

Sponsored by: Lindsey

**CITY OF MARATHON, FLORIDA
RESOLUTION 2016-83**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, APPROVING WORK AUTHORIZATION NO. 1 TO THE CONTINUING SERVICES AGREEMENT DATED FEBRUARY 14, 2013, BETWEEN THE CITY OF MARATHON, FLORIDA, AND BERMELLO AJAMIL & PARTNERS, INC. CONSULTING SERVICES FOR AN EROSION AND BEACH NOURISHMENT STUDY AT COCO PLUM BEACH IN AN AMOUNT NOT TO EXCEED \$140,810.00; AUTHORIZING THE CITY MANAGER TO EXECUTE THE WORK AUTHORIZATION AND EXPEND BUDGETED FUNDS ON BEHALF OF THE CITY; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Marathon, Florida (“City”) has a Continuing Services Agreement with Bermello Ajamil & Partners, Inc. Consulting Services (“Consultant”); and

WHEREAS, the City desires to issue a Work Authorization to the Consultant in an amount not to exceed \$140,810 to provide a study to determine possible measures to reduce the rate of erosion at the beach. The City requested and received a grant from the TDC for the study and re-nourishment study, and the proposed agreement is consistent in pursuing this goal.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:

Section 1. The above recitals are true and correct and incorporated herein.

Section 2. Work Authorization No.1 between the City and the Consultant to perform an erosion study for Coco Plum Beach, a copy of which is attached hereto as Exhibit “A,” is hereby approved. The City Manager is authorized to execute the Work Authorization and expend budgeted funds on behalf of the City.

Section 3. This resolution shall take effect immediately upon its adoption.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS 27th DAY OF SEPTEMBER, 2016.

THE CITY OF MARATHON, FLORIDA



Mark Senmartin, Mayor

AYES: Bartus, Coldiron, Kelly, Zieg, Senmartin
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST:



Diane Clavier, City Clerk

(City Seal)

**APPROVED AS TO FORM AND LEGALITY FOR THE USE AND
RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:**



David Migut, City Attorney

EXHIBIT "A"
PROJECT SPECIFIC AGREEMENT

PROJECT SPECIFIC AGREEMENT
Between
THE CITY OF MARATHON, FLORIDA
And
Bermello Ajamil & Partners, Inc.
For
Erosion Control and restoration Study at Coco Plum Beach

Pursuant to the provisions contained in the “Continuing Services Agreement” between the City of Marathon, Florida (the “City”) and Bermello Ajamil & Partners, Inc., (the “Consultant”) dated February 14, 2013; this Project Specific Agreement authorizes the Consultant to provide the services as set forth below:

I. Scope of Services

The Consultant shall provide engineering services to the City for the Project as described in the “Project Description” attached as Exhibit “1.”

The “Scope of Services and Project Schedule” and tasks to be provided by the Consultant for this Project are those services and tasks as listed in Exhibit “2.”

The City may request changes that would increase, decrease, or otherwise modify the Scope of Services. Such changes must be contained in a written change order executed by the parties in accordance with the provisions of the Continuing Engineering Services Agreement, prior to any deviation from the terms of this Project Specific Agreement, including the initiation of any extra work.

II. Deliverables

As part of the Scope of Services and Project Schedule, the Consultant shall provide to the City the following Deliverables:

See Exhibit 2

III. Term/Time of Performance

This Project Specific Agreement shall be effective on the date it is fully executed by all parties and shall continue in full force for 1 year (s) or until completion of the Project, unless otherwise terminated pursuant to the Continuing Services Agreement or other applicable provisions of this Project Specific Agreement. The City Manager, in his sole discretion, may extend the term of this Project Specific Agreement through written notification to the Consultant. Such extension shall not exceed 180 days. No further extensions of this Project Specific Agreement shall be effective unless authorized by the City Council

The Consultant's services under this Project Specific Agreement and the time frames applicable to this Project Specific Agreement shall commence upon the date provided in a written Notification of Commencement ("Commencement Date") provided to the Consultant from the City. The Consultant shall not incur any expenses or obligations for payment to third parties prior to the issuance of the Notification of Commencement. Consultant must receive written notice from the City prior to the beginning the performance of services.

