Public Meeting Summary

Individual Environmental Reports 4, 5, 11 Tier 2
Tuesday, July 1, 2008

Location	St. Dominic's Elementary School 6326 Memphis St. New Orleans, LA 70124
Time	6pm-7pm Open House 7pm-9pm Presentation and Discussion
Attendees	163 and 15 staff
Format	Presentation then Discussion
Handouts	Power Point Presentation
Facilitation	Julie Morgan
Presenter(s)	Maj. Jeremy Chapman Kevin Wagner John Ashley

Welcome

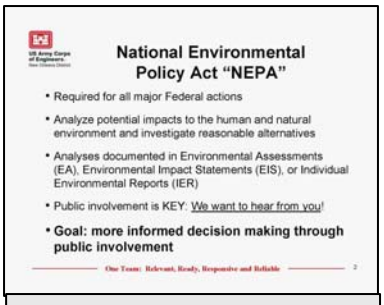
Shelly Midura

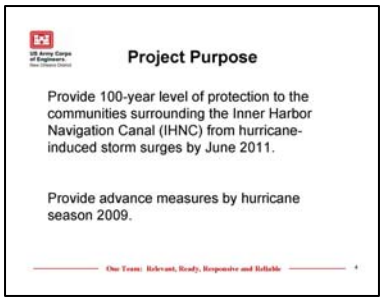
Julie Morgan, public affairs

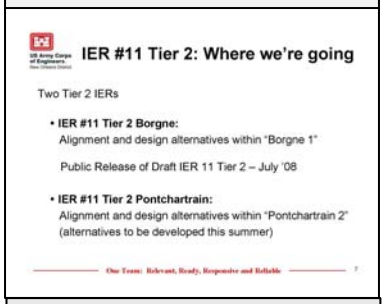
Good evening, we are here to give you the projected status update and the road ahead on Individual Environmental Reports 4, 5, and 11 Tier 2 Borgne. We are also going to address any concerns relevant to environmental compliance. You are here because you play an important role in the decision making process of the different alternatives. Your comments are important to us because we have made changes to the alternatives because of your input and there will be more dialogs in the future. Major Chapman will discuss IER 11 (Inner Harbor Navigation Canal), Kevin Wagner IER 5 (Floodwalls), and John Ashley IER 4 permanent pumps at the outfall canals. John is the Chief of Permanent Protection for Outfall Canals. Before we begin I have one request, please do not interrupt until the presentation has ended. Once the presentation has ended the floor will up for questions until everyone is satisfied.

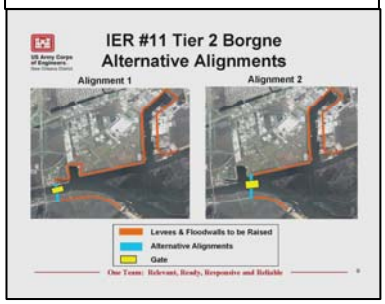
Public Meeting Summary

Major Jeremy Chapman, Senior Project Manager

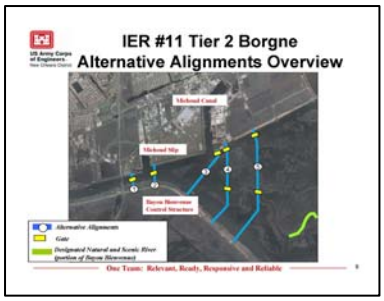








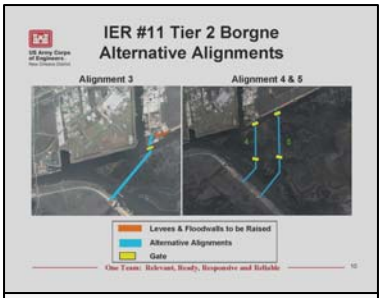
Where the Corps has been: basically, the tier 1 IER 11 document, selected putting in a structural barrier in place to protect the Inner Harbor Navigation Canal and the communities surrounding it. The first area is the Borgne 1 project which is the contract Shaw Environmetnal was awarded. The second area is Ponchatrain 2, which is the area that breached, also known as the Seabrook, and we are still going to be conducting engineering studies based on the Ponchatrain 2 document. The tier 2 document has split into parts. So we have tier 2 Borgne and tier 2 Ponchatrain. Right now we are about to release the Tier 2 Borgne document, that will be coming out very soon. The Pontchatrain 2 document will follow sometime in the future, maybe this fall or in the winter time

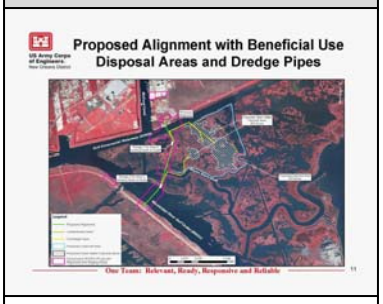


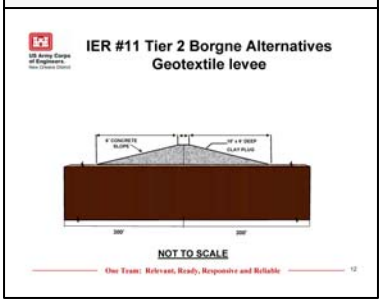
depending on when the engineering analysis will be complete.

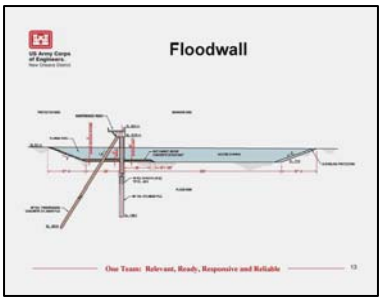
As far as the Borgne alignments there are 5 structural alternatives that we are looking at here (pointing). They are varying from Michoud near the Paris Rd Bridge (pointing), this is the Michoud/NASA facility (pointing), the Michoud Slip and Canal and the Gulf Intracoastal Waterway. Alternative 1 and 2 detail a deep traffic gate barrier that goes from the levee north to south. Then alternative 3, 4, and 5 are just varying degrees of shallow draft gate structures with a barrier across the marsh and some kind of gate. Similar to the existing structure.

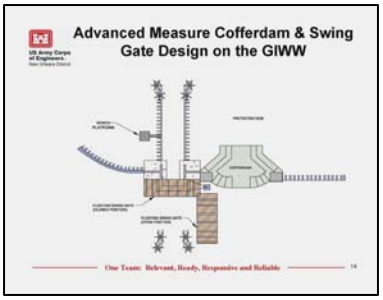
Alternative 1 is a deep traffic gate, which means it is a large gate 350 feet wide by 40 feet deep. It is a large, deep shipping channel. It would also entail raising the existing protection to the 100-year level protection out to the Michoud Canal down to the Bayou Bienvenue infrastructure. Alternative 2 is similar it is just on the east side of the Michoud slip, but the same type of gate, we are just shortening the distance of the existing protection. There are some complications to this because there are several access gates up and down the walls of the Michoud Canal and Slip; so there are some issues with that. Alignment 3 goes pass the Michoud Canal to the east same as 3 and 4 which allows us to put a shallow draft gate, 150 foot wide and 50 foot deep gate which is simpler engineer design and cost a lot less. Everything east of the Michoud Canal is for shallow draft traffic not for deep shipping. Alignment 3, it has a barrier that goes across the marsh and ties in just north of the Bayou Bienvenue infrastructure. Alignment 4 and 5 are very similar just one is further to the east and a little longer (alternative 5), but these are a little different in that they have a smaller structure at the Bayou Bienvenue to allow for recreational and commercial fishing boats mostly shrimp boats to get to Lake Borgne. This gate would be 56 feet wide by 8 feet deep, not for industrial use. This is our proposed Alignment, 4, with all the different features. The big area surrounded by the blue line is the disposal area for the dredging we have to do. We are proposing to build a concrete wall in the marsh area from the enclosure in the MRGO, a huge underwater textile sand earthen levee with a concrete wall on top. Then the concrete wall will continue across the marsh and tie into the Gulf Intracoastal Waterway gate and then that wall will continue to tie into the existing floodwall on the north side. In order to build that we have to dredge a construction access channel and that dredge material would be placed in this area for beneficial use, to enrich the marsh in this area. Mostly it is a marsh enrichment project, and there could be some marsh created but that is not the purpose of it. Basically, the spoil we dredge and pump into open water areas marked by the patched area there (pointing) would be able to spread out and flow, because we are only doing partial containment by the marsh land. Some of the alternatives we are looking at

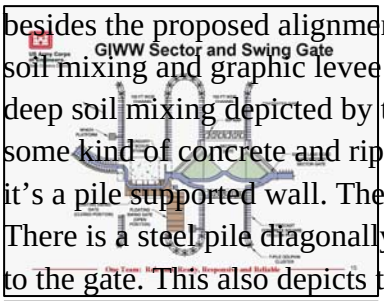




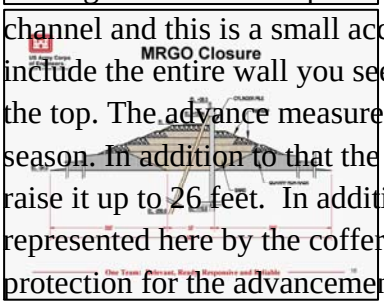




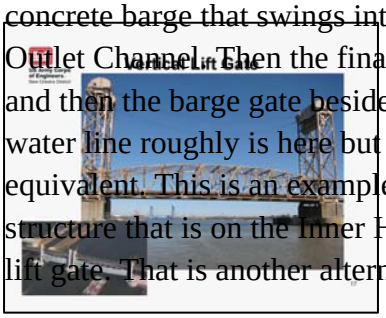




besides the proposed alignment are the Geotextile levee. Basically it is a textile levee with deep soil mixing and graphic levee which allows us to shrink the blueprint of the levee. By using the deep soil mixing depicted by the brown which where concrete and grout mix in the soil. Then some kind of concrete and rip rap on top of the levee. This floodwall here is the proposed action, it's a pile supported wall. The main permeable pile is the concrete pile, 66 inch concrete piles. There is a steel pile diagonally from the back, and then there is a road on top which is the access to the gate. This also depicts the access to the construction channels. This is just a construction channel and this is a small access channel. The advance measures of this project basically



include the entire wall you see here minus the small elevation east, a little piece of the wall on the top. The advance measures would give you a 20 foot wall of protection by next hurricane season. In addition to that the advance measures by 2011 would put this little piece in place to raise it up to 26 feet. In addition to that we would place this full section here which is represented here by the cofferdam. During advance measure the cofferdam provides the protection for the advancement. The advance measures have a large swing gate which is a large concrete barge that swings into the closure area of the navigation channel into the Gulf Coast Outlet Channel. Then the final configuration of the project would have a full section gate here and then the barge gate beside it. To give you the detail of the MRGO closure that again the water line roughly is here but most of this levee and structure is underwater with the wall equivalent. This is an example of a lift structure, this is the Claiborne Bridge. This is a lift structure that is on the Inner Harbor Navigation Canal. The small inset picture is an actual flood lift gate. That is another alternative we are looking at but is separate from the proposed action.



Kevin Wagner, Senior Project Manager

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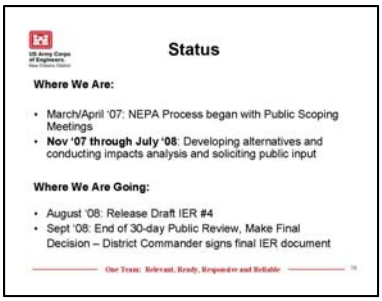
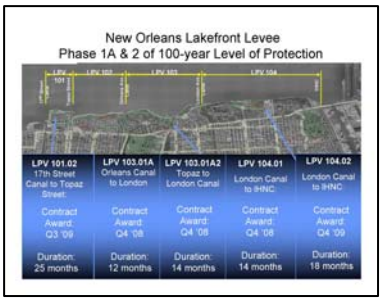
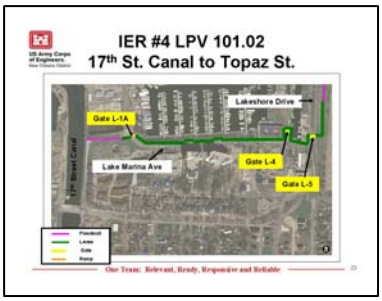
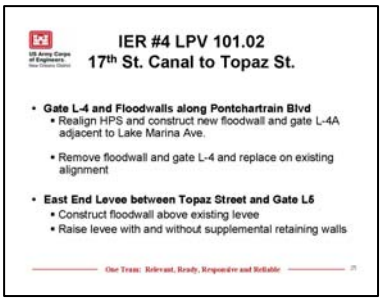
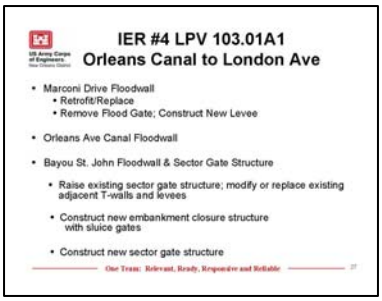


We are here to talk about IER 4 that is about the levees and floodwalls all along the Lakefront to the 17th Street canal to the IHNC canal. The purpose is to provide the 100-year level of hurricane protection for this particular area. We're here to give you a status of where we are and where we are going. Since November 2007 through July 2008 we have developed the alternatives and have been conducting impact analysis as well soliciting public input about the alternatives we are considering. We are going to release the draft of IER 4 in August 2008. Then we will have a 30-day comment period, where you will have an opportunity to comment on any of the alternatives presented tonight. This is some ongoing construction that will contribute to the 100-year protection system. We have three contracts for phase 1 construction. As you can see, we have two that are 99% complete from Topaz St. and the Orleans Avenue Canal to London Avenue Canal to the IHNC. Those two are basically complete now we are just trying to get things established. The other job currently on the way is the Orleans Avenue Canal to the London Avenue Canal where we are enlarging the levee out there and we are 72% complete on that particular contract. Some of the alternatives we will be looking at in the next phase of work are 1A and 2 required to get the 100-year protection. Most of the alternatives revolve around these four alternatives. [Inaudible] whether we do any existing work along the existing levee to reach our criteria. We're also going to be raising the road ramps for floodgates and armoring the transitions and utility crossing. As you can see we have 5 contracts to award a along the Lakeshore Drive area. We would have some impacts out there. We are talking about construction durations that bring some of the contracts from 12 months to 25 months. This is the 101.02 by the Lake Marina Avenue area, the current purple that you see is the existing levee. The green is the existing floodwall. Then the yellow is the gates that we intend on taking some action. Some gates down here are L 2 and L3 and these are some of the basic features. Levees on the east and









west end and a flood wall on the London area. At the West End levee on the 17th Street canal we are looking at two options. One option is to construct a floodwall above the existing levee and the other is to raise the area embankment. When we look at the existing floodwall between the gates L-1A and L-5 we're look at moving and replacing the wall and raising Lake Marina Avenue. The other is the realignment of the floodwall to the marina seawall. Gate l-4 would remove and replace the existing gate or eliminate the gate and replacing it with a ramp. There are many indications that gate L-4 and floodwalls along Pontchartrain Blvd [inaudible], realign the Hurricane Protection System and construct a new floodwall and build a new gate adjacent to Lake Marina Avenue. Another option is to replace the existing gate. One plan near the East End Levee near Topaz Street is to construct a flood wall above the existing levee. The other alternative is to raise the levee with and without retaining the walls. This is the next reach 103.01 A1; we divided it up into two separate contractors from Orleans Avenue to London Avenue. There is some minor work that we need to do to the existing sheet pile wall that is out there. We drove some sheet pile to provide some protection. We need to make sure we have protection on the flood side. We are talking about putting in reinforced concrete and scour protection at the Orleans Avenue Canal; this will meet the permanent criteria then [inaudible] to convert the L-wall to meet the design criteria. Another option is a gate on Marconi Dr., also in the Bayou St. John area.

At Marconi Dr. we have a gate and two options. One option is to retrofit and replace as well as to possibly remove the floodgate and in its place an earthen levee. The decision on that has not been made but we are considering those two options. Now, discussing the Orleans Avenue floodwall we are focused on two [inaudible]. The options for Bayou St. John are to raise the current floodgate following the existing alignment. The two other alternatives are to construct an earthen closure on Lakeshore Dr. with sluice gates to allow water flow. Those would only be closed if a storm is approaching the area. Then the last one is a new structure.

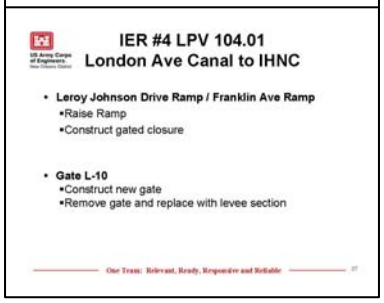
This deals with the remaining work near Lake Terrace and slide 29 talks about the remaining work on Canal Blvd. The alternatives are all the same for this area for the ramp crossing we will raise the ramp or construct a floodwall. We have not made that decision yet because we have not had the discussion with the local sponsor.

This slide shows where the existing ramp is and gives you an idea of the change on that location if we went with the ramp alternative. The existing levee would be here [pointing], then there would be some relocation of the roadway that leads into the Lake Vista subdivision.

