

# MEMORANDUM

MIAMI-DADE  
COUNTY

Date: September 4, 2007  
To: Honorable Chairman Bruno A. Barreiro  
and Members, Board of County Commissioners  
From: George W. Burges  
County Manager

Agenda Item No. 8(Q)3a

Subject: Request to Advertise for Oleta River State Park Mitigation - Project No: 2007.013; Contract No: 2007.013

## Recommendation

This Request to Advertise for Construction contract has been prepared by the Miami-Dade Seaport Department and is recommended for approval.

## Scope

PROJECT NAME: Oleta River State Park Mitigation

PROJECT NO: 2007.013

CONTRACT NO: 2007.013

PROJECT DESCRIPTION: The Seaport Department has the need to secure one (1) General Contractor to mitigate 62.5 acres with red mangroves (*Rhizophora mangle*) mitigation within the Oleta River State Park in North Miami, Florida. Work conducted within the park will include the creation/restoration of 42.5 acres of red mangrove swamp, tidal streams and tidal pools and the enhancement of 20.0 acres of impounded red mangrove through restored hydration. Of the 42.5 acres of habitat to be restored, 25 acres will be planted and the remaining 17.5 acres will vegetate via natural recruitment (not planted) or will be planted using volunteers (local high school students or other volunteer programs). This project has stringent grading requirements (within 0.10 of a foot) and detailed tidal pools and flushing channels to ensure wetland survival. Additionally, the Port will be creating and installing a minimum of two bi-lingual environmental education signs at site locations approved by the park manager. Mitigation activities will be conducted according to the requirements of a Florida Department of Environmental Protection (FDEP) Consent Order (OGC File No. 01-0647-13-DF), executed on May 7, 2002 and associated environmental permits.

PROJECT LOCATION: 3400 NE 163 Street, North Miami, FL 33160

PROJECT SITES:	<u>LOCATION</u>	<u>DIST</u>	<u>ESTIMATE</u>	<u>T-S-R</u>
	3400 NE 163RD ST 33160	4	\$2,000,000.00	52-15-42

PRIMARY COMMISSION DISTRICT: District 4 Sally A. Heyman

APPROVAL PATH: Board of County Commissioners

USING DEPARTMENT: Miami-Dade Seaport Department

MANAGING DEPARTMENT: Miami-Dade Seaport Department

**Fiscal Impact / Funding Source**

**FUNDING SOURCES:**            **SOURCE**  
 2006 Seaport Loan  
 Federal reimbursement for this project is being requested through a legislative request pending approval of the Water Resource Development Act.

**PTP FUNDING:**                No

**GOB FUNDING:**                No

<b>CAPITAL BUDGET PROJECTS:</b>	<b><u>BUDGET PROJECT / DESCRIPTION</u></b>	<b><u>RTA ESTIMATE</u></b>
	6432030-DREDGING - PHASE II MITIGATION Book Page: 129    Funding Year: Adopted 2006-07	\$100,000.00
	6432030-DREDGING - PHASE II MITIGATION Book Page: 129    Funding Year: Adopted 2006-07 Capital Budget Book for funding in 2007-08	\$250,000.00
	6432030-DREDGING - PHASE II MITIGATION Book Page: 129    Funding Year: Adopted 2006-07 Capital Budget Book for funding in 2008-09	\$350,000.00
	6432030-DREDGING - PHASE II MITIGATION Book Page: 129    Funding Year: Adopted 2006-07 Capital Budget Book for funding in 2009-10	\$450,000.00
	6432030-DREDGING - PHASE II MITIGATION Book Page: 129    Funding Year: Adopted 2006-07 Capital Budget Book for funding in 2010-11	<u>\$850,000.00</u>

Project Totals:    \$2,000,000.00

**PROJECT TECHNICAL CERTIFICATION REQUIREMENTS:**    General Contractor

**ESTIMATED CONTRACT PERIOD:**            365 Calendar Days

**ESTIMATED CONTINGENCY PERIOD:**        36

**IG FEE INCLUDED IN BASE CONTRACT:**    Yes

**ART IN PUBLIC PLACES:**                    No

**BASE ESTIMATE:**                            \$1,769,911.51

<b>CONTINGENCY ALLOWANCE (SECTION 2-8.1 MIAMI DADE COUNTY CODE):</b>	<b>TYPE</b>	<b>PERCENT</b>	<b>AMOUNT</b>	<b>COMMENT</b>
	Renovation	10%	\$176,991.15	

