Agenda Report



2725 Judge Fran Jamieson Way Viera, FL 32940

New Business - Development and Environmental Services Group

J.1. 12/20/2022

Subject:

Increase Contracted Dredge Volume for Sykes Creek Phase I Muck Removal Project - District 2

Fiscal Impact:

\$5,000,000 from Save Our Indian River Lagoon Program Funds already allocated for Sykes Creek Muck Removal, and \$661,129.81 from the Florida Department of Environmental Protection State Appropriations Agreement No. NS005, for cost savings up to \$2.2 million from Phase II project costs

Dept/Office:

Natural Resources Management Department

Requested Action:

It is requested that the Board authorize the County Manager to: 1) execute a change order for up to \$5,661,129.81 to remove up to 60,792 additional cubic yards of muck; 2) extend the contract time to July 1, 2024; and 3) approve associated budget change requests.

Summary Explanation and Background:

The Sykes Creek Phase I Dredging Project was approved by the Board May 21, 2019 to remove 57,459 cubic yards (CY) of muck to improve water quality. The initial contract volume for Phase I was based on the consulting engineer using a conservative estimate of how much material would fit in the dredge material management area. Work on Phase I began in August 2022 and the contractor, Gator Dredging, is nearly 40% complete. Now that work is this far along, it is apparent that through efficient use of space and restructuring of the management area, an additional 48,000 to 60,792 CY of muck will fit within the permitted site. This additional muck volume would otherwise be removed during Phase II, however accomplishing the work now via a change order to the Phase I contract will as outlined below, complete the work more quickly and to be more cost effective than waiting for Phase II.

The proposed change order will maximize the amount of muck removal that can be completed during Phase I of the Sykes Creek muck removal project. Remaining material not removed during Phase I will be bid as Phase II, likely late in 2023, and processed through a separate temporary dredge material management area on Merritt Island (as approved by the Board on September 17, 2019). This Phase II dewatering area will require trucking cost to dispose of the material off-site, as compared to use of the Phase 1 handling and disposal onsite.

Cost Savings up to approximately \$2.2 million:

1. By more efficient use of the permitted material storage area and other fixed costs like pumps already mobilized to the island site, this change order will provide up to a 7% savings per CY of additional muck removed relative to the overall Phase I cost.

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2. The Consumer Price Index Unit (CPI-U) has increased approximately 15% from the date of the original bid in February 2020, yet Gator Dredging is offering to continue dredging at their 2020 bid rate.

- 3. Trucking cost required for Phase II, but not for Phase I, would cost over \$400,000.
- 4. By removing at least an additional 48,000 CY and up to 60,792 CY of material now, a total approximate cost savings of at least \$1 million and up to \$2.2 million is anticipated relative to the expected costs of removing this material as part Phase II. Savings arise from the cost efficiency of using the existing site and mobilized pumps, avoiding trucking costs, and not incurring price inflation since the 2020 bid.

To attain this cost savings, approval of a \$5,661,129.81 Change Order (attached) to the Gator Dredging Sykes Creek muck removal contract is requested to remove up to 60,792 CY of additional muck using the current dredge material management area. The Change Order does allow for removal of as little at 48,000 CY should unforeseen logistics at the dredge material management area force a reduced volume. The cost savings of a lesser muck removal volume would still be substantial (approximately \$1M) relative to future Phase II cost estimates.

A one-year time extension to July 1, 2024 is needed for the additional work, which is consistent with the original contract that allowed 365 days for removal of 57,459 CY.

Funding for this work will be from the Save Our Indian River Lagoon Program Funds and from Florida Department of Environmental Protection State Appropriations, both already planned for the Sykes Creek Muck Removal Project, Phases I and II.

Clerk to the Board Instructions:

Startup of this additional work is time sensitive so please email a copy of the Clerk's memo to Jeanne.Allen@brevardfl.gov



FLORIDA'S SPACE COAST

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December 21, 2022

MEMORANDUM

TO: Virginia Barker, Natural Resources Management Director Attn: Jeanne Allen

RE: Item J.1., Increase Contracted Dredge Volume for Skyes Creek Phase I Muck Removal Project

The Board of County Commissioners, in regular session on December 20, 2022, authorized the County Manager to execute a change order for up to \$5,661,129.81 to remove up to 60,792 additional cubic yards of muck; approved extending the contract time to July 1, 2024, and approved associated Budget Change Requests.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

