

## **EXECUTIVE SUMMARY**

**Recommend Approval of Change Order 1 and 2 with Humiston & Moore Engineers to Work Order HM-FT-3902-06-05 for \$30,671.25 and Change Order 1 to Work Order HM-3271-06-03 for \$5,000 for a total of 35,671.25.**

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**OBJECTIVE:** To approval Humiston & Moore Engineers Change Order 1 and 2 to Work Order HM-FT-3902-06-05. Change Order No. 1 will be for \$15,000. Change Order No. 2 will be for \$15,671.25. Approve Work Order HM-3271-06-03 for \$5,000. The total of these three work orders will be \$35,671.25.

**CONSIDERATIONS:** Work Order HM-FT-3902-06-05 was approved by the CAC on October 12, 2006 and TDC on October 23, 2006 for Wiggins Pass monitoring – Permitting and Surveys for a total of \$30,770.00. Change Order 1 for \$15,000.00 is to obtain East Channel Dredging history and associated information. Work with the Department of Environmental Protection staff to modify the state permits to include the East Channel with the current Wiggins Pass project. Obtain vibracore proposal to obtain samples from the East Channel. Attend meetings as requested by staff.

Change Order 2 for \$15,671.25 is for Sub-consultant expense; Athena Technologies to perform vibracore sampling as detailed attached proposal. The total increase for both these Change Orders is \$30,671.25.

Work Order HM-FT-3271-06-03 was approved be the CAC on January 12, 2006, TDC on January 23, 2006 and the BCC approved this item on January 24, 2006 for the Maintenance Dredging of Clam Pass for a total of 64,820.00. Change Order 1 for \$5,000.00 is for additional funds to prepare and submit the Department of Environmental Protection a request for modification of Notice to Proceed to change the entrance width of the dredge cut of channel from 30 feet to 80 feet.

**COUNTY ATTORNEY FINDING:** A finding by the County Attorney is not required for this item.

**FISCAL IMPACT:** The Source of funds is from Category “A” Tourist Development Tax.

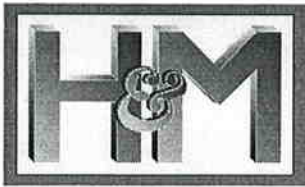
**ADVISORY COMMITTEE RECOMMENDATIONS:** This item was approved at the November 9, 2006 CAC Board meeting 8-0.

**GROWTH MANAGEMENT IMPACT:** There is no impact to the Growth Management Plan related to this action.

**RECOMMENDATION:** Approve Change Order 1 and 2 with Humiston & Moore Engineers to Work Order HM-FT-3902-06-05 for \$30,671.25 and Change Order 1 to Work Order HM-3271-06-03 for \$5,000 for a total of 35,671.25.

**PREPARED BY:** Gail Hambright, Tourist Tax Coordinator

November 27, 2006  
New Business VI - 5  
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**HUMISTON  
& MOORE  
ENGINEERS**

COASTAL  
ENGINEERING DESIGN  
AND PERMITTING

5679 STRAND COURT  
NAPLES, FLORIDA 34110  
FAX: 239 594 2025  
PHONE: 239 594 2021

October 18, 2006

Mr. Gary McAlpin  
Collier County Public Utilities Engineering Department  
3050 Horseshoe Drive  
Suite 218  
Naples, FL 34104

**Re: Request for Amendment to Work Order HM-FT3902-06-05**  
Wiggins Pass Monitoring/Permitting & Surveys  
Purchase Order 4500065993  
HM File No: 16-001.Wiggins-Permit

Dear Gary:

In accordance with Article 2 of Contract 06-3902; Additional Services of Consultant, and Humiston & Moore Engineers Proposal dated August 18, 2006, a budget amendment to Work Order HM-FT-3902 is requested to address additional tasks not included in the original scope of services, which have been requested by County staff or regulatory agencies. In accordance with paragraph 1.2.3 to promptly of the Contract provide the services required, this amendment is requested.

The additional scope includes but is not limited to:

**Task 3: Obtain East Channel dredging history and associated information. Work with the Department of Environmental Protection staff to modify the state permits to include the East Channel with the current Wiggins Pass project. Obtain vibracore proposal to obtain samples from the East Channel. Attend meetings as requested by staff.**

We request an additional budget of

\$15,000.00

Due to the nature of the regulatory review process and the need to be responsive to requests from County staff for information and for attendance at meetings, services under this Work Order Amendment shall be billed on a time and materials basis. The budgets for this task may be considered as a not-to-exceed amount with the understanding that in the event regulatory requirements, sub-consultant participation or requests from County staff result in costs above these budget amounts, additional budget amendments will be required.

