CS-16-183

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CONTRACT ADDONIAL FORM			(Contract Management Use only)		
CONTRACT APPROVAL FORM			CONTRACT TRACKING NO.		
CONTRACTOR INFORMATION				52-TO21	
Name: Olsen Associates, Inc.					2 2
Address: 2618 Herschel Street	, Jacksonville, FL 32204				-
	City	Sta		Zip 🥯 i	
Contractor's Administrator Name: Al	bert E. Browder, Ph.D., P.E.	Title:			
	ax: Ema			75. 5	com
	CONTRACT INFORMA	TION			
Contract Name: Professional Co	astal Engineering Services for	SAISS Co	ntract Value:	38,800.00	
	Area - Detailed Sonar Sub-Bottom & Hydrographic Sur				Project
	to: Fall 2017 Status: No	w Renew	Amend#	X _{WA/Task O}	rder
	Single Source JTB RFP				
If Processing an Amendment:					
	ncrease Amount of Existing Contract:				
New Contract Dates:	to TOTAL OR AME	NDMENT AMO	DUNT:		
	RSUANT TO NASSAU COUNTY PL			ION 6	
1. Willie KN	Losa 5.17.17	SAISSA		·	
Department Head Signature	Date		mitting Departn		
2. <u>Contract Management</u> <u>Date</u> <u>43603539-531376</u> Funding Source/Acct #					<u>1</u> 5
A. A.	stalla	1.00	ung source Act		
3. Office of Management & Bi	idget Date 5	SIRIA			
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County Attorney (approved)	as to form only) Date				
Comments:					
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~	117	5-26 Dat	-17		
Shanea D.	Jones	Dat	e		
	TRACT MANAGEMENT FOR DIS'				
	lerk's Services; Contractor (original) Department	or certified cop	y)		
C	Office of Management & Budget				
	Contract Management Clerk Finance				
Revised 4/05/2017					

NASSAU COUNTY - SAISSA Task Order Memorandum Contract CM1852

To: Olsen Associates, Inc. 2618 Herschel St. Jacksonville, FL 32204 Date: Contract: **Request Made By: Request Received By:** Task Order No:

01 May 2017 **Coastal Engineering** Bill Moore, SAISSA Rep. Albert E. Browder, Ph.D., P.E. CM1852 TO #21

Task Order: Nassau Sound Borrow Area - Detailed Geophysical Sonar Sub-Bottom & Hydrographic Surveys Beach Renourishment: South Amelia Island Shore Stabilization Project

Consultant and subconsultant team shall acquire a) comprehensive hydrographic seabed survey data and b) geophysical detailed sonar sub-bottom survey data associated with the proposed Nassau Sound sand borrow area, as described in the attached Scope-of-Work (Exhibit A). Deliverables for the project include sediment isopach maps, one copy hardcopy of the signed and sealed hydrographic survey map, and a summary of findings of work. All products shall be provided to SAISSA in electronic *. PDF format, The work products shall likewise be incorporated into the geotechnical sand search report associated with Task Order #17.

All work shall be performed on a Lump Sum basis.

Fee: \$ 38,800.00 (Lump Sum)

Requested Completion Date: Two (2) months from receipt of survey data (summer/fall 2017).

Olsen Associates, Inc.

Albert E. Browder, Ph.D., P.E.

Date: 01 May 2017

SAISSA

Andrew L. Wallace, SAISSA President

5-10-2017 Date:

Nassau County, Board of County Commissioners

Shanea D. Jones Its: County Manager

Date: 5-26-1

Approved As, To Form and Legal Sufficiency: Michael S. Mullin

5-19-1-Date:

Attest to Chair Signature

John A. Crawford It's: Ex-Officio Clerk

Date:



CM 1852 T.O. #21 EXHIBIT A

SCOPE OF WORK

Nassau Sound Borrow Area – Detailed Hydrographic and Geophysical Sonar Sub-Bottom and Surveys Beach renourishment: South Amelia Island Shore Stabilization Project

May 2017

OVERVIEW

The purpose of the task is to acquire detailed sonar-sub-bottom and hydrographic survey data across the proposed borrow area and buffer zone along the northeast edge of Nassau Sound (Figure 1). The proposed detailed hydrographic survey will provide higher-resolution seabed elevation data for the sonar sub-bottom work and the volume calculations. The proposed geophysical sonar sub-bottom survey will provide detailed information regarding the sediment layering of the seabed across the proposed borrow area, to a depth below any final excavation depth. The collected data will supplement the sediment Vibracores recently collected in the area, using the Vibracores to calibrate the sonar sub-bottom results and extending the geophysical information between and below the Vibracore locations. The sonar sub-bottom data will likewise identify other potential anomalies in the area that require avoidance. These data will be used to define the final dimensions of the borrow area and potentially define the maximum depth of excavation.

