

**AGENDA
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
MONDAY, JULY 21, 2025
ISLAND ROOM – TOWN HALL – 2 BRIDGE ROAD
*DIRECTLY FOLLOWING SMRU BOARD MEETING (APPROX. 11:30AM)***

1. **Consent Agenda**

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

- a. Minutes of the June 10, 2025, Beach Protection District Meeting
- b. Monthly Finance Report

2. **Memorandum of Agreement- Martin County Cost Share**

3. **Model Turtle Lighting Ordinance (Sea Turtle Conservancy)***

4. **Beach Status***

5. **Coastal Engineering Services Contract - RFQ 2025-06**

6. **Borrow Site Investigation**

7. **Local Government Funding Request Application**

8. **Other Items***

** No advanced materials provided*

Town Commission

Penny Townsend, Mayor
Anne Scott, Vice Mayor
Marshall Field VI, Commissioner
Patricia Warner, Commissioner
Joseph Taddeo, Commissioner

Town Staff

Town Manager, Robert Garlo
Town Attorney, Thomas J. Baird
Town Clerk, Kimberly Kogos

STATE MANDATED STATEMENT

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 will need a record of the proceedings, and that, for such purpose, he 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. Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the Town prior to the

meeting. Please contact the Town Hall, 2 Bridge Road, Hobe Sound, FL 33455, telephone (772) 545-0103.

**MINUTES
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
TUESDAY, JUNE 10, 2025**

TIME: Tuesday, June 10, 2025 – 10:00 AM
PLACE: Town Hall Island Room – 2 Bridge Rd., Hobe Sound, FL
PRESENT: Present were Mayor Penny Townsend, Vice Mayor Anne Scott, and Commissioners Marshall Field VI and Patricia Warner. Also present were Town Manager Robert Garlo, Town Clerk Kimberly Kogos, Town Attorney Thomas Baird and IT Director Bill Sutton.

1. Consent Agenda

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

- a. Minutes of the May 19, 2025, Beach Protection District Meeting

MOTION: *Vice Mayor Scott/Commissioner Warner moved to approve the minutes of the May 19, 2025 meeting as presented.*

ACTION: *Motion Passed 4-0.*

2. Beach Status*

Director Duchock provided a beach status report, noting that there are isolated and limited escarpments at the north end and near 251 South Beach Road. However, there are no active hot spots currently.

He stated that the beaches are transitioning from winter (steep) to summer (mild) conditions. The hurricane season has officially begun and forecasts are above-average with 17 named storms, 9 minor hurricanes, and 4 major hurricanes predicted.

Director Duchock provided an update on the turtle nest count by species:

- Loggerhead - 1764 total
- Green - 14
- Leatherback - 373

3. Offshore Borrow Sites (GBA)*

Director Duchock introduced Clay Bryant of Gahagan and Bryant Associates, who provided an Offshore Borrow Site update. Mr Bryant explained the borrow site locations that remain within state water boundaries. He noted that the previous borrow site (A) located to the north, has been exhausted. He reviewed the relic, current and potential borrow sites along the shoreline. He explained the current borrow site volume forecast, noting that the current site will be viable until 2050, which includes another 5 renourishment projects. He stated that GBA is researching a potential future site that abuts the current borrow site B, essentially expanding the current borrow site. He explained the various surveys and investigative work that goes into researching and clearing new borrow sites. He added the importance of "staking claim" to any potential new borrow sites which involves submitting an application to the state. This potential borrow site would provide an additional 55-year sand supply, lasting to the year 3000.

Mr. Bryant recommended submitting an application/letter to the state sooner than later. Discussion ensued regarding this action.

MOTION: *Commissioner Field/Commissioner Warner moved to authorize GBA to provide an outline of the process with estimated costs and submit the initial letter to the state as discussed.*

ACTION: *Motion Passed 4-0.*

4. Long-Range Planning*

Director Duchock provided an overview of the major beach program elements involved in long-range planning including design, performance, permitting, regulator monitoring (including Queen Conch), sand supply, inlet management (engagement with the County and State is important), and funding (ad valorem, grants, and disaster recovery).

5. Draft 12-Year Financial Plan

Director Duchock provided a summary of the 12-year financial plan that provides a long-range projection of revenues and expenditures, including major capital expenses for construction of beach nourishment projects. He noted a long-range financial plan is required by the state as part of the FDEP beach management funding assistance program. He explained projected revenues, noting that holding Ad Valorem rate at 0.9593 mils with assumed 3% annual proper value increases will generate revenue for reserves (\$3.65M - \$5.06M each year). He explained projected expenses including major beach projects every 6 year at \$33M-\$40M each, 600 block dune projects every 3 years at \$400k-\$600k, annual project-related and operating expenses. He also noted that reserves would decrease from \$23M to -\$3m in fiscal year 37.

Discussion ensued regarding potential increased taxes due to lack of federal or state funding. Suggested conducting workshops every couple of years in order to inform residents of a potential deficit and/or increased taxes. Mayor Townsend asked Director Pazanski to bring a forecast report to the July meeting. Vice Mayor Scott requested additional information regarding what other special districts are doing. Director Duchock stated that information is available, and he will bring it forward in July.

Mr Bryant noted that historically, the millage increased to 1.4mils but has been trimmed down due to the success of the renourishment projects.

