

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2010	2011	2012	2013	2014
Capital Expenditures	23,094,378	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	(10,757,904)	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	12,336,474 *	_____	_____	_____	_____
# ADDITIONAL FTE POSITIONS (Cumulative)	_____	_____	_____	_____	_____

Is Item Included in Current Budget? Yes _____ No X _____
 Budget Account No.: Fund _____ Department _____ Unit _____ Object _____
 Program _____

B. Recommended Sources of Funds/Summary of Fiscal Impact

There is no fiscal impact until State funding is appropriated and a project agreement is executed. Potential fiscal impact to the County is \$12,336,474. The State and Federal share of each project's costs would be allocated to the County on a reimbursement basis. If State funds were to be appropriated for the projects and County funding is found to be insufficient to match the State-funded project, other funding sources could be considered, such as short-term borrowing, securing bonds, or delaying the design and construction of other projects already funded.

C. Department Fiscal Review: *JF*

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Administrator Comments:

* Only a portion of the match has been identified in the proposed FY2010 Budget.

<p><i>[Signature]</i> 8-24-09 OFMB <i>[Signature]</i> SN ON 8/14/09 8/12/09 8/12/09</p>	<p><i>[Signature]</i> 8/24/09 Contract Administrator <i>[Signature]</i> 8/24/09</p>
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B. Legal Sufficiency: *once a project agreement is made available, CDC will review it.*
[Signature] 8-26-09
 Assistant County Attorney

C. Other Department Review:

 Department Director

RESOLUTION NO. 2009-_____

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**A RESOLUTION OF THE BOARD OF COUNTY
COMMISSIONERS OF PALM BEACH COUNTY,
FLORIDA, REQUESTING THE STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION TO SUPPORT APPROPRIATION OF
FUNDS WITHIN THE BEACH EROSION CONTROL ASSISTANCE
PROGRAM FOR FISCAL YEAR 2010-11.**

WHEREAS, the Board of County Commissioners of Palm Beach County, Florida, is committed to a program of coastal restoration and preservation; and

WHEREAS, Palm Beach County wishes to effectively address beach erosion by construction of shore protection projects and restoration of its dunes; and

WHEREAS, Palm Beach County has a need to perform engineering design, environmental studies and monitoring of shore protection projects; and

WHEREAS, Palm Beach County has developed and funded a Shore Protection Program to act as the local sponsor for coastal projects; and

WHEREAS, the projects listed below are consistent with the coastal element of the Palm Beach County's Comprehensive Plan; and

WHEREAS, Palm Beach County has the ability and intention of providing the local cost share of eligible coastal projects using a combination of tourist development taxes, interest and reserve funds; and

WHEREAS, the Bureau of Beaches and Coastal Systems is preparing their Beach Erosion Control Long-Range Budget Plan to develop the Fiscal Year 2010-11 prioritized list of beach erosion control projects; and

WHEREAS, the public work projects listed below are eligible within the State of Florida's Beach Erosion Control Assistance Program under the provisions of Section 161.101, Florida Statutes

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, THAT:

Section 1: Palm Beach County is requesting that the State appropriate \$1,991,110 for the Jupiter/Carlin Shore Protection Project, \$550,000 for the Jupiter Beach Erosion Control Project, \$157,750 for the Juno Beach Shore Protection Project, \$3,135,554 for the

1 Singer Island Shore Protection Project, \$4,650,000 for the Central Palm Beach County
2 Comprehensive Erosion Control Project (formerly known as the South Palm Beach Shore
3 Protection Project), \$52,000 for implementation of the South Lake Worth Inlet Management
4 Plan, and \$221,490 for the Ocean Ridge Shore Protection Project.

5 Section 2:

6 The foregoing Resolution was offered by Commissioner _____, who
7 moved its adoption. The motion was seconded by Commissioner _____,
8 and upon being put to a vote, the vote was as follows:

- 9 Commissioner John F. Koons, Chairman _____
- 10 Commissioner Burt Aaronson, Vice Chair _____
- 11 Commissioner Karen T. Marcus _____
- 12 Commissioner Shelley Vana _____
- 13 Commissioner Steven L. Abrams _____
- 14 Commissioner Jess R. Santamaria _____
- 15 Commissioner Pricilla A. Taylor _____

16 The Chairman thereupon declared the Resolution duly passed and adopted this
17 _____ day of _____, 20__.

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APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

**PALM BEACH COUNTY, FLORIDA BY ITS
BOARD OF COUNTY COMMISSIONERS**

Sharon R. Bock, Clerk & Comptroller

By _____
Assistant County Attorney

By _____
Deputy Clerk

RESOLUTION NO. 2009-_____

**A RESOLUTION OF THE BOARD OF COUNTY
COMMISSIONERS OF PALM BEACH COUNTY,
FLORIDA, REQUESTING THE STATE OF FLORIDA DEPARTMENT OF
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- 11 Commissioner Karen T. Marcus _____
- 12 Commissioner Shelley Vana _____
- 13 Commissioner Steven L. Abrams _____
- 14 Commissioner Jess R. Santamaria _____
- 15 Commissioner Pricilla A. Taylor _____

16 The Chairman thereupon declared the Resolution duly passed and adopted this
17 _____ day of _____, 20__.

19 APPROVED AS TO FORM AND
20 LEGAL SUFFICIENCY

**PALM BEACH COUNTY, FLORIDA BY ITS
BOARD OF COUNTY COMMISSIONERS**

Sharon R. Bock, Clerk & Comptroller

21
22
23
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25 By _____
26 Assistant County Attorney

By _____
Deputy Clerk

6

JUPITER/CARLIN SHORE PROTECTION PROJECT

Location:

Palm Beach County, R13.5 - R19 (fill area) location map attached

Project Description:

Shoreline protection for 1.08 miles of beach adjacent to the Jupiter Inlet in Palm Beach County. The beach was first nourished in 1995 and renourished in 2002. A primary dune was reestablished along the project area. Permit-required post-construction monitoring is ongoing. A second renourishment was planned for winter 2010/2011, however budgetary constraints and Federal reporting requirements have pushed this back to November 2011. Design and permitting work for this renourishment is underway.

The borrow area for this project is located approximately 8 miles to the south, offshore of Singer Island, FL. This borrow area will be used for the upcoming Juno Beach shore protection project, scheduled to begin construction in November, 2009. Once the Juno project is complete, additional geotechnical work will be conducted on the borrow area to better define the sand remaining and to make most efficient use of remaining resources.

Use of Program Funds:

Funds requested for FY 2010-11 will be used to complete project design and permitting (including the additional borrow area investigation and 934 Economic study), and for construction of the beach fill. Eligible aerial surveys and regional (profiles and hydrographic) monitoring will also be funded. Because of the importance of this beach as sea turtle nesting habitat, it is expected that one year of pre-construction surveys will be required to document sea turtle and shorebird activity on this beach and funding is requested for these activities as well.

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Kimberly Miranda; 561-233-2465; Kmiranda@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: Both previous nourishments of the project and the 2007 emergency dune restoration were funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding. Emergency dune restoration as a result of impacts due to Sub-Tropical Storm Andrea was cost-shared through DEP funding agreement 07PB2. DEP grant agreement #09PB1 currently provides funding for Design and Permitting on the renourishment project for this project.

Federal Authorization: The project was authorized in 1962, WRDA 1986 & WRDA 1996. A PCA for nourishment was signed on March 15, 1995. The project currently has a Federal cost share of 54%. The sponsor is seeking approval for federal participation in design & construction of the next scheduled renourishment, and a Section 934 report is being prepared to this effect.

Eligibility Calculation:

Project length in feet		<u>5560'</u>
Project length within ½ mile of primary public beach access		<u>5560'</u>
Length of Project Shoreline zoned commercial/recreational		<u>4009'</u>
Jupiter Beach Park	1117' in project area	169 parking spaces
Carlin Park	2502' in project area	532 parking spaces
Jupiter Beach Resort	390'	158 guest rooms

Public lodging license documentation as provided by the FL Department of Business and Professional Regulation is attached.

Supporting Data:

Severity of Erosion: The entire project area is designated as critically eroded by the Department of Environmental Protection. The historic 30-year erosion rate along the project shoreline was computed to be 1.9 ft/yr (Aug 1996 GDM). However, based on increasing erosional trends and the development of a "hot spot" in Jupiter Beach Park, this will be recalculated as part of the 934 economic feasibility study.

Threat to Upland Structures: Over 30% of the project area includes habitable structures, including one hotel and one condominium. According to the FDEP MapDirect Web Mapping site, all of these properties are seaward of the Coastal Construction Control Line. There is one bathroom building in Jupiter Beach Park which was closed for nearly a year following Sub-Tropical Storm Andrea due to building damage and dune collapse. This building is now protected by a sea wall.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Approximately 70% of the project area lies within two county parks. The Jupiter Beach Resort, with 159 guest rooms, fronts 8% of the project length. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections, and Indiantown Road which runs E-W and is centrally located within the project area. Threatened and endangered marine turtles utilize the entire project area for nesting, however this beach is not a designated marine turtle refuge. The dune in Carlin Park provides habitat for one of the few remaining colonies of endangered Beach Jacquemontia (*Jacquemontia reclinata*) in Palm Beach County. The attached map identifies public beach access points with associated parking spaces, as well as the location of the Beach Jacquemontia colony.

Project Performance: The original project design was based on the GDM & EIS. The project provides for greater than 15 year return interval storm protection. The dune within the project limits is stabilized with vegetation and walkovers and provides enhanced shore protection consistent with the natural system. The extreme north end of the project (R-13 through R-15) experienced a near total loss of berm and dune in May 2007 due to wind and waves associated with Sub-Tropical Storm Andrea. Portions of this beach have not recovered fully from the hurricanes of 2004 and 2005 (Taylor Engineering, Jupiter Carlin Shore Protection 24-month monitoring report, August 2006), and additional solutions are being sought for this beach.

The majority of the project area is holding up beyond the estimated seven-year lifespan, and will not be renourished until at least 2011 (nine years after 1st renourishment).

Innovative Applications: The original project was constructed using conventional beach fill methods and design. It is anticipated that the upcoming renourishment will utilize similar technology; however, a feasibility study is underway to provide options to extend the required nourishment intervals and address a "hot spot" in the north end of the project area. Extending the nourishment interval will minimize the environmental impacts from maintaining the beach, especially in an area of high sea turtle nesting densities.

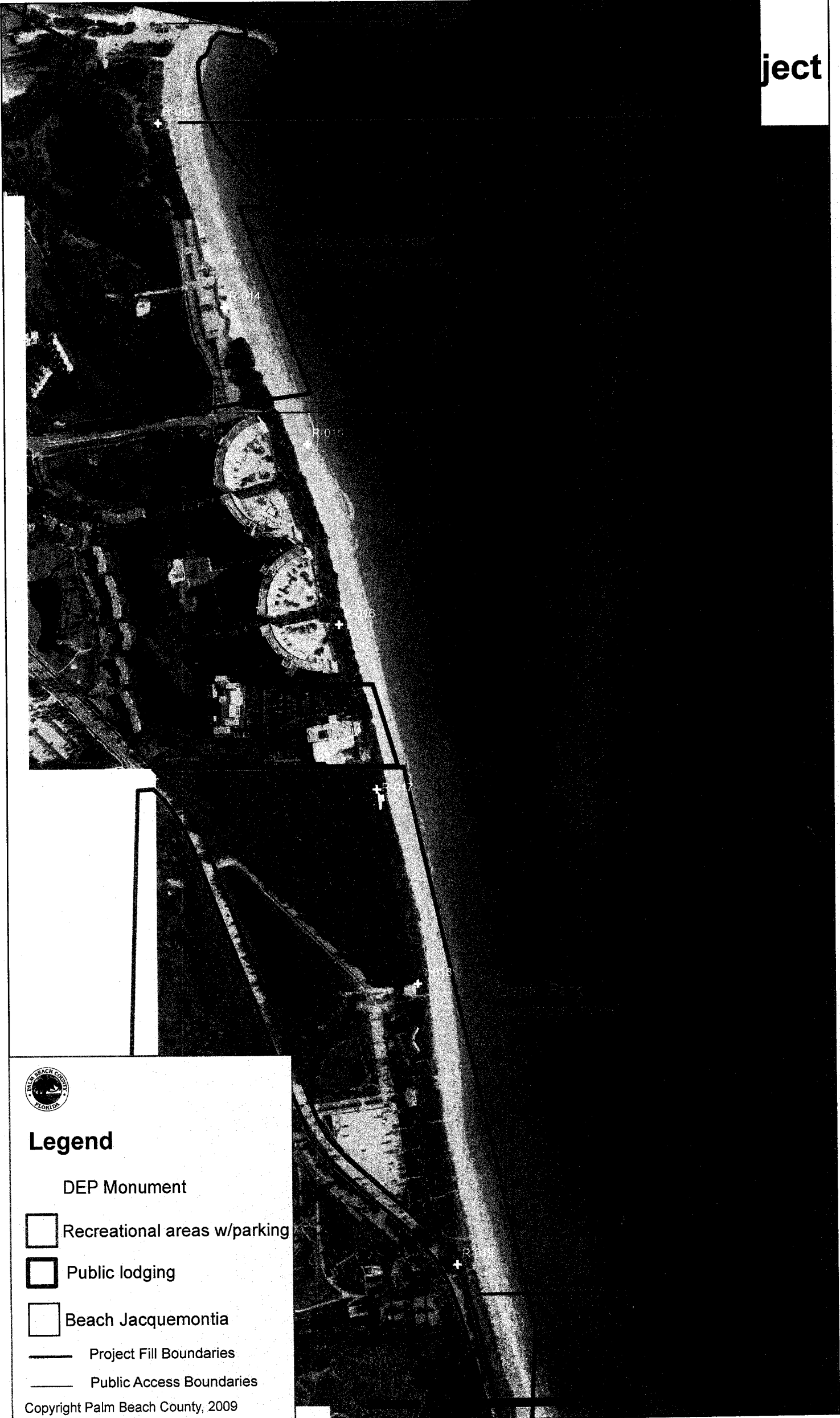
Regionalization: The Jupiter Inlet District and the Florida Inland Navigation District utilize this project's beach fill template for disposal of beach quality fill dredged from sand traps located within the Jupiter Inlet and AICW. Palm Beach County has agreements in place with both of these agencies to work together to fulfill monitoring requirements for all of the area projects including sea turtle, shorebird, and fill performance monitoring.

Attachments:

1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking, and public lodging establishments
4. MPP timeline


Jupiter/Carlin Shore Protection Project
5 year estimated project costs
10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	PED	934 report; permitting JCP/COE; PCA	\$500,000	\$270,000	\$115,000	\$115,000
	Construction	dredge and fill	\$8,000,000	\$4,320,000	\$1,840,000	\$1,840,000
	Monitoring	pre/post const physical, reef, sea turtle, shorebird	\$157,000	\$84,780	\$36,110	\$36,110
2011-2012	Monitoring	post construction physical, reef, sea turtle, shorebird	\$150,000	\$81,000	\$34,500	\$34,500
2012-2013	Monitoring	post construction physical, reef, sea turtle, shorebird	\$150,000	\$81,000	\$34,500	\$34,500
2013-2014	Monitoring	post construction physical, reef, sea turtle, shorebird	\$150,000	\$81,000	\$34,500	\$34,500
2014-2015	Monitoring	post construction physical, reef, sea turtle, shorebird	\$150,000	\$81,000	\$34,500	\$34,500
2015-2016	Monitoring	post construction physical, reef, sea turtle, shorebird	\$150,000	\$81,000	\$34,500	\$34,500
2016-2017	PED	sand search, Federal coordination				
	Monitoring	post construction physical, reef, sea turtle, shorebird				
2017-2018	PED	permitting, PCA				
	Monitoring	post construction physical, reef, sea turtle, shorebird				
2018-2019	Monitoring	pre construction physical, reef, sea turtle, shorebird				
	Construction	dredge and fill				
2019-2020	Monitoring	post construction physical, reef, sea turtle, shorebird				



Legend

DEP Monument

 Recreational areas w/parking

 Public lodging

 Beach Jacquemontia

 Project Fill Boundaries

 Public Access Boundaries

Copyright Palm Beach County, 2009

Licensee Details

Licensee Information

Name: **OPROCK JUPITER FEE LLC OPROCK JUPITER TRS LLC (Primary Name)**
JUPITER BEACH RESORT (DBA Name)

Main Address: **1000 MARKET ST BLDG 1**
PORTSMOUTH New Hampshire 03801

County: **OUT OF STATE**

License Mailing: **1000 MARKET ST BLDG 1**
PORTSMOUTH NH 03801

County: **OUT OF STATE**

LicenseLocation: **5 N A1A**
JUPITER FL 33477

County: **PALM BEACH**

License Information

License Type: **Motel**

Rank: **Motel**

License Number: **MOT6003850**

Status: **Current,Active**

Licensure Date: **10/31/2007**

Expires: **12/01/2009**

Special Qualifications Qualification Effective

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JUPITER BEACH EROSION CONTROL PROJECT

Location:

Between DEP range monuments R13 and R16.5 in Palm Beach County (location map attached).