Upon receipt of the Notification of Commencement, the Consultant shall commence services to the City on the Commencement Date, and shall continuously perform services to the City, without interruption, in accordance with the time frames set forth in the Project Schedule."

IV. Amount, Basis and Method of Compensation

X Lump Sum Compensation - City agrees to pay consultant compensation for performance of all services described in Exhibit "2" in the total amount of \$66,130.00, for Phase 1, plus reimbursable expenses not to exceed \$N/A. Consultant will submit invoices for monthly progress payments in an amount equivalent to the percentage completion of the total Work.

AND

X City agrees to pay Consultant compensation for performance of all services described in Exhibit "2" at Consultant's hourly rates as set forth in Exhibit "2", up to a maximum amount not to exceed \$73,930.00, plus reimbursable expenses not to exceed \$750.00, for Phase 2.

V. Incorporation of Terms and Conditions of Continuing Service Agreement

This Project Specific Agreement incorporates the terms and conditions set forth in the Continuing Services Agreement dated February 14, 2013 between the City and Consultant as though fully set forth herein. In the event that any terms or conditions of this Project Specific Agreement conflict with the Continuing Services Agreement, the more restrictive provision shall prevail and apply.

PAYMENT UNDER THIS PROJECT SPECIFIC AGREEMENT SHALL ONLY BE MADE FROM APPROPRIATIONS BUDGETED ON AN ANNUAL BASIS.

IN WITNESS WHEREOF, the parties have executed this instrument on this 29th day of September, 2010

CONSULTANT:

By: [Signature]
Its: Luis Ajamu, CEO

CITY:

By: George Farrell
Its: Deputy City Manager

ATTEST:

[Signature]
Diane Clavier, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:

[Signature]
City Attorney

This agreement shall be executed on behalf of Consultant by its President or a Vice President. If executed by a person other than Consultant's President or a Vice President, then attach evidence of that person's actual authority to bind Consultant to this agreement.

EXHIBIT "1"
PROJECT DESCRIPTION

The Project consist of providing consulting services for a Beach Erosion Report at Coco Plum Beach with recommendation and preliminary meeting with Federal, State agencies having jurisdiction over the project as further described in Exhibit 2.

EXHIBIT "2"
SCOPE OF SERVICES AND PROJECT SCHEDULE



Bermello Ajamil & Partners, Inc.

Architecture
Engineering
Planning
Interior Design
Landscape Architecture

September 8, 2016

via email

Mr. Carlos Solis
City of Marathon

**Re: Scope and Fee Proposal – City of Marathon
Cocoplum Beach Erosion Study**

Dear Carlos

As a follow-up to our meeting and e-mails, Bermello Ajamil & Partners, Inc. (B&A) welcomes the opportunity to submit for your review, our proposal for professional services for the above mentioned project.

A. BACKGROUND

On August 29, 2016 the City of Marathon met with B&A staff to discuss and request professional services for the preparation of an erosion study, design of the implementation, providing recommendations from the erosion study, assisting the City by coordinating with the regulatory agencies, as well as the preparation and submittals of the necessary permits.

The proposed scope of work for professional services will be provided by B&A and its sub-consultant Cummins Cederberg (CC). We have selected CC due to their coastal engineering experience, as well as the on-going working relationship between B&A and CC. CC will be responsible for the coastal erosion process modeling and recommendations, while B&A will focus on the implementation engineering of the solutions proposed.