Director Duchock summarized by explaining that the financial plan represents a static snapshot in time and is updated annually to reflect current conditions. He stated that by holding current assumptions on property values/millage rate and limited state grant funding, reserves are projected to decrease over time. He noted that based on all the assumptions in the plan, potentially increasing millage to 1.4mils over the next 12 years would maintain steady reserve levels. Director Duchock added that FEMA/FDEM funding for disaster recovery remains uncertain and will not be reflected as revenue until a signed agreement has been executed. Finally, the success of the Town's beach program is linked to the operation and maintenance of the St. Lucie Inlet, and future cost-share agreements with Martin County may be advanced through a new interlocal agreement, broadening the potential sources of revenue for the future.

6. Other Items*

No other items were discussed.

The meeting was adjourned at 11:11am.

Respectfully Submitted,

Kimberly Kogos, Town Clerk

BEACH EROSION DISTRICT
 INTERIM REVENUE AND EXPENDITURE REPORT
 PERIOD ENDING 6/30/2025

*NOTE: Available Balance / Pct Budget Used does not reflect amounts encumbered.

GL NUMBER	DESCRIPTION	2024-25		YTD BALANCE 06/30/2025	AVAILABLE BALANCE	% BDGT USED
		ORIGINAL BUDGET	2024-25 AMENDED BUDGET			
Fund 101 - BEACH PROTECTION DISTRICT						
Revenues						
Dept 000						
101-000-311.000	AD VALOREM TAXES	3,380,769.00	3,380,769.00	3,356,199.56	24,569.44	99.27
101-000-331.391	FEMA REIMBURSEMENT	23,666,698.00	23,666,698.00	23,666,698.00	0.00	100.00
101-000-334.500	STATE DISASTER RELIEF	3,380,957.00	3,380,957.00	3,380,957.00	0.00	100.00
101-000-361.100	INTEREST	200,000.00	500,000.00	587,852.49	(87,852.49)	117.57
101-000-381.001	TRFR-UNDESIGNATED/UNRESERVED	807,539.00	5,033,283.00	0.00	5,033,283.00	0.00
Total Dept 000		31,435,963.00	35,961,707.00	30,991,707.05	4,969,999.95	86.18
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TOTAL REVENUES		31,435,963.00	35,961,707.00	30,991,707.05	4,969,999.95	86.18
Expenditures						
Dept 211 - BEACH PROTECTION ADMINISTRATION						
	PERSONNEL AND BENEFITS	442,443.00	309,050.00	202,355.80	106,694.20	65.48
	OPERATING	293,520.00	293,520.00	251,651.01	41,868.99	85.74
Total Dept 211 - BEACH PROTECTION ADMINISTRATION		735,963.00	602,570.00	454,006.81	148,563.19	75.35
Dept 221 - BEACH PROTECTION PROJECTS						
Total Dept 221 - BEACH PROTECTION PROJECTS		30,700,000.00	35,359,137.00	34,127,087.81	1,232,049.19	96.52
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TOTAL EXPENDITURES		31,435,963.00	35,961,707.00	34,581,094.62	1,380,612.38	96.16
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Fund 101 - BEACH PROTECTION DISTRICT:						
TOTAL REVENUES		31,435,963.00	35,961,707.00	30,991,707.05	4,969,999.95	86.18
TOTAL EXPENDITURES		31,435,963.00	35,961,707.00	34,581,094.62	1,380,612.38	96.16
NET OF REVENUES & EXPENDITURES		0.00	0.00	(3,589,387.57)	3,589,387.57	100.00

BEACH EROSION DISTRICT
INTERIM BALANCE SHEET
PERIOD ENDING 06/30/2025

GL Number	Description	Balance
Fund 101 - BEACH PROTECTION DISTRICT		
*** Assets ***		
101-000-101.000	CASH IN BANK-SEACOAST NATIONA	333,278.57
101-000-101.001	MONEY MARKET-SEACOAST NATIONA	106,831.72
101-000-101.152	INVESTMENT POOL	22,606.92
101-000-101.155	INVESTMENT-SBA	104,661.75
101-000-131.001	DUE FROM GENERAL FUND	2,267,924.07
101-000-133.001	DUE FROM STATE OF FLORIDA	1,113,032.93
101-000-133.002	DUE FROM FEMA	23,666,698.00
101-000-155.000	PREPAID ITEMS	741.46
	Total Assets	27,615,775.42
*** Liabilities ***		
101-000-202.000	ACCOUNTS PAYABLE	4,282,373.00
101-000-207.001	DUE TO GENERAL FUND	4,342,880.06
	Total Liabilities	8,625,253.06
*** Fund Balance ***		
101-000-280.001	NONSPENDABLE PREPAID	2,723.00
101-000-284.000	FUND BALANCE	22,577,186.93
	Total Fund Balance	22,579,909.93
	Beginning Fund Balance	22,579,909.93
	Net of Revenues VS Expenditures	(3,589,387.57)
	Ending Fund Balance	18,990,522.36
	Total Liabilities And Fund Balance	27,615,775.42



TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 2 – Memorandum of Agreement – Martin County Cost Share

Date: 7/16/2025

Background:

The Town successfully completed a beach renourishment project (2025 Project) in April of this year, fully restoring erosion losses from Hurricane Nicole and including an expansion of the project from 1.2M cubic yards to 1.5M cubic yards. The Town has obligated funding and has applied for reimbursement from FEMA and FDEM for construction costs associated with the approved FEMA project volume of 1.2M cubic yards. The balance of the expanded project (additional 300,000 cubic yards) was covered using reserves.

Martin County, who is responsible for management of the St. Lucie Inlet including erosion impacts on Jupiter Island, has proposed a cost share contribution in the form of the attached Memorandum of Agreement. The intent of the agreement is to allow Martin County to contribute funds to the Town in exchange for inlet bypassing credit, which is required of the County through the State-adopted inlet management plan. The agreement proposes a total contribution of \$9,292,000, which includes \$6,969,000 for the cost of construction of 300,000 cubic yards for the 2025 Project plus \$2,323,000 which will be used for a future TOWN resiliency project(s). The additional \$2,323,000 would provide the County with an additional 200,000 cubic yards of inlet bypass credit, making the total bypass credit under this agreement 500,000 cubic yards.

Recommendation:

The Memorandum of Agreement is presented for Commission consideration.

**MEMORANDUM OF AGREEMENT
FOR CONTRIBUTED FUNDS FOR THE
JUPITER ISLAND BEACH RE-NOURISHMENT PROJECT**

This MEMORANDUM OF AGREEMENT (“Agreement”), dated _____, 2025 is made by and between MARTIN COUNTY, Florida, political subdivision of the State of Florida, 2401 S.E. Monterey Road, Stuart, FL 34996 (“COUNTY”) and the TOWN OF JUPITER ISLAND, a municipal corporation in the State of Florida, 2 Bridge Road, Hobe Sound, FL 33455 (“TOWN”).

WITNESSETH:

WHEREAS, the COUNTY implements the St. Lucie Inlet Management Plan (“Plan”), last updated and adopted by the State of Florida on September 15, 2023; and

WHEREAS, the COUNTY and the TOWN desire to cooperate in efforts to place sand on the beaches within the TOWN’s boundaries in connection with a beach re-nourishment and storm recovery project in accordance with the Plan; and

WHEREAS, the COUNTY and the TOWN entered into an Interlocal Agreement dated October 28, 2014 pertaining to the St. Lucie Inlet Management Plan (Inlet Interlocal); and

WHEREAS, Section 2.3 of the Inlet Interlocal provides that the COUNTY and the TOWN will participate in joint sand placement projects to save on mobilizations and other costs in bypassing sand to the beaches on Jupiter Island in accordance with the Plan; and

WHEREAS, the current Project under the Plan consisted of dredging and placement of 1,500,000 cubic yards of sand, removed from the TOWN’s offshore borrow site and placed in accordance with the TOWN’s permitted fill template. The Project was completed on April 20, 2025; and

WHEREAS, the TOWN complied with all permit conditions and obligations associated with the Project.

WHEREAS, the COUNTY is required to participate in the bypassing of sand to the most critically eroded beaches south of the Inlet under the Plan; and

WHEREAS, on average approximately 163,000 cubic yards of sand must be bypassed south; and

WHEREAS, the COUNTY works with the TOWN to remove inlet sand material and deposit it in the TOWN’s permitted offshore borrow site; and

WHEREAS, the COUNTY has placed approximately 363,814 cubic yards of inlet sand in the TOWN’s offshore borrow site since the update of the St. Lucie Inlet Management Plan adopted by the State of Florida on September 15, 2023; and

WHEREAS, the COUNTY has historically paid the TOWN for 500,000 cubic yards of sand that is brought to the shore from the borrow site under the Plan; and

WHEREAS, for the completed Project, the cost of 500,000 cubic years of sand was \$11,615,000 (“County Project Funds”); and

WHEREAS, at the end of 2024, the TOWN was obligated with funding agreements from the Federal Emergency Management Agency (FEMA Funds) and the Florida Department of Environmental Protection (FDEP Funds) for the Project; and

WHEREAS, because of the TOWN's outstanding funding efforts, the TOWN was able to fully fund the restoration requirements of 1.2 million cubic yards of sand under the Plan with Federal and State funds and does not need the County Project Funds to meet the requirements under the Plan; and

WHEREAS, in addition to the 1.2 million cubic yards bid for construction of the project, the TOWN added an additional 300,000 cubic yards of sand for the Project; and

WHEREAS, the COUNTY desires to utilize a portion of the unused County Project Funds to pay \$6,969,000 for the additional 300,000 cubic yards of sand; and

WHEREAS, after payment for the additional 300,000 cubic yards of sand in the amount of \$6,969,000, there will be a surplus of the unused County Project Funds in the amount of \$4,646,000; and

WHEREAS, the State of Florida participates in cost-sharing for the Project and reimburses the COUNTY for 50% of its funding obligation for the sand under the Plan; and

WHEREAS, the COUNTY desires to allow the TOWN to utilize up to \$2,323,000 which equals 50% of the remaining unused County Project Funds (50% of the cost of the remaining 200,000 cubic yards of sand) for resiliency projects, which include water and sewer conversion, beach restoration, or other environmental projects.

