinator shall ensure that all such material is expeditiously removed therefrom and relocated to the Licensed Premises so as to prevent creation of any traffic hazard.

(7.10) Licensee shall install and at all times during the Term at its sole expense, maintain vehicle traffic control signage and trespass / theft warning signage within the Licensed Premises in compliance with the **Exhibit F** attached hereto and incorporated herein by this reference.

(7.11) Licensee shall install and at all times during the Term at its sole expense, maintain an outdoor lighting system to illuminate the entire Haul Road (particularly illumination of Licensor's pole structures) which shall be activated and utilized at all times when vehicles and equipment are in motion or expected to be in motion within the Licensed Premises after sunset and before sunrise.

(7.12) Licensee shall at all times during the Term and at its sole expense, obtain and have all necessary applicable federal, state, county, municipal and other permits, licenses and approvals required in connection with Licensee's occupancy and use of the Licensed Premises and provide a copy of each such permit, license and approval to Licensor upon request.

(7.13) Licensee shall at all times during the Term and at its sole expense, comply with each law, ordinance, code, regulation, rule, permit and approval of each governmental authority which has jurisdiction over the Licensed Premises and/or use and/or maintenance of the Licensed Premises. Licensee shall employ land management practices standard in the county in which the Licensed Premises is located according to the purpose for which this License is granted and for the protection of the Licensed Premises.

(7.14) Licensee shall never construct or erect any permanent or temporary building, structure, fixture, fence, shelter, attachment or improvement within the Licensed Premises without prior written permission from Licensor. All work to be performed by Licensee upon the Licensed Premises shall be in accordance with plans and specifications to be prepared by Licensee and submitted to Licensor for written approval. Licensee shall directly pay at its sole expense for all improvements and facilities, to be constructed, installed, operated, maintained, and repaired within the Licensed Premises by Licensee or on its behalf.

(7.15) Licensee shall not cause or allow any waste of the Licensed Premises and shall not remove soil, import soil or alter the existing surface elevation of the Licensed Premises without first obtaining written permission of Licensor.

(7.16) Licensee shall at all times during the Term at its sole expense, pay for all utility and other services furnished to or for Licensee upon the Licensed Premises and remove trash and debris at its sole cost from the Licensed Premises as necessary.

(7.17) Licensor shall at all times have the right, but not obligation, to direct Licensee to perform maintenance and repair of the Haul Road and Licensed Premises as Licensor deems necessary.

(7.18) Before commencing any type of digging, drilling, excavation or other work or activity below the ground surface of the Licensed Premises, Licensee shall, as required by law, determine if any underground utility infrastructure exists within the location where such below-ground activity is expected to occur.

(7.19) Licensee shall be solely responsible for security of its employees, contractors, subcontractors, vendors, invitees, operations and property within the Licensed Premises. Licensee shall lock gates and exercise practical measures to prevent trespassing and unauthorized persons from entering the Licensed Premises. Licensor and Licensee shall each maintain their own separate gate locks configured in such a manner which ensures that Licensor and Licensee each have independent unrestricted access at all times to the Licensed Premises.

8. Environmental.

(8.1) Licensee shall install and at all times during the Term at its sole expense, maintain wetland area protection signage within the Licensed Premises in compliance with the **Exhibit F** attached hereto and incorporated herein by this reference.

(8.2) Licensee shall not place or store within the Licensed Premises, any substance or material defined as "**Hazardous Waste**" or "**Hazardous Substance**" or "**Hazardous Material**" by Section 101 (14) of the Comprehensive Environmental Response Compensation and Liability Act of 1980 ("**CERCLA**") (42 USC Section 9601 [14]), and the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, et seq.; and the Resource Conservation and Recovery Act, 49 U.S.C. Section 6901 et seq.; and the Florida Resource and Management Act, and Chapter 403, Florida Statutes; and the Pollution, Spill, Prevention And Control Act, and Chapter 376, Florida Statutes, except that fuel carried and contained within a tank that is designed and permanently attached as an integral fixture to a vehicle for the purpose of propelling only that vehicle shall not be considered a violation, breach or default of this restriction.

(8.3) Licensee shall not create, cause or contribute to any "**Environmental Contamination**", "**Unpermitted Wetland Impact**", "**Unauthorized Groundwater Well**", **Illegal Water Consumption**", or any other "**Environmental Impact**", (all collectively referred to as "**Environmental Violation**") related to Licensee's occupancy and use of the Licensed Premises.

(8.3.1) "Environmental Contamination" is defined as any spilling or discharge of any chemical constituent by the Licensee to the environment that results in any pollution, sheen or contamination of the groundwater, surface water, soil, or any other environmental media, on or from the Licensed Premises, above the federal, state or local regulatory levels; including, (a) for groundwater: Chapters 62-777, Table I, 62-520, or 62-550 of the Florida Administrative Code ("**FAC**"); (b) for surface waters: Chapters 62-777, Table I, or 62-302 of the FAC; and (c) for soils: Chapters 62-777, FAC, Table II; or above natural background levels.

(8.3.2) "Unpermitted Wetland Impact" is defined as failure to obtain all required federal, state and local permits to impact a subject wetland or undertaking any action or activity in violation of any such permit(s). Some examples of permits needed to impact to a wetland are county environmental resources management permits, and/or permits issued by the State of Florida Department of Environmental Protection, a jurisdictional water management district, or ACOE. A "Wetland Impact" is defined as an activity which impacts any area defined as "**Wetland**" per the following: (a) federal law (for example, Section 404 of the Clean Water Act); (b) federal rules (for example, Army Corps of Engineers ("**ACOE**") Delineation Manual); (c) federal guidance; (d) state law (for example, Section 373.019(22), Florida Statutes); (e) state rules (for example, Chapter 62-340, FAC); (f) state guidance; (g) case law as formulated that further explains wetland jurisdictional criteria; or (h) local law (for example, county and municipal ordinances; (i) local guidance; or (j) local policy.

(8.3.3) "Unauthorized Groundwater Well" is defined as installation or the use of an existing groundwater well without first obtaining each required applicable state and local permit for installation and operation of a water well an use of groundwater or surface water.

(8.3.4) "Illegal Water Consumption" is defined as withdrawal or use of ground water or surface water without first obtaining each required applicable consumptive use permit or water use permit, or any violation of any consumptive use permit or water use permit issued by any governmental regulatory entity which has jurisdiction over the Licensed Premises.

(8.3.5) "Environmental Impact" includes, but is not limited to; failure to apply pesticides consistent with labeling instructions; failure to dispose of pesticide containers as per label instructions; failure to have licensed and trained personnel apply pesticides; failure to properly manage pesticide mix/load sites to avoid pesticide release to soils or surface waters in quantities or concentrations other than that specified on the label application instructions; any violations of Federal Insecticide, Fungicide, and Rodenticide Act, or its state law equivalent; or any violation of any Florida Department of Agriculture and Consumer Services rule or Best Management Practices to the degree that such violation or failure damages or creates an adverse impact to the Licensed Premises.

(8.4) No later than one (1) hour immediately following any and each discovery by Licensee or its employee, contractor, or subcontractor of an Environmental Violation related to Licensee's occupancy and use of the Licensed Premises, Licensee shall notify Licensor of such discovery via telephone in compliance with the instructions described by the **Exhibit G** attached hereto and incorporated herein by this reference. Upon discovery of an Environmental Violation created, caused or contributed to (or reasonably suspected to have been created, caused or contributed to) by Licensee and/or by any party working on behalf of Licensee, the Licensee shall immediately and no later than one (1) hour after such discovery, begin containment, cleanup, remediation and corrective action of the Environmental Violation at Licensee's sole cost and expense. Licensor may terminate this License if Licensee fails to notify Licensor and/or begin containment, cleanup, remediation or corrective action of an Environmental Violation within any prescribed deadline. Licensor may elect to directly participate in any corrective action.

(8.5) If Licensee, and/or its employee, contractor, subcontractor, vendor, invitee or any other person or entity working on behalf of or at the direction of the Licensee causes an Environmental Violation within the Licensed Premises or to originate from the Licensed Premises, then Licensee, on its own behalf and on behalf of its shareholders, officers, directors, employees, servants, agents, and affiliates, shall forever indemnify, defend, hold harmless, and release Licensor and Licensor's parent(s), subsidiaries, and affiliates (including each of their respective shareholders, officers, directors, employees, and agents) who are each and all hereinafter referred to collectively as "**Licensor Entities**", of and from all claims, demands, costs, losses, actions and investigations on account of or in any way arising from, connected to, associated with, related to, such an Environmental Violation, and from any and all known and unknown, foreseen and unforeseen damages, and consequences thereof which result from such an Environmental Violation, including, but not limited to, restoration of the site to the condition which existed prior to the occurrence of an Environmental Violation.

(8.6) Licensee shall at its sole expense, hire a qualified independent third party environmental inspector ("**Inspector**"), satisfactory to both Licensee and Licensor, to visit and inspect the Licensed Premises no more than one (1) week prior to the first (1st) day of the Term and establish a baseline site inspection report with photographs and soil sample results. From the date when initial construction of the Haul Road begins through and until the date when Haul Road construction becomes completed, the Inspector shall inspect the Licensed Premises for no less than one (1) hour each day that construction activity will occur. Upon the date when the initial Haul Road construction is completed, the Inspector shall inspect the Licensed Premises no less than once every two weeks for a period of one (1) month, and then inspect the Licensed Premises no less than once each month thereafter for the remainder of the Term. If an Environmental Violation occurs, then Licensor may direct Licensee to increase the frequency and otherwise modify the inspection process. A report of each inspection shall be delivered by the Inspector via electronic mail "**Email**" to both Licensor and Licensee within five (5) calendar days of each such inspection. Each inspection report shall document if the Inspector observed that any Environmental Violation has occurred and/or appears to be imminent. If the Inspector, or the Licensor, or the Licensee suspect that occurrence of an Environmental Violation is imminent, then Licensee shall commence all action necessary and reasonable to prevent and avoid the occurrence of such Environmental Violation.

(8.7) No later than the fifth (5th) calendar day which occurs after the calendar date this License becomes terminated for any reason, the Inspector shall inspect the Licensed Premises to determine if any Environmental Violation exists, and if an Environmental Violation is found to exist at that time, then Licensee shall immediately commence all remediation and corrective action required by each applicable law. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

9. **No Licensee Encumbrance**. Licensee shall never cause the Licensed Premises to become encumbered by any mortgage, lien, bond, security pledge, financial obligation or other agreement beyond or in addition to this License, nor shall the Licensed Premises be designated or made liable in any manner to satisfy any debt or obligation related to, or which could result from, Licensee's activities, operations, or its occupancy or use of the Licensed Premises. Licensee agrees to never claim any form of ownership, leasehold interest, easement or estate of any kind or extent whatsoever to or in the Licensed Premises by virtue of this License or its occupancy or use of the Licensed Premises. Licensee's occupancy, use and maintenance of the Licensed Premises are now and shall always be subject, subordinate and inferior to Licensor's ownership of, title to, and rights in the Licensed Premises, and to each and all of Licensor's encumbrances applicable or related to the Licensed Premises whether or not recorded in any public record.

10. **No Transfer or Third Party Beneficiary Rights.** Licensee shall not transfer, assign, lease, sublease, license, sublicense or in any other manner, convey this Licensee or allow another party to occupy or use the Licensed Premises, except that Licensor acknowledges and agrees that Licensee may employ one or more contractor(s) to perform work for and on behalf of Licensee and that such contractor(s) may utilize the Haul Road and Licensed Premises for and in their performance of work directly related to Licensee's authorized use of the Licensed Premises. Neither this License, nor the Licensor, confer any right, benefit or remedy, either intended or incidental, upon any party other than Licensee. Licensee shall not enter into any contract or agreement which conflicts with or is contradictory to the terms, conditions and provisions of this License.

11. **Governing Law and Venue.** All litigation, legal actions, and legal proceedings which arise or result from, and/or are in any way caused by, associated with, related to, or connected with this License are and shall be governed and interpreted according to the laws of the State of Florida (excluding its conflicts of laws provisions) and the federal laws of the United States of America and in the event of any litigation arising hereunder, the venue for any such litigation, shall be in any federal or state court having jurisdiction in Palm Beach County, Florida. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

12. JURY TRIAL WAIVER. LICENSOR AND LICENSEE KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE NOW AND FOREVERMORE, EACH AND ALL OF THEIR RIGHT(S) THAT EITHER PARTY HAS NOW OR MAY HAVE AT A FUTURE TIME TO A TRIAL BY JURY WITH RESPECT TO ANY LITIGATION UNDER, BASED UPON, ARISING FROM, ASSOCIATED OR CONNECTED WITH, OR RELATED TO THIS LICENSE AND/OR ANY DOCUMENT CONTEMPLATED TO BE EXECUTED IN CONJUNCTION HEREWITH, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENT (WHETHER ORAL OR WRITTEN) OR ACTION OF OR BY LICENSOR AND/OR LICENSEE. ANY PARTY HERETO MAY FILE A COPY OF THIS LICENSE WITH ANY COURT AS CONCLUSIVE EVIDENCE OF THE CONSENT OF THE PARTIES HERETO TO THE WAIVER OF ANY RIGHT THEY MAY HAVE TO TRIAL BY JURY. THIS SECTION SHALL SURVIVE TERMINATION OF THIS LICENSE COEXTENSIVELY WITH OTHER SURVIVING TERMS, CONDITIONS AND PROVISIONS OF THIS LICENSE.

13. Attorneys' Fees. If litigation occurs between the parties under or related to this License, then the prevailing party in each such litigation shall be entitled to recovery from the non-prevailing party of all of the prevailing party's reasonable attorneys' fees and paralegals' fees and court costs incurred due to all trial and appellate court proceedings. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

14. Entire Agreement. This License contains and constitutes all of the rights, privileges, terms, conditions, provisions, covenants, promises, requirements, obligations and duties of the entire understanding and agreement between Licensor and Licensee, and there are not any other agreements, terms, conditions, provisions, covenants, promises, requirements, obligations or duties other than those set forth herein, and this License supersedes all prior discussions, negotiations, understandings and agreements between the parties, whether oral or written.

15. Amendments. This License shall not be amended, modified, altered or changed, except by a subsequent written agreement mutually executed by and between Licensor and Licensee, or their respective successors or assigns.

16. Severability. If any term, condition, provision, obligation, duty, or requirement of this License is determined by appropriate judicial authority to be illegal or otherwise invalid, then such term, condition, provision, obligation, duty, or requirement shall be given its nearest legal meaning or be construed as deleted as such authority determines, and the remainder of this License shall be construed to be in full force and effect.

17. Headings and Gender. All section headings in this License are inserted only for convenience and ease of reference and do not limit or restrict the scope, meaning or intent of any term, condition, provision, obligation, duty, or requirement of this License and shall not be considered in the construction or interpretation of any term, condition, provision, obligation, duty, or requirement of this License. In construing this License, the singular shall be held to include the plural, the plural shall include the singular, and the use of any gender shall include every other and all genders.

18. Agreement Construction. This License shall not be construed more strictly against one party than against the other, merely by virtue of the fact that it may have been prepared by legal counsel for one of the parties, it being recognized that both Licensor and Licensee entered into it freely without duress, and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this License or any exhibits, schedules, addendums or amendments hereto.

19. Recording. Licensee shall be responsible at its sole expense to pay for any and all costs to record this agreement and all documents hereto in any and all official public records.

20. **Notices**. Except for initial notification of emergency or Environmental Violation which may be initially delivered by voice over telephone network, and environmental inspection reports to be delivered via Email, each notice pursuant to this License sent by either Licensor or Licensee to the other shall be in writing and sent by at least one of the following methods: (i) Email; or by (ii) United States Postal Service ("**USPS**") via certified mail with return receipt requested; or by (iii) Federal Express ("**FedEx**"), United Parcel Service ("**UPS**") or other carrier via next-day delivery with delivery confirmation. Each notice shall be sent with all postage and related fees prepaid in advance by the sender sufficient to carry each notice without cost to the addressee to its destination as follows:

To Licensor at:
FPL
CRE / JB - Asset Management
700 Universe Blvd.
Juno Beach, FL 33408

To Licensee at:
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477

or any other address which Licensor and/or Licensee may subsequently designate for themselves per advance written notice. Each notice shall be deemed given and served upon the addressee as of the calendar date when it is delivered to the addressee or as of the calendar date when delivery to the addressee is first attempted, whichever occurs first.

21. **Indemnity**. Licensee acknowledges, understands, accepts and agrees that each and all of Licensee's privileges, rights, covenants, promises, requirements, obligations and duties contained in this License are conditioned upon and undertaken at Licensee's sole risk, cost and expense, but at no cost or expense of any kind to Licensor Entities. To the fullest extent permitted by law, Licensee shall indemnify, defend, save harmless, and release the Licensor Entities from all litigation, lawsuits, legal actions, legal proceedings, claims, demands, arbitrations, liabilities, losses, fines, penalties, damages, awards, settlements, costs, expenses and fees (fees to include, but not be limited to attorneys' fees, paralegal's fees, expert witness fees, court fees, and all other costs) related to and through all trial and appellate court proceedings and administrative legal proceedings, which arise, result from, and/or are in any way caused by, associated with, related to, or connected with this License and/or by the occupancy, use or maintenance of the Licensed Premises and/or facilities therein by Licensee and/or by Licensee's officers, directors, employees, agents, contractors, subcontractors, vendors, members, invitees, or other parties, whether or not directly or indirectly arising from, due to, caused by, associated with, related to, or in any way connected with negligence of Licensor Entities. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

22. **Insurance**. Licensee shall have and maintain at all times during the Term without any lapse or interruption and at Licensee's sole cost and expense, the following described minimum forms of insurance coverages with Licensee as named insured, with insurance companies acceptable to Licensor (insurers rated "A-, VII" or higher by A.M. Best's Key Rating Guide are deemed acceptable to Licensor) that are licensed to do business in the State of Florida:

(i) Commercial General Liability Insurance covering liability arising out of premises, operations, bodily injury, property damage, products and completed operations, independent contractors and liability insured under and insured contract (contractual liability), with minimum amount of Three Million Dollars ($3,000,000.00) per occurrence and in the aggregate.

(ii) Business Automobile Liability Insurance coverage with minimum amount of One Million Dollars ($1,000,000.00) per occurrence, combined single limit for bodily injury and property damage liability per accident. Such policy shall insure owned, non-owned, leased and hired vehicles.

(iii) Workers' Compensation Insurance coverage as mandated by applicable laws of the State of Florida.

(iv) Employers' Liability Insurance, including Occupational Disease, with minimum amounts of One Million Dollars ($1,000,000.00) for bodily injury by accident, of One Million Dollars ($1,000,000.00) for bodily injury by disease/policy, and of One Million Dollars ($1,000,000.00) for bodily injury by disease/employee.

Except for Workers' Compensation Insurance, each above insurance coverage required by this License shall name and endorse "Florida Power & Light Company" as an "additional insured" party, and include a "waiver of subrogation" clause in favor of "Florida Power & Light Company", and include a "severability of interests" or "separation of insureds" clause, and provision that each insurance coverage is primary and non-contributory to any other insurance that is or may be maintained by or on behalf of "Florida Power & Light Company".

Licensee shall cause and require by separate contractual agreement(s) by and between Licensee and its General Contractor ("**GC**") who will enter upon, occupy and use the Licensed Premises as a Haul Road for the Broward Intracoastal Waterway Deepening Project, that such GC shall have and maintain at all times during the Term of this License without any lapse or interruption, and at GC sole cost and expense, each and all of the following described minimum forms of insurance coverages with GC as named insured and both "Florida Inland Navigation District and "Florida Power & Light Company" named as additional insured parties, with insurance companies acceptable to Licensee and Licensor (insurers rated "A-, VII" or higher by A.M. Best's Key Rating Guide are deemed acceptable to Licensor) that are licensed to do business in the State of Florida:

(i) Commercial General Liability Insurance covering liability arising out of premises, operations, bodily injury, property damage, products and completed operations, independent contractors and liability insured under and insured contract (contractual liability), with minimum amount of Fifteen Million Dollars ($15,000,000.00) per occurrence and in the aggregate.

(ii) Environmental Impairment Liability Insurance coverage which includes clean-up costs on a claims-made basis with minimum amount of Eight Million Dollars ($8,000,000.00) per claim, subject to a maximum deductible of Two Hundred and Fifty Thousand Dollars ($250,000.00) per claim.

(iii) Business Automobile Liability Insurance coverage with minimum amount of Million Dollars ($1,000,000.00) per occurrence, combined single limit for bodily injury and property damage liability per accident. Such policy shall insure owned, non-owned, leased and hired vehicles.

(iv) Workers' Compensation Insurance coverage as mandated by applicable laws of the State of Florida.

(v) Employers' Liability Insurance, including Occupational Disease, shall be provided with minimum amounts of One Million Dollars ($1,000,000) for bodily injury by accident, of One Million Dollars ($1,000,000.00) for bodily injury by disease/policy, and of One Million Dollars ($1,000,000.00) for bodily injury by disease/employee.

Except for Workers' Compensation Insurance, each insurance coverage with GC as named insured and required by this License shall name and endorse "Florida Inland Navigation District" and "Florida Power & Light Company" as "additional insured" parties, and include a "waiver of subrogation" clause in favor of "Florida Inland Navigation District" and "Florida Power & Light Company", and include a "severability of interests" or "separation of insureds" clause, and provision that each insurance coverage is primary and non-contributory to any other insurance that is or may be maintained by or on behalf of "Florida Inland Navigation District" and "Florida Power & Light Company"

If any insurance coverage with GC as named insured and required by this License designates coverage on a "claims made" basis, then the retroactive date of that insurance coverage shall be the same as or prior to the Effective Date of this License so as to protect the interests of Florida Inland Navigation District and Florida Power & Light Company, and shall survive the termination of this License and expiration of any applicable warranty period until expiration of the maximum statutory period of limitations pursuant to applicable law for actions based in contract or in tort.

Prior to the first day of the Term and then each year thereafter during the Term, Licensee shall send to Licensor, an ACORD "Certificate of Insurance" for each insurance coverage required by this License and which provides evidence satisfactory to Licensor that each such insurance coverage is effective and in force according to the conditions described herein. If any insurance coverage required by this License is cancelled or will become cancelled or non-renewed, then Licensee shall send to Licensor, a Certificate of Insurance or binder for another insurance policy to avoid any lapse of required insurance coverage. Licensor may, on one or more occasions, by providing Licensee with thirty (30) days advance written notice, require Licensee to alter and adjust the amount of any or all insurance coverage(s) to ensure compliance with Licensor's risk management policy. Upon Licensor's request, Licensee shall provide Licensor with complete copies of any or all insurance policies required by this License. Required minimum insurance coverage amounts may be met and evidenced with a combination of primary and excess insurance coverage(s).

23. Default and Waiver. If Licensor believes that Licensee has failed and/or is failing to adequately perform, or comply with, any term, condition, provision, covenant, promise, requirement, obligation or duty contained in this License, then Licensor may, but is not obligated to, send a written notice of default to Licensee to describe the default. Licensee shall immediately commence all action necessary to cure each default. A notice of default may also describe specific action(s) which Licensee must undertake to correct each default. **If Licensee defaults regarding any of its insurance coverage obligations as required by this License and/or fails at any time for any reason to abide by each and all of Licensee's covenants, promises, requirements, obligations and duties regarding any insurance coverage(s) described and required by this License, then Licensor may elect to immediately terminate this License, in which case, this License shall become terminated as of the same date that Licensee receives notice from Licensor of such immediate termination.** All Licensee defaults not related to the Insurance Policy must be cured by Licensee no later than the thirtieth (30^{th}) calendar day which occurs after Licensee receives Licensor's notice of default, and if a default is not cured by Licensee within the prescribed thirty-day time period, then Licensor may pursue any and all remedies available at law or in equity, or available pursuant to this License, or otherwise available, including, but not limited to immediate termination of this License. Licensor may, but is not obligated to also commence any other action to cause Licensee's default to be cured if Licensor believes that such action is necessary and prudent, and in such event, Licensee shall reimburse Licensor for all costs incurred by Licensor to cure Licensee's default(s). Licensor may notify Licensee of a default at any time regardless of the period of time which may have elapsed since the default first occurred or became known to Licensor, and the passage of time shall not constitute a waiver of Licensee's default nor a waiver of any term, condition, provision, covenant, promise, requirement, obligation or duty to which Licensee is bound or obligated to abide by, nor shall the waiver of any right occasioned by a default in any one or more instances constitute a waiver of any right occasioned by either a subsequent default of the same obligation or by any other default. Licensor shall not be considered in violation, breach or default of this License due to Licensee's inability to occupy or use the Licensed Premises at any time due to natural catastrophe, severe weather, war, civil unrest, or other incident or circumstance not directly caused by Licensor or within Licensor's control. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

24. Licensor's Right to Cure. Licensor may at any time without notice to Licensee, remove or cause to be removed by it or by its employees, agents, contractors, subcontractors, or other party acting on Licensee's behalf, all objects, materials, debris, or structures that Licensor believes will likely create a condition hazardous to persons or property or interfere with Licensor's electric utility service, and/or with Licensor Facilities, and/or with Licensor's occupancy and use of the Licensed Premises. Each cost expended by Licensor pursuant to this section which is caused by Licensee, or by Licensee's employee, agent, contractor, subcontractor, vendor or invitee, is and shall be reimbursed by Licensee to Licensor. If Licensee's occupancy and/or use of the Licensed Premises causes or results in an interruption of the delivery of Licensor's electric utility service, then Licensee shall reimburse Licensor for all costs related to each such interruption, including, but not limited to, Licensor's lost revenue and costs to restore electric utility service.

25. **Termination**. Licensee may elect to early terminate this License at any time and for any reason by sending Licensor a written notice of such termination at least thirty (30) days prior to the calendar date which the Licensee designates for this License to become terminated. Licensor may elect to early terminate this License at any time and for any reason by sending Licensee a written notice of such termination at least thirty (30) days prior to the calendar date which the Licensor designates for this License to become terminated. The last and final License Fee payment shall be calculated by prorating the monthly License Fee amount to a daily factor which shall then be multiplied by the number of days remaining through and including the calendar date on which this License becomes terminated. If Licensor elects to terminate that certain Consent Agreement with an effective date of the 24th day of August, 2015 by and between Florida Power & Light Company and Florida Inland Navigation District due to a default of that Consent Agreement by the Licensee herein (who is referred to as the Consentee in the Consent Agreement), then the Licensor herein may elect to also early terminate this License as of the same date the Consent Agreement becomes terminated or as of any other date thereafter.

26. **Surrender and Restoration**. On the same calendar date this License becomes terminated for any reason, Licensee shall cease all of its occupancy and use of the Licensed Premises, vacate and leave the Licensed Premises, and restore the Licensed Premises to a condition at least as good as the condition that existed on the first (1st) day of the Term. Licensee shall remove all personal property owned, leased or otherwise under the legal possession or control of Licensee and its employees, contractors, subcontractors, vendors and invitees and that is not affixed or attached to the Licensed Premises. Licensor, at its discretion and without any cost to Licensor, may direct Licensee to leave any or all facilities, improvements fixtures and/or attachments constructed or installed within the Licensed Premises by or for the Licensee. Licensor, at its discretion, may direct Licensee to remove at Licensee's sole expense, any or all facilities, improvements, fixtures or attachments constructed or installed within the Licensed Premises by or for the Licensee. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

27. **Holding Over.** If Licensee fails for any reason to ensure that it, along with each and all of its employees, agents, contractors, subcontractors, vendors and invitees, fully and completely vacate, surrender and restore the entire Licensed Premises as required by this License, then no tenancy, ownership or other legal interest in the Licensed Premises to the benefit of Licensee shall result therefrom, but such failure to vacate, surrender and restore the entire Licensed Premises as required by this License shall be deemed as a hold-over and an unlawful detainer by Licensee, which shall be subject to eviction, ejectment and/or other method of removal, and Licensor shall be entitled to immediately pursue any remedy available at law or in equity, pursuant to the terms of this License and/or otherwise available. In addition to other damages and reimbursements which Licensor may be entitled to or awarded, Licensee shall be obligated to pay to Licensor, a "**Penalty Fee**" which shall be calculated by prorating the monthly License Fee amount to a daily factor which shall then be multiplied by the number 2 and then further multiplied by the total number of days which occur between the calendar date on which this License became terminated and the calendar date on which Licensee fully vacates, surrenders and restores the entire Licensed Premises as required by this License. The Licensee shall also reimburse Licensor for all fees, costs and expenses incurred by Licensor to enforce compliance with this License and Licensor's legal rights, including all reasonable attorneys' fees, paralegals' fees, litigation expenses through all trial and appellate court proceedings, and other related costs and expenses. Licensee shall also be liable to Licensor for consequential, incidental and special damages, whether direct or indirect which Licensor incurs as a result of a failure by Licensee for any reason to ensure that the Licensed Premises is vacated, surrendered and restored as required by this License. This section shall survive termination of this License coextensively with other surviving terms, conditions and provisions of this License.

28. **Counterparts**. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which together shall constitute a single instrument.

IN WITNESS WHEREOF, Licensor and Licensee have caused this License to be signed and executed effective as of the Effective Date.

Witnesses for Licensor:

Signature: _____
Print Name: _____

Signature: _____
Print Name: _____

Licensor:
Florida Power & Light Company

By: _____
Name: _____
Title: _____

Witnesses for Licensee:

Signature: _____
Print Name: _____

Signature: _____
Print Name: _____

Licensee:
Florida Inland Navigation District

By: _____
Name: _____
Title: _____

Exhibit A (Sheet 1 of 1) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.

Exhibit B (Sheet 1 of 8) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.

FPL Safety 6 materials are available at: www.fpl.com/safety

Safety Rules

Always follow these Safety 6 rules to prevent the most common mistakes near power lines.

