

**To: Galveston Attractions Association**



**Galveston's Beach Replenishment Project**

***Status Report***

**Thursday, April 14, 1994**

**Prepared by: Douglas W. Matthews  
City Manager**

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## City of Galveston Beach Renourishment Project

**1991** Beach renourishment efforts under the leadership of Armin Cantini began to pursue ways to successfully replenish the beaches. Some of the committee members were:

Armin Cantini, Chamber Chairman  
Mike Martin, State Representative  
Chet Brooks, State Senator  
Eddie Barr, County Commissioner  
Pat Hallisey  
Willis Thames

Barbara Crews, Mayor  
James Hury, State Representative  
Eddie Janek, County Commissioner  
Russ Eitel  
Dr. William Levin  
Mimo Milosevich

### **1991 Original concept:**

- Take advantage of Corps of Engineers Maintenance Dredging of channel
- Local Share estimated at \$2.5 million for beach from 10th to 61st

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### Chronological Events:

- Feb 17, 1992 Chamber Committee discuss financial options
- Mar 04, 1992 Beach Committee meets to discuss Water Development Board Financing Option
- Mar 20, 1992 Mike Martin host beach meeting: discuss Tax Zone 9 expansion
- Jun 25, 1992 Park Board makes application for \$2.8 million to TX Water Development Board
- Jul 16, 1992 TX Water Development Board approves Park Board application for \$2.8 million
- Sep 04, 1992 Corps of Engineers briefing of Channel Sediments. Bids showed sand not beach quality
- Sep 30, 1992 Corps of Engineers suggest to City to use Big Reef Area. They estimated there was **953,000** cubic yards of **quality sand material**
- Nov 03, 1992 City begins solicitation process to select engineering firm to coordinate bids for beach project using Big Reef area

- Nov 13, 1992 Corps gives City estimate of \$3.1 million for Big Reef - to move 1 million cubic yards of sand. Park Board adds \$900,000 for total project cost of \$4 million
- Jan 28, 1993 Mike Martin expresses "strong support for moving forward with the engineering study on the beach renourishment project."
- Feb 05, 1993 Army Corps of Engineers require an archeological study of proposed borrow area of Big Reef
- Feb 11, 1993 City Council approves entering into contract with Coastal Planning & Engineering, Inc. of Boca Raton, Florida. Contract amount \$214,215
- Oct 14, 1993 City Council approves Interlocal Agreement with Park Board for Issuance of bonds for Beach Renourishment
- Nov 02, 1994 Local voters approve 1/8 cent sales tax for beach replenishment
- Dec 14, 1993 Two bids were received by the City Purchasing Office in the amount of \$6.49 million and \$6.55 million
- Dec 21, 1993 Coastal Planning & Engineering provided the City with the reasons why the bids were above the original Corps budget of \$4 million. Reasons cited were: a) not enough quality sand/material at Big Reef b) the proposed winter dredging/exposed location/weather considerations caused the contractors to increase their cost
- Dec 23, 1993 City Council rejects the beach renourishment bids received. In light of some confusion as to who was the project coordinator, Council announced they wanted the City Manager to be project manager and thanked the Chamber Beach Renourishment Committee for its efforts
- Jan 07, 1994 City Council met with Coastal Planning & Engineering, Inc. to go over the various options to get the project back on track. Council decided to have the engineering firm interview all of the dredge contractors and provide the options to Council at its Feb 10 meeting
- Feb 09, 1994 Coastal Planning provides the City with results from the dredge contractor interviews and outlined the four options available to the City
- Feb 10, 1994 City Council formally decided to pursue option #4 which is to identify an offshore borrow site, which would cost less than Big Reef. The offshore method of sand replenishment is commonly used in Florida

