

## **APPENDIX J: OWNER OBTAINED PERMITS**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

FEB 20 2013

RECEIVED  
2-29-13

Operations Division  
Eastern Evaluation Section

SUBJECT: MVN 2009-1353-EFF

Louisiana Coastal Protection and Restoration Authority  
Attn: Garrett Graves  
Post Office Box 44027  
Baton Rouge, Louisiana

Dear Mr. Graves:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Eastern Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Michael V. Farabee  
Chief, Eastern Evaluation Section

Enclosure



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

Operations Division  
Eastern Evaluation Section

FEB 20 2013

RECEIVED  
226.13

SUBJECT: MVN 2009-1353-EFF

Louisiana Department of Transportation  
and Development  
Attn: Ms. Sherrie Labas  
Post Office Box 94245  
Baton Rouge, Louisiana 70804-9245

Dear Ms. Labas:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Eastern Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Michael V. Farabee  
Chief, Eastern Evaluation Section

Enclosure

# DEPARTMENT OF THE ARMY PERMIT

Permittee: Louisiana Coastal Protection and Restoration Authority & Louisiana Department of Transportation and Development

Permit No. 2009-1353-EFF

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** Dredge within an area of the Mississippi River in order to construct a sediment pipeline corridor and marsh restoration/nourishment area; all as part of the Mississippi River Long Distance Sediment Pipeline (LDSP) project, in accordance with the drawings attached in forty-one sheets dated December 12, 2012.

**Project Location:** In Plaquemines Parish and Jefferson Parish, within the Mississippi River at approximately miles 64 and 65, crossing and south of Highway 23, near Naomi, Louisiana.

## Permit Conditions:

### General Conditions:

1. The time limit for completing the work authorized ends on **DEC 31, 2014**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.



4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions: See Attached.**

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
  - (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
  - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
  - ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
  - a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
  - b. This permit does not grant any property rights or exclusive privileges.
  - c. This permit does not authorize any injury to the property or rights of others.
  - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
  - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
  - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

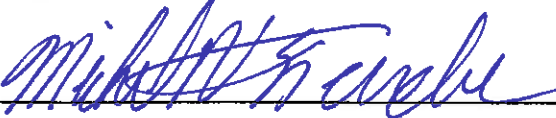
6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X   
(PERMITTEE)

X 12-20-2012  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
Michael V Farabee, Chief Eastern Evaluation Section

February 19, 2013  
(DATE)

for Edward R. Fleming, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEE)

\_\_\_\_\_  
(DATE)

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. ~~Reliance on Applicant's Data.~~ The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

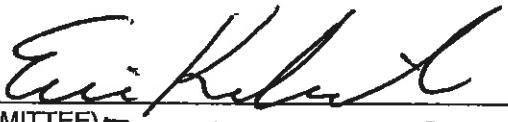
b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.


Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X  X 2/7/2013  
(PERMITTEE) ERIC KALISODA, DEPUTY SECRETARY (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

 February 19, 2013  
Michael V Farabee, Chief Eastern Evaluation Section (DATE)

for Edward R. Fleming, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFeree) (DATE)

SPECIAL CONDITIONS: MVN-2009-1353-EFF

7. This Department of the Army permit authorization expires as of December 31, 2014.
8. The borrow site (Alliance Anchorage Borrow Area) identified in the application, is the saltwater barrier sill's primary Borrow Area #1, (Mississippi River Mile 63.8 to Mile 65 AHP). The issuance of this permit and the permittee's actions hereunder, shall in no way adversely affect the cost, time, and schedule of the planning and/or construction of the saltwater barrier sill by the US Army Corps of Engineers (USACE).
9. The permittee must ensure that 500,000 cubic yards (cy) are always available above elevation -70 NGVD, within the Alliance Anchorage Borrow area. A reserve area for this material has been designated and the reserve quantity must be located within the boundaries shown on the enclosed (Mississippi River Hydrographic Survey Salt Water Sill Borrow Area I- map), as **Attachment I**.
10. While this project is ongoing, the permittee must be aware that the USACE may issue a contract to build the sill. If USACE issues a sill solicitation, the permittee shall allow its contractor to bid on the sill contract. If the permittee's contractor is awarded the sill contract, then the permittee shall release the contractor for the time required to build the sill. If the permittee's contractor chooses not to bid on the sill contract or another contractor is awarded the sill contract, the permittee's contractor shall suspend operations and move off site so as not to interfere with or delay the USACE notice to proceed or the sill contractor's work.
11. Until the Alliance Anchorage Borrow Area is naturally restored from the effects of this permit, any additional costs associated with USACE's construction of the sill shall be borne by the permittee. These additional costs could occur after this permit has expired. These additional costs will be calculated by the USACE. The permittee will provide funds prior to USACE opening bids for the saltwater barrier sill contract.
12. Dredging in the Alliance Anchorage Borrow site is limited to a 1V on 5H slope with a control point 400 feet riverward of the levee C/L and El. +5 feet. The permittee shall submit for approval a detailed dredging plan for the Alliance Anchorage Borrow Area. The plan shall be submitted at least 30 days prior to the scheduled commencement of work in the site and shall include hydrographic surveys of the borrow area with plans for dredging; thereby identifying the material to be removed and the 500,000 cy reserved area (material to be reserved above elevation -70 NGVD). USACE must approve the dredging plan prior to the commencement of permittee's work. The surveys and plans shall be updated every 30 days until project completion. All updated plans must also be approved before the permittee can implement the updated plan. The surveys and dredging plan shall be submitted in electronic format and hardcopy to the USACE Mississippi River Operations Manager. For questions or forwarding information, please contact Mrs. Heather Jennings at (504) 862-1253 or [heather.l.jennings@usace.army.mil](mailto:heather.l.jennings@usace.army.mil).

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13. To address navigation safety during construction of the project, the permittee will initiate a daily conference call; ~~to include representatives of the dredging contractor, the US Coast Guard,~~ pertinent members of the USACE, and other navigation stakeholders. During construction, the frequency of the conference call can be reduced upon agreement from the US Coast Guard and the USACE.
14. Construction over the Mississippi River levee and back levee and within 10 feet of the levee toes as well as open excavations is limited to river stages below +11 feet on the Carrollton gage.
15. The permittee is aware that USACE project (NOV-NFL-5) is proposed for the back levee, at the vicinity of the project site.
16. Dredging in the Alliance South Anchorage Borrow Site is limited to the limits provided in the URS Stability Analysis report dated September 2012.
17. Dredging in the Wills Point Borrow Site is limited to the limits provided in the URS Stability Analysis report dated September 2012.
18. Any damage to the revetment occurring during or as a result of this work will be repaired at the permittee's expense.
19. Construction is not allowed when a hurricane is within 5 days of affecting the Louisiana coast. During such times, the site must be secured, flood protection maintained, and coordination maintained with the Engineering Division of this district.
20. The authorization does not obviate the permittee from obtaining other necessary approvals from pertinent federal, state, and/or local authorities.
21. You shall notify this office in writing within five working days after construction has been completed.
22. The permittee shall assure that contractors, foremen, and/or workers associated with project implementation are equally cognizant of the conditions and restrictions associated with this approval.
23. If archaeological materials and/or human remains are discovered during ground disturbing activities you shall cease and desist all activities in the project area and contact this office and Mr. Dennis Jones of the Louisiana Office of Cultural Development, Division of Archaeology at (225) 342-8160.
24. The permittee is aware that future site visits and inspections may be conducted to the project area by this office and/or other resource agencies, to assess project compliance with this authorization and requirements associated herewith.



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25. The permittee understands and agrees that, if future operations by the United States require ~~the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the~~ opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
26. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
27. You must install and maintain, at your expense, any safety lights, signs and signals prescribed by the US Coast Guard, through regulations or otherwise, on your authorized facilities.
28. If the proposed project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.,) in the waterway, you are advised to notify the US Coast Guard so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the US Coast Guard, Sector New Orleans Command Center, 200 Hendee Street, New Orleans, Louisiana 70114, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 365-2281.
29. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the applicant will contact the Chitimacha Tribe of Louisiana at Post Office Box 661, Charenton, LA 70523, and the Army Corps of Engineers, New Orleans District (CEMVN) Regulatory Branch. CEMVN will initiate the required Federal, State, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.
30. The proposed project occurs within an area impacted by the Deepwater Horizon Oil Spill in the summer of 2010 and activities such as yours could potentially re-suspend oiled sediments that may be located in the area. It is also noted that cleanup crews associated with the US Coast Guard's Deepwater Horizon Response are potentially working in multiple sites located throughout the Louisiana coastal area. In order to coordinate and mitigate potential re-suspension of oiled sediments, adverse impacts to fish and wildlife species, and safety issues related to cleanup operations; the permittee shall contact and coordinate with LT David R. Simonson, US Coast Guard Deepwater Horizon Response (504-252-8748 or [david.r.simonson@uscg.mil](mailto:david.r.simonson@uscg.mil)) , prior to commencement of work.

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31. After one complete growing season following completion of spoil placement within the proposed beneficial use areas, the permittee will manually breach or degrade the earthen containment dikes to marsh elevation, if they do not degrade naturally.

32. If the proposed project requires any additional work not expressly permitted herein, the permittee must obtain an amendment to this authorization prior to commencement of work.

33. In order to address potential impacts to the **Pallid sturgeon**, the cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate shall be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased. During dredging, the pumping rates shall be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom. Should the proposed project directly or indirectly affect the pallid sturgeon or their habitats, further consultation with that office will be necessary.

34. In order to address potential impacts to the **West Indian manatee**; in the event of water-related activities, all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with an injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable and could provide useful data in the Service's ongoing manatee conservation efforts.

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35. During in-water work in areas that potentially support manatees, all on-site personnel are ~~responsible for observing water-related activities for the presence of manatee(s). The following~~ actions will be administered to minimize potential impact to manatee: (1) All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the 50 foot buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatees. (2) If a manatee is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible. (3) If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement. (4) Collisions with, injury to, or sightings of manatees should be immediately reported to the US Fish and Wildlife Service's (USFWS) Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible. Should the proposed project directly or indirectly affect the West Indian manatee or their habitats, further consultation with that office will be necessary.

36. In order to minimize potential project impacts to **bald eagles**, particularly where such impacts may constitute "disturbance," which is prohibited by the BGEPA, the permittee shall abide by the following guidelines:<http://www.fws.gov/southeast/es/baldeagle/NationalBaldEagleManagementGuidelines.pdf>. These Guidelines recommend: (1) maintaining a specified distance between the activity and the nest (buffer area); (2) maintaining natural areas (preferably forested) between the activity and nest trees (landscape buffers); and (3) avoiding certain activities during the breeding season. During any project construction, on-site personnel should be informed of the possible presence of nesting bald eagles in the vicinity of the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest occurs or is discovered within 1,500 feet of the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at: <http://www.fws.gov/southeast/es/baldeagle>. Following completion of the evaluation, that website will provide a determination of whether additional consultation is necessary. Should you need further assistance interpreting the guidelines, avoidance measures, or performing an on-line project evaluation, please contact Mrs. Patti Holland with the USFWS at (337) 291-3121.

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37. To minimize disturbance to **colonial nesting birds**, the following restrictions on activity ~~should be observed:~~ (1) For colonies containing nesting wading birds (i.e., herons, egrets, night herons, ibis, and roseate spoonbills), anhingas, and/or cormorants, all activity occurring within 1,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 1 through February 15, exact dates may vary within this window depending on species present). (2) On-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season. (3) If it is necessary to perform work within 1,000 feet of a known nest site during the nesting season, a migratory bird abatement plan will need to be developed in consultation with the Service. That plan will include deterrence measures to ensure that birds do not nest in proximity to the work area during the construction period. Patti Holland with the USFWS is the Service contact for such matters and can be reached at 337-291-3121.

38. Stockpiling of materials and/or equipment on the BA-39 restoration site, the BA-48 restoration site, or any other existing wetland or ridge, whether natural or restored; is not authorized. Vehicles, equipment and personnel should only access and/or traverse the BA-39 and BA-48 sites when necessary for the construction, inspection, maintenance and removal of the physical sediment pipeline.

39. The permittee shall submit pre and post-construction photographs as well as surveying of elevations at regular intervals (e.g. every 500 feet) in the right of way (ROW) crossing the BA-39 and BA-48 marsh creation areas, the type, acreage, and extent of vegetative coverage (i.e. wetlands, open water) impacted or benefitted by project implementation, and the general condition of the soils (particularly with respect to the presence or absence of rutting). This condition would be applicable to the BA-39 site, as well as any other wetlands and ridges, whether natural or restored. Monitoring shall document initial fill elevations immediately post construction and 1 year post construction. Monitoring should document acres of open water and marsh that received fill and are 0.5 to 2.0 ft NAVD-88, and acres of water that receive some fill but remained subaqueous. Information and surveys shall be submitted and coordinated with this office, the Environmental Protection Agency (EPA), the National Marine Fisheries Service, (NMFS), as well as any other interested resource agencies (particularly those involved in the CWPPRA program), following construction completion. Be aware that follow up field site investigations may be warranted in order to determine if additional efforts may be necessary to restore areas impacted by project implementation.

40. To the greatest extent practicable, the BA-39 site should not be used as a permanent or long-term transportation corridor for vehicular access to portions of the pipeline ROW, west of the existing BA-39 restoration area.

SPECIAL CONDITIONS: MVN-2009-1353-EFF

41. The permittee should use the least environmentally damaging practicable routes and techniques for mobilizing equipment and personnel, for construction and maintenance of the pipeline and its corridor, as well as for the eventual removal and/or replacement of the physical sediment pipeline structure. To the maximum extent practicable, the permittee shall use water access and barge storage of equipment and construction materials.

42. During construction, the width of the pipeline corridor for construction, maintenance, and removal of the sediment pipeline should be minimized to the greatest extent practicable. This condition is applicable to the BA-39 site as well as any other wetlands and ridges, whether natural or restored.

43. Mats, boards, and/or geotextile material should be used where practicable, to minimize rutting and soil compaction from vehicles and equipment. This condition is applicable to the BA-39 site as well as any other wetlands and ridges, whether natural or restored.

44. Additional fill will be placed in the pipeline ROW or grading undertaken, within the BA-39 and/or BA-48 project areas, which incur any unforeseen impacts or rutting to wetland areas, by construction activities. Remediation of adverse impacts or rutting identified should occur immediately upon cessation of construction activities. It is reasonable to allow for a full growing season to pass, prior to implementing any vegetative plantings, thereby allowing time for natural re-vegetation of any areas damaged by construction activities. However, if damaged areas do not adequately recover within one full growing season, planting of appropriate species may be necessary. If substantial remediation is needed, the permittee should coordinate with this office, the EPA, the NMFS, and any other pertinent agencies, prior to implementation of any such work, to ensure it is consistent with the original goals and intent of the BA-39 project. This condition is also applicable to remediation work on any other wetlands and ridges, whether natural or restored. Surveys and remediation methods should be repeated if and when the physical pipeline structure is removed, replaced, and/or when there is maintenance activity that has the potential to cause substantial damage to soils and/or vegetation.

45. Prior to initiation of work within 1500 feet of the Mississippi River Levee system and/or within 300 feet of the back Hurricane Protection Levee, the permittee must acquire a **Letter of No Objection** from the USACE, Operations Manager of Completed Works. For information relevant this approval, you may contact the (Operations Manager, Mrs. Amy Powell at 504-862-2241) or (Project Manager, Mrs. Karen Clement at 504-862-2313).

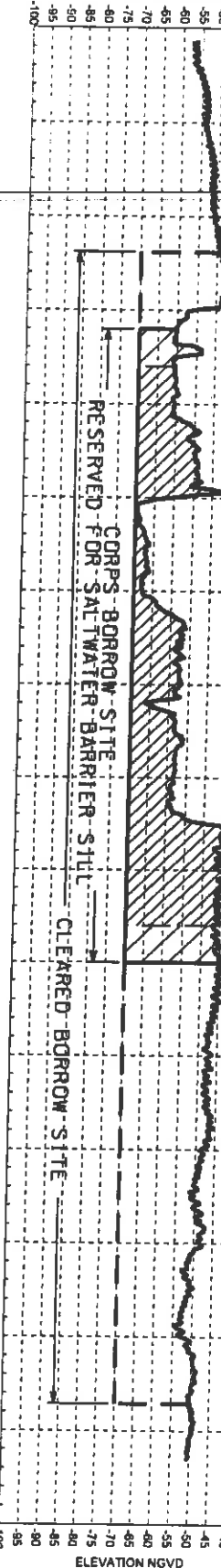


**SPECIAL CONDITIONS: MVN-2009-1353-EFF**

46. Pipeline information including pipeline locations, pipeline owner information and number of pipelines shown on sheet 6 of 41, titled Wills Point Borrow Area Layout, is not accurate based on New Orleans District records. The permittee shall investigate the pipelines and ensure that all pipeline information is corrected. CEMVN has some information on these pipelines, but the information is not complete. This information can be obtained by contacting Heather Jennings (504) 862-1253. The permittee shall arrange a meeting between themselves, Heather Jennings and the pipeline owner to verify pipeline locations prior to beginning work.

# ATTACHMENT I

ELEVATION NGVD



RESERVED FOR SALT WATER BARRIER SILL

Cleared BORROW SITE

ELEVATION NGVD

REVT.

BASLINE

CORPS BORROW SITE  
RESERVED FOR SALT WATER BARRIER SILL

21 SEP 2012 MULTIBEAM SURVEY

64

X 3710485.6  
Y 439779.0

X 3709546.5  
Y 439773.2

X 3707488.6  
Y 445064.9

- |   |               |                   |   |               |                   |
|---|---------------|-------------------|---|---------------|-------------------|
| ① | X 3708420.729 | Lot 29°43'1.576"  | ③ | X 3708652.961 | Lot 29°42'26.360" |
|   | Y 445129.282  | Lon 89°59'10.579" |   | Y 441574.482  | Lon 89°59'8.420"  |
| ② | X 3709644.915 | Lot 29°42'30.034" | ④ | X 3707383.912 | Lot 29°42'57.735" |
|   | Y 441957.316  | Lon 89°58'57.121" |   | Y 444729.134  | Lon 89°59'22.390" |

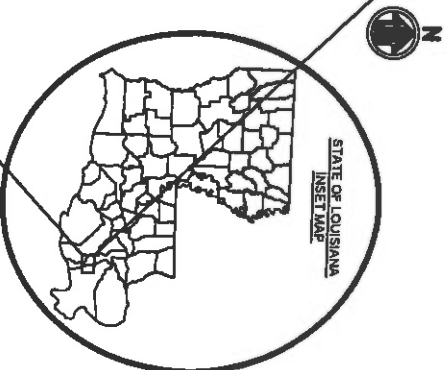
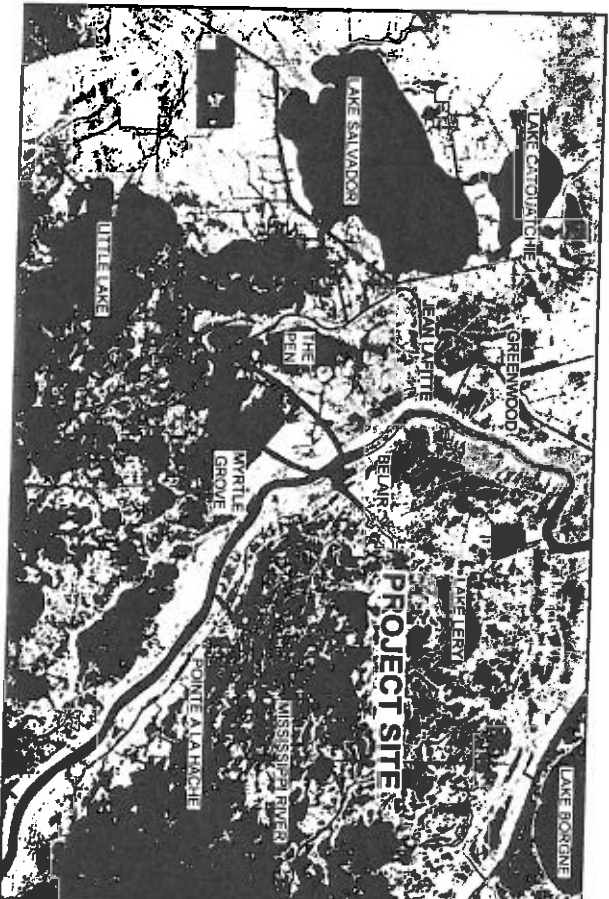
		<b>MISSISSIPPI RIVER HYDROGRAPHIC SURVEY SALT WATER SILL BORROW AREA 1 N.E. 63.87 TO 65.03</b>	
PROJECT: SALT WATER SILL BORROW AREA 1 DRAWN BY: J. L. BROWN CHECKED BY: J. L. BROWN DATE: 11/15/2012		PROJECT: SALT WATER SILL BORROW AREA 1 DRAWN BY: J. L. BROWN CHECKED BY: J. L. BROWN DATE: 11/15/2012	
SCALE: 1" = 100'		SCALE: 1" = 100'	
DATE: 11/15/2012		DATE: 11/15/2012	
15 NOV 2012		15 NOV 2012	
1		1	

# INDEX TO DRAWINGS


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1.	TITLE SHEET
2.	PROJECT LAYOUT
3.	GENERAL NOTES & DREDGING NOTES
4.	BORROW AREAS
5.	TYPICAL MISSISSIPPI RIVER PIPELINE SECTIONS
6.	WILLS POINT BORROW AREA LAYOUT
7.	WILLS POINT ANCHORAGE SOUTH BORROW AREA TYPICAL SECTION
8.	ALLANCE ANCHORAGE BORROW AREA LAYOUT
9.	ALLANCE ANCHORAGE BORROW AREA TYPICAL SECTION
10.	ALLANCE SOUTH BORROW AREA LAYOUT
11.	ALLANCE SOUTH BORROW AREA TYPICAL SECTION
12.	PIPELINE CORRIDOR LAYOUT (1 OF 4)
13.	PIPELINE CORRIDOR LAYOUT (2 OF 4)
14.	PIPELINE CORRIDOR LAYOUT (3 OF 4)
15.	PIPELINE CORRIDOR LAYOUT (4 OF 4)
16.	PIPELINE CORRIDOR - DETAIL 'A'
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19.	TYPICAL FILL SECTIONS (2 OF 4)
20.	TYPICAL FILL SECTIONS (3 OF 4)
21.	TYPICAL FILL SECTIONS (4 OF 4)
22.	ACCESS CHANNEL LAYOUT
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24.	BAYOU DUPONT CROSSING DETAIL
25.	BAYOU DUPONT BOOSTER PUMP SITE TYPICAL DETAILS
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27.	RAILROAD CROSSING DETAIL
28.	HIGHWAY CROSSING DETAIL
29.	MISSISSIPPI RIVER LEVEE CROSSING DETAIL
30.	MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL
31.	CATTLE CROSSING DETAIL
32.	DIRT ROAD CROSSING DETAIL
33.	GRAVEL ROAD CROSSING DETAIL
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37.	FLOATING BOOSTER PUMP PLAN & ELEVATIONS
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39.	NEW BRIDGE/PIPE CROSSING DETAILS (1 OF 3)
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41.	NEW BRIDGE/PIPE CROSSING DETAILS (3 OF 3)

## STATE OF LOUISIANA COASTAL PROTECTION AND RESTORATION AUTHORITY






### MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE STATE PROJECT No. BA-43 EB JEFFERSON & PLAQUEMINES PARISHES, LOUISIANA



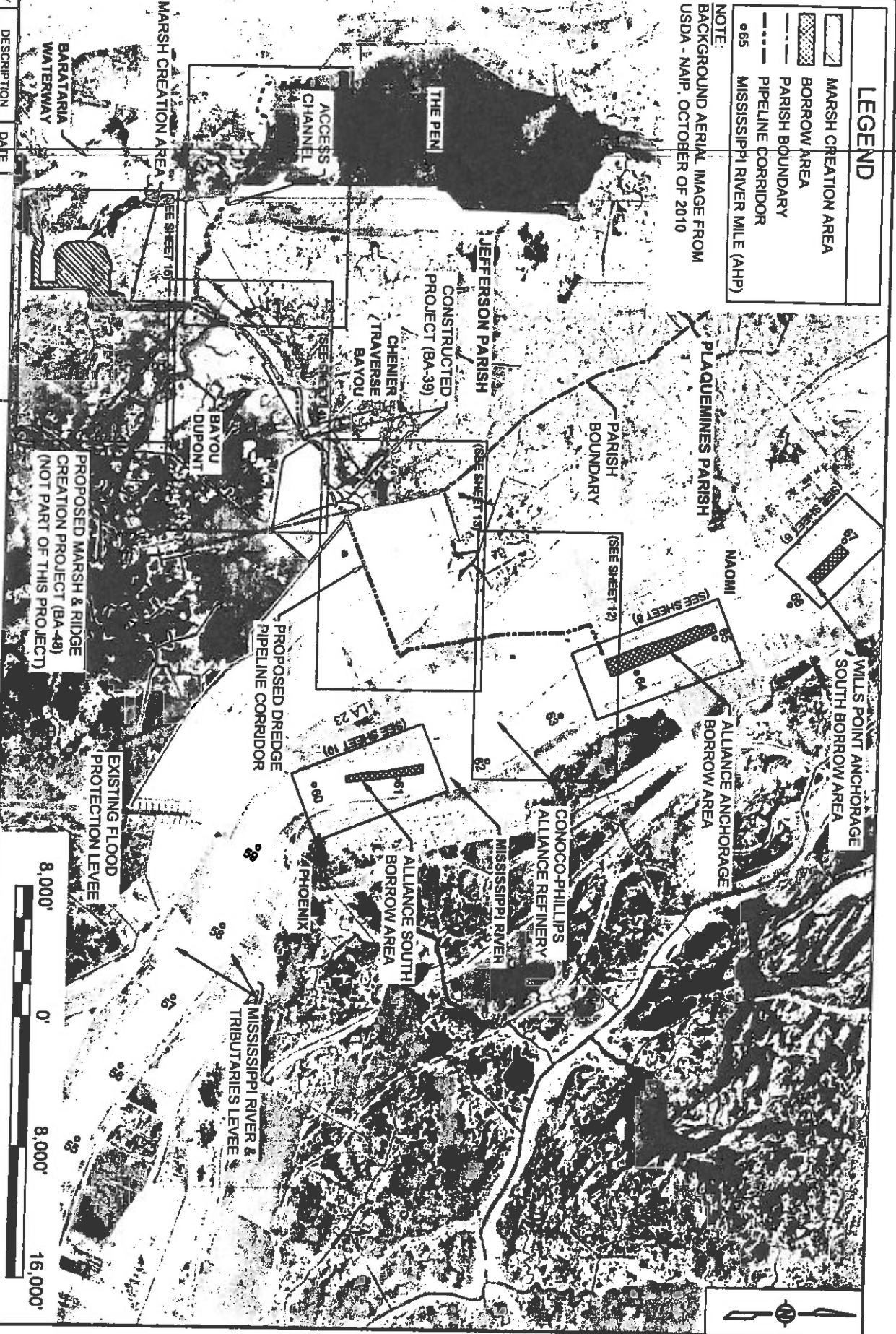
**THIS DRAWING SET IS FOR PERMITTING PURPOSES  
ONLY AND NOT TO BE USED FOR CONSTRUCTION**

BY		DESCRIPTION	DATE	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-927-7193</p>	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>	450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	TITLE SHEET
SA	REVISION 5	12/12/12						
SA	REVISION 4	08/24/12						
SA	REVISION 3	03/09/12						
DRAWN BY VC				DESIGNED BY SA	APPROVED BY: MAURY CHATELLIER, P.E.	STATE PROJECT NUMBER: BA-43 (EB)	DATE: DECEMBER 12, 2012	
						FEDERAL PROJECT NUMBER: N/A	SHEET 1 OF 41	

# LEGEND

-  MARSH CREATION AREA
-  BORROW AREA
-  PARISH BOUNDARY
-  PIPELINE CORRIDOR
-  MISSISSIPPI RIVER MILE (AHP)

NOTE:  
BACKGROUND AERIAL IMAGE FROM  
USDA - NAIP, OCTOBER OF 2010



PROPOSED MARSH & RIDGE  
CREATION PROJECT (BA-48)  
(NOT PART OF THIS PROJECT)



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-327-1793

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

## MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE

## PROJECT LAYOUT

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 2 OF 41

BY	DESCRIPTION	DATE
SA	REVISION 5	12/11/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12
DRAWN BY:	YC	

DESIGNED BY: SA


APPROVED BY: MAURY CHATELIER, P.E.

# GENERAL NOTES:

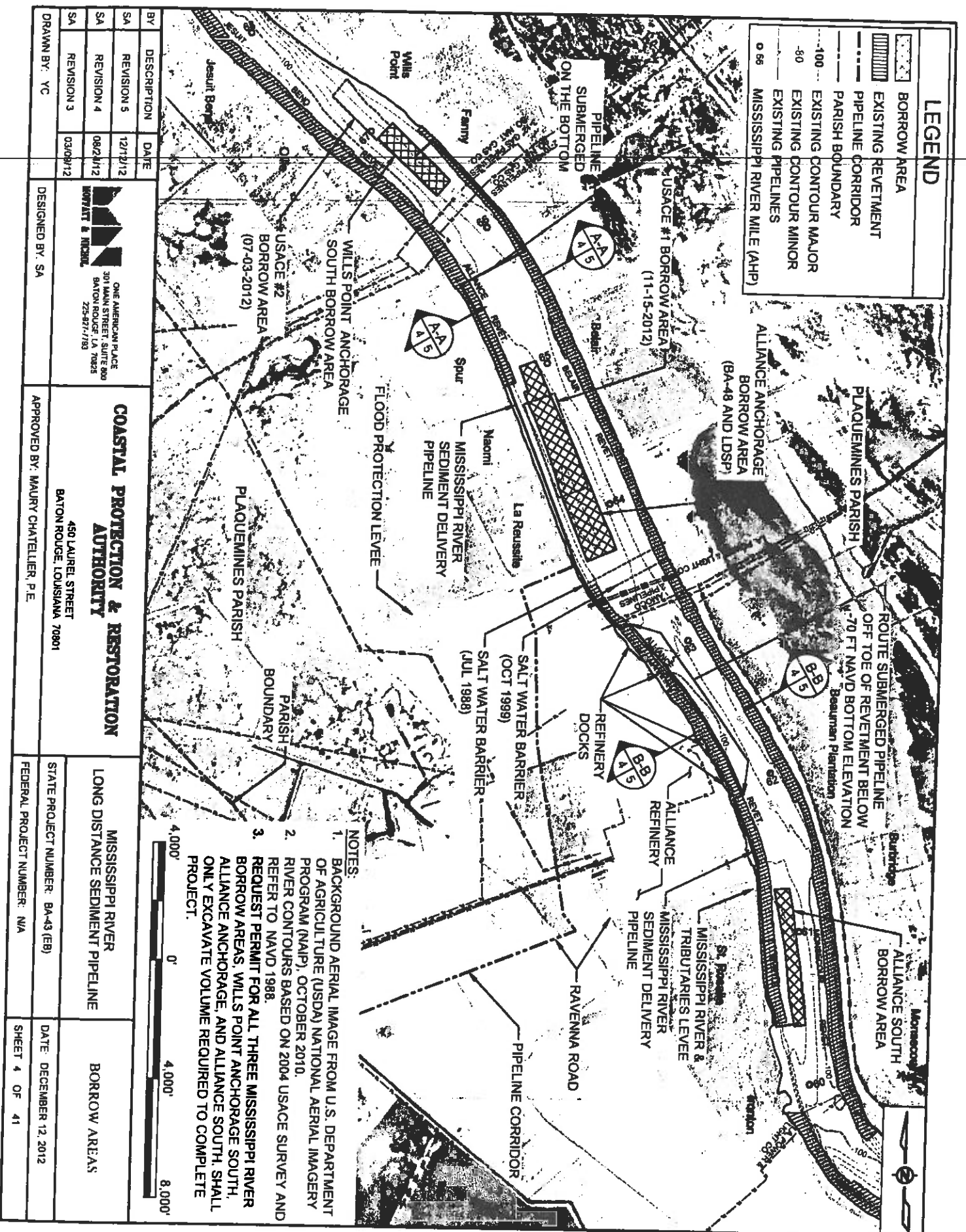
1. BACKGROUND AERIAL IMAGES FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER OF 2010.
2. COORDINATES ARE NAD83, LOUISIANA STATE PLANE, SOUTHERN ZONE, U.S. SURVEY FEET.
3. ALL ELEVATIONS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), U.S. SURVEY FEET.
4. ALL RIVER DATUMS SHOWN BASED ON HISTORIC DATA FOR MISSISSIPPI RIVER AT ALLIANCE (01390) RIVER MILE 62.5. RECORDS AVAILABLE FROM APRIL 2, 1977 TO DATE.
5. THE CONTRACTOR SHALL NOT EXCAVATE WITHIN 500' OF ANY PIPELINE IN THE MISSISSIPPI RIVER OR WITHIN 50' OF ANY OTHER PIPELINE EXCEPT FOR NAOMI SIPHON PIPES.
6. NO EXCAVATION SHALL BE PERMITTED WITHIN 25 FEET OF THE NAOMI SIPHON PIPES. THE EDGE OF THE DREDGE SLURRY PIPELINE SHALL BE PLACED A MINIMUM OF 25 FEET FROM THE EDGE OF THE NAOMI SIPHON PIPES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS AT THE TIME OF CONSTRUCTION. ALL PIPELINES AND UNDERGROUND UTILITIES SHALL BE FIELD LOCATED AND MARKED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS 72 HOURS PRIOR TO ANY EXCAVATION.
9. NO CONSTRUCTION EQUIPMENT OR ACTIVITIES MAY OPERATE, TRANSIT, STAGE, OR STORE OUTSIDE OF THE CONSTRUCTION LIMITS.
10. THIS DRAWING SET IS FOR PERMITTING PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.
11. ESTIMATED RAGE OF FULLY-LOADED DRAFTS FOR VESSELS TO BE USED DURING CONSTRUCTION:
  - a. 4,000 HP TUGS ..... 15-20 FT
  - b. 2,000 HP TUGS ..... 10-14 FT
  - c. WORKBOATS, TENDERS ..... 6-8 FT
  - d. CREWBOATS ..... 2-4 FT
  - e. BOOSTER PUMP BARGES, WORK BARGES, FUEL BARGES ..... 4-6 FT
  - f. SMALL BARGE-MOUNTED CLAMSHELL OR EXCAVATOR ..... 4-8 FT
  - g. LARGE HYDRAULIC DREDGE ..... 10 FT

# DREDGING NOTES:

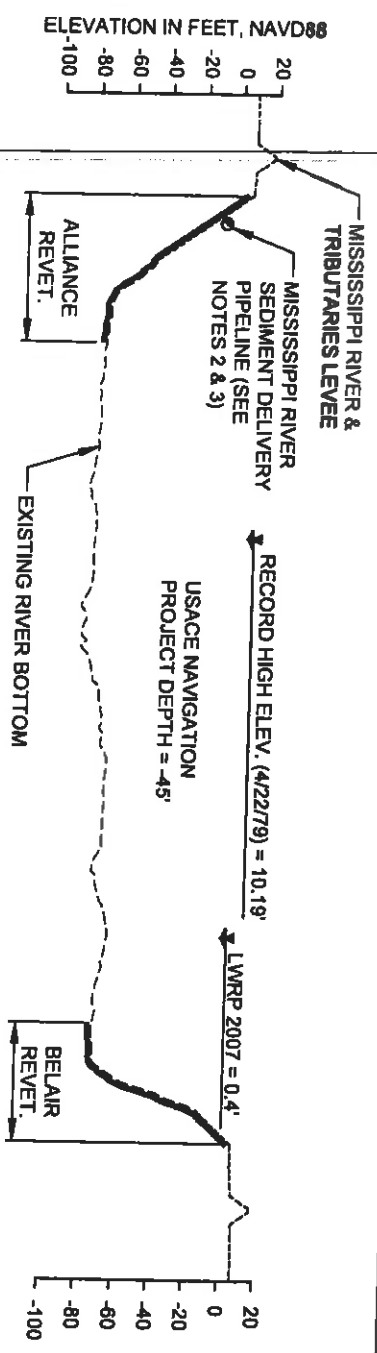
1. THE CONTRACTOR WILL BE REQUIRED TO ANCHOR WITHIN THE DREDGE ANCHOR LIMITS SHOWN IN SHEETS 6, 8 AND 10.
2. DREDGE ANCHOR LIMITS SHALL BE MARKED WITH BUOYS AS SHOWN IN SHEETS 6, 8 AND 10.
3. DREDGING BEYOND THE BORROW AREA LIMITS SHOWN WILL BE NOT ALLOWED.
4. DREDGING WILL BE ALLOWED TO A MAXIMUM DEPTH OF -90 FT NAVD88.
5. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DAILY COMMUNICATION PLAN TO THE OWNER, THE USAGE OPERATIONS DIVISION, AND MNSA DELINEATING THE LOCATION OF THE DREDGE, ATTENDANT PLANT, ANCHOR BUOYS, AND FLOATING PIPELINE AS PER THE OWNER SPECIFICATIONS.

BY	DESCRIPTION	DATE	DESIGNED BY SA		APPROVED BY: MAURY CHATELLIER, P.E.		STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
SA	REVISION 5	12/12/12	 <b>ONE AMERICAN PLACE</b> 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-387-7173		<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		LONG DISTANCE SEDIMENT PIPELINE		GENERAL & DREDGING NOTES	
SA	REVISION 4	08/22/12					FEDERAL PROJECT NUMBER: N/A		SHEET 3 OF 41	
SA	REVISION 3	03/08/12								
DRAWN BY: YC										

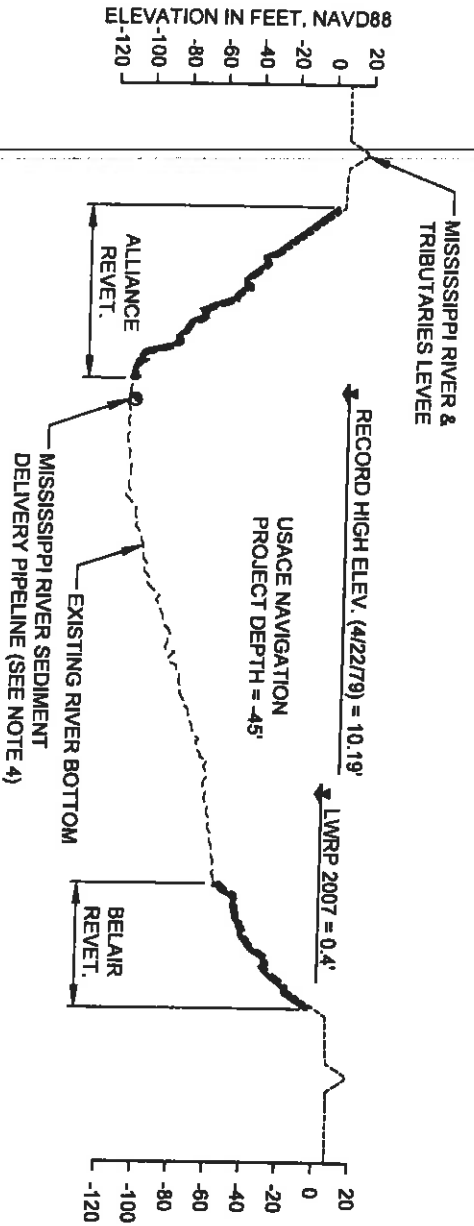




LEGEND	
---	AUGUST 2011 SURVEY
—	EXISTING REVEMENT
●	SEDIMENT DELIVERY PIPELINE

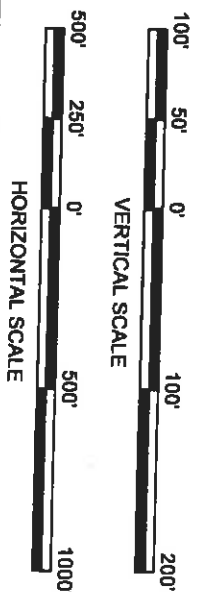



**A-A**  
TYPICAL MISSISSIPPI RIVER PIPELINE SECTION  
RIVER MILE 65.6



**B-B**  
TYPICAL MISSISSIPPI RIVER PIPELINE SECTION  
RIVER MILE 62.5

- NOTES:
1. RIVER BOTTOM PROFILES BASED ON OSI SURVEY DATED AUGUST 17, 2011.
  2. MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET ± 30 FEET FROM THE LWRP.
  3. SEDIMENT DELIVERY PIPELINE MAY BE SUBMERGED OR FLOATING.
  4. ROUTE SUBMERGED PIPELINE OFF TOE OF REVEMENT BELOW -70 FEET NAVD BOTTOM ELEVATION.



BY	DESCRIPTION	DATE	DESIGNED BY: SA		APPROVED BY: MAURY CHATELLIER, P.E.		STATE PROJECT NUMBER: BA-43 (ES)	DATE: DECEMBER 12, 2012
SA	REVISION 5	12/21/12	 ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-927-1793		<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	TYPICAL MISSISSIPPI RIVER PIPELINE SECTIONS
SA	REVISION 4	08/24/12						
SA	REVISION 3	03/09/12						
DRAWN BY: YC							FEDERAL PROJECT NUMBER: N/A	SHEET 5 OF 41

# LEGEND

- EXISTING REVEITEMENT
- LDSP BORROW AREA PERIMETER (TOP OF CUT)
- USACE BORROW AREA PERIMETER (TOP OF CUT)
- DREDGE ANCHOR LIMITS
- LWRP LINE
- RAIL ROAD
- CONTOUR MAJOR
- CONTOUR MINOR
- MISSISSIPPI RIVER MILE (AHP)
- BUOY MARKING DREDGE ANCHOR LIMITS

## BUOYS MARKING DREDGE ANCHOR LIMITS

PT.	LATITUDE	LONGITUDE
A	29°44'26.53" N	90°00'22.20" W
B	29°44'05.91" N	89°59'56.59" W

Wills Point



MISSISSIPPI RIVER & TRIBUTARIES LEVEE

MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE

Fanny

USACE #2 BORROW AREA (07-03-2012)

MISSISSIPPI RIVER SOUTH BORROW AREA

WILLS POINT ANCHORAGE

2-10" GAS PIPELINES - SO. NAT. GAS CO.

3-12" GAS PIPELINES - SO. NAT. GAS CO.

PIPELINE SUBMERGED ON THE BOTTOM

WILLS POINT SOUTH BORROW AREA PARAMETERS	
BORROW AREA ACREAGE	45.2 AC.
BORROW AREA LENGTH	2,800'
BORROW AREA WIDTH	680' TO 715'
BORROW AREA THICKNESS	10' TO 40'
BORROW AREA VOLUME (-90° NAVD88 MAX.)	2.38 MCY

BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12
SA	REVISION 2	03/09/12

### NOTES

1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER OF 2010.
2. RIVER CONTOURS SHOWN ARE BASED ON OSI SURVEY DATED AUGUST 17, 2011 AND REFER TO NAVD88.



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-897-7793

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

## MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE

## WILLS POINT BORROW AREA LAYOUT

DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 6 OF 41

LEGEND

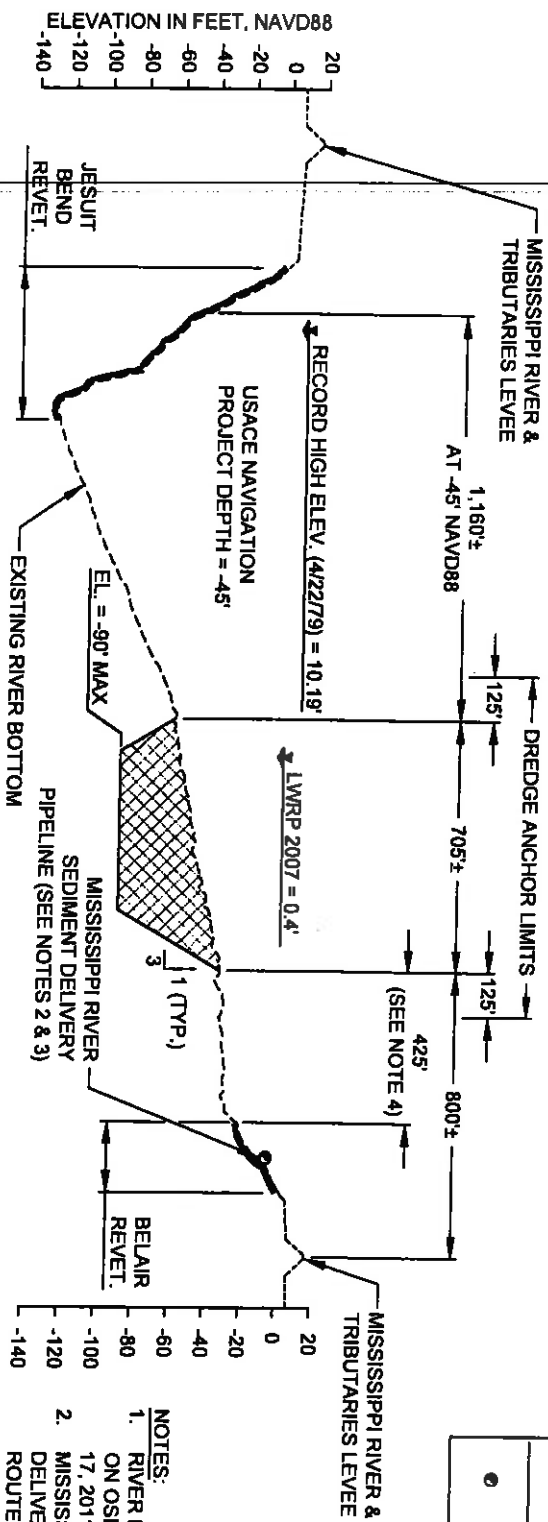
BORROW AREA

APPROX. EXISTING GRADE

EXISTING REVETMENT

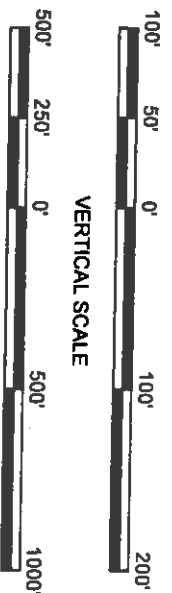
DESIGN


SEDIMENT DELIVERY PIPELINE



WILLS POINT ANCHORAGE SOUTH  
RIVER MILE 66.7

- NOTES:
- RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.
  - MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET ± 30 FEET FROM THE LWRP.
  - SEDIMENT DELIVERY PIPELINE MAY BE SUBMERGED OR FLOATING.
  - MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF BELAIR REVETMENT VARIES FROM 300 TO 450 FEET.



