

#### HUMISTON & MOORE ENGINEERS

COASTAL ENGINEERING DESIGN AND PERMITTING 5679 STRAND COURT NAPLES, FLORIDA 34110 FAX 239 594 2025 PHONE: 239 594 2021

February 21, 2023 (Proposal valid for 120 days.)

Andrew Miller, Principal Project Manager Coastal Zone Management (CZM) Collier County Government 2685 South Horseshoe Drive Unit 103 Naples, FL 34104

Re: Proposal for Collier County Beaches and Inlets Annual Monitoring for 2023 Collier County Contract 18-7432-CZ; HM File No 29-018.2023Beach-Monitor

Dear Andy:

Enclosed is a proposal for the Wiggins Pass Inlet, Doctors Pass Inlet, South Marco Beach, and Doctors Pass Erosion Control Structures (includes survey) monitoring reports for 2023. The completion date for all work is estimated to be 365 days from the date of the Notice to Proceed. Rectified aerial images acquired for 2023, provided by the Collier County Property Appraiser's Office, are to be submitted to the Department of Environmental Protection (DEP) by Humiston and Moore Engineers (HM) as part of the work described below for all projects and an aerial image book provided to CZM in pdf format for online posting.

The monitoring report and survey for Central Marco, conducted biennially, is not required for 2023, and the borrow area for South Marco is also not required. These items are not included in the scope of work for the 2023 monitoring.

The monitoring summary reports for Wiggins, Doctors and South Marco will be prepared based on the Post-Ian survey conducted by APTIM. This survey does not include the half monuments from R-10 to R-22, the MHWL east of R-17, R-60+518, R-61+408, R-61+816, G-1, K-1 and K-2. The associated reports will be modified accordingly and alternative analysis provided as applicable. The Doctors Pass Erosion Control Structures Report will be based on a survey conducted by Sea Diversified Inc. (SDI).

#### Task 1 Wiggins Pass - Final Monitoring Report

Prepare and submit the annual monitoring summary report for the Wiggins Pass Navigation Channel Expansion and Maintenance Dredging Project based on the Post-lan survey conducted by APTIM. The monitoring summary includes inlet/beach profiles, inlet volume change from previous monitoring surveys, information relative to the 2022 dredging, other information in compliance with the DEP monitoring requirements, comments from CZM staff after review of draft summary, and applicable recommendations.

Task 1 Wiggins Pass Monitoring Report (H&M)......\$ 12,688 TM

Deliverable: One electronic copy of the Final Monitoring Report.



#### Task 2 Doctors Pass - Final Monitoring Report

Prepare and submit the annual monitoring summary report for Doctors Pass Maintenance Dredging Project based on the Post-Ian survey conducted by APTIM. The monitoring summary includes inlet/beach profiles, inlet volume change from previous monitoring surveys, information relative to the 2022 dredging, other information in compliance with the DEP monitoring requirements, comments from CZM staff after review of draft summary, and applicable recommendations.

Task 2. Doctors Pass Final Monitoring Report (H&M).....\$ 9,318 TM

Deliverable: One electronic copy of the Final Monitoring Report.

#### Task 3 South Marco Beach-Final Monitoring Report

Prepare and submit the annual monitoring summary report for South Marco Beach Nourishment Project based on the Post-Ian survey conducted by APTIM. The monitoring summary includes beach profiles, volume change from previous monitoring surveys, other information in compliance with the DEP monitoring requirements, comments from CZM staff after review of draft summary, and applicable recommendations. This survey scope does not include the Caxambas Pass borrow area, not required by DEP in 2023.

Task 3 South Marco Beach Final Monitoring Report (H&M)......\$7,601 TM

Deliverable: One electronic copy of the Final Monitoring Report.

#### Task 4 Doctors Pass Structures Survey and Final Monitoring Report

Provide the annual monitoring report for the Doctors Pass Erosion Control Structures (ECS) Project consistent with the monitoring plan approved by the DEP. This scope of work is based on the survey of DEP monuments R58A-400 south to R-64 (17 profiles)\*.

- Survey is scheduled to be completed by October 2023 pending unforeseen conditions such as poor weather conditions.
- A Final Monitoring Report will be submitted to CZM and DEP within 90 days after the completion of the survey.

Task 4a. Doctors Pass ECS Survey (SDI)	\$ 9,900 LS
Task 4b Doctors Pass ECS Initial and Final Monitoring Report (H&M)	.\$ 8,894 TM
Total Task 4 Subtotal (SDI + H&M)	.\$ 18,794

The final monitoring summary includes beach profiles, shoreline/volume change from the previous monitoring surveys, other information in compliance with the DEP monitoring requirements, comments from CZM staff after review of the draft summary, and applicable recommendations.

Deliverable: One electronic copy of the Final Monitoring Report.

\*Includes beach profiles R58A-400, R58A-300, R58A-150, R58A, R58A+150, R58A+300, R58A+425, R58, R58+150, R58+300, R58+600, and R59 to R64.



