

**AMENDMENT #13 TO CONTRACT NO. 2012000050
AGREEMENT BETWEEN CHARLOTTE COUNTY
and
COASTAL ENGINEERING CONSULTANTS, INC.
for
STUMP PASS 10 YEAR MANAGEMENT PLAN**

THIS AMENDMENT #13 to Contract 2012000050 (the "Contract") is made by and between CHARLOTTE COUNTY, a political subdivision of the State of Florida, 18500 Murdock Circle, Port Charlotte, Florida 33948-1094 ("County"), and COASTAL ENGINEERING CONSULTANTS, INC., 28421 Bonita Crossings Boulevard, Bonita Springs, Florida 34135 ("Consultant").

WHEREAS, pursuant to RFP No. 2012000050 and a selection and negotiation process conducted in accordance with the requirements of law and County policy, the County determined that it would be in the best interest of the County to award a contract to Consultant for the rendering of professional services associated with a ten-year beach and inlet management plan to include alternative analysis, design, permitting, construction support and monitoring (the "Project"); and

WHEREAS, the parties entered into Contract No. 2012000050 on April 23, 2012 for the beach and inlet management plan Project; and

WHEREAS, the Contract has been amended on twelve prior occasions to add additional services relating to surveys, design, construction administration, restoration oversight, physical and biological monitoring, and hurricane mitigation; and

WHEREAS, the Consultant has been providing, and is capable of continuing to provide the necessary Project services; and

WHEREAS, the parties now wish to amend the Contract to include additional services to complete the permit-required monitoring services and provide technical support services for the Stump Pass dredging project and the South Beach Fill construction project.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the County and Consultant amend Contract No. 2012000050 as follows:

1. The effective date of this Amendment #13 is the date upon which this Amendment is signed by both parties.
2. The provisions of this Amendment #13, and **Exhibits A**, Scope of Services, and **B**, Professional Fees, attached to it, are specifically incorporated into, and made a part of, the Contract.
3. Consultant agrees to perform the additional services specified in **Exhibit A**.
4. The County agrees to pay an amount not to exceed One Hundred Eighty-Two Thousand Eight Hundred Seventy-Six Dollars and no cents (\$182,876.00), for the additional services that are the subject of this Amendment, as set forth in **Exhibit B**.

5. Consultant's services shall be deemed complete when Consultant provides all services contained in the Scope of Services, **Exhibit A**, and the County accepts those services as satisfactory.

6. All other provisions of the Contract not in conflict with this Amendment #13 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment #13 as of the date and year written below.

WITNESS:

Signed By: Tim R Davis

Print Name: TIM R DAVIS

Date: 4/19/23

COASTAL ENGINEERING CONSULTANTS, INC.

By: Michael Poff

Print Name: Michael Poff

Title: President

Date: 4/18/23

**BOARD OF COUNTY COMMISSIONERS
OF CHARLOTTE COUNTY, FLORIDA**

By: William G. Truex

William G. Truex, Chairman

Date: April 11, 2023

ATTEST:

Roger D. Eaton, Clerk of the Circuit
Court and Ex-Officio Clerk to the
Board of County Commissioners

By: Dawn Pleuston
Deputy Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

By: Janette S. Knowlton

Janette S. Knowlton, County Attorney
LR23-0274 (LT)

Attachments:

Exhibit A – 2023 Stump Pass Navigation Channel Monitoring and Technical Support Services
Exhibit B – Professional Fees

EXHIBIT A

Charlotte County 10-Year Beach and Inlet Management Plan
2023 South Beach Fill Monitoring and Technical Support Services
2023 Stump Pass Navigation Channel Monitoring and Technical Support Services
CEC File No. 23.001
January 23, 2023

INTRODUCTION

The Charlotte County Erosion Control Project State and Federal permits require annual physical and biological monitoring. The scope of services presented herein is designed for Coastal Engineering Consultants, Inc. (Consultant) to assist Charlotte County (County) complete the permit required services and provide technical support services for year one monitoring of Stump Pass dredging completed in 2022, and year three monitoring of South Beach Fill construction completed in 2020. This scope is based on a companion scope of services for the annual monitoring services for the Manasota Key Beach Restoration Project that was constructed concurrent with the restoration of South Beach Fill. When tasks overlap, the budget is shared among the tasks.

SCOPE OF SERVICES

SOUTH BEACH FILL (SBF) MONITORING SERVICES

TASK 1. SBF PHYSICAL MONITORING

1A. Beach Profiles: Consultant will conduct third year monitoring surveys of the FDEP reference monuments R-29 through R-40. The profile alignments shall be identical to the azimuths previously established for each monument. All R-monument beach profiles shall extend seaward 3,000 feet from the Mean High Water (MHW) or to a depth of -30 feet NAVD88, whichever is less.

