

PW- Engineering, Kian Movafaghi (Ext. 7818).



ROUTING FORM FOR TASK ORDERS - CITY MANAGER'S APPROVAL

Project/Contract Number:	11825 / 243-11357	CMO Lo	CMO Log #:				
Document Title:	Task Order No. 2 - Bay Repair/Replacement - Repair, Maintenance C	Annual Marine Faci		d: S original			
Department:	Public Works - Engin						
Corresponding CAM #:	14-0933						
Commission Date:	8/19/2014						
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Purpose: This Task Order is the Bayview Drive Seawall.			,				
poses damage to upland str							
	FUND	ING INFORMATIO)N				
CIP Funded Project:	Yes 🛚	No 🗌					
Amount Required by Task C							
Index/Sub Object Code:	P11825.331	1-6534					
Engineering Finance Approv	al Sign: Alpho	mbe (7/17/13	5)				
	APPROVAL R	OUTING -PUBLIC	WORKS	,			
		Approved:	Disapproved:	Signature/Initials			
Dane M. Esdelle, CGC, CMIT				The state of the s			
Annalise Mannix, P.E., Senio		X		shill and			
Pedram Zohrevand, Ph.D., F Engineer	P.E., Assistant City	- X		12 hrand Thois			
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Public Works Director			_ 00	valy many			
	APPROVAL ROUT	TING -FINANCE D	EPARTMENT	1 4190			
		Recommend Approva:	Disapproved:	Signature/Initials			
Kirk W. Buffington, C.P.M.,	Finance Director			M			
	APPROVAL ROUTI	NG – CITY ATTOR	NEY'S OFFICE				
		Approved as to form:	Disapproved:	Signature/Initials			
City Attorney				MW			
	APPROVAL ROUT	NG – CITY MANA	GER'S OFFICE				
		Approved:	Disapproved:	Signature/Initials			
Lee R. Feldman, ICMA-CM,	City Manager						
		City Manager	please route th	nis form along with Task			

TASK ORDER No. 2

Dated this 5th day of August, 2015

FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

BAYVIEW DRIVE SEAWALL REPAIR/ REPLACEMENT

PROFESSIONAL SERVICES

This Task Order is pursuant to the Agreement between the CITY of Fort Lauderdale, a Florida municipality, ("CITY") and Lakdas-Yohalem Engineering Inc, a Florida Company, ("CONSULTANT"), for Engineering Consultant Services dated August 19th, 2014 and expiring on August 19th, 2016 ("MASTER AGREEMENT").

PROJECT BACKGROUND

The Bayview Drive seawall is located east of Bayview Drive between NE 60th Street and NE 59th Street. Two locations along the existing seawall show signs of bulging towards the canal. Parts of the seawall have been tilted and multiple cracks and fractures are present. The damage may be due to tie-back rods being severed. Soil closest to the seawall has subsided, possibly passing through the holes in the wall into the canal. It would also appear that one outfall pipe has collapsed and fill material from the landside is migrating to the canal through the broken pipe.

The CONSULTANT services shall include design development services, bid services, and post-design services. The CONSULTANT is responsible for working in cooperation with officials of the CITY, or their designees, and with the CITY'S project managers in administering the design and construction of this project. The CONSULTANT will be responsible for the preparation of all design and construction documents and will coordinate all required permit applications.

SPECIFIC SCOPE OF SERVICES

The Scope of Services to be provided by CONSULTANT shall be as follows:

Task 2.1 – Condition Survey of Wall at Two Locations and damaged Culvert at south end of seawall

2.1A - Structural Condition Survey of the existing Seawall

 The CONSULTANT shall provide Structural Condition Survey of the existing Seawall at two (2) failed location walls with a minimum of 50'-0 at each location including condition of the cap, condition of the existing piles, condition of the seawall panels, failure mode and reason for the failure. Compile a letter report with findings, comments and recommendations.

2.1B - Structural Condition Survey of the existing Culvert

 The CONSULTANT shall identify the location and mode of failure of the existing culvert and coordinate with City underground pipe camera survey. Compile a letter report with findings, comments and recommendations.

2.1C - Geotechnical Services

• The CONSULTANT shall conduct a geotechnical investigation with two soil borings down to 30'-0 at each location. The CONSULTANT shall provide one (1) hard copy and one (1) CD of the report to the CITY's Project Manager. This report will be signed and sealed by a Professional Engineer registered in the State of Florida and shall contain, at a minimum, project vicinity map, plan view showing the location of borings, basis and results of tests performed, detailed description of findings, recommendations, and an executive summary.

