

February 25, 2009

NOTICE OF AVAILABILITY

**U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
ENVIRONMENTAL ASSESSMENTS
FOR EMERGENCY REPAIRS TO**

**THE GALVESTON SEAWALL AND GROINS,
AND THE FREEPORT AND TEXAS CITY AND VICINITY
HURRICANE AND FLOOD PROTECTION PROJECTS**

PURPOSE

This notice is being distributed to interested State, Federal, and local agencies, private organizations, news media, and individuals in order to assist in collecting facts and recommendations concerning proposed rehabilitation and repair work that will restore the Galveston Seawall and Groins, and the Freeport and Texas City and Vicinity Hurricane Flood Protection Projects (HFPPs) to pre-storm conditions following damages sustained from Hurricane Ike, which made landfall in northern Galveston County on September 13, 2008. The proposed rehabilitation and repair work is necessary to restore the projects to their pre-storm levels of protection and safety. The proposed work will not result in improvements or expansion of existing projects.

NEED FOR WORK

Hurricane Ike made landfall in northern Galveston County on September 13, 2008. Before making landfall the hurricane was a Category 4 storm, as measured on the Saffir-Simpson Scale. Wind speeds decreased as it approached land, and the storm was classified as a Category 2 storm when it reached land. The magnitude of the storm surge was more characteristic of a Category 3 or 4 storm than a Category 2 storm. According to the National Hurricane Center, Ike was a very large hurricane with hurricane force winds extending 120 miles from the center and tropical storm force winds extending 275 miles. Hurricane Ike's unprecedented size, which at one point was the largest Atlantic hurricane ever recorded, caused extensive damage. Ike ranks as the third costliest storm in U.S. history, causing approximately \$27 billion in property damage. The proposed work would be conducted under authority of Public Law 84-99 for Flood Control and Coastal Emergencies. Engineer Regulation (ER) 500-1-1 eligibility requirements for the work are met under the criteria for extraordinary storm and significant amount of damage.

The combined storm surge and wave action from Hurricane Ike caused extensive damage to the Galveston Seawall and Groins, and the Freeport and Texas City and Vicinity HFPPs. The proposed rehabilitation work will include repairs that will restore these projects to pre-storm conditions. If these projects are left in their current conditions, the risk of structural failure and potential damages the projects may sustain during future significant storm events could threaten the communities and properties they protect.

PROJECT LOCATIONS

The locations of the Galveston Seawall and Groins, and the Freeport and Texas City and Vicinity HFPPs are shown in Figure 1.

