# STATE OF LOUISIANA
# COASTAL PROTECTION AND RESTORATION AUTHORITY

# MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE BA-43 EB

# BAYOU DUPONT MARSH AND RIDGE CREATION BA-48

## JEFFERSON & PLAQUEMINES PARISHES, LOUISIANA

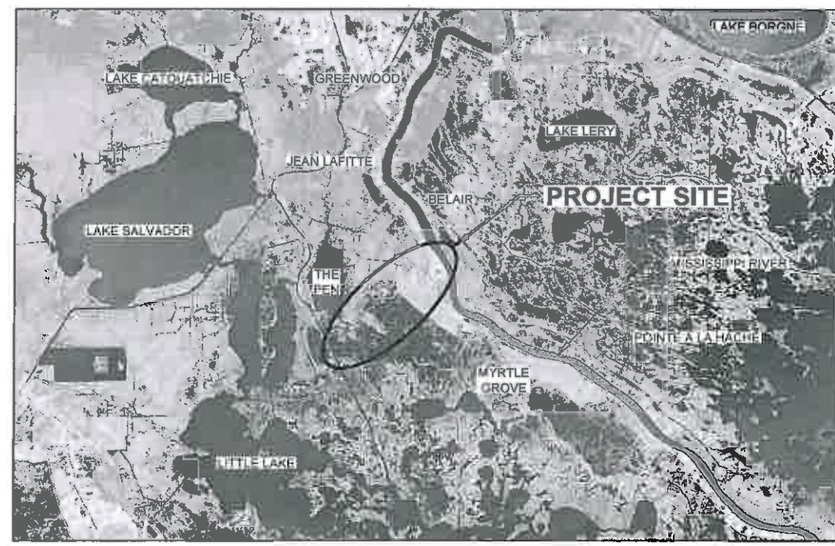
**FINAL BID SET**

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

INDEX TO SHEETS

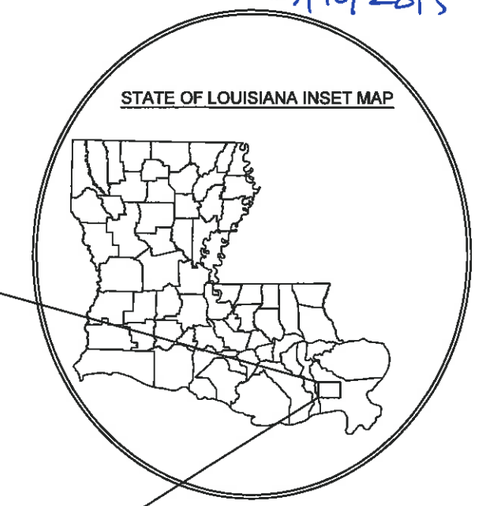

| SHEET NO. | DESCRIPTION |
|---|---|
| 1. | TITLE SHEET |
| 2. | GENERAL NOTES, ABBREVIATIONS AND ESTIMATED QUANTITIES (1 OF 2) |
| 3. | GENERAL NOTES (2 OF 2) |
| 4. | PROJECT LAYOUT |
| 5. | BORROW AREAS |
| 6. | TYPICAL MISSISSIPPI RIVER DREDGE PIPELINE ROUTE SECTIONS |
| 7. | WILLS POINT ANCHORAGE BORROW AREA LAYOUT |
| 8. | ALLIANCE ANCHORAGE BORROW AREA LAYOUT |
| 9. | BORROW AREAS TYPICAL SECTIONS |
| 10. | BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (1 OF 7) |
| 11. | BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT- DETAIL B |
| 12-17. | BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUTS (6 OF 7) |
| 18-19. | ADDITIVE ALTERNATE #1: ACCESS CORRIDOR AND MARSH CREATION LAYOUTS (2 OF 2) |
| 20-21. | ADDITIVE ALTERNATE #2: ACCESS CORRIDOR AND MARSH CREATION LAYOUTS (2 OF 2) |
| 22. | LDSP EARTHEN CONTAINMENT DIKE LAYOUT AND COORDINATES |
| 23. | PROJECT FEATURES COORDINATES |
| 24-26. | BASE BID: LDSP TYPICAL FILL SECTIONS (3 OF 3) |
| 27. | BASE BID: LDSP MARSH CREATION AREA TYPICAL SECTIONS |
| 28. | BASE BID: BA-48 MARSH CREATION AREA TYPICAL SECTIONS |
| 29. | BASE BID: BA-48 CONTAINMENT DIKE AND RIDGE TYPICAL DETAILS |
| 30. | ADDITIVE ALTERNATE #1: BA-48 MARSH CREATION AREA TYPICAL SECTIONS |
| 31. | ADDITIVE ALTERNATE #2: LDSP MARSH CREATION AREA TYPICAL SECTIONS |
| 32. | ACCESS CHANNEL LAYOUT |
| 33. | TYPICAL ACCESS CHANNEL SECTIONS |
| 34. | BAYOU DUPONT WEIR STRUCTURE |
| 35. | DREDGE PIPELINE CORRIDOR SECTION |
| 36. | RAILROAD CROSSING DETAIL |
| 37. | HIGHWAY CROSSING DETAIL |
| 38. | MISSISSIPPI RIVER LEVEE CROSSING DETAIL |
| 39. | MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL |
| 40. | CATTLE CROSSING DETAIL |
| 41. | DIRT ROAD CROSSING DETAIL |
| 42. | GRAVEL ROAD CROSSING DETAIL |
| 43. | FLOOD PROTECTION LEVEE CROSSING DETAIL |
| 44. | PERMANENT CANAL CROSSING DETAIL |
| 45. | TEMPORARY CANAL CROSSING DETAIL |
| 46. | PROPOSED LAND BASED BOOSTER PUMP LOCATION DETAILS |
| 47. | BAYOU DUPONT BOOSTER PUMP SITE TYPICAL DETAILS |
| 48-49. | BRIDGE/PIPE CROSSING PLANS (2 OF 2) |
| 50. | BRIDGE/PIPE CROSSING SECTIONS |
| 51-52. | BRIDGE/PIPE CROSSING DETAILS (2 OF 2) |
| 53. | BUOY AND CONCRETE ANCHOR BLOCK DETAILS |
| 54. | PILE CLUSTER AND NAVIGATIONAL AID DETAILS |
| 55. | TEMPORARY SHOAL WARNING SIGN DETAILS |
| 56. | CASTING PIPE CAP, MARKER AND SETTLEMENT PLATE DETAILS |
| 57. | FILL AREA SECTIONS LAYOUT |
| 58. | BASE BID: LDSP REACH 2 FILL AREA SECTIONS |
| 59-62. | BASE BID: BA-48 FILL AREA SECTIONS (4 OF 4) |
| 63-68. | BASE BID: LDSP FILL AREA SECTIONS (6 OF 6) |
| 69-71. | ADDITIVE ALTERNATE #1: BA-48 FILL AREA SECTIONS (3 OF 3) |
| 72-76. | ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (5 OF 5) |
| 77. | BORROW AREAS SECTIONS LAYOUT |
| 78. | WILLS POINT ANCHORAGE BORROW AREAS SECTIONS |
| 79-80. | ALLIANCE ANCHORAGE BORROW AREA SECTIONS (2 OF 2) |
| 81. | PROJECT FUNDING SIGN |


25,000' 0' 25,000' 50,000'

N

STATE OF LOUISIANA INSET MAP



CHIEF - ENGINEERING DIVISION

ENGINEER MANAGER

PROJECT ENGINEER

LICENSURE CLASSIFICATION REQUIREMENTS
MAJOR CATEGORY: HEAVY CONSTRUCTION
SUBCLASSIFICATION: DREDGING

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA & RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

TITLE SHEET

DATE: MARCH 8, 2013

SHEET 1 OF 81

## GENERAL NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET. ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983 (NAD 83, LOUISIANA STATE PLANE SOUTH ZONE U.S. FEET).

2. BACKGROUND AERIAL IMAGES SHOWN ON THE PLANS ARE FROM U.S. DEPARTMENT OF AGRICULTURE (USDA) NATIONAL AERIAL IMAGERY PROGRAM (NAIP), OCTOBER OF 2010.

3. FILL AREA SURVEY DATA SHOWN ON THE PLANS IS BASED ON FIELD SURVEYS PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011 BY T. BAKER SMITH AND IN OCTOBER 2008 BY PBS&J. ESTIMATED FILL QUANTITIES SHOWN ARE FOR BIDDING PURPOSES ONLY AND ARE BASED ON THESE SURVEYS. QUANTITIES WERE CALCULATED USING AUTOCAD DIGITAL TERRAIN MODELS.

4. FOUR CPRA SECONDARY BENCHMARKS WERE USED AS HORIZONTAL AND VERTICAL SURVEY CONTROL FOR ALL FILL AREA SURVEYS: BA41-SM-01, BA23-SM-02, BA03C-SM-01 & BA03C-SM-02. ONE OR MORE OF THESE BENCHMARKS WERE USED FOR DAY-TO-DAY CONTROL BASED ON THEIR PROXIMITY TO THE SURVEY.

| SECONDARY SURVEY MONUMENT | NORTHING | EASTING |
|---|---|---|
| BA03C-SM-01 | 438,782.62 | 3,708,237.23 |
| BA03C-SM-02 | 423,541.04 | 3,701,364.95 |
| BA23-SM-02 | 403,728.57 | 3,680,575.00 |
| BA41-SM-01 | 417,912.61 | 3,673,985.63 |

5. BORROW AREAS SURVEY DATA SHOWN ON PLANS IS BASED ON MULTI-BEAM BATHYMETRIC SURVEYS PERFORMED BY OCEAN SURVEYS INC. ON AUGUST 17, 2011 AND USACE SURVEY PERFORMED ON NOVEMBER 29, 2012.

6. THE CORRIDOR AND MARSH CREATION SITES AND MISSISSIPPI RIVER BORROW AREAS MAY BE REVISED BY THE ENGINEER AT THE TIME OF CONSTRUCTION TO REFLECT CHANGES IN FIELD CONDITIONS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NAVIGATING FROM ACCESS WATER BODY TO THE PROJECT AREA. DREDGING IS ONLY ALLOWED WITHIN THE LIMITS SHOWN ON THE PLANS. THE ENGINEER OR RESIDENT PROJECT REPRESENTATIVE SHALL MONITOR THE EQUIPMENT LOCATION DURING CONSTRUCTION.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS 72 HOURS IN ADVANCE OF THE WORK. DREDGE PIPELINES IN OPEN WATER SHALL BE MARKED WITH BUOYS BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN BUOYS DURING CONSTRUCTION OR HAVE ADEQUATE NAVIGATIONAL EQUIPMENT ON THE DREDGE TO AVOID DREDGING IN RESTRICTED AREAS. THE CONTRACTOR SHALL NOT ANCHOR OR EXCAVATE WITHIN 500 FEET OF ANY PIPELINE IN THE MISSISSIPPI RIVER. THE FOLLOWING IS A LIST OF PIPELINE OPERATORS KNOWN TO HAVE PIPELINES IN THE VICINITY. CALL LOUISIANA ONE CALL AT 1-800-272-3020 5 DAYS PRIOR TO EXCAVATION TO LOCATE ANY OTHER PIPELINES OR UTILITY.

SHELL OIL PIPELINE
CONTACT: FLETCHER PUDERER
PHONE: (504) 416-4011

PLAINS PIPELINE, L.P.
CONTACT: FRANK CARDEN
PHONE: (713) 646-4692

ENTERGY SUBMERGED TRANSMISSION LINE
CONTACT: GARY HERGERT
PHONE: (985) 850-1253

ENTERGY OVERHEAD TRANSMISSION LINE
CONTACT: JOSEPH GIAMMALVA
PHONE: (504) 219-4207

RIO GRANDE PACIFIC
CONTACT: JOHNNY HYDES
PHONE: (504) 458-1075

ENBRIDGE PIPELINES (LOUISIANA INTERSTATE) INC.
CONTACT: LEONARD MORRISON
PHONE: (713) 353-5609

MIDCOAST LOUISIANA LIQUIDS INC.
CONTACT: HENRY LEGER
PHONE: (337) 572-3771

9. PLANS AND SPECIFICATIONS ARE COMPLEMENTARY; WHAT IS REQUIRED BY ONE IS BINDING AS REQUIRED BY ALL. CLARIFICATIONS AND INTERPRETATIONS OF, OR NOTIFICATIONS OF MINOR VARIATIONS AND DEVIATIONS IN THE CONTRACT DOCUMENTS, WILL BE ISSUED BY THE ENGINEER.

10. ANY DAMAGE TO EXISTING U.S. COAST GUARD NAVIGATION AIDS OR PRIVATE NAVIGATION AIDS SHALL BE REPAIRED BY THE CONTRACTOR TO U.S. GUARD STANDARDS AT THE EXPENSE OF THE CONTRACTOR.

11. DATA FROM CPRA GAGE BA03C-CR-61 IN BAYOU DUPONT WAS USED TO CALCULATE THE MHW AND MLW. ELEVATIONS ARE REFERENCED TO NAVD 88, U.S. FEET. MHW = 0.87' AND MLW = 0.50'.

12. THE CONTRACTOR SHALL PERFORM A MAGNETOMETER SURVEY OF THE ACCESS FLOTATION, BORROW AREA AND FILL AREAS PRIOR TO ANY WORK. DRAWINGS SHOWING THE TRACK LINES, ANY MAGNETOMETER HITS, COORDINATES, AMPLITUDE, SIGNATURE TYPE, AND SIGNATURE WIDTH OF ALL MAGNETOMETER HITS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO EXCAVATION AS PER TS-3.3.7 OF THE SPECIFICATIONS.

13. NO EXCAVATION OF MATERIALS IS ALLOWED FOR MRT LEVEE, FLOOD PROTECTION LEVEE, AND NAOMI SIPHON LEVEE CROSSINGS. ALL LEVEE CROSSINGS SHALL BE OVER LAND AND IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

14. 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 OR AS OTHERWISE NOTED.

15. 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.

16. NO CONSTRUCTION EQUIPMENT OR ACTIVITIES MAY OPERATE, TRANSIT, STAGE, OR STORE OUTSIDE OF THE CONSTRUCTION LIMITS.

17. CONSTRUCTION OVER THE MRT LEVEE AND CONSTRUCTION WITHIN 10 FT OF THE LEVEE TOES IS LIMITED TO RIVER STAGES BELOW +11 FT ON THE CARROLLTON GAGE.

