



US Army Corps
of Engineers®

Lake Pontchartrain & Vicinity

Teammate Update

June 28, 2010



Mission

We are committed to achieving the 100-year level of risk reduction in 2011 for the people of Orleans and St. Bernard parishes by constructing the Hurricane and Storm Damage Risk Reduction System.

The program also includes completing the permanent canal closures and pumps, the Grand Isle flood risk management project, Plaquemines Parish risk reduction projects, storm proofing and repair of existing pump stations.



Executive Summary

We made great strides in our construction effort last year:

- The dune on **Grand Isle** was completed;
- Nearly all of the perimeter work in Orleans Metro was completed;
- All construction is under way in Orleans East and over half of the Lakefront work was completed;
- More than 95% of the Lake Borgne Surge Barrier wall (with the exception of the gates and control structures) was completed; we completed the first phase of the Inner Harbor Navigation Canal wall improvements;
- And we also completed 60 of the 61 pump station repairs.

Over the next 12 months we will primarily focus our efforts on finishing up the work in Orleans East, St. Bernard Parish and the Inner Harbor Navigation Canal:

Orleans East: Work will include the largest deep soil mixing project ever attempted in the Americas, and possibly the world. It will also include moving a Superdome's worth (4.9 million cubic yards) of clay, and placing it on Orleans East levees.

St. Bernard Parish: We will construct 23 miles of T-wall (nearly 2 miles per month). We will also construct sector gates at Bayou Dupre and Caernarvon.

Inner Harbor Navigation Canal: We will construct a sector gate at Seabrook, a sector gate on the Gulf Intracoastal Waterway, a barge gate on the Gulf Intracoastal Waterway and a lift gate at Bayou Bienvenue.

We still have several real estate actions to finalize so that we can get all work under way on the Seabrook Gate and near the Caernarvon Sector Gate. We are less than 12 months away from Hurricane Season 2011, and need to get real estate actions wrapped up so that we can get all remaining projects started. We want to get the Seabrook cofferdam in place during this Hurricane Season to help reduce the risk further.

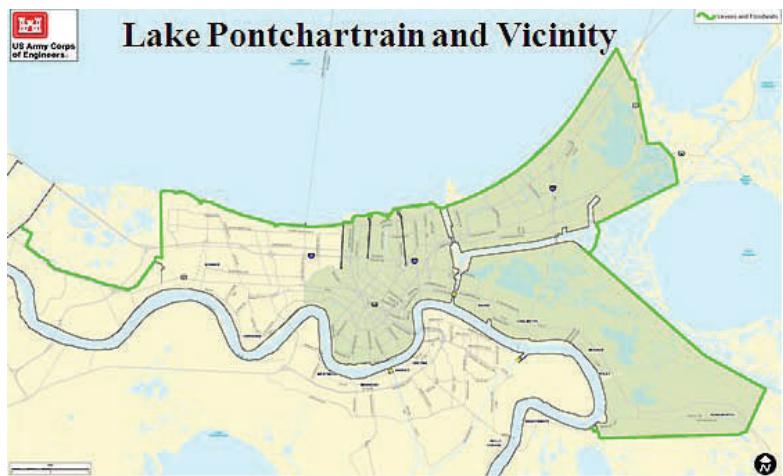
The Hurricane Protection Office will have more than four times as much construction during the next twelve months than it did last year. We still have most of the hard construction ahead of us. To help put things into perspective, we expended one million man hours constructing the Lake Borgne Surge Barrier wall, and will expend about four million man hours constructing the three Surge Barrier gates. Every construction day is very, very important to us, especially since this Hurricane Season is projected to be much more active than the last. Heavy rains at our work sites would potentially delay levee and clay work.

Plaquemines Parish: More than 130 miles of levees and floodwalls will be improved over the next four years. Due to the magnitude of this effort, we will continue to keep Parish leadership informed by means other than this update.

We are committed to ensuring that the Lake Pontchartrain and Vicinity system can handle a 100-year storm surge event in 2011 even if there is a storm in May. We will wrap up projects through 2014.

Hurricane Season *In the News*

[WDSU-TV](#) | [Engineering News-Record](#) | [Times-Picayune](#)
[Times-Picayune](#) | [WVUE-TV](#) | [Times-Picayune](#)



1. Jefferson Parish - Protection & Restoration Office

Approximately 65% of the 9.1 miles of Jefferson Parish's perimeter levees have been raised to the 100-year construction elevations. All but 1,700 feet of the remainder are currently under construction.

There are currently five structure contracts under construction. The breakwater at Bonnabel Pump Station is substantially complete. The breakwater at Duncan Pump Station is over 80% complete. The floodgates and floodwalls at Bonnabel and Williams Boulevard are under construction. The contract for fronting protection at the four pump stations in the Lake Pontchartrain & Vicinity (LPV) Jefferson Parish is under construction.

Six contracts remain to be awarded in LPV Jefferson Parish. The final levee contract to be awarded, levee improvements north of the Louis Armstrong International New Orleans Airport, is projected for award in August 2010. There are two contracts to replace the West Return Floodwall; both are currently advertised. There are two contracts to provide wave attenuation and foreshore protection for a large portion of the Jefferson Parish levee system on Lake Pontchartrain; the contracts are projected for award in July and August 2010. The contract to improve risk reduction at the Causeway Boulevard peninsula is advertised.

2. St. Charles Parish - Protection & Restoration Office

Approximately 20% of the 9.5 miles of St. Charles Parish's perimeter levee have been raised to the 100-year construction elevations and the remainder are currently under construction. The final St. Charles Parish contract to be awarded, the Illinois Central Railroad Gate, is currently advertised and is scheduled for award in June.

New T-walls at the Almedia and Walker Drainage Structures, as well as the Gulf South Floodwall, are substantially complete. Work continues at the Bayou Trepagnier Complex, I-310 Floodwall, and Goodhope Floodwall during hurricane season with Temporary Flood Protection in place that matches the pre-existing protection elevations.

Currently, St. Charles Parish levee work is expected to be completed in Spring 2011 and structures and floodwalls are scheduled for completion by June 2011.

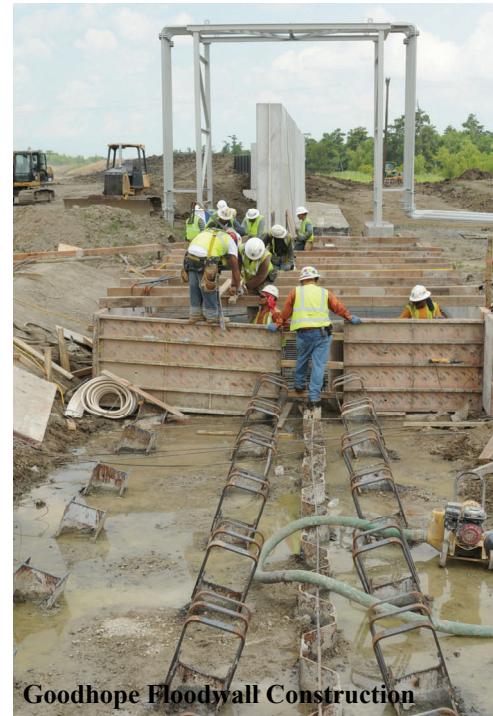
Lakefront Levee Construction



Gulf South Floodwall Construction



Goodhope Floodwall Construction



3. Orleans Metro (Main Supporting District - St. Louis)

The perimeter system is over 90% complete and we only have one small contract left to award.

Major construction continues between 17th Street and the Inner Harbor Navigation (Industrial) Canal.

Due to ongoing construction, the following road closures are in place:

- *Franklin Avenue at Lakeshore Drive will remain closed until fall 2010;*
- *Lakeshore Drive at Camp Leroy Johnson Drive will remain closed until fall 2010;*
- *East and West Lakeshore Drive at Elysian Fields will remain closed until fall 2010;*
- *Canal Boulevard between Amethyst Street and Lakeshore Drive will remain closed until fall 2010;*



LPV 101 - Floodwall Construction

We do anticipate additional road closures; throughout the construction phase, we will continue to work with our partners at the City of New Orleans and Orleans Levee District to ensure public safety. If you have questions and / or concerns, please call our ***Construction Impacts Hotline: 877-427-0345***.

The last remaining contract for work in Orleans Metro (LPV 103.01A2) has been advertised and is scheduled for award this month, pending resolution of outstanding real estate issues.

We are continuing our outreach efforts with neighborhood and civic associations. Last month, we gave construction updates at the Gentilly Civic Improvement Association meeting, the Mid-City Neighborhood Organization meeting and the Marseilles Condominiums Association / Lake Marina Tower meeting.

