US Army Corps
of Engineers

Project Information Report

Rehabilitation Hurricane or Shore Protection Projects Damaged by Hurricane Katrina

Lake Pontchartrain, Louisiana and Vicinity, Hurricane Protection Project

Orleans Parish, Louisiana

ORLEANS EAST BANK

Revision #03

Revised July 2006

Prepared by U.S. Army Corps of Engineers
New Orleans District

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1. Through 11. No Change

12. Proposed Work
    a. Description

    (1) No Change
    (2) No Change
    (3) Increase temporary pumping capacity at the 17th Street and London Avenue Canals. This alternative consists of adding additional pumps at the interim gated closure structures at 17th Street and London Avenue Canals near Lake Pontchartrain. Further, the interim gated closure structures and initial temporary pumping capacity approved via the 20 Jan 06 Revision #01 to the OEB PIR was not fully in place at the 17th Street and London Avenue Outfall Canals by 1 Jun 06. Thus, an interim sheet pile closure with portable temporary pumps of 1,000 cfs capacity is required at the 17th Street and/or London Avenue Outfall Canals.

Revision No. 2 to the OEB PIR identified the use of the portable pumps `with a sheet pile closure in the event that the interim gated structure with temporary were not complete by June 1, 2006. This plan is in place. The PIR also recommended that 6,000 cfs capacity at 17th Street canal be installed using 60-inch hydraulic pumps. The local sponsors have identified that it is critical that 4,000 cfs be provided at the interim closure structure in the most active part of the hurricane season, specifically by August 31, 2006. In order to achieve this goal, it will be necessary to use portable pumps on the interim gated closure structure in addition to the temporary pumps proposed. The plan to achieve the desired capacity is as follows:

1. Temporary Sheet Pile Closure at Hammond Highway with 1,000 cfs portable pumps. The sheet pile and portable pumps will be removed when the gated structure and 1,000 cfs of temporary pumps is available for use.

2. 12 Temporary pumps (6-60 inch on the east and 6-60 inch on the west side).
Capacity 2,800 cfs Total 2,800 cfs

3. Two additional pumps on the east side of the interim gated structure.
Capacity 400 cfs Total 3,200 cfs

4. Add portable pumps to the interim gated structure.
Capacity 1,000 cfs Total 4,200 cfs

5. Four additional pumps on the west side of the interim gated structure.
Capacity 900 cfs Total 5,100 cfs

13. Recommended Alternative

(a) No Change
(b) No Change
(c) Upon completion of the interim gated closure structure, portable pumps will be added to the structure. The portable pumps will be rented and provide supplemental pumping capacity of approximately 1,000 cfs. The rental period will be through November 2006. These pumps will be used in conjunction with the temporary pumps to obtain a total capacity of 4,200 cfs in the early September time frame and 5,100 cfs by October 31, 2006.

14. Economics.

a. Economic Analysis

Change paragraphs 3 and 4 to the following:

(1) No Change
(2) No Change
(3) Cost Analysis. The total first cost for the rehabilitation work is [redacted]. The total average annual cost associated with repair of the damaged portions of the east bank reach of Orleans Parish (west of the industrial canal) is [redacted]. This estimate includes [redacted] for levee and floodwall repairs and construction of the interim closure structures and initial temporary pumps, [redacted] for tree removal, [redacted] for pumps at the 17th Street Canal, [redacted] for pumps at the London Avenue Canal, and [redacted] for contingency measures at the 17th Street and London Avenue Canals, and [redacted] for portable pumps at the interim closure structure. The total first costs reflect May 2006 price levels and were amortized at the FY 2006 Federal discount rate of 5.125 percent over a 50-year period of analysis. Since the efforts to increase temporary pumping capacity at the 17th Street and London Avenue Canals are expected to be completed within one year, no interest during construction accrues. No incremental operations and maintenance costs are expected since the scope of the original project design has not changed.

(4) Summary. The degree to which average annual project benefits exceeds average annual project costs is the measure of positive average annual net project benefits and is consistent with a benefit-to-cost ratio of 1.0 or greater. Net benefits for the rehabilitation project are [redacted]. The benefit-to-cost ratio is accordingly [redacted] to 1.0.

b. Cost Estimate

Revise Table 6, Summary of Overall Project Costs to include 1,000 cfs in portable pumps at 17th Street Canal.