Currently we have an existing ramp that we can see, by raising that we would have to extend the footprint. There could be some impacts to driveways and we are trying to minimize the impacts. We are going to an alternative design so we do not impact the area. The final decision has not been decided on but we could still make it a floodgate at this location.

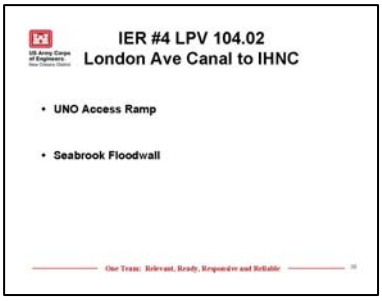
From London to the IHNC this is the 104.01 area. See the ramps; we are going to (inaudible) with Lakeshore Drive near UNO to Leroy Johnson. We have the Franklin Avenue ramp and we may have some additional work at the floodwalls by Pontchartrain Beach.

A ramp from

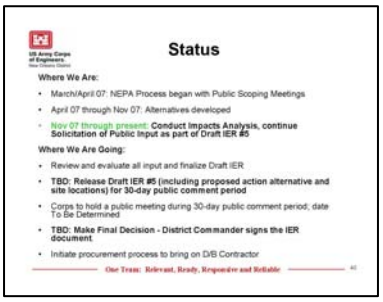


Johnson avenue and we would consider raising the ramp and floodwall. We could also construct a new gate or replace it with an earthen levee.

The last construction is a clean up of (inaudible) this ramp in



association with the research park. It was not in the last contract because we do not know about the real estate. When we talk about West End Park there is an entrance to UNO campus that if we go to an earthen ramp it may become a safety issue with access to the campus. So we are looking at putting in an additional ramp. Another location is the Seabrook floodwall that passes under Ted Hickey Bridge and then connects to Northfold Southern railroad track. The only alternative is to replace the existing I-wall with a T-wall. Now I am going to turn it over to Mr. John Ashley.



John Ashley, senior project manager Branch Chief for Permanent Pumps

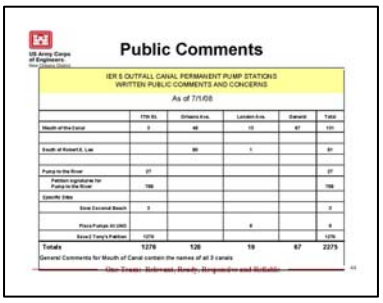
I am the chief of permanent pumps at the outfall canals. The purpose of the project is to remove storm water from the canals.

Where we are today: we are still conducting the impact analysis. We are evaluating the alternatives. We are working to draft the IER. Some people thought we would have a decision at

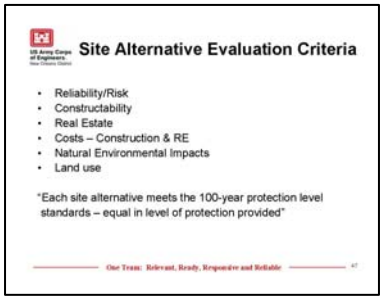
this point and we will be making a decision soon. Where we are going: we are looking into the possible design build contractor.

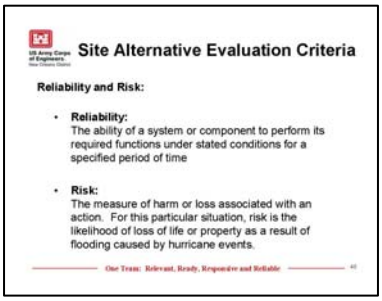
The 6th supplemental did pass and is enacted into legislation.

We collect public input on the decisions we're making everyday and we can do this through e-mails, phone calls, letters, petition, resolutions, public meetings, etc.



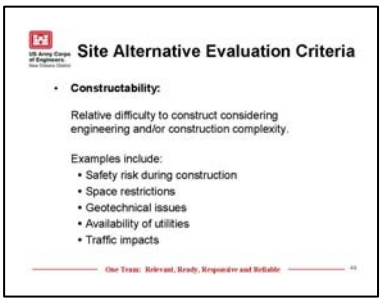
We have a strong technical team. We have monthly interagency meetings and are working with our non-federal sponsor and the northwest division.



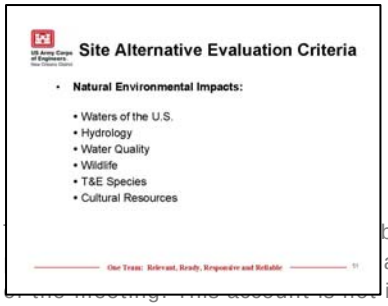


This is a snapshot of public comments we have received. Some of these comments include feedback on [inaudible] Pump to the River. [Inaudble]

The evaluation of the criteria may not be all the criteria used in the final decision but we take a risk and reliability for real estate, cost, and environmental impacts. One thing we want to mention is when we get to the site location we will provide 100-year level of protection. All those sites do provide 100-year level of protection.

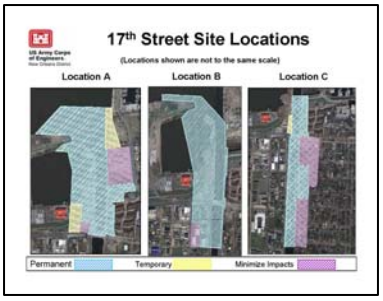


Reliability is different from the slide, but risk is a measure of content from the slide.



Constructability: these are just a few examples.

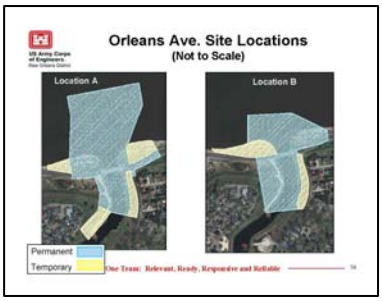
Real estate, there is time associated with real estate. One of the issues is costs and construction.



The natural environmental impacts are on the waters of the US wildlife and species and cultural resources.

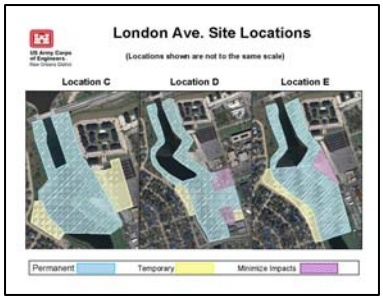
The existing land use is the consideration of impacts to land uses, i.e. parks, green space, residential, commercial, educational, recreational areas, and historical areas.

These are the locations for the 17th St. Canal. The yellow areas are the temporary impact areas.



At Orleans: We have 4 locations, this is the area north of Lakeshore Dr. This would be a location south of Lakeshore Drive. Location C is (inaudible) use of this area here. This location would be south of Robert E. Lee.

The London Canal, this location would be 100-year and it would tie into the existing lakefront.



Opportunities for public input can be done during public meetings, www.nolaenvironmetnal.gov, and by contacting Gib Owen.

Julie Morgan, public affairs

Thank you to Major Chapman, Kevin Wagner, and John Ashley for their presentation.

Tonight we have other senior project managers here relative to what was in the presentation. We have: Gib Owen, Senior Environmental Manager; Rick Kendrick, Chief of Project Execution for the Hurricane Protection Office; Julie LeBlanc, project manager for Task Force Hope; Rueben Mabry, Senior Project Manager for Risk and Reliability; Soheila Holley, Chief Project Manager of Borrow; LLW, Environmental manager for HPO; Joe Kopec and Deanna Walker, Real Estate; Mike Stout, Senior Project Manager of Trees; Ron Elmer, chief of IHNC Surge Barrier project.

The ground rules for tonight: We would like you to use the microphone so if you have any questions please come up to the microphone and state your name. There are a lot of people here tonight so we'd ask that people who want to comment please keep your comments to 3 minutes. If you have more than one question, if you can fit in okay, but if it will take more than 3 minutes please get in line and allow others to speak.

We would like you to respect each others time. There are a lot of people here, so please keep it brief and respect each other. We want to hear constructive comments. We want you to understand the project before leaving. If you feel like you did not get an answer to your question please let us know and we'll try again. If you would like to make a comment about the meeting, (pointing) we have evaluation sheets at the door. Please fill them out so we can make the meeting better. Please sign in so we can send you the notices of future meetings. After the meeting the project managers will make themselves available so you can talk to them face to face.

Question 1. Kasey King: I live in Vista Park by the London Ave. Canal. We have had a briefing but we have not heard about the total system. The worst thing is we know this system by name only through the meeting format. Non-structural alternatives keep coming up as an option. (Inaudible) When will the Corps step up to give us decisions needed to make safe rebuilding decisions?

Response 1a. Morgan: We are responding to the hurricane protection in a system wide approach. We come to talk about the Lake Pontchartrain project because that is what most people are interested in in this area.

Response 1b. Maj. Kurgan: Prior to Hurricane Katrina there were a series of projects to protect the entire system. So the system did not perform (inaudible) this is not a system in name (inaudible). We have done hydraulic elevations that are based on hydraulic modeling. There is a difference [in the height needed] for a floodwall here than in New Orleans East. The status map shows the system and you can see where the east and west levees tie in. Yes, the Corps is addressing this as a system and we are moving ahead.

Question 2. Kasey King: How are you dealing with homeowners that have to raise their homes? They are part of the system and are as important as any of the lines. How are you dealing with residents that are making the decision about elevating because they are an integral part of the system? Unless the Corps (inaudible) not the system manager then who is? How are you dealing with residents to make decisions on how they should elevate their houses? Obviously if we elevated before Katrina people would be drier.

Response 2. Maj**.** Kurgan: That would be the non-structural levee and I have not seen [inaudible] throughout the system.

Question 3. Kasey King: Is that acceptable to have a system in name with out a structure?

Response 3. Maj. Kurgan: This system is designed and will provide 100-year level of protection. We put that image maps to help people understand risk.

Question 4. Kasey King: Your maps are not reaching people. They indicate 100-year and they indicated 6 plus elevation.

Response 4. Maj**.** Kurgan: We are trying to reach everyone and we have this information on our web site.

Question 5. Kasey King: But people are not elevating and you're not getting results.

Response 5. Maj**.** Kurgan: Everyone has to make their own decision on how to raise and where to put their house.

Question 6. Cindy Siegrest, Bellaire Dr.: We were impacted, we are elevating. Can you assure us that any of your alternatives, if you have to take our property or deny access, we will be reimbursed?

Response 6. Joe Kopec: This question came up last November prior to the election. There was miscommunication between the levee districts [inaudible].The short answer is if your property is acquired whether the Corps acquires it or the local sponsor acquires it you will be compensated. It is in the State Constitution and US Constitution.

Question 7. Cindy Siegrest: That answers my question but that is different than what the Corps told us.

Response 7. Joe Kopec: Your question is, someone at the Corps told you that if we use your property as right-of-way then you would be compensated?

Question 8. Cindy Siegrest: I am talking about if we are denied usage of our land, if we can not build, or put fences and someone tears down our fences and takes 20-30- or 40 feet for our property will we be compensated?

Response 8. Brett Herr: You are talking about tree removal? We are coming in to remove fences from the tow of the levee. We're not taking your property this is being done under authority from the Orleans Levee District.

Question 9. Cindy Siegrest: But that is denying us use, you are saying you can not build on that land meaning we no longer have use of our land, we paid for that land. I am for making levees safe but if you can not [inaudible]. If you are taking 30-40 feet of our property and we do not have rights to the land then that is a taking.

Response 9a. Brett Herr: This is being done under a state statue.

Response 9b. Joe Kopec: We are talking apples and oranges if we take the new right–of-way they will be compensated. We are talking about a different statue under state law.

Question 10. Cindy Siegrest: What takes precedent the state or the US Constitution?

Comment 11. Anne Rheams, Lake Pontchartrain Basin Foundation: I want to go on the record, our concern is Bayou St. John and we have neighborhood groups that are concerned. The water in Lake Pontchartrain (clapping) we support alternative 1 and the alternative that has operational gates if science proves that it is possible. Bayou St. John is a scenic area and it must be protected. It is historic and the reason New Orleans exists.

Question 12. Eric Thorton, Lower 9th Ward: My question is about defining jargon. The term 100-year level of protection [inaudible] with the changing nature of our environment [inaudible] we might have stronger storms. A 100-year storm has a 1 percent chance, that's the storm that will supposedly reach the amount of protection [you're building]. By what standards are you determining the data? [Inaudiible]

Response 12. Mabry: The 100-year strom is frustrating. The Chief of Engineers is coming up with what is sufficient protection. The Interagency Performance Task Force (IPET) is 150 people of the brightest folks who deal with forensics and high-tech modeling to determine the risk of storm surge. You are looking at water getting inside the system. We had to find out our levees were not high enough so now we need to know what is high enough? That storm surge is the threat so we ran computer models to determine the height of water on the outside of the system. Three federal agencies came together (FEMA, NOAH, and USACE) to have a defined approach to determine that level of water. That is exactly what they did, they came up with a probabilistic consensus of 152 storms. Those storms replace the standard project hurricane. The height of the water on the outside of the system itself was developed from that internal surge.

Question 13. Eric Thorton: So the 152 storms were plugged into that computer and determines what storms we will see over the next 100 years?

Response 13. Mabry: [Inaudible] It takes into account wind, the speed of the hurricane, and barometric pressure those two things intensity a storm.

Question 14. Anna Cizaig, Canal Blvd: My family has been in this area since 1958. I flooded with Katrina. My husband and I are renovating. I am most concerned that this flooding will never happen again. On all of the sheets you handed out it looked like there were locations for a 17th, London and Orleans Ave. canal [pump station] but why not put protection into Lake Pontchartrain? Stop [the water] before it hits houses. We have not discussed the merit of these locations. Can you assure me that the Corps is not going to be swayed away from the best

protection based on petitions? On page 22 you show a petition trying to save the residents. As a resident I am most concerned we get the best protection so we do not flood again. How will this work in concert with an overall system? If they finalize location B for 17th Street site and location C for Orleans Avenue and another for London, I want to feel that this is all going to work in concert to prevent flooding.

Response 14. Ashley: That is why we need input. We will choose what provided the best protection to the city of New Orleans that is our intention. You asked about 17th or London we have existing pumps to provide 100-year, we are talking about permanent protection. [Inaudible]

Question 15. Anna Cizaig: The locations have merit making some locations better than others.

Response 15. Ashley: Any of those sites: site A, C, D any of those sites they would provide 100-year for our standard design hurricane system.

Question 16. Anna Cizaig: A chain is only as strong as its weakest link. Based on what you decide and the public comments is it all going to work as a system?

Response 16. Ashley: Our selection criteria and environmental analysis will allow us to reach the best technical solution at each site. That is our mission.

Question 17. Anna Cizaig: There are not any natural environmental impacts to giving us the best protection.

Response 17. Ashley: [Inaudible]

Question 18. Jack Oufnac, Bucktown: I grew up on Topaz Street and I want to make comments on impacts on the 17th St. Canal. I was in a meeting at the Pontchartrain Center and you showed that you wanted to get our input. You showed a slide and it showed a lot of comments. I am clueless if you are thinking B or C. Everyone in this room has respect for the Corps, in Bucktown it is small and has blocks of 17th Street Canal. There are little businesses there and we employ 30 people. You are getting feedback from us and I hear people say that before you know it you will decide is there any way to get progress? (Clapping)

Response 18. Morgan: We can set up a meeting with the neighborhood association to talk more about this if you'd like.

Question 19. Jack Oufnac: In 1928 there was a breach in Jefferson, no one at the Corps now has built that but a beauracy scares us to death (lots of clapping). Can you give input back to us? The comments are great but is there a way to get back to us so it is not just a dog and pony show.

Response 19. Morgan: I would like to remind everyone we have 1,000 employees and we live in New Orleans . Many Corps employees flooded too, we're in this too. We are as interested in getting protection as you are.

Question 20. Terry Lonatho, Bellaire Dr.: I am curious. Are people in the audience aware that pumping stations will never be used unless there is a hurricane?

Response 20. Ashley: [Inaudible] We will have to coordinate with Coastal Wetland Planning Protection and Restoration Authority and the Sewage and Water Board of New Orleans.

Question 21. Terry Lonatho: Should there be an A, B, C and D that is an enclosed culvert so it can pump to a main pumping station at the lake, should there be a D scenario.

Response 21. Ashley: [Inaudible] that is why we are here tonight to seek input.

Question 22. Terry Lonatho: We were under the impression that we would have a final decision on these things. When is the next target date for the final?

Response 22. Ashley: Probably September. We are working hard, this is a complex project. We want to do it right, this is a very complex project. We do want to come up with a final decision.

Question 23. Terry Lonatho: Without tying in culverts the pump stations would not operate unless a storm came.

Response 23. Ashley: It may [inaudible].

Question 24. Terry Lonatho: It is not written in stone.

Response 24. Ashley: Absolutely not

Question 25. Shelly Midura: I have received e-mail traffic about the Orleans Canal and the pump station if it is out on the lake. Is that equally as safe as if it is in the canal? At a recent meeting there was an expert who said it was safer. If it were at the Lakefront or in the Canal. I need someone to give a definitive answer to that.