WWL-TV News Coverage: [Work nearing completion on Lakeshore Drive](#)

4. New Orleans East (Main Supporting District - Memphis)

We awarded the final three contracts for vital risk reduction work in New Orleans:

- A \$19.4 million contract was awarded to David Boland, Inc. to replace the existing I-wall with T-wall and construct new floodwall east of the Lakefront Airport (LPV 105.02).
- A \$15.9 million contract was awarded to L&A Contracting Company to raise the existing Citrus Lakefront levee (LPV 106).
- A \$7.3 million contract was awarded to Shavers-Whittle Construction, LLC to replace the existing I-wall with T-wall and construct a new access gate at Lincoln Beach (LPV 107).

[News Release](#)

We also awarded a \$3.4 million contract to Garner Services, LLC to construct a new floodgate at the CSX Railroad Crossing. [News Release](#)



South Point (LPV 108) construction is wrapping up and grass is continuing to grow; construction along this reach will be complete this month.

Between South Point and the CSX Railroad crossing (LPV 109) we are 100% complete with placement of the sand drainage blanket. The contractor mobilized and is placing the wick drains with four machines at a rate of 1 every 35 seconds. The contractor will begin placing the rock layer sometime next month followed by the clay.



LPV 111- Deep Soil Mixing

Between the CSX Railroad crossing and IHNC Surge Barrier (LPV 111) work is progressing on all project features including Deep Soil Mixing (DSM) which is now 20 percent complete. Currently, there are six DSM rigs working and two additional rigs will be operational by the end of the month. The floodwall construction at Pump Station 15 is on hold until the end of hurricane season, but the wall that was demolished has been rebuilt to the 100-year level. The *Construction Site Hurricane Preparation Plan* in this area is complete. The T-walls that tie into the surge barrier at the west end of LPV 111 are being constructed quickly and the *Construction Site Hurricane Preparation Plan* in that area is also complete.

Last month, we provided a construction update to the Spring Lake Neighborhood Association with a focus on risk reduction features along the IHNC corridor.

Engineering News-Record Coverage - [New Orleans Area Levee Bolstered by Deep Soil Mixing](#)

WVUE-TV News Coverage - [The Great Wall of Orleans-St. Bernard \(Deep Soil Mixing\)](#)

Associated Press Coverage - [Last 3 post-Katrina contracts in New Orleans East](#)

5. St. Bernard Parish (Main Supporting District - St. Paul)

We awarded the final contract for vital risk reduction work in St. Bernard to construct a new floodwall alignment and sector gate across the Caernarvon Canal (LPV 149). The contract was awarded to New Jersey-based Conti Federal Services, Inc. on June 15. [News Release](#)

Construction on the Bayou Dupre Floodgate (LPV 144) is ongoing. Five of six spans are now complete on the trestle bridge across the bayou; the tie-ins will be complete next week.

Major construction continues between Bayou Bienvenue and Bayou Dupre (LPV 145). The contractor has placed 680 pairs of sheet pile, 464 H-piles and 1,044 cubic yards of concrete. The sheet pile installation is scheduled to be complete by the end of July. The temporary bridge across Bayou Bienvenue is now open.

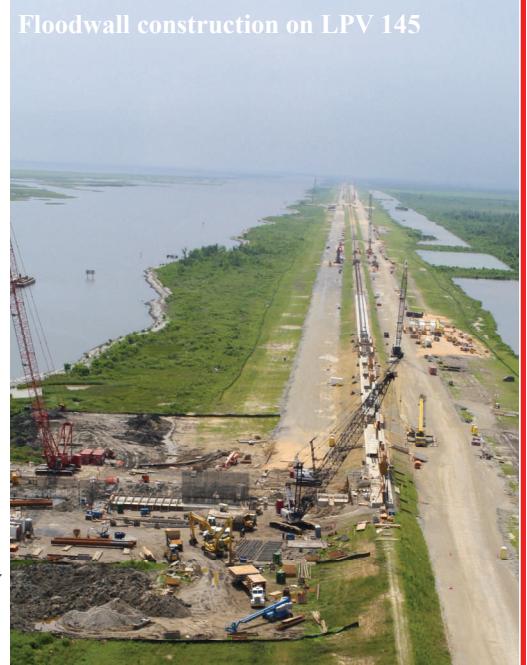
Major construction also continues between Bayou Dupre and Highway 46 (LPV 146). The contractor has driven 610 H-piles and more than 14,000 linear feet of sheet pile is in the ground. Construction of the emergency bypass ramp along Highway 46 is progressing.