Summary of Overall Project Costs

Reach	Total Cost
OEB01 - Phase I Floodwall Repairs - 17 St. Canal	$ [redacted]
OEB02 - Phase II Floodwall Repairs - 17 St. Canal	$
OEB03 - Phase I Floodwall Repairs - London Ave Canal at Mirabeau Ave	$
OEB04 - Phase II Floodwall Repairs - London Ave Canal at Mirabeau Ave	$
OEB05 - Phase I Floodwall Repairs - London Ave Canal at Robert E. Lee Blvd	$
OEB06 - Phase II Floodwall Repairs - London Ave Canal at Robert E. Lee Blvd	$
OEB07 - Lake Pontchartrain-Scour Repair and Slope Paving at Orleans Canal Pump Station; Floodwall Repair; East Bank	$
OEB09 - Closure Structure at 17th Street Canal	$
OEB10 - Closure Structure at London Avenue Canal	$
OEB11 - Closure Structure at Orleans Avenue Canal	$
OEB12 - Bank Stabilization for 17th Street Canal	$
OEB13 - Bank Stabilization for London Avenue Canal	$
IHNC02 - West Side Floodwall Repairs - France Rd to Benefit Rd	$
IHNC04 - West Side Floodwall Repairs - Hwy 90 To Lake	$
IHNC05 - West Side Floodwall Repairs - France Rd to IHNC	$
IHNC08 - West Side Floodwall and Minor Scour Repairs - Benefit Rd. to Almonaster Blvd.	$
IHNC09 - West Side Floodwall and Minor Scour Repairs - IHNC Lock to Florida Ave.	$
Subtotal	**$**
Contingency (Awarded Contracts = [redacted]	$
Demolition of Interim Gates and Temporary Pumps	$
Temporary Pumps	$
Subtotal	**$**
Engineering and Design (E&D = [redacted]	$
Supervision and Administration (S&A = [redacted]	$
LERRDs: 17th Street Canal - [redacted]	
London Avenue Canal @ Mirabeau Avenue - [redacted]	
London Avenue Canal @ Robert E. Lee Boulevard - [redacted]	
17th Street Canal Closure Structure - $ [redacted]	$
Operation and Maintenance of interim closures and temporary pumps ($ [redacted] year for 3 years)	$
Additional Temporary Pumps	$
Tree Removal	$
Contingency Measures (17th Street and London Avenue Outfall Canals)	$
Portable Pums at 17th street	$
TOTAL	**$**
TOTAL (ROUNDED)	**$**

Summary of Overall Project Costs

Recommended Plan

Reach		Total Cost
Additional Temporary Pumps - 17th Street Canal	$	[redacted]
Additional Temporary Pumps - London Avenue Canal	$	
Contingency Measures (17th Street and London Avenue Outfall Canals)	$	
Portable Pumps 17th Street Canal	$	
Total	**$**	
Total (Rounded)	**$**	

NOTE: Total Cost includes [redacted]% contingency; [redacted] E&D; and [redacted] S&A

15 Through 17. No Change

18. Project Management

b. Project Funds

(1) Total estimated construction cost, as presented in Table 7, for increasing the temporary pumping capacity at 17th Street and London Avenue Canals, including contingencies, Engineering & Design (E&D), and Supervision & Administration (S&A) is [redacted].

19 and 20. No Change

21.

b. Recommendations / Project Approval

(1) It is recommended that structural repair of the hurricane protection system consisting of increasing temporary pumping capacity at the 17th Street and London Avenue Outfall canals should be implemented. The utilization and removal of the additional temporary pumps will be the responsibility of the USACE. Structural repairs to the project would consist of increasing the temporary pumping capacity at the 17th Street Canal closure by 3,600 cfs and at the London Avenue Canal closure structure by up to 3,200 cfs.

The increased capacity on the 17th Street Canal will be implemented in phases. Upon completion of the interim gated closure structure and the available of 1,400 cfs in temporary pumps on the west side of the interim sheet pile closure, the portable pumps will be removed. Portable pumps will then be added to the interim gated closure structure by placing 23 pumps on the crane deck providing a capacity of approximately 1,000 cfs. Two additional temporary 60-inch hydraulic pumps will be added to the east pump platform to increase the capacity of the east platform from 1,400 cfs to 2,200 cfs. Finally, an additional 4 60-inch hydraulic pumps will be added to the west pump platform

providing an additional 800 cfs. This will provide a capacity at the 17th Street Canal of approximately 5,400 cfs by 31 Oct 2006. At the end of the 2006 hurricane season the portable pumps will be removed from the structure. The implementation strategy for providing the approved capacity of 6,000 cfs will be addressed through a revision of the PIR.

(2) It is also recommended that this project be approved and that additional Federal funds in the amount of $ [redacted] be provided.

DISTRICT PROJECT AUTHENTICATION
Project Information Report, PUMP STATIONS FLOOD CONTROL, Orleans Parish, Louisiana

Report Prepared By: James J. St. Germain 7/7/06
James J. St. Germain — Date
Project Manager

Emergency Management Approval By: Chris Accardo 7/7/06
Michael Lowe — Date
Chief, Emergency Operations

CERTIFICATION OF LEGAL REVIEW

The Project Information Report (PIR) for repair of the Federal and non-Federal Pump Stations in Orleans Parish, Louisiana has been reviewed by the Office of Counsel, New Orleans District and is approved as a legally sufficient document for commencement of construction.

Reviewed by: Daryl R. Klein 7 July 2006
Assistant District Counsel — Date

Certified by: Denise D. Frederick 7 July 2006
District Counsel — Date

District-Level Approval By: 7/11/06
Richard P. Wagenaar — Date
Colonel, U.S. Army
District Commander

DIVISION PROJECT APPROVAL
Project Information Report, PUMP STATIONS FLOOD CONTROL, Orleans Parish, Louisiana

Emergency Management Approval By: Jay Smith 7/7/06
Chief, MVD Emergency Operations Date

CERTIFICATION OF LEGAL REVIEW

The Project Information Report (PIR) for repair of the Federal and non-Federal Pump Stations in Orleans Parish, Louisiana has been reviewed by the Office of Counsel, Mississippi River Division and is approved as a legally sufficient document for commencement of construction.

Certified by: Lawrence Barnett 7-7-06
Division Counsel Date

Division-Level Approval By: Albert M. Bleakley 7/7/06
Albert M. Bleakley Date
Colonel, Engineer
Deputy Division Commander