East Jefferson Levee District Status Report
November 2009

East Jefferson Levee District LPV 27 26

The hurricane protection levee system is divided into five Reaches along Lake Pontchartrain, plus the East Return Levee on the 17th Street Canal and the West Return Levee on the St. Charles Parish Line. (Map of the East Jefferson Levee District is attached.)

LPV 27 26 WRL
Description:
The West Return Levee is located along the St. Charles Parish Line in Kenner and is comprised of floodwalls, earthen levees and floodgates. The earthen levees in this section are at the south end of the section surrounding the airport runway. This section was elevated in the spring of 2005 by the Louis Armstrong International Airport, to the pre-Katrina design elevation of 12’ plus 2’ of overbuild, or a total of 14’, to account for subsidence. The sheetpile I-wall at the corner of the West Return levee wall and the airport runway extension that ties in to the earthen levee section were replaced with deeper, stronger 60’ sheeting. The earthen berms along these sheetpile I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and improve scour protection.

Construction:
The East Jefferson Levee District assisted the Corps’ Memphis hired labor crew with modifications made to the earthen berms at the south end of the West Return levee to provide additional stability and improve drainage. A 1,500’ section of I-wall along the West Return levee at Vintage, which was sinking and leaning, was reinforced with 60’ sheetpile, which was strengthened further with an enlarged berm and concrete slope paving to prevent scour. Phase 2 100-year protection of the earthen levees surrounding the airport runway is scheduled for a 1st Quarter, 2010 award with completion in the 3rd Quarter of 2010. The West Return levee floodwall will be divided into North and South segments. Both segments are scheduled for a 1st Quarter 2010 award with anticipated completion in the 4th Quarter of 2011.

Inspection:
Issues: None

LPV 27 26 R1
Description:
The Reach 1 levee is located between the Duncan Canal in Kenner and the St. Charles Parish Line and is comprised of floodwalls, earthen levees and floodgates. The earthen levees in this section were elevated in Phase 1 to the pre-Katrina authorized design elevation of 16’ plus 1’ of overbuild, to a total of 17’, to account for subsidence. The Re-curve I-wall at the St. Charles Parish line and the I-walls that tie the Duncan Canal Pump Station into the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.
**Construction:**
The project to build the breakwater designed to protect the Duncan Canal Pump Station is underway and should be completed in the 2\textsuperscript{nd} Quarter of 2010. The awards for the construction of the Duncan Canal Pump Station fronting protection and for the replacement of the I-wall tie-ins are currently scheduled for a 4\textsuperscript{th} Quarter 2009 award with a projected completion date in 2013. Phase 2 100-year protection project for the Reach 1 earthen levees has been awarded and should be completed in the 2\textsuperscript{nd} Quarter of 2010.

**Inspection:**
Riprap is needed along the shoreline.

**Issues:**
None

**LPV 27 26 R2**

**Description:**
The Reach 2 levee is located between the Elmwood Canal in Metairie and the Duncan Canal in Kenner and is comprised of floodwalls, earthen levees and floodgates. The earthen levees do not meet the Corps’ current stability requirements. The earthen sections that are deficient in height have been elevated 3’ using HESCO baskets filled with sand. Older sheetpile I-walls were replaced with deeper, stronger 60’ sheeting on the west side of the Elmwood Canal. The I-walls at the Williams Blvd. roadway floodgates and the I-walls that tie in the Duncan and Elmwood Canal Pump Stations to the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**
It appears at this time that the levee can be lifted to provide 100 year protection and qualify the new design criteria with a straddle that does not involve degrading the existing levee or shifting the levee alignment. The bike path may be impacted. The construction for this project is underway and should be completed in the 2\textsuperscript{nd} Quarter of 2010. Contracts for the Elmwood Canal pump station fronting protection and for the replacement of the I-wall tie-ins are currently scheduled for a 4\textsuperscript{th} Quarter 2009 award with a projected completion date in the 3\textsuperscript{rd} Quarter of 2011. The Williams Boulevard floodgate has been awarded with work beginning in the 4\textsuperscript{th} Quarter of 2009. The projected completion in the 1\textsuperscript{st} Quarter of 2010.

