



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, MOBILE DISTRICT
CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

June 7, 2010

Regulatory Division
Coastal Branch

EMERGENCY
STANDARD PERMIT NOTICE

In accordance with 33 CFR Part 325.2(e)(4), emergency procedures are being initiated for authorization of work in wake of a recent explosion on a Transocean Deepwater Horizon drilling rig in the Gulf of Mexico and subsequent oil spill affecting areas within the regulatory boundaries of the U.S. Army Corps of Engineers (USACE), Mobile District, South Atlantic Division.

To: See Distribution List

From: Philip A. Hegji, Mobile District, Regulatory Division

Subject: Department of the Army (DA) Notification Number SAM-2010-00823-PAH, The State of Alabama, Gulf of Mexico

Applicant: The State of Alabama, 600 Dexter Avenue Montgomery, Alabama 36130

Proposed Work: The applicant proposes to install a series of 240-long 36" pipe booms attached by chain to driven 48" pipe piles within the channel at Perdido Pass. In addition to the pile-supported booms, a stone-rubble current-diversion dike will be placed in the pass at the south end of the boom structure and a riprap berm will be placed onshore at the north end to protect against overspill during high-water events.

The approximate area of water bottoms to be filled is 2,800 square feet. The total volume of fill proposed to be placed within Waters of The United States is approximately 1,230 cubic yards. The southern rock-rubble dike will contain approximately 1,200 cubic yards of fill covering approximately 2,500 square feet of water bottom. The northern dike will be placed mainly in the tidal zone with a fill area of approximately 800 square feet 300 of which will be in Waters of The United States, and a total volume of approximately 80 cubic yards; 30 of which will be placed within Waters of The United States.

A removable navigation section will be placed in the center of the boom structure to allow emergency and oil recovery vessels access in and out of the bay. It is anticipated that the pass will be closed to recreational traffic while recovery operations are still underway.

A series of instruments will be attached to the structure to monitor sea conditions, tidal velocities and loads on the structure. The structure will be monitored daily to ensure that all connections remain intact.

- Any authorization would include the special condition that all authorized structures would be removed within one year of the date of DA authorization. At the time of removal, any areas affected by the

permitted action or during its implementation would have to be restored to pre-construction conditions.

- All activities required for clean-up of hazardous substances would be subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300).

Location: The project will be located in waters of the Gulf of Mexico fronting Perdido Pass, Orange Beach, Baldwin County, Alabama (Latitude: 30° 16' 30" North; Longitude: 87° 33' 20" West)

Purpose: The purpose of the project is to close the primary path through which oil from the Deepwater Horizon spill could enter Perdido Bay which contains, estuaries which are essential to a wide range of sea life

We respectfully request immediate review and email response within 4 hours of receipt of this proposal OR no later than 1500, June 7, 2010. If no major objections are received, we plan to authorize this request by Emergency Standard Permit. Should we receive no comment, this will be considered as agency concurrence or no objection to the proposed project.

Department of the Army regulatory authority prescribes this type of permit to abbreviate processing procedures for minor work having no significant environmental impacts and no appreciable opposition or controversy. See 33 CFR Part 325.5(b)(2) Federal Register, Vol. 51, No. 219 - Thursday, November 13, 1986.

In an emergency situation the district engineer will make every reasonable effort to receive comments from the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Section 402.5 (a) and (b), Emergencies, of the Endangered Species Act of 1973, states that where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirement of sections 7(a)–(d) of the Act. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc. Formal consultation would be initiated as soon as practicable after the emergency is under control.

In an emergency situation the district engineer will make every reasonable effort to receive comments from the SHPO and the ACHP, when the proposed undertaking can reasonably be expected to affect a potentially eligible or designated historic property and will comply with the provisions of 33 CFR 325 Appendix C to the extent that time and the emergency situation allows.

If you have any questions, please email me at Philip.A.Hegji@usace.army.mil or call me at (251) 690-3222.