18. CONSTRUCTION OVER THE MRT LEVEE AND CONSTRUCTION WITHIN 10 FT OF THE LEVEE TOES IS NOT ALLOWED WHEN A HURRICANE IS WITHIN 5 DAYS OF AFFECTING THE LOUISIANA COAST.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

## ABBREVIATIONS:

| | |
|---|---|
| AC | ACRES |
| AHP | ABOVE HEAD OF PASSES |
| LDSP | LONG DISTANCE SEDIMENT PIPELINE |
| LWRP | LOW WATER REFERENCE PLANE |
| MCY | MILLION CUBIC YARDS |
| MHW | MEAN HIGH WATER |
| MLW | MEAN LOW WATER |
| MR | MISSISSIPPI RIVER |
| MRT LEVEE | MISSISSIPPI RIVER & TRIBUTARIES LEVEE |
| SP | SETTLEMENT PLATE |
| UON | UNLESS OTHERWISE NOTED |

**FINAL BID SET**

## SUMMARY OF ESTIMATED QUANTITIES:

### BASE BID

| ITEM No. | DESCRIPTION | UNIT | ESTIMATED QUANTITY[1] |
|---|---|---|---|
| 1 | MOBILIZATION AND DEMOBILIZATION[2] | LUMP SUM | 1 |
| 2 | CONSTRUCTION SURVEYS | LUMP SUM | 1 |
| 3 | EARTHEN CONTAINMENT DIKES[3] | LINEAR FEET | 33,720 |
| 4 | EARTHEN RIDGE | LINEAR FEET | 11,117 |
| 5 | ACCESS CHANNEL | LUMP SUM | 1 |
| 6 | HYDRAULIC DREDGING - CORRIDOR AND MARSH CREATION (FILL VOLUME IN PLACE) | CUBIC YARDS | 4,725,153 |
| 7 | PERMANENT WATERWAY CROSSINGS | LUMP SUM | 1 |
| 8 | BAYOU DUPONT WEIR RECONSTRUCTION | LUMP SUM | 1 |
| 9 | SETTLEMENT PLATES | EACH | 21 |

### ADDITIVE ALTERNATE #1

| ITEM No. | DESCRIPTION | UNIT | ESTIMATED QUANTITY[1] |
|---|---|---|---|
| 10(A) | MOBILIZATION AND DEMOBILIZATION[2] | LUMP SUM | 1 |
| 10(B) | MOBILIZATION AND DEMOBILIZATION[2] | LUMP SUM | 1 |
| 11 | CONSTRUCTION SURVEYS | LUMP SUM | 1 |
| 12 | EARTHEN CONTAINMENT DIKES[3] | LINEAR FEET | -8,144 |
| 13 | EARTHEN CONTAINMENT DIKES[3] | LINEAR FEET | 13,037 |
| 14(A) | HYDRAULIC DREDGING - MARSH CREATION (FILL VOLUME IN PLACE) | CUBIC YARDS | 324,191 |
| 14(B) | HYDRAULIC DREDGING - MARSH CREATION (FILL VOLUME IN PLACE) | CUBIC YARDS | 324,191 |

**OPTIONS: TWO BORROW SITE LOCATIONS MAY BE USED FOR THE ALTERNATE OPTIONS**
(A) HYDRAULIC DREDGING AND MARSH FILL FROM ALLIANCE ANCHORAGE BORROW SITE
(B) HYDRAULIC DREDGING AND MARSH FILL FROM WILLS POINT ANCHORAGE BORROW SITE

### ADDITIVE ALTERNATE #2

| ITEM No. | DESCRIPTION | UNIT | ESTIMATED QUANTITY[1] |
|---|---|---|---|
| 15(A) | MOBILIZATION AND DEMOBILIZATION[2] | LUMP SUM | 1 |
| 15(B) | MOBILIZATION AND DEMOBILIZATION[2] | LUMP SUM | 1 |
| 16 | CONSTRUCTION SURVEYS | LUMP SUM | 1 |
| 17(A) | HYDRAULIC DREDGING - MARSH CREATION (FILL VOLUME IN PLACE) | CUBIC YARDS | 359,280 |
| 17(B) | HYDRAULIC DREDGING - MARSH CREATION (FILL VOLUME IN PLACE) | CUBIC YARDS | 359,280 |

**OPTIONS: TWO BORROW SITE LOCATIONS MAY BE USED FOR THE ADDITIVE ALTERNATE**
(A) HYDRAULIC DREDGING AND MARSH FILL FROM ALLIANCE ANCHORAGE BORROW SITE
(B) HYDRAULIC DREDGING AND MARSH FILL FROM WILLS POINT ANCHORAGE BORROW SITE

1. WHERE THE QUANTITY OF WORK WITH RESPECT TO ANY ITEM IS COVERED BY A UNIT PRICE, SUCH QUANTITIES ARE ESTIMATED QUANTITIES TO BE USED WHEN COMPARING BIDS AND THE RIGHT IS RESERVED BY THE OWNER TO INCREASE/DECREASE SUCH QUANTITIES AS MAY BE NECESSARY TO COMPLETE THE WORK AND/OR REMAIN WITHIN THE FUNDING LIMITS. IN THE EVENT OF MATERIAL UNDERRUNS/OVERRUNS, THE BID UNIT COSTS WILL BE USED TO DETERMINE PAYMENT TO THE CONTRACTOR.
2. MOBILIZATION AND DEMOBILIZATION SHALL INCLUDE ALL APPROPRIATE COSTS ASSOCIATED WITH CONSTRUCTING ALL FEATURES LISTED IN THE SPECIFICATIONS AND/OR SHOWN IN THE PLANS. IN THE EVENT THAT WORK IS NOT PERFORMED FROM A BORROW AREA, THE MOBILIZATION AND DEMOBILIZATION ITEM FOR THAT SITE WILL BE DELETED FROM THE PAYMENT TO THE CONTRACTOR.
3. THE LINEAR FEET OF CONTAINMENT DIKES AND THE EARTHEN RIDGE WAS ESTIMATED FOR CONSTRUCTION USING AERIAL PHOTOGRAPHY, FIELD SURVEYS, AND AUTOCAD. THE OWNER RESERVES THE RIGHT TO REQUEST ADDITIONAL DIKES BE BUILT FOR CONSTRUCTION AT THE CONTRACTOR'S BID PRICE PER LINEAR FOOT.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

GENERAL NOTES, ABBREVIATIONS AND ESTIMATED QUANTITIES SHEET 1 OF 2

DATE: MARCH 8, 2013

SHEET 2 OF 81

## LA DOTD SPECIFICATIONS:

| | |
|---|---|
| STRUCTURAL EXCAVATION AND BACKFILL: | SECTION 802 |
| DRIVEN PILES: | SECTION 804 |
| STRUCTURAL CONCRETE: | SECTION 805 |
| PAINTING AND PROTECTIVE COATINGS: | SECTION 811 |
| TREATED TIMBER: | SECTION 812 |

THE CONTRACTOR SHALL USE THE MOST RECENT VERSION OF LA DOTD SPECIFICATIONS.

## CONCRETE AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301, UNLESS OTHERWISE NOTED.
2. ALL CONCRETE SHALL BE A NORMAL WEIGHT CONCRETE.
3. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315 AND ACI SP-66.
4. MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

   A. CONCRETE: 28 DAY STRENGTH
   - CAST-IN-PLACE.....5000 PSI
   - CEMENTIOUS GROUT (UON).....7000 PSI
   - PRE-STRESSED CONCRETE.....6000 PSI

   B. REINFORCING STEEL
   - REINFORCING STEEL AND DOWELS FOR CONCRETE.....ASTM A615, GRADE 60
5. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4", 45° CHAMFER, UON.
6. PROVIDE CONCRETE COVER OVER REINFORCEMENT IN ACCORDANCE WITH ACI 318, UON.
7. PROVIDE A BROOM FINISH PERPENDICULAR TO THE PATH OF TRAVEL ON ALL WALKING SURFACES.
8. ALL REINFORCING BAR SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES PER ACI 318, UON. SPLICING SHALL OCCUR AT 1/3 POINTS OF THE SPAN PER ACI 318, CHAPTER 21. SPLICING OVER JOINTS IS NOT PERMITTED.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

## STRUCTURAL AND MISCELLANEOUS STEEL:

1. ALL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (ASD).
2. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING, UON:

   A. MISC PLATES, BARS, AND SHAPES.....ASTM A572, GRADE 50, GALV
   B. HIGH STRENGTH BOLTS AND NUTS.....ASTM A325, GALV
   C. THREADED TIE RODS.....ASTM A615, GRADE 75, GALV
   D. LAG SCREWS.....ASTM A307, GALV
   E. ANCHOR BOLTS.....ASTM F1554, GRADE 55, GALV
3. ALL STEEL SHAPES, PLATES, OTHER FABRICATIONS, AND ALL HARDWARE SHALL BE GALVANIZED BY THE HOT-DIP PROCESS IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123 AND/OR A153, AS APPLICABLE, AFTER FABRICATION, UNLESS OTHERWISE INDICATED. ITEMS TO BE COMPLETELY EMBEDDED IN CONCRETE NEED NOT BE GALVANIZED.
4. FIELD TREAT DAMAGED GALVANIZED STEEL FINISH WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT, COLD GALVANIZED COMPOUNDS OR APPROVED EQUAL CONFORMING TO THE REQUIREMENTS OF ASTM A780. IN ADDITION, ALL EXPOSED THREADED SURFACES SHALL BE PAINTED WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT AFTER INSTALLATION OF THE NUT.

## DESIGN CRITERIA:

1. GRAVITY LOADS:
   - LIVE LOAD.....HS20 TRUCK
2. SEISMIC LOAD AS REQUIRED BY THE ASCE-7 STANDARD BUILDING CODE (AMERICAN SOCIETY OF CIVIL ENGINEERS)
   - PGA.....0.088g
3. CODES AND REFERENCES (LATEST EDITION):

   A. ACI - (AMERICAN CONCRETE INSTITUTE)

   B. AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION "MANUAL OF STEEL CONSTRUCTION LRFD/ASD DESIGN"

   C. ASCE - (AMERICAN SOCIETY OF CIVIL ENGINEERS)

   D. AWS - D1.1 (AMERICAN WELDING SOCIETY)

   E. IBC - (INTERNATIONAL BUILDING CODE)

## ADDITIONAL DREDGING NOTES:

1. THE CONTRACTOR SHALL ANCHOR WITHIN THE DREDGE ANCHOR LIMITS SHOWN ON SHEETS 7 AND 8.
2. DREDGE ANCHOR LIMITS SHALL BE MARKED WITH BUOYS AS SHOWN ON SHEETS 7 AND 8 IN ACCORDANCE WITH USCG REGULATIONS.
3. DREDGING BEYOND THE BORROW AREA LIMITS SHOWN WILL NOT BE ALLOWED.
4. DREDGING WILL BE ALLOWED TO A MAXIMUM DEPTH OF -90 FT NAVD88.
5. THE CONTRACTOR SHALL SUBMIT A DAILY COMMUNICATION PLAN TO THE OWNER, THE USACE OPERATIONS DIVISION, AND MARITIME NAVIGATION SAFETY ASSOCIATION (MNSA) DELINEATING THE LOCATION OF THE DREDGE, ATTENDANT PLANT, ANCHOR BUOYS, AND FLOATING PIPELINE AS PER THE SPECIFICATIONS.

## FOUNDATION:

1. PILES SHALL BE DRIVEN TO THE MINIMUM PILE TIP ELEVATIONS INDICATED ON THE PLANS USING A HAMMER OF AN APPROVED TYPE, WITH A CAPACITY AT LEAST EQUAL TO THE HAMMER MANUFACTURER'S RECOMMENDATION FOR THE TOTAL WEIGHT OF PILE AND CHARACTER OF SUBSURFACE MATERIAL TO BE ENCOUNTERED.
2. SPUDDING AND/OR JETTING OF PILES WILL NOT BE ALLOWED.
3. THE CONTRACTOR SHALL COORDINATE THE PILE DRIVING SCHEDULE SO AS NOT TO INTERFERE WITH OR BE DETRIMENTAL TO THE CONCRETE PLACEMENT AND CURING OPERATIONS.
4. TIMBER PILE AXIAL COMPRESSION CAPACITY:
   20 TONS (ALLOWABLE)
   40 TONS (ULTIMATE)
5. CONTRACTOR SHALL VERIFY COORDINATES AND GEOMETRY PRIOR TO ORDERING TIMBER PILES.

## TIMBER CONSTRUCTION:

1. ALL TIMBER CONSTRUCTION SHALL CONFORM TO THE RECOMMENDATIONS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
2. TIMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA USE CATEGORY 5C FOR TIMBER IN SALTWATER IMMERSION. PRESERVATIVE RETENTION SHALL BE 2.50 PCF.
3. TIMBER MATERIALS:
   - LAGGING.....MARINE GRADE NO.1(S4S)
   - PILES.....ASTM D25
4. WHEN CONNECTING HARDWARE IS SHOWN ON THE DRAWINGS THE TYPE, SIZE, SPACING, AND ALIGNMENT ARE CRITICAL AND MUST BE MAINTAINED. DO NOT UNDERCUT WOOD. CONNECTIONS SHALL PULL AND HOLD MEMBERS BEING JOINED INTO CLOSE CONTACT.
5. USE GALVANIZED DOCK WASHER OR OGEE WASHER WHERE INDICATED.
6. CHECK ALL BOLTS BY BURRING THE THREADS AFTER THE NUTS HAVE BEEN FINALLY TIGHTENED.
7. BORE HOLES FOR THRU BOLTS WITH A BIT 1/16 INCH LARGER IN DIAMETER THAN THE SHANK OF THE BOLT.
8. FIELD TREAT ALL CUTS AND HOLES WITH APPROVED MARINE GRADE WOOD PRESERVATIVE. ALLOW PRESERVATIVE TO COMPLETELY DRY PER MANUFACTURER'S INSTRUCTION PRIOR TO IMMERSING IN WATER.

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

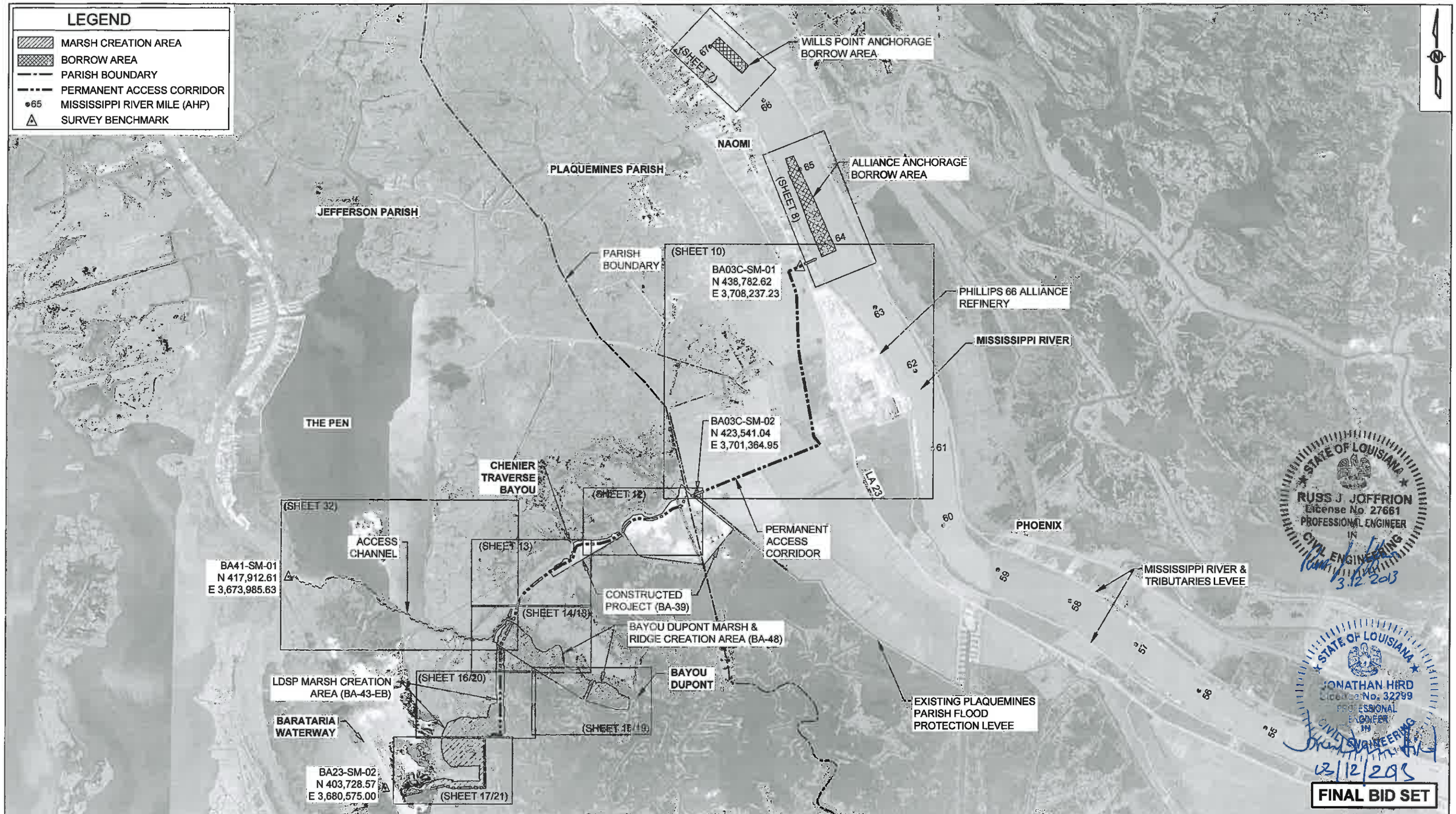
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