#### Task 5 2023 Aerial Image Book

Prepare an updated aerial image book for the Collier County Beaches ranging from DEP reference monument R-1 south to R-89 and from Hideaway Beach reference monument H-16 including the entrance to Collier Bay south to DEP reference monument R-148 including Caxambas Pass. The monument locations will be overlaid along with the names of existing structures as noted in the 2022 book. The rectified images will be the latest available from the County Appraiser's Office. The ECL, latest MHWL, and vegetation line will be shown along with the distance from each to the 2003 Baseline.

Task 5. Aerial Image Book (H&M)......\$ 3,603 TM

Deliverable: One electronic copy of the final Aerial Image Book.

Total (SDI + H&M) \$52,004 Tasks 1 thru 5

Tasks will be billed on a time and materials basis, unless otherwise noted. The budgets for these tasks may therefore be considered as not-to-exceed amounts with the understanding that in the event regulatory requirements or requests from County staff result in Additional Services exceeding the estimated budget amounts, a budget amendment will be requested.

Please call if you have any questions.

Sincerely yours,

**HUMISTON & MOORE ENGINEERS** 

Brett D. Moore, P.E.

President

### Coiller County Beaches and Inlets Annual Monitoring 2023 Contract 18-7432-CZ

#### **Estimated Summary**

Esumated Su						
SUMMARY BI	REAKDOWN BY TASK					
	s Pass Final Monitoring Report			\$12,688.00		
	s Pass Final Monttoring Report			\$9,318.00		
	Marco Final Monitoring Report			\$7,601.00		
Task 4 Doctors	s Pass - Structures Survey and Final Monitoring Report			\$18,794.00		
Task 5 2023 /	Aerlal Image Book			\$3,603.00		
				\$52,004.00		
SUMMARY BI	REAKDOWN BY SUB-TASK					
Task 1	Wiggins Pass Final Monitoring Report			\$12,688.00	тм	\$12,688
,						
Task 2	Doctors Pass Final Monitoring Report	Doctors Pass Final Monitoring Report				\$9,318
Task 3	South Marco Final Monitoring Report			\$7,601.00	TM	\$7,601
Task 4	Doctors Pass Structures Survey			\$9,900.00		
Task 4	Doctors Pass Structures Final Monitoring Report		\$8,894.00	TM	\$18,794	
Task 5	2023 Aerial Image Book			\$3,603.00	TM	\$3,603
						\$52,004
SUMMARY			+			
	Sea Diversified Survey				9,900.00	(LS)
	Title	Rate	Hours			\$52,004
PRN2	Principle	\$231	29		\$6,699	
SDS	Engineer	\$130	182.5		\$21,125	
SIN	Scientist/Geologist	\$115	70		\$8,050	
SRT	Senior Technician	\$103	41		\$4,223	
TEC	Technician	\$83	10		\$830	
CAD	Cadd Technician	\$107	11		\$1,177	

**Humiston & Moore Engineers** 

\$42,104 (TM)

TOTAL

\$52,004



	Task 1 Wig	gins Pass F	inal Monitorii	ng Report					
					HM (T&M)	\$12,688.00	-		
		_	RATE/UNIT	HOURS/QT	COST	MARKUP	AMOUNT		
RN2	Principle		231	8	0001		1,848.00		
DS	Engineer		130	40			5,200,00		
SIN	Scientist/Geo		115	20			2,300.00		
RT	Senior Techn		103	21			2,163.00		
AD	Cadd Techni	cian	107	11			1,177.00	\$12,688.00	(TM)
								OVERFIER VICTOR	200000
	Task 2 Doo	tors Pass F	inal Monitorir	g Report					
					HM (T&M)	\$9,318.00			
					thin (1 carry				
			RATE/UNIT	HOURS/QT	COST	MARKUP	AMOUNT		
PRN2	Principle		231	8			1,848.00		
SOS	Engineer		130	53.5			6,955.00		
SRT	Senior Techn	nicien	103	5			515.00	******	CT III
								\$9,318.00	(1M)
	Task 3 Sou	th Marco F	inal Monitorin	g Report					
					HM (T&M)	\$7,601.00			
			IDATERINIT	HOURS/QT	COCT	MARKUP	AMOUNT		
PRN2	Districts	-	RATE/UNIT 231	HOURS/Q1	COST	MARKUF	924.00		
SIN	Principle Scientist/Con	Inciet	115	50		-	5,750.00		
SRT	Scientist/Geo		103	9			927.00		
SKI	Senior Techn	HCIEN	103				827.00		
								\$7,601.00	(TM)
		1 D (	Structures Sur	and file	al Manitori	na Panori			
	lask 4 Doc	tors Pass	structures Sur	vey and rin	al Monitori	ng Keport			
	Survey		SDI (LS)				9,900.00	\$9,900.00	(LS)
	Survey		55. (65)		HM (T&M)	8,894.00	117.00		
			RATE/UNIT	HOURS/QT	COST	MARKUP	AMOUNT		
PRN2	Principle		231	6			1,386.00		
SDS	Engineer		130	53			6,890.00		
SRT	Senior Techn	nician	103	6			618.00		
								\$8,894.00	/TMV
								30.034.00	(1,11)
							Total:	\$18,794.00	
	Task 5 202	3 Aerial Ima	age Book						
					HM ( T&M)	\$3,603.00	0)		
							Lucian -		
			RATE/UNIT	HOURS/QT		MARKUP	AMOUNT		
PRN2	Principle		231	3			693.00		
SDS	Engineer		130	16			2,080.00 830.00		
TEC	Technician		83	10	-		850.00		
							Total:	\$3,603.00	(TM)
	Title		Rate	Hours					
PRN2	Principle		\$231	29				\$6,699.00	
SDS	Engineer		\$130	162.5				\$21,125.00	
www.	Scientist/Geo	ologist	\$115	70				\$8,050.00	
SIN	Coloniosecon	-Talana	\$103	41				\$4,223.00	
	Senior Tech	nician						F020 00	
SIN		nician	\$83	10				\$830.00	
SIN SRT TEC	Senior Tech	T		10				\$1,177.00	
SIN SRT	Senior Technician Cadd Techni	dan	\$83 \$107					\$1,177.00	
SIN SRT TEC	Senior Technician Cadd Techni	T	\$83 \$107						
SIN SRT TEC	Senior Technician Cadd Techni	dan	\$83 \$107				H&M	\$1,177.00	(TM)