Enclosures:
Alternatives Analysis provided by the applicant
Copy of vicinity map and plan view drawing

DISTRIBUTION LIST - ALABAMA

Standard Permit Notification sent via e-mail to the following:

CESAM-RD: Nelson Sanchez, Craig Litteken

CESAM-RD-C: Munther Sahawneh, Joy Earp, Matt Grunewald, Damon Young

CESAM-OP: Wynne Fuller, Duane Poiroux

CESAM-OP-GW: Stephen Reid

CESAM-OP-N: Steve Hrabovsky, Nathan Lovelace, George Rush

USCG: LTJG Lisa G. Hartley, David Ormes, Mobile MTSRU

EPA: Brittany Croll, Rosemary Hall, Timothy Landers, Clay Miller, Tom Welborn

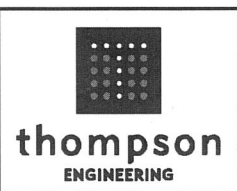
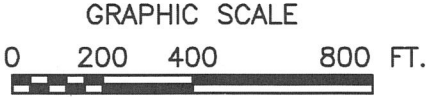
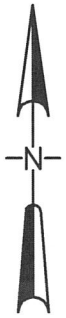
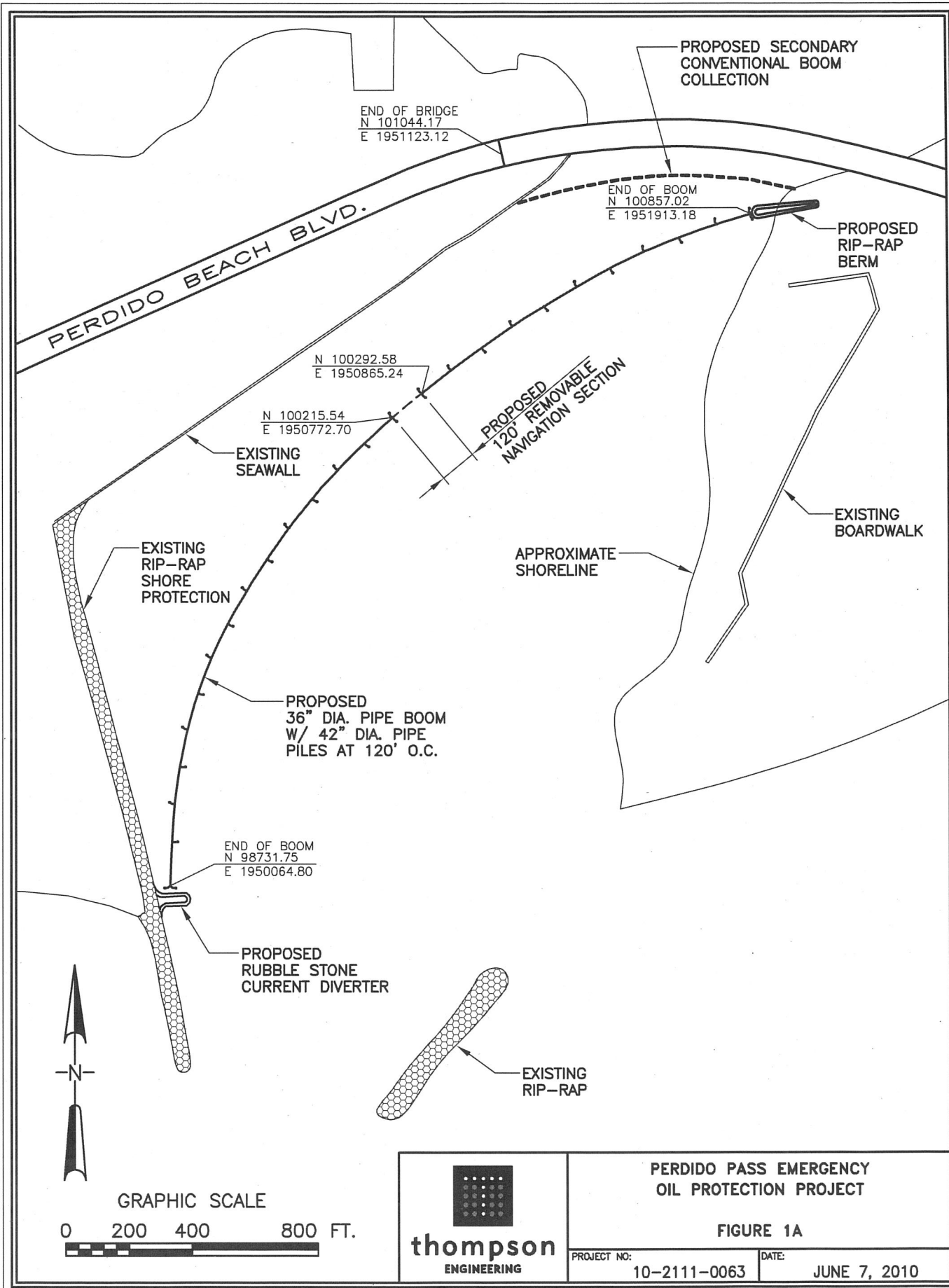
USFWS: Patric Harper, Bill Pearson