RACHEL M. SADOFF, CLERK

Kimberly Powell, Clerk to the Board

/pp

Encl. (1)

cc: County Manager

Finance Budget

CHANGE ORDER NO. 003			to Contract for Bid No. B-2-20-05				
Project Title: Contractor: Date:	Sykes Creek P Waterfront Pro December 7, 20	hase I Muck Reperty Services, L.	moval Project L.C. dba Gator Dr	redging			
Original Contract Previous Chara Previous Cont Current Chana New Contract Previous Contract Description of Chara	ge Orders: \$\fract Sum; ge Order: \$\fract Modification	\$ 5,658,177.83 \$ 90,747.62 \$ 5,748,925.45 \$ 5,661,129.81 .11,410,055.36	Original Contract Previous Change Previous Contract Current Change T New Contract End	Orders: t End Date: 'ime: d Date:	6/1/2023 30 days 7/1/2023 365 days 7/1/2024		
Description of Change (Attach additional sheets if required) CO1 - Mobilize an excavator to the Sykes Creek Phase I dre			ged material	Decrease	<u>Increase</u> \$71,747.62		
		nty staff's supervision a	and direction				
CO2- Change the Zone 1A, because Funding is added	areas in Zone 1A we for pre & post dredge	re found to be inaccess		Ē	\$19,000.00		
CO3 – Increases the	tion Date: April 1, 20	minimum of 48,000 C	Y and a maximum of 61	Decrease Increase 1,000 CY	\$5,661,129.81		
This Change Order shall apply unless spand the Contractor Contractor hereby occurrences giving with respect to this	is an amendment to opecifically exempted. for this change. In releases Owner from rise to this Change Order. No ot	the Contract Agreement The amount and time consideration of the for all claims, demands der. This written Char ther agreements or mod	change designated are to pregoing adjustments in or causes of action are age Order is the entire a	nd the Owner, and all content time and continue time and continue of the transact greement between Owner this Contract amendmenter.	y both the Owner tract amount, the tions, events and er and Contractor		
AGREED:					appliff .		
Signature (Contracton) Name and Title	or)		County Manager	Rachel	M Sadoff, Cyerl		
Date		DEC. 20	, 2022	DEC. 20	, 2022		

		MAINAL TY	pansi	on Fian	Lump Sum Fixed Costs - DMMA Expansion Plan								
Bid Item	Item Description	Est. Qty.	Unit	Unit Cost	Lump Sum Total								
	DMMA Expansion		STREET, STREET										
1.A	Bonds and Insurance	1	LS	\$ 163,991.02	\$ 163,991.02								
2.A	Environmental Protection	1	LS	\$ 15,870.10	\$ 15,870.10								
3.A	Engineering Design and Permitting	1	LS	\$ 158,700.99	\$ 158,700.99								
4.A	Temporary Utilities Construction and Permitting	1	LS	\$ 10,580.07	\$ 10,580.0								
5.A	DMMA Construction Surveys	1	LS	\$ 37,030.23	\$ 37,030.23								
6.A	DMMA Mobilization	1	LS	\$ 565,025.00	\$ 565,025.00								
7.A	Construction Quality Control Testing	1	LS	\$ 15,870.10	\$ 15,870.10								
8.A	DMMA Facility Construction	1	LS	\$ 795,384.01	\$ 795,384.0								
9.A	DMMA Demobilization	1	LS	\$ 68,770.43	\$ 68,770.43								
10.A	DMMA Stabilization and Cleanup	1	LS	\$ 47,610.30	\$ 47,610.3								
11.A	Site Mitigation	1	LS	\$ -	\$ -								
12.A	Pre-Construction Utility Survey	1	LS	\$ -	\$ -								
13.A	Pre-Dredging Bathymetric Surveying	1	LS	\$ 12,000.00	\$ 12,000.00								
14.A	Pipeline Mobilization and Construction	1	LS	\$ 52,900.33	\$ 52,900.3								
15.A	Dredging Mobilization	1	LS	\$ 132,250.82	\$ 132,250.8								
16.A	Pipeline Demobilization and Construction	1	LS	\$ -	\$ -								
17.A	Dredging Demobilization	1	LS	\$ -	\$ -								
18.A	Payment/Post-Dredging Bathymetric Surveying	1	LS	\$ 19,000.00	\$ 19,000.00								
19.A	Dredging	60,792	CY	\$ 44.37	\$ 2,697,341.04								
20.A	Dredged Material Management	1	LS	\$ 287,248.79	\$ 287,248.79								
21.A	Operations Material Testing	1	LS	\$ 26,450.16	\$ 26,450.10								
22.A	Turbidity and Water Quality Testing	1	LS	\$ 37,030.23	\$ 37,030.2								
23.A	Environmental Species Monitoring	1	LS	\$ 31,740.20	\$ 31,740.20								
24.A	Phosphorus Concentration Level = 75 ppb or less	60,792	CY	\$ 4.00	\$ 243,168.0								
25.A	Nitrogen Concentration Level = 3,000 ppb or less	60,792	CY	\$ 4.00	\$ 243,168.0								
	TOTAL LUMP SUM	FIXED COS	STS - DI		\$ 5,661,129.8								