NOW, THEREFORE, in consideration of the mutual benefits, the parties do hereby agree as follows:

1. The recitals above are incorporated into this Agreement by reference.
2. The COUNTY agrees to pay the TOWN a total of \$9,292,000, which includes \$6,969,000 for the cost of construction of 300,000 cubic yards for the 2025 Project plus \$2,323,000 which will be used for a future TOWN resiliency project(s) as described above.
3. The TOWN agrees that the COUNTY has fulfilled its funding obligations under the Plan, including its requirements to provide 500,000 cubic yards of sand for the Project boundaries more particularly described in Exhibit "A" which is attached and incorporated herein.
4. The TOWN has obtained bids in accordance with all applicable Florida Statutes and TOWN requirements. Based on the lowest qualified bid received, the total Project unit price, as reflected in Exhibit "B" of this Agreement is \$23.23 per cubic yard.
5. The TOWN agrees to utilize 50% of the surplus of County Project Funds in the amount of \$2,323,000 for a resiliency project(s) and agrees to provide documentation demonstrating how the County Project Funds were expended to the COUNTY upon request.

6. TOWN shall be solely responsible for maintenance, replacement, and repair of the Project, and COUNTY shall have no responsibility for such maintenance, replacement, and repair of the Project.
7. Disputes under this Agreement may be resolved by the COUNTY's Authorized Representative and the TOWN's Authorized Representative. If such Authorized Representatives are unable to reach a resolution and the parties agree that the issue is of sufficient merit, the parties shall select a mediator mutually acceptable to both parties to conduct a non-binding mediation of the issues involved and make a recommendation to both parties in order to settle the dispute. The parties agree to be responsible for their respective costs and fees incurred during the mediation and that the mediator's fees and costs shall be paid in equal amounts by each party.
8. COUNTY and TOWN agree to jointly hold construction meetings, if needed, with the contractor engaged to construct the Project. The parties agree to designate in writing their representatives for such meetings.
9. This Agreement may be amended only by a written document duly executed by both parties.
10. This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior contemporaneous representations or agreements, whether oral or written.
11. If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to person or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.
12. Any notice, request, demand, consent approval or other communication required or permitted by this Agreement shall be given or made in writing and shall be served (as elected by the party giving such notice) by one of the following methods: (i) hand delivery to the other party; (ii) delivery by commercial overnight courier service; or (iii) mailed by registered or certified mail (postage prepaid), return receipt requested. For purposes of notice the addresses are:

COUNTY

County Administrator
Martin County Board of County Commissioners
2401 Monterey Road

Stuart, FL 34996

Required Copy to:
County Attorney
Martin County Board of County Commissioners
2401 SE Monterey Road
Stuart, FL 34996

TOWN:

Town Manager
Town of Jupiter Island
2 Bridge Road
Hobe Sound, FL 33455

Notice given in accordance with the provision of this paragraph shall be deemed to be delivered and effective on the date of hand delivery or on the second day after the date of the deposit with an overnight courier or on the date upon which the return receipt is signed or delivery is refused, or the notice is designated by the postal authorities as not delivered if mailed.

13. The Project Manager for the TOWN is John Duchock, P.E., Assistant Town Manager (772-545-0187).
14. This Agreement shall remain in effect during the construction of the Project and for the useful life of the Project. The useful life of the Project is defined as the period of time between the Town's re-nourishment projects.
15. Except as otherwise provided in this Agreement, neither party shall be deemed in default or in breach of the Agreement to the extent it shall be unable to perform due to an event of Force Majeure. For the purpose of this Agreement, Force Majeure shall mean and include any act of God, accident, fire, lockout, strike or other labor dispute, riot or civil commotion, act of a public enemy, failure of transportation facilities, enactment, rule, order, or act of government or governmental instrumentality (whether domestic or international and whether federal, state or local, or the international equivalent thereof), failure of technical facilities, or any other cause of any nature whatsoever beyond the control of either party which was not avoidable in the exercise of reasonable care and foresight.
16. To the extent permitted by Florida Law, and as limited in accordance with Section 768.28, Florida Statutes, the parties agree to be responsible for all claims, actions, demands, suits, losses, expenses (including attorney's fees), judgments and liabilities arising out of or from the acts, negligence or misconduct of themselves and their agents, officers, directors, employees, members, or managers occurring in connection with this Agreement. Provided however, nothing herein shall be construed as a waiver of the sovereign immunity afforded either party by the Florida Constitution, a waiver of the provisions of Section 768.28, Florida Statutes, or a consent to be sued by third parties.

17. The parties expressly agree that each party will bear its own attorney's fees and court costs incurred in connection with this Agreement.
18. The parties expressly and specifically hereby waive the right to a jury trial as to any issue in any way connected with this Agreement.
19. This Agreement and the terms hereof shall be construed in accordance with the laws of the State of Florida and venue for all actions in a court of competent jurisdiction shall lie in Martin County, Florida.
20. This Agreement may not be assigned by either party.

IN WITNESS WHEREOF, the parties hereto have caused these this Agreement to be executed on the above date.

ATTEST:

BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

CAROLYN TIMMANN
CLERK OF THE CIRCUIT COURT
AND COMPTROLLER

SARAH HEARD, CHAIR

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

SARAH W. WOODS
COUNTY ATTORNEY

ATTEST:

TOWN OF JUPITER ISLAND

KIMBERLY KOGOS
TOWN CLERK

PENELOPE TOWNSEND, MAYOR

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

THOMAS J. BAIRD
TOWN ATTORNEY



TOWN OF JUPITER ISLAND

CONTRACT MEMORANDUM

To: Mayor & Town Commission
Through: Robert Garlo, Town Manager *RG*
CC: Kimberly Kogos, Town Clerk
From: John Duchock, Asst. Town Manager
RE: Agenda Item 5 - Coastal Engineering Consulting Services
 (RFQ#2025-06)
Date: 6/30/2025

Department: Beach Protection District

Prepared by: John Duchock

Requested by:

Legal Sufficiency Review: Thomas J. Baird, Jones Foster PA (pending)

Contract Title: Coastal Engineering Consulting Services

1. Executive Summary: Town staff rely on engineering and environmental support services from outside consultants. Since August 2019, the Town has maintained agreements for continuing consulting services with Gahagan & Bryant Associates, Applied Technology & Management, and Cummins Cederberg. Those contracts are set to expire in August of this year. In accordance with the Consultants' Competitive Negotiation Act (CCNA), the Town solicited a Request for Qualifications (RFQ) to provide coastal engineering consulting services for the Beach Protection District.