Project Description:

Planning and design of nearshore structures combined with dune restoration and maintenance for 0.6 miles of beach adjacent to the Jupiter Inlet in Palm Beach County. A primary dune was reestablished along the project area as part of the first beach nourishment project in 1995. The dune remained stable until it was almost completely eroded during sub-Tropical Storm Andrea (May, 2007) and restored during the winter 2007/2008. Additional dune restoration is expected to be required at least annually until a more permanent structural solution can be built. A feasibility study to further define the best erosion control solution for this hot spot is underway. Based on results from other Palm Beach County "hot spots", it is likely that erosion control in the form of nearshore breakwaters will be the best alternative and that an Environmental Impact Statement (EIS) will be required. The attached timeline accounts for this, and construction is likely in the Spring of 2012.

Use of Program Funds:

The requested funding for FY 2010-11 for this area will be used for the design and permitting (including EIS) and pre-construction environmental monitoring of structures for this area as well as any continued dune restoration necessary to protect upland structures and. Funding for the feasibility and design/permitting of structures has been authorized in previous funding cycles, however only the money appropriated in the 2006/2007 funding cycle for the feasibility study has been encumbered into a funding agreement. Additional study is necessary to account for the severe erosion this area is experiencing.

Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the existing funding agreement for the Jupiter/Carlin Renourishment (#09PB1).

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Kimberly Miranda; 561-233-2465; Kmiranda@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: Both previous nourishments of the project and the 2007 emergency dune restoration were funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding. Emergency dune restoration as a result of impacts due to Sub-Tropical Storm Andrea was cost-shared through DEP funding agreement 07PB2. DEP grant agreement #07PB4 currently provides funding for the feasibility study.

Federal Authorization: Currently there is no Federal participation authorized for the erosion control structural alternative or the dune reconstruction and maintenance in the project area.

Eligibility Calculation:

Project length in feet		3438'
Project length within ½ mile of primary public beach access		3438'
Length of Project Shoreline zoned commercial/recreational		2141'
Jupiter Beach Park	1816' in project area	169 parking spaces
Carlin Park	adjacent to project area	532 parking spaces
Jupiter Beach Resort	390'	158 guest rooms

Public lodging license documentation as provided by the FL Department of Business and Professional Regulation is attached.

Supporting Data:

Severity of Erosion: The entire project area is designated as critically eroded by the Department of Environmental Protection. The historic 30-year erosion rate along the project shoreline was computed to be 1.9 ft/yr (Aug 1996 GDM). Recent post-construction surveys, which take into effect the periodic influx of sand from inlet bypassing and ICWW dredging projects, combined with the effects of the 2004 and 2005 storm seasons, calculated the erosion rate on the project area from the toe of dune out to -30 ft-NGVD (R13 – R16). From 2001 through 2006, these surveys show the volume loss in the project area is approximately 57.6 cy/ft/yr (Taylor Engineering, Jupiter Carlin Shore Protection 48-month monitoring report, May 2008).

Threat to Upland Structures: Half of the project area includes habitable structures, including one hotel and one condominium. The remaining half of the project area is developed public park area. Wind driven waves associated with sub-tropical Storm Andrea (May, 2007) resulted in a total loss of dune and berm throughout the area, destroyed a parks maintenance structure and threatened the bathroom building in Jupiter Beach Park. Emergency permits were issued (PB-899 E M1) and approximately 25,000 yd³ of beach-quality fill was used to reconstruct the dune throughout the area after November 1, 2007. This emergency fill was included for funding under DEP agreement 07PB2.

There is one bathroom building in Jupiter Beach Park which was closed for nearly a year following Sub-Tropical Storm Andrea due to building damage and dune collapse. This building is now protected by a steel sheet pile sea wall.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Approximately 50% of the project area lies within a county park. The Jupiter Beach Resort, with 159 guest rooms, fronts 11% of the project length. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections, and Indiantown Road which runs E-W and is located within the project area. Threatened and endangered marine turtles utilize the entire project area for nesting, however this beach is not a designated marine turtle refuge. The attached map identifies public beach access points with associated parking spaces.

Project Performance: The dune within the project limits (Jupiter Beach Park) was stabilized with vegetation and walkovers and provided enhanced shore protection consistent with the natural system since first built in 1995. The extreme north end of the project (R-13 through R-15) experienced a near total loss of berm and dune in May 2007 due to wind and waves associated with Sub-Tropical Storm Andrea. Portions of this beach have not recovered fully from the hurricanes of 2004 and 2005 (Taylor Engineering, Jupiter Carlin Shore Protection 48-month monitoring report, May 2008), and additional solutions are being sought for this beach. Recurring dune projects will provide interim protection to upland structures and habitat and a feasibility study is underway to address the erosional hot spot existing in the project area.

Innovative Applications: The planned structures will provide options to extend the required nourishment intervals. Extending the nourishment interval will minimize the environmental impacts from maintaining the beach, especially in an area of high sea turtle nesting densities. The use of structures in this area will also reduce impact to nearshore reefs which exist within the vicinity of the project. The feasibility study for this project will evaluate the effects of both emergent and submerged structures and their effect on coastal processes and threatened species as well as the potential impacts to recreation (surfing) on this very popular beach.

Dune construction templates are based on previous designs and are not expected to change. Restoring a dune structure on a high density nesting beach has provided the Sponsor with unique challenges, however. We continue to work closely with FFWCC to ensure sea turtle safety and protection throughout the new dune area. Special consideration was taken to prevent turtles from accessing the parking lot and road immediately west of the dune.

Regionalization: The Jupiter Inlet District and the Florida Inland Navigation District utilize this project's beach fill template for disposal of beach quality fill dredged from sand traps located within the Jupiter Inlet and AICW. Palm Beach County has agreements in place with both of these agencies to work together to fulfill monitoring requirements for all of the area projects including sea turtle, shorebird, and fill performance monitoring.

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2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking, and public lodging establishments
4. MPP Timeline

Jupiter Beach Erosion Control Project
5 year estimated project costs
10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	Feasibility	structures/modeling	\$200,000	\$0	\$100,000	\$100,000
	PED	EIS, permitting	\$400,000	\$0	\$200,000	\$200,000
	Dune fill	maintenance of dune	\$500,000	\$0	\$250,000	\$250,000
2011-2012	Construction	breakwaters	\$5,000,000	\$0	\$2,500,000	\$2,500,000
	Monitoring	pre/post construction physical, reef, sea turtle	\$150,000	\$0	\$75,000	\$75,000
	Dune fill	maintenance of dune	\$250,000	\$0	\$125,000	\$125,000
2012-2013	Monitoring	post construction physical, reef, sea turtle	\$150,000	\$0	\$75,000	\$75,000
	Dune fill	maintenance of dune	\$200,000	\$0	\$100,000	\$100,000
2013-2014	Monitoring	post construction physical, reef, sea turtle	\$150,000	\$81,000	\$34,500	\$34,500
2014-2015	Monitoring	post construction physical, reef, sea turtle	\$150,000	\$81,000	\$34,500	\$34,500
2015-2016	Monitoring	post construction physical, reef, sea turtle				
2016-2017	Monitoring	post construction physical, reef, sea turtle				
2017-2018	Monitoring	post construction physical, reef, sea turtle				
2018-2019	Monitoring	pre construction physical, reef, sea turtle				
2019-2020	Monitoring	post construction physical, reef, sea turtle				

Licensee Details

Licensee Information

Name: **OPROCK JUPITER FEE LLC OPROCK JUPITER TRS LLC (Primary Name)**
JUPITER BEACH RESORT (DBA Name)

Main Address: **1000 MARKET ST BLDG 1**
PORTSMOUTH New Hampshire 03801

County: **OUT OF STATE**

License Mailing: **1000 MARKET ST BLDG 1**
PORTSMOUTH NH 03801

County: **OUT OF STATE**

LicenseLocation: **5 N A1A**
JUPITER FL 33477

County: **PALM BEACH**

License Information

License Type: **Motel**

Rank: **Motel**

License Number: **MOT6003850**

Status: **Current,Active**

Licensure Date: **10/31/2007**

Expires: **12/01/2009**

Special Qualifications	Qualification Effective
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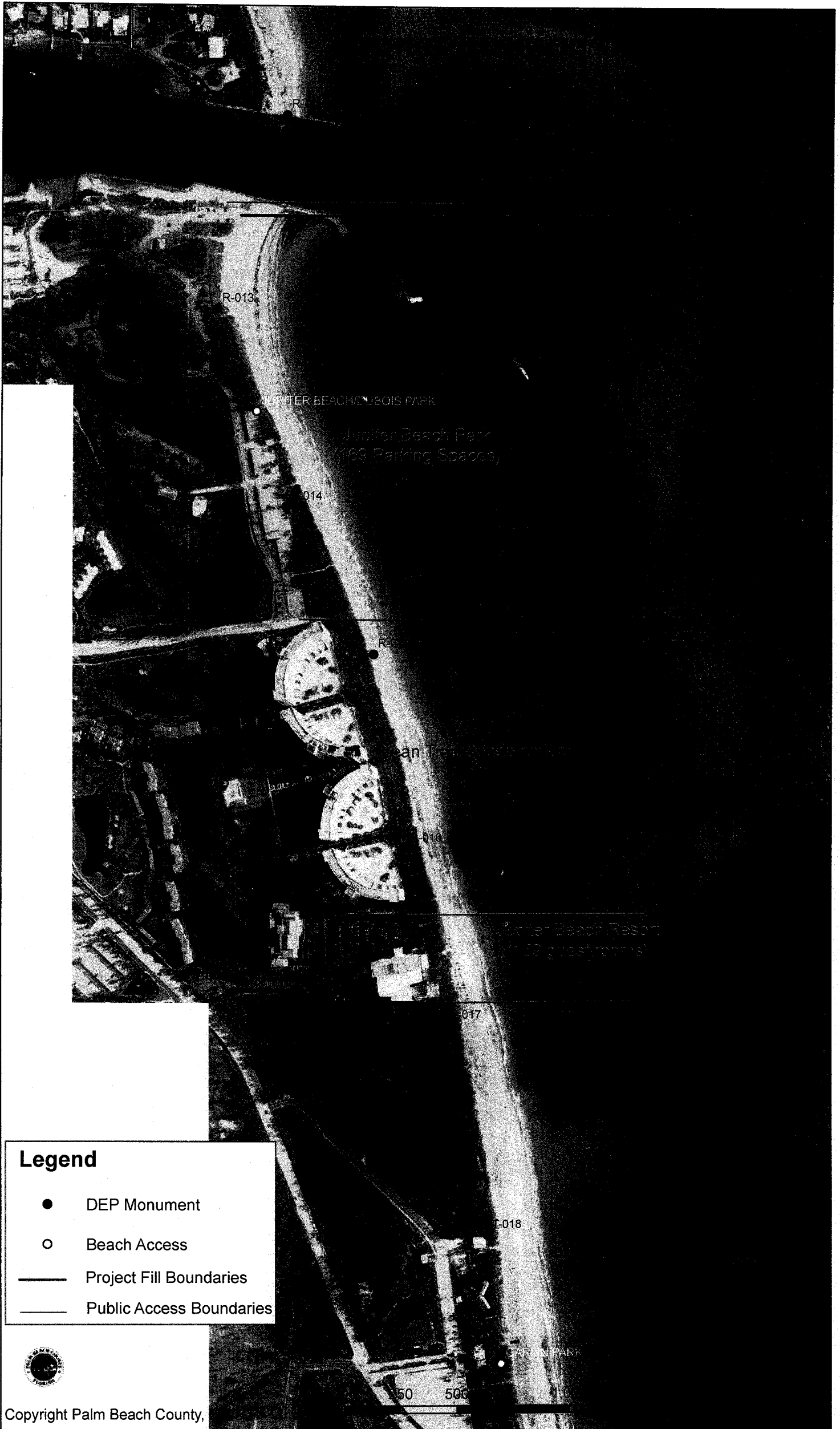
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15



Legend

- DEP Monument
- Beach Access
- Project Fill Boundaries
- Public Access Boundaries



structures timeline
Last Updated: Wed 8/5/09

Gantt Chart

ID	Task Name	Duration	Start	Finish	Predecessors
1	Jupiter-Carlin Structures Project	344 days?	Mon 5/1/06	Thu 8/23/07	
13	Task Order	41 days?	Mon 8/20/07	Tue 10/16/07	
14	Prepare Task Order & Board Item	19 days?	Mon 8/20/07	Thu 9/13/07	
15	BCC Approval	0 days	Tue 10/16/07	Tue 10/16/07	14
16	Verbal NTP	0 days	Tue 10/16/07	Tue 10/16/07	15
17	State Funding	49 days	Mon 8/20/07	Thu 10/25/07	
18	Grant agreement received from DEP	31 days	Mon 8/20/07	Mon 10/1/07	
19	BCC approval	1 day	Tue 10/16/07	Tue 10/16/07	
20	Signed agreement returned to DEP	8 days	Tue 10/16/07	Thu 10/25/07	19
21	Feasibility Study	1070 days?	Tue 10/16/07	Mon 11/21/11	16
22	Task 1: Evaluate Historic Beach Performance	114 days	Tue 10/16/07	Fri 3/21/08	
25	Task 2: Evaluate Changes in Beach Behavior	30 days	Mon 5/5/08	Fri 6/13/08	
28	Task 3: Determine Beach Performance Improvement Targets and Modeling Scenarios	35 days	Fri 6/6/08	Thu 7/24/08	
31	Task 4: Data Collection	270 days?	Tue 1/22/08	Mon 2/2/09	
37	Task 5: Model Setup, Calibration & Validation	127 days	Sat 9/6/08	Tue 3/3/09	
43	Task 6: Evaluate Design Alternatives	22 days	Mon 9/21/09	Wed 10/21/09	41
44	Task 6 DRAFT Report Received	0 days	Mon 9/21/09	Mon 9/21/09	
45	ERM Review	30 edays	Mon 9/21/09	Wed 10/21/09	44
46	Task 7: FDEP Reports	295 days	Mon 8/4/08	Mon 9/21/09	
47	First Report	0 days	Mon 8/4/08	Mon 8/4/08	
48	Second Report	0 days	Mon 3/23/09	Mon 3/23/09	47
49	Third Report	0 days	Mon 9/21/09	Mon 9/21/09	48
50	Task 8: Environmental Characterization & EA Preparation	506 days	Tue 10/16/07	Tue 9/22/09	
51	EA draft	491 days	Tue 10/16/07	Tue 9/1/09	
52	ERM review	15 days	Wed 9/2/09	Tue 9/22/09	51
53	Task 9: State & Federal Permitting	119 days	Mon 12/21/09	Fri 6/4/10	
54	JCP Application Submitted to FDEP	0 days	Mon 12/21/09	Mon 12/21/09	
55	USACE Issues Public Notice	0 days	Wed 1/20/10	Wed 1/20/10	54FS+30 edays
56	Public Notice Comment Period Ends	0 days	Fri 6/4/10	Fri 6/4/10	55FS+135 edays
57	Response to FDEP RAIs	436 days	Sun 3/21/10	Mon 11/21/11	
58	First RAI Received	0 edays	Sun 3/21/10	Sun 3/21/10	54FS+90 edays
59	County Response	45 edays	Sun 3/21/10	Wed 5/5/10	58
60	Second RAI Received	0 edays	Tue 8/3/10	Tue 8/3/10	59FS+90 edays
61	County Response	45 edays	Tue 8/3/10	Fri 9/17/10	60
62	Third RAI Received	0 days	Thu 12/16/10	Thu 12/16/10	61FS+90 edays
63	County Response	45 days	Thu 12/16/10	Wed 2/16/11	62
64	DRAFT FDEP Permit Received	90 edays	Fri 3/18/11	Thu 6/16/11	63FS+30 edays
65	Receipt of USACE permit	90 edays	Tue 8/23/11	Mon 11/21/11	172
66	USACE - Environmental Impact Statement (EIS)	415 days	Wed 1/20/10	Tue 8/23/11	55
67	Task 1 Prepare Statement of Work	25 days	Wed 1/20/10	Tue 2/23/10	55
72	Task 2 Prepare/implement QA/QC Plan	15 days	Wed 1/20/10	Tue 2/9/10	55
76	Task 3 Public Participation Plan	15 days	Wed 1/20/10	Tue 2/9/10	55
83	Task 4 Scoping Meeting	51 days	Mon 2/8/10	Mon 4/19/10	82
94	Task 5 Data Development Process	118 days	Mon 2/8/10	Wed 7/21/10	82
103	Task 6 Prepare Action Summaries	46 days	Mon 5/3/10	Mon 7/5/10	
108	Task 7. Preliminary Draft Environmental Impact Statement	132 days	Tue 7/6/10	Wed 1/5/11	107
130	Task 8. Hold Public Comment Meetings	24 days	Fri 1/14/11	Thu 2/17/11	
137	Task 9 Prepare Preliminary Final EIS	109 days	Mon 1/17/11	Thu 6/16/11	
167	Task 10. Prepare Draft Record of Decision (ROD)	48 days	Fri 6/17/11	Tue 8/23/11	166
173	Task 11, 14 t Administrative Records, other documentation	405 days	Wed 1/20/10	Tue 8/9/11	
176	Plans & Specs	90 days	Thu 12/16/10	Wed 4/20/11	
177	Prepare Plans & Specs	90 days	Thu 12/16/10	Wed 4/20/11	62
178	Construction Contractor Selection	106 days	Wed 8/24/11	Wed 1/18/12	
208	Construct Rock Structures	267 days	Wed 1/18/12	Sun 1/27/13	195
209	Mobilization	5 edays	Wed 1/18/12	Mon 1/23/12	207FS+1 day
210	Construction	365 edays	Mon 1/23/12	Tue 1/22/13	209
211	Demobilization	5 edays	Tue 1/22/13	Sun 1/27/13	210
212	Post-construction Monitoring	858 days	Tue 8/3/10	Fri 11/15/13	
213	Biological monitoring	1200 edays	Tue 8/3/10	Fri 11/15/13	60
214	Physical monitoring	1200 edays	Tue 8/3/10	Fri 11/15/13	60
215	Quarterly Reports	508 days?	Mon 4/21/08	Wed 3/31/10	
216	Q1 Report 2008	6 days?	Mon 4/21/08	Mon 4/28/08	
217	Q2 Report 2008	7 days?	Mon 7/14/08	Tue 7/22/08	
218	Q3 Report 2008	1 day?	Fri 10/24/08	Fri 10/24/08	
219	Q4 Report 2008	2 days	Wed 1/21/09	Thu 1/22/09	218
220	Q1 Report 2009	1 day	Mon 4/20/09	Mon 4/20/09	219
221	Q2 Report 2009	1 day	Mon 7/20/09	Mon 7/20/09	220
222	Q3 Report 2009	1 day	Tue 11/24/09	Tue 11/24/09	221FS+90 days
223	Q4 Report 2009	1 day?	Wed 3/31/10	Wed 3/31/10	222FS+90 days

Task		Rolled Up Task		External Tasks	
Critical Task		Rolled Up Critical Task		Project Summary	
Progress		Rolled Up Milestone		Group By Summary	
Milestone		Rolled Up Progress		Deadline	
Summary		Split			

17

JUNO BEACH SHORE PROTECTION PROJECT

Location

Palm Beach County, R-26 - R-38 (fill area), map attached.