1B. Aerial Photography: Consultant will obtain aerial photography of the beach concurrently with the survey and during approximate low water tide on that date. The limits of the photography shall include from R-29 to R-40. The photography shall be color vertical photos with a 30% forward overlap, taken from an elevation of 3,000 feet (1:6,000 negative scale) and centered on the local shoreline. A digital scan of the color photos at a rate of 21 microns with a pixel size of 0.4 feet shall be made and submitted in TIF format (uncompressed).

1C. Annual Monitoring Report: Consultant will prepare and submit to the agencies the Monitoring Report to summarize work completed and present beach profile surveys and aerial photographs, compute shoreline and volume calculations to define erosion and accretion trends, assess Project performance, and identify adverse impacts attributable to the Project. Specific assessments include analysis for patterns, trends, or changes between surveys and for cumulative changes over time since project construction; evaluate volume and percentage of advance nourishment lost since construction as measured landward of MHW of most recent survey; evaluate erosion and accretion rates occurring between post-construction survey and monitoring surveys; assess volume of fill remaining within Project area; evaluate beach fill adjustment and volume accumulations outside of Project area and assess alongshore and cross-shore fill movement; and evaluate total measured remaining volume in comparison with total predicted remaining volume on average annual basis based on nourishment cycle.

TASK 2. SBF BIOLOGICAL MONITORING

2A. Sea Turtle Monitoring: County will retain the local marine turtle permit holders (Turtle Consultants). Turtle Consultants will conduct the sea turtle monitoring and reporting as well as escarpment monitoring. County will conduct escarpment monitoring and reporting to USFWS and FFWCC, and contract with local contractor to address escarpment removal. County will conduct the artificial lighting surveys. Consultant will provide technical support to the County and the monitors for implementation of the marine turtle protection

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plans, monitoring, and reporting.

2B. Compaction Monitoring: County will contract with local contractor to till beach. Consultant will conduct cone penetrometer testing after contractor has tilled the beach to confirm the tilling was completed in accordance with the Permit requirements.

SBF TECHNICAL SUPPORT SERVICES

TASK 3. SBF PROJECT MANAGEMENT

Specific to SBF, Consultant will attend and serve as the County's representative at stakeholder meetings including but not limited to the Beaches and Shores Committee, Coastal Advisory Committee, Board of County Commissioners, Marine Advisory Committee, and Parks and Recreation Committee. Provide technical support services for the County specific to stakeholder coordination. Manage and coordinate the team's internal efforts. Maintain informal contact with the County and FDEP via email and phone calls.

TASK 4. SBF FUNDING

Consultant will assist the County prepare and submit the annual funding requests to the State of Florida for inclusion in the Beach Management Funding Assistance Program, and respond to the FDEP request for additional information and critique of the funding application specific to SBF. Consultant will prepare and submit the quarterly monitoring reports to FDEP.

TASK 5. SBF STORM SURVEYS & ASSESSMENTS

In the event a significant storm impacts the Project Area, the County may request Consultant conduct pre- and / or post-storm surveys and perform assessments to quantify beach erosion and assist with post-storm recovery public assistance.

STUMP PASS NAVIGATION CHANNEL (SPNC) MONITORING SERVICES

TASK 6. SPNC PHYSICAL MONITORING

6A. Beach Profiles: Consultant will conduct first year monitoring survey of the FDEP reference monuments R-16 through R-28, twelve (12) additional lines near Stump Pass, and Mean High Water (MHW) surveys from R-18 through R-28 (inlet shorelines). The profile alignments shall be identical to the azimuths previously established for each monument. All R-monument beach profiles shall extend seaward 3,000 feet from the Mean High Water (MHW) or to a depth of -30 feet NAVD88, whichever is less, with the exception of R-22 to R-28 which shall be 5,000 feet from MHW to cover the shoal.

6B. Navigation Channel Surveys: Consultant will conduct first year monitoring survey of the Stump Pass Navigation Channel and MWH adjacent to the inlet. Bathymetric surveys shall be conducted along each cross-section at 100-foot intervals and three longitudinal profiles, along the centerline and at 150-foot offsets to either side. The northern and southern limits of the survey shall extend approximately 600 feet beyond the permitted template, or to the limits of the ebb/flood shoals, whichever is greater.