BY	DESCRIPTION	DATE	 ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-927-7785	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>  450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	<b>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</b>	<b>WILLS POINT ANCHORAGE SOUTH BORROW AREA TYPICAL SECTION</b>
SA	REVISION 5	12/12/12				
SA	REVISION 4	08/24/12				
SA	REVISION 3	03/28/12				
DRAWN BY	YC					
					FEDERAL PROJECT NUMBER: N/A	SHEET 7 OF 41

### LEGEND

- EXISTING REVEMENT
- LDSP BORROW AREA PERIMETER (TOP OF CUT)
- USACE BORROW AREA PERIMETER (TOP OF CUT)
- DREDGE ANCHOR LIMITS
- LMWP LINE
- RAIL ROAD
- CONTOUR MAJOR
- CONTOUR MINOR
- MISSISSIPPI RIVER MILE (AHP)
- BUOY MARKING DREDGE ANCHOR LIMITS

### BUOYS MARKING DREDGE ANCHOR LIMITS

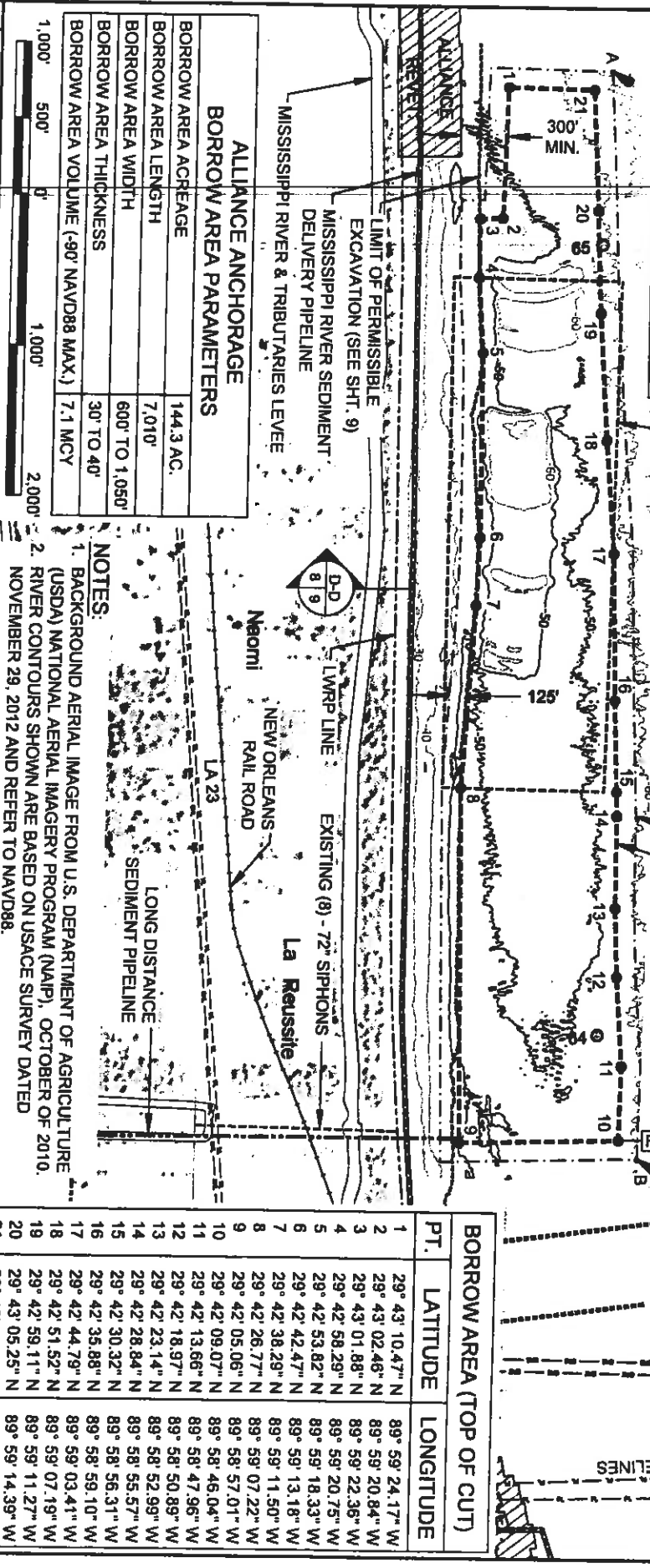
PT.	LATITUDE	LONGITUDE
A	29° 43' 13.97" N	89° 59' 17.37" W
B	29° 43' 08.38" N	89° 58' 44.24" W

SALT WATER BARRIER C.L. (OCT 1989)

SALT WATER BARRIER C.L. (JUL 1988)

20° & 24° PLAINS PIPELINES

ENERGY CABLES



### BORROW AREA PARAMETERS

BORROW AREA ACREAGE	144.3 AC.
BORROW AREA LENGTH	7,010'
BORROW AREA WIDTH	600' TO 1,050'
BORROW AREA THICKNESS	30' TO 40'
BORROW AREA VOLUME (-90° NAVD88 MAX.)	7.1 MCY

- NOTES:**
- BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER OF 2010.
  - RIVER CONTOURS SHOWN ARE BASED ON USACE SURVEY DATED NOVEMBER 29, 2012 AND REFER TO NAVD88.

PT.	LATITUDE	LONGITUDE
1	29° 43' 10.47" N	89° 59' 24.17" W
2	29° 43' 02.46" N	89° 59' 20.84" W
3	29° 43' 01.88" N	89° 59' 22.36" W
4	29° 42' 58.29" N	89° 59' 20.75" W
5	29° 42' 53.82" N	89° 59' 18.33" W
6	29° 42' 42.47" N	89° 59' 13.18" W
7	29° 42' 38.29" N	89° 59' 11.50" W
8	29° 42' 26.77" N	89° 59' 07.22" W
9	29° 42' 05.06" N	89° 58' 57.01" W
10	29° 42' 09.07" N	89° 58' 46.04" W
11	29° 42' 13.66" N	89° 58' 47.96" W
12	29° 42' 18.97" N	89° 58' 50.89" W
13	29° 42' 23.14" N	89° 58' 52.99" W
14	29° 42' 28.84" N	89° 58' 55.57" W
15	29° 42' 30.32" N	89° 58' 56.31" W
16	29° 42' 35.88" N	89° 58' 56.10" W
17	29° 42' 44.79" N	89° 59' 03.41" W
18	29° 42' 51.52" N	89° 59' 07.19" W
19	29° 42' 55.11" N	89° 59' 11.27" W
20	29° 43' 05.25" N	89° 59' 14.39" W
21	29° 43' 12.41" N	89° 59' 18.11" W

### COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

### MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE

### ALLANCE ANCHORAGE BORROW AREA LAYOUT

BY	DESCRIPTION	DATE	DESIGNED BY	APPROVED BY	STATE PROJECT NUMBER	DATE	SHEET
SA	REVISION 5	12/2/12	MAURY CHATELIER, P.E.		BA-43 (EB)	DECEMBER 12, 2012	8 OF 41
SA	REVISION 4	08/24/12					
SA	REVISION 3	03/09/12					



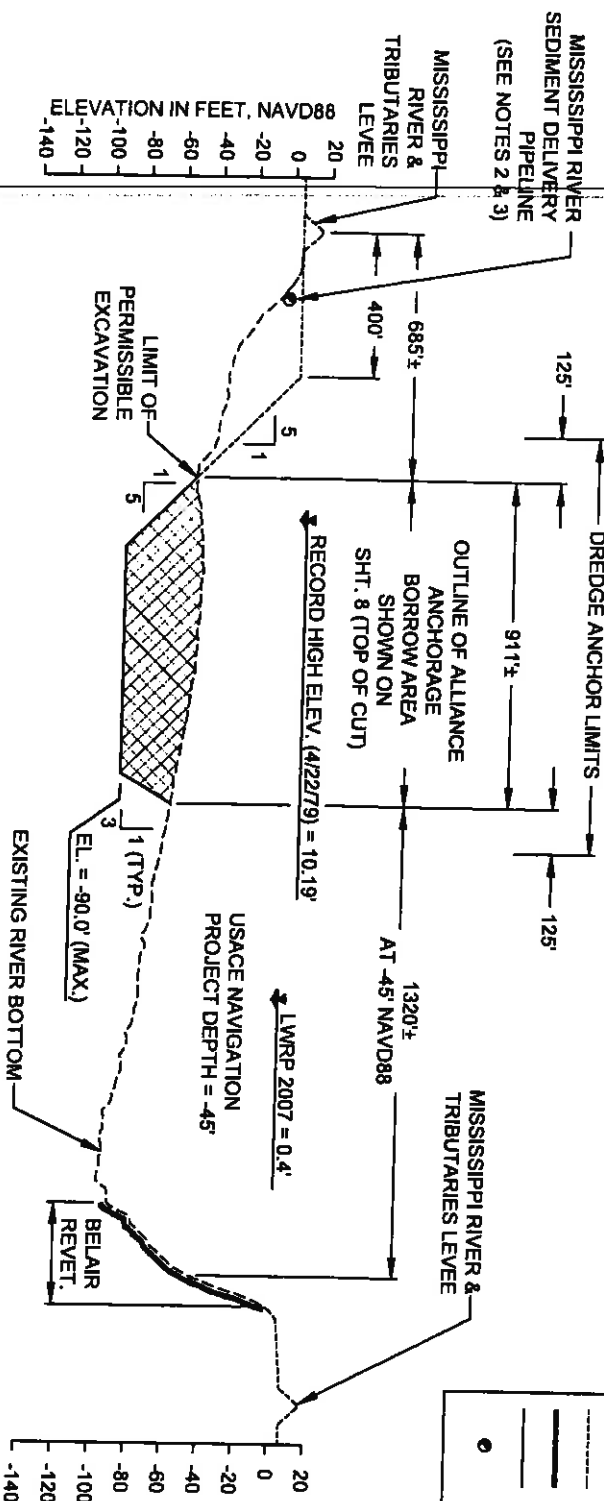
ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70802  
225-387-1783

DRAWN BY YC

FEDERAL PROJECT NUMBER: N/A

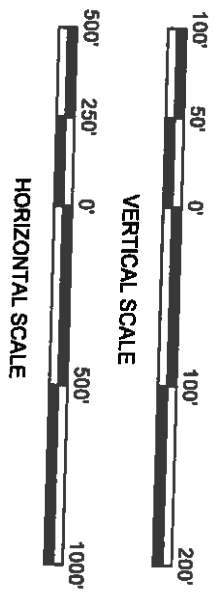
DATE: DECEMBER 12, 2012





LEGEND	
	LDSR BORROW AREA
	AUGUST 2011 SURVEY
	APPROX. EXISTING GRADE
	EXISTING REVEMENT
	DESIGN
	SEDIMENT DELIVERY PIPELINE

**D-D ALLIANCE ANCHORAGE BORROW AREA**  
 8 RIVER MILE 64.3



- NOTES:**
1. RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.
  2. MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET ± 30 FEET FROM THE LWRP.
  3. SEDIMENT DELIVERY PIPELINE MAY BE SUBMERGED OR FLOATING.
  4. MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF ALLIANCE REVEMENT IS 300 FEET.

BY	DESCRIPTION	DATE	 <b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-987-1753		DESIGNED BY: SA APPROVED BY: MAURY CHATELLIER, P.E. 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	
SA	REVISION 5	12/21/12				
SA	REVISION 4	08/24/12				
SA	REVISION 3	03/09/12				
SA	REVISION 2	03/09/12				
DRAWN BY: VC			STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
			FEDERAL PROJECT NUMBER: N/A		SHEET 9 OF 41	

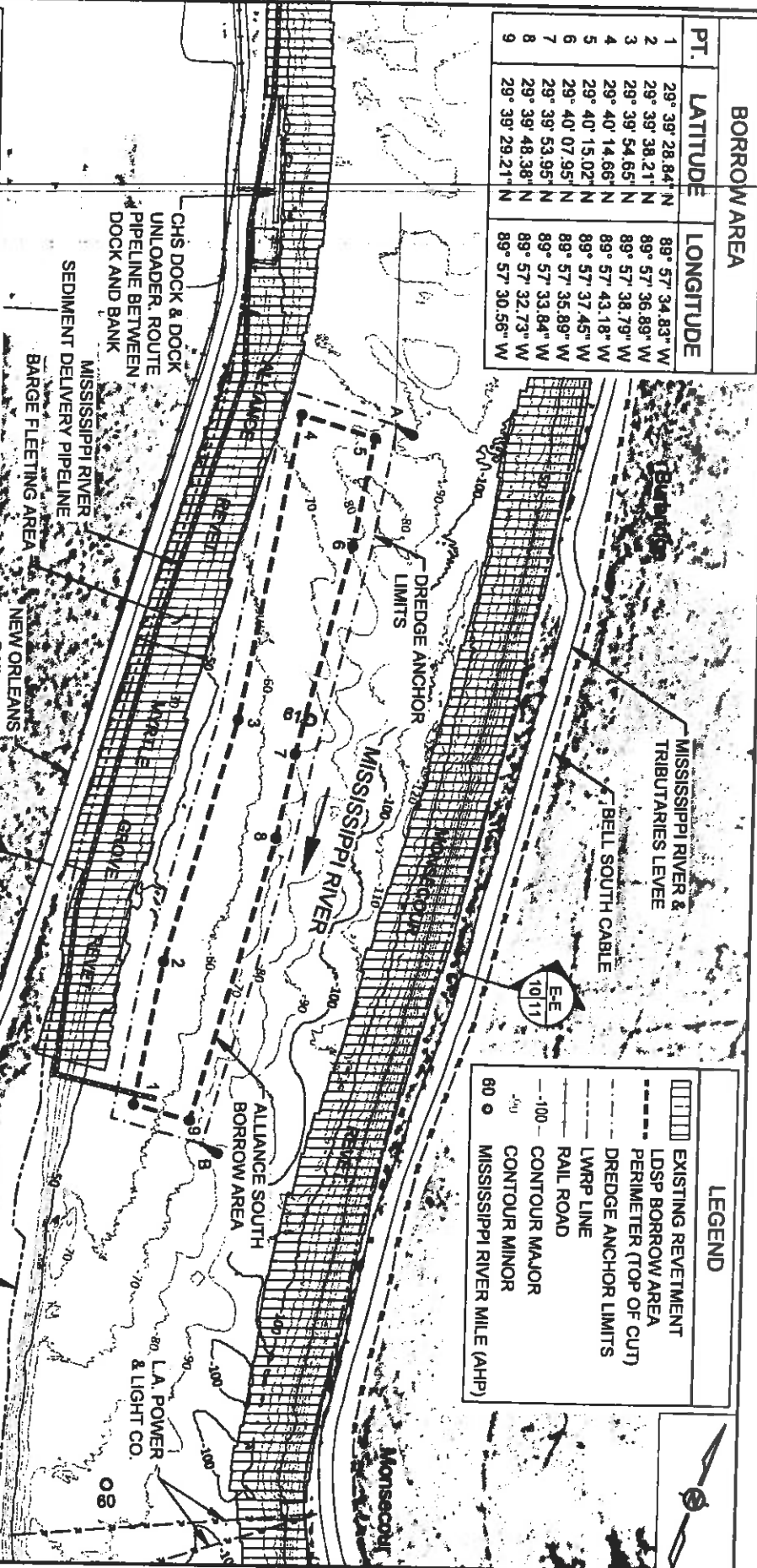
BORROW AREA		
PT.	LATITUDE	LONGITUDE
1	29° 39' 28.84" N	89° 57' 34.83" W
2	29° 39' 38.21" N	89° 57' 36.89" W
3	29° 39' 54.65" N	89° 57' 38.79" W
4	29° 40' 14.66" N	89° 57' 43.18" W
5	29° 40' 15.02" N	89° 57' 37.45" W
6	29° 40' 07.95" N	89° 57' 35.89" W
7	29° 39' 53.95" N	89° 57' 33.84" W
8	29° 39' 48.38" N	89° 57' 32.73" W
9	29° 39' 29.21" N	89° 57' 30.56" W

ALLIANCE SOUTH BORROW AREA PARAMETERS	
BORROW AREA ACREAGE	49.4 AC.
BORROW AREA LENGTH	4,675'
BORROW AREA WIDTH	380' TO 510'
BORROW AREA THICKNESS	10' TO 45'
BORROW AREA VOLUME (90' NAVD88 MAX.)	1.7 MCY

- NOTES:**
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER OF 2010.
  2. RIVER CONTOURS SHOWN ARE BASED ON OSI SURVEY DATED AUGUST 17, 2011 AND REFER TO NAVD88.

BUOYS MARKING DREDGE ANCHOR LIMITS		
PT.	LATITUDE	LONGITUDE
A	29° 40' 16.33" N	89° 57' 36.29" W
B	29° 39' 28.10" N	89° 57' 29.01" W

LEGEND	
[Pattern]	EXISTING REVEMENT
[Pattern]	LDSP BORROW AREA PERIMETER (TOP OF CUT)
[Pattern]	DREDGE ANCHOR LIMITS
[Pattern]	LWRP LINE
[Pattern]	RAIL ROAD
[Pattern]	CONTOUR MAJOR
[Pattern]	CONTOUR MINOR
[Symbol]	MISSISSIPPI RIVER MILE (AHP)



BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12
DRAWN BY: YC		



**COASTAL PROTECTION & RESTORATION AUTHORITY**  
 450 LAUREL STREET  
 BATON ROUGE, LOUISIANA 70801

MISSISSIPPI RIVER  
 LONG DISTANCE SEDIMENT PIPELINE


ALLIANCE SOUTH  
 BORROW AREA  
 LAYOUT

DESIGNED BY: SA

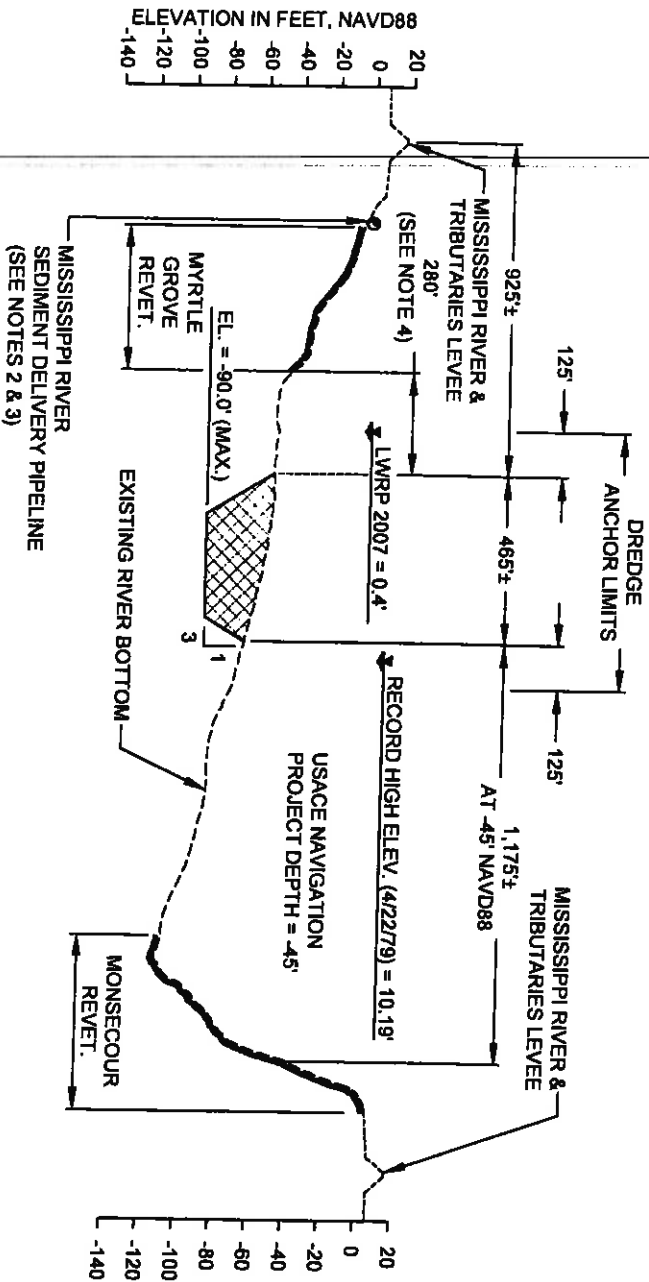
APPROVED BY: MAURY CHATELLIER, P.E.







STATE PROJECT NUMBER: BA-43 (EB)  
 FEDERAL PROJECT NUMBER: N/A

DATE: DECEMBER 12, 2012  
 SHEET 10 OF 41

BY	DESCRIPTION	DATE	 ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70824 225-387-7783		<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE		ALLIANCE SOUTH BORROW AREA TYPICAL SECTION	
SA	REVISION 5	12/12/12					STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
SA	REVISION 4	08/24/12					FEDERAL PROJECT NUMBER: N/A		SHEET 11 OF 41	
SA	REVISION 3	03/09/12								
DRAWN BY: YC			DESIGNED BY: SA		APPROVED BY: MAURY CHATELLIER, P.E.					

**E-E**  
**10**  
**ALLIANCE SOUTH BORROW AREA**  
**RIVER MILE 60.7**

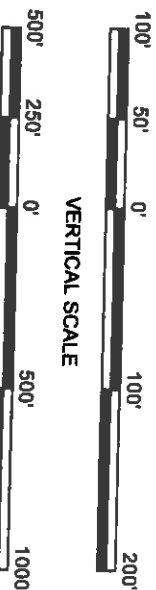


LEGEND	
	BORROW AREA
	AUGUST 2011 SURVEY
	APPROX. EXISTING GRADE
	EXISTING REVEGETATION
	DESIGN
	SEDIMENT DELIVERY PIPELINE

**NOTES:**

1. RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.
2. MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET ± 30 FEET FROM THE LWRP.
3. SEDIMENT DELIVERY PIPELINE MAY BE SUBMERGED OR FLOATING.
4. MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF MYRTLE GROVE REVEGETATION VARIES FROM 110 TO 340 FEET.








**VERTICAL SCALE**



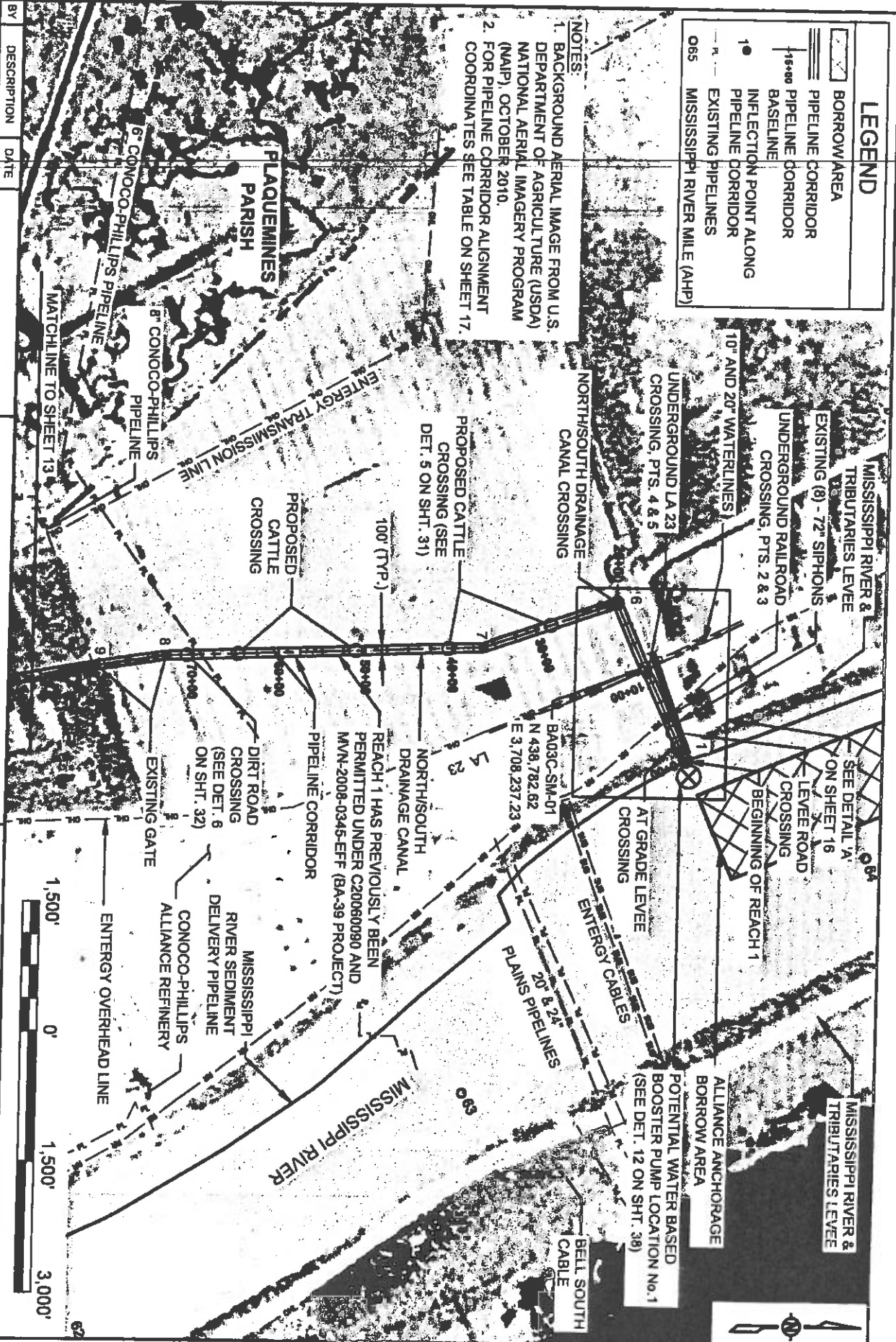
**HORIZONTAL SCALE**



# LEGEND

-  BORROW AREA
-  PIPELINE CORRIDOR
-  PIPELINE CORRIDOR
-  BASELINE
-  INFLECTION POINT ALONG PIPELINE CORRIDOR
-  EXISTING PIPELINES
-  065 MISSISSIPPI RIVER MILE (AHP)

- NOTES:
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
  2. FOR PIPELINE CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 17.



62

BY	DESCRIPTION	DATE
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SA	REVISION 5	12/12/12
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SA	REVISION 4	08/14/12
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SA	REVISION 3	03/09/12
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DRAWN BY: YC



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-327-7170

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DESIGNED BY: SA

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

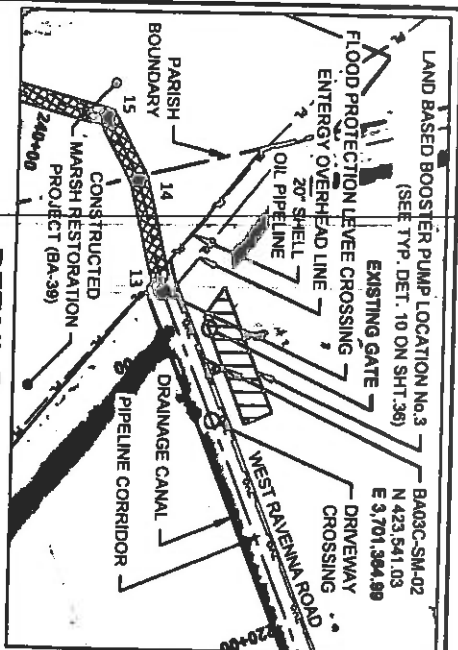
PIPELINE CORRIDOR  
LAYOUT (1 OF 4)

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

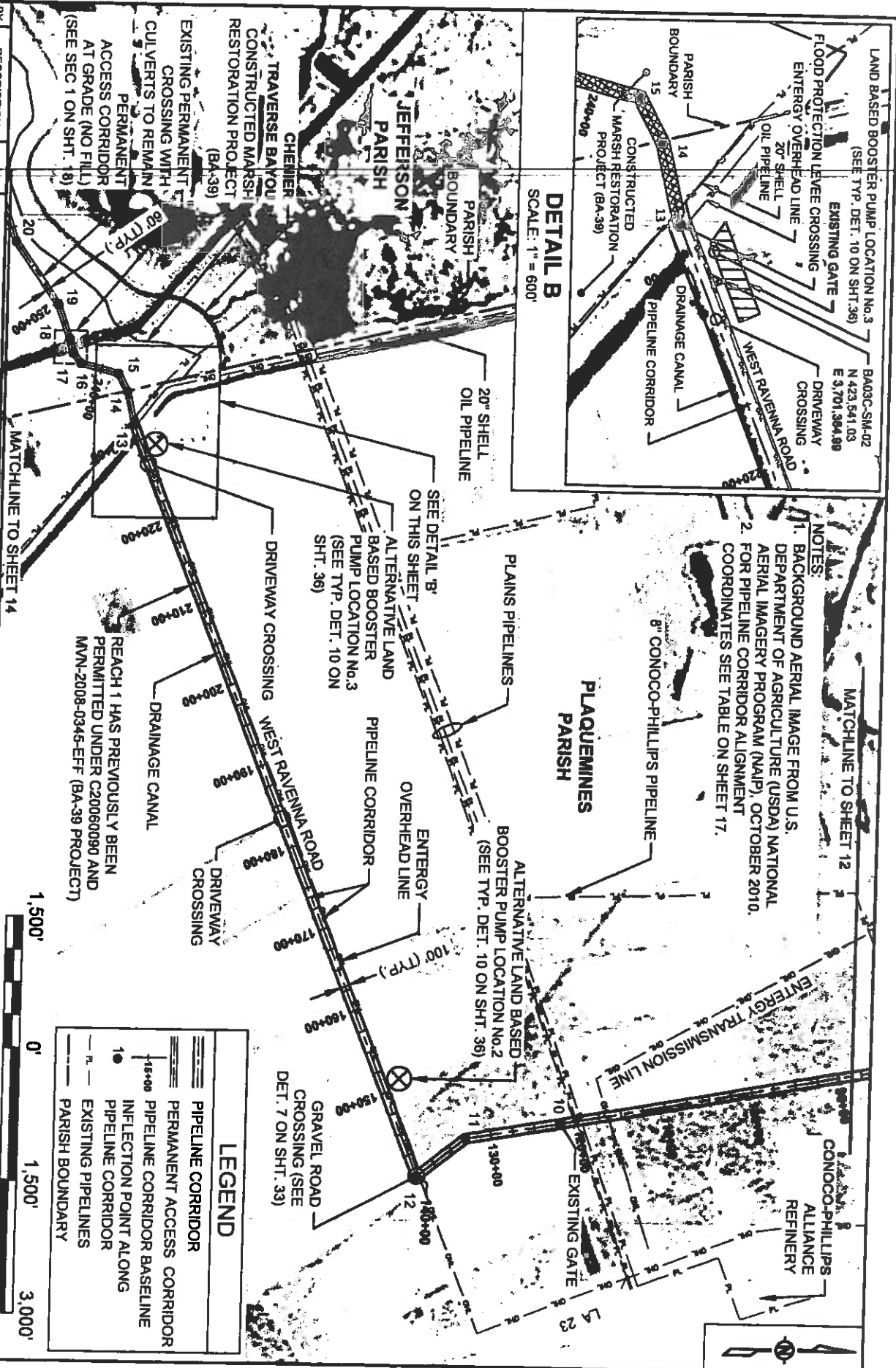
FEDERAL PROJECT NUMBER: N/A

SHEET 12 OF 41



**DETAIL B**  
SCALE: 1" = 600'

- NOTES:**
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
  2. FOR PIPELINE CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 17.



LEGEND	
	PIPELINE CORRIDOR
	PERMANENT ACCESS CORRIDOR
	PIPELINE CORRIDOR BASELINE
	INFLECTION POINT ALONG PIPELINE CORRIDOR
	EXISTING PIPELINES
	PARISH BOUNDARY



BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/08/12
DRAWN BY	YC	



**COASTAL PROTECTION & RESTORATION AUTHORITY**

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

PIPELINE CORRIDOR  
LAYOUT (2 OF 4)

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

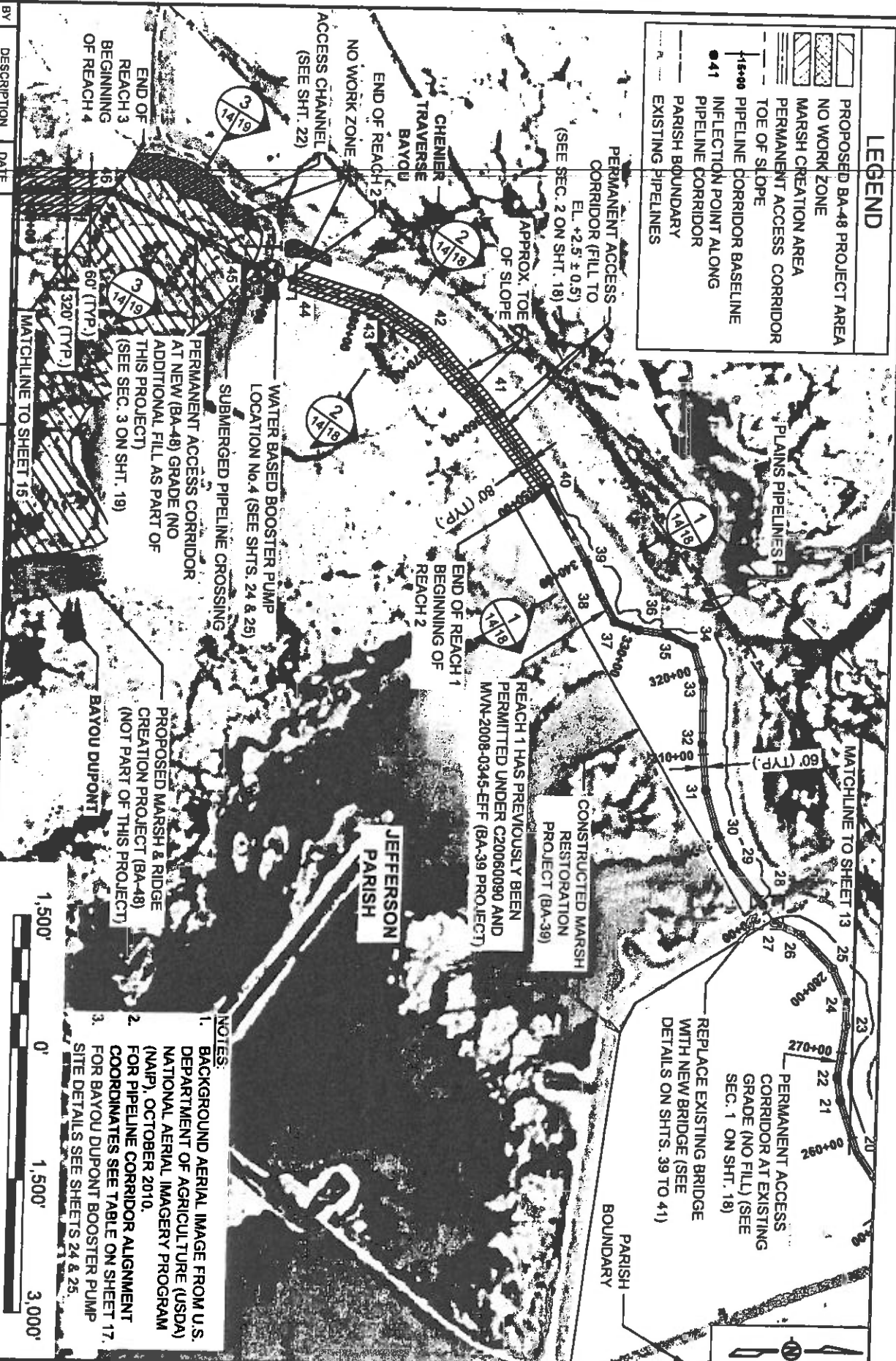
SHEET 13 OF 41

DESIGNED BY: SA

APPROVED BY: MAURY CHATELLIER, P.E.

# LEGEND

- PROPOSED BA-48 PROJECT AREA
- NO WORK ZONE
- MARSH CREATION AREA
- PERMANENT ACCESS CORRIDOR
- TOE OF SLOPE
- PIPELINE CORRIDOR BASELINE
- INFLECTION POINT ALONG PIPELINE CORRIDOR
- PARISH BOUNDARY
- EXISTING PIPELINES



## NOTES:

1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
2. FOR PIPELINE CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 17.
3. SITE DETAILS SEE SHEETS 24 & 25.



BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/08/12
DRAWN BY: YC		



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 600  
BATON ROUGE, LA 70825  
225-307-7783

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

PIPELINE CORRIDOR  
LAYOUT (3 OF 4)

STATE PROJECT NUMBER: BA-43 (EB)

FEDERAL PROJECT NUMBER: N/A

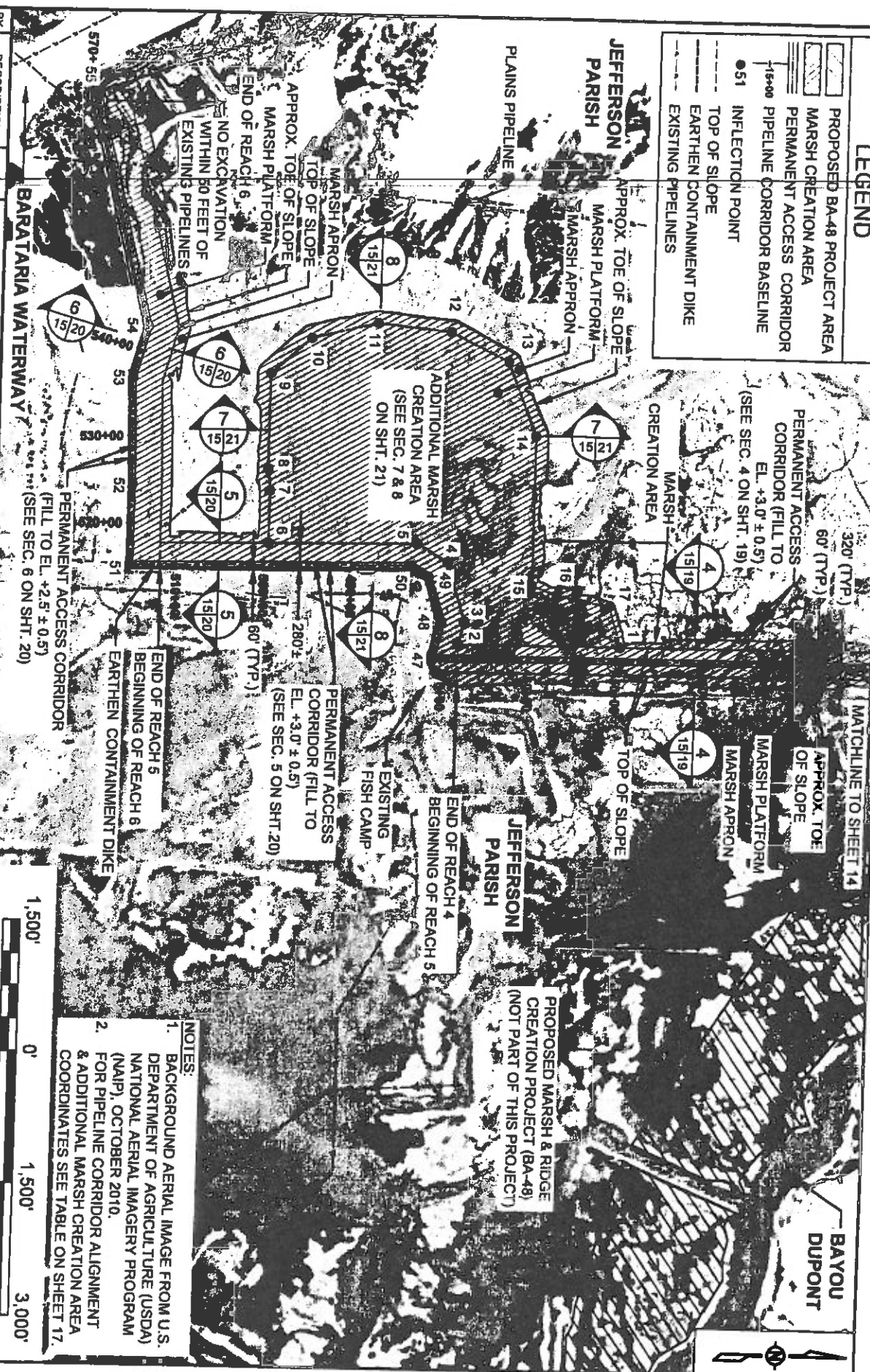
DATE: DECEMBER 12, 2012

SHEET 14 OF 41



# LEGEND

	PROPOSED BA-48 PROJECT AREA
	MARSH CREATION AREA
	PERMANENT ACCESS CORRIDOR
	PIPELINE CORRIDOR BASELINE
	INFLECTION POINT
	TOP OF SLOPE
	EARTHEN CONTAINMENT DIKE
	EXISTING PIPELINES



- NOTES:**
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
  2. FOR PIPELINE CORRIDOR ALIGNMENT & ADDITIONAL MARSH CREATION AREA COORDINATES SEE TABLE ON SHEET 17.

BY	DESCRIPTION	DATE
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SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 600  
BATON ROUGE, LA 70825  
225-387-7793

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DRAWN BY: YC

DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

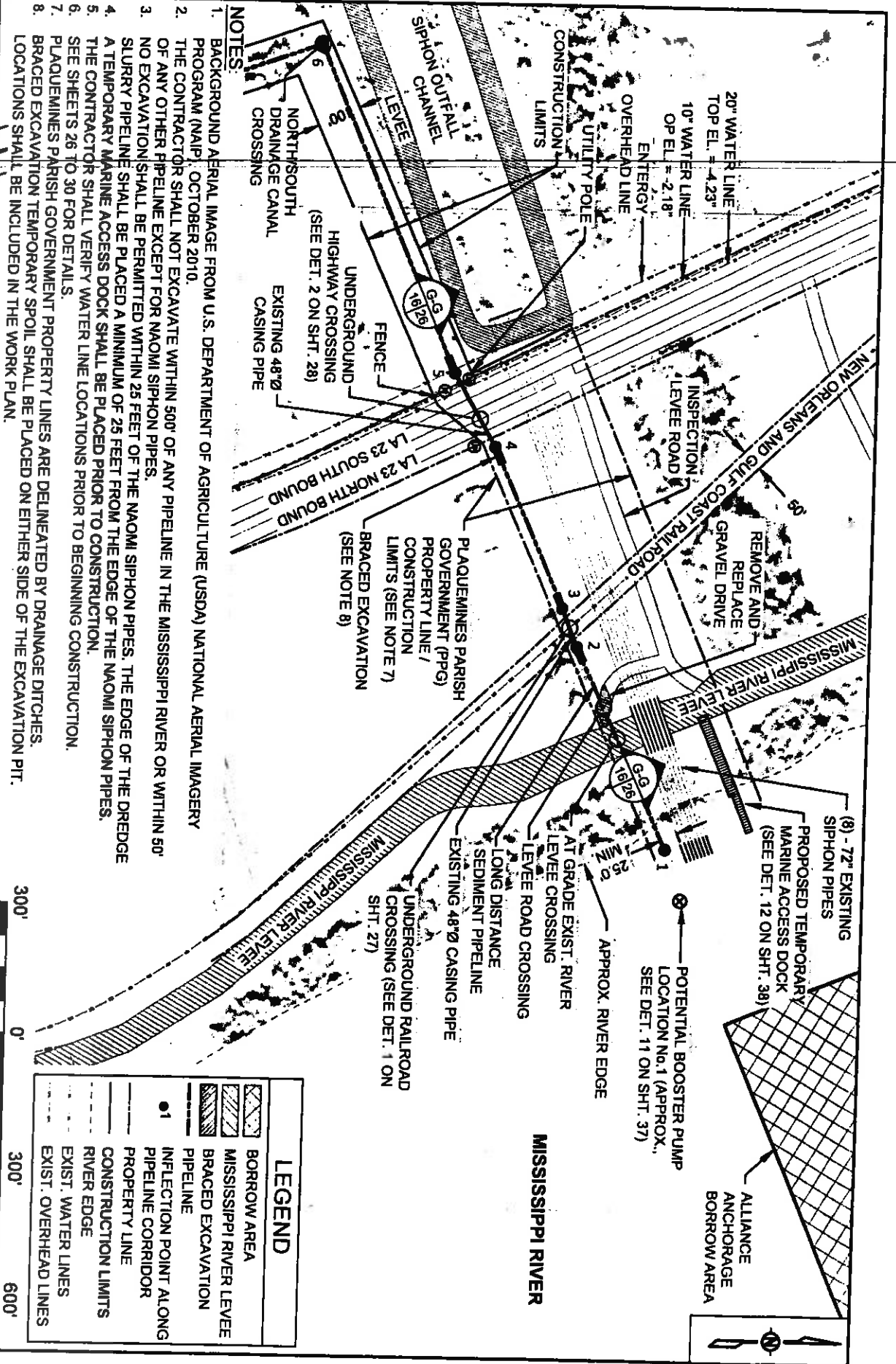
PIPELINE CORRIDOR  
LAYOUT (4 OF 4)

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 15 OF 41



- NOTES:**
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
  2. THE CONTRACTOR SHALL NOT EXCAVATE WITHIN 500' OF ANY PIPELINE IN THE MISSISSIPPI RIVER OR WITHIN 50' OF ANY OTHER PIPELINE EXCEPT FOR NAOMI SIPHON PIPES.
  3. NO EXCAVATION SHALL BE PERMITTED WITHIN 25 FEET OF THE NAOMI SIPHON PIPES. THE EDGE OF THE DREDGE A TEMPORARY MARINE ACCESS DOCK SHALL BE PLACED PRIOR TO CONSTRUCTION.
  4. THE CONTRACTOR SHALL VERIFY WATER LINE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
  5. SEE SHEETS 26 TO 30 FOR DETAILS.
  6. PLAQUEMINES PARISH GOVERNMENT PROPERTY LINES ARE DELINEATED BY DRAINAGE DITCHES.
  7. BRACED EXCAVATION TEMPORARY SPOIL SHALL BE PLACED ON EITHER SIDE OF THE EXCAVATION PIT.
  8. LOCATIONS SHALL BE INCLUDED IN THE WORK PLAN.