GENERAL NOTES SHEET 2 OF 2

DATE: MARCH 8, 2013

SHEET 3 OF 81




6,000' 0' 6,000' 12,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

# COASTAL PROTECTION AND RESTORATION AUTHORITY

450 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

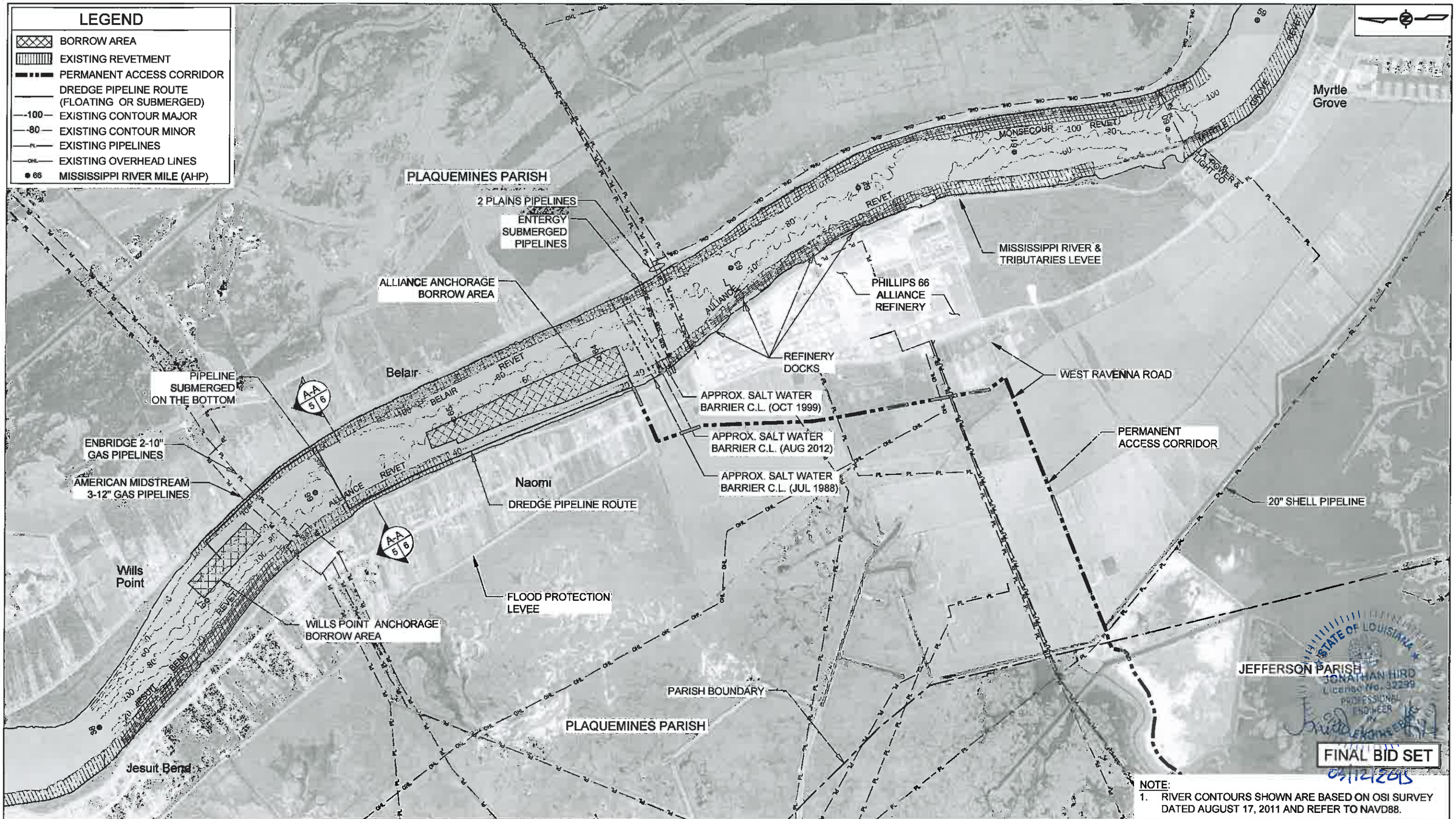
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

PROJECT LAYOUT

DATE: MARCH 8, 2013

SHEET 4 OF 81




NOTE:
1. RIVER CONTOURS SHOWN ARE BASED ON OSI SURVEY DATED AUGUST 17, 2011 AND REFER TO NAVD88.

3,000' 0' 3,000' 6,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

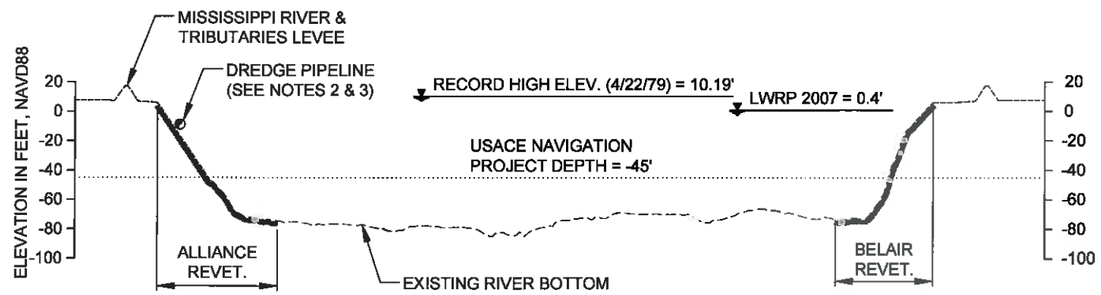
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BORROW AREAS

DATE: MARCH 8, 2013

SHEET 5 OF 81




A-A / 5 TYPICAL DREDGE PIPELINE ROUTE SECTION
RIVER MILE 65.6

NOTES:

1. MISSISSIPPI RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.
2. DREDGE PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET 30 FT MINIMUM FROM THE LWRP.
3. DREDGE PIPELINE MAY BE SUBMERGED OR FLOATING.

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

| LEGEND | |
|---|---|
| - - - - - | AUGUST 2011 SURVEY |
| ——— | EXISTING REVETMENT |
| ● | DREDGE PIPELINE |

FINAL DRAFT BID SET

100' 50' 0' 100' 200'
VERTICAL SCALE
500' 250' 0' 500' 1000'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

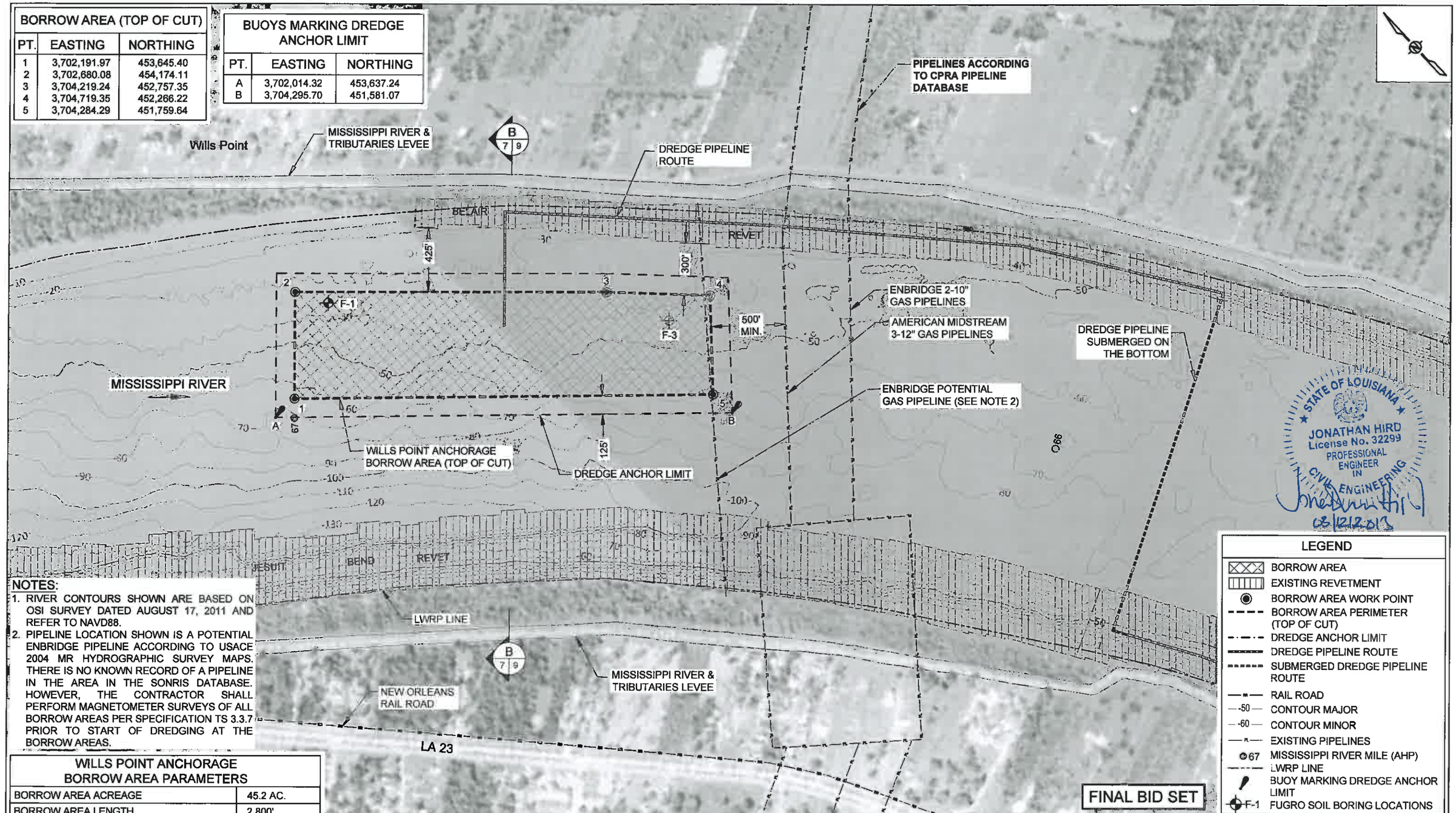
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

TYPICAL MISSISSIPPI RIVER DREDGE PIPELINE ROUTE SECTIONS
DATE: MARCH 8, 2013
SHEET 6 OF 81

| BORROW AREA (TOP OF CUT) | | |
|---|---|---|
| PT. | EASTING | NORTHING |
| 1 | 3,702,191.97 | 453,645.40 |
| 2 | 3,702,680.08 | 454,174.11 |
| 3 | 3,704,219.24 | 452,757.35 |
| 4 | 3,704,719.35 | 452,266.22 |
| 5 | 3,704,284.29 | 451,759.64 |

| BUOYS MARKING DREDGE ANCHOR LIMIT | | |
|---|---|---|
| PT. | EASTING | NORTHING |
| A | 3,702,014.32 | 453,637.24 |
| B | 3,704,295.70 | 451,581.07 |




NOTES:

1. RIVER CONTOURS SHOWN ARE BASED ON OSI SURVEY DATED AUGUST 17, 2011 AND REFER TO NAVD88.
2. PIPELINE LOCATION SHOWN IS A POTENTIAL ENBRIDGE PIPELINE ACCORDING TO USACE 2004 MR HYDROGRAPHIC SURVEY MAPS. THERE IS NO KNOWN RECORD OF A PIPELINE IN THE AREA IN THE SONRIS DATABASE. HOWEVER, THE CONTRACTOR SHALL PERFORM MAGNETOMETER SURVEYS OF ALL BORROW AREAS PER SPECIFICATION TS 3.3.7 PRIOR TO START OF DREDGING AT THE BORROW AREAS.

| WILLS POINT ANCHORAGE 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 50' |
| BORROW AREA VOLUME (-90' NAVD88 MAX.) | 2.38 MCY |

600' 300' 0' 600' 1,200'

LEGEND

- BORROW AREA
- EXISTING REVETMENT
- BORROW AREA WORK POINT
- BORROW AREA PERIMETER (TOP OF CUT)
- DREDGE ANCHOR LIMIT
- DREDGE PIPELINE ROUTE
- SUBMERGED DREDGE PIPELINE ROUTE
- RAIL ROAD
- -50 CONTOUR MAJOR
- -60 CONTOUR MINOR
- EXISTING PIPELINES
- 67 MISSISSIPPI RIVER MILE (AHP)
- LWRP LINE
- BUOY MARKING DREDGE ANCHOR LIMIT
- F-1 FUGRO SOIL BORING LOCATIONS

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

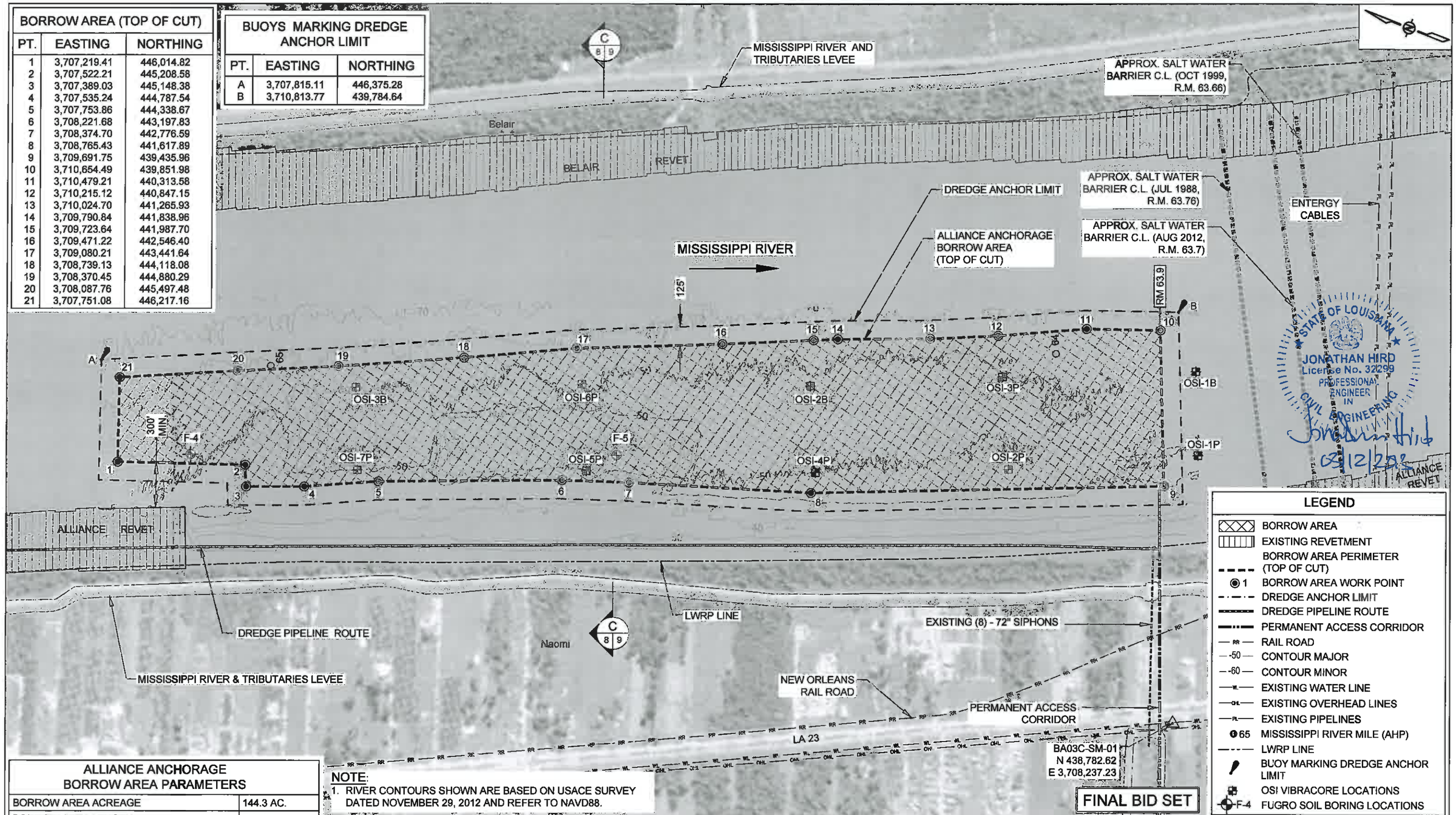
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

