

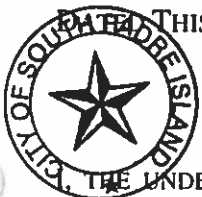
**NOTICE OF MEETING
CITY OF SOUTH PADRE ISLAND
SHORELINE TASK FORCE**

NOTE: One or more members of the City of South Padre Island City Council may attend this meeting; if so, this statement satisfies the requirements of the OPEN MEETINGS ACT.

NOTICE IS HEREBY GIVEN THAT THE SHORELINE TASK FORCE OF THE CITY OF SOUTH PADRE ISLAND, TEXAS, WILL HOLD A REGULAR MEETING ON:

MONDAY, SEPTEMBER 25, 2017
3:00 P.M. AT THE MUNICIPAL BUILDING,
CITY COUNCIL CHAMBERS, 2ND FLOOR
4601 PADRE BOULEVARD, SOUTH PADRE ISLAND, TEXAS

1. Call to Order.
2. Pledge of Allegiance.
3. Public Comments and Announcements: *This is an opportunity for citizens to speak to Task Force relating to agenda or non-agenda items. Speakers are required to address the Task Force at the podium and give their name before addressing their concerns. [Note: State law will not permit the Shoreline Task Force to discuss debate or consider items that are not on the agenda. Citizen Comments may be referred to City Staff or may be placed on the agenda of a future Shoreline Task Force meeting]*
4. Approval of the September 11, 2017 regular meeting minutes.
5. Discussion and possible action to recommend approval of proposed change order on Ocean Circle beach access improvement project for the amount of \$17,646.25. (Hill)
6. Discussion and possible action to recommend approval of resolution declaring the City of SPI's support for the HARTE Institute Watershed Infrastructure Strategies E-market. (Hill)
7. Discussion and possible action to recommend implementation of the five year nourishment placement plan. (Hill)
8. Discussion and possible action to recommend the approval of a budget amendment for the purchase of a dump truck. (Hill)
9. Discussion and possible action to recommend to City Council adopt an ordinance specifying conditions for tying into public beach access walkovers. (Schwartz)
10. Adjournment.

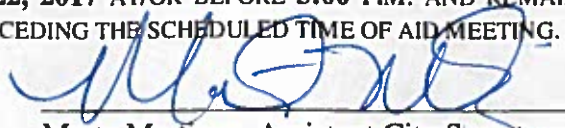


THIS THE 22ND DAY OF SEPTEMBER 2017

Marta Martinez, Assistant City Secretary

THE UNDERSIGNED AUTHORITY, DO HEREBY CERTIFY THAT THE ABOVE NOTICE OF MEETING OF THE SHORELINE TASK FORCE OF THE CITY OF SOUTH PADRE ISLAND, TEXAS IS A TRUE AND CORRECT COPY OF SAID NOTICE AND THAT I POSTED A TRUE AND CORRECT COPY OF SAID NOTICE ON THE BULLETIN BOARD AT

CITY HALL/MUNICIPAL BUILDING ON **SEPTEMBER 22, 2017** AT/OR BEFORE **3:00 P.M.** AND REMAINED SO POSTED CONTINUOUSLY FOR AT LEAST 72 HOURS PRECEDING THE SCHEDULED TIME OF AID MEETING.


Marta Martinez, Assistant City Secretary

THIS FACILITY IS WHEELCHAIR ACCESSIBLE, AND ACCESSIBLE PARKING SPACES ARE AVAILABLE. REQUESTS FOR ACCOMMODATIONS OR INTERPRETIVE SERVICES MUST BE MADE 48 HOURS PRIOR TO THIS MEETING. PLEASE CONTACT BUILDING OFFICIAL, DAVID TRAVIS; ADA DESIGNATED RESPONSIBLE PARTY AT (956) 761-8103.

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Approval of the September 11, 2017 regular meeting minutes.

ITEM BACKGROUND

BUDGET/FINANCIAL SUMMARY

None

COMPREHENSIVE PLAN GOAL

LEGAL REVIEW

Sent to Legal:

YES: _____

NO: _____

Approved by Legal:

YES: _____

NO: _____

Comments:

RECOMMENDATIONS/COMMENTS

<p style="text-align: center;">MINUTES CITY OF SOUTH PADRE ISLAND SHORELINE TASK FORCE</p>

MONDAY, SEPTEMBER 11, 2017

I. Call to Order.

The Shoreline Task Force of the City of South Padre Island, Texas held a regular meeting on Monday, September 11, 2017, at the Municipal Complex Building, 2nd Floor, 4601 Padre Boulevard, South Padre Island Texas. Chairman Troy Giles, called the meeting to order at 3:00 p.m. A quorum was present: Task Force Members Virginia Guillot, Stormy Wall, Neil Rasmussen, Norma Trevino, Kerry Schwartz and Thoren Thorbjørnsen were present at the meeting.

City staff members present were: City Manager Susan Guthrie, Assistant City Manager Darla Jones, Shoreline Management Director Brandon Hill, and Shoreline Program Coordinator Jose Manuel Aguilar,

II. Pledge of Allegiance.

Mr. Troy Giles led the Pledge of Allegiance.

III. Public Comments and Announcements.

Shoreline Department Director Brandon Hill remarked on the status on the current Beach Access Walkover projects.

IV. Approval of the July 31, 2017 meeting minutes.

Task Force Member Norma Trevino made a motion to approve the July 31, 2017 meeting minutes, seconded by Neil Rasmussen. Motion passed unanimously.

V. Discussion and possible action to recommend approval of proposed Ordinance to amend 13-24 Regulation of Shade Devices and Chairs on the Public Beach, Section E. (Hill and Baldovinos):

Task Force Member Norma Trevino made a motion, seconded by Thoren Thorbjørnsen to table the proposed amendment to ordinance 13-2413-24 Regulation of Shade Devices and Chairs on the Public Beach, Section E, until the Shoreline Taskforce can conduct a site survey accompanied by the Shoreline Department and other City representatives. The motion passed unanimously.

VI. Discussion and possible action to recommend approval of Memorandum of Understanding (MOU) extension with Partrac Ltd. (Hill)

Task Force member Kerry Schwartz made a motion, seconded by Stormy Wall to recommend approval of Memorandum of Understanding (MOU) extension with Partrac Ltd. The motion passed unanimously.

VII. Discussion and possible action to recommend awarding Gulf of Mexico Alliance Grant for Planning Services for South Padre Island Resilient Public Access and Education, Conservation, and Tourism Master Plan to HDR Engineering, INC. (Hill)

Task Force member Thoren Thorbjørnsen made a motion, seconded by Neil Rasmussen to recommend awarding Gulf of Mexico Alliance Grant for Planning Services for South Padre Island Resilient Public Access and Education, Conservation, and Tourism Master Plan to HDR Engineering, INC. The motion passed unanimously

VIII. Discussion and possible action to recommend the approval of a Beach and Dune Permit to E.B. Merit for removal of vegetation at lot and exchange of material at 5102 Gulf Blvd. (Hill)

Task Force member Stormy Wall made a motion, seconded by Neil Rasmussen to recommend the approval of a Beach and Dune Permit to E.B. Merit for removal of vegetation at lot and exchange of material at 5102 Gulf Blvd. The motion passed unanimously.

VIII. Discussion and possible action to recommend the approval of a change order on the Queen Isabella Causeway Boardwalk Repairs Contract. (Hill)

Task Force member Virginia Guillot made a motion, seconded by Norma Trevino recommend the request for quotes and selection of contractor for the remaining seven pilings for the Queen Isabella Causeway Boardwalk Repairs Contract. The motion passed unanimously.

X. Discussion and possible action to recommend the request for quotes and selection of contractor for the remaining seven pilings for the Queen Isabella Causeway Boardwalk Repairs Contract. (Hill)

Task Force member Kerry Schwartz made a motion, seconded by Neil Rasmussen recommend the request for quotes and selection of contractor for the remaining seven pilings for the Queen Isabella Causeway Boardwalk Repairs Contract. The motion passed unanimously.

XI. Adjournment.

There being no further business, Task Force Chairman Troy Giles adjourned the meeting at 4:37 p.m.

Jose Aguilar, Program Coordinator

Troy Giles, Chairman

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend approval of proposed change order on Ocean Circle beach access improvement project for the amount of \$17,646.25. (Hill)

ITEM BACKGROUND

International Consulting Engineers (ICE) received Change Order no.01 for Ocean Beach Access improvements project on September 14, 2017. Pursuant to the Clauses of this contract for delays beyond the control of the contractor GDA request the time and cost associated with the project timeline extension.

BUDGET/FINANCIAL SUMMARY

Total Project cost with 7% profit \$17,646.25

COMPREHENSIVE PLAN GOAL

Chapter III. Parks and Resources

Policy 1.1.3:

Strategy 1.1.3.1 The City should construct or reconstruct two-way walkovers, with directional barriers to prevent breached access to the dune, at all designated beach access points.

LEGAL REVIEW

Sent to Legal:

YES: _____

NO: X

Approved by Legal:

YES: _____

NO: X

Comments:

RECOMMENDATIONS/COMMENTS

Staff recommends approval of the change order.

September 19, 2017

City of South Padre Island
Attn: Mr. Brandon Hill
Shoreline Management Director
4601 Padre Blvd.
South Padre Island, TX 78597

Re: Ocean Circle Beach Access Improvements Change Order No.01 Review

Dear Mr. Hill,

On September 14, 2017, our office received Change Order No.01 for the Ocean Circle Beach Access Improvements project, dated September 14, 2017 (attached), and after review our office has determined that the change order is in accordance with the contract schedule of values and is monetarily accurate for the additional days needed to accommodate for the use of a subcontractor on a separate project at the City's request. ICE recommends the change order amount of \$17,646.25 be considered for approval to the original contract amount of \$452,000.00 as well as the contract end date to be extended to October 20, 2017. The new contract amount, including change order 01, will be \$469,646.25.

If you have any questions or need additional information, please feel free to contact me at (361) 826-5805 or by email at jj@icengineers.net

Sincerely,



Jesus J. Jimenez, PE, CFM
Project Manager



Gonzalez-De La Garza

4800 Fredericksburg Rd.
Suite 200SL
San Antonio, TX 78229

Phone: (210) 208-9400
Fax: (210) 208-9401

Thursday September 14, 2017

International Consulting Engineers
555 N. Carancahua St., Suite 860
Corpus Christi, TX

Attn: Mr. Carlos Montalvo
Project: CITY OF SOUTH PADRE ISLAND
OCEAN CIRCLE BEACH ACCESS IMPROVEMENTS
BEACH ACCESS POINT #2
Re: Change Order for Extended General Conditions

Contract/PO #: CC1703

Mr Montalvo:

DESCRIPTION OF CHANGE: Due to Owner's request to utilize GDA's subcontractor for other projects beyond the scope of the subject contract, there has been a delay in construction at the Beach Access Point #2 project site.

Pursuant to the clauses of this contact for delays beyond the control of the Contractor, GDA requests the time and cost associated with the project time line extension. The revised, expected completion date is now October 20, 2017. The cost associated with the extension is as described below.

We appreciate the opportunity to work with you towards successful completion of this project.

GDA has provided a cost breakout (see attachment) for review and acceptance in the amount of Seventeen thousand six hundred forty six dollars and twenty five cents (\$17,646.25).

Sincerely,

Digitally signed by
Christopher J. Cardenas
Date: 2017.09.14
13:45:31 -05'00'

Christopher J. Cardenas, SPM

(FOR OFFICIAL USE ONLY)

COST ESTIMATE BREAKDOWN									
AGENCY Gonzalez+De La Garza & Associates, LLC		Prepared by: Christopher J Cardenas		ADDRESS 4800 Fredericksberg Rd., Suite SL200, San Antonio, TX 78229					
CONTRACT FOR (Work to be performed) Extended general conditions for owner caused delays				TOTAL PROJECT COST WITH 7% PROFIT \$17,646.25					
PURCHASE REQUEST NUMBER				PROJECT NUMBER CC-1703		WORK Ocean Circle Beach Access, Access Pt #2			
LINE NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	MATERIAL COSTS		LABOR COSTS		EQUIPMENT COSTS	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	GC- Construction Extended General Conditions	EA	1						\$16,491.83
SUBTOTAL COST = \$16,491.83									
Ocean Circle Beach Access, Access Pt #2 Extended Overhead Estimate									
Extended general conditions for owner caused delays				Profit (7%)				Total Costs TG002	
\$16,491.83				\$1,154.43				\$17,646.25	

Ocean Circle Beach Access, Access Pt #2					
Division 1	Projected Construction Schedule Extension - 6 Weeks				
	Duration	Unit	Direct Cost	Total	
Project Superintendent	240	\$ 37.50		\$ 9,000.00	
Project Management 4hrs/wk	24	\$ 50.00		\$ 1,200.00	
Job Containers (month)	1.5	\$ 300.00		\$ 450.00	
Dumpsters (month)	1.5	\$ 500.00		\$ 750.00	
Temp Job Boxes (month)	1.5	\$ 75.00		\$ 135.00	
Office Trailer (month)	1.5	\$ 850.00		\$ 1,275.00	
Temp Fencing (month)	1.5	\$ 250.00		\$ 375.00	
PS Vehicle (month)	1.5	\$ 650.00		\$ 975.00	
FOGM (month)	1.5	\$ 250.00		\$ 375.00	
PS Phone (month)	1.5	\$ 75.00		\$ 112.50	
Internert, Phone, Printer (wk)	6	\$ 35.00		\$ 210.00	
			TOTAL	\$ 14,857.50	
		G&A	11.00%	\$ 1,634.33	
			Sub Total =	\$ 16,491.83	
		BOND	0.000%	\$ -	
		Total		\$ 16,491.83	



GONZALEZ DE LA GARZA

SUPERVISORS ENGINEERS CONTRACTORS

GONZALEZ DE LA GARZA & ASSOCIATES
SCHEDULE

#	Activity ID	Activity Name	Original Duration	Activity % Complete	Early Start	Actual Start	Early Finish	Actual Finish
1	SPI OCEAN CIRCLE BEACH		151		07-Sep-17	23-May-17	23-Oct-17	
2	1100	AWARD	0	100%	07-Sep-17	23-May-17	07-Sep-17	24-May-17
3	1200	PRECON MEETING	1	100%	07-Sep-17	23-May-17	07-Sep-17	06-Jun-17
4	1300	MOBILIZATION	2	100%	07-Sep-17	05-Jun-17	07-Sep-17	08-Jun-17
5	1400	CONSTRUCTION FENCING	2	100%	07-Sep-17	07-Jun-17	07-Sep-17	10-Jun-17
6	1500	SEDIMENT FENCING	2	100%	07-Sep-17	09-Jun-17	07-Sep-17	04-Jul-17
7	1600	CONSTRUCTION STAKING	3	100%	07-Sep-17	12-Jun-17	07-Sep-17	15-Jun-17
8	1800	SITE CLEARING & GRUBBING	55	100%	07-Sep-17	04-Jul-17	07-Sep-17	28-Aug-17
9	1910	DELAY: SUBCONTRACTOR UNAVAILABLE - MAJOR WEATHER EVENT	13	50%	07-Sep-17	28-Aug-17	13-Sep-17	
10	1900	INSTALL TIMBER PILES	7	0%	07-Sep-17		14-Sep-17	
11	1700	WATER LINES / METER CONNECTION	10	0%	13-Sep-17		23-Sep-17	
12	2000	CONSTRUCT/INSTALL DECKING	5	0%	23-Sep-17		28-Sep-17	
13	2100	CONSTRUCT/INSTALL RAILINGS	5	0%	28-Sep-17		03-Oct-17	
14	2200	CONSTRUCT PARKING PAVEMENT STRUCTURE	17	0%	28-Sep-17		15-Oct-17	
15	2400	CONSTRUCT PARKING/INSTALL PAVERS	7	0%	03-Oct-17		10-Oct-17	
16	2300	CONCRETE CURB/SEWALK CONSTRUCTION	1	0%	15-Oct-17		16-Oct-17	
17	2500	FINAL INSPECTION/PUNCHLIST	2	0%	16-Oct-17		18-Oct-17	
18	2600	COMPLETE PUNCHLIST	1	0%	18-Oct-17		19-Oct-17	
19	2800	SITE CLEANUP	1	0%	18-Oct-17		19-Oct-17	
20	2700	AS-BUILTS	1	0%	18-Oct-17		19-Oct-17	
21	2900	DEMOBILIZE	1	0%	19-Oct-17		20-Oct-17	