Response 25. Ashley: There are four sites on Orleans that will provide 100-year protection. Each of these alternatives would provide 100-year. You would be as safe with location D as with B.

Question 26. Shelly Midura: How come some people left the last meeting believing it would be safer on the lakefront? That belief was disseminated and I need to know what the story is.

Response 26a. Ashley: It's because of transitions, if you look at those areas there are potential [inaudible] these are being reinforced.

Response 26b. Kendrick: We are not going to sacrifice integrity of the system for location. Constructability [inaudible]. There are two components, first is the ability to stop storm surge then [inaudible] to pump the storm water out. We have to be able to [inaudible]. We are looking at all those factors.

Question 27. Shelly Midura: I can understand people thinking one way or another. I request that before the Army Corps make a decision on 17th that you contact the my office for [inaudible]. I have also been contacted by people of Mariners Cove with concerns if you pick one of these sites. I talked to Col. Bedey but I do not see any changes. I am going to ask him to talk to people on Mariners Cove. If you went with A, then they need to be part of the discussion. They want to be specifically part of your discussion. I completely agree with how we hear about what you are thinking. You do not tell me what you are thinking. Is there a deadline by which you have to tell this community what is going to happen? Are we going to be worried and scared to death? When does that deadline hit? How long are you going to be on edge of seat? (Clapping).

Response 27a. Morgan: If at any time any organization wants to meet with the Corps we will meet with you. You can call us and or go to the web site. There are phone numbers and we have public affairs here. There is a point when the decision has to be made.

Response 27b. Laura Lee Wilkinson: As far as NEPA we are evaluating site locations. The goal for this project is that by fall we will have the proposed action. The document will go out to the public to review. We will have a public meeting for IER 5.

Question 28. Ramon Kleinpeter, Lakeshore: My question is related to the third comment. I question the two figures. The number that says mouth of canal and south of Robert E Lee, I see these are the figures as of July 1, 2008 and I question those figures.

Response 28. Trish Leroux: I tally these comments and they come through the environmental web site. They go to Gib Owen and then to me.

Question 29. Ramon Kleinpeter: I think they are wrong. I attended a meeting a week ago. I furnished AJ Krouse a Flood Protection Coalition petition of names, and I am sure there were over 300 signatures he presented to the Corps at that meeting. I know all those figures that I am quoting were for the mouth.

Response 29a. Leroux: Was that the Lake Vista meeting? I did not receive those.

Response 29b. Wilkinson: We will check.

Response 29c. Morgan: We look over the meeting notes and we go back so if you come back next time we will have a response.

Question 30. Morgan Elzey: I have asked questions and I am here to discuss the Borgne flood wall in IER 11. There was a statement from Maj. Chapman that this is just a pumping project, and then it has been said this is not a pumping project. If 200 acres is a small area it seems that by taking a little time, preparing and creating marsh could be really successful and would enrich the area. We are worried about impacting driveways and not about creating driveways that baffles me (clapping).

Response 30. Morgan: The project is appropriated and authorized and that gives us the authority to create the hurricane protection system. We are addressing wetland ecosystem and estuary under Louisiana Coastal Protection and Restoration Authority, so it is not that the Corps is not aware it is just that we are addressing it in another project.

Question 31. Morgan Elzey: CWIPPRA and Bayou Bienveneu, it is all a system. If we have a small change. [Inaudible] use common sense.

Response 32. Wilkinson: We can use the material from the canal for marsh nourishment but our authority is for hurricane protection, it is not restoration like Coastal Wetlands Planning Protection and Restoration Act. [Inaudible] wetland enhancement is what Maj. Chapman was talking about.

Question 33. Josh Pollack: You're talking about the 100-year plan and current progress but what is the protection level today in terms of year of protection? You said 2011, what is today's current level?

Response 33a. Mabry: We can not answer directly because [inaudible] vulnerability is different [inaudible]. That gives indication of what level the water comes in [inaudible] at this point of time there are floodwalls going up so it is not something you can quantify.

Response 33b. Maj, Kurgan: There is another project we are trying to explain [inaudible] we did a system status map. It gives you the levee elevations pre-Katrina, today and what they will be when the 100-year system is complete. [Inaudible] we are trying to communicate where the system is today. That is in the back and it is on our Web site.

Question 34. Josh Pollack: Does 100-year include potential damage to wetlands or other environmental impacts? Rising water level [inaudible] including damage from the project itself?

Response 34. Maj. Kurgan: The elevations takes into account subsidence and sea level rise.

Question 35. Josh Pollack: In terms of the Lakefront levee area, what are the hold ups for the awarding of those contracts, what are our timelines?

Response 35. Kevin Wagner: Those are under design right now. As soon as we have funding and the cost-share it is 70 percent federal and 30 percent local [inaudible] We need to have our money in hand as well as the local sponsor. We also need to make sure we have agreements [inaudible]. The current projections are the system will be completed in 2011.

Question 36. Kasey King: Those who have seen the Times-Picayune headline saw that it said "100-year flood". The chair of the [inaudible] wrote a letter to the editor that said in his opinion every 50-year flood is unacceptable for a design basis of 100-year system.

Response 37. Maj. Kurgan: It is not acceptable. One in ten is not acceptable. Your confusing our programs but our hurricane system is being built to withstand a one percent storm.

Question 38. Kasey King: It is not engineering the best standards?

Response 38. Maj. Kurgan: What we are building [inaudible].

Question 39. Kasey King: You are saying [inaudible] to say here is where you need to be to be secure. [Inaudible] as I mentioned before. I do not see the system behavior. [Inaudible] Do not tell us that your 100-year is safe.

Response 39a. Maj. Kurgan: The 100-year you are talking about is river flooding. If you want to talk riverine flooding I'd like you to know New Orleans experienced the 8th worst flooding in its history and not a single drop of water came into the system because of operation of the Bonnet Carre Spillway and Old River structure. That is a system and we are building a system for New Orleans. You are right, you do not have a 100-year system yet and there will always be risk. We have to keep [inaudible] local politicians and there is a coastal restoration effort through the Louisiana Coastal Authority and Coastal and Wetlands Planning Protection and Restoration Act. And home elevation is a personal choice. Right now that is not in our program.

Response 39b. Morgan: Our chief of engineers has said we are building a system to reduce risk not to guarantee safety. Our job is to reduce risk.

Question 40. Jean dress: I see a series of levees on the Orleans Avenue site. What if we built this structure on other side of Robert E Lee? Were a storm surge to come in and breach the levees, what will happen at Lake Vista and Lakeview? That would impact us negatively. Then when you chose location C, it seems that risk is minimized because the gate is higher up than Robert E Lee, but if you look at where the Mississippi River levees are built, then water appears to make those people vulnerable. If it comes on Lake Vista we would be vulnerable. It is not going to stay on Lakeshore Dr., it looks as though those are more viable and protected so it does seem as high of a level of protection. It appears as though we will be vulnerable but when the real problem is storm surge.

Response 40. Ashley: The floodwall elevations are based on a conservative design. The real levee is for 100-year level if protection. [Inaudible].

Question 41. Jean dress: I understand that but it seems we are going to build strong levees but storm surge is still coming. It would seem like we need to keep storm surge from entering the canals (loud clapping).

Response 41. Ashley: We are looking at all the alternatives. We have to maintain [inaudible].

Question 42. Jean dress: I know people want to protect wildlife. I appreciate that I love my dog and animals but I came from an area that had 12 ½ feet of water. I do not care about aesthetics I want to feel safe. I think if water is coming in to that canal, how can I feel safe (clapping)?

Response 42. Ashley: We understand. We will provide you 100-year protection.

Question 43. Jean dress: You're talking to a group of people that were impacted by the levees. I guess what I would like you to tell me is there is one that is more logical and safe? Can they honestly be equal?

Response 43. Ashley: [inaudible]

Question 44. Sharon Duplessis: I am aware of the Dutch and German [inaudible]. I have a Dutch friend who speaks highly of the Dutch levees. I am wondering how closely you have considered these? Last time Col. Bedey said the site in the lake is not going to happen. I am deeply concerned about buildings. The Dutch [inaudible] we don't build pumps that rise higher than our levees. Less [inaudible] you do not need 80 foot buildings. [Inaudible] they would have less of a footprint and the Corps has already bought pumps like this. So I am wondering how serious you are considering these very efficient pumps. A project manager said these will be like Sewage and Water Board of New Orleans pumps. You can see this pumping station. I live on Pratt; I do not care if you put a highly efficient pumping station in my front yard. I know tonight is about impact analysis. I know this is an innovative thing to do but it is not innovative. The newest pump near I-10 is the least efficient [inaudible]. I am concerned for safety and aesthetics. I'm hoping you consider something innovative. The most efficient water and the [inaudible] beautiful city (loud clapping).

Response 44. Ashley: Two of our contractor's [inaudible] were looking at innovation. The pump station [inaudible] it would be smaller [inaudible] we have engineers from the Netherlands on our design team. (Inaudible)

Question 45. Sharon Duplessis: So you are looking at pumps the Tennessee Valley authority is using?

Response 45. Ashley: (Inaudible) we talk to the Sewage and Water Board about those pumps.

Question 46. Sharon Duplessis: (Inaudible) pilings.

Question 47. Glen Pilie: I have a process question. The lady earlier wanted to go on record about the Lake Vista meeting. [Inaudible] I do not know that Lake Vista is part of the record. Is it part of the record? A gentleman put a comment on the table. What do we do to get on the record? People come to meetings talking about official record.

Response 47. Wilkinson: All of these meetings are part of this record. At non-Corps sponsored meetings we are not taking notes as we are in this meeting but as you make comment please be sure to say your name, speak clearly, and send in written comments. That is what we have been doing [inaudible].

Question 48. Glen Pilie: You record the number of responds and use them in your site selection comments?

Response 49. Wilkinson: The official comments that come during the official 30-day comment period, we'll try to be as responsive as possible as part of the project.

Question 50. Glen Pilie: It's just an observation but that table does not seem to reflect our input. The meeting I went to in Lake Vista appears to be a strong sentiment by people who live near the structure and the overwhelming sentiment seems to be as close to the lake as possible. You should eliminate levees cause people do not like levees. We do not want to have to baby sit any more levees. It seems like the sentiment there [inaudible] and do not know if that has been captured in public comments (clapping). Congress authorized 100-year protection and we are here to talk about impacts, your selection is going to cost. I do not think anyone has the idea that I want protection and do not care what it looks like, that does not seem to be sentiment. I made these comments at Lake Vista but what you are showing is cross hatched marks. Nobody can take those areas and visualize them. There seems to be a decision already made that it will be a design-build project. It seems more logical for some of us to see what it is designed before it is given to a contractor to design. We feel like no input on what to look like…I think design-build is the way to go because it does not give a real clue of what it is going to look like.

Response 50. Morgan: That will be part of the record. The upper echelon of the Corps was at the Lake Vista meeting. They may not know specific [inaudible] but we want you to know the powers that be know what happened. It may not be in the record but it's known.

Question 51. Hugh Lambert, Attorney- Representing a group: Originally there was litigation over the17th St. Canal but that litigation is over [inaudible]. from Holland made a comment that their canals and drainage canals they are not part of the flood protection system. [Inaudible] a drainage system can not be closed but a [inaudible] of flood protection keeps flood water out of a

polder. So comments have been heard about the 17th St. Canal, they talk about the barrier being a bowl. [Inaudible]. All of us would like to feel that you know how to fix this problem but we do not because we are not engineers. You are experts in this issue. I turn now to the issue of the Mississippi River Gulf Outlet and the structure being built by Shaw. My question is about (inaudible) why is it the Corps wants to separate flood protection from natural barriers like marsh lands and swamps? The structure is possibly on the GIWW and the other on the MRGO. In between, is that community called the funnel of the surge barrier? There is another guy who has experiences and his name is Sherwood Galliano he recommended there be a channel cut on Violet to supply that wetland with freshwater. The closure of MRGO, which has been approved, will reduce saltwater [intrusion] by introducing water from the river and having a combonation of manmade structures. Let some smart guys, who know more than we do, do this. You should not just accommodate people in a room but listen to PhDs who makes suggestions and make sense.

Response 52. Morgan: we have internal groups of scientist we are working with.

Question 53. Hugh Lambert: The hurricane protection system separated because [inaudible]. What I am saying is you can not just say we are not going to work with the levee because it is not funded. This is a memo that has to do with the closure of Bayou La Loutre it's based on the de-authorization of MRGO. It says the assessment of the proposed benefits of this feature is salinity reduction and flood level reduction for smaller storm events outside the hurricane system. There are some who believe that this future would have affects on larger storms as well. [Inaudible] is the primary office however everyone is welcome to comment. The date on this e-mail is April 22, 2002. That is 6-years ago, long before this [building a] hurricane [system]to 100-year [protection standards was] an issue. Hurricane Betsy was in 1965, Hurricane Katrina was in 2005. The same area of New Orleans East flooded every time so you guys need to not just ask us to get to a microphone you need listen to people who have plans to [inaudible]. Work with guys with PhDs and have them explain what you need to do (clapping).

Response 53. Maj. Chapman: We are listening; we do work with all the other projects. I had a meeting yesterday with Greg Miller on the Bayou La Loutre closure. There are people higher than me to bring it all together.

Question 54. Hugh Lambert: Is there a plan to de-authorize MRGO?

Response 54. Maj.Chapman: Yes, it's been authorized but not funded.

Question 55. Linda Leavitt, Lake Vista: I have family across the entire footprint of the project. If you look at history this is where the Corps [inaudible]. Is there anyone here a soil engineer? I ask because if you look at West End all the way to the east to Seabrook Bridge and Robert E. Lee that is all reclaimed lake, can you guarantee 100-year protection with all those interior canals?

[Inaudible] considering it is pumping grounds [inaudible] in the canal. We have an un-reclaimed lake, it'll turn to Jello. What is the existing integrity between Robert E. Lee and Lakeshore Drive?

Response 55. Kevin Wagner: We take soil into consideration into the design. We are trying to address [inaudible] when built in the 1920s and 1930s. Over the years [inaudible] so structural integrity and we take that into consideration. We take borings and design with that info in hand.

Question 56. Linda Leavitt: So when we make repair work, is that based on soil sentiments and integrity and is it prioritized? How did the Corps prioritize?

Response 56. Wagner: During Task Force Guradian our mission was to repair all damaged sections and get everything restored by June 1. The priority was we have 9 months to get all prepares done.

Question 57. Linda Leavitt: [Inaudible]. Over site and quality control.

Response 57. Wagner: We have oversight and Corps employees [Inaudible].

Question 58. Linda Leavitt: Was there third party oversite? We have NASA who comes in to check milestones. [Inaudible] is there a third party looking at all of these phases?

Response 58. Wagner: That is a lesson learned from Katrina. We are doing external peer review to look at our levee designs. It has happened in the past but there is more and more. Our division headquarters [inaudible] we have documentation in place.

Question 59. Linda Leavitt: Is that publicly available for review during construction?

Response 59a. Wagner: You can request that under the Freedom of Information Act.

Response 59b. Owen: If you go on the Corps Web site you can click on Office of Counsel, if it is publicly releasable you can get it through a FOIA.

Question 60. Linda Leavitt: Do you have to know the milestones, or are there timelines built in?

Response 60. Maj. Kurgan: A lot of that information is part of timelines and we try to post it on the Web site. If you click on information you are interested in you can check timelines, you do not need to login in just go on www.nolaenvironmental.gov.

Question 61. Linda Leavitt: So the general public does have a check? I have been corresponding with the National Science Foundation; my question is on soil and deposits.

Response 61. Maj. Kurgan: It's not just the Lakefront, it is New Orleans. We have an [inaudible] contract in place that the sole purpose is to provide geotech data. If we know what is in the ground we can design for it.

Comment 62. Linda Leavitt: And that is part of the analysis about building at the mouth or further down.

Question 63. Tom Schnatz, retired professor: I want a pumping station [inaudible] whether we have been contacted [inaudible] noise factor, came across a young lady who [inaudible] picked them up and left and the reason that it was noisy. [Inaudible] elderly lady could not find it. The noise was at 180 decibels. [The noise from the pumps] is absolutely unbearable. [Inaudible] point is we're not worried about the noise levels at the Interim Control Structures [we know you need] to test the engines. I want to make sure 180 decimals is absolutely [inaudible] what is the Corps' goal to reducing significant noise levels and how do they violate local state and city sound ordinance?

Response 56. Ashley: We will take your concern and check that out.

Question 57. Plaid Skirt: You keep talking about the 100-year level of protection and you keep talking about how the 100-year protection is regardless of the pumping station gates are south of Robert E. Lee but I think you are telling us [inaudible] it is obvious you could reduce risk by eliminating storm surge into the city. That 100-year level of protection is all about height. What are you doing different? What is the current design safety factored? Is it the same as before the storm?

Response 57a. Maj**.** Chapman: No the [factor of safety] has increased from 1.3 to 1.4.