300' 0' 300' 600'

# **LEGEND**

- BORROW AREA
- MISSISSIPPI RIVER LEVEE
- BRACED EXCAVATION
- INFLECTION POINT ALONG PIPELINE CORRIDOR
- PROPERTY LINE
- CONSTRUCTION LIMITS
- RIVER EDGE
- EXIST. WATER LINES
- EXIST. OVERHEAD LINES

## **COASTAL PROTECTION & RESTORATION AUTHORITY**

ONE AMERICAN PLACE  
307 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70805  
225-421-7783

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

PIPELINE CORRIDOR  
DETAIL A

DRAWN BY: VC

DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

STATE PROJECT NUMBER: BA-43 (EB)  
FEDERAL PROJECT NUMBER: N/A

DATE: DECEMBER 12, 2012  
SHEET 16 OF 41



# PIPELINE CORRIDOR ALIGNMENT

PT.	LATITUDE	LONGITUDE
1	29° 42' 03.65" N	89° 59' 01.44" W
2	29° 42' 01.58" N	89° 59' 06.71" W
3	29° 42' 01.24" N	89° 59' 07.71" W
4	29° 41' 59.67" N	89° 59' 11.90" W
5	29° 41' 58.73" N	89° 59' 13.82" W
6	29° 41' 55.64" N	89° 59' 12.27" W
7	29° 41' 40.40" N	89° 59' 16.32" W
8	29° 41' 04.23" N	89° 59' 15.22" W
9	29° 40' 56.28" N	89° 59' 13.92" W
10	29° 40' 16.32" N	89° 59' 06.00" W
11	29° 40' 05.58" N	89° 59' 04.03" W
12	29° 40' 00.10" N	89° 58' 59.20" W
13	29° 39' 27.14" N	90° 00' 36.31" W
14	29° 39' 26.32" N	90° 00' 40.52" W
15	29° 39' 25.26" N	90° 00' 42.84" W
16	29° 39' 21.00" N	90° 00' 44.18" W
17	29° 39' 20.08" N	90° 00' 45.51" W
18	29° 39' 19.67" N	90° 00' 47.36" W
19	29° 39' 18.35" N	90° 00' 51.73" W
20	29° 39' 13.49" N	90° 00' 59.89" W
21	29° 39' 11.57" N	90° 01' 06.43" W
22	29° 39' 11.17" N	90° 01' 09.43" W
23	29° 39' 12.07" N	90° 01' 16.15" W
24	29° 39' 12.08" N	90° 01' 16.20" W
25	29° 39' 10.50" N	90° 01' 23.40" W
26	29° 39' 06.93" N	90° 01' 27.77" W
27	29° 39' 03.93" N	90° 01' 29.37" W
28	29° 39' 02.66" N	90° 01' 31.56" W
29	29° 38' 58.08" N	90° 01' 36.77" W
30	29° 38' 57.33" N	90° 01' 40.53" W
31	29° 38' 55.85" N	90° 01' 46.47" W
32	29° 38' 55.39" N	90° 01' 52.52" W
33	29° 38' 55.40" N	90° 02' 00.71" W
34	29° 38' 54.26" N	90° 02' 05.00" W
35	29° 38' 51.24" N	90° 02' 06.67" W
36	29° 38' 48.03" N	90° 02' 07.20" W
37	29° 38' 45.29" N	90° 02' 08.26" W
38	29° 38' 43.58" N	90° 02' 11.97" W
39	29° 38' 42.10" N	90° 02' 15.78" W
40	29° 38' 37.05" N	90° 02' 25.47" W
41	29° 38' 28.71" N	90° 02' 36.65" W
42	29° 38' 23.16" N	90° 02' 45.01" W
43	29° 38' 17.99" N	90° 02' 48.83" W
44	29° 38' 08.30" N	90° 02' 52.14" W
45	29° 38' 03.70" N	90° 02' 54.05" W

PT.	LATITUDE	LONGITUDE
46	29° 37' 47.94" N	90° 03' 03.37" W
47	29° 36' 48.43" N	90° 03' 03.76" W
48	29° 36' 49.44" N	90° 03' 08.53" W
49	29° 36' 41.92" N	90° 03' 14.40" W
50	29° 36' 45.83" N	90° 03' 15.80" W
51	29° 36' 14.08" N	90° 03' 15.84" W
52	29° 36' 14.19" N	90° 03' 26.04" W
53	29° 36' 14.03" N	90° 03' 39.98" W
54	29° 36' 15.72" N	90° 03' 46.51" W
55	29° 36' 09.48" N	90° 04' 16.78" W

## ADDITIONAL MARSH AREA (TOP OF SLOPE)

PT.	LATITUDE	LONGITUDE
1	29° 37' 09.74" N	90° 03' 05.44" W
2	29° 36' 51.36" N	90° 03' 05.55" W
3	29° 36' 52.00" N	90° 03' 08.60" W
4	29° 36' 50.03" N	90° 03' 16.24" W
5	29° 36' 46.63" N	90° 03' 18.64" W
6	29° 36' 29.72" N	90° 03' 18.55" W
7	29° 36' 29.79" N	90° 03' 25.34" W
8	29° 36' 29.53" N	90° 03' 28.15" W
9	29° 36' 29.65" N	90° 03' 40.60" W
10	29° 36' 34.21" N	90° 03' 45.20" W
11	29° 36' 41.70" N	90° 03' 47.24" W
12	29° 36' 49.99" N	90° 03' 46.13" W
13	29° 36' 56.56" N	90° 03' 42.32" W
14	29° 36' 59.84" N	90° 03' 32.70" W
15	29° 36' 59.65" N	90° 03' 13.33" W
16	29° 37' 02.51" N	90° 03' 12.08" W
17	29° 37' 08.41" N	90° 03' 10.74" W

## PROBABLE PROPOSED BOOSTER PUMP LOCATIONS

PT.	LATITUDE	LONGITUDE
1	29° 42' 04.01" N	89° 59' 00.12" W
2	29° 39' 58.03" N	89° 59' 11.71" W
3	29° 39' 29.57" N	90° 00' 33.78" W
4	29° 38' 05.92" N	90° 02' 53.14" W

PT.	LATITUDE	LONGITUDE
1	29° 38' 33.79" N	90° 05' 43.76" W
2	29° 38' 36.11" N	90° 05' 38.23" W
3	29° 38' 35.25" N	90° 05' 38.05" W
4	29° 38' 33.34" N	90° 05' 37.43" W
5	29° 38' 33.08" N	90° 05' 35.59" W
6	29° 38' 32.07" N	90° 05' 34.21" W
7	29° 38' 30.85" N	90° 05' 32.82" W
8	29° 38' 30.78" N	90° 05' 28.75" W
9	29° 38' 28.67" N	90° 05' 22.82" W
10	29° 38' 26.43" N	90° 05' 18.94" W
11	29° 38' 30.26" N	90° 05' 16.81" W
12	29° 38' 33.49" N	90° 05' 15.41" W
13	29° 38' 34.70" N	90° 05' 13.23" W
14	29° 38' 35.21" N	90° 05' 06.01" W
15	29° 38' 34.77" N	90° 05' 00.40" W
16	29° 38' 33.52" N	90° 04' 55.13" W
17	29° 38' 31.55" N	90° 04' 49.78" W
18	29° 38' 24.42" N	90° 04' 38.98" W
19	29° 38' 22.33" N	90° 04' 37.22" W
20	29° 38' 17.09" N	90° 04' 33.99" W
21	29° 38' 16.07" N	90° 04' 29.78" W
22	29° 38' 14.53" N	90° 04' 28.39" W
23	29° 38' 12.55" N	90° 04' 25.78" W
24	29° 38' 11.96" N	90° 04' 20.94" W
25	29° 38' 11.26" N	90° 04' 18.04" W
26	29° 38' 10.59" N	90° 04' 14.17" W
27	29° 38' 08.55" N	90° 04' 11.61" W
28	29° 38' 07.56" N	90° 04' 11.11" W
29	29° 38' 05.95" N	90° 04' 09.47" W
30	29° 38' 04.23" N	90° 04' 01.09" W
31	29° 38' 01.33" N	90° 03' 57.32" W
32	29° 37' 58.26" N	90° 03' 53.74" W
33	29° 37' 58.56" N	90° 03' 50.99" W
34	29° 37' 58.67" N	90° 03' 48.16" W
35	29° 37' 59.61" N	90° 03' 45.24" W
36	29° 38' 00.16" N	90° 03' 42.71" W
37	29° 37' 59.91" N	90° 03' 39.88" W
38	29° 37' 58.56" N	90° 03' 36.16" W
39	29° 37' 56.92" N	90° 03' 36.90" W
40	29° 37' 56.06" N	90° 03' 36.03" W
41	29° 37' 55.53" N	90° 03' 35.00" W
42	29° 37' 53.79" N	90° 03' 29.95" W
43	29° 37' 52.82" N	90° 03' 23.74" W
44	29° 37' 52.63" N	90° 03' 20.42" W
45	29° 37' 52.76" N	90° 03' 15.34" W

PT.	LATITUDE	LONGITUDE
46	29° 37' 53.05" N	90° 03' 12.51" W
47	29° 37' 53.63" N	90° 03' 10.48" W
48	29° 37' 54.31" N	90° 03' 09.40" W
49	29° 37' 56.11" N	90° 03' 08.75" W
50	29° 37' 57.50" N	90° 03' 08.22" W
51	29° 37' 59.11" N	90° 03' 06.86" W
52	29° 38' 00.30" N	90° 03' 05.45" W
53	29° 38' 00.92" N	90° 03' 04.47" W
54	29° 38' 02.81" N	90° 03' 02.54" W
55	29° 38' 04.04" N	90° 03' 01.49" W
56	29° 38' 04.97" N	90° 03' 00.88" W
57	29° 38' 06.05" N	90° 02' 59.77" W
58	29° 38' 06.50" N	90° 02' 58.86" W
59	29° 38' 06.70" N	90° 02' 57.71" W
60	29° 38' 06.81" N	90° 02' 56.01" W
61	29° 38' 05.55" N	90° 02' 51.89" W

# ACCESS CHANNEL ALIGNMENT

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

## MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE

## PROJECT ALIGNMENT TABLES

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

APPROVED BY: MAURY CHATELIER, P.E.

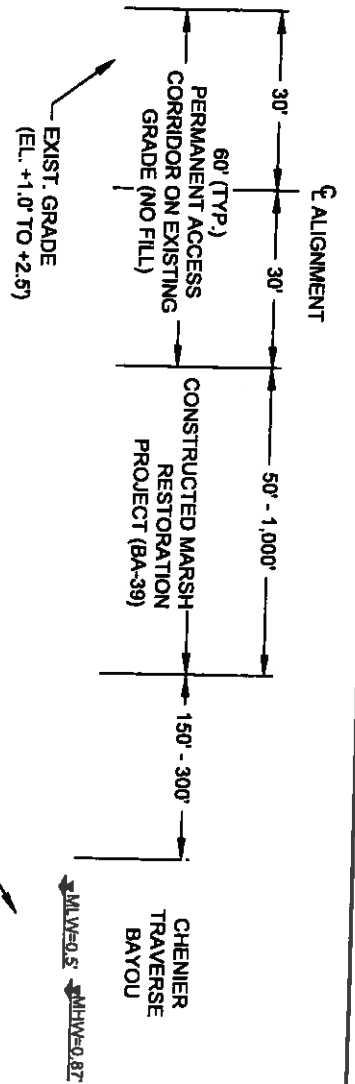
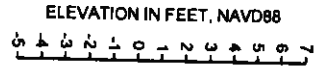
FEDERAL PROJECT NUMBER: N/A



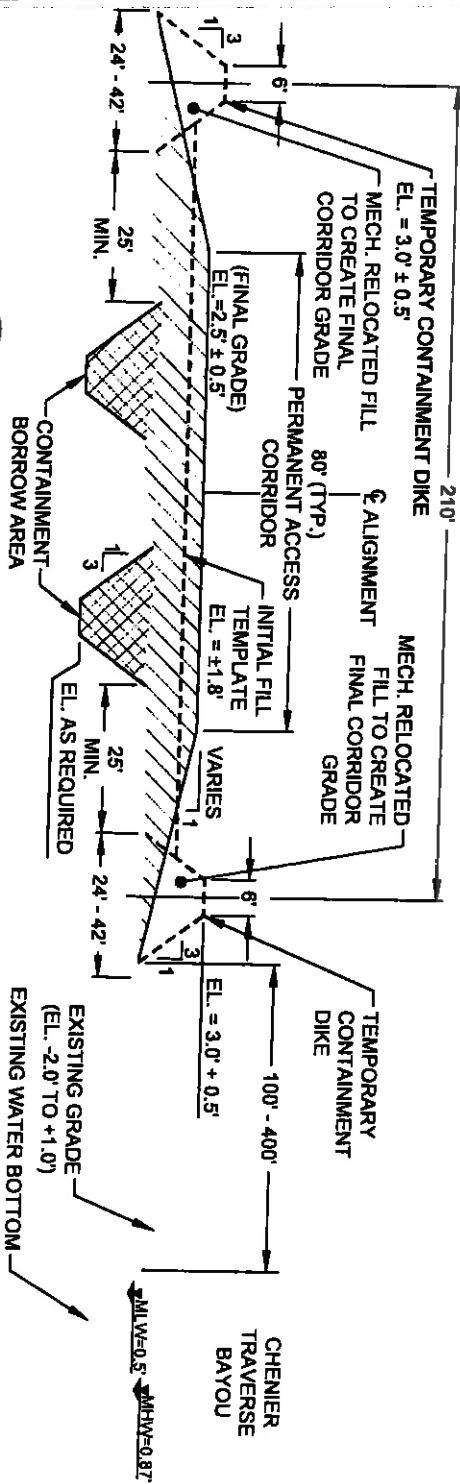
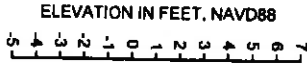
DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: N/A



1  
13  
TYPICAL REACH 1 SECTION (ACROSS BA-39 PROJECT AREA)  
(STA. 232+12.07 TO STA. 349+28.02)



2  
14  
TYPICAL REACH 2 SECTION (BETWEEN BA-39 & BAYOU DUPONT)  
(STA. 349+28.02 TO STA. 388+06.42)

NOTE:  
EXISTING GROUND ELEVATIONS BASED ON TOPOGRAPHIC  
SURVEYS PERFORMED FROM JULY 26 THROUGH OCTOBER 10,  
2011 BY T. BAKER SMITH, LLC.

HORIZONTAL SCALE



BY	DESCRIPTION	DATE	DESIGNED BY: SA		APPROVED BY: MAURY CHATELIER, P.E.		STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
SA	REVISION 5	12/12/12			<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE		TYPICAL FILL SECTIONS (SHEET 1 OF 4)	
SA	REVISION 4	08/24/12								
SA	REVISION 3	03/09/12								
DRAWN BY: YC			DESIGNED BY: SA		APPROVED BY: MAURY CHATELIER, P.E.		STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
							FEDERAL PROJECT NUMBER: N/A		SHEET 18 OF 41	




**ONE AMERICAN PLACE**  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-827-7793

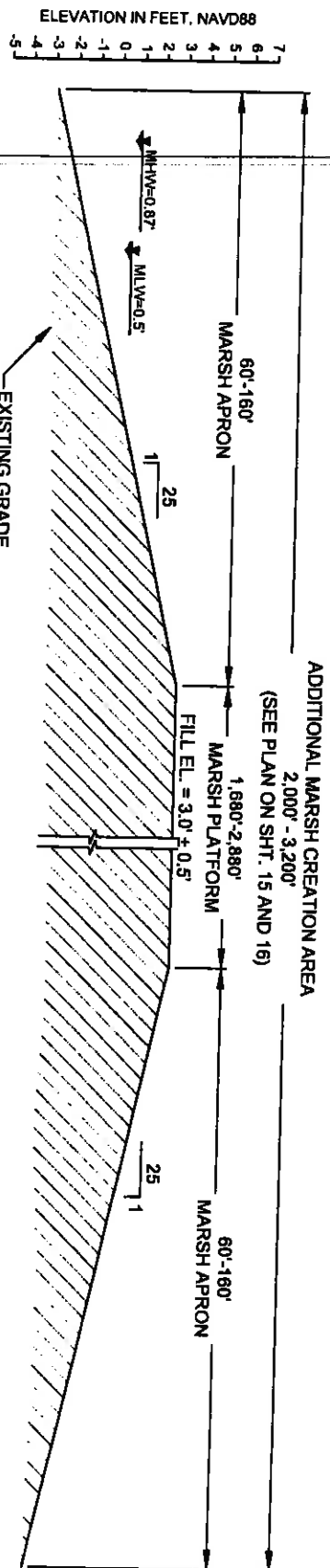
**COASTAL PROTECTION & RESTORATION  
AUTHORITY**

**MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE**

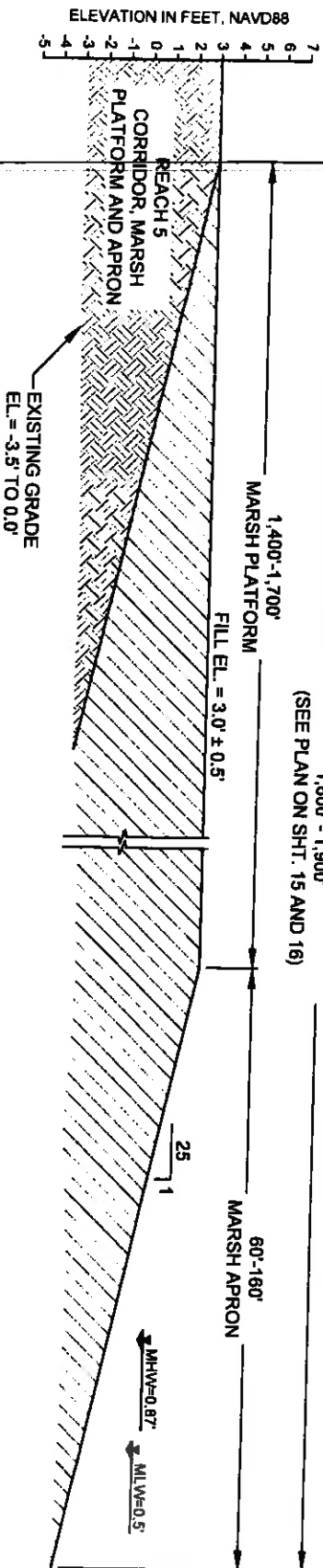
**TYPICAL  
FILL SECTIONS  
(SHEET 2 OF 4)**

BY	DESCRIPTION	DATE	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70803 225-687-7700</p> <p><b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b></p> <p>450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p>		MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	TYPICAL FILL SECTIONS (SHEET 2 OF 4)
SA	REVISION 5	12/02/12				
SA	REVISION 4	08/24/12				
SA	REVISION 3	03/09/12				
DRAWN BY:	YC					
DESIGNED BY: SA			STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	





**7**  
15  
**TYPICAL FILL SECTION ACROSS ADDITIONAL MARSH CREATION AREA**  
(SOUTH TO NORTH)



**8**  
15  
**TYPICAL FILL SECTION ACROSS ADDITIONAL MARSH CREATION AREA**  
(WEST TO EAST)



NOTE:  
EXISTING GROUND ELEVATIONS BASED ON  
TOPOGRAPHIC SURVEYS PERFORMED FROM JULY 26  
THROUGH OCTOBER 10, 2011 BY T. BAKER SMITH, LLC.

BY	DESCRIPTION	DATE
SA	REVISION 5	12/10/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-827-7700

**COASTAL PROTECTION & RESTORATION  
AUTHORITY**

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DESIGNED BY: SA

APPROVED BY: MAURY CHATELIER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

TYPICAL  
FILL SECTIONS  
(SHEET 4 OF 4)

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 21 OF 41

BA41-SM-01  
N 417.912.65  
E 3.673.985.88

BA-03C WEIR  
STRUCTURE  
(SEE NOTE 5)

TEMPORARY WARNING SIGN  
(TYP., SEE DET. 9 ON SHT. 35)

TEMPORARY SPOIL PLACEMENT  
(TO BE BACKFILLED AT THE END  
OF CONSTRUCTION)

- NOTES:**
1. BACKGROUND AERIAL IMAGE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER 2010.
  2. NO DREDGING WITHIN 500' OF EXISTING PIPELINES. FOR ACCESS CHANNEL ALIGNMENT SEE TABLE ON SHEET 17.
  3. ACCESS CHANNEL FROM STA. 0+00 TO STA. 61+89 CURRENTLY OPEN AS PART OF BA-41 CONSTRUCTION. CHANNEL FROM STA. 61+89 TO STA. 181+53 LIKELY TO BE DREDGED AS PART OF BA-48 CONSTRUCTION. LDSP WOULD BACKFILL.
  4. BA-03C WEIR STRUCTURE PARTIALLY REMOVED AS PART OF BA-41 CONSTRUCTION TO ALLOW ACCESS. LDSP WILL RECONSTRUCT TO ORIGINAL DESIGN.

ACCESS CHANNEL BOTTOM OF  
CUT (MAX. 80 FEET WIDE, SEE  
SEC. ON SHT. 23)

CONSTRUCTED SHORELINE  
PROTECTION AND MARSH  
CREATION PROJECT (BA-41)

NO DREDGING WITHIN 500'  
OF EXISTING PIPELINES

NO DREDGING WITHIN 500'  
OF EXISTING PIPELINES

PROPOSED MARSH & RIDGE  
CREATION PROJECT (BA-48)  
(NOT PART OF THIS PROJECT)

PIPELINE CORRIDOR ALIGNMENT

### LEGEND

- PROPOSED BA-48 PROJECT AREA
- NO WORK ZONE
- TEMPORARY SPOIL
- ACCESS CHANNEL
- ACCESS CHANNEL BASELINE
- INFLECTION POINT ALONG  
ACCESS CHANNEL BASELINE
- EXISTING PIPELINES
- WARNING SIGN



BY	DESCRIPTION	DATE
----	-------------	------

SA REVISION 5 12/1/12

SA REVISION 4 08/24/12

SA REVISION 3 03/09/12

DRAWN BY: YC



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70805  
225-421-7765

### COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

APPROVED BY: MAURY CHATELIER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

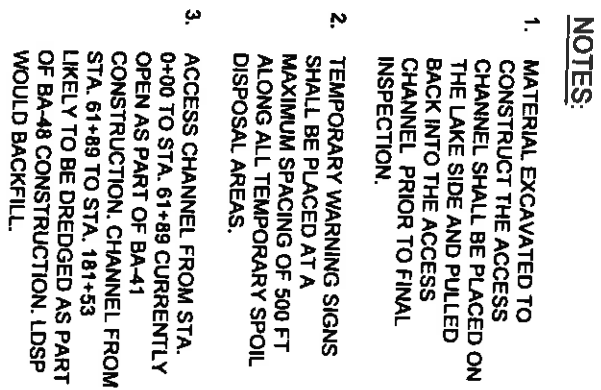
ACCESS CHANNEL  
LAYOUT


STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 22 OF 41

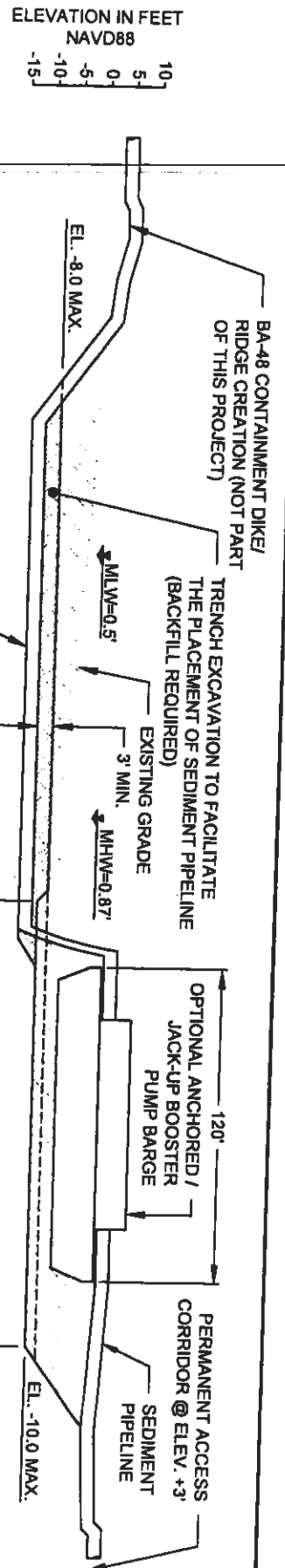


HORIZONTAL SCALE			
BY	DESCRIPTION	DATE	
SA	REVISION 5	12/10/12	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-422-7793</p>
SA	REVISION 4	08/24/12	
SA	REVISION 3	03/09/12	
DRAWN BY YC			
DESIGNED BY: SA		<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>  450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	
APPROVED BY: MAURY CHATELIER, P.E.		<b>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</b>  TYPICAL ACCESS CHANNEL SECTIONS	
STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
FEDERAL PROJECT NUMBER: NA		SHEET 23 OF 41	

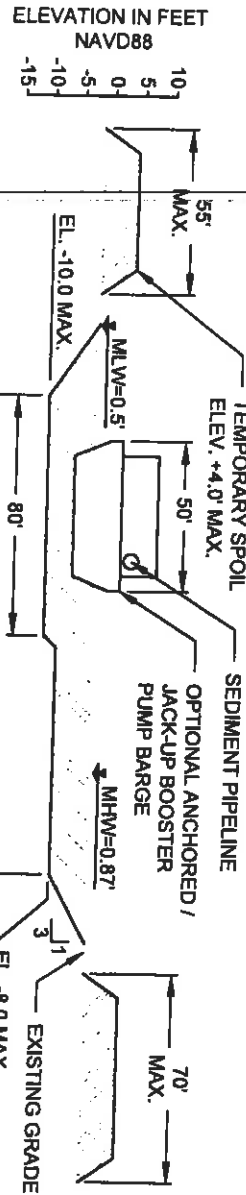




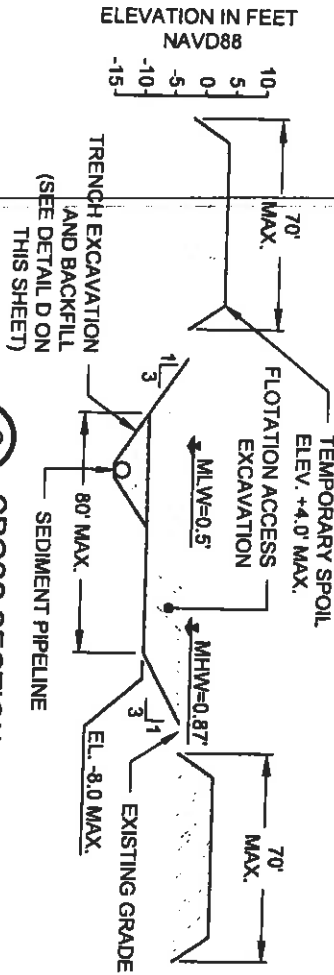




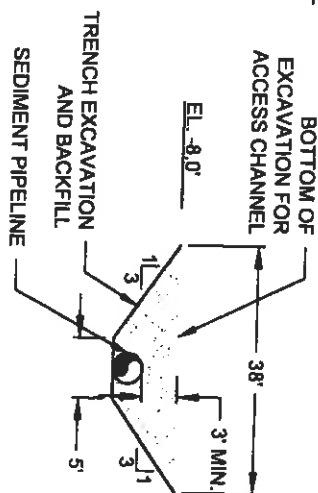
**A PROFILE**



**B CROSS SECTION**



**C CROSS SECTION**



**D TRENCH DETAIL**



BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/01/12



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-927-7183

**COASTAL PROTECTION & RESTORATION AUTHORITY**

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DESIGNED BY: SA

APPROVED BY: MAURY CHATELLIER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

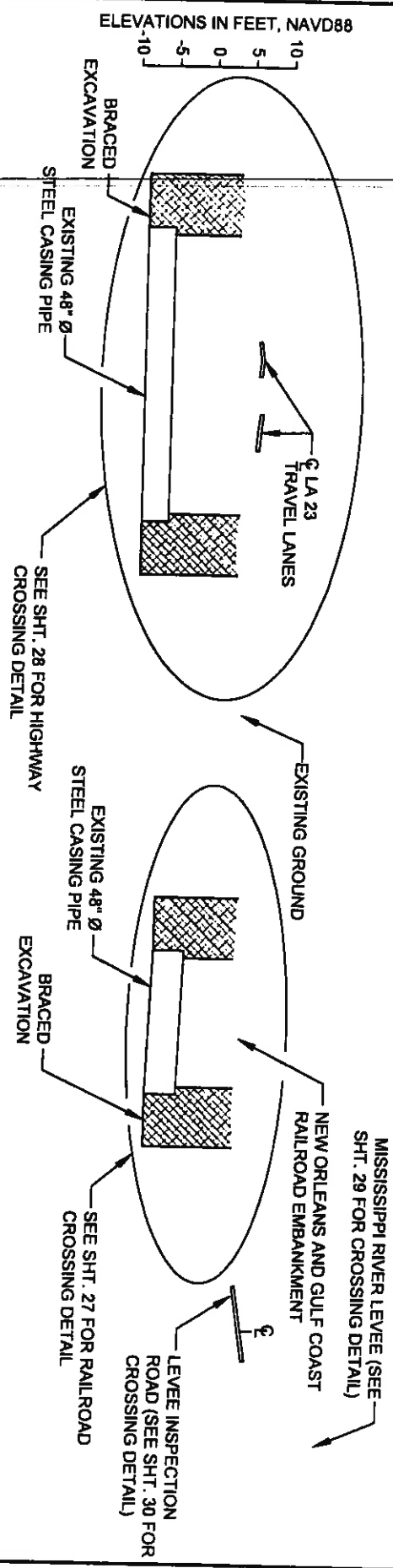
BAYOU DUPONT  
BOOSTER PUMP SITE  
TYPICAL DETAILS

STATE PROJECT NUMBER: BA-43 (ES)

DATE: DECEMBER 12, 2012


FEDERAL PROJECT NUMBER: N/A

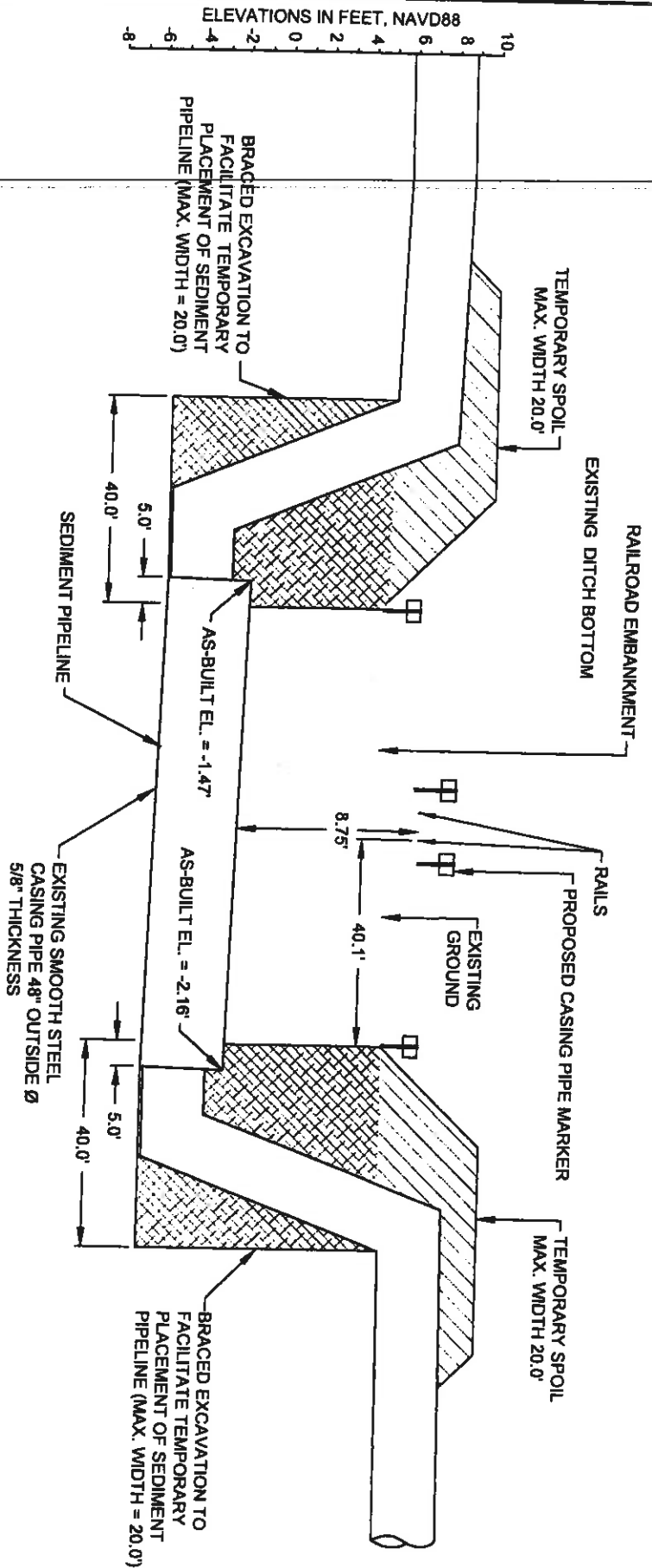
SHEET 25 OF 41



**G-G DREDGE PIPELINE CORRIDOR SECTION**



BY	DESCRIPTION	DATE	 <b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		<b>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</b>		<b>DREDGE PIPELINE CORRIDOR SECTION</b>	
SA	REVISION 5	12/10/12						
SA	REVISION 4	08/24/12						
SA	REVISION 3	03/08/12						
DRAWN BY	YC							
DESIGNED BY: SA			APPROVED BY: MAURY CHATELLIER, P.E.		STATE PROJECT NUMBER: BA-43 (EB)		DATE: DECEMBER 12, 2012	
					FEDERAL PROJECT NUMBER: N/A		SHEET 26 OF 41	



# 1 16 RAILROAD CROSSING DETAIL

## NOTES:

1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT THE EXCAVATION ON BOTH SIDES.
2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION AFTER COMPLETION OF CONSTRUCTION.

LEGEND	
	TEMPORARY SPOIL
	BRACED EXCAVATION
	EXISTING GROUND



BY	DESCRIPTION	DATE
SA	REVISION 5	12/19/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12
DRAWN BY	VC	



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-327-1753

## COASTAL PROTECTION & RESTORATION AUTHORITY

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

DESIGNED BY: SA

APPROVED BY: MAURY CHATELLER, P.E.

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

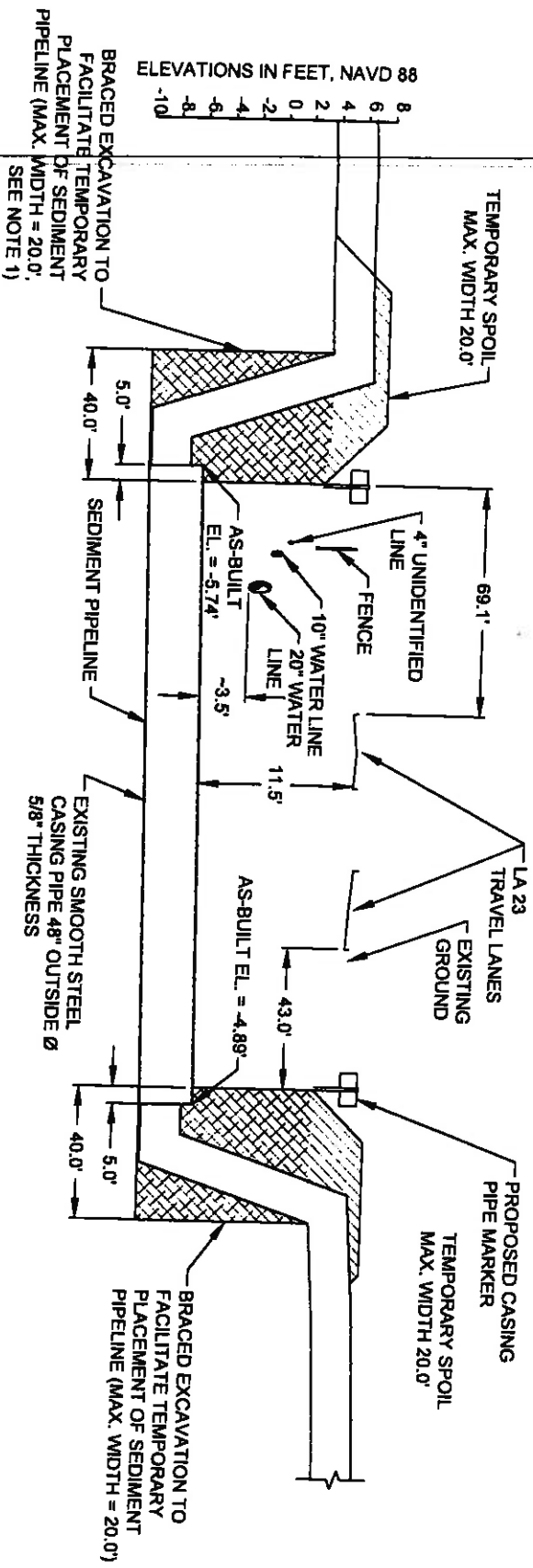
RAILROAD  
CROSSING DETAIL

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

FEDERAL PROJECT NUMBER: N/A

SHEET 27 OF 41



**2**  
HIGHWAY CROSSING DETAIL

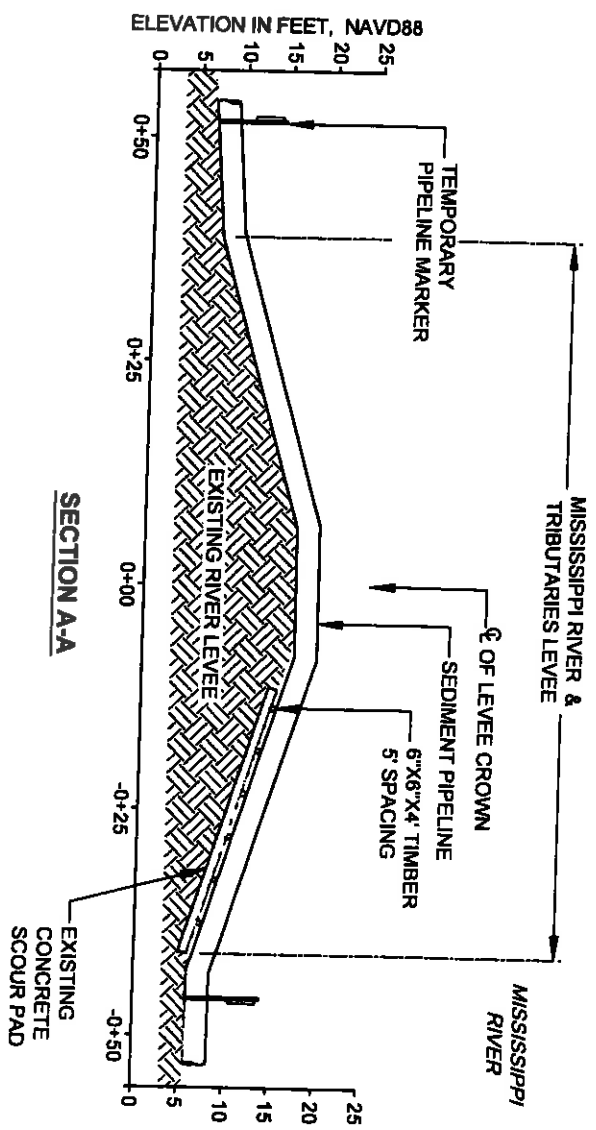
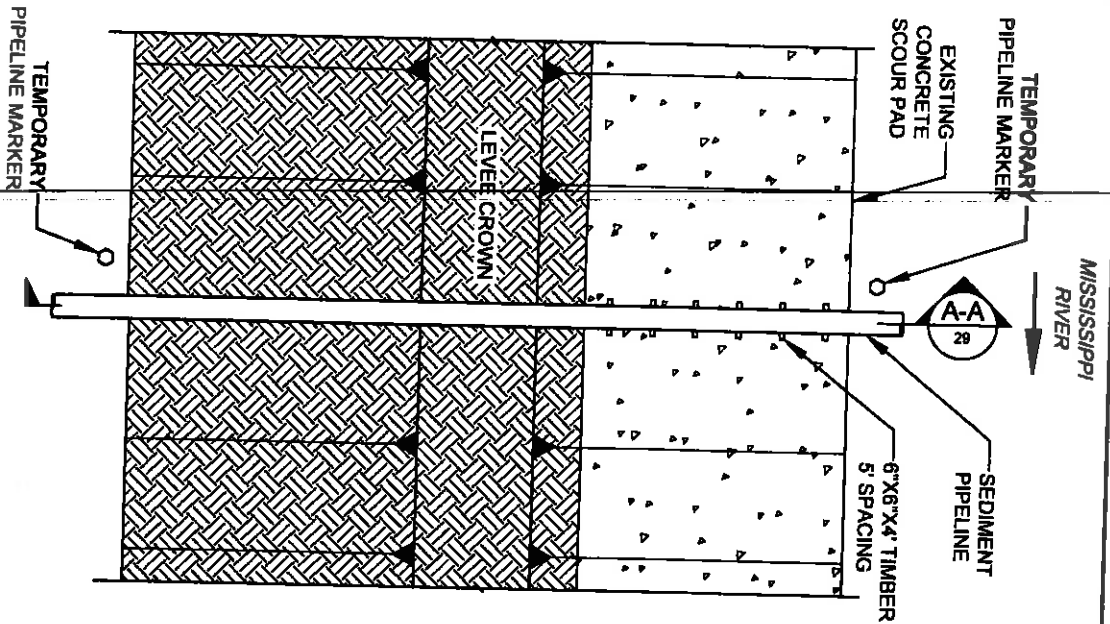
**NOTES:**

1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT THE EXCAVATION ON BOTH SIDES.
2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION AFTER COMPLETION OF CONSTRUCTION.

LEGEND	
	TEMPORARY SPOIL
	BRACED EXCAVATION
	EXISTING GROUND



BY	DESCRIPTION	DATE	DESIGNED BY	APPROVED BY	STATE PROJECT NUMBER	FEDERAL PROJECT NUMBER	DATE	SHEET
SA	REVISION 5	12/12/12	 ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-427-7793	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	N/A	HIGHWAY CROSSING DETAIL	28 OF 41
SA	REVISION 4	08/24/12						
SA	REVISION 3	03/09/12						
SA	REVISION 2	03/09/12						
DRAWN BY: YC			DESIGNED BY: SA		APPROVED BY: MAURY CHATELLIER, P.E.			



**3 MISSISSIPPI RIVER LEVEE CROSSING DETAIL**  
 SCALE: 1"=20'

- NOTES:
1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF LEVEE NEAR SEDIMENT PIPELINE.
  2. EXISTING GRADE BASED ON JANUARY 2012 TBS SURVEY.



