Coastal Engineering

## **MEMORANDUM**

Date:

21 March 2016

To:

Bill Moore – SAISSA

From:

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

Re:

OAI Task Order #17 CM-1852: Nassau Sound Geotechnical Investigation

Attached please find a proposed Task Order #17 for Nassau County Contract CM-1852. It is proposed to conduct a geotechnical investigation of Nassau Sound to develop sand borrow areas suitable for future beach nourishment of the South Amelia Island Shore Stabilization Project.

The proposal includes the collection of up to 55 seabed sediment Vibracores, each extending roughly 20 feet into the seabed in the general vicinity of the Nassau Sound ebb shoal. The Vibracores will be collected not only in the vicinity of the prior borrow areas used for SAISSP beach nourishment, but also in other areas in and around the Sound. These areas will be investigated to seek previously unexplored beach compatible sediment deposits and to potentially assess the fate of sediments that were historically placed along the South Amelia Island shoreline and subsequently eroded from the beach (presumably transported into the inlet).

The deliverables for this Task Order will include the Vibracore logs, photographs, and core descriptions, as well as detailed descriptions of sediment characteristics, including grain size analyses, carbonate/shell content assessment, and sediment color assessment. These data shall be prepared and submitted in accordance with Florida Department of Environmental Protection (FDEP) guidelines via a sand source development report of findings. The engineering evaluation of the Vibracores and their sediments will include the assimilation of the new data into the existing geotechnical database for the area, and an evaluation of the Vibracores in terms of borrow area development in Nassau Sound, with the objective of developing a borrow area or areas to pursue for a 15-yr, multiple nourishment permit to maintain the beaches of South Amelia Island.

Task Order #17 CM-1852 Att.:

Exhibit A – Scope of Work

## NASSAU COUNTY - SAISSA Task Order Memorandum Contract CM1852

To:	Olsen Associates, Inc.	Date:	21 March 20		
	2618 Herschel St.	Contract:	Coastal Engi	ineering	
	Jacksonville, FL 32204	Request Made By:	SAISSA		
		Request Received By:		owder, Ph.D., P.E.	
		Task Order No:	CM 1852-T0	) #17	
Task	Order: Nassau Sound Geotechnic	al Investigation			
	South Amelia Island Shor				
the vice Exhibit purpose develoe board final sefforts geotec	The Consultant, aided by a qualification of Nassau Sound and the South Ait A). These areas are proposed for invites of future beach nourishment along apment of the field test plan, management	of the seabed in State waters off Amelia Island Shore Stabilizatio estigation to seek to develop beat the South Amelia Island shorent of contract and subcontracto eering design and analysis of rest established in accordance with FDE wessel, the collection of up of the collected Vibracore and	Amelia Island, Non Project (reference ach-compatible sereline. Consultar activities, field ults and borrows P guidelines. Spate 55 sediment existing beach serelines.	assau County, FL, in mee Scope of Work - and borrow areas for nt tasks include the work to provide onite development, and pecific subcontractor Vibracores, and the	
Task .	A Sediment Vibracore Collectio	n, Logging and Laboratory A	nalysis	\$127,200.00	
Task	B Project Management, Enginee	ring, Field Work, Final Repor		\$ 96,900.00	
			TOTAL	\$224,100.00	
				(Lump Sum)	
Olser	Associates, Inc.	SAISSA			
	to EBrowle	7:	ellan		
Albert E. Browder, Ph.D., P.E. Mr. Andrew L. Wallace, SAISSA President		SSA President			
Date: 21 March 2016		Date: 4-13	Date: 4-13-2011		
		Walte	J. Doal	unty Commissioners	
Attest to Chair		Walter J. Boatri	Walter J. Boatright		
Signature		Its: Chair	Its: Chair		
h	Maurited	Date: 4-20-1	16		
sohn	A. Cowford	1			
Alt's:	Signio Clerk	Approved As T	o Form and Le	gal Sufficiency:	
Date	4/22/16		[[]]]	1	
	WE	Michael S. Mul	lin VV	,	

Date:

4-20-16