Project was publicly bid on: Demandstar (6/20 to 7/18/25)

Estimated Contract Value: \$0 to \$500,000 (per year)

Maximum Not-to-Exceed Term: 6 Years

The term of the contract will commence on the date of execution of the contract by the Town and continue for a period of four (4) years. The contract may be renewed a single time for two additional years upon mutual agreement of parties. Any change in price, terms or conditions shall be accomplished by written amendment to this contract. The contract is a standard form of Agreement approved by the Town Attorney which allows for termination for cause or convenience at any time.

2. Fiscal Impact: Funding is allocated within Beach Protection District budget.
3. Recommended Action: Sealed bids will be publicly opened and announced on July 18, 2025. Following review, staff will prepare an updated memo with a recommendation and request for award by the Commission.



TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 6 – Borrow Site Investigation

Date: 7/15/2025

Background:

As discussed during the June Commission meeting, it is important that the Town begin the process of identifying and securing additional offshore sand sources for future beach renourishment project. As directed by the Commission, Town staff has solicited a proposed approach for this process from Gahagan & Bryant Associates. Attached is a scope of services and fee proposal for review and discussion.

It is noted that the current fiscal year budget did not consider initiating a large-scale sand search effort and the total effort will span two to three years to accomplish the following key tasks:

1. Initial Permitting (begin FY25/complete FY26)
2. Field Surveys (summer of FY26)
3. Vibracore Sampling (summer of FY27)

Following completion, the results of these work efforts would then be utilized to apply for a modification to the Town's Joint Coastal Permit, securing a new sand source for future use by the Town.

Recommendation:

Town staff is seeking approval of Task 1, "*De Minimis Permitting and Cultural Resource Review*" at a lump sum cost of \$24,000. Tasks 2 through 6 are for information and planning purposes and require no action by the Commission.

Gahagan & Bryant Associates, Inc.
3802 W. Bay to Bay Blvd., Suite B-22
Tampa, Florida 33629
(813) 831-4408 Fax (813) 831-4216
info@gba-inc.com



July 15, 2025

Mr. John Duchock, PE
Beach District Manager
Town of Jupiter Island
2 Bridge Road
Hobe Sound, FL 33455

**RE: Scope of Services and Fee Proposal
In Support of the Jupiter Island Beach Restoration Program
Sand Search Investigation of Borrow Site B Southern Expansion Area**

Dear John,

Below please find the requested scope of work and fee schedule for the continuation of a sand search investigation of the southern portion of the Borrow Site B Investigation Area (Figure 1), to provide for securing and fully developing the available sand resources offshore of the Town. The work will include permitting, hydrographic surveys, remote sensing survey for the purposes of identifying submerged marine and cultural resources, and the acquisition of vibracores to characterize the borrow materials. The cultural resource survey will be conducted over the entire proposed borrow area expansion to locate hardbottom communities, objects, vessels, or sites of potential prehistoric or historic significance. The tasks are shown as having unit rates either as lump sum (LS) or time and materials (T&M). Tasks that have uncertainty or variability in their anticipated scope have been budgeted on a T&M basis to allow for future flexibility and coordination with Town staff. These tasks will be executed as discussed and coordinated with Town staff during future meetings. The fieldwork would be performed during a June-August timeframe, when offshore sea conditions are typically more favorable. The sand search is projected to require a three-year performance period through final permitting application. The estimated proposed cost for the performance of this investigation and preparation of reports and deliverables is detailed below.

Task 1) Deminimis Permitting and Cultural Resource Review

This task shall provide for completion of the sand search to provide a continued long-term source of quality beach sand for the Town's future beach restoration projects. A magnetometer\sub-bottom survey of the proposed borrow area will be performed to ascertain the presence of cultural resources or debris, as required by the Florida Department of Environmental Protection, Division of Historical Resources. The cultural resource survey will be performed under the supervision of a marine archaeologist, in accordance with FDEP procedures.



Archival Research: Prior to conducting fieldwork, the marine archaeologist will consult the existing archaeological site files for previously recorded sites within the proposed area and vicinity, and review the findings of the previous cultural resources report, which was prepared in 2016. Site files will be obtained from the Florida Master Site File (FMSF), Florida Division of Historical Resources. The archaeologist will also consult with the FMSF to determine if properties listed on, being considered for listing on, or determined eligible for the National Register of Historic Places are located within or near the proposed borrow area. The marine archaeologist will consult other available documents, maps, records, or local experts as necessary to determine the known history and prehistory of the area. As required by the State, a permit will be obtained from the Bureau of Archaeological Research to perform the surveys. All reporting of survey results will comply with those standards set forth in 1A-46, *Florida Administrative Code*.