BY	DESCRIPTION	DATE		
SA	REVISION 5	12/12/12		
SA	REVISION 4	08/24/12		
SA	REVISION 3	03/09/12		
DRAWN BY: VC			DESIGNED BY: SA	
			APPROVED BY: MAURY CHATELIER, P.E.	
			STATE PROJECT NUMBER: BA-43 (EB)	DATE: DECEMBER 12, 2012
			FEDERAL PROJECT NUMBER: N/A	SHEET 28 OF 41

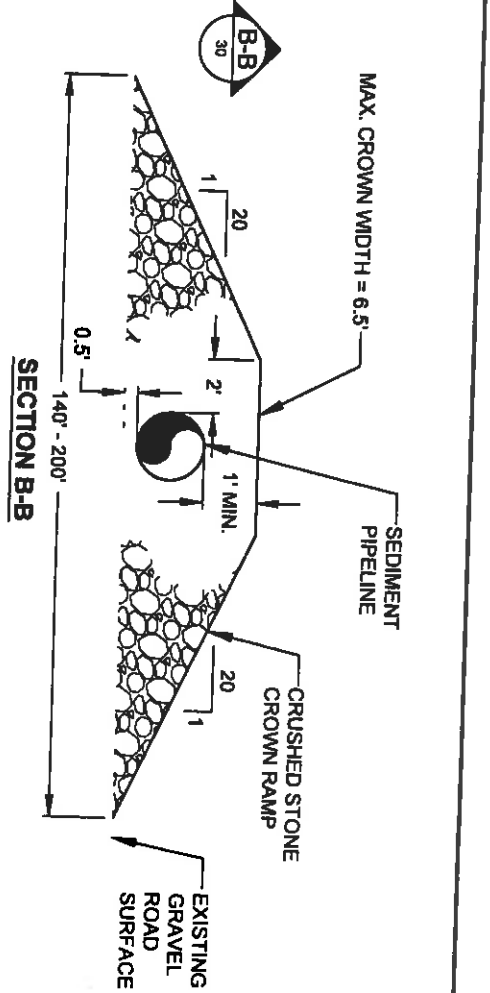
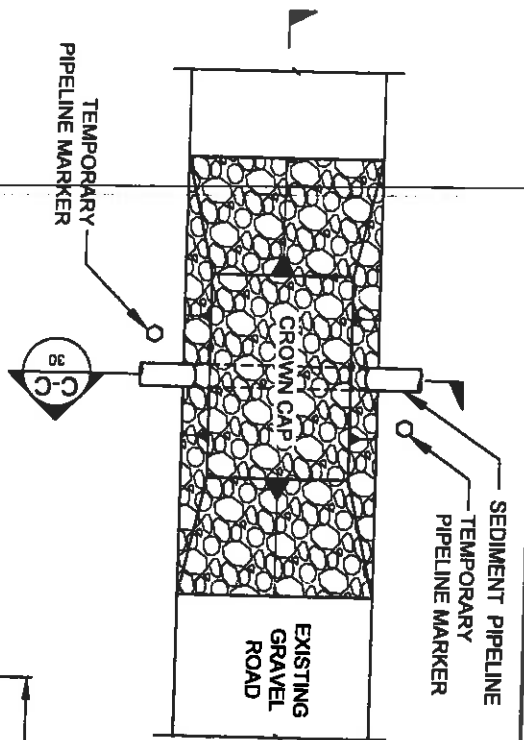


ONE AMERICAN PLACE  
 301 MAIN STREET, SUITE 800  
 BATON ROUGE, LA 70825  
 225-371-7733

**COASTAL PROTECTION & RESTORATION AUTHORITY**  
 450 LAUREL STREET  
 BATON ROUGE, LOUISIANA 70801

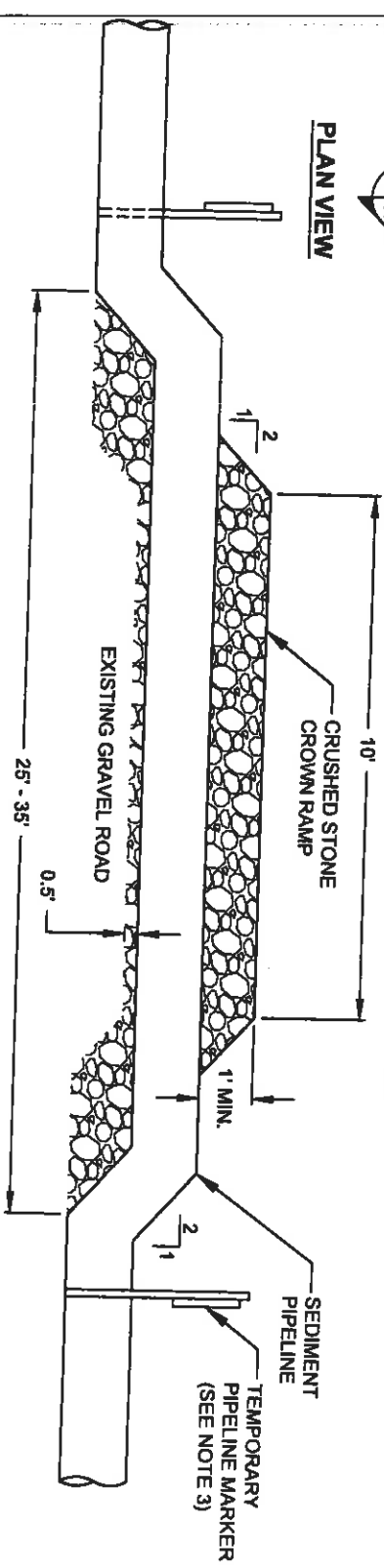
MISSISSIPPI RIVER  
 LONG DISTANCE SEDIMENT PIPELINE

MISSISSIPPI RIVER LEVEE  
 CROSSING DETAIL




**4 MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL**  
16 NOT TO SCALE

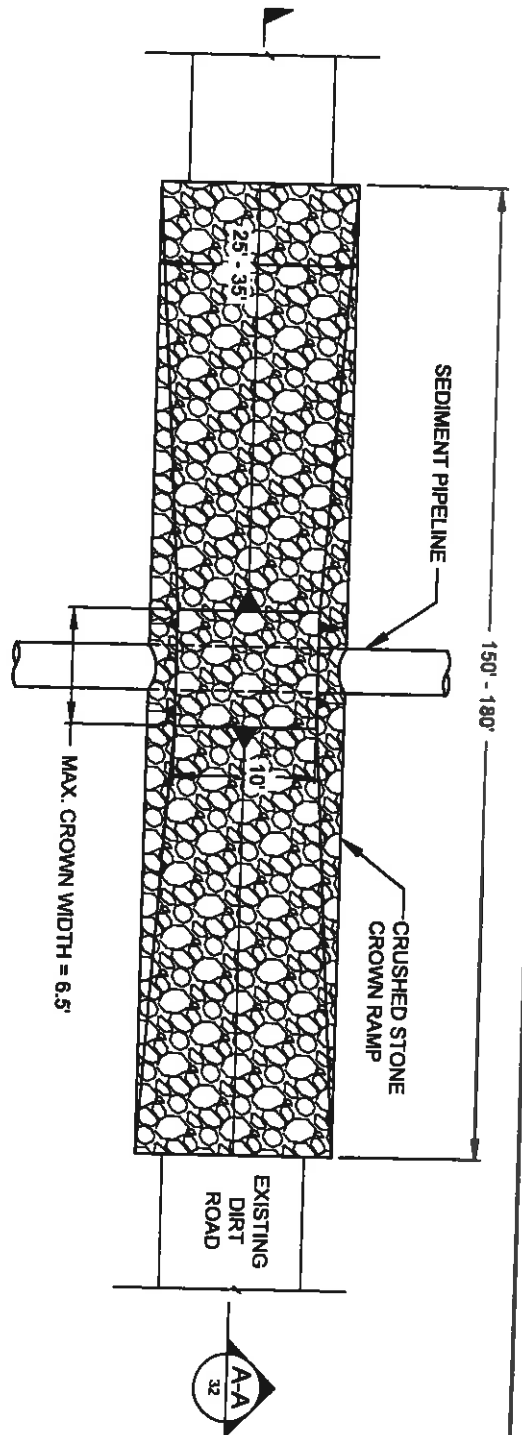
**SECTION C-C**



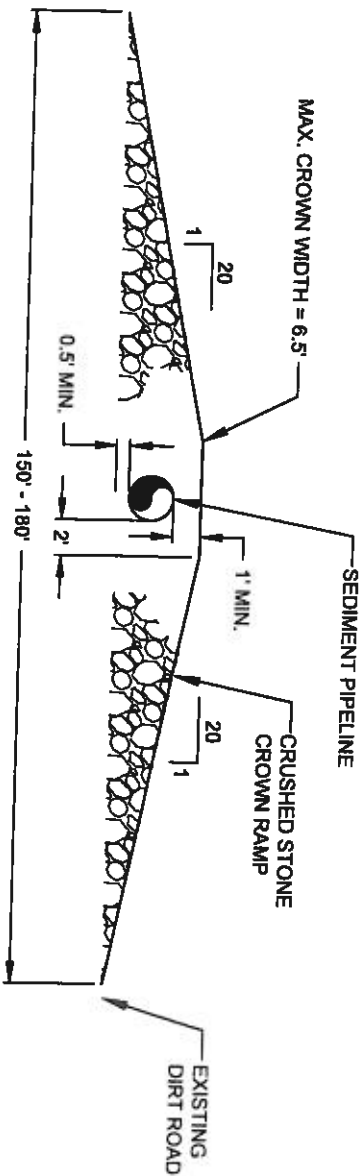
- NOTES:
1. MISSISSIPPI RIVER LEVEE INSPECTION ROAD IS AT THE LANDSIDE TOE OF THE MISSISSIPPI RIVER LEVEE.
  2. THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH AND LENGTH OF RAMP. THE CRUSH STONE MATERIAL SHALL CONFORM TO DOTD 6006 SPECIFICATION 1003.04 (a).
  3. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF LEVEE NEAR SEDIMENT PIPELINE.

BY	DESCRIPTION	DATE							
SA	REVISION 5	12/12/12	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-427-1793</p>	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>  450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL			
SA	REVISION 4	08/24/12							
SA	REVISION 3	03/08/12							
DRAWN BY: YC			DESIGNED BY: SA				APPROVED BY: MAURY CHATELLIER, P.E.	STATE PROJECT NUMBER: BA-43 (EB)	DATE: DECEMBER 12, 2012
								FEDERAL PROJECT NUMBER: N/A	SHEET 30 OF 41






**PLAN VIEW**



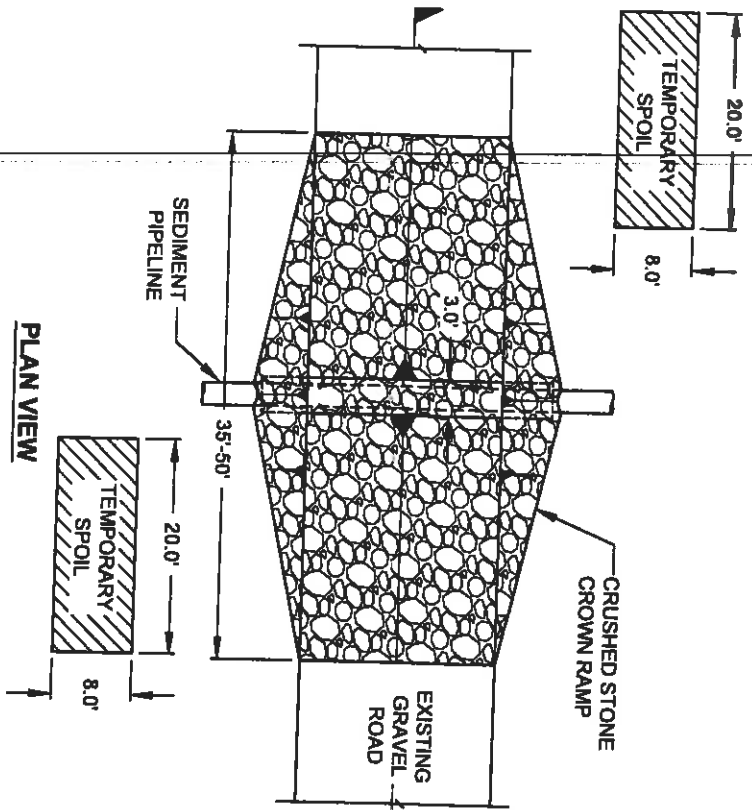
**SECTION A-A**

NOTE:  
THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH AND LENGTH OF RAMP. THE CRUSH STONE MATERIAL SHALL CONFORM TO DOTD 6006 SPECIFICATION 1003.04 (a).

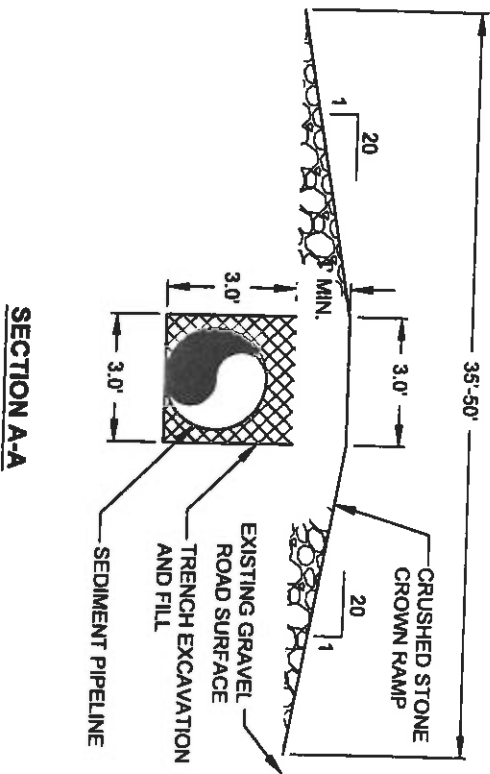
**6** DIRT ROAD CROSSING DETAIL  
12 NOT TO SCALE

BY	DESCRIPTION	DATE	DESIGNED BY: SA	APPROVED BY: MAURY CHATELIER, P.E.	STATE PROJECT NUMBER: BA-43 (EB)	FEDERAL PROJECT NUMBER: N/A	DATE: DECEMBER 12, 2012	SHEET 32 OF 41
SA	REVISION 5	12/12/12	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70802 225-327-7793</p>	<p><b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b></p> <p>450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p>	<p>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</p>	<p>DIRT ROAD CROSSING DETAIL</p>		
SA	REVISION 4	06/24/12						
SA	REVISION 3	03/09/12						
DRAWN BY: YC								





**PLAN VIEW**

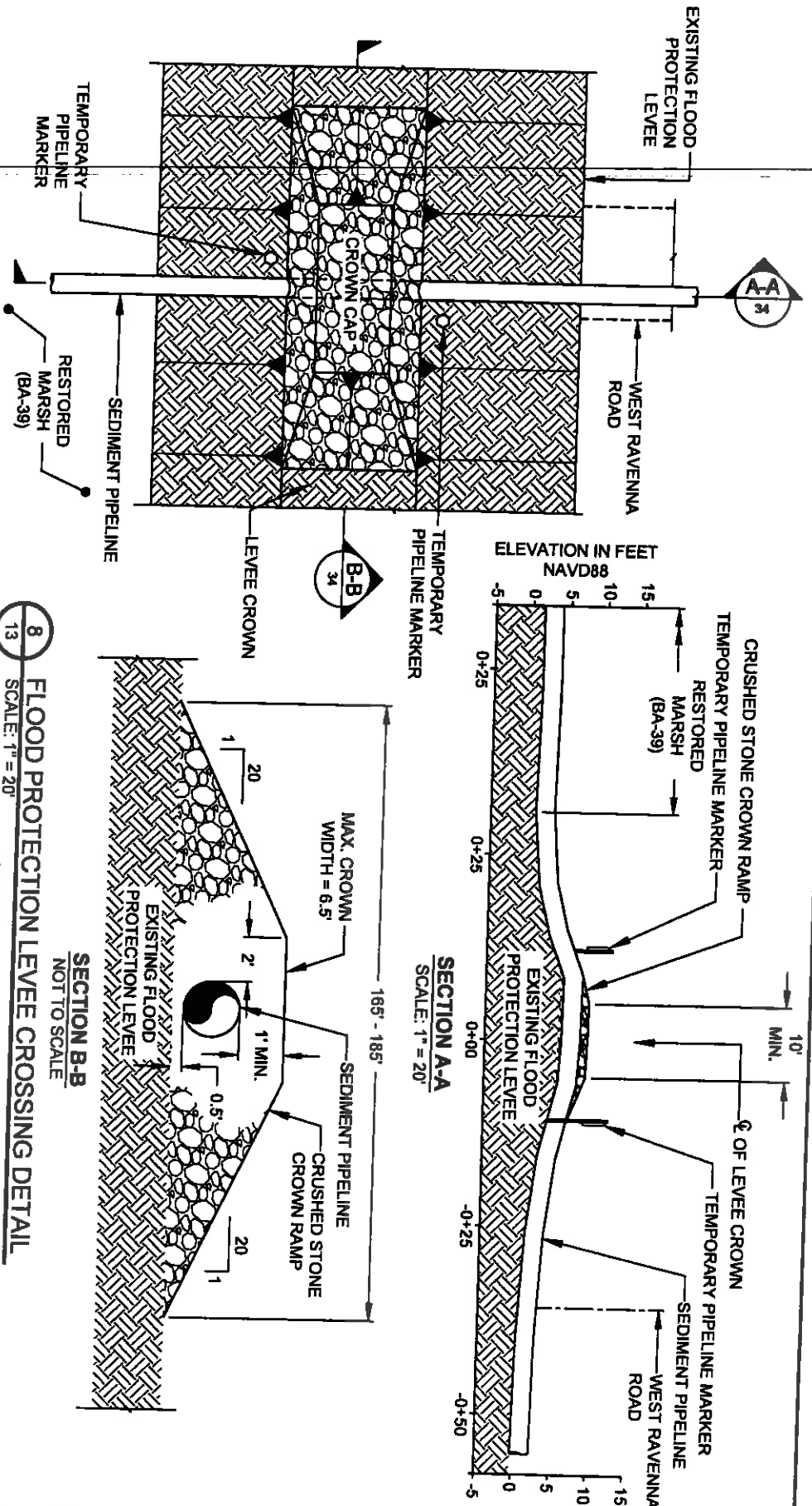


**SECTION A-A**

**NOTE:**  
THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH AND LENGTH OF RAMP. THE CRUSH STONE MATERIAL SHALL CONFORM TO DOTD 5006 SPECIFICATION 1003.04 (a).

**7**  
**13** **GRAVEL ROAD CROSSING DETAIL**  
NOT TO SCALE

BY	DESCRIPTION	DATE			
SA	REVISION 5	12/12/12			
SA	REVISION 4	08/24/12			
SA	REVISION 3	03/09/12			
DRAWN BY YC			DESIGNED BY SA		
			APPROVED BY: MAURY CHATELIER, P.E.		
			<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		
			MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE		
			GRAVEL ROAD CROSSING DETAIL		
			STATE PROJECT NUMBER: BA-43 (EB) FEDERAL PROJECT NUMBER: N/A		
			DATE: DECEMBER 12, 2012 SHEET 33 OF 41		



BY	DESCRIPTION	DATE
SA	REVISION 5	12/12/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70805  
225-487-1783

# **COASTAL PROTECTION & RESTORATION AUTHORITY**

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

MISSISSIPPI RIVER  
LONG DISTANCE SEDIMENT PIPELINE

FLOOD PROTECTION LEVEE  
CROSSING DETAIL

STATE PROJECT NUMBER: BA-43 (EB)

DATE: DECEMBER 12, 2012

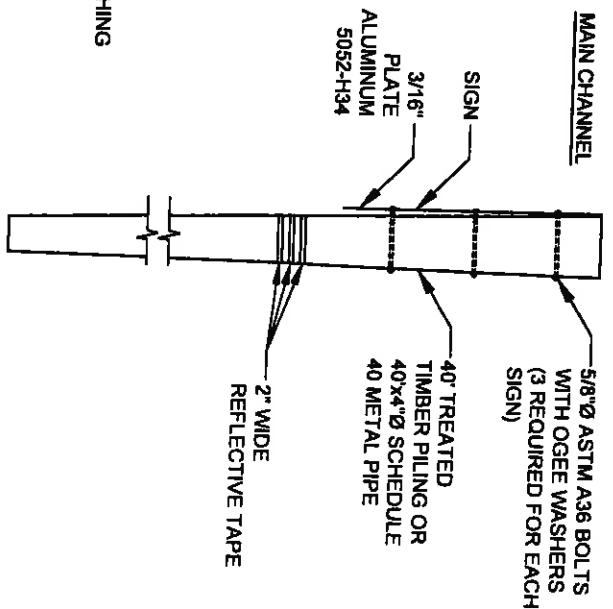
FEDERAL PROJECT NUMBER: N/A

SHEET 34 OF 41

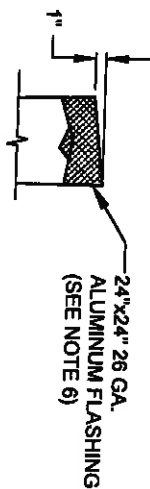
DESIGNED BY: SA

APPROVED BY: MAURY CHATELLIER, P.E.

DRAWN BY: YC




### WARNING SIGN SIDE DETAIL



### WARNING SIGN NOTES

BY	DESCRIPTION	DATE
SA	REVISION 5	12/13/12
SA	REVISION 4	08/24/12
SA	REVISION 3	03/09/12



ONE AMERICAN PLACE  
301 MAIN STREET, SUITE 800  
BATON ROUGE, LA 70825  
225-827-7700

**COASTAL PROTECTION & RESTORATION  
AUTHORITY**

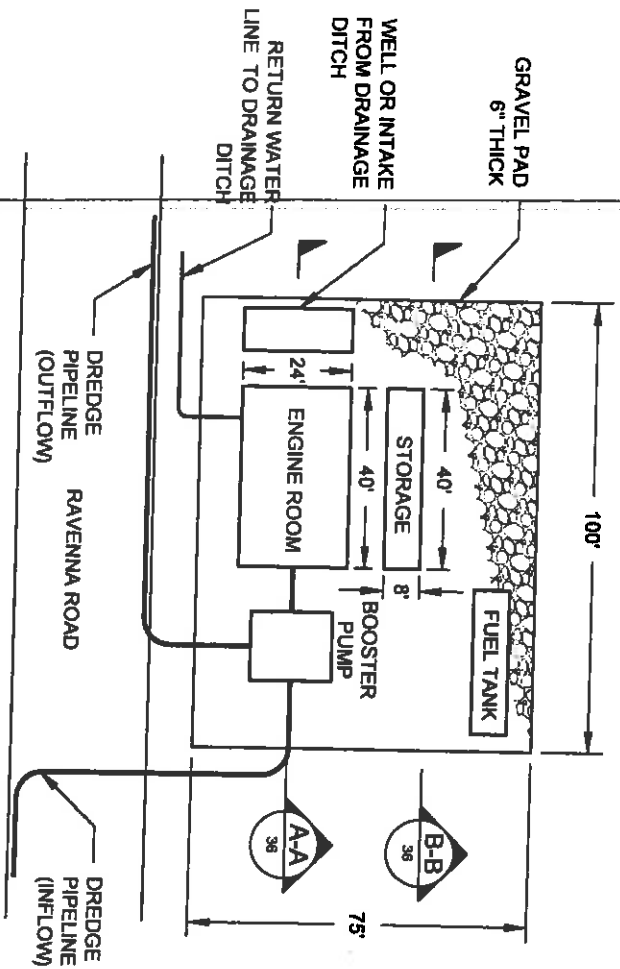
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

STATE PROJECT NUMBER	PROJECT NAME	PROJECT LOCATION
STATE PROJECT NUMBER	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	TEMPORARY SHOAL WARNING SIGN DETAILS

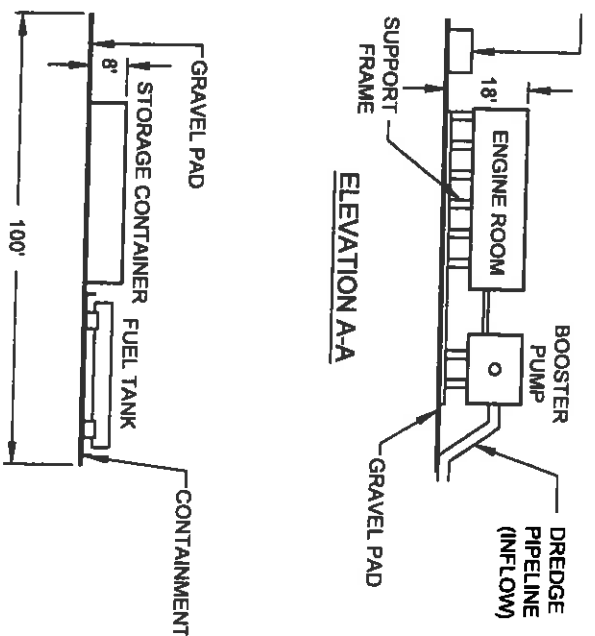
### TEMPORARY SIGNAL WARNING SIGN DETAILS

DATE: DECEMBER 12, 2017

**SHEET 35 OF 41**




PLAN

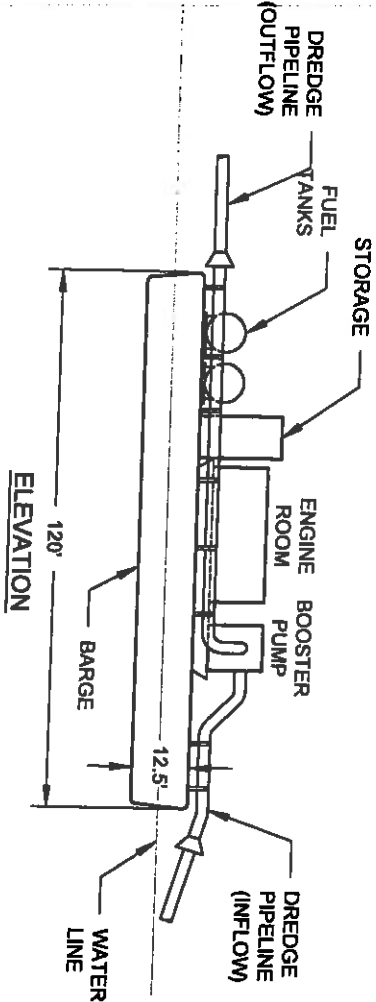
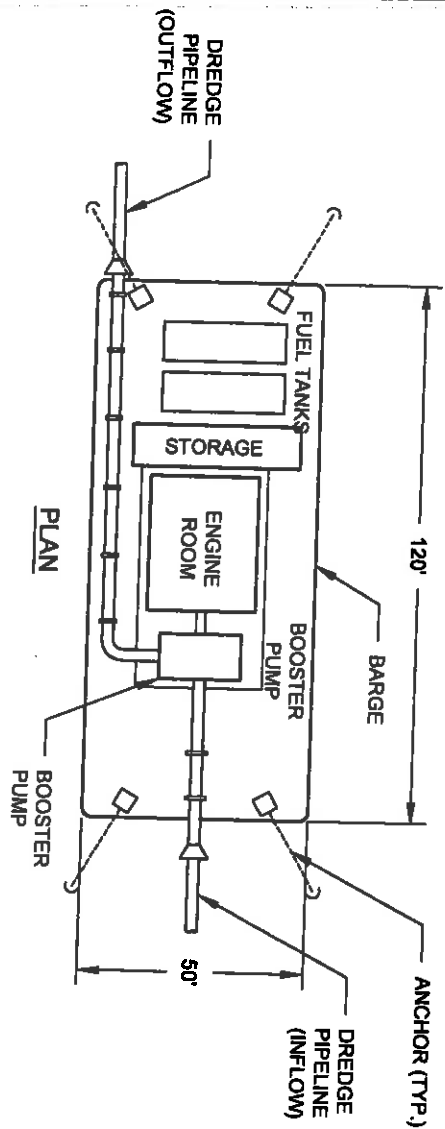


ELEVATION B-B

10 LANDSIDE BOOSTER PUMP DETAILS  
13 NOT TO SCALE


NOTE:  
TYPICAL LANDSIDE BOOSTER SETUP. ACTUAL MAY VARY.

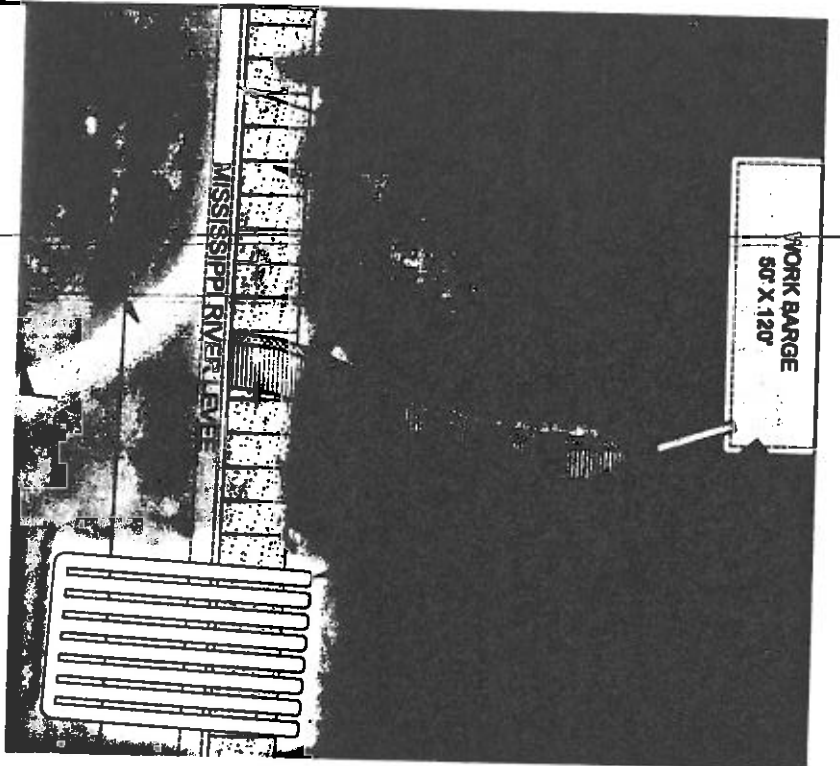
BY	DESCRIPTION	DATE			
SA	REVISION 5	12/12/12	 ONE AMERICAN PLACE 301 MAIN STREET SUITE 800 BATON ROUGE, LA 70825 225-321-1793	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>  450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	<b>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</b>
SA	REVISION 4	08/24/12			
SA	REVISION 3	03/09/12			
DRAWN BY: YC			DESIGNED BY: SA	APPROVED BY: MAURY CHATELLIER, P.E.	
			STATE PROJECT NUMBER: BA-43 (EB) FEDERAL PROJECT NUMBER: N/A		<b>LANDSIDE BOOSTER PUMP PLAN AND ELEVATIONS</b>
			DATE: DECEMBER 12, 2012		
			SHEET 36 OF 41		



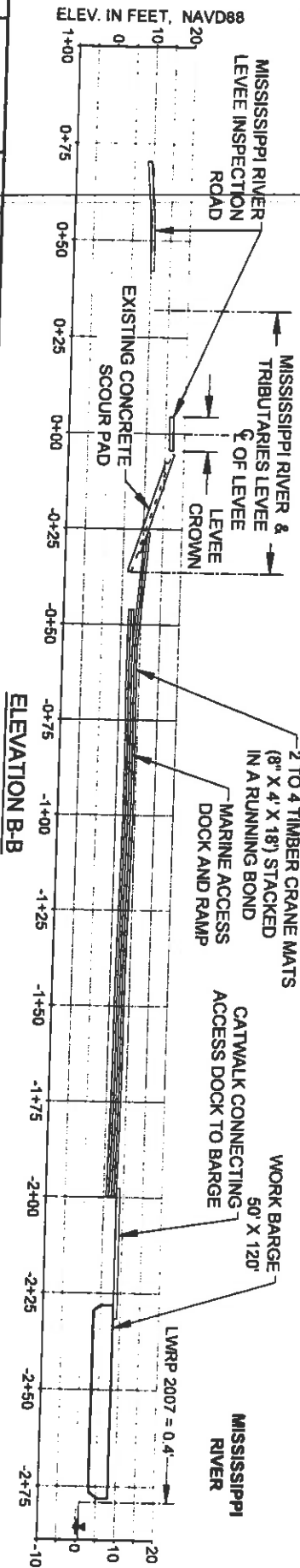
**11**  
16 **FLOATING BOOSTER PUMP DETAILS**  
NOT TO SCALE

NOTE:  
TYPICAL FLOATING BOOSTER SETUP.  
ACTUAL MAY VARY.

BY	DESCRIPTION	DATE			STATE PROJECT NUMBER:	DATE
SA	REVISION 5	12/12/12	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70803 225-927-7783</p>	<p><b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p>	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	FLOATING BOOSTER PUMP PLAN AND ELEVATIONS
SA	REVISION 4	08/24/12				
SA	REVISION 3	03/08/12				
DRAWN BY: YC			DESIGNED BY: SA		APPROVED BY: MAURY CHATELLIER, P.E.	



### PLAN VIEW

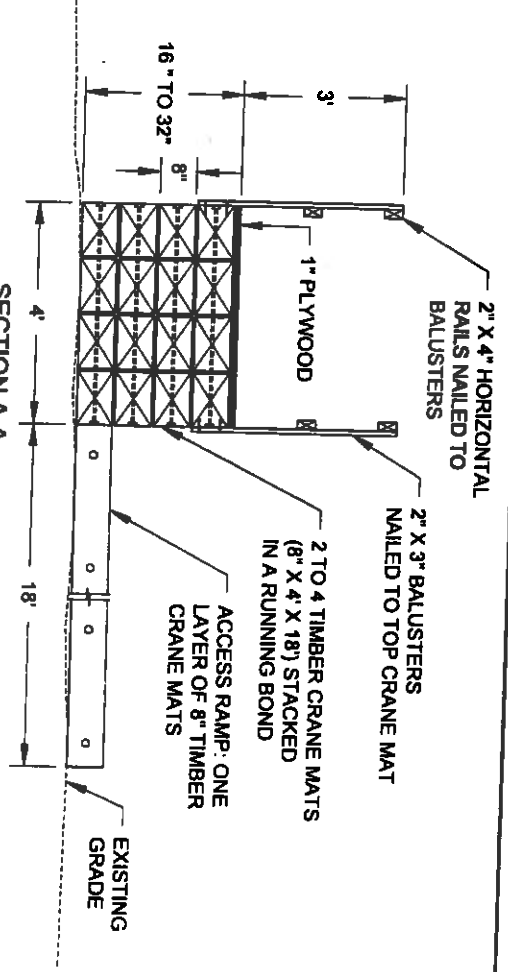



### 12 TEMPORARY MARINE ACCESS DOCK DETAILS

16 NOT TO SCALE


- NOTES:
1. EXISTING GRADES BASED ON JANUARY 2012 TBS SURVEY.
  2. TEMPORARY MARINE ACCESS DOCK WILL BE PLACED TO FACILITATE CONSTRUCTION PERSONNEL ACCESS TO THE MISSISSIPPI RIVER.
  3. ACCESS DOCK DETAILS BASED ON BA-39 PROJECT CONSTRUCTION. ACTUAL DETAILS MAY VARY BUT WILL HAVE TO BE INCLUDED IN THE CONTRACTORS WORK PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO CONSTRUCTION AND PLACED WITHIN THE CONSTRUCTION LIMITS.
  4. ACCESS DOCK TO BE COMPLETELY REMOVED AFTER PROJECT IS COMPLETE.

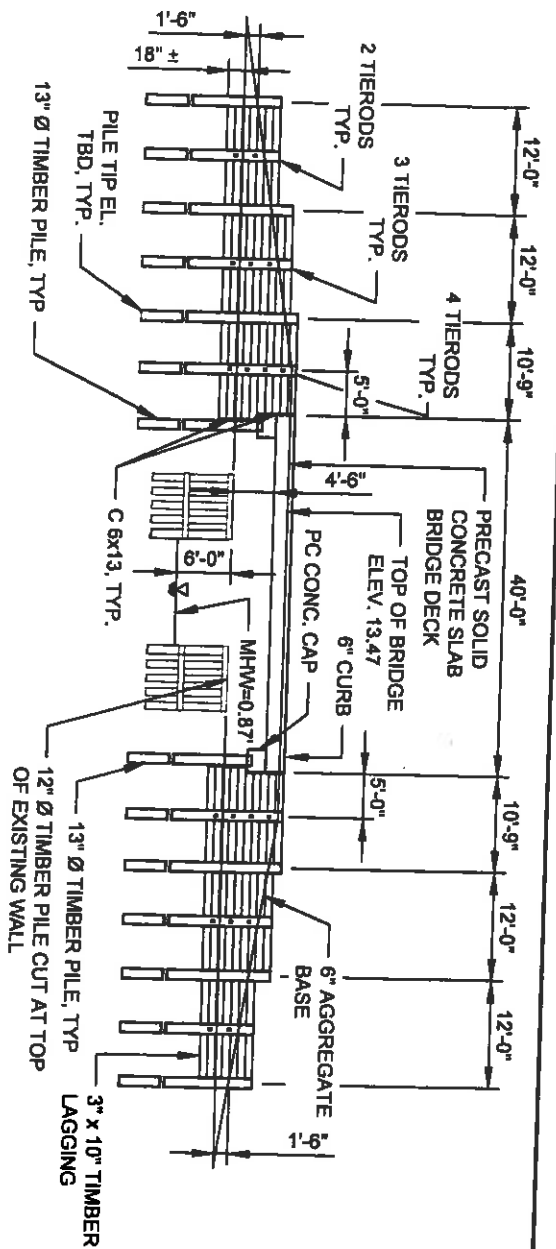
### SECTION A-A



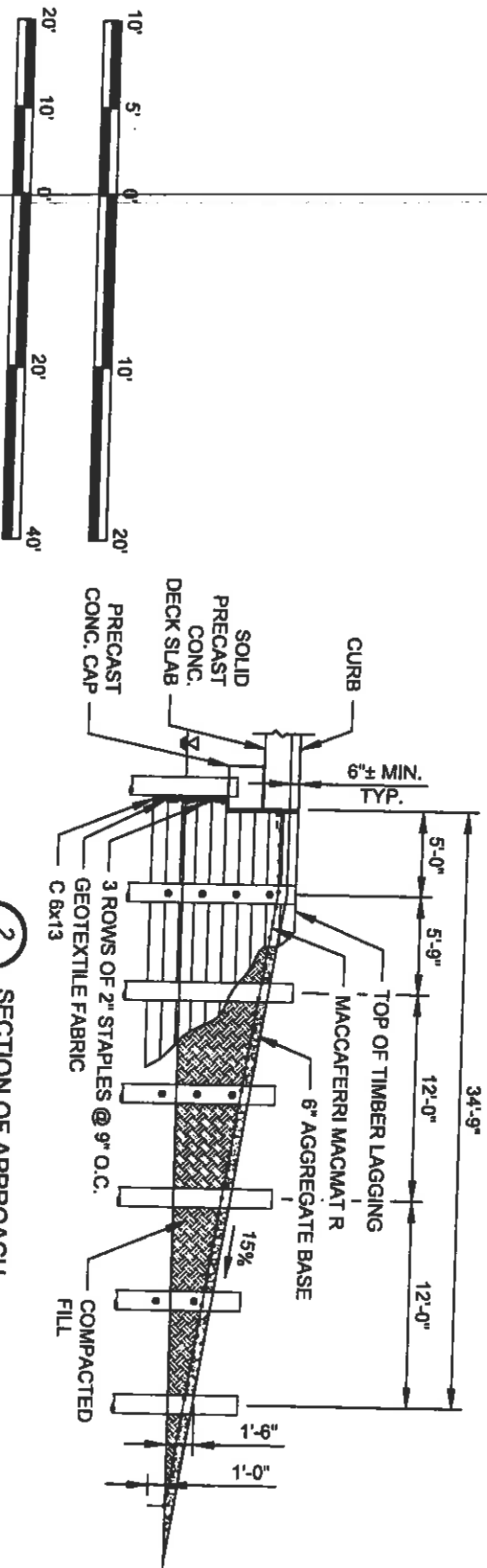
BY	DESCRIPTION	DATE	 <p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70805 225-427-1793</p>	<b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b>  450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	TEMPORARY MARINE ACCESS DOCK DETAILS
SA	REVISION 5	12/12/12				
SA	REVISION 4	08/24/12				
SA	REVISION 3	03/09/12				
DRAWN BY: YC			DESIGNED BY: SA			



BY	DESCRIPTION	DATE	<div><p>ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70805 225-387-1700</p><p><b>COASTAL PROTECTION &amp; RESTORATION AUTHORITY</b></p><p>450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p></div>					
SA	REVISION 5	12/12/12						
SA	REVISION 4	08/24/12						
SA	REVISION 3	03/09/12						
DRAWN BY: YC			DESIGNED BY: SA		APPROVED BY: MAURY CHATELLIER, P.E.		<div><p>MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE</p><p>NEW BRIDGE/ PIPE CROSSING DETAILS (SHEET 1 OF 3)</p></div>	
STATE PROJECT NUMBER: BA-43 (EB)				FEDERAL PROJECT NUMBER: N/A				
DATE: DECEMBER 12, 2012				SHEET 39 OF 41				



1 PROPOSED BRIDGE ELEVATION  
39 SCALE: 1" = 20'



2 SECTION OF APPROACH  
39 SCALE: 1" = 10'

BY	DESCRIPTION	DATE	DESIGNED BY	APPROVED BY	STATE PROJECT NUMBER	DATE
SA	REVISION 5	12/12/12	MAURY & CHATELLIER	MAURY CHATELLIER, P.E.	BA-43 (EB)	DECEMBER 12, 2012
SA	REVISION 4	08/24/12	ONE AMERICAN PLACE 301 MAIN STREET, SUITE 800 BATON ROUGE, LA 70825 225-587-7705			
SA	REVISION 3	03/08/12				
DRAWN BY: YC			DESIGNED BY: SA		FEDERAL PROJECT NUMBER: N/A	SHEET 40 OF 41
			COASTAL PROTECTION & RESTORATION AUTHORITY		MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE	
			450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		NEW BRIDGE/ PIPE CROSSING DETAILS (SHEET 2 OF 3)	







**DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF COASTAL MANAGEMENT**

P.O. BOX 44487  
BATON ROUGE, LOUISIANA 70804-4487  
(225)342-7591  
1-800-267-4019

**COASTAL USE PERMIT/CONSISTENCY DETERMINATION**

**C.U.P. No.:** P20111445

**C.O.E. No.:** MVN- 2009- 1353- EFF

**NAME:** **COASTAL PROTECTION AND RESTORATION AUTHORITY**  
c/o MOFFATT & NICHOL  
301 MAIN ST., SUITE 800  
BATON ROUGE, LA 70825  
Attn: Paul Tschirky

**LOCATION:** **Jefferson, Plaquemines Parishes, LA**

Wills Point Anchorage South Borrow Area - MP 66.7; Alliance Anchorage Borrow Area - MP 64.3; Alliance South Borrow Area MP 60.7; POB/Reach 1 Pipeline Corridor: Lat. 29° 42' 03.65"N / Long. -89° 59' 01.44"W; POE/Reach 5 Pipeline Corridor: Lat. 29° 36' 09.48"N / Long. -90° 04' 16.78"W; Marsh Creation Area (Pt. 11): Lat. 29° 36' 41.70"N / Long. -90° 03' 47.24"W; Section 14, T15S-R25E & R24E; crosses LA Hwy. 23 north of Alliance Refinery, LA.

**DESCRIPTION:** Proposed Mississippi River Long Distance Sediment Pipeline, State Project BA-43 EB. Project includes the permitting of three potential borrow sources from the Mississippi River to a -90 elevation totaling +/- 270 acres (+/- 5,031,382 CY), a total of +/- 10.8 miles of a 60' - 80' wide permanent pipeline access corridor (+/- 6.6 miles previously permitted under C20060090/MVN-2008-0345-EFF), and the creation of +/- 256 acres and nourishment of 103 acres of emergent marsh and ridge habitat. Of the three borrow sources proposed with estimated losses in sediment due to transfer anticipated, a total of +/- 3,354,255 CY of sediment will be required to construct +/- 4.16 miles of the pipeline access corridor and to create/nourish the proposed emergent marsh and ridge habitat with a final elevation of +/- 3.0' +/- 0.5'. Also proposed is the dredging/backfilling of +/- 257,823 CY for the +/- 3.4 mile access channel from the south shore of the Pen to Bayou Dupont, installation of four booster pumps (4,451 CY access dredging), the construction of containment dikes (+/- 46,365 CY of native fill), and placement of +/- 2,400 CY of crushed stone/gravel and +/- 7,310 CY of topsoil for the various crossings proposed.