6C. Aerial Photography: Consultant will obtain aerial photography of the beach concurrently with the survey and during approximate low water tide on that date. The limits of the photography shall include from R-15 to

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R-29. The photography shall be color vertical photos with a 30% forward overlap, taken from an elevation of 3,000 feet (1:6,000 negative scale) and centered on the local shoreline. A digital scan of the color photos at a rate of 21 microns with a pixel size of 0.4 feet shall be made and submitted in TIF format (uncompressed).

6D. Annual Monitoring Report: Consultant will prepare and submit to the agencies the Monitoring Report. The Report shall include a summary of the work completed; beach profile and channel surveys; shoreline and volume change calculations; aerial photography; survey data and deliverables; and identification of adverse impacts attributable to the Project.

TASK 7. SPNC BIOLOGICAL MONITORING

7A. Sea Turtle Monitoring: County will retain the local marine turtle permit holders (Turtle Consultants). Turtle Consultants will conduct the 2023 sea turtle monitoring and reporting as well as escarpment monitoring. County will conduct escarpment monitoring and reporting to USFWS and FFWCC, and contract with local contractor to address escarpment removal. County will conduct the artificial lighting surveys. Consultant will provide technical support to the County and the monitors for implementation of the marine turtle protection plans, monitoring, and reporting.

7B. Compaction Monitoring: County will contract with local contractor to till beach. Consultant will conduct cone penetrometer testing after contractor has tilled the beach to confirm the tilling was completed in accordance with the Permit requirements.

7C. Shorebird Monitoring: Consultant will contract with agency pre-qualified Shorebird Consultants to conduct the Permit required monitoring and reporting for the 2023 nesting season and assisting with establishing Permit required signage and marking between R-22 and R-28. Provide technical support services for the County through the Shorebird Consultants' implementation of the monitoring, reporting, and signage. Arrange and attend one (1) meeting with the County and Shorebird Consultants. Prepare graphics showing nesting locations and similar information derived from Shorebird Consultants reports.

SPNC TECHNICAL SUPPORT SERVICES

TASK 8. SPNC PROJECT MANAGEMENT

Specific to SPNC, attend and serve as the County's representative at stakeholder meetings including but not limited to the Beaches and Shores Committee, Board of County Commissioners, Marine Advisory Committee, and Parks and Recreation Committee. Provide technical support services for the County specific to stakeholder coordination. Manage and coordinate the team's internal efforts. Maintain informal contact with the County and FDEP via email and phone calls.

TASK 9. SPNC FUNDING

Consultant will assist the County prepare and submit the annual funding requests to the State of Florida for inclusion in the Beach Management Funding Assistance Program, and respond to the FDEP request for additional information and critique of the funding application specific to SPNC. Consultant will prepare and submit the quarterly monitoring reports to FDEP.

TASK 10. SPNC STORM SURVEYS & ASSESSMENTS

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In the event a significant storm impacts the Project Area, the County may request Consultant conduct pre- and / or post-storm surveys and perform assessments to quantify beach erosion and channel shoaling and assist with post-storm recovery public assistance.

DELIVERABLES

For all specified deliverables, Consultant will prepare and submit to the County a draft deliverable in electronic format (e.g., pdf file). Consultant will review the draft deliverable with the County, make one (1) round of revisions as may be identified by the County, and submit one (1) hard copy and one (1) digital copy in the appropriate formats (e.g., Word, Excel, PowerPoint, AutoCAD, shape file, etc.) of all deliverables to the County. The following is a list of deliverables to be provided.

Task 1A

- Beach Profile Survey Field Notes, Plots, and Data Files

Task 1B

- Aerial Photographs and Survey Report

Task 1C

- Annual Monitoring Report

Task 2A

- 2023 Sea Turtle Monitoring Nest Location Aerial Exhibits

Task 2B

- Compaction Test Results

Task 3

- Stakeholder Meeting Minutes, Stakeholder Coordination Memos, and Schedule Updates

Task 4

- FY24-25 Annual Funding Request Application and Technical Support Documents
- FY24-25 Funding Application RAI Response and FDEP Funding Assessment Critique
- FDEP Quarterly Reports (Quarterly)

Task 5

- Beach Profile Survey Field Notes, Plots, Data Files, Erosion Calculations, and Report

Task 6A

- Beach Profile Survey Field Notes, Plots, and Data Files

Task 6B

- Navigation Channel Survey Field Notes, Plots, and Data Files

Task 6C

- Aerial Photographs and Survey Report

Task 6D

- Annual Monitoring Report

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Task 7A

- 2023 Sea Turtle Monitoring Nest Location Aerial Exhibits

Task 7B

- Compaction Test Results

Task 7C

- 2023 Shorebird Daily Monitoring Reporting
- 2023 Annual Monitoring Report

Task 8

- Stakeholder Meeting Minutes, Stakeholder Coordination Memos, and Schedule Updates

