



Agenda Item Summary

File ID: 18-0538

CNST-11

Meeting Date: 7/10/2018

PLACEMENT: Consent

TITLE:

MEMORANDUM OF AGREEMENT WITH THE TOWN OF JUPITER ISLAND FOR SAND BYPASSING

EXECUTIVE SUMMARY:

The Memorandum of Agreement provides an opportunity for Martin County and the Town of Jupiter Island to partner in an upcoming sand placement project. The Town will administer the entire project which consists of a storm damage recovery component and a sand bypass component. Martin County will provide the funding for the sand bypass component, in compliance with the St. Lucie Inlet Management Plan.

DEPARTMENT: Public Works

PREPARED BY: **Name:** Kathy FitzPatrick, P.E.
Title: Coastal Engineer

REQUESTED BY:

PRESET:

PROCEDURES: None

BACKGROUND/RELATED STRATEGIC GOAL:

The Florida Department of Environmental Protection (FDEP) requires that the responsible entity for each inlet in Florida be guided by an Inlet Management Plan. Inlets along the coast divert sand that would otherwise be propelled by the currents along the beach, traveling in the nearshore area. On the east coast of Florida, the primary currents run from north to south, often driven by strong nor'easter storms. As the sand that is being propelled by the currents hits the improved inlets, some of the sand is redirected, reducing the volume of sand that makes its way to the beach on the south side of the inlet. This scenario also plays out in reverse, with a much milder current periodically running south to north, and a smaller volume of sand is lost to beaches to the north when it reaches the inlet.

An updated management plan for the St. Lucie Inlet (SLIMP) was adopted by the FDEP in January 2016. The plan identifies the average annual sand placement required on beaches north and south of the inlet to mitigate for erosion impacts caused by the St. Lucie Inlet. Martin County has complied with the required sand placement north of the Inlet with beach construction projects on Bathtub Beach and Sailfish Point beach. The SLIMP states that the impact to the beach south of the inlet is

161,000 cubic yards of sand per year. Martin County, as the responsible entity for St. Lucie Inlet, is required to periodically place sand onto those beaches in a volume and frequency that will maintain a minimum average of 161,000 cubic yards per year as a long term solution to inlet impacts. One option to achieve this goal is to work with the Town of Jupiter Island during their regularly scheduled beach restoration project, building 1 large project with 2 components: 1) the Town's beach restoration project and 2) the County's sand bypassing requirement. This option has the advantage of reducing the overall unit price for the sand that is placed. In 2016 the County entered into an interlocal agreement with the Town to construct this type of project. The County agreed to provide \$6,275,000 to the Town to fund the placement of 500,000 cubic yards of sand that were credited as "bypass sand". This bypass volume was in addition to the 1 million cubic yards placed by the Town in their beach restoration project. Sand placed under that agreement fulfills the county's requirement for 3.1 years of bypassing, through early 2019.

The Town typically plans for regular beach restoration projects to be completed on 5-6 year cycles, with the subsequent cycle of renourishment scheduled for 2021 or 2022. This schedule was abruptly changed in 2016 when Hurricane Matthew caused a major episodic-erosion event on the Town's beach. A statewide emergency was declared and the Federal Emergency Management Agency (FEMA) determined that approximately 700,000 cubic yards of sand loss from the Town's beach was directly attributable to storm damage, and awarded emergency funds to mitigate that impact. A project that receives emergency repair funding must proceed to construction as soon as is practicable after the damage occurs. Early on the County expressed an interest in participating in the Town's pending FEMA project, using the same model followed in the 2016 project. Assuming the project's construction would be complete in April 2019, near the time the prior sand bypassing credit would be exhausted, the County planned to provide funds for 5 years-worth of "bypass sand" or approximately 800,000 cubic yards of sand.

ISSUES:

As the Town began to develop plans and specifications for the FEMA project, it became apparent that the volume of sand approved by FEMA for storm damage recovery would fill their permitted beach template. A completely restored beach would not accommodate the placement of bypass sand to mitigate inlet impacts. The Town recognized this issue and took action to increase the size of their permitted template. Even with the Town's effort, there will not be sufficient room to place the optimum 800,000 cubic yards of sand. The Town's current estimate is that the County will have room in the expanded template to place about 531,000 cubic yards. This will give the County 3.3 years of bypass credit, extending our compliance to mid-2022. County staff will investigate options for additional sand placement within that time frame.

The Town has received bids for the upcoming project. The unit cost for sand, including project management and permit required monitoring came in slightly higher than expected, at \$16.82 resulting in a total project cost of \$8,941,394.26. The County had budgeted \$7,769,500, resulting in an increase in total project cost of \$1,171,894.26. State grant funds for this project have been awarded in the amount of \$5,827,125. There are sufficient funds in the Coastal budget to cover this cost increase.

The attached Memorandum of Agreement formalizes the Town's willingness to retain project management and permit compliance responsibilities and to acknowledge that any sand funded and placed as authorized in this agreement will be credited to the County as "bypass sand". In return, the County agrees to transfer \$8,941,394.26 to the Town on or before October 1, 2018 with the

understanding that should the new template hold less than the estimated volume, any unspent balance will be returned to the County.

The agreement will be considered by the Town's Council during their July 17th meeting. Town staff is recommending approval of the Memorandum of Agreement.

LEGAL SUFFICIENCY REVIEW:

This item has been reviewed for legal sufficiency to determine if it is consistent with applicable law, has identified and addressed legal risks, and has developed strategies for legal defensibility.

RECOMMENDED ACTION:

RECOMMENDATION

Move that the Board approve the attached Memorandum of Agreement.

ALTERNATIVE RECOMMENDATIONS

None

FISCAL IMPACT:

RECOMMENDATION

None

Funding Source	County Funds	Non-County Funds
	3,114,269.26	
FDEP Grant		5,827,125
Subtotal		
Project Total	8,9413,94.26	

ALTERNATIVE RECOMMENDATIONS

None

DOCUMENT(S) REQUIRING ACTION:

- ☐ Budget Transfer / Amendment ☐ Chair Letter ☒ Contract / Agreement
☐ Grant / Application ☐ Notice ☐ Ordinance ☐ Resolution
☐ Other: