Agenda Item #: 3L4

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date:	April 07, 2009	(X) Consent ( ) Workshop	( ) Regular ( ) Public Hearing

Department

Submitted By: Environmental Resources Management
Submitted For: Environmental Resources Management

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Task Order No. 0688-07 to a continuing Contract (R2006-0688) with Applied Technology & Management, Inc. (ATM) in the amount of $157,327.01 to provide permit required biological monitoring in support of the beach renourishment project for Juno Beach.

Summary: The BCC approved the Contract with ATM on April 18, 2006. Six (6) task orders totaling $518,979.64 have been issued under the Contract. Task Order No. 0688-07 authorizes ATM to conduct biological monitoring as required under Florida Department of Environmental Protection (DEP) permit number 0276415-001-JC. DEP grant 08PB1 will reimburse 50% of these costs. County match is from a combination of Tourist Development Tax, interest, and ad valorem. ATM committed to an overall 20% small business and minority business enterprise (SBE-MBE) participation in the Contract. ATM has achieved 13.9% cumulative SBE-MBE participation on the Contract including this Task Order. District 1 (SF)

Background and Justification: Construction of the original Juno Beach Shore Protection Project was successfully completed in February 2001 and included placement of 1.1 million cubic yards of sand over 2.4 miles of primarily public beachfront. The Juno Project is scheduled for renourishment beginning November 1, 2009. Biological monitoring of the reefs adjacent to the borrow area is required prior to the start of construction as per the permit. The County has obtained new permits from DEP and Army Corps of Engineers for the impending renourishment.

Attachments:
1. Task Order No. 0688-07 with Contract History
2. Contract (pages 1, 18, Fee Schedule)

Recommended by:	Richard E. Walesky **Department Director**	3/12/09 **Date**
Approved by:	 **County Administrator**	3-18-09 **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2010	2011	2012	2013	2013
Capital Expenditures					
Operating Costs	157,327				
External Revenues	(78,664)				
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT	78,664	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0

Is Item Included in Current Budget? Yes X No _____

Budget Account No.: Fund 3652 Department 381 Unit MO28 Object 3120

Program _____

B. Recommended Sources of Funds/Summary of Fiscal Impact

3652-381-MO28-3120-03 Juno Beach Shoreline Protection $78,664
FDEP Grant 08PB1 $78,664

C. Department Fiscal Review:

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Administrator Comments:

3-23-09
OFMB

3/17/09

3/23/09
Contract Administrator

3/23/09

This item complies with current County policies.

B. Legal Sufficiency:

Assistant County Attorney

C. Other Department Review:

Department Director

Attachment 1

TASK ORDER

TASK ORDER: 0688-07 CONSULTANT: Applied Technology & Management, Inc.

ACCOUNT: 3652-381-M028-~~4630~~ 3120-03 CONTRACT: R2006-0688, R2008-0876

[Fiscal approval of Budget Availability: Liz Burns

PROJECT MANAGER: Reubin Bishop PHONE: 561-233-2519

CONTRACT MANAGER: Juan Cueto PHONE: 561-233-2431

PROJECT NAME: Juno Beach Renourishment – Borrow Area Biological Monitoring

LOCATION/DISTRICT #: Atlantic Ocean (District 1)

TASK DESCRIPTION (use additional pages if necessary): The consultant shall perform Biological Monitoring for the Juno Beach Renourishment Project, as described in the Scope of Work dated December 17, 2008.

DELIVERABLES: See attached proposal.

TASK ORDER TYPE: FIXED PRICE $120,567.56 DUE DATE: 9/30/2010
NOT-TO-EXCEED $36,759.45

TOTAL AMOUNT: $ 157,327.01 See attached spreadsheet dated 12/17/08
RETAINAGE: $ 0

(Check 1 or both) for Subcontract Amounts:		Black	Hispanic	Women	Other (specify)	White Male
MBE	☐	$	$	$	$	
SBE	☐	$	$	$	$	$

TOTAL M/WBE-SBE PARTICIPATION: $ 0.00

CONSULTANT REP: _____ DATE: 3/9/09

DIVISION DIRECTOR: _____ DATE: 3-10-09

APPROVED AS TO TERMS AND CONDITIONS:

ERM DIRECTOR: Richard E Walesby DATE: 3/12/09

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

ASSISTANT COUNTY ATTORNEY: _____ DATE: _____

BOARD OF COUNTY COMMISSIONERS: _____ DATE: _____
John F. Koons, Chairman

APPLIED TECHNOLOGY & MANAGEMENT

400 S. AUSTRALIAN AVE., SUITE 300
WEST PALM BEACH, FL 33401-5045
(561) 659-0041 FAX 659-3733
WWW.APPLIEDTM.COM

December 17, 2008

Reubin Bishop
Palm Beach County
Department of Environmental Resources Management
2300 North Jog Rd., Fourth Floor
West Palm Beach, FL 33411

RE: Juno Beach Renourishment
Project Biological Monitoring Proposal

Dear Reubin:

Please find attached our proposal for Biological Monitoring Support for the Juno Beach Renourishment Project. This effort will be conducted with significant support from Tetra Tech. Tier proposal is provided as an attachment to this letter in addition to ATM's cost summary.

Task 1 through 4 will be conducted on a Lump Sum basis for a total cost of $120,567.56. Task 5 will be conducted on a Time and Materials Not to Exceed basis contingent on a Notice to Proceed from the County for a Not to Exceed amount of $36,759.45. The total costs for all efforts (Tasks 1 through 5) is $157,327.01.

Should you have any questions regarding this proposal, please feel free to contact me at your convenience.

Sincerely,

Applied Technology & Management, Inc.

Michael G. Jenkins, Ph.D., P.E.
Coastal Engineering Team Leader

cc: Leanne Welch
Juan Cueto

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Juno Beach Renourishment
Biological Monitoring
12/17/08

	TASK DESCRIPTION	ATM Team Leader	ATM Sr. Coastal Engineer	ATM Staff Eng./Bio	ATM Eng. Tech.	ATM Senior Scientist	ATM CADD Designer	ATM Clerical	ATM Surveyor	Inwater Survey Rate	ATM Total Labor	Sub Fee	ATM Management Fee on Sub	ATM Rental Fees (1) - see detail breakdown below	ATM Other Direct Costs (ODC's) (2) - see detail breakdown below	Total Task Budget
	Contract Labor Rates - 2008	$132.75	$128.25	$92.68	$59.75	$114.00	$82.47	$60.14	$94.31	$141.50						
1	Project Planning & Station Reconnaissance / Establishment & Reporting										$0.00	$19,616.50	$980.83			$20,597.33
2	Pre-Construction Phase Monitoring (1 Event) & Reporting										$0.00	$11,533.75	$576.69			$12,110.44
3	Construction Phase Monitoring (4 Events) & Reporting										$0.00	$46,629.00	$2,331.45			$48,960.45
4	Post-Construction Phase Monitoring (1 Events) & Reporting										$0.00	$37,047.00	$1,852.35			$38,899.35
5	Contingency Video Documentation Analysis and/or Construction Phase Monitoring (4 Field Events)										$0.00	$35,009.00	$1,750.45			$36,759.45
	TOTAL COSTS										**$0.00**	**$149,835.25**	**$7,491.78**	**$0.00**	**$0.00**	**$157,327.01**
		0	0	0	0	0	0	0	0	0						

1 **ATM Rental Fees (Per Monitoring Event)**	Daily Rate	Days	Cost
25' Parker Boat	$800	0	$0
SCUBA Gear	$200	0	$0
Underwater Still Camera and Strobe	$75	0	$0
Survey Vehicle	$75	0	$0
Turbidity Meter/YSI meter	$50	0	$0
Tide Guage	$75	0	$0
Sub-Total			**$0**

2 **ATM Other Direct Costs**	Rate	Quantity	Cost
Photocopies (8.5 x 11)	$0.12	0	$0
Color Copies	$0.75	0	$0
Standard Paper Plots	$1.00	0	$0
Heavy Duty Plots	$7.50	0	$0
Sub-Total			**$0**

Lump Sum Amount (Tasks 1 through 4)	$120,567.56
Not to Exceed Amount (Task 5)	$36,759.45

NOTE: Task 1 through 4 will be conducted on a lump sum basis for a total cost of $120,567.56. Task 5 will be conducted on a Not to Exceed basis contingent on receipt of Notice to Proceed for this task. Total Not to Exceed amount for this contignent task is $36,759.45. Total taks order amount is $157,327.01.

