



September 24, 2012
New Business 7-a

City of Marco Island

May 1, 2012

Collier County
Coastal Zone Management Office
3299 Tamiami Trail East, Suite 103
Naples, Florida 34112

Re: Category "A" Grant Application for FY 12/13
Attn: Mr. Gary McAlpin, Director

Dear Gary:

Please accept the attached application from the City of Marco Island for the proposed Big Marco / Capri Pass Inlet Sand Bypassing and Northern Marco Island Erosion Control Structures Project.

The City of Marco Island's northern beach area has been experiencing significant erosion in the wake of recent storms including Tropical Storm Fay. Since 2005, this beach segment has eroded on average of 12 feet per year. The upland development and infrastructure are threatened by the continuing erosion. The City has completed a detailed model study and preliminary design, and is currently processing permits through the FDEP and USACE, for their erosion control project to address this emergency situation.

The purpose of this project is to provide a mechanism to offset historical erosion, restore recreational beach use, provide storm protection to the upland prosperities, provide and preserve sea turtle nesting sites, and to restore coastal habitat for the threatened and endangered species.

If you have any questions or comments concerning this application, please contact me directly.

Sincerely,

Timothy E. Pinter, P.E.
Public Works Director
City of Marco Island

FILE COPY

COLLIER COUNTY TOURIST DEVELOPMENT COUNCIL
CATEGORY "A" GRANT APPLICATION
Beach Renourishment and Pass Maintenance
Big Marco / Capri Pass Inlet Sand Bypassing and
Northern Marco Island Erosion Control Structures
(Project Title)

1. Name and Address of Project Sponsor Organization:

City of Marco Island
50 Bald Eagle Drive
Marco Island, FL 34145

2. Contact Person, Title and Phone Number:

Name: Timothy E. Pinter, P.E.

Address: 50 Bald Eagle Drive

City: Marco Island **ST:** FL **ZIP:** 34145

Phone: 239-389-5018 **FAX:** 239-389-4359

Other: _____

3. Organization's Chief Official and Title:

Dr. James Riviere, City Manager

4. Details of Project- Description and Location:

Description: The City of Marco Island's northern beach area has been experiencing significant erosion in the wake of recent storms including Tropical Storm Fay and coastal processes (winds, waves, tides and currents). Please refer to Exhibit A for recent photographs. Since 2005, this beach segment has eroded on average 12 feet per year (Figure 1). The upland development and infrastructure are threatened by the continuing erosion. Based on these measured near-term erosion rates, it is expected the building foundations will soon be under direct wave attack as the remaining dune and wetland habitats and upland vegetated lawn areas will be lost to erosion.

To address this critical erosion area, the City has completed a detailed model study and preliminary design, and is currently processing permits through the FDEP and USACE for installation of three erosion control structures (T-groins)

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and placement of up to 25,000 cubic yards of beach compatible sand from inlet bypassing sources.

The purpose of the renourishment and erosion control structures is to address significant erosion along this beach segment providing a mechanism to offset historical erosion, restore recreational beach, provide storm protection to the upland properties, provide and preserve sea turtle nesting sites, and restore coastal habitat for other threatened and endangered species. The sand sources for the renourishment include the previously utilized Big Marco / Capri Pass Ebb Shoal and Nearshore Borrow Areas.

The public benefit realized by the Project is to extend the project life of the recently completed Collier Bay Entrance Channel Dredging which temporarily addressed the navigation needs for the boating community. Installation of the structures is expected to hold the sand placed in the nearshore zone along this critically eroded beach segment, thereby reducing Project related costs as well as future maintenance costs.

FDEP indicated support of the City’s recommended plan and has requested a Physical and Biological Monitoring Plan. The USACE completed its permit review and has initiated consultation with the USFWS and NMFS. Permits are expected by the end of the year.

As established by prior precedent in 2004 and 2010 County Commission approvals, the City of Marco Island will be responsible for the cost of the sand dredging and placement, and the County will be responsible for cost of the T-

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groins. In order to reduce the County's cost sharing compared to the prior projects, the City will also be responsible for the mobilization and demobilization costs specific to the T-groins. That is, this request is specific to the materials and installation costs for the three erosion control structures only.