1. Work at a safe distance

This is the most important rule: Work at a safe distance from all power lines. The Occupational Safety and Health Administration (OSHA) requires that equipment be kept at least 10 feet away from power lines with voltages up to 50kV. For lines with voltages higher than 50kV, the required distance is even greater (see below). When uncertain of a power line's voltage, stay 20 feet away for voltages up to 350 kV and 50 feet away for voltages greater than 350kV. Cranes and derricks are required to take additional steps before beginning work (see OSHA Standards 29 CFR 1926.1400 effective Nov. 8, 2010). Call FPL at 1-800-375-4375 or your local electric utility to identify the voltage of power lines before you begin working. If you witness a violation of this rule, stay away from the equipment and warn the operator to move away from the power line.

FPL Power Line Voltages	OSHA Minimum Approach Distance* (OSHA 1926.1408 Table A)
0 to 50kV	10 feet
Over 50kV to 200kV	15 feet
Over 200kV to 350kV	20 feet
Over 350kV to 500kV	25 feet
Over 500kV to 750kV	35 feet

*Minimum distance for travel under power lines must comply with OSHA Rules.

Exhibit B (Sheet 2 of 8)

2. Stay calm, stay away

When operating a piece of equipment that contacts a power line	You should:
If you are **not** in danger from fire or from being struck by a power line	• Stay where you are. • Move the equipment away from the power line, if possible. • Warn others not to approach the equipment. • Call FPL at 1-800-4OUTAGE (1-800-468-8243) or your local electric utility for assistance.
If you **are** in danger and must get off the equipment	• Jump as far away from the equipment as you can and land with both feet together. (No part of your body should touch the equipment and the ground at the same time.) • Hop or shuffle away from the equipment with your feet together to reduce the risk of electric shock. • Once clear, do not return to the equipment until FPL declares it safe. • Call 911 and/or call FPL at 1-800-4OUTAGE (1-800-468-8243) or your local electric utility.
If a fellow worker is in danger	• Stay away. • Warn fellow workers to stay away. • Call 911 and/or call FPL at 1-800-4OUTAGE (1-800-468-8243) or your local electric utility.

Exhibit B (Sheet 3 of 8)

3. Ladders and lines don't mix

Before you begin working, look up and note the location of power lines. You can be seriously hurt or killed if the object you are holding or standing on contacts a power line.

- Before raising or extending any equipment capable of reaching a power line, check in all directions for power lines.
- Keep a safe distance from any power line, measuring from the end or tip of your own extended reach and including the end or tip of any object you are holding or carrying. Remember to allow even greater distance for safety near higher voltage lines such as transmission lines.
- Even nonmetallic ladders and equipment can conduct electricity.

Exhibit B (Sheet 4 of 8)

4. Call before you dig

One easy call to 811 starts the process of getting underground utility lines marked for free.

- Utility company locators will mark the approximate location and type of underground utilities with paint and flags.
- To avoid costly repairs and construction delays, be sure to contact **Sunshine State One Call of Florida at 811 or 1-800-432-4770** at least two full business days in advance of any excavation work.* Visit www.CallSunshine.com for more information.

**In accordance with the Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes.*

Exhibit B (Sheet 5 of 8)

5. Look up and live

Look up when working around overhead power lines, especially when trees are nearby. Branches can hide power lines from view.

- Look up for power lines when using tools of any kind. Even nonmetallic tools can conduct electricity.
- Cranes and derricks that approach working distance within 20 feet of power lines with operating voltages up to 350 kV, or within 50 feet of power lines with voltages greater than 350 kv, are mandated to take "encroachment prevention measures." See OSHA Standards 29 CFR 1926.1400.
- Look up for power lines when putting up scaffolding, framing a building, painting, pruning trees or picking fruit.
- Trees can conduct electric current. Before moving a tree under a power line, look up and determine the overhead clearance from the top of the tree. Keep a safe distance away as required by OSHA.
- Look up for power lines when working on top of buildings.
- Before transporting large boats or large objects, identify a safe route that avoids power lines. If you cannot avoid power lines, please call 1-800-375-4375 to coordinate transport and temporary removal* or de-energizing of FPL power lines.

** Charges may apply for temporary removal or relocation of power lines. You may need to coordinate transportation of oversized objects with local authorities.*

Exhibit B (Sheet 6 of 8)

6. Downed lines can be deadly

Always assume that any downed power line is energized, and stay away.

- Do not touch or attempt to move any power line.
- Call 911 and 1-800-4OUTAGE (1-800-468-8243) or your local electric utility immediately.
- If a fellow worker touches a downed line or is handling equipment that contacts a power line, remember that any rescue attempt places you in danger.
- If you must rescue a person in contact with a power line, never use your hands. Use a dry, nonconductive object to move the person to safety.

Important contact information

Call 911 for any emergency.

Call 1-800-4 OUTAGE (1-800-468-8243) to report contact with power lines, downed power lines or an outage.

Call 811 before you dig.

Call 1-800-375-4375 for identification of power line voltage or help with safe transportation of large boats or other large objects.

To order more copies of this poster and/or the Safety 6 Brochure, call 1-800-375-2434.

Occupational Safety & Health Administration: www.OSHA.gov

Exhibit B (Sheet 7 of 8)

FPL materiales 6 Seguridad están disponibles en

Según la Oficina de Estadísticas Laborales, los accidentes de trabajo matan a más de 5.000 trabajadores en EE.UU. cada año. Urgimos a nuestros clientes y empleados ¡que utilicen hábitos de trabajo seguros para prevenir lesiones graves y salvar vidas!

Siempre siga las 6 reglas de seguridad para evitar los errores más comunes cerca de las líneas eléctricas.

1 Mantenga una distancia prudente

Esta es la regla más importante: trabaje a una distancia segura de todas las líneas eléctricas. La Administración de Seguridad y Salud Ocupacional (OSHA) requiere que el equipo se mantenga por lo menos a **10 pies de distancia de las líneas eléctricas** de 0–50 kV. Para las líneas de voltaje más alto, la distancia requerida es aún mayor (vea el cuadro abajo). Cuando no esté seguro en cuanto al voltaje de una línea eléctrica, manténgase a 20 pies de distancia de voltajes hasta de 350 kV y a 50 pies de distancia de voltajes superiores a 350 kV. Las **grúas y mástiles de carga** deben tomar medidas adicionales antes de comenzar un trabajo (vea Estándares OSHA 29 CFR 1926.1400 vigentes desde nov. 8, 2010). Llame a FPL al 1-800-375-4375 o a su empresa de energía eléctrica para identificar el voltaje del tendido eléctrico antes de que usted comience a trabajar.

Si usted es testigo de una violación de las reglas, manténgase alejado de la maquinaria y avísele al operador que se aleje de la línea eléctrica.

Voltaje de líneas eléctricas de FPL	Distancia de acercamiento mínima de OSHA (OSHA 1926.1408 Cuadro A)
0 – 50 kV	10 pies
Más de 50 kV – 200 kV	15 pies
Más de 200 kV hasta 350 kV	20 pies
Más de 350 kV hasta 500 kV	25 pies
Más de 500 kV hasta 750 kV	35 pies

2 Mantenga la calma; manténgase alejado

Cuando esté operando un equipo que haga contacto con la línea eléctrica	Usted debe
Si usted no está en peligro de que ocurra un incendio o de ser lesionado por una línea eléctrica	• Quédese donde está. • Colocar la maquinaria lejos de la línea eléctrica, si es posible. • Advierta a los demás que no se acerquen al equipo. • Llamar a FPL al 1-800-4OUTAGE (1-800-468-8243) o llamar al 911 para contactar a FPL o a su compañía local de energía eléctrica para pedir ayuda.
Si usted está en peligro debe bajarse de la maquinaria	• Saltar tan lejos como sea posible de la maquinaria con los pies juntos. (Ninguna parte de su cuerpo debe tocar el equipo y el suelo al mismo tiempo). • Saltar manteniendo los pies juntos alejándose de la maquinaria para reducir el riesgo de recibir un choque eléctrico. • Una vez fuera del área, no regresar hasta la maquinaria hasta que FPL declare que esto es seguro. • Llamar al 911 y/o llamar a FPL al 1-800-4 OUTAGE (1-800-468-8243) o a su compañía local de energía eléctrica para pedir ayuda.
Si un compañero de trabajo está en peligro	• Manténgase alejado. • Advierta a compañeros de trabajo que se mantengan alejados. • Llamar al 911 y/o llamar a FPL al 1-800-4OUTAGE (1-800-468-8243) o a su compañía local de energía eléctrica para pedir ayuda.

3 Las escaleras de mano y las líneas no se complementan

Antes de comenzar a trabajar, busque y señale la ubicación de las líneas eléctricas. Usted puede resultar gravemente herido o puede morir si el objeto en sus manos o donde esté parado toca un cable eléctrico.

- Antes de levantar cualquier maquinaria capaz de alcanzar una línea eléctrica, mire a los lados para ver si hay líneas eléctricas.
- Mantenga una distancia segura de cualquier línea de alto voltaje, midiendo desde el extremo o punta de su alcance e incluyendo cualquier objeto en sus manos. Recuerde mantener aún una mayor distancia cerca de líneas de alto voltaje, tales como las líneas de transmisión.
- Recuerde que hasta las escaleras no metálicas y la maquinaria pueden conducir electricidad.

4 Llame antes de excavar

- Una llamada sencilla al 811 inicia el proceso de marcar las líneas subterráneas de energía eléctrica de forma gratuita.
- Localizadores de empresas de energía eléctrica marcarán la ubicación aproximada y el tipo de instalación subterránea con pintura y banderas.
- Para evitar reparaciones costosas y retrasos en la construcción, asegúrese de contactar a Sunshine State One Call of Florida al 811 o al 1-800-432-4770 por lo menos dos días hábiles completos antes de cualquier trabajo de excavación.* Visite www.CallSunshine.com para más información.

** De acuerdo con la Ley de Seguridad y Prevención de Daños a Instalaciones Subterráneas, Capítulo 556, Estatutos de la Florida*

Exhibit B (Sheet 8 of 8)

5 Mire hacia arriba y viva

Mire hacia arriba cuando esté trabajando cerca de líneas eléctricas, especialmente cuando hay árboles alrededor. Las ramas pueden ocultar de la vista las líneas eléctricas.

- Busque líneas eléctricas mientras utilice cualquier tipo de herramienta. Las herramientas no metálicas también pueden conducir electricidad.
- A las grúas y mástiles de carga que se acercan a un perímetro donde se trabaja y que sea dentro de 20 pies del tendido eléctrico con voltajes operativos hasta de 350 kV, o dentro de 50 pies del tendido eléctrico con voltajes superiores de 350 kV, se les requiere que tomen "medidas preventivas de traspaso de límites". Vea Estándares OSHA 29 CFR 1926.1400.
- Busque líneas eléctricas cuando está colocando andamios, colocando la estructura de un edificio, pintando, podando árboles o recogiendo fruta.
- Antes de mover un árbol bajo una línea eléctrica, busque y determine la altura máxima de levantar el árbol. Mantenga una distancia segura, como es requerido por OSHA. Los árboles pueden conducir electricidad.
- Mire dónde están las líneas eléctricas mientras trabaja en la parte superior de los edificios.
- Antes de transportar barcos de gran tamaño u objetos grandes, por favor identifique una ruta segura que evite las líneas eléctricas. Si usted no puede evitar las líneas eléctricas, póngase en contacto con el 1-800-375-4375 para coordinar el transporte y la eliminación temporal* de la energía o líneas eléctricas de FPL.

** Algunas cargas se pueden aplicar por reubicar o mover temporalmente las líneas eléctricas. Puede que tenga que coordinar el transporte de objetos grandes con las autoridades locales.*

6 Líneas caídas pueden ser mortales

Asuma siempre que cualquier cable caído puede tener corriente eléctrica y manténgase alejado.

- No toque ni intente mover ninguna línea eléctrica.
- Llame al 911 y al 1-800-4OUTAGE (1-800-468-8243) o a su empresa de energía eléctrica local inmediatamente.
- Si un compañero de trabajo toca una línea caída o está manejando equipos que pueden entrar en contacto con líneas eléctricas, recuerde que cualquier intento de rescate lo pone en peligro.
- Si tiene que rescatar a una persona en contacto con un cable eléctrico, nunca use sus manos. Utilice un objeto seco y que no sea un conductor de electricidad para mover a la persona a una zona segura.

Información de contacto importante

Llame al 911 en cualquier caso de emergencia.

LLAME AL 1-800-4OUTAGE
(1-800-468-8243)
para reportar contacto con líneas eléctricas, cables de electricidad caídos o un apagón.

Llame al 811 antes de excavar.

Llame al 1-800-375-4375 para identificar el voltaje del tendido eléctrico o para obtener ayuda con el transporte seguro de barcos grandes u objetos de gran tamaño.

Para solicitar más copias de este folleto, llame al 1-800-375-2434.

Administración de Seguridad y Salud Ocupacional

www.OSHA.gov

www.FPL.com

FPL

1-15dCP-1105_15f120

Exhibit C (Sheet 1 of 1) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.

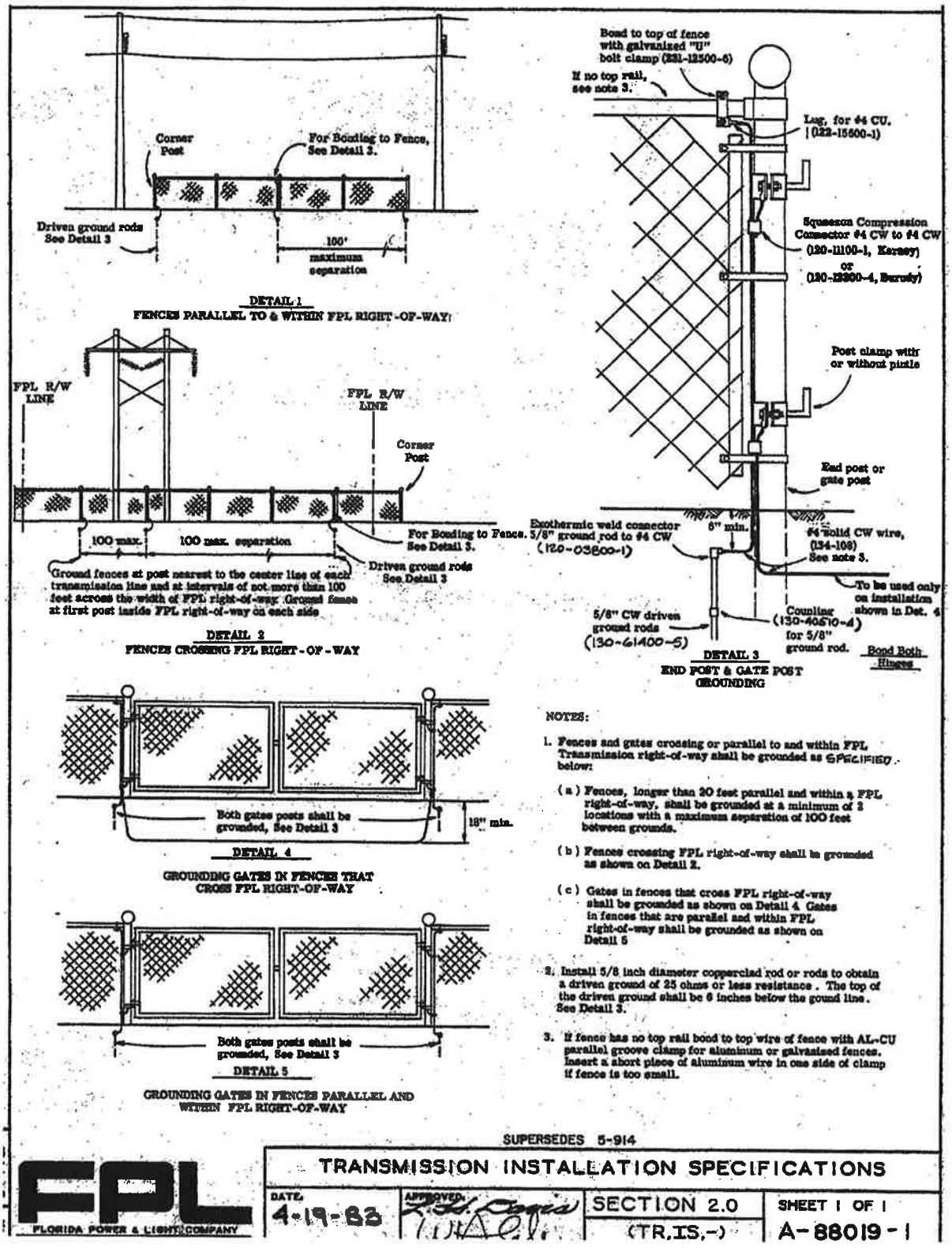
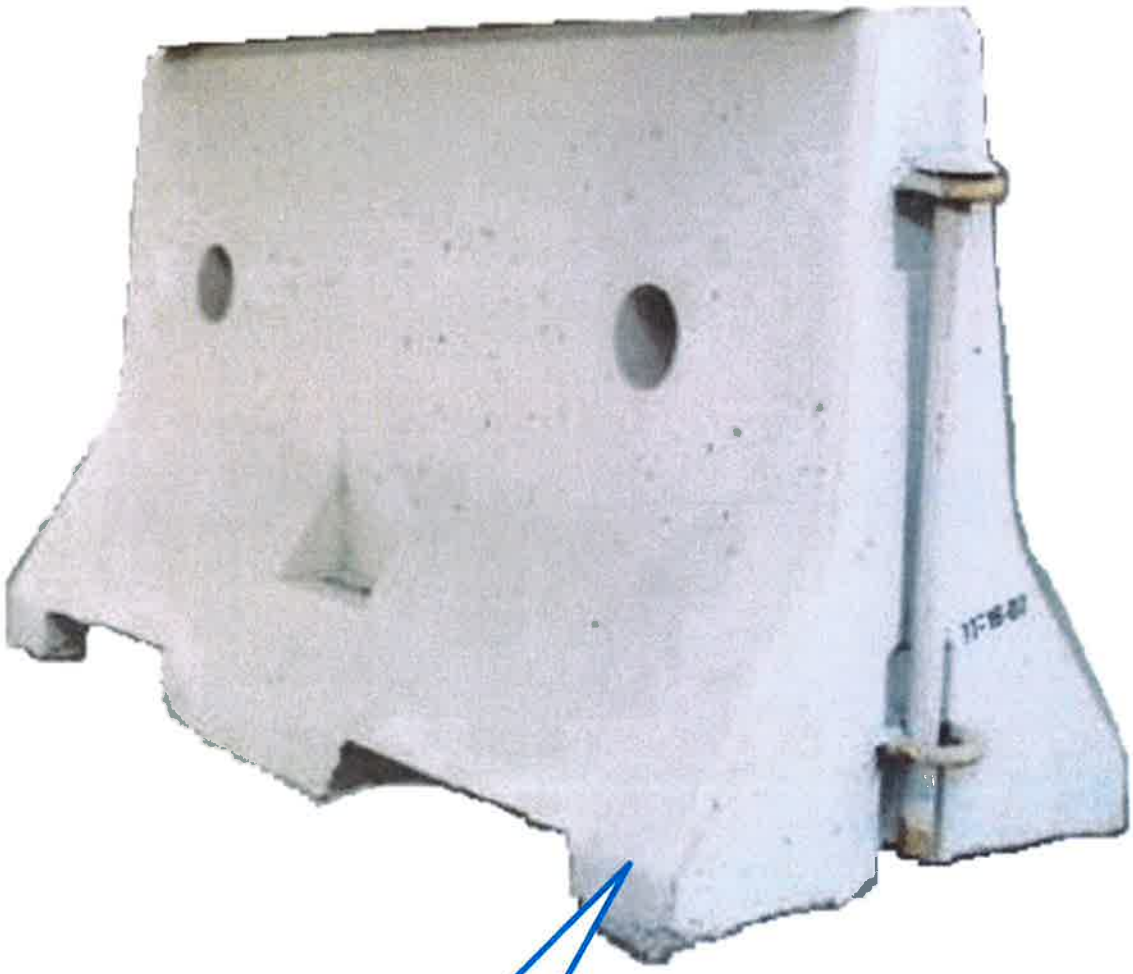
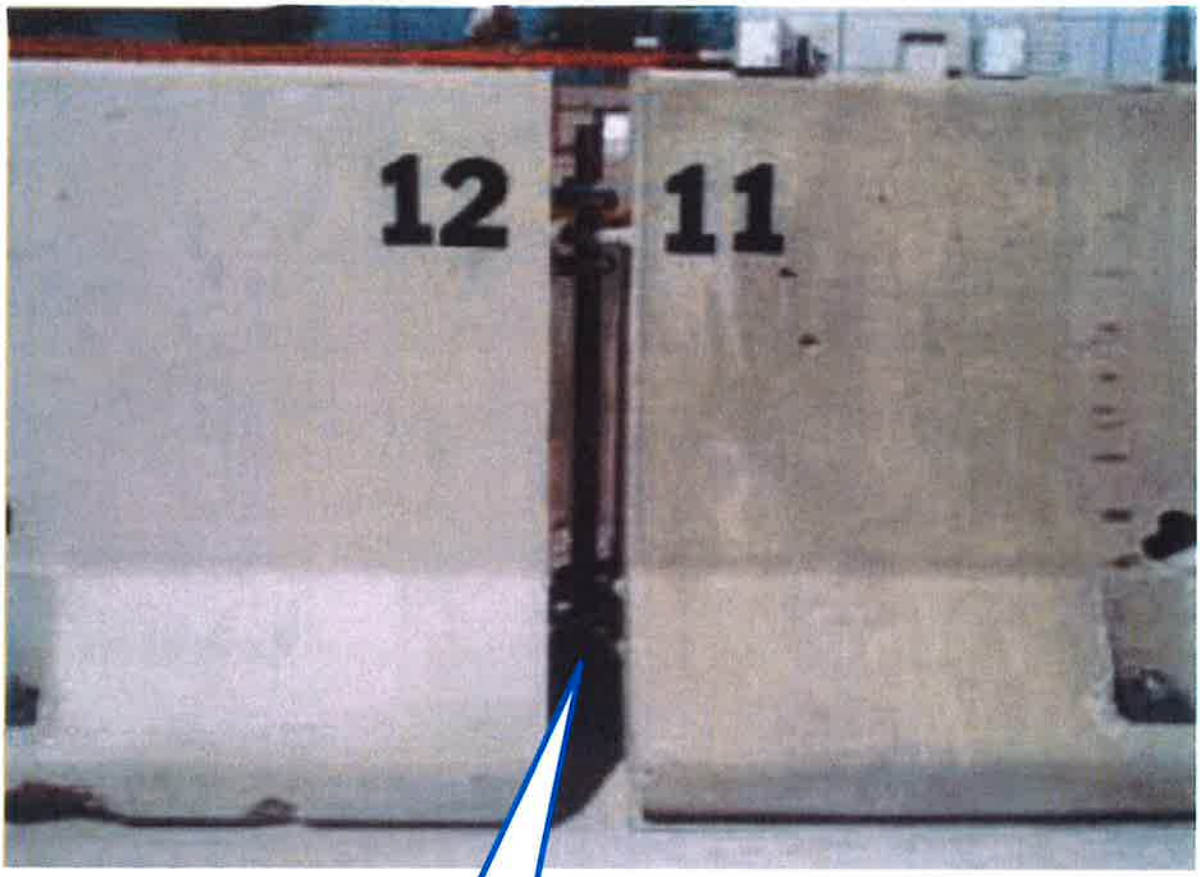


Exhibit D (Sheet 1 of 7) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.



Install a series of connected "Type K" concrete traffic barriers at each FPL facility structure as described and illustrated on subsequent pages of this exhibit.

Exhibit D (Sheet 2 of 7)



Connect each series of concrete traffic barriers into a composite unit with steel rods as illustrated by this photo.

Exhibit D (Sheet 3 of 7)

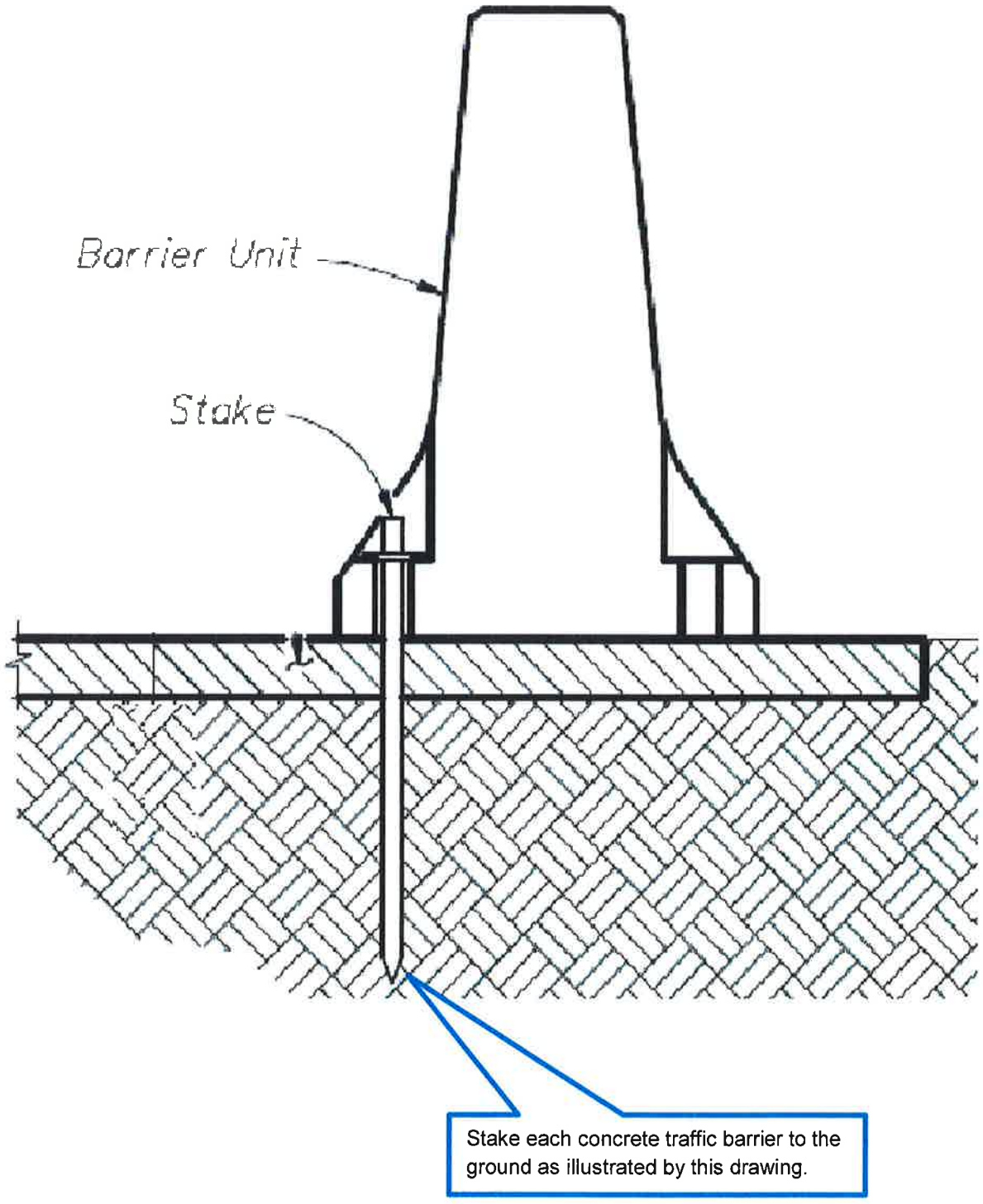


Exhibit D (Sheet 4 of 7)

Install plastic traffic crash barrels filled with sand and similar to this type between concrete barriers and each FPL facility structure as described and illustrated by the aerial photo on page 7 of this exhibit.