**Inspection:**
Riprap is needed along the shoreline.

**Issues:**
None

**LPV 27 26 R3**

**Description:**
The Reach 3 levee is located between the Elmwood Canal in Metairie and the Suburban Canal in Metairie and is comprised of floodwalls and earthen levees. The earthen levees in this section were elevated during Phase 1 to the pre-Katrina authorized design elevation of 16’ plus 1’ of overbuild, to a total of 17’, to account for subsidence. Older sheetpile I-walls were replaced with deeper, stronger 60’ sheeting on the east side of the Elmwood Canal and the west side of the Suburban Canal. The I-walls that tie in the Elmwood and Suburban Canal Pump Stations to the earthen levees were improved with
interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**
A construction contract for the Suburban Canal Pump Station fronting protection and for the replacement of the I-wall tie-ins is currently scheduled for a 4th Quarter 2009 award with a projected completion date in the 3rd Quarter of 2011. The construction for the Phase 2 100-year protection is underway and should be completed in the 2nd Quarter of 2010.

**Inspection:**
Riprap is needed along the shoreline.

**Issues:**
None.

**LPV 27 26 R4**

**Description:**
The Reach 4 levee is located between the Suburban Canal in Metairie and Causeway Blvd. in Metairie and is comprised of floodwalls and earthen levees. The earthen levees in this section were elevated in Phase 1 to the design elevation of 16' plus 1' of overbuild, to a total of 17', to account for subsidence. Older sheetpile I-walls were replaced with deeper, stronger 60’ sheeting on the east side of the Suburban Canal. The I-walls that tie in the Causeway bridge structure and the Suburban Canal Pump Station to the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**
Phase 2 100-year protection has been awarded with a projected completion date in the 2nd Quarter of 2010.

**Inspection:**
The repairs to the Causeway crib wall are complete.
Riprap is needed along the shoreline.

**Issues:**
None

**LPV 27 26 R5**

**Description:**
The Reach 5 levee is located between Causeway Blvd. in Metairie and the 17th St. Canal to the Orleans Parish Line and is comprised of floodwalls, earthen levees and floodgates. The earthen levees are about 2' low. To provide interim protection until the permanent levee project can be constructed, the earthen sections were elevated 3’ using HESCO baskets filled with sand. The construction contract for the permanent lift was awarded in the 4th Quarter of 2008. The I-walls at the Bonnabel Blvd. roadway gates and the I-walls that tie in the Bonnabel Canal Pump Station to the earthen levees have been improved with interim protection. The earthen berms along these I-walls have been enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**
The lift for this levee section is in progress and will elevate the Reach to 16.5’ with 10’ crowns. This lift will bring the levee section to 100-year protection and satisfy the new
design criteria. The construction of the breakwater designed to protect the Bonnabel Canal Pump Station is underway and should be completed in the 1\textsuperscript{st} Quarter of 2010. The Bonnabel Boulevard floodgate and wall project is scheduled for a 4\textsuperscript{th} Quarter 2009 award with projected completion in the 2\textsuperscript{nd} Quarter of 2010. The awards for the construction of the Bonnabel Canal Pump Station fronting protection and for the replacement of the I-wall tie-ins are currently scheduled for a 4\textsuperscript{th} Quarter 2009 award with a projected completion date in 2013.

**Inspection:**
Riprap is needed along the shoreline.

**Issues:** None

**LPV 27 26 ERL**

**Description:**
The East Return Levee is located between the Hammond Highway Bridge and Pump Station 6 along the 17\textsuperscript{th} St. Canal and is comprised of floodwalls, earthen levees and floodgates. Post-Katrina interim closure gates and temporary pumps were constructed at the lakefront outfall of the 17\textsuperscript{th} Street Canal to eliminate the risk from lake waters filling the canal and causing failure of the canal walls as happened during Katrina. This interim protection will remain in place until a permanent structure can be installed.

**Construction:**
The Corps is beginning investigation surveys and borings for the permanent pump station.

**Inspection:**
Erosion and nutria burrowing along the canal bank is being monitored.

**Issues:** The tree and fence project along the 17\textsuperscript{th} Street Canal is complete.

**LPV 27 26 MRL**

**Description:**
The Mississippi River Levee is located between the Orleans Parish Line and the St. Charles Parish line and is comprised of earthen levees only. The levees are constructed between an elevation of 24.5’ and 26.5’.

**Construction:** The Corps has not yet provided information for the upcoming Mississippi River Levee lift. The bike paths will be replaced because they serve as an access road for routine inspections and emergency responses.

**Inspection:** Good

**Issues:** The Corps and the levee district will be compiling an inventory of trees within 6’ of the toe of the levee that will need to be removed.

**LPV 27 26 Special Issues**

**Shoreline Protection**
The levee district has contracted with Burk-Kleinpeter, Inc. to replace the shoreline rock lost during Hurricane Katrina. This approximately $9 million project being funded by FEMA was awarded July 17, 2008, and will hopefully be completed before the end of 2010. BKI is coordinating this project with the Corps and the Lake Pontchartrain Basin Foundation.