**PERMIT FEES :**                                \$17,699.11                                1.00%

2

**BONDS & INSURANCE :** \$35,398.23 2.00%

**TOTAL DEDICATED ALLOWANCE:** \$53,097.34

**COST ESTIMATE:** \$2,000,000.00

**Track Record / Monitor**

**EXPLANATION:**

**MINIMUM QUALIFICATIONS EXCEED LEGAL REQUIREMENTS:** No

**REVIEW COMMITTEE:** MEETING DATE: 3/7/2007 SIGNOFF DATE: 3/7/2007

**RESPONSIBLE WAGES:** Yes

<b>REVIEW COMMITTEE ASSIGNED CONTRACT MEASURES:</b>	<b>MEASURE GOAL</b>	<b>COMMENT</b>
	CSBE 0.00% No Measure	
	CWF 0.00% Not Applicable: Not in DTA	

**MANDATORY CLEARING HOUSE:** N/A

<b>CONTRACT MANAGER NAME/PHONE/EMAIL:</b>	Becky Hope	(305) 347-4972	bhope@miamidade.gov
---	------------	----------------	---------------------

<b>PROJECT MANAGER NAME/PHONE/EMAIL:</b>	Maria Cerna	(305) 347-4916	MCerna@miamidade.gov
--	-------------	----------------	----------------------

**Background**

**BACKGROUND:**

On April 2, 1999, the Miami-Dade County Department of Environmental Resources Management ("DERM") issued a Notice of Violation to the Miami-Dade County Seaport Department and other parties for approximately three (3) acres of unauthorized dredging along the southern boundary of the Central Turning Basin in the South Channel, Port of Miami. On April 27, 1999, the Florida Department of Environmental Protection ("FDEP") issued a Warning Letter to the Miami-Dade County Seaport Department for the same unauthorized activity.

Subsequent assessment of the violation area determined that the County's dredging contractor, Dutra Construction Co., Inc. ("Dutra"), impacted approximately 3.5 acres of low to moderate density seagrasses outside of the permitted dredging area. This violation likely occurred between May 1995 and August 1996. Although the contractor committed the violation, under applicable environmental law, the Seaport Department, as the permittee and project owner, has liability for the contractor's permit violations.

Since notice of the violations, the Seaport Department has worked closely with the FDEP and DERM to develop a mitigation plan acceptable by all parties. On April 9, 2002, the Board of County Commissioners passed Resolution R-367-02, authorizing the execution of a Consent Order between the State of Florida Department of Environmental Protection and Miami-Dade County for settlement of Miami Harbor dredging permit violations.

The Consent Order requires mitigation of 62.5 acres with red mangroves (Rhizophora mangle) within the Oleta River State Park in North Miami, Florida. Work conducted within the park will include the creation/restoration of 42.5 acres of red mangrove swamp, tidal streams and tidal pools and the enhancement of 20.0 acres of impounded red mangrove through restored hydration. Of the 42.5 acres of habitat to be restored, 25 acres will be planted and the remaining 17.5 acres will vegetate via natural recruitment or will be planted using volunteers. Additionally, the Port will be creating and installing a minimum of two bi-lingual environmental education signs at site locations approved by the park manager. Mitigation activities will be conducted according to the requirements of a Florida Department of Environmental Protection (FDEP) Consent Order (OGC File No. 01-0647-13-DF), executed on May 7, 2002 and associated environmental permits.

This Request to Advertise is critical to the Seaport Department as the final design has been accepted and approved by all entities, including the Oleta River State Park Manager, and all associated environmental permits have now been obtained for this project. Timely implementation is necessary for the Seaport Department to comply with the terms of the Consent Order and resolve all liabilities for the Port's contractor's Phase II dredging violations with respect to FDEP and DERM.