2.1D – Topographical Survey

- The CONSULTANT shall obtain the services of a Florida Registered Surveyor to perform
 a topographic and/or bathometric survey to locate all above ground and underground
 features, and any additional data required for the completion of the design and
 permitting of the project. The CONSULTANT shall obtain a topographical survey of the
 canal bank and mud line at two locations 50'-0 long (15'-0 on each end of the failed wall
 section), and the invert elevation and rim elevation of the drainage structure with culvert
 out fall elevation.
- The CONSULTANT shall be responsible for survey control. The datum shall be as required by the CITY and Permitting Agencies (NAVD 88).

2.1 E – Underwater Survey

- Underwater Structural Condition Survey of Seawall panel, king piles and condition of the mud line adjacent to failed seawall; 100'-0 long at each location for a total of 200'-0.
- The CONSULTANT shall advise the CITY of any additional testing or surveys that may be required prior to the development of plans and specifications.

Task 2.2 - Conceptual Design (30% Design) Submittal

- The CONSULTANT shall perform the work to provide the conceptual design for the repair/replacement of the Bayview Drive seawall. The objective of this task is to define the design approach and intent, and to communicate the design assumptions to the CITY.
- The CONSULTANT shall identify key constructability issues.
- The CONSULTANT shall submit the 30% design for CITY review. The CITY shall inform the CONSULTANT within 14 days of receiving the submittal on how to proceed with the proposed design.
- The CONSULTANT shall provide two (2) original sets of the 30% design package (11" x17" plan sheets), together with an electronic copy CD.
- The CONSULTANT shall attend a meeting with the CITY to review the 30% design comments. The CONSULTANT shall incorporate the review comments into the 90% design documents. The CONSULTANT shall prepare and submit meeting minutes.

 The CONSULTANT shall prepare an estimate of probable costs based on the conceptual design.

Deliverables

The following deliverables shall be provided under this Task:

- Two (2) copies of the Conceptual Design.
- One (1) copy of the Conceptual Design review meeting minutes.
- One (1) copy of the Estimate of Probable Cost.

Task 2.3 - Final Design (90% Design and Final Construction Documents Submittal)

- The CONSULTANT shall complete the 90% design based on the outcome of the 30% review meeting. The 90% design includes, but not limited to, the following:
 - √ General Notes
 - √ Structural Analysis
 - ✓ Detail drawings
 - ✓ Material and construction specifications
 - ✓ Erosion & Sediment Control
- The CONSULTANT shall submit the 90% design for CITY review. The CITY shall inform the CONSULTANT within 14 days of receiving the submittal on how to proceed with the proposed design.
- The CONSULTANT shall provide two (2) original sets of the 90% design package (11" x 17" plan sheets), together with an electronic copy CD.
- The CONSULTANT shall attend a meeting with the CITY to review the 90% design comments. The CONSULTANT shall incorporate the review comments into the final contract documents. The CONSULTANT shall prepare and submit meeting minutes.
- Once all changes are made, or if no changes or corrections are necessary after CITY review, the CONSULTANT shall submit the Final Plans and Specifications, and any other document required by the CITY. The CONSULTANT shall provide two (2) original signed and sealed sets of the Final Design Package (24" x 36" plan sheets), together with an electronic copy CD.
- The CONSULTANT shall obtain all applicable permits from agencies having an interest
 or jurisdiction over this project. The CONSULTANT shall pay for all permit fees required
 by regulatory agencies for approvals directly attributable to the project. These permit
 fees do not include those permits required for the construction contractor. \$2,000.00
 allowance is reserved in this proposal for the permits.
- The CONSULTANT shall prepare a construction cost estimate based on the final design.

Deliverables

The following deliverables shall be provided under this Task:

- Two (2) copies of the 90% design drawings and specifications.
- Two (2) copies of the design calculations.
- Two (2) copies of the design data.
- One (1) copy of the 90% design review meeting minutes.
- One (1) copy of the Final Construction Cost Estimate.
- Two (2) copies of the signed and sealed Final Contract Documents, including drawings and specifications, plus one (1) CD.
- One (1) copy of all completed permit applications associate with the project.

Task 2.4 - Bidding Services

- During the bidding phase, the CONSULTANT shall make services available to the CITY for interpretation of the plans and specifications and review of prior approved equal product submittals.
- Bid Support includes the following:
 - ✓ Respond to bid questions, as needed.
 - ✓ Issuing the clarification or drawings/addendums as needed. Project manager will convey bidders concerns to the CONSULTANT.

Task 2.5 Construction Phase

The CONSULTANT shall provide the following services during the construction phase:

- CONSULTANT shall review all shop drawings and submittals within 10 business days of receipt of the item to determine compliance with the drawings and specifications. Assume 4 shop drawings packages.
- CONSULTANT shall provide a written response to all requests for information (RFIs) within seven (7) business days. Assume 5 RFI's.
- CONSULTANT shall review and respond to request for changes and claims and forward recommendations and cost evaluations to the CITY.
- CONSULTANT shall conduct site meetings and construction inspections. Provide pile driving inspection reports, and other inspection documentation. Provide Final Certification.
- CONSULTANT shall review as-built drawings provided by the contractor and provide written comments to the City.