- Mar 01, 1994 City receives a REVISED construction schedule from Coastal Planning & Engineering, Inc. contingent upon City Council's approval at its Mar 10, meeting of their contract amendment to coordinate the offshore sand search. Their schedule indicates beach replenishment could begin as early as Aug 1994. It is staff's belief, because of permit modifications, that late Sep 1994 is a more practical start date.
- Mar 02, 1994 City Manager hosts meeting with former members of the Beach Renourishment Committee to give them a project status report. Suggestions were made about expanding the Big Reef Area and using sand from the Galveston Ship Channel. City Manager requests Coastal respond in writing to these suggestions
- Mar 09, 1994 Coastal Planning & Engineering responds to the suggestions regarding Big Reef and Galveston Ship Channel sand sources. They recommend the offshore borrow site to be the best approach to stay within the budget and scope of the project. Environmental problems with expanding Big Reef and a construction cost of \$6 to \$7 million were cited as problems. The Galveston Ship Channel was considered too expensive due to the need to truck the dredged sand across the City and the high likelihood of sand being tainted with industrial contaminants
- Mar 10, 1994 City Council approves \$15,000 contract amendment to Coastal Planning & Engineering to coordinate the offshore sand search
- Mar 15, 1994 City staff provides memorandum regarding the proposed offshore borrow site after meeting with Coastal Planning & Engineering. The offshore borrow site approach is what was used in Boca Raton and Del Ray Beach, Florida
- Apr 14, 1994 City Council is to consider approval of the following contracts: a) Rice University vibracoring at \$55,000 b) Coastal Planning & Engineering for permit modifications at \$5,000 and c) Coastal Environmental for archeological survey of offshore sand site at \$10,000.  
City Manager recommends that City Council rescind, at its Apr 28 meeting, the 1 cent hotel/motel tax dedicated for beach nourishment. If approved, this will release an approximate \$200,000 of hotel tax money for advertisement through Sep 30, 1994

RECEIVED

NOV 13 1992

NOV 16 1992

Executive Office

OFFICE OF  
CITY MANAGER

Honorable Barbara Crews  
Mayor of Galveston  
City Hall  
Galveston, Texas 77550

Dear Mayor Crews:

This letter is in response to the article appearing in the Galveston Daily News on October 29, 1992, copy enclosed. The article includes a statement from Mr. Warner that it would cost \$5 million just to connect the south jetty at Big Reef to 10th Street. Although this may be a mistake within the article, we would like to clarify the costs that the Corps projected for the project. The cost of placing a pipeline from Big Reef to 61st Street was estimated at \$480,000, which includes installation and removal, wear and tear and mobilization/demobilization costs. Additional costs for dredging, booster pumps and additional mobilization/demobilization will bring the cost to \$3.1 million for moving approximately 1 million cubic yards of material from Big Reef to Galveston Beaches between 10th and 61st Streets. This estimate includes only dredging costs and does not include costs associated with beach design, security issues, real estate or any coordination, mitigation costs. Pipeline dredges have proven themselves as the most cost effective method for removing submerged sediments.

If we can be of any further assistance please do not hesitate to call.

Sincerely,

John P. Basilotto  
Colonel, Corps of Engineers  
District Engineer

Enclosure

Copy Furnished:

Mr. Douglas Matthews  
City Manager  
City of Galveston  
City Hall  
Galveston, Texas 77550



US ARMY CORPS  
OF ENGINEERS

GALVESTON DISTRICT  
P.O. BOX 1229  
GALVESTON, TEXAS 77553  
(409)766-3004

# NEWS CLIPS

PUBLIC AFFAIRS OFFICE

GALVESTON DAILY NEWS

PERIODICAL

GALVESTON, TX

29 Oct 92

CITY/STATE

DATE

## Consultants sought to lead replenishment

### Isle beach work could begin as early as March

By MAGGIE SIEGER  
*The Daily News*

GALVESTON — A committee of four community leaders will retain the services of a consulting firm to direct beach replenishment efforts within 30 days, officials pledged Wednesday.

Under the best-case scenario, work on the beaches could begin in March.

The Galveston Chamber of Commerce beach replenishment committee charged Doug Matthews, Galveston city manager, Russ Eitel, Galveston County Beach Preservation Association co-chairman; Don Schattel, Galveston Park Board executive director; and Pat Hallisey, director of the Galveston County Beach and Parks Department; with the duty of securing engineering services for the project.