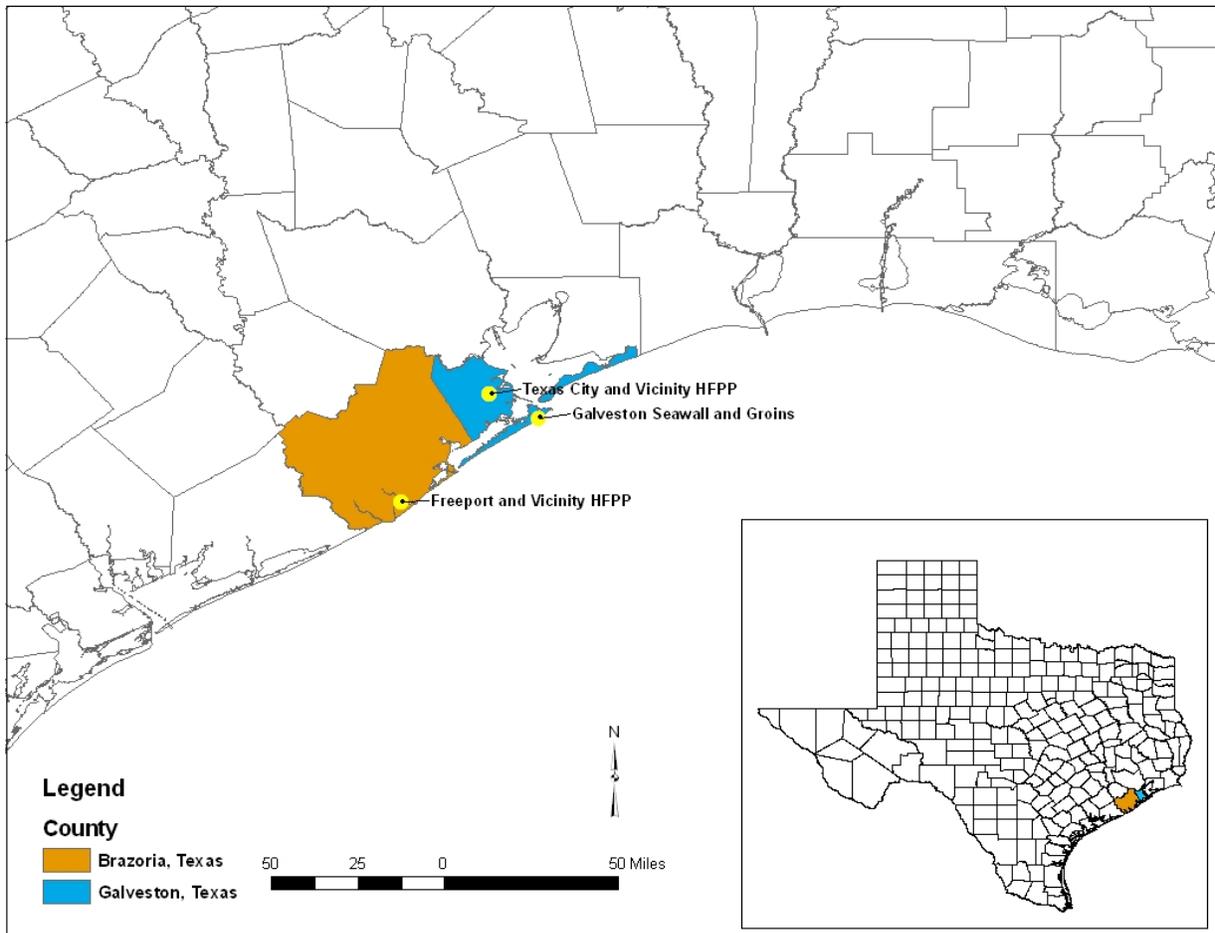


Figure 1. Locations of the Galveston Seawall and Groins, and the Freeport and Texas City and Vicinity HFPPs.

Galveston Seawall and Groins, Galveston County, Texas

The Galveston Seawall and Groins Project is located on Galveston Island, Galveston County, Texas. The Galveston Seawall and Groins Project protects portions of the City of Galveston beginning at the south jetty located at the entrance to the Houston Ship Channel and extending approximately 9.7 miles along Galveston Island's beach front on the Gulf of Mexico.

The Texas City and Vicinity, Hurricane Flood Protection Project, Galveston County, Texas

The Texas City and Vicinity HFPP is located in Galveston County, Texas on the southwest shore of Galveston Bay, about 9 miles northwest of Galveston, Texas and encompasses the cities of Texas City, La Marque, and the surrounding vicinity. The Texas City HFPP consists of 17 miles of protective works, including earthen levees and concrete floodwalls. The system has numerous appurtenant structures, including a tide control and navigation structure for Moses Lake, vehicular and railroad closure gates, highway ramps, gated gravity drainage structures, and two pumping plants.

Freeport and Vicinity, Hurricane Flood Protection Project, Brazoria County, Texas

The Freeport and Vicinity HFPP is located in southern Brazoria County, about 48 miles southwest of Galveston, Texas. The project consists of 53 miles of earthen levees varying from 15 to 21 feet above MSL with concrete and steel pile floodwalls and removable panels, a flood control tide gate structure providing a horizontal navigation clearance of 75 feet and a vertical clearance of 70 feet above MSL, water intake structures, numerous gravity drainage structures and two new pumping stations having a combined capacity of 650,000 gallons per minute.