The contractor for the Highway 46 floodgates (LPV 147) will mobilize by the end of this month.

The pile load test program is under way between Verret and Caernarvon (LPV 148.02). We expect the results of those tests by late summer. The contractor will begin mobilizing equipment to construct the temporary access road this week.

Times-Picayune News Coverage - [Bidder protests slowing corps flood-control projects](#)

Floodwall construction on LPV 145



6. Inner Harbor Navigation Canal (Corps-wide Support)

a. Surge Barrier

It has been just over one year since construction began on the base portion of the surge barrier at Lake Borgne. The team continues to make significant progress each day.

On 8 May, the Canada - United States Interparliamentary Group, chaired by Congressman Oberstar, visited the surge barrier to learn about the Hurricane & Storm Damage Risk Reduction System, ecosystem restoration and the Mississippi River Gulf Outlet.

On 13 May, the Chief of Engineers LTG Robert Van Antwerp visited the surge barrier and other projects to see progress to date, and to conduct an inspection of the construction sites. LTG Van Antwerp was joined by City of New Orleans Mayor Mitch Landrieu, local stakeholders and other Corps senior leaders. Later that week, Senator Mary Landrieu toured the surge barrier construction site.

As of 28 June, the overall design of the entire structure is 92% complete. We are 96% complete on the installation of caps (308) and 95% complete on the parapet wall. The north T-wall has 96% of the monoliths cast and the south T-wall has 54% cast.

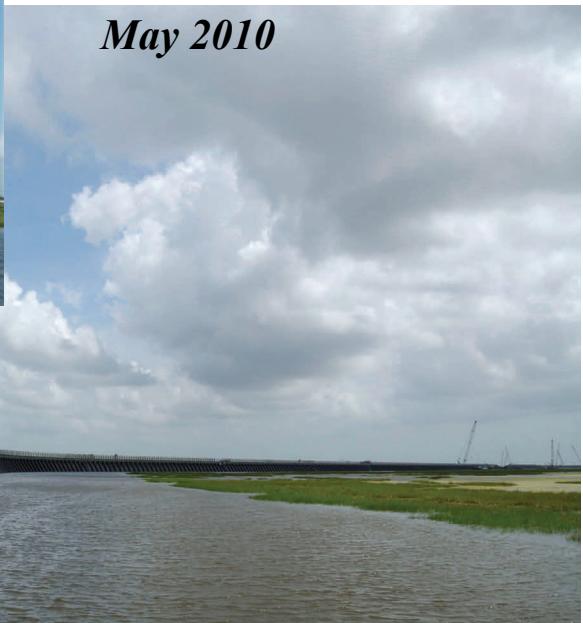
The casting of the top half of the barge gate is under way. The cofferdam installation for the vertical lift gate at Bayou Bienvenue is complete with all cofferdam sheets. For the sector gate, we have driven 468 of 478 piles (98%) during night operations.



Mayor Mitch Landrieu, LTG Robert Van Antwerp & MG Michael Walsh



May 2009



May 2010

IHNC Surge Barrier *In the News*

The Science Channel is currently featuring the IHNC on episodes of “Build it Bigger!”

Times-Picayune Coverage

[Build it Bigger visits New Orleans flood-protection project](#)

Media Event Coverage:

[WWL-TV](#) | [WGNO-TV](#) | [Times-Picayune](#)

Engineering News-Record Coverage

[Critical Surge Barrier Ahead of Schedule](#)

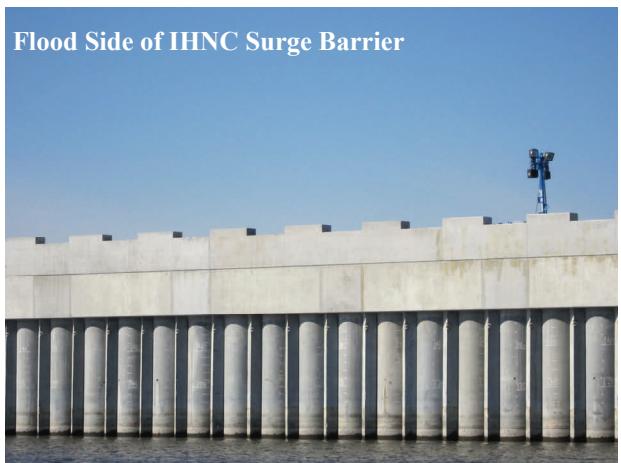
International Feature

[New Orleans may let the water back in](#)