Project Description

Renourishment of approximately 2.4 miles of critically eroding shoreline beginning 2.2 miles downdrift of Jupiter Inlet. The original project was completed in 2001 and impacted by the hurricanes of 2004 and 2005 and by T.S. Fay in 2008. Renourishment was originally scheduled for the winter of 2008/2009, however necessary permits were not received in time to complete to construction before sea turtle nesting season. The project was advertised for bidding and a contract was signed with Weeks Marine to begin construction in November, 2009.

The borrow area for this project is located approximately 5 miles to the South, offshore of Singer Island, FL in approximately 70 fsw.

Use of Program Funds

Funds requested for FY2010 - 11 will be used to support project-specific monitoring required by permit (currently aerial photography, regional (profiles and hydrographic), sea turtle, shorebird, and nearshore reef).

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Reubin Bishop; 561-233-2400; RBishop@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: The previous nourishment and mitigation of this project was funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding. DEP grant agreement #08PB3 currently provides funding for construction, mitigation and monitoring of the renourishment project.

Federal Authorization: This project has no federal participation with the exception of FEMA claims provided for impacts due to Hurricane Frances and T.S. Fay.

Eligibility Calculation:

Project length in feet		12,818'
Project length within ½ mile of primary public beach access		12,818'
Length of Project Shoreline zoned commercial/recreational		6918'
*Radnor Park	1285' in project	165 parking spaces
Double Roads Access	1262'	106 parking spaces
*Ocean Cay Park	686'	220 parking spaces
*Juno Beach Park	300'	318 parking spaces
Juno Dunes Natural Area	2100'	no parking
*Loggerhead Park	1125'	218 parking spaces
Mercury Road Access	160'	97 parking spaces
*Primary access with parking and restrooms		

Supporting Data:

Severity of Erosion: The entire project area is designated as critically eroded by the Department of Environmental Protection. The historic 30-year erosion rate along the project shoreline was computed to be 1.9 ft/yr (Aug 1996 GDM). Since the 2001 project construction, the recession rate has averaged 17.8 feet per year, though this recession is largely attributable to profile adjustment and diffusion loss to adjacent shorelines. The impact from the 04/05 hurricanes however is clearly

notable and significant within the data. During this timeframe the shoreline eroded an average of 43 feet within the project area based on the monitoring data.

Threat to Upland Structures: Shoreline development within the area of fill (R-26 through R-38) is approximately 40 % (5,250 ft) multifamily/commercial structures.

According to the FDEP MapDirect Web Mapping site, all of these properties are seaward of the Coastal Construction Control Line. Recent storm-induced erosion has resulted in several of these properties with less than 25' of dune and berm between the ocean and the building foundation.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. A total of 100% of the shoreline is available for public recreational use. Approximately 60% of the project area (7,820 ft) is publicly owned land, parks, and public beach access ways (Radnor, Ocean Cay, Juno Beach Park, Juno Dunes, and Loggerhead Park). Juno Beach is one of the highest nesting density beaches for threatened and endangered sea turtles in the United States. Shorebirds (including piping plovers) utilize this beach extensively for foraging purposes and a pair of nesting killdeer has fledged chicks on this beach each summer since 2005. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections, and Donald Ross Road which runs E-W and is centrally located within the project area.

The attached map identifies public beach access points and public parks with associated parking spaces.

Project Performance: The project design was based on the GDM & EIS and provides for greater than 15 year return interval storm protection. The dune within the project limits is stabilized with vegetation and walkovers and provides enhanced shore protection consistent with the natural system. Hot spot erosion areas at R-26 through R-29 and R-30 through R-33 are included in the area of fill. The project area is 2.2 miles downdrift of Jupiter Inlet. Jupiter Inlet is estimated to have a volumetric impact on downdrift beaches of 1.65 million cy/yr (Bodge, 1994) and, based on beach profile surveys, this volume of cumulative total sediment loss affects the Juno Beach project area and well south of it as specified in the 1998 Feasibility Study. The fill is expected to provide 100% of the sand needed to maintain the downdrift beaches with minimal impacts to the local nearshore habitat. The project is currently eight-years post nourishment and the majority of the project area is holding up well beyond the estimated six-year lifespan.

Innovative Applications: The original project was constructed using conventional beach fill methods and design. It is anticipated that the upcoming renourishment will utilize similar technology.

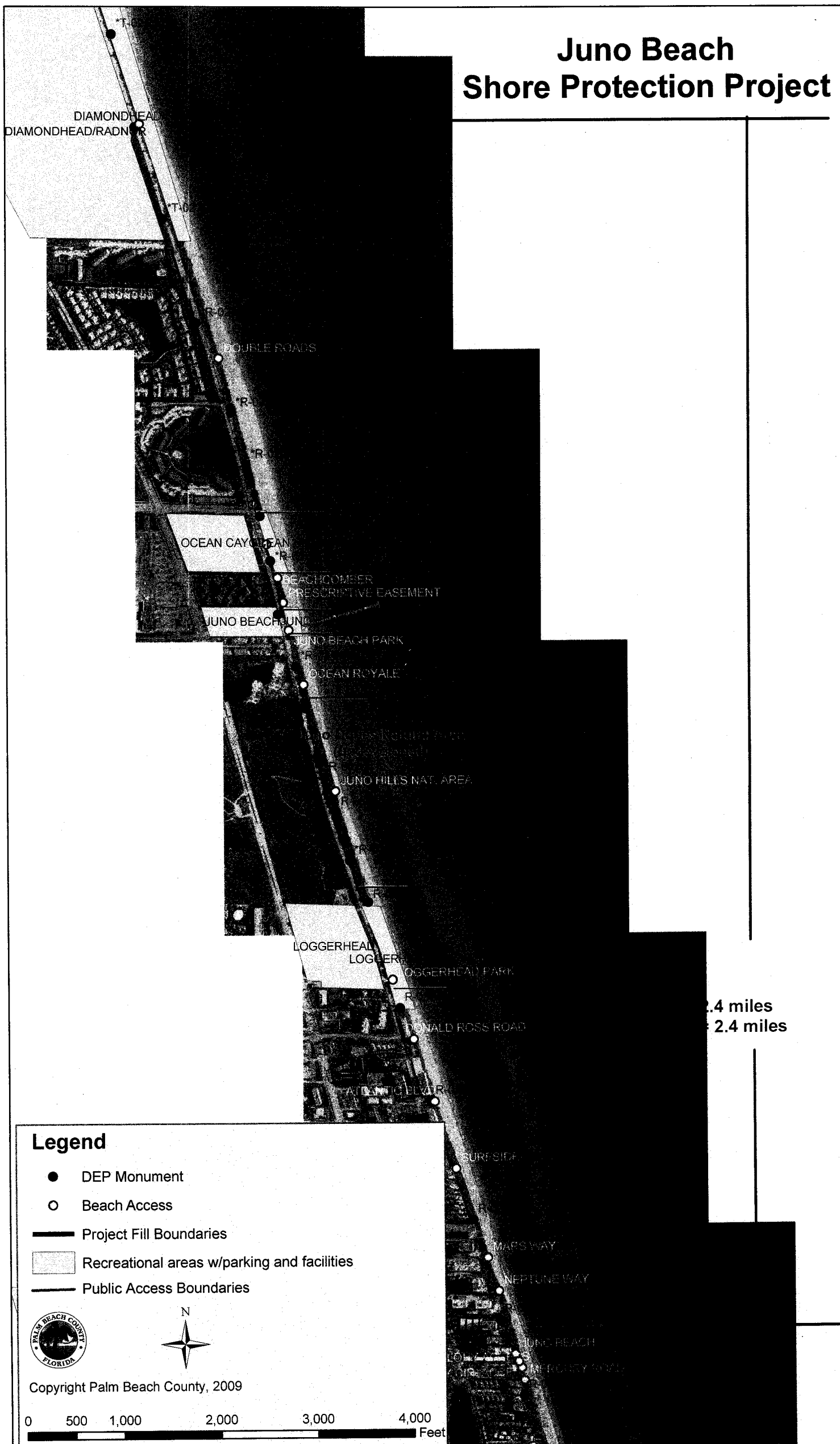
Attachments:

1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking
4. MPP timeline

Juno Beach Shore Protection Project
5 year estimated project costs
10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	Monitoring	post const physical, reef, sea turtle, shorebird	\$315,500	\$0	\$157,750	\$157,750
2011-2012	Monitoring	post construction physical, reef, sea turtle, shorebird	\$300,000	\$0	\$150,000	\$150,000
2012-2013	Monitoring	post construction physical, reef, sea turtle, shorebird	\$300,000	\$0	\$150,000	\$150,000
2013-2014	Monitoring	post construction physical, reef, sea turtle, shorebird	\$250,000	\$0	\$125,000	\$125,000
2014-2015	PED	Sand search, permitting	\$500,000	\$0	\$250,000	\$250,000
	Monitoring	post construction physical, reef, sea turtle, shorebird	\$250,000	\$0	\$125,000	\$125,000
2015-2016	PED	permitting, contracting				
	Monitoring	pre/post construction physical, reef, sea turtle, shorebird				
2016-2017	Construction	dredge and fill				
	Monitoring	post construction physical, reef, sea turtle, shorebird				
2017-2018	Monitoring	post construction physical, reef, sea turtle, shorebird				
2018-2019	Monitoring	post construction physical, reef, sea turtle, shorebird				
2019-2020	Monitoring	post construction physical, reef, sea turtle, shorebird				

Juno Beach Shore Protection Project



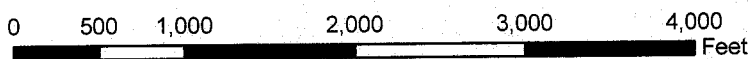
2.4 miles
2.4 miles

Legend

- DEP Monument
- Beach Access
- ▬ Project Fill Boundaries
- ▭ Recreational areas w/parking and facilities
- ▬ Public Access Boundaries



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ID	Task Name	Duration	Start	Finish	Predecessors
0	Juno Beach Renourishment	333 days?	Tue 8/30/08	Mon 8/28/11	
1	Renourishment Planning Engineering and Design	377 days	Tue 8/30/08	Fri 1/30/09	
97	Plans and Specs	168 days	Mon 8/2/08	Tue 11/4/08	
102	Construction Contract (1st Bid - Cancelled)	41.5 days	Mon 10/27/08	Tue 12/30/08	
131	Construction Contract (2nd Bid)	146 days	Mon 2/2/09	Fri 8/21/09	
173	Construction	188 days	Sun 9/13/09	Wed 6/2/10	
174	Pre Construction Meeting Notice to Agencies	0 days	Sun 9/13/09	Sun 9/13/09 177SS-30 edays	
175	Pre Construction See Turtle Meeting Notice to Agencies	0 days	Thu 9/17/09	Thu 9/17/09 176SS-15 edays	
176	Pre Construction See Turtle Meeting	0 days	Fri 10/2/09	Fri 10/2/09 180SS-30 edays	
177	Pre Construction Meeting	0.5 days	Tue 10/13/09	Tue 10/13/09 160FS+2 days	
178	Commencement Date	0 days	Sun 11/1/09	Sun 11/1/09	
179	Commencement Notice	0 days	Mon 10/19/09	Mon 10/19/09 180SS-10 days	
180	Construction	88 edays	Sun 11/1/09	Thu 1/28/10 178	
181	FDEP Completion Certification & As built	0 days	Sat 2/27/10	Sat 2/27/10 180FS+30 edays	
182	USACE Completion Certification & As Built	0 days	Mon 3/29/10	Mon 3/29/10 180FS+80 edays	
183	Turbidity Summary Report	0 days	Wed 6/2/10	Wed 6/2/10 180FS+90 edays	
184	Final Project Report	1 day	Wed 4/29/10	Wed 4/29/10 180FS+90 edays	
185	USFWS Construction Report	1 day	Mon 3/15/10	Mon 3/15/10 180FS+45 edays	
188	Contract Administration	321 days	Fri 11/27/09	Mon 2/21/11	
234	Monitoring	333 days?	Tue 8/30/08	Mon 8/28/11	
235	Pre Construction	1116 days?	Tue 8/30/08	Wed 12/30/08	
236	Develop Plan	23 days?	Tue 11/21/08	Thu 12/21/08	
237	Review and Edit Plan	21 days?	Wed 12/27/08	Wed 1/24/09	
238	Final Plan	6 days?	Mon 1/29/09	Mon 2/5/09	
239	2007 Sand Analysis & Compaction Testing	14 days?	Mon 3/5/07	Thu 3/22/07	
240	2008 Sand Analysis & Compaction Testing	1 day?	Tue 8/30/05	Tue 8/30/05	
241	2007 Sea Turtle Monitoring	178 days?	Thu 3/1/07	Wed 10/3/07	
244	2008 Sea Turtle Monitoring	178 days?	Mon 3/2/08	Thu 11/6/08 241	
247	2006 Aerial Cartographic Photography	5 days?	Fri 12/22/06	Thu 12/28/06	
248	2007 Aerial Cartographic Photography	1 day?	Thu 9/13/07	Thu 9/13/07	
249	2008 Aerial Cartographic Photography	1 day?	Tue 7/1/08	Tue 7/1/08	
250	2007 Beach Profiles and Wading Surveys	1 day?	Thu 9/13/07	Thu 9/13/07	
251	2008 Beach Profiles and Wading Surveys	1 day?	Tue 8/30/05	Tue 8/30/05	
252	2007 Reef/ Hardbottom Monitoring	1 day?	Thu 9/13/07	Thu 9/13/07	
253	2008 Reef/Hardbottom Monitoring	1 day?	Tue 8/30/05	Tue 8/30/05	
254	Pre Construction Topo and Bathy Survey	1 day	Mon 8/3/09	Mon 8/3/09 180SS-90 edays	
255	2008 Sea Turtle Monitoring	281 days	Thu 1/1/08	Wed 12/30/08	
256	Nesting surveys	178 days	Sun 3/1/08	Thu 10/28/08	
257	Nesting Report	175 days	Sun 3/1/09	Thu 10/29/09	
258	In-Water Sea Turtle Monitoring	251 days	Thu 1/1/09	Wed 12/30/09	
259	2009 Reef/Hardbottom Monitoring	1 day	Tue 8/30/05	Tue 8/30/05	
260	2009 Sand Analysis & Compaction Testing	5 days	Mon 5/4/09	Fri 5/8/09	
261	2009 Beach Profiles and Wading Surveys	1 day	Wed 8/30/05	Wed 8/30/05 251FS+364 edays	
262	2009 Aerial Cartographic Photography	1 day	Wed 7/1/09	Wed 7/1/09 246FS+364 edays	
263	Pre-Construction lighting survey	1 day	Mon 8/24/09	Mon 8/24/09 180SS-70 edays	
264	Pre Construction Hardbottom Assessment	1 day	Mon 8/31/09	Mon 8/31/09 262FS+80 edays	
265	Construction Monitoring	1288 days	Tue 8/30/08	Mon 8/2/10	
266	Borrow Area Hardbottom Monitoring	261 days	Mon 8/3/08	Mon 8/2/10	
267	Task 1 Recon Dive Station Establishment	4 days	Mon 8/3/09	Thu 8/6/09	
268	Task 2 Pre-Construction Monitoring Event	2 days	Mon 9/7/09	Tue 9/8/09 180SS-56 edays	
269	Pre-construction report	1 day	Wed 9/30/09	Wed 9/30/09 288FS+15 days	
270	Task 3 Construction Monitoring Events	63 days	Mon 11/2/09	Wed 1/27/10 186SS	
271	Construction Event 1 & report	2 days	Mon 11/2/09	Tue 11/3/09 180SS	
272	Construction Event 2 & report	2 days	Mon 11/16/09	Tue 11/17/09 180SS+14 edays	
273	Construction Event 3 & report	2 days	Mon 11/30/09	Tue 12/1/09 180SS+28 edays	
274	Construction Event 4 & report	2 days	Mon 12/14/09	Tue 12/15/09 180SS+42 edays	
275	Construction Report	1 day	Wed 1/27/10	Wed 1/27/10 274FS+30 days	
276	Task 4 Post Construction Monitoring Event	2 days	Thu 3/25/10	Fri 3/26/10 180FS+56 edays	
277	Final Report	1 day	Mon 8/2/10	Mon 8/2/10 276FS+90 days	
278	Turbidity Monitoring and Reports	1 day	Tue 8/30/05	Tue 8/30/05	
279	Notify STSSN of Hopper Dredging Start	0 days	Sun 11/1/09	Sun 11/1/09 180SS	
280	Notify STSSN of Hopper Dredging Stop	0 days	Thu 1/28/10	Thu 1/28/10 180	
281	Turtle Trawl Reports	0 days	Thu 1/28/10	Thu 1/28/10 180	
282	Sediment Testing Results	1 day	Mon 3/29/10	Mon 3/29/10 180FS+80 edays	