Exhibit D (Sheet 5 of 7)

Exhibit D (Sheet 6 of 7)

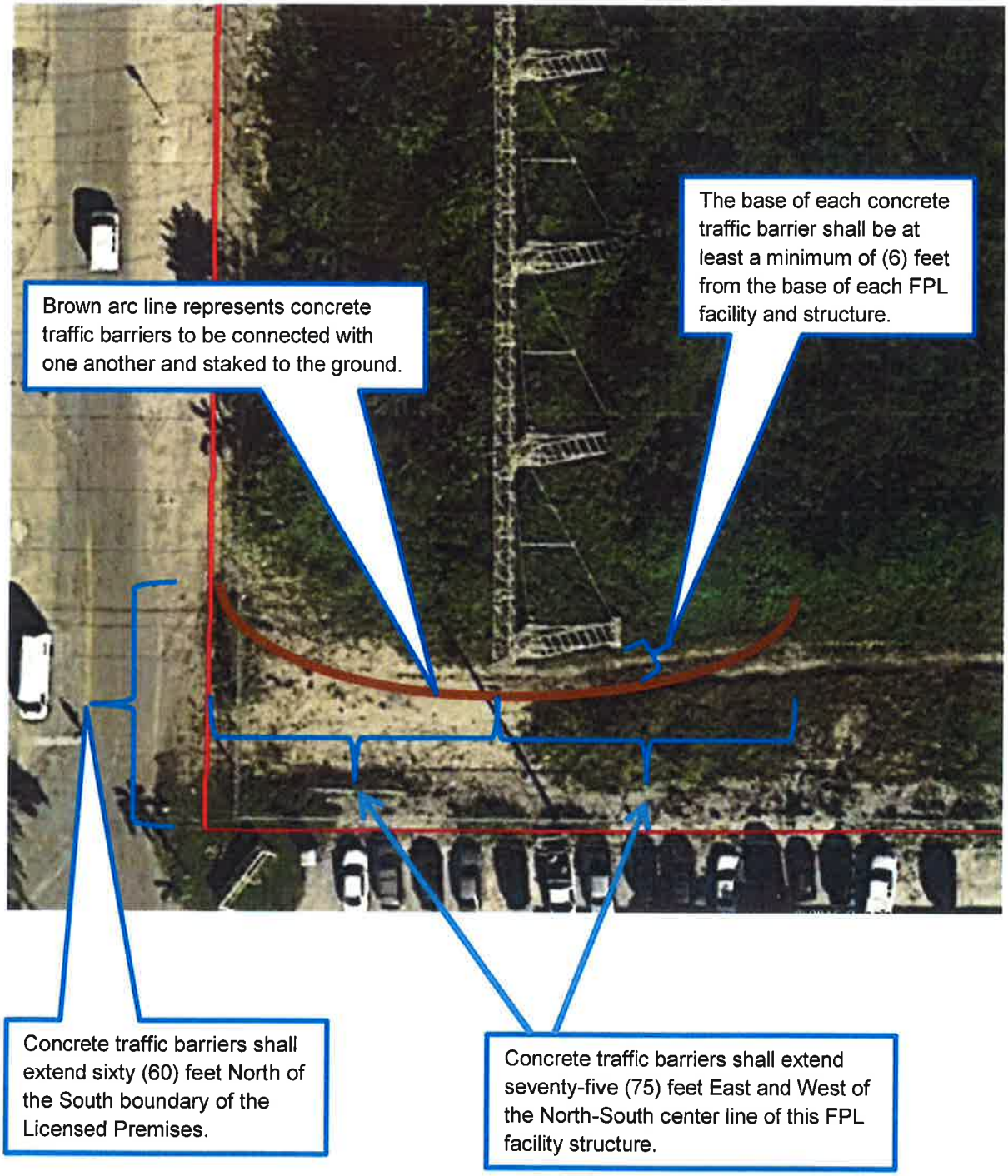


Exhibit D (Sheet 7 of 7)

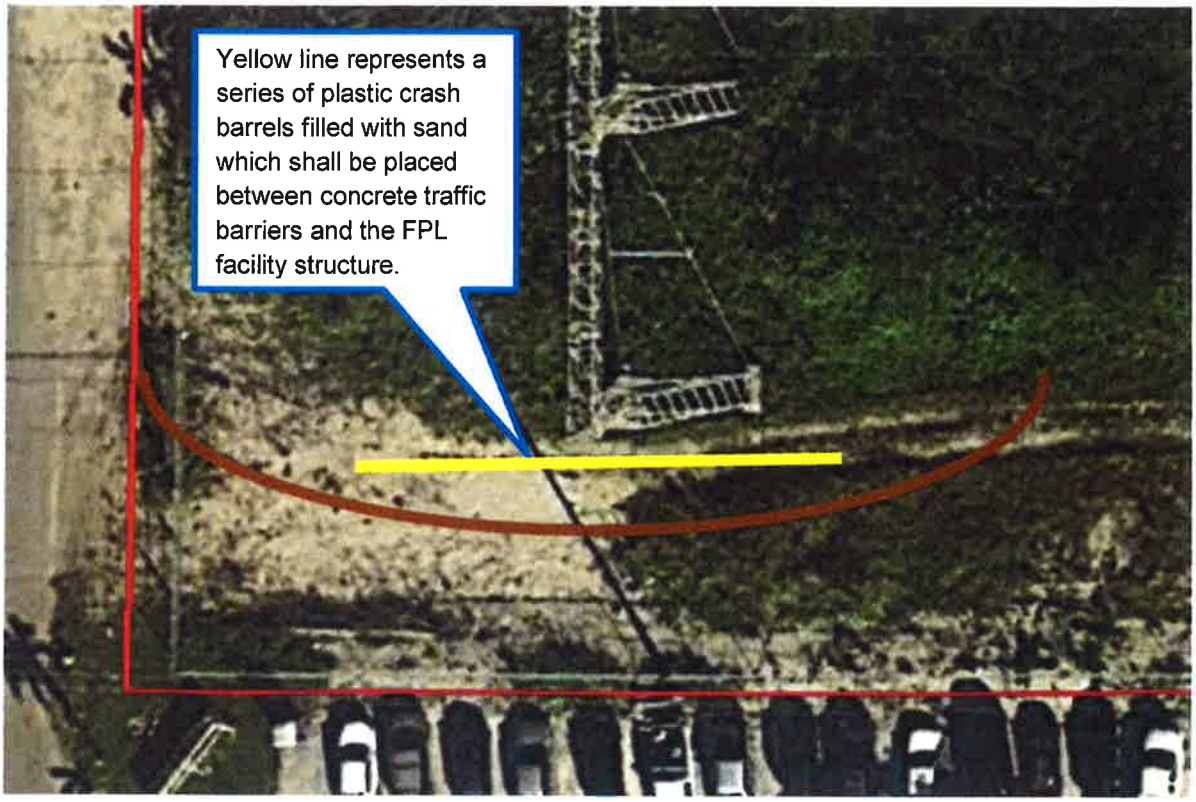
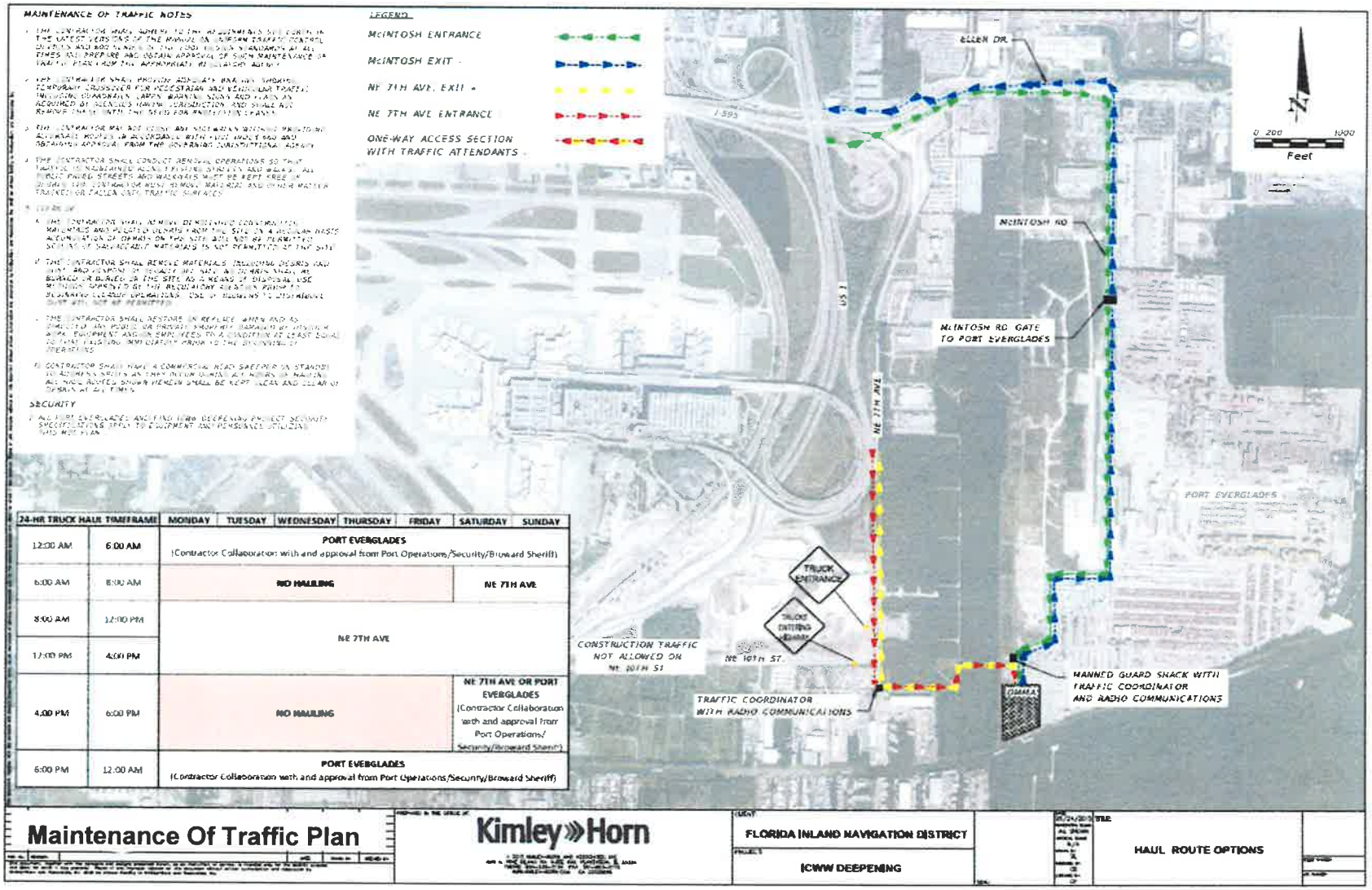


Exhibit E (Sheet 1 of 1) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.



24-HR TRUCK HAUL TIMEFRAME		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
12:00 AM	6:00 AM	PORT EVERGLADES (Contractor Collaboration with and approval from Port Operations/Security/Broward Sheriff)						
6:00 AM	8:00 AM	NO HAULING					NE 7TH AVE	
8:00 AM	12:00 PM	NE 7TH AVE						
12:00 PM	4:00 PM							
4:00 PM	6:00 PM	NO HAULING					NE 7TH AVE OR PORT EVERGLADES (Contractor Collaboration with and approval from Port Operations/ Security/Broward Sheriff)	
6:00 PM	12:00 AM	PORT EVERGLADES (Contractor Collaboration with and approval from Port Operations/Security/Broward Sheriff)						

Maintenance Of Traffic Plan

Kimley»Horn

FLORIDA INLAND NAVIGATION DISTRICT

ICWW DEEPENING

HAUL ROUTE OPTIONS

Exhibit F (Sheet 1 of 6) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.

This type of traffic speed limit signage must be posted at the locations illustrated and described by the aerial photo on page 6 of this exhibit.

Exhibit F (Sheet 2 of 6)

This type of traffic stop signage must be posted at the location illustrated and described by the aerial photo on page 6 of this exhibit.

This type of trespass warning signage must be posted at the location illustrated and described by the aerial photo on page 6 of this exhibit, and all sign letters must be a minimum of two (2) inches in height as required by Florida statute.

WARNING

NOT A PUBLIC ROAD

PRIVATE PROPERTY

THIS AREA IS A DESIGNATED CONSTRUCTION SITE, AND ANYONE WHO TRESPASSES ON THIS PROPERTY COMMITS A FELONY.
FS 810.09 (2) (d)

Exhibit F (Sheet 4 of 6)

This type of traffic signage must be posted at the location illustrated and described by the aerial photo on page 6 of this exhibit.

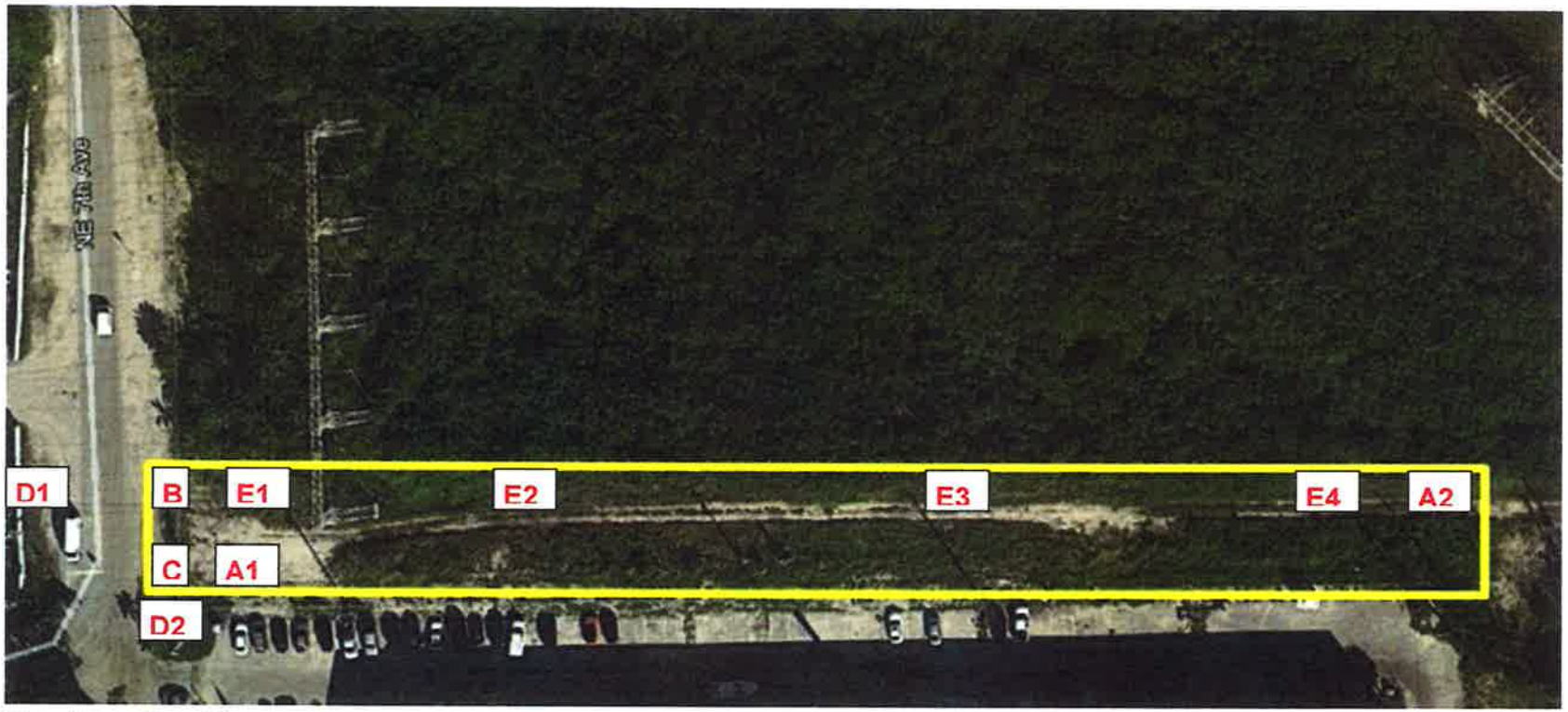
This type of wetland protection signage must be posted sixty (60) feet North of the South boundary line of the Licensed Premises at the locations illustrated and described by the aerial photo on page 6 of this exhibit.

Protected Mangrove Wetland Area

Do Not Mow, Apply Herbicides, or Disturb

Exhibit F (Sheet 6 of 6)

Yellow lines represent approximate boundaries of the Licensed Premises. Licensee shall install and maintain at all times, all required signage according to the illustration and sign location key below.



Sign Location Key

Locations of speed limit signs = **A1** for Eastbound Haul Road traffic and **A2** for Westbound Haul Road traffic.
Location of a stop sign = **B** for Westbound Haul Road traffic.
Location of a trespass warning sign = **C** with sign text facing West toward 7th Avenue.
Locations of "Trucks Entering And Leaving Roadway" signs = **D1** and **D2** for 7th Avenue and Taylor Lane traffic.
Locations of wetland protection signs = **E1** , **E2** , **E3** and **E4** with each sign text facing South.

Exhibit G (Sheet 1 of 1) to that certain License Agreement with an Effective Date of the 1st day of December, 2015 by and between Florida Power & Light Company AND Florida Inland Navigation District.

Employees, contractors and subcontractors of Florida Inland Navigation District must report each actual and suspected Environmental Violation by calling FPL per the following instructions no later than one (1) hour immediately after discovery.

Call FPL Customer Service at **1 – 800 – 468 – 8243**

Press 1 for the first menu option

Press 5 for the next menu option

Describe the incident and location to the FPL representative.

The location is: FPL transmission corridor East of the intersection of 7th Avenue and Taylor Lane in Dania Beach.

Client: FIND
Project: Broward County ICWW Deepening
Project #: c2005-076

Prepared by: John F. Adams, P.E.
Date: 10/30/2015

Opinion of Probable Construction Cost
Broward County Deepening
Haul Road
Costs to Implement FPL Terms and Conditions

Item	Description	Unit	Estimated Quantity	Unit Price	Total[1] Cost [$]
	General Items				
1.01	Contractor's Bonds and Insurance	LS	1	5.0%	$ 1,875.00
1.02	Taxes and Fees	LS	1	5.0%	$ 1,875.00
1.03	Construction Quality Control Testing	LS	1	10.0%	$ 3,750.00
1.04	Independent Inspection	2/MO	30	$ 1,400.00	42,000.00
Subtotal — General Items					**$ 49,500.00**
	Items Added by FPL Terms and Conditions				
2.01	Aggregate Base Course	SY	325	$ 14.40	$ 4,680.00
2.02	Gravel Topping	CY	20	$ 60.00	$ 1,200.00
2.03	Concrete Pavement	SY	120	$ 48.00	$ 5,760.00
2.04	Concrete Traffic Barriers - Type K	LF	165	$ 18.00	$ 2,970.00
2.05	Traffic Impact Barrels	EA	39	$ 540.00	$ 21,060.00
2.06	High Visibility Paint	LS	1	$ 1,800.00	$ 1,800.00
Subtotal — Items Added by FPL Terms and Conditions					**$ 37,470.00**
4.01	FPL Lease	MO	15	$ 6,370.00	$ 95,550.00
GRAND TOTAL					**$ 182,520.00**

General Notes:

1. Taylor Engineering developed this opinion of probable construction cost based on review of preliminary lease documents by FPL.

2. This estimate considers that the prices will be negotiated with the existing dredge contractor.

3. The estimated materials quantities and unit costs represent Taylor Engineering's best judgment as a professional design firm familiar with the type of proposed construction. Taylor Engineering has no control over the availability or cost of labor, equipment, or materials; market conditions, or the Contractor's methods of pricing. Accordingly, Taylor Engineering makes no warranty, express or implied, that the actual bids or negotiated prices will not vary from this Opinion of Probable Cost.

4. Some cost are rounded to whole numbers.

TAYLOR ENGINEERING, INC.
Delivering Leading-Edge Solutions

October 30, 2015

Mr. Mark Crosley
Executive Director
Florida Inland Navigation District
1314 Marcinski Rd
Jupiter, FL 33477

RE: Scope of Professional Engineering Preliminary Design and Permitting Services
Okeechobee Waterway Cut 1 (Crossroads) Sediment Basin and Channel Alignment Alternatives
Martin County, Florida

Mr. Crosley:

Per your request, Taylor Engineering has prepared the attached Scope of Services (Attachment A) and Cost Proposal (Attachment B) for a proposed project for initial dredging of a sediment basin on the eastern end of Okeechobee Waterway (OWW) Cut 1 (OWW-E), analysis of channel alignment alternatives to reduce maintenance dredging of OWW Cut-1W and Cut-2, in Martin County, FL. We propose the following tasks to accomplish these services:

Task 1 – Preliminary Sediment Basin Design
Task 2 – Evaluation of OWW Navigation Channel Re-Alignment
Task 3 – Submerged Aquatic Vegetation Survey Coordination
Task 4 – Sediment Basin Permitting

Taylor Engineering will complete the work described herein for a cost-plus-maximum fee of $164,600.06. Of this amount, $18,650.00 represents the proposed fee for our surveying sub-consultant Morgan & Eklund. Their proposal is included as Attachment C. We selected Morgan & Eklund due to their recent survey work in Martin County in 2014 and 2015, specifically at the Crossroads area, under direct contract with the FIND. We can begin work upon your notice to proceed.

Taylor Engineering appreciates this opportunity to serve FIND. Please contact me if you have questions or comments.

Sincerely,

John Adams, P.E.
Senior Advisor, Waterfront Engineering

Attachments (3)
Figure (1)

ATTACHMENT A

SCOPE OF PROFESSIONAL ENGINEERING AND PERMITTING SERVICES OKEECHOBEE WATERWAY CUT 1 SEDIMENT BASIN DESIGN AND PERMITTING; MARTIN COUNTY, FLORIDA

INTRODUCTION

This scope of professional engineering and permitting services describes Taylor Engineering's effort to support a proposed project for initial dredging of a sediment basin on the eastern end of Okeechobee Waterway (OWW) Cut 1 (OWW-E) in Martin County, Florida (Figure 1). The primary objective of this sediment basin would be to reduce the frequency and long term costs of maintenance dredging of OWW Cut 1. Dredged material disposal would occur within the Florida Inland Navigation District's (FIND) Dredged Material Management Area (DMMA) M-5 facility or onto the beach south of the St. Lucie Inlet.

In July 2015 Taylor Engineering, under contract to the FIND, completed the *Okeechobee Waterway Cut 1 Sediment Basin Feasibility Study.* The FIND requested Taylor Engineering to conduct this study to identify and analyze the existing features, hydrodynamics, and sediment transport characteristics of the OWW Cut 1 area to determine whether alternatives exist that would reduce sediment inflow into OWW Cut 1. The study evaluated costs and benefits of 11 alternatives, of which Alternative 9 presented the best performance and largest cost savings among the functionally and economically feasible alternatives identified. Alternative 9 specified, in addition to the existing OWW Cut 1 maintenance dredging, dredging nearby shoals on both sides of OWW Cut 1 to elevation -10.0 ft Mean Lower Low Water (MLLW). The conclusions in this report supported proceeding with the permitting, engineering, and design of Alternative 9. The final report also recommended that the permitting, engineering, and design process should include vibracore borings to evaluate the sediment layers underneath the shoals. Additionally, the report recommended that future bathymetric surveys should include the shoals area to allow monitoring of shoal development.

The FIND requested Taylor Engineering provide Professional Engineering Preliminary Design and Permitting Services for this project. In addition to design and permitting of the sediment basin at OWW Cut-1, the FIND requested Taylor Engineering to analyze the potential for re-alignment of the OWW Cut-1 and Cut-2 channel in order to utilize naturally deeper water to reduce future maintenance intervals and costs.

ASSUMPTIONS

Taylor Engineering has developed this scope of services based on the following assumptions:

- Use of the FIND M-5 DMMA during project construction (dredging and offloading) will require a topographic survey to establish the available disposal volume within M-5 since the current available volume is unknown following recent offloading.
- The FIND, through its designated surveyor Morgan & Eklund, Inc. (M&E), provided a 2014 bathymetric survey of the ICWW, OWW Cut-1, and a supplemental limited scope survey (dated 9/01/2015) of the OWW Cut-1 area. These will be reviewed for this project, however, an additional detailed survey of the OWW Cut -1 and Cut-2 area will be required for development of sediment basin quantities and assessment of potential channel realignment.
- The U.S. Army Corps of Engineers, Jacksonville District (USACE), has provided existing geotechnical data (vibracore borings and testing data) which is sufficient for permitting needs for ICWW dredging, however, two additional vibracores and corresponding laboratory data will be required for permitting of the OWW Cut-1 sediment basin. The USACE has tentatively

committed to collecting these additional cores during winter 2015 and providing the necessary testing data shortly thereafter. In the event that USACE cannot collect the cores they will need to be collected under a separate scope of services.

- Permitting and engineering for any potential future beach placement of dredged materials will occur under a separate scope of services with FIND.
- The FIND, through its designated environmental specialist subcontractor, will provide a pre-dredge submerged aquatic vegetation (SAV), natural hardbottom, or other protected aquatic resources survey between June 1 and September 30 following Johnson's seagrass protocols, under a separate scope of services. Taylor Engineering will assist in coordination of this effort.
- Analysis of the potential OWW navigation channel re-alignment will occur within OWW Cut-1 and Cut-2, within approximately 300 ft of the existing OWW alignment.

If any of these assumptions prove incorrect, Taylor Engineering will work with the FIND to develop an appropriate additional scope of services and cost. Finally, this proposal excludes permit fees, bid and contract administration, and construction administration and observation services.

TASK 1 PRELIMINARY DESIGN

Sub-Task 1.1 Topographic Surveying

Morgan and Eklund, Inc. (M&E) shall conduct a topographic survey of FIND DMMA M-5 to determine the available capacity within 4-feet of the dike crest. The survey will consist of ground elevations at 100-foot intervals from the top of dike, across the spoil containment area, to the top of the adjacent dike, or whatever is determined most practical to define the DMMA interior. Ground elevations will be collected at a maximum distance of fifty (50) feet, and at any significant changes of material or changes in elevation over one (1) foot.

Upon completion of field survey activities, data will be edited and reduced to the project datum and formatted as required for modeling and chart preparation. Certified charts will be prepared of the DMMA interior, inclusive of the dike crest, providing volumetric calculations of the available capacity within four (4) feet of the dike crest top elevation.

Sub-Task 1.2 Bathymetric Surveying

M&E will conduct a bathymetric survey of an approximate 100-acre area in the vicinity of OWW Cut-1 and Cut-2 (Figure 1). M&E will use multi-beam, single-beam, and/or hand-held RTK/GPS survey instruments as needed to collect survey data for deep-water areas as well as shallow shoaled areas.

Soundings will be collected in both raw and adjusted (tide corrected) formats using RTK GPS derived water surface elevations. Data will be collected in MLW referenced to feet, relative to NAVD88. Redundant tide measurements will be recorded as a quality control check on the RTK GPS derived water surface elevations. A tide gauge will be employed to record continuous tidal data during the course of bathymetric data collection. Tidal data will be collected and recorded at 10-minute intervals or less. In areas deemed impractical for multi-beam sounding technology, M&E will use a combination of single-beam sounding methods, RTK GPS, total station and/or standard poling techniques

Sub-Task 1.3 Dredging Template and Dredge Quantities

Following collection of detailed bathymetric data for OWW Cut-1 and the proposed sediment basin area Taylor Engineering will develop a three-dimensional AutoCAD-based digital terrain model of

the project area. Taylor Engineering will develop for FIND review a dredge template that will include plan area, cross sections, and total required dredging volume by individual channel cut. We will apply side slopes of one vertical to three horizontal (1V:3H) for the preliminary dredging template. Taylor Engineering may update this side-slope assumption as geotechnical data from the dredging area becomes available. We will assess the shoaling areas and determine, based on the capacity of M-5, the best placement for the material from OWW and the ICWW. In the case that the proposed dredging volume exceeds the storage capacity of M-5, we will evaluate other maintenance dredging and material handling scenarios, including the potential for offloading dewatered dredged sediment during dredging and/or potential beach placement of suitable dredged material.

Sub-Task 1.4 DMMA Reconnaissance

Taylor Engineering staff will investigate the FIND M-5 DMMA to evaluate and document existing site conditions. Staff will document any visibly apparent geotechnical issues (e.g., erosion, settling, cracking) of the DMMA and weir, and evaluate any potential on-site environmental issues (within the DMMA, pipeline corridor, and within the contractor's likely staging areas). In a letter report to the FIND, we will summarize site conditions and note potential site encumbrances. The report will include photographs, an aerial map detailing any geotechnical and environmental site features and, if necessary, recommend any restorative DMMA features or environmental restrictions required for the project.

Sub-Task 1.5 Permit-Level Drawings

In support of Task 3 (Permitting), Taylor Engineering will prepare permit drawings for the various site elements. If appropriate, the permit set will include photo-based sheets depicting the project areas. We will obtain existing aerial photography for this purpose. These drawings will provide plan, cross section, and detail views of the proposed dredging project and the associated DMMA and, if necessary, its return water control structure as well as any necessary seepage, drainage, and erosion control features. We will provide signed and sealed permit drawings in appropriate hard-copy format and in digital (AutoCAD and PDF) format.

TASK 2 EVALUATION OF OWW NAVIGATION CHANNEL RE-ALIGNMENT TO REDUCE DREDGING MAINTENACE

Sub-Task 2.1 Model Mesh Revision

Taylor Engineering will modify its existing MIKE21 hydrodynamic, wave, and sediment transport model mesh from the *Okeechobee Waterway Cut 1 Sediment Basin Feasibility Study* to include three potential re-alignments of the OWW. The modification will provide sufficient resolution in the model mesh to describe the flow and sediment transport in each of the three channel re-alignment alternatives. We will setup a baseline scenario MIKE21 sediment transport model to estimate sand movement through the waterway and through the areas immediately north and south of OWW Cut 1. We will also setup three models with each model having an alternative OWW navigation channel re-aligned within 300 ft from the baseline model's OWW navigation channel alignment. The sediment transport model will include morphological computations that will estimate accretion and erosion in the waterway and nearby areas — specifically, the shoaling rate in the proposed channel re-alignment.

Sub-Task 2.2 Short-Term Evaluations of Three OWW Navigation Channel Re-alignments

We assume we will analyze the no-realignment and up to three OWW navigation channel re-alignment alternatives to determine the short-term (month-long) performance — re-aligned channel

sediment trapping capacity, trapping efficiency, and impacts on waterway navigability. The short-term evaluations provide the means to quickly establish (1) if channel re-alignment improves maintenance dredging frequency; and (2) which one of the channel re-alignment alternatives provides less frequent dredging frequency relative to the baseline scenario.

Sub-Task 2.3 Long-Term Evaluation of Selected OWW Navigation Channel Re-alignment

Long-term morphologic developments including the magnitude of erosion and deposition could vary from those presented in Sub-Task 2.2 because of long-term variation of sediment transport rate, effect of episodic events i.e. major storms and hurricanes. In addition, as sediments accrete in the navigation channel, sediment deposition elevates the bed and lessens the channel's shoaling rate. As the channel's shoaling efficiency reduces with time, the shoaling rates provided by short-term evaluations (Sub-Task 2.2) would not reflect the long-term average shoaling rates and the temporal variation of shoaling rates in the channel. Therefore, it is necessary to evaluate the long-term performance of a re-aligned navigation channel to include the effects of variation of sediment transport rate, episodic events, and reduction of the sediment trapping capacity of a re-aligned channel.

The long-term evaluations will include one-year long simulations for the baseline scenario and the selected channel realignment alternative. The long-term simulations will apply the same model mesh and model parameters as applied in the short-term model simulations. However in contrast to the short-term model simulations, the long-term model simulations will apply model boundary conditions that describe the water level and wave conditions for a period of one year.

Sub-Task 2.4 Recommendations and Economic Analysis

If our analyses show that the selected navigation channel re-alignment is hydraulically and morphologically feasible, we will provide recommendations for detailed engineering design, estimates of construction and maintenance costs, and descriptions for permitting requirements.

Sub-Task 2.5 Numerical Modeling Report Preparation

We will prepare and submit a report on the numerical modeling for the channel re-alignment evaluation. The report will describe the applied data, methodologies, and results of evaluation in Sub-Tasks 2.1 – 2.3.

Sub-Task 2.6 Presentation of Numerical Modeling Results for Channel Re-alignment

We assume we will make one presentation to the FIND to describe the methodology and results of the numerical modeling study.

TASK 3 SUBMERGED AQUATIC VEGETATION SURVEY

Task 3.1 Survey Coordination

Taylor Engineering will coordinate with FIND's designated environmental specialist subcontractor, as necessary, during the natural resources surveying process. This survey should occur between the months of June and September 2016. Taylor Engineering will provide FIND's subcontractor with an AutoCAD-based digital terrain model of the dredge template (plan area, cross sections, and total required dredging volume by individual channel cut) for the subcontractor's Uniform Mitigation Assessment Method (UMAM) and seagrass impact calculations, if necessary.

TASK 4 PERMITTING

Constructing the sediment basins will require state and federal authorizations. When permit drawings are in draft stage and we are within a few months of being able to submit a permit package, we will conduct pre-application meetings with each agency. The meetings will help refine the application package contents and help minimize the application review process. We will develop and submit a single joint permit application with all components required by each lead agency. After application submission, state and federal review activities will occur independently. Both lead agencies will likely provide requests for additional information (RAIs) for which we will develop responses. The federal review also includes NEPA consultation with other federal agencies, in this case most likely NOAA Fisheries Service and the US Fish and Wildlife Service. We will offer assistance to the lead federal agency in developing the necessary consultation materials and responding to questions during the consultation process. We will also coordinate the information flow so that both agencies are aware of any required changes in the project and can adjust their review to include consideration of new or modified application data.

Task 4.1 Pre-Application Meetings

Taylor Engineering will coordinate and attend pre-application meetings (one per agency) with the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE). During these meetings, located at DEP and USACE offices, Taylor Engineering will introduce the project to state and federal regulatory agency staff, discuss foreseeable permit application issues, and solicit agency recommendations concerning the content and format of the application materials. Following completion of the pre-application meetings, Taylor Engineering will compile and submit meeting minutes to all attending parties.

Task 4.2 Joint Permit Application

We will prepare and submit to the FDEP a permit application for construction and dredging of the proposed sediment basin(s). This takes the form of a "Joint Application for Individual Environmental Resource Permit Authorization to Use State-Owned Submerged lands / Federal Dredge and Fill Permit" (ERP) application. The application will include all information required by the FDEP and the USACE. In general this includes the completed forms provided by DEP, a short and extended project description, the report summarizing modeling for the basin design, proposed construction methodology and schedule for construction and expected future basin dredging, signed and sealed engineering design drawings, seagrass survey, natural resources narrative, permit level engineering drawings, and other components recommended during the preapplication meetings. A natural resources summary for the project area and site, a section identifying state-listed species (threatened, endangered, or candidate for listing) potentially found in the area and an assessment of the potential effects of the project to those species will be included as an attachment along with standard in-water construction guidance for protection of listed species and other agency-required assessment forms completed for the proposed project.

In addition to the information listed above, USACE requires additional information specific to their review process, in particular, identification of species that may use the project area that are listed or candidate for listing under the Endangered Species Act, an assessment for each of the listed and candidate species concerning the likelihood that the project effects on those species, an assessment of essential fish habitat (EFH) in the project area and potential project effects on EFH, and other necessary agency checklists, assessment keys, and construction methodologies for listed species protection, etc.

Task 4.3 Request for Additional Information (RAI) Response and Submittal

After initial review of the Joint Permit Application, the FDEP and USACE will likely respond with one or more RAIs. An RAI typically comprises a series of questions that require additional clarification or other information regarding the proposed work. We have budgeted for a maximum of two requests for additional information from each lead agency. In addition, we have budgeted to support federal agency NEPA consultation-related questions the USACE may request support to answer.

Task 4.4 Coordination

As the agencies review the applications and receive additional information, the single most important activity during the permitting process is the establishment and maintenance of a clear line of communications between the applicant and the participating agencies. There is little coordination between state and federal agencies. Changes required by the state may conflict with federal standards, and vice versa. Resolving these issues and answering questions informally to minimize the review period requires active coordination with local, state, and federal agency staff during the application process. These agencies include, but are not limited to, the FDEP, USACE, U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, and National Marine Fisheries Service. Taylor Engineering will maintain consistency between the state and federal permit applications and other environmental documentation, and strive to resolve environmental issues that arise during the review period.

ESTIMATED SCHEDULE

No.	Task	Months from Notice to Proceed															
		1 Dec 15	**2**	**3**	**4**	**5**	**6**	**7 Jun 16**	**8**	**9**	**10**	**11**	**12**	**13**	**14 Dec 16**	**15**	**16**
1	Preliminary Design																
2	Channel Re-alignment Evaluation																
3	SAV Survey Coordination																
4	Permitting																

FLORIDA INLAND NAVIGATION DISTRICT
OKEECHOBEE WATERWAY CUT 1 SEDIMENT BASIN DESIGN AND PERMITTING
MARTIN COUNTY, FLORIDA

ATTACHMENT B
COST PROPOSAL

 ATTACHMENT B

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
P2015-137: MARTIN COUNTY CROSSROADS SEDIMENT BASIN AND ICWW MAINTENANCE

TASK 1: Preliminary Design

Labor	Hours	Cost ($)	Task Totals
Vice President	2.0	370.00	
Senior Advisor	24.0	4,464.00	
Director	18.0	2,862.00	
Senior Professional	124.0	17,484.00	
Project Professional	20.0	2,120.00	
Editor	2.0	198.00	
Senior Technical Support	144.0	15,552.00	
Administrative	14.0	728.00	
Total Man-Hours	348.0		
Labor Cost			43,778.00

Non-Labor	Units	Cost ($)	
Milage (DMMA Recon)	120.0	69.60	
Per diem for 2 people	2.0	140.00	
Reproductions and delivery	1.0	75.00	
Survey Sub-Contract (M&E)	1.0	18,650.00	
Non-Labor Cost		18,934.60	
Fee @ 10.0%		1,893.46	
Total Non-Labor Cost			20,828.06
Total Task 1			$ 64,606.06

P2015-137: MARTIN COUNTY CROSSROADS SEDIMENT BASIN AND ICWW MAINTENANCE

TASK 2: Evaluation of Channel Re-Alignment Alternatives

Labor	Hours	Cost ($)	Task Totals
Vice President	13.0	2,405.00	
Senior Advisor	15.0	2,790.00	
Director	41.0	6,519.00	
Senior Professional	138.0	19,458.00	
Staff Professional	64.0	5,504.00	
Editor	4.0	396.00	
Senior Technical Support	8.0	864.00	
Staff Technical Support	2.0	166.00	
Administrative	7.0	364.00	
Total Man-Hours	292.0		
Labor Cost			38,466.00
Non-Labor	Units	Cost ($)	
Reproductions and delivery	1.0	50.00	
Milage	400.0	232.00	
Per diem for 1	1.0	70.00	
Non-Labor Cost		352.00	
Fee @ 10.0%		35.20	
Total Non-Labor Cost			387.20
Total Task 2			$ 38,853.20

P2015-137: MARTIN COUNTY CROSSROADS SEDIMENT BASIN AND ICWW MAINTENANCE

TASK 3: Submerged Aquatic Vegetation Survey (Administration)

Labor	Hours	Cost ($)	Task Totals
Senior Advisor	2.0	372.00	
Director	1.0	159.00	
Senior Professional	24.0	3,384.00	
Senior Technical Support	8.0	864.00	
Administrative	2.0	104.00	
Total Man-Hours	37.0		
Labor Cost			4,883.00
Total Task 3			$ 4,883.00

TASK 4: Permitting

Labor	Hours	Cost ($)	Task Totals
Vice President	7.0	1,295.00	
Senior Advisor	16.0	2,976.00	
Director	58.0	9,222.00	
Senior Professional	140.0	19,740.00	
Project Professional	90.0	9,540.00	
Staff Professional	70.0	6,020.00	
Editor	8.0	792.00	
Senior Technical Support	52.0	5,616.00	
Administrative	10.0	520.00	
Total Man-Hours	451.0		
Labor Cost			55,721.00

Non-Labor	Units	Cost ($)	
Reproductions and Delivery	2.0	150.00	
Milage	50.0	29.00	
Per Diem for 2 people	2.0	140.00	
Milage	50.0	29.00	
Per Diem for 2 people	2.0	140.00	
Non-Labor Cost		488.00	
Fee @ 10.0%		48.80	
Total Non-Labor Cost			536.80
Total Task 4			$ 56,257.80

Project Total $ 164,600.06

FLORIDA INLAND NAVIGATION DISTRICT
CROSSROADS SEDIMENT BASIN AND MARTIN COUNTY ICWW DESIGN AND PERMITTING
MARTIN COUNTY, FLORIDA

ATTACHMENT C
MORGAN & EKLUND, INC
SCOPE OF WORK AND COST PROPOSAL

MORGAN & EKLUND, INC.
PROFESSIONAL SURVEY CONSULTANTS

September 22, 2015

Taylor Engineering, Inc.
Attn: Mr. Bill Aley, Professional Geologist
10151 Deerwood Park Blvd.
Building 300, Suite 300
Jacksonville, Florida 32256

RE: Topographic and Hydrographic Survey Services Okeechobee Waterway Cut-1 Sediment Basin Design and Permitting, Martin County, Florida

Dear Bill:

Morgan & Eklund, inc. is pleased to provide you with the following proposal to furnish professional topographic and bathymetric survey services for the above referenced project.

In accordance with the scope of work as provided, I estimate our costs to be as follows:

Task 1.1

A. Topographic survey of F.I.N.D. DMMA M-5 on 100' line spacing from top of dike to top of dike.

Chief Surveyor		
2 hours @ $135/hr	$	270.00
Project Surveyor		
4 hours @ $75/hr	$	300.00
Three Man Survey Crew		
35 hours @ $135/hr	$	4,725.00
Trimble RTK/GPS		
3 days @ $450/day	$	1,350.00
16' Survey Boat		
3 days @ $175/day	$	525.00
	$	7,170.00

8745 U.S. HIGHWAY 1, P.O. BOX 701420, WABASSO, FL 32970-1420 • PHONE: (772) 388-5364 • FAX: (772) 388-3165 • jmorgan@morganeklund.com
1001 North America Way, Suite 211, Miami, FL 33132 * PHONE: 305-364-5158 * 1159 SW 1st Way DEERFIELD BEACH, FL 33441 •
PHONE: (954) 421-6882 • FAX: (954) 421-0425 • pvoute@morganeklund.com

B. Data Reduction and Plotting of DMMA M-5 Topographic Survey/Compute Capacity Volume

Chief Surveyor		
2 hours @ $135/hr	$	270.00
Project Surveyor		
8 hours @ $75/hr	$	600.00
Computer Technician		
16 hours @ $65/hr	$	1,040.00
	$	1,910.00
Total 1.1, A-B	$	9,080.00

Task 1.2

A. Bathymetric Survey of OWW Cut-1 and Cut-2 within area outlined on attached exhibit

Project Manager		
20 hours @ $75/hr	$	1,500.00
Three Man Survey Crew		
20 hours @ $135/hr	$	2,700.00
Trimble RTK/GPS		
2 days @ $450/day	$	900.00
26' Survey Boat		
1 day @ $450/day	$	450.00
16' Survey Boat		
1 day @ $175/day	$	175.00
MB-1 Multi Beam		
1 day @ $750/day	$	750.00
Odom Fathometer		
1 day @ $125/day	$	125.00
TSS Motion Compensator		
1 day @ $200/day	$	200.00
	$	6,800.00

B. Data Reduction/Plotting

Chief Surveyor		
2 hours @ $135/hr	$	270.00
Project Surveyor		
16 hours @ $75/hr	$	1,200.00
Computer Technician		
20 hours @ $65/hr	$	1,300.00
	$	2,770.00
Total Cost 1.2, A-B	$	9,570.00
Total Cost 1.1-1.2	**$**	**18,650.00**

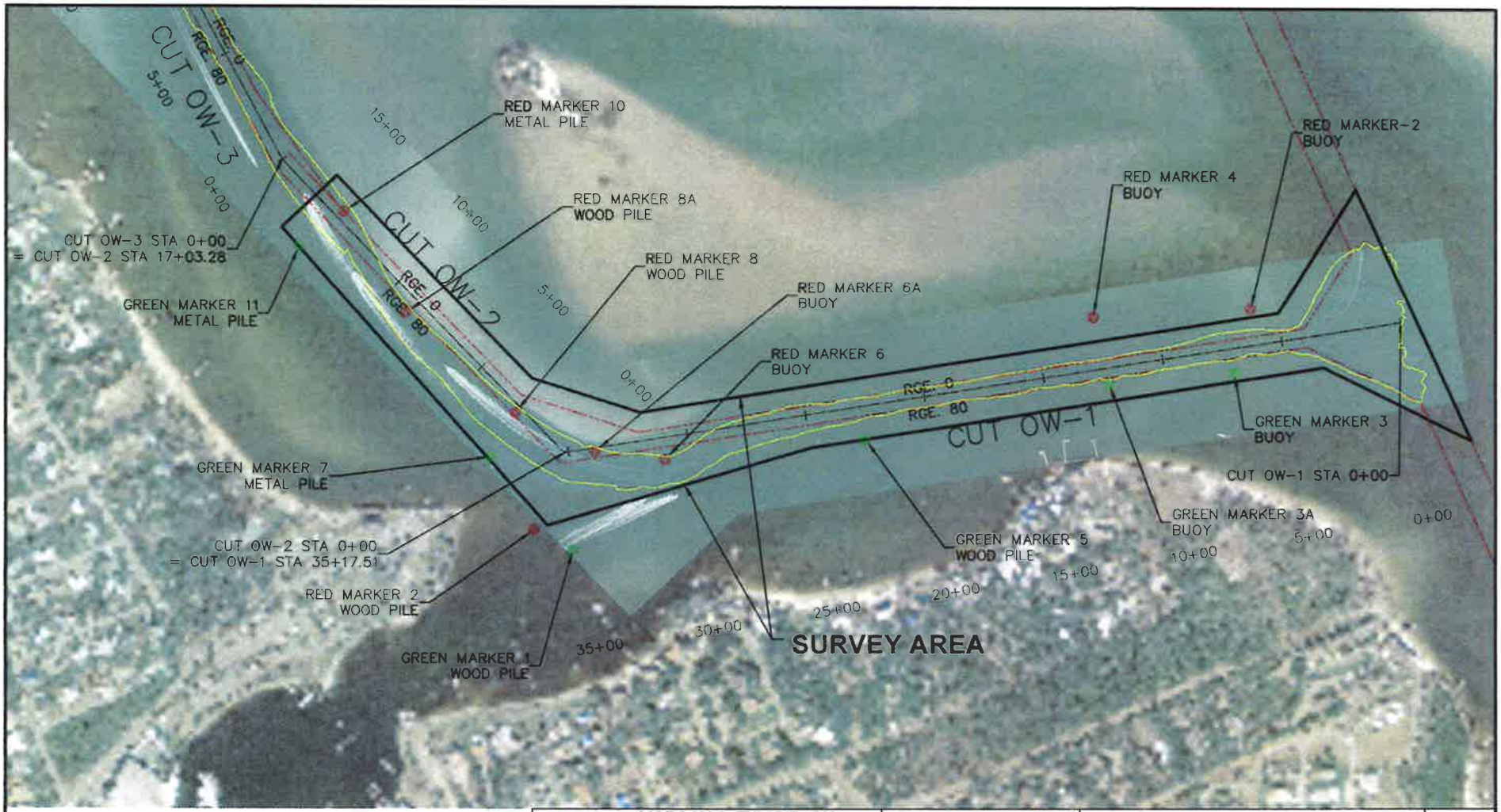
As always, Morgan & Eklund, Inc. appreciates this opportunity to work with you and Taylor Engineering, Inc. on this project.

Sincerely,

John R. Morgan, II, PLS
President

JRM:sm

Figure 1



MORGAN & EKLUND, INC.
PROFESSIONAL SURVEY CONSULTANTS
8745 US HIGHWAY 81
P.O. BOX 701420
WAUCHULA, FL 33870
PHONE: (772) 388-5384
FAX: (772) 388-3165
1159 SW 1ST WAY
DEERFIELD BEACH, FL 33441
PHONE: (954) 421-6882
FAX: (954) 421-0425
LB #4298

CERTIFICATE OF SURVEYOR - I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS IN ACCORDANCE WITH A RECENT FIELD SURVEY MADE UNDER MY DIRECTION, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

JOHN R. MCMAHAN, JR. PLS
PROFESSIONAL LAND SURVEYOR #5320
STATE OF FLORIDA

SHOAL EXHIBIT
OKEECHOBEE WATERWAY CUT OW-1 TO CUT OW-2
- FOR -
FLORIDA INLAND NAVIGATION DISTRICT

DRAWN BY	CHECKED BY	FIELD BOOK	DATE OF SURVEY
LFP	JRM	-	-

FILE NO. -

COMMISSION NO.	SCALE	DATE	SHEET
5303.11	1" = 400'	8/21/15	- OF -

Summary of
St. Lucie and Palm Beach Counties Seagrass Mitigation Site Evaluations

Purpose

- Future Intracoastal Waterway operations and maintenance may require mitigation for impacts to seagrass
- Seagrass mitigation usually occurs as seagrass habitat creation
- Some FIND-controlled properties may be useful for seagrass habitat creation
- Taylor Engineering evaluated FIND-controlled properties in St. Lucie and Palm Beach counties for their potential suitability for seagrass habitat creation

Methods

- Desktop evaluation
- Assumed seagrass habitat creation would occur by excavation of upland or intertidal areas to subtidal elevations suitable for seagrass growth
- Review FIND GIS information and USACE real estate maps to identify FIND-controlled property
    - FIND ownership
    - FIND easements
    - USACE easements
- Review readily available information (aerial photographs, state seagrass. mangrove, and land use GIS information, National Wetlands Inventory maps,) to identify islands or other areas with seagrass mitigation potential located within FIND-controlled property
- Review Indian River Lagoon Spoil Island Management Plan (St. Lucie County only) to identify island habitats, natural resources, and designated uses
    - Plan-identified issues (e.g., presence of bird rookeries or extensive mangroves) eliminated some islands from consideration as seagrass habitat creation sites
    - Plan-designated uses did not necessarily eliminate islands from consideration as seagrass habitat creation sites
- Develop site-specific evaluation of each identified potential seagrass mitigation site

Results

- St. Lucie County
    - 27 sites identified
    - 40 acres total potential seagrass habitat creation area
- Palm Beach County
    - 16 sites identified
    - 58 acres total potential seagrass habitat creation area
- Tables on following pages list sites for each county
- Figures on following pages show site locations for each county

Recommendation

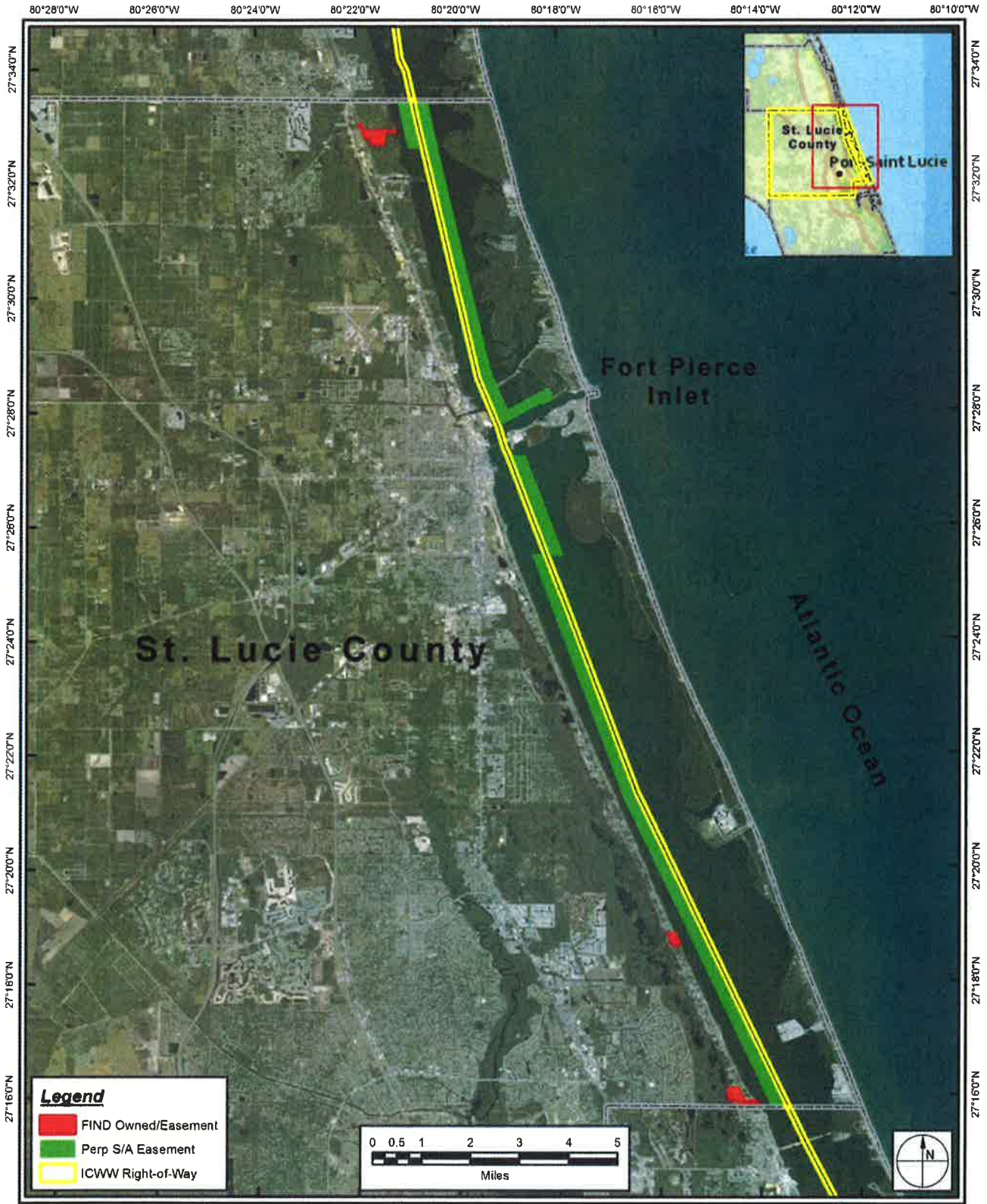
- FIND should designate and retain the identified sites as potential seagrass habitat creation areas
    - For any island identified for a seagrass habitat creation project, site-specific evaluation must confirm ownership and existing conditions to verify suitability for such use.

St. Lucie County Potential Seagrass Mitigation Sites

Mitigation Site Name	FIND Control[1]	Mitigation Area (acres)	IRL Spoil Island Mgmt. Plan Number[2]	IRL Spoil Island Mgmt. Plan Use Designation[2]
SG MSA SL-1-01	USACE S/A	0.2	-	-
SG MSA SL-1-02	USACE S/A	0.2	-	-
SG MSA SL-2-01	USACE S/A	5.6	SL1	Conservation
SG MSA SL-2-02	USACE S/A	0.1	-	-
SG MSA SL-2-03	USACE S/A	0.3	SL1A	Passive Recreation
SG MSA SL-2-04	USACE S/A	0.1	SL1B	Conservation
SG MSA SL-2-05	USACE S/A	3.3	SL2	Active Recreation
SG MSA SL-2-06	USACE S/A	0.2	SL4	Passive Recreation
SG MSA SL-2-07	USACE S/A	5.5	SL5	Education
SG MSA SL-2-08	USACE S/A	3.7	SL6	Passive Recreation
SG MSA SL-2-9	USACE S/A	3.5	SL7	Passive Recreation
SG MSA SL-2-10	USACE S/A	3.0	SL8	Active Recreation
SG MSA SL-2-11	USACE S/A	0.4	SL9	Conservation
SG MSA SL-2-12	USACE S/A	0.4	SL10	Conservation
SG MSA SL-2-13	USACE S/A	4.3	SL11	Conservation
SG MSA SL-2-14	USACE S/A	2.8	SL12	Conservation
SG MSA SL-2-15	USACE S/A	0.3	SL12A	Passive Recreation
SG MSA SL-2-16	USACE S/A	0.1	SL12B	Conservation
SG MSA SL-2-17	USACE S/A	0.1	SL12C	Conservation
SG MSA SL-2-18	USACE S/A	0.1	SL13C	Conservation
SG MSA SL-2-19	USACE S/A	3.8	SL13	Active Recreation
SG MSA SL-2-20	USACE S/A	0.2	SL13B	Passive Recreation
SG MSA SL-2-21	USACE S/A	0.1	SL13A	Passive Recreation
SG MSA SL-2-22	USACE S/A	0.2	SL14B	Conservation
SG MSA SL-2-23	USACE S/A	0.2	SL14A	Conservation
SG MSA SL-2-24	USACE S/A	0.5	SL15A	Education/Conservation
SG MSA SL-2-25	USACE S/A	0.7	SL16	Conservation
Total FIND-Controlled Potential Seagrass Sites (acres)		**39.9**		

[1]USACE S/A = USACE spoil area easement on state-owned land

[2] "-" indicates island does not appear in the spoil island management plan



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Jacksonville, FL 32256
CERTIFICATE OF AUTHORIZATION # 4615

Figure 1
FIND Properties Reviewed as
Potential Seagrass Mitigation Sites
St. Lucie County, FL

PROJECT C2014-044
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DATE 12/3/2014

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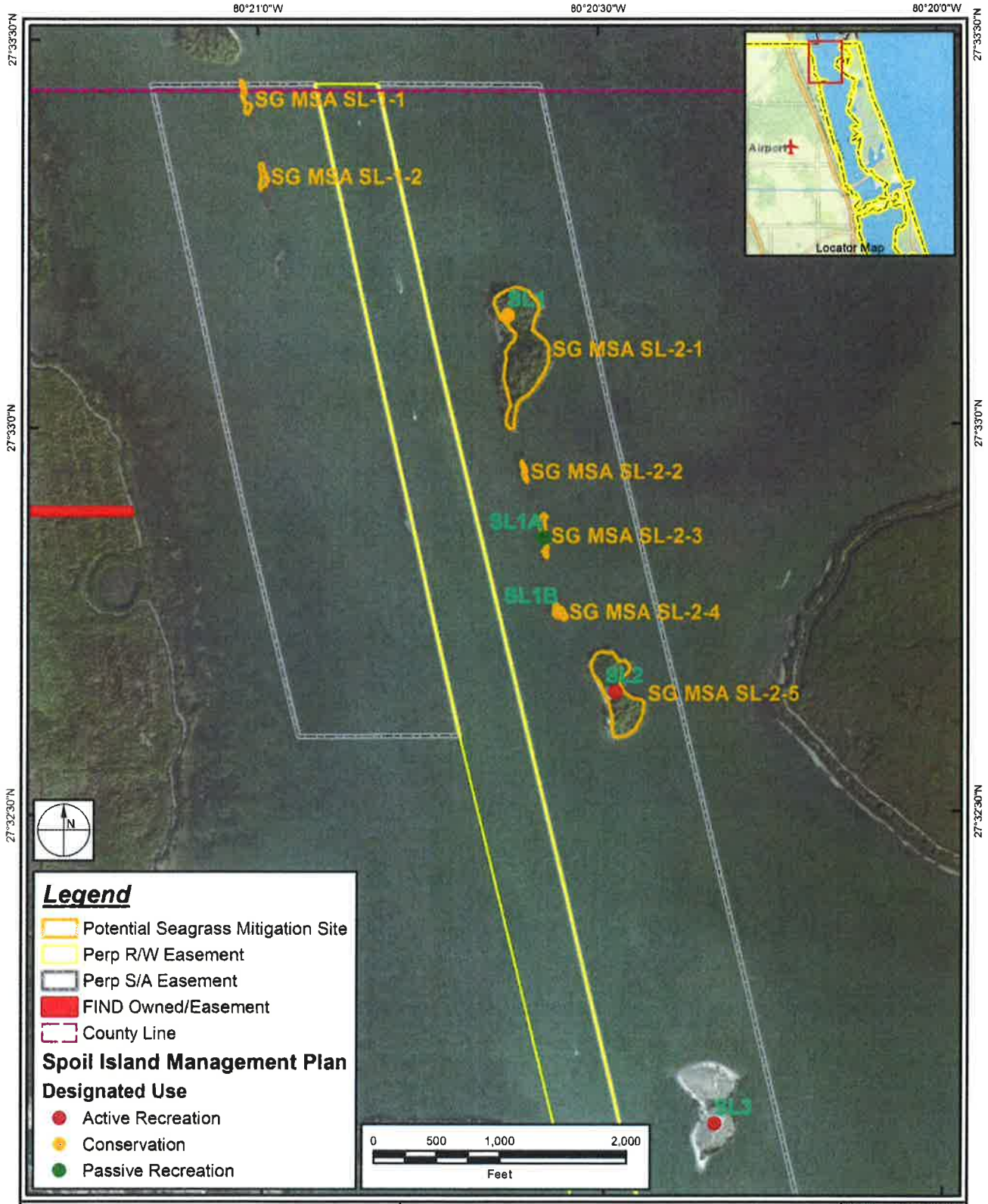