B. SCOPE OF WORK

The proposed work authorization consist of the following two Phases:

Phase 1: Erosion Study

- Task 1: Meetings and project management
- Task 2: Data collection, topographic and bathymetric survey
- Task 3: Erosion study

Phase 2: Design and permitting

- Task 4: Marine resource survey
- Task 5: Concept development
- Task 6: Permitting feasibility
- Task 7: Final feasibility report

PHASE 1

During Phase 1, the team will evaluate the existing information to be provided by the City of Marathon, coordinate with the City for missing required information, and will prepare an Erosion Study with recommendations to be implemented during Phase 2.

TASK 1 – MEETINGS AND PROJECT MANAGEMENT

This task will include:

- Kick off meeting
- Project updates
- Project management services
- Up to Two Project Meetings in Marathon
- Presentation of results in Marathon

Deliverable: Meeting minutes

TASK 2 – DATA COLLECTION

Compile available present and historical information pertaining to the project. This may include:

- Nautical charts
- Bathymetric data
- Historical beach profiles
- Geotechnical data of existing sand and testing of two (2) samples from site
- Sand sources used for previous nourishment activities
- Volumes of historical restoration efforts
- Marine resource data
- Historical aerials

Under this task, B&A will also complete a topographic and bathymetric survey of the area as follows:

- a. **Topographic and Bathymetric Surveying:** topographic and bathymetric surveying to provide data for the engineering analysis and design. The overall bathymetric survey work will include profile lines taken at approximately 200-foot intervals to map the water depths in the Project vicinity. The approximate survey area is 3,800 feet wide (1,800 feet project site + 1,000 feet on each side) extending approximately 500 feet seaward of MSL. Topographic data will be obtained along the shoreline and upland beach area.
- b. **Base Map:** The hydrographic and topographic survey data collected in the field will be reduced to the horizontal coordinate system and vertical datum established for the Project. Contours reflecting elevations at one-foot intervals will be reflected in the base map and aerial.

Deliverable: Technical Memorandum #1 with summary of data collected, including topographic and bathymetric surveying and base map.

TASK 3- EROSION STUDY

- a. **Site Visit:** A team with the coastal engineer will conduct a site visit to visually evaluate the coastal processes within the vicinity of the Project site. Observations will be made of the existing topography and bathymetry in accessible areas, shoreline configuration, sediment transport, as well as wind and wave characteristics.
- b. **Historical Data Review:** Conduct a detailed evaluation of the previously compiled historical data available to assess potential trends in erosion and accretion patterns. Historical data may include aerials and/or beach profiles. The data will be reviewed relative to longer and shorter terms trends. The performance of historical beach project will be reviewed based on the available data.
- c. **Design Winds and Offshore Waves:** Conduct a statistical analysis based on +100-year historical storm and hurricane tracks, as well as available offshore wave data within the Project vicinity in order to determine seasonal and extreme conditions. This will be accomplished using a database of offshore wave data throughout the Caribbean in an approximately 25-mile grid. The design winds and design offshore waves for extreme conditions (i.e. 25, 50 and 100-year return periods) will be determined through an extreme probability analysis. The wind and wave analyses will provide the basic information required for wave propagation modeling under Task 1(c).
- d. **Modeling of Wave Propagation:** Utilize the state-of-the-art DHI MIKE21 Spectral Wave (SW) numerical wave model to conduct a wave propagation study to evaluate the effects of wave propagation from the offshore region to the nearshore region. The MIKE21 SW numerical wave model is a 3rd generation spectral wind-wave model that simulates the growth, decay, and transformation of wind-generated waves in offshore and coastal areas.
- e. **Sediment Transport Assessment:** The wave modeling results obtained will be evaluated along with the shoreline configuration, and bathymetric conditions to determine sediment transport characteristics in the nearshore area. Areas of potential sand deposition and erosion will be identified along with the predominant direction of sediment transport patterns in the Project vicinity. These estimates will be used for the subsequent design of beach and potential coastal structures. The concept design will be analyzed relative to the effectiveness of stabilizing and enhancing the beach area as well as to potential adverse impacts to adjacent areas and future beach management practices. Results from the coastal engineering analysis will used as basis of the evaluation. Potential long-term shoreline changes will be assessed through desktop methods.
- f. **Erosion Study Report:** Summarize the statistical wave analysis, wave modeling, and sediment transport assessment in an Erosion Study Report. The Erosion Study Report will include figures illustrating the results of the analyses.