22

ID	Task Name	Duration	Start	Finish	Predecessors
283	Sea Turtle Take Notification	0 days	Sun 11/1/09	Sun 11/1/09	180SS
284	Post Construction Monitoring	2418 days?	Thu 3/18/09	Mon 8/28/18	
285	Develop Plan	30 days	Thu 3/19/09	Wed 4/29/09	
286	Review and Edit Plan	1 day?	Thu 3/19/09	Thu 4/30/09	285
287	Final Plan	1 day	Thu 4/30/09	Fri 5/1/09	286
288	Post Construction Lighting survey	1 day	Mon 3/1/10	Mon 3/1/10	180FS+30 edays
289	Juno Construction Lighting Report	10 days	Tue 3/9/10	Mon 3/22/10	288FS+5 days
290	Post Construction Scarp Monitoring	1 day	Thu 2/4/10	Thu 2/4/10	180FS+7 edays
291	Post Construction Topo & Bathy Survey	1 day	Mon 3/22/10	Mon 3/22/10	180FS+60 edays
292	Post Construction Topo & Bathy Report	1 day	Wed 4/28/10	Wed 4/28/10	180FS+90 edays
293	Post Construction Inwater Monitoring	1 day	Mon 3/1/10	Mon 3/1/10	180FS+30 edays
294	2011 Scarp Monitoring	1 day	Mon 2/7/11	Mon 2/7/11	290FS+365 edays
295	2012 Scarp Monitoring	1 day	Wed 2/8/12	Wed 2/8/12	294FS+365 edays
296	2013 Scarp Monitoring	1 day	Fri 2/8/13	Fri 2/8/13	295FS+365 edays
297	Post Construction Sea Turtle Nesting Report	1 day	Thu 1/28/10	Thu 1/28/10	180
298	2011 Sea Turtle Nesting Report	1 day	Mon 1/31/11	Mon 1/31/11	297FS+365 edays
299	2012 Sea Turtle Nesting Report	1 day	Wed 2/1/12	Wed 2/1/12	298FS+365 edays
300	2013 Sea Turtle Nesting Report	1 day	Fri 2/1/13	Fri 2/1/13	299FS+365 edays
301	2010 Inwater Turtle Monitoring Report	1 day	Thu 12/30/10	Thu 12/30/10	298FS+364 edays
302	2011 Inwater Turtle Monitoring Report	1 day	Fri 12/30/11	Fri 12/30/11	301FS+364 edays
303	2012 Inwater Turtle Monitoring Report	1 day	Mon 12/31/12	Mon 12/31/12	302FS+364 edays
304	2010 Topo & Bathy Survey and Report	1 day	Mon 8/28/10	Mon 8/28/10	281FS+90 edays
305	2011 Topo & Bathy Survey and Report	1 day	Tue 8/28/11	Tue 8/28/11	304FS+364 edays
306	2012 Topo & Bathy Survey and Report	1 day	Wed 8/27/12	Wed 8/27/12	305FS+364 edays
307	2014 Topo & Bathy Survey and Report	1 day	Thu 8/28/14	Thu 8/28/14	306FS+728 edays
308	2016 Topo & Bathy Survey and Report	1 day	Fri 8/24/16	Fri 8/24/16	307FS+728 edays
309	2018 Topo & Bathy Survey and Report	1 day	Mon 8/25/18	Mon 8/25/18	308FS+728 edays
310	2010 Beachfront Lighting surveys	136 days	Mon 8/3/10	Mon 11/8/10	
317	2011 Beachfront Lighting Surveys	136 days	Mon 8/8/11	Mon 11/14/11	
324	2012 Beachfront Lighting Surveys	136 days	Mon 4/30/12	Mon 11/8/12	
331	2011 Tiling and Scarp levelling	3 days	Thu 1/27/11	Mon 1/31/11	180FS+364 edays
332	2012 Tiling and Scarp Levelling	3 days	Tue 1/31/12	Thu 2/2/12	331FS+364 edays
333	2013 Tiling and Scarp Levelling	3 days	Fri 2/1/13	Tue 2/5/13	332FS+364 edays
334	2010 Aerial Cartographic Photography	1 day	Thu 7/1/10	Thu 7/1/10	282FS+364 edays
335	2011 Aerial Cartographic Photography	1 day	Fri 7/1/11	Fri 7/1/11	334FS+364 edays
336	Post Construction Hardbottom Assessment	1 day	Fri 7/29/11	Fri 7/29/11	305FS+30 edays
337	2012 Aerial Cartographic Photography	1 day	Mon 7/2/12	Mon 7/2/12	335FS+364 edays
338	2013 Aerial Cartographic Photography	1 day	Tue 7/2/13	Tue 7/2/13	337FS+364 edays
339	2014 Aerial Cartographic Photography	1 day	Wed 7/2/14	Wed 7/2/14	338FS+364 edays
340	Funding	878 days?	Wed 3/1/08	Wed 12/16/09	
373	Project Updates	314 days	Wed 10/24/07	Wed 1/28/09	

SINGER ISLAND SHORE PROTECTION PROJECT

Location:

Palm Beach County, R-60.5 to R-68 (See attached location map.)

Project Description:

This project consists of design, permitting, construction, and monitoring associated with the restoration of 1.8 miles of coastline on Singer Island. The restored dune will reduce the impact of storms, add a reservoir of sand and help dissipate wave energy. Structures will be used to stabilize the beach. The permit application for the structures is complete; however Palm Beach County has waived the 90-day timeclock to allow for continued discussion of mitigation and monitoring plans. Due to the extended permitting, it is likely that these structures will be constructed beginning in late 2009. Periodic dune restoration will occur as necessary until the erosion control structures are built and performing as designed.

Use of Program Funds:

The requested funding for FY 2010 - 11 for this area will be used to complete construction of the limestone breakwaters and the required mitigation reefs and for continued permit-required monitoring of both project performance and effects on biological populations (sea turtles, shorebirds, and fish). Funds are also requested to be appropriated for periodic dune restoration as necessary to protect upland structures.

Project specific environmental monitoring for this project is likely to cost nearly \$500,000 per year. This includes intensive monitoring to examine the effect on sea turtle populations including, but not limited to: nesting and reproductive success, foraging, navigation, and predation. Extensive biological monitoring of near shore reefs (both natural and artificial) as well as physical monitoring to examine the effects of the breakwater structures is planned.

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Michael Stahl; 561-233-2443; MStahl@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: The feasibility studies for the project were funded by the state (01PB1) and the project is included in the Strategic Beach Management Plan. The initial phase of dune restoration was funded by the state (01PB1), as were subsequent restorations (H5PB1) and design and initial permitting of erosion control structures (05PB2 and 06PB2). Most recently, this area was included under emergency funding grant 07PB2 for dune restoration following the impact of Sub-tropical storm Andrea.

The most recent funding agreement determined this project was eligible for State cost share at a rate of 39%.

Federal Authorization: This project is not currently eligible for Federal cost share, however FEMA claims have been submitted for storm-induced erosion due to T. S. Fay.

Eligibility Calculation:

Project length in feet		9450'
Project length within ½ mile of primary public beach access		7550'
MacArthur State Beach Park	adjacent to project area	500+ parking spaces
Ocean Reef Park	710'	243 parking spaces

24

The Resort at Singer Island 239 guest rooms

Hilton Singer Island Oceanfront 223 guest rooms

Public lodging license documentation as provided by the FL Department of Business and Professional Regulation is attached.

Supporting Data:

Severity of Erosion: The entire project area is designated as critically eroded by the Department of Environmental Protection. Since 2001, erosion rates have been calculated up to -15 ft/yr. Recent hurricanes and storm activity have accelerated the beach erosion throughout the area. Dune restoration and plantings have been necessary each year to protect upland properties since 2004. The hurricanes of 2004 and 2005 destroyed the restored dunes and lowered the berm height. The beach has not recovered, and continues to be impacted by wind and waves due to winter storms and tropical activity, most recently Sub-Tropical Storm Andrea and Tropical Storms Noel and Fay.

Threat to Upland Structures: Rapid fluctuations in shoreline position threaten developed property along over 75% of the project area. According to the FDEP MapDirect Web Mapping site, all of these properties are seaward of the Coastal Construction Control Line. Nearly all of the condominium properties along the project area have either applied for, or already received permits to install armoring (seawalls) to protect their property.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. Public beach access, as shown on the attached map, allows for public and tourism use throughout the project area. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area.

Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

Project Performance: The project design is based on an updated feasibility study. The project is designed to enhance shore protection by the restoration of the native dunes and stabilization of the berm in an area where extensive near shore environmental resources would be impacted by beach nourishment. The structures will provide long term stabilization (50 years) to the project area. The dune component of the project utilizes local sand resources to minimize cost. The proposed structures are based on the least-cost alternative suggested in the feasibility study and are designed to provide long-term stability.

Innovative Applications: The structural components are based on the use of innovative modeling technology to minimize the extent of construction necessary for shoreline stabilization. The combination of dune restoration and structural stabilization instead of conventional beach nourishment minimizes the potential impacts to nearshore hardbottom. A comprehensive physical and biological monitoring plan is designed to reduce impacts to adjacent habitats.

Attachments:

1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking, and public lodging establishments
4. MPP timeline

25

Singer Island Shore Protection Project

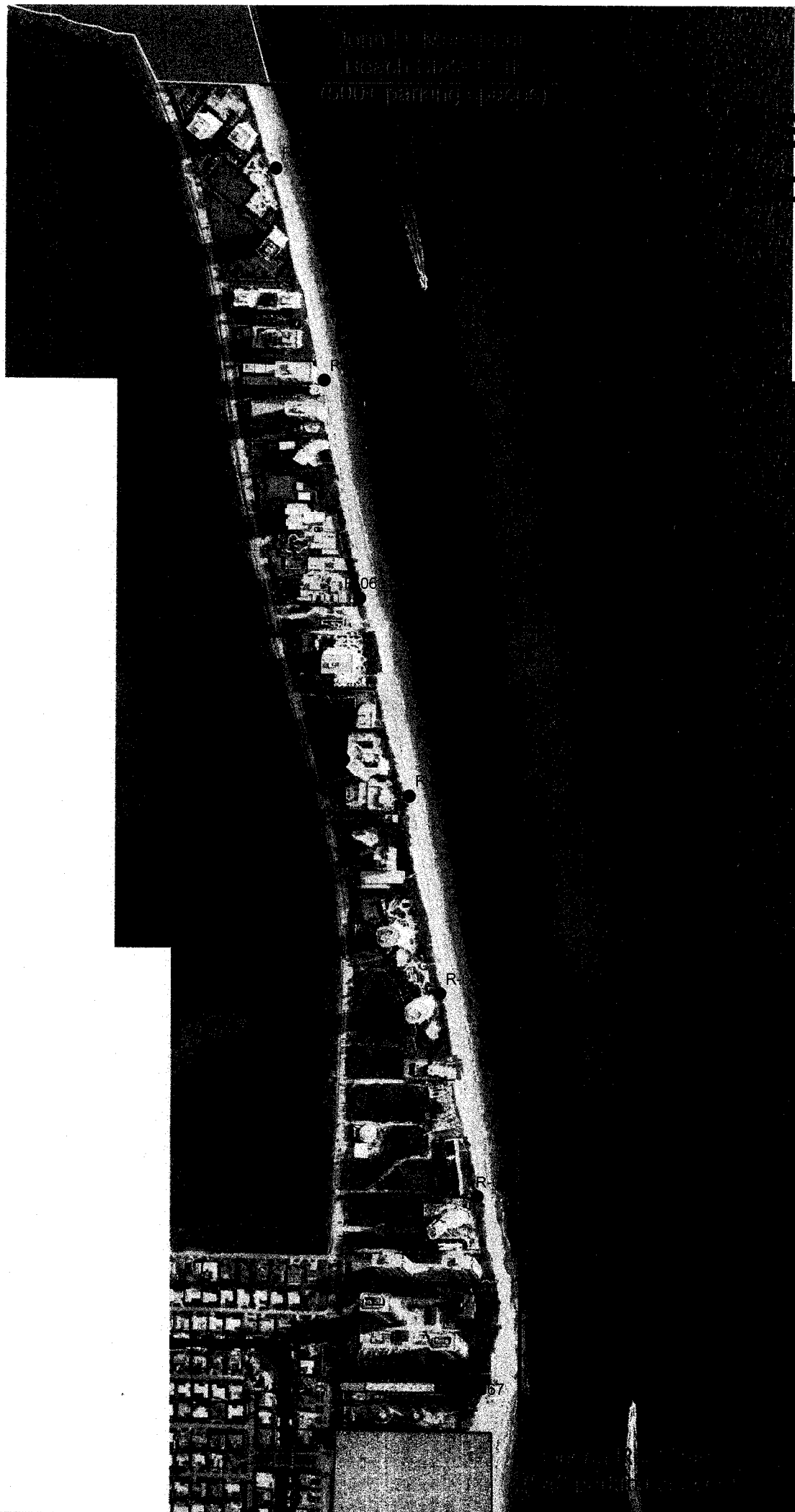
5 year estimated project costs

10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	Monitoring	post construction physical, reef, sea turtle	\$520,000	\$0	\$207,714	\$312,286
	Construction	finalize construction of structures	\$6,129,678	\$0	\$2,448,500	\$3,681,178
	Dune fill	maintenance of dune	\$1,200,000	\$0	\$479,340	\$720,660
2011-2012	Monitoring	post construction physical, reef, sea turtle	\$500,000	\$0	\$199,725	\$300,275
	Dune fill	maintenance of dune	\$1,000,000	\$0	\$399,450	\$600,550
2012-2013	Monitoring	post construction physical, reef, sea turtle	\$500,000	\$0	\$199,725	\$300,275
	Dune fill	maintenance of dune	\$750,000	\$0	\$299,588	\$450,413
2013-2014	Monitoring	post construction physical, reef, sea turtle	\$500,000	\$0	\$199,725	\$300,275
	Dune fill	maintenance of dune	\$500,000	\$0	\$199,725	\$300,275
2014-2015	Monitoring	post construction physical, reef, sea turtle	\$500,000	\$0	\$199,725	\$300,275
	Dune fill	maintenance of dune	\$250,000	\$0	\$99,863	\$150,138
2015-2016	Monitoring	Dune inspections, physical profiles				
2016-2017	Monitoring	Dune inspections, physical profiles				
2017-2018	Monitoring	Dune inspections, physical profiles				
2018-2019	Monitoring	Dune inspections, physical profiles				
2019-2020	Monitoring	Dune inspections, physical profiles				

Annex 1: Monuments
used for DEP
(0001 parking (10204))

Shore Project



Legend

- DEP Monument
- Project Fill Boundaries
- ▨ Recreational areas w/parking and facilities
- FL State Parks
- Public Lodging



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Licensee Details

Licensee Information

Name: **RESORT AT SINGER ISLAND PROPERTIES INC (Primary Name)**
RESORT AT SINGER ISLAND (THE) (DBA Name)

Main Address: **3800 N OCEAN DR**
RIVIERA BEACH Florida 33404

County: **PALM BEACH**

License Mailing:

LicenseLocation: **3800 N OCEAN DR**
RIVIERA BEACH FL 33404

County: **PALM BEACH**

License Information

License Type: **Hotel**
Rank: **Hotel**
License Number: **HOT6002978**
Status: **Current,Active**
Licensure Date: **04/04/2007**
Expires: **12/01/2009**

Special Qualifications Qualification Effective

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Licensee Details

Licensee Information

Name: CRESTLINE HOTELS & RESORTS INC (Primary Name)
HILTON SINGER ISLAND OCEANFRON (DBA Name)