20-Oct-17, SPI OCEAN CIRCLE BEACH

2017

Sep

Oct

Nov

INSTALL TIMBER PILES

WATER LINES / METER CONNECTION

CONSTRUCT/INSTALL DECKING

CONSTRUCT/INSTALL RAILINGS

CONSTRUCT PARKING PAVEMENT STRUCTURE

CONSTRUCT PARKING/INSTALL PAVERS

CONCRETE CURB/SEWALK CONSTRUCTION

FINAL INSPECTION/PUNCHLIST

COMPLETE PUNCHLIST

SITE CLEANUP

AS-BUILTS

DEMOBILIZE

Actual Work

Remaining Work

Critical Remaining Work

Milestone

summary

SPI OCEAN CIRCLE BEACH

Start Date 23-May-17
Finish Date 20-Oct-17
Data Date: 07-Sep-17

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend approval of resolution declaring the City of SPI's support for the HARTE Institute Watershed Infrastructure Strategies E-market. (Hill)

ITEM BACKGROUND

The Harte Research Institute is applying for a GLO CMP grant to support a project to provide numerous stakeholders involved in the Texas Coastal Resiliency Master Plan a more robust source of data and information on different types of coastal infrastructure, and have requested a letter of support for the Watershed Infrastructure Strategies E-market (WISE) project.

BUDGET/FINANCIAL SUMMARY

COMPREHENSIVE PLAN GOAL

LEGAL REVIEW

Sent to Legal: YES: _____ NO: X
Approved by Legal: YES: _____ NO: X

Comments:

RECOMMENDATIONS/COMMENTS

Staff recommends approval of the resolution declaring the City of SPI's support for the HARTE Institute Watershed Infrastructure Strategies E-market.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH PADRE ISLAND, TEXAS, TO SUPPORT THE HARTE RESEARCH INSTITUTE FOR THE GULF OF MEXICO STUDIES, TEXAS A&M UNIVERSITY CORPUS CHRISTI'S WATERSHED INFRASTRUCTURE STRATEGIES E-MARKET (WISE)

WHEREAS, around the U.S., watersheds are under stress from extreme events, and especially flooding from precipitation and tropical cyclones, which impact critical water resources and utilities, and result in heavy economic and social losses; and

WHEREAS, Watershed Infrastructure Strategies E-Market, will strive to aggregate and serve data on scientifically proven coastal and watershed infrastructure strategies for resilience, including detailed and comparable project specification, cost, and benefit information for various approaches (e.g., regulations, project type, location, owner, size, materials, challenges, funding source, finance mechanism, results, monitoring, etc.) – with emphasis on natural and hybrid approaches – ultimately to facilitate implementation of adaptation strategies that can better mitigate and reduce risk to extreme precipitation events; and

WHEREAS, the Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi will confirm/adjust the framework of their database with additional states and municipalities around the Gulf of Mexico, and will serve the information in an easy-to-access and visually compelling database so decision-makers can scope the costs and benefits of projects, find source materials, and more, and engineering firms can bid on upcoming work; and

WHEREAS, the Watershed Infrastructure Strategies E-Market seeks to establish common units and providing discrete, project-level information on successful approaches, local decision-makers and private land owners can be assured when natural and hybrid approaches can most effectively strengthen their resilience to extreme events and climate impacts; and

WHEREAS, South Padre Island desires to contribute its support and to utilize this tool in the future to further the City's resilience in the wake of an ever changing environment.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF SOUTH PADRE ISLAND AS FOLLOWS:

The City Council of South Padre Island does hereby give its full and complete support for the Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi

This Resolution was unanimously adopted by the City Council of South Padre Island on the _____ day of _____, 2017.

BHARAT R. PATEL, MAYOR

ATTEST:

SUSAN HILL, City Secretary

Watershed Infrastructure Strategies E-Market

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University – Corpus Christi

Goals and Objectives

Around the U.S., watersheds are under stress from extreme events, and especially flooding from precipitation and tropical cyclones, which impact critical water resources and utilities, and result in heavy economic and social losses. The response has been to control surging water (stormwater, river flooding, storm surge) with concrete infrastructure. Yet in many cases building or restoring natural infrastructure can more effectively capture, store and absorb water and prevent losses. Further, by combining natural and built infrastructure in a hybrid approach, innovative designs can provide critical ecosystem services while affording greater resource and community protection than may exist with natural approaches alone. Many efforts have recently been completed to detail the effectiveness of natural and hybrid approaches, e.g., NOAA's Green Infrastructure Effectiveness Database, and EPA's Stormwater Toolkit. However, though these efforts are evolving, data consists largely of one-off projects. Towns, municipalities and small cities still do not have access to comparable, detailed cost and benefit data on specific projects in the U.S., which they need to fairly compare tradeoffs and justify use of alternative, less accepted adaptation strategies.

To serve this critical information, the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University-Corpus Christi (HRI) will build a Watershed Infrastructure Strategies E-Market (WISE). The objective of this work is to aggregate and serve data on scientifically proven coastal and watershed infrastructure strategies for resilience, including detailed and comparable project specification, cost, and benefit information for various approaches (e.g., regulations, project type, location, owner, size, materials, challenges, funding source, finance mechanism, results, monitoring, etc.) – with emphasis on natural and hybrid approaches – ultimately to facilitate implementation of adaptation strategies that can better mitigate and reduce risk to extreme precipitation events.