WILLS POINT ANCHORAGE BORROW AREA LAYOUT
DATE: MARCH 8, 2013
SHEET 7 OF 81

| BORROW AREA (TOP OF CUT) | | |
|---|---|---|
| PT. | EASTING | NORTHING |
| 1 | 3,707,219.41 | 446,014.82 |
| 2 | 3,707,522.21 | 445,208.58 |
| 3 | 3,707,389.03 | 445,148.38 |
| 4 | 3,707,535.24 | 444,787.54 |
| 5 | 3,707,753.86 | 444,338.67 |
| 6 | 3,708,221.68 | 443,197.83 |
| 7 | 3,708,374.70 | 442,776.59 |
| 8 | 3,708,765.43 | 441,617.89 |
| 9 | 3,709,691.75 | 439,435.96 |
| 10 | 3,710,654.49 | 439,851.98 |
| 11 | 3,710,479.21 | 440,313.58 |
| 12 | 3,710,215.12 | 440,847.15 |
| 13 | 3,710,024.70 | 441,265.93 |
| 14 | 3,709,790.84 | 441,838.96 |
| 15 | 3,709,723.64 | 441,987.70 |
| 16 | 3,709,471.22 | 442,546.40 |
| 17 | 3,709,080.21 | 443,441.64 |
| 18 | 3,708,739.13 | 444,118.08 |
| 19 | 3,708,370.45 | 444,880.29 |
| 20 | 3,708,087.76 | 445,497.48 |
| 21 | 3,707,751.08 | 446,217.16 |

| BUOYS MARKING DREDGE ANCHOR LIMIT | | |
|---|---|---|
| PT. | EASTING | NORTHING |
| A | 3,707,815.11 | 446,375.28 |
| B | 3,710,813.77 | 439,784.64 |




## LEGEND

- BORROW AREA
- EXISTING REVETMENT
- BORROW AREA PERIMETER (TOP OF CUT)
- 1 BORROW AREA WORK POINT
- DREDGE ANCHOR LIMIT
- DREDGE PIPELINE ROUTE
- PERMANENT ACCESS CORRIDOR
- RR RAIL ROAD
- -50 CONTOUR MAJOR
- -60 CONTOUR MINOR
- WL EXISTING WATER LINE
- OHL EXISTING OVERHEAD LINES
- PL EXISTING PIPELINES
- 65 MISSISSIPPI RIVER MILE (AHP)
- LWRP LINE
- BUOY MARKING DREDGE ANCHOR LIMIT
- OSI VIBRACORE LOCATIONS
- F-4 FUGRO SOIL BORING LOCATIONS

| ALLIANCE ANCHORAGE 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 |

600' 300' 0' 600' 1,200'

**NOTE:**

1. RIVER CONTOURS SHOWN ARE BASED ON USACE SURVEY DATED NOVEMBER 29, 2012 AND REFER TO NAVD88.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

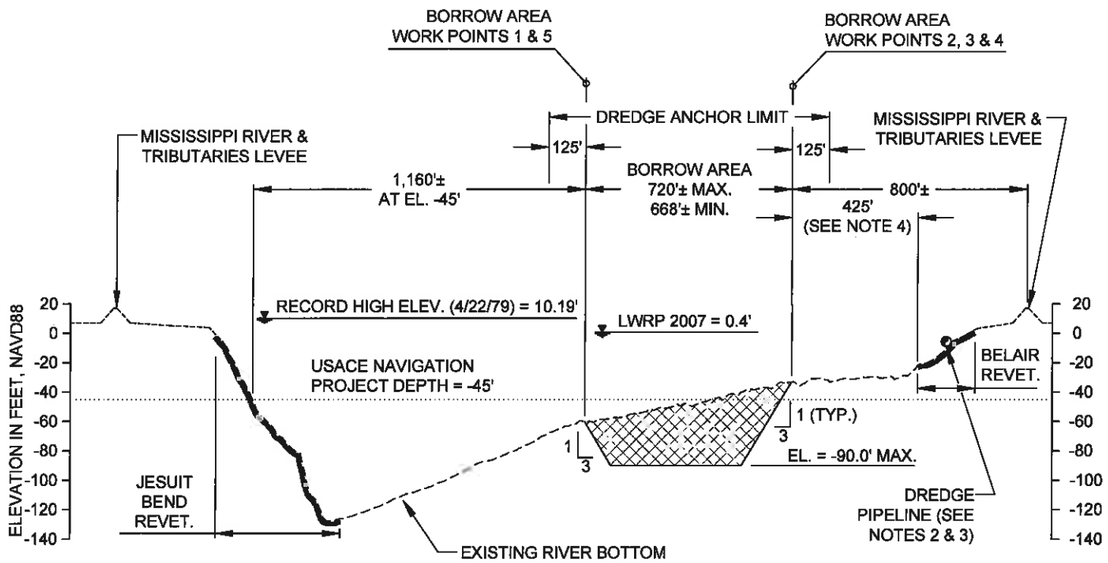
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

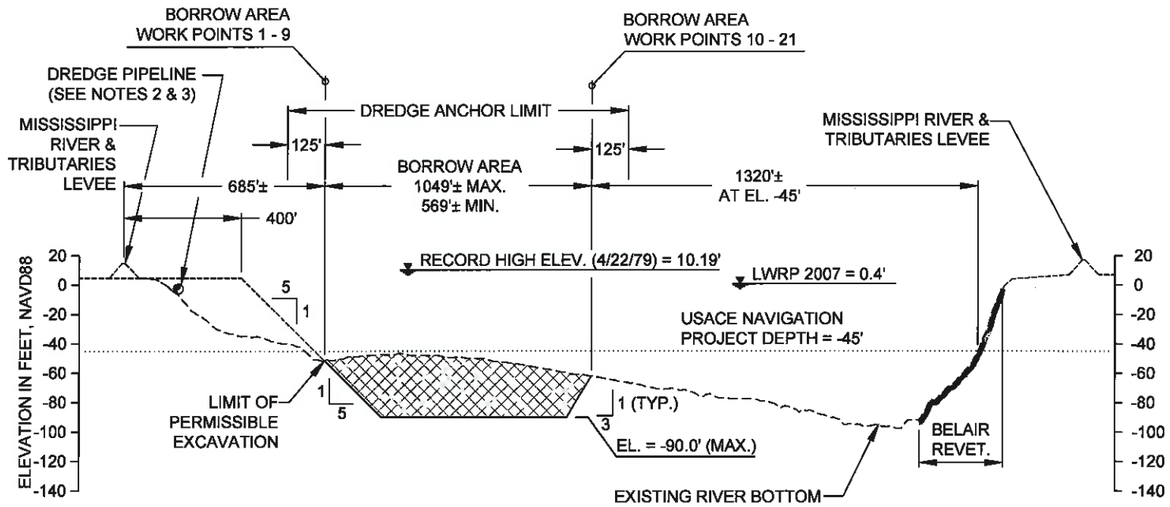
ALLIANCE ANCHORAGE BORROW AREA LAYOUT

DATE: MARCH 8, 2013

SHEET 8 OF 81




B / 7 WILLS POINT ANCHORAGE BORROW AREA
RIVER MILE 66.7




C / 8 ALLIANCE ANCHORAGE BORROW AREA
RIVER MILE 64.6

NOTES:

1. MISSISSIPPI RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.
2. DREDGE PIPELINE TO BE ROUTED ALONG RIVER BANK AT AN OFFSET ± 30 FT FROM LWRP.
3. DREDGE PIPELINE MAY BE SUBMERGED OR FLOATING.
4. THE MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF BELAIR REVETMENT VARIES FROM 300 TO 450 FEET.
5. THE MINIMUM DISTANCE BETWEEN TOP OF CUT AND TOE OF ALLIANCE REVETMENT IS 300 FEET WHERE OCCURS, SEE SHT. 8 FOR EXTENTS.

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

LEGEND

- BORROW AREA
- AUGUST 2011 SURVEY
- APPROX. EXISTING GRADE
- EXISTING REVETMENT
- DESIGN GRADE
- DREDGE PIPELINE

FINAL BID SET

100' 50' 0' 100' 200'
VERTICAL SCALE

500' 250' 0' 500' 1000'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

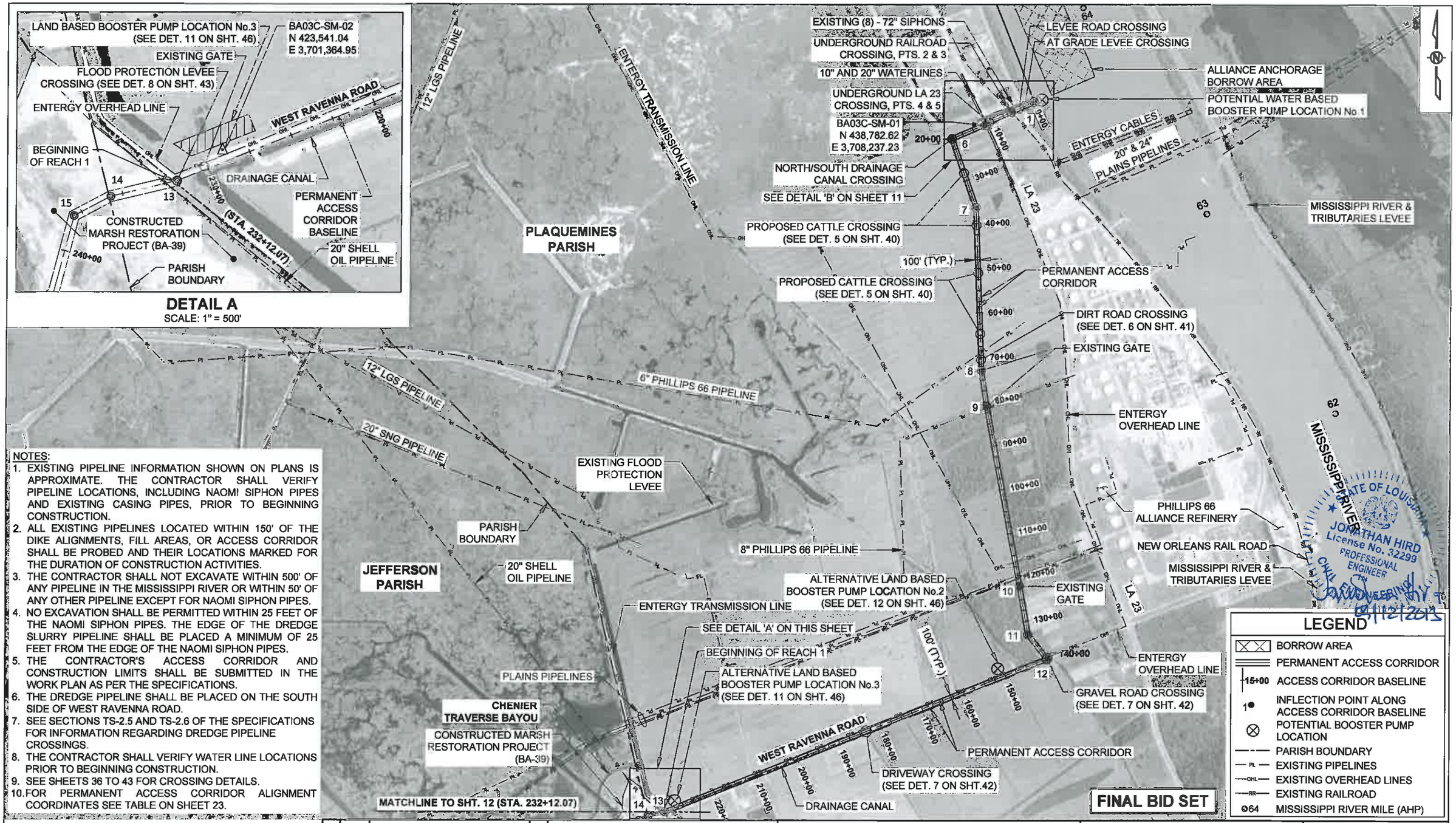
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

BORROW AREAS TYPICAL SECTIONS
DATE: MARCH 8, 2013
SHEET 9 OF 81




NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY PIPELINE LOCATIONS, INCLUDING NAOMI SIPHON PIPES AND EXISTING CASING PIPES, PRIOR TO BEGINNING CONSTRUCTION.
2. ALL EXISTING PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES.
3. 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.
4. 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.
5. THE CONTRACTOR'S ACCESS CORRIDOR AND CONSTRUCTION LIMITS SHALL BE SUBMITTED IN THE WORK PLAN AS PER THE SPECIFICATIONS.
6. THE DREDGE PIPELINE SHALL BE PLACED ON THE SOUTH SIDE OF WEST RAVENNA ROAD.
7. SEE SECTIONS TS-2.5 AND TS-2.6 OF THE SPECIFICATIONS FOR INFORMATION REGARDING DREDGE PIPELINE CROSSINGS.
8. THE CONTRACTOR SHALL VERIFY WATER LINE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
9. SEE SHEETS 36 TO 43 FOR CROSSING DETAILS.
10. FOR PERMANENT ACCESS CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 23.