The proposed borrow expansion area encompasses a 1,200 acre tract of submerged state lands as shown in Figure 1. Previous investigations of this area consisted of hydrographic surveys and side scan sonar surveys. To complete the investigation and obtain a State Lands easement for future use as a borrow site, a remote sensing survey must be performed to identify if any shipwrecks or other cultural resources reside within the proposed borrow area. No hardbottom communities were documented within the proposed borrow site during the prior side scan investigation. The proposed investigation will include sediment grab samples, vibracoring, dive transects and groundtruthing, hydrographic surveys, magnetometer, sub-bottom profiler, and side-scan surveys.

Upon review of the prior data and studies, a de minimis permit exemption request will be made to the FDEP to perform the required field surveys. Our intent is to submit the application promptly to document the Town's intent to develop a borrow area in this region; and lay claim to prevent others from sand prospecting offshore of the Town.

Task 2) Field Surveys: The field surveys are envisioned to be performed during the summer of 2026. To save additional mobilizations, the surveys will be performed from a larger research vessel so that multiple sensors may be deployed at the same time in order to accomplish the required data collection in one pass. The remote sensing surveys shall include a magnetometer, a high resolution sub-bottom profiler, side-scan sonar, multibeam sounder, with real-time kinematic global positioning system (RTK-GPS). The high-resolution shallow seismic profiler records will provide data on the stratification of sediments below the seafloor and reveal the presence of any buried objects or relic paleo channels. The sub-bottom data will be used to correlate with the subsequent vibracore data to determine the continuity of sand resources. The surveys will be conducted by trained and experienced geophysical technicians qualified to operate and interpret the magnetometer and sub-bottom profiler data, as well as to keep accurate horizontal positioning during the progress of the survey. Final interpretation of the data and a report of the survey results will be prepared by the qualified marine survey archaeologist.

Multibeam sounding data shall also be acquired during the survey. The surveys will be performed by employing a fully automated hydrographic survey system, operated from a survey vessel. Navigation and positioning for the offshore survey will be accomplished using an RTK Global



Positioning System. All data will be recorded on a hard disk drive for post survey data processing. Sound velocity cast calibration of the fathometer will be taken at the start and end of each survey day. The tidal data will be utilized as a quality control check of the RTK collected data. The survey data will be collected in the NAVD88 datum. The bathymetric survey will be performed by procedures meeting USACE standards.

The surveys shall be performed along transects at a line spacing of 100 feet, resulting in a total survey distance of approximately 100 line miles. Upon the occurrence of significant magnetic anomaly clusters or patterns during the survey, a sufficient number of additional lines shall be run to insure any anomaly clusters are fully defined. The coordinates of all anomalies recorded during the survey shall be listed in a table and plotted on maps of sufficient scale and detail to allow for easy relocation should identification and evaluation studies or anomaly avoidance and preservation be required.

The multibeam survey data will be processed and input into a DTM and contours will be plotted. This data will also provide an accurate seafloor surface elevation for mapping and interpreting the sub-bottom profiler data. Survey mapping will be certified by a registered engineer. The data shall be provided in plan view (with a plot of the bathymetric soundings and contours) and in cross-sections, and in electronic format in Adobe PDF and ASCII – XYZ formats.

The locations of submerged or relic river/creek channels, or other natural geomorphic features that are identified through evaluation of sub-bottom data shall be plotted to show their location and extent. Cross section maps showing definable strata shall be prepared for each target. Any small targets that produce hard echoes compared to the normal background signal of the area being surveyed shall be identified and plotted.

Task 3) Ground Truthing of Potentially Significant Underwater Anomalies:

Should potentially significant underwater anomalies be identified during the course of the survey, the anomalies may have to be ground-truthed and assessed as to their archaeological significance to provide for the greatest utilization and sand yield from the borrow site. This would be accomplished using scuba diver techniques. The scope and cost of this work would be dependent upon the results of the magnetometer and sub-bottom surveys.

Task 4) Survey Report & Deliverables:

A report detailing the results of the survey and collected data shall be prepared and submitted. The report will include analyses of the magnetometer and sub-bottom profiler data, mapping of anomalies and cross sections of the sub-bottom traces, magnetic anomaly data tables and location figures.

The report shall note the nature of the proposed project, its location (including a project location map). The report will comply with those standards set forth in 1A-46, *Florida Administrative Code*. The methodology used for data collection shall be described and a discussion of survey equipment



used, weather conditions, survey procedures, types of data collected, recording techniques, and any special analytical methods and techniques. The report will contain a brief discussion of the prehistory and history of the general area of the borrow area region, with specific reference to any known vessel losses in the area. This information will be used to correlate remote sensing data collected during the survey with potential prehistoric and historic archaeological sites.

The report will contain an inventory of all anomalies located by the magnetometer and sub-bottom profiler. Recommendations for additional evaluation of anomalies shall be provided with supporting documentation, which will include water depth to target, depth of burial, and types of equipment necessary to uncover and/or identify the target.

During the cultural resources survey, the State's historical archives will be researched to provide information in the vicinity of the potential borrow sites and provide documentation of existing shipwrecks/artifacts. Appropriate buffers will be utilized to avoid disturbance of these areas. Anomalies identified during the magnetometer and sub-bottom surveys will be assessed for their cultural significance. Coordination with the SHPO on the survey results will provide for concurrence on identified anomalies and provide for adequate buffer distances to avoid their disturbance during future dredging activities. The report shall include a statement of conclusions on the location of potentially significant cultural resources, the need for any additional work to assess site significance, and measures to be taken to avoid/preserve or mitigate project impacts to identified or potentially significant site locations.