Location: The activity is located along the City of Marco Island's northern beach area adjacent to the Big Marco River and Gulf of Mexico, Marco Island, Collier County, Sections 5, 6, and 7, Township 52S, Range 26E, Class III Waters.

5. **Estimated project start date:** Winter 2012-2013
6. **Estimated project duration:** 4-5 months
7. **Total TDC Tax Funds Requested:** \$ 925,000
8. **If the full amount requested cannot be awarded, can the program/project be restructured to accommodate a smaller award?**

Yes (X) No ()

PROJECT BUDGET

<u>PROGRAM ELEMENT</u>	<u>AMOUNT</u>
TDC Funds Requested	\$ <u>925,000</u>
City/Taxing District Share	\$ <u>1,425,000</u>
State of Florida Share	\$ _____
Federal Share	\$ _____
TOTAL	\$ <u>2,350,000</u>

**PROJECT EXPENSES:
 (Engineering, Mobilization, Contractor, Monitoring etc)**

<u>Engineering</u>	\$ <u>250,000</u>
<u>Sand Bypass Dredging (incl Mob/Demob)</u>	\$ <u>1,175,000</u>
<u>Erosion Control Structures</u>	\$ <u>925,000</u>
TOTAL	\$ <u>2,350,000</u>

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I have read the Tourist Development Category "A" Beach Funding Policy covering beach renourishment and pass maintenance and agree that my organization will comply with all guidelines and criteria.