2,000' 0' 2,000' 4,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (1 OF 7)

DATE: MARCH 8, 2013

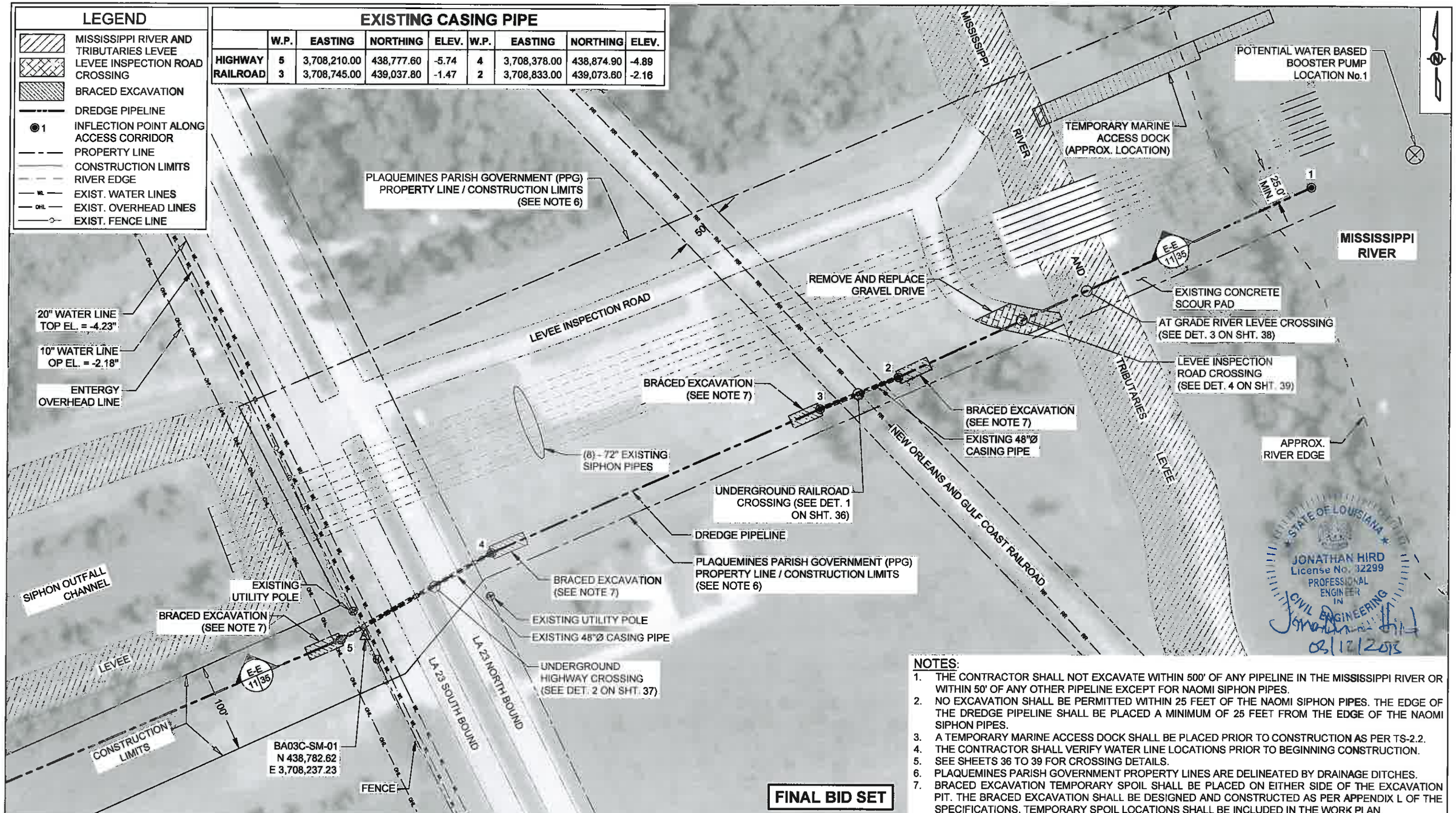
SHEET 10 OF 81

## LEGEND

- MISSISSIPPI RIVER AND TRIBUTARIES LEVEE
- LEVEE INSPECTION ROAD CROSSING
- BRACED EXCAVATION
- DREDGE PIPELINE
- 1 INFLECTION POINT ALONG ACCESS CORRIDOR
- PROPERTY LINE
- CONSTRUCTION LIMITS
- RIVER EDGE
- WL EXIST. WATER LINES
- OHL EXIST. OVERHEAD LINES
- EXIST. FENCE LINE

## EXISTING CASING PIPE

| | W.P. | EASTING | NORTHING | ELEV. | W.P. | EASTING | NORTHING | ELEV. |
|---|---|---|---|---|---|---|---|---|
| HIGHWAY | 5 | 3,708,210.00 | 438,777.60 | -5.74 | 4 | 3,708,378.00 | 438,874.90 | -4.89 |
| RAILROAD | 3 | 3,708,745.00 | 439,037.80 | -1.47 | 2 | 3,708,833.00 | 439,073.60 | -2.16 |




**FINAL BID SET**

## NOTES:

1. 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.
2. NO EXCAVATION SHALL BE PERMITTED WITHIN 25 FEET OF THE NAOMI SIPHON PIPES. THE EDGE OF THE DREDGE PIPELINE SHALL BE PLACED A MINIMUM OF 25 FEET FROM THE EDGE OF THE NAOMI SIPHON PIPES.
3. A TEMPORARY MARINE ACCESS DOCK SHALL BE PLACED PRIOR TO CONSTRUCTION AS PER TS-2.2.
4. THE CONTRACTOR SHALL VERIFY WATER LINE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
5. SEE SHEETS 36 TO 39 FOR CROSSING 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. THE BRACED EXCAVATION SHALL BE DESIGNED AND CONSTRUCTED AS PER APPENDIX L OF THE SPECIFICATIONS. TEMPORARY SPOIL LOCATIONS SHALL BE INCLUDED IN THE WORK PLAN.

100' 0' 100' 200'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

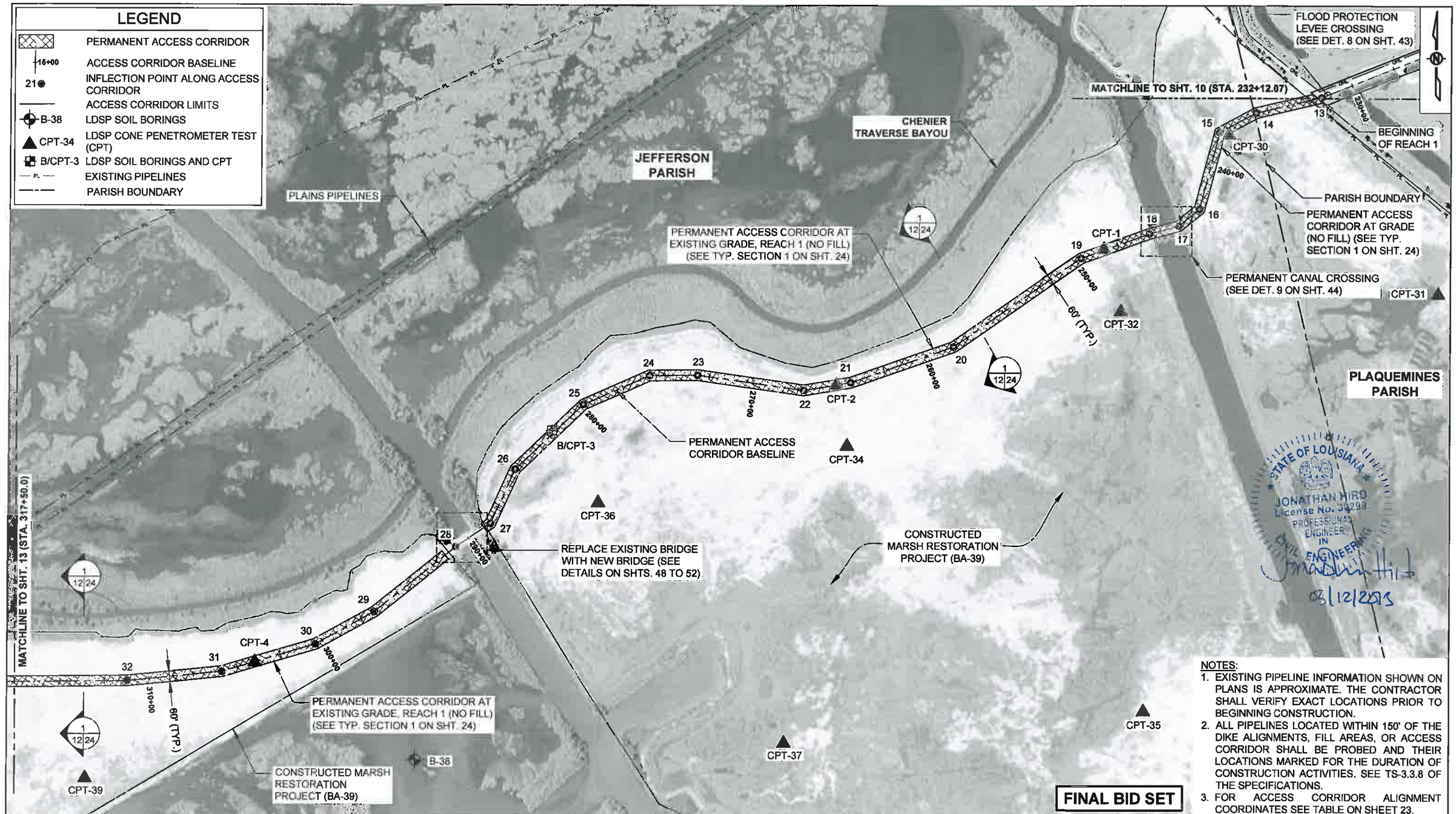
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT - DETAIL B

DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

SHEET 11 OF 81




NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 23.

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

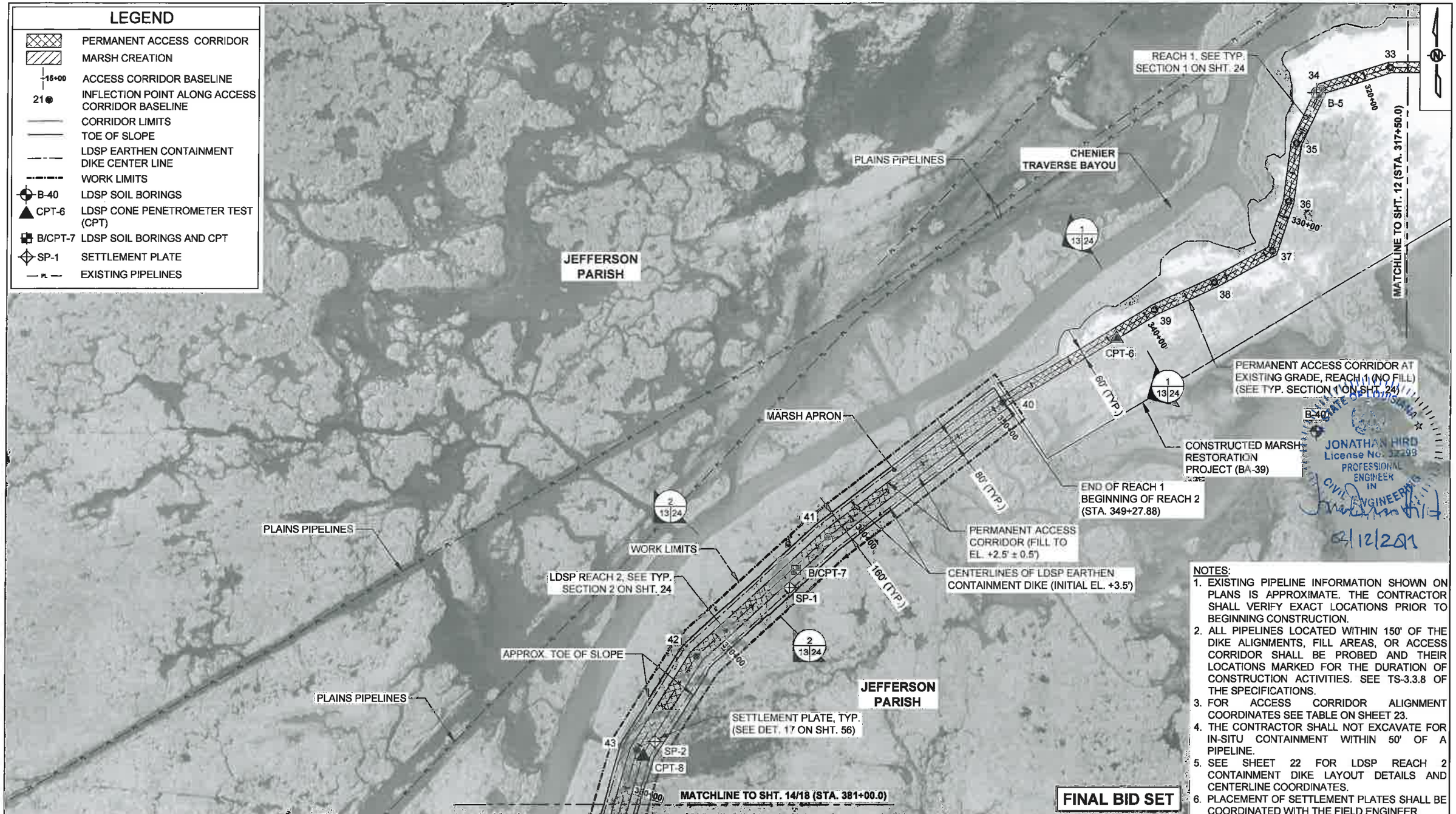
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (2 OF 7)

DATE: MARCH 8, 2013

SHEET 12 OF 81




NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT COORDINATES SEE TABLE ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. SEE SHEET 22 FOR LDSP REACH 2 CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.
6. PLACEMENT OF SETTLEMENT PLATES SHALL BE COORDINATED WITH THE FIELD ENGINEER.

FINAL BID SET

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-338-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-43

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (3 OF 7)

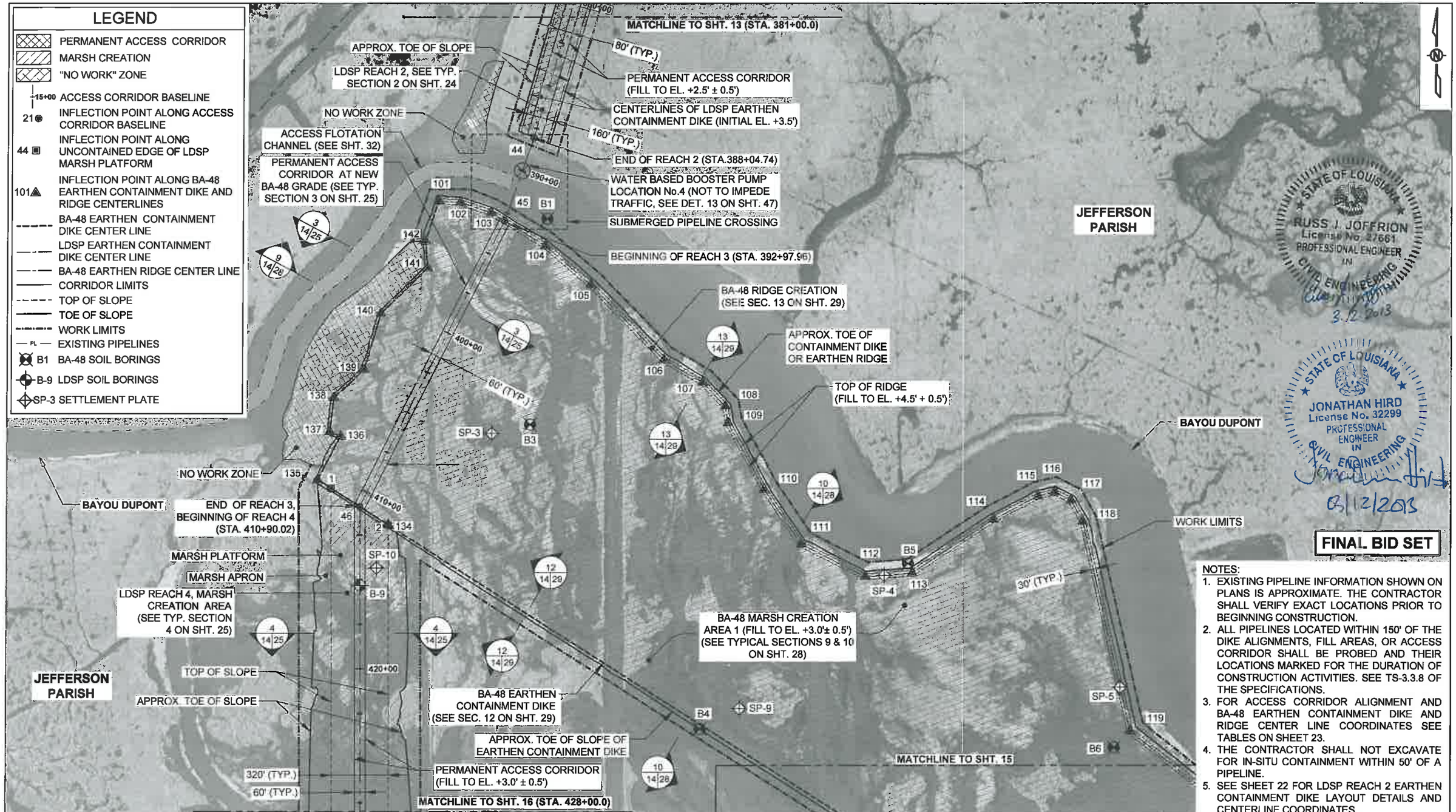
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