Main Address: 8405 GREENSBORO DR STE 500
MCLEAN Virginia 22102

County: PALM BEACH

License Mailing: 3700 NORTH OCEAN DRIVE
SINGER ISLAND FL 33404

LicenseLocation: 3700 N OCEAN DR
RIVIERA BCH FL 334042806

County: PALM BEACH

License Information

License Type: Hotel

Rank: Hotel

License Number: HOT6007204

Status: Current,Active

Licensure Date: 02/28/2000

Expires: 12/01/2009

Special Qualifications **Qualification Effective**

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29

Singer Island Erosion Control Project
Updated: August 2009

ID	Task Name	% Complete	Start	Finish
1	Task 1 Data Collection & Baseline Establishme	100%	Mon 5/2/05	Tue 6/6/06
2	Review Existing Studies	100%	Mon 5/2/05	Fri 6/10/05
3	Review Previous Studies	100%	Mon 5/2/05	Fri 6/3/05
4	Review Hydrographic Data	100%	Mon 5/2/05	Fri 6/3/05
5	Review Topographic Data	100%	Mon 5/2/05	Fri 6/3/05
6	Compile Data	100%	Mon 6/6/05	Fri 6/10/05
7	Determine need for additional data	100%	Mon 6/6/05	Fri 6/10/05
8	Geotechnical Data	100%	Mon 5/2/05	Tue 6/28/05
9	Existing Hardbottom and Bedrock Da	100%	Mon 5/2/05	Fri 6/24/05
10	Review Existing Data	100%	Mon 5/2/05	Fri 6/3/05
11	Prepare Base Maps	100%	Mon 5/2/05	Fri 6/17/05
12	Determine Additional Data Needed	100%	Mon 6/20/05	Fri 6/24/05
13	Existing Borrow Area Data	100%	Wed 6/1/05	Tue 6/28/05
14	Review Existing Offshore Data	100%	Wed 6/1/05	Tue 6/14/05
15	Perform Analysis	100%	Wed 6/15/05	Tue 6/28/05
16	Review Existing Upland Data	100%	Wed 6/1/05	Tue 6/14/05
17	Perform Analysis	100%	Wed 6/15/05	Tue 6/28/05
18	Project Development Meeting	100%	Wed 6/29/05	Wed 6/29/05
19	Meeting	100%	Wed 6/29/05	Wed 6/29/05
20	Data Collection	100%	Thu 6/30/05	Tue 6/6/06
21	Hardbottom and Bedrock Phase 1	100%	Wed 3/15/06	Tue 4/4/06
22	Hardbottom and Bedrock Phase 2	100%	Wed 4/5/06	Tue 4/25/06
23	Hardbottom and Bedrock Phase 3	100%	Wed 4/26/06	Tue 5/16/06
24	Hardbottom and Bedrock Phase 4	100%	Wed 5/10/06	Tue 6/6/06
25	Wave and Current	100%	Thu 6/30/05	Wed 8/10/05
26	Wave and Current	100%	Wed 3/15/06	Tue 5/2/06
27	Task 2 Project Design	100%	Wed 3/30/05	Tue 11/22/05
28	Develop Design Criteria	100%	Wed 3/30/05	Tue 11/22/05
29	Determine Erosional Stress	100%	Wed 3/30/05	Tue 7/19/05
30	Perform Modeling	100%	Wed 7/20/05	Tue 11/22/05
31	Preliminary Design	100%	Wed 3/30/05	Tue 8/16/05
32	Erosion Control Structures	100%	Wed 3/30/05	Tue 8/16/05
33	Prepare Site Plan	100%	Wed 3/30/05	Tue 8/2/05
34	Estimate Cost	100%	Wed 8/3/05	Tue 8/16/05
35	Nearshore Reef	100%	Wed 3/30/05	Tue 8/9/05
36	Prepare Site Plan	100%	Wed 3/30/05	Tue 8/2/05
37	Estimate Cost	100%	Wed 8/3/05	Tue 8/9/05
38	Beach Fill (eliminated)	100%	Wed 3/30/05	Tue 8/2/05
39	Prepare Site Plan	100%	Wed 3/30/05	Tue 8/2/05
40	Estimate Cost	100%	Wed 3/30/05	Tue 4/5/05
41	Task 3 Permitting	92%	Wed 3/30/05	Wed 10/28/09
42	Pre-Application Meetings	100%	Wed 3/30/05	Mon 2/13/06
43	Coordinate Meetings	100%	Wed 3/30/05	Tue 5/10/05
44	COE Meeting	100%	Mon 1/16/06	Mon 1/16/06
45	DEP Meeting	100%	Tue 2/7/06	Tue 2/7/06
46	Prepare Summary of Meetings	100%	Wed 2/8/06	Mon 2/13/06
47	JCP Application	95%	Wed 3/30/05	Tue 10/6/09
48	Prepare Final Design - Erosion Control	100%	Wed 3/30/05	Wed 5/25/05
49	Prepare Final Design - Nearshore Reef	100%	Wed 3/30/05	Wed 5/25/05
50	Prepare Final Design - Beach Fill	100%	Wed 3/30/05	Wed 5/25/05
51	Prepare JCP Application	100%	Thu 5/26/05	Wed 6/29/05
52	County Review op application	100%	Wed 6/29/05	Thu 6/29/06
53	JCP application submitted to DEP	100%	Fri 6/30/06	Fri 6/30/06
54	RAI#1 received	100%	Fri 6/30/06	Sun 7/30/06
55	Response to RAI #1	100%	Wed 8/2/06	Fri 8/17/07
56	RAI #2 received	100%	Mon 8/20/07	Wed 9/19/07
57	Response to RAI #2	100%	Tue 8/14/07	Thu 8/14/08
58	RAI #3 received	100%	Thu 8/14/08	Fri 9/12/08
59	Response to RAI #3, ECL Survey	100%	Fri 9/12/08	Wed 3/25/09
60	Monitoring/Mitigation Plan	100%	Tue 2/24/09	Mon 6/15/09
61	Revised ECL	75%	Wed 4/22/09	Tue 10/6/09
62	DEP issues Permit	0%	Fri 6/12/09	Thu 10/1/09
63	Federal Permitting	90%	Fri 6/30/06	Wed 10/28/09
64	Public Notice Published	100%	Fri 6/30/06	Fri 9/28/07
65	Fed Agency RAIs	100%	Mon 10/1/07	Thu 2/12/09
66	RAI responses	100%	Thu 11/1/07	Wed 2/18/09
67	USACE Issues Biological Assessment	100%	Thu 2/19/09	Tue 3/24/09
68	Fed Concurrence and BO	40%	Wed 4/1/09	Mon 8/17/09
69	USACE Issues Permit	20%	Fri 8/14/09	Wed 10/28/09
70	Task 4 Construction	9%	Thu 6/26/08	Tue 3/1/11
71	Annual Reef Construction Contract	76%	Thu 6/26/08	Wed 11/25/09
72	IFB Advertised	100%	Thu 6/26/08	Tue 7/22/08
73	Contract Signed (ERM to BCC)	100%	Tue 8/5/08	Tue 9/9/08
74	DEP Approval	100%	Tue 7/22/08	Tue 9/23/08
75	Task Order	0%	Wed 10/28/09	Wed 11/25/09
76	Capital Project Construction Contract	7%	Mon 8/25/08	Tue 8/11/09
77	Prepare Technical Specifications	15%	Mon 8/25/08	Wed 2/4/09
78	Prep IFB	0%	Wed 2/4/09	Wed 2/18/09
79	Advertise for Bids	0%	Wed 2/18/09	Tue 3/31/09
80	Pre-bid Site Visit	0%	Mon 3/9/09	Wed 3/11/09
81	Pre-bid Meeting	0%	Wed 3/11/09	Thu 3/12/09
82	Respond to Addenda ?s	0%	Thu 3/12/09	Mon 3/16/09
83	IFB Quality Assurance	0%	Mon 3/16/09	Wed 3/18/09
84	Bid Opening	0%	Tue 3/31/09	Tue 3/31/09
85	ERM Bid Evaluation	0%	Tue 3/31/09	Tue 4/14/09
86	OSBA Bid Evaluation	0%	Tue 4/14/09	Tue 4/21/09
87	Intent Notice to Award & Send Contract	0%	Tue 4/21/09	Tue 5/5/09
88	Bid Posting	0%	Mon 5/4/09	Mon 5/11/09

30

Singer Island Erosion Control Project
Updated: August 2009

ID	Task Name	% Complete	Start	Finish
89	Contractor Sign/Insurance/Bond	0%	Mon 5/11/09	Fri 5/29/09
90	Review Contract/Insurance/Bond	0%	Fri 5/29/09	Mon 6/8/09
91	Sign Contract (ERM to BCC)	0%	Mon 6/8/09	Mon 7/27/09
92	Pre-Construction Meeting	0%	Mon 7/27/09	Tue 7/28/09
93	Notice To Proceed	0%	Tue 7/28/09	Tue 8/11/09
94	Start-up Construction	0%	Wed 1/14/09	Tue 7/14/09
95	Pre-Construction Meeting	0%	Wed 1/14/09	Wed 1/14/09
96	Issue Annual Reef Construction Work O	0%	Thu 1/15/09	Tue 1/20/09
97	mobilize	0%	Wed 1/21/09	Tue 1/27/09
98	Place Rock	0%	Wed 1/28/09	Tue 7/14/09
99	Capital Project Construction	0%	Tue 8/11/09	Tue 3/1/11
100	Mobilize	0%	Tue 8/11/09	Tue 8/18/09
101	Place Rock	0%	Tue 8/18/09	Tue 3/1/11

31

CENTRAL PALM BEACH COUNTY EROSION CONTROL PROJECT
(Former name: South Palm Beach Shore Protection Project)

Location:

Palm Beach County, R-134 - R-138.5 (fill area), map attached.

Project Description:

Restoration of approximately 0.8 miles of critically eroding shoreline along the entire length of the municipality, the public beach in Lantana, and the beach in front of the Ritz-Carlton in Manalapan. As mentioned in the Strategic Beach Management Plan for this beach, a feasibility study for the project is complete and has been accepted by the Bureau. Design and Permitting work for the shoreline protection project continues. An Environmental Impact Statement (EIS) for the project is required as part of the permitting process. Palm Beach County staff is working with the US Army Corps of Engineers and our consultants to get this process underway. The most updated timeline for this project (attached) indicates construction beginning in the spring of 2011.

Persistent dunes within the project area are restored on an as-needed basis as required by the Strategic Beach Management Plan. Since the near total loss of dune resulting from sub-tropical Storm Andrea (May 2007), this has occurred at least annually. Sand lost from the berm during the 2004 and 2005 hurricanes has not been restored however; staff works to maintain the current level of the beach with periodic dune restoration and plantings.

Use of Program Funds:

Funds requested for FY 2010-11 will be used to complete project design and permitting (including the EIS), currently underway; and for construction of structures. Eligible aerial surveys and regional (profiles and hydrographic) monitoring for this area will also be funded. Additional funds have been requested to restore the dune in the project area on an as-needed basis until a permanent solution is completed.

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others. Currently there are six full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services.

The project manager for this project is Kimberly Miranda; 561-233-2465; Kmiranda@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance. Most recently, an interlocal agreement has been signed by the Town of South Palm Beach to provide a share of the local cost for the design, permitting, management, and construction of erosion control structures.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Though there is no current funding agreement for this project, Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: Grant funding was provided for the feasibility study and dune work. The project is included in the Florida DEP Beach Restoration Management Plan. The feasibility study for this project was cost-shared through DEP funding agreement H5PB1. This was a one-time cost share of 90% due to hurricane impacts (Frances and Jeanne). Emergency dune restoration as a result of impacts due to Sub-Tropical Storm Andrea was cost-shared through DEP funding agreement 07PB2. Cost share for this grant was 50% based on project length and public access. There is currently no funding agreement executed for this project, however all scopes of work continue to be sent to the Department for approval.

Federal Authorization: This project is not federally authorized.

Eligibility Calculation:

Project length in feet		<u>4245'</u>
Project length within 1/2 mile of primary public beach access		<u>4070'</u>
Length of Project Shoreline zoned commercial/recreational		<u>1510'</u>
Lantana Municipal Beach	680'	228 parking spaces
Palm Beach Oceanfront Inn	100'	58 guest rooms, 60 parking spaces
Ritz - Carlton	730'	310 guest rooms

Public lodging license documentation as provided by the FL Department of Business and Professional Regulation is attached.

Supporting Data:

Severity of Erosion: The entire project area has been designated as critically eroded by the Florida State Department of Environmental Protection. The hurricanes of 2004 and 2005 destroyed the restored dunes and lowered the berm height. The beach has not recovered, and continues to be impacted by wind and waves due to winter storms and tropical activity. Dune restoration occurs at least annually however the most recent project (completed in January 2009) has completely eroded. In addition, the entire berm throughout the project area appears to have lost at least 3-4 vertical feet due to deflation of the beach from the effects of Tropical Storm Fay.

Threat to Upland Structures: The majority (84%) of the project area consists of residential or commercial establishments. According to the FDEP MapDirect Web Mapping site, all of these properties are partially or entirely seaward of the Coastal Construction Control Line. While nearly all of these are protected by some form of coastal armoring, the feasibility study shows that all show some sign of long-term deterioration. During storm events, many of these walls are regularly overtopped by waves. In 2007, the wall behind The Imperial House (R-137-340') collapsed and was temporarily replaced with large concrete blocks. As of this year, this wall has not been replaced.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. A total of 96% of the project area shoreline is available for public recreational use (within ½ mile of Lantana Public Beach). Approximately 36% of the project area is publicly owned parks, beach access ways, or public lodging establishments. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area.

Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

Innovative Applications: Innovative modeling technology is being used to minimize the extent of construction necessary for shoreline stabilization. Preliminary results show that a combination of dune restoration, and the establishment of a narrow berm stabilized by nearshore segmented breakwaters instead of conventional beach nourishment will minimize the potential impacts to extensive nearshore hardbottom resources in the vicinity as well as provide a more long-term solution.

Project Performance: Once the segmented breakwater project is constructed, it is expected to have a life span of approximately 50 years with periodic maintenance of dune and berm after major storm events.

Regionalization: The project boundaries currently encompass three municipalities: South Palm Beach, Lantana, and Manalapan. In addition, the local sponsor is entering into an interlocal agreement with the Town of Palm Beach to combine engineering, design, project management, and construction efforts for the segmented breakwater to extend into the Town through R-132. Though this extension is not an official part of the South Palm Beach Shore Protection Project, combining efforts to design and build this project concurrently with the Town of Palm Beach will result in significant cost savings for both project sponsors.

Attachments:

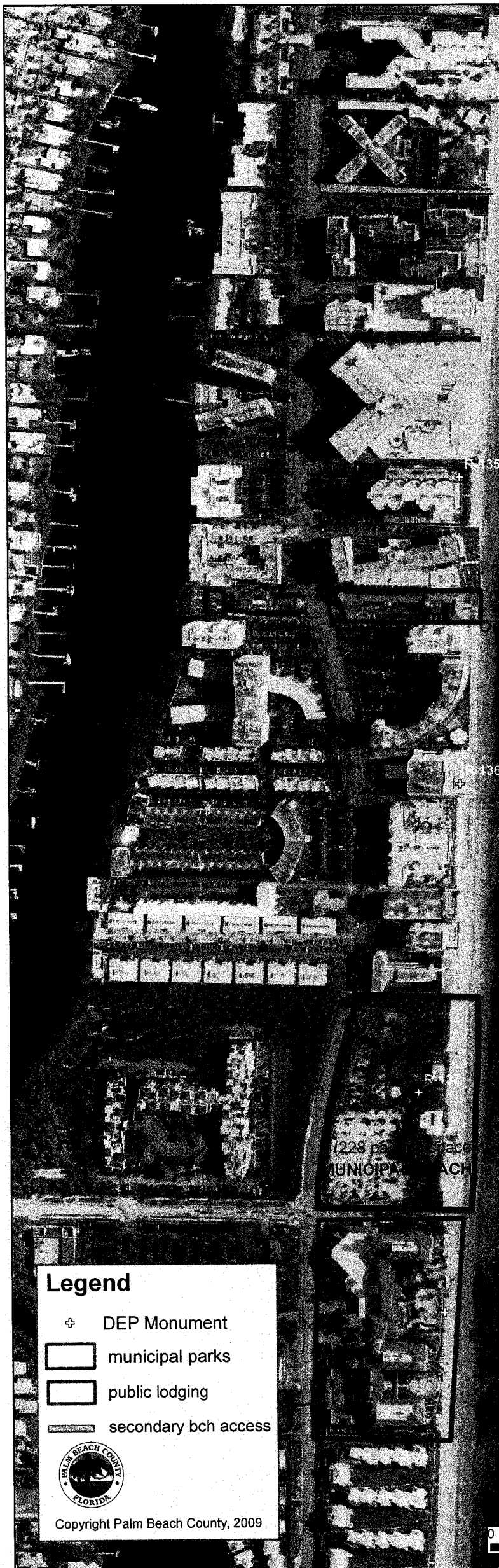
1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking, and public lodging establishments
4. MPP timeline

Central Palm Beach County Erosion Control Project

5 year estimated project costs

10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	PED	EIS, permitting	\$700,000	\$0	\$350,000	\$350,000
	Construction	breakwaters	\$8,000,000	\$0	\$4,000,000	\$4,000,000
	Monitoring	pre/post construction physical, reef, sea turtle	\$100,000	\$0	\$50,000	\$50,000
	Dune fill	maintenance of dune	\$500,000	\$0	\$250,000	\$250,000
2011-2012	Monitoring	pre/post construction physical, reef, sea turtle	\$100,000	\$0	\$50,000	\$50,000
	Dune fill	maintenance of dune	\$300,000	\$0	\$150,000	\$150,000
2012-2013	Monitoring	post construction physical, reef, sea turtle	\$100,000	\$0	\$50,000	\$50,000
	Dune fill	maintenance of dune	\$300,000	\$0	\$100,000	\$100,000
2013-2014	Monitoring	post construction physical, reef, sea turtle	\$100,000	\$81,000	\$34,500	\$34,500
2014-2015	Monitoring	post construction physical, reef, sea turtle	\$100,000	\$81,000	\$34,500	\$34,500
2015-2016	Monitoring	dune inspections, physical profiles				
2016-2017	Monitoring	dune inspections, physical profiles				
2017-2018	Monitoring	dune inspections, physical profiles				
2018-2019	Monitoring	dune inspections, physical profiles				
2019-2020	Monitoring	dune inspections, physical profiles				