Deliverables: Four (4) Copies of the Erosion Study Report and PDF-file, including Technical Memorandum #1 as Exhibit.

PHASE 2

During this Phase, implement the recommendations and information compiled during Phase 1, will coordinate with the regulatory agencies and will assess and prepare a permitting schedule and will submit a final report summarizing the information obtained in the previous tasks.

TASK 4 – MARINE RESOURCE SURVEY (AS NECESSARY)

- c. **Marine and Shoreline Resource Survey:** Conduct a marine resource survey to identify potential corals, seagrasses, mangroves, and any other organisms of significance within the proposed project limits. Terrestrial native and invasive vegetation in the immediate upland area of the proposed project will also be identified. This data will be used to quantify potential environmental impacts, if any. The area to survey the marine resource will extend approximately 100 feet out from the shoreline.
- d. **Marine Resource Map:** The marine resource data collected in the field will be processed and illustrated on an aerial. A brief observation report will be prepared summarizing the investigations.

Deliverable: Technical Memorandum #2 with Marine Resource Survey

TASK 5 – CONCEPT DEVELOPMENT

- a. **Conceptual Design:** Prepare a conceptual design for re-nourishment of the beach and additional shoreline stabilization. Recommended locations and approximate dimensions of beach stabilization structures (e.g. groins, breakwaters) will be included based on the sediment transport assessment and permitting feasibility (Task 6). Approximate rock size will be determined relative to coastal stability. Considerations will be given to minimize impacts to marine resources and adjacent shorelines.
- b. **Design Evaluation:** The concept design will be analyzed relative to the effectiveness of stabilizing and enhancing the beach area as well as to potential adverse impacts to adjacent areas and future beach management practices. Results from the coastal engineering analysis will used as basis of the evaluation. Potential long-term shoreline changes will be assessed through desktop methods. Various designs will be evaluated through an iterative process in order to optimize the design.
- c. **Preliminary Cost Estimate:** Preliminary quantities for marine works will be determined in order to prepare a preliminary cost estimate. Volumes and quantities will be estimated based on the conceptual design.

Deliverable: Technical Memorandum #3 including conceptual designs, drawings, calculations and additional information as recommended in the Erosion Study.

TASK 6 – PERMITTING FEASIBILITY

Pre-application Meetings: Discuss via meeting and/or conference call the details of the Project with the various environmental regulatory agencies, in order to determine permitting issues of the project as proposed. Pre-application meetings with the following agencies will be conducted:

- Florida Department of Environmental Protection

- US Army Corps of Engineers
- Florida Keys National Marine Sanctuary

Summarize the results of the meetings with the agencies relative to feasibility and concerns. The anticipated permitting schedule for the project will be discussed and included in the summary. The meetings will be based on the conceptual design developed under Task 4.

Deliverable: Technical Memorandum # 4 with permitting information.

TASK 7 – FINAL FEASIBILITY REPORT

- a. **Final Feasibility Report:** Summarize the conceptual design, concept evaluation, cost estimate and permitting issues in a Final Feasibility Report. Potential long-term impacts and maintenance will be included along with anticipated performance of project. The Feasibility Report will include figures illustrating the results of the analyses and conceptual designs.

Deliverables: Four (4) Copies of Final Feasibility Report and PDF-file.