SHEET 13 OF 81

## LEGEND

- PERMANENT ACCESS CORRIDOR
- MARSH CREATION
- "NO WORK" ZONE
- 15+00 ACCESS CORRIDOR BASELINE
- 21 INFLECTION POINT ALONG ACCESS CORRIDOR BASELINE
- 44 INFLECTION POINT ALONG UNCONTAINED EDGE OF LDSP MARSH PLATFORM
- 101 INFLECTION POINT ALONG BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTERLINES
- BA-48 EARTHEN CONTAINMENT DIKE CENTER LINE
- LDSP EARTHEN CONTAINMENT DIKE CENTER LINE
- BA-48 EARTHEN RIDGE CENTER LINE
- CORRIDOR LIMITS
- TOP OF SLOPE
- TOE OF SLOPE
- WORK LIMITS
- PL EXISTING PIPELINES
- B1 BA-48 SOIL BORINGS
- B-9 LDSP SOIL BORINGS
- SP-3 SETTLEMENT PLATE




FINAL BID SET

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT AND BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTER LINE COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. SEE SHEET 22 FOR LDSP REACH 2 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA & RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

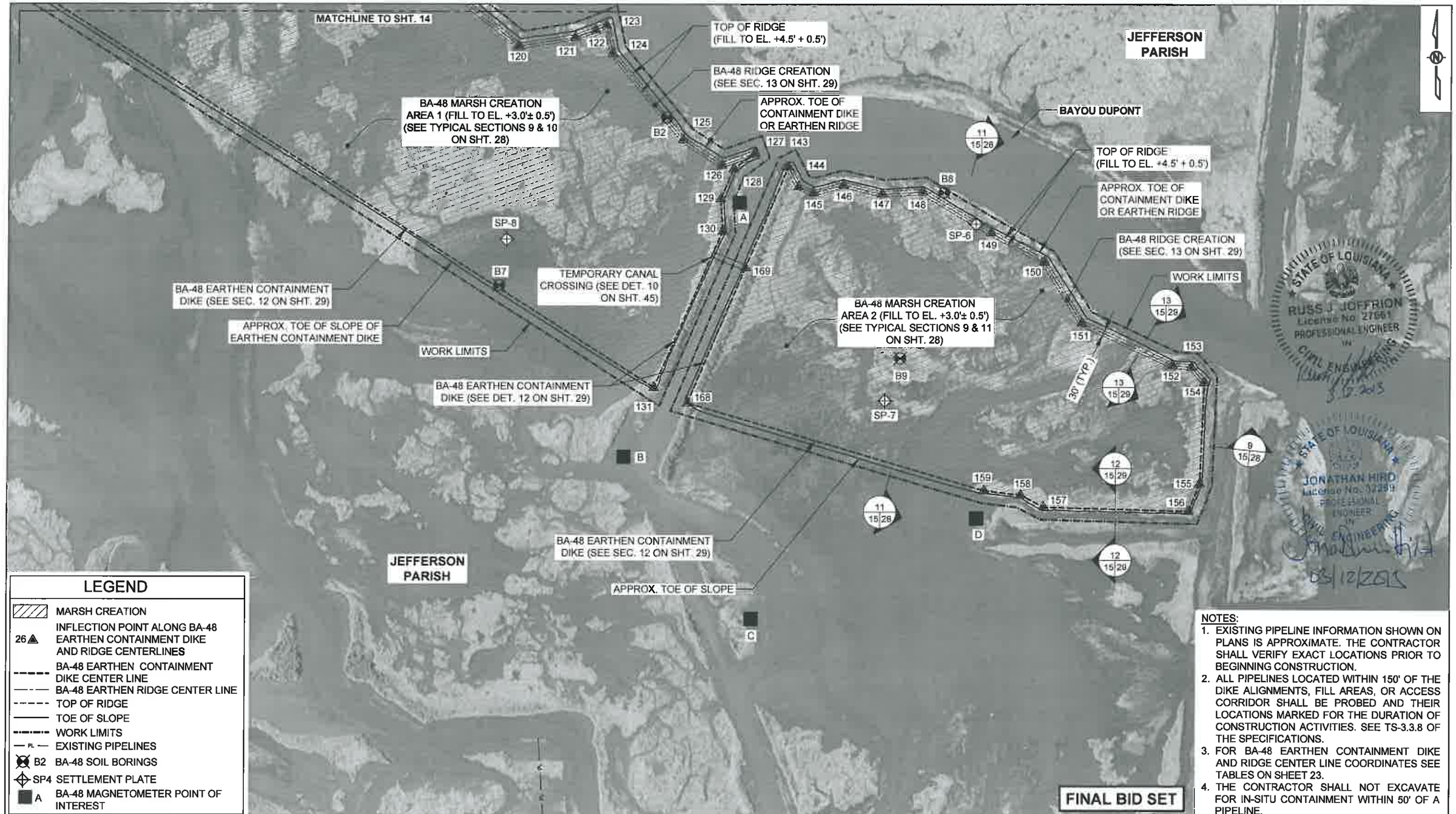
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (4 OF 7)

DATE: MARCH 8, 2013

SHEET 14 OF 81




## LEGEND

- MARSH CREATION
- 26 INFLECTION POINT ALONG BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTERLINES
- BA-48 EARTHEN CONTAINMENT DIKE CENTER LINE
- BA-48 EARTHEN RIDGE CENTER LINE
- TOP OF RIDGE
- TOE OF SLOPE
- WORK LIMITS
- PL EXISTING PIPELINES
- B2 BA-48 SOIL BORINGS
- SP4 SETTLEMENT PLATE
- A BA-48 MAGNETOMETER POINT OF INTEREST

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTER LINE COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (5 OF 7)

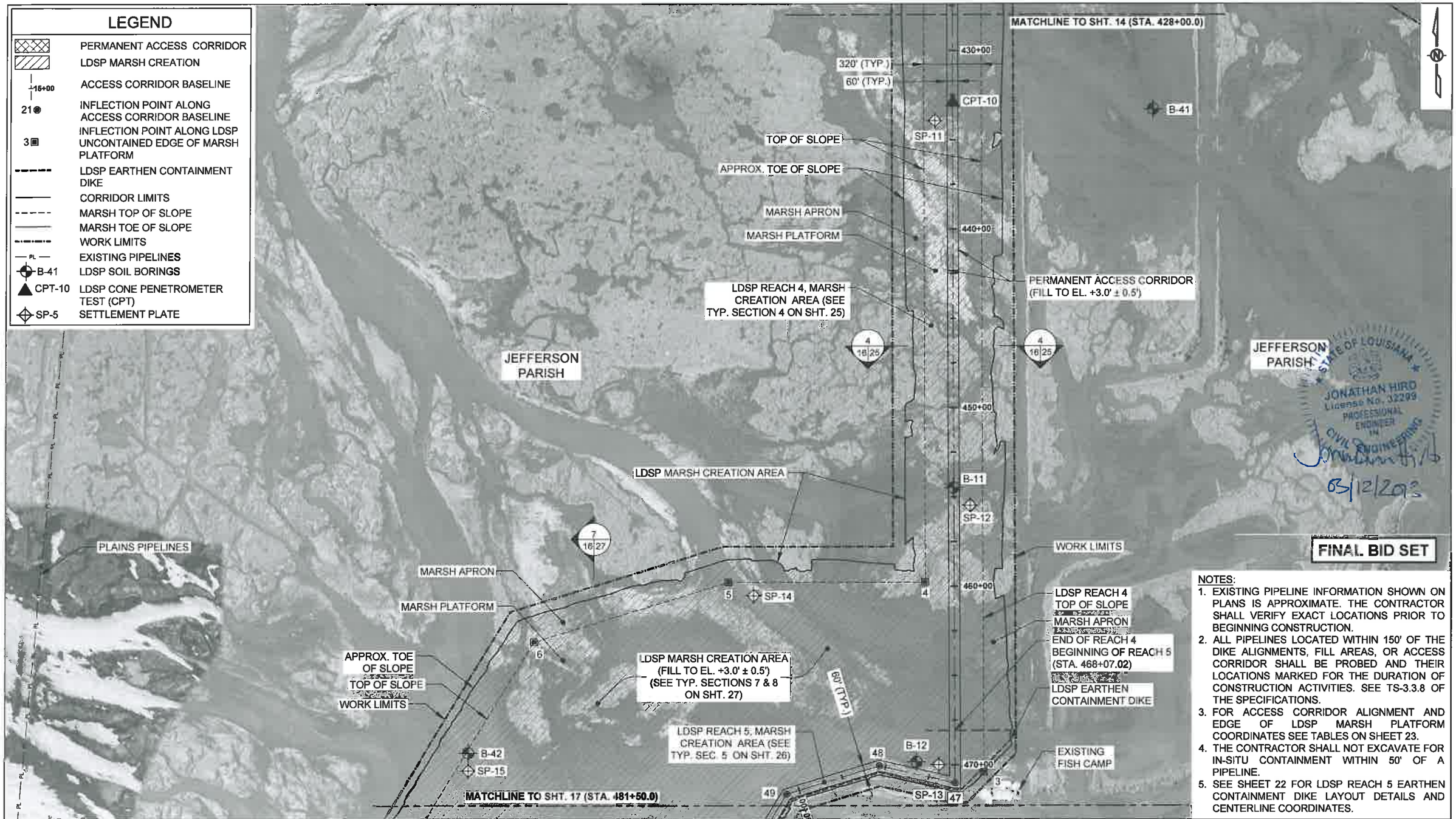
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

SHEET 15 OF 81

## LEGEND

- PERMANENT ACCESS CORRIDOR
- LDSP MARSH CREATION
- 15+00 — ACCESS CORRIDOR BASELINE
- 21 — INFLECTION POINT ALONG ACCESS CORRIDOR BASELINE
- 3 — INFLECTION POINT ALONG LDSP UNCONTAINED EDGE OF MARSH PLATFORM
- LDSP EARTHEN CONTAINMENT DIKE
- CORRIDOR LIMITS
- MARSH TOP OF SLOPE
- MARSH TOE OF SLOPE
- WORK LIMITS
- PL — EXISTING PIPELINES
- B-41 — LDSP SOIL BORINGS
- CPT-10 — LDSP CONE PENETROMETER TEST (CPT)
- SP-5 — SETTLEMENT PLATE




NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT AND EDGE OF LDSP MARSH PLATFORM COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. SEE SHEET 22 FOR LDSP REACH 5 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (6 OF 7)

DATE: MARCH 8, 2013

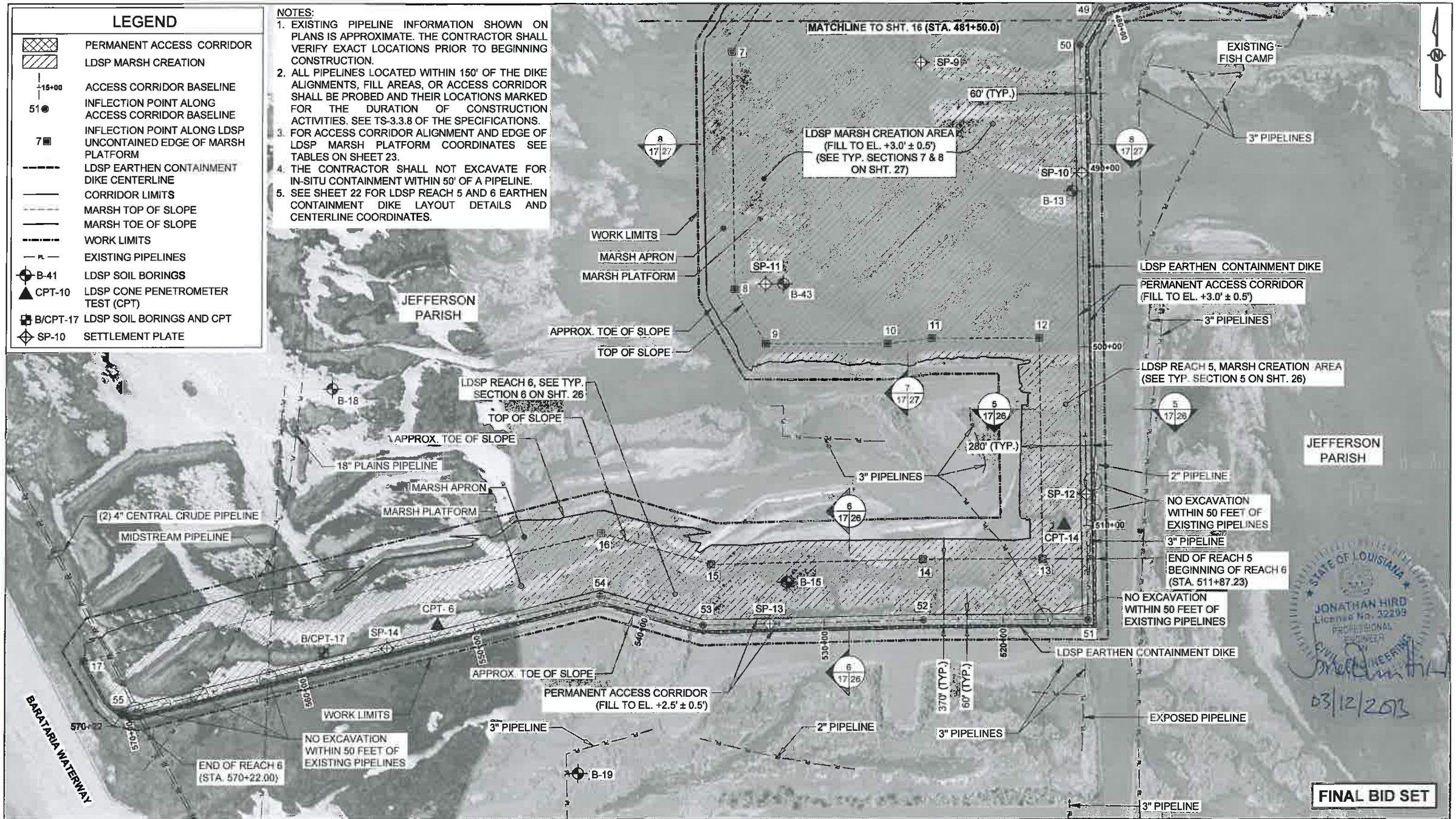
SHEET 16 OF 81

## LEGEND

- PERMANENT ACCESS CORRIDOR
- LDSP MARSH CREATION
- 15+00 — ACCESS CORRIDOR BASELINE
- 51 — INFLECTION POINT ALONG ACCESS CORRIDOR BASELINE
- 7 — INFLECTION POINT ALONG LDSP UNCONTAINED EDGE OF MARSH PLATFORM
- LDSP EARTHEN CONTAINMENT DIKE CENTERLINE
- CORRIDOR LIMITS
- MARSH TOP OF SLOPE
- MARSH TOE OF SLOPE
- WORK LIMITS
- PL — EXISTING PIPELINES
- B-41 — LDSP SOIL BORINGS
- CPT-10 — LDSP CONE PENETROMETER TEST (CPT)
- B/CPT-17 — LDSP SOIL BORINGS AND CPT
- SP-10 — SETTLEMENT PLATE

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT AND EDGE OF LDSP MARSH PLATFORM COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. SEE SHEET 22 FOR LDSP REACH 5 AND 6 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.