**This permit supersedes the original permit which was issued September 16, 2012.**

In accordance with the rules and regulations of the Louisiana Coastal Resources Program and Louisiana R.S. 49, Sections 214.21 to 214.41, the State and Local Coastal Resources Management Act of 1978, as amended, the permittee agrees to:

1. Carry out, perform, and/or operate the use in accordance with the permit conditions, plans and specifications approved by the Department of Natural Resources.
2. Comply with any permit conditions imposed by the Department of Natural Resources.
3. Adjust, alter or remove any structure or other physical evidence of the permitted use if, in the opinion of the Department of Natural Resources, it proves to be beyond the scope of the use as approved or is abandoned.
4. Provide, if required by the Department of Natural Resources, an acceptable surety bond in an appropriate amount to ensure adjustment, alteration, or removal should the Department of Natural Resources determine it necessary.
5. Hold and save the State of Louisiana, the local government, the department, and their officers and employees harmless from any damage to persons or property which might result from the use, including the work, activity, or structure permitted.
6. Certify that the use has been completed in an acceptable and satisfactory manner and in accordance with the plans and specifications approved by the Department of Natural Resources. The Department of Natural Resources may, when appropriate, require such certification to be given by a registered professional engineer.
7. All terms of the permit shall be subject to all applicable federal and state laws and regulations.
8. This permit, or a copy thereof, shall be available for inspection at the site of work at all times during operations.
9. The applicant will notify the Office of Coastal Management of the date on which initiation of the permitted activity described under the "Coastal Use Description" began. The applicant shall notify the Office of Coastal Management by mailing the enclosed green initiation card on the date of initiation of the coastal use.
10. Unless specified elsewhere in this permit, this permit authorizes the initiation of the coastal use described under "Coastal Use Description" for two (2) years from the date of the signature of the Secretary or his designee on the original permit which was September 16, 2012. If the coastal use is not initiated within this two (2) year period, then this permit will expire and the applicant will be required to submit a new application. Initiation of the coastal use, for the purposes of this permit, means the actual physical beginning of the use of activity for which the permit is required. Initiation does not include preparatory activities, such as movement of equipment onto the coastal use site, expenditure of funds, contracting out of work, or performing activities



which by themselves do not require a permit. In addition, the permittee must, in good faith, and with due diligence, reasonably progress toward completion of the project once the coastal use has been initiated.

11. The following special conditions must also be met in order for the use to meet the guidelines of the Coastal Resources Program:

- a. This permit does not convey any property rights, mineral rights, or exclusive privileges; nor does it authorize injury to property.
- b. Permittee shall, prior to commencement of the herein permitted activities, contact Rhonda Braud (phone: 225-342-4553, email: rhonda.braud@la.gov) to determine if a construction permit will be required from the local levee district.
- c. Permittee shall obtain a Water Quality Certification, should one be required, from the LA Department of Environmental Quality prior to initiation of any construction activities.
- d. All logs, stumps and other debris encountered during dredging activities shall be removed from the site during or immediately after the activity and disposed of in accordance with all applicable laws and regulations.
- e. No impacts to rare, threatened or endangered species or critical habitats are anticipated from the proposed project. No state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known at the specified site or within ¼ mile of the proposed project.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the State of Louisiana. LNHP reports summarize the existing information known at the time of the request regarding the location in question. LNHP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. If at any time LNHP tracked species are encountered within the project area, please contact our biologist at 225-765-2643.

- f. Submerged sediment/dredge pipeline must be marked/lighted in accordance with U. S. Coast Guard regulations.
- g. Permitted activities shall not interfere with navigation and project operations shall be coordinated with the USCG prior to initiation of activities permitted under this authorization.
- h. The requirement for compensatory mitigation for impacts to marsh habitat resulting from the referenced project will be determined after one full growing season (March 1 to November 1) following the completion of the permitted activities. This assessment shall include both primary impacts and secondary impacts which may result from the permitted activities.

If OCM determines that compensatory mitigation is required, permittee shall submit a compensatory mitigation plan for approval within 30 days of notification of the compensatory mitigation requirements by OCM. All necessary approvals shall be obtained for the compensatory mitigation plan and the plan shall be implemented as directed by OCM. Permittee should be aware that compensatory mitigation projects may be required to be maintained for as many as 20 years for marsh mitigation projects and 50 years for forested wetland mitigation projects. A processing fee will be assessed for the determination of compensatory mitigation requirements and evaluation of the proposed compensatory mitigation plan in accordance with LAC Title 43, Part I, Chapter 7, §724.D. This fee shall apply regardless of which compensatory mitigation option is selected and does not include the cost incurred to implement the required compensatory mitigation.

- i. Permittee shall notify OCM Field Scientist, Frank Cole, at 225-280-4064 or frank.cole@la.gov no later than ten (10) days prior to initiation and following completion of activities permitted under this authorization.



- j. Permittee shall provide to OCM within 30 days following project completion as-built drawings and/or plats that include the actual borrow sources utilized for the completion of the permitted activity and the entire dredged material placement area.
- k. All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.
- l. That permittee shall insure that all sanitary sewage and/or related domestic wastes generated during the subject project activity and at the site, thereafter, as may become necessary shall receive the equivalent of secondary treatment (30 mg/l BOD5) with disinfection prior to discharge into any of the streams or adjacent waters of the area or, in the case of total containment, shall be disposed of in approved sewerage and sewage treatment facilities, as is required by the State Sanitary Code. Such opinion as may be served by those comments offered herein shall not be construed to suffice as any more formal approval(s) which may be required of possible sanitary details (i.e. provisions) scheduled to be associated with the subject activity. Such shall generally require that appropriate plans and specifications be submitted to the Department of Health and Hospitals for purpose of review and approval prior to any utilization of such provisions.
- m. The area where the project is located is all part of the aboriginal homelands of the Chitimacha Tribe of Louisiana. As such, large villages, burial sites, and sacred sites were in place in that entire area. If at any time during the course of the work, any traditional cultural properties are discovered, Permittee shall immediately contact Kimberly S. Walden (Cultural Director) or Melanie Aymond (Research Coordinator) at (337) 923-9923 or (337) 923-4395. Office hours are Monday through Thursday from 7:30 A.M. - 5:00 P.M. and on Friday between 7:30 A.M. - 11:30 A.M. If traditional cultural properties are discovered on the weekend or after business hours, the notification shall be made the next business morning.
- n. Permittee is subject to all applicable state laws related to damages which are demonstrated to have been caused by this action.
- o. Permittee shall allow representatives of the Office of Coastal Management or authorized agents to make periodic, unannounced inspections to assure the activity being performed is in accordance with the conditions of this permit.
- p. Permittee shall comply with all applicable state laws regarding the need to contact the Louisiana One Call (LOC) system (1-800-272-3020) to locate any buried cables and pipelines.
- q. This permit authorizes the initiation of the Coastal Use described under "Coastal Use Description" for two (2) years from the date of the signature of the Secretary or his designee on the original permit which was September 16, 2012. Initiation of the Coastal Use, for purposes of this permit, means the actual physical beginning of the use or activity for which the permit is required. Initiation does not include preparatory activities, such as movement of equipment onto the Coastal Use site, expenditure of funds, contracting out of work, or performing activities which by themselves do not require a permit. In addition, Permittee must, in good faith and with due diligence, reasonably progress toward completion of the project once the Coastal Use has been initiated. If the Coastal Use is not initiated within this two (2) year period, an extension may be granted pursuant to the requirements contained in the Rules and Procedures for Coastal Use Permits (Title 43:I.723.D.). Please note that a request for permit extension MUST be made no sooner than one hundred eighty (180) days and no later than sixty (60) days prior to the expiration of the permit.

The expiration date of this permit is five (5) years from the date of the signature of the Secretary or his designee on the original permit which was September 16, 2012.

Upon expiration of this permit, a new Coastal Use Permit will be required for completion of any unfinished or



uncommenced work items and for any maintenance activities involving dredging or fill that may become necessary. Other types of maintenance activities may also require a new Coastal Use Permit.

\*\*\*\*\* End of Conditions \*\*\*\*\*

By accepting this permit the applicant agrees to its terms and conditions.  
I affix my signature and issue this permit this 16th day of September, 2012.

THE DEPARTMENT OF NATURAL RESOURCES

Karl L. Morgan, Administrator  
Office of Coastal Management

This agreement becomes binding when signed by Administrator of  
the Office of Coastal Management Permits/Mitigation Division, Department of Natural Resources.

Attachments



**Final Plats:**

- 1) [P20111445](#) Final Plats 03/20/2012
- 2) [P20111445](#) Final Plats 03/20/2012

cc: Pete Serio, COE w/attachments  
Dave Butler, LDWF w/attachments  
Jessica Diez, OCM w/attachments  
Frank Cole, OCM/FI w/attachments  
Jefferson Parish w/attachments  
Plaquemines Parish w/attachments

COASTAL PROTECTION AND RESTORATION AUTHORITY w/attachments



REPLY TO  
ATTENTION OF

# DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P. O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

Operations Division  
Eastern Evaluation Section

SUBJECT: MVN-2010-0422-EQ

MAY 19 2010

River Rest, LLC  
1800 Carol Sue Avenue, Suite 7  
Gretna, Louisiana 70056

Gentlemen:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Eastern Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete and return the attached Customer Service Survey or go to the survey found on our web site at <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

  
Pete J. Serio  
Chief, Regulatory Branch

Enclosure

RECEIPT FOR COLLECTION VOUCHER

DATE: MAY 19 2010

RECEIVED FROM: River Rest, LLC

THE SUM OF Ten DOLLARS/AND 41/100 CENTS  
(\$ 10.00) FOR THE FOLLOWING:

PERMITTEE: <u>River Rest, LLC</u>	AMOUNT <u>10.00</u>
PERMIT NUMBER: <u>2010-0422-EQ</u>	
CHECK NUMBER: <u>1581</u> DATED: <u>MAY 19 2010</u>	
TOTAL AMOUNT:	<u>10.00</u>

REC'D

cellell/bst  
ce Automation Clerk

MAY 19 2010  
Date



# DEPARTMENT OF THE ARMY PERMIT

Permittee: River Rest, LLC

**MAY 19 2010**

Permit No. MVN-2010-0422-EQ

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To maintain an existing 2200 cubic yard sand fill culverted crossing and an existing 1991 cubic yard sand fill and sheet pile bridged crossing in order to limit water access and improve land access. In accordance with drawings attached in four sheets, undated.

Project Location: Within CWPPRA project BA-39 at Latitude 29.65584/Longitude -90.01263 and Latitude 29.65086/Longitude -90.02532, approximately 5.8 miles east-southeast of Lafitte in Jefferson Parish, Louisiana.

## Permit Conditions:

### General Conditions:

1. The time limit for completing the work authorized ends on **MAY 31, 2015**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions: See Page 4.**

**Further Information:**

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- (X ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X ) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X M. J. Jeanneret  
(PERMITTEE)

X 5/19/10  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Michael V. Farabee May 19, 2010  
Michael V. Farabee, Chief Eastern Evaluation Section (DATE)

for Alvin B. Lee, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFeree)

\_\_\_\_\_  
(DATE)

**SPECIAL CONDITIONS: MVN-2010-0422-EQ**

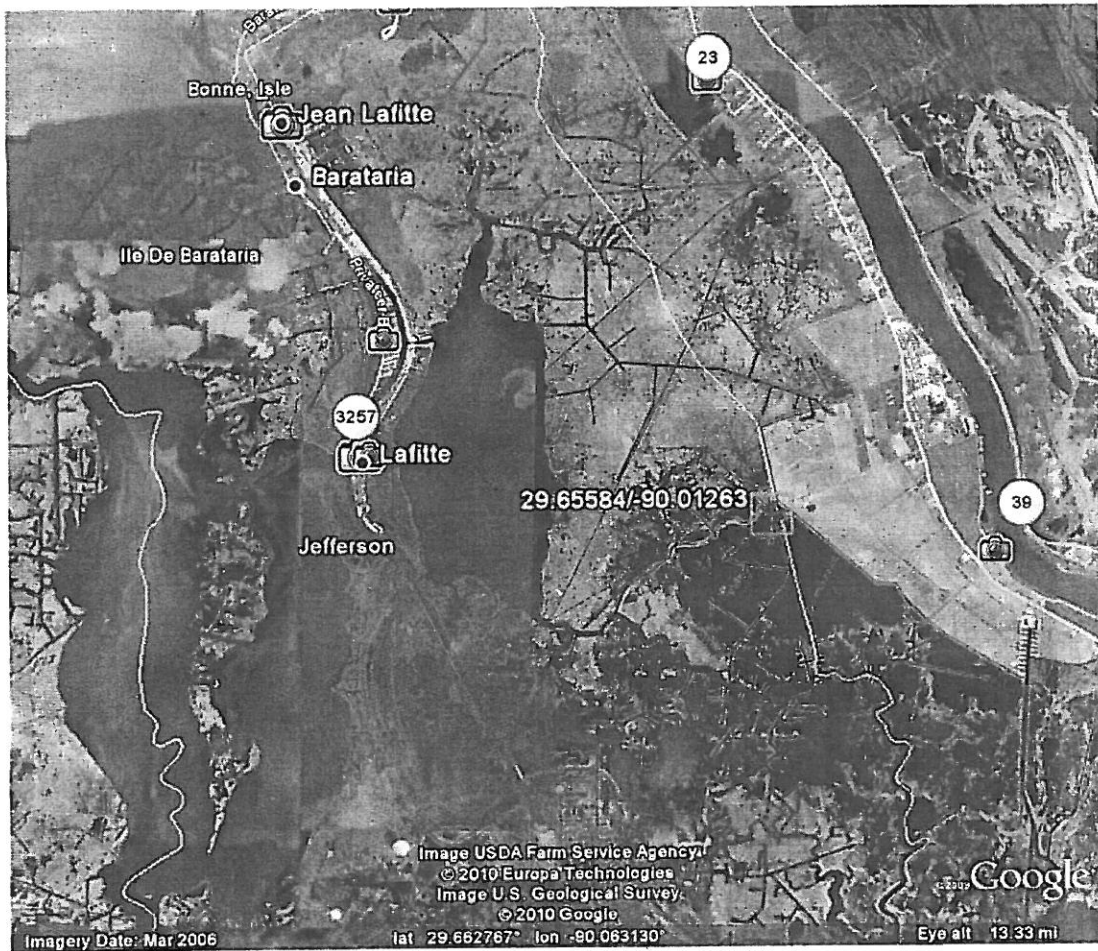
7. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

8. The permittee must install and maintain, at the permittee's expense, any safety lights, signs, and signals prescribed by the US Coast Guard, through regulations or otherwise, on the permittee's authorized facilities.

9. If the proposed project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.,) in the waterway, you are advised to notify the U.S. Coast Guard so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the US Coast Guard District, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 846-5923.

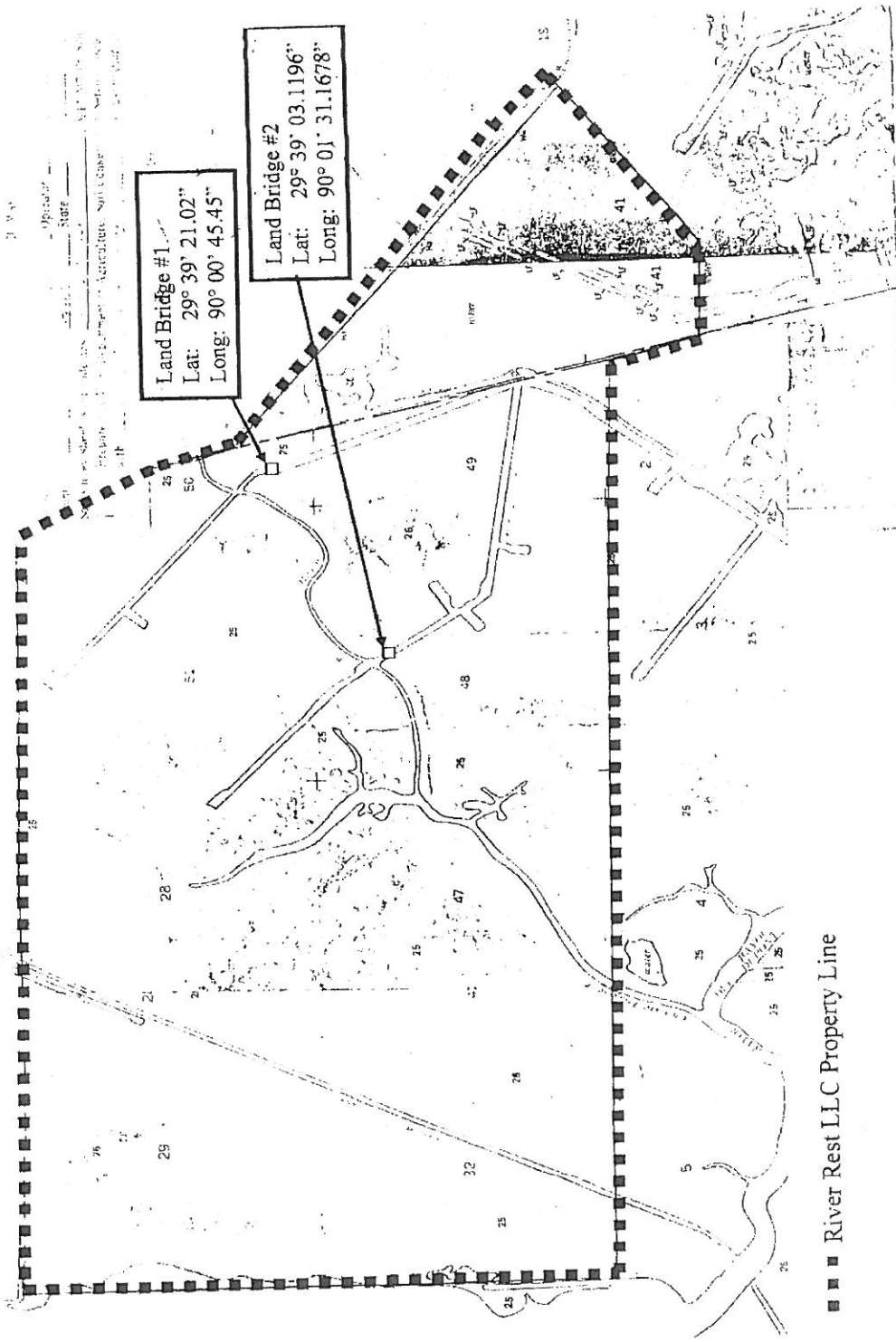
10. The Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters.

11. The permittee must maintain both crossings open as shown in the enclosed drawings.



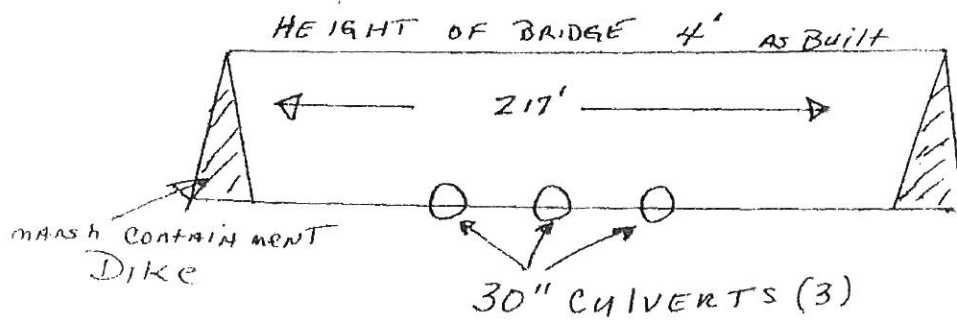
Project Site

Land Bridge to Limit Water Access and  
 Improve Land Access, ~~Phragmites~~ ~~Phragmites~~ Parish  
 Site Map *Jefferson*



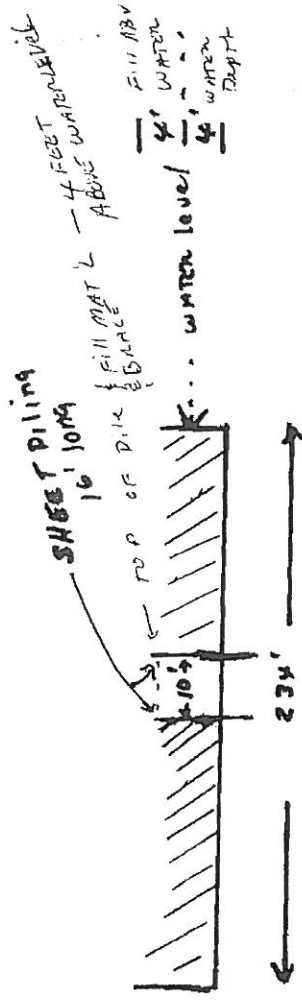
CROSS SECTION  
LAND BRIDGE to LIMIT WATER ACCESS AND  
IMPROVE LAND ACCESS

2200 yd<sup>3</sup> OF SAND USED  
ON NON VEGETATED WATER BOTTOM



LAT 29° 39' 21.02"  
LONG 90° 00' 45.45"

Landbridge #1



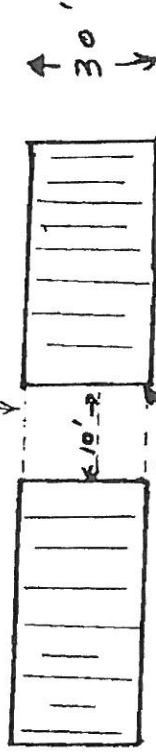
1991 Yd<sup>3</sup> OFFILL

.154 ACRES

OF NON VEGETATED  
WATER BOTTOM

CROSS SECTION  
NOT TO SCALE

3 STEEL BRACES TO SUPPORT SHEET PILE  
10 FEET APART



LAT 29° 39' 03.1196"  
LONG 90° 01' 31.1678"

LAND BRIDGE TO LIMIT  
WATER ACCESS AND IMPROVE  
LAND ACCESS

PLAN VIEW

NOT TO SCALE

Landbridge #2





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

RECEIVED

FEB 20 2013

2013 FEB 25 P 1:00

CPRA

Operations Division  
Eastern Evaluation Section

SUBJECT: MVN 2010-2720-EFF

National Marine Fisheries Service  
Attn: Mr. Richard Hartman  
Post Office Box 94245  
Baton Rouge, Louisiana 70804-9245

Dear Mr. Hartman:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Eastern Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Michael V. Farabee  
Chief, Eastern Evaluation Section

Enclosure



REPLY TO  
ATTENTION OF

Operations Division  
Eastern Evaluation Section

DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

FFB 20 2013

RECEIVED

2013 FEB 25 P 1:01

CFRA

SUBJECT: MVN 2010-2720-EFF

Louisiana Department of Transportation and Development  
Attn: Ms. Sherrie Labas  
Post Office Box 94245  
Baton Rouge, Louisiana 70804-9245

Dear Ms. Sherrie Labas:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Eastern Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Michael V. Farabee  
Chief, Eastern Evaluation Section

Enclosure

# DEPARTMENT OF THE ARMY PERMIT

FEB 20 2013

Permittee: National Marine Fisheries Service (NMFS) & Louisiana Department of Transportation and Development (DOTD).

Permit No. 2010-2720-EFF

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Excavate and deposit fill to construct the Bayou Dupont Marsh and Ridge Restoration Project (BA-48 CWPPRA), for the purpose of coastal restoration efforts in Jefferson Parish, in accordance with the drawings attached in thirty-five sheets, sheets 1, 4-9, 12-18, 23-28 and 31-35 dated July 2011, sheet 2 dated May 5, 2012, sheet 3 dated December 12, 2012, sheets 11, 19 and 20 dated November 15, 2012 and sheets 21 and 22, 29 and 30 dated December 2011.

Project Location: Within Plaquemines and Jefferson Parish, Section 4 and 10, T17S-R24, located on the Mississippi River (RM 64 and 65), across and south of Highway 23, near Naomi, Louisiana.

## Permit Conditions:

### General Conditions:

1. The time limit for completing the work authorized ends on **DEC 31, 2014**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions: See Attached.**

**Further Information:**

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

x Richie Horton  
(PERMITTEE)

x 12-20-2012  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Michael V Farabee

Michael V Farabee, Chief Eastern Evaluation Section

February 19, 2013  
(DATE)

for Edward R. Fleming, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFeree)

\_\_\_\_\_  
(DATE)

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X Eric Kaluoda X 2/7/2013  
(PERMITTEE) ERIC KALUODA, DEPUTY SECRETARY (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Michael V Farabee February 19, 2013  
Michael V Farabee, Chief Eastern Evaluation Section (DATE)

for Edward R. Fleming, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFeree) (DATE)



**SPECIAL CONDITIONS: MVN-2010-2720-EFF**

7. This Department of the Army permit authorization expires as of December 31, 2014. The borrow site (Alliance Anchorage Borrow Area) identified in the application, is the saltwater barrier sill's primary Borrow Area #1, (Mississippi River Mile 63.8 to Mile 65 AHP). The issuance of this permit and the permittee's actions hereunder, shall in no way adversely affect the cost, time, and schedule of the planning and/or construction of the saltwater barrier sill by the US Army Corps of Engineers (USACE).
8. The permittee must ensure that 500,000 cubic yards (cy) are always available above elevation -70 NGVD, within the Alliance Anchorage Borrow area. A reserve area for this material has been designated and the reserve quantity must be located within the boundaries shown on the enclosed (Mississippi River Hydrographic Survey Salt Water Sill Borrow Area I- map), as **Attachment I**.
9. While this project is on-going, the permittee must be aware that the USACE may issue a contract to build the sill. If USACE issues a sill solicitation, the permittee shall allow its contractor to bid on the sill contract. If the permittee's contractor is awarded the sill contract, then the permittee shall release the contractor for the time required to build the sill. If the permittee's contractor chooses not to bid on the sill contract or another contractor is awarded the sill contract, the permittee's contractor shall suspend operations and move off site so as not to interfere with or delay the USACE notice to proceed or the sill contractor's work.
10. Until the Alliance Anchorage Borrow Area is naturally restored from the effects of this permit, any additional costs associated with USACE's construction of the sill shall be borne by the permittee. These additional costs could occur after this permit has expired. These additional costs will be calculated by the USACE. The permittee will provide funds prior to USACE opening bids for the saltwater barrier sill contract.
11. Dredging in the Alliance Anchorage Borrow site is limited to a 1V on 5H slope with a control point 400 feet riverward of the levee C/L and El. +5 feet. The permittee shall submit for approval a detailed dredging plan for the Alliance Anchorage Borrow Area. The plan shall be submitted at least 30 days prior to the scheduled commencement of work in the site and shall include hydrographic surveys of the borrow area with plans for dredging; thereby identifying the material to be removed and the 500,000 cy reserved area (material to be reserved above elevation -70 NGVD). USACE must approve the dredging plan prior to the commencement of permittee's work. The surveys and plans shall be updated every 30 days until project completion. All updated plans must also be approved before the permittee can implement the updated plan. The surveys and dredging plan shall be submitted in electronic format and hardcopy to the USACE Mississippi River Operations Manager. For questions or forwarding information, please contact Mrs. Heather Jennings at (504) 862-1253 or [heather.l.jennings@usace.army.mil](mailto:heather.l.jennings@usace.army.mil).

**SPECIAL CONDITIONS: MVN-2010-2720-EFF**

12. To address navigation safety during construction of the project, the permittee will initiate a daily conference call; to include representatives of the dredging contractor, the US Coast Guard, pertinent members of the USACE, and other navigation stakeholders. During construction, the frequency of the conference call can be reduced upon agreement from the US Coast Guard and the USACE.
13. Construction over the Mississippi River levee and back levee and within 10 feet of the levees toes as well as open excavations is limited to river stages below +11 feet on the Carrollton gage.
14. Construction is not allowed when a hurricane is within 5 days of affecting the Louisiana coast. During such times, the site must be secured and flood protection maintained.
15. The permittee is aware that USACE project (NOV-NFL-5) is proposed for the back levee, at the vicinity of the project site.
16. Any damage to the revetment occurring during or as a result of this work will be repaired at the applicant's expense.
17. The authorization does not obviate the permittee from obtaining other necessary approvals from pertinent federal, state, and/or local authorities.
18. You shall notify this office in writing within five working days after construction has been completed.
19. The permittee shall assure that contractors, foremen, and/or workers associated with project implementation are equally cognizant of the conditions and restrictions associated with this approval.
20. If archaeological materials and/or human remains are discovered during ground disturbing activities you shall cease and desist all activities in the project area and contact this office and Mr. Dennis Jones of the Louisiana Office of Cultural Development, Division of Archaeology at (225) 343-160.
21. The permittee is aware that future site visits and inspections may be conducted to the project area by this office and/or other resource agencies, to assess project compliance with this authorization and requirements associated herewith.
22. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.



**SPECIAL CONDITIONS: MVN-2010-2720-EFF**

23. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
24. You must install and maintain, at your expense, any safety lights, signs and signals prescribed by the US Coast Guard, through regulations or otherwise, on your authorized facilities.
25. If the proposed project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.) in the waterway, you are advised to notify the US Coast Guard so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the US Coast Guard, Sector New Orleans Command Center, 200 Hendee Street, New Orleans, Louisiana 70114, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 365-2281.
26. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the applicant will contact the Chitimacha Tribe of Louisiana at Post Office Box 661, Charenton, LA 70523, and the Army Corps of Engineers, New Orleans District (CEMVN) Regulatory Branch. CEMVN will initiate the required Federal, State, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.
27. In accordance with your coordination efforts with the Maritime Navigation Safety Association, you will abide by the enclosed Dredging Procedures Narrative, shown as (**Attachment II**) to this authorization. Due to changes implemented and finalized within this Department of the Army permit, certain cubic yard quantities portrayed within Attachment II may not correspond with authorized calculations.
28. The proposed project occurs within an area impacted by the Deepwater Horizon Oil Spill in the summer of 2010 and activities such as yours could potentially re-suspend oiled sediments that may be located in the area. It is also noted that cleanup crews associated with the US Coast Guard's Deepwater Horizon Response are potentially working in multiple sites located throughout the Louisiana coastal area. In order to coordinate and mitigate potential re-suspension of oiled sediments, adverse impacts to fish and wildlife species, and safety issues related to cleanup operations; the permittee shall contact and coordinate with LT David R. Simonson, US Coast Guard Deepwater Horizon Response (504-252-8748 or [david.r.simonson@uscg.mil](mailto:david.r.simonson@uscg.mil)) , prior to commencement of work.
29. After one complete growing season following completion of spoil placement within the proposed marsh restoration areas, the permittee will manually breach or degrade earthen containment dikes to marsh elevation, if they do not degrade naturally.

## SPECIAL CONDITIONS: MVN-2010-2720-EFF

30. If the proposed project requires any additional work not expressly permitted herein, the permittee must obtain an amendment to this authorization prior to commencement of work.

31. In order to address potential impacts to the **Pallid sturgeon**, the cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate shall be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased. During dredging, the pumping rates shall be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom. Should the proposed project directly or indirectly affect the pallid sturgeon or their habitats, further consultation with that office will be necessary.

32. In order to address potential impacts to the **West Indian manatee**, in the event of water-related activities, all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with an injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable and could provide useful data in the Service's on-going manatee conservation efforts. During in-water work in areas that potentially support manatees, all on-site personnel are responsible for observing water-related activities for the presence of manatee(s). The following actions will be administered to minimize potential impact to manatee: (1) all work, equipment, and vessel operation should cease if a manatee is spotted within a 50 foot radius (buffer zone) of the active work area. Once the manatee has left the 50 foot buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatees. (2) If a manatee is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible. (3) If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement. (4) Collisions with, injury to, or sightings of manatees should be immediately reported to the US Fish and Wildlife Service's (USFWS) Louisiana Ecological Services Office (337/293-1100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible. Should the proposed project directly or indirectly affect the West Indian manatee or their habitats, further consultation with that office will be necessary.

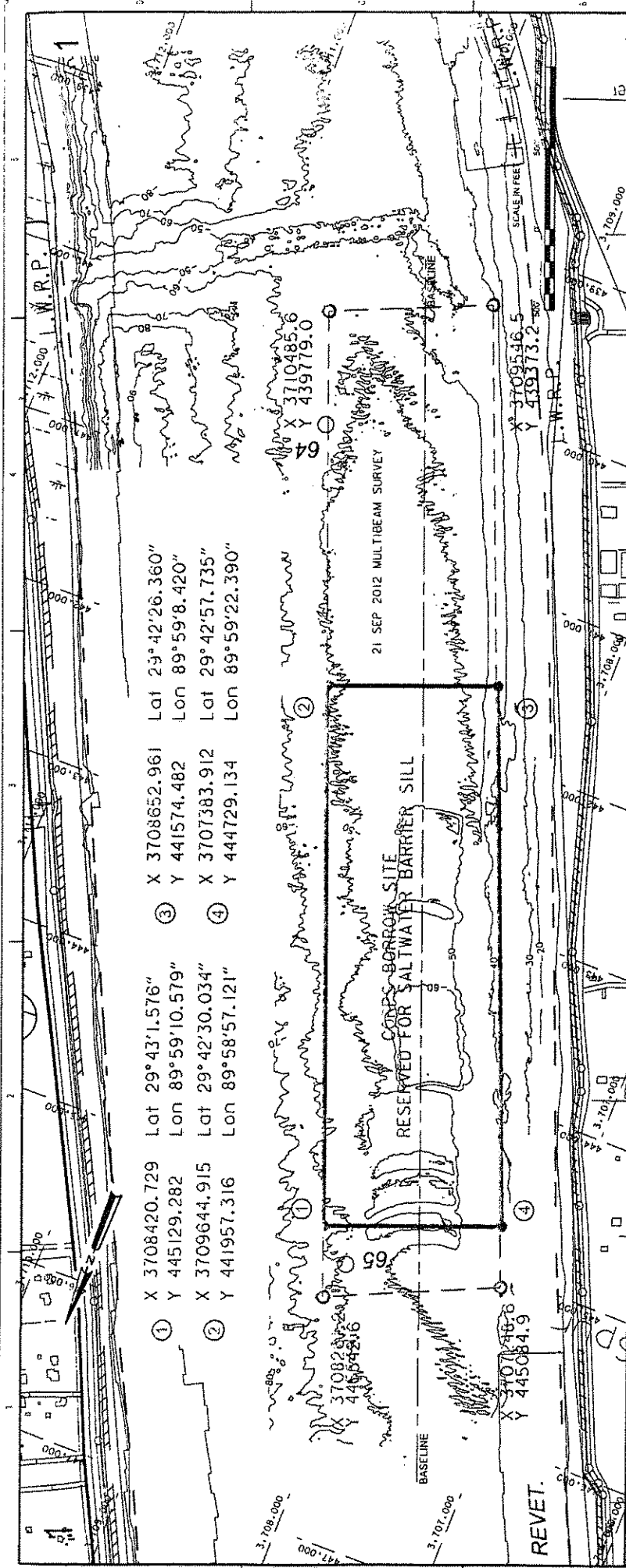
**SPECIAL CONDITIONS: MVN-2010-2720-EFF**

33. In order to minimize potential project impacts to **bald eagles**, particularly where such impacts may constitute "disturbance," which is prohibited by the BGEPA, the permittee shall abide by the

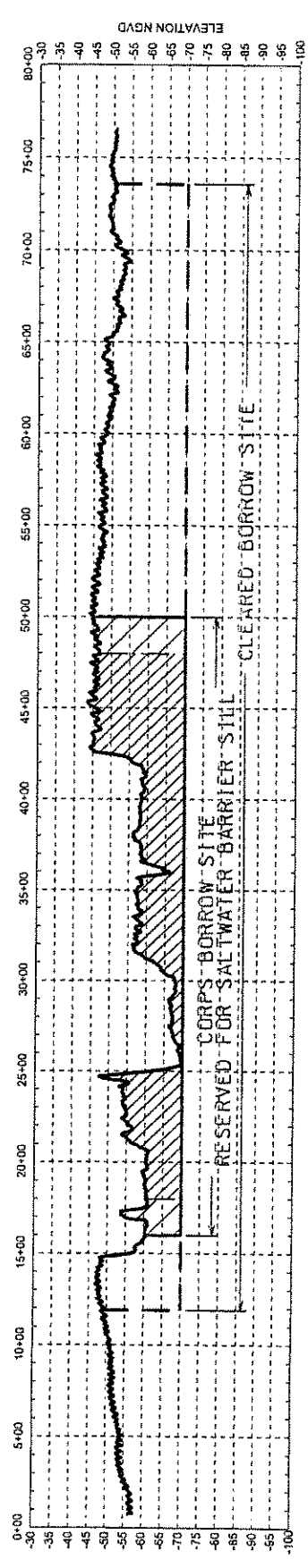
following guidelines: <http://www.fws.gov/southeast/es/baldeagle/NationalBaldEagleManagementGuidelines.pdf>. These Guidelines recommend: (1) maintaining a specified distance between the activity and the nest (buffer area); (2) maintaining natural areas (preferably forested) between the activity and nest trees (landscape buffers); and (3) avoiding certain activities during the breeding season. During any project construction, on-site personnel should be informed of the possible presence of nesting bald eagles in the vicinity of the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest occurs or is discovered within 1,500 feet of the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at: <http://www.fws.gov/southeast/es/baldeagle>. Following completion of the evaluation, that website will provide a determination of whether additional consultation is necessary. Should you need further assistance interpreting the guidelines, avoidance measures, or performing an on-line project evaluation, please contact Mrs. Patti Holland with the USFWS at (337) 291-3121.

34. To minimize disturbance to **colonial nesting birds**, the following restrictions on activity should be observed: (1) For colonies containing nesting wading birds (i.e., herons, egrets, night herons, ibis, and roseate spoonbills), anhingas, and/or cormorants, all activity occurring within 1,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 1 through February 15, exact dates may vary within this window depending on species present). (2) On-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season. (3) If it is necessary to perform work within 1,000 feet of a known nest site during the nesting season, a migratory bird abatement plan will need to be developed in consultation with the Service. That plan will include deterrence measures to ensure that birds do not nest in proximity to the work area during the construction period. Patti Holland with the USFWS is the Service contact for such matters and can be reached at 337-291-3121.

35. Prior to initiation of work within 1500 feet of the Mississippi River Levee system and/or within 300 feet of the back Hurricane Protection Levee, the permittee must acquire a **Letter of No Objection** from the USACE, Operations Manager of Completed Works. For information relevant this approval, you may contact the (Operations Manager, Mrs. Amy Powell at 504-862-2241) or (Project Manager, Mrs. Karen Clement at 504-862-2313).



- ① X 3708420.729 Lat 29°43'1.576" Y 445129.282 Lon 89°59'10.579"
- ② X 3709644.915 Lat 29°42'30.034" Y 441957.316 Lon 89°58'57.121"
- ③ X 3708652.961 Lat 29°42'26.360" Y 441574.482 Lon 89°59'8.420"
- ④ X 3707383.912 Lat 29°42'57.735" Y 444729.134 Lon 89°59'22.390"



		<b>MISSISSIPPI RIVER HYDROGRAPHIC SURVEY SALTWATER SILL BORROW AREA 1 MILE 63.87 TO 65.03</b>		<b>15 NOV 2012</b>		<b>1</b>	
PROJECT NAME PROJECT NUMBER PROJECT DATE PROJECT BY		PROJECT LOCATION PROJECT SCALE PROJECT STATUS PROJECT COMMENTS		PROJECT DATE PROJECT BY PROJECT STATUS PROJECT COMMENTS		PROJECT NAME PROJECT NUMBER PROJECT DATE PROJECT BY	

# Mississippi River Dredging for the Bayou Dupont Marsh and Ridge Creation (BA-48)

## Dredging Procedures Narrative

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### I. Introduction

The National Marine and Fisheries Services (NMFS) and The Coastal Protection and Restoration Authority (CPRA) have applied for a permit to construct the Bayou Dupont Marsh and Ridge Creation Project (BA-48). This project intends to create approximately 317 acres of sustainable marsh and approximately two miles of ridge along the southern shore of Bayou Dupont. Due to the project's close proximity to the Mississippi River, it is intended to utilize the renewable sediment resource from the Mississippi River to accomplish these objectives. In the spring of 2010, Mississippi River sediment was used successfully to complete the construction of the CWPPRA Project, Mississippi River Sediment Delivery System Bayou Dupont (BA-39). This narrative will present the proposed protocols for mining the sediment from the Mississippi River Alliance Anchorage borrow area and the proposed sediment delivery system to the project area.

### II. Borrow Area

The Alliance Anchorage borrow area (approximately Mississippi RM 63.7 to RM 65 Above Head of Passes) was chosen as the sediment source for this project due to its' previous use as the BA-39 borrow area and available material. Permit drawing sheets 3 and 10 depict the horizontal delineation and the typical section of the proposed borrow area. The designated borrow area will stretch approximately 7000 feet along the alliance anchorage borrow area with an average width of approximately 900 feet. The western boundary will be approximately 800 feet to the centerline of the Mississippi River and Tributary (MRT) levee and the eastern boundary will maintain an approximate distance of 300 feet from the navigation channel.

#### 1. Dredging Operations

Approximately 3.3 million cubic yards of material will be dredged from the designated area. The material will be hydraulically dredged using a cutterhead dredge to an elevation of -90 feet NAVD88. Approximately 1.3 million cubic yards will be retained within the southern portion of the borrow area to accommodate the potential need for the construction of the USACE Saltwater Barrier Sill at approximately RM 63.55. It is anticipated that dredging will begin at the northern-most portion of the delineated borrow area and move southward. If the infilling rate proves to be replenishing material in the initially dredged northern portion during dredging production, the dredge may re-dredge the newly deposited material before moving to the southern reaches of the borrow area.

## 2. Dredging Safety

**2.a Mississippi River and Tributary Levee Stability Evaluation.** A global slope stability analysis of the Mississippi River and Tributary levee has been performed using the proposed dredging template. Factors of safety calculated exceed the minimum factors of safety provided by the *Hurricane and Storm Damage Risk Reduction System (HSDRRS) Design Guidelines* dated June 12, 2008.

**2.b Floating Sediment Pipeline:** The dredge pipeline will contain a floating segment between the dredge and the shoreline pipe. The contractor will be required to provide the location of the floating sediment pipeline in the work plan, daily communication plan. Segments of floating sediment pipeline shall be clearly marked with dredging aids and lights in such a way as to obstruct or confuse navigation. All dredging aid markers and lights shall comply with the regulations set forth in Commandant USCG Instruction M16672.2, Navigation Rules: International-Inland (COMDTINST M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland) as applicable.

**2.c Communication.** The contractor will be required to submit a daily communication plan to the Owner, the USACE, and the MNSA. The dredge will communicate with the main control stations using bridge-to-bridge radiotelephones capable of transmitting and receiving on the frequencies within the 156 to 162 Megahertz band using the class of emissions designated by the Federal Communications Commission for the exchange of navigational information. During mobilization, construction, and demobilization, an Officer shall be required to be present on the dredge. The Officer shall be required to implement operational safety of all vessels associated with the project and will be required to monitor the marine radio channels for vessel-to-vessel communications.

**2.d Dredge Location Control.** The dredge shall be required to operate electronic positioning equipment that shall send clear and frequent dredge position updates so as to ensure accurate and continuous accessibility to the location of the dredge. The contractor's daily communication plan shall include the delineation of the dredge, attendant plant, anchor, buoys, and floating pipeline.

**2.e Interference with Mississippi River Traffic.** Based on the delineation of the cutterhead dredge work area, there should be no interference with Mississippi River traffic. The borrow area's eastern-most limit runs approximately 300 feet from the boundary of the navigation channel. The dredge shall be required to attach buoys to its anchor lines to alert river traffic of the anchors' locations within the dredge anchor limits shown on the permit drawings. This information will be provided daily to the MNSA.

**2.f Obstruction of Navigable Waterways.** In order to keep the Mississippi River free of obstructions, any item (material, plant, machinery, or appliance) which is misplaced overboard shall be promptly marked in accordance with USCG regulations. USCG - Eighth District shall be notified immediately so as to include the description and location in the "Local Notice to Mariners" issued weekly. The obstructions shall then be recovered and removed as quickly as possible.

**2.g Pipeline Crossings.** All petroleum pipelines at this location in the Mississippi River are outside of the cutterhead dredge work area. No hydraulic dredging will take place within 500 feet of any existing pipeline or submerged transmission line.

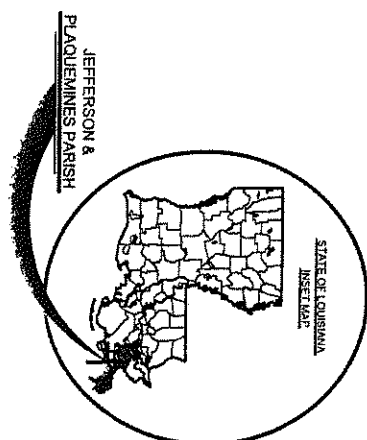
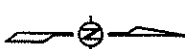
# INDEX TO SHEETS

## SHEET NO. DESCRIPTION

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- 2 PROJECT LAYOUT
- 3 ALLIANCE ANCHORAGE BORROW AREA LAYOUT
- 4-7 PLAN VIEW
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- 9 MARSH CREATION AREA LAYOUT
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- 16 BAYOU DUPONT WEIR DETAILS
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## STATE OF LOUISIANA COASTAL PROTECTION & RESTORATION AUTHORITY

### BAYOU DUPONT MARSH AND RIDGE CREATION BA-48 JEFFERSON & PLAQUEMINES PARISHES



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

TITLE SHEET

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E.










APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 1 OF 35

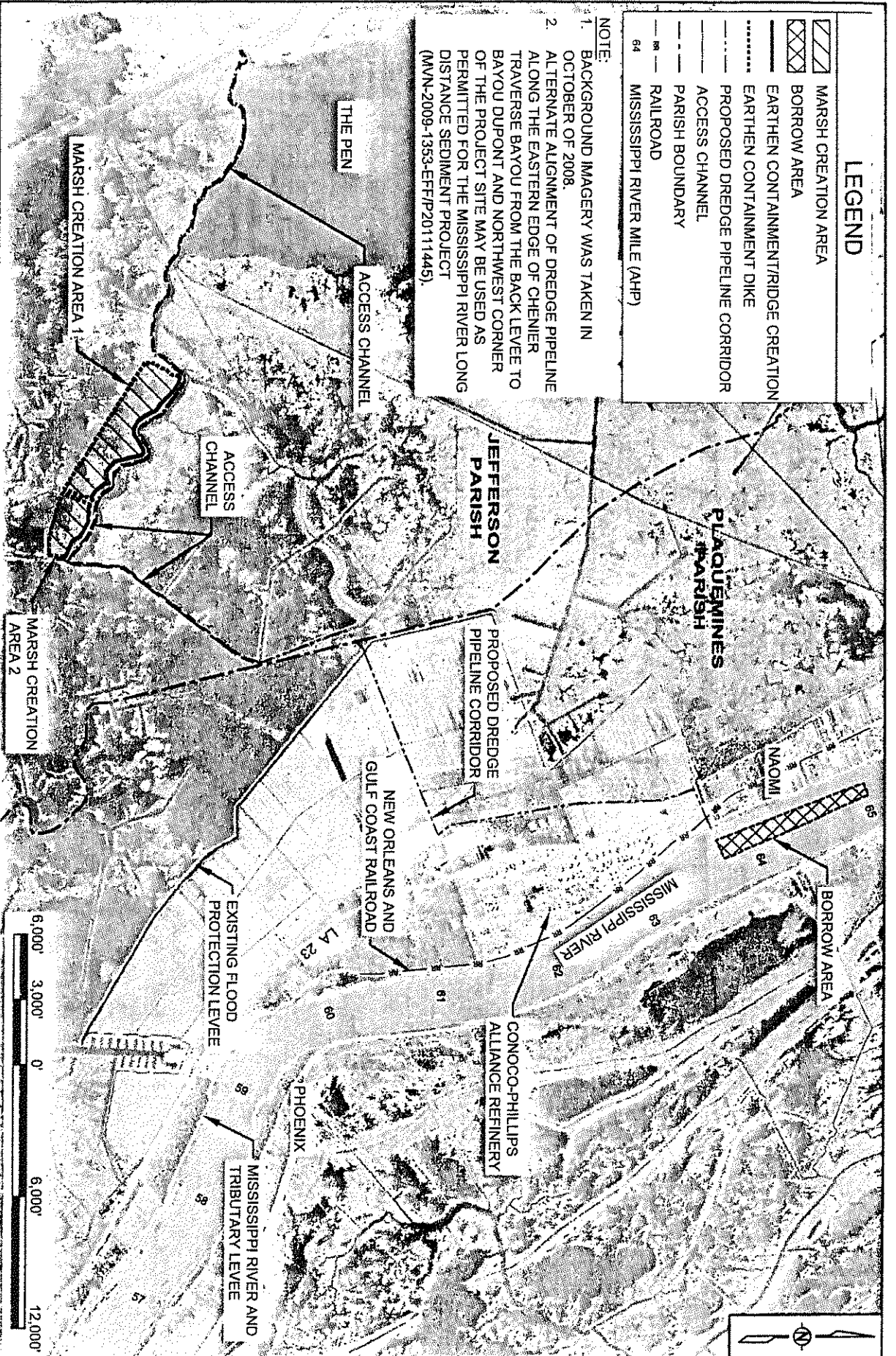


# LEGEND

-  MARSH CREATION AREA
-  BORROW AREA
-  EARTHEN CONTAINMENT/RIDGE CREATION
-  EARTHEN CONTAINMENT DIKE
-  PROPOSED DREDGE PIPELINE CORRIDOR
-  ACCESS CHANNEL
-  PARISH BOUNDARY
-  RAILROAD
-  MISSISSIPPI RIVER MILE (AHP)

## NOTE:

1. BACKGROUND IMAGERY WAS TAKEN IN OCTOBER OF 2008.
2. ALTERNATE ALIGNMENT OF DREDGE PIPELINE ALONG THE EASTERN EDGE OF CHEMIEP TRAVERSE BAYOU FROM THE BACK LEVEE TO BAYOU DUPONT AND NORTHWEST CORNER OF THE PROJECT SITE MAY BE USED AS PERMITTED FOR THE MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PROJECT (MVN-2009-1353-EFF/P20111445).



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH ST. LOUISIANA RIVER  
BATON ROUGE, LA 70803

COASTAL PROTECTION AND  
RESTORATION AUTHORITY  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

PROJECT LAYOUT

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011 (MOD MAY 2012)

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E.

APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 2 OF 35

BORROW AREA (TOP OF CUT)		
PT.	LATITUDE	LONGITUDE
1	29° 43' 10.47" N	89° 59' 24.17" W
2	29° 43' 02.46" N	89° 59' 20.84" W
3	29° 43' 01.88" N	89° 59' 22.36" W
4	29° 42' 58.29" N	89° 59' 20.75" W
5	29° 42' 53.82" N	89° 59' 18.33" W
6	29° 42' 42.47" N	89° 59' 13.18" W
7	29° 42' 38.29" N	89° 59' 11.50" W
8	29° 42' 26.77" N	89° 59' 07.22" W
9	29° 42' 05.06" N	89° 58' 57.01" W
10	29° 42' 09.07" N	89° 58' 46.04" W
11	29° 42' 13.66" N	89° 58' 47.96" W
12	29° 42' 18.97" N	89° 58' 50.89" W
13	29° 42' 23.14" N	89° 58' 52.99" W
14	29° 42' 28.84" N	89° 58' 55.57" W
15	29° 42' 30.32" N	89° 58' 56.31" W
16	29° 42' 35.88" N	89° 58' 59.10" W
17	29° 42' 44.79" N	89° 59' 03.41" W
18	29° 42' 51.52" N	89° 59' 07.19" W
19	29° 42' 59.11" N	89° 59' 11.27" W
20	29° 43' 05.25" N	89° 59' 14.39" W
21	29° 43' 12.41" N	89° 59' 18.11" W

BUOYS MARKING DREDGE ANCHOR LIMITS		
PT.	LATITUDE	LONGITUDE
A	29° 43' 13.97" N	89° 59' 17.37" W
B	29° 43' 08.38" N	89° 58' 44.24" W

- NOTES:
1. THE CONTRACTOR SHALL NOT DREDGE BEYOND THE BORROW AREA LIMITS SHOWN ON THE DRAWINGS.
  2. EXCAVATION VOLUME = 7,120,700 CU. YD.
  3. BORROW AREA POINTS REFERENCED FROM TOP OF CUT.
  4. BACKGROUND IMAGERY WAS TAKEN IN OCTOBER OF 2010.



APPLICATION BY:  
 NATIONAL MARINE FISHERIES SERVICE  
 U.S. SOUTH STADIUM DRIVE  
 BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
 450 LAUREL STREET  
 BATON ROUGE, LOUISIANA 70801

STATE PROJECT NUMBER: BA-48

BAYOU DUPONT MARSH AND RIDGE CREATION

ALLIANCE ANCHORAGE BORROW AREA LAYOUT

DATE: JULY 2011 (MDD DEC. 12, 2012)

DRAWN BY: KRISTI CANTU      DESIGNED BY: RUSS JOFFRION, P.E.      APPROVED BY: MAURY CHATELLIER, P.E.      FEDERAL PROJECT NUMBER: BA-48      SHEET 3 OF 35

**LEGEND**

BORROW AREA

NAVIGATION CHANNEL

PROPOSED DREDGE PIPELINE CORRIDOR

REVELEMENT

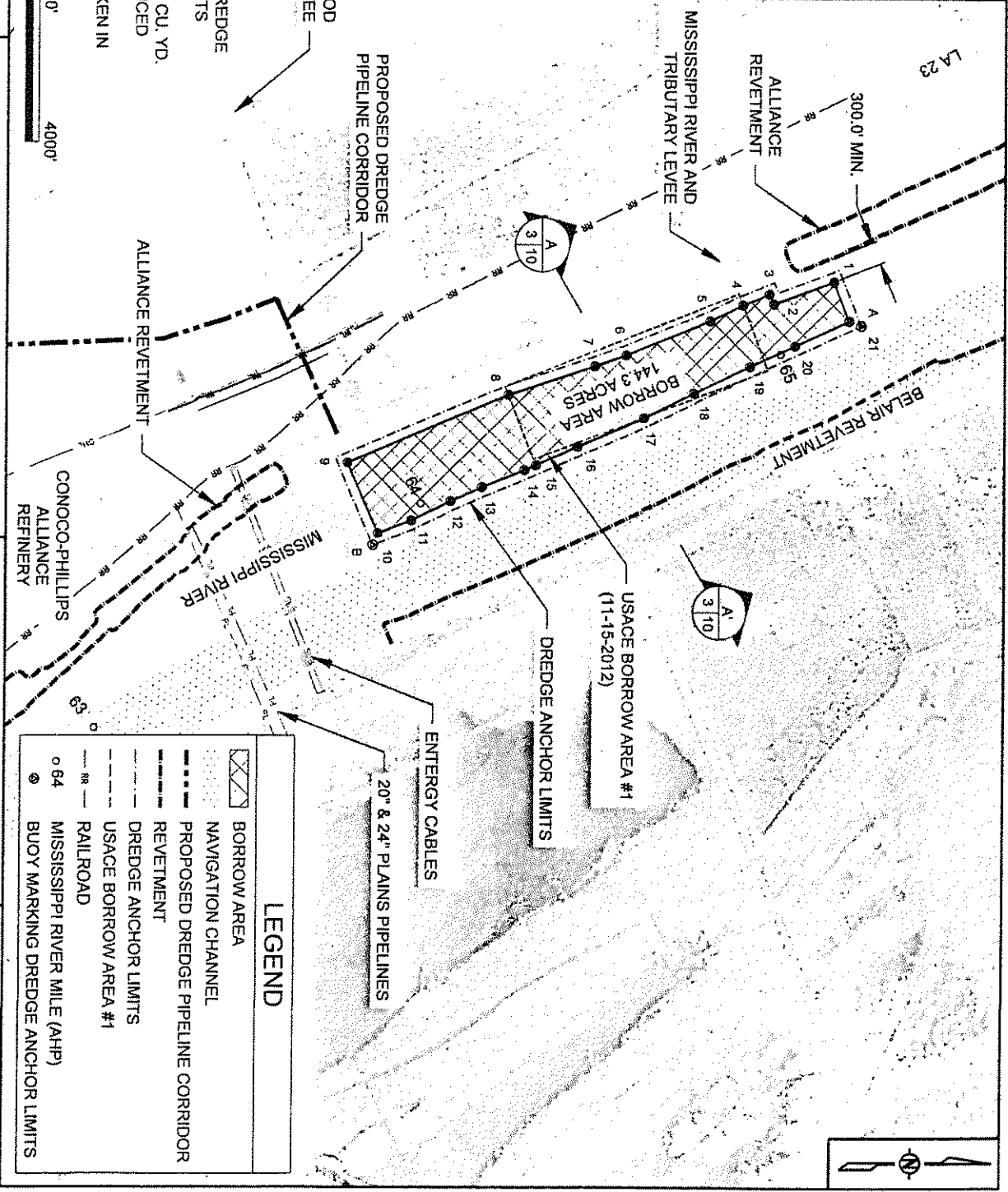
DREDGE ANCHOR LIMITS

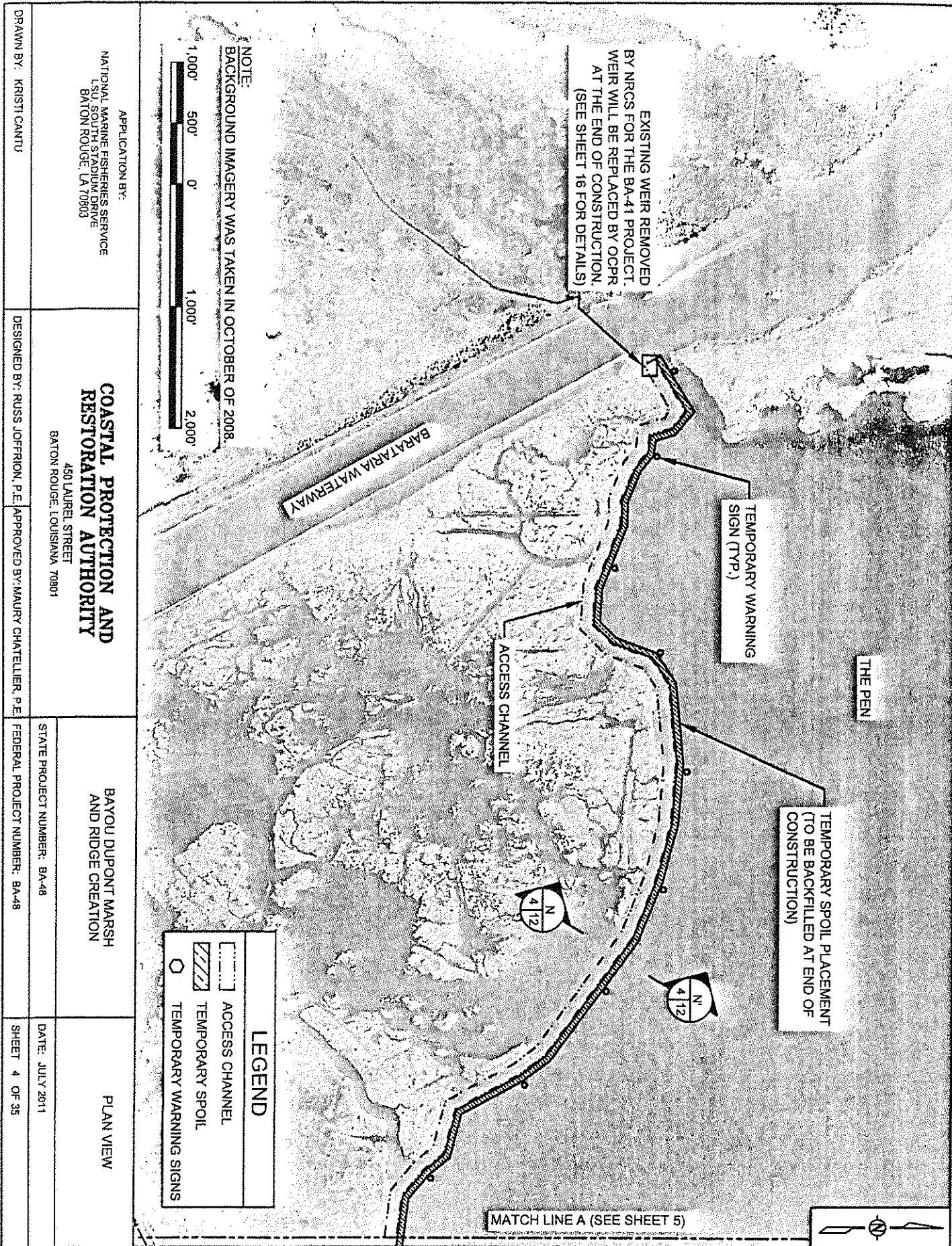
USACE BORROW AREA #1

RAILROAD

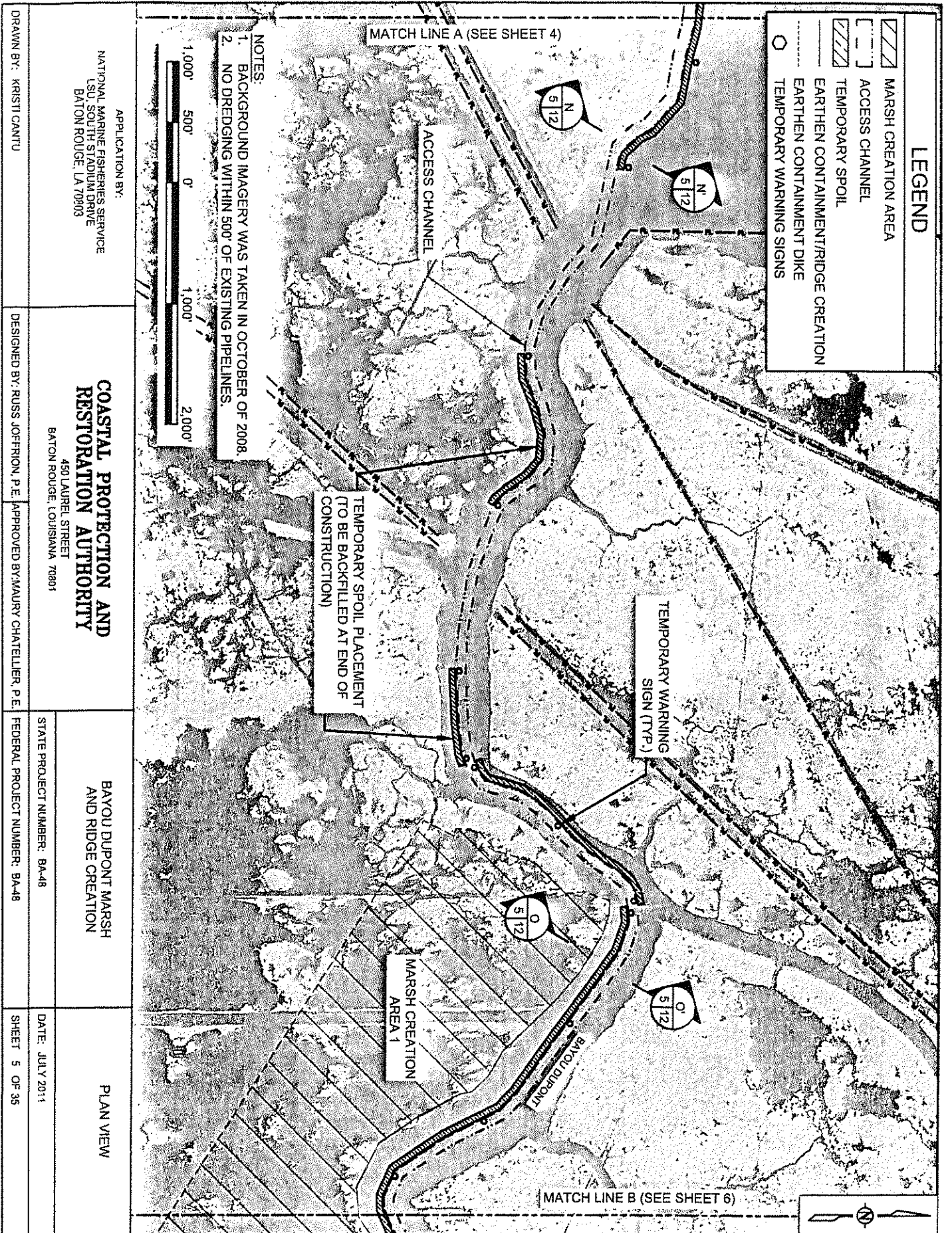
MISSISSIPPI RIVER MILE (AHP)

BUOY MARKING DREDGE ANCHOR LIMITS









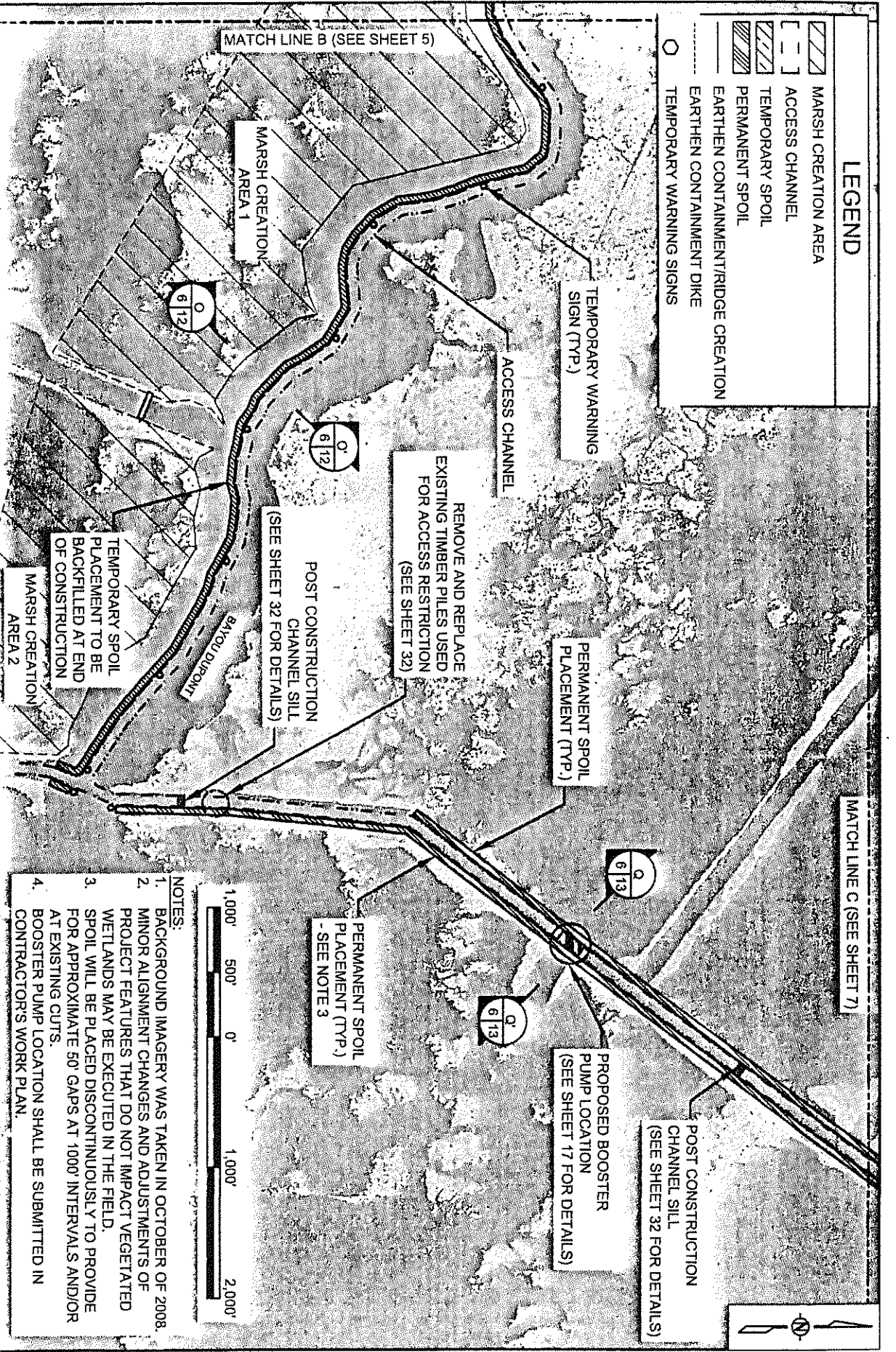






# LEGEND

-  MARSH CREATION AREA
-  ACCESS CHANNEL
-  TEMPORARY SPOIL
-  PERMANENT SPOIL
-  EARTHEN CONTAINMENT/RIDGE CREATION
-  TEMPORARY WARNING SIGNS



- NOTES:**
1. BACKGROUND IMAGERY WAS TAKEN IN OCTOBER OF 2008.
  2. MINOR ALIGNMENT CHANGES AND ADJUSTMENTS OF PROJECT FEATURES THAT DO NOT IMPACT VEGETATED WETLANDS MAY BE EXECUTED IN THE FIELD.
  3. SPOIL WILL BE PLACED DISCONTINUOUSLY TO PROVIDE FOR APPROXIMATE 50' GAPS AT 1000' INTERVALS AND/OR AT EXISTING CUTS.
  4. BOOSTER PUMP LOCATION SHALL BE SUBMITTED IN CONTRACTOR'S WORK PLAN.

APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

PLAN VIEW

DRAWN BY: KRISTI CANTU      DESIGNED BY: RUSS JOFFRION, P.E.      APPROVED BY: MAURY CHATELIER, P.E.      STATE PROJECT NUMBER: BA-48      FEDERAL PROJECT NUMBER: BA-48      DATE: JULY 2011      SHEET 6 OF 35

# LEGEND

- ACCESS CHANNEL
- PERMANENT SPOIL
- PARISH BOUNDARY

JEFFERSON  
PARISH

PLAQUEMINES  
PARISH

PROPOSED LAND BASED  
BOOSTER PUMP LOCATION  
AT THE END OF WEST RAVENNA ROAD  
(SEE SHEET 17 FOR DETAILS)

LAT. = 29° 39' 19.66"  
LONG. = 90° 00' 46.47"

ACCESS CHANNEL

NO DREDGING BEYOND  
THIS POINT  
LAT. = 29° 38' 39.07"  
LONG. = 90° 00' 29.78"

PERMANENT SPOIL  
PLACEMENT (TYP.)

REMOVE AND REPLACE  
EXISTING TIMBER PILES USED  
FOR ACCESS RESTRICTION  
(SEE SHEET 32)

EXISTING FLOOD  
PROTECTION LEVEE

PROPOSED BOOSTER  
PUMP LOCATION  
(SEE SHEET 17 FOR DETAILS)

MATCH LINE C (SEE SHEET 6)



## NOTES:

1. CONTRACTOR IS NOT TO DREDGE OUTSIDE ACCESS CHANNEL LIMITS.
2. ACCESS CHANNEL EXCAVATION VOLUME = 500,000 CU. YDS.
3. BACKGROUND IMAGERY WAS TAKEN IN OCTOBER OF 2008.
4. MINOR ALIGNMENT CHANGES AND ADJUSTMENTS OF PROJECT FEATURES THAT DO NOT IMPACT VEGETATED WETLANDS MAY BE EXECUTED IN THE FIELD.
5. BOOSTER PUMP LOCATION SHALL BE SUBMITTED IN CONTRACTOR'S WORK PLAN

APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

COASTAL PROTECTION AND  
RESTORATION AUTHORITY  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

PLAN VIEW

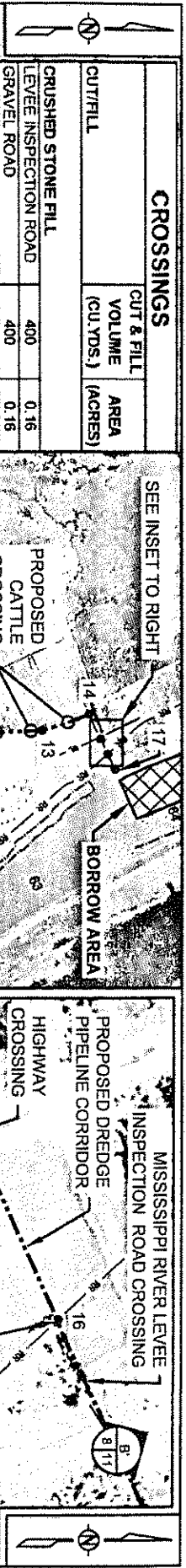
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

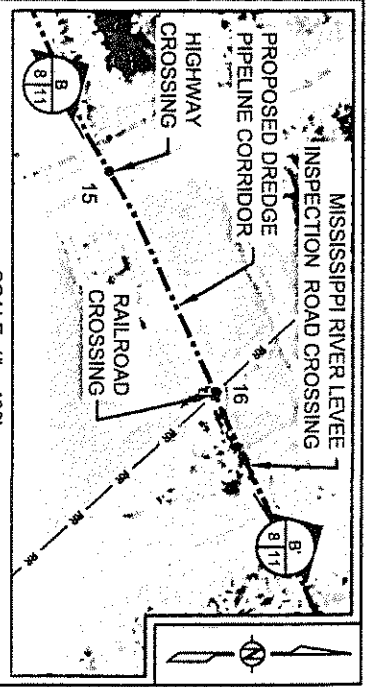
STATE PROJECT NUMBER: BA-48  
FEDERAL PROJECT NUMBER: BA-48

DATE: JULY 2011  
SHEET 7 OF 35





CROSSINGS		
CUT/FILL	CUT & FILL VOLUME (CU YDS.)	AREA (ACRES)
<b>CRUSHED STONE FILL</b>		
LEVEE INSPECTION ROAD	400	0.16
GRAVEL ROAD	400	0.16
FLOOD PROTECTION LEVEE	400	0.16
DIRT ROAD	400	0.16
DRIVEWAY X 2	800	0.32
	2,400	0.96
<b>DIRT FILL</b>		
HIGHWAY	3,130	0.17
RAILROAD	2,590	0.16
CATTLE X 4	1,590	0.64
	7,310	0.97
<b>MISSISSIPPI RIVER BORROW AREA</b>		
CANAL CROSSING	1,920	1.9
<b>TOTAL</b>	<b>11,630</b>	<b>3.83</b>



PROPOSED DREDGE PIPELINE CORRIDOR		
PT.	LATITUDE	LONGITUDE
1	29° 37' 11.18"	90° 01' 24.30"
2	29° 37' 16.41"	90° 01' 21.44"
3	29° 37' 22.94"	90° 01' 21.58"
4	29° 37' 38.71"	90° 01' 19.40"
5	29° 38' 30.16"	90° 00' 33.62"
6	29° 38' 40.98"	90° 00' 29.97"
7	29° 39' 19.18"	90° 00' 46.11"
8	29° 39' 27.06"	90° 00' 36.52"
9	29° 40' 00.10"	89° 58' 59.20"
10	29° 40' 06.58"	89° 59' 04.03"
11	29° 40' 16.32"	89° 59' 08.00"
12	29° 41' 06.43"	89° 59' 15.15"
13	29° 41' 40.40"	89° 59' 16.32"
14	29° 41' 55.64"	89° 59' 22.28"
15	29° 41' 58.20"	89° 59' 12.86"
16	29° 42' 01.43"	89° 59' 07.24"
17	29° 42' 03.65"	89° 59' 01.44"

NOTE:  
BACKGROUND IMAGERY WAS TAKEN IN OCTOBER OF 2008.

LEGEND	
	MARSH CREATION AREA
	BORROW AREA
	EARTHEN CONTAINMENT/RIDGE CREATION
	EARTHEN CONTAINMENT DIKE
	PROPOSED DREDGE PIPELINE CORRIDOR
	RAILROAD
	MISSISSIPPI RIVER MILE (AHP)

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSU, SOUTH STADIUM DRIVE BATON ROUGE, LA, 70803	COASTAL PROTECTION AND RESTORATION AUTHORITY 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BAYOU DUPONT MARSH AND RIDGE CREATION DREDGE PIPELINE CORRIDOR LAYOUT
DRAWN BY: KRISTI CANTU	DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.	STATE PROJECT NUMBER: BA-48 FEDERAL PROJECT NUMBER: BA-48 DATE: JULY 2011 SHEET 8 OF 35

CULTURAL  
RESOURCES  
BUFFER

NOTE:  
BACKGROUND IMAGERY WAS  
TAKEN IN OCTOBER OF 2008.







RIDGE CREATION

MARSH CREATION AREA 1  
240 ACRES

EARTHEN CONTAINMENT DIKE

NOTE:  
MARSH EXCAVATED = 15 ACRES  
OPEN WATER EXCAVATED = 140 ACRES  
MARSH CREATED = 317 ACRES  
RIDGE CREATED = 36 ACRES  
MARSH CREATION FILL = 2,146,200 CU. YDS.

### LEGEND

-  MARSH CREATION AREA
-  ACCESS CHANNEL
-  RIDGE CREATION
-  EARTHEN CONTAINMENT DIKE
-  PROPOSED DREDGE PIPELINE CORRIDOR
-  TEMPORARY CANAL CROSSING

APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

COASTAL PROTECTION AND  
RESTORATION AUTHORITY  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

MARSH CREATION  
AREA LAYOUT

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E.

APPROVED BY: MAURY CHATELIER, P.E.

SHEET 9 OF 35

### FILL AREAS 1 AND 2

PT.	LATITUDE	LONGITUDE	PT.	LATITUDE	LONGITUDE	PT.	LATITUDE	LONGITUDE
1	29° 38' 04.84"	90° 02' 58.22"	21	29° 37' 31.59"	90° 02' 05.67"	41	29° 37' 23.15"	90° 01' 51.54"
2	29° 38' 04.77"	90° 02' 58.84"	22	29° 37' 31.97"	90° 02' 06.39"	42	29° 37' 23.81"	90° 01' 50.60"
3	29° 38' 04.17"	90° 02' 54.90"	23	29° 37' 32.22"	90° 02' 03.67"	43	29° 37' 23.24"	90° 01' 48.69"
4	29° 38' 02.30"	90° 02' 51.46"	24	29° 37' 30.66"	90° 02' 03.30"	44	29° 37' 22.71"	90° 01' 46.24"
5	29° 38' 00.10"	90° 02' 48.60"	25	29° 37' 25.84"	90° 01' 58.85"	45	29° 37' 22.80"	90° 01' 43.63"
6	29° 37' 55.90"	90° 02' 44.02"	26	29° 37' 24.40"	90° 01' 56.38"	46	29° 37' 20.69"	90° 01' 39.34"
7	29° 37' 54.63"	90° 02' 41.59"	27	29° 37' 25.04"	90° 01' 54.31"	47	29° 37' 18.83"	90° 01' 35.97"
8	29° 37' 53.28"	90° 02' 40.16"	28	29° 37' 24.20"	90° 01' 55.65"	48	29° 37' 15.43"	90° 01' 33.61"
9	29° 37' 52.37"	90° 02' 38.99"	29	29° 37' 22.63"	90° 01' 56.47"	49	29° 37' 13.02"	90° 01' 25.66"
10	29° 37' 48.64"	90° 02' 37.73"	30	29° 37' 20.74"	90° 01' 55.37"	50	29° 37' 12.91"	90° 01' 25.66"
11	29° 37' 45.58"	90° 02' 36.39"	31	29° 37' 12.11"	90° 02' 00.82"	51	29° 37' 12.06"	90° 01' 25.85"
12	29° 37' 43.73"	90° 02' 31.35"	32	29° 37' 49.45"	90° 03' 06.026"	52	29° 37' 06.46"	90° 01' 26.21"
13	29° 37' 43.90"	90° 02' 28.38"	33	29° 37' 51.84"	90° 03' 04.56"	53	29° 37' 04.92"	90° 01' 26.92"
14	29° 37' 46.83"	90° 02' 23.19"	34	29° 37' 52.11"	90° 03' 05.24"	54	29° 37' 03.24"	90° 01' 38.13"
15	29° 37' 48.09"	90° 02' 20.36"	35	29° 37' 54.00"	90° 03' 04.96"	55	29° 37' 05.92"	90° 01' 37.59"
16	29° 37' 48.30"	90° 02' 19.30"	36	29° 37' 55.53"	90° 03' 03.05"	56	29° 37' 06.19"	90° 01' 39.90"
17	29° 37' 47.85"	90° 02' 18.26"	37	29° 37' 58.64"	90° 03' 01.94"	57	29° 37' 11.24"	90° 01' 58.68"
18	29° 37' 46.64"	90° 02' 17.52"	38	29° 38' 01.14"	90° 02' 58.96"	58	29° 37' 18.70"	90° 01' 54.94"
19	29° 37' 35.01"	90° 02' 14.66"	39	29° 38' 02.82"	90° 02' 59.08"			
20	29° 37' 31.13"	90° 02' 09.23"	40	29° 37' 24.26"	90° 01' 52.16"			

ACCESS  
CHANNEL

PROPOSED DREDGE  
PIPELINE CORRIDOR

CHANNEL SILL

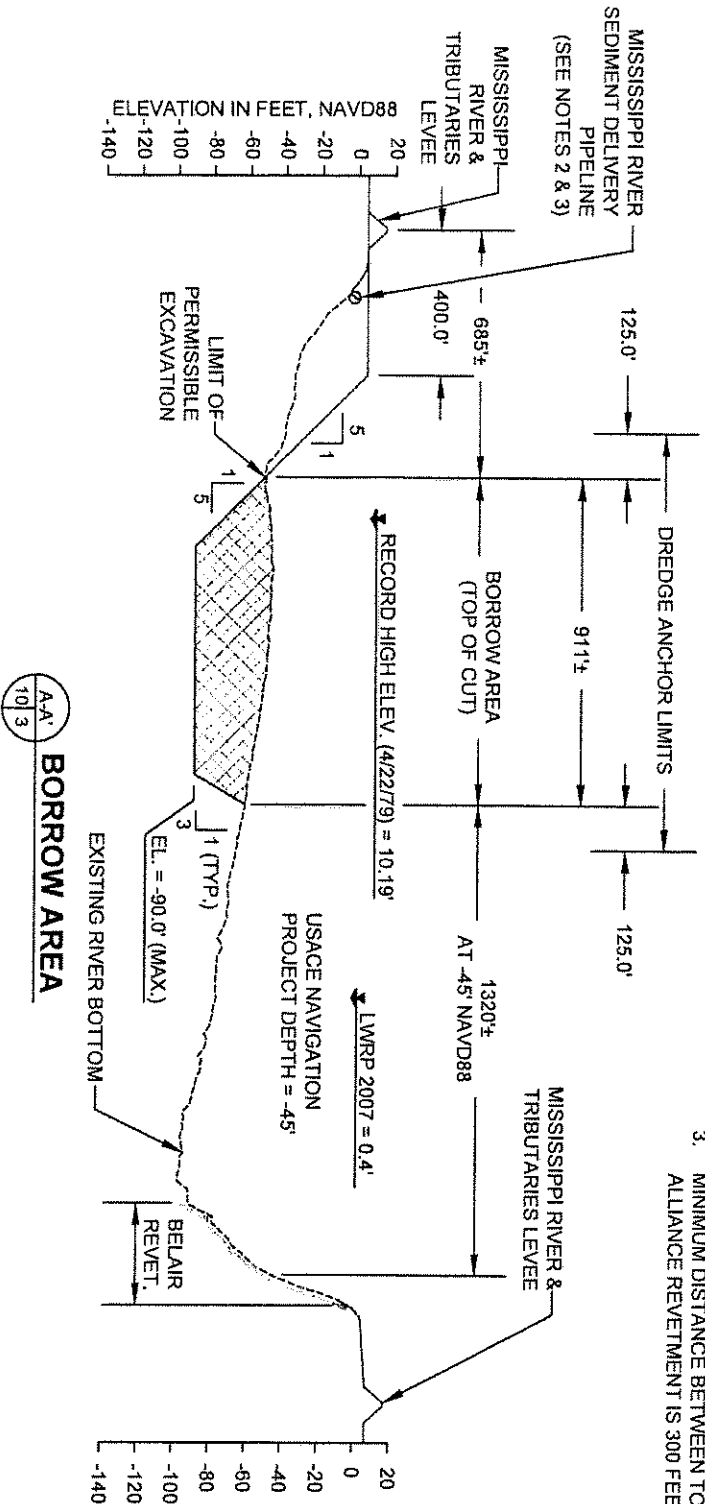
MARSH CREATION AREA 2  
77 ACRES

TEMPORARY CANAL CROSSING  
(SEE SHEET 30 FOR DETAILS)

1000' 500' 0' 1000' 2000'



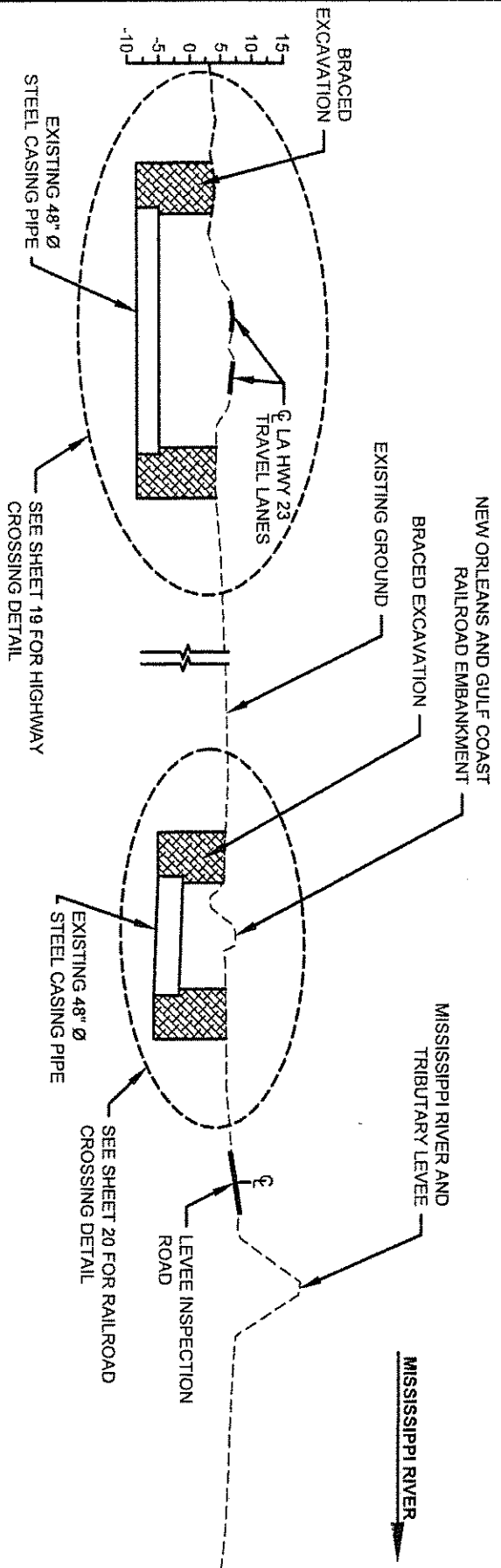
- NOTES:**
1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET.
  2. RIVER BOTTOM PROFILE BASED ON SURVEY DONE ON AUGUST 17, 2011.
  3. MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF ALLIANCE REVELTMENT IS 300 FEET.



LEGEND
--- EXISTING RIVER BOTTOM
XXX BORROW AREA

- DREDGING NOTES:**
1. THE CONTRACTOR WILL BE REQUIRED TO ANCHOR WITHIN THE DREDGE ANCHOR LIMITS SHOWN ON THE DRAWINGS. ANCHORING BEYOND THE DREDGE ANCHOR LIMITS SHOWN ON THE DRAWINGS IS NOT ALLOWED.
  2. THE DREDGE ANCHOR LIMIT COORDINATES, POINTS A AND B, AND ALL DREDGE ANCHORS SHALL BE MARKED WITH BUOYS DURING DREDGING OPERATIONS.
  3. THE CONTRACTOR WILL BE REQUIRED TO STAY WITHIN THE BORROW AREA LIMITS SHOWN ON THE DRAWINGS. DREDGING BEYOND THE BORROW AREA LIMITS SHOWN ON THE DRAWINGS IS NOT ALLOWED.
  4. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DAILY COMMUNICATION PLAN TO THE OWNER, THE USAGE OPERATIONS DIVISION, AND MNSA DELINEATING THE LOCATION OF THE DREDGE, ATTENDANT PLANT, ANCHOR BUOYS, AND FLOATING PIPELINE AS PER THE OWNER SPECIFICATIONS.

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICES LSU SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	DESIGNED BY: RUSS JOFFRION, P.E.	APPROVED BY: MAURY CHATELIER, P.E.	FEDERAL PROJECT NUMBER: BA-48	SHEET 10 OF 35
<b>COASTAL PROTECTION AND RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BAYOU DUPONT MARSH AND RIDGE CREATION		TYPICAL SECTION	
DRAWN BY: KRISTI CANTU	DATE: JULY 2011 (MOD DEC. 12, 2012)			



**DREDGE PIPELINE CORRIDOR**  
**11/8 HIGHWAY & RAILROAD CROSSING**

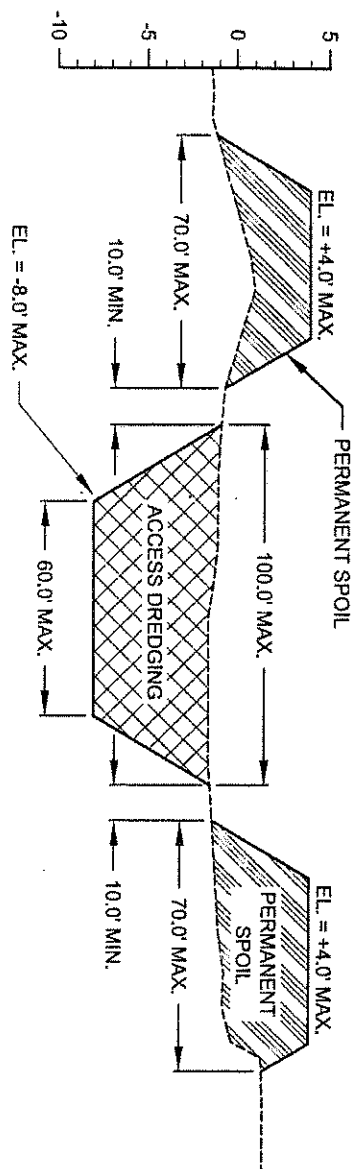


**NOTE:**  
 ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL  
 DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET.