Response 57b. Maj**.** Kurgan: It is not just the factor of safety but the entire design criteria has changed. [Inaudible] projector it has been reviewed by IPET and [inaudible]. It was not an Orleans Corporation. Engineers [inaudible] design floodwalls and levees [inaudible]. If you take a drive on the westbank [inaudible] you can see floodwalls going up on Peters Rd we are driving H-piles and sheet piles. That is what we are talking about when we say 100-year protection, it's not just height. You do not have 100–year protection yet and that system meets the revised design criteria. We are still verifying that everything in the systems of levee meets 100-year design critera. Unless it meets both standards we won't certify it.

Question 58. Plaid Skirt: We do not want them breaking [inaudible].

Response 58. Maj. Kurgan: After Katrina we went back [inaudible].

Comment 59. Plaid Skirt: I would like to see you double it.

Comment 60. John Trask, Lakeside Property Owners: Thank you for clarifying that all 4 will be equal. That is the number 1 question I get. If something new comes out everyone in the whole system will support what the best system is, that is based on science. This is my request for low rise pumping options. Mary Landrieu said she will have this checked out. I want politicians to get you funding to build low rise pumps and I have 70 signatures saying we will support a low rise option. If you need help from politicians I will help. Thank you for your time. (Some clapping)

Question 61. Stephanie Mayer, Lakeshore Drive: The woman who discussed soil conditions, the breach on Orleans and 17th were south of Robert E Lee. I am opposed to a pump on the lake [inaudible] caused stagnant water. No one wants to live there. Those that want pumps on the lake, what is the Corps looking at in regard to wind speed tides and waves for a pump in late as opposed to [inaudible].

Response 61. Ashley: One alternative is building in the lake. We are using the latest design criteria across the country a lot of [inaudible].

Question 62. Fred Guthoie, Lakeview Civic: There are 7,000 people adjacent to the Orleans and 17th St. canals, the polls we have do not oppose to doing [inaudible] verses south. It makes sense to be at the mouth of the canal. [Inaudible] my question is why you would have to protect [inaudible] moving inland. Doesn't it make more sense to have it at the mouth, why move to the south and not worry about those canals. Basically build [inaudible] pumping station. Now, plan B [inaudible] I do not understand why people should be across from City Park. Why would you expose us? [Inaudible] why expose us to additional risk when you do not have to (clapping)?

Response 62. Ashley: It is part of the process [to explore all the alternatives]. [Inaudible].

Comment 63. John Wilson, Sewage and Water Board: I wanted to make a brief statement, we have been a part of the meetings. Our engineers have documented processes to resolve these issues and you have that data. You are looking at this but the audience needs to know about mitigation. Some alternatives require more than one station. For the Sewage and Water Board that would be an [inaudible] simpler you make it the more reliable to reduce risk. Some of these issues are too complicated. At the last meeting Col. Bedey mentioned horizontal or vertical pumps. That is a very critical issue. It could help to mitigate each concern about noise. No matter what type of pumps they are going with, they need to be electrical driven. We generate our own power. We have [inaudible] and steam fire turban. We should beef up our power plant. We are going to continue to operate pumps but one thing is to [inaudible] horizontal vertical pumps use energy that Entergy produces. We have energy there but what needs to be looked at is how to reduce your footprint at the station, to remove generators at these stations, to beef up central power plans and to minimize noise. Generators make noise not pumps. I think our engineers

gave out this information as to how to power our central power plant so it does not make noise the neighbors will hear.

Question 64. Barbara McArther, St. Charles: My family has property. We talk about surge protection but my question is, one person said you want to protect the environment, you want to protect wetlands. When do you study if the price is too high? Will that stop you from doing the project?

Response 64. Morgan: Congress and the federal government builds project that the best engineering at the most reasonable cost to protects the most people. These are our criteria.

Question 65. Barbara McArther: So if it costs too much you won't build?

Response 65. Morgan: That is correct.

Question 66. Barbara McArther: If the environmental protection is too much, could it make you stop?

Response 66. Wilkinson: That is why we have NEPA, by discussing the impacts and mitigation of projects we can avoid stopping.

Question 67. Barbara McArther: But will you stop a project if enough environmentalist ask you to, even if it means protecting more people?

Response 67. Wilkinson: Our goal is to minimize impacts. We are supposed to mitigate human and environmental impacts. Part of the natural environment includes anything east of Causeway [inaudible] as part of that [inaudible] national fisheries.

Question 68. Barbara McArther: So that could make a difference as far as where to put the wall?

Response 68. Wilkinson: Yes, but [inaudible] we would not do it, we assess the impacts.

Question 69. Barbara McArther: You are supposed to supply the best way of protecting us. You keep talking about storm surge; if you stop the water from going into the lake you won't have this problem. The more wetlands, the more water is going to come in from the Lake Borgne. The only way to stop is putting a barrier. In the 60s they stopped that project [the Barrier Plan]. Why not, no matter what the cost protect the wetlands on the outside?

Response 69a. Wilkinson: That is LACPR

Response 69b. Maj. Kurgan: Coastal restoration does not happen overnight.

Response 69c. Owen: We are looking at that under LACPR.

Question 70. Barbara McArthur: When will the public see what that study is doing?

Response 71. Owen: We have a request going to Congress in December. It will lay out to Congress [inaudible].

Question 72. Barbara McArther: In the 60's it did not happen.

Response 72. Owen: Your question is did an environmentalist stop a project and the answer is no. It was not just because of environmentalists.

Question 73. Brian Levy: It seems like we do not care about as much as the Dutch do. They have a 10,000 year protection.

Response 73. Morgan: In the Netherlands, it is the entire country impacted, here it is just one state.

Question 74. Barbara McArther: You made a list of people; can you put that in a brochure?

Response 74. Morgan: That is a good idea we can do that.

Thank you for coming, please leave your questionnaire at the door.

Julie Morgan, public affairs

Thank you for coming tonight and we appreciate your input. Please leave your questionnaire at the door on your way out.


U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS
DISTRICT
AND THE
HURRICANE PROTECTION SYSTEM

US Army Corps of Engineers
New Orleans District

National Environmental Policy Act "NEPA"

- Required for all major Federal actions
- Analyze potential impacts to the human and natural environment and investigate reasonable alternatives
- Analyses documented in Environmental Assessments (EA), Environmental Impact Statements (EIS), or Individual Environmental Reports (IER)
- Public involvement is KEY: We want to hear from you!
- **Goal: more informed decision making through public involvement**

US Army Corps of Engineers
New Orleans District

Improving Hurricane Protection on the Inner Harbor Navigation Canal IER #11 Tier 2 Borgne

US Army Corps of Engineers
New Orleans District

Project Purpose

Provide 100-year level of protection to the communities surrounding the Inner Harbor Navigation Canal (IHNC) from hurricane-induced storm surges by June 2011.

Provide advance measures by hurricane season 2009.

US Army Corps of Engineers
New Orleans District

Where we've been

- Award largest design-build, civil works construction contract.
- IER #11 Tier 1 Decision Record signed March 14th
- Investigated alternatives for providing improved protection for the communities surrounding the IHNC

US Army Corps of Engineers
New Orleans District

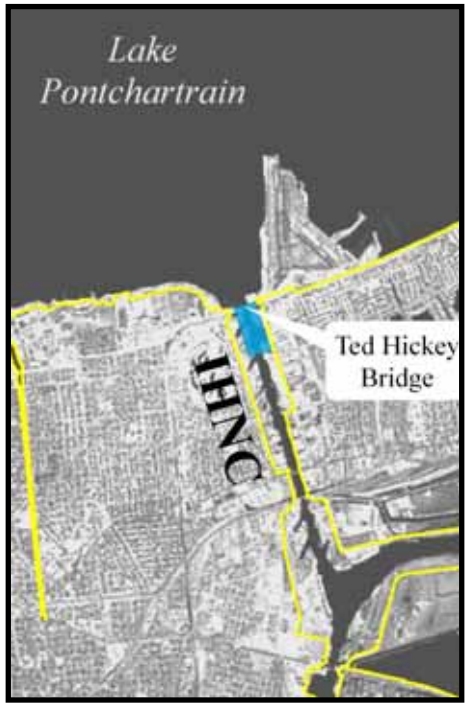
Where we've been

- Selected "Storm Surge Protection Structures" alternative to protect from Lake Borgne surge and Lake Pontchartrain surge

- Selected "Pontchartrain 2" and "Borgne 1" location ranges

Borgne 1

Pontchartrain 2



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IER #11 Tier 2: Where we're going

Two Tier 2 IERs

- **IER #11 Tier 2 Borgne:**
  Alignment and design alternatives within "Borgne 1"

  Public Release of Draft IER 11 Tier 2 – July '08

- **IER #11 Tier 2 Pontchartrain:**
  Alignment and design alternatives within "Pontchartrain 2"
  (alternatives to be developed this summer)

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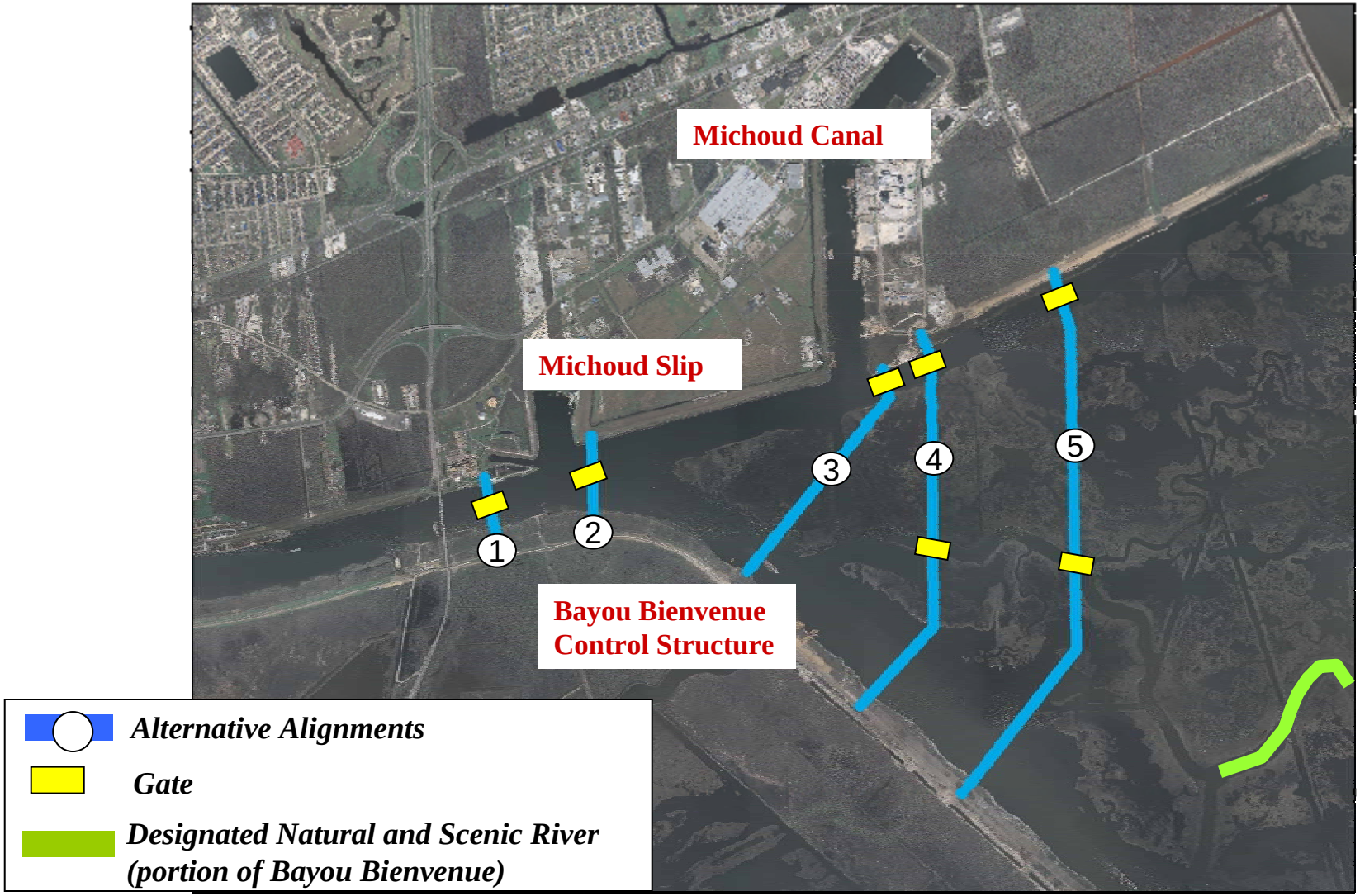
New Orleans District

IER #11 Tier 2 Borgne Alternative Alignments Overview



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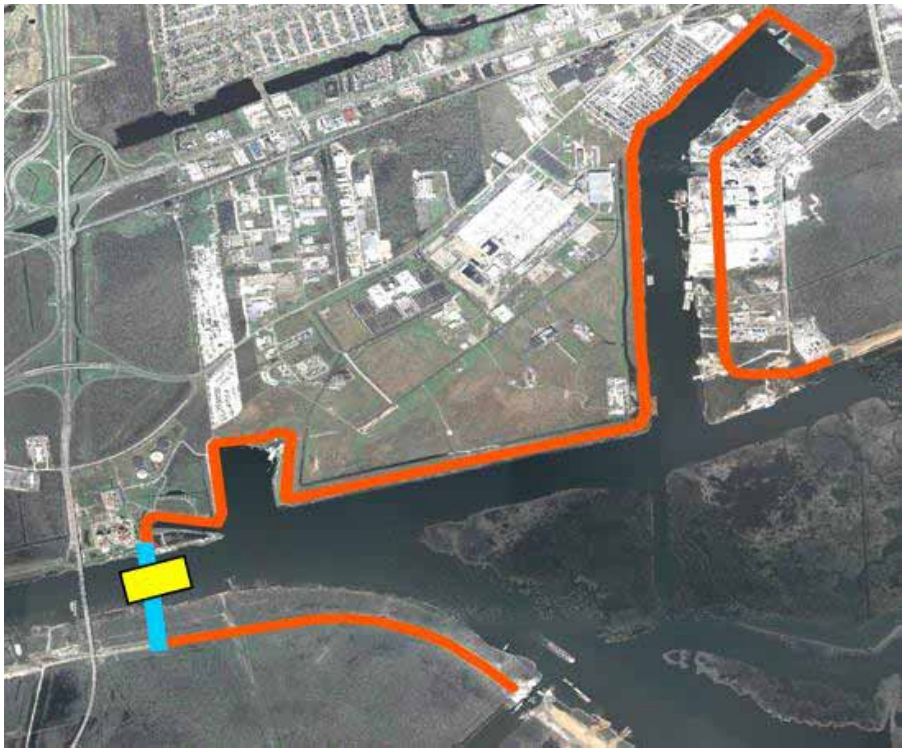
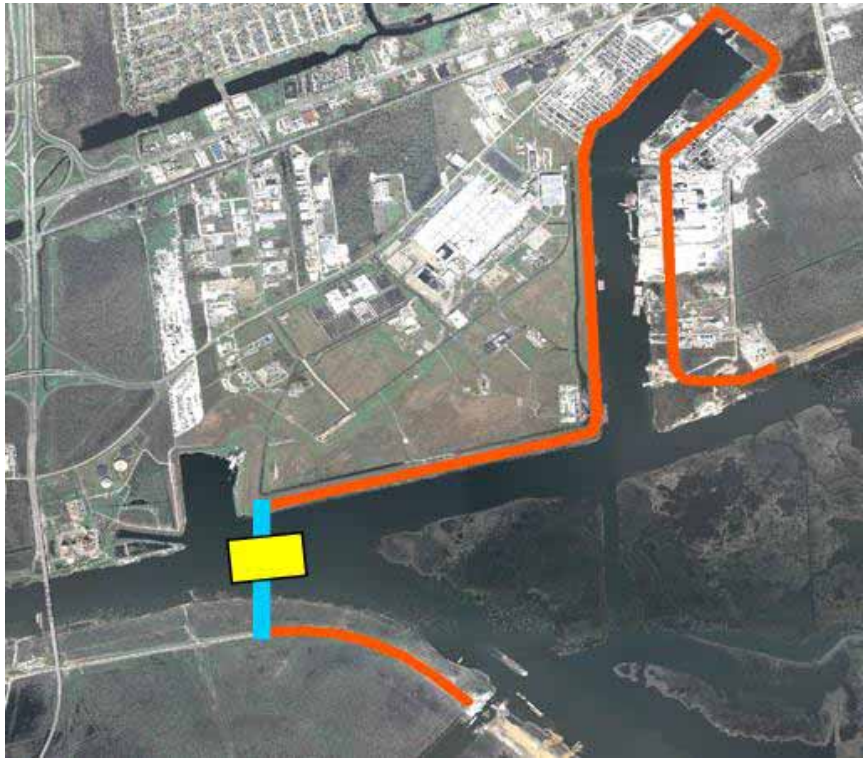
IER #11 Tier 2 Borgne Alternative Alignments