34





public beach access
(no parking)

35

36

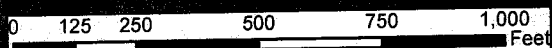
(228 parking spaces)
MUNICIPAL BEACH

Legend

-  DEP Monument
-  municipal parks
-  public lodging
-  secondary bch access



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Licensee Details

Licensee Information

Name: **TIDES LLC & PALM BEACH OCEAN FRONT LLC (Primary Name)**
TIDES RESTAURANT, PALM BEACH OCEAN FRONT INN (DBA Name)

Main Address: **3550 S OCEAN BLVD**
SOUTH PALM BEACH Florida 33480

County: **PALM BEACH**

License Mailing: **3550 S OCEAN BLVD**
SOUTH PALM BEACH FL 33480

County: **PALM BEACH**

LicenseLocation: **3550 SOUTH OCEAN BOULEVARD**
SOUTH PALM BEACH FL 33480

County: **PALM BEACH**

License Information

License Type: **Retail Beverage**

Rank: **4COP**

License Number: **BEV6000010**

Status: **Current,Active**

Licensure Date: **01/07/2003**

Expires: **03/31/2010**

Special Qualifications	Qualification Effective
Dual Beverage and Tobacco License	08/30/2002
Hotel/Motel - COP & Package	08/30/2002
Invoice Sent	12/11/2002

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36

Licensee Details

Licensee Information

Name: **TIDES LLC (Primary Name)**
TIDES RESTAURANT & BAR (DBA Name)

Main Address: **3550 S OCEAN BLVD**
PALM BEACH Florida 33480

County: **PALM BEACH**

License Mailing: **3550 S OCEAN BLVD**
PALM BEACH FL 33480

County: **PALM BEACH**

License Location: **3550 S OCEAN BLVD**
S PALM BCH FL 334805762

County: **PALM BEACH**

License Information

License Type: **Permanent Food Service**

Rank: **Seating**

License Number: **SEA6000143**

Status: **Current,Active**

Licensure Date: **07/30/2002**

Expires: **12/01/2009**

Special Qualifications Qualification Effective

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37

Print

Licensee

Name: **TIDES LLC**
 Rank: **Seating**
 Primary Status: **Current**
 Secondary Status: **Active**

License Number: **6000143**
 License Expiration Date: **12/01/2009**
 Original License Date: **07/30/2002**

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
6002037	Current, Active	PALM BEACH OCEANFRONT LLC	Food Associated with Lodging	01/01/1901	Motel	12/01/2009

38

Licensee Details

Licensee Information

Name: **RITZ-CARLTON HOTEL COMPANY LLC, THE (Primary Name)**
RITZ-CARLTON PALM BEACH (DBA Name)

Main Address: **100 S OCEAN BLVD**
MANALAPAN Florida 33462

County: **PALM BEACH**

License Mailing:

LicenseLocation: **100 S OCEAN BLVD**
MANALAPAN FL 33462

County: **PALM BEACH**

License Information

License Type: **Hotel**
Rank: **Hotel**
License Number: **HOT6009710**
Status: **Current,Active**
Licensure Date: **12/09/2003**
Expires: **12/01/2009**

Special Qualifications **Qualification Effective**
Current with Renewal **12/09/2003**

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39

Southpalmbeach_erosion control alternative

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors	Apr 16
							S M
1	South Palm Beach Erosion Control Engineering Alternative Development	1897 days?	Tue 4/18/06	Wed 7/24/13	18%		
2	Erosion Control Study DRAFT received	211 days	Tue 4/18/06	Tue 2/6/07	100%		
3	After review of DRAFT, ERM staff supports development of an Environmental Impact Statement (EIS) for erosion control	12 days	Tue 2/6/07	Wed 2/21/07	100%		
4	Attend Town of South Palm Beach Town Council Meeting to present study results & request financial participation of 20% for an erosion control project	1 day	Wed 2/28/07	Wed 2/28/07	100%		
5	BCC approves Interlocal Agreement w/ South Palm Beach for financial participation of 20%	1 day	Tue 5/15/07	Tue 5/15/07	100%		
6	County feasibility study comments sent to CPE	1 day	Fri 5/18/07	Fri 5/18/07	100%		
7	Emergency dune restoration due to Subtropical Storm Andrea (7,000 CY placed)	10 days	Tue 5/29/07	Mon 6/11/07	100%		
8	FINAL copies of the Feasibility Study Received	1 day	Thu 7/5/07	Thu 7/5/07	100%		
9	All consultant qualification packages received by the ACOE local office	40 days	Fri 5/18/07	Thu 7/12/07	100%		
10	ERM staff attends meeting w/ ACOE to discuss project & EIS	1 day	Tue 9/4/07	Tue 9/4/07	100%		
11	Engineering & Design SOW	404 days	Wed 4/18/07	Mon 11/3/08	100%		
12	ACOE selects consultant to perform EIS	275 days	Tue 10/16/07	Mon 11/3/08	100%		
13	CPE & County Meeting	1 day	Tue 12/18/07	Tue 12/18/07	100%		
14	CPE submits first ADP SOW	1 day	Wed 1/16/08	Wed 1/16/08	100%		
15	1st DRAFT Engineering & Design SOW Received	1 day	Wed 2/6/08	Wed 2/6/08	100%		
16	CPE submits second ADP SOW	1 day	Mon 2/25/08	Mon 2/25/08	100%		
17	FDEP approves ADP SOW	1 day	Tue 2/26/08	Tue 2/26/08	100%		
18	CPE & County Meeting	1 day	Wed 4/18/07	Wed 4/18/07	100%		
19	2nd DRAFT Engineering & Design SOW Received	1 day	Tue 5/20/08	Wed 5/21/08	100%		
20	County submits Engineering & Design SOW to FDEP	1 day	Wed 5/28/08	Wed 5/28/08	100%		
21	FDEP comments received	1 day	Tue 6/24/08	Tue 6/24/08	100%		
22	3rd DRAFT Engineering & Design SOW Received	1 day	Wed 7/16/08	Wed 7/16/08	100%		
23	County submits responses to FDEP comments	17.88 days	Mon 6/23/08	Wed 7/23/08	100%		
24	ERM submits comments to CPE regarding 3rd DRAFT	29 days	Mon 7/28/08	Thu 9/4/08	100%	23	
25	County submits Final SOW to FDEP for final approval	1 day	Thu 8/28/08	Thu 8/28/08	100%		
26	4th SOW (FINAL) received	1 day	Fri 9/5/08	Fri 9/5/08	100%		
27	ERM receives FDEP approval	26 days	Thu 9/28/08	Thu 10/2/08	100%		
28	FDEP FUNDING	48 days	Wed 7/2/08	Mon 9/8/08	100%		
29	ERM requests FDEP cost sharing for Engineering & Design SOW	0 days	Wed 7/2/08	Wed 7/2/08	100%		
30	ERM requests funding update	0 days	Mon 9/8/08	Mon 9/8/08	100%		
31	Task Order Approval (0877-03A)	282 days?	Mon 8/18/08	Tue 9/15/09	97%		
32	Prepare Task Order & Board Item	16 days	Mon 8/18/08	Mon 9/8/08	100%		
33	Approval of BCC & NTP	1 day	Tue 10/7/08	Tue 10/7/08	100%		
34	First Engineering & Design Change Order Approval (0877-03A)	0 days	Thu 3/12/09	Thu 3/12/09	100%		
35	Second Engineering & Design Change Order Approval (TBD)	1 day?	Tue 9/15/09	Tue 9/15/09	50%		
36	Engineering, Design & Permitting (Task Order 0877-03A)	297 days?	Mon 10/13/08	Tue 12/1/09	67%		
37	Review of SI Material	86 days	Mon 10/13/08	Mon 2/9/09	100%		
38	Environmental Impacts & Benefits Assessment	231 days	Mon 10/13/08	Mon 8/31/09	60%		
39	Nearshore/Offshore Edge Relief Measurements	149 days?	Thu 2/5/09	Tue 9/1/09	50%		
43	Engineering Design & Documentation	182 days?	Mon 3/9/09	Tue 11/17/09	0%		
49	Pre-design Stakeholder Identification Meeting w/ Regulatory Agencies - TBD	1 day	Tue 12/1/09	Tue 12/1/09	0%		
50	Beach Profile Survey R132 - R143	11 days	Fri 12/5/08	Sun 12/21/08	100%		
51	JCP Permit Application	134 days	Mon 3/9/09	Mon 10/12/09	56%		
52	Meetings with County Staff	217 days?	Wed 12/3/08	Thu 10/1/09	0%		
58	Nearshore Seismic Reflection Subbottom Profile Survey	2 days	Mon 9/7/09	Tue 9/8/09	0%		
59	DRAFT survey received for review	2 days	Mon 9/7/09	Tue 9/8/09	0%		
60	Requests for Additional Information (RAI)	290 days	Mon 11/2/09	Fri 12/10/10	0%		
61	Request DRAFT RAI_SOW	10 days	Mon 11/2/09	Fri 11/13/09	0%		
62	FDEP approval of RAI SOW	0 edays	Sun 12/13/09	Sun 12/13/09	0%	61FS+30 edays	
63	Task Order prep	10 days	Mon 11/16/09	Fri 11/27/09	0%	61	
64	First RAI received	0 days	Sun 1/10/10	Sun 1/10/10	0%	51FS+90 edays	
65	RAI Response Submitted	45 days	Mon 1/11/10	Fri 3/12/10	0%	84	
66	Second RAI received	0 days	Sun 4/11/10	Sun 4/11/10	0%	65FS+30 edays	
67	2nd RAI Response Submitted	45 days	Mon 4/12/10	Fri 6/11/10	0%	66	
68	Third RAI Response Received	0 days	Sun 7/11/10	Sun 7/11/10	0%	67FS+30 edays	
69	3rd RAI Response Submitted	45 days	Mon 7/12/10	Fri 9/10/10	0%	68	
70	Fourth RAI Received	0 days	Sun 10/10/10	Sun 10/10/10	0%	69FS+30 edays	
71	4th RAI Response Submitted	45 days	Mon 10/11/10	Fri 12/10/10	0%	70	
72	EIS SOW	963 days?	Tue 9/4/07	Fri 5/13/11	48%		
73	Corps approve selection of a Contractor	407 edays	Tue 9/4/07	Wed 10/15/08	100%	10	
74	ACOE, Taylor, County meeting to discuss EIS	1 day	Fri 11/7/08	Fri 11/7/08	100%	73	
75	Corps submit Communication Protocol to County & Contractor	1 day?	Fri 11/7/08	Fri 11/7/08	100%		
76	Submit draft Scope of Work to Corps (&County)	16 days	Mon 11/10/08	Mon 12/1/08	100%	75	
77	Finalize Scope of Work & Communication Protocol	10 days	Tue 12/2/08	Mon 12/15/08	100%	76	
78	BCC Meeting	0 days	Tue 4/21/09	Tue 4/21/09	100%		
79	EIS Change Order Proposal	63 days?	Tue 6/16/09	Thu 9/10/09	50%		
80	FDEP Review of EIS Change Order	30 edays	Wed 7/22/09	Fri 8/21/09	0%		
81	CRC Meeting & Approval (NTP)	1 day?	Thu 9/10/09	Thu 9/10/09	0%		
82	EIS TASKS	530 days	Mon 5/4/09	Fri 5/13/11	4%		
83	Task 1 Prepare Statement of Work	95 days	Mon 5/4/09	Fri 9/11/09	11%	78	
88	Task 2 Prepare/Implement QA/QC Plan	90 days	Mon 5/11/09	Fri 9/11/09	6%		
92	Task 3 Public Participation Plan	115 days	Mon 5/11/09	Fri 10/16/09	41%		
99	Task 4 Scoping Meeting	60 days	Mon 10/19/09	Fri 11/8/10	0%		
110	Task 5 Data Development Process	133 days	Mon 11/2/09	Wed 5/5/10	0%		
119	Task 6 Prepare Action Summaries	48 days	Thu 2/4/10	Mon 4/12/10	0%		
124	Task 7. Preliminary Draft Environmental Impact Statement (PDEIS)	122 days	Thu 4/8/10	Fri 9/24/10	0%		
146	Task 8. Hold Public Comment Meetings	24 days	Thu 9/30/10	Wed 11/3/10	0%		
153	Task 9 Prepare Preliminary Final EIS	112 days	Fri 10/1/10	Mon 3/7/11	0%		
183	Task 10. Prepare Draft Record of Decision (ROD)	48 days	Tue 3/8/11	Thu 5/12/11	0%		
189	Task 11, 14 t Administrative Records, other documentation	525 days	Mon 5/11/09	Fri 5/13/11	0%		
192	PERMITS Received	983 days?	Mon 10/19/09	Wed 7/24/13	0%		
193	FDEP Permit	0 days	Fri 12/10/10	Fri 12/10/10	0%	71	
194	ACOE Permit	0 days	Thu 5/12/11	Thu 5/12/11	0%	188	
195	Plans & Specs	115 days	Mon 9/13/10	Fri 2/18/11	0%		
196	Preliminary DRAFT Plans & Specs	80 days	Mon 9/13/10	Fri 12/31/10	0%	69	

Project: spbd 2
Date: Wed 8/5/09

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

40

Southpalmbeach_erosion control alternative

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors	Apr 16 S M
197	DEP Review & Approval	30 days	Mon 1/3/11	Fri 2/11/11	0%	198	
198	Final Plans & Specs	5 days	Mon 2/14/11	Fri 2/18/11	0%	197	
199	CONSTRUCTION CONTRACT (Invitation for Bid)	74 days	Fri 4/8/11	Wed 7/20/11	0%		
229	Construction	263.5 days	Thu 7/21/11	Tue 7/24/12	0%		
230	Pre-Construction Meeting	0.5 days	Thu 7/21/11	Thu 7/21/11	0%	228	
231	Receive Submissions From Contractor	0 days	Thu 7/21/11	Thu 7/21/11	0%	230	
232	Review Submissions/Prepare And Send NTP	2 days	Thu 7/21/11	Mon 7/25/11	0%	231	
233	Notice To Proceed	0 days	Mon 7/25/11	Mon 7/25/11	0%	232	
234	Commencement	0 days	Mon 7/25/11	Mon 7/25/11	0%	233	
235	Construction	365 edays	Mon 7/25/11	Tue 7/24/12	0%	234	
236	Pre & Post Construction Monitoring (TBD)	858 days?	Sun 4/11/10	Wed 7/24/13	0%		
237	Biological monitoring (TBD)	1200 edays?	Sun 4/11/10	Wed 7/24/13	0%	66	
238	Physical Monitoring (TBD)	1200 edays?	Sun 4/11/10	Wed 7/24/13	0%	66	
239	Contract Administration	1 day?	Tue 7/24/12	Wed 7/25/12	0%		
241	Contract Closeout	43 days	Tue 7/24/12	Fri 9/21/12	0%		
259	Quarterly Reports	196 days?	Mon 10/19/09	Mon 7/19/10	0%		
260	Q3 2009	1 day?	Mon 10/19/09	Mon 10/19/09	0%		
261	Q4 2009	1 day?	Mon 1/18/10	Mon 1/18/10	0%	260FS+90 edays	
262	Q1 2010	1 day?	Mon 4/19/10	Mon 4/19/10	0%	261FS+90 edays	
263	Q2 2010	1 day?	Mon 7/19/10	Mon 7/19/10	0%	262FS+90 edays	

Project: spbd 2
Date: Wed 8/5/09



41

SOUTH LAKE WORTH INLET MANAGEMENT

Location:

Palm Beach County, R-151 – R-152 (monitoring from R137-R164)

Project Description:

The project consists of design, permitting, construction, and monitoring associated with the implementation of the South Lake Worth Inlet Management Plan. Activities occurring under this project include the periodic dredging of the sand trap and navigational channel located inside the inlet and the reconstruction of the sand transfer plant. The reconstruction of the plant is currently ongoing and expected to be complete in 2011.

Use of Program Funds:

The requested funding will be used for ongoing biological and physical monitoring associated with the implementation of the South Lake Worth Inlet Management Plan.

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Tracy Logue; 561-233-2491; TLogue@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: The management plan for the project and annual monitoring was funded by the state and the project is included in the Strategic Beach Management Plan. The initial phase of sand trap development & restoration of the sand transfer plant was funded by the state. The funding appropriation for the SLWI jetty restoration was confirmed by the legislature on July 17, 2007. The original grant for this project (99PB1) has been extended several times and expires on December 31, 2009.

Federal Authorization: This project has not been federally authorized, however a one-time allotment has been awarded to repair damages to the sand transfer plant and to the inlet jetty as a result of the 2004 hurricanes. This money, authorized by FEMA, was used to offset project management and construction costs.

Eligibility Calculation:

This project has been determined to be 100% eligible for cost-sharing by the Department.

Supporting Data:

Severity of Erosion: The entire project area is designated as critically eroded by the Department of Environmental Protection. The historic erosion rate along the project shoreline was computed to be 5 ft/yr (Aug 1996 GDM). Over the anticipated six year renourishment schedule of the Ocean Ridge Shore Protection Project, the erosion rate is anticipated to average 7.44 cy/lf/yr (including end losses).