Sincerely yours,

**HUMISTON & MOORE ENGINEERS**

A handwritten signature in blue ink that reads "Ken Humiston".

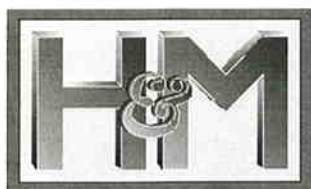
Kenneth K. Humiston, P.E.

Wiggins Pass Maintenance Permitting and Surveying  
Spreadsheet

November 27, 2006  
New Business VI - 5  
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		Initial Estimate of Resource Allocation									
		Actual allocation of personnel hours and task assignments will be determined during execution of individual tasks									
			\$ 160.00	\$ 125.00	\$ 100.00	\$ 70.00	\$ 65.00	\$ 50.00	\$ 50.00		TOTAL
Date	October 18, 2006	H&M									EXPENSE
Task		FEES/HOURS	PRIN	PJT.MGR.	EN3	EN1	SR.TECH	TECH	ADM	Reimb.Exp	
3	East Channel	14,750.00	6400.00	0.00	6700.00	1400.00	0.00	0.00	250.00	250.00	\$ 15,000.00
	H&M Task 3 Hours	132	40	0	67	20.00	0	0	5		
	TOTAL	\$ 14,750.00								500.00	\$ 15,000.00
Task #1 Reimbursable for copies and Federal Express charges											
In Accordance with Section 5.4 of the Contract, this estimate of reimbursable expenses is requested to be included in the work order.											
Material breakdown will be included on monthly billing based on the actual supplies used to complete the task.											

November 27, 2006  
New Business VI - 5  
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NAPLES, FLORIDA 34110  
FAX: 239 594 2025  
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October 25, 2006

Mr. Gary McAlpin  
Collier County Public Utilities Engineering Department  
3050 Horseshoe Drive  
Suite 218  
Naples, FL 34104

**Re: Request for Amendment to Work Order HM-FT3902-06-05**  
Wiggins Pass Monitoring/Permitting & Surveys  
Purchase Order 4500065993  
HM File No: 16-001.Wiggins-Permit

Dear Gary:

In accordance with Article 2 of Contract 06-3902; Additional Services of Consultant, and Humiston & Moore Engineers Proposal dated August 18, 2006, a budget amendment to Work Order HM-FT-3902 is requested to address additional tasks not included in the original scope of services, which have been requested by County staff or regulatory agencies. In accordance with paragraph 1.2.3 to promptly of the Contract provide the services required, this amendment is requested.

The additional scope includes but is not limited to:

**Task 4: Subconsultant Expense: Athena Technologies to perform vibracore sampling as detailed in the attached proposal. The requested additional budget includes 5% in accordance with paragraph 5.5**

We request an additional budget of  
\$15,671.25

Due to the nature of the regulatory review process and the need to be responsive to requests from County staff for information and for attendance at meetings, services under this Work Order Amendment shall be billed on a time and materials basis. The budgets for this task may be considered as a not-to-exceed amount with the understanding that in the event regulatory requirements, sub-consultant participation or requests from County staff result in costs above these budget amounts, additional budget amendments will be required.

Sincerely yours,

**HUMISTON & MOORE ENGINEERS**

Kenneth K. Humiston, P.E.



24<sup>th</sup> October 2006

Ken Humiston  
Humiston & Moore Engineers  
5679 Strand Court, Unit 110  
Naples, FL 34110

*RE: Vibracoring at Wiggins Pass, FL*

Dear Ken,

The intent of this letter is to act as a cost proposal for the abovementioned vibracore sampling effort.

It is our understanding that you will require six geotechnical vibracore samples to a depth of at least ten feet below sediment surface at Wiggins Pass. Athena will be responsible for logging, sub-sampling, grain size analysis, and core photography.

We are proposing the use of our twenty-four foot portable research vessel to operate as a sampling platform for this effort. This vessel is equipped with all required Coast Guard safety gear. It also uses Trimble DGPS (sub-meter accurate) and a Humminbird Fathomeer (accurate to 0.1') interfaced through HyPack for horizontal and vertical positioning. This vessel carries all necessary vibracore sampling. This vessel cannot operate seaward of the inlet.

Sampling vessel will be maneuvered to the desired sample site using coordinates provided to Athena by the client. Once on station, the core location will be marked and the vessel will be immobilized using a triple point anchor system. When the vessel is anchored and immobilized, the coordinates will be checked against the desired sample site.