D. COMPENSATION

Compensation for the work outlined in this proposal is as follows (fees do not include any permit fees):

- Phase 1 – \$ 66,130 (lump sum)
- Phase 2 - \$ 73,930 (NTE)

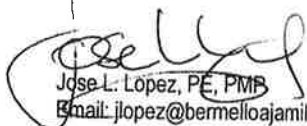
E. ESTIMATED SCHEDULE

B&A will start begin immediately after receiving the notice to proceed from the City. The breakdown of estimated time required for B&A is as follows:

Phase 1: Erosion Study		
Task 1 :	Meetings and project management	12 weeks
Task 2:	Data collection- TM#1	4 weeks
Task 3:	Erosion study	8 weeks
Phase 2: Design and permitting		
Task 4:	Marine resource survey - TM#2	4 weeks
Task 5:	Concept development- - TM#3	8 weeks
Task 6	Permitting feasibility- TM#4	4 weeks
Task 7:	Final feasibility report	2 weeks

Please review this information and contact me should you have any questions or comments. We are ready to start as soon as we received a notice to proceed in writing from you.

On behalf of B&A, I want to thank you for the opportunity to work with you and your staff on this project.


 Jose L. Lopez, PE, PMB
 Email: jlopez@bermelloajamil.com

City of Marathon- Cocoplum Beach Erosion Study- Phase I Service Fees

	Task 1: Project Management and meetings	Task 2: Data Collection	Task 3: Erosion study	TOTALS	
Duration	12 weeks	4 weeks	8 weeks		
CONSULTANT	Total	Total	Total		
Bermello Ajami & Partners (B&A)	\$ 7,920.00	\$4,960.00	\$5,640.00	\$	18,520.00
Cumming Cederberg (CC)	\$ 5,120.00	\$ 9,940.00	\$ 31,800.00	\$	46,860.00
				\$	-
Total Each Task	\$ 13,040.00	\$ 14,900.00	\$ 37,440.00	\$	65,380.00

REIMBURSABLE

\$750.00

Total Service Fees- Phase I (lump sum)

\$ 66,130.00

Bermello Ajamil and partners

City of Marathon- Cocoplum Beach Erosion Study- Phase I

Hourly Rates		Task 1: Project Management and meetings		Task 2: Data Collection		Task 3: Erosion study		TOTALS	
Duration		12 weeks		4 weeks		8 weeks			
Title	Hourly rates	Hours	Total	Hours	Total	Hours	Total		
Project Manager/Professional Engineer	\$170.00	40	\$ 6,800.00	20	\$ 3,400.00	24	\$ 4,080.00	\$	14,280.00
Sr. Engineer/Quality Control	\$170.00	4	\$ 680.00	4	\$ 680.00	4	\$ 680.00	\$	2,040.00
Administrativa assistant	\$55.00	8	\$ 440.00	16	\$ 880.00	16	\$ 880.00	\$	2,200.00
Total hours		52		40		44			136
Total each task		\$ 7,920.00		\$ 4,960.00		\$ 5,640.00		\$	18,520.00

Cumming Cederberg (sub)

City of Marathon- Cocoplum Beach Erosion Study- Phase I

Hourly Rates		Task 1: Project Management and meetings		Task 2: Data Collection		Task 3: Erosion study		TOTALS	
Duration		12 weeks		4 weeks		8 weeks			
Title	Hourly rates	Hours	Total	Hours	Total	Hours	Total		
Senior Engineer	\$160.00	32	\$ 5,120.00	12	\$ 1,920.00	60	\$ 9,600.00	\$	16,640.00
Project Engineer	\$120.00		\$ -	20	\$ 2,400.00	180	\$ 21,600.00	\$	24,000.00
Senior Scientist	\$140.00		\$ -	2	\$ 280.00		\$ -	\$	280.00
Project Scientist	\$120.00		\$ -	40	\$ 4,800.00		\$ -	\$	4,800.00
CAD Technician	\$75.00		\$ -	4	\$ 300.00	8	\$ 600.00	\$	900.00
Secretary	\$60.00		\$ -	4	\$ 240.00		\$ -	\$	240.00
Total hours		32		82		248		362	
Total each task		\$ 5,120.00		\$ 9,940.00		\$ 31,800.00		\$ 46,860.00	