WVUE-TV News Coverage

[The Great Wall of Orleans-St. Bernard \(Deep Soil Mixing\)](#)

Flood Side of IHNC Surge Barrier



b. IHNC East Wall

Sheet piles were recently installed to prevent underground water from seeping under the wall in the event of a storm surge.

c. Seabrook Floodgate Complex

Currently, the contractor is providing engineering value solutions to optimize the schedule for Seabrook. The contractor is preparing to mobilize for test pile driving within the next few weeks and for major construction to be under way shortly thereafter.

St. Louis Post Coverage - [Alberici begins anti-hurricane project in New Orleans](#)

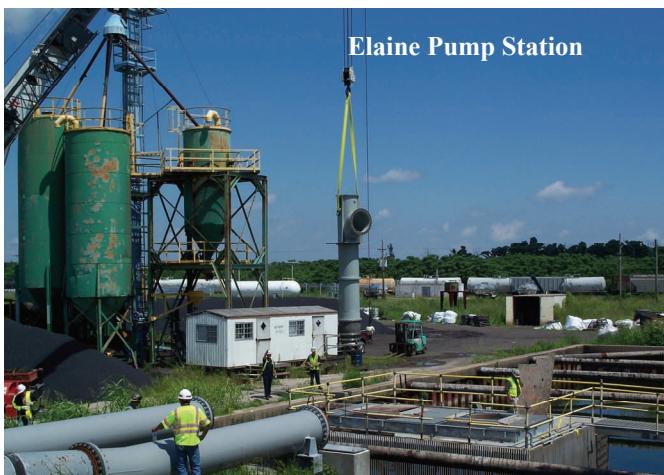
7. Existing Pump Station Repairs (Main Supporting District - Chicago)

We have completed 29 projects out of 30 total; the project at Elaine Pump Station is under construction and progressing well. The overall Pump Station Repair Program is approximately 97% complete.

Our goal remains to complete all pump station repairs in 2010.

On 20 April, we officially transferred the recently repaired pump stations in Plaquemines Parish to officials in a ceremony at Scarsdale Pump Station.

Media Event Coverage: [WWL-TV](#) | [WVUE-TV](#)
[Times-Picayune](#)



8. Storm Proofing (Main Supporting District - Chicago)

We continue work on finishing up the storm proofing program in Jefferson Parish (15 projects): one is beyond available funding, four are in design, one is in preconstruction, six are under construction and three are complete. Storm proofing continues in Orleans Parish (18 projects): six are beyond available funding, seven are in design, two are in construction proposal stage, one is under construction and two are complete. The overall Storm Proofing Program is approximately 31% complete.

Our goal is to have all storm proofing complete in 2011.

9. Permanent Canal Closures & Pumps (Main Supporting District - Portland)

The Request for Proposal (RFP) Phase I was issued on 30 April for a 30-day period. Phase I proposals were due on 1 June, evaluations began on 3 June and the short list for Phase II will be formed by the end of the month. The RFP Phase II will be issued in August 2010.

Following the release of RFP Phase I, we held a pre-proposal conference for potential contractors. There were nearly 125 participants representing 77 firms. During that event, Corps team members hosted tours of the Interim Closure Structures.



Interim Closure Structure at Orleans Avenue

WWL-TV Coverage - [Corps overestimating cost of superior hurricane protection](#)

Times-Picayune Coverage - [Preferred outfall canal options cheaper than corps' estimates, report says](#)

10. Outfall Canals

The construction of the Interim Closure Structures and temporary pump stations effectively removed the outfall canal walls as part of the primary hurricane storm surge system. We are currently making progress on improvements to the walls of the three canals so that they can effectively handle the planned Sewerage & Water Board's pumping capacities. Since their initial construction in the mid 1990s, the outfall canal walls have performed well in removing rainwater from the city, including the record rainfall events in May 1995 and December 2009. Since 2005, \$35.6 million in repairs and improvements were made to the London Avenue Canal and \$25.7 million in repairs and improvements were made to the 17th Street Canal.