NMFS: Mark Thompson

ADEM: Scott Brown

ADCNR: Will Brantley, Carl Ferraro, Jeff Jordan

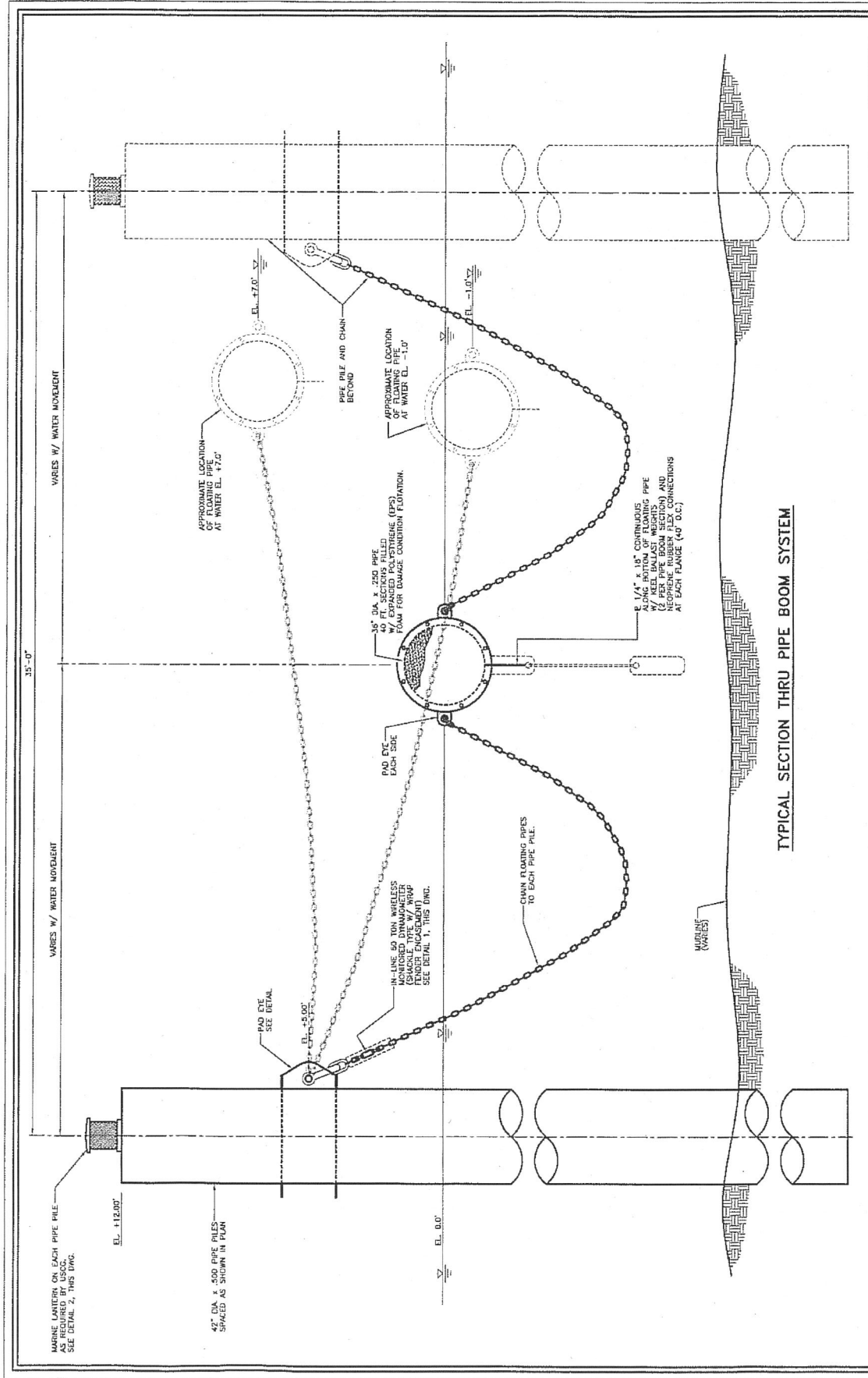
BP America, Inc.: Katherine Hughes, Lyle Trumbull, MC252 Email Retention, MC252 Environmental Unit Deputy, MC252 Environmental Unit Lead, Pfeiffja, Fauthdp