BUDGET APPROVAL  
FUNDS AVAILABLE:

  
OSBM DIRECTOR      6-1-07  
DATE

APPROVED AS TO LEGAL  
SUFFICIENCY:

  
COUNTY ATTORNEY      6-5-07  
DATE

CAPITAL  
IMPROVEMENTS  
CONCURRENCE:

  
Roger J. Hermsdorf  
OCI DIRECTOR      6-5-07  
DATE

  
ASSISTANT COUNTY  
MANAGER      6-5-07  
DATE

CLERK DATE

\_\_\_\_\_  
DATE

STRATEGIC AREA: Transportation  
 DEPARTMENT: Seaport

\*\*\*\*\* FUNDED PROJECTS \*\*\*\*\*  
 (dollars in thousands)

**STOLEN AUTO RECOVERY (STAR) UNITS FOR NEW GATEWAY**

PROJECT # 644010

DESCRIPTION: Remove, reinstall, and purchase two STAR units for new gateway

LOCATION: Dante B. Fascell Port of Miami-Dade  
 Dante B. Fascell Port of Miami-Dade

DISTRICT LOCATED: 5  
 DISTRICT(s) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: \$100

REVENUE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
FDOT Funds	450	4,440	0	0	0	0	0	0	4,890
Florida Ports Trust Bond Program	100	0	0	0	0	0	0	0	100
Seaport Bonds/Loans	250	3,331	0	0	0	0	0	0	3,581

**TOTAL REVENUE:** 800 7,771 0 0 0 0 0 0 0 8,571

EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Construction	800	7,771	0	0	0	0	0	0	8,571

**TOTAL EXPENDITURES:** 800 7,771 0 0 0 0 0 0 0 8,571

**SURFACE PARKING LOT TERMINAL D**

PROJECT # 643700

DESCRIPTION: Construct a surface parking lot to service Terminal D

LOCATION: Dante B. Fascell Port of Miami-Dade  
 Dante B. Fascell Port of Miami-Dade

DISTRICT LOCATED: 5  
 DISTRICT(s) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

REVENUE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Seaport Bonds/Loans	0	1,500	0	0	0	0	0	0	1,500

**TOTAL REVENUE:** 0 1,500 0 0 0 0 0 0 0 1,500

EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Construction	0	1,500	0	0	0	0	0	0	1,500

**TOTAL EXPENDITURES:** 0 1,500 0 0 0 0 0 0 0 1,500

**Seaport Dredging**

PROJECT # 6432030

**DREDGING - PHASE II MITIGATION**

DESCRIPTION: Plant 45 acres of mangroves to mitigate Phase II dredging violations

LOCATION: Oleta River  
 North Miami

DISTRICT LOCATED: 4  
 DISTRICT(s) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

REVENUE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Seaport Bonds/Loans	0	100	250	350	450	1,350	0	0	2,500

**TOTAL REVENUE:** 0 100 250 350 450 1,350 0 0 2,500

EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Construction	0	100	250	350	450	1,350	0	0	2,500

**TOTAL EXPENDITURES:** 0 100 250 350 450 1,350 0 0 2,500



**Dept. of Business Development  
Project Worksheet**

Project/Contract Title: CONSTRUCTION SERVICES FOR OLETA RIVER STATE PARK MITIGATION **RC Date:** 03/07/2007  
 (SIC 16) 3-04  
 Project/Contract No: 07.013 **Funding Source:**  
 Department: SEAPORT SEAPORT **Item No:**  
 Estimated Cost of Project/Bid: \$2,000,000.00 **Resubmittal Date(s):**  
 Description of Project/Bid: THE SEAPORT DEPARTMENT HAS THE NEED TO SECURE ONE (1) GENERAL CONTRACTOR TO CONSTRUCT 62.5 ACRES OF RED MANGROVE (RHIZOPHORA MANGLE) MITIGATION WITHIN THE OLETA RIVER STATE PARK IN NORTH MIAMI, FLORIDA.

**Contract Measures Recommendation**

Measure	Program	Goal Percent
No Measure		

**Reason for Recommendation**

An analysis of the trades, as well as a CSBE availability indicate that no measure is appropriate for this project due to insufficient availability.  
 CWP Not Applicable: Not in DTA

**Analysis for Recommendation of Goal**

Subtrade	Cat.	Estimated Value	% of Items to Base Bid	Availability
		\$0.00		0
<b>Total</b>		\$0.00		

Living Wages: YES  NO  Highway: YES  NO  Heavy Construction: YES  NO   
 Responsible Wages: YES  NO  Building: YES  NO

Ordinance 90-143 is applicable to all construction projects over \$100,000 that do not utilize Federal Funds