\$D! Only \$9,900.00

**Grand Total** \$52,004.00



# SCHEDULE B-ATTACHMENT 1 RATE SCHEDULE

Title	Hourly Rate		
Principal	\$231		
Senior Project Manager	\$203		
Project Manager	\$160		
Senior Engineer	S177		
Engineer	\$130		
Senior Inspector	\$126		
Inspector	\$93		
Senior Planner	\$150		
Planner	\$120		
Senior Designer	\$140		
Designer	\$105		
Environmental Specialist	S120		
Senior Environmental Specialist	\$167		
Scientist/Geologist	\$115		
Senior Scientist/Geologist	\$153		
Marine Biologist/Hydrogeologist	\$120		
Senior Marine Biologist/Hydrogeologist	\$145		
Senior GIS Specialist	\$155		
GIS Specialist	\$115		
Clerical/Administrative	\$73		
Senior Technician	\$103		
Technician	\$83		
Surveyor and Mapper	\$125		
CADD Technician	\$107		
Survey Crew - 2 man	\$145		
Survey Crew - 3 man	\$180		
Survey Crew - 4 man	\$215		
Senior Architect	\$160		
Architect	S125		

The above hourly rates are applicable to Time and Materials task(s) only. The above list may not be all inclusive. Hourly rates for additional categories required to provide particular project services shall be mutually agreed upon by the County and firm, in writing, on a project by project basis, as needed, and will be set forth in the Work Order agreed upon by the parties.

☑ Grant Funded: The above rates are for purposes of providing estimate(s), as required by the grantor agency.

Page 2 of 3 First Amendment to Agreement # 18-7432-CZ Humiston & Moore Engineers, P.A.







## **Direct Select Form**

Request Date	Contract No.	Proposal Cost Estimate		Construction Cost Estimate			
08.11.22	18-7432-CZ	\$	170,000	N/	A		
Requested By (	Use name as it appears	in Outlook):	Division / Departmen	t:			
Andrew Mil	ler		Capital Project Planning	g, Impact Fees, & Pro	gram Management		
Administrative A	Agent (If different from I	Requestor):					
Library Categor	y: Coastal Engineering	Vendor Nam	e: Humiston &	Moore Engir	neers, P.A.		
Work Assignme	nt Title: 2023 Coll	ier Count	y Beaches and I	nlets Annual	Monitoring		
Description of R	Requested Services:						
Permit-require	d annual beach and	inlet monito	oring and report.				
Justification:			erience with project				
(Select all that ap	oply and explain		ation of previous work as qualifications	signment			
Delow)		☐ Offique of	qualifications				
	olanation of Direct Sel						
H&M performs this work annually and is best suited to continue based on their experience and							
their knowledge of the County's requirements.							
Requestor: An	drew Miller		Signature: MillerAnd	Digitally signed by MillerAndrew Date: 2022,08.12.07:15:28 -04'90'	Date: 08.11.22		
Division Director: Beth Johnssen			Signature: Johnsser	Cigitally a greed by   dahnseen_b   Date: 2022.08 12 16 29 34   -64'00'	Date:		
Procurement Director:			BigelowCa Signature: rine	the BigGally signed by BigGlowCatherine Date 2022 08, 19 08:53 32 04/00	Date:		