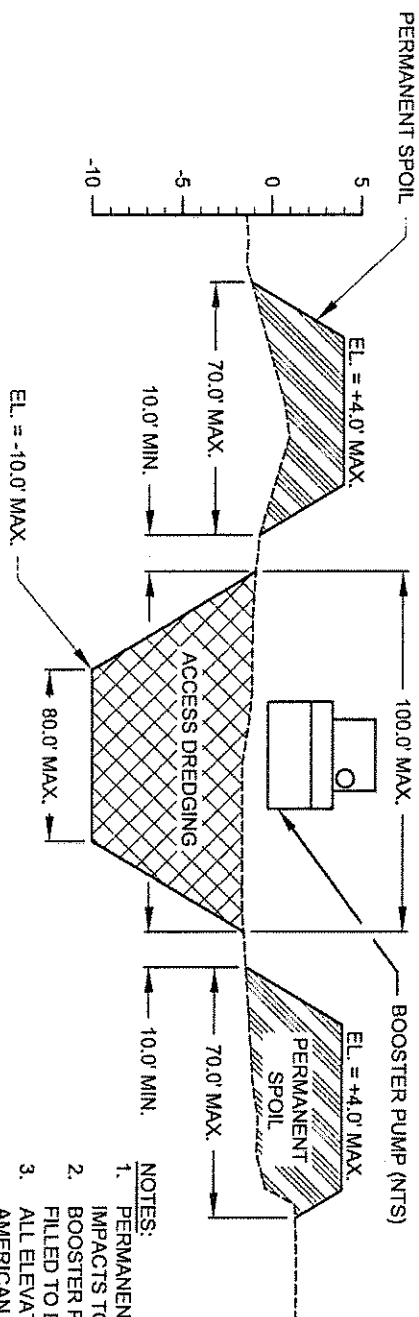
LEGEND	
	EXISTING GROUND
	BRACED EXCAVATION

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICES LSU, SOUTH STADIUM DRIVE BATON ROUGE, LA 70803		<b>COASTAL PROTECTION AND RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48 FEDERAL PROJECT NUMBER: BA-48		TYPICAL SECTIONS DATE: JULY 2011 (MOD. 11/15/12) SHEET 11 OF 36
DRAWN BY: KRISTI CANTU		DESIGNED BY: RUSS JOFFRION, P.E.		APPROVED BY: MAURY CHATELLIER, P.E.		

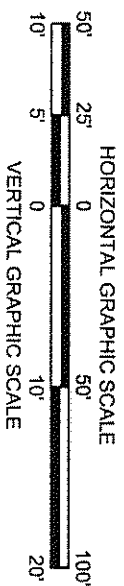




P.P. 13.7
**ACCESS CHANNEL & PERMANENT SPOIL**



- NOTES:**
1. PERMANENT SPOIL TO BE PLACED TO AVOID IMPACTS TO EXISTING MARSH.
  2. BOOSTER PUMP LOCATION TO BE BACK FILLED TO ELEVATION -8.0' NAVD88.
  3. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET.



O.C. 13.6
**ACCESS CHANNEL FOR BOOSTER PUMP**

LEGEND	
---	EXISTING GROUND/WATER BOTTOM
XXX	ACCESS DREDGING
///	PERMANENT SPOIL

APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTHERN MARINE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

TYPICAL SECTIONS

DRAWN BY: KRISTI CANTU

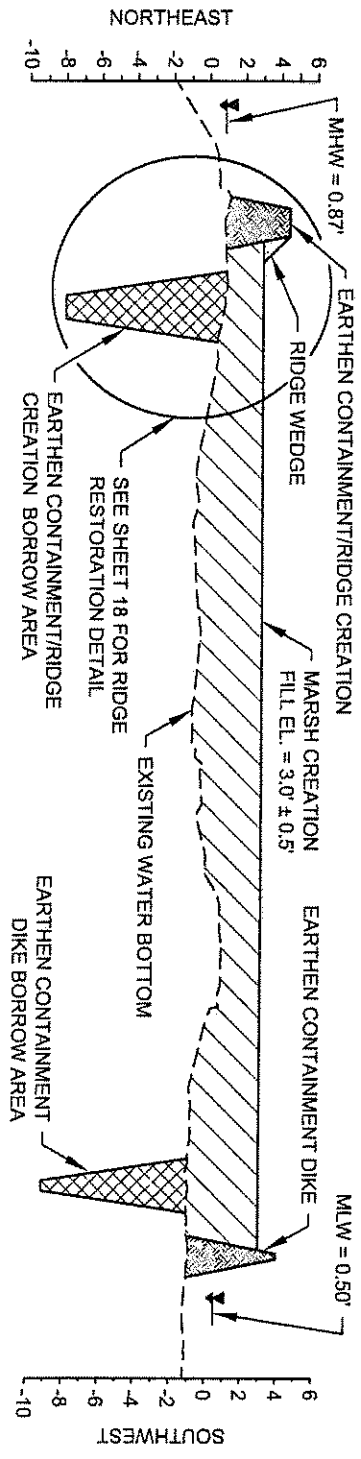
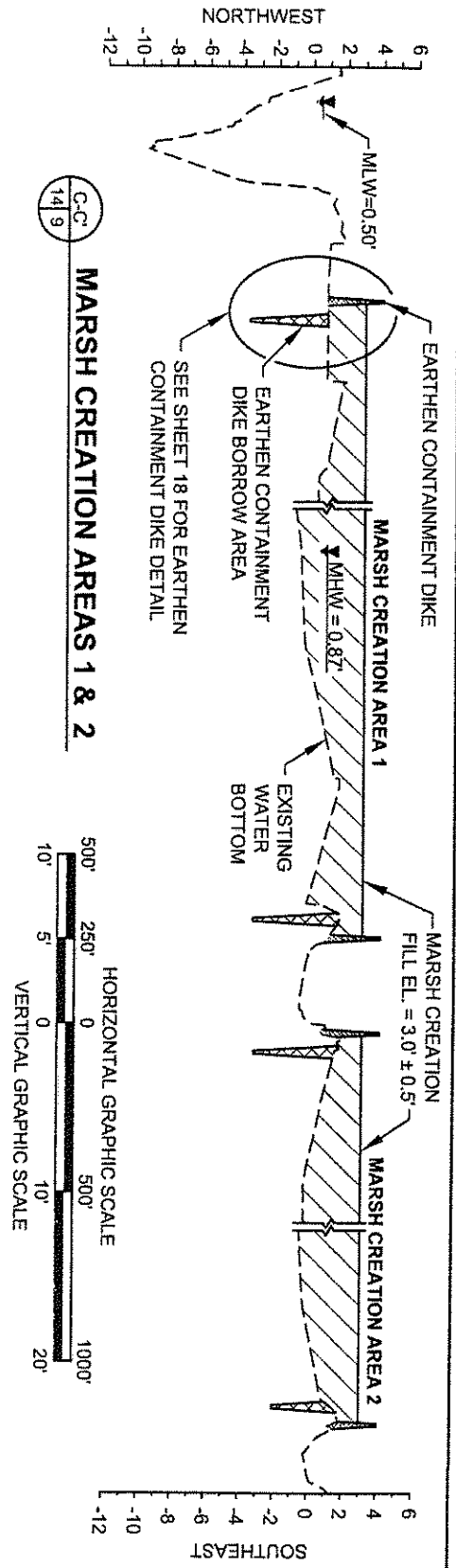
DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 13 OF 35

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

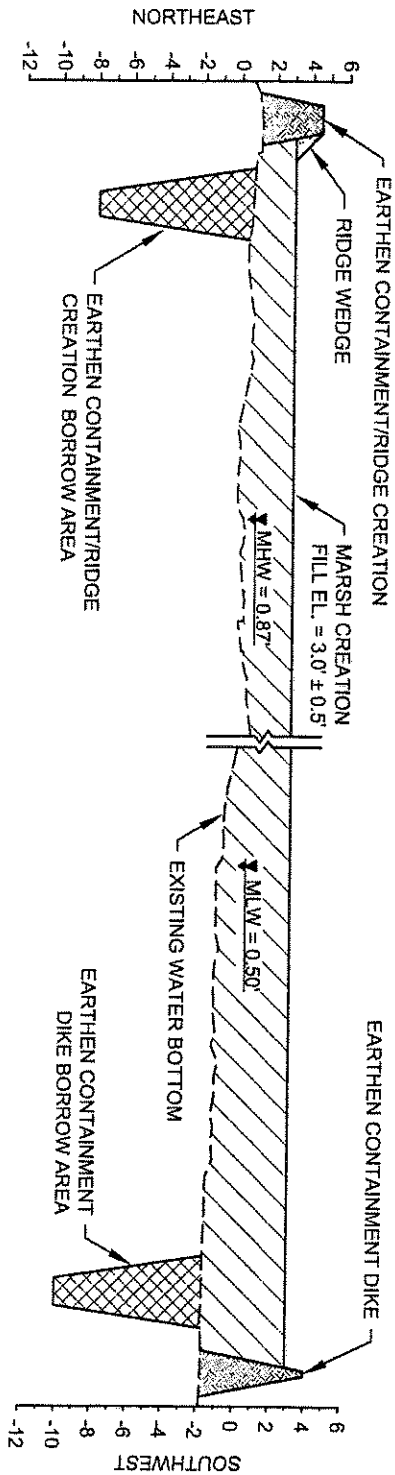


**LEGEND**

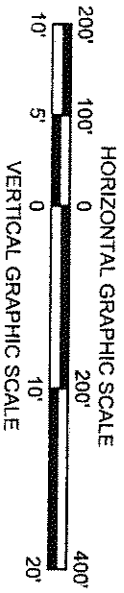
- EXISTING GROUND/WATER BOTTOM
- BORROW AREA
- EARTHEN CONTAINMENT/RIDGE CREATION
- MARSH FILL
- RIDGE WEDGE

**NOTE:** ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET.

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSU, SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	<b>COASTAL PROTECTION AND RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48	TYPICAL SECTIONS DATE: JULY 2011 SHEET 14 OF 35
DRAWN BY: KRISTI CANTU	DESIGNED BY: RUSS JOFFRION, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-48



## MARSH CREATION AREA 2



LEGEND	
	EXISTING GROUND/WATER BOTTOM
	BORROW AREA
	EARTHEN CONTAINMENT/RIDGE CREATION
	MARSH FILL
	RIDGE WEDGE

APPLICATION BY:  
 NATIONAL MARINE FISHERIES SERVICE  
 LSU SOUTH STADIUM DRIVE  
 BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
 450 LAUREL STREET  
 BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

TYPICAL SECTIONS

DRAWN BY: KRISTI CANTU

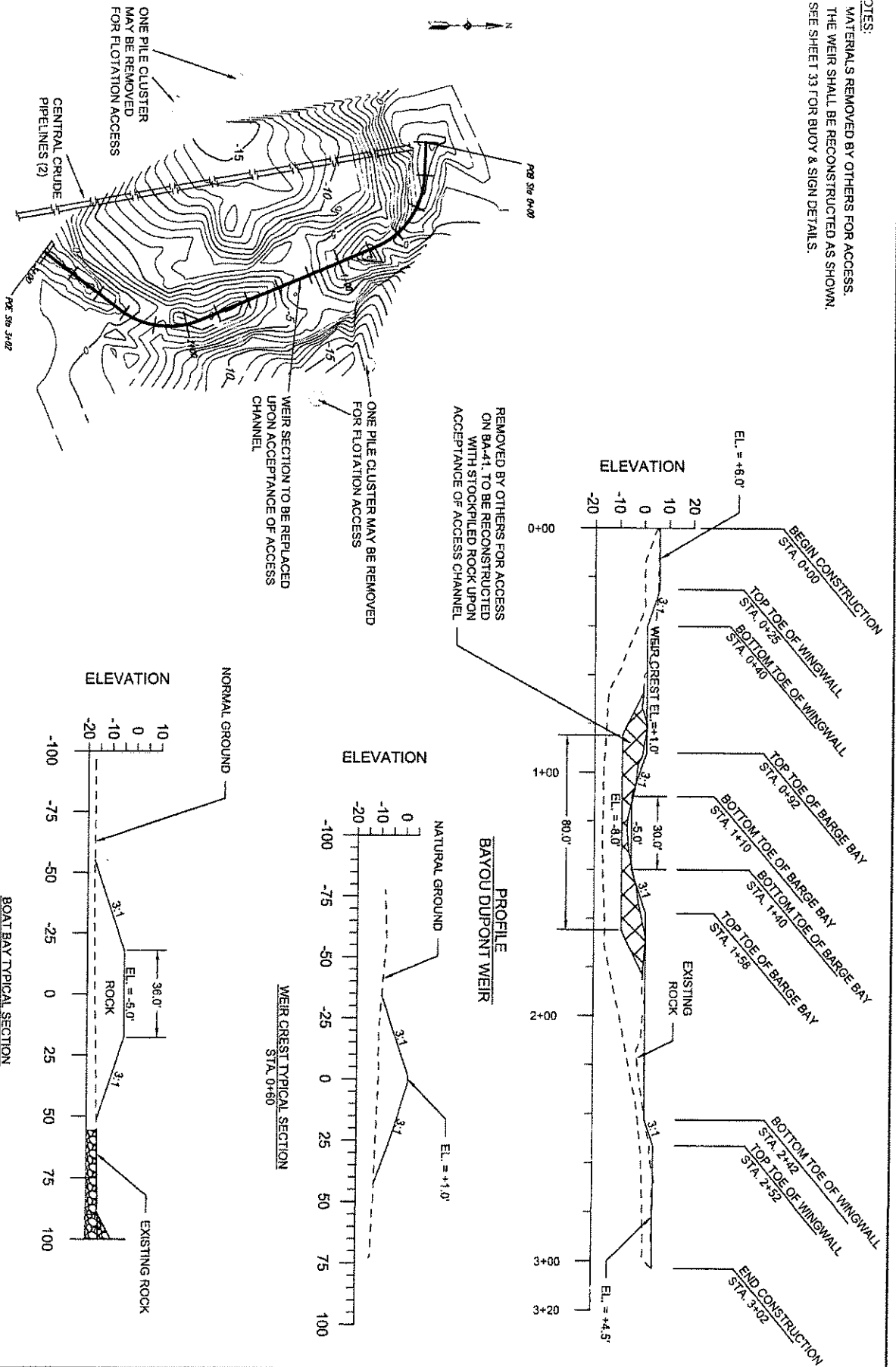
DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURICE CHATELIER, P.E.

STATE PROJECT NUMBER: BA-48 FEDERAL PROJECT NUMBER: BA-48

DATE: JULY 2011

SHEET 15 OF 35

- NOTES:
1. MATERIALS REMOVED BY OTHERS FOR ACCESS.
  2. THE WEIR SHALL BE RECONSTRUCTED AS SHOWN.
  3. SEE SHEET 33 FOR BUOY & SIGN DETAILS.



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUNEL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

BAYOU DUPONT WEIR DETAILS

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

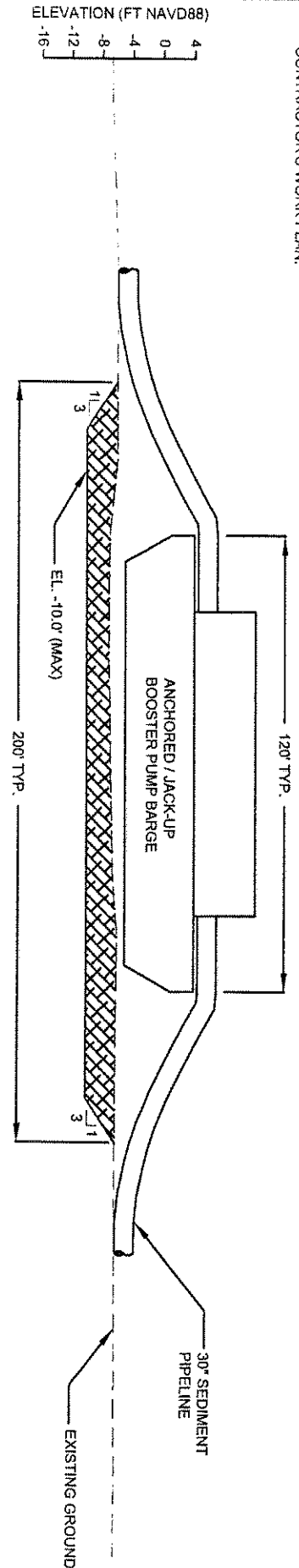
STATE PROJECT NUMBER: BA-48

FEDERAL PROJECT NUMBER: BA-48

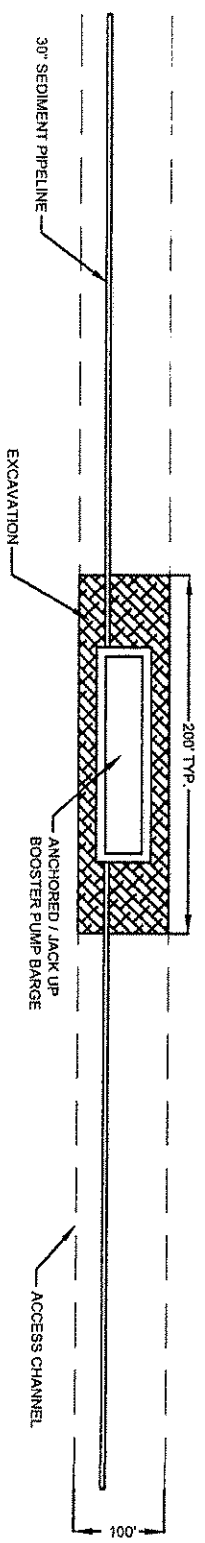
DATE: JULY 2011

SHEET 16 OF 35

- NOTES:**
1. BARGE ANCHORS OR JACK-UP LEGS SHALL NOT BE PLACED WITHIN 50' OF ANY EXISTING PIPELINES OR UTILITIES
  2. BOOSTER PUMP LOCATION SHALL BE SUBMITTED IN CONTRACTOR'S WORK PLAN.



**BOOSTER PUMP LOCATION PROFILE SECTION**  
NOT TO SCALE



**BOOSTER PUMP LOCATION PLAN VIEW**  
NOT TO SCALE

EXCAVATION FOR  
BOOSTER COOLING

APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

BOOSTER PUMP SITE  
TYPICAL DETAILS

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

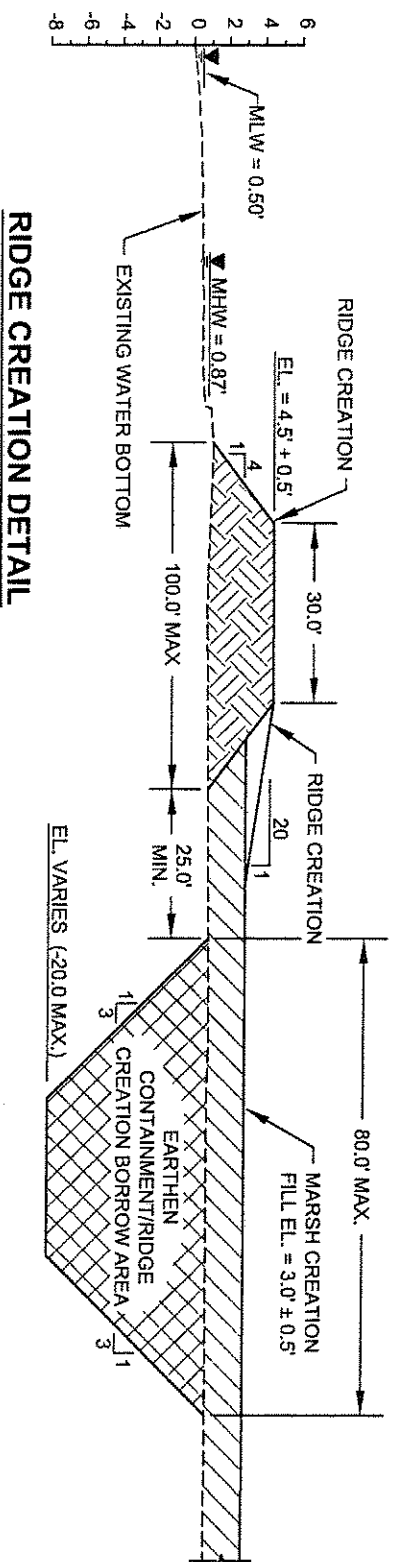
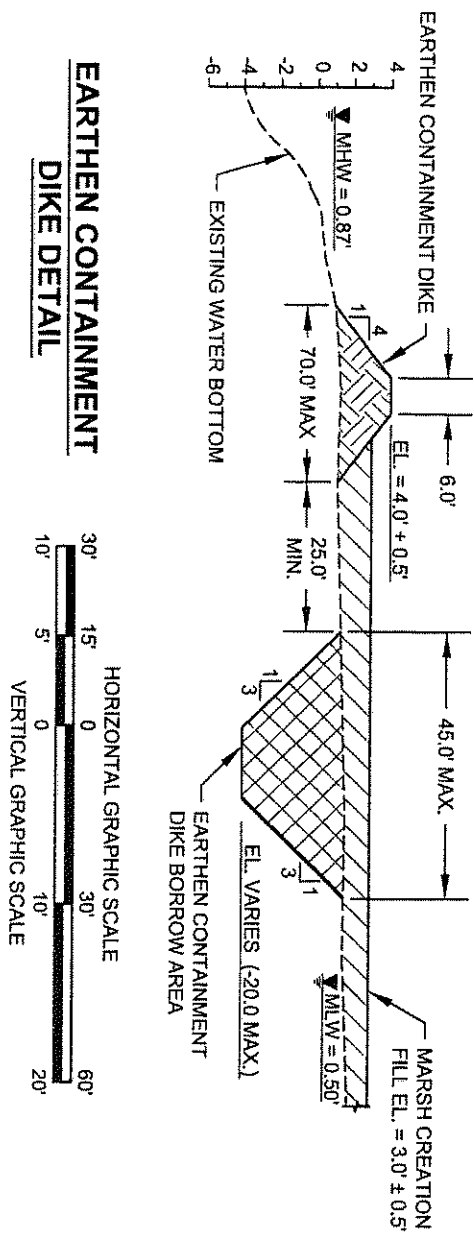
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLEIR, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 17 OF 35



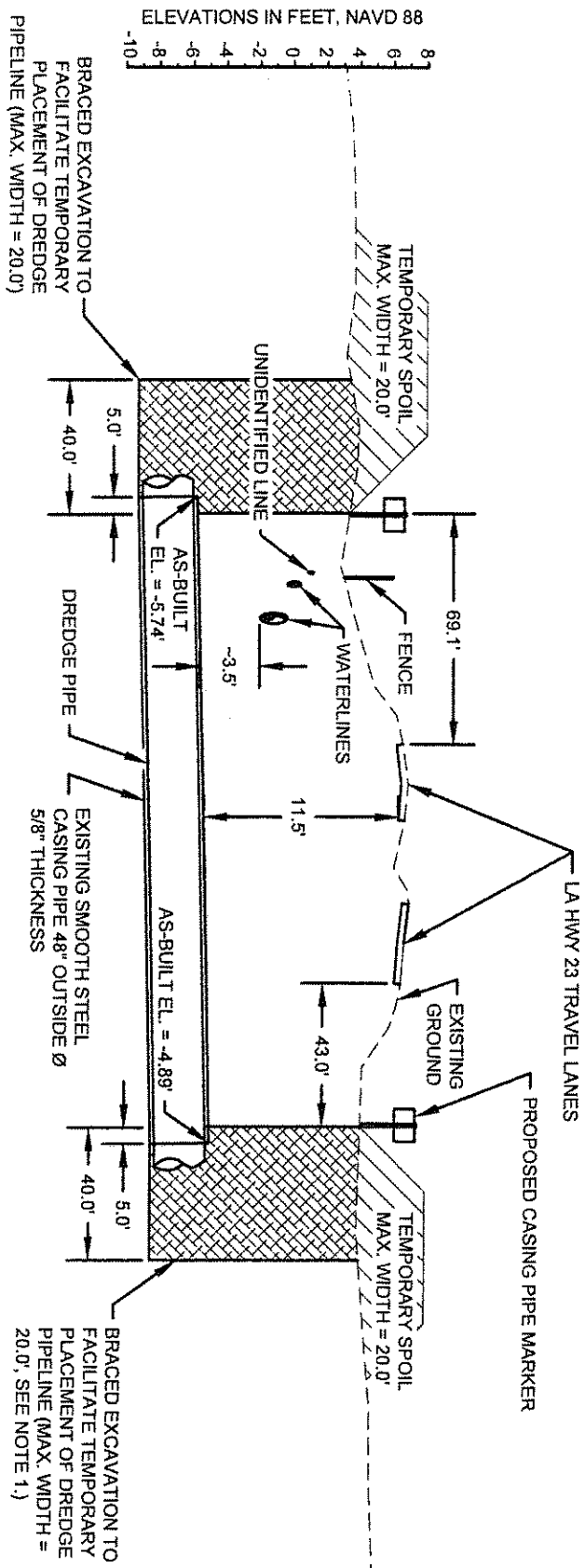


**LEGEND**

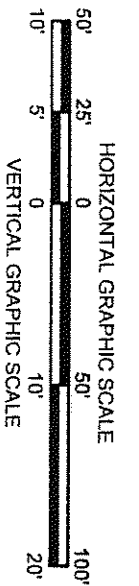
- EXISTING GROUND/WATER BOTTOM
- MARSH CREATION (FILL)
- EARTHEN CONTAINMENT/RIDGE CREATION
- RIDGE CREATION
- BORROW AREA

**NOTE:** ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET.

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSD, SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	DESIGNED BY: RUSS JOFFRION, P.E.	APPROVED BY: MAURY CHATELIER, P.E.	STATE PROJECT NUMBER: BA-48	DATE: JULY 2011
<b>COASTAL PROTECTION AND RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801			FEDERAL PROJECT NUMBER: BA-48	SHEET 18 OF 35
DRAWN BY: KRISTI CANTU			BAYOU DUPONT MARSH AND RIDGE CREATION	EARTHEN CONTAINMENT DIKE AND RIDGE DETAILS



## HIGHWAY CROSSING DETAIL



- NOTES:
1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT THE EXCAVATION PIT ON BOTH SIDES.
  2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION PIT AFTER COMPLETION OF CONSTRUCTION.

LEGEND
--- EXISTING GROUND
XXXX BRACED EXCAVATION

APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**

450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

HIGHWAY CROSSING DETAIL

STATE PROJECT NUMBER: BA-48

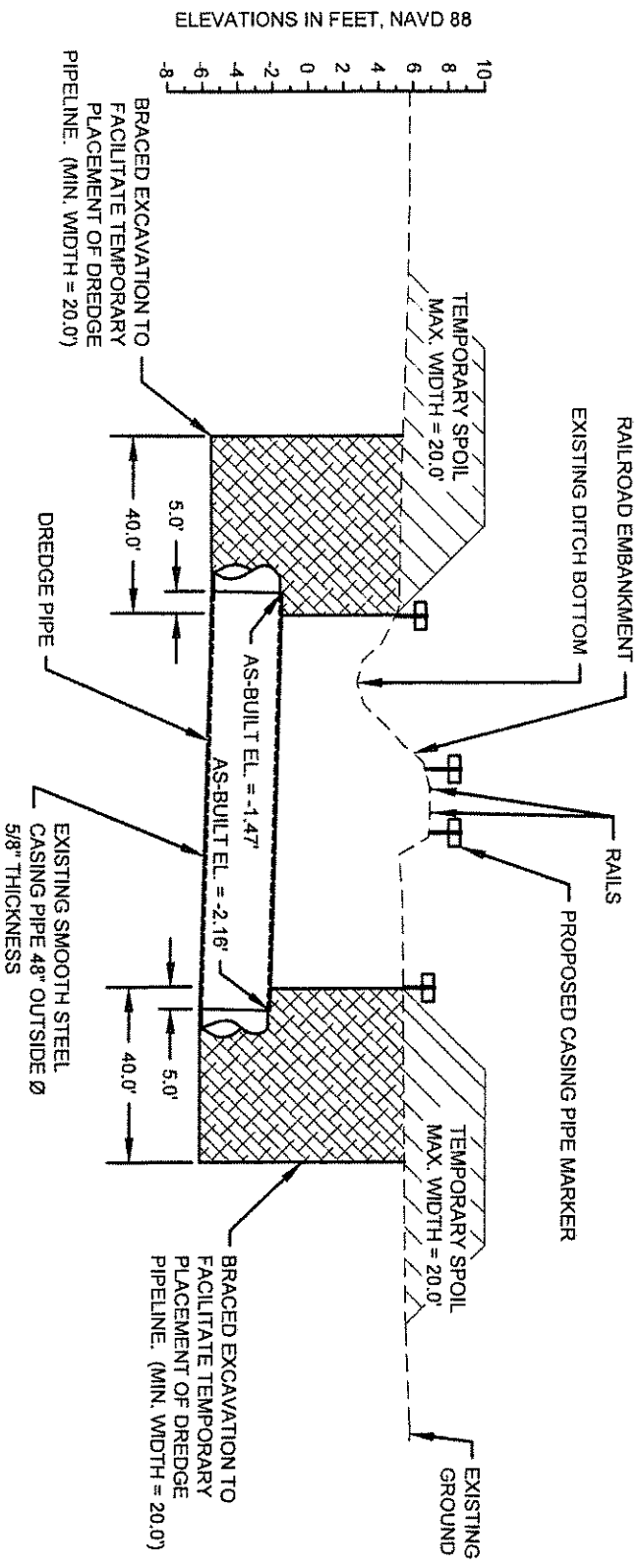
DATE: JULY 2011 (MOD. 11/15/12)

DRAWN BY: KRISTI CANTU

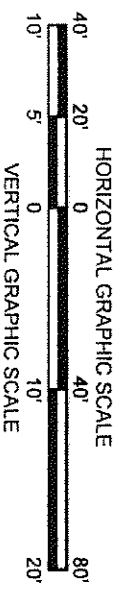
DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 19 OF 35



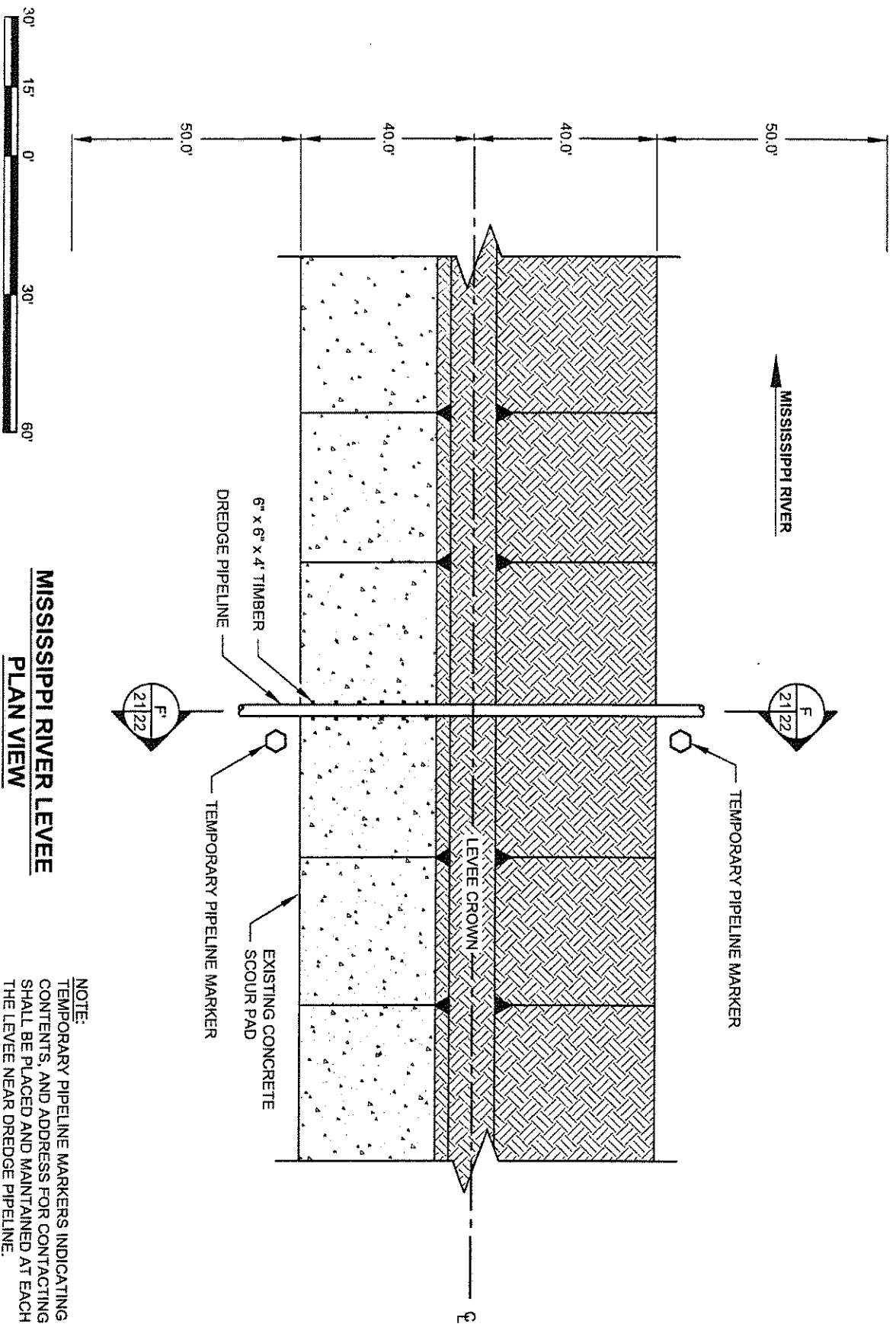
### RAILROAD CROSSING DETAIL



- NOTES:
1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT THE EXCAVATION PIT ON BOTH SIDES.
  2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION PIT AFTER COMPLETION OF CONSTRUCTION.

LEGEND	
	EXISTING GROUND
	BRACED EXCAVATION
	TEMPORARY SPOIL

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSU, SOUTH STADIUM DRIVE BATON ROUGE, LA 70803		DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.	
COASTAL PROTECTION AND RESTORATION AUTHORITY 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48	
DRAWN BY: KRISTI CANTU		FEDERAL PROJECT NUMBER: BA-48	
		DATE: JULY 2014 (MOD. 11/15/12)	
		SHEET 20 OF 35	



# **MISSISSIPPI RIVER LEVEE** **PLAN VIEW**

NOTE:  
TEMPORARY PIPELINE MARKERS INDICATING OWNER,  
CONTENTS, AND ADDRESS FOR CONTACTING OWNER  
SHALL BE PLACED AND MAINTAINED AT EACH TOE OF  
THE LEVEE NEAR DREDGE PIPELINE.

APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICES  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

MISSISSIPPI RIVER LEVEE  
CROSSING DETAIL

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011 (MOD DECEMBER 2011)

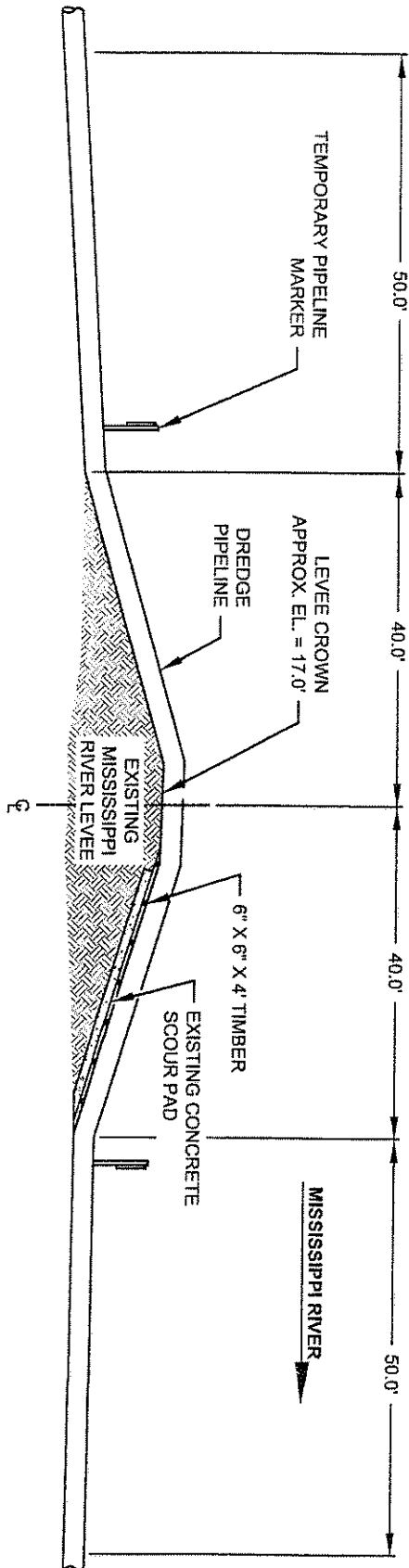
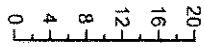
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 21 OF 35

ELEVATIONS IN FEET, NAVD 88



# **SECTION F-F'**

## **NOTES:**

1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER, SHALL BE PLACED AND MAINTAINED AT EACH TOE OF THE LEVEE NEAR DREDGE PIPELINE.
2. NO EXCAVATION NEAR MISSISSIPPI RIVER AND TRIBUTARY LEVEE.



APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICES  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

MISSISSIPPI RIVER LEVEE  
CROSSING DETAIL

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011 (MOD DECEMBER 2011)

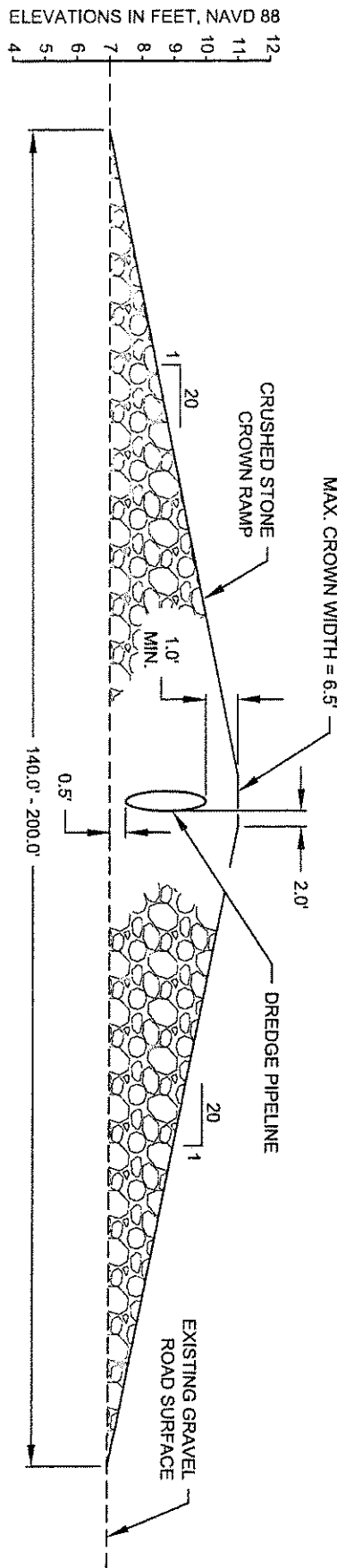
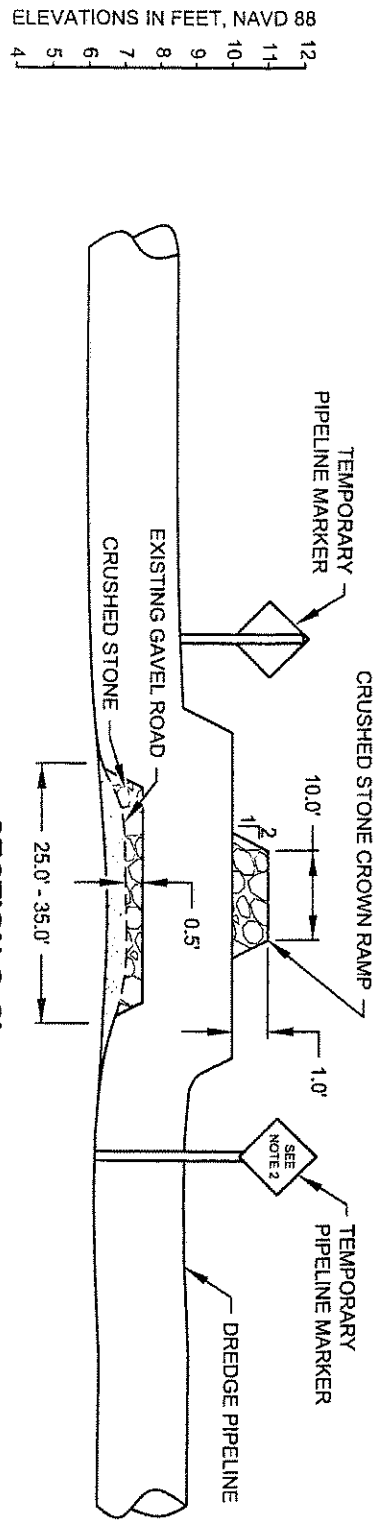
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

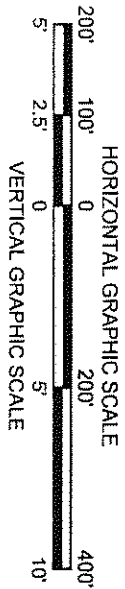
SHEET 22 OF 36





### SECTION H-H'

- NOTES:
1. MISSISSIPPI RIVER LEVEE INSPECTION ROAD IS AT THE LANDSIDE TOE OF THE MISSISSIPPI RIVER LEVEE.
  2. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF THE LEVEE NEAR DREDGE PIPELINE.