TETRA TECH EC, INC.

December 5, 2008
Rev. December 17, 2008

Mr. Michael Jenkins, PhD, PE
Director of Engineering
Applied Technology & Management, Inc.
400 S. Australian Avenue, Suite 855
West Palm Beach, FL 33401-5045

Re: Juno Beach, Florida Beach Nourishment Project – Borrow Area Environmental Monitoring

Dear Dr. Jenkins:

It is my sincere pleasure to submit Tetra Tech EC, Inc. (TtEC) team's qualifications to Applied Technology & Management, Inc. (ATM) for the Juno Beach, Florida Beach Nourishment Project Borrow Area environmental monitoring services. We have assembled a strong team with demonstrated knowledge of, and experience with, hardbottom resource monitoring associated with shore protection projects. We are confident that this team will allow ATM to capitalize on our experience to meet all project objectives.

The information in our submittal includes this letter affirming that TtEC is willing and capable of providing the services described in the *Biological Monitoring of Hardbottom Communities Adjacent to the Borrow Area* document provided by your office and included as Appendix A. of this submittal. We will provide the described services for the lump sum cost of $114,826.25. It should be understood that this proposal includes reconnaissance investigations, station establishment and station monitoring for the specifically delineated eight (8) monitoring events.

Should additional monitoring be required by the Florida Department of Environmental Protection, U. S. Army Corps of Engineers, or Palm Beach County; then additional compensation must be authorized by ATM. As stipulated in the monitoring plan, these additional services could be required if:

1. A determination that additional analyses of reef based video documentation is required due to the findings of the qualitative data collection,
2. A requirement to conduct more than specified samplings due to water quality (NTU based) exceedences at the borrow site during project construction. or
3. A requirement that additional biweekly sampling events are necessary due to project construction phase activities that exceed the projected 8 week construction estimate.

The rates for additional services will require supplemental authorization from ATM before commencement of service provision. A rate of $7,000.00 per day for field activities provided by a standard four (4) person monitoring team with requisite equipment, or hourly professional rates (time and materials) for data analysis services shall be paid to Tetra Tech for these additional

services. It is assumed that if supplemental field activities are required by the regulatory agencies, that additional video documentation analysis services will also be required and therefore the contingency cost as proposed shall be based on a not-to-exceed contingency cost for the described services of $35,009.00 that is supplemental to the lump sum fee of $114,826.25.

Thank you very much for considering our qualifications and we look forward to working with you on fulfilling the needs of Palm Beach County on the Juno Beach Nourishment Project. If you have any questions, please contact Craig Kruempel, our proposed Project Manager, at 561-735-0432 ext. 201 or by email at Craig.Kruempel@tteci.com. Alternatively, you may contact me at 772-781-3440 or by email at John.Moulton@tteci.com.

Sincerely,

John F. Moulton, III

John F. Moulton, III
Florida Operations Manager

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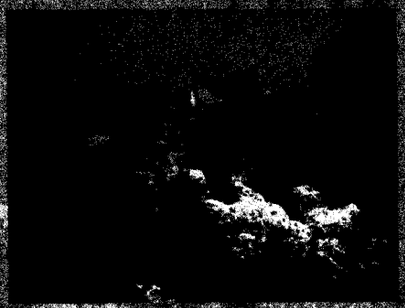
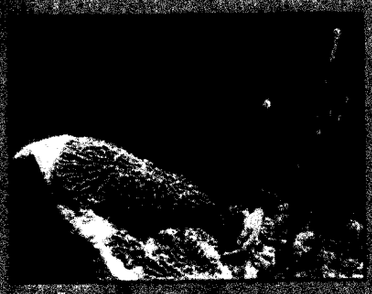
Juno Beach Nourishment Project Borrow Area
Biological Monitoring

Statement of Qualifications and Cost Estimate



December 5, 2006

December 17, 2

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Appendices

1.0 INTRODUCTION

Tetra Tech EC, Inc. (Tetra Tech) is pleased to provide this Statement of Qualifications (SOQ) to Applied Technology & Management, Inc. (ATM) for consideration of environmental monitoring services at the Juno Beach Nourishment Borrow Area. Tetra Tech has assembled the finest resources to support ATM including our staff of biologists and engineers which has extensive experience working in Florida's unique marine ecosystems.

Tetra Tech is a leader in providing a full range of environmental consulting, ecological assessment, restoration, planning, and permitting services. In over 20 years of service to South Florida clients, we have represented federal, state, and local agencies, as well as a number of private organizations.

2.0 QUALIFICATIONS AND RELEVANT EXPERIENCE OF PERSONNEL

The proposed personnel of the Tetra Tech team are located within our Stuart and Boynton Beach, Florida offices and have significant experience in marine resource monitoring and assessments for coastal project permit compliance. The significant professional qualifications that the our team brings to the project include:

- Project Manager with exceptional project management expertise, having served in this capacity for over 20 years, with demonstrated experience in the implementation of environmental management and biological monitoring plans in Florida.
- Highly qualified field team possessing demonstrated experience of working in and around southern Florida's coral reef communities.
- Proven ability to successfully complete coral and habitat monitoring projects on time and within budget.

The Tetra Tech team is knowledgeable, qualified, and experienced with the requirements of the project. Individually, and collectively, the team has unparalleled experience in the development of environmental management plans, resource protection agency coordination, and implementation of approved biological monitoring programs. Our comprehensive understanding of marine resources, particularly those associated with the hardbottom and coral reef communities of South Florida makes our team uniquely qualified to provide these services to ATM.

The Tetra Tech team is unique among environmental firms in Florida in that our team operates under a rigorous Environmental, Health and Safety program in order to fulfill the objectives of our Environmental, Safety and Quality policy. This program assures that each project professional is appropriately trained and qualified to fulfill the obligations of our clients and strive for Zero Incident Performance ® (ZIP).

Tetra Tech will develop a project-specific Health and Safety Dive Plan (HASDP) for the identified field activities. The HASDP will be approved by TtEC's Dive Safety Coordinator and will detail the roles of each dive team member, emergency contact information, emergency

planning information (e.g., local hospital, Diver's Alert Network [DAN]), dive planning information (e.g., maximum depths, equipment, dive hazards), and project objectives.

Tetra Tech's designated project dive supervisor will keep daily dive logs in accordance with our dive policies. Daily dive logs will include dive duration, profile, maximum depths, and objectives. The project dive supervisor will also conduct a health and safety briefing each day prior to field operations.