**PERDIDO PASS EMERGENCY
OIL PROTECTION PROJECT**

FIGURE 1A

PROJECT NO: 10-2111-0063	DATE: JUNE 7, 2010
-----------------------------	-----------------------



PERDIDO PASS EMERGENCY
OIL PROTECTION PROJECT

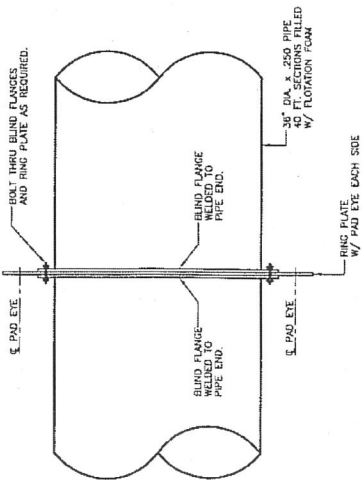
FIGURE 2

PROJECT NO: 10-2111-0063
DATE: JUNE 4, 2010

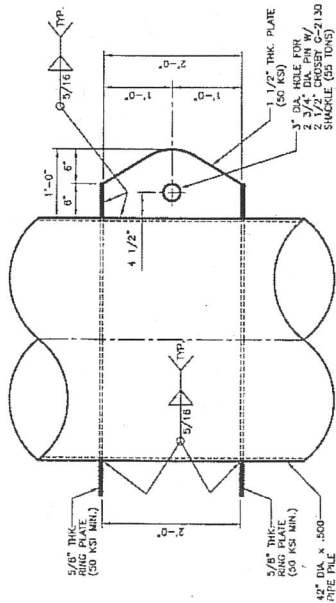


thompson
ENGINEERING

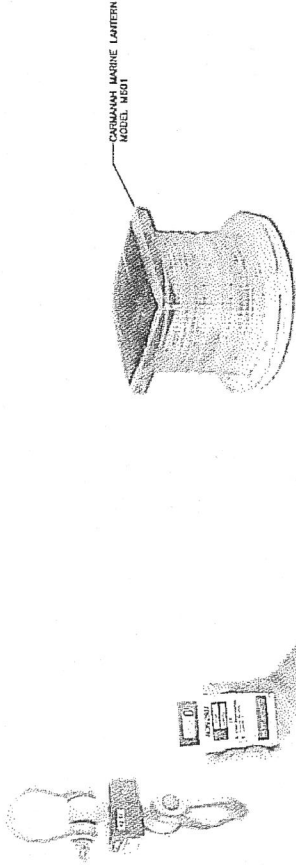
- MONITORING PROGRAM**
1. DAILY MEASUREMENT OF SEA CONDITIONS
 2. DAILY MEASUREMENT OF EBB & FLOW VELOCITIES
 3. DAILY MEASUREMENT OF DYNAMOMETER LOAD IN CHAIN RESTRAINT
 4. DAILY INSPECTION OF ALL CONNECTIONS AND INSTALLATION.