Task 9

- FY24-25 Annual Funding Request Application and Technical Support Documents
- FY24-25 Funding Application RAI Response and FDEP Funding Assessment Critique
- FDEP Quarterly Reports (Quarterly)

Task 10

- Survey Field Notes, Plots, Data Files, Erosion and Shoaling Calculations, and Report

EXHIBIT B

Charlotte County 10-Year Beach and Inlet Management Plan
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PROFESSIONAL FEES

Presented on the following pages are the fees for the services. Payment for services shall be made on a monthly basis on a percent complete basis. Fees for individual tasks shall not be exceeded.

TABLE 1. FEE SUMMARY

Task Description	
TASKS	TOTAL
TASK 1 - SBF PHYSICAL MONITORING	\$31,739
1A Beach Profiles	\$12,488
1B Aerial Photography	\$7,097
1C Annual Monitoring Report	\$12,154
TASK 2. SBF BIOLOGICAL MONITORING	\$6,914
2A Sea Turtle Monitoring	\$4,293
2B Compaction Monitoring	\$2,621
TASK 3. SBF PROJECT MANAGEMENT	\$7,754
TASK 4. SBF FUNDING	\$6,932
TASK 5. SBF STORM SURVEYS & ASSESSMENT	\$19,852
SBF SUBTOTAL	\$73,191
TASK 6. SPNC PHYSICAL MONITORING	\$42,498
6A Beach Profiles	\$9,976
6B Navigation Channel Surveys	\$11,655
6C Aerial Photography	\$7,297
6D Annual Monitoring Report	\$13,570
TASK 7. SPNC BIOLOGICAL MONITORING	\$20,288
7A Sea Turtle Monitoring	\$4,293
7B Compaction Monitoring	\$2,621
7C Shorebird Monitoring	\$13,374
TASK 8. SPNC PROJECT MANAGEMENT	\$7,754
TASK 9. SPNC FUNDING	\$6,932
TASK 10. SPNC STORM SURVEYS & ASSESSMENT	\$32,213
SPNC SUBTOTAL	\$109,685
TOTALS	\$182,876

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TABLE 2. DETAILS OF PROFESSIONAL FEES BY TASK

Coastal Engineering Consultants, Inc.																				
Task Description	Principal President	Principal Engineer	Principal Surveyor	Senior Engineer	Senior Scientist	Coastal Modeler	Managing Engineer	Marine Surveyor	Project Engineer	Staff Engineer	Senior Technician	Construction Manager	Project Coordinator	2-Man GPS Crew	1-Man GPS Crew	Total Fees	Direct Costs		Total	
	\$230	\$214	\$214	\$188	\$188	\$148	\$154	\$143	\$132	\$112	\$120	\$103	\$85	\$178	\$147		Amount	Subs		
TASKS																				
TASK 1 - SBF PHYSICAL MONITORING	10	0	10	5	0	38	8	20	2	12	48	0	5	10	10	\$26,139	\$5,600		\$31,739	
1A Beach Profiles	1	0	4	1	0	12	2	20	0	0	16	0	0	10	10	\$11,388	\$1,100	Equip	\$12,488	
1B Aerial Photography	1	0	4	0	0	2	0	0	0	0	8	0	3	0	0	\$2,597	\$4,500	Aerials	\$7,097	
1C Annual Monitoring Report	8	0	2	4	0	24	6	0	2	12	24	0	2	0	0	\$12,154	\$0		\$12,154	
TASK 2. SBF BIOLOGICAL MONITORING	2	0	0	0	20	8	0	0	0	0	8	0	5	0	0	\$6,789	\$125		\$6,914	
2A Sea Turtle Monitoring	1	0	0	0	12	4	0	0	0	0	8	0	3	0	0	\$4,293	\$0		\$4,293	
2B Compaction Monitoring	1	0	0	0	8	4	0	0	0	0	0	0	2	0	0	\$2,496	\$125	Equip	\$2,621	
TASK 3. SBF PROJECT MANAGEMENT	10	0	0	10	0	8	10	0	0	0	0	0	10	0	0	\$7,754	\$0		\$7,754	
TASK 4. SBF FUNDING	4		0	8	0	8	8	0	6	0	8	0	4	0	0	\$6,932	\$0		\$6,932	
TASK 5. SBF STORM SURVEYS & ASSESSMENT	8	8	2	0	0	30	4	24	4	4	12	0	4	0	24	\$18,752	\$1,100	Equip	\$19,852	
TASK 6. SPNC PHYSICAL MONITORING	13	0	12	4	0	46	6	24	18	16	42	0	8	24	12	\$33,398	\$9,100		\$42,498	
6A Beach Profiles	2	0	3	0	0	4	2	12	6	0	8	0	2	12	0	\$7,776	\$2,200	Equip	\$9,976	
6B Navigation Channel Surveys	2	0	3	0	0	4	2	12	6	0	8	0	1	12	12	\$9,455	\$2,200	Equip	\$11,655	
6C Aerial Photography	1	0	4	0	0	2	0	0	0	0	8	0	3	0	0	\$2,597	\$4,700	Aerials	\$7,297	
6D Annual Monitoring Report	8	0	2	4	0	36	2	0	6	16	18	0	2	0	0	\$13,570	\$0		\$13,570	
TASK 7. SPNC BIOLOGICAL MONITORING	3	0	0	0	28	8	0	0	0	0	16	0	13	0	0	\$10,163	\$10,125		\$20,288	
7A Sea Turtle Monitoring	1	0	0	0	12	4	0	0	0	0	8	0	3	0	0	\$4,293	\$0		\$4,293	
7B Compaction Monitoring	1	0	0	0	8	4	0	0	0	0	0	0	2	0	0	\$2,496	\$125	Equip	\$2,621	
7C Shorebird Monitoring	1	0	0	0	8	0	0	0	0	0	8	0	8	0	0	\$3,374	\$10,000	Monitors	\$13,374	
TASK 8. SPNC PROJECT MANAGEMENT	10	0	0	10	0	8	10	0	0	0	0	0	10	0	0	\$7,754	\$0		\$7,754	
TASK 9. SPNC FUNDING	4	0	0	8	0	8	8	0	6	0	8	0	4	0	0	\$6,932	\$0		\$6,932	
TASK 10. SPNC STORM SURVEYS & ASSESSMENT	4	0	4	0	0	12	8	60	16	16	20	0	5	0	60	\$28,913	\$3,300	Equip	\$32,213	
TOTALS	68	8	28	45	48	174	62	128	52	48	162	0	68	34	106	\$153,526	\$29,350		\$182,876	