Phase I of beach replenishment includes beaches in front of the seawall from 10th to 61st streets.

Matthews said he hopes to have the name of a proposed firm before the City Council at its Dec. 10 meeting.

Schattel said the committee will ask at least three firms to submit their qualifications.

"We will check with Florida and other states which have experience for some names initially," Matthews said.

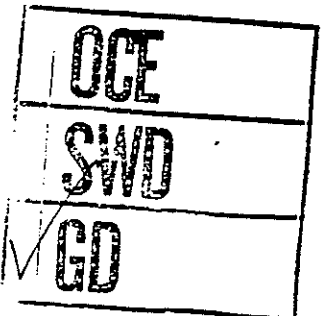
The selection committee was formed at the same time officials learned that using Big Reef as a source for beach sand would cause trouble with environmental groups.

Various groups already have called the city to protest plans to use Big Reef, Matthews said. To maintain the environment, any sand used must be at least four to five feet below the water line, Charles Warner Jr., Galveston city engineer, told members of the Galveston County Beach Preservation Association at an earlier meeting Wednesday.

"Basically, if you can see it, you can't use it," Warner said. "There is a little path (above ground) along which we could possibly lay pipeline, but, essentially, Big Reef is off limits."

Piping the sand from the reef to beaches is not cost-effective, Warner said, adding it would cost about \$5 million just to connect the south jetty at Big Reef to 10th Street.

"We seem to be narrowing in on the method to transport sand," Eitel said. "We thought we could use dry sand and truck it, but trucking seems to have been eliminated."

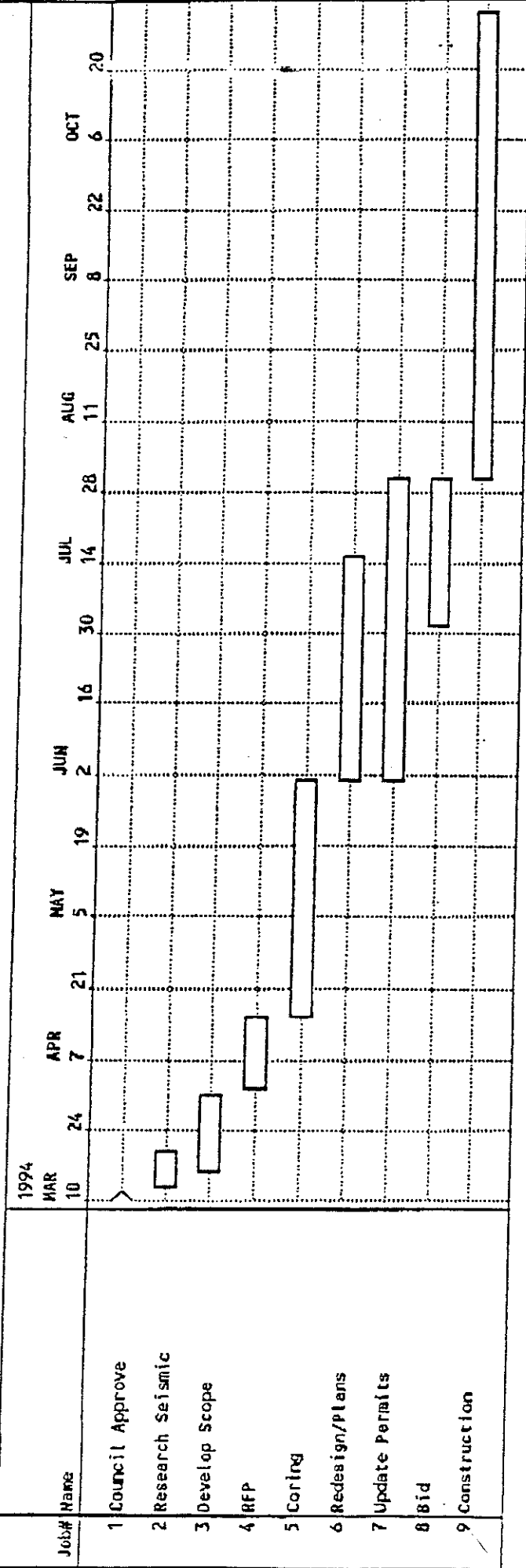


**PROJECT: GALVESTON OFFSHORE**

**CURRENT DATE: 03/01/94**

**AS OF DATE: 03/01/94**

**GALVESTON OFFSHORE BORROW AREA**





MEMORANDUM

To: Douglas W. Matthews, City Manager  
From: Stephanie Bowers, Executive Assistant *SBOWERS*  
Date: March 15, 1994  
Subject: Beach Nourishment: Proposed Potential Borrow Area