Alignment 1



Alignment 2



Levees & Floodwalls to be Raised

Alternative Alignments

Gate

IER #11 Tier 2 Borgne Alternative Alignments

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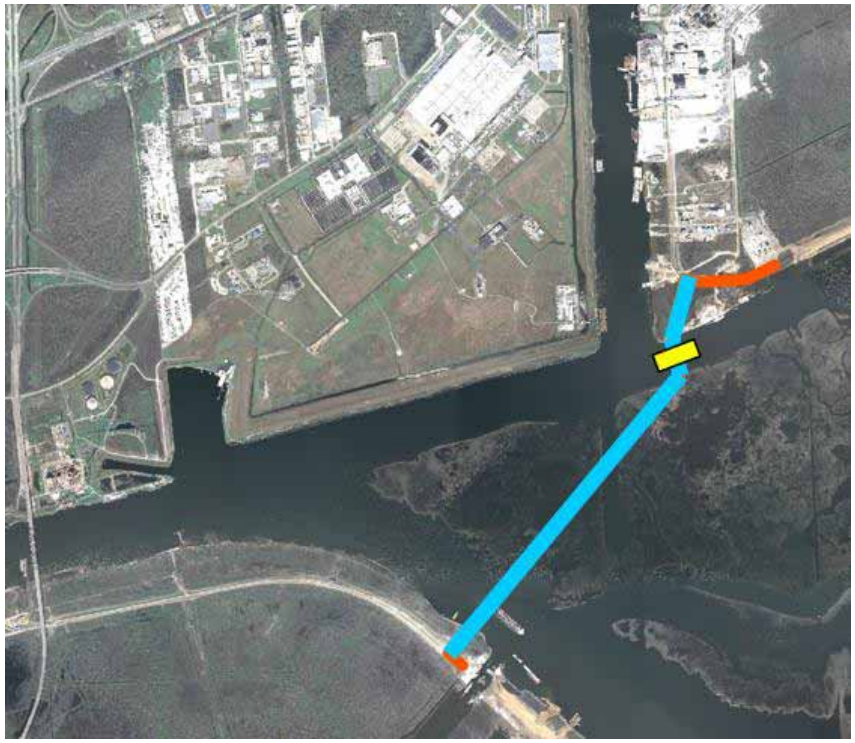
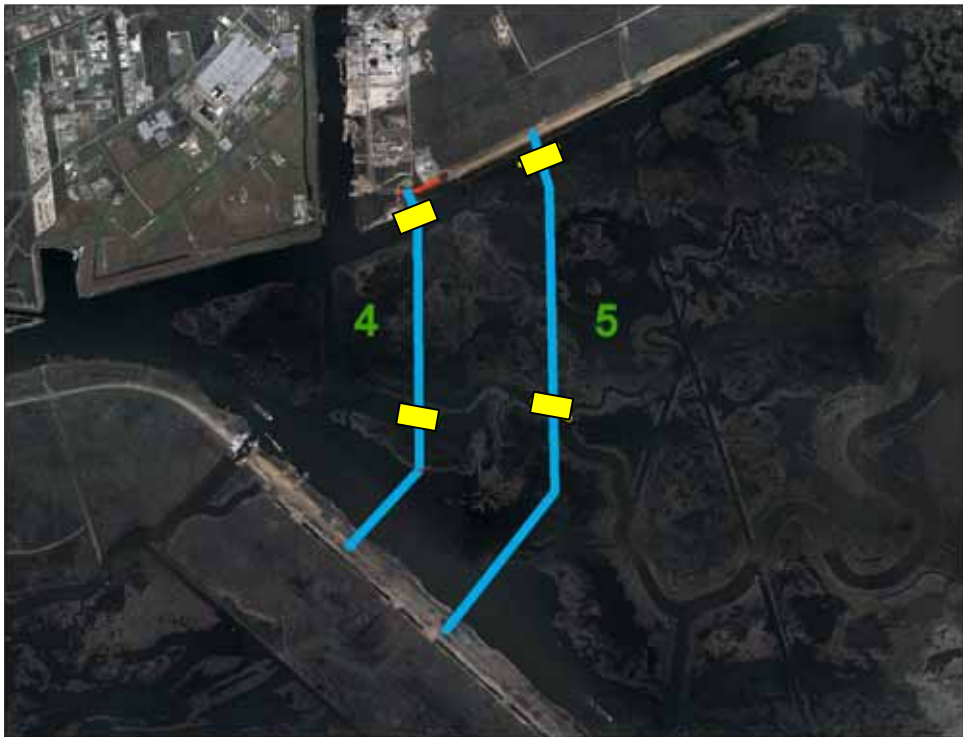
Alignment 3



Alignment 4 & 5



- Levees & Floodwalls to be Raised
- Alternative Alignments
- Gate

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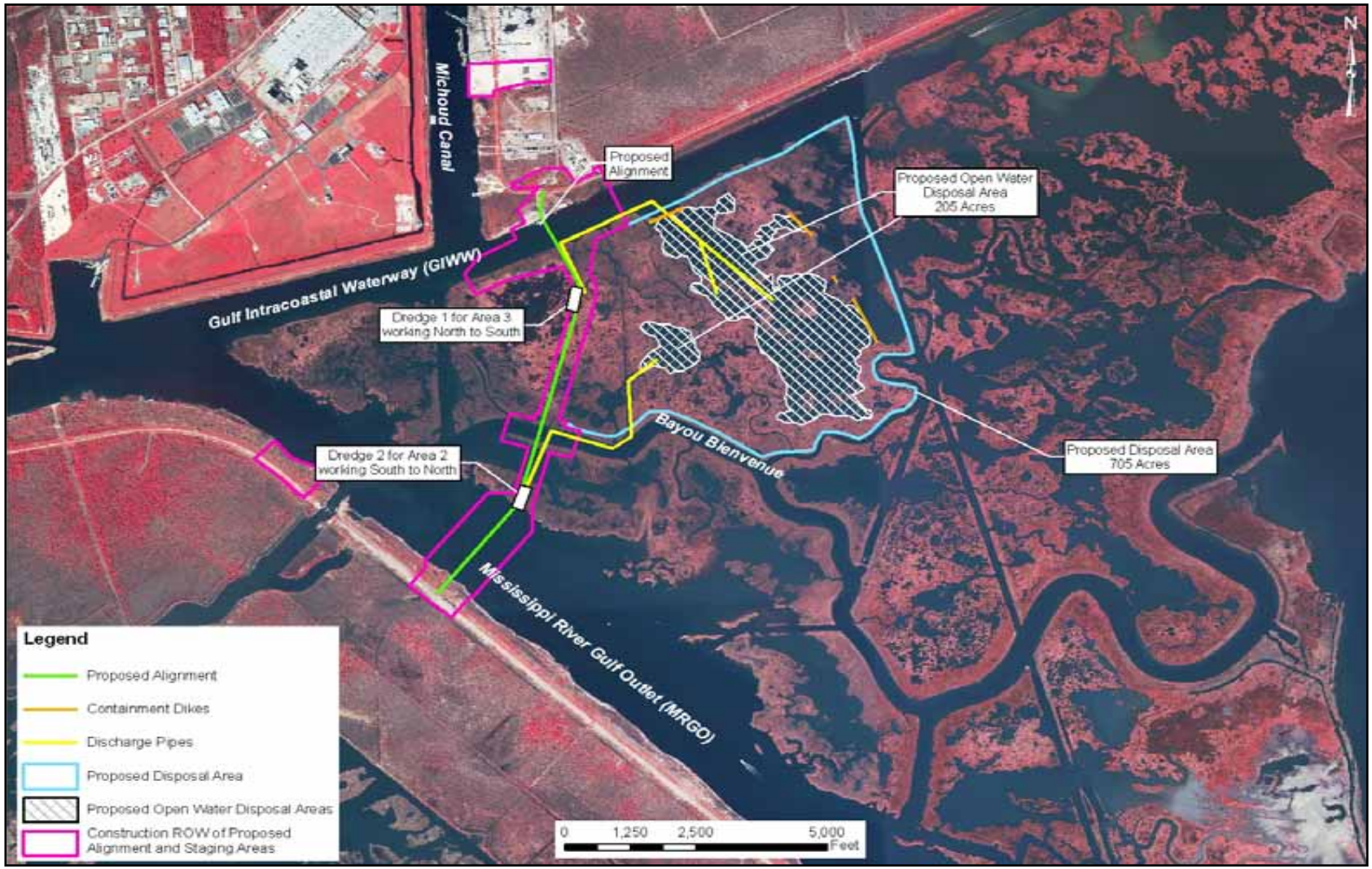
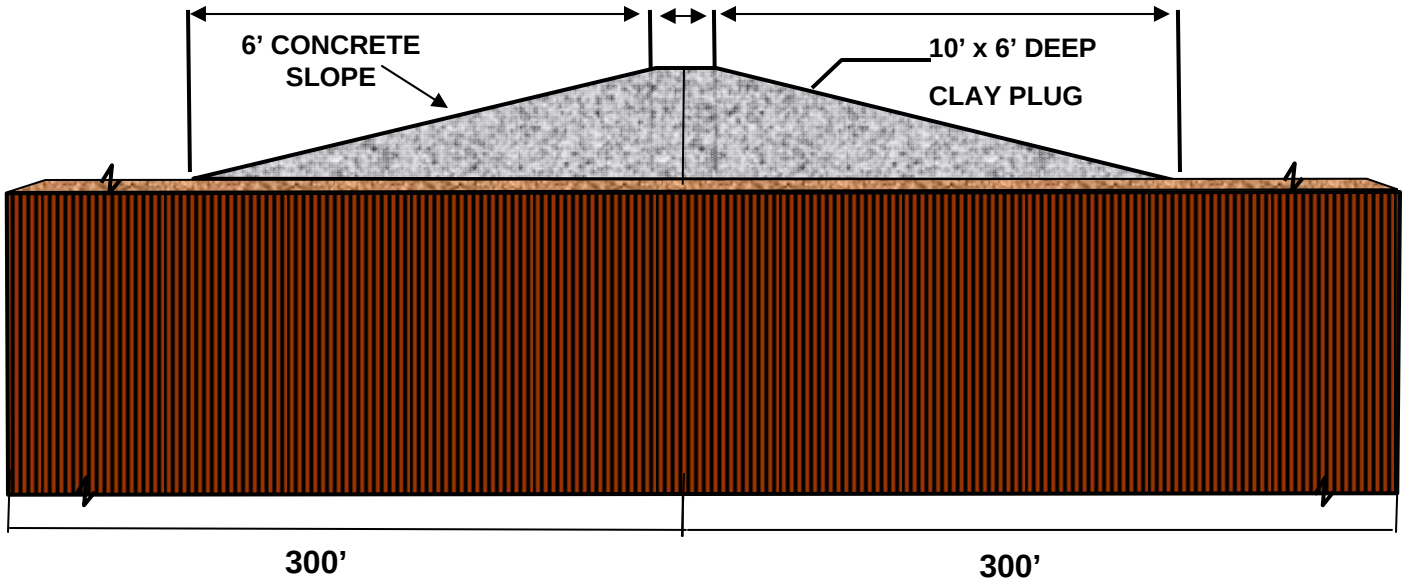
Proposed Alignment with Beneficial Use Disposal Areas and Dredge Pipes



IER #11 Tier 2 Borgne Alternatives Geotextile levee



NOT TO SCALE

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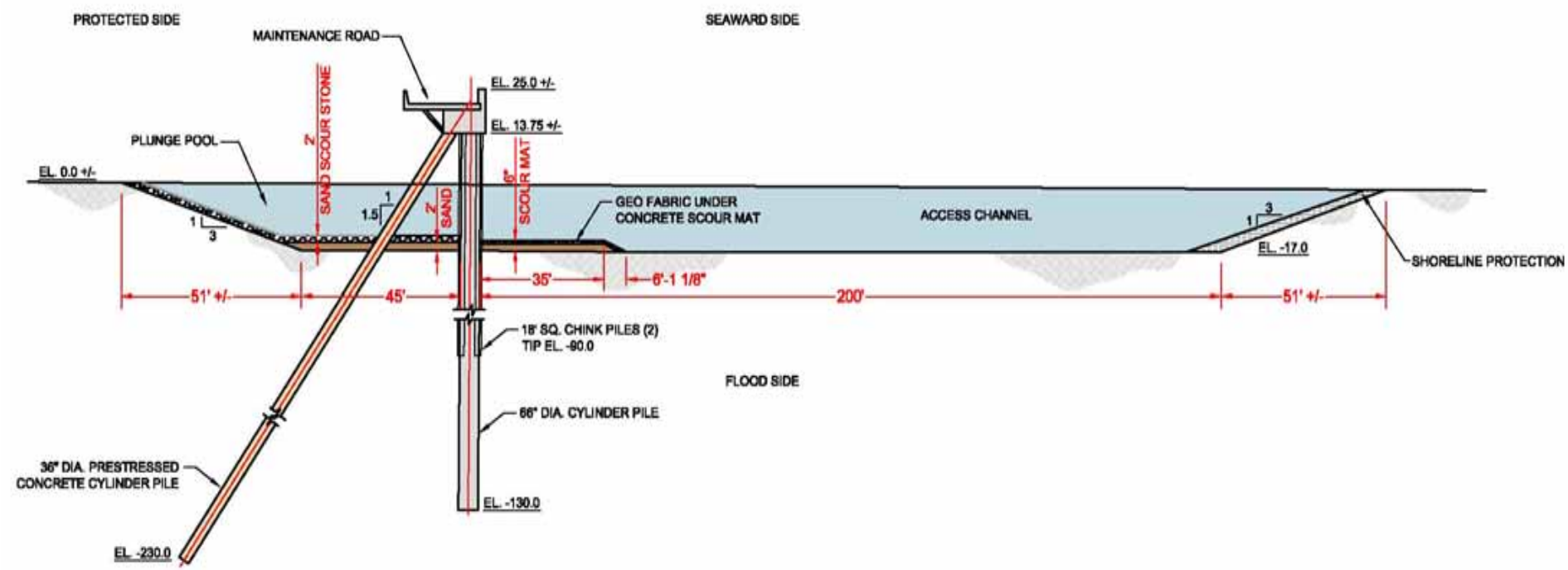
Floodwall



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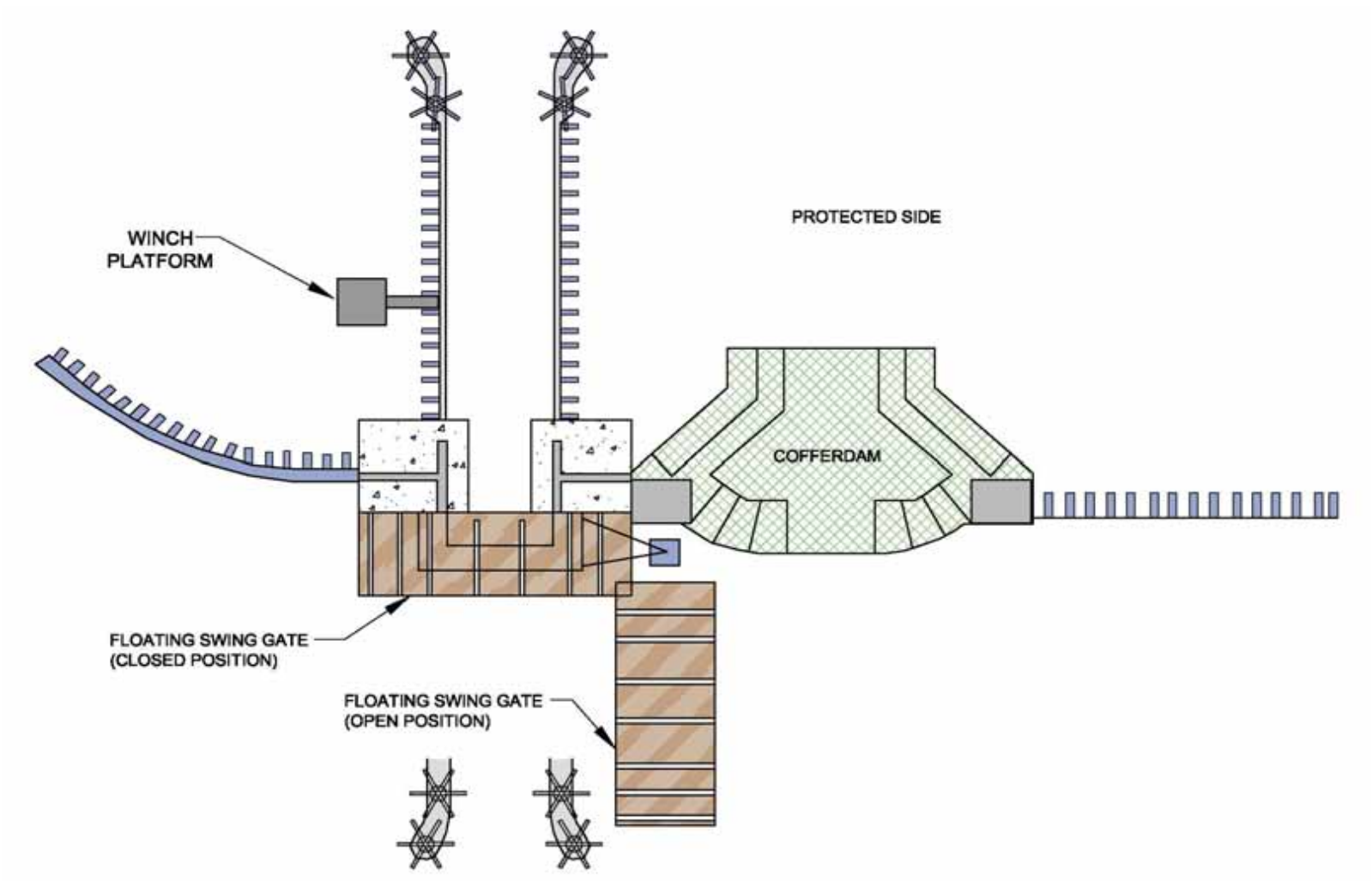
Advanced Measure Cofferdam & Swing Gate Design on the GIWW