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

LEVEE INSPECTION ROAD  
CROSSING DETAILS

STATE PROJECT NUMBER: BA-48

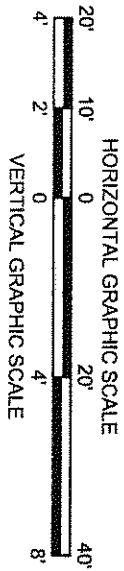
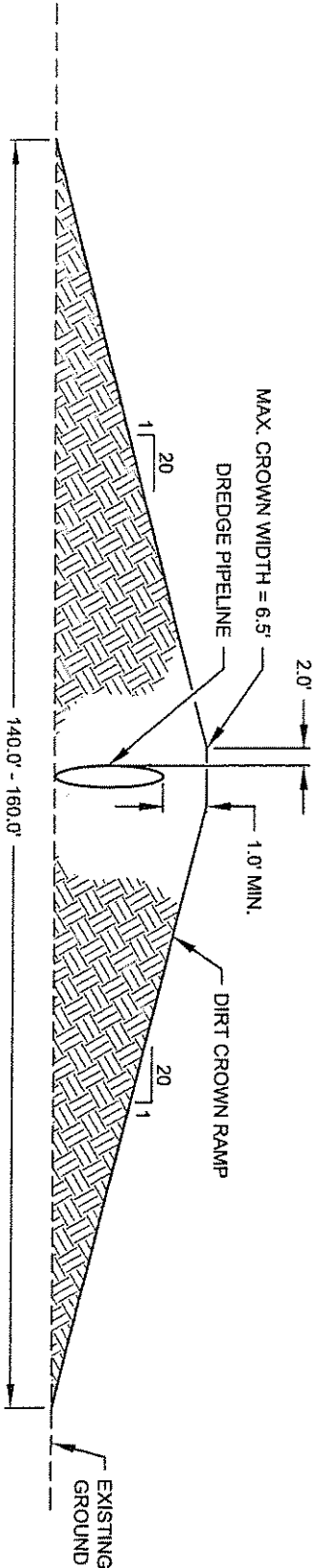
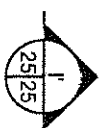
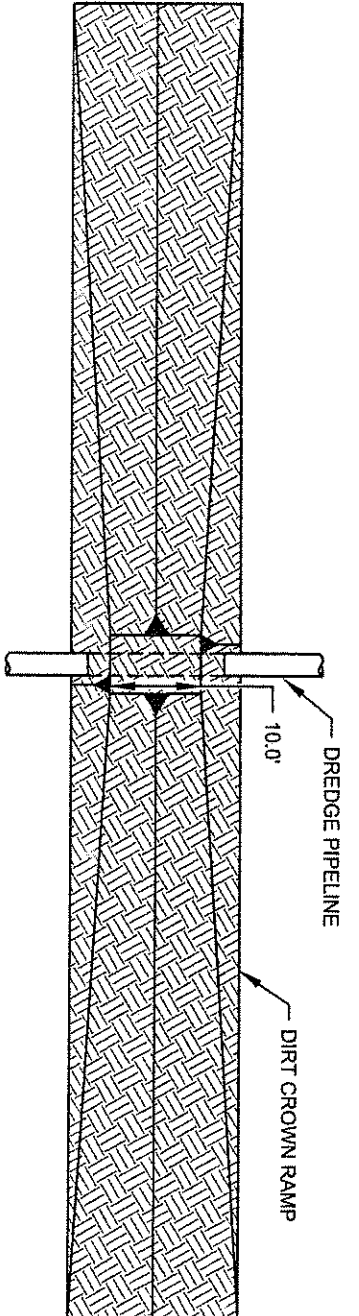
DATE: JULY 2011

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 24 OF 35



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

COASTAL PROTECTION AND  
RESTORATION AUTHORITY  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

CATTLE CROSSING  
DETAILS

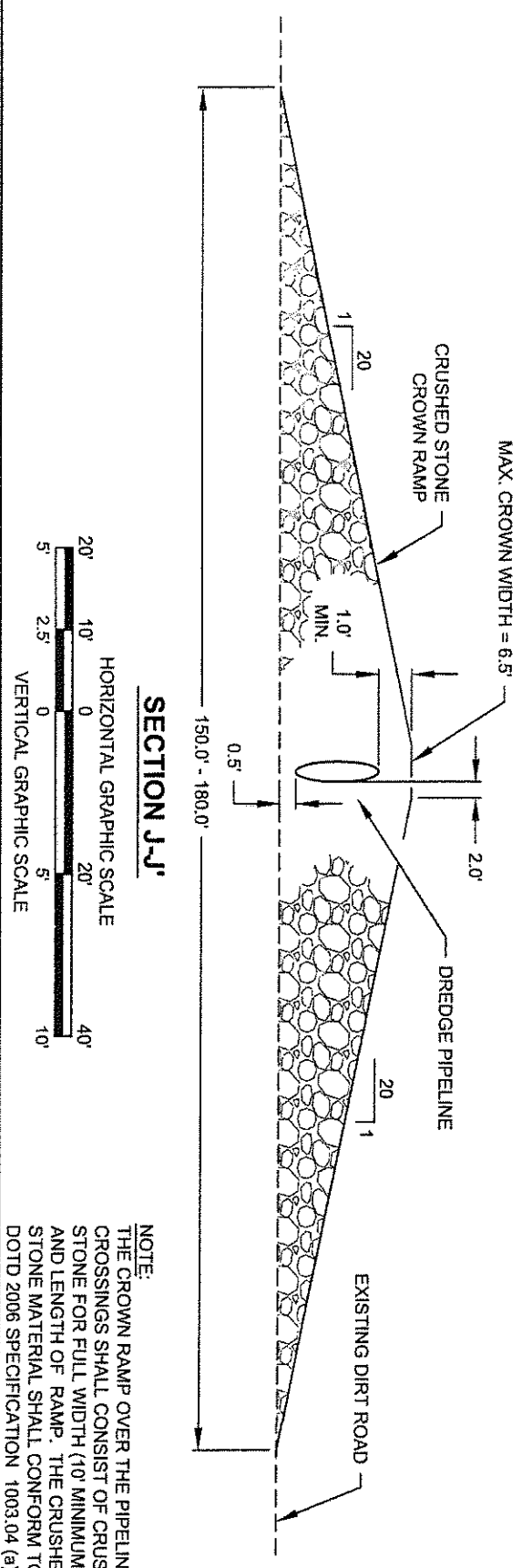
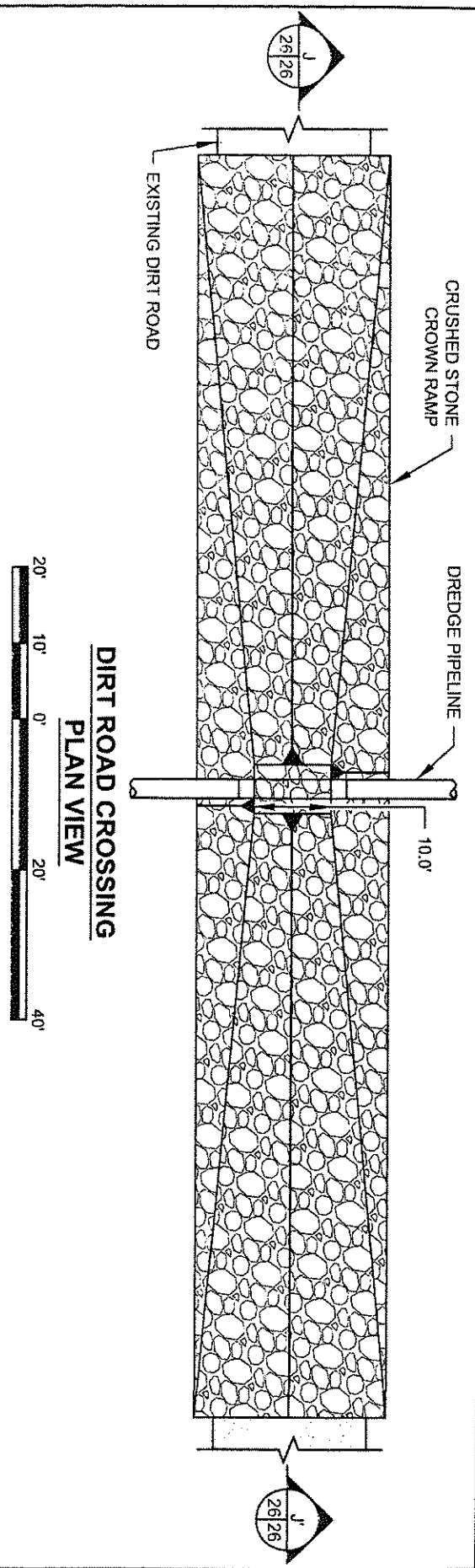
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

STATE PROJECT NUMBER: BA-48  
FEDERAL PROJECT NUMBER: BA-48

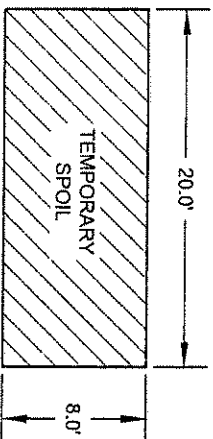
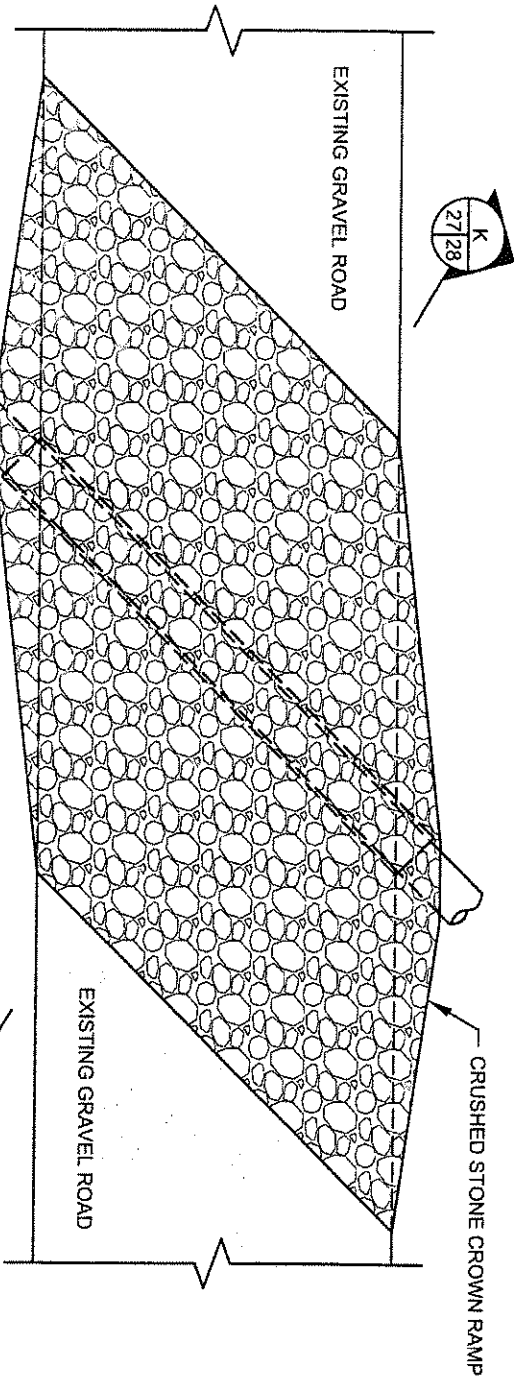
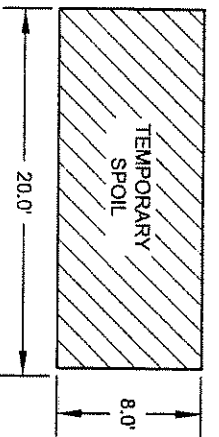
DATE: JULY 2011  
SHEET 25 OF 35





NOTE:  
THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH (10' MINIMUM) AND LENGTH OF RAMP. THE CRUSHED STONE MATERIAL SHALL CONFORM TO DOTD 2006 SPECIFICATION 1003.04 (a).

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSU, SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	COASTAL PROTECTION AND RESTORATION AUTHORITY 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48	DIRT ROAD CROSSING DETAILS DATE: JULY 2011
DRAWN BY: KRISTI CANTU	DESIGNED BY: RUSS JOFFRION, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-48	SHEET 26 OF 35



## GRAVEL ROAD CROSSING PLAN VIEW

- NOTES:
1. THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH AND LENGTH OF RAMP. THE CRUSHED STONE MATERIAL SHALL CONFORM TO DOTD 2006 SPECIFICATION 1003.04 (a).
  2. AFTER CONSTRUCTION THE DREDGE PIPELINE SHALL BE REMOVED AND THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO THE TRENCH. THE ROAD SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS.



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

COASTAL PROTECTION AND  
RESTORATION AUTHORITY  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

GRAVEL ROAD  
CROSSING DETAIL

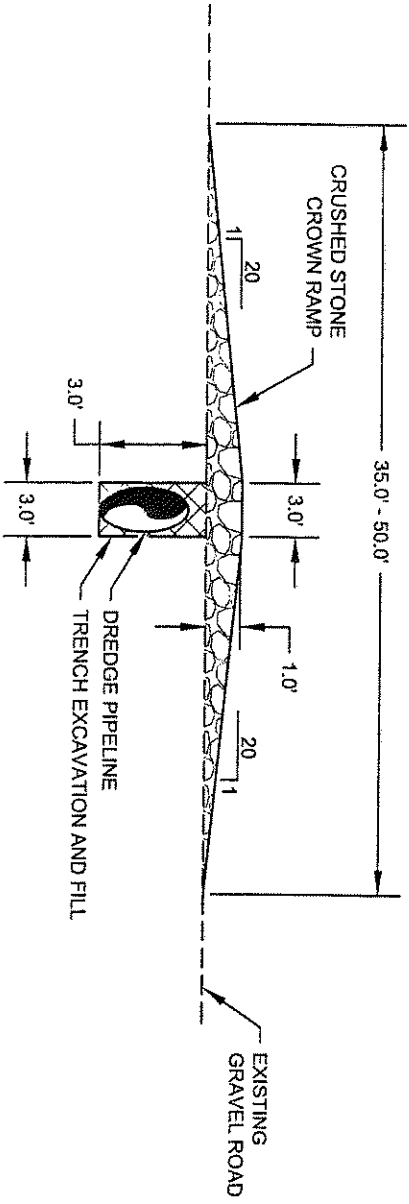
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

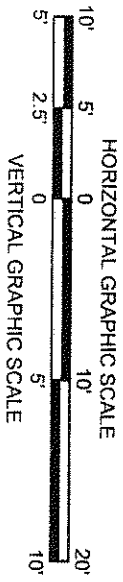
STATE PROJECT NUMBER: BA-48  
FEDERAL PROJECT NUMBER: BA-48

DATE: JULY 2011

SHEET 27 OF 35

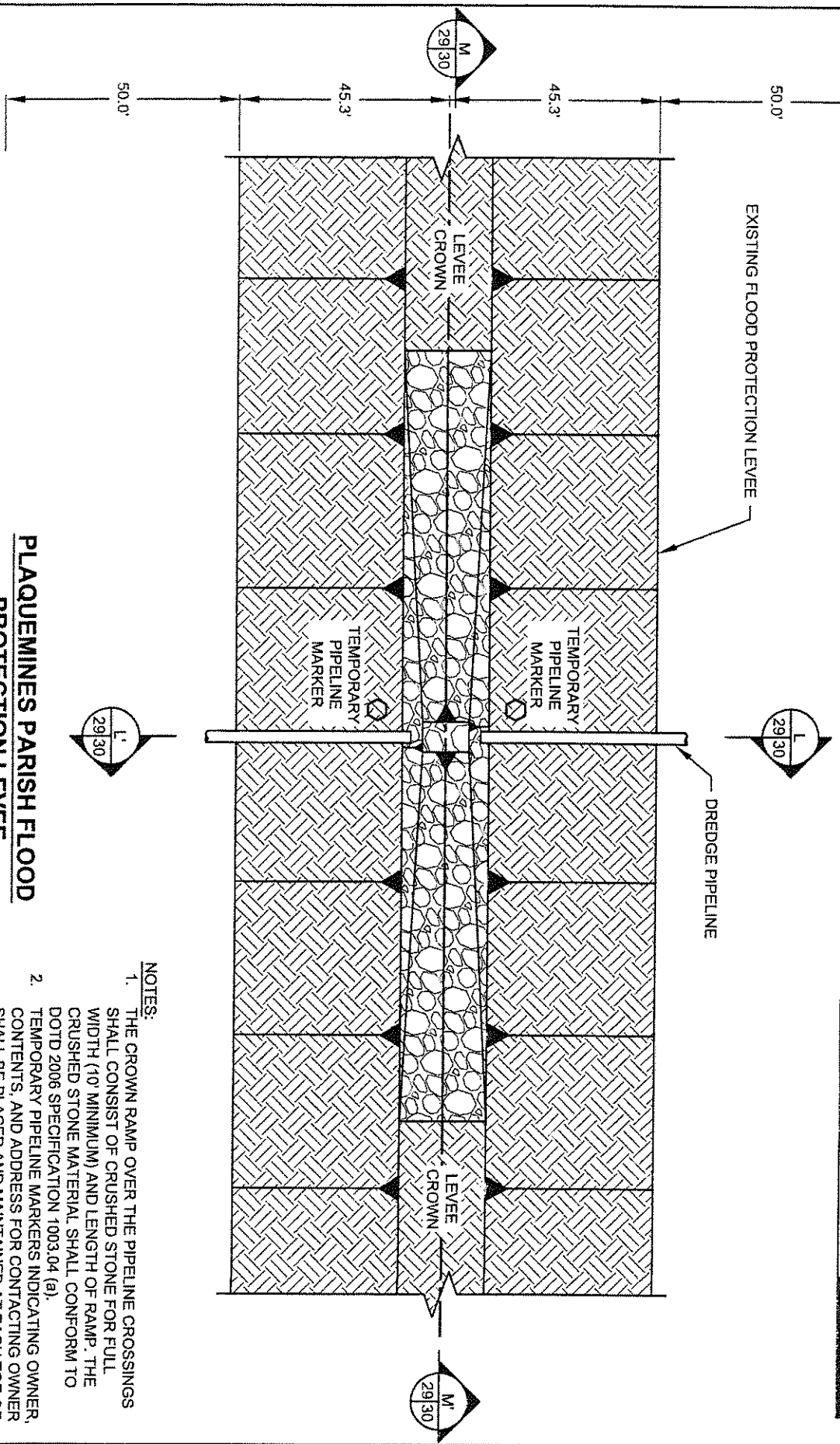


# **SECTION K-K'**



NOTE:  
THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH AND LENGTH OF RAMP. THE CRUSHED STONE MATERIAL SHALL CONFORM TO DOTD 2006 SPECIFICATION 1003.04 (a).

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE 1501 SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	COASTAL PROTECTION AND RESTORATION AUTHORITY 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48 FEDERAL PROJECT NUMBER: BA-48	GRAVEL ROAD CROSSING DETAIL DATE: JULY 2011 SHEET 28 OF 35
DRAWN BY: KRISTI CANTU	DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.			



**PLAQUEMINES PARISH FLOOD  
PROTECTION LEVEL**

- NOTES:
1. THE CROWN RAMP OVER THE PIPELINE CROSSINGS SHALL CONSIST OF CRUSHED STONE FOR FULL WIDTH (10' MINIMUM) AND LENGTH OF RAMP. THE CRUSHED STONE MATERIAL SHALL CONFORM TO DOTD 1006 SPECIFICATION 1003.04 (a).
  2. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER, SHALL BE PLACED AND MAINTAINED AT EACH TOE OF THE LEVEE NEAR DREDGE PIPELINE.

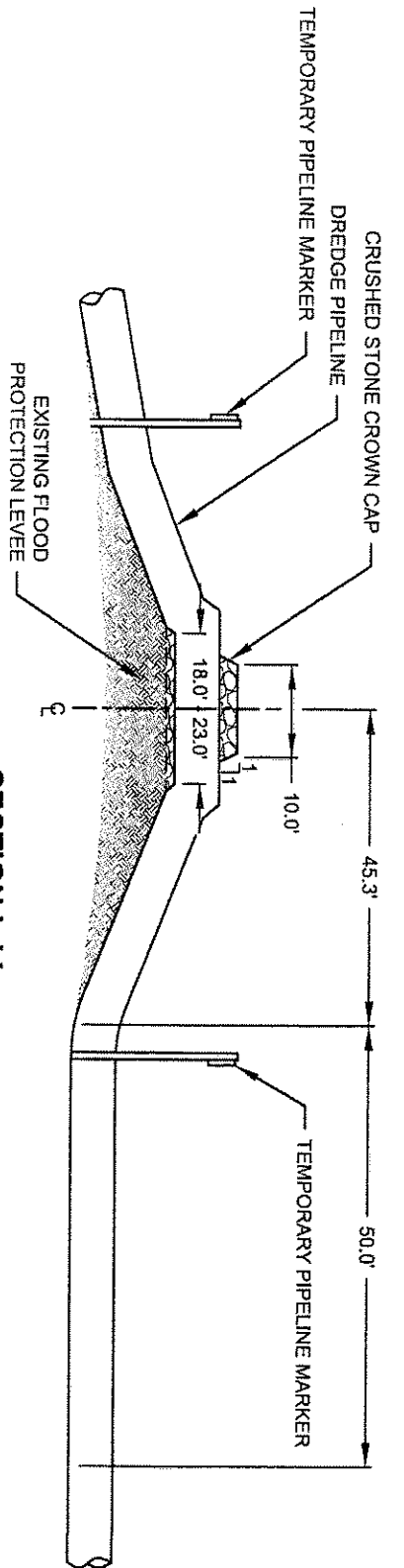
APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

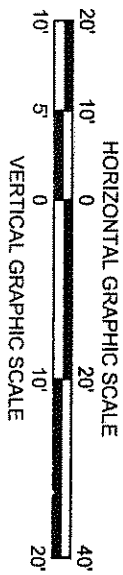
BAYOU DUPONT MARSH  
AND RIDGE CREATION

FLOOD PROTECTION LEVEL  
CROSSING DETAILS

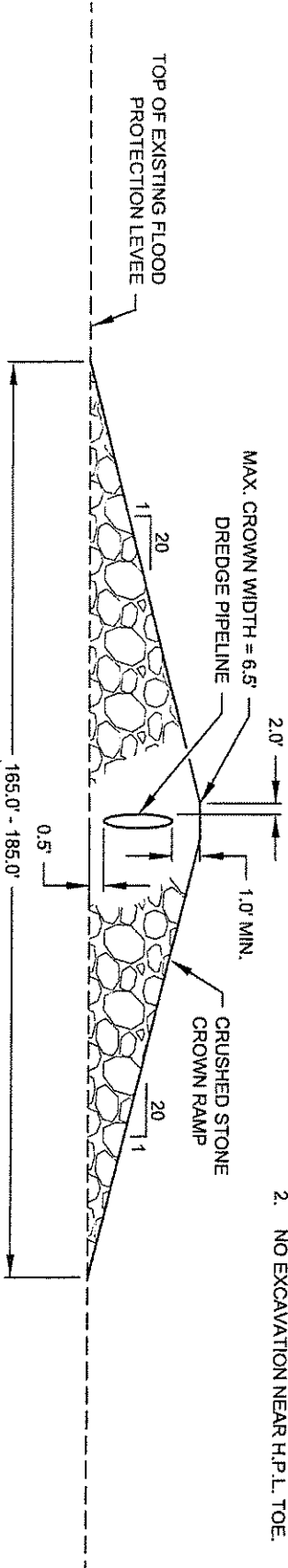
DRAWN BY: KRISTI CANTU      DESIGNED BY: RUSS JOFFRION, P.E.      APPROVED BY: MAURY CHATELLIER, P.E.      STATE PROJECT NUMBER: BA-48      FEDERAL PROJECT NUMBER: BA-48      DATE: JULY 2011 (MOD DECEMBER 2011)      SHEET 29 OF 35



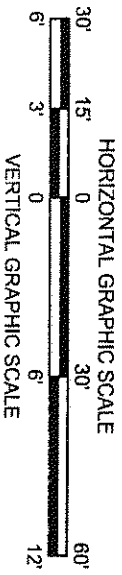
**SECTION L-L'**



- NOTES:**
1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF THE LEVEE NEAR THE DREDGE PIPELINE.
  2. NO EXCAVATION NEAR H.P.L. TOE.



**SECTION M-M'**



APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
1501 SOUTH ST. LAUREL DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

FLOOD PROTECTION LEVEE CROSSING DETAILS

STATE PROJECT NUMBER: BA-48

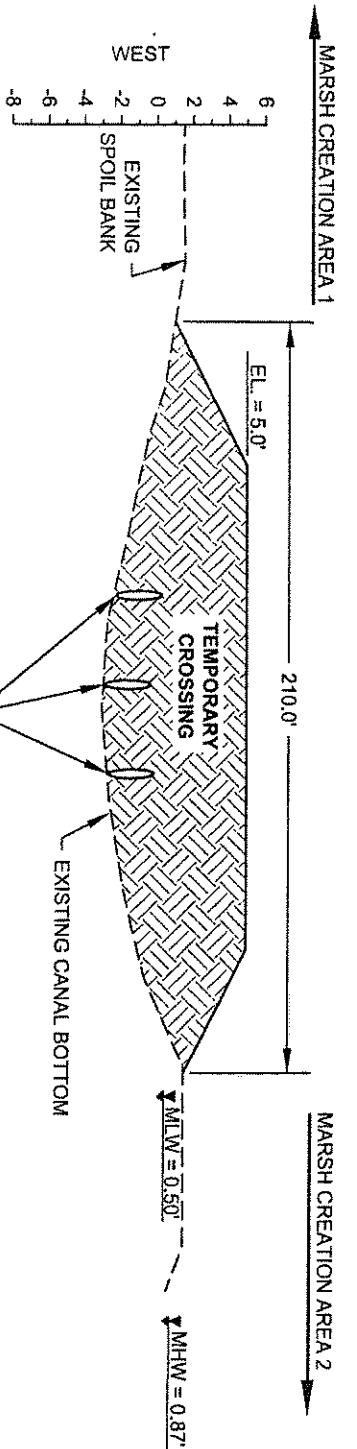
DATE: JULY 2011 (MOD DECEMBER 2011)

DRAWN BY: KRISTI CANTU

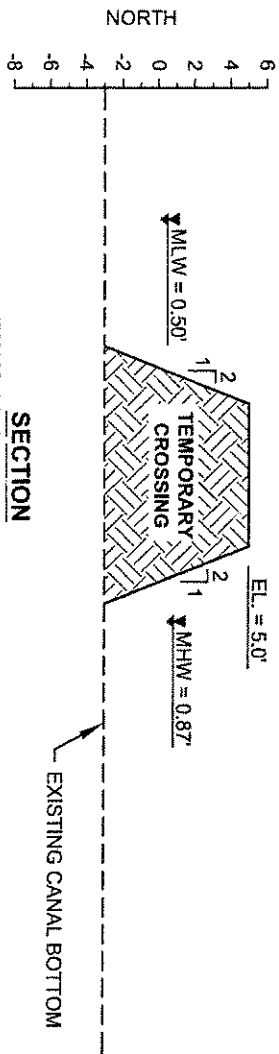
DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 30 OF 35

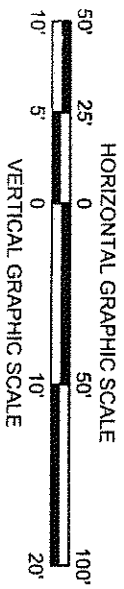


**PROFILE**  
**TEMPORARY CROSSING**



**SECTION**  
**TEMPORARY CROSSING**

- NOTES:**
1. THE TEMPORARY CROSSING SHALL BE CONSTRUCTED USING MATERIAL HYDRAULICALLY DREDGED FROM THE BORROW AREA IN THE MISSISSIPPI RIVER.
  2. TEMPORARY CROSSINGS SHALL BE REMOVED PRIOR TO DEMOBILIZATION.



APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

TEMPORARY CANAL  
CROSSING DETAILS

STATE PROJECT NUMBER: BA-48

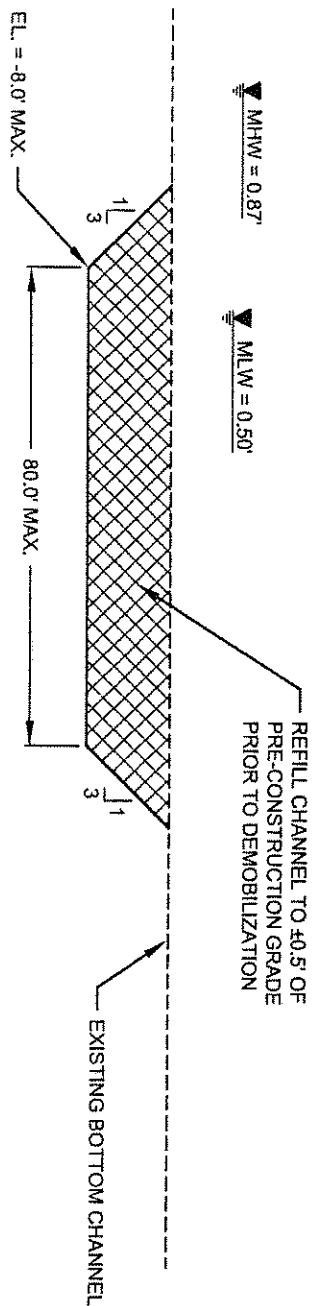
DATE: JULY 2011

DRAWN BY: KRISTI CANTU

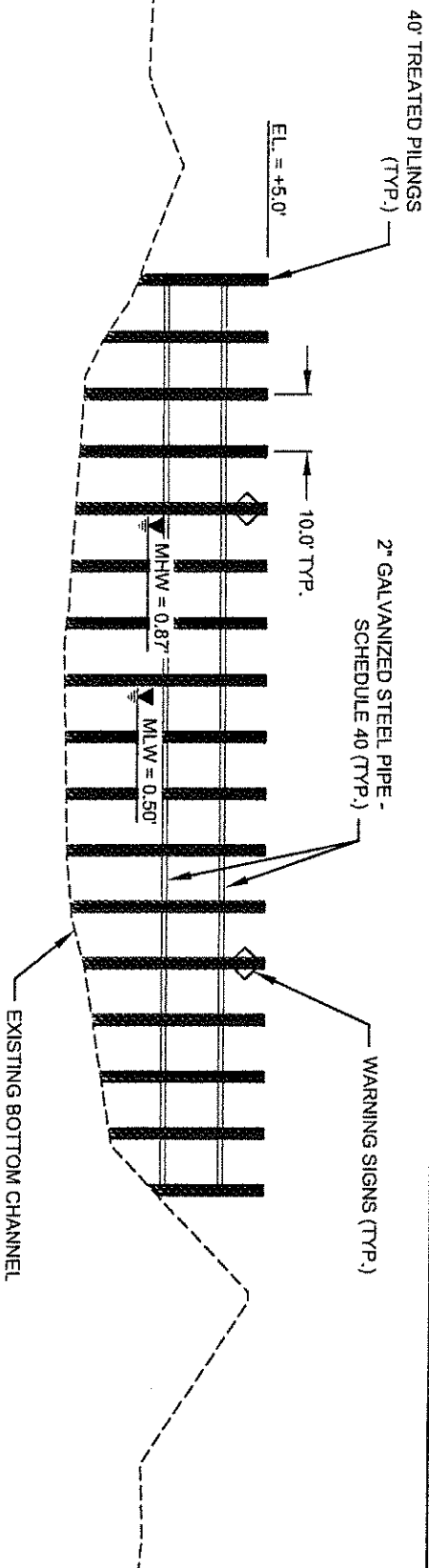
DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

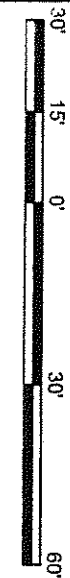
SHEET 31 OF 35



**TYPICAL CHANNEL SILL DETAIL**



**TYPICAL ACCESS RESTRICTION DETAIL**



NOTE:  
REMOVE AND REPLACE  
EXISTING TIMBER PILES USED  
FOR ACCESS RESTRICTIONS.

APPLICATION BY:  
NATIONAL MARINE FISHERIES SERVICE  
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RESTORATION AUTHORITY**  
450 LAUREL STREET  
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BAYOU DUPONT MARSH  
AND RIDGE CREATION

CANAL SILL AND  
ACCESS RESTRICTION DETAILS

STATE PROJECT NUMBER: BA-48

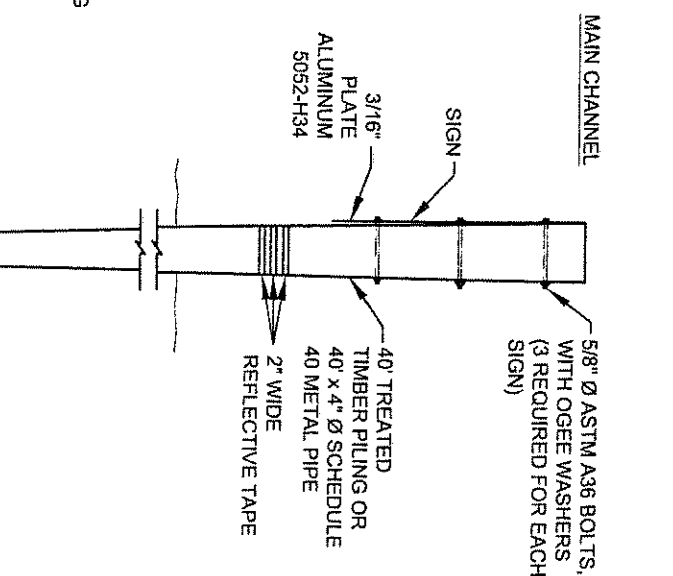
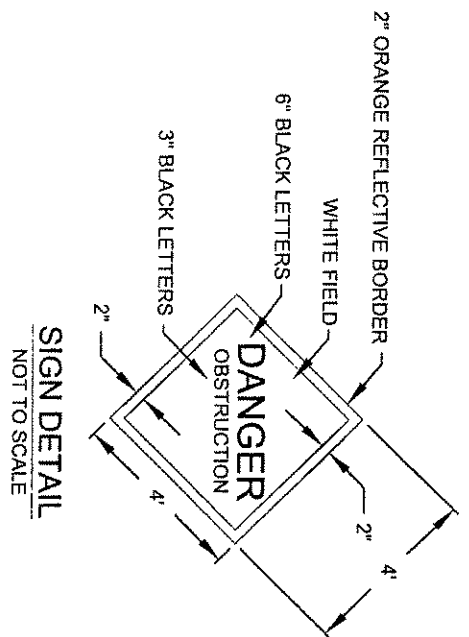
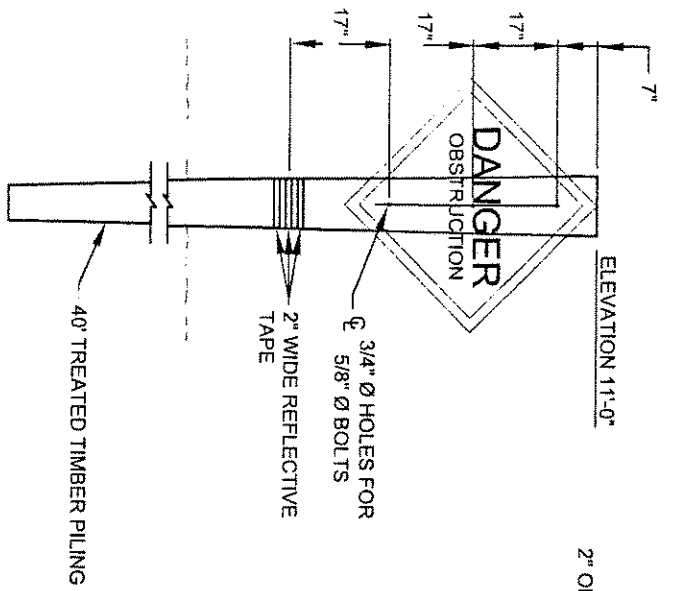
DATE: JULY 2011

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 32 OF 35



## WARNING SIGN ELEVATION

## TYPICAL TIMBER PILE CAP

## WARNING SIGN SIDE DETAIL

- WARNING SIGN NOTES:**
1. FORTY-TWO (42) PERMANENT WARNING SIGNS, INCLUDING TIMBER PILES, SHALL BE INSTALLED AT LOCATIONS SHOWN ON SHEETS 3 - 8. THE 2" BORDER ON THE WARNING SIGN WILL BE A REFLECTIVE MATERIAL OF ORANGE COLOR. THE LETTERING FIELD WILL BE A REFLECTIVE MATERIAL OF WHITE COLOR. THE LETTERING FOR THE WARNING SIGNS WILL BE BLACK. ALL SIGNS MUST MEET U.S. COAST GUARD STANDARDS, IN ACCORDANCE WITH 33 CFR 330.4 (a) (1) WHICH CAN BE DOWNLOADED AT [http://www.access.gpo.gov/nara/cfr/waisidx\\_02/33cfr330\\_02.html](http://www.access.gpo.gov/nara/cfr/waisidx_02/33cfr330_02.html)
  2. NEOPRENE WASHERS SHALL BE PLACED BETWEEN THE SIGN AND THE PILING AT ALL POINTS OF CONTACT.
  3. HARDWARE FOR TIMBER CONNECTIONS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SECTION 811.5 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS PUBLISHED BY THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, LATEST EDITION.
  4. TIMBER PILES SHALL CONFORM TO SECTIONS 804 AND 1014 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS PUBLISHED BY THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, LATEST EDITION. PILES SHALL BE TREATED WITH A CREOSOTE SOLUTION CONFORMING TO AWPAP2 TO A MINIMUM RETENTION OF 20 PCF AND CAPPED ACCORDING TO LA DOTD SPECIFICATION 812.06.
  5. TIMBER PILING SHALL BE 40" IN LENGTH WITH A NOMINAL 12" DIAMETER BUTT AND 7" MINIMUM DIAMETER AT THE TIP.
  6. THE TOP OF THE PILES SHALL BE COATED WITH COAL TAR EPOXY PAINT PRIOR TO PLACING CAP. THE PILE CAP SHALL BE ATTACHED USING ALUMINUM OR STAINLESS STEEL NAILS.

APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICE  
LSU, SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND  
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450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH  
AND RIDGE CREATION

SIGN DETAILS

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

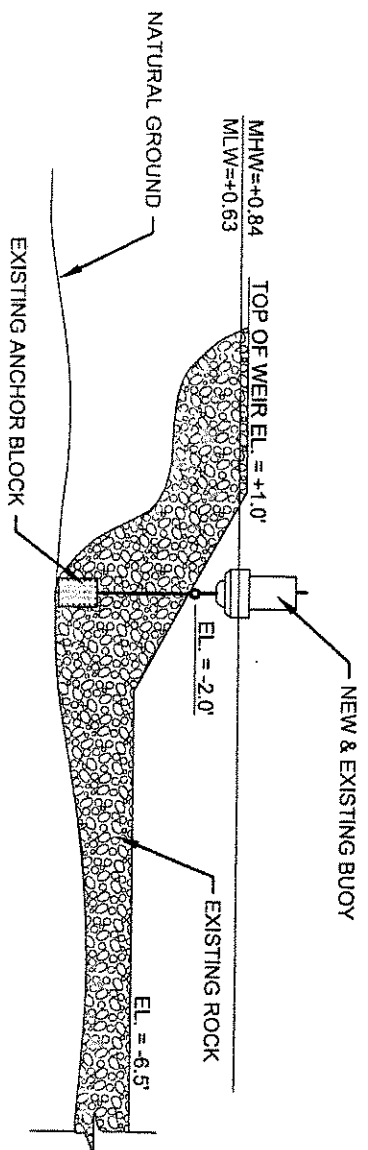
DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELLIER, P.E.

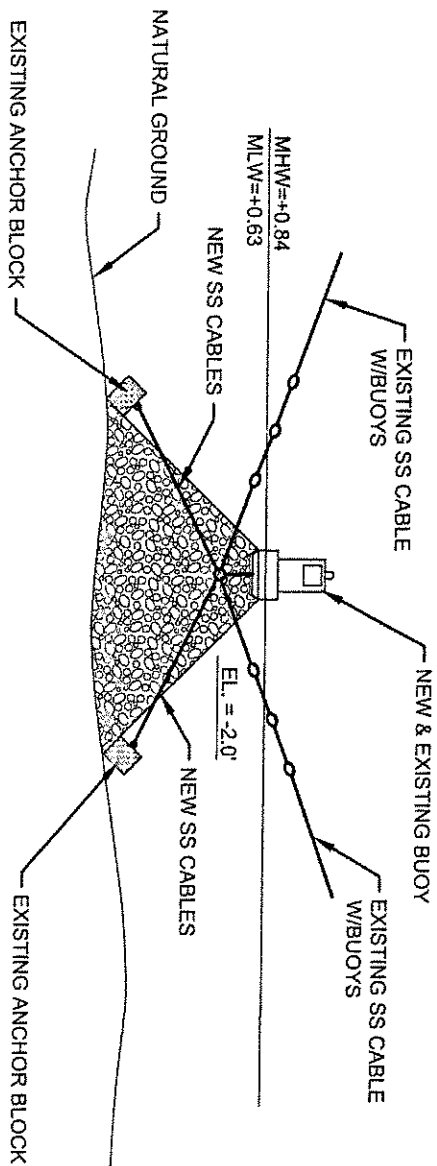
FEDERAL PROJECT NUMBER: BA-48

SHEET 33 OF 35





**ELEVATION - BUOY DETAILS**  
**TYPE A**

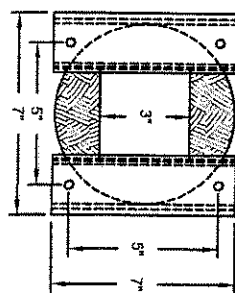
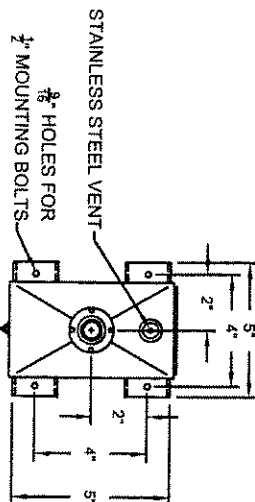
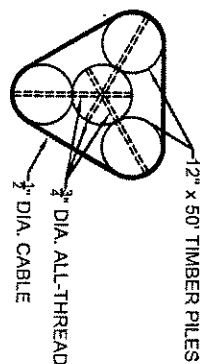
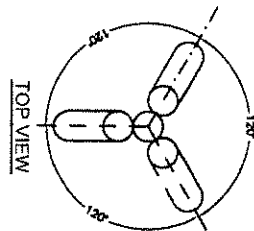


**SECTION - BUOY DETAILS**  
**TYPE A**

APPLICATION BY: NATIONAL MARINE FISHERIES SERVICE LSU SOUTH STADIUM DRIVE BATON ROUGE, LA 70803	<b>COASTAL PROTECTION AND RESTORATION AUTHORITY</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BAYOU DUPONT MARSH AND RIDGE CREATION STATE PROJECT NUMBER: BA-48	BUOY DETAILS DATE: JULY 2011 SHEET 34 OF 35
DRAWN BY: KRISTI CANTU	DESIGNED BY: RUSS JOFFRION, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-48	SHEET 34 OF 35

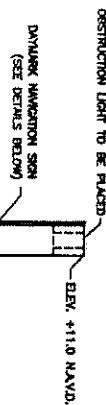
NOTES:

1. ALL 3/4" DIA. ALL-THREAD TIE RODS SHALL BE SECURED BY NOTCHED IN PLACE OGEE WASHERS AND TACK WELDED NUTS.
2. 8 WRAPS OF 1/2" DIA. CABLE MEETING ASTM A-416 AND ASTM A-882/A-882M-92 BETWEEN THE 3-3/4" DIA. ALL-THREAD ASTM A-615 GR60 GALVANIZED AND EPOXY COATED TIE RODS.
3. THE 1/2" DIA. CABLE SHALL BE SECURED USING 3 STAINLESS STEEL CLAMPS.
4. THE 3/4" DIA. ALL-THREAD TIE RODS SHALL BE A MINIMUM OF 6" BELOW TOP OF BATTERY PILE AND 3" VERTICAL CLEARANCE FROM ADJACENT TIE ROD.
5. TIE ROD PILING SHALL BE 50 FEET IN LENGTH WITH A NOMINAL 12-INCH DIAMETER BUTT AND 7-INCH MINIMUM DIAMETER AT THE TIP.

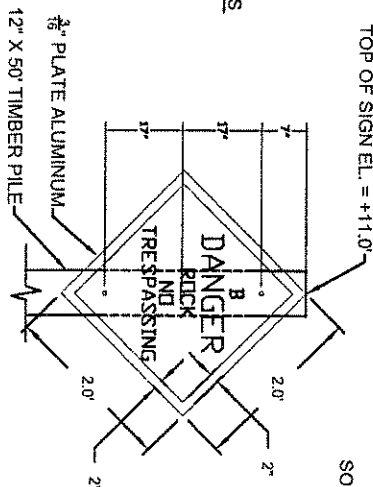


NOTES:

1. NOTCH ROUND TIMBER PILE FOR FLUSH ALUMINUM MOUNTING BRACKET ATTACHMENT.
2. HOLES IN ALUMINUM SHALL BE 1/16" OVERSIZE AND HOLES IN ROUND TIMBER PILE SHALL BE 1/8" OVERSIZE FOR THEIR CORRESPONDING BOLTS.

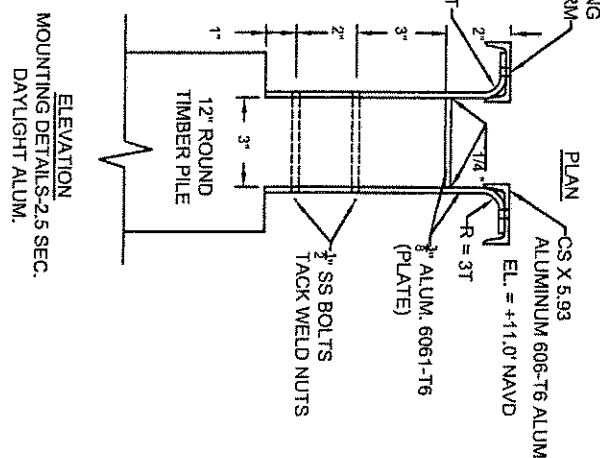
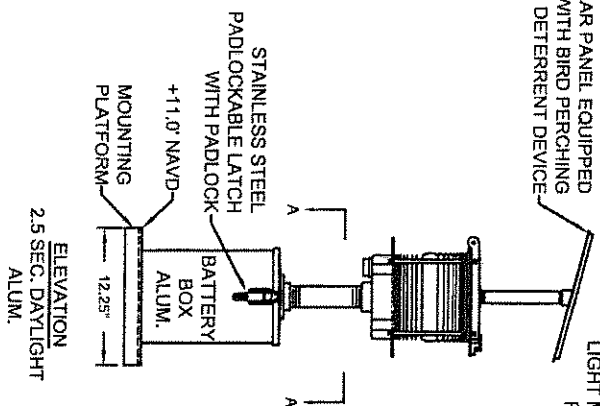


ELEVATION VIEW APPLIES TO SIGNS C AND D



DAYMARK NAVIGATION AID DANGER SIGN APPLIES TO SIGNS C AND D

- NOTES:
1. SEE SHEETS 4-7 FOR SIGN PLACEMENT LOCATIONS.
  2. ALL DAYMARK NAVIGATION AIDES SHALL ABIDE BY U.S.C.G. REGULATIONS.
  3. SIGNS SHALL BE SECURED TO TIMBER PILE WITH 3-5/8" x 8" STAINLESS STEEL LAG SCREW WITH 1 1/4" O.D. STAINLESS STEEL WASHER.
  4. SIGNS A, B, AND D SHALL BE INSTALLED ON SINGLE 50' PILES.



APPLICATION BY:

NATIONAL MARINE FISHERIES SERVICE  
LSU SOUTH STADIUM DRIVE  
BATON ROUGE, LA 70803

**COASTAL PROTECTION AND RESTORATION AUTHORITY**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BAYOU DUPONT MARSH AND RIDGE CREATION

NAVIGATIONAL AID DETAILS

STATE PROJECT NUMBER: BA-48

DATE: JULY 2011

DRAWN BY: KRISTI CANTU

DESIGNED BY: RUSS JOFFRION, P.E. APPROVED BY: MAURY CHATELIER, P.E.

FEDERAL PROJECT NUMBER: BA-48

SHEET 35 OF 35

BOBBY JINDAL  
GOVERNOR



SCOTT A. ANGELLE  
SECRETARY

State of Louisiana  
DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF COASTAL MANAGEMENT

January 24, 2011

Richard Hartman  
Chief, Baton Rouge Office  
NOAA Fisheries  
c/o Louisiana State University  
Baton Rouge, Louisiana 70803-7535

RE: **C20100273**, Coastal Zone Consistency  
**NMFS**  
Direct Federal Action  
Bayou Dupont Marsh and Ridge Creation CWPPRA Project BA-48, **Jefferson Parish,**  
**Louisiana**

Dear Dr. Hartman:

The above proposed project has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. The project, as represented in this application, is consistent with the LCRP.

If you have any questions concerning this determination please contact Brian Marcks of the Consistency Section at (225)342-7939 or 1-800-267-4019.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory J. DuCote".

Gregory J. DuCote  
Administrator  
Interagency Affairs/Field Services Division

GJD/JH/bgm

cc: David Butler, LDWF  
Pete Serio, NOD-COE  
Frank Cole, CMD/FI

Kristi Cantu, OCPR  
Jason Smith, Jefferson Parish