DESCRIPTION OF REHABILITATION AND REPAIR WORK

Galveston Seawall and Groins

Although the seawall appears to remain structurally intact, the damage to toe scour protection and exposure of the sheet pile cutoff could have significant consequences for future wall stability. In addition, loss of integrity of the groins appears to have reduced their trapping efficiency which will result in increased erosion of the scour protection and exposure of the timber sheet pile cutoffs. Flanking of the seawall at the west end has exposed areas landward of the seawall to erosion, and continued erosion is possible from future wave impacts.

Elements of the Galveston Seawall proposed for repair include: 1) the Seawall West End Ramp; 2) the maintenance access ramp at 57th Street; 3) the maintenance access ramp at 35th Street; 4) the loss of subgrade and sidewalk between 25th and 22nd Street; 5) grade settling/toe protection in various locations; 6) void repair under sidewalk in various locations; 7) sheet pile repair at the seawall toe, 8) crack repair in various locations; and, 9) groin repair at 10th, 29th, 37th and 61st Streets. The locations of the repair work are shown in Figure 2.



Figure 2. Galveston Island Seawall and Groins.

The Texas City and Vicinity Hurricane Flood Protection Project

Storm surge and wave action from Hurricane Ike caused severe damage to portions of the levee system of the Texas City and Vicinity HFPP, including riprap displacement and severe erosion of the levee slope and toe. Rehabilitation and repairs to the Texas City and Vicinity HFPP will include the use of geotextile, blanket stone and riprap to restore the pre-storm cross-sections and/or conditions to the following areas that were damaged by erosion (Figure 3):

- Interior Levee Repairs - Station 150+00 to 152+50 where 250 linear feet of interior levee slope located northwest of Moses Lake was eroded

- Moses Lake Floodgate Protection - Stations 192+00 to 197+00 and 200+00 to 205+00 where the riprap and armoring system was eroded or displaced
- Levee Erosion Section One - Stations 205+00 to 278+00, 303+00 to 311+00, and 313+00 to 320+00, where levee erosion ranged from 5 to 15 feet
- Levee Erosion Section Two - Station 356+00 to 370+00, where levee erosion ranged from 40 to 50 feet
- Riprap Displacement - Stations 370+00 to 448+00 and 457+00 to 464+00 where the levee toe protection was damaged and riprap was displaced along the length of the levee



Figure 3: Texas City Levee Stationing and Proposed Repair Work

Freeport and Vicinity Hurricane Flood Protection Project

The Freeport and Vicinity HFPP will be restored to pre-storm conditions by making repairs to the following areas that sustained damage:

- -Velasco Memorial Tide Gate and the Port of Freeport
- -Sections of the removable panel wall from Station 197+00 to 224+24 at the Port of Freeport.

The Project will be repaired to provide the same level of flood protection as the pre-storm condition. The damaged emergency generator and associated system located within the Velasco Memorial Tide Gate house will be repaired or replaced to restore the pre-storm level of protection. In addition, the removable flood panel wall from Station 197+00 to 224+24 at the Port of Freeport which was damaged during Hurricane Ike will be replaced. Because the wall is within the Port of Freeport operating facilities, it must consider the operational constraints of the loading/unloading of ships. Two structural alternatives are under consideration (Figure 4):

- Option 1 - a removable flood panel wall
- Option 2 - permanent flood panel wall with removable gates that can be opened for Port of Freeport operations



Figure 4. Freeport and Vicinity HFPP flood panel wall repair work.