Task 5: Vibracore Sampling & Sediment Testing and Analysis

A vibracore investigation will collect a limited number of vibracores in the delineated potential borrow area. These cores will be used to verify sub-bottom data and potential layer thickness, as well as textural characteristics of the sediments. Data from the preliminary field investigations will be used to develop a detailed field investigation into the most promising potential borrow area. Potential areas with insufficient layer thickness or extents, and incompatible material will be eliminated from the search. Surveys will meet or exceed the guidelines and standards outlined in the USACE Hydrographic Survey Manual EM 1110-2-1003.

Collection and Analysis of Vibracores: Approximately 50 vibracores will be collected from a large offshore research vessel, at spacing that adheres with permitting agencies requirements for offshore borrow areas(1000' grid). All cores will have recovery past the anticipated dredge depth for the borrow sites. Vibracores will be collected, split, logged and photographed. Samples from the vibracores will be collected from each distinct lithological layer and analyzed. The samples will be transferred to our geotechnical laboratory for classification. Geotechnical analyses will follow American Society for Testing and Materials (ASTM) standards and guidelines. Deliverables to be provided include:

- Vibracore logs to include approximate easting, northing, and top of hole elevation
- Vibracore Photos
- Plan view drawings of the vibracore locations
- Laboratory Results
- Characterization of the materials

Native Beach Analysis: To determine compatibility between the borrow site and the beach nourishment area, native sand samples must be analyzed as well. Ideally, the native sample will be completely natural, and void of any artificially placed sediment from prior beach renourishment projects. Typically, sediment samples are obtained along differing elevations across the entire active beach profile, from the dune area out to depth of closure. Prior native beach grain size analysis will be reviewed and analyzed, and composite statistics will be developed for comparison to potential borrow area composite statistics.

Compatibility Analysis: The most important statistic to match between the native sand sample and the borrow material is the overall grain size and range of size throughout the borrow site. The native sand found on the beach will indicate the type of material that will allow the beach to gain equilibrium. Applying a finer grain sediment to the beach will result in increased erosion and a flatter beach profile, as material is removed from the beach face and transported to the nearshore regime. A coarser material will reduce erosion, as it requires more wave energy to move larger, heavier grains. However, if the sediment is too coarse, a steeper beach profile will occur. Ideally, an identical grain size distribution would be used for nourishment of all beaches, however, the sorting that occurs while sediment is transported greatly limits the probability of finding a viable borrow site with these exact characteristics. Generally, using a slightly coarser material for replenishment is the best option as the larger grain size increases the longevity of the project while diminishing the amount of overfill material needed on the beach. Additional characteristics such as Munsell color and carbonate content will be used for the compatibility analysis. Native beach material sample statistics will be compared with borrow area statistics to ensure they meet compatibility requirements set forth by permitting agencies.

Borrow Area Impact Assessment: Upon determination of potential borrow sites, mapping of hardbottom and environmental resources will be performed to provide design guidance in the appropriate borrow site limits, to avoid impacts to the sensitive marine resources. Additionally, an evaluation of potential changes in nearshore wave climate will be performed through the use of numerical models, to determine if excavation of the borrow areas could result in undesirable impacts to adjacent beaches. The modeling will provide insight to the maximum depth of excavation to avoid the development of erosional impacts.

Final Borrow Area Delineation: Final borrow area delineation will be determined based upon available volume, material characteristics, magnetic anomalies and proximity to any adjacent hardbottom areas. Additionally, a legal description of the final delineated borrow site shall be prepared by a Florida PLS and supporting easement mapping and documents shall be created for submission to FDEP.

Task 6: Final Report

A final report of Cultural Resource Survey, the vibrocore collection and analysis and the native beach and compatibility analysis will be prepared. This data will be combined into a single database in a format usable by the Town and the potential borrow area will be defined.



Information gathered regarding potential offshore borrow areas will be combined into a detailed final report. Based upon available volume, material characteristics, and proximity to the fill area, the borrow sites may be ranked by preference and economic feasibility of dredging.

The final report may include, but is not limited to, the following information:

- Description of the work performed
- Description of the geology/ geomorphology of the potential borrow areas
- Bathymetric maps
- Isopach maps of sediment thickness, and/or the elevation of the bottom of beach compatible material
- Plan view map of vibrocore locations and survey tracklines depicting both the investigation as a whole (all vibrocore locations and seismic survey tracklines) and each targeted sedimentary feature/ borrow area
- Cross-sections of the borrow areas
- Vibrocore logs
- Tabular summary of gradation analyses for the borrow area sediments
- Sediment compatibility analysis
- Results of the Cultural Resource Survey
- Recommendations and conclusions for future work and/or use of borrow area identified
- Discussion of borrow area design with respect to dredging efficiency.

