



AGENDA MEMORANDUM

*Natural Resources
Department*

City Council Regular Meeting Date: November 12, 2024

To: City Council
From: Holly Milbrandt, Natural Resources Director
Date: November 6, 2024

SUBJECT: City Council is asked to approve two (2) change orders for the Sanibel Lighthouse Protection Project component of the Post Hurricane Ian Emergency Berm/Beach Recovery Project and to authorize expanded hours of construction.

BACKGROUND:

City Council ratified the City Manager's approval of Contract DNR24-006 Change Order 1 (Vulcan Materials) and Contract DNR24-005 Change Order 2 (Eastman Aggregates) on May 7, 2024 for the Historic Sanibel Lighthouse Post Hurricane Ian Emergency Protection Project. This project was added to the Sanibel Island Post Hurricane Ian Emergency Berm/Beach Recovery Project to include the placement of approximately 75,000 tons of beach compatible sand above and below mean high water along approximately 2,853 feet of shoreline at Lighthouse Beach Park. Work commenced on April 18, 2024, and continued thru April 30, 2024, with approximately 22,420 tons of sand placed. Work ceased from May 1, 2024-October 31, 2024 for sea turtle nesting season, with the expectation that work would resume on or around November 1, 2024 to place the remaining 52,580 tons of sand.

The pre-construction project survey conducted in mid-October 2024 documented significant changes in the existing beach profile due to the cumulative impacts of tropical systems during the summer of 2024 (Tropical Storm Debby, Hurricane Helene, and Hurricane Milton). As a result of those changes plus pending approval from USACE to expand the fill template to include the area from the fishing pier to the bay side boundary of Lighthouse Beach Park, the estimated quantity of sand to complete the project has increased from 75,000 to approximately 105,000 tons. This increase in the estimated quantity of sand results in the need to execute change orders to the existing contracts with Vulcan Materials for sand purchase and Eastman Aggregates for sand placement. Each change order is described in further detail below.

Contract DNR24-006

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Vulcan Construction Materials, LLC

Change Order 2

Vulcan Construction Materials, LLC has the contract to provide sand to the City for the beach nourishment project at \$8.23/ton. The original contract was approved at \$3,375,123 for 410,100 tons of sand. The actual quantity purchased was 389,401 tons, leaving a positive balance of 20,699 tons. In April 2024, the total estimated sand quantity for the “Historic Sanibel Lighthouse Post Hurricane Ian Emergency Protection Project” was 75,000 tons. Accounting for the remaining 20,699 tons from the emergency berm/beach recovery project, Change Order 1 authorized the purchase of the additional 54,301 tons for the Sanibel Lighthouse Protection Project at the same unit price of \$8.23 per ton. Approximately 22,420 tons were purchased prior to May 1, 2024, with the remaining 52,580 tons to be purchased after sea turtle nesting season was complete beginning on or after November 1, 2024. Based on a new estimated quantity of 105,000 tons, Change Order 2 authorizes the purchase of an additional 52,420 tons at a cost of \$8.23 per ton for a cost increase of \$431,416.60. This expense will be paid for using State funding for the beach nourishment/berm project.

Project Component	Estimated Tons	Contract Quantity	Actual Tons Purchased	Remaining Tons	Cost @ \$8.23/Ton
Emergency Berm/Gullies	410,100	410,100	389,401	20,699	3,375,123.00
Sanibel Lighthouse-Spring 2024 (Change Order 1)	75,000	54,301	22,420	52,580	446,897.23
Sanibel Lighthouse-Fall 2024 (Change Order 2)	105,000	52,420	TBD		431,416.60
Totals	590,100	516,821			4,253,436.83

Change Order Summary-Vulcan Materials

Beach Sand Supply Contract - Vulcan Construction Materials										
Original Contract			Change Order 1				Change Order 2			
Date	Amount	Notes	Date	Amount	Revised Contract Amount	Notes	Date	Amount	Revised Contract Amount	Notes
12/21/2023	3,375,123.00	410,100 tons of sand @ \$8.23/ton	4/19/2024	446,897.23	3,822,020.23	54,301 tons of sand at \$8.23/ton for lighthouse beach area	11/12/2024	431,416.60	4,253,436.83	52,420 tons of sand at \$8.23/ton for lighthouse beach area

Contract DNR24-005

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Eastman Aggregate Enterprises, LLC Change Order 3-Sanibel Lighthouse