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Shoreline development within the project area consists of developed property and public park land, 100% of which lies within ½ mile of adequate public access facilities. Public beach access allows for public and tourism use throughout the project area. Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

Project Performance: The project mitigates for adverse impacts associated with the inlet, providing

42

nearly 100% of the bypass quantity required by the approved management plan. The project area acts as a feeder beach to maintain down drift areas which contain nearshore hardbottom habitat. The transfer plant continues to provide a cost effective and environmentally sound method of bypassing sand over an extended time period. The latest data show the sand transfer plant bypasses approximately 60,000 CY annually to down drift beaches. Sand trap and navigational channel dredging maximize the use of sediment sources in maintaining the beach. The performance of sand bypass into the groin field is such that the area maintained its width throughout the project interval and did not require any fill during the most recent downdrift beach nourishment (Ocean Ridge shore protection project, completed Dec 2005), resulting in a cost savings through the reduction in the amount of fill necessary.

Innovative Applications: The plant is a component of an innovative approach to maintain the downdrift beaches using inlet sand bypass discharge into a groin field. The bypassed sand is native beach material, with color, fine fraction and compaction characteristics which has been shown to not impact sea turtle nesting success. The steady rate of transfer eliminates the need for advanced fill and the related impacts to nearshore hardbottom.

Regionalization: During the most recent dredging of the SLWI sand trap, Palm Beach County combined projects with the City of Boynton Beach (for the dredging of the boat club channel) and the Florida Inland Navigation District (for the dredging of the AICW) to bid three individual projects as one to save on mobilization and demobilization costs for each project. Permit required sea grass monitoring for three projects were combined as well and the work completed by one consultant.

Attachments:

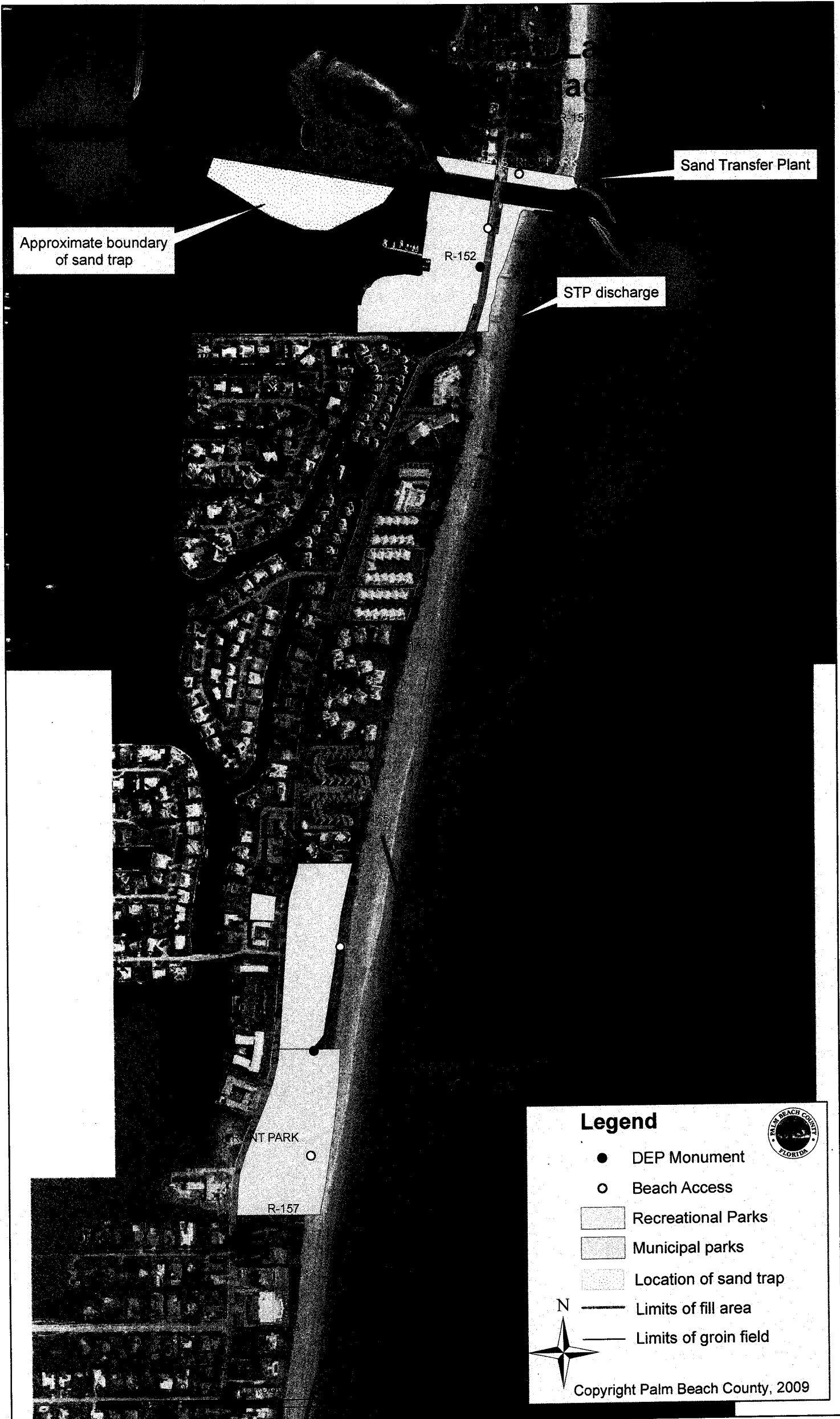
1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking,
4. MPP timeline

South Lake Worth Inlet Management Plan Implementation

5 year estimated project costs

10 year estimated project schedule

Year	Phase	Description	Total Cost	State	Local
2010-2011	monitoring	sand trap, physical profiles, sea turtle, SAV	\$104,000	\$52,000	\$52,000
2011-2012	monitoring	sand trap, physical profiles, sea turtle, SAV	\$75,000	\$37,500	\$37,500
2012-2013	monitoring	sand trap, physical profiles, sea turtle, SAV	\$75,000	\$37,500	\$37,500
2013-2014	monitoring	sand trap, physical profiles, sea turtle, SAV	\$75,000	\$37,500	\$37,500
	Construction	dredging of sand trap, placement on	\$500,000	\$250,000	\$250,000
2014-2015	monitoring	sand trap, physical profiles, sea turtle, SAV	\$75,000	\$37,500	\$37,500
2015-2016	monitoring	sand trap, physical profiles, sea turtle, SAV			
2016-2017	monitoring	sand trap, physical profiles, sea turtle, SAV			
2017-2018	monitoring	sand trap, physical profiles, sea turtle, SAV			
2018-2019	monitoring	sand trap, physical profiles, sea turtle, SAV			
2019-2020	monitoring	sand trap, physical profiles, sea turtle, SAV			



Sand Transfer Plant

Approximate boundary of sand trap

STP discharge

R-152

FRONT PARK

R-157

Legend

- DEP Monument
- Beach Access
- ▭ Recreational Parks
- ▭ Municipal parks
- ▭ Location of sand trap
- Limits of fill area
- Limits of groin field



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SLWI STP/Jetties/Seawall

ID	Task Name	Duration	Start	Finish	Predec
0	SLWI STP/Jetties/Seawall	1492 days	Tue 10/26/04	Fri 8/6/10	
1	Funding	250 days	Tue 1/15/08	Tue 1/13/09	
2	DEP Grant	250 days	Tue 1/15/08	Tue 1/13/09	
3	BCC Meeting - Amend 5 of Grant 99PB1 Approv	1 day	Tue 1/15/08	Tue 1/15/08	
4	BCC Meeting - Amend 6 of Grant 99PB1 Approv	1 day	Tue 1/13/09	Tue 1/13/09	
5	99PB1 Grant Renewal (if needed)	61 days	Tue 10/14/08	Tue 1/13/09	
6	Prepare Grant Amendment for Extension	5 days	Tue 10/14/08	Mon 10/20/08	3FS+9
7	Receive Executed Amendment from DEP	0 days	Wed 11/19/08	Wed 11/19/08	6FS+3C
8	Prepare Agenda Item for Amendment	5 days	Thu 11/20/08	Wed 11/26/08	7
9	ERM Admin Approves Agenda Item	5 days	Mon 12/1/08	Fri 12/5/08	8
10	BCC Meeting - Amend 6 of Grant 99PB1 Ap	1 day	Tue 1/13/09	Tue 1/13/09	9FS+27
11	Design	153 days	Tue 3/4/08	Tue 10/7/08	
12	Consultant Task Order	30 days	Tue 3/4/08	Tue 4/15/08	
13	Prepare/Negotiate Task Order	30 days	Tue 3/4/08	Mon 4/14/08	
14	BCC Meeting - Task Order Approved	0 days	Tue 4/15/08	Tue 4/15/08	13
15	Plans and Specs	109 days	Mon 5/5/08	Tue 10/7/08	14
24	Permitting	1492 days	Tue 10/26/04	Fri 8/6/10	
25	Environmental Permits	1492 days	Tue 10/26/04	Fri 8/6/10	
26	Sand Transfer Plant	1447 days	Tue 10/26/04	Sun 6/6/10	
27	STP - DEP Permit	1232 days	Tue 10/26/04	Fri 8/7/09	
28	DEP Permit Issued	0 days	Tue 10/26/04	Tue 10/26/04	
29	Renewal (if needed)	27 days	Thu 7/2/09	Fri 8/7/09	
30	Prepare Application for Permit Re	5 days	Thu 7/2/09	Wed 7/8/09	28FS+E
31	Permit Renewal Approved	0 days	Fri 8/7/09	Fri 8/7/09	30FS+E
32	STP - USACE Permit	1230 days	Thu 8/25/05	Sun 6/6/10	
33	USACE Permit Issued	0 days	Thu 8/25/05	Thu 8/25/05	
34	Renewal (if needed)	25 days	Mon 5/3/10	Sun 6/6/10	
35	Prepare Application for Permit Re	5 days	Mon 5/3/10	Fri 5/7/10	33FS+E
36	Permit Renewal Approved	0 days	Sun 6/6/10	Sun 6/6/10	35FS+E
37	Jetties	771 days	Wed 8/1/07	Fri 8/6/10	
55	Seawall	228 days	Thu 8/7/08	Wed 7/1/09	
65	All Environmental Permits Issued	0 days	Wed 10/8/08	Wed 10/8/08	28,33,4
66	PZ&B Building Permits	36 days	Fri 10/17/08	Thu 12/11/08	
67	CID Submits Permit Applications to PZ&B	0 days	Fri 10/17/08	Fri 10/17/08	23,65FI
68	ERM Pays Permit Application Fees	6 days	Mon 10/20/08	Mon 10/27/08	67
69	Permits Approved	0 days	Thu 12/11/08	Thu 12/11/08	68FS+E
70	Construction Contract	93.63 days	Wed 10/8/08	Tue 2/24/09	
71	Prepare Contract Docs & Send to Facilities	2 days	Wed 10/8/08	Thu 10/9/08	23
72	Facilities Create IFB/Bid Docs	8 days	Tue 10/21/08	Thu 10/30/08	71FS+7
73	Palm Beach Post Receives IFB Ad	0 days	Thu 10/30/08	Thu 10/30/08	65,72
74	IFB Advertising Starts	0 days	Sun 11/2/08	Sun 11/2/08	73FS+1
75	Facilities Sells Bid Docs	24 days	Mon 11/3/08	Tue 12/9/08	74
76	Pre-bid Meeting	2 hrs	Tue 11/18/08	Tue 11/18/08	74FS+E
77	Pre-bid Site Visit	2 hrs	Tue 11/18/08	Tue 11/18/08	74FS+E
78	Bids Received	0 hrs	Tue 12/9/08	Tue 12/9/08	75
79	Bid Opening	2 hrs	Wed 12/10/08	Wed 12/10/08	78
80	Evaluate Bids (Facilities + ERM + OSBA)	10 days	Wed 12/10/08	Wed 12/24/08	79
81	Notice to Award Posted	0 days	Wed 12/24/08	Wed 12/24/08	80
82	Facilities prepares Contract/Agenda Item	20 days	Wed 12/24/08	Fri 1/23/09	81
83	Contract/Agenda Item Sent Downtown for Processing	0 hrs	Fri 1/23/09	Fri 1/23/09	82
84	BCC Meeting - Contract Approved	5 hrs	Tue 2/24/09	Tue 2/24/09	83FS+2
85	Pre-Construction Meeting with Contractor	0 days	Tue 2/24/09	Tue 2/24/09	84
86	Construction	349.88 days	Tue 2/24/09	Tue 6/29/10	
87	Facilities Prepares NTP	1 day	Tue 2/24/09	Wed 2/25/09	85
88	Send Notice To Proceed	0 days	Wed 2/25/09	Wed 2/25/09	69,87
89	Submittals	60 days	Wed 2/25/09	Wed 5/20/09	88
90	Fabricate concrete piles	60 days	Wed 2/25/09	Wed 5/20/09	88
91	Mobilization	39 days	Wed 2/25/09	Tue 4/21/09	88
92	Drive piles for sand transfer plant	24 days	Tue 4/21/09	Mon 5/25/09	91
93	Drive piles for utility trench	13 days	Mon 5/25/09	Thu 6/11/09	92
94	North Jetty - Install concrete and steel sheet pilings	153 days	Tue 4/21/09	Fri 11/20/09	91
95	South Jetty - Install steel sheet piles	35.5 days	Tue 4/21/09	Wed 6/10/09	91
96	Demolish sand transfer plant	28 days	Mon 6/1/09	Wed 7/8/09	
97	Construct new stp/utility trench/discharge pipe	79 days	Thu 7/9/09	Tue 10/27/09	96
98	North jetty - replace deck panels and hand rail	143.5 days	Thu 12/10/09	Tue 6/29/10	
99	South jetty - replace deck panels and hand rail	37.5 days	Wed 6/10/09	Fri 7/31/09	95
100	Construct bridge to Bird Island	6 days	Thu 5/7/09	Thu 5/14/09	99
101	Clear and grub	3 days	Fri 5/15/09	Tue 5/19/09	100
102	Demolish existing concrete cap	9.5 days	Wed 5/20/09	Tue 6/2/09	101
103	Install new seawall	161 days	Tue 6/2/09	Wed 1/13/10	102
104	Remove bridge to seawall	2 days	Wed 1/13/10	Fri 1/15/10	103
105	Demobilize	5 days	Fri 1/15/10	Fri 1/22/10	104
106	Site restoration	10 days	Fri 1/22/10	Fri 2/5/10	105
107	Substantial Completion	5 days	Fri 2/5/10	Fri 2/12/10	106
108	Contract Closeout	13.5 days	Fri 2/12/10	Wed 3/3/10	
109	Facilities Prepares Closeout Paperwork	10 days	Fri 2/12/10	Fri 2/26/10	107
110	CRC Meeting - Contract Closeout	1 day	Wed 3/3/10	Wed 3/3/10	109
111	DEP Permit (Post Construction)	57.5 days	Fri 2/12/10	Tue 5/4/10	
112	Prepare As-Built Cert & Req for Xfer to Op Phase	5 days	Fri 2/12/10	Fri 2/19/10	107
113	Transfer to Operation Phase Permit Approved	0 days	Tue 5/4/10	Tue 5/4/10	112FS+
114	Prepare Physical Monitoring Report	5 days	Fri 2/12/10	Fri 2/19/10	107
115	Statement of Completion & Certification by P.E.	1 day	Fri 2/12/10	Mon 2/15/10	107
116	FEMA Reimbursement - Seawall and Jetties	74 days	Thu 4/15/10	Tue 7/27/10	
117	Prepare and Submit Invoice	14 days	Thu 4/15/10	Tue 5/4/10	110FS+
118	Receive Reimbursement	3 mons	Wed 5/5/10	Tue 7/27/10	117

46

OCEAN RIDGE SHORE PROTECTION PROJECT

Location:

Between DEP reference monuments R-151 and R-159 in Palm Beach County (location map attached).

Project Description:

Shoreline protection and monitoring of 1.42 miles of beach adjacent to the South Lake Worth Inlet in Palm Beach County. The beach was first nourished in 1998. A series of eight T-head groins was also constructed and a primary dune was reestablished along a majority of the project area. In November of 2005, 1.1 miles of this beach was renourished. The next scheduled renourishment of this beach is planned for Nov 2012. Palm Beach County has received confirmation from the USACE planning office that a Limited Re-evaluation Report (LRR) will be required for Federal participation on the next renourishment. County staff is beginning to plan and schedule this process.

The borrow area for this project is located just offshore of the fill area. This allows the project to be constructed with a hydraulic dredge and shortens the construction time. This borrow area has been used twice before and additional investigations of new segments of this borrow area will be required as part of the planning, engineering and design of the next nourishment.

Use of Program Funds:

The requested funding will be used for continued post-construction monitoring (aerial surveys and regional (profiles and hydrographic) monitoring) required by DEP permit, as well as any pre-construction evaluation necessary for the LRR. Additional funds are also requested for mitigation costs, which have exceeded the original estimates.

Local Government Support:

Dedicated Support Staff: The administrative capability of the local sponsor has been demonstrated by the successful completion of two nourishments of this project as well as many others. Currently there are five full-time project managers on staff dedicated to shoreline enhancement and restoration. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services. The County has retained the services of a professional coastal engineering firm to assist in design, permitting, monitoring, and other project related activities.