5/1/12
 Date

Signature of Sponsor Organization's Chief Official

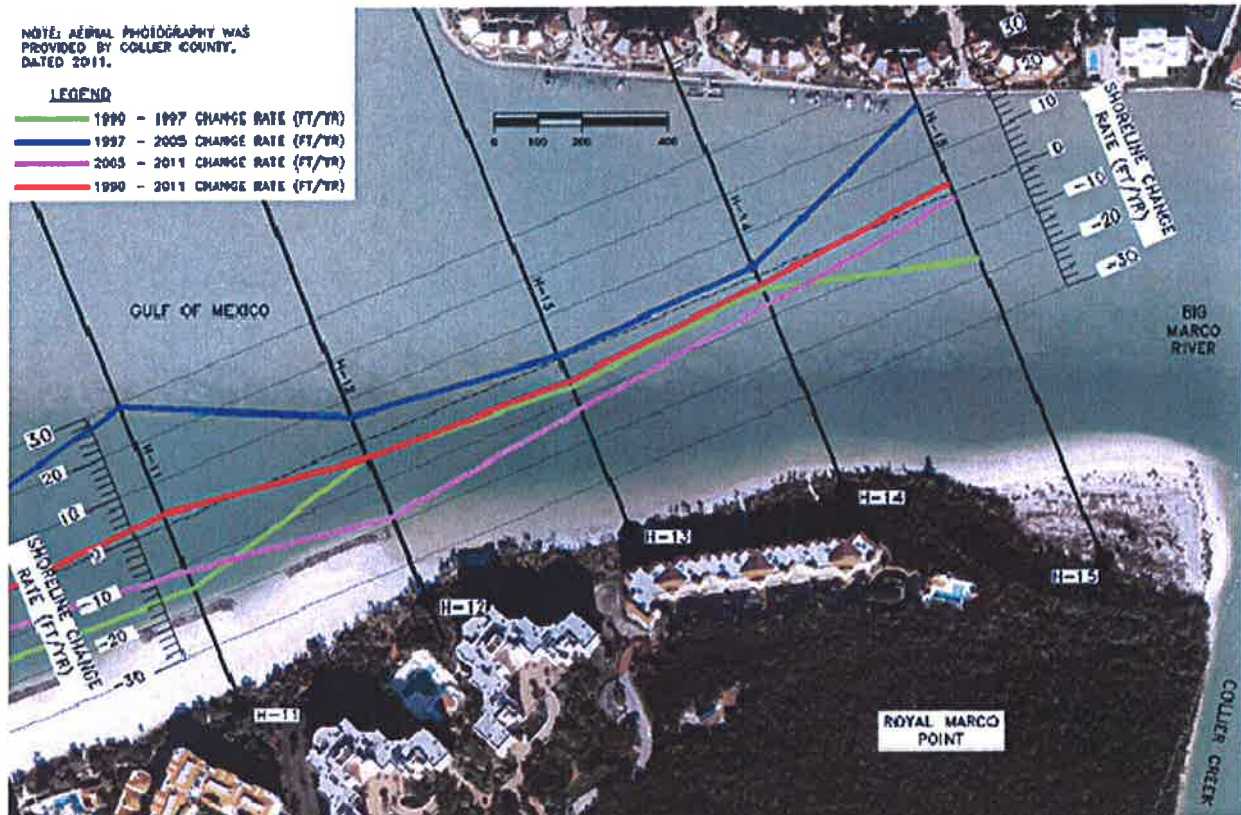


Figure 1. Marco Island North Beach Historic Shoreline Change Rates.

Table 1. Marco Island North Beach Annualized Shoreline Changes.

Survey Line	Jul-90 – Oct-97	Oct-97 – Dec-05	Dec-05 – Dec-11	Jul-90 – Aug-11
	Shoreline Change Rate at MHW (ft/year)			
H-12	-3.8	6.1	-18.5	-3.9
H-13	-7.1	0.8	-12.4	-5.5
H-14	-3.2	2.3	-7.1	-2.1
Average	-4.7	3.1	-12.7	-3.8

EXHIBIT A



Photo 1: View from upland residence looking north



Photo 2: View from escarpment at toe of dune looking northwest



Photo 3: View from escarpment at toe of dune looking northeast



Photo 4: View from mangrove fringe looking west

RESOLUTION NO. 12-15

A RESOLUTION OF THE CITY OF MARCO ISLAND, FLORIDA DECLARING AN EMERGENCY FOR A CRITICALLY ERODED BEACH WITHIN THE BOUNDARIES OF THE HIDEAWAY BEACH DISTRICT WHICH REQUIRES EMERGENCY CONSTRUCTION OF THREE EROSION CONTROL STRUCTURES AND MAKING FINDINGS TO SUPPORT THE PUBLIC PURPOSE OF THE CONSTRUCTION OF THE EROSION CONTROL STRUCTURES IN THE CITY OF MARCO ISLAND, FLORIDA; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the area of the City of Marco Island's northern beach located within the Hideaway Beach District in the vicinity of Florida Department of Environmental Protection (FDEP) monuments H-13 to H-14 has suffered severe beach erosion; and

WHEREAS, the City of Marco Island, Florida finds that the Hideaway Beach District has experienced severe beach erosion which requires emergency construction of erosion control structures to control erosion loss of the beach in the vicinity of FDEP monuments H-13 and H-14; and

WHEREAS, condominium units located within the District at 6000 Royal Marco Way abut the eroding beach between FDEP monuments H-13 to H-14 and are threatened by the continuing erosion; and

WHEREAS, the City and the District have retained Coastal Engineering Consultants, Inc. to seek FDEP permits for emergency construction of the erosion control structures.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marco Island, Florida, that:

SECTION 1. The area of the City's and the District's northern beach in the vicinity of FDEP monuments H-13 to H-14 fronting Royal Marco Way Building 6000 has experienced significant beach erosion.

SECTION 2. The emergency construction of three erosion control structures as proposed by Coastal Engineering Consultants, Inc. (CEC) is a viable solution to the erosion.

SECTION 3. The City Council of the City of Marco Island declares an emergency and directs and authorizes the City Manager or his designee to support and assist the District in obtaining governmental approvals for the erosion control structures and the City will assist the District with application on behalf of the District to the Collier County Coastal Advisory Committee; the Collier County Tourist Development Council and the Collier County Board of County Commissioners for Emergency Tourist Development Funds required for the construction of the erosion control structures.

SECTION 5. EFFECTIVE DATE. This Resolution shall take effect immediately upon its adoption.


DULY PASSED AND ADOPTED in open and regular session by the City of Marco Island, Florida, this 7th day of May, 2012

ATTEST

CITY OF MARCO ISLAND, FLORIDA




Laura Litzan, City Clerk

By: 

Larry Magel, Chairman

Approved as to Form and
Legal sufficiency:



Burt L. Saunders, City Attorney