Athena's custom designed and built vibracore system will then be deployed from the sampling platform. This system consists of a generator with a mechanical vibrator attached via cable. This vibrator is attached directly to a three-inch diameter, galvanized sample barrel. The sample barrel is lowered to the sea floor through a moon pool in the deck of the sampling platform by attaching lengths of drill stem. The vibracore machine is then turned on and the sample barrel is allowed to penetrate until it reaches target depth or refusal. Minimum recovery is 80%. The sample barrel is then



retrieved using an electric winch. Once the sample is on deck, the core is cut, capped, labeled and measured.

If refusal is met and the material at the base of the core is not limestone, carbonate cemented clastic sediments, or dewatered silt/mud, we will make one attempt to jet to the required penetration depth. Jetting consists of using a mechanical pump to jet the sample barrel to one foot above the previous depth of penetration. The jet pump will then be turned off and the vibracore machine activated and coring will be resumed at that point. The core will be retrieved and processed for shipment to South Carolina.

Completed vibracores will be sectioned into five foot lengths and cut open longitudinally. Athena will log and sub-sample each core at a facility in Columbia, South Carolina. The sections will be placed into thick plastic tubing and sealed for transport and storage and turned over to you. The completed cores will be transferred to PVC tubing to prevent discoloration from the galvanized tubing rusting.

Athena will perform grain size analyses on the sub-sampled material. We use a modified ASTM-D-422 method that uses sieves ranging from  $-3.25$  to  $4 \phi$  in half  $\phi$  intervals. We will also note the percentage of shell in each sample using tables for visual estimation created by Terry and Chilingar (1953) and wash material finer than  $-4 \phi$  (0.0625mm) to determine the percent fines. We will process the raw data using a custom designed system that will produce grain size curves (percent passing sieve, cumulative weight percent, frequency weight percent) and statistical data (median, mean, sorting, skewness, and kurtosis) based on Folk (1974). This data will be incorporated into the final report.

Our proposed cost for this effort is **\$14,925.00**. This price includes mobilization/demobilization, labor, per diem, equipment rental, reporting, and all other associated costs. Additional cost will be \$50.00 per grain size sample run. This cost is subject to change based upon the final scope of work.

Thank you for giving us an opportunity to provide a cost for this sampling effort and we look forward to the opportunity to work together again.

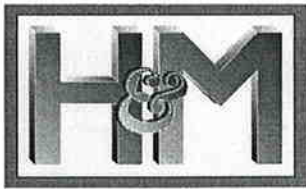
Best Regards,



J. Neil Wicker  
Marketing Director



November 27, 2006  
New Business VI - 5  
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October 18, 2006

Mr. Gary McAlpin  
Collier County Public Utilities Engineering Department  
3050 Horseshoe Drive  
Suite 218  
Naples, FL 34104

**Re: Request for Amendment to Work Order HM-FT3721-06-03**  
Clam Pass Maintenance Dredging  
Purchase Order 4500058270  
HM File No: 11-049.ClamPass

Dear Gary:

In accordance with Article 2 of Contract 01-3271; Additional Services of Consultant, and Humiston & Moore Engineers Proposal dated December 13, 2005, a budget amendment to Work Order HM-FT-06-03 is requested to address additional tasks not included in the original scope of services, which have been requested by County staff or regulatory agencies. In accordance with paragraph 2.2 of the Contract this amendment is requested.

The additional scope includes but is not limited to:

**Task 7: Prepare and submit to the Department of Environmental Protection a request for modification of Notice to Proceed to change the entrance width of the dredge cut of channel from 30 feet to 80 feet.**

We request an additional budget of  
\$5,000.00

Due to the nature of the regulatory review process and the need to be responsive to requests from County staff for information and for attendance at meetings, services under this Work Order Amendment shall be billed on a time and materials basis. The budgets for this task may be considered as a not-to-exceed amount with the understanding that in the event regulatory requirements, sub-consultant participation or requests from County staff result in costs above these budget amounts, additional budget amendments will be required.

Sincerely yours,

**HUMISTON & MOORE ENGINEERS**

Kenneth K. Humiston, P.E.

Initial Estimate of Resource Allocation												
Actual allocation of personnel hours and task assignments will be determined during execution of individual tasks												
			\$ 154.00	\$ 103.00	\$ 82.00	\$ 72.00	\$ 57.00	\$ 46.00	\$ 51.00	\$ 41.00		
Date	October 18, 2006	H&M	HOURS								EXPENSE	TOTAL
Task		FEES	PRIN	SENG	ENG2	EN1	STEC	TEC	ADMIN	CLK		
7	Change entrance depth	0.00	1848.00	0.00	0.00	2520.00	285.00	0.00	306.00	0.00	41.00	5,000.00
	<b>Hours</b>		<b>12.00</b>			<b>35.00</b>	<b>5.00</b>		<b>6.00</b>			
	<b>TOTAL</b>											