PROJECT ASSUMPTIONS

- The design will be based on the federal, state, and local codes and standards in effect at the start of the project.
- The 30% and 90% design review meeting will be held at the City of Fort Lauderdale City Hall and attended by up to two (2) CONSULTANT staff.
- Existing seawall geometry assumed to be acceptable to all permitting agencies.

PERFORMANCE SCHEDULE

The CONSULTANT shall perform the services identified in Tasks 2.1 - 2.3 within 90 calendar days after the Notice to Proceed. Task 2.4 - 2.5 shall be determined based on the bid dates and construction award period.

PROJECT FUNDING

Performance of this project is at the CITY's discretion and may be contingent upon the CITY receiving funding and work shall not begin until the CITY provides a Purchase Order to CONSULTANT and issues a Notice to Proceed.

METHOD OF COMPENSATION

The services performed will be accomplished using the Not-to-Exceed method of compensation. The total hourly rates payable by the CITY for each of CONSULTANT's employee categories, reimbursable expenses, if any, and sub-consultant fees, if any, are shown on Exhibit "A" attached hereto and made a part hereof. Pay applications shall be detailed and submitted monthly.

TERMS OF COMPENSATION

Services will be provided for the following Not-to-Exceed amounts:

Task2.1 A & B – Condition Survey of wall at	\$4,847.50
two locations and damaged Culvert Survey Task 2.1C – Geotechnical Evaluation	\$4,220.00
(Tierra & LYE fees combined)	Ψ+,220.00
Task 2.1D – Topographical Survey	\$2,477.00
(CGA & LYE fees combined)	
Task 2.1E – Underwater Survey	\$1,330.00
(Diversified Diving & LYE fees combined)	
Task 2.2 - Conceptual Design (30%	
Design)	\$6,503.50
Task 2.3 – Final Design (90% Design and	
Final Construction Documents	\$6,969.50
Task 2.4 – Bidding Services	\$1,669.00
Task 2.5 – Construction Phase	\$14,061.00
Permit Allowance	\$2,000.00
Grand Total	\$44,077.50

CITY CONTACTS

Requests for payments should be directed to CITY of Fort Lauderdale Accounts Payable via e-mail to AcctsPayable@FortLauderdale.gov. All other correspondence and submittals should be directed to the attention of Dane Esdelle, Project Manager II, at the address shown below. Please be sure that all correspondence refers to the CITY project number and title as stated above.

CITY of Fort Lauderdale CITY Hall, 4th Floor Engineering 100 North Andrews Avenue Fort Lauderdale, FL 33301

CONSULTANT CONTACTS

Lakdas Nanayakkara – Principal/Project Manager Lakdas/Yohalem Engineering, Inc. 2211NE 54th Street Fort Lauderdale, FL 33308

Email: lye@lyengineering.com

Phone: 954-771-0630 Fax: 954-771-0519

SUBCONSULTANT CONTACTS

Contact Name - Mr. Steven Watts, PSM - Director of Survey

Calvin, Giordano & Associates, Inc.

Address: 1800 Eller Drive, Suite 600, Fort Lauderdale, Fl. 33316

Email: SWatts@cgasolutions.com

Phone: 954-921-7781 Fax: 954-921-8807

Contact Name – Francois Thomas, P.E.

Tierra South Florida, Inc.

Address: 2765 Vista Parkway, Suite 10, West Palm Beach, Fl. 33411

Email: fthomas@tierrasf.com

Phone: 561-687-8536 Fax: 561- 687-8570

Contact Name – Steve Saunders Diversified Diving Services

Address: 5190 NW 1st Ave, Fort Lauderdale, Fl. 33309

Email: diversifieddivingservice@gmail.com

Phone: 954-491-5296 Fax: 954-771-9088 IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first written above.

WITNESSES:

CITY OF FORT LAUDERDALE, a municipal corporation of the State of Florida.