Dive operations will be conducted by divers certified by internationally recognized dive associations and who have American Red Cross cardiopulmonary resuscitation (CPR), First Aid, and Oxygen First Aid for Self Contained Underwater Breathing Apparatus (SCUBA) Diving Injuries certifications. These operations will be administered in accordance with the Tetra Tech corporate Dive Safe Practices Manual and abide by Occupational Safety & Health Administration (OSHA) and United States Coast Guard (USCG) regulations.

Tetra Tech's Project Manager, **Craig Kruempel**, has nearly 25 years of experience in coastal zone resource planning, documentation and monitoring services. His extensive experience in natural and artificial marine hardbottom habitats includes comprehensive site characterization investigations, site condition documentation, project effect determinations, damage assessment evaluations, long-term environmental monitoring, and post vessel grounding site restoration program implementation. As a consultant to numerous local project sponsors, he served as environmental project manager for numerous marine resource monitoring projects throughout Florida, including several projects for Palm Beach County.

Other Key Professionals that will work with ATM on this project:

- **Erin Hague** has over 13 years of experience in environmental services. Her project-related field experience includes: deep water (max. 130 FSW) and shallow natural hardbottom and artificial reef habitat assessments and *in situ* monitoring; vessel grounding site investigations and restoration program development hard and soft coral transplanting; seagrass surveys; wetland delineations (fresh and saltwater); stream gauging; water quality sampling and monitoring; and surveying. In addition, her project experience has included extensive agency coordination associated with project design and permit acquisition; State and Federal resource permitting; avoidance, minimization and mitigation planning and strategizing; development of biological monitoring plans for marine, estuarine and freshwater projects; habitat characterization studies and data analysis.
- **Patrick Zuloaga** has 8 years of field experience in marine and estuarine systems and has conducted studies for habitat restoration, monitoring, assessment, and surveys. Mr. Zuloaga has led restoration teams to successfully complete several coral reef and seagrass restoration projects associated with vessel grounding sites in Biscayne and Everglades National Parks. He has extensive experience in coral reef and seagrass related monitoring and restoration, and seagrass transplantation throughout South Florida. In addition to his technical proficiency, he is experienced in project and task management with responsibilities including client interaction, subcontractor management, budget development and cost tracking, and coordination and preparation of project reports and deliverables.
- **Lisa Canty** has more than 6 years of experience in wetlands biology including freshwater and coastal ecosystems. Ms. Canty is proficient at performing impact assessments and surveys of environmentally sensitive areas, including seagrass habitat, and presenting the results for

preservation or restoration planning. Her current responsibilities include working with several ecological teams to restore seagrass and coral habitat in numerous vessel grounding locations throughout Biscayne and Everglades National Parks. As part of the National Park Service team working in Biscayne National Park, she has also recovered and successfully reattached several hundred coral colonies over the past year at vessel grounding sites. She has field experience conducting coral reef fish surveys in Southeast Florida and Hawaii, in addition to identification skills of marine algae and coral species.

3.0 TECHNICAL APPROACH & DELIVERABLES

Tetra Tech has reviewed and is confident that we can accomplish effective and efficient implementation of the Juno Beach Nourishment Biological Monitoring Program for Hardbottom Communities Adjacent to the Borrow Area. As described in this plan, there are several critical components of the program that require data collection and analysis and deliverable development and submittal in order to maintain compliance with the Florida Department of Environmental Protection (FDEP) permit for the project. Detailed costs, including staff and equipment rates and estimated hours for each phase of the project are provided in Appendix B.

As requested, following is a summary of the activities and deliverables associated with each task. The basis for this estimate of Tetra Tech's technical approach and deliverables is the Juno Beach Nourishment Biological Monitoring Program for Hardbottom Communities Adjacent to the Borrow Area document provided in Appendix A. The basis for the costs provided in Appendix B is this Plan. Client or agency action may result in additional requirements for service provision under this contract due to:

1. A determination that additional analyses of reef based video documentation is required due to the findings of the qualitative data collection,
2. A requirement to conduct more than specified samplings due to water quality (NTU based) exceedences at the borrow site during project construction; or
3. A requirement that additional biweekly sampling events are necessary due to project construction phase activities that exceed the projected 8 week construction estimate.

The rates for additional services will require supplemental authorization from ATM before commencement of service provision. A rate of $7,000.00 per day for field activities provided by a standard four (4) person monitoring team with requisite equipment, or hourly professional rates (time and materials) for data analysis services shall be paid to Tetra Tech for these additional services.

Specific activities associated with this project are briefly described below.

Task 1 – Project Planning and Station Reconnaissance / Establishment & Reporting.
The Monitoring Program document states that three monitoring stations will be established on the barrier reef formation at two (2) specific sites for compliance determinations, and at a single control site located southeast of the primary borrow area. After conducting the required reconnaissance survey, in coordination with Palm Beach County and the FDEP, monitoring stations shall be established as described in the Plan using stainless steel markers permanently

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installed in the hardbottom structure. Differential GPS coordinates shall be acquired at each specific site once the monitoring sites are established.

Video documentation of the three, 20 meter long transects, will be collected in accordance with the methods described in the Plan. Additional data collection shall occur at five (5), 0.25-m^2 quadrats spread equidistance along the transects and sampled at specific point-intercept locations along each of the 20-meter transects.

The reef edge at each of the three stations shall be visually assessed for a total distance of 200 ft. (~61 meters) during each monitoring event. A digital video record of this reef edge shall be obtained at the end of the pre-construction monitoring period, end of the construction monitoring period and the end of the post-construction monitoring period. DGPS positioning of the reef edge transect will be recorded. The video record will include quantitative video methods and qualitative landscape and close-up video of the reef communities along the edge.

A letter report shall be prepared and submitted to ATM within 14 days of completion of the field activities associated with Task 1. The letter report, 15 to 20 pages in length, shall be comprised of sufficient narrative and supporting graphics to comply with the requirements as described in the Monitoring Plan. Five (5) hardcopies and five (5) electronic (PDF on CD-Rom) copies of the document shall be submitted to ATM as documentation of the activities conducted during Task 1.

Task 2 – Pre-Construction Phase Monitoring (1 Event) & Reporting.

Due to unknowns associated with project schedule and contractor mobilization prior to project implementation, Tetra Tech will conduct the required pre-construction station and transect conditions documentation after ATM formally notifies our project manager that the Task Order for this work has been approved. This monitoring event shall be conducted in accordance with the Monitoring Plan, and a brief letter report, no more than five (5) pages in length, shall be submitted to ATM via e-mail within 14 days of completion of the Task 2 pre-construction monitoring event. The purpose of this letter report is to provide confirmation to ATM that the required monitoring was conducted in accordance with the Monitoring Plan. No data analysis or presentation of results shall be submitted as part of this deliverable. Two (2) copies of the raw video data deliverables shall be provided to ATM within 21 days of completion of the pre-construction monitoring event. Raw video data deliverables include all digital video transects on DVD, frame-grabbed images from all transects on DVD and Excel spreadsheets containing the *in-situ* quadrat data.

Task 3 –Construction Phase Monitoring (4 Events) & Reporting.

As noted in the Monitoring Plan, it is anticipated that construction of the proposed Juno Beach Nourishment Project will take approximately eight (8) weeks to complete. Monitoring shall be performed bi-weekly during construction for a total of four (4) events. Supplemental monitoring events may be conducted at the specific and formal authorization of ATM, and the cost for those additional services is provided as described in Task 5 Contingency Construction Phase Monitoring.

Tetra Tech shall rely on ATM to provide daily records of water quality monitoring, conducted by

an independent third party. As required in the Monitoring Plan, water quality monitoring results shall provide the basis for effect determination and may necessitate the performance of additional environmental monitoring within very narrowly defined timeframes. Due to the requirement that additional monitoring be conducted within 72 hours of a water quality measurement that exceeds the threshold levels, Tetra Tech, will require that ATM provide formal notice (e-mail is satisfactory) that an exceedence has occurred. This notification must be received no later than 10:00 a.m. the day following the documented water quality exceedence. Specific authorization to provide the services described in Task 5 shall be issued before mobilization of Tetra Tech's team shall occur.

Regular monitoring shall be conducted in accordance with the procedures described in the Monitoring Plan. After each regularly scheduled monitoring event, e-mail notification and a brief letter report, no more than five (5) pages in length, shall be submitted to ATM within 48 hours of completion of the Task 3 construction monitoring event and shall provide a description of the site conditions at the time of the survey. The purpose of this letter report is to provide confirmation to ATM that the required monitoring was conducted in accordance with the Monitoring Plan and observations of the conditions at the time of the monitoring event. No data analysis or presentation of results shall be submitted as part of this deliverable.

Two (2) copies the raw video documentation data shall be provided to ATM within 21 days after completion of the final construction phase monitoring event. Raw video data deliverables include all digital video transects on DVD, frame-grabbed images from all transects on DVD and Excel spreadsheets containing the *in-situ* quadrat data.

Task 4 – Post-Construction Phase Monitoring (1 Event) & Reporting.

After demobilization and departure from the project area of all dredge contractor floating equipment and support vessels, including the dredge, a final post-construction monitoring event shall be conducted in accordance with the Monitoring Plan. This monitoring and condition documentation shall occur as soon as practical after receiving notice from ATM that the contractor has completely demobilized from the project site.

A draft of the final monitoring report shall be submitted to ATM within 50 days of completion of the final monitoring event. This proposal assumes that ATM shall provide copies of the draft report to Palm Beach County ERM personnel for their review and comment. ATM and the County shall have no more than fourteen (14) calendar days to review and provide formal written comments to Tetra Tech on the draft report. Within 80 days of completion of the final, post-construction phase survey, the final monitoring report shall be provided to ATM for distribution to Palm Beach County and the FDEP. Analyses and data required in the Monitoring Plan shall be provided as part of the final submittal. Five (5) hardcopies and five (5) electronic (PDF on CD-Rom) copies of the document shall be submitted to ATM as documentation of the activities conducted in compliance with the Monitoring Plan requirements.

Task 5 – Contingency Video Documentation Analysis and/or Construction Phase Monitoring (4 Field Events) & Reporting.

Client or agency action may result in additional requirements for service provision under this contract due to:

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1. A determination that additional analyses of reef based video documentation is required due to the findings of the qualitative data collection,
2. A requirement to conduct more than specified samplings due to water quality (NTU based) exceedences at the borrow site during project construction; or
3. A requirement that additional biweekly sampling events are necessary due to project construction phase activities that exceed the projected 8 week construction estimate.

The rates for additional services will require supplemental authorization from ATM before commencement of service provision. A rate of $7,000.00 per day for field activities provided by a standard four (4) person monitoring team with requisite equipment, or hourly professional rates (time and materials) for data analysis services shall be paid to Tetra Tech for these additional services. It is assumed that if supplemental field activities are required by the regulatory agencies, that additional video documentation analysis services will also be required and therefore the contingency cost as proposed shall be based on a not-to-exceed contingency cost for the described services of $35,000.00.

Tetra Tech shall rely on ATM to provide daily records of water quality monitoring, conducted by an independent third party. As required in the Monitoring Plan, water quality monitoring results shall provide the basis for effect determination and may necessitate the performance of additional environmental monitoring within very narrowly defined timeframes. Due to the requirement that additional monitoring be conducted within 72 hours of a water quality measurement that exceeds the threshold levels, Tetra Tech, will require that ATM provide formal notice (e-mail is satisfactory) that an exceedence has occurred. This notification must be received no later than 10:00 a.m. the day following the documented water quality exceedence. Specific authorization to provide the services described in Task 5 shall be issued before mobilization of Tetra Tech's team shall occur.

If supplemental monitoring is required due to degradation of water quality beyond the threshold levels, the monitoring event shall be performed, after authorization by ATM. ATM shall be notified within 48 hours (via e-mail) when the additional compliance monitoring event has been completed. This initial notification shall not include a formal presentation of findings, but is intended to confirm that the monitoring was completed as required. A summary letter report detailing Tetra Tech's findings shall be provided to ATM within five (5) days of completion of the supplemental construction monitoring. Sufficient narrative and graphic representations shall be included in this report to present our findings.

Two (2) copies the raw video documentation data shall be provided to ATM within 21 days after completion of the final construction phase monitoring event. Raw video data deliverables include all digital video transects on DVD, frame-grabbed images from all transects on DVD and Excel spreadsheets containing the *in-situ* quadrat data.

4.0 SUMMARY

Tetra Tech is a full-service consulting firm with extensive capabilities and experience necessary to support ATM in their efforts to monitor the Juno Beach Nourishment Project borrow sites in

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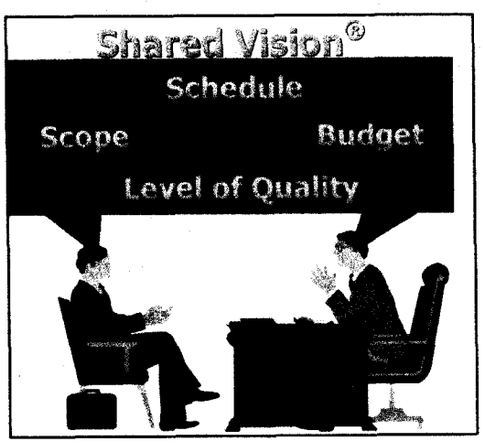
compliance with regulatory requirements. Tetra Tech has a clear understanding of what it takes to successfully execute this work and to be certain that each of ATM's needs is satisfied.

Tetra Tech understands what it takes to exceed expectations for this contract. We make a solid commitment to ATM to provide the proposed key staff and other support staff needed to implement the project in the agreed upon schedule. Our confidence in meeting this commitment is based on our experience with similar types of work and the local resource capacity we bring to the project.

As President and CEO of Tetra Tech EC, Inc. I offer my personal commitment that we will provide the necessary resources to deliver superior performance for a successful relationship with the City.

The Tetra Tech Team will provide work products consistent with the standards established by ATM, Palm Beach County, and the regulatory agencies. Specific project deliverables, schedules, and delineation of resources will be provided as described above.

Tetra Tech has repeatedly demonstrated our ability to comply with performance schedules, even when clients adjust milestones to meet more aggressive project goals or expand the scopes of their projects. Our approach is founded on development of a work breakdown structure (WBS) that organizes detailed work elements into a logical time sequence. This WBS is the basis for an overall schedule that has milestones for activities and decisions. The form of the schedule is tailored to the complexity and duration of the project.



Tetra Tech will utilize its strong understanding of this type of project coupled with up-front staff consultations to guide development of the work effort to meet ATM's technical needs. Tetra Tech calls this approach to tasking as achieving Shared Vision®. Through on-board reviews and document approval, we can jointly work to implement a plan that is consistent with the project scope.

The Tetra Tech team is by far the most capable and experienced firm available to ATM for the Juno Beach, Florida Beach Nourishment Borrow Area Environmental Monitoring Project. We are uniquely qualified to assist ATM in their efforts to accomplish this work in a timely and cost effective manner. We view this project as the opportunity to provide exceptional service to ATM on this very important project.

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APPENDIX A

JUNE BEACH, FLORIDA BEACH NOURISHMENT PROJECT
BIOLOGICAL MONITORING OF HARDBOTTOM COMMUNITIES
ADJACENT TO THE BORROW AREA

BIOLOGICAL MONITORING OF HARDBOTTOM COMMUNITIES ADJACENT TO THE BORROW AREA

The proposed borrow area is delineated into two segments: primary and future use (Figure 1). It is expected that the primary borrow area will be fully expended during the initial nourishment event. The primary borrow area is the easternmost segment of the borrow area. It is approximately 9,390 ft. in length and is located approximately 4,920 ft. offshore between FDEP monuments R-53.5 and R-64.5. The secondary borrow area is located just west of the primary borrow area, and the distance from the shoreline to the western boundary of the secondary borrow area is approximately 4,664 ft.

Continental Shelf Associates (CSA) conducted a series of dives along the reef edge to the east of the proposed borrow area on March 28, 2008. This reconnaissance survey revealed that the reef edge adjacent to the borrow area transitions from the high-relief feature indicated in the LADS bathymetry to low-relief ledges/rubble field feature to the west of the LADS reef edge (Figure 1). The low-relief ledges and rubble are colonized by macroalgae, octocorals, scattered sponges, tunicates and small stony corals. A summary of the reef communities observed on this reef edge is provided in the attached letter report dated April 18, 2008 by CSA.

The buffer distance between the borrow area boundary and adjacent low-relief/rubble reef communities exceeds 1,000 ft. (~305 meters) for approximately 2/3 of the length of the borrow area (Figure 1). There are two protrusions in the adjacent reef community edge with buffer distances less than 1,000 feet along the southern half of the borrow area. The southernmost protrusion is approximately 924 feet east of the borrow area limits and the northern protrusion is approximately 893 feet east of the borrow area limits.

These buffer distances provide reasonable assurance that the potential for impacts to hardbottom communities adjacent to the borrow areas is minimal. Therefore, detailed biological monitoring of these hardbottom habitats along the majority of the reef edge is not proposed. The County recommends implementation of detailed biological monitoring at the two locations within 1,000 feet of the borrow area edge. These two stations are shown on the attached Figure 1.

In situ Biological Monitoring

Three monitoring stations (two compliance and one reference are proposed at the following locations (See Figure 1). A reconnaissance level survey of the reef will be conducted prior to the pre-construction survey to assist in station placement.

Station 1 (compliance): located approximately 893 feet from the primary borrow area boundary
Station 2 (compliance): located approximately 924 feet from the primary borrow area boundary
Station 3 (reference): located approximately 3,000 feet southeast of the southeastern corner of the primary borrow area on low-relief reef edge

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Each monitoring station shall consist of three, cross-shore transects spaced at 1 meter from each other. The transects shall commence at the west edge of the hardbottom and extend east for 20 meters over hardbottom. Stations shall be permanently established by the installation of stakes at the east and west end of the three transects at each station and at the 10-meter mark along each transect. Video sampling of three, 0.4 meter wide transects, running the length of the station (20 meters), will be performed to provide estimates of coverage for the major taxonomic groups and the evaluation of sediment cover over benthos. A weighted line shall be placed on the bottom connecting the first and the last stake to guide the videographer as he/she swims the length of each transect. The transects shall be sampled using digital video in progressive scan mode. Videographers shall swim at a speed of approximately five (5) meters per minute with a constant camera distance of 40 cm above bottom. A convergent laser guidance system indicates the precise height of forty (40) centimeters from the benthos.

Five, 0.25-m^2 quadrats will be sampled at point-intercept locations along each of the 20-meter transects. Within each quadrat, visual estimates of percent cover and genus/species identification will be performed *in situ* for the following functional groups: macroalgae (overall percent cover and identification/percent cover of two dominant species within the quadrat), microalgae/cyanobacteria, encrusting calcareous algae, sponges (genus level, with a separate assessment of percent cover of the boring sponge [*Cliona* spp.]), tunicates (with identification of dominant genera), zoanthids (genus level), hydroids, octocorals (genus level), and scleractinian corals (species level). Individual counts will be conducted for all octocorals, scleractinian corals, sponges (excluding *Cliona* spp., which will be assessed for percent cover), solitary tunicates, and urchins within the quadrat.

Scleractinian corals and octocorals also will be assessed for the following size class distribution (diameter of scleractinian/height of octocoral):

1 – <5 cm;
2 – 5 to 15 cm;
3 – 15 to 25 cm; and
4 – >25 cm.

Percent cover of consolidated substrate (e.g., hardbottom and rock), unconsolidated substrate (e.g., motile rubble, rhodoliths, and shell hash), and sand will be recorded. The maximum physical relief of hard bottom from the lowest to highest point in the quadrat will be measured to the nearest centimeter.

The reef edge at each of the three stations shall be visually assessed for a total distance of 200 ft. (~61 meters) during each monitoring event. A digital video record of this reef edge shall be obtained at the end of the pre-construction monitoring period, end of the construction monitoring period and the end of the post-construction monitoring period. DGPS positioning of the north and south end points of the reef edge transect will be recorded. The video record will include quantitative video methods and qualitative landscape and close-up video of the reef communities along the edge. If the divers

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observe excessive sedimentation upon benthic communities along the reef edge survey during any of the monitoring events, documentation of the sedimentation impact will be obtained with still and video photography and measurements of sediment depth accumulation shall be performed on the epibiota. Scientific divers shall map the extent of the apparent impact and obtain DGPS positioning of the impact area.

Standing Sediment Depth Protocol
Standing sediment depth on the hardbottom communities within each of the three stations will be performed with repeated direct measurements at regular intervals along the transects. A ruler, graduated in millimeters (0 mm to 300 mm), will be pressed through the sediment until it reaches refusal. Sediment depth shall be recorded to the nearest millimeter. Measurements greater than or equal to 300 mm are recorded as 300 mm. Sediment accumulation will be assessed at 2-meter intervals along each of the three, 20-meter transects within each station. At each 2-meter interval, three measurements will be taken for a total of 99 measurements per station during each monitoring event.

Monitoring Schedule
Pre-construction biological monitoring shall be conducted to establish a baseline dataset for comparison to the construction and post-construction observations. The exact locations of the monitoring stations shall be determined during the first pre-construction monitoring event. Pre-construction and post-construction monitoring of hardbottom resources located offshore of the borrow site shall be comparable to the length of the construction monitoring.

It is anticipated that construction of the proposed Juno Beach Nourishment Project will take approximately 8 weeks to complete. Monitoring shall be performed twice during the eight-week period prior to construction to establish a baseline and capture potential variability in the baseline condition; bi-weekly during construction (up to four events); and twice during the eight-week period immediately after completion of construction for a total of 8 monitoring events. In addition to the regularly scheduled monitoring events, additional monitoring events may occur due to measured levels of turbidity over reef communities as delineated within the following section.

Turbidity Monitoring
Water quality and turbidity monitoring at the borrow site shall be incorporated into the project monitoring requirements and performed by a qualified independent contractor. In addition to the permit required turbidity monitoring at the edge of the turbidity mixing zone, daily turbidity monitoring shall be performed at Stations 1, 2 and 3 when the dredge is operating within 1,000 feet of Stations 1 and 2 or whenever a turbidity plume is observed over the reef. Turbidity monitoring is proposed at the surface and approximately 2 meters above bottom.

If a turbidity reading in excess of 10 NTUs above background is recorded over the offshore reef during dredging operations, a monitoring event will be scheduled within 72 hours of the discovery of the turbidity plume. If the regularly scheduled monitoring event does not coincide with the 72 hour requirement, an additional survey monitoring effort

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will be conducted within the 72 hour timeframe. Any apparent sedimentation impacts related to the dredging operations shall be documented with still and video photography and measurements of sediment depth accumulation shall be performed at the point intercept locations along the transects and on the reef epibiota. Scientific divers shall also map the extent of the apparent impact and obtain DGPS positioning of the impact area. The results of the survey shall be reported to the Department within 48 hours of completion of the survey, and a written report with still photographs and videography shall be submitted to the Department within 5 days of completion of the survey. The Department may require additional monitoring of these sites during subsequent weekly surveys.

Data Evaluation and Monitoring Schedule
At a minimum, quantitative digital video sampling of the stations shall be performed at the beginning and end of each monitoring period (twice during pre-construction, twice during construction, and twice during post-construction) for a total of 6 video samplings during the entire monitoring period.

Standing sediment measurements and quadrat evaluations will be performed during each sampling event along each of the three 20-meter transects within each station for a total of two events during the pre-construction monitoring period, four events during the construction monitoring period, and two events during the post-construction period. Sediment accumulation data shall be transferred to Microsoft Excel spreadsheets, and the data shall be compiled and analyzed after each sampling event.

Data Evaluation and Reporting Requirement
Only one set of transect video data shall be analyzed for each monitoring period: the final pre-construction monitoring transect data, the final construction monitoring transect data, and the final post-construction monitoring transect data. The second video data set will serve as a record of benthic community conditions at the site and shall be quantitatively analyzed as deemed necessary to document variability within the monitoring periods.

The transect video data shall be quantitatively analyzed using PointCount'99 or a comparable software package. Each 20-meter digital video transect shall result in approximately 60 non-overlapping frame-grabbed images. A unique set of 20 random points shall be generated at the time of frame-grabbing and stored with each set of images so that the same points are assessed during each monitoring event. This also ensures that each person examining a particular image will view the same points, thereby allowing for double-blind counting for quality assurance and control purposes.

An estimate of percent cover (projected to the surface) will be performed for each image according to the following functional groups/categories: scleractinian corals, octocorals (to the genus level), macroalgae (to the genus level if possible, if not, then according to the following breakdown: calcareous red, calcareous green, fleshy brown, fleshy red, fleshy green), microalgae/cyanobacteria, sponges, tunicates, hydroids, wormrock, zoanthids, urchins, holothuroids, and substrate. Substrate shall be broken down into the

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following categories: unconsolidated substrate, sediment over hardbottom, sediment over benthos (where the underlying fauna cannot be identified due to the sediment cover), and sand.

The reef edge video data will be qualitatively reviewed after each monitoring event and compared to previous monitoring events and subsequent events. If the qualitative review of the video transect suggests sedimentation impacts or significant changes in the reef edge community, quantitative analysis of the reef edge video data shall be conducted to determine the extent of the project-related impacts.

All raw video data deliverables shall be provided within 30 days after completion of each survey period (pre-construction period, construction period, and post-construction period). Raw video data deliverables include all digital video transects on DVD, frame-grabbed images from all transects on DVD and Excel spreadsheets containing the *in-situ* quadrat data.

A letter report which provides the results of the turbidity data and standing sediment depth measurements for the pre-construction period shall be submitted to the Department within 15 days of the completion of the final pre-construction survey. The report shall be submitted in hard copy and electronic copy and contain representative photographs of the benthos and scleractinian corals within the stations.

During the construction period, bi-weekly reports shall be submitted via email to the Department which summarizes the turbidity data and standing sediment depth measurements for each bi-weekly construction monitoring event. Bi-weekly email reports are due within 5 days of completion of each bi-weekly construction survey and shall provide detailed observations of conditions at the monitoring sites.

A letter report which provides the results of the turbidity data and standing depth measurement for the construction phase period shall be submitted to the Department within 30 days of the completion of the final construction-phase survey. The report shall be submitted in hard copy and electronic copy and contain representative photographs of the benthos and scleractinian corals within the stations. The construction phase letter report shall provide a comparison to the pre-construction sediment depth data set.

A final monitoring report shall be submitted to the Department within 90 days of completion of the final, post-construction phase survey. This report will provide the PointCount files and associated data (i.e. PTS files, MGR files, cd.dat files), and Excel spreadsheets of turbidity data, Point Count data (raw data and summary files) and *in-situ* quadrat data from all survey periods. The report will compare the current conditions to: the pre-construction baseline survey conditions; a compilation of the four, construction-phase surveys, and the post-construction condition. The report will analyze and discuss any elevated turbidity levels, associated weather conditions, observed burial, sedimentation, or trauma that has affected the sessile biota within the stations. The report will also include quantitative data on major benthic biological components (e.g., percent cover by corals, octocoral, sponges, tunicates, zoanthids and algae) and a statistical

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evaluation and comparison (paired or multiple) of the data collected along the permanent transects and monitoring stations to ascertain changes in species richness/abundance during the study period. Parametric and non-parametric techniques will be used to detect change in community composition/abundance. Reports shall be provided in both hard copy and digital format.

