#### MEMORANDUM

**To:** Tom Harmer, Town Manager

**From:** Charles Mopps, Public Works Project Manager

**Through:** Isaac Brownman, Public Works Director

Report date: September 20, 2021

Meeting date: September 27, 2021

**Subject:** Beach Management Plan Projects Update

#### **Recommended Action**

None, informational only.

### **Background**

The Town embarked on a major beach nourishment, structural stabilization and inlet Pass dredging project in Fiscal Year 2021 (FY21). The project includes six (6) Segments as outlined below including project scopes, current status, and related contractor information:

- Segment 1 North End/Greer Island
  - Project Scope: Rock Groin Structures and Beach Nourishment
  - Status: Near Completion
  - Contractors: Weeks Marine, Inc. & Kelly Brothers, Inc.
- Segment 2 Central Island
  - Project Scope: Beach Nourishment
  - Status: Complete
  - Contractor: Weeks Marine, Inc.
- Segment 3 South Key/Longboat Club Road
  - Project Scope: Beach Nourishment
  - Status: Complete
  - Contractor: Weeks Marine, Inc.
- Segment 4 Gulfside Road
  - Project Scope: Beach Nourishment
  - Status: Complete
  - Contractor: Cottrell Contracting Corporation
- Segment 5 South End/New Pass
  - Project Scope: Beach Nourishment
  - Status: Complete
  - Contractor: Cottrell Contracting Corporation
- Segment 6 Southern Terminal Structure Improvements
  - Project Scope: Structure Improvements (groin maintenance)
  - Status: Anticipated Winter 2021/2022
  - Contractor: TBD

Staff will provide an update on these projects at the September 27, 2021 Town Commission Regular Workshop Meeting.

## **Project Segment Overviews and Accomplishments**

The Town successfully combined three (3) Fiscal Years' worth of projects into the FY21 Budget. Originally Segment 1 was to be nourished with sand from Longboat Pass however, Manatee County delayed their Longboat Pass dredging project, to the point that the remaining material within the Pass would be insufficient to fill the groin field within Segment 1 on Longboat Key. This resulted in the Town seeking material from Passage Key, providing a permitted sand source to fill Segment 1. This was the dedicated source to nourish Segments 2 and 3. Staff recommended moving forward with this effort resulting in approximately 750,000 cubic yards of sand dredged from the Passage Key borrow site and was successfully placed within these areas

While Segment 1 and 3 were under construction, Manatee County commenced dredging of Longboat Pass to complete their delayed project. Nearing their completion of the project, the Town remained interested in the remaining sand within the Pass. Per permit, the Town was allowed to utilize the remaining material to nourish Segment 4. The Town quickly contracted with Cottrell Contracting (Cottrell), Manatee County's Contractor, to continue to dredge Longboat Pass, utilizing the remaining material to nourish Segment 4, which resulted in approximately 76,000 cubic yards of sand placement.

Originally, Cottrell Contracting needed to leave the Longboat Key area in mid-April, 2021 to engage in a prior commitment. However, their follow-on project was delayed and they offered to move forward in dredging New Pass for the Town, at a cost savings. The Town moved forward with Cottrell and was successful in placing 180,000 additional cubic yards of sand within Segment 5.

As mentioned, there was a cost savings by combining all of these projects. All of the sand placement by Weeks Marine, (Contractor for Segments 1, 2, and 3) was achieved for an average of \$32.75 per cubic yard. All the sand placed through the previously described Cottrell efforts, averaged \$19.71 per cubic yard. That equates to a combined weighted average \$29.44 per cubic yard. In comparison to the Town's last major beach nourishment project in 2016, the Town weighted average was \$39.56 per cubic yard between the Truck-hall and Pass Dredging efforts, if the same amount of sand was placed. This recent project resulted in a savings of \$10.12 per cubic yard, if both projects were done to the same volumes.

Managing and streamlining communication throughout these projects was instrumental in developing the funding, addressing questions and concerns, and managing expectations. This could only be accomplished through coordination with Manatee County, for dredging of Longboat Pass material and cost sharing in the construction of the northern two groins. Through coordination with the City of Sarasota for New Pass dredging of material to nourish Segment 5. Being able to effectively communicate our intent with State and Federal agencies for environmental approvals was also critical in moving these projects forward. Flexible procurement also allowed for adding the Pass Dredging and related segments to be constructed. The quick turnaround of Change Orders allowed for Mote Marine to add turtle monitoring services to these segments (not part of the original scope), in addition to Steve Sauers Environmental, for additional Shore Bird Monitoring. The Town's contractors communicated extremely well during

construction and received approval to continue working operations through holidays and scheduled events. The flexibility of our Contractors assisted in this effort.

Public Outreach during the winter of 2019/2020 lead to both an informed community and a successful Bond passing by approval of our voters. Without this funding, none of these critical projects could go forward. To keep the public informed and to manage expectations, the Town utilized the "Talk of the Town" web videos, social media, and our local media outlets to share important project information. The Town was also able to establish a Project Website early on to direct citizens and visitors for information. This provided general scopes of the different projects along with their progress update(s). It supplied timelines, interactive maps, photos, and even aerial videos.

## **Greer Island Spit Management Plan**

While these projects were underway, the Town was actively seeking permits for the Town's Greer Island Spit Management Plan. This management plan will reshape Greer Island to the 2006 condition, providing safer navigation into Greer Island Lagoon and restoring riparian rights to those waterfront Town citizens. It will also provide for between 25,000 and 35,000 cubic yards of sand to be used along the Gulf shoreline. This would help in the maintenance of the fill within and around the Segment 1 groin field and Gulfside Road area, if combined with additional fill. To date, the Town has received the Florida Department of Transportation permit, the Florida Department of Environmental Protection permit application was deemed complete, and the Town is in communication with the Army Corps of Engineers to determine permit status.

## Looking Ahead

The Town is looking to start the design and permitting necessary to move forward with the maintenance needs of the New Pass groin (Segment 6) in FY21. Staff would like to commence the construction/maintenance early in FY22, putting all the construction activities outside of Shorebird and Sea Turtle nesting season. Staff are also working with the Town Attorney's Office to update all the Beach Easements that allow for our nourishment projects to occur. In addition, the Town Public Works will be pursuing feasibility and options for a Northshore Public Access beautification project using beach nourishment project savings. As part of the initial beach access beautification/improvement effort, Public Works will be removing a portion of the chain link fence at the west end of the North Shore Road cul-de-sac and replacing with a post-and-rope feature. This will be scheduled to occur after all beach nourishment construction is complete.

#### **Staff Recommendation**

None, Informational only.

#### **Attachments**

PowerPoint Presentation (Available from Town Clerk's Office)

# **End of Agenda Item**