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Figure 2
Potential Seagrass Mitigation Sites
SG MSA SL-1-1/2; SG MSA SL-2-1/2/3/4/5
St. Lucie County, FL

PROJECT: C2014-044
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SHEET:
DATE: 12/4/2014

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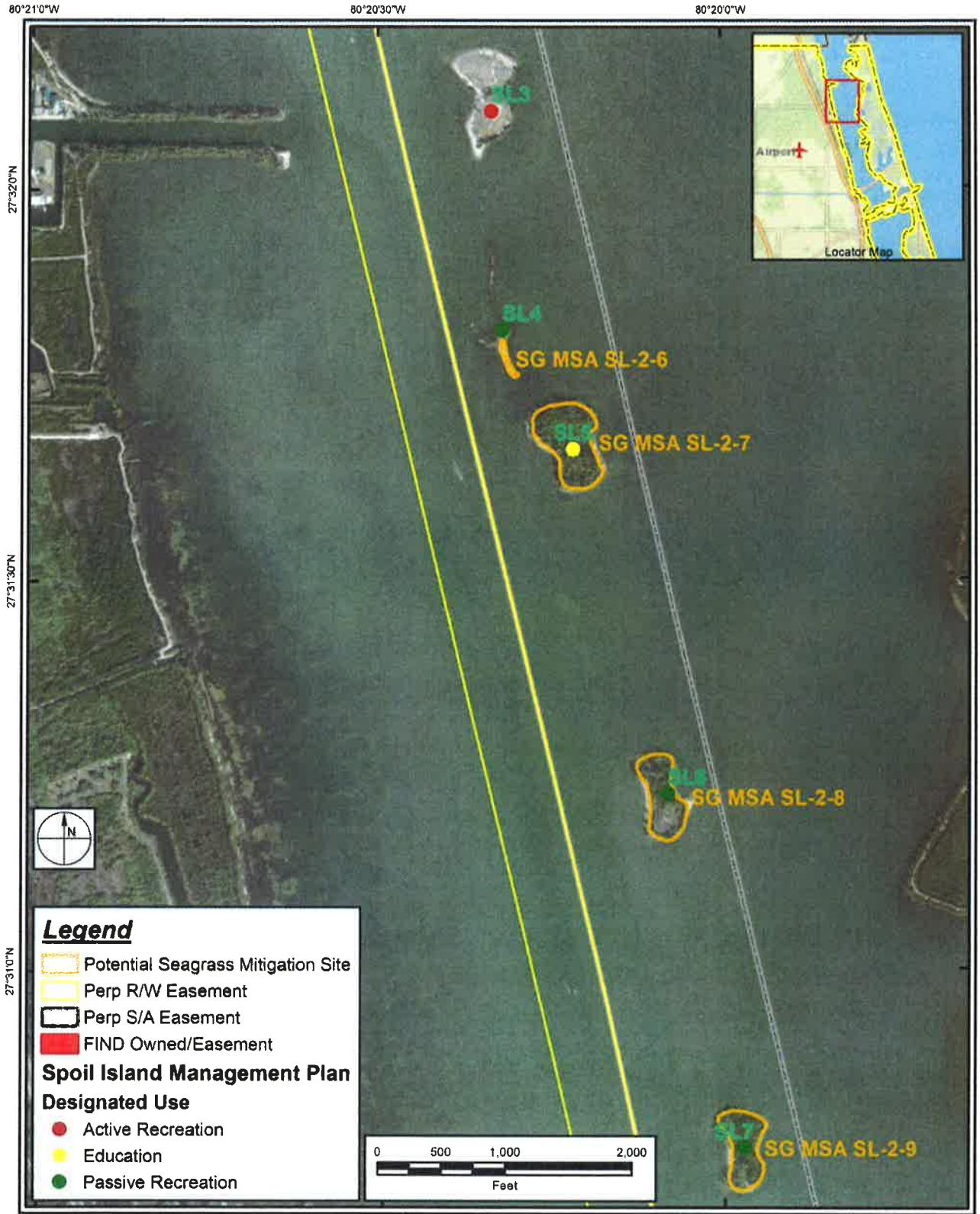

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Figure 3
Potential Seagrass Mitigation Sites
SG MSA SL-2-6/7/8/9
St. Lucie County, FL

PROJECT C2014-044
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SHEET
DATE 12/4/2014

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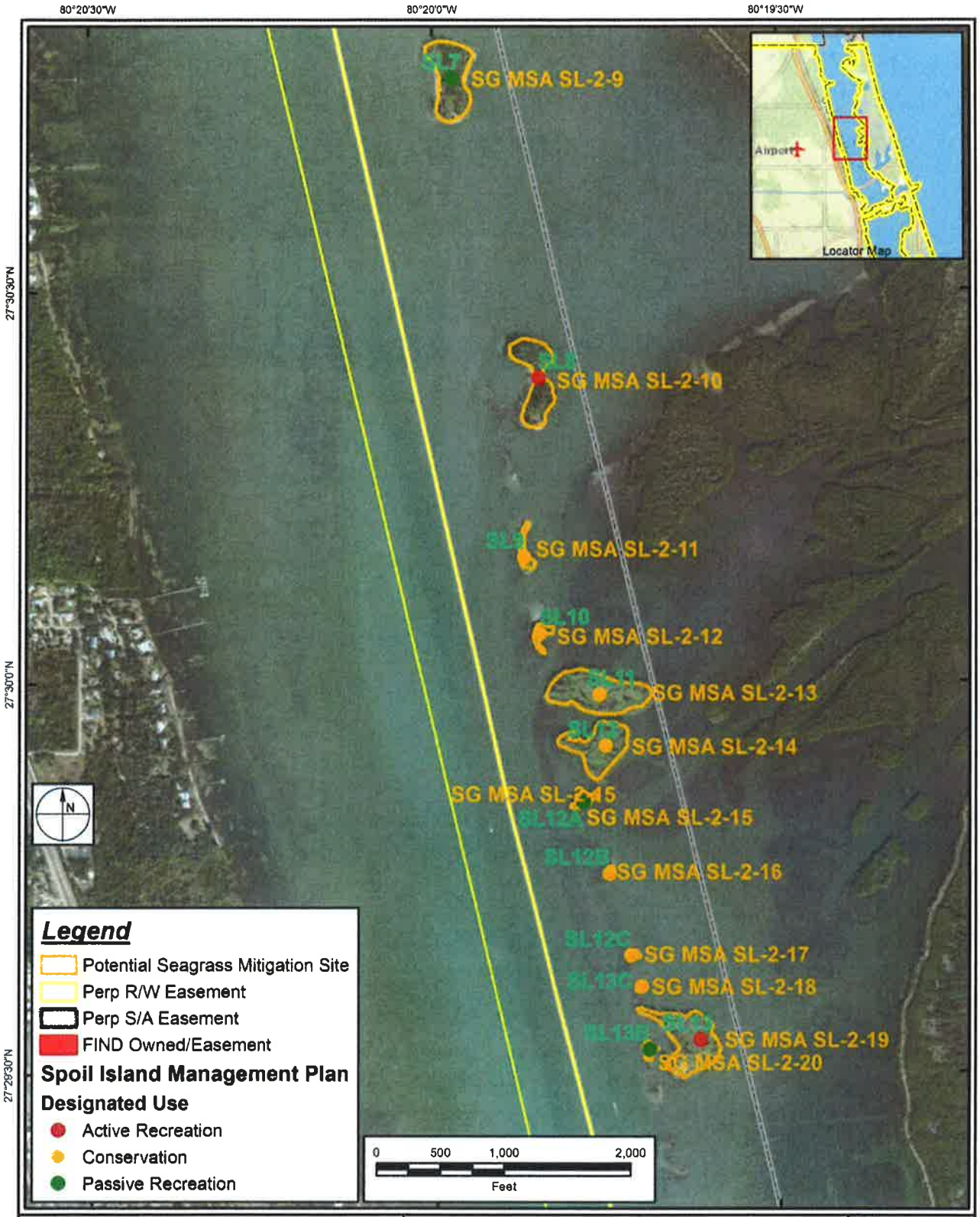

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Figure 4
Potential Seagrass Mitigation Sites
SG MSA SL-2-9/10/11/12/13/14/15/16/17/18/19/20
St. Lucie County, FL

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DATE 12/4/2014

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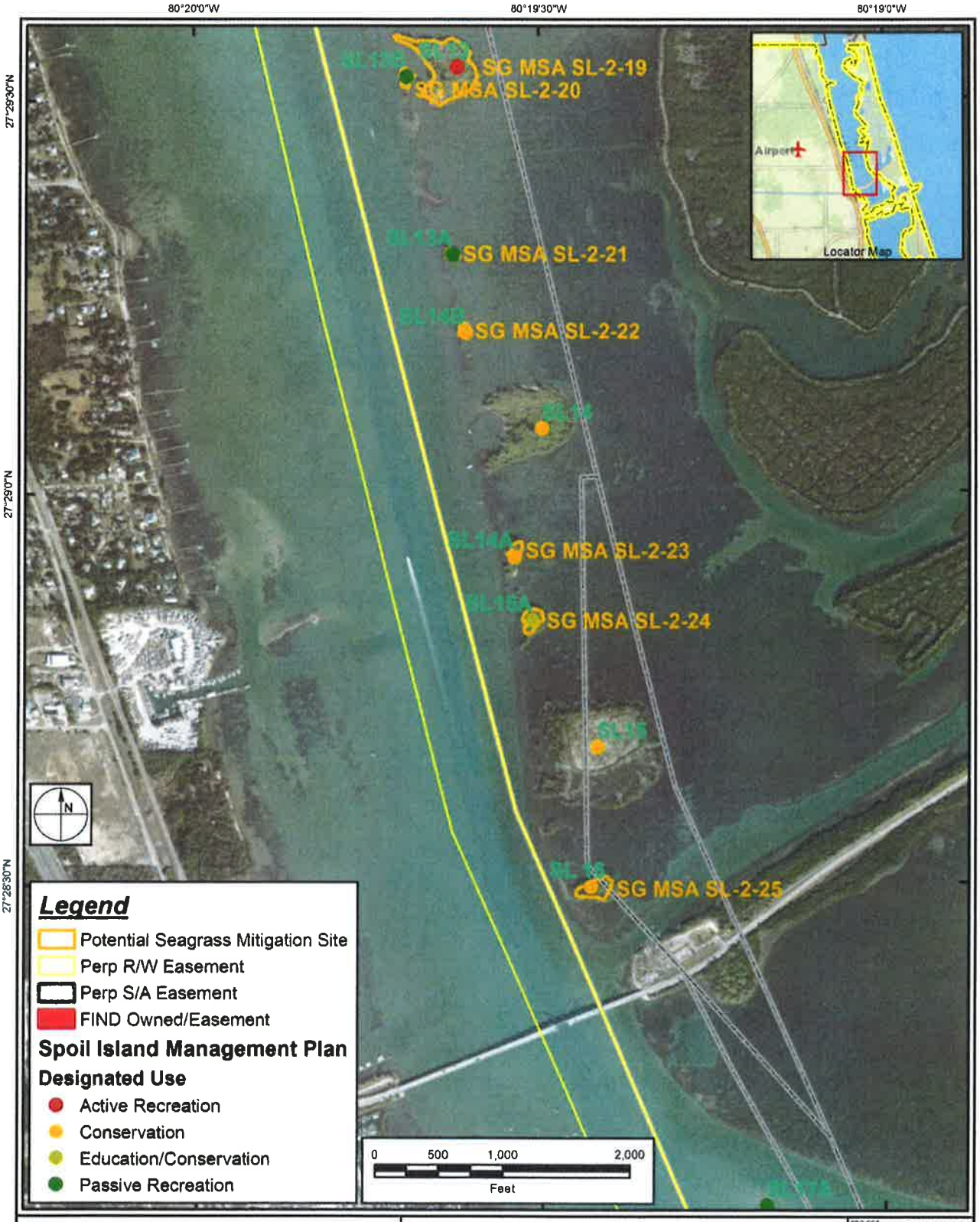

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Figure 5
Potential Seagrass Mitigation Sites
SG MSA SL-2-19/20/21/22/23/24/25
St. Lucie County, FL

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DATE: 12/4/2014

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Palm Beach County Potential Seagrass Mitigation Sites

Mitigation Site Name	FIND Control[1]	Mitigation Area (acres)
SG PB-SBA-1	FIND	1.0
SG PB-SBB-1	FIND	1.8
SG MSA 607-1	USACE Perp S/A	1.1
SG MSA 607-2	USACE S/A	8.2
SG MSA 609-1	USACE S/A	5.4
SG MSA 609A-1	USACE S/A	20.8
SG MSA 619-1	FIND	3.6
SG MSA 621-1	FIND	1.5
SG MSA LW-9C-1	USACE S/A	0.1
SG MSA LW-9C-2	USACE S/A	0.1
SG MSA LW-9C-3	USACE S/A	0.1
SG MSA LW-9C-4	USACE S/A	0.2
SG MSA 645C-1	FIND	1.7
SG MSA 645D-1	FIND	4.2
SG MSA 651-1	USACE S/A - Private	0.9
SG MSA 690-1	FIND	7.3
Total FIND-Controlled Potential Seagrass Sites (acres)		**58.0**

[1]USACE Perp S/A = USACE perpetual spoil area easement on state-owned land; USACE Perp S/A - Private = USACE perpetual spoil area easement on privately-owned land; FIND = FIND-owned land

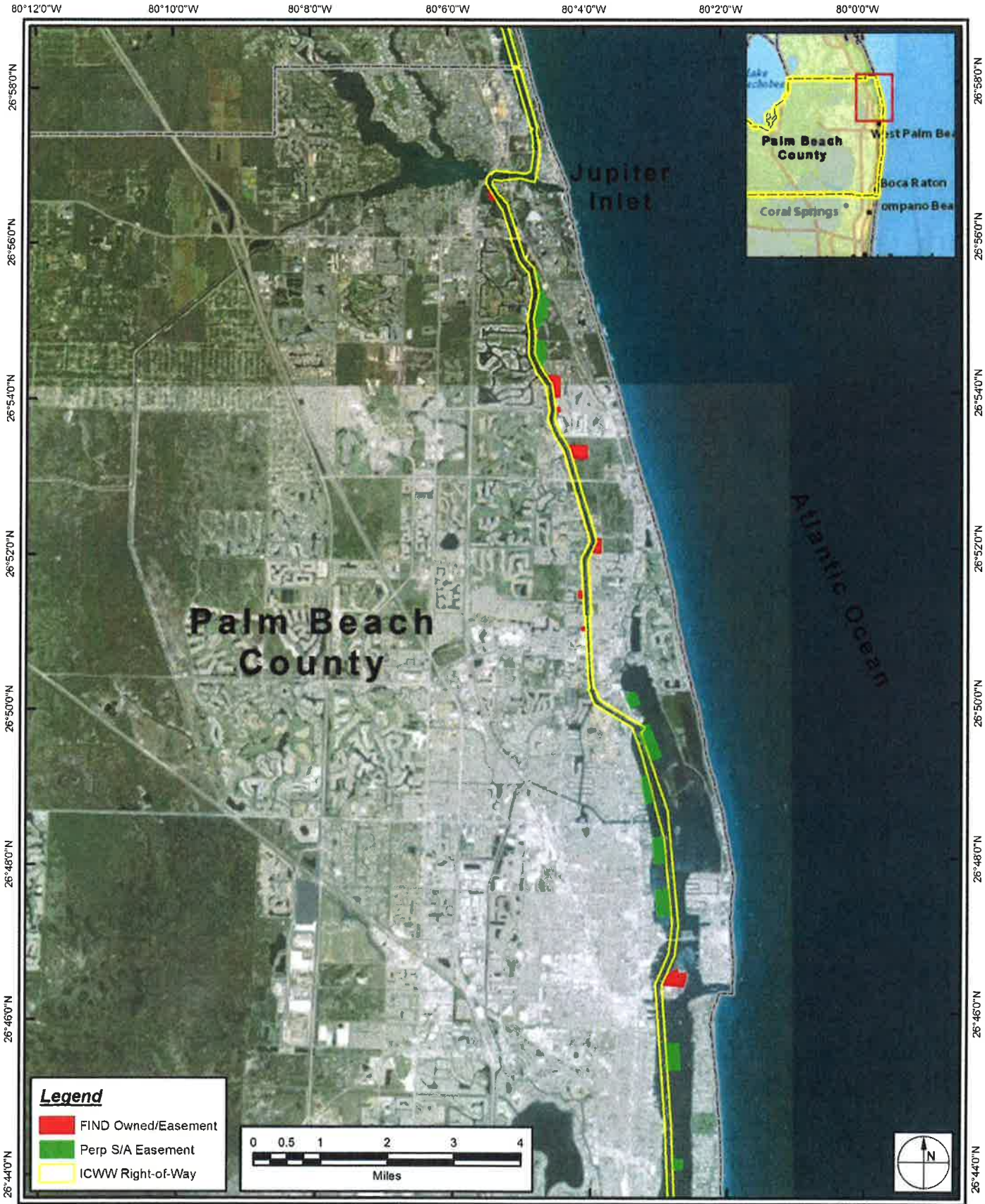

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Figure 1
FIND Properties Reviewed as
Potential Seagrass Mitigation Sites (North)
Palm Beach County, FL

PROJECT	C2014-044
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DATE	1/30/2015

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Figure 2
FIND Properties Reviewed as
Potential Seagrass Mitigation Sites (Central)
Palm Beach County, FL

PROJECT C2014-044
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SHEET
DATE 1/30/2015

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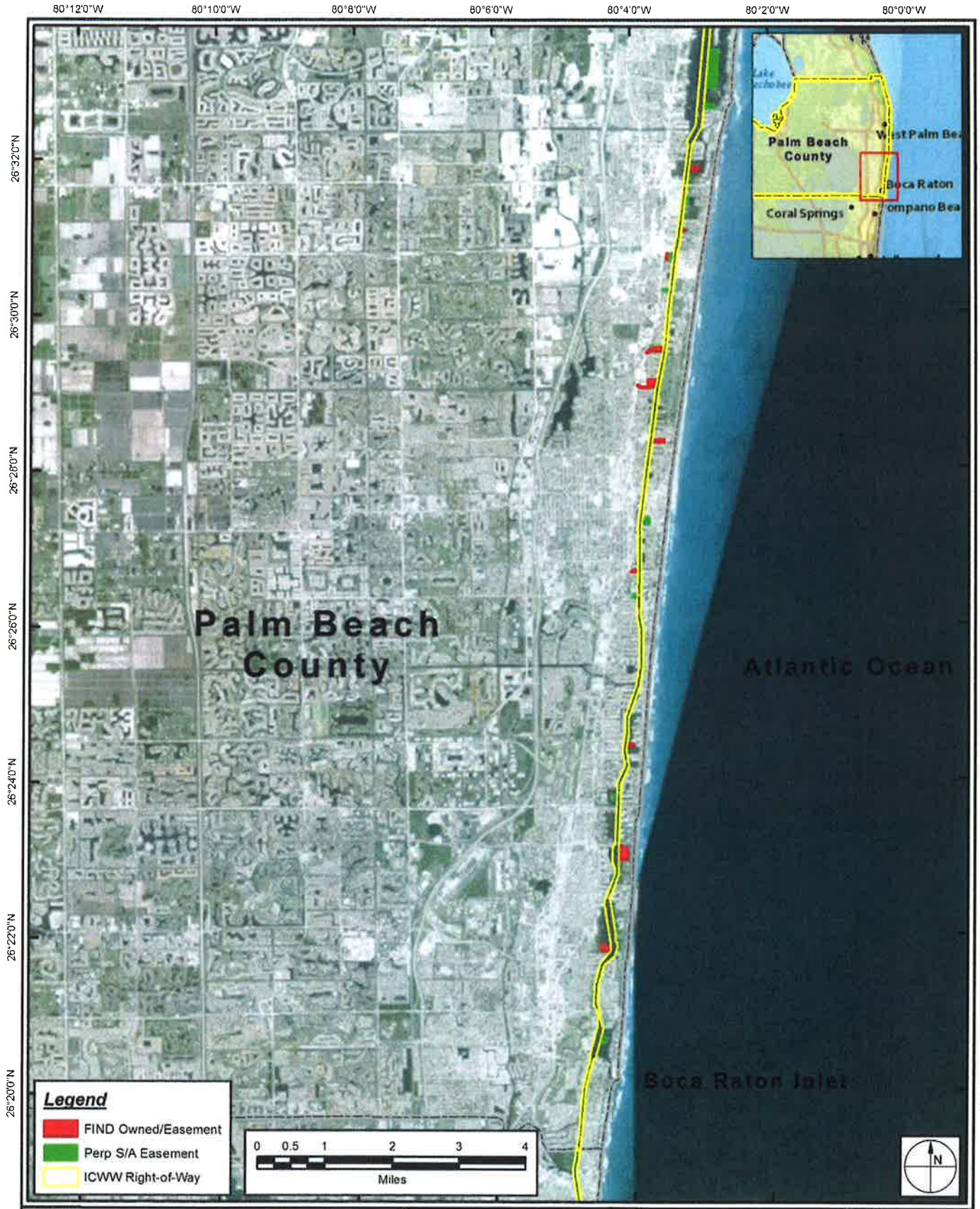

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Figure 3
FIND Properties Reviewed as
Potential Seagrass Mitigation Sites (South)
Palm Beach County, FL

PROJECT	C2014-044
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DATE	1/30/2015

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Figure 4
Potential Seagrass Mitigation Sites
SG PB-SBA-1; SG PB-SBB-1
Palm Beach County, FL

PROJECT	C2014-044
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SHEET	
DATE	1/30/2015

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Figure 5
Potential Seagrass Mitigation Sites
SG MSA 607-1/2; SG MSA 609-1; SG MSA 609A-1
Palm Beach County, FL

PROJECT	C2014-044
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SHEET	
DATE	1/30/2015

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Figure 6
Potential Seagrass Mitigation Sites
SG MSA 619-1; SG MSA 621-1
Palm Beach County, FL

PROJECT	C2014-044
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DATE	1/30/2015

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Jacksonville, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

Figure 7
Potential Seagrass Mitigation Sites
SG MSA LW-9C-1/2/3/4
Palm Beach County, FL

PROJECT: C2014-044
DRAWN BY: SS
SHEET:
DATE: 1/30/2015

Y:\C2014-049 FIND Palm Beach Seagrass\GIS\MXD\Palm Beach Fig7.mxd

Taylor Engineering Inc.
10151 Deerwood Park Blvd.
Bldg. 300, Suite 300
Jacksonville, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

Figure 8
Potential Seagrass Mitigation Sites
SG MSA 645C-1; SG MSA 645D-1
Palm Beach County, FL

PROJECT	C2014-044
DRAWN BY	SS
SHEET	
DATE	1/30/2015

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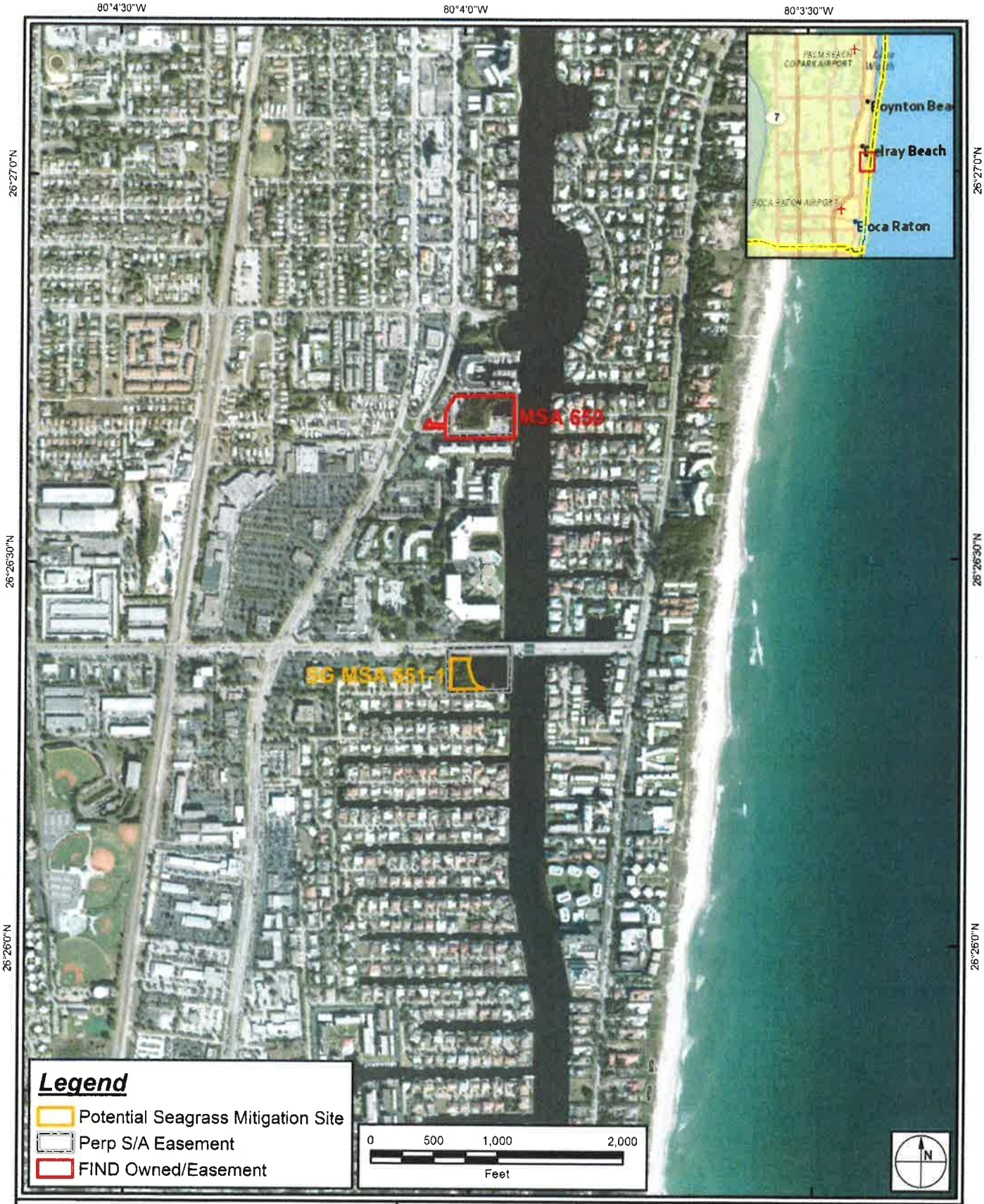

Taylor Engineering Inc.
10151 Deerwood Park Blvd.
Bldg. 300, Suite 300
Jacksonville, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

Figure 9
Potential Seagrass Mitigation Sites
SG MSA 651-1
Palm Beach County, FL

PROJECT C2014-044
DRAWN BY SS
SHEET
DATE 1/30/2015

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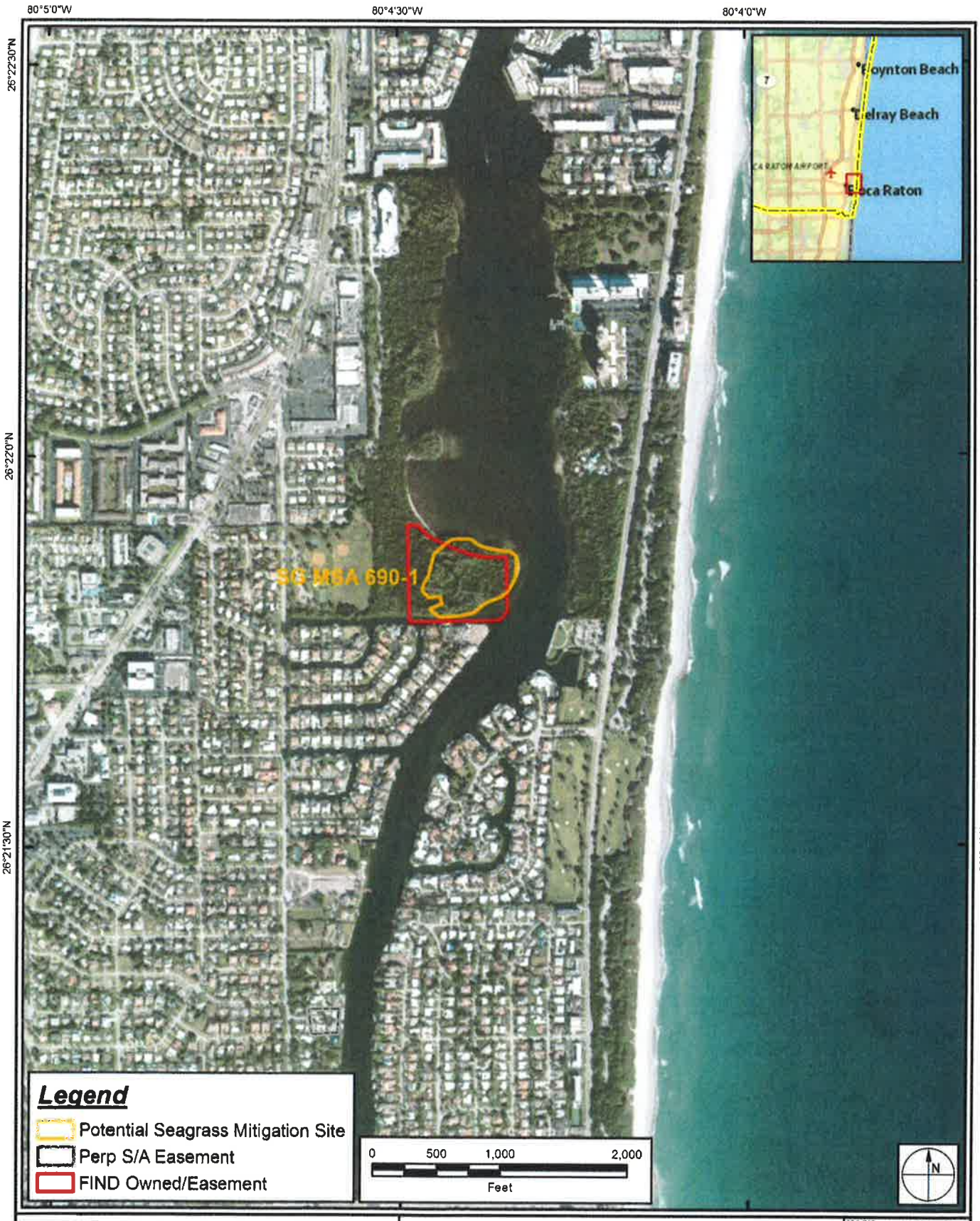

Taylor Engineering Inc.
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Jacksonville, FL 32256
CERTIFICATE OF AUTHORIZATION # 4615

Figure 10
Potential Seagrass Mitigation Sites
SG MSA 690-1
Palm Beach County, FL

PROJECT	C2014-044
DRAWN BY	SS
SHEET	
DATE	1/30/2015

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TAYLOR ENGINEERING, INC.
Delivering Leading-Edge Solutions

October 30, 2015

Mr. Mark Crosley
Executive Director
Florida Inland Navigation District
1314 Marcinski Rd
Jupiter, FL 33477

RE: BV-24A Permitting and Final Design
Scope of Professional Engineering and Environmental Services

Mr. Crosley:

Per your request, we have enclosed a Scope of Work (Attachment A) and Cost Proposal (Attachment B) for engineering and environmental services required to permit and design Dredged Material Management Area (DMMA) BV-24A. As detailed in the enclosed documents, our proposed services include a field investigation, environmental permitting, preliminary and final design, and bid administration services. Similar in area and distance from the Intracoastal Waterway as BV-4B, BV-24A will require an evaluation (and, if necessary, a subsequent engineering solution) of potential for saline water infiltration into groundwater and off-site migration that may result from the use of the site.

Taylor Engineering will perform these services on a cost-plus basis, for a total cost not-to-exceed $556,108.90. Of this amount, $306,709.00 represents the proposed fee for our surveying ($5,240.00 for Morgan & Eklund, Inc.) and geotechnical ($301,469.00 for Dunkelberger Engineering & Testing, Inc. [DET]) sub-consultants. Taylor Engineering selected each sub-consultant based on either their previous selection by FIND for the selected services (i.e., surveying) or through a previous Request for Qualifications (RFQ) process. Attachments C and D provide the individual Scope of Work and Cost Proposal for Morgan & Eklund and DET. Due to the recent land exchange for BV-24A, Brevard County has agreed to reimburse FIND for a portion ($88,823.38) of the engineering fees previously expended on BV-24.

Finally, due to the unknown final design features of the DMMA BV-24A facility and associated fees for this scope of work, we propose to perform the enclosed services in the following four phases.

PHASE	ACTIVITY DESCRIPTION	COST
I	**Natural Resources Survey (Task 1.1)** **Geotechnical Investigation (Task 1.2)** *Review of Existing Data (Geotechnical, Hydrological, Hydrogeological)* *Compilation of Nearby Wells, Septic Tanks, Ponds, etc.* *Sampling and Lab Testing of ICWW Sediments to be Dredged* *Geotechnical Field Work and Testing for Groundwater Model & DMMA Design* *Conceptual Groundwater Model – identification/selection of alternates for detailed analysis* **Environmental Permitting (Task 2.1)** *Pre-Application Meeting*	$240,926.90
	INTERMEDIATE RESULTS PRESENTED TO FIND STAFF	
II	**Geotechnical Investigation (Task 1.2)** *Detailed Groundwater Numerical Model* *Saltwater Intrusion Alternatives Analysis*	$39,061.00
	INTERMEDIATE RESULTS PRESENTED TO FIND STAFF	
III	**Environmental Permitting (Tasks 2.2 – 2.5)** *Joint Environmental Permit Application* *Natural Resources Impact Analysis and Mitigation Planning*	$184,736.00

PHASE	ACTIVITY DESCRIPTION	COST
	Responses to Requests for Additional Information *Coordination* **Preliminary Engineering Design (Task 3) & Final Geotechnical Analysis (Task 1.2)** *Site Layout* *Dike Stability and Seepage Analyses* *Weir Foundation* *Stormwater Quality* *Site Saline Controls, as applicable*	
IV	**Final Design and Bid Documents (Task 4)** *Final Site Design* *Preparation of Plans and Specifications* *Opinion of Probable Cost* **Bid Administration (Task 5)**	$91,385.00
	TOTAL COST NOT TO EXCEED	$556,108.90

After the completion of Phase I and II, Taylor Engineering and DET will provide the intermediate results to FIND staff and obtain direction and feedback, based on a foundation of field- and engineering-specific data to the BV-24A site, before moving into the next phase of work. If you have any questions concerning this proposal, please contact Lori Brownell, P.E. or me. We can begin work upon your notice to proceed.

Sincerely,

John Adams, P.E.
Senior Advisor, Waterfront Engineering

Attachments (4)

ATTACHMENT A

SCOPE OF PROFESSIONAL ENGINEERING AND ENVIRONMENTAL SERVICES
BV-24A PERMITTING AND FINAL DESIGN
BREVARD COUNTY, FLORIDA

INTRODUCTION

The Florida Inland Navigation District's (FIND's) long-range dredged material management plan for the Intracoastal Waterway (ICWW) in Brevard County identified BV-24 as one of eight permanent dredged material management areas (DMMA) (Taylor et al., 1989). After a dense population of Florida scrub jays (*Aphelocoma coerulescens*) were identified on the western portion of BV-24, FIND negotiated a property exchange with Brevard County through which FIND received property adjacent to and east of BV-24 and the county received a portion of the north and west areas of BV-24. The exchange allowed FIND to minimize impacts to scrub jay habitat while allowing the county to increase its scrub jay habitat preservation area. The re-designated BV-24A — the subject of this proposal effort — comprises a 112.52-acre area approximately 1,400 feet west of the shoreline of the Indian River and east of the southeast leg of the Valkaria Missile Tracking Annex. Consisting primarily of native vegetation, the site is currently isolated from adjacent development; however, residential development approaches the site from the south.

As documented in the updated BV-24A Management Plan (Taylor et al., 2015), the ±1,053,000 cubic yard (CY) capacity BV-24A site is expected to comprise a ±63-acre containment basin with a dike crest elevation approximately 16.5 ft above the existing mean site grade of ±20.21 ft NAVD. Similar in area and distance from the ICWW as BV-4B, BV-24A will require an evaluation (and, if necessary, a subsequent engineering solution) of potential for saline water infiltration into groundwater and off-site migration that may result from the use of the site.

Given that FIND and Brevard County have nearly completed the necessary exchange agreement terms, FIND has requested Taylor Engineering move forward with permitting, final design, and preparation of bid documents. We have based our scope of services on the following assumptions:

1. Regulatory agencies will not require the mitigation for temporary wetland impacts, if any, associated with the placement of the ingress/egress pipeline for dredging operations.
2. A permanent pipeline installation will not be required.
3. The pipeline and road access right-of-way, routing approximately 2,540 ft east from the site boundary to the ICWW, will not require any geotechnical field investigation.
4. Regulatory agencies will not require any sediment sampling, grain size, or chemical analysis beyond what is summarized in the 1992 BV-24 Dredged Material Management Area Management Plan.
5. State and federal regulatory agencies will require a wetlands delineation and community classification of the entire BV-24A site to document existing natural resource conditions. These agencies will require compensatory mitigation for unavoidable, permanent wetland impacts.
6. FIND will use an approved wetlands mitigation bank to offset unavoidable wetland impacts.
7. Because a gopher tortoise (*Gopherus polyphemus*) survey is only valid for 90-days, identification of active gopher tortoise burrows and the relocation permit (required for construction) is not included in this proposal effort. FIND will address gopher tortoise permitting and relocation requirements separately from this contract and closer to the expected construction start date.
8. Brevard County will not require a permit for the construction of the DMMA nor associated wetland impacts, if any.
9. No cultural or archeological resources occur on site

10. No utilities occur on site
11. FIND will pay all permit application fees directly to the regulatory agencies

If any of these assumptions prove incorrect, Taylor Engineering will notify FIND of the changes and submit a proposal for any additional services necessitated by the changes. This proposal does not include construction-phase services.

TASK 1 FIELD INVESTIGATION

This task involves collection of existing site conditions data necessary for preparation of regulatory permit applications and completion of the final engineering design of the BV-24A site.

1.1 Natural Resources Survey

State and federal regulatory agency policy requires wetland delineation performed within the past five years. Taylor Engineering will perform a jurisdictional wetlands delineation of the ±112.52-acre BV-24A and the 60-ft wide pipeline right-of-way out to the edge of the ICWW. The wetlands delineation methodologies will follow the protocols mandated by the Florida Department of Environmental Protection (FDEP) and the U. S. Army Corps of Engineers (USACE). Taylor Engineering will install sequentially-numbered stakes and/or flags to mark the wetland-upland interface. Succeeding flags/stakes will be clearly visible from the previous flag location, and the distance between flags will not exceed 100 feet. Taylor Engineering will fill out all necessary data sheets as required by the USACE wetlands delineation methodology and regional supplements. Taylor Engineering will also identify and mark the seasonal high water elevation for each wetland that contains distinct indicators. Taylor Engineering will schedule and participate in an on-site meeting with USACE and FDEP staff to verify the jurisdictional wetland boundary and, if necessary, adjust the boundary based on agency staff field observations and comments. Morgan & Eklund, Inc. (Attachment C) will survey the approved jurisdictional wetland boundary and seasonal high water elevation markers.

1.2 Geotechnical Investigation

Taylor Engineering selected subconsultant Dunkelberger Engineering & Testing, Inc. (DET), a Terracon Company, to complete a geotechnical investigation and provide key design information for the DMMA BV-24A facility. Activities during this task will begin with a field investigation to include Standard Penetration Test (SPT) borings with variable depths between 15 and 100 feet. Work will continue with necessary laboratory and geotechnical engineering analysis. The deliverable for this task will comprise a report to establish geotechnical parameters for the pile foundation conditions (near the overflow weir structure), dike foundation conditions, borrow source soil conditions, settlement countermeasures (if necessary), dike construction qualities (e.g., recommended slopes, compaction criteria, etc.), and complete seepage/slope stability analysis to guide the containment dike design.

As part of this sub-task, DET will also evaluate the potential area of influence of saline migration resulting from multiple uses (i.e., repeated dredging events) of the DMMA. DET, through comprehensive groundwater flow and transport modeling, will evaluate the need for an engineered controlled solution (e.g., deeper perimeter ditches, cutoff wall, liner) to minimize and/or prevent off-site saline contamination. Attachment D provides DET's scope of services in its entirety.

TASK 2 ENVIRONMENTAL PERMITTING

The construction of the DMMA BV-24A will require permits/authorizations from FDEP, USACE and concurrent acceptance of the project plans from USFWS. Task 3 includes preparation and submittal of Joint Environmental Resources Permit (ERP) application for the construction of BV-24A. It also includes time to respond to requests for additional information (RAI) from the FDEP, USACE and USFWS.

2.1 Pre-Application Meetings

Taylor Engineering will develop materials for, coordinate and conduct up to two pre-application meetings with the FDEP, USACE, and USFWS. During these meetings (potentially located on-site), we will introduce the project to regulatory agency staffs, discuss foreseeable permit application issues, and solicit agency recommendations concerning the content and format of the application materials. Following completion of the pre-application meetings, Taylor Engineering will compile and submit meeting minutes to all attending parties.

2.2 Joint Environmental Resources Permit Application

Based on data collected in Task 1, the proposed site plan layout, and agency comments made during the pre-application meetings, Taylor Engineering will prepare and submit a Joint ERP application to the FDEP and the USACE. The application will include signed and sealed permit-level design drawings and narratives describing the (1) overall project and conceptual design, (2) location of on-site sensitive natural habitats, (3) best management practices and impact avoidance/minimization techniques, (4) natural resource impact analysis and mitigation (mitigation bank assumed), and (5) construction methodology and schedule.

2.3 Natural Resource Impact Analysis and Mitigation Planning

Based on findings of Task 1 and pre-application meeting results, Taylor Engineering will overlay the project footprint on the natural resources and wetlands features maps to locate and quantify natural resource impacts areas. We will apply the FDEP's Uniform Mitigation Assessment Method (UMAM) to assess natural resource impacts and mitigation requirements. The regulatory agencies' mitigation preference is the use of an approved mitigation bank. As such, Taylor Engineering will identify the available mitigation bank options and associated costs. Taylor Engineering will provide this information to FIND.

2.4 Responses to Requests for Additional Information

Following submission of the permit applications, FDEP, USACE, and USFWS will likely respond with one or more request(s) for additional information (RAI). A RAI typically includes a series of questions requiring additional explanation of the proposed project work, requested changes to the project to meet specific concerns, and specific design changes to meet agency design guidance. We may also expect some questions from USFWS regarding how the proposed project considers and minimizes impacts to the scrub jay population described in the recent scrub jay study. Accordingly, our cost estimate includes time (not to exceed a total of 200 man-hours or $24,756.00) to respond to RAIs. Finally, on an as-needed basis, we will coordinate with Normandeau Associates, Inc. for their scrub-jay expertise. If RAI responses require additional labor, field investigations, or laboratory tests, we will submit a new proposal describing the work needed to satisfy agency requests and costs to accomplish the work. Taylor Engineering will provide all RAI responses to FIND for review before submitting to the agencies.

2.5 Coordination

The single most important activity during the permitting process is the establishment and maintenance of a clear line of communications between the applicant and the participating agencies. To that end, Taylor Engineering will coordinate with local, state, and federal agencies staff during the application review process. These agencies include, but are not limited to, the FDEP, USACE, USFWS, Florida Fish and Wildlife Conservation Commission, and Brevard County. We will maintain consistency between the state and federal permit applications and other environmental documentation, and strive to resolve environmental issues that arise during the review period.

TASK 3 PRELIMINARY ENGINEERING DESIGN

In conjunction with Tasks 1 and 2, Taylor Engineering will prepare preliminary engineering design documents sufficient for permit review by regulatory agencies. For the preliminary and final design (Task 4) tasks, Taylor Engineering will build on the updated site layout as presented in the October 2015 BV-24A Management Plan and Engineering Narrative.

3.1 Site Reconnaissance Visit

Taylor Engineering will visit the site at least once to examine the physical characteristics of the site as they relate to the overall design of the project.

3.2 Preliminary Design

Taylor Engineering will design the DMMA site layout, perform associated volume calculations for the containment basin, and provide a preliminary engineering design for the weir structure.

Site Layout. Based on the wetland delineation and geotechnical report, we will update, as necessary, the project site plan consistent with the environmental and buffer requirements, and any design updates necessary to accommodate modification in the site conditions. In addition to the central containment basin, the site plan will include access ramp location, ingress/egress points, and access road location.

Volume Calculations. We will construct a detailed 3-D terrain model to complete a site design with the goal of obtaining balanced cut and fill earth volumes (to avoid the expense of having an off-site borrow material source) while providing sufficient dredged material storage volume.

Weir Design. We will provide a preliminary design analysis of the hydraulic control structures. Design components will include analysis of the hydraulic weir discharge characteristics, the H-pile box weir structures, the HDPE (high-density polyethylene) discharge piping system, and the timber access walkway. The weir structural design will consider geotechnical design parameters, lateral and hydrostatic uplift loads, and lateral earth pressure loads.

Site Saline Controls. Taylor Engineering will work with the geotechnical subconsultant, DET, to evaluate the need for and develop and design (if necessary) a site saline control system (e.g., liner), that (1) is compatible with typical DMMA designs; (2) will help to reduce and potentially eliminate off-site saline water impacts; and (3) enable the site to be eventually offloaded (when site capacity is reached) without damage (to the extent practicable) to the saline control system. This task also includes the submittal of an intermediate report providing a summary of the alternatives analyzed, associated cost, and subsequent recommendations.

3.3 ERP Engineering Review Criteria

This sub-task addresses each of the three primary engineering design elements for the environmental permit application.

1 – Capacity and Settling Time for Meeting Water Quality Standards at the Discharge. This element requires calculations demonstrating that the containment basin design settling characteristics (for the Reach VI finest sediment fraction) will result in a discharge meeting water quality standards. To address this criterion, we will submit calculations and supporting geotechnical data from previously-collected sediment samples as reported and updated, as necessary, from our November 1992 BV-24 Dredged Material Management Area Management Plan.

2 – Dike Stability. This element includes (1) geotechnical site investigation, (2) soil testing, (3) stability/seepage analysis, (4) design safety factor determination, (5) site preparation specification, (6) dike construction material identification, (7) water level control design, (8) seepage control design, (9) minimum freeboard determination, (10) construction methods specifications, and (11) construction quality assurance/quality control. Our scope of services addresses items 1 – 2; our submittal of standard guide specifications addresses items 5, 6, 10, and 11.

Addressing items 3, 4, 7, 8, and 9 (i.e., stability/seepage analysis, design safety factor determination, water level control design, seepage control design, and minimum freeboard determination) require in-depth engineering analysis of the containment basin. Taylor Engineering, in coordination with DET, will complete the analysis and prepare a memorandum to detail the stability/seepage analysis, design safety factors, excess capacity requirements, storage capacity, structure height, volume recovery, and location and elevation of control structures.

3 – Stormwater Quality and Prevention of Off-site Flooding. This element involves evaluation of the stormwater quality and quantity. Taylor Engineering will design the site drainage and size pipes, culverts, inlets, and ditches as necessary to provide adequate drainage and in accord with the required conditions determined at the pre-application meeting. We will design erosion control measures as necessary to protect against erosion from weir discharge and rainfall runoff.

3.4 Permit Drawings

We will prepare digital permit drawings for the various site elements. If appropriate, the permit set will include photo-based sheets depicting the project area. We will obtain existing aerial photography for this purpose. These drawings will provide plan, cross section, and detail views of the proposed DMMA basin and its return water control structure as well as any necessary seepage, drainage, and erosion control features. We will provide signed and sealed permit drawings in appropriate hardcopy format and in digital (AutoCAD and PDF) format.

TASK 4 FINAL DESIGN AND BID DOCUMENTS

4.1 Final Design

Building on the preliminary design efforts and the regulatory permitting process, Taylor Engineering will conduct one additional site reconnaissance visit; complete the final engineering design necessary to construct the containment basin, weir structure and associated deck platform, site access

road, and stormwater and saline control infrastructure; and calculate final earthwork volumes associated with the overall site plan.

Site Reconnaissance Visit. Taylor Engineering will visit the site once to visualize and coordinate design aspects with site characteristics during the final engineering design process.

Containment Basin. Taylor Engineering will complete the project site plan consistent with the preliminary design, planning, and permit documents, as well as environmental and buffer requirements. In addition to the central containment basin, the site plan will include a final access ramp with ingress/egress points. Based on the slope stability and seepage analyses performed in Task 3.3, we will design and detail the underdrains (as appropriate), selected saline-control system (e.g., liner), and collection system (including the perimeter ditch) to collect and route seepage away from the dike. This task also includes an evaluation of the perimeter ditch capacity for control and treatment of stormwater runoff.

Weir Structure and Associated Deck Platform. Taylor Engineering will complete final design of hydraulic control structures consisting of box weirs with adjustable timber flashboards to control discharge from the DMMA basin during operation. We will design an HDPE pipe collection system to route water collected by the weirs through the dike structure (and the selected site saline control system). Taylor Engineering will design appropriate piles and foundation slab to constrain the weirs against hydrostatic uplift forces during operations. We will design and detail box weir structural members and connections to resist later earth pressure and hydrostatic loads. We will design and detail a timber access walkway to allow personnel access to the weir structure from the dike crest.

Site Access Road. Taylor Engineering will provide design for stabilized soil/gravel access road to allow for site ingress/egress and transport around the site perimeter.

Stormwater Control. Taylor Engineering will stormwater drainage requirements to size pipes, culverts, inlets, and ditches for adequate site drainage. We will design erosion control measures to protect against erosion from weir discharge and rainfall runoff.

Volume Computations. Taylor Engineering will construct a final 3-D digital terrain model to complete a site design with balanced cut and fill earth volumes.

4.2 Bid Documents

We will prepare digital construction drawings for the various site elements. If appropriate, the drawing set will include photo-based sheets depicting the project areas. We will obtain existing aerial photography for this purpose. Construction drawings will provide plan, cross-sectional, and detail views of the proposed DMMA basin and its return water control structure as well as any necessary seepage, drainage, saline, and erosion control features. Taylor Engineering will provide construction drawings in appropriate hard-copy format and in digital (AutoCAD) format, as well as record drawings signed and sealed by a Florida Registered Professional Engineer.

We will update the Division 0 and 1 contract documents (Contract Documents) and prepare Division 2 and higher contract documents (Technical Specifications) for construction of the project. We will follow the Engineer's Joint Contract Documents Committee (EJCDC) and Construction Specification Institute (CSI) standards and guidelines in preparing the specifications.

4.3 Opinion of Probable Cost

We will prepare an opinion of probable cost for constructing the BV-24A DMMA facility.

4.4 Bid Package Preparation

We will prepare a bid schedule with estimated quantities for all bid items. In preparation for project bidding and bid administration, Taylor Engineering will develop a digital bid document package including digital copy of the final drawings and specifications for FIND to advertise the bid and upload onto its FTP site. We will provide FIND with a record set of drawings sealed by a Florida Registered Professional Engineer.

TASK 5 BID ADMINISTRATION

Taylor Engineering will help FIND administer the bidding process and assist in selecting the contractor. We will remain available at our Jacksonville offices to clarify and interpret project documents and prepare addenda, if required. Our project engineer will attend the pre-bid meeting to answer questions concerning elements of the project for which Taylor Engineering is responsible. We will assist with reviewing the bids received and provide FIND with our recommendations for contractor selection. This work includes reviewing the submitted bid documents, checking references of the responsive bidders, and preparing and transmitting a written recommendation for contractor selection. Taylor Engineering will limit its review and recommendations to engineering and technical issues. FIND will take responsibility for legal review and evaluation of contractors' financial condition, business licenses or authorizations, bonding, contractual requirements, and any other non-engineering or non-technical information.

ESTIMATED SCHEDULE

No.	Task	Months from Notice to Proceed																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Field Investigation																		
2	Environmental Permitting																		
3	Preliminary Engineering Design																		
4	Final Design and Bid Documents																		
5	Bid Administration																		

ATTACHMENT B

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
P2015-165: BV-24A PERMITTING AND FINAL DESIGN

TASK 1: FIELD INVESTIGATION

Labor	Hours	Cost ($)	Task Totals
R. Bruce Taylor, Ph.D. P.E.	0.0	-	
President	0.0	-	
Vice President	8.0	1,480.00	
Senior Advisor	6.0	1,116.00	
Director	0.0	-	
Senior Professional	46.0	6,486.00	
Project Professional	0.0	-	
Staff Professional	60.0	5,160.00	
Editor	0.0	-	
Senior Technical Support	1.0	108.00	
Staff Technical Support	8.0	664.00	
Administrative	12.0	624.00	
Total Man-Hours	141.0		
Labor Cost			15,638.00

Non-Labor	Units	Cost ($)	
Natural Resources Survey	-	-	
Rental Car	2.0	250.00	
Per Diem	2.0	30.00	
Morgan & Eklund Wetland Survey	1.0	5,240.00	
DET Geotechnical Investigation	1.0	301,469.00	
Non-Labor Cost		306,989.00	
Fee @ 10.0%		30,698.90	
Total Non-Labor Cost			337,687.90
Total Task 1			$ 353,325.90

TASK 2: ENVIRONMENTAL PERMITTING

Labor	Hours	Cost ($)	Task Totals
R. Bruce Taylor, Ph.D. P.E.	0.0	-	
President	0.0	-	
Vice President	16.0	2,960.00	
Senior Advisor	19.0	3,534.00	
Director	110.0	17,490.00	
Senior Professional	100.0	14,100.00	
Project Professional	0.0	-	
Staff Professional	148.0	12,728.00	
Editor	10.0	990.00	
Senior Technical Support	60.0	6,480.00	
Staff Technical Support	0.0	-	
Administrative	28.0	1,456.00	
Total Man-Hours	491.0		
Labor Cost			59,738.00

ATTACHMENT B

P2015-165: BV-24A PERMITTING AND FINAL DESIGN

Non-Labor	Units	Cost ($)	
Pre-Application Meeting	-	-	
Rental Car	2.0	250.00	
Per Diem	2.0	30.00	
Reproductions and Delivery	1.0	100.00	
Non-Labor Cost		380.00	
Fee @ 10.0%		38.00	
Total Non-Labor Cost			418.00
Total Task 2			$ 60,156.00

TASK 3: PRELIMINARY ENGINEERING DESIGN

Labor	Hours	Cost ($)	Task Totals
R. Bruce Taylor, Ph.D. P.E.	0.0	-	
President	0.0	-	
Vice President	22.0	4,070.00	
Senior Advisor	32.0	5,952.00	
Director	12.0	1,908.00	
Senior Professional	160.0	22,560.00	
Project Professional	0.0	-	
Staff Professional	212.0	18,232.00	
Editor	0.0	-	
Senior Technical Support	106.0	11,448.00	
Staff Technical Support	0.0	-	
Administrative	34.0	1,768.00	
Total Man-Hours	578.0		
Labor Cost			65,938.00

Non-Labor	Units	Cost ($)	
Site Visit	-	-	
Rental Car	2.0	250.00	
Per Diem	2.0	30.00	
Non-Labor Cost		280.00	
Fee @ 10.0%		28.00	
Total Non-Labor Cost			308.00
Total Task 3			$ 66,246.00

TASK 4: FINAL DESIGN AND BID DOCUMENTS

Labor	Hours	Cost ($)	Task Totals
R. Bruce Taylor, Ph.D. P.E.	0.0	-	
President	0.0	-	
Vice President	18.0	3,330.00	
Senior Advisor	15.0	2,790.00	
Director	1.0	159.00	
Senior Professional	174.0	24,534.00	
Project Professional	0.0	-	
Staff Professional	288.0	24,768.00	

ATTACHMENT B

P2015-165: BV-24A PERMITTING AND FINAL DESIGN

Editor	0.0	-	
Senior Technical Support	0.0	-	
Staff Technical Support	172.0	14,276.00	
Administrative	24.0	1,248.00	
Total Man-Hours	692.0		
Labor Cost			71,105.00
Non-Labor	Units	Cost ($)	
Site Visit	-	-	
Rental Car	2.0	250.00	
Per Diem	2.0	30.00	
Reproductions and Delivery	1.0	100.00	
Non-Labor Cost		380.00	
Fee @ 10.0%		38.00	
Total Non-Labor Cost			418.00
Total Task 4			$ 71,523.00

TASK 5: BID ADMINISTRATION

Labor	Hours	Cost ($)	Task Totals
R. Bruce Taylor, Ph.D. P.E.	0.0	-	
President	0.0	-	
Vice President	0.0	-	
Senior Advisor	5.0	930.00	
Director	0.0	-	
Senior Professional	12.0	1,692.00	
Project Professional	0.0	-	
Staff Professional	20.0	1,720.00	
Editor	0.0	-	
Senior Technical Support	0.0	-	
Staff Technical Support	0.0	-	
Administrative	4.0	208.00	
Total Man-Hours	41.0		
Labor Cost			4,550.00
Non-Labor	Units	Cost ($)	
Pre-Bid Meeting	-	-	
Rental Car	2.0	250.00	
Per Diem	2.0	30.00	
Non-Labor Cost		280.00	
Fee @ 10.0%		28.00	
Total Non-Labor Cost			308.00
Total Task 5			$ 4,858.00

Project Total $ 556,108.90

ATTACHMENT C

MORGAN & EKLUND, INC.

PROFESSIONAL SURVEY CONSULTANTS

October 29, 2015

Taylor Engineering, Inc.
ATTN: Ms. Lori Brownell, P.E
10151 Deerwood Park Blvd., Bldg. 300, Suite 300
Jacksonville, Florida 32256

RE: Location of Delineated Wetlands for Dredged Material Management Area BV-24A, Brevard County, Florida

Dear Lori:

Morgan & Eklund, Inc. is pleased to provide you with the following proposal to furnish professional survey services for the above-referenced project.

In accordance with the scope of work as provided, I estimate our costs to be as follows:

I. Field Work

Chief Surveyor	
2 hours @ $135/hr	$ 270.00
Project Surveyor	
6 hours @ $75.00/hr	$ 450.00
Three Man Survey Crew	
16 hours @ $135/hr	$ 2,160.00
Trimble RTK	
1 day @ $450.00/day	$ 450.00
	$ 3,330.00

II. Data Reduction & Plotting of Wetlands locations on Boundary/Topographic Survey.

Chief Surveyor	
2 hours @ $135/hr	$ 270.00
Project Surveyor	
8 hours @ $75.00/hr	$ 600.00
Computer Technician	
16 hours @ $65/hr	$ 1,040.00
	$ 1,910.00

Total Cost I-II..... $ 5,240.00

8745 U.S. HIGHWAY 1, P.O. BOX 701420, WABASSO, FL 32970-1420 • PHONE: (772) 388-5364 • FAX: (772) 388-3165 • jmorgan@morganeklund.com
1001 North America Way, Suite 211, Miami, FL 33132 * PHONE: 305-364-5158 * 1159 SW 1st Way DEERFIELD BEACH, FL 33441 •
PHONE: (954) 421-6882 • FAX: (954) 421-0425 • pvoute@morganeklund.com

As always, Morgan & Eklund, Inc. appreciates this opportunity to work with you and the Florida Inland Navigation District on this project.