**REVIEW COMMITTEE RECOMMENDATION**

Tier 1 Set Aside \_\_\_\_\_  
 Set Aside \_\_\_\_\_ Level 1 \_\_\_\_\_ Level 2 \_\_\_\_\_ Level 3 \_\_\_\_\_  
 Trade Set Aside (MCC) \_\_\_\_\_ Goal \_\_\_\_\_ Bid Preference \_\_\_\_\_  
 No Measure  Deferred \_\_\_\_\_ Selection Factor \_\_\_\_\_  
 \_\_\_\_\_ 3/7/07 \_\_\_\_\_  
 Chairperson, Review Committee Date County Manager Date

6

RECEIVED  
DEPT. BUSINESS  
2007 FEB 23 AM 11:22



# Memorandum

BA

**Date:** February 22, 2007

**To:** Marsha Jackman, Director  
Department of Business Development

ENTERED  
2/23/07

**From:** Bill Johnson, Director  
Seaport Department

**Subject:** Review Committee Recommendation for Construction Services for  
Oleta River State Park Mitigation  
POM Project No. 07.013

Your assistance in reviewing this request and forwarding the attached recommendation to the Review Committee for consideration at its scheduled meeting of February 28, 2007, is respectfully requested.

The Seaport Department has the need to secure one (1) General Contractor to construct 62.5 acres of red mangrove (*Rhizophora mangle*) mitigation within the Oleta River State Park in North Miami, Florida. Work conducted within the park will include the creation/restoration of 42.5 acres of red mangrove swamp, tidal streams and tidal pools and the enhancement of 20.0 acres of impounded red mangrove through restored hydration. Of the 42.5 acres of habitat to be restored, 25 acres will be planted and the remaining 17.5 acres will vegetate via natural recruitment or will be planted using volunteers. This project has stringent grading requirements (within .10 of a foot) and detailed tidal pools and flushing channels to ensure wetland survival. Additionally, adjacent mangroves and other environmentally sensitive areas must be preserved during construction as prescribed in the permits and construction drawings. The creation and installation of a minimum of two bilingual environmental education signs at site locations to be approved by the park manager is also part of this project. Mitigation activities will be conducted according to the requirements of a Florida Department of Environmental Protection (FDEP) Consent Order (OGC File No. 01-0647-13-DF), DOA permit SAJ-1996-5842, FDEP permit 13-0235046-001, and DERM Class 1 permit CC05-285. Specific mitigation activities are described on the attached detailed scope of services.

The construction cost estimate for this project is approximately \$2,000,000, which includes contingency and mobilization.

Should you have any questions, please feel free to contact Mr. Fernando Alonso, Assistant Port Director for Engineering & Development at (305) 347-4802.

Attachments

7

## Scope

The Port of Miami is proposing to construct 62.5 acres of red mangrove (*Rhizophora mangle*) mitigation within the Oleta River State Park in North Miami, Florida. Work conducted within the park will include the creation/restoration of 42.5 acres of red mangrove swamp, tidal streams and tidal pools and the enhancement of 20.0 acres of impounded red mangrove through restored hydration. Of the 42.5 acres of habitat to be restored, 25 acres will be planted and the remaining 17.5 acres will vegetate via natural recruitment or will be planted using volunteers. Additionally, the Port will be creating and installing a minimum of two bilingual environmental education signs at site locations approved by the park manager. Mitigation activities will be conducted according to the requirements of a Florida Department of Environmental Protection (FDEP) Consent Order (OGC File No. 01-0647-13-DF), DOA permit SAJ-1996-5842, FDEP permit 13-0235046-001, and DERM Class 1 permit CC05-285. Specific mitigation activities are described as follows:

### Pavilion Site (site 1 – project location map)

The 8.80-acre Pavilion site is located adjacent to the Intracoastal Waterway, north of an existing park pavilion area. An isolated, mangrove-fringed channel in the southern extreme of the site intersects the Pavilion site. Scattered portions of the site are occupied by small mangrove stands and isolated spoil piles. The majority of the upland is vegetated by Australian pine (*Casuarina sp.*), seaside mahoe (*Thespesia populnea*) and various other exotic species.

While working around the isolated mangrove stands and fringe areas, the upland areas will be scraped down to an elevation of 1.00 NGVD and a network of tidal creeks and pools will be constructed for tidal circulation and habitat enhancement.