TYPICAL PIPE TO PIPE CONNECTION



TYPICAL PADEYE DETAIL

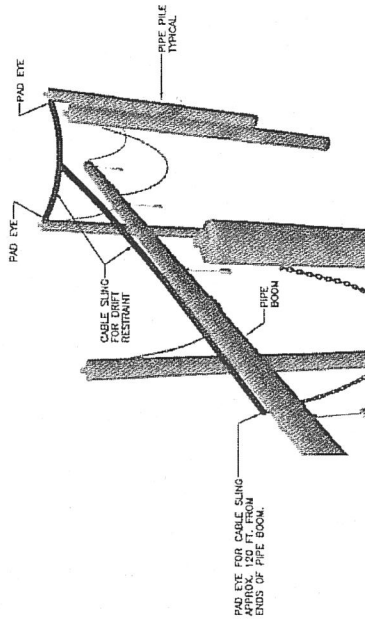


IN-LINE 50 TON WIRELESS DYNAMOMETER

DETAIL 1

MARINE LANTERN

DETAIL 2



CABLE SLING DIAGRAM
(LOCATED AT NORTH AND SOUTH END OF PIPE BOOM STRENGTH)



thompson
ENGINEERING

PERDIDO PASS EMERGENCY
OIL PROTECTION PROJECT

FIGURE 3

PROJECT NO: 10-2111-0063 DATE: JUNE 4, 2010

Project Description

The applicant intends to install a series of 240-long 36” pipe booms attached by chain to driven 48” pipe piles within the channel at Perdido Pass. In addition to the pile-supported booms, a stone-rubble current-diversion dike will be placed in the pass at the south end of the boom structure and a riprap berm will be placed onshore at the north end to protect against overspill during high-water events.

The approximate area of water bottoms to be filled is 2,800 square feet. The total volume of fill proposed to be placed within Waters of The United States is approximately 1,230 cubic yards. The southern rock-rubble dike will contain approximately 1,200 cubic yards of fill covering approximately 2,500 square feet of water bottom. The northern dike will be placed mainly in the tidal zone with a fill area of approximately 800 square feet 300 of which will be in Waters of The United States, and a total volume of approximately 80 cubic yards; 30 of which will be placed within Waters of The United States.

A removable navigation section will be placed in the center of the boom structure to allow emergency and oil recovery vessels access in and out of the bay. It is anticipated that the pass will be closed to recreational traffic while recovery operations are still underway.

A series of instruments will be attached to the structure to monitor sea conditions, tidal velocities and loads on the structure. The structure will be monitored daily to ensure that all connections remain intact.

Project Purpose

The purpose of the project is to close the primary path through which oil from the Deepwater Horizon spill could enter Perdido Bay which contains, estuaries which are essential to a wide range of sea life.

Alternatives Analysis

No Action

Without some form of oil barrier, the incoming tide could bring the oil slick into Perdido Bay where it could spread into the fragile estuaries to the north, east and west.

Floating Oil Boom

The option impeding the entry of oil by using traditional floating booms was investigated. However, attempts to place floating oil booms in waters with such high tidal velocities as Perdido Pass have already been attempted and failed miserably. Experience has shown that flexible booms cannot be deployed effectively when currents exceed 3kts.

Rock Rubble Closure

Closing the pass between the jetties with rock rubble due to the readily available material and equipment,

In addition to the tremendous amount of material that would have been required to affect this closure, hydrologic analysis revealed that over 30% of all the riverine inflow into Perdido Bay exited through the pass. Closing the pass would have diverted that flow to the east and west, causing excessive velocities and erosion problems all along the Intercoastal Waterway.

Steel Sheet Piling

Steel sheet piling, supported by structural pipe piles were investigated as a potential closure material

Hydrodynamic analysis of the wave forces expected to be imparted on these sheet piles required sheet-pile strengths and driving depths that made this alternative impractical. In order for the sheet-piles to withstand the wave-induced forces, battered piles attached to a waler would have to be placed on minimum 3' centers on the back side. Even then, the system could not perform under storm conditions. Placing sand behind the sheet piles instead of batter piles was investigated but it was determined that the sand would quickly erode as the sheet piles are overtopped by waves.

Additionally, material-procurement time and construction time are also much higher with this option than with the chosen option.

Underground pipelines crossing the project site also make a sheet-pile closure impractical.

Pile-Supported Pipe-Boom Structure

In light of the strong currents in Perdido Pass, a stronger, more structural booms system had to be design which could withstand the hydrodynamic forces within the pass, prevent a surface oil slick from entering Perdido Bay, and collect the surface oil to a central location for skimming - "deflect and collect".

The current design serves all of those functions. The parabolic design of the system seen in Figure 1 of the Permit Drawings not only directs an incoming oil slick to a central location for skimming, but also reduces the force on the supporting pile structure by aligning the booms at an angle to the direction of the current.