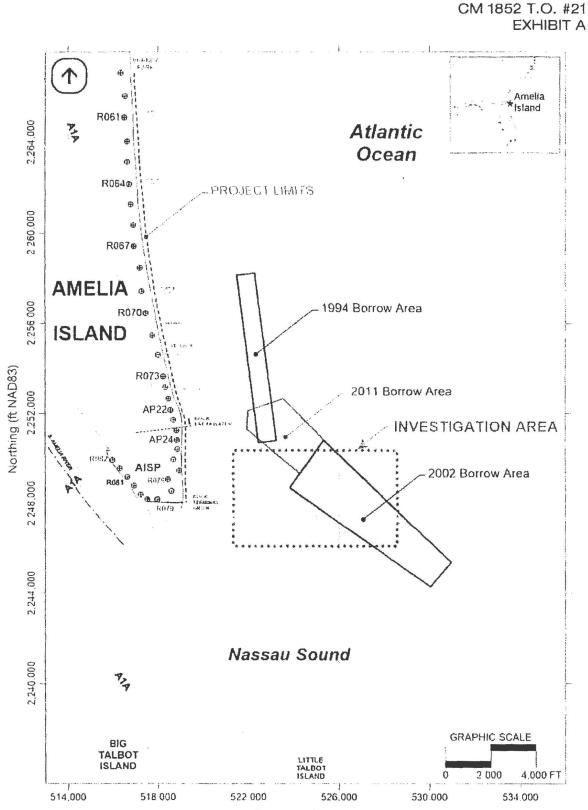
The subtasks associated with this work include subcontractor field work to acquire sonar sub-bottom and seabed hydrographic survey data. The results of this work shall be submitted along with the Vibracore sediment data (Task #17) as part of the permitting process for future beach renourishment

Sub-task A – Borrow Area and Buffer Hydrographic Survey

A certified hydrographic surveyor will conduct the borrow area-specific survey along the northeast edge of the Nassau Sound ebb shoal complex. ARC Surveying and Mapping, Inc., of Jacksonville, FL, shall conduct the survey, under the direction of Mr. Rick Sawyer, PLS. These data shall be collected in accordance with the FDEP monitoring guidelines for collection of survey data, as published in "Monitoring Standards for Beach Erosion Control Projects," (FDEP, October 2014)."

<u>Sub-task A – Deliverables</u> Surveyor shall provide electronic copies of the survey data in the prescribed datums to the Engineer for formatting and distribution to the Clients (SAISSA, FPS, FDEP). Surveyor shall likewise provide to Engineer three (3) signed and sealed hardcopies of the survey.

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Easting (ft NAD83)

Figure 1 Location Map – South Amelia Island and proposed investigation area at Nassau Sound. Contours in feet (2016).



CM 1852 T.O. #21 EXHIBIT A

Surveyor and Engineer shall develop and submit those portions of the FDEP data submittal requirements that are the primary responsibility of the Surveyor, including copies of the field book pages from the survey, monument control, QA/QC, surveyor reports, etc. Engineer shall review and approve these documents and any geotechnical analysis results prior to submittal to FDEP.

Sub-task B - Geophysical Sonar Sub-bottom Survey

A qualified marine geophysicist (subconsultant) will conduct the sonar sub-bottom survey over the investigation area along the northeast edge of the Nassau Sound ebb shoal complex. The Engineer shall provide the coordinates for the survey limits. Sonographics, Inc., of Wilton Manors, FL, shall conduct the survey, under the direction of Mr. Rick Horgan. Up to 75 lines miles of geophysical mapping data shall be collected, predominantly in one direction at 100 ft trackline spacing, with additional lines run in the perpendicular direction at broader spacing for verification. Post-processing of the survey data will result in isopach maps of sediment layer thickness, map products of digitized reflector¹ positions and depths, and imagery of the sonar sub-bottom profiles. The data provided from the Vibracore collection (T.O. #17) will be included in the development and presentation of the map products. Electronic data files of the isopachs, tracklines, and reflector details shall likewise be produced and transmitted to the Engineer for inclusion on other work products associated with borrow area development.

<u>Sub-task B – Deliverables</u> Deliverables for the project include a brief summary of the field work performed including maps and examples of the sub-bottom profile images; hardcopies of the signed and sealed hydrographic survey map; and electronic data describing the isopachs, reflector positions, and sub-bottom profile imagery (in ASCII data, *.tif, *.jpg, *.pdf, *.dxf, and *.shp formats as appropriate for CAD and GIS database incorporation). The work products shall likewise be incorporated into the geotechnical sand search report associated with Task Order #17. Engineer shall coordinate transmittal of the data to the Client and to FDEP and the USACE in permit documents as required, and to FDEP for inclusion in their geotechnical database.

¹ Reflectors are lines of significant change in sediment density, such as a transition from sand to hard clay. Such reflectors typically indicate the limit of the depth of excavation for a dredging project.



Potential FDEP Cost-shared Tasks* Nassau Sound Borrow Area – Detailed Hydrographic and Geophysical Sonar Sub-Bottom and Surveys Beach Renourishment: South Amelia Island Shore Stabilization Project

May 2017

Task	Total Fee	Potential State Cost-Share* (39.21%)	Local Cost-Share (60.79%)	
Hydrographic/Geophysical Surveys	\$38,800.00	\$15,213.48	\$23,586.52	

*Portion of 2016-2017 Beach Management Funding Assistance appropriation of \$313,680.00

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