The excavated material from this site, as well as the other restoration sites, will be used at the Terama site to fill the deep water channel. The existing mangrove fringe, inclusive of a 3-foot wide berm, along the Intracoastal Waterway will be left in place to insure the stability of the shoreline. The existing shoreline riprap near the southern boundary of the site will be left in place to assist in erosion protection.

The four hydrological connection points (connections to the intracoastal waterway) were chosen based upon breaks in the existing mangrove fringe and the absence of seagrasses or other benthic communities in the waterward connection areas.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant.

### East and West Trail Sites (site 2 – project location map)

The 0.58-acre East Trail site and the 0.81-acre West Trail site are located immediately northwest of the Pavilion site. The East Trail site currently consists of a

dense stand of Australian pine with a small, longitudinal stand of mangroves near the center of the site. The existing mangrove area is partially hydrated at extreme high tides by a culvert connection to a northerly mangrove area. The area will be scraped down to 1.00 NGVD and connected hydraulically to an existing flushing channel in the northerly mangrove area. The hydraulic connection has been positioned to avoid impacts to an existing upland planting area (southeast corner of the existing mangrove shoreline) and to mature mangrove specimens within the wetland proper. The existing stand of mangrove trees located in the scrape down area will be preserved through incorporation into the site design. A simplified internal network of tidal creeks will be constructed for tidal circulation and habitat enhancement.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant. In addition to the creation of mangrove habitat, all upland and transitional side slopes will be planted with a variety of native plant species.

The West Trail site is positioned along the western edge of the existing mangrove area. Existing vegetation is limited to scattered trees and herbaceous ground cover. The existing elevation will be scraped down to 1.00 NGVD to effect an expansion of the existing mangrove area.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant.

#### **West and East Cabin Sites (sites 3 and 5 – project location map)**

The 1.75-acre West Cabin site and the 0.50 acre East Cabin site are located southwest of the Trail sites and east of the park's rental cabins. Existing conditions within the West Cabin site include scattered spoil piles and partial coverage by Australian pine and other, various exotic species. The site will be scraped down to an elevation of 1.00 NGVD and a network of tidal creeks and pools will be constructed for tidal circulation and habitat enhancement. The hydraulic connection points were selected at points of narrowed mangrove coverage to minimize mangrove fringe impacts. No seagrasses or other benthic communities are present in the open water areas adjacent to this site. A 20-foot wide walkway near the southern end of the mitigation area has been incorporated into the design to provide future access to a proposed bridge structure over the adjacent waterway. Additionally, a 15-foot utility easement at the northern end of the mitigation area will be preserved for utility protection and access. Exotic vegetation will be removed from each of these areas during the land clearing process.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant.

The East Cabin site, located across a tidal channel from the West Cabin site, consists of scattered spoil piles and is vegetated by Australian pine. The site will be

scraped down to an elevation of 1.00 to create a linear restoration site adjacent to the existing tidal channel.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant.

**Bay Vista Site (site 4 – project location map)**

The 5.64-acre Bay Vista site is located at the southwest corner of the park, adjacent to the Florida International University (FIU) Campus and immediately east of Bay Vista Road. Existing site vegetation is dominated by a dense coverage of Australian pine. Scattered spoil piles and other debris were also observed. The site will be scraped down to an elevation of 1.00 NGVD and a network of tidal creeks and pools will be constructed for tidal circulation and habitat enhancement. The hydraulic connection points were selected at points of narrowed mangrove coverage to minimize mangrove fringe impacts. No seagrasses or other benthic communities are present in the open water area adjacent to this site. An existing 15-ft. water main easement near the eastern end of the site will be used as a future access corridor between the FIU campus and parklands.

The created mangrove habitat will be allowed to recruit naturally or may be planted by community volunteers at the discretion of the applicant.

**Terama Site (site 6 – project location map)**

The 45-acre Terama site includes 24.5 acres of upland, 0.5 acres of river bottom and 20.0 acres of impounded mangrove habitat. Current site conditions include a deep water channel approximately 1600 ft long and upland areas that are vegetated by Australian pine, Brazilian pepper (*Schinus terebinthifolius*), seaside mahoe and various other exotic species. The majority of upland areas will be scraped down to an elevation of 1.00 NGVD and a network of tidal creeks and pools will be constructed for tidal circulation and habitat enhancement. The design of the Terama site also incorporates mud flats and a deepwater pool for further diversification and habitat value. A section of upland in the east-central portion of the site will be preserved as upland for future primitive camp site development.