DONNA M. SAPRUDA

Print Name

Print Name

(CORPORATE SEAL)

ATTEST:

Jeffrey A. Modarelli, Assistant City Clerk

Approved as to form:

Rhonda Montoya Hasan Assistant City Attorney

CONSULTANT

WITNESSES: Signature	Lakdas-Yohalem Engineering, Inc. A Florida Corporation
Print Name Signature LUAM NGUEN Print Name	by:
	ATTEST: Secretary (CORPORATE SEAL)
STATE OF FLORIDA COUNTY OF BROWARD The foregoing instrument was acknowledge 2015, by Lakdas Nanayakkara, P.E. as Florida Corporation authorized to transact to (SEAL) Notary Public State of Florida Beatriz Almansa My Commission FF 082749 Expires 01/12/2018	principal for Lakdas-Yohalem Engineering, Inc. a
Personally Known OR Produced Iden Type of Identification Produced	tification

Exhibit A - Work Break Down Fee Schedule

		_	rive Seawa	ill Repair/Re	eplacement											
City Pro	ject No.	11825	-					Com	suitant							
		Principal Engineer	Project Manager	Senior Engineer	Project Engineer	Sr. Designer/ Technician	Sr. Dratter	Sr. Inspector	Inspector	Quality Assurance	Clencal	Survey	Soil Boring Crew	Underwater Survey	SUB- TOTAL HOURS	SUB- TOTAL FEES
	Hourly Rate	\$198.75	\$132.50	\$138.00	\$117.00	\$86.00	\$86.00	\$88.50	\$83.00	\$117.00	\$57.00	\$135.00	\$200.00	\$160.00		,,,,,
Task 2.1 A & B	Condition Survey of wall at two locations and damaged Culvert Survey • Collect Existing Data • Review existing Construction documents • On Site Evaluation • Analyze cause of failure • Compile a report	10	8		10	6					2				36	\$4 847.50
2.1C	Geotechnical Evaluation Two soil borings down to 30'-0 at each location														6	\$795.00
2.1D	Lekdas/Yohalem Engineering Topographical Survey Survey of the canal bank and mud line at two location		6												2	\$265.00
2.1E	Lakdas/Yohalem Engineering Underwater survey 100'-0 at each location; total of 200'-0		2												4	\$530 00
Task 2.2	Lakdas/Yohalem Engineering Conceptual Design (30% Design)		4													
	Prelimanary Design 2.2A Seawall 2.2B Culvert Pipe	6	6		20	20					8				60	\$6,503.50
Task 2.3	Final Design (90% Design and Final Construction Documents) Structural Analysis Detailed Drawings Material and Construction Specification 2.3A Seawal 2.3B Culvert Pipe	6	6		22	28									62	\$6,969.50
Task 2.4	Bidding Prepare Bid Package (technical package only) Bid Review and Recommendations		2		12										14	\$1,669.00
Task 2.5	Construction Phase - Site Meeting - Reply to RFI's - Shop Drawing Review - Inspections		4 6 8 6		6 8 4			0	80		6				140	\$14,061.0
	Inspections Final Certification	4	4		4											
	TOTAL	\$5,167.50	\$8,215.00	\$0.00	\$10,062.00	\$4,644.00	\$0.00	\$0.00	\$6,640.00	\$0.00	\$912.00	\$0.00	\$0.00	\$0.00	324	\$35,640.5

Proie	ct name :	Bavview Driv	e Seawall Re	pair/Replacem	ent	:		
City Project No.		11825						
				SUBCO	ONSULTANTS			
		Project Manager	Sr. Drafter	Survey Crew	Soil Boring Crew	Underwater Survey	SUB- TOTAL HOURS	SUB-TOTAL FEES
	Hourly Rate	\$132.50	\$86.00	\$135.00	\$200.00	\$160.00		
2.1A	Geotechnical Evaluation Two soil borings down to 30'-0 at each location							
	Tierra of South Florida	10			10		20	\$3,325.00
2.1B	Topographical Survey Survey of the canal bank and mud line at two location							
	Calvin Giordano & Associates	4	7	8			19	\$2,212.00
2.1C	Underwater survey 100'-0 at each location; total of 200'-0					5	5	\$800.00
	Diversified Diving Services							
		\$1,855.00	\$602.00	\$1,080.00	\$2,000.00	\$800.00	44	\$6,337.00
	TOTAL	**************************************						1
HOU	RS	14	7	8	10	5		
FEES		\$1,855.00	\$602.00	\$1,080.00	\$2,000.00	\$800.00		

Exhibit B - Location Map



Exhibit C - Tentative Schedule

See below table for reference purposes only

Activity/Deliverable	Start Date	End Date
Notice to Proceed	08/17/2015	
Task 2.1A & B - Condition Survey	08/18/2015	09/04/2015
of wall at two locations & Culvert		
Task 2.1C - Geotechnical	08/18/2015	09/25/2015
Task 2.1D - Topographical Survey	08/18/2015	09/25/2015
Task 2.1E – Underwater Survey	08/18/2015	09/04/2015
Task 2.2 - Conceptual Design	08/31/2015	09/25/2015
Task 2.3 – Final Design	10/05/2015	10/23/2015
Task 2.4 – Bidding	10/30/2015	11/30/2015
Task 2.5 - Construction Phase	01/11/2016	03/31/2016