Methods/Approach

Our approach is three-fold. First, we will convene local and state decision-makers in Texas, as well as engineers and risk modelers, in building an initial, draft common framework for WISE database design by selecting the database categories that will be used, focusing on those categories that are most useful to decision-making and relatively easy/possible to populate. The framework will ensure usability, that population of the database will involve granular project level information on various approaches, and will standardize information into similar units. Second, we will work with those same representatives to populate the database with a set of no less than 15 case studies, with at least 10 of those representing natural/hybrid approaches. Third, we will engage more decision-makers and land owners around Texas to gain further buy-in and use of the framework and growing data and information.

As subsequent steps to this project, we will confirm/adjust the framework with additional states and municipalities around the Gulf of Mexico, and will serve the information in an easy-to-access and visually compelling database so decision-makers can scope the costs and benefits of projects, find source materials, and more, and engineering firms can bid on upcoming work. By establishing common units and providing discrete, project-level information on successful approaches, local decision-makers and private land owners can be assured when natural and hybrid approaches can most effectively strengthen their resilience to extreme events and climate impacts.

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend implementation of the five year nourishment placement plan. (Hill)

ITEM BACKGROUND

The City of South Padre Island Five Year Sediment Management Strategy A plan for scientifically informed beneficial use of dredge material. This five year plan has been crafted as a means of providing scientifically informed strategy for the future of beneficial use of dredge materials for the beaches of the City of South Padre Island.

BUDGET/FINANCIAL SUMMARY

COMPREHENSIVE PLAN GOAL

Chapter III Parks & Resources

Policy 1.1.2 The city should secure and dedicate funding for beach nourishment and dune maintenance.

Strategy 1.1.2.1 The City should strengthen an ongoing, regular dune maintenance program, and leverage access to State and Federal funds to continuously sustain this activity.

LEGAL REVIEW

Sent to Legal:

YES: _____

NO: X

Approved by Legal:

YES: _____

NO: X

Comments:

RECOMMENDATIONS/COMMENTS

Staff recommends the implementation of the five year nourishment placement plan. (Hill)

The City of South Padre Island

Five Year Sediment Management Strategy

A plan for scientifically informed beneficial use of dredge material

Introduction

The City of South Padre Island (SPI) sits at the southern end of a unique Texas Barrier Island. It is a densely developed tourist destination directly juxtaposed against some of the most pristine beaches on the Texas shoreline. The south end of the island is within the wave shadow of the Brazos-Santiago jetties allowing it to maintain its stable condition. The City of South Padre Island has a long and successful practice of utilizing beneficial use of dredge material (BUDM) projects to hold Island roll-over at bay and allow the city to remain the tourism's mecca that it is.

This five year plan has been crafted as a means of providing scientifically informed strategy for the future of beneficial use of dredge materials for the beaches of the City of South Padre Island. Continuing the City's BUDM strategy will: 1) Reduce and possibly prevent loss of property and public infrastructure caused by the chronic retreat of the beach within the project areas; 2) Enhance the usability and accessibility of the public beach for recreational purposes; 3) Minimize storm damage caused by high tides and waves to private property and public infrastructure; and 4) Re-establish, create and stabilize dunes providing protection from storms and enhancements for the Gulf Beach natural flora and fauna.

The BUDM on SPI is crucial to fighting beach erosion, supplying our dune system with enough fetch over the aerial beach and protecting the homes and business that lie west of the beach. The sand is a vital part of maintaining our shoreline, without it our entire Island could be undermined. Due to the lack of seawall, the City of South Padre Island relies entirely on natural shoreline protection. The sand serves not only to buffer us from the ocean but also provides a wide recreational area on which hundreds of thousands throng.

The BUDM widens a portion of the City's beach, which results in: a higher quality of the public beach within the project area which insures beach access; increased economic activity and associated tax revenues; reduced public costs of post-storm response; reduced infrastructure maintenance and/or relocations costs; greater habitat value in the healthy beach/dune system, and reduced future erosion response costs.

Furthermore, widening the beach in front of private property protects those structures, inhabitants, and reduces damage caused to those structures by storm events and their wave action and reduces insurance losses.

By widening the beach, this project not only provides a larger area for tourists to enjoy, it provides a protection of nearby property (by virtue of the increased distance of the waves from hard structures), as well as more sand in this area of the beach/dune system that can potentially develop into dunes, which do provide a greater amount of protection of not only property, but of the beach. Furthermore, a wider beach and a stronger dune system provide a larger habitat for beach and dune flora and fauna, as well as for the endangered Kemps Ridley Sea Turtle and the threatened Piping Plover. By having a wider beach, the City also has a greater opportunity for the natural development of dunes in the project area.

The north end of the City's beach does not have the substantial development and complex dune system that the south end of City has, due primarily to the width of the beach and the available amount of sand blowing in the beach/dune system.

The Island is densely populated and many of the properties in our proposed nourishment area lie west of a shoreline whose erosion rate is between -4 and -6 feet per year. This project is what protects the property. Placing sand in this general area forms a prism of material that will be redistributed by nature. The local currents will spread the material along the shoreline, bringing the majority of it eventually North. The aerial beach will be transported by wind into the dune system and serve to fortify them. The submerged beach will act as wave attenuation and absorb the oceans energy that would otherwise be directed at the inland properties.

Erosion Response History

The City of South Padre Island has had 21 BUDM projects in the last 29 years and 12 of those have been on shore beach placement. As a part of this well-oiled process the GLO and the City have cost shared the annual survey performed by HDR. This makes South Padre Island one of the most studied beaches in the Gulf, maybe even the US.