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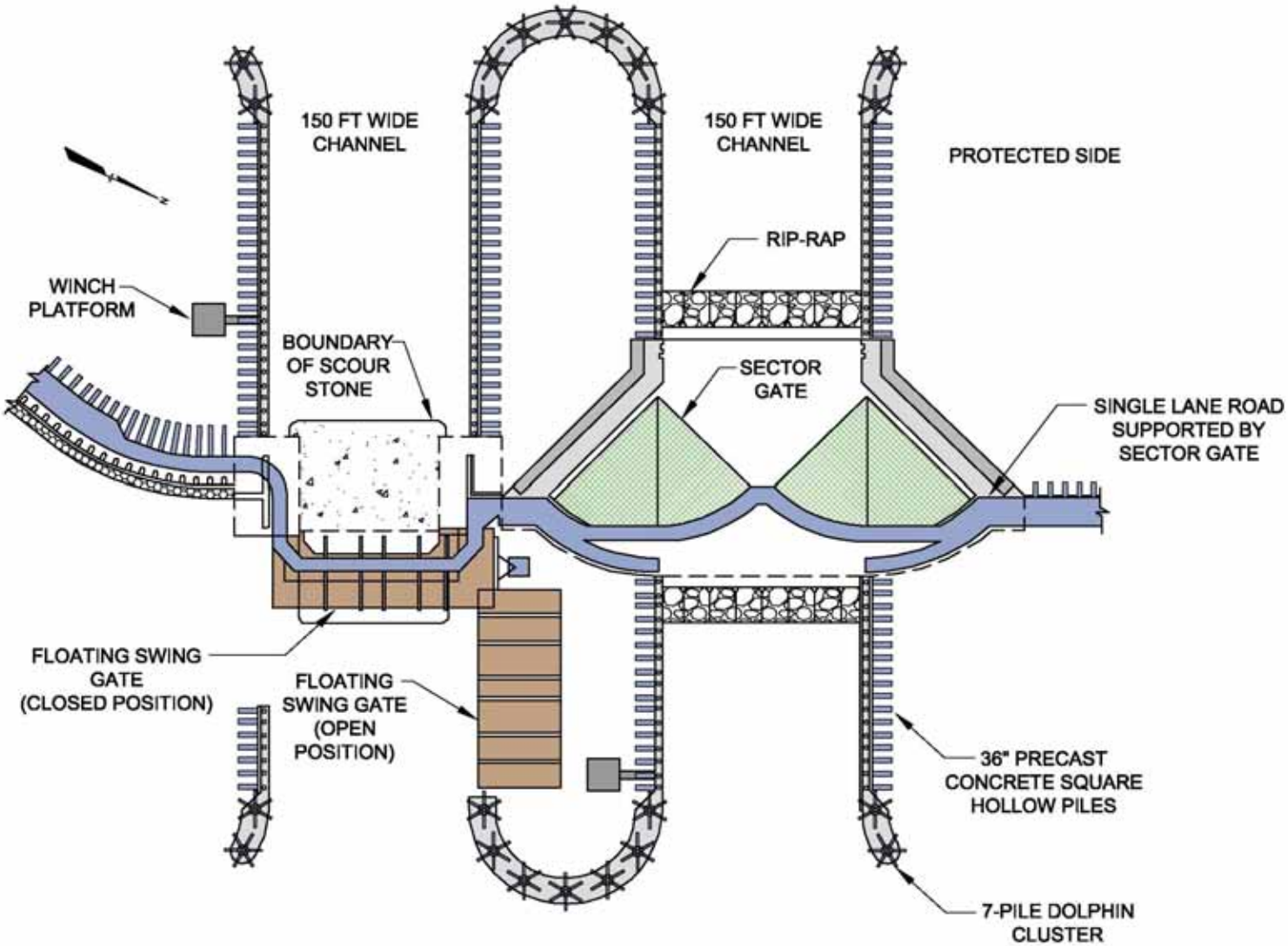
GIWW Sector and Swing Gate



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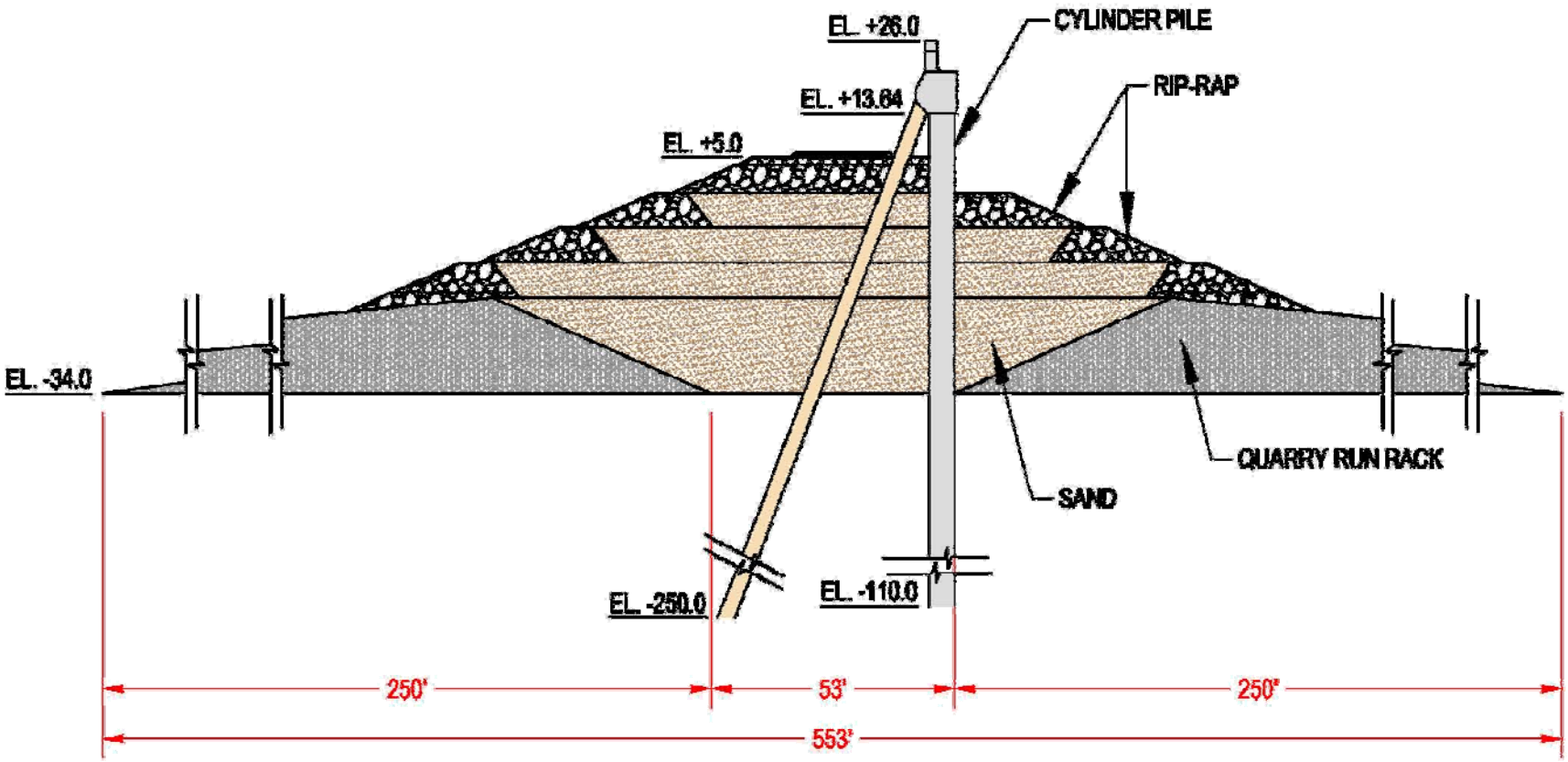
MRGO Closure



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Vertical Lift Gate

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IER #4

New Orleans Lakefront Levees & Floodwalls

Purpose and Need: Provide for the 100-year Level of the Hurricane and Storm Damage Risk Reduction System

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New Orleans District

Status

Where We Are:

- March/April '07: NEPA Process began with Public Scoping Meetings
- **Nov '07 through July '08**: Developing alternatives and conducting impacts analysis and soliciting public input

Where We Are Going:

- August '08: Release Draft IER #4
- Sept '08: End of 30-day Public Review, Make Final Decision – District Commander signs final IER document

New Orleans Lakefront Levee - Current Construction: Phase 1 of 100-year level of protection

LPV 102
Topaz Street to Orleans Avenue:

Contract Awarded 3 Oct '07

99% Complete

LPV 103
Orleans Avenue Canal to London Avenue Canal:

Contract Awarded 3 Dec '07

72% Complete

LPV 104
London Avenue Canal to IHNC:

Contract Awarded 13 July '07

99% Complete

New Orleans Lakefront Levee
Phase 1A & 2 of 100-year Level of Protection

- Modifications or replacement of floodwalls / gates
- Additional embankment work to meet new design criteria
- Raise Road Ramps
- Armoring of transitions & utility crossings

New Orleans Lakefront Levee
Phase 1A & 2 of 100-year Level of Protection

LPV 101.02	LPV 103.01A	LPV 103.01A2	LPV 104.01	LPV 104.02
17th Street Canal to Topaz Street:	Orleans Canal to London	Topaz to London Canal	London Canal to IHNC:	London Canal to IHNC:
Contract Award: Q3 '09	Contract Award: Q4 '08	Contract Award: Q4 '08	Contract Award: Q4 '08	Contract Award: Q4 '09
Duration: 25 months	Duration: 12 months	Duration: 14 months	Duration: 14 months	Duration: 18 months

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IER #4 LPV 101.02
17th St. Canal to Topaz St.

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IER #4 LPV 101.02
17th St. Canal to Topaz St.

- **West End Levee**
  - Construct floodwall above existing levee
  - Raise levee
- **Existing Floodwall between gates L-1A and L-5**
  - Retrofit / Replace
  - Raise Lake Marina Ave
  - Realignment of floodwall to marina seawall
- **Gate L-1A**
  - Remove and replace existing gate
  - Remove gate and replace with ramp

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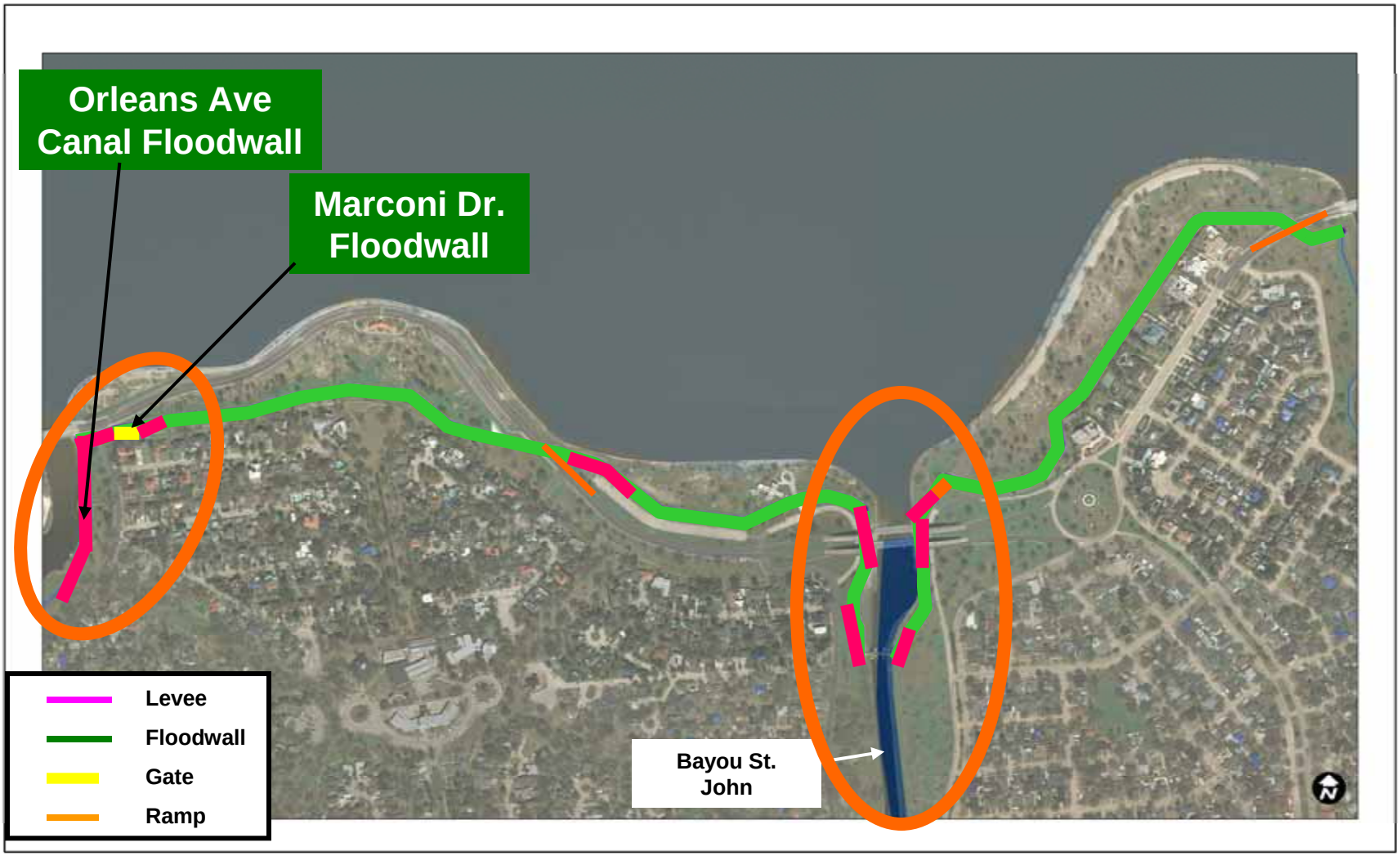
IER #4 LPV 101.02
17th St. Canal to Topaz St.

