

## MEMORANDUM

**TO:** Tom Harmer, Town Manager  
**FROM:** Isaac Brownman, Public Works Director  
**DATE:** April 26, 2019  
**SUBJECT:** Canal Dredging Project Update

### **Recommended Action**

None, informational only.

### **Background**

At the October 17, 2016, Regular Workshop Meeting the Town Commission held discussions regarding a canal dredging maintenance project. Dr. Cliff Truitt, P.E., and Ms. Jenna Phillips of Taylor Engineering presented the results of the Canal Dredging Feasibility Study. Discussions centered on future optimal/desired navigation depth of canals that would trigger different types of permitting requirements from State and Federal regulatory agencies.

Taylor Engineering also presented at the April 17, 2017, Regular Workshop Meeting to provide an update regarding completed work and to provide recommendations of budget planning level construction estimates and proposed sediment management handling areas.

Based on the resulting studies, the Taylor recommendation, and Town direction, was to use a depth of 3-feet below Mean Lower Low Water (“MLLW”) level as a minimum navigable threshold. As such, Taylor Engineering developed “hot spot” dredge areas and adjacent areas to establish the program of sixteen (16) canals. During the current review process fourteen (14) canals are now being considered for dredging as part of the current effort.

In addition, the Greer Island Beneficial Use project was added as part of the overall program with the goal of removing sand material that has migrated around Greer Island up to and past the Longboat Pass bridge and is contributing to the potential closure of Canal 1A. The goal of this project scope is to remove the migrated sand and place back on the beach face on the gulf side.

### **Current Status of Project Permitting**

Prior to formal submittal of the USACE and FDEP permits for the canal dredging project, the USACE requires that the Seagrass Mitigation Plan be included in the submittal. Sub-consultant Sheda Ecological Associates has conducted a recent seagrass survey to assist in prioritizing a final mitigation plan for submittal.

Based on the results of the canal sea grass surveys, it has also been determined that significant sea grass impacts will occur with the project, which will be required to be mitigated at a 2:1 ratio. The sea grass survey to analyze the proposed mitigation area

was delayed in 2018 due to Red Tide, storms and government shut downs. In addition, the nature of this project is such that progression of engineering and environmental design/permitting for project has been incremental as information becomes available. In addition to the seagrass survey, other elements of the mitigation plan must include identification of the sand fill source, geotechnical data analysis of soils at the mitigation site compared to the canal dredging locations, and preliminary design and volume calculations for the proposed mitigation site.

Below is a summary of permits required from both State and Federal agencies, in order of priority:

- USACE canal dredging permit (requires mitigation plan completion)
- FDEP Individual Permit for Mitigation Site
- FDEP Canal Maintenance Exemption submittal (requires letters of consent from Golf course and FDOT as proposed Dredge Material Management Areas)

The timing for receipt of these permits is unknown, and it is likely that the permits are not received concurrently. For this reason, it is difficult to estimate the timing for start of construction – which may not occur concurrently. Therefore, in an effort to be conservative (for budget planning), we assumed that this work may require separate bid and construction stages.

### **Current Status of Budget**

At the April 17, 2017, Town Commission meeting, Taylor Engineering provided conceptual project cost estimates ranging from \$1.25 Million to \$2.35 Million. The conceptual costs did not include construction administration nor a full picture of the overall mitigation, permitting and construction requirements.

Based on the initial cost estimates, the Town decided to budget General Fund dollars to fund the project, as opposed to establishing special district(s). The Town budgeted CIP funds in major line items for canals and beaches (Greer Island Beneficial Use) related to this project includes about \$1,684,570 plus some incidental line items and carryover amounts.

As more information becomes available, it is becoming clearer that the level of funding to accomplish the total project is more than originally planned and/or budgeted. For example, based on current and proposed work scopes to accomplish all engineering design, permitting, bidding and construction administration for the project is approximately \$709,060. Construction costs are unknown at this point, however, Taylor Engineering recommended additions to the five (5) year CIP in order to accomplish the total project. Those additions roughly totaled \$2 million and far exceed the Town's capacity to fund under our current General Fund budget source.

Since the project is experiencing budget constraints, options being reviewed by Public Works include:

- Reduce project scope to start with a smaller project within budget. The scope, magnitude, and method of mitigation is still of concern.
- Perform a third-party peer review to review the work performed to date and provide recommendations. The cost would further reduce capacity of construction funding.
- Explore the possibility of pursuing a design-build contract to complete a design, permitting and mitigation scenario for a sub-set of the canal project at a Not-to-Exceed amount.
- For the remainder of the project (and future canal dredge programs), develop a funding methodology to include special assessments / districts rather than dependency on the General Fund, or note the extent of a millage increase to accomplish this project with the General Fund.

It is important to note that additional funding of about \$300,000 from the West Coast Inland Navigation District (“WCIND”) is pending and can contribute towards the project. The request requires Sarasota County Commission and WCIND Board approval of selected canals being declared public access and use.

### **Additional Residential Canals**

A number of residents have approached Public Works about the following scenarios: 1) adding adjacent canals to the Town project, as their canals were outside of the established threshold, 2) extending the limits of dredging in current canals to within private or residential docks at owner cost, and 3) adding other canals and utilizing the Town contractor at owner cost. In addition to the budget constraints involved for any additions to the Town project, additional work would be required for all scenarios in the form of:

- Verification that the canals fit the exemption definition for FDEP
- Additional natural resource surveys
- Dredging design and volume calculations
- Modification to mitigation plan (if required), design and FDEP Mitigation permit
- Extends timeline for permitting and construction

### **Next Steps**

Permitting of the project is still actively moving forward. Public Works will continue to develop options of revising the project scope into a smaller project within budget, consider alternative delivery methods for construction, and possibly pursue a third-party peer review in order to gain any additional insights and/or recommendations. Public Works will provide a follow-up update before the summer recess.

### **Attachments**

PowerPoint Presentation