Sincerely,

John R. Morgan, II, PLS
President

JRM:sm

ATTACHMENT D

DUNKELBERGER
engineering & testing, inc.
A Terracon COMPANY

October 28, 2015
Revised

Taylor Engineering, Inc.
10151 Deerwood Park Boulevard
Building 300, Suite 300
Jacksonville, Florida 32256

Attention: Ms. Lori S. Brownell, P.E...*Via email (lbrownell@taylorengineering.com*
Director, Waterfront Engineering

Subject: **Geotechnical Engineering Services Proposal**
BV-24A Dredged Material Management Area (DMMA)
Brevard County, Florida
Proposal No. PHB150009

Dear Ms. Brownell:

INTRODUCTION

In response to your most recent written request of October 13, 2015, Dunkelberger Engineering & Testing, Inc., A Terracon Company (DUNKELBERGER) is pleased to submit this proposal for geotechnical engineering services to support engineering design and permitting of the proposed Florida Inland Navigation District (FIND) BV-24A site in Brevard County, Florida. The proposal closely models our on-going scope of work for the nearby BV-4B site which is similar many respects. Comparatively speaking, the BV-24A site is located within a more remote area with higher, flatter ground. Our work is to be carried out in phases as outlined below.

PHASE	ACTIVITY DESCRIPTION
I	• *Review of Existing Data (Geotechnical, Hydrological, Hydrogeological)* • *Inventory of Nearby Wells, Septic Tanks, and Ponds* • *Sampling and Lab Testing of ICWW Sediments to be Dredged* • *Geotechnical Field Work and Testing for Groundwater Modeling & DMMA Design* • *Initial Groundwater Modeling – Set-up, calibration of MODFLOW/MT3DMS models; operational runs (Years 10 through 50) with no saline controls*
II/III	• *Final Groundwater Modeling- Operational runs with up to three saline control features (ditches, under-drains and/or pumped wells) including wetland drawdown analysis and site grading/embankment details for the preferred saline control alternative*
III	• *Final Geotechnical Analysis –* o *Dike Stability, Settlement and Seepage Analyses* o *Weir Foundation* o *Permanent Pipeline* o *Site Saline Controls Design, as applicable*
IV	• *Final Plans and Specifications Preparation for Saline Control and Groundwater Monitoring Features*

BACKGROUND INFORMATION

Site Conditions

The subject BV-24A site is 112.52 acres in area located about nine miles south of Melbourne in Brevard County. The site is located within a generally undeveloped area and, from its east side, is about 1200 feet west of the Intracoastal Waterway (ICWW). The Google Earth 2014 aerial map shows the site as undeveloped, vegetated land with multiple sand-surfaced trails traversing throughout the site boundaries.

We performed a site reconnaissance on January 20, 2015. Our significant findings are described below.

- Site vegetation consists mostly of 5 to 7-foot high palmetto bushes and tall pine trees.
- Several all-terrain and/or equestrian trails traverse through site. Larger trails contain a soft sand surface layer.
- There is a ditch running along Old Dixie Highway which restricts vehicle access to the east of the site. Private property lies to the south and dormant asphalt plants lie to the north.
- An area at the east end of the site was underwater, in January 2015, where an all-terrain path cuts through a wetland feature. This area is visible in the 2014 Google Earth aerial map.
- Two other wetland type areas were found: one just east of the center of the DMMA footprint and the other at the south of the planned embankment alignment.
- A fence aligned north-south is located in the center of the site.
- Most of the site shows evidence of what was likely a previous brush fire.
- Minimal trash found in the explored areas suggesting no significant dumping on site.

Project Description

The dredged material is to be obtained from Reach VI which is a 13.5-mile stretch of the ICWW just north of the Sebastian Inlet.

The site is expected to comprise a ±63-acre DMMA with a design capacity of approximately 1,053,044 cubic yards. This is based on a dike crest elevation of approximately 16.5 feet above the existing mean site grade of +20.21 feet NAVD with the final deposition layer 4 feet below the dike crest. Preliminary design of the dike was based on 3:1 (horizontal: vertical) side slopes with a crest width of 15 feet. Borrow material for dike construction will be obtained by excavating the basin interior to an elevation of + 15.71 feet NAVD (approximately 4 ½ feet below the existing ground surface). Other details regarding the site development are discussed in previously prepared reports and design documents, which have been provided to us. These documents, listed below, provide the foundation for the final DMMA design and permitting.

- **BV-24 Management Plan** — a summary of the preliminary design, site preparation, and site management features as originally documented in 1992; last revised October 2015.

- **BV-24 Engineering Narrative** — an abbreviated summary of the site's key proposed engineering parameters

- **BV-24A Exchange Agreement Exhibit** — a preliminary revised site layout representing land exchange between Brevard County and FIND

- **USACE Boring Logs** – drilling logs, dated 1992, of four test holes (CB-24-2 through CB-24-5) to a depth of 21 feet in and around the revised site layout

Presently, the site is isolated from development although new residential areas are approaching from the south. Additional, nearby development is likely to occur during the 50-year operational life of the DMMA. Therefore, a key design consideration for BV-24A, similar to BV-4B, is the potential for saline impacted groundwater beneath the DMMA footprint to migrate off-site. The design criterion is to maintain chloride concentrations within the fresh water aquifer at less than 250 milligrams per liter (mg/L) at the site boundaries during the DMMA's operational life span.

We have also assumed that a permanent, closed pipeline, approximately 2400 feet in length, will be constructed to carry saline-impacted ditch water from the DMMA weir structure to the ICWW.

SCOPE OF SERVICES

Pursuant to Taylor Engineering's Request for Proposal and our recent experience at BV-4B, the planned scope of services is as follows:

I. GEOTECHNICAL FIELD INVESTIGATION AND LABORATORY ANALYSIS

Geotechnical field investigation and laboratory analysis are required to provide an overall subsurface characterization that will accomplish the following tasks:

1. Identify soil strata available and suitable as borrow for dike embankment construction within the interior dike footprint.
2. Identify soil strata likely unsuitable as borrow for dike embankment construction material (silts, clays, and organic materials) located within the expected excavation zone.
3. Determine expected groundwater elevations during construction and recommend whether dewatering, mixing, or compaction of excavated material will be required for placement and construction of the dike.
4. Determine soil properties for dike stability, settlement and seepage analyses.
5. If the investigation identifies compressible soils, determine dike consolidation settlement and length of time for settlement to occur.
6. Collect field and laboratory data necessary to support groundwater modeling to evaluate the need for site saline controls.
7. Develop groundwater models to consider alternative saline controls and design and specify a saline control system (if necessary).
8. Provide soil properties for analysis of shallow or deep (pile) foundations at weir location (expected pile depth no greater than 80 feet below existing grade).

9. Provide laboratory compaction tests (Modified Proctor) and bearing tests (LBR) of in situ material for dike and access road construction.
10. Provide general recommendations for earthwork and pile construction methods.

Our work will include the conducting of laboratory classification and index property tests on soil samples obtained during field data collection. The testing will be performed on representative disturbed and undisturbed samples. All field borings will be logged and classified in accordance with the Unified Soil Classification System (USCS) with location and depths, referenced to depth below ground surface and elevation, of all samples recorded on the log.

Laboratory tests will include consolidation (if clays and/or silts are encountered), shear-strength, laboratory compaction, Limerock Bearing Ratio (LBR), and hydraulic conductivity of the foundation and embankment soils. Index property tests will include moisture content, sieve analysis, organic content, and Atterberg limits. Tests will be conducted in accordance with ASTM or other accepted standards.

We are proposing the use of Standard Penetration Test (SPT) borings to accomplish the field investigation requirements. The attached Sheet 1 provides a layout of the proposed SPT borings along with the proposed depths. The borings will be drilled with a specialty ("mini") all-terrain rig due to the difficult site access conditions (wet ground and thick vegetation). However, some earth moving will be required to temporarily fill in a section of the ditch along Old Dixie Highway to provide drill rig access to the site. We have included an estimated allowance for the temporary ditch filling by a subcontractor. The allowance does not include the cost of permitting, if any, for that work.

Groundwater data (depths/elevations) will be obtained from monitoring wells to be installed within and around the planned DMMA footprint. The wells will also be sampled to establish baseline/background water quality data (chlorides, total dissolved solids and pH).

Proposed test hole and monitoring well locations are presented on Sheets 1 and 2, respectively. Taylor Engineering will arrange for a registered land surveyor to field stake each test hole and well location with XYZ data.

In addition to the on-site exploratory work, we have included a provision for vibracore sampling from the subject ICWW reach to collect samples for laboratory testing. Specifically, we will be working to develop laboratory methods to quantify the concentration of chlorides that may leach from the impounded samples as the result of rainfall infiltration (i.e., long-term chloride leaching potential of dredged material). Samples from the vibracores will be classified in accordance with the Unified Soil Classification System (ASTM D 2487), and representative samples will be tested for grain size distribution (ASTM D 422).

A detailed breakdown of our proposed field investigation and laboratory analysis scope, with estimated fee, is provided on attached Table 1 of this proposal.

II. ENGINEERING ANALYSES, RECOMMENDATIONS, AND DESIGN

DUNKELBERGER will provide the following engineering analyses and recommendations:

1. If the field investigation identifies compressible soils, estimates of dike settlement at appropriate locations along the dike will be furnished, including estimated time required for consolidation settlement to occur.
    a. Determine whether dike settlement or differential settlement is excessive for the type and height of earthen dike.
    b. If dike settlement or differential settlement is excessive, recommend ways to reduce or design for the expected settlement.
    c. Recommend methods to decrease the consolidation period (e.g. wick drains, surcharge, etc.) and methods to monitor consolidation settlement.
2. Provide recommended foundation type to support weir (shallow foundation vs. deep foundation). If a shallow foundation appears feasible, provide allowable bearing capacity and anticipated settlement. For deep foundation, provide soil properties for analysis of pile foundation. Based on the data provided, Taylor Engineering will complete the design for the weir foundation.
    a. Provide measured and estimated soil properties for dike stability and seepage analysis including:
    b. Shear strength for undrained and drained conditions
    c. Hydraulic conductivity of in-situ soils in the horizontal and vertical directions
    d. Hydraulic conductivity of mixed and compacted soils for dike construction in the horizontal and vertical directions.
3. Complete seepage and slope stability analysis to include design safety factor determination for conditions including:
    a. End-of-Construction
    b. Steady-State Seepage
    c. Transient Seepage
    d. Rapid Drawdown
4. Based on seepage analysis and in conjunction with Taylor Engineering, provide recommendations for maximum interior and exterior dike slopes, stability berms, seepage control features, construction specifications, and other design features necessary to maintain minimum standard safety factors.
5. Develop groundwater models to evaluate the need for site saline controls based on the 250 mg/L groundwater criterion at the site boundaries, evaluate alternative solutions, select the preferred cost-effective solution (collaborative effort with Taylor Engineering), and develop the necessary design details. This task also includes the submittal of an intermediate report providing a summary of the alternatives analyzed, and subsequent recommendations.
    a. The final saline controls design must (i) be compatible with typical DMMA design and operations; (ii) help to reduce off-site saline water impacts; and (iii) enable the site to be eventually offloaded (when site capacity is reached) without damage (to the extent practicable) to the saline control system. This task will also include locating and describing (e.g., depth, purpose, etc.) local area surficial (potable and/or irrigation) wells.
    b. If the analysis recommends installation of saline control features, its design must be integrated into the seepage and slope stability analysis and coordinated with any seepage control features.
6. If necessary, work collaboratively with Taylor Engineering to prepare construction drawings and specifications to be integrated within the overall construction document package to fully detail the requirements for required saline control features.

We will retain Andreyev Engineering, Inc. as a professional sub-consultant to carry out the groundwater modeling. Similar to the study approach for BV-4B, we expect the groundwater modeling effort to include the following:

i. Collect available data for the project area, including previous studies, geotechnical investigations, water quality data, rainfall, runoff, source water quality and other data that may be available and useful for this analysis and modeling.
ii. Identify needed additional data; collect the necessary data and conduct laboratory testing as necessary. This will include collecting dredge material samples at the source (budgeted for approximately 10 samples), set up and conduct ten leachability tests in the laboratory (DUNKELBERGER laboratory and Palm Beach Environmental Laboratories) to estimate the leaching parameters for the saline water transport model calibration, conduct water quality tests on leachate from the laboratory tests (analytical laboratory), and reduce all field and laboratory data as needed for model import.
iii. Set up MODFLOW and MT3DMS models to cover the effective area around the DMMA and calibrate the models to existing groundwater flow and measured leachability parameters, respectively.
iv. The operational events of the DMMA will be incorporated into the calibrated models and the effect of saline water infiltration and movement will be simulated by the flow and contaminant transport models. The models will be re-run with operational control measures (ditches, under-drains and wells) to allow selection of the most practical option to contain the saline water to meet the "250 mg/L design criterion". This task may include meeting with the project team to present initial results and then final modeling once the preferred alternative is selected.
v. Conduct final model runs for the preferred alternative to incorporate site grading and embankment details as well as to analyze wetland drawdown impacts
vi. Prepare a detailed report summarizing the field work, data collection, laboratory testing, data reduction, describing the model set up and calibration, presenting the model results for operational events (Years 10 through 50) with and without saline control measures, and providing design recommendations for the preferred saline control feature.
vii. Participate in up to three, in-person client (Taylor Engineering) meetings and one FIND Board meeting as requested.

Man-hour estimates for these tasks are presented on the attached Sheet 3. The tasks, along with their associated costs, are broken out by phase.

III. SUMMARY REPORT AND RECOMMENDATIONS

The following information, as a minimum, will be furnished in a final, detailed geotechnical report. We have made allowance for preparation and presentation of interim phase reports (Phase I only and Phase I/II combined).

1. Summary of project considerations including review of surface features and site conditions that could affect foundation construction and site preparation.

2. A general evaluation of the site considering the proposed project and estimated

subsurface conditions.

3. Logs of all SPT borings along with a field exploration plan illustrating the location and reference number of each test location. For each test location, the following will be provided.

    a. Actual GPS coordinates of each test location.

    b. Grain-size distribution from sieve analyses, presented both graphically and by summary statistics.

    c. Existing and estimated seasonal high groundwater depths, referenced to depth below ground surface and elevation, at each test location.

4. A geotechnical engineering evaluation of the subsurface conditions with respect to the planned construction (i.e., settlement evaluation of the planned dike).

5. Recommended shear strength, unit weight, and hydraulic conductivity parameters for dike stability and seepage analyses.

6. A summary of seepage and slope stability analysis.

7. A summary of groundwater modeling relative site saline controls. The summary will include an evaluation of the need (or lack thereof) for such control, alternative control measures considered including the estimated construction costs (to be done collaboratively with Taylor Engineering) and technical risks and benefits associated with each alternative, and a summary of the recommended saline control design (if any).

8. Specific recommendations for construction if dike settlement or differential settlement is deemed excessive.

9. General recommendations for earthwork, weir foundation and pipeline construction methods.

10. Recommendations for a groundwater monitoring system.

IV. CONSTRUCTION DRAWINGS AND SPECIFICATIONS

Develop construction drawings and specifications to describe and detail the construction requirements for any recommended saline control features. DUNKELBERGER will coordinate with Taylor Engineering to integrate saline control construction drawings and specifications into the project's overall construction documents.

V. PROJECT DELIVERABLES

Six hard copies and one digital copy of the final report providing the test results and recommendations signed and sealed by a licensed Florida Professional Engineer.

Six hard copies and one digital copy of construction drawings and technical specifications for any recommended saline control features signed and sealed by licensed Florida Professional Engineer.

Digital point file containing the horizontal coordinates of each boring location.

SCHEDULE

We are prepared to begin providing the required services as soon as needed. We estimate that our schedule for the geotechnical work will be as follows:

- Phase I:
  - Field Work – 6 weeks
  - Laboratory Testing – 4 weeks
  - Model set-up, calibration and operational runs (w/o controls)- 6 weeks
  - Engineering Analysis & Reporting – 4 weeks
  - Total: About 20 weeks
- Phase II:
  - Model operational runs (w/ controls) – 4 weeks
  - Engineering Analysis & Reporting – 2 weeks
  - Total: About 6 weeks
- Phases III and IV:
  - Engineering & Final Report, Plans and Specifications – 12 weeks

SCHEDULE TOTAL: About 38 weeks

During the course of the project, we will provide electronic (email) progress reports on a monthly basis, or as requested.

COST

Our work will be performed on a unit rate basis in accordance with the fees shown on Tables 2 and 3 of this proposal. Based on our understanding of the project and our scope of work as described herein, we have developed an estimated total not-to-exceed cost of **$301,469** for completion of the geotechnical services. We understand that our work will be executed under a subcontract agreement prepared by Taylor Engineering, Inc.

SAFETY – *IIF*

At DUNKELBERGER, we all have a personal and uncompromising commitment to everyone going home safely each and every day. Incident and Injury-Free (*IIF*) is about care and concern for people. It is our personal and organizational commitment at all levels of the company. Working safely is an inseparable part of working correctly, just as much as other operational priorities, in particular quality, profitability and schedule. Incident and Injury-Free is our commitment to our

people and others, who we value for who they are and what they do. *IIF* is not just something we do; it's in everything we do.

As part of our IIF process, we will prepare a "Pre-Task Plan" for this project where we will identify the potential site safety and job hazards associated with your site. Our Pre-Task Plan will identify and prepare our personal to be able to handle conditions such as but not limited to traffic control, environmental contamination, site access issues, overhead and underground utilities, adverse weather conditions, and personal protection equipment and will continually be reviewed and reevaluated throughout the field work activities. We understand that each site is unique and may contain different safety conditions and as a company to protect our personnel as well as others, we look at each site individually to identify the potential concerns.

_____oOo_____

We appreciate the opportunity to submit this proposal for your consideration and look forward to further discussions with you concerning this project.

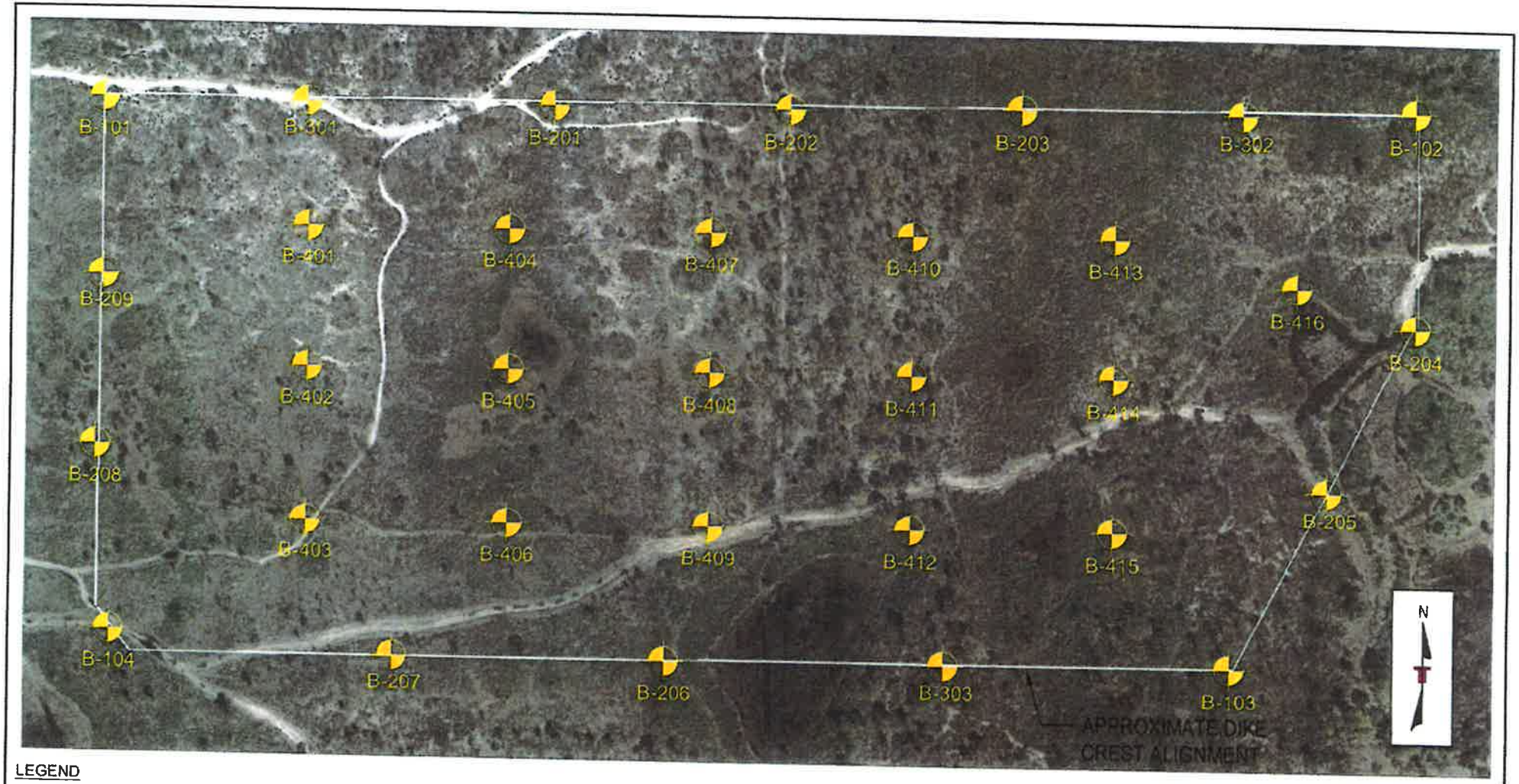
Sincerely,

DUNKELBERGER ENGINEERING & TESTING, INC.,
A TERRACON COMPANY

Brent M. Langlois, E.I.
Project Geotechnical Engineer

Douglas S. Dunkelberger, P.E.
Principal

Attachments: Sheet 1 – Proposed SPT and CPT Location Plan
Sheet 2 – Proposed Monitoring Well Location Plan
Table 1 – Detailed Field and Laboratory Scope and Fee Breakdown
Table 2 – Man-hour and Overall Cost Breakdown



SOURCE: GOOGLE EARTH

LEGEND

- 100 FOOT STANDARD PENETRATION TEST (SPT) BORING LOCATION AND NUMBER
- 70 FOOT STANDARD PENETRATION TEST (SPT) BORING LOCATION AND NUMBER
- 45 FOOT STANDARD PENETRATION TEST (SPT) BORING LOCATION AND NUMBER
- 15 FOOT STANDARD PENETRATION TEST (SPT) BORING LOCATION AND NUMBER

Locations are approximate

Note: Location plan does not show the permanent pipeline SPT borings: 12 to 20 feet deep and 2 to 40 feet deep (at Old Dixie Highway)

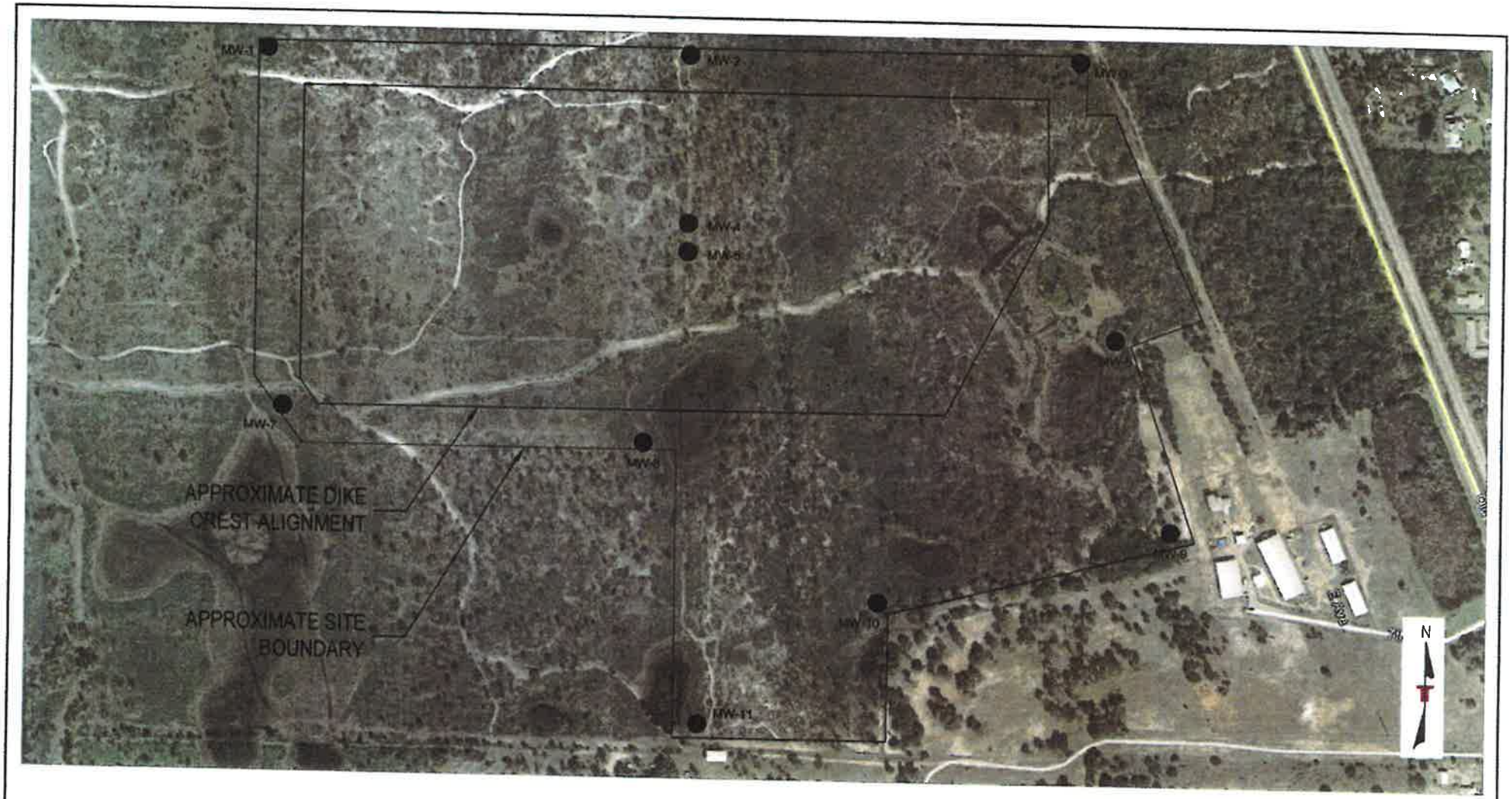
0' 100' 200' 400'

Drawn By	BML
Checked By	DSD
Scale	AS SHOWN
Date	REVISED 10-27-15

Terracon
Consulting Engineers and Scientists

PROPOSED BORING LOCATION PLAN
GEOTECHNICAL SITE EXPLORATION
TAYLOR ENGINEERING
BV-24A DMMA
BREVARD COUNTY FLORIDA

ATTACHMENT D SHEET



LEGEND

MW-1 - MONITORING WELL LOCATION AND NUMBER

Locations are approximate

SOURCE: GOOGLE EARTH

0' 250' 500' 1000'

Drawn By: BML	Scale: AS SHOWN	Terracon Consulting Engineers and Scientists	PROPOSED MONITORING WELL PLAN
Checked By: DSO	File No: -		GEOTECHNICAL SITE EXPLORATION
Approved By:	Date: 1/15/15		TAYLOR ENGINEERING
			BV-24A DMMA
			BREVARD COUNTY FLORIDA

ATTACHMENT D2 SHEET

ATTACHMENT D

Table 1

BV-24A DREDGED MATERIAL MANAGEMENT AREA
GEOTECHNICAL STUDY SCOPE and COST BREAKDOWN
DUNKELBERGER ENGINEERING & TESTING, INC., A TERRACON COMPANY (DUNKELBERGER)