The estimated cost for the performance of the sand search of the borrow site expansion is given below:

Task 1) Deminimis Permitting and Cultural Resource Review.....	\$ 24,000 LS
Task 2) Field Surveys.....	\$122,000 T&M
Task 3) Groundtruthing of Significant Anomalies.....	\$ 25,000 T&M
Task 4) Survey Report & Deliverables.....	\$ 23,000 T&M
Task 5) Vibrocore Sampling & Sediment Testing and Analysis.....	\$317,000 T&M
Task 6) Final Report.....	\$ 28,000 T&M

2025-2028 Sand Search of Borrow Site B Southern Expansion Area..... \$539,000.00

The attached spreadsheets provide a breakdown of the estimated requisite labor and expenses for budgetary purposes, and will be refined as the investigation progresses. We trust that this proposal meets with your approval. Should you have any questions or require any additional information regarding this matter, please do not hesitate to call.

Best regards,

Clay M. Bryant, P.E.

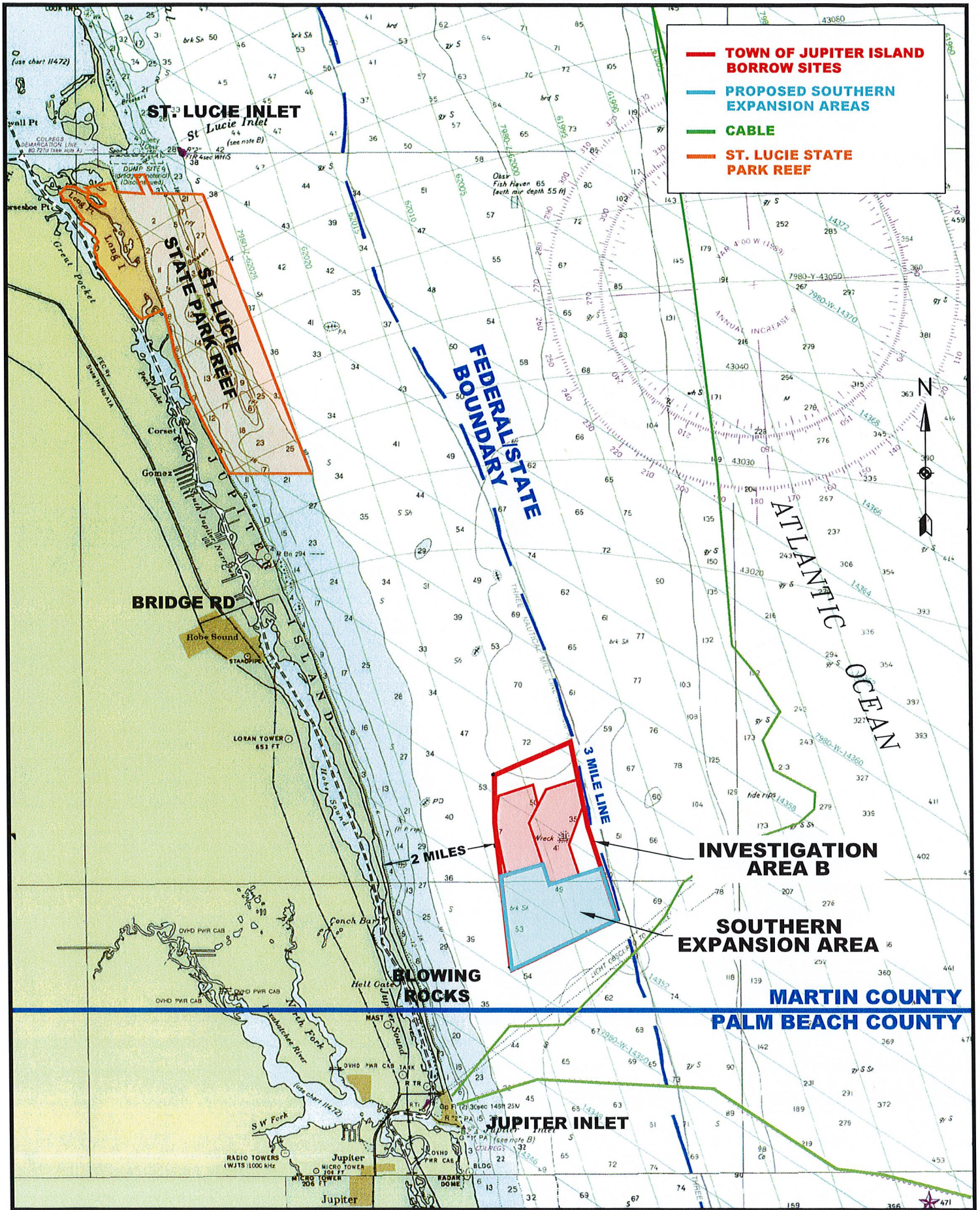


Figure 1. Existing Borrow Sites and Expansion Area



TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 7 – Local Government Funding Request

Date: 6/30/2025

Background:

Each year, the Town's Beach Protection District submits an application to the State of Florida in order to be considered for beach funding which is administered by the Florida Department of Environmental Protection through legislated funding each year. Last year, the Town applied for funds through the Local Government Funding Request 2025/26 funding application for the following activities:

- 2025 Beach tilling (required by permit); and,
- 2025 Permit-required monitoring costs (biological, physical, turbidity, and turtle).

This year the Town's application for FY2026/2027 will focus on funding for the following:

- 2025 Beach Project Construction (balance of costs beyond FEMA/FDEM obligation);
- 2026 Beach tilling; and,
- 2026 Permit-required monitoring costs (biological, physical, and turtle).

Applications are due by July 31, 2025.

Recommendation:

For informational purposes only. Town staff will bring forward a resolution supporting the Town's grant application during the September 2025 Commission meeting.