The continued funding of this effort will continue the historic erosion response work previously completed on the City's beach. These projects include surveys and beneficial use of dredge material for beach nourishment projects in which the City of SPI and the General Land Office leveraged funds against the Army Corps of Engineers dredge money reducing the cost of beach nourishment by half. These projects took place March 2012, February 2011, March 2010, February 2009, December 2008, November 2004, November 2002, December 2000, February 1999, and February 1997. The City's collaborative efforts in past years include a project similar to this proposal alongside Texas Department of Transportation (TxDOT) and the Texas General Land Office (utilizing CEPRF funds). This collaboration provided a smaller scale beach nourishment project by hauling beach quality sand blown over the highway north of City to the north end of the City's beach. The previously mentioned projects took place in March 2009, March 2008, February 2007, November 2002, and February 2001. Unfortunately that source of sand is no longer available to the City.

Working with the local South Texas chapter of the Surfrider Foundation, the City has organized and completed multiple volunteer plantings and harvests in an attempt to fill in gaps along the dune line. The dune line provides protection against storm surge. The City has successfully completed one grant in CMP Cycle 17 which vegetated 6 acres of bare dune areas and planted over 190,000 plants on the beach. Currently in Cycle 19 we have planted 70,000 plants this year.

In the last decade the City of South Padre Island has grown their dune system in some areas as much as 100 feet seaward. This is due to a combination of plantings and the continued sand nourishment. The wind transports the sand into the dunes where it is held in place by the wind break created by the dune plants. Keeping enough sand in front of the dunes not only feeds them but keeps the waves from scarping them away.

USACE and SPI Partnership

The City requests continued support from the United States Army Corps. Of Engineers (USACE) with the following:

- Annual closure depth maintenance surveys of the City's beach. These surveys are necessary to determine the impact of beach nourishment on the Island and the beach/sand system within the lower Gulf of Mexico Closure depth; surveys are estimated to cost approximately \$50,000 for each survey.
- Engineering and design of shoreline nourishment project as per FEMA requirements. In order to receive FEMA disaster reimbursements funds, the City's beach must be engineered and surveyed regularly. The engineering design work for this project is estimated at \$25,000.
- Beach Nourishment- another coordinated phase between the City, US Army Corps of Engineers, Cameron County, Port of Brownsville, and General Land Office for beneficial use of dredge material from dredging of Brazos Santiago Pass. The City benefited from this project 13 times beginning 1997 as a sand source to maintain and widen the City's beach.

BUDM Aspects

The proposed project involves the following:

- Coordination with Army Corps of Engineers and Port of Brownsville regarding schedules to dredge Brazos Santiago Pass;
- Coordination with coastal engineering firm for survey work, engineering work to determine estimated volume of sand available and calculations to determine best placement location for sand deposition - both dredged and hauled sand material;
- Coordination with General Land Office regarding contracts and funding mechanisms. The City has completed work on updating previous permits and coastal boundary surveys. No expectation of delay or difficulty in renewing USACE permits to allow deposition of dredge material is expected.

Benefit Cost Analysis

In the 2013 Technical Report prepared by Taylor Engineering which evaluated the CEPRA Cycle 6 projects, had a benefit ratio of 9.1% for CEPRA project 1524, which indicates a good rate of return for the State. The total proposed costs are reasonable as related to the benefits. Tourists benefit from the quality of sand and the quality of the City's beach as do residents and business owners. Tourism is the City's most prominent income base. This last fiscal year (October 1, 2013- September 30, 2014) the City contributed to the State an estimated \$5,312,974 in Hotel/Motel Tax dollars (6% of the 14.5% rate) and \$9,581,560 in Sales Tax (6.25% of the 8.25% rate) revenue. The nearly \$15 million in tax revenue sent to the State is a direct result of the City's beaches. Without the beaches- and without proper beach nourishment -these funds would cease to exist in the future.

Consistency and Considerations

This work is consistent with the City's beach/dune rules and considers sources of beach quality sand useful in replenishing the beach as it erodes. The City is continually monitoring the state of erosion on beaches. The City's commitment with the GLO includes providing 200 feet of sand to allow for public access. This project will help to provide the 200 feet and without this project the erosion rate and mean tide will continue to eliminate further portions of the beach. Without the additional sand the 200 feet of beach will be in jeopardy and could result in property loss and inaccessibility to the beach. In regards to

floodplain administration, this project helps prevent the negative impacts due to high tides and coastal flooding.