Excavated material from each of the proposed restoration sites will be placed into the Terama deep water canal to an elevation of 1.00 NGVD to facilitate planting and natural recruitment of red mangroves. Clean fill material may be imported from off-site, if necessary. Prior to canal filling, an earthen berm will be constructed at the southern terminus of the canal to contain fill material and to prevent the off-site migration of turbid water. The Marine Fauna Protection Plan, as incorporated into the DERM Class 1 permit, must be followed during the filling of the canal.

Existing shoreline bulkheads and concrete slabs will be demolished and used as fill, if suitable. Existing shoreline structures that can not be demolished without significant damage to the existing mangrove fringe will be left in place. Existing wooden pilings and other waterward debris will be removed and properly disposed of off-site.

Additional flushing channels will be constructed to connect to the historical stream beds of the impounded mangrove area at the north end of the Terama site. The creation of these connections will effectively restore the cyclic tidal regime to this historically impacted system.

Planting within the created mangrove habitat will consist of 40 percent (10 acres) planted with one gallon, well rooted, nursery grown red mangroves planted on 3 foot centers. The remaining 60 percent (15 acres) will be planted with one-year old, tube cone, red mangroves on 3 foot centers.

#### **Additional Considerations – All Sites**

Best management practices will be used at all work sites during construction. Silt screens and/or floating turbidity barriers will be installed along existing shorelines prior to any excavation or filling activities to prevent violations of State Water Quality Standards. Sediment and turbidity control devices will remain in place until construction is complete, sideslopes are stabilized and turbidities subside.

Any native upland trees and mangroves which must be removed to accomplish the restoration construction will be relocated to appropriate transplanting locations, whenever feasible.

All excavation and filling activities associated with this project will be conducted from land with the use of conventional equipment such as backhoes and dump trucks. All equipment will be transported to and from the site via existing roadways. All vegetation and other debris removed during the construction effort will be collected and properly disposed of off site.

The contractor will be responsible for all monitoring, record drawings and as-built certifications for the project, when completed.

The contractor will be required to pull additional permits from the City of North Miami and North Miami Beach, although both municipalities have reviewed/approved the project.

**Oleta River State Park Mitigation**  
**Miami-Dade County Seaport Department**  
**Miami, Florida**

**COMMUNITY WORK FORCE BREAKDOWN ESTIMATE**

Division of Work:	Construction Cost	Days on Project	Number of Craft	Craft Man-hours
Mobilization/Demobilization @ 5%	\$79,874.52	12	5	500
Supervision & Contingency @ 10%	\$170,931.47	120	2	1,350
Bond @ 2%	\$31,949.81			
<b>Division 2 - Site Construction</b>				
Concrete Demolition	\$20,000.00	12	4	320
Remove Underground Fuel Tanks	\$20,000.00	10	4	240
Remove Piling and Docks	\$10,000.00	5	3	120
Import Fill	\$86,989.00	8	4	180
Finish Grading/Surface Preparation	\$135,520.00	36	5	1,400
Mangrove Planting, Contract	\$542,080.00	60	8	3,800
On-Site Excavation - Terama Site	\$233,933.33	55	4	1,700
On-Site Excavation - Pavillion Site	\$114,782.50	25	4	830
On-Site Excavation - Trail Site	\$5,808.22	4	2	44
On-Site Excavation - Bayvista Rd. Site	\$51,397.50	15	4	370
On-Site Excavation - East Cabin Site	\$5,557.50	3	2	40
On-Site Excavation - West Cabin Site	\$27,460.00	7	4	200
Culvert Modification/Removal	\$3,361.50	3	2	44
Tree Transplanting	\$14,900.00	5	3	120
Mulch Relocation	\$7,300.00	5	3	120
Erosion Protection	\$21,392.67	5	2	50

2

## Address Information

Input Address	Output Address	X Coordinate	Y Coordinate
3400 NE 163 ST 33160	3400 NE 163RD ST 33160 33160	940276.029041157	580624.207071152

## Census Information

Tract	Block	Population	Unemployment Rate	Percent LowMod
000106	3	5415	n/a	n/a
000109	2	333	n/a	n/a

## Commission District Information

Name	Number
Sally A. Heyman	4

[Please Go Back To Continue Geocoding]