- **Gate L-4 and Floodwalls along Pontchartrain Blvd**
  - Realign HPS and construct new floodwall and gate L-4A adjacent to Lake Marina Ave.
  - Remove floodwall and gate L-4 and replace on existing alignment
- **East End Levee between Topaz Street and Gate L5**
  - Construct floodwall above existing levee
  - Raise levee with and without supplemental retaining walls

IER #4 LPV 103.01A1
Orleans Canal to London Ave



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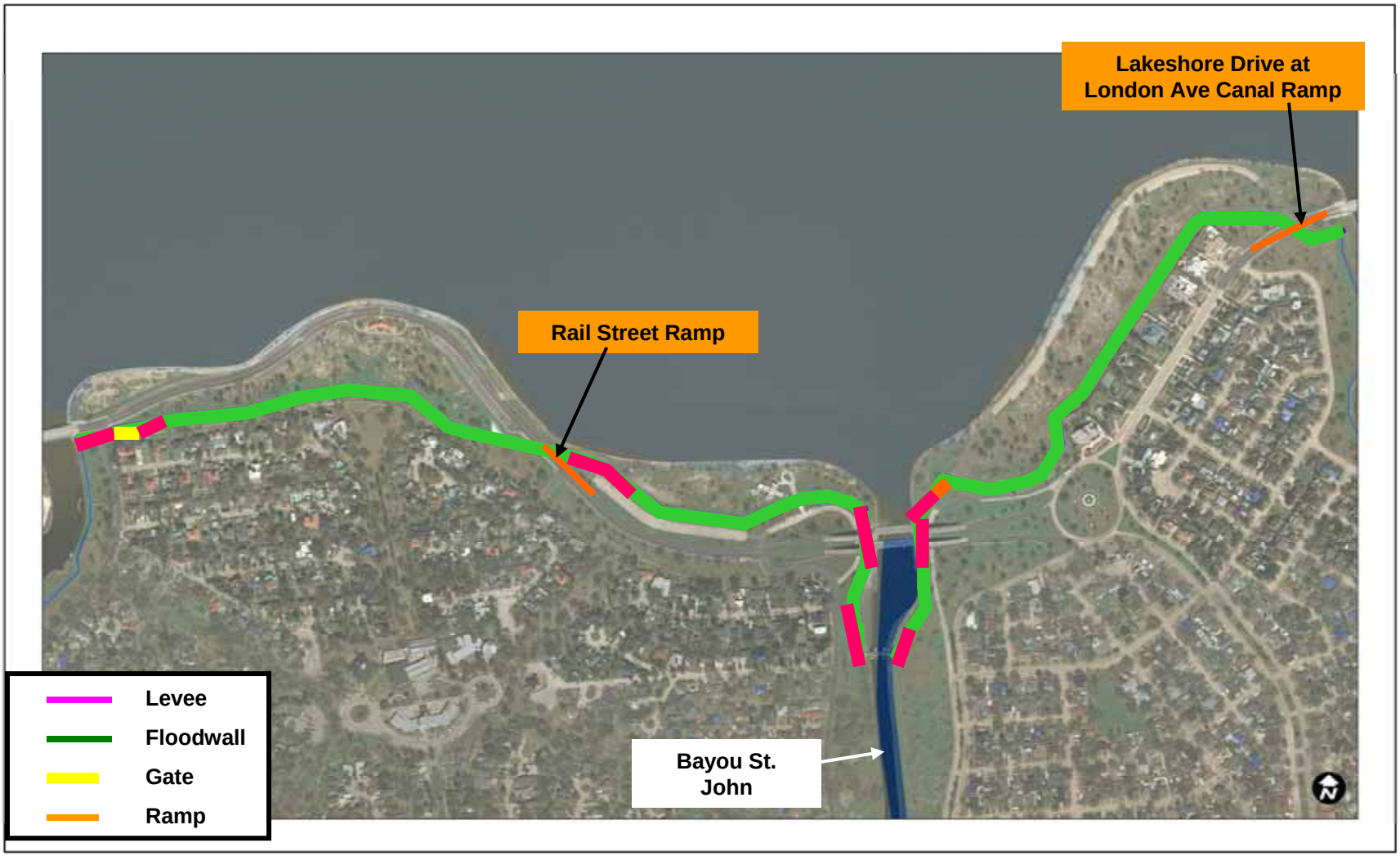
IER #4 LPV 103.01A1
Orleans Canal to London Ave

- Marconi Drive Floodwall
  - Retrofit/Replace
  - Remove Flood Gate; Construct New Levee
- Orleans Ave Canal Floodwall
- Bayou St. John Floodwall & Sector Gate Structure
  - Raise existing sector gate structure; modify or replace existing adjacent T-walls and levees
  - Construct new embankment closure structure with sluice gates
  - Construct new sector gate structure

IER #4 LPV 103.01A2
Orleans Canal to London Ave



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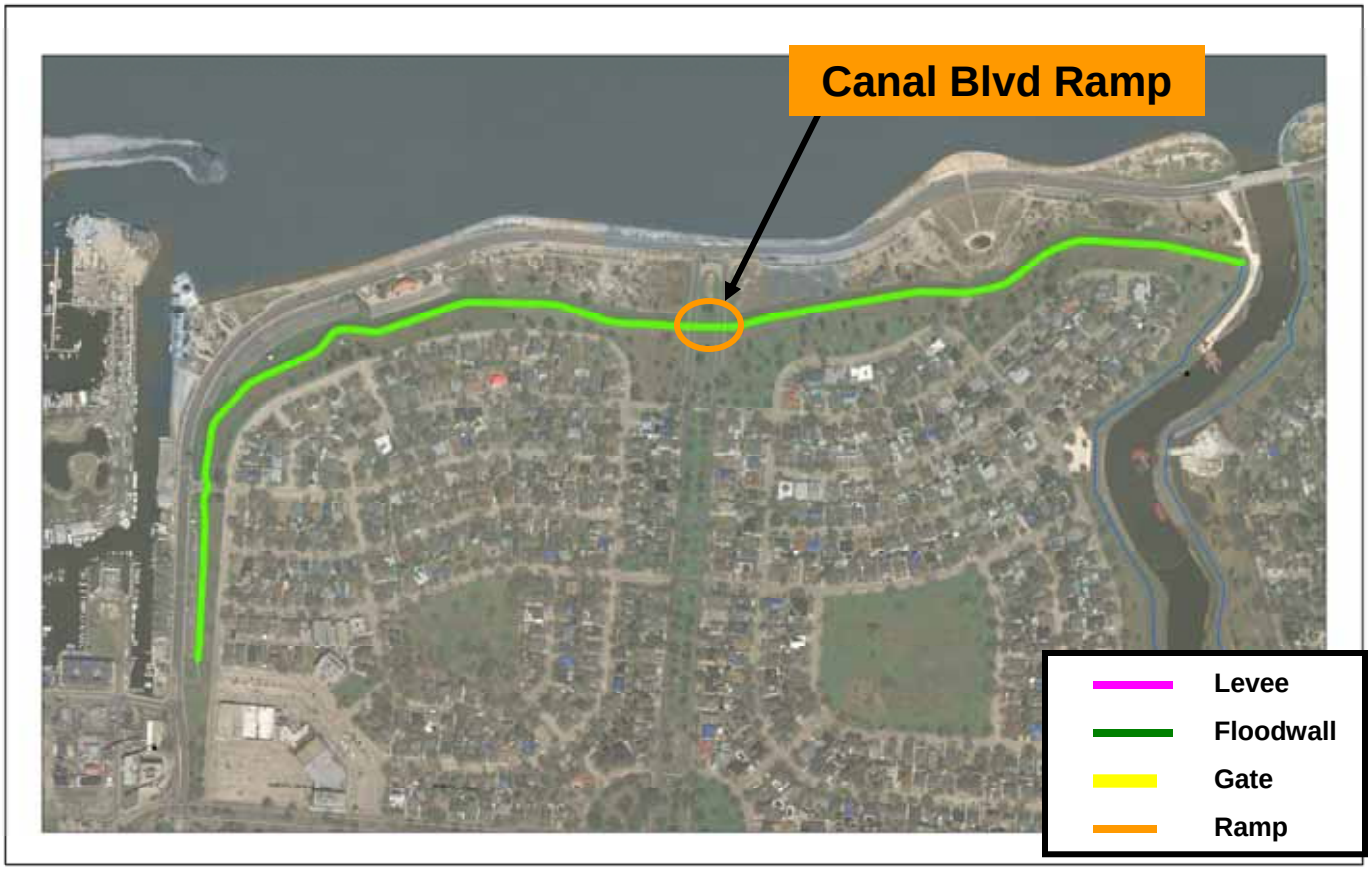
IER #4 LPV 103.01A2
Canal Blvd Ramp



- **Canal Blvd Ramp**
  - Raise Ramp
  - Construct New Flood Gate

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IER #4 LPV 103.01A2
Orleans Canal to London Ave

- **Canal Blvd Ramp**
  - Raise Ramp
  - Construct new floodgate
- **Rail Street Ramp**
  - Raise Ramp
  - Construct new floodgate
- **Lakeshore Drive at London Ave Canal Ramp**
  - Raise Ramp
  - Construct new floodgate

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Existing Alignment

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Future Alignment

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Existing Alignment

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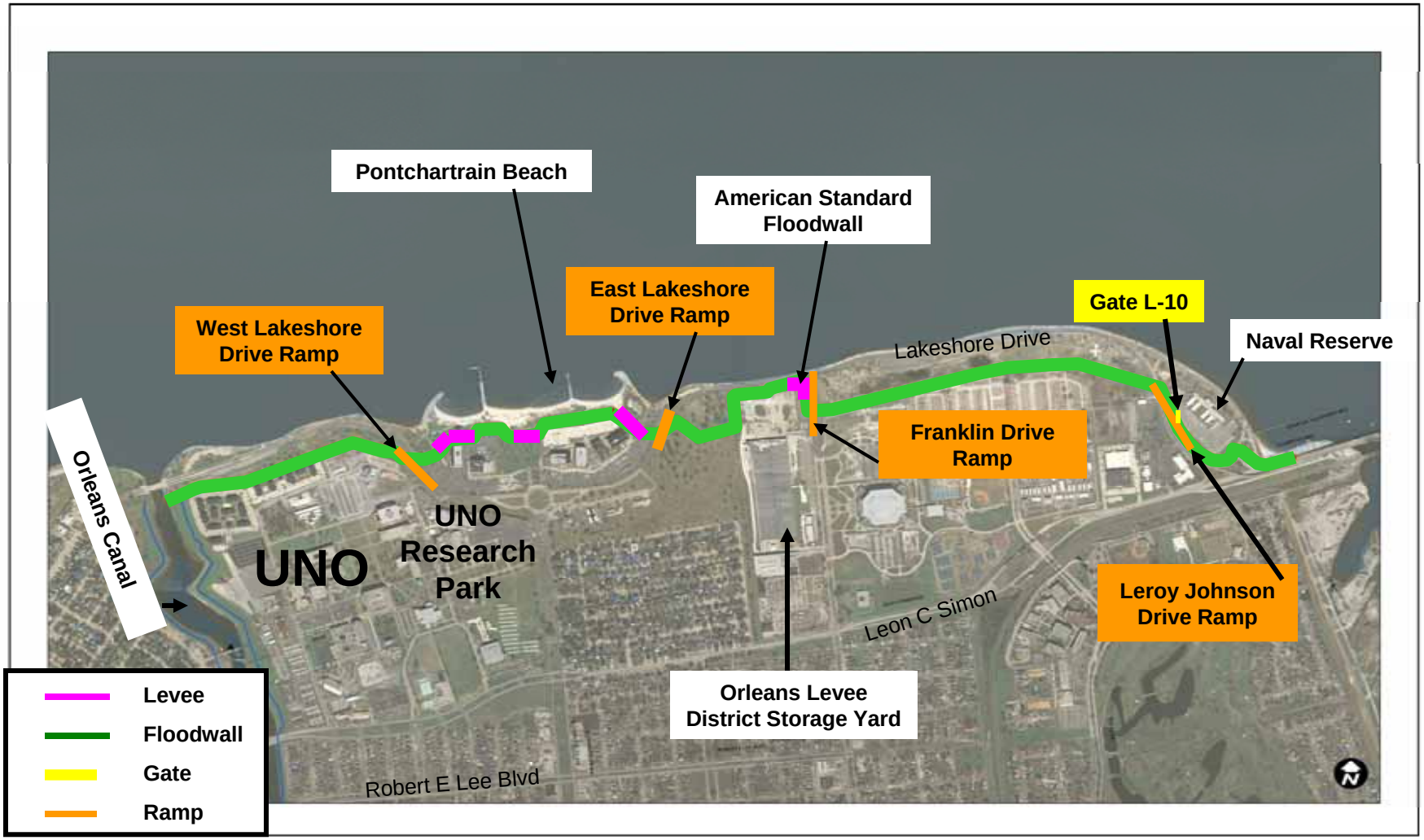
Future Alignment

IER #4 LPV 104.01
London Ave Canal to IHNC



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IER #4 LPV 104.01
London Ave Canal to IHNC

- **Lakeshore Drive ramps east / west of UNO research facility**
  - Raise Ramp
  - Construct Gated closure

- **Pontchartrain Beach**
  - Convert I-wall to L-wall on current alignment
  - Remove gates and replace with new floodwall
  - Remove floodwall and gates and replace with levee section

- **American Standard Floodwall**
  - Convert I-wall to L-wall; leave T-wall as is
  - Construct new floodwall
  - Remove floodwall and replace with levee section

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IER #4 LPV 104.01
London Ave Canal to IHNC

- **Leroy Johnson Drive Ramp / Franklin Ave Ramp**
  - Raise Ramp
  - Construct gated closure

- **Gate L-10**
  - Construct new gate
  - Remove gate and replace with levee section

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IER #4 LPV 104.02
London Ave Canal to IHNC

- **UNO Access Ramp**

- **Seabrook Floodwall**

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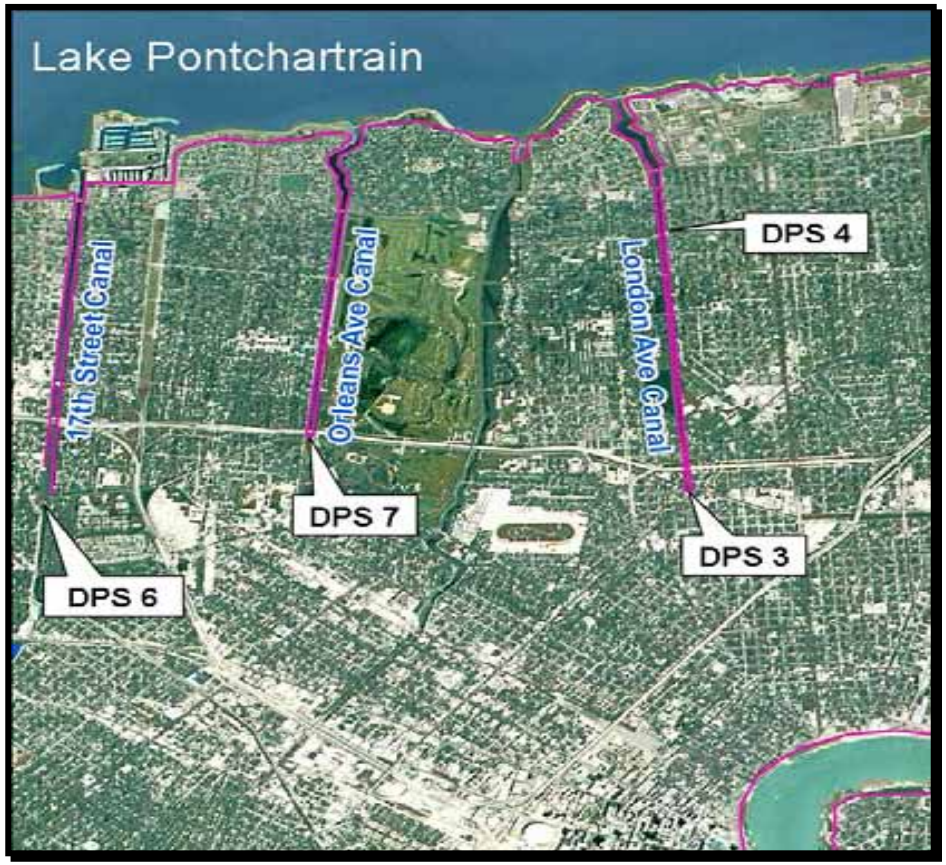
IER #5
Permanent Protection System for the Outfall Canals



Purpose and Need

Protect City of New Orleans and Jefferson Parish from storm surge-induced flooding through the 17th St, Orleans Ave, and London Ave Canals, while not impeding the ability of the area's internal drainage system to remove storm water.

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New Orleans District

Status

Where We Are:

- March/April 07: NEPA Process began with Public Scoping Meetings
- April 07 through Nov 07: Alternatives developed
- **Nov 07 through present: Conduct Impacts Analysis, continue Solicitation of Public Input as part of Draft IER #5**

Where We Are Going:

- Review and evaluate all input and finalize Draft IER
- **TBD: Release Draft IER #5 (including proposed action alternative and site locations) for 30-day public comment period**
- Corps to hold a public meeting during 30-day public comment period; date To Be Determined
- **TBD: Make Final Decision - District Commander signs the IER document**.
- Initiate procurement process to bring on D/B Contractor

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6th Supplemental

- The Supplemental Appropriations Act of 2008 has just been enacted into law on 30 June 08.

- We are in the process of reviewing the legislation and any implications it may have on the current project.

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How we collected input

Public Input

- Frequent public meetings
- Numerous meetings with interested parties
- Numerous emails, phone calls, letters, petition, resolutions
- Partnering sessions with potential non-federal sponsors
- Alternatives selection workshop

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New Orleans District

How we collected input

Technical Input

- Senior Review Panel
- Monthly interagency team meetings
- Analysis of Impacts to important resources (human and natural)
- Engineering support team

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Public Comments

IER 5 OUTFALL CANAL PERMANENT PUMP STATIONS
WRITTEN PUBLIC COMMENTS AND CONCERNS

As of 7/1/08

	17th St.	Orleans Ave.	London Ave.	General	Total
Mouth of the Canal	**3**	**48**	**13**	**67**	**131**
South of Robert E. Lee		**80**	**1**		**81**
Pump to the River	**27**				**27**
Petition signatures for Pump to the River	**758**				**758**
Specific Sites					
Save Coconut Beach	**3**				**3**
Place Pumps At UNO			**5**		**5**
Save 2 Tony's Petition	**1270**				**1270**
Totals	**1276**	**128**	**19**	**67**	**2275**

General Comments for Mouth of Canal contain the names of all 3 canals

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Snapshot of Public Comments

- Avoid or minimize destruction of wetlands and non-wet bottomland hardwoods
- Avoid taking of public lands and green space
- Avoid disruption of neighborhoods
- For and against locating pump station along Bellaire Dr.
- For and against use of UNO properties
- Opposition to taking of Il Tony's Restaurant

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Snapshot of Public Comments

- Avoid disruption of re-development of West End
- Disruption of Coconut Beach hampers recreational opportunities
- Pump stations should blend into the neighborhood
- Protection first, aesthetics second
- Hoey's Basin Pump to the River should be implemented
- Pump station at or in the lake is safest location
- Pump station at lake detracts from neighborhood quality of life and property values

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Site Alternative Evaluation Criteria

- Reliability/Risk
- Constructability
- Real Estate
- Costs – Construction & RE
- Natural Environmental Impacts
- Land use

"Each site alternative meets the 100-year protection level standards – equal in level of protection provided"

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Site Alternative Evaluation Criteria

Reliability and Risk:

- **Reliability:**
  The ability of a system or component to perform its required functions under stated conditions for a specified period of time

- **Risk:**
  The measure of harm or loss associated with an action. For this particular situation, risk is the likelihood of loss of life or property as a result of flooding caused by hurricane events.