The project manager for this project is Tracy Logue; 561-233-2491; Tlogue@pbcgov.org

Dedicated Funding Source: A long-range budget plan and dedicated funding sources are in place. Shoreline protection activities are funded by Tourist Development taxes as mandated by County ordinance.

Local Government Resolution: The Palm Beach County Board of County Commissioners will provide a resolution supporting proposed project activities which will be signed at their regular meeting September 1, 2009.

Prior Quarterly Report Compliance: Palm Beach County has submitted quarterly reports on time for the past year.

Previous State Cost Share: The design & construction of both nourishment projects were funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding.

The original grant for this project (06PB1) expired on June 1, 2009. Additional funds for mitigation of this project were awarded in the 2007/2008 funding cycle, and funds for monitoring were awarded in the 2008/2009 funding year. Funding agreement 08PB3 encumbered these funds for mitigation and monitoring.

Federal Authorization: The project was authorized on October 23, 1962 (87-874) & WRDA 1996. The original PCA was signed on March 15, 1999, and updated and signed on February 15, 2005. The 2005 renourishment was completed as part of the US Army Corps of Engineers regional hurricane remediation efforts. Palm Beach County is seeking Federal participation in the next scheduled renourishment. This project currently has a federal funding cost share of 54%.

Eligibility Calculation:

Project length in feet	<u>7350'</u>
Project length within ½ mile of primary public beach access	<u>7350'</u>
Length of Project Shoreline zoned commercial/recreational	<u>2144'</u>

47

SLWI Park	91'	26 parking spaces
Ocean Inlet Park	725'	126 parking spaces
Ocean Hammock Park	1110'	33 parking spaces
Oceanfront Park	1034'	247 parking spaces
Edith Street Access	10'	no parking

Supporting Data:

Severity of Erosion: The historic erosion rate along the project shoreline was computed to be five ft/yr (Aug 1996 GDM). Over the anticipated six year renourishment schedule, the volume loss is anticipated to average 7.44 cy/yr/lf (including end losses). Erosion immediately down drift of the southernmost groin continues to be problematic.

Threat to Upland Structures: Approximately 60% of the project area includes habitable structures, including single and multi-family homes. According to the FDEP MapDirect Web Mapping site, all of these properties are seaward of the Coastal Construction Control Line. Coastal armoring exists in front of some of the structures, but the majority of these homes are unprotected by armoring.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Approximately 40% of the project area lies within two county parks and one municipal park. Studies included in the GDM estimated beach usage in 2010 to be over 665,000 visits/year. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections. Threatened and endangered marine turtles utilize the entire project area for nesting, however this beach is not a designated marine turtle refuge. The attached map identifies public beach access points with associated parking spaces.

Project Performance: The project design was based on the GDM (NED included) & EIS. It has performed as designed and is optimized with the addition of sand dredged from the ICW, the inlet sand trap, the boat club channel and the sand bypass plant. The project mitigates for adverse impacts of the inlet by providing 100% of the bypass quantity proposed in the inlet management plan. The fill provides 100% of the sand needed to maintain the downdrift beaches in Gulfstream without impacting the local nearshore habitat. The project is designed to improve cost effectiveness by using groins, a bypass plant, and periodic dredging of areas within Lake Worth Lagoon. The project is expected to be stable beyond the estimated seven-year lifespan, and will not be renourished until at least 2013 (eight years after 1st renourishment).

Innovative Applications: The original project was constructed using conventional beach fill methods and design. It is anticipated that the upcoming renourishment will utilize similar technology; however, the project demonstrates the combined successful use of periodic nourishment, groins and a sand transfer plant.

Attachments:

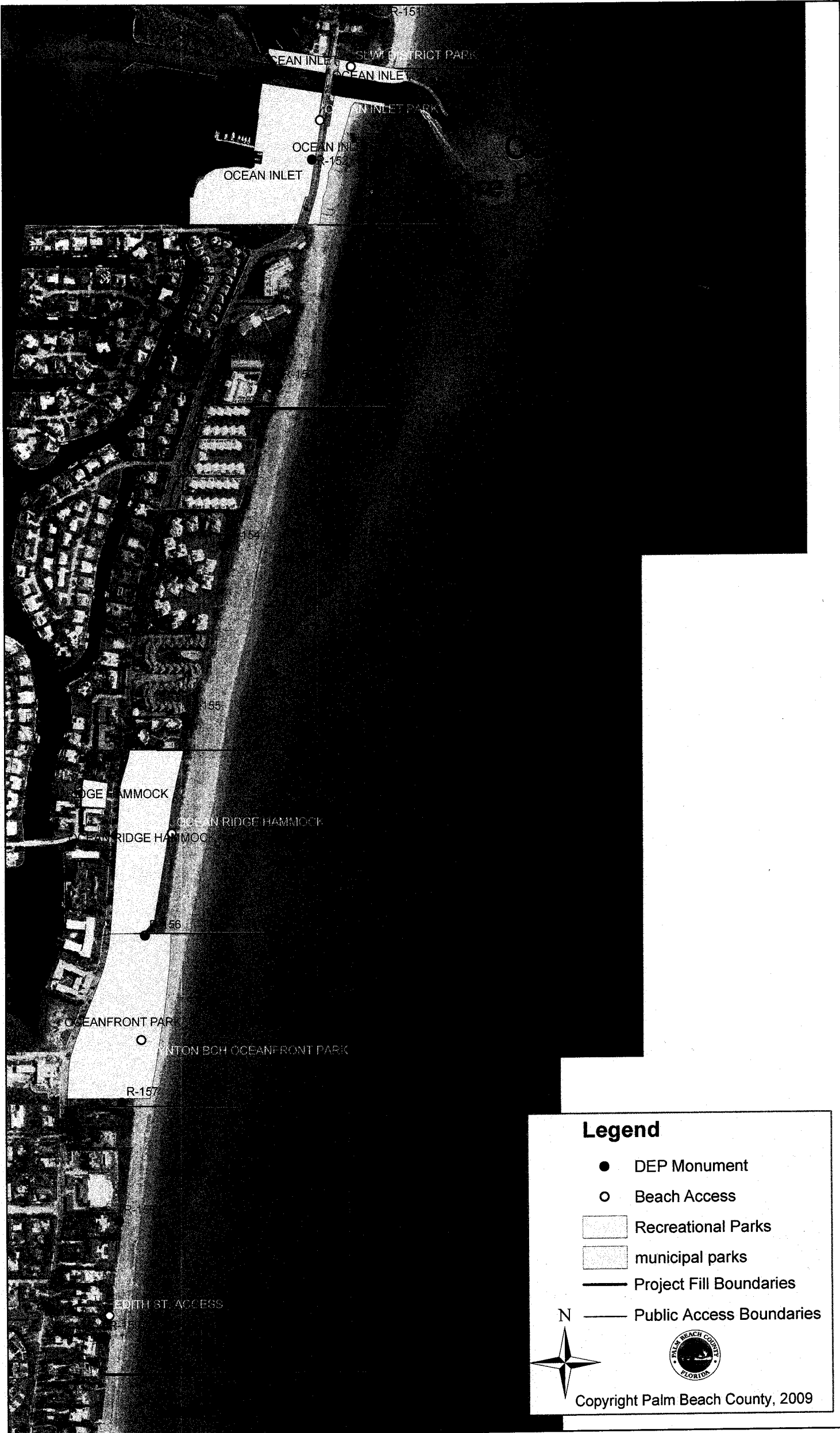
1. Five-year annual project cost estimates
2. Ten-year project schedule
3. Project map, including project boundaries, public beach access and parking, and public lodging establishments
4. MPP timeline

Ocean Ridge Shore Protection Project

5 year estimated project costs

10 year estimated project schedule

Year	Phase	Description	Total Cost	Federal	State	Local
2010-2011	PED	LRR; geo-tech, sand search; PCA	\$250,000	\$135,000	\$57,500	\$57,500
	Mitigation	mitigation reef	\$500,000	\$270,000	\$115,000	\$115,000
	Monitoring	post const physical, reef, sea turtle, shorebird	\$213,000	\$115,020	\$48,990	\$48,990
2011-2012	PED	LRR, permitting (JCP/COE)	\$200,000	\$108,000	\$46,000	\$46,000
	Monitoring	post const physical, reef, sea turtle, shorebird	\$200,000	\$108,000	\$46,000	\$46,000
2012-2013	PED	permitting (JCP/COE)	\$200,000	\$108,000	\$46,000	\$46,000
	Monitoring	pre const physical, reef, sea turtle, shorebird	\$200,000	\$108,000	\$46,000	\$46,000
2013-2014	Construction	dredge and fill	\$10,000,000	\$5,400,000	\$2,300,000	\$2,300,000
	Monitoring	pre/post const physical, reef, sea turtle, shorebird	\$300,000	\$162,000	\$69,000	\$69,000
2014-2015	Monitoring	post construction physical, reef, sea turtle, shorebird	\$300,000	\$162,000	\$69,000	\$69,000
2016-2017	Monitoring	post construction physical, reef, sea turtle, shorebird				
2017-2018	Monitoring	post construction physical, reef, sea turtle, shorebird				
2018-2019	Monitoring	pre construction physical, reef, sea turtle, shorebird				
2019-2020	Monitoring	post construction physical, reef, sea turtle, shorebird				



Legend

- DEP Monument
- Beach Access
- ▨ Recreational Parks
- ▨ municipal parks
- Project Fill Boundaries
- Public Access Boundaries



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Ocean Ridge SPP 3

ID	Task Name	Duration	Start	Finish	Predi
0	Ocean Ridge SPP 3	1355 days	Mon 11/3/08	Wed 2/5/14	
1	Federal Funding	739 days	Mon 3/9/09	Thu 1/19/12	
2	Letter to COE on decision doc for next nourishmen	1 day	Mon 3/9/09	Mon 3/9/09	
3	COE Response	69 days	Tue 3/10/09	Mon 6/15/09	2
4	Proposal Requested from Consultant	1 day	Wed 8/12/09	Wed 8/12/09	3FS+
5	Consultant Proposal to FDEP for Approval	20 days	Thu 8/13/09	Thu 9/10/09	4
6	Task Order Approved by BCC	59 days	Fri 9/11/09	Tue 12/8/09	5
7	Consultant Submits Draft LRR	90 days	Wed 12/9/09	Fri 4/16/10	6
8	Send LRR to COE	10 days	Mon 4/19/10	Fri 4/30/10	7
9	COE Comments	30 days	Mon 5/3/10	Fri 6/11/10	8
10	Revise LRR and Send to COE	37 days	Mon 6/14/10	Tue 8/3/10	9
11	COE Sends LRR to COE Atlanta (SAD)	8 days	Wed 8/4/10	Fri 8/13/10	10
12	SAD Approves LRR	90 days	Mon 8/16/10	Fri 12/17/10	11
13	Provide Financial Plan to COE	10 days	Mon 12/20/10	Fri 12/31/10	12
14	District Engineer Finding of Financial Capability	45 days	Mon 1/3/11	Fri 3/4/11	13
15	Draft PCA Amendment Prepared	60 days	Mon 3/7/11	Fri 5/27/11	14
16	Draft Amendment Negotiated With COE	30 days	Mon 5/30/11	Fri 7/8/11	15
17	Approve Draft PCA Amendment	23 days	Mon 7/11/11	Wed 8/10/11	16
18	Draft PCA Amendment Sent to SAD/CECW	25 days	Thu 8/11/11	Wed 9/14/11	17
19	PCA Amendment Approved by USACE HQ	90 days	Thu 9/15/11	Wed 1/18/12	18
20	ASA (CW) Executes PCA Amendment	1 day	Thu 1/19/12	Thu 1/19/12	19
21	State Funding	46 days	Mon 11/3/08	Tue 1/13/09	
22	Submit Application to DEP	20 days	Mon 11/3/08	Wed 12/3/08	
23	DEP Review	10 days	Thu 12/4/08	Wed 12/17/08	22
24	County Review/Sign Agreement	16 days	Thu 12/18/08	Tue 1/13/09	23
25	FDEP Permit	431 days	Fri 1/2/09	Tue 9/14/10	
35	USACE Permit Process	256 days	Thu 10/1/09	Mon 10/4/10	
43	Plans & Specifications	130 days	Tue 10/5/10	Mon 4/4/11	35
44	Prepare Plans	60 days	Tue 10/5/10	Mon 12/27/10	
45	Write Specifications	40 days	Tue 10/5/10	Mon 11/29/10	
46	Sponsor Provides P&S to SAJ with ITR	10 days	Tue 12/28/10	Mon 1/10/11	45,4
47	SAJ Completes Review and Approval of P&S	60 days	Tue 1/11/11	Mon 4/4/11	46
48	Construction Contract (Invitation For Bid)	58 days	Fri 1/20/12	Tue 4/10/12	25,3
49	Meeting to Discuss Bid Process	0.5 days	Fri 1/20/12	Fri 1/20/12	
50	Prepare Contract Book, Bid Documents, Ads	5 days	Fri 1/20/12	Fri 1/27/12	49
51	ERM Admin Approve Contract Book, Bid Documen	2 days	Fri 1/27/12	Tue 1/31/12	50
52	Send IFB Ad to Palm Beach Post	0.5 days	Wed 2/1/12	Wed 2/1/12	51
53	IFB Advertised to Public (Bidding Time Begins)	0 days	Sun 2/5/12	Sun 2/5/12	52FS
54	Manage Sale of Bid Documents and Addenda	20 days	Mon 2/6/12	Fri 3/2/12	53
55	Pre-bid Meeting (Mandatory or Optional)	1 day	Tue 2/14/12	Tue 2/14/12	53FS
56	Pre-bid Site Visit	0.5 days	Tue 2/14/12	Tue 2/14/12	53FS
57	Receive Bids and Bid Opening (Bidding Time Ends)	0.5 days	Mon 3/5/12	Mon 3/5/12	54,5
58	Evaluate Bids (Contract)	8 days	Mon 3/5/12	Thu 3/15/12	57
59	Evaluate Bids (Technical)	8 days	Mon 3/5/12	Thu 3/15/12	57
60	Send Bid Info to OSBA for Approval	0.25 days	Mon 3/5/12	Mon 3/5/12	57
61	Receive OSBA Approval	10 days	Thu 3/15/12	Thu 3/29/12	60FS
62	Prepare Intent of Notice to Award Docs & Contract	1 day	Thu 3/29/12	Fri 3/30/12	58,5
63	Review/Approve Notice to Award	2 days	Fri 3/30/12	Tue 4/3/12	62
64	Notice to Award Posted & Contract Sent	0.25 days	Tue 4/3/12	Tue 4/3/12	63
65	Award Protest Time Ends	0 days	Tue 4/10/12	Tue 4/10/12	64FS
66	Agenda Item	35 days	Wed 4/11/12	Tue 5/29/12	48
67	Prepare Agenda Item (Draft)	10 days	Wed 4/11/12	Tue 4/24/12	53
68	Prepare Agenda Item (Final)	1 day	Wed 4/25/12	Wed 4/25/12	64,6
69	Review Agenda Item (Final)	1 day	Thu 4/26/12	Thu 4/26/12	68
70	Copy and Send Agenda Item/Contract Book	1 day	Fri 4/27/12	Fri 4/27/12	69,6
71	OFMB Receives Agenda Item/Contract Book	1 day	Mon 4/30/12	Mon 4/30/12	70
72	Contractor Receives Contract/Insurance/Bond	1 day	Wed 4/11/12	Wed 4/11/12	64FS
73	Receive Signed Contract/Insurance/Bond	1 day	Thu 4/26/12	Thu 4/26/12	72FS
74	Review Contract/Insurance/Bond	2.5 days	Fri 4/27/12	Tue 5/1/12	73
75	Copy Contract And Send Downtown	0.5 days	Tue 5/1/12	Tue 5/1/12	65,7
76	Contract Received Downtown	0 days	Wed 5/2/12	Wed 5/2/12	75FS
77	BCC Meeting - Contract Approved	1 day	Tue 5/29/12	Tue 5/29/12	71FS
78	Construction	154 days	Wed 5/30/12	Mon 12/31/12	66
79	Pre-Construction Meeting	2 days	Wed 5/30/12	Thu 5/31/12	
80	Receive Submissions From Contractor	10 days	Fri 6/15/12	Thu 6/28/12	79FS
81	Review Submissions/Prepare And Send NTP	5 days	Fri 6/29/12	Thu 7/5/12	80
82	Notice To Proceed	0 days	Thu 7/5/12	Thu 7/5/12	81
83	Commencement	1 day	Thu 11/1/12	Thu 11/1/12	82
84	Construction	2 mons	Fri 11/2/12	Thu 12/27/12	83
85	Demobilization	2 days	Fri 12/28/12	Mon 12/31/12	84
86	Contract Administration	308 days	Sat 12/1/12	Wed 2/5/14	
87	Invoice Processing	103.75 days	Sat 12/1/12	Thu 4/25/13	
143	Contract Closeout	289 days	Thu 12/27/12	Wed 2/5/14	
167	Monitoring	40 days	Fri 1/2/09	Mon 3/2/09	
168	Pre-construction physical/environmental monitoring	15 days	Fri 1/2/09	Mon 1/23/09	
169	Construction monitoring (turbidity, etc)	2 mons	Fri 1/2/09	Mon 3/2/09	
170	Post-construction physical/environmental monitorin	10 days	Fri 1/2/09	Thu 1/15/09	
171	FDEP Quarterly Reports	1106 days	Thu 1/15/09	Mon 4/29/13	

51