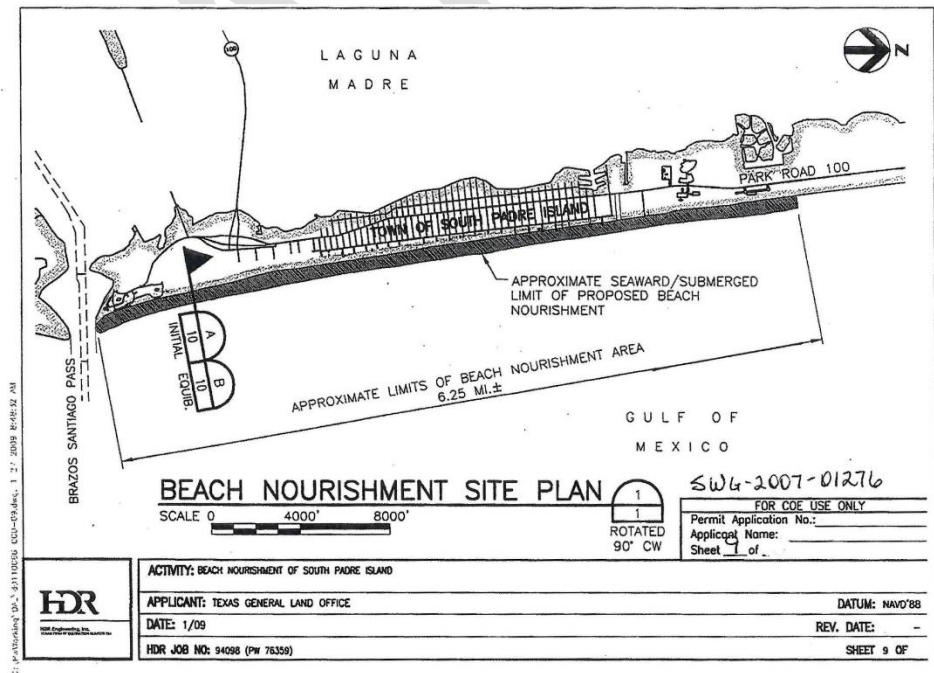
Endangered Turtle nesting season would need to be observed and respected. Traditionally the USACE and the City have worked in tandem to ensure the safety of tourists and wildlife as well as maintaining beach accesses to Texas beaches uninhibited by the BUDM Projects. The project schedule is heavily dependent upon turtle nesting season (May 15 - Oct 1). If necessary this project can take place any other time of the year, however avoidance of high traffic seasons including Spring Break (the month of March) and the Winter Texans Season (Jan/Feb) is preferred. The ideal project window will be completed through October-December.

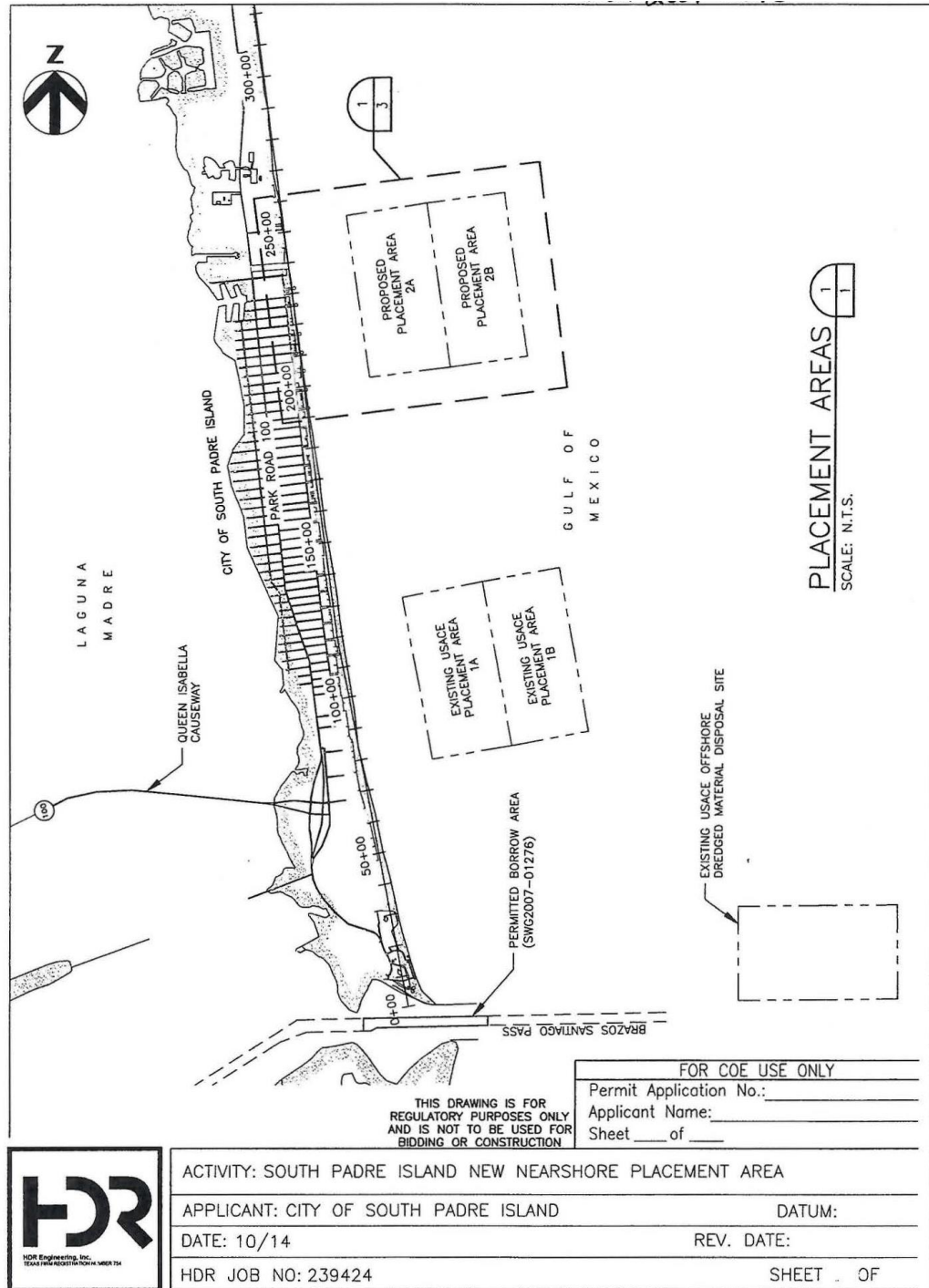
The City of South Padre Island and GLO both are dedicated to the continued monitoring of this Island. The City will continue to provide funding for every other year of surveying and has even developed the capabilities to perform spot surveys throughout the year as needed. The City of South Padre Island possess reserve funds, a strong tax base, and budgeted funds for the project.