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Site Alternative Evaluation Criteria

- **Constructability:**

  Relative difficulty to construct considering engineering and/or construction complexity.

  Examples include:
  - Safety risk during construction
  - Space restrictions
  - Geotechnical issues
  - Availability of utilities
  - Traffic impacts

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Site Alternative Evaluation Criteria

- **Real Estate**

  Time frame associated with acquiring property

  - Public Land
  - Existing Rights of Way
  - Privately Owned Parcels

- **Costs – Construction & RE**

  Total cost for constructing the pump station and flood protection system (100 yr) and associated cost required to acquire RE

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Site Alternative Evaluation Criteria

- **Natural Environmental Impacts:**
  - Waters of the U.S.
  - Hydrology
  - Water Quality
  - Wildlife
  - T&E Species
  - Cultural Resources

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Site Alternative Evaluation Criteria

- Existing Land Use:

  Consideration of impacts to land use, i.e. parks, green space, residential, commercial, educational, recreational areas, and historical areas.

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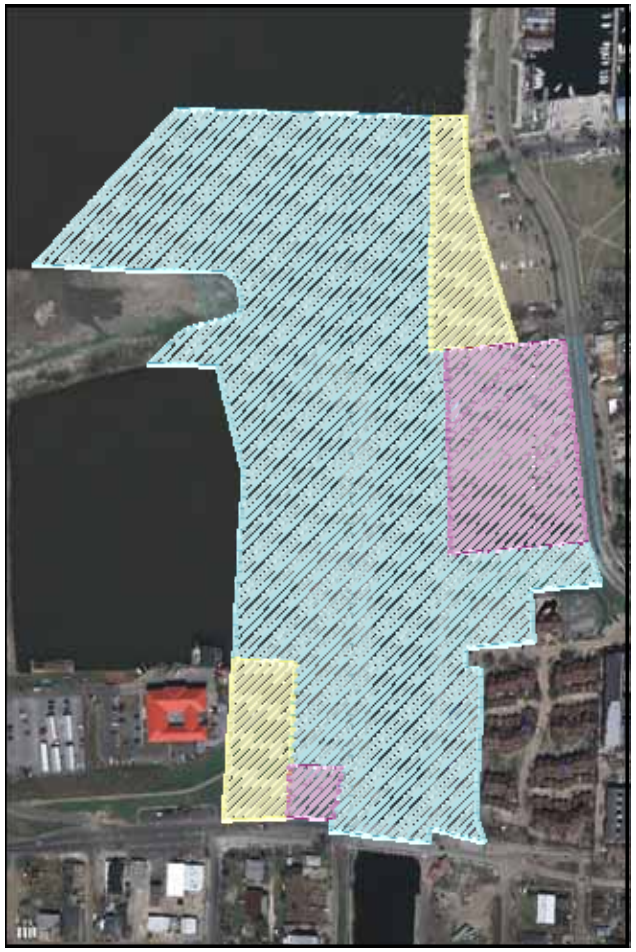
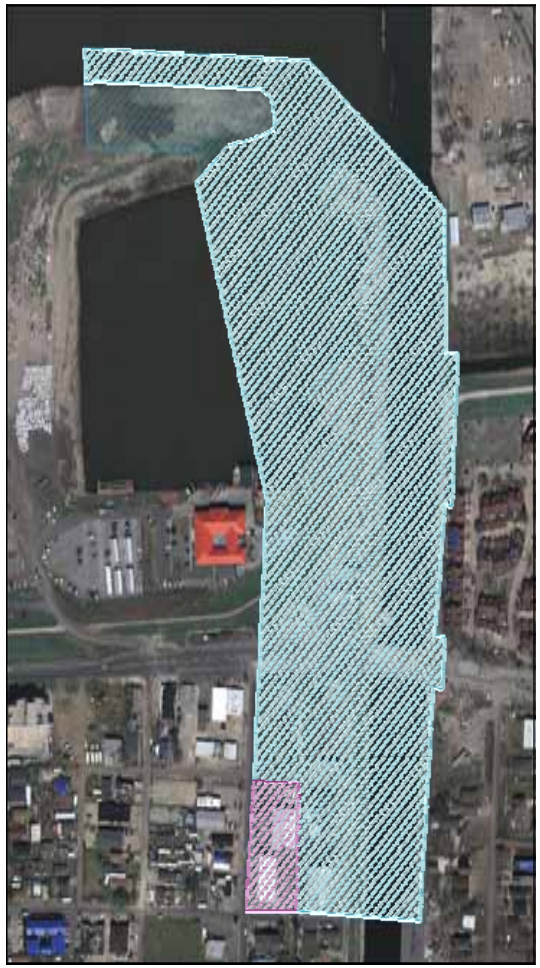
17th Street Site Locations

(Locations shown are not to the same scale)

Location A



Location B



Location C

Permanent Temporary Minimize Impacts

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Orleans Ave. Site Locations
(Not to Scale)

Permanent

Temporary

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Orleans Ave. Site Locations

(Locations shown are not to the same scale)

Location C

Location D

Permanent

Temporary

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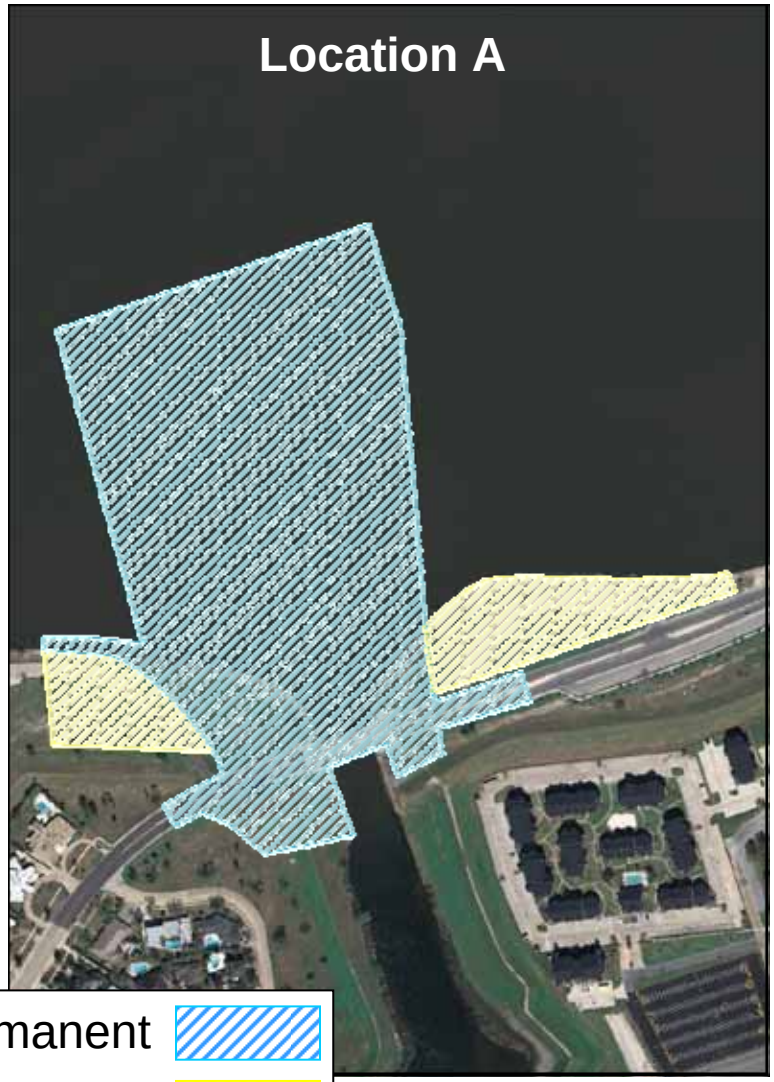
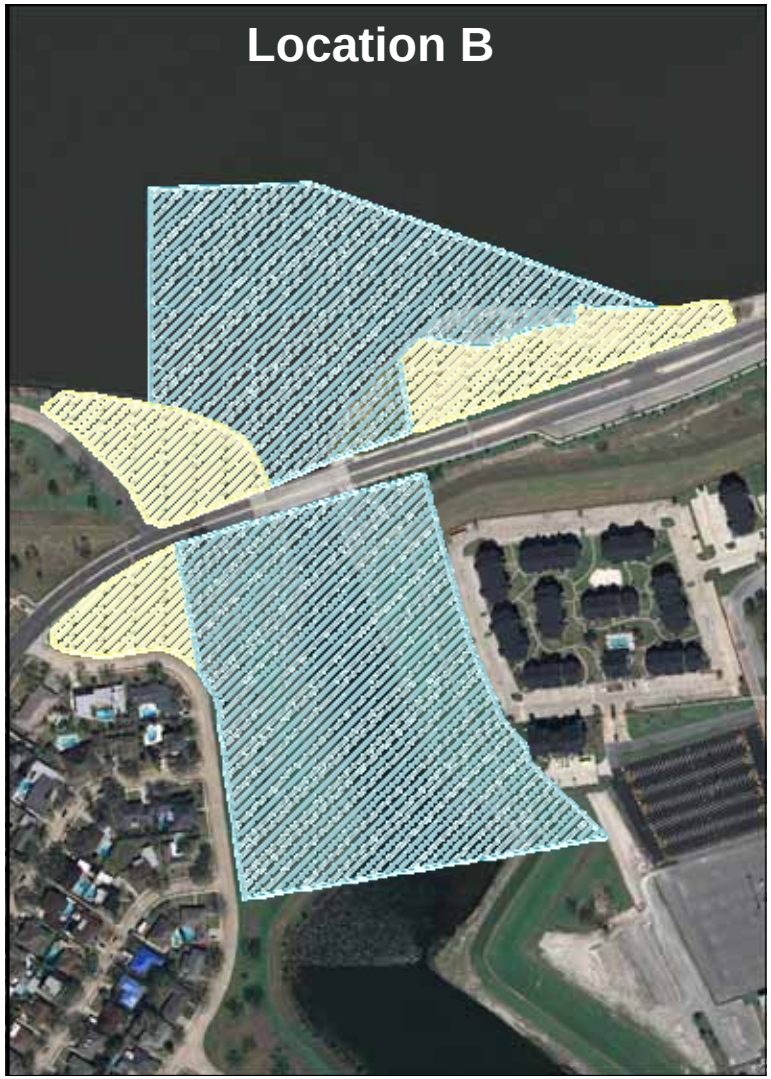
London Ave. Site Locations

(Locations shown are not to the same scale)





Permanent

Temporary

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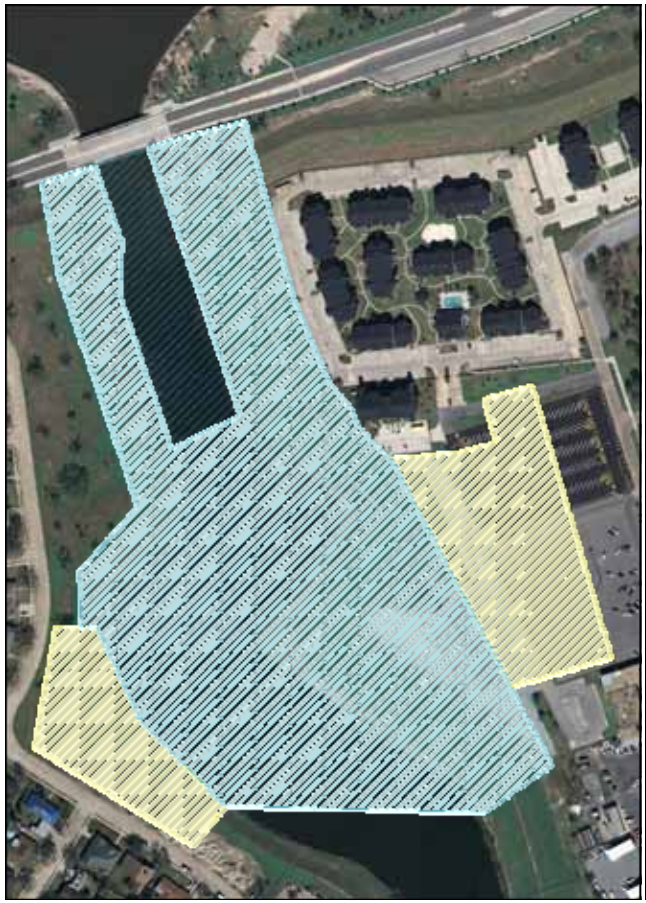
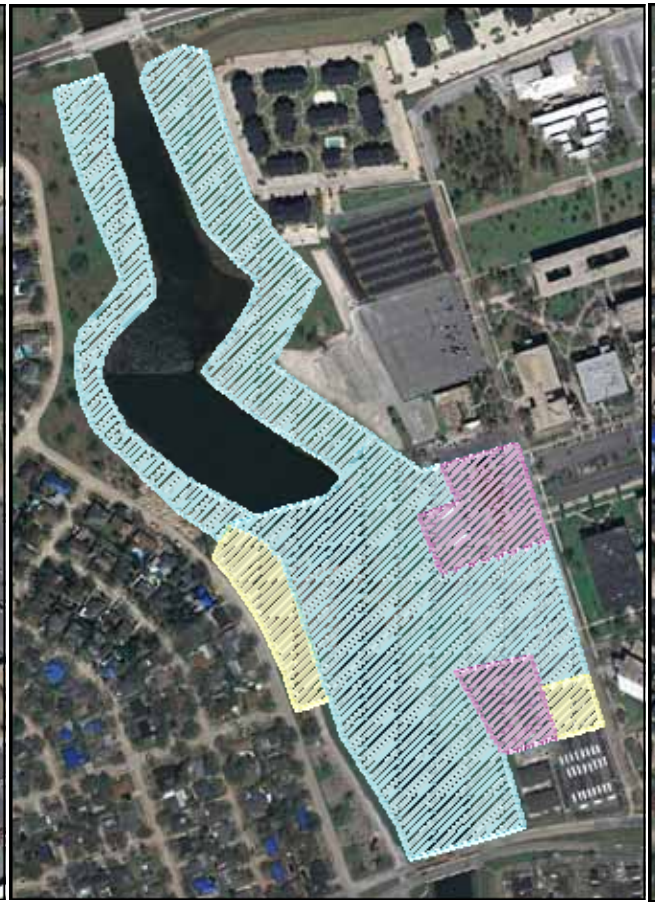
London Ave. Site Locations

(Locations shown are not to the same scale)

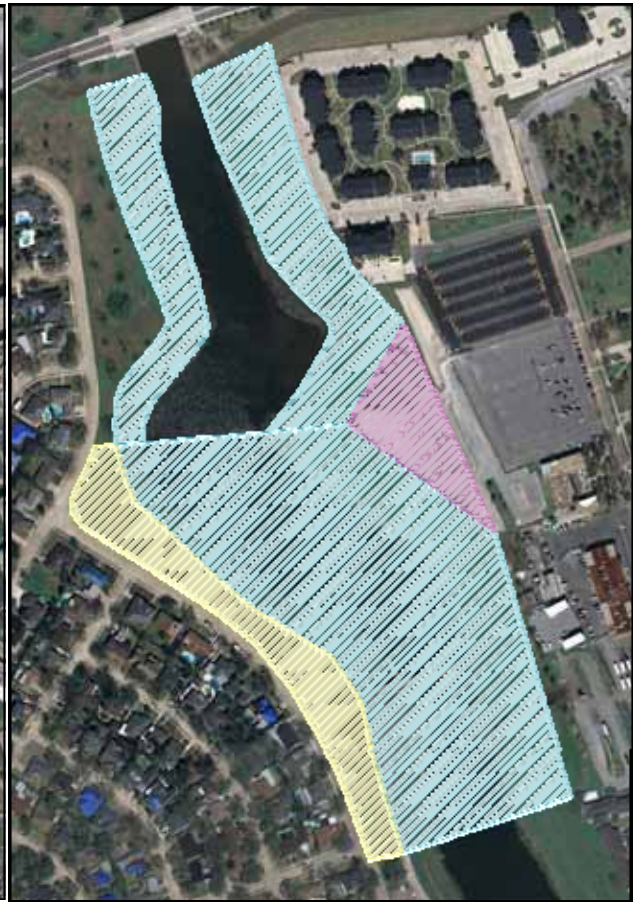
Location C



Location D



Location E



Permanent Temporary Minimize Impacts

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New Orleans District

Opportunities for Public Input

- Monthly Public Meetings throughout New Orleans Metro Area
  - Make sure to sign in tonight to get on our meeting notification mailing list
- Comments can be submitted at any time at **www.nolaenvironmental.gov**
- Individual Environmental Reports (IER) 30-day Public Review

Questions and comments regarding Hurricane Protection Projects should be addressed to:

Gib Owen
PM-RS
P.O. Box 60267
New Orleans, LA 70160-0267
Telephone: 504-862-1337
E-mail: mvnenvironmental@usace.army.mil