ITEM DESCRIPTION	UNITS	AMOUNT	UNIT RATE	FEE
I. MOBILIZATION				
Utility Clearance				
Sr. Engineering Technician	hour	10	$ 75.00	$ 750.00
Site Access Clearing and Earthwork (cost + 15%)	allowance	1	$ 5,000.00	$ 5,000.00
Site Clearing Supervision				
Sr. Engineering Technician	hour	20	$ 75.00	$ 1,500.00
Drill Rig Mobilization				
SPT Drilling Rig	each	1	$ 750.00	$ 750.00
CPT Sounding Rig	each	1	$ -	$ -
SUBTOTAL- MOBILIZATION				**$ 8,000.00**
II. FIELD EXPLORATION				
SPT Borings (4 @ 100 feet, 9 @ 70 feet, 3 @ 45 feet, 2 @ 40 feet, 12 @ 20 feet, 16 @ 15 feet) [1,725 lf total]				
0 to 50 feet deep	feet	1345	$ 13.00	$ 17,485.00
50 to 100 feet deep	feet	380	$ 15.00	$ 5,700.00
Casing allowance for SPT Borings *(allowance of 50 ft/boring times the 13 deep (75 & 100) borings)*				
0 to 50 feet deep	feet	650	$ 5.00	$ 3,250.00
Grout Seal Boreholes				
0 to 50 feet deep	feet	1345	$ 4.00	$ 5,380.00
50 to 100 feet deep	feet	380	$ 5.00	$ 1,900.00
Undisturbed (Shelby Tube) Samples	each	9	$ 125.00	$ 1,125.00
Allowance 1 per dike SPT boring				
CPT Soundings (4 @ 70 feet and 3 @ 45 feet) [415 lf total]				
0 to 100 feet deep	feet	-	$ 8.00	$ -
Groundwater Monitoring Wells (10 @ 15 feet, 1 @ 70 feet)	feet	220	$ 27.00	$ 5,940.00
9 placed along site boundaries, pair placed in center of site (1 shallow, 1 deep)				
Difficult Access	hour	40	$ 150.00	$ 6,000.00
Aboveground well head cover and concrete pad	each	11	$ 285.00	$ 3,135.00
Groundwater Monitoring Wells Permits	ls	11	$ 125.00	$ 1,375.00
Sr. Engineering Technician	trip	6	$ 750.00	$ 4,500.00
One trip per month for 6 months to measure water levels in monitoring wells				
Vibracoring (cost + 15%)	allowance	1	$ 22,750.00	$ 22,750.00
Allowance for 2 days of vibracore sampling at approximately 11 locations (+/-1/mile) along the 13.5 +/- ICWW reach. Cost includes mobilization, two days of sampling and core liners (materials). Assumes 10-foot maximum sample depth				
Vehicle Mileage - Field Related (nondrilling-rig trucks)	mile	1500	$ 0.55	$ 825.00
Staff Engineer	hours	80	$ 85.00	$ 6,800.00
Oversee and direct field exploration and collect bulk samples for Proctor, LBR and Triaxial strength testing.				
Vehicle Mileage - Field Related (nondrilling-rig trucks)	mile	2500	$ 0.55	$ 1,375.00
Daily Rig Rate	day	2	$ 1,500.00	$ 3,000.00
Collection of bulk samples for Proctor and Trixiaxial strength testing.				
SUBTOTAL- FIELD EXPLORATION				**$ 84,540.00**
III. LABORATORY WORK				
Lab Assignment & Coordination				
Staff Engineer	hours	10	$ 85.00	$ 850.00
Moisture Content Test	each	150	$ 10.00	$ 1,500.00
Organic Content Test	each	25	$ 35.00	$ 875.00
Fines Content Test	each	60	$ 35.00	$ 2,100.00
Grain Size Distribution	each	30	$ 65.00	$ 1,950.00
Hydrometer Analysis	each	0	$ 105.00	$ -
Atterberg Limits	each	12	$ 85.00	$ 1,020.00
Proctor Compaction	each	6	$ 100.00	$ 600.00
Limerock Bearing Ratio (LBR) Tests	each	3	$ 300.00	$ 900.00
CU Triaxial Shear Test w/ Pore Pressure (3 points/test)	each	12	$ 450.00	$ 5,400.00
Permeability Test on Sand	each	8	$ 185.00	$ 1,480.00
Permeability Test on Fine-Grained Soil	each	4	$ 370.00	$ 1,480.00
Consolidation Testing	each	4	$ 500.00	$ 2,000.00
Preparation of Samples for Advanced Testing	each	30	$ 50.00	$ 1,500.00
Water Quality Testing of Groundwater from monitoring wells				
Chlorides	each	22	$ 30.00	$ 660.00
Total Dissolved Solids (TDS)	each	22	$ 25.00	$ 550.00
pH	each	22	$ 25.00	$ 550.00
Estimate 20 TCLP Tests by Palm Beach Laboratory, cost-plus 15%	each	20	$ 150.00	$ 3,000.00
Estimate 10 in-house tests in Dunkelberger laboratory using falling-head permeameter with varying pH leachate. pH and Chlorides will be measured in-house with split samples (10) provided to PBL for comparison (QA) and TDS testing.	each	10	$ 250.00	$ 2,500.00
SUBTOTAL-LABORATORY WORK				**$ 28,915.00**
IV. GEOTECHNICAL ENGINEERING				
Senior Geotechnical Engineer	hours	36	$ 160.00	$ 5,760.00
Project Geotechnical Engineer	hours	48	$ 120.00	$ 5,760.00
Staff Engineer	hours	60	$ 85.00	$ 5,100.00
CADD Drafting	hours	40	$ 70.00	$ 2,800.00
Clerical Assistant	hours	24	$ 50.00	$ 1,200.00
SUBTOTAL-GEOTECHNICAL ENGINEERING				**$ 20,620.00**
TOTAL-PHASE I INVESTIGATION				**$ 142,075.00**

BV-24A DREDGED MATERIAL MANAGEMENT AREA
GEOTECHNICAL TASKS COST ESTIMATE
DUNKELBERGER ENGINEERING & TESTING, INC., A TERRACON COMPANY (DUNKELBERGER)

Task	Senior Geotechnical Engineer	Project Geotechnical Engineer	Staff Engineer	Senior Engineering Technician	CADD	Clerical Assistant	Other Direct Charges	Labor Fee	Total Fee	Total Hours	WORK PHASE
Unit	HRS	HRS	HRS	HRS	HRS	HRS	$	$	$	HRS	
$/Unit	$160.00	$120.00	$85.00	$75.00	$70.00	$50.00					
Task 1 Project Management											
Project Management and Coordination	60										
Progress Review Meetings						8	$500.00	$10,000.00	$10,500.00	68	I
End of Phase I	4	8									
End of Phase II	16	16					$250.00	$1,600.00	$1,850.00	12	I
During Phase III	8	16					$500.00	$4,480.00	$4,980.00	32	II
Subtotal Task 1	**88**	**40**	**0**	**0**	**0**	**8**	$100.00	$3,200.00	$3,300.00	24	III
Task 2 Geotechnical Site Evaluation							$1,350.00	**$19,280.00**	**$20,630.00**	**136**	
Mobilization											
Field Exploration				30			$5,750.00	$2,250.00	$8,000.00	30	I
Laboratory Work			80				$77,740.00	$6,800.00	$84,540.00	80	I
Geotechnical Engineering			10				$28,065.00	$850.00	$28,915.00	10	I
Subtotal Task 2	36	48	60	0	40	24	$0.00	$20,620.00	$20,620.00	208	I
Task 3 Geotechnical Analysis	**36**	**48**	**150**	**30**	**40**	**24**	$111,555.00	**$33,350.00**	**$142,075.00**	**326**	
Seepage Analysis											
Stability Analysis	8	40			12		$250.00	$6,920.00	$7,170.00	60	III
Settlement Analysis	8	40			8		$250.00	$6,640.00	$6,890.00	56	III
Geotechnical Support for Dredge Disposal	6	24			8		$100.00	$4,400.00	$4,500.00	38	III
Geotechnical Support for Structures	8	24			4	8	$100.00	$4,840.00	$4,940.00	44	III
Geotechnical Support for Permanent Pipeline	6	24			8	4	$100.00	$4,600.00	$4,700.00	42	III
Subtotal Task 3	8	16			8	4	$100.00	$3,660.00	$3,960.00	36	III
Task 4 Groundwater Analysis	**42**	**176**	**0**	**0**	**48**	**16**	$900.00	**$31,280.00**	**$32,180.00**	**276**	
Collect available data, review existing studies/mode	0	26	0		0		$100.00	$3,220.00	$3,320.00	26	I
Conduct Potable Well Inventory Survey	6	0	24		6	2	$250.00	$3,520.00	$3,770.00	38	I
Consult on field and laboratory work	0	26	0		0		$ -	$3,120.00	$3,120.00	26	I
Setup MODFLOW and MT3DMS and calibrate as necessary; conduct model operational runs w/o saline controls; generate contour maps, cross-sections and other graphics for reporting	24	124	0		8		$ -	$19,304.00	$19,304.00	156	I
Conduct MODFLOW modeling and MT3DMS, including up to 3 alternative saline control systems, generate contour maps, cross-sections and other graphics for reporting	16	48	0		16	0	$ -	$9,440.00	$9,440.00	80	II
Conduct final MODFLOW modeling and MT3DMS for preferred saline control system with site grading and embankment details; generate wetland drawdown maps	8	24			8			$4,720.00	$4,720.00	40	III
Prepare applicable reporting documents for incorporation into Phase I/II and final geotechnical reports	0	80	0		0	0	$250.00	$9,860.00	$10,110.00	80	II
Allowance for meetings, coordination, conference calls, presentations	0	30	0		0	0	$100.00	$3,700.00	$3,800.00	30	II
Subtotal Task 4	**54**	**358**	**24**	**0**	**38**	**2**	$700.00	**$56,884.00**	**$57,584.00**	**476**	
Task 5. Geotechnical Report Preparation											
Draft Geotechnical Report Preparation											
At end of Phase I	16	16	24		30	8	$500.00	$9,020.00	$9,520.00	94	I
At end of Phase II	16	16	8		16	8	$500.00	$6,680.00	$7,180.00	64	II
Draft Geotechnical Report Preparation- Phase III	30	60	20		30	16	$500.00	$16,600.00	$17,100.00	156	III
Final Geotechnical Report Preparation	10	20	8		10	8	$500.00	$5,780.00	$6,280.00	56	III
Plans and Specifications Preparation	20	40	24		40	12	$200.00	$13,440.00	$13,640.00	136	IV
Subtotal Task 5	**92**	**152**	**84**	**0**	**126**	**52**	$2,200.00	**$51,520.00**	**$53,720.00**	**506**	
TOTAL ESTIMATED PROJECT FEE:	**312**	**766**	**258**	**30**	**252**	**102**	$116,705.00	**$192,314.00**	**$309,199.00**	**1722**	

ESTIMATED COST BY PHASE:		
	I	$193,459.00
	II	$35,810.00
	III	$58,860.00
	IV	$13,640.00
	TOTAL	$301,469.00

REQUEST FOR PROPOSAL

FLORIDA INLAND NAVIGATION DISTRICT

GEOGRAPHICAL INFORMATION SYSTEM (GIS) DATA CONVERSION AND UPDATE FOR THE INTRACOASTAL WATERWAY (IWW) AND OKEECHOBEE WATERWAY IN PALM BEACH COUNTY, FL.

I. BACKGROUND

The Florida Inland Navigation District (District) is the state sponsor of the Atlantic Intracoastal Waterway (IWW) in Florida. The District boundaries includes the twelve (12) east coast counties of Florida. The District is also responsible for 62 miles of the Okeechobee Waterway (OWW) in Martin and Palm Beach Counties. As the state sponsor of the Waterways, the District has the responsibility of providing all lands required for their construction, operation and maintenance. At this time, the District's property inventory includes approximately 1,000 parcels of land containing approximately 60,000 acres.

The District also operates two other programs: the Waterways Assistance Program through which the District has participated with local governments within the 12 member counties to develop over 1,000 waterway improvement projects; and the Cooperative Assistance Program, through which the District has participated with State and Regional governments to develop approximately 72 waterway improvement projects.

II. PROJECT AREA

The District has decided to initiate this project update for Palm Beach County. Future work could lead to updates to this project in all twelve (12) counties of the District. The intimal project will include the IWW and the OWW in Palm Beach County. Future efforts may include the entire 406 miles of waterway channel from Nassau County to Miami-Dade County (both inclusive), as well as 62 miles of the Okeechobee Waterway in Martin and Palm Beach Counties (entire Project Area).

III. PROPOSAL LIMITATION

Proposals submitted in response to this request shall cover the conversion of the District's current GIS coverages from NAD 27 State Plane East to NAD 83 State Plane East for the IWW and OWW in Palm Beach County, and the update of District properties and interest in Palm Beach County. Additional phases of this project may be negotiated with the project contractor in the future, or awarded after a new advertisement and evaluation of proposals is made similar to that described herein. This determination of

alternatives will be made by the District after this contract has been completed. All proposals and contracts generated from this request are subject to the provisions of Chapter 287 Florida Statutes.

IV. SCOPE OF WORK

See Attachment A.

V. DELIVERABLES

See Attachment B.

VI. GENERAL INSTRUCTIONS FOR THE PREPARATION AND SUBMISSION OF PROPOSALS

VI. 1. Issuing Office:

Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477
Telephone (561)627-3386
FAX (561)624-6480
Project Manager: Brenda Sullivan, Information Manager

VI. 2. Time, Date, and Place Proposals are Due:

Proposals must be received **NO LATER THAN 2:00 P.M.** local prevailing time on **October 2, 2015**.

Proposals should be addressed or delivered to the issuing office.

CAUTION: A proposal received after the time specified for receipt will not be considered, as specified by the provisions of the State Procurement Regulations describing treatment of late proposals, modifications of proposals, and withdrawals of proposals.

VI. 3 Description of Work Being Procured:

Work to be performed in this project is described in Attachment A and B of this package.

VI. 4. Type of Contract Contemplated:

A cost-plus-fixed fee contract with a ceiling price is contemplated for this project; however, the District reserves the right to award another type of contract if such will be more advantageous to the District. The contract agreement will comply with all procurement regulations of the State of Florida. The District will not provide copies of State procurement regulations with the solicitations. Proposers are cautioned that references are made to State procurement regulations and it is the responsibility of the proposers to be familiar with these regulations and their application to this solicitation.

VI. 5. Number of Awards:

One award for the Project work will result from this solicitation.

VI. 6. Contract Acceptance Period:

The District expects to award a contract approximately sixty (60) days after receipt of proposals.

VI. 7. Disclosures:

Information will be disclosed to proposers in accordance with regulations applicable to this solicitation after evaluations are complete.

Written notice will be given to unsuccessful proposers.

VI. 8. Solicitation Schedule Information:

The District intends to announce the contract award on or about November 14, 2015 and initiate the contract work on or about December 1, 2015. It is estimated that work products will be delivered and the contracts completed on or before April 15, 2015.

VI. 9. Costs:

The District is not liable for any costs incurred by the proposer in responding to this RFP.

VII. SPECIFIC INSTRUCTIONS FOR THE PREPARATION OF PROPOSALS:

The instructions for preparation of this proposal have been prepared in order to minimize costs and response time, and to help ensure that all proposals are reviewed and evaluated in a consistent manner.

ANY AND ALL INFORMATION SUBMITTED BY A PROPOSER IN VARIANCE WITH THESE INSTRUCTIONS WILL NOT BE REVIEWED OR EVALUATED.

The proposal shall consist of the following two parts:

PART I: TRANSMITTAL LETTER (limit 1 page)

This is to serve only as the document covering transmittal of the proposal package. The letter should provide the name, title, address, and telephone number of the proposer's official contact and alternate. These individuals shall have the authority to bind the proposer and shall be available to be contacted by telephone or attend meetings as may be appropriate on or about the dates stipulated in Item VI. 8.

PART II. TECHNICAL PROPOSAL (limit 25 pages)

A page shall consist of one type-written side of standard size 8 1/2 x 11 inch stationery.

The Technical Proposal shall contain the following six sections:

(1) Introduction

The content of this section shall be at the discretion of the proposer.

(2) Technical Understanding

The proposer shall describe in precise terms his technical understanding of the scope of the contract services outlined in Attachments A and B with emphasis on those tasks deemed important by the proposer.

(3) Technical Approach

The proposer shall describe clearly the technical approach which will be used to accomplish the scope of work for this project.

The proposer shall identify any problems that are anticipated in completing the work outlined in Attachments A and B of this RFP. A plan to be used in solving these problems shall be provided.

The proposer shall outline the technical approach to the preparation of all reports.

(4) Project Organization and Management

The proposer shall describe the project organization and management methods to be used to perform the contract services. The management methods shall address monitoring and control of costs. The services of subcontractors shall be described in detail.

(5) Personnel Assigned and Level of Effort

Personnel assigned to the project, including the name(s) and key personnel of all subcontractors shall be identified and their qualifications provided. Specific project positions shall coincide with paragraph (4) above. Specific information shall be provided concerning the expertise and experience of the key personnel in the area of geographic system development, training and support. The project requires a dedicated GIS individual with at least ten (10) years experience and not a student or apprentice. Familiarity with coastal work is preferred.

The availability and permanent work station of assigned personnel shall be stated. For each individual assigned to the project, his estimated level of effort for this project and his current workload shall be provided, both in man-hours per year and as a percentage of his total workload. Secretarial personnel shall be included when such services are a direct cost item.

(6) Past Performance Record

The proposer will list a minimum of three references for which the proposer has performed a geographic information system development project for in the last three years. Specific contact names and telephone numbers shall be provided for all references listed.

(7) Schedule

Compliance with the schedule provided in paragraph VI. 8. is of prime importance. The proposer shall state compliance with this schedule, or identify any variance along with a plan for resolving the variance. The proposer shall provide a schedule of work activities to meet the required close-out date.

VIII. NUMBER OF PROPOSAL COPIES TO BE SUBMITTED.

Three (3) signed copies each of the Transmittal Letter and Technical Proposal are to be submitted as directed under paragraph VI.2. Each copy of the Technical Proposal is to be packaged individually.

IX. PROPOSAL EVALUATION

a. The factors to be used in conducting evaluations of each proposal are indicated in Attachment C.

b. At the discretion of the District the top rated proposers may be invited to make an oral presentation prior to a final decision on the award of a contract.

ATTACHMENT A

SCOPE OF WORK

FLORIDA INLAND NAVIGATION DISTRICT

GEOGRAPHICAL INFORMATION SYSTEM DATA CONVERSION FOR THE ATLANTIC INTRACOASTAL WATERWAY NASSAU COUNTY TO MIAMI-DADE COUNTY (BOTH INCLUSIVE) AND OKEECHOBEE WATERWAY (MARTIN COUNTY ONLY)

The Florida Inland Navigation District (District) is seeking consulting services in the update and conversion of our Geographic Information System (GIS) project for the Intracoastal Waterway (IWW) in Palm Beach County, Florida. This project will serve as the prototype for a GIS capable of supporting the District's spatial data management needs for the foreseeable future. The services required for the project will include the following tasks:

- Review of user current needs
- Conversion of all shape files from NAD 27 State Plane East to NAD 83 State Plane East
- Update miscellaneous parcel, easement, and utility shape files
- Verify dredging reaches, channel miles and dredging cuts
- Update (60) Waterways Assistance Program project locations (point only)
- Update (4) Cooperative Assistance Program project locations (point only)
- Update (8) Interlocal Agreement Program project locations (point only)
- Incorporate 2014 IWW Hydrographic Survey Data
- Update Data Dictionary
- Instruction to staff on GIS update and use of developed applications

Task 1 - Review of User Needs

The contractor shall familiarize themselves with the District's current GIS hardware and software systems, and should visit the office to meet with District staff to review the District's current GIS system and assess the District's status and capabilities. This review will assist the contractor to more completely understand the District's operations and programs, including existing computer hardware and software and future needs. The information gathered in this visit will allow the contractor to develop, in a cost effective manner, hardware recommendations and a project capable of meeting the District's needs.

Task 2 - Conversion and Update of Shape Files

Task 2 will include the conversion and update to the District's GIS system using ARC/GIS Version 10 or above. The task includes converting all the shape files from NAD 27 State Plane East to NAD 83 State Plane East, updating shape files and attributes, and update the District's GIS Data Dictionary.

Information gathered in Task 1 will be used to update the District's GIS program to accommodate the program needs of the District. The update and conversion by the contractor must be achievable through existing, cost effective technology.

The project data base for Palm Beach County will include the following:

A seamless base map constructed of available aerial photography 2014 or later at 1:800 minimum resolution and of the Atlantic Intracoastal Waterway (IWW).

Task 3 - GIS Hardware and Software Recommendations

Based on information collected in Task 1 - Review of User Needs, and Task 2 - Data Base Design, the contractor will recommend a hardware and software system (or updates) capable of supporting the District's anticipated GIS needs. It is anticipated that ARC/INFO will serve as the core GIS software for the District. The contractor will review the existing hardware in use at the District and recommend any additional hardware or software necessary to support the installation of the updated GIS data. The District's goal is to own a system that provides District users access to current functions and the new GIS data and applications while incorporating the existing hardware to the extent possible.

Task 4 - Scanning of Hard Copy Drawings or other Pertinent Data

This will include engineering and design drawings and other specified data that are in hard copy form. These data will be converted to ARC Imagery format and linked to the appropriate site or area.

Task 5 - GIS Update Review & of Developed Application

Task 5 includes an on-site overview of the final product.

Deliverables/Services

The deliverables/services for this project are shown in Attachment B.

ATTACHMENT B

PROJECT DELIVERABLES

FLORIDA INLAND NAVIGATION DISTRICT

GEOGRAPHICAL INFORMATION SYSTEM (GIS) DATA CONVERSION FOR THE INTRACOASTAL WATERWAY (IWW) AND OKEECHOBEE WATERWAY, PALM BEACH COUNTY, FL

Task 1 - Review of User Needs

Task 1 will include a brief on-site visit by contractor's senior GIS application developer to evaluate existing computer hardware and software and the District's future GIS needs. The results of this evaluation will be provided to the District in a summary letter report. These results will be discussed with the District's project manager.

Task 2 - Conversion and Update of Shape Files

Task 2 will include the conversion and update to the District's GIS system using ARC/GIS Version 10 or above. The task includes converting all existing shape files from NAD 27 State Plane East to NAD 83 State Plane East, updating shape files and attributes, defining attribute files for efficient processing, and an update of the District's GIS Date Dictionary.

Task 3 - GIS Hardware and Software Recommendations

Based on the information obtained in Task 1 - Review of User Needs, and Task 2 - Data Base Design, a letter report will be prepared by the contractor providing system requirements and/or updates. These requirements will include software, hardware and overall functional requirements. A configuration diagram will be included which will illustrate the recommended system.

Task 4 - Scanning of Hard Copy Drawings or other Pertinent Data

Task 4 will include engineering and design drawings and other specified data that are in hard copy form. This data will be converted to ARC Imagery format and linked to the appropriate site or area.

Task 5 - GIS Update Review and Use of Developed Application

Task 5 includes an on-site overview of the final product.

ATTACHMENT C

FLORIDA INLAND NAVIGATION DISTRICT

GEOGRAPHIC INFORMATION SYSTEM (GIS) DATA CONVERSION FOR THE ATLANTIC INTRACOASTAL WATERWAY (IWW) AND OKEECHOBEE WATERWAY, PALM BEACH COUNTY, FL

PROPOSAL EVALUATION

NAME OF FIRM: _____

EVALUATION CATEGORIES	Relative Weight	Rating Score
1. Technical Understanding Demonstration of the technical understanding of the problem.	20	
2. Technical Approach Completeness and sufficiency of the technical approach.	20	
3. Project Organization and Management Sufficiency of project organization and management to efficiently perform the project while responding to the District's needs and controlling costs.	15	
4. Personnel Assigned and Level of Effort Degree of experience and qualifications of key personnel assigned to the project and their availability to the project in terms of location and work load.	15	
5. Past Performance Record Adequate record in the past three years of the satisfactory development of GIS projects.	20	
6. Schedule Past record which demonstrates the ability to satisfactorily meet deadlines along with workload during contract periods.	10	
Totals	100	

Evaluator's Initials: _____

GIS PROPOSAL REVIEWER EVALUATION SCORES - NOVEMBER 2, 2015

COMPANY NAME	REVIEWER #1	REVIEWER #2	REVIEWER #3	REVIEWER #4	AVG. SCORE
AECOM	94	62	78	85	**79.8**
Calvin, Giordano & Associates, Inc.	93	61	71	79	**76.0**
Contract Land Staff, LLC	78	37	75	67	**64.3**
DRMP, Inc.	84	76	89	83	**83.0**
Engenuity Group, Inc.	98	69	93	79	**84.8**
Geographic Technologies Group (GTG)	90	65	81	78	**78.5**
George F. Young, Inc.	83	60	75	76	**73.5**
Grimail Crawford, Inc. (GCI)	62	61	71	87	**70.3**
InterDev	74	49	66	74	**65.8**
New Wave Geographic, LLC	74	61	69	81	**71.3**
Pegasus Engineering, LLC	89	68	50	93	**75.0**
The R-A-M Professional Group, Inc.	98	83	90	82	**88.3**
The Sanborn Map Company, Inc.	89	52	73	73	**71.8**
Taylor Engineering, Inc.	99	90	94	84	**91.8**
VHB, Inc.	82	71	68	77	**74.5**

GIS PROPOSAL REVIEWER EVALUATION
AVERAGED SCORES
NOVEMBER 2, 2015

COMPANY NAME	AVG. SCORE
Taylor Engineering, Inc.	91.8
The R-A-M Professional Group, Inc.	88.3
Engenuity Group, Inc.	84.8
DRMP, Inc.	83.0
AECOM	79.8
Geographic Technologies Group (GTG)	78.5
Calvin, Giordano & Associates, Inc.	76.0
Pegasus Engineering, LLC	75.0
VHB, Inc.	74.5
George F. Young, Inc.	73.5
The Sanborn Map Company, Inc.	71.8
New Wave Geographic, LLC	71.3
Grimail Crawford, Inc. (GCI)	70.3
InterDev	65.8
Contract Land Staff, LLC	64.3

ALCALDE & FAY
GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

October 31, 2015

MEMORANDUM

TO: Mark Crosley, Executive Director
Janet Zimmerman, Assistant Executive Director

FROM: Jim Davenport

SUBJECT: **Federal Legislative Report**

FEDERAL BUDGET AND DEBT CEILING

On October 28th, the House approved the Bipartisan Budget Act of 2015 (HR 1314) by a vote of 266 to 167, with 79 Republicans joining all Democrats to secure passage. Newly elected House Speaker Paul Ryan (R-WI) was among those voting in favor of the bill and we anticipate prompt Senate passage. The bipartisan legislative package, announced earlier this week by Congressional leaders, would temporarily suspend the limit on the public debt (debt ceiling), while also providing relief from sequester spending caps by increasing discretionary spending in Fiscal Year (FY) 2016 and 2017.

The deal should allow Congress to more easily finalize appropriations for the remainder of FY 2016, either through a large catch-all omnibus spending bill or potentially through several smaller "minibus" packages pairing together the remaining appropriations bills. The current FY 2016 continuing resolution is scheduled to expire on December 11, 2015, giving Congress several weeks to negotiate a final FY 2016 spending package. The FY 2017 appropriations process should also be much smoother with established discretionary spending caps for FY 2017 that are more palatable to Senate Democrats, who this year had remained steadfast in their opposition to the FY 2016 spending, vowing to filibuster any such bill that made it to the floor. The bipartisan deal decreases the possibility that Congress would be embroiled in a protracted debate in the months leading up to next year's presidential elections over a potential government shutdown or defaulting on the national debt.

The final bill was the result of high-level negotiations in recent weeks between Congressional leaders and the White House. Perhaps most notable among the participants is outgoing House Speaker John Boehner (R-OH), who relinquished his role on October 29th to current Ways and Means Chairman Ryan. Following the announcement that a deal had been reached, Speaker Boehner said that he wanted to prevent a situation wherein Congressman Ryan would be assuming his new role amidst

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a lingering fight over issues related to the budget and debt limit, and therefore was hoping to "clean the barn" of any potential crisis in the coming weeks and months.

The bill's primary components relating to the changes in discretionary spending over the next two years are highlighted below:

- Includes a suspension of the debt limit until March 15, 2017. Treasury Secretary Jacob Lew recently informed Congressional leadership that the nation's debt ceiling needed by be increased by no later than November 3, 2015, which he said was the point at which the country would be left with insufficient funds to meet current commitments and therefore could begin defaulting on existing debts.

- After several last minute adjustments to the bill to reconcile discrepancies between spending increases and new sources of revenue, CBO estimates that over a 10-year-period the updated bill will reduce the deficit by $79.9 billion, more than the $79.4 billion cost of increasing the spending caps.

- Increases discretionary spending by a total of $80 billion over two years, which includes $50 billion in FY 2016 and $30 billion in FY 2017. In each fiscal year, the discretionary spending increases are split evenly between the security and non-security spending categories.

In order the offset the costs related to increasing the discretionary spending caps in FY 2016 and 2017, summarized below are several provisions that were included to reduce spending elsewhere and/or raise revenue:

- Approximately $4.4 billion would be gained from the authorized auction by the Federal Communications Commission (FCC) of government spectrum, to occur no later than 2024. The bill also allocates $500 million from the Spectrum Relocation Fund for the purpose of research and development to improve government efficiency in using spectrum.
- Authorizes the sale of 58 million barrels of oil from the Strategic Petroleum Reserve (SPR) between 2018 and 2025, which is expected to garner approximately $5.05 billion.
- Repeals a provision in the Affordable Care Act that, if implemented, would have required employers that offer health insurance and have more than 200 employees to automatically enroll new employees in a health plan, as well as automatically continue enrollment for existing employees. This language was also included in a House-passed bill targeting the Act, and CBO at the time estimated the repeal to save approximately $7.9 billion over the next 10 years.

- Modifications would be made to the IRS process for auditing business partnerships, replacing/streamlining the numerous existing partnership audit procedures established by the Tax Equity and Fiscal Responsibility Act (TEFRA) into a single set of rules. Also clarifying language is included to address receipt of capital interest as part of a partnership, and CBO estimates that the two provisions could save more than $11.2 billion over the next 10 years.

LEADERSHIP ELECTION

On October 29th, the House elected Rep. Paul Ryan as the 62nd Speaker of the House, following Rep. John Boehner's announcement that he plans to retire from Congress on October 30th. Ryan received 236 votes for Speaker, House Minority Leader Nancy Pelosi received 184 votes, and Rep. Daniel Webster, Freedom Caucus favorite, received 9 votes. Ryan became the Republican Party nominee for Speaker when he won, 200-43, the October 28th closed-door vote against Rep. Webster.

Boehner's retirement comes amidst interparty struggles over the budget and debt ceiling that also discouraged House Majority Leader Kevin McCarthy for running for the position. McCarthy cited the need for a "fresh face" to unite the Republican Party. While Ryan was initially reluctant to seek the Speakership, the House Ways and Means Committee Chairman was widely viewed as the only Representative behind whom the Republican Party could unite. He announced that he would run for Speaker only with the endorsement of each of the House Republican Caucuses, and while he fell just short of this goal with a 70% approval in the Freedom Caucus, his receipt of a supermajority vote encouraged him to proceed.

While the new Speaker will not have to negotiate a budget deal for FY 2016, he will be leading the House through several contentious debates in the coming months over FY 2016 appropriations, the Trans-Pacific Partnership agreement, education reform, and more. Pundits have indicated that Ryan will likely attempt to press forward comprehensive tax reform, which had been a goal of his during his tenure as Chairman of the House Ways and Means Committee.

Ryan is the first speaker elected in the middle of a congressional term since 1989, when Thomas Foley of Washington succeeded Jim Wright of Texas, who resigned after an ethics investigation into his business dealings.

Please contact us with any questions.