City of Marathon- Cocoplum Beach Erosion Study- Phase 2

	Task 4: Marine resources	Task 5: Design study	Task 6: Permitting	Task 7: Final study	TOTALS
Duration	4 weeks	8 weeks	4 weeks	2 weeks	
CONSULTANT	Total	Total	Total	Total	
Bermello Ajamil & Partners (B&A)	\$ 2,260.00	\$7,240.00	\$7,700.00	\$2,260.00	\$ 19,460.00
Cumming Coderberg (CC)	\$ 9,720.00	\$ 27,600.00	\$ 7,840.00	\$ 8,560.00	\$ 53,720.00
					\$ -
Total Each Task (NTE)	\$ 11,980.00	\$ 34,840.00	\$ 15,540.00	\$ 10,820.00	\$ 73,180.00

REIMBURSABLE

\$ 750.00

Total Service Fees- Phase 2 (NTE)

\$ 73,930.00

B&A, Inc.

City of Marathon- Cocoplum Beach Erosion Study- Phase 2

Hourly Rates		Task 4: Marine resources		Task 5: Design study		Task 6: Permitting	TOTALS	
Duration		4 weeks		8 weeks				
Title	Hourly rates	Hours	Total	Hours	Total	Hours		
Project Manager/Professional Engineer	\$170.00	8	\$ 1,360.00	16	\$ 2,720.00	40	\$	12,240.00
Quality Control/Sr. Engineer	\$170.00	4	\$ 680.00	24	\$ 4,080.00	4	\$	6,120.00
Secretary	\$55.00	4	\$ 220.00	8	\$ 440.00	4	\$	1,100.00
Total hours		16		48		48		128
Total each task		\$ 2,260.00		\$ 7,240.00				\$ 19,460.00

Cumming Cederberg (sub)

City of Marathon- Cocoplum Beach Erosion Study- Phase 2

Hourly Rates		Task 4: Marine resources		Task 5: Design study		Task 6: Permitting	TOTALS
Duration		4 weeks		8 weeks			
Tide	Hourly rates	Hours	Total	Hours	Total	Hours	
Senior Engineer	\$160.00	6	\$ 960.00	60	\$ 9,600.00	16	\$ 15,040.00
Project Engineer	\$120.00		\$ -	130	\$ 15,600.00		\$ 18,480.00
Senior Scientist	\$140.00	24	\$ 3,360.00		\$ -	24	\$ 7,840.00
Project Scientist	\$120.00	40	\$ 4,800.00		\$ -	16	\$ 7,680.00
CAD Technician	\$75.00	8	\$ 600.00	32	\$ 2,400.00		\$ 4,200.00
Secretary	\$60.00		\$ -		\$ -		\$ 480.00
Total hours		78		222		56	432
Total each task		\$ 9,720.00		\$ 27,600.00			\$ 53,720.00

ID	Task Mode	Task Name	Duration									
				August	September	October	November	December	January	February		
1												
2		Phase 1: Erosion Study	61 days									
3		NTP	1 day									
4		Task 1 :Meetings and project manager	12 wks									
5		Task 2: Data collection	4 wks									
6		Task 3: Erosion study	8 wks									
7		Phase 2: Design and permitting										
8		Negotiate SOW for Phase 2	2 wks									
9		Task 4: Marine resources	4 wks									
10		Task 5: Concept development	8 wks									
11		Task 6: Permitting feasibility	4 wks									
12		Task 7: Final feasibility report	2 wks									

Project: Schedule- revised Date: Mon 9/19/16	Task		External Milestone		Manual Summary Rollup	
	Split		Inactive Task		Manual Summary	
	Milestone		Inactive Milestone		Start-only	
	Summary		Inactive Summary		Finish-only	
	Project Summary		Manual Task		Deadline	
	External Tasks		Duration-only		Progress	

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