Placement

Historically the City of South Padre Island has focused its nourishments on an area deemed a hotspot for erosion. The City of South Padre Island has identified locations that they believe ought to be nourished on an alternating annual basis.

In the City of South Padre Island's Department of the Army Permit the placement locations are split between onshore and offshore. Onshore placement areas encompass the Gulf shoreline within the city limits. There are two offshore placement locations proposed placement area 1 (A&B) and proposed placement are 2 (A&B).





The City wishes to establish a nourishment cycle that deposits available BUDM material onshore and strategically offshore. This plan will allow for the seemingly incongruous flexibility and preparation that is intrinsically linked to BUDM projects. Multiple scenarios have been devised and will be utilized based on the BUDM material availability and the shoreline systems need for sediment input.

Year	Placement Area	Considerations	Goal
2017	200+00 - 150+00	Turtle nesting season, peak tourism season, potential weather encroachment	Widen the aerial beach to facilitate better protection and utility
2018	150+00 – 100+00	Turtle nesting season, peak tourism season, potential weather encroachment	Widen the aerial beach to facilitate better protection and utility
2019	200+00 - 150+00	Turtle nesting season, peak tourism season, potential weather encroachment	Widen the aerial beach to facilitate better protection and utility
2020	Proposed Placement Area 2A	Sea turtle taking, potential weather encroachment	Create a sacrificial near-shore berm as close to the Island's shore as possible
2021	200+00 - 150+00	Turtle nesting season, peak tourism season, potential weather encroachment	Widen the aerial beach to facilitate better protection and utility
2022	150+00 – 100+00	Turtle nesting season, peak tourism season, potential weather encroachment	Widen the aerial beach to facilitate better protection and utility

Summary

Portions of the island currently experience dune scarping weekly will require attention in order to restore an aerial beach. Due to the Islands littoral system placing the material further south may increase its life-span on the shores of South Padre Island

According to the Texas General Land Office's (GLO) Texas Coastal Resiliency Master Plan (CRMP) the City of South Padre Island is in need of a continuation of similar beach nourishment activities that are necessary to help protect the community from the impacts of tropical storms and hurricanes. This is due to the "heavy and persistent" erosion experienced by the City's shoreline, and can be projected to claim more than 100 acres over the next 50 years.

The GLO calls for a \$40-\$80 million dollar investment utilizing a phased restoration for up to 8 miles along the City of South Padre Island's Gulf shoreline. This plan is a strategic means of meeting the recommendations laid out in the CRMP as a means of maintaining the economic stability, environment, and safety of SPI and Cameron County.

SPI, with 0.7% of the county's population and 0.2% of the county's land area contributes almost 5% to the county's Gross Product. This means that SPI contributes almost 6 times as much to the economy of the county per person than the rest of the county or almost 20 times as much to the economy of the county per square mile than the rest of the county.

The beach and dune system are critical to a diverse cast of flora and fauna. The Island is not only home to an exceptional coastal habitat but home to many outstanding conservation efforts. The SPI Birding and Nature Center, SPI Native Plant Center and Sea Turtle Inc. are all renowned for their work in safeguarding the Texas coastal environment.

A continuous and well-fed dune system is the City's only line of defense as the barrier island itself is the first line of defense for the low-lying mainland behind it. The beach-dune system must be maintained in order to protect the properties and homes that lie west of the shoreline. A strategic and purposeful approach is necessary in order to help protect the Rio Grande Valley community from impacts of tropical storms and hurricanes.

DRAFT

Bibliography

1. AEC for the SPI Economic Development Committee, Economic Impact of South Padre Island (2012)
2. Texas General Land Office, Texas Coastal Resiliency Master Plan (March 2017)
3. Department of the Army, Beneficial Use of Dredge Material Permit No. SWG-2007-01276 (June 2016)

DRAFT

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend the approval of a budget amendment for the purchase of a dump truck. (Hill)

ITEM BACKGROUND

The City of South Padre Island will benefit from the use of Dump Truck in times of Disaster preparedness as well as in normal day to day use for the movement of sand, dirt, or other like materials for city projects that involve Public Works as well as the Shore Line Department.

BUDGET/FINANCIAL SUMMARY

The estimated budget amendment will be 60,000.00-100,000.00 to be determined after subsequent quotes have been received.

COMPREHENSIVE PLAN GOAL

LEGAL REVIEW

Sent to Legal: YES: _____ NO: X
Approved by Legal: YES: _____ NO: X

Comments:

RECOMMENDATIONS/COMMENTS

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 9/25/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend to City Council adopt an ordinance specifying conditions for tying into public beach access walkovers. (Schwartz)

ITEM BACKGROUND

An unpermitted dune walkaway was identified and cited for violations of Chapter 22 Ordinances.

BUDGET/FINANCIAL SUMMARY

COMPREHENSIVE PLAN GOAL

Chapter III. Parks and Resources

Objective 1.1 Beach and dunes shall be protected from both natural and artificial erosion.

Strategy 1.1.3.3 Whenever feasible, joint construction of walkovers should be encouraged.

LEGAL REVIEW

Sent to Legal: YES: _____

NO: X

Approved by Legal: YES: _____

NO: X

Comments:

RECOMMENDATIONS/COMMENTS