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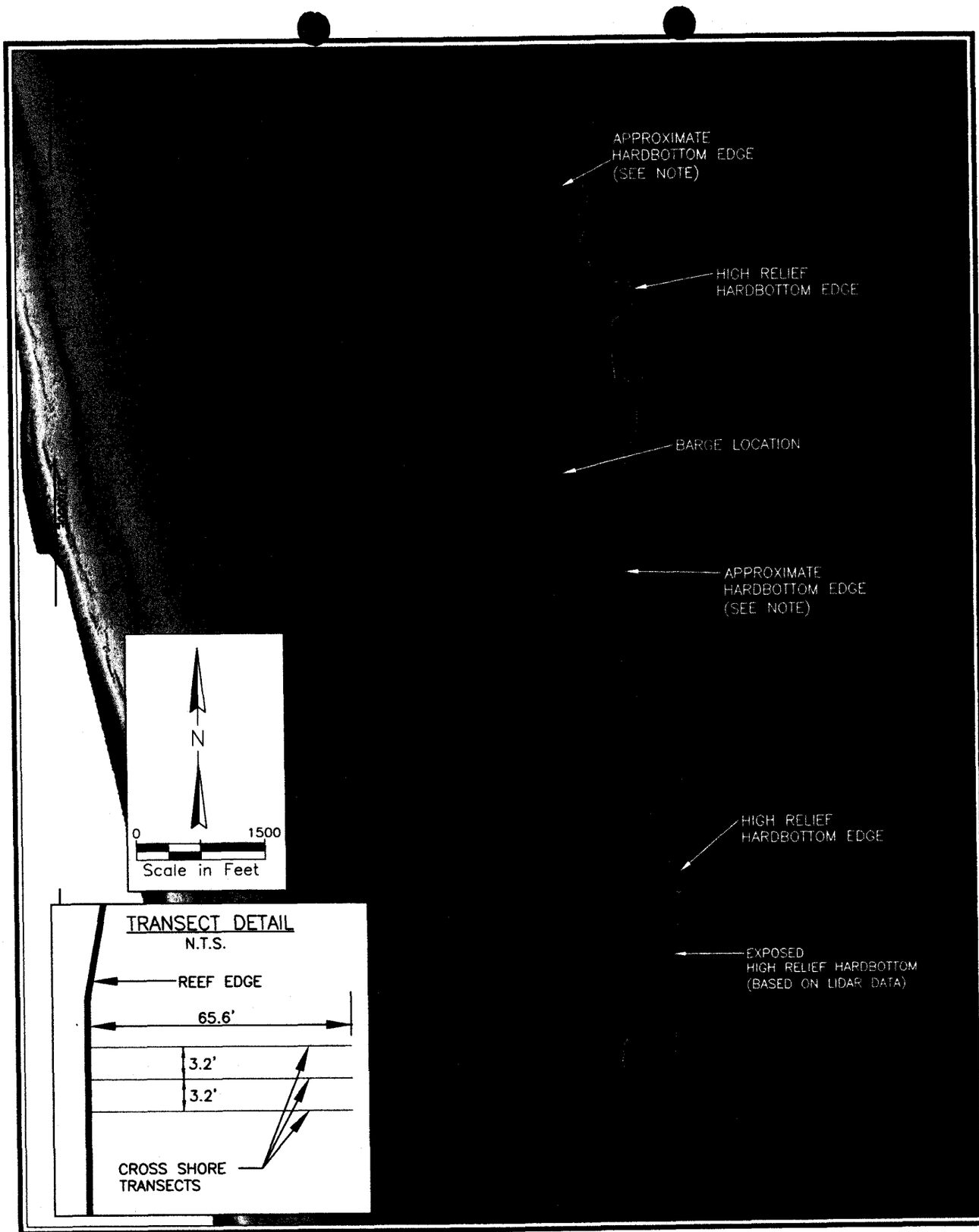

Figure 1
Juno Beach Nourishment Project Borrow Area Biological Monitoring Station Locations.

APPLIED TECHNOLOGY & MANAGEMENT, INC.

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APPENDIX B

COST ESTIMATE AND RATES

Juno Beach, Florida Beach Nourishment Project
Borrow Area Environmental Monitoring
Detailed Cost Breakdown by Phase

Category	Task 1 - Project Planning & Station Reconnaissance / Establishment & Reporting		Task 2 - Pre-Construction Phase Monitoring (1 Event) & Reporting		Task 3 - Construction Phase Monitoring (4 Events) & Reporting		Task 4 - Post-Construction Phase Monitoring (1 Events) & Reporting		Task 5 - Contingency Video Documentation Analysis and/or Construction Phase Monitoring (4 Field Events) & Reporting	
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Labor										
Department Head, John Moulton	2	$378.00	2	$378.00	2	$378.00	2	$378.00	1	$189.00
Project Manager, Craig Kruempel	16	$3,024.00	8	$1,512.00	24	$4,536.00	24	$4,536.00	10	$1,890.00
Senior Scientist, Pat Zuloaga	32	$4,256.00	12	$1,596.00	64	$8,512.00	45	$5,985.00	64	$8,512.00
Engineer, David Wells	2	$252.00	2	$252.00	2	$252.00	2	$252.00	0	$0.00
Scientist, Erin Hague	32	$4,032.00	18	$2,268.00	80	$10,080.00	48	$6,048.00	64	$8,064.00
Associate Scientist, Lisa Canty & Matt Livingston	26	$2,470.00	18	$1,710.00	96	$9,120.00	64	$6,080.00	52	$4,940.00
Science Technician, Josefina Massa	29	$2,436.00	24	$2,016.00	96	$8,064.00	122	$10,248.00	64	$5,376.00
CADD, Laurie Wynne	2	$148.00	4	$296.00	8	$592.00	16	$1,184.00	8	$592.00
Senior Secretary/Clerk, Peggy Alexander	4	$232.00	6	$348.00	8	$464.00	16	$928.00	11	$638.00
Total Labor	**145**	**$17,228.00**	**94**	**$10,376.00**	**380**	**$41,998.00**	**339**	**$35,639.00**	**274**	**$30,201.00**
Supplies & Equipment										
B&W copies/print	100	$15.00	150	$22.50	600	$90.00	800	$120.00	800	$120.00
Color copies/print	50	$23.50	75	$35.25	300	$141.00	400	$188.00	400	$188.00
Trimble GXT and GeoBeacon	2	$200.00	1	$100.00	4	$400.00	1	$100.00	4	$400.00
Stainless Steel Pins	150	$150.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Dive Gear & Insurance	6	$600.00	3	$300.00	12	$1,200.00	3	$300.00	12	$1,200.00
Video gear	2	$200.00	1	$100.00	4	$400.00	1	$100.00	4	$400.00
Boat	2	$1,000.00	1	$500.00	4	$2,000.00	1	$500.00	4	$2,000.00
Tapes / Digital Media / Storage / Expendable Field	$200	$200.00	$100	$100.00	$400	$400.00	$100	$100.00	$500	$500.00
Total Equipment and ODCs		**$2,388.50**		**$1,157.75**		**$4,631.00**		**$1,408.00**		**$4,808.00**
Total for Task		**$19,616.50**		**$11,533.75**		**$46,629.00**		**$37,047.00**		**$35,009.00**
							Total Lump Sum Cost =	**$114,826.25**	**Contingency Cost =**	**$35,009.00**

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Juno Beach Biological Monitoring

TETRA TECH EC INC.

CLASSIFICATION DESCRIPTIONS		2009 HOURLY RATE
Senior Consultant		$236.00
Department Head / Sr. Project Manager		$189.00
Task Manager		$152.00
Senior Engineer / Scientist		$133.00
Engineer / Scientist		$126.00
Associate Engineer / Scientist		$95.00
Engineering / Science Technician		$84.00
Field Representative		$74.00
CADD	*	$74.00
Senior Secretary/Clerk	*	$58.00

* Non-exempt employees

TRAVEL

Mileage	$0.59
All other travel at cost plus 10%	

OTHER DIRECT COSTS

PC.GIS/CADD Usage	$2.05
Black and White Photocopies or prints	$0.15
Color Photocopies or Prints	$0.47
Trimble GXT and GeoBeacon	$100.00
Dive Gear & Insurance	$100.00
Video gear	$100.00
Boat	$500.00

All other ODCs at cost plus 10%

SUBCONTRACTORS

Billed at cost plus 10%

*rates valid for 2009

Applied Technology & Management
Continuing Contract for Coastal and Marine Engineering

Contract R2006-0688 dated April 18, 2006 for period of two years expires on April 17, 2008.
Contract Amendment R2008-0876 dated May 20, 2008 extends contract through April 17, 2009.
SBE-MBE Goal 20.0% (10% SBE/W; 10% MBE/W)
Task order summary:

TASK NUMBER	TOTAL/ SBE and/or MWBE AMOUNT	TASK DUE DATE	TASK DESCRIPTION	APPROVED BY/DATE
0688-01	62,897.60 0.00	11/30/06	Lake Worth Lagoon Seagrass Mapping	CRC 5/31/2006
0688-01A	637.38 0.00	11/30/06	Lake Worth Lagoon Seagrass Mapping	ERM 7/27/2006
0688-02	211,260.57 25,420.00	8/3/07	Juno Beach Renourishment - Engineering and Permitting Services	BCC 1/9/2007
0688-01B	35,344.87 0.00	5/31/08	Lake Worth Lagoon Seagrass Mapping	CRC 4/18/2007
0688-01C	5,407.50 0.00	11/30/06	Lake Worth Lagoon Seagrass Mapping	ERM 7/26/2007
0688-02A	7,331.17 0.00	8/3/07	Juno Beach Renourishment - Engineering and Permitting Services	ERM 10/22/2007
0688-03	59,870.62 0.00	10/15/08	South Lake Worth Inlet Seagrass Surveys	CRC 2/20/2008
0688-02B	15,979.44 0.00	8/3/07	Juno Beach Renourishment - Engineering and Permitting Services	ERM 4/17/2008
0688-04	12,557.82 0.00	9/29/08	South Lake Worth Inlet Post-Dredge Impact Seagrass Surveys	ERM 7/8/2008
0688-05	36,003.92 0.00	12/31/08	2008 Lake Worth Lagoon Fixed Transect Seagrass Monitoring	ERM 6/26/2008
0688-06	71,688.75 68,275.00	4/30/09	Lake Worth Lagoon Sediment Study	CRC 2/4/2009
0688-07	157,327.01 0.00	9/30/10	Juno Beach Renourishment - Borrow Area Biological Monitoring	BCC

Total: 676,306.65
SBE-MBE: 93,695.00
SBE-MBE Participation: 13.9%
Report Date & Filename: 03/09/09 T:\eer\engser\Consultants\ATM_2008\[history_0688.xls]Sheet1

Attachment 2

R2006-0688

CONTRACT FOR PROFESSIONAL CONSULTANT SERVICES
BETWEEN PALM BEACH COUNTY AND
APPLIED TECHNOLOGY AND MANAGEMENT, INC.

APR 18 2006

This is a Contract made as of _____, by and between Palm Beach County, a Political Subdivision of the State of Florida, by and through its Board of County Commissioners, hereinafter referred to as the COUNTY, and Applied Technology and Management, Inc., 400 Australian Avenue, Suite 855, West Palm Beach, FL, 33401, an engineering firm, a corporation, authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal I.D. Number is 59-2413268.

In consideration of the mutual promises contained herein, the COUNTY and the CONSULTANT agree as follows:

ARTICLE 1 - SERVICES

The CONSULTANT's responsibility under this Contract is to perform professional coastal and marine engineering services and incidental services as more specifically set forth in the Scope of Work attached hereto as Exhibit "A". In the event services are required to be performed that are not described in Exhibit "A", but are within the general scope of services, the COUNTY and the CONSULTANT hereby reserve the right to negotiate task orders covering the desired services.

The CONSULTANT shall conduct professional services in accordance with Chapters 471 and 472, Florida Statutes and other applicable local, state and federal standards. The CONSULTANT shall conduct topographic and hydrographic survey work in compliance with the U.S. Army Corps of Engineers "Technical Requirements for Surveying, Mapping and Photogrammetric Services," Revised March 1989 and the U.S. Army Corps of Engineers "Engineering Design: Hydrographic Surveying," EM 1110-2-1003, January 1, 2001, and the most current Florida Department of Environmental Protection specifications for topographic (section 02000) and bathymetric (section 02100) surveying.

ARTICLE 2 - PERIODS OF SERVICE AND SCHEDULES

This Contract commences on the day and year first written above and ends two years later. At the option of the COUNTY, the Contract can be renewed for an additional one-year period.

Reports and other work items shall be delivered or completed according to schedules established in each task order.

ARTICLE 3 - ASSIGNMENT OF WORK

The CONSULTANT shall provide professional services on a task order basis. A copy of the Task Order form and Task Change Order form are attached hereto as Exhibit "C" and Exhibit "D". The COUNTY reserves the right to modify these forms during the term of the Contract.

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ARTICLE 32 - CRIMINAL HISTORY RECORDS CHECK

The CONSULTANT shall comply with the provisions of Ordinance 2003-030, the Criminal History Records Check Ordinance ("Ordinance"), if CONSULTANT's employees or subcontractors are required under this contract to enter a "critical facility" as identified in Resolution R-2003-1274. The CONSULTANT acknowledges and agrees that all employees and subcontractors who are to enter a "critical facility" will be subject to a fingerprint based criminal history records check. Although COUNTY agrees to pay for all applicable FDLE/FBI fees required for criminal history record checks, the CONSULTANT shall be solely responsible for the financial, schedule, and staffing implications associated in complying with Ordinance 2003-030.

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida has made and executed this Contract on behalf of the COUNTY and CONSULTANT has hereunto set its hand the day and year above written.

R2006 0688

ATTEST:
Sharon R. Bock, Clerk & Comptroller

By _____
Deputy Clerk

PALM BEACH COUNTY APR 18 2006
BOARD OF COUNTY COMMISSIONERS:

By _____
Tony Masilotti, Chairman

WITNESS:

_____
Signature

Judy H. Oyler
Name (type or print)

CONSULTANT:

Applied Technology & Management, Inc.
Company Name

By: _____
Signature

Michael Jenkins, Ph.D., P.E.
Name (type or print)

Coastal Engineering Team Leader
Title

(corp.seal)

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

By _____
Assistant County Attorney

APPROVED AS TO TERMS
AND CONDITIONS:

By _____
Richard E. Walesky, Director
Dept. of Environmental Resources Mgmt.

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EXHIBIT B
APPLIED TECHNOLOGY AND MANAGEMENT, INC.
2006 WAGE AND EQUIPMENT RATES

WAGE RATES

EMPLOYEE CLASS	HOURLY WAGE RATE (AVG)	BILLABLE RATES (X 2.85)
Senior Vice President	$63.61	**$181.29**
Coastal Team Leader	$46.58	**$132.75**
Senior Coastal Engineer	$45.00	**$128.25**
Coastal Specialist	$38.00	**$108.30**
Coastal Engineer	$32.52	**$92.68**
Staff Engineer	$26.62	**$75.87**
Senior Scientist	$60.00	**$114.00**
Senior Scientist (SCUBA rate)	$120.00	**$141.50**
Junior Engineer / Engineering Tech.	$20.96	**$59.75**
Professional Surveyor & Mapper	$33.09	**$94.31**
CAD/GIS	$21.92	**$62.47**
Clerical	$21.10	**$60.14**
Professional Geologist	$35.77	**$101.94**

EQUIPMENT RATES

EQUIPMENT TYPE	RATE	RATE UNIT
ATM Survey Vessel w/DGPS[1]	$800	DAY
Johnboat (w/40 HP)	$200	DAY
RTK GPS	$450	DAY
Trimble Pro-XR	$125	DAY
Survey Vehicle	$100	DAY
Tide Gauge	$100	DAY
Turbidity Meter	$50	DAY
Underwater Still Camera w/Strobe	$75	DAY
SCUBA Gear	$100	DAY
Photocopies (8.5 x 11)	$0.12	COPY
Color Copies	$0.75	COPY
Standard Paper Plots (24 x 36)	$1.00	COPY
Heavy Duty Plots	$7.50	COPY

1. Survey Vessel Rate includes Hypack and Fathometer Systems

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