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Attached please find a map reproduced from the U.S. Army Corps of Engineers Coastal Engineering Research Center 1979 study of Sediment Distribution, Sand Resources, and Geological Character of the Inner Continental Shelf off Galveston County, Texas.

As denoted, the shaded area was found by the Corps of Engineers to be a High Potential Borrow Area. The 1979 study states:

"Borrow area C to the south of Galveston Inlet is triangular in plan view and comprises the lower shoreface and shoal area off Galveston Beach (Fig. 17). It actually consist of two areas. The area of highest potential includes cores 15, 17, and 18 which contain relatively clean, fine-grained sand interbedded with thin mud and muddy sand layers. Seismic records show that the horizontal stratification in the cores extends throughout the borrow area but the sediment probably becomes progressively finer seaward from core 15. Core 14 at the seaward boundary of the area contains 2 meters of sand but it is just within the authorized dredged material disposal area and it is probably a unique occurrence, since most of the dredged material dumped there is fine grained in nature. The estimated volume of sandy sediment in area C is 20.6 million cubic meters (27 million cubic yards) using a thickness of 1 meter in the high priority area and 0.5 meter (1.6 feet) in the offshore region (Table 2.)"

In meeting with Coastal Planning and Engineering, Inc. they expressed their opinion that the City of Galveston's best potential borrow area was this shaded area. A 1991 study by Rice University also yielded concurring data.

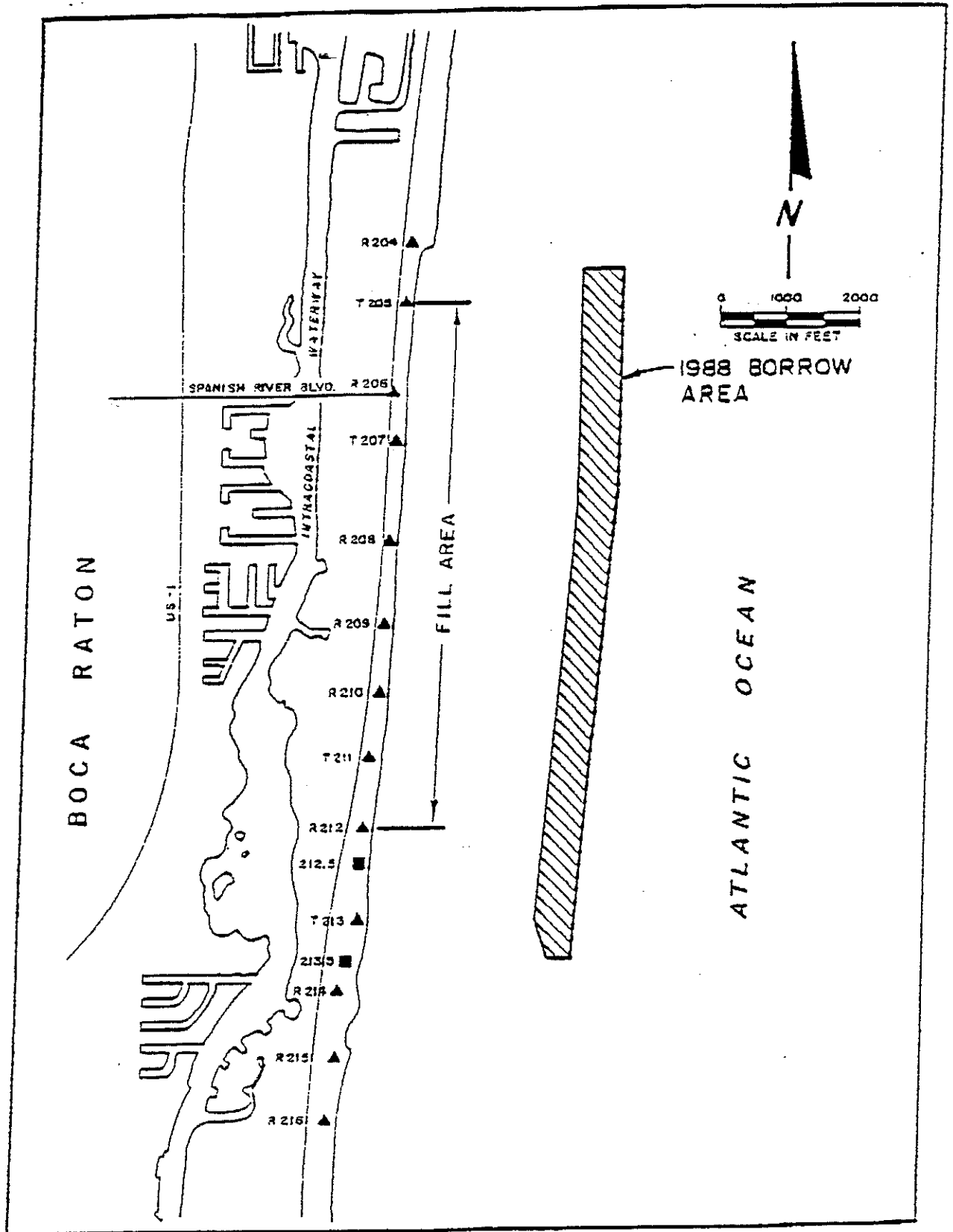
As you will note, the potential borrow area is directly offshore of Galveston Island. This is the same type of location used as the nourished beaches I viewed in Florida. I have attached maps of the two (2) nourished beaches and their borrow areas for your easy reference.