Eastman Aggregate Enterprises, LLC has the contract to place the sand on the City's beach. The original contract was approved at \$14,181,208. Change Order 1 reduced the contract cost for the sand in the amount of \$3,375,123 which allowed the City to purchase sand directly from Vulcan Materials and save over \$200,000 in sales tax costs. Change Order 2 authorized Eastman Aggregates to construct the Sanibel Lighthouse Protection Project, placing an additional 75,000 tons of sand at Lighthouse Beach Park, both above and below mean high water. The total project cost was \$3,048,687.50 including line items for beach access set up and restoration, management of traffic, sand placement, surveying, turbidity monitoring, and tilling. For the Lighthouse Beach scope of work, the cost per unit for sand placement increased from \$23.72 per ton for the emergency berm/beach recovery project to \$35.07 per ton, due to increased costs and risks associated with building a beach in the water *below* the mean high water line (for the emergency berm/beach recovery project all sand was placed on the *dry* beach *above* the mean high water line). Due to this change in unit cost, Change Order 2 was executed for the total estimated sand quantity (75,000 tons) and did not incorporate the balance of the sand quantity from the emergency berm/beach recovery project (20,699 tons). Under Change Order 2, approximately 22,420 tons were placed at Lighthouse Beach Park prior to May 1, 2024, leaving 52,580 tons to be placed after sea turtle nesting season on or after November 1, 2024. Based on a new estimated quantity of 105,000 tons, Change Order 3 authorizes the placement of an additional 52,420 tons at a cost of \$35.07 per ton for a total cost increase of \$1,838,369.40. This expense will be paid for using State funding for the beach nourishment/berm project.

Sand (Tons)	Change Order 2
Quantity	75,000
Placed	22,420
Remainder	52,580

Sand (Tons)	Change Order 3
Quantity	105,000
Remainder (CO2)	52,580
Change	52,420
Cost @ \$35.07/Ton	\$1,838,369.40

Change Order Summary-Eastman Aggregates

Beach Nourishment Contract - Eastman Aggregate Enterprises, LLC															
Original Contract			Change Order 1				Change Order 2				Change Order 3				
Date	Amount	Notes	Date	Amount	Revised Contract Amount	Notes	Date	Amount	Revised Contract Amount	Notes	Date	Amount	Revised Contract Amount	Notes	
12/5/2023	14,181,208.00	410,100 tons of sand; purchase @ \$8.23/ton; placement @ \$23.72/ton	12/22/2023	-3,375,123.00	10,806,085.00	Deductive CO - direct purchase of sand from Vulcan	4/19/2024	3,048,687.50	13,854,772.50	Lighthouse above and below mean high water; 75,000 tons, sand placement \$35.07 per ton	11/12/2024	1,838,369.40	15,693,141.90	Lighthouse above and below mean high water; increased sand quantity 52,420 tons, sand placement \$35.07 per ton	

Anticipated Construction Schedule & Construction Hours

To limit the impact of a prolonged closure of Lighthouse Beach Park on the island's east end businesses, staff met with the contractor to discuss opportunities and trade-offs to expedite completion of the project and/or maintain a portion of the park open during construction. The

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anticipated construction schedule currently includes a Monday-Friday, 6:00AM-6:00PM (dawn to dusk) work schedule beginning the week of November 11, 2024 and allows for a portion of the park to remain open throughout construction. Although Section 30-63 of the Sanibel code establishes construction hours of 7:00AM-5:00PM, Monday thru Saturday, City Council previously authorized hours of construction for the Sanibel Island Post Hurricane Ian Emergency Berm/Beach Recovery Project from 6:00AM to 6:00PM Monday thru Saturday to better align with sand mine hours of operation and to provide additional flexibility to minimize traffic delays. Since this was nearly a year ago, staff is requesting that Council reaffirm their approval of expanded construction hours and, although weekend work is not currently anticipated, to authorize Saturday and/or Sunday work in the event it is needed or desirable to minimize the project duration and impact.

FUNDING SOURCE:

FDEP Grant Agreement 23LE5-A1 in the amount of \$26,973,000 for the City of Sanibel 2022 Hurricane Ian and Nicole Beach Recovery Project. The grant agreement was approved by City Council on 11/7/2023.

RECOMMENDED ACTIONS:

1. Motion to approve Agreement DNR24-006, Change Order 2 with Vulcan Construction Materials, LLC for the direct purchase of approximately 52,420 tons of specified sand for the Sanibel Lighthouse component of the Sanibel Island Post Hurricane Ian Emergency Berm/Beach Recovery Project at a price of \$8.23/ton for a cost of \$431,416.60, for a revised contract amount of \$4,253,436.83.
2. Motion to approve Agreement DNR24-005, Change Order 3 with Eastman Aggregate Enterprises, LLC for additional placement of approximately 52,420 tons of sand at Lighthouse Beach Park as part of the Sanibel Island Post Hurricane Ian Emergency Berm/Beach Recovery Project at a price of \$1,838,369.40, for a revised contract amount of \$15,693,141.90.
3. Motion to authorize hours of construction for the project from 6:00 AM until 6:00 PM, 7-days per week, if necessary to minimize project duration and impact.