Additional improvements will likely be made to the three outfall canals in the future. The 17th Street Canal walls might be further strengthened with deep soil mixing in a few places. Only very minor improvements, if any, will need to be made to the Orleans Avenue Canal Walls. Some areas along the London Avenue Canal walls may require seepage cut-off walls.

More specific information will be provided in future updates. Any improvements to the outfall canal walls will be very similar to the improvements already made to the IHNC canal walls.

11. Lake Pontchartrain Coastal Zone (Basin) Coastal Protection & Restoration



Planning is under way to create marsh and re-establish cypress forests in the Lake Pontchartrain Coastal Zone (Basin) to mitigate for construction of the Hurricane & Storm Damage Risk Reduction System.

[View Mississippi River Gulf Outlet Video](#)

A handwritten signature in black ink, appearing to read "Robert A. Sinkler".

Robert A. Sinkler
Colonel, U.S. Army Corps of Engineers
Commander, Hurricane Protection Office
Mississippi Valley Division

Recent Visitors to East Bank Construction Sites



Congressman Oberstar and SLFPA-East Commissioner John Barry during the US-Canada Inter-Parliamentary visit to the IHNC Surge Barrier



Jackie Clarkson, Vice President and Councilmember-At-Large, New Orleans City Council



MG Michael Walsh and Resident Engineer Chester Ashley at the LPV 109 project in New Orleans East



Congressman Cao visit to the IHNC Surge Barrier



Bob Turner (right), Southeast Louisiana Flood Protection Authority - East at LPV 145 in St. Bernard Parish



Congressman Lipinski, US-Canada Inter-Parliamentary visit to the IHNC Surge Barrier

Recent Visitors to East Bank Construction Sites



Susan Guidry, New Orleans City Council visits the IHNC Surge Barrier



Senator Mary Landrieu and MG Michael Walsh



Tim Doody (right), Southeast Louisiana Flood Protection Authority - East at LPV 101 in Orleans Metro



James Dalton, Engineering & Construction Chief, U.S. Army Corps of Engineers, at LPV 109 in New Orleans



Drew Heaphy, Bradley Cantrell, Reed Henderson, Elton LeBlanc, Robert Scafidel & Jerry Graves - Port of St. Bernard Parish visit to IHNC Surge Barrier



Stuart Williamson, Ricardo Pineda, Stevan Spencer, Larry Marino, Gerry Gillen - SLFPA - East visit to IHNC Surge Barrier

2010 Construction Gaps



Seabrook Floodgate Complex



Gulf Intracoastal Waterway –
Barge and Sector Gates

Under Construction –
Scheduled to be
Functional by the
June 2011
Hurricane Season

The IHNC Canal Walls
will be the Primary
Hurricane Storm Surge
Defense in 2010

Bayou Bienvenue – Vertical Lift Gate



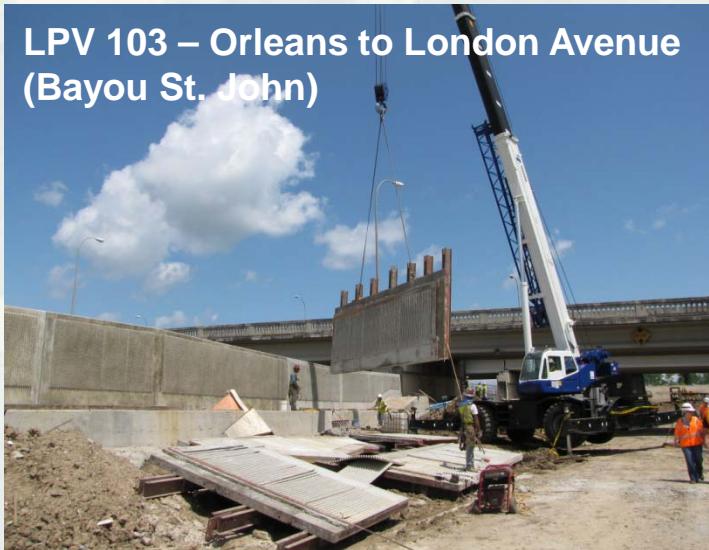
2010 Temporary Floodwall Construction Openings

(Would be closed within 48 hours of a tropical event)

LPV 111 / IHNC Surge Barrier Tie-in



LPV 103 – Orleans to London Avenue
(Bayou St. John)



LPV 101 – 17th Street to Topaz Street



BUILDING STRONG®