If you would like any additional information, please advise.

SB:mc

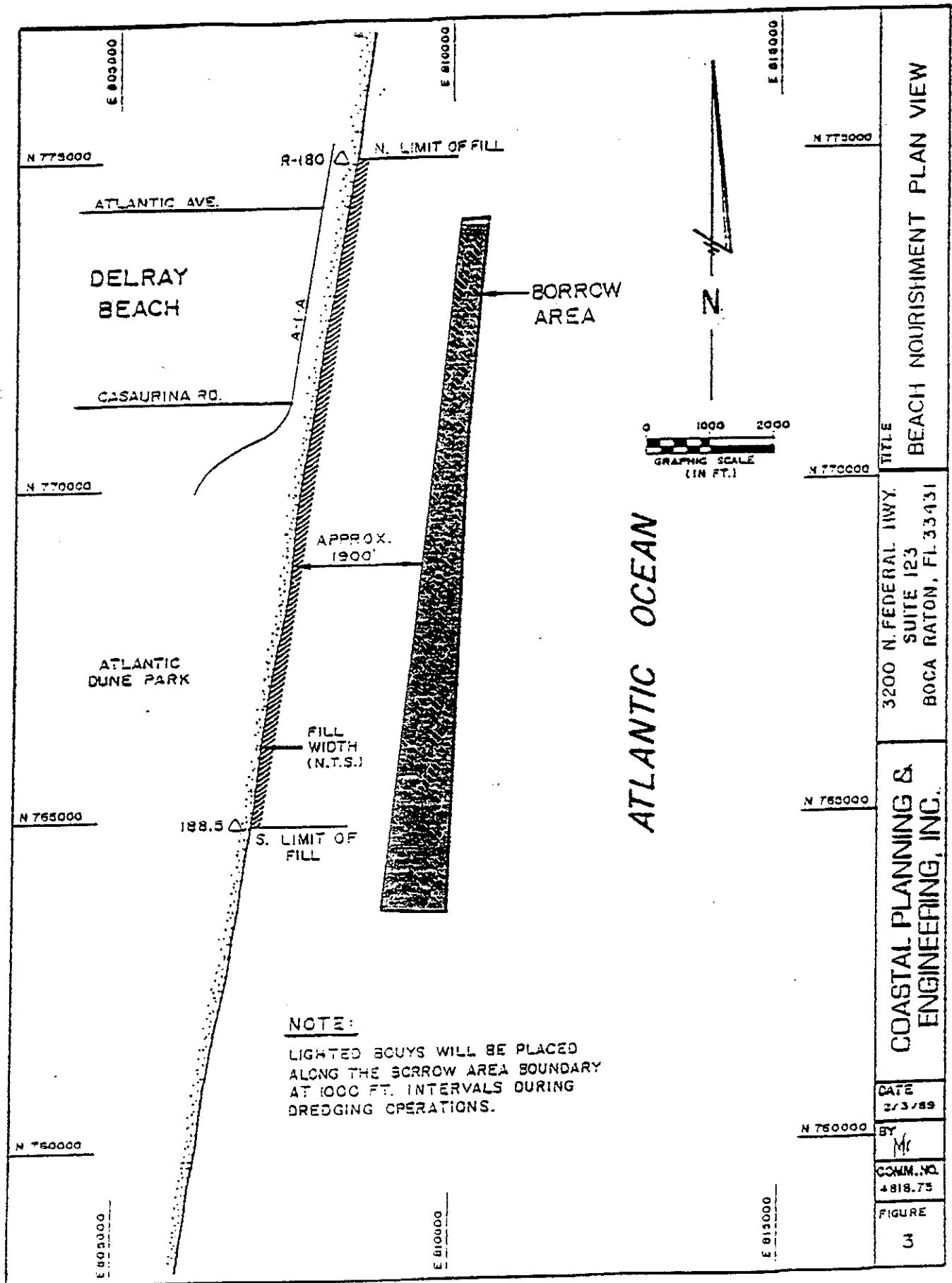
Attachments





LOCATION MAP  
 NORTH BOCA RATON BEACH RESTORATION PROJECT

COASTAL PLANNING & ENGINEERING, INC. • BOCA RATON • SARASOTA • JACKSONVILLE



TITLE		BEACH NOURISHMENT PLAN VIEW	
3200 N. FEDERAL HWY. SUITE 123 BOCA RATON, FL 33431		COASTAL PLANNING & ENGINEERING, INC.	
DATE	2/3/89	BY	Mr
COMM. NO.	4818.75	FIGURE	3

**Beach Renourishment Project Budget  
March 1994**

Revenues:			
Balance as 9/ 30/93		\$	200,000
1% of hotel tax through 3/31/94			122,941
	<b>Total</b>	<b>\$</b>	<b>322,941</b>
Expenditures:			
Expenses through 3/31/94		\$	185,574
	<b>Total</b>	<b>\$</b>	<b>185,574</b>
	<b>Balance</b>	<b>\$</b>	<b>137,367</b>

**Expenditure Breakdown/Budget**

	<u>Encumbrance</u>	<u>Expenditure</u>	<u>Balance</u>
Coastal Planning & Engineering	\$ 214,000	\$ 156,848	\$ 57,152
Extra Work options	4,705	4,705	0
Offshore Sand Search	15,000	0	15,000
Permit Modification	5,000 *	0	5,000 *
Coastal Environmental, Inc.			
Big Reef Archeological Survey	5,749	5,749	0
Offshore Archeological Survey	10,000 *	0	10,000 *
McLeod, Alexander, Powell & Apffel	17,595	17,595	0
Park Board Austin Trip	679	679	0
Rice University-Vibracoring	55,000 *	0	55,000 *
Contingency Fund	25,000		25,000
<b>TOTAL</b>	<b>\$ 352,728</b>	<b>\$ 185,576</b>	<b>\$ 167,152</b>

\* denotes projects pending City Council's approval

**Staff recommends that City Council rescind beach nourishment 1 cent hotel/motel tax ordinance effective May 1, 1994. This action will release \$200,000 to advertisement.**