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TABLE 3. SUMMARY OF DIRECT COSTS

Task Description	Jet-Pump (day)	Penetrometer (day)	Field Equipment (day)	Boat-Offshore (day)	Hydro System (day)	CEC Direct Costs	Subconsultant Fees	Total Direct Costs
	\$100	\$125	\$100	\$400	\$600			
TASKS								
TASK 1 - SBF PHYSICAL MONITORING	0	0	1	1	1	\$1,100	\$4,500	\$5,600
1A Beach Profiles			1	1	1	\$1,100	\$0	\$1,100
1B Aerial Photography						\$0	\$4,500	\$4,500
1C Annual Monitoring Report						\$0	\$0	\$0
TASK 2. SBF BIOLOGICAL MONITORING	0	1	0	0	0	\$125	\$0	
2A Sea Turtle Monitoring						\$0	\$0	\$0
2B Compaction Monitoring		1				\$125	\$0	\$125
TASK 3. SBF PROJECT MANAGEMENT	0	0	0	0	0	\$0	\$0	\$0
TASK 4. SBF FUNDING	0	0	0	0	0	\$0	\$0	\$0
TASK 5. SBF STORM SURVEYS & ASSESSMENT	0	0	1	1	1	\$1,100	\$0	\$1,100
TASK 6. SPNC PHYSICAL MONITORING	0	0	4	4	4	\$4,400	\$4,700	
6A Beach Profiles			2	2	2	\$2,200	\$0	\$2,200
6B Navigation Channel Surveys			2	2	2	\$2,200	\$0	\$2,200
6C Aerial Photography						\$0	\$4,700	\$4,700
6D Annual Monitoring Report						\$0	\$0	\$0
TASK 7. SPNC BIOLOGICAL MONITORING	0	1	0	0	0	\$125	\$10,000	\$10,125
7A Sea Turtle Monitoring						\$0	\$0	\$0
7B Compaction Monitoring		1				\$125	\$0	\$125
7C Shorebird Monitoring						\$0	\$10,000	\$10,000
TASK 8. SPNC PROJECT MANAGEMENT	0	0	0	0	0	\$0	\$0	\$0
TASK 9. SPNC FUNDING	0	0	0	0	0	\$0	\$0	\$0
TASK 10. SPNC STORM SURVEYS & ASSESSMENT	0	0	3	3	3	\$3,300	\$0	\$3,300
TOTALS	\$0	\$250	\$900	\$3,600	\$5,400	\$10,150	\$19,200	\$29,350