COMPLIANCE WITH LAWS AND REGULATIONS

Draft Environmental Assessments (EAs) are being coordinated with the US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and other Federal, state, and local agencies. Consultation has been initiated with the USFWS and NMFS in compliance with the Endangered Species Act to address potential impacts to piping plovers and sea turtles for the Galveston Seawall and Groins Project, and Attwaters prairie chicken for the Texas City and Vicinity Hurricane and Shore Protection Project. The Biological Assessments (Appendix B of

the Draft EAs) conclude that the projects may affect, but are not likely to adversely affect threatened or endangered species in the project areas.

The EAs also initiate Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The initial determination is that the proposed actions are minor and temporary in nature and will not have adverse impacts on EFH or federally-managed fisheries in the Gulf of Mexico. The final determinations relative to project impacts and the need for mitigation measures is subject to consultation with the NMFS.

The proposed rehabilitation and repair work will also be evaluated, as appropriate, with regard to the requirements of Section 404(b)(1) of the Clean Water Act (CWA). The Texas Council on Environmental Quality (TCEQ) has waived Clean Water Act Section 401 certification for these projects in recognition that impacts from the proposed work are minor and temporary in nature, and to expedite Hurricane Ike recovery efforts. It should be noted that all projects would qualify under Corps of Engineers Nation Wide Permit 3, and as such, would require no further CWA coordination.

It is also our preliminary determination that the proposed actions are consistent with the Texas Coastal Management Program (TCMP) to the maximum extent practicable.

A record of non-applicability has been issued for general conformity under the Clean Air Act (CAA), Section 176 according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to these projects because the projects are exempt actions under 40 CFR 93.153(e)(1) and 30 TAC 101.30(c)(5)(A).

The proposed activities will be coordinated with the State Historic Preservation Officer (SHPO). Our initial determination is that the proposed actions will not have any adverse impacts on historic or cultural resources. SHPO coordination of potential impacts to the Galveston Seawall, a National Register property has been initiated.

The following is a partial list of Federal, State, and local agencies with which these activities are being coordinated:

U.S. Environmental Protection Agency, Region 6
U.S. Department of Commerce
U.S. Department of the Interior
Texas Historical Commission
Texas Parks and Wildlife Department
Texas Commission on Environmental Quality
Texas General Land Office

Coastal Coordination Council
Texas Department of Transportation
Texas Water Development Board

EVALUATION FACTORS

The decision whether to proceed with these repair projects will be based on an evaluation of the probable impact of the proposed activities on the public interest. That decision will reflect the national concern for both protection and utilization of important resources as well as public and environmental safety and economic concerns. The benefit, which reasonably may be expected to accrue from the proposals, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered. The proposed repair projects will proceed unless found contrary to the overall public interest.

ENVIRONMENTAL DOCUMENTATION

It is anticipated that Environmental Assessments and Findings of No Significant Impact will fulfill the requirements of the National Environmental Policy Act. Single copies of these documents will be available by request to the address below. The draft EAs are also available online for review in the "Hot Topics" section at: <http://www.swg.usace.army.mil/>.

PUBLIC COMMENT

Persons desiring to express their views or provide information to be considered in evaluating the impacts of these proposed repair projects are requested to submit their comments within 10 days of the date of this notice, March 6, 2009 to:

District Engineer
U.S. Army Engineer District, Galveston
ATTN: CESWG-PE-PR, Ms. Carolyn Murphy
P.O. Box 1229
Galveston, Texas 77553-1229

or email at: carolyn.e.murphy@usace.army.mil; or phone 409-766-3044.

Comments should make specific reference to the individual project to which they pertain. Any person who has an interest which may be affected by this action may request a public hearing. The request must be submitted in writing within 10 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be

affected by the proposed work. Any questions concerning the proposed action may be directed to Ms. Carolyn Murphy at (409) 766-3044, or the email address above.

A handwritten signature in black ink, appearing to read "Col David C. Weston". The signature is written in a cursive style with a large, sweeping flourish at the end.

David C. Weston
Colonel, Corps of Engineers
District Engineer