500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

# COASTAL PROTECTION AND RESTORATION AUTHORITY

450 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

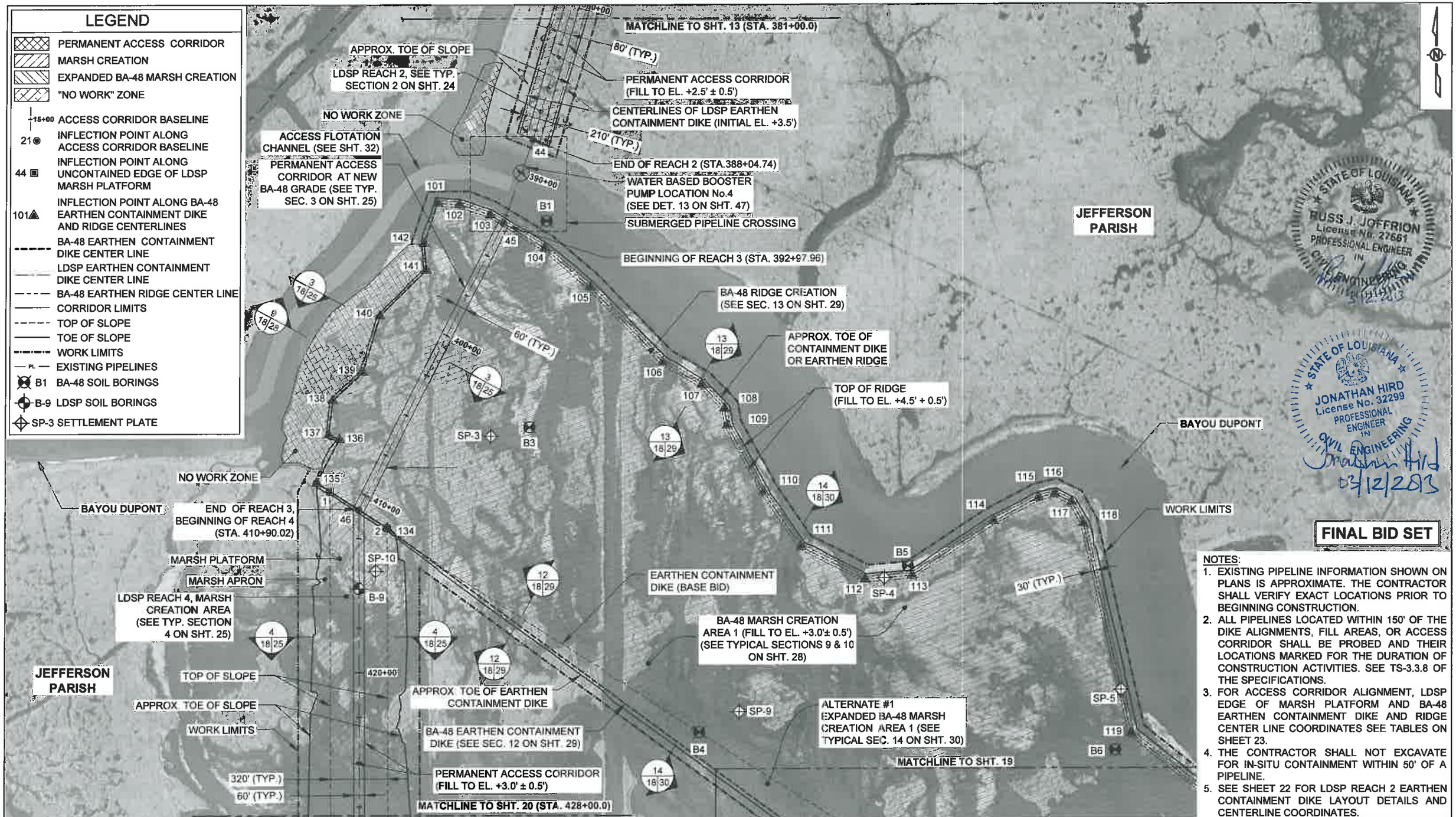
BASE BID: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (7 OF 7)

DATE: MARCH 8, 2013

SHEET 17 OF 81

## LEGEND

- PERMANENT ACCESS CORRIDOR
- MARSH CREATION
- EXPANDED BA-48 MARSH CREATION
- "NO WORK" ZONE
- 15+00 ACCESS CORRIDOR BASELINE
- 21 INFLECTION POINT ALONG ACCESS CORRIDOR BASELINE
- 44 INFLECTION POINT ALONG UNCONTAINED EDGE OF LDSP MARSH PLATFORM
- 101 INFLECTION POINT ALONG BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTERLINES
- BA-48 EARTHEN CONTAINMENT DIKE CENTER LINE
- LDSP EARTHEN CONTAINMENT DIKE CENTER LINE
- BA-48 EARTHEN RIDGE CENTER LINE
- CORRIDOR LIMITS
- TOP OF SLOPE
- TOE OF SLOPE
- WORK LIMITS
- PL EXISTING PIPELINES
- B1 BA-48 SOIL BORINGS
- B-9 LDSP SOIL BORINGS
- SP-3 SETTLEMENT PLATE




FINAL BID SET

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR ACCESS CORRIDOR ALIGNMENT, LDSP EDGE OF MARSH PLATFORM AND BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTER LINE COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. SEE SHEET 22 FOR LDSP REACH 2 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA & RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

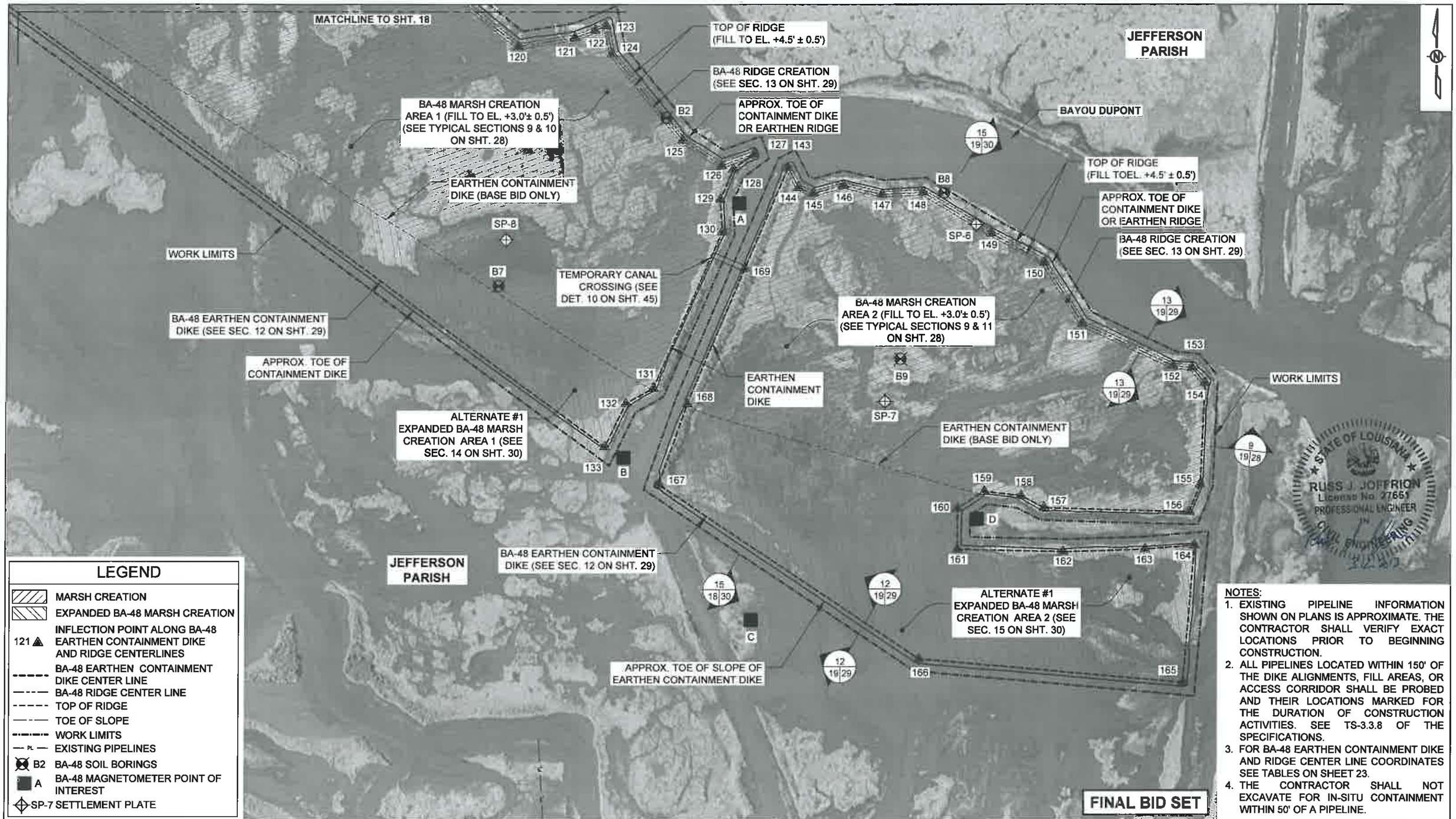
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

ADDITIVE ALTERNATE #1: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (1 OF 2)

DATE: MARCH 8, 2013

SHEET 18 OF 81




## LEGEND

- MARSH CREATION
- EXPANDED BA-48 MARSH CREATION
- 121 INFLECTION POINT ALONG BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTERLINES
- BA-48 EARTHEN CONTAINMENT DIKE CENTER LINE
- BA-48 RIDGE CENTER LINE
- TOP OF RIDGE
- TOE OF SLOPE
- WORK LIMITS
- PL EXISTING PIPELINES
- B2 BA-48 SOIL BORINGS
- A BA-48 MAGNETOMETER POINT OF INTEREST
- SP-7 SETTLEMENT PLATE

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR BA-48 EARTHEN CONTAINMENT DIKE AND RIDGE CENTER LINE COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

ADDITIVE ALTERNATE #1: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (2 OF 2)

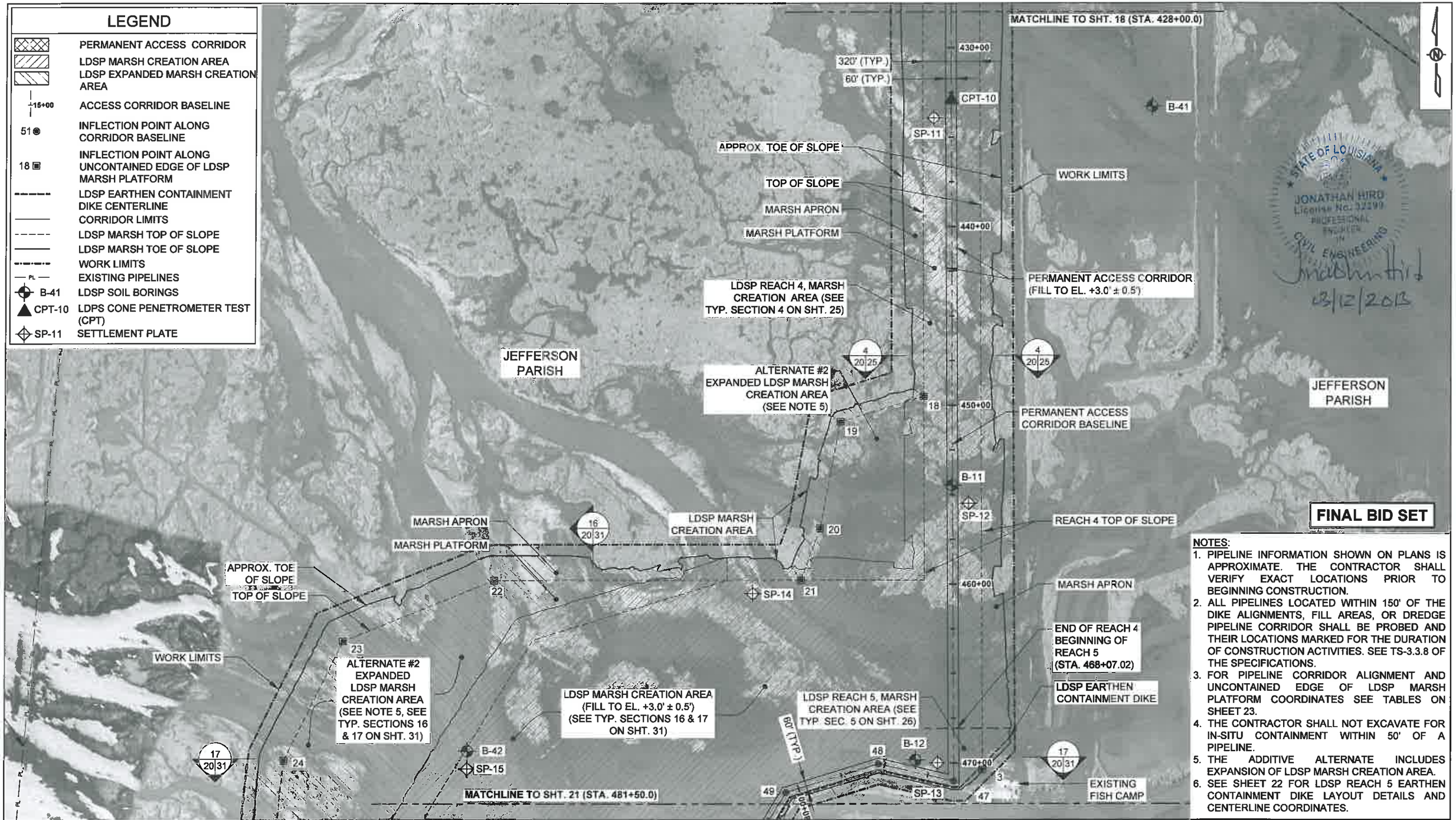
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

SHEET 19 OF 81

## LEGEND

- PERMANENT ACCESS CORRIDOR
- LDSP MARSH CREATION AREA
- LDSP EXPANDED MARSH CREATION AREA
- 15+00 — ACCESS CORRIDOR BASELINE
- 51 — INFLECTION POINT ALONG CORRIDOR BASELINE
- 18 — INFLECTION POINT ALONG UNCONTAINED EDGE OF LDSP MARSH PLATFORM
- LDSP EARTHEN CONTAINMENT DIKE CENTERLINE
- CORRIDOR LIMITS
- LDSP MARSH TOP OF SLOPE
- LDSP MARSH TOE OF SLOPE
- WORK LIMITS
- PL — EXISTING PIPELINES
- B-41 — LDSP SOIL BORINGS
- CPT-10 — LDPS CONE PENETROMETER TEST (CPT)
- SP-11 — SETTLEMENT PLATE




**FINAL BID SET**

NOTES:

1. PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR DREDGE PIPELINE CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR PIPELINE CORRIDOR ALIGNMENT AND UNCONTAINED EDGE OF LDSP MARSH PLATFORM COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. THE ADDITIVE ALTERNATE INCLUDES EXPANSION OF LDSP MARSH CREATION AREA.
6. SEE SHEET 22 FOR LDSP REACH 5 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

ADDITIVE ALTERNATE #2: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (1 OF 2)

DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

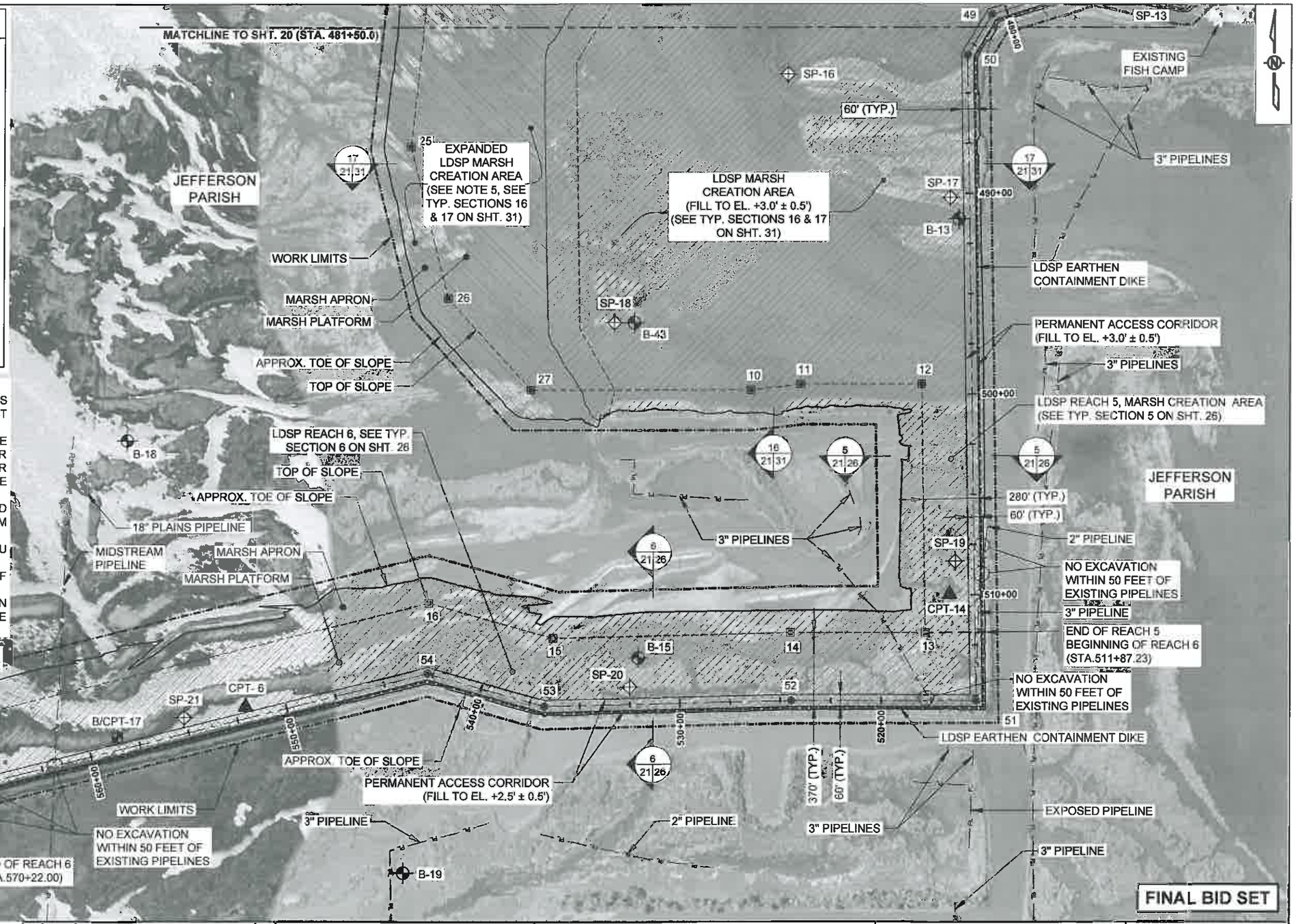
SHEET 20 OF 81

## LEGEND

| | |
|---|---|
| | PERMANENT ACCESS CORRIDOR |
| | LDSP MARSH CREATION |
| | LDSP EXPANDED MARSH CREATION |
| 15+00 | ACCESS CORRIDOR BASELINE |
| 53 | INFLECTION POINT ALONG ACCESS CORRIDOR BASELINE |
| 18 | INFLECTION POINT ALONG LDSP UNCONTAINED EDGE OF MARSH PLATFORM |
| | LDSP EARTHEN CONTAINMENT DIKE CENTERLINE |
| | CORRIDOR LIMITS |
| | MARSH TOP OF SLOPE |
| | MARSH TOE OF SLOPE |
| | WORK LIMITS |
| PL | EXISTING PIPELINES |
| B-41 | LDSP SOIL BORINGS |
| CPT-10 | LDSP CONE PENETROMETER TEST (CPT) |
| B/CPT-17 | LDSP SOIL BORINGS AND CPT |
| SP-20 | SETTLEMENT PLATE |

NOTES:

1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS, FILL AREAS, OR ACCESS CORRIDOR SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. FOR PIPELINE CORRIDOR ALIGNMENT AND UNCONTAINED EDGE OF LDSP MARSH PLATFORM COORDINATES SEE TABLES ON SHEET 23.
4. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.
5. THE ADDITIVE ALTERNATE INCLUDES EXPANSION OF LDSP MARSH CREATION AREA.
6. SEE SHEET 22 FOR LDSP REACH 5 AND 6 EARTHEN CONTAINMENT DIKE LAYOUT DETAILS AND CENTERLINE COORDINATES.




STATE OF LOUISIANA
JONATHAN HIRD
License No. 32298
PROFESSIONAL ENGINEER IN ENGINEERING
03/12/2013

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

ADDITIVE ALTERNATE #2: ACCESS CORRIDOR AND MARSH CREATION LAYOUT (2 OF 2)

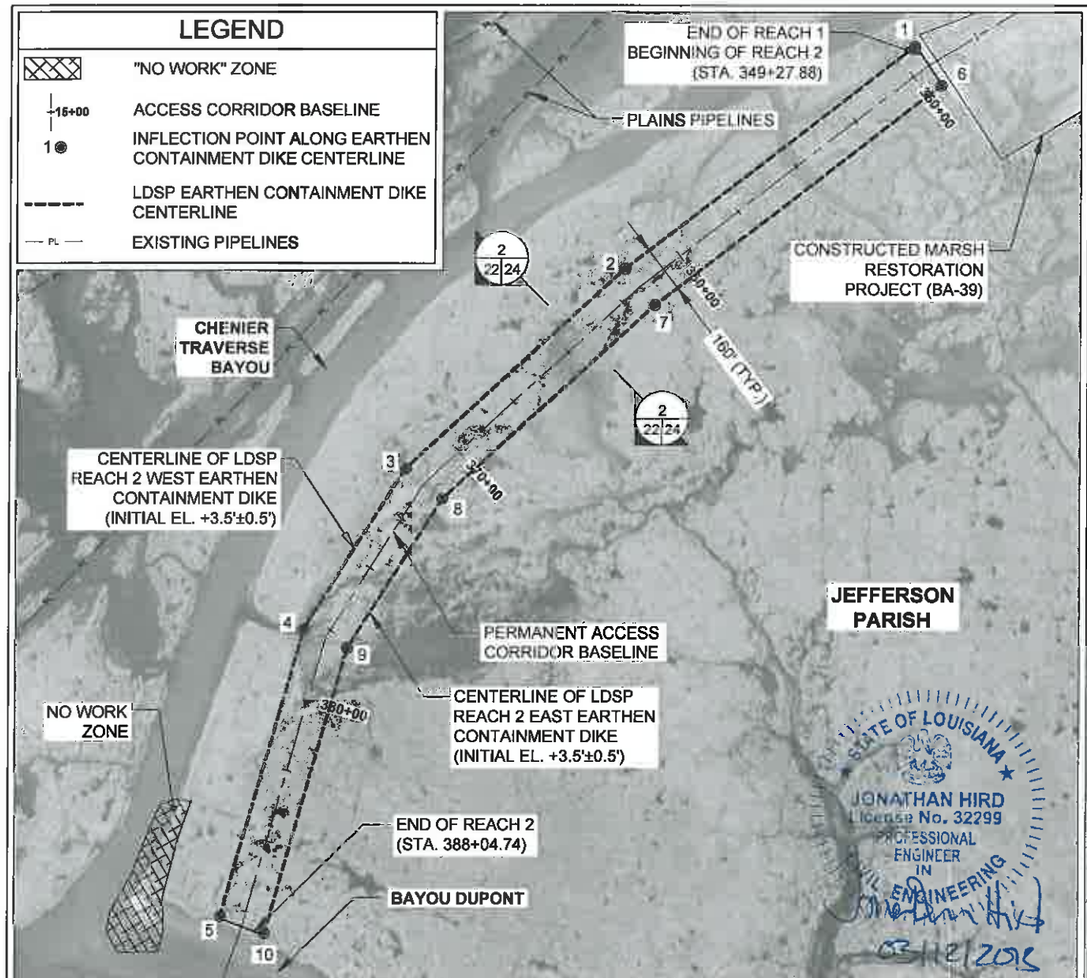
DATE: MARCH 8, 2013

SHEET 21 OF 81

**FINAL BID SET**

## LEGEND

- "NO WORK" ZONE
- 15+00 ACCESS CORRIDOR BASELINE
- 1 INFLECTION POINT ALONG EARTHEN CONTAINMENT DIKE CENTERLINE
- LDSP EARTHEN CONTAINMENT DIKE CENTERLINE
- PL EXISTING PIPELINES



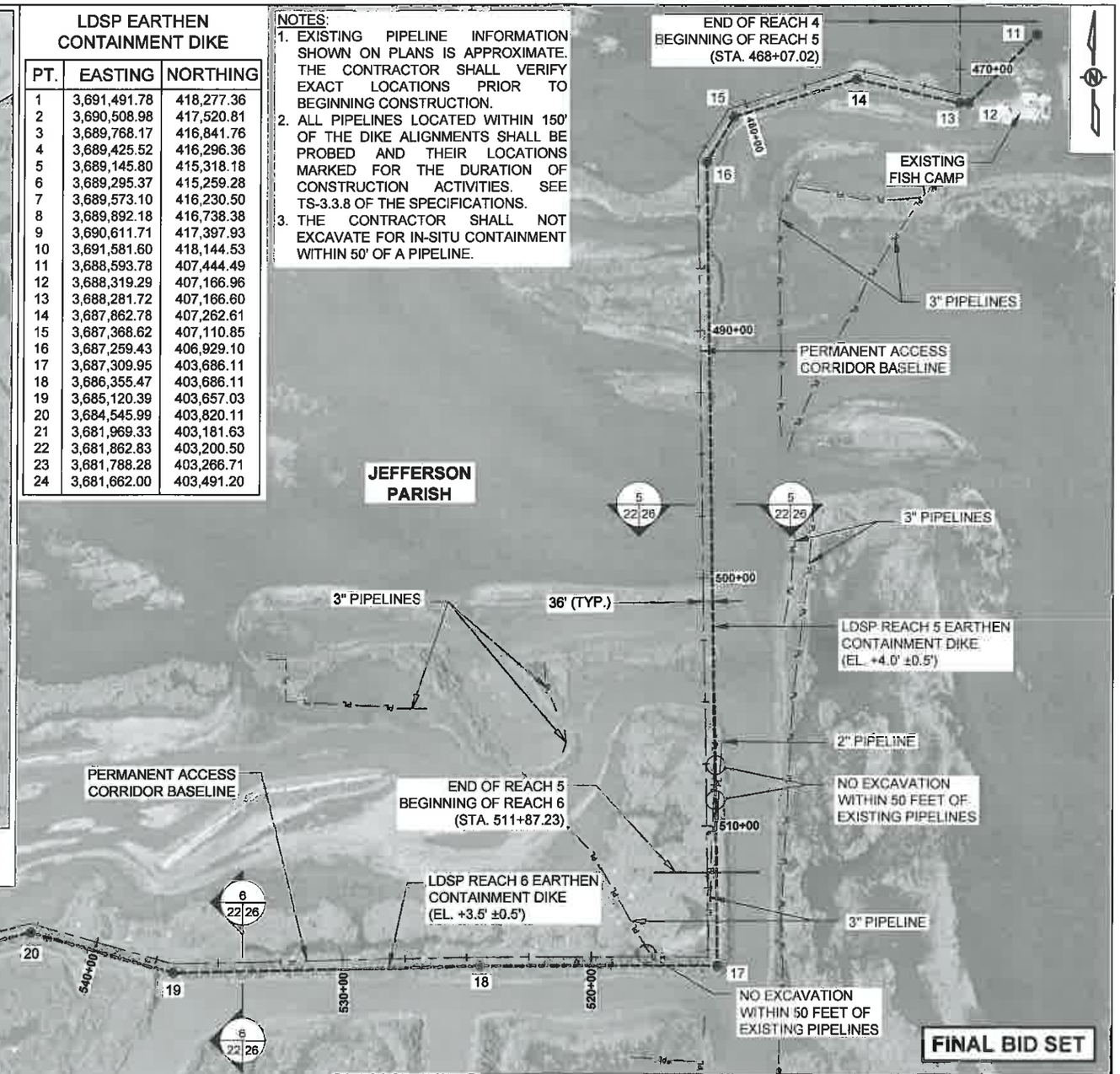

## LDSP REACH 2 - EARTHEN CONTAINMENT DIKES

SCALE: 1" = 500'

### LDSP EARTHEN CONTAINMENT DIKE

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,691,491.78 | 418,277.36 |
| 2 | 3,690,508.98 | 417,520.81 |
| 3 | 3,689,768.17 | 416,841.76 |
| 4 | 3,689,425.52 | 416,296.36 |
| 5 | 3,689,145.80 | 415,318.18 |
| 6 | 3,689,295.37 | 415,259.28 |
| 7 | 3,689,573.10 | 416,230.50 |
| 8 | 3,689,892.18 | 416,738.38 |
| 9 | 3,690,611.71 | 417,397.93 |
| 10 | 3,691,581.60 | 418,144.53 |
| 11 | 3,688,593.78 | 407,444.49 |
| 12 | 3,688,319.29 | 407,166.96 |
| 13 | 3,688,281.72 | 407,166.60 |
| 14 | 3,687,862.78 | 407,262.61 |
| 15 | 3,687,368.62 | 407,110.85 |
| 16 | 3,687,259.43 | 406,929.10 |
| 17 | 3,687,309.95 | 403,686.11 |
| 18 | 3,686,355.47 | 403,686.11 |
| 19 | 3,685,120.39 | 403,657.03 |
| 20 | 3,684,545.99 | 403,820.11 |
| 21 | 3,681,969.33 | 403,181.63 |
| 22 | 3,681,862.83 | 403,200.50 |
| 23 | 3,681,788.28 | 403,266.71 |
| 24 | 3,681,662.00 | 403,491.20 |

NOTES:
1. EXISTING PIPELINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL PIPELINES LOCATED WITHIN 150' OF THE DIKE ALIGNMENTS SHALL BE PROBED AND THEIR LOCATIONS MARKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. SEE TS-3.3.8 OF THE SPECIFICATIONS.
3. THE CONTRACTOR SHALL NOT EXCAVATE FOR IN-SITU CONTAINMENT WITHIN 50' OF A PIPELINE.




## LDSP REACHES 5 & 6 - EARTHEN CONTAINMENT DIKE

SCALE: 1" = 500'

500' 0' 500' 1,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

LDSP EARTHEN CONTAINMENT DIKE LAYOUT & COORDINATES

DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E. | SHEET 22 OF 81

## ACCESS CHANNEL ALIGNMENT

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,674,046.30 | 417,690.06 |
| 2 | 3,674,443.87 | 417,928.38 |
| 3 | 3,674,549.10 | 417,843.37 |
| 4 | 3,674,605.34 | 417,650.30 |
| 5 | 3,674,768.33 | 417,626.30 |
| 6 | 3,674,891.14 | 417,524.89 |
| 7 | 3,675,173.97 | 417,404.50 |
| 8 | 3,675,374.37 | 417,400.08 |
| 9 | 3,675,899.41 | 417192.18 |
| 10 | 3,676,242.80 | 417,171.66 |
| 11 | 3,676,428.65 | 417,358.88 |
| 12 | 3,676,548.44 | 417,686.20 |
| 13 | 3,676,739.59 | 417,811.17 |
| 14 | 3,677,375.53 | 417,869.55 |
| 15 | 3,677,870.90 | 417,830.11 |
| 16 | 3,678,337.82 | 417,708.89 |
| 17 | 3,678,811.83 | 417,514.80 |
| 18 | 3,679,772.32 | 416,805.21 |
| 19 | 3,679,930.74 | 416,596.04 |
| 20 | 3,680,221.29 | 416,069.93 |
| 21 | 3,680,593.81 | 415,970.76 |
| 22 | 3,680,718.25 | 415,816.36 |
| 23 | 3,680,950.88 | 415,619.43 |
| 24 | 3,681,378.51 | 415,564.60 |
| 25 | 3,681,635.27 | 415,496.11 |
| 26 | 3,681,977.36 | 415,432.46 |
| 27 | 3,682,205.59 | 415,229.13 |
| 28 | 3,682,250.83 | 415,129.57 |
| 29 | 3,682,397.09 | 414,968.27 |
| 30 | 3,683,138.30 | 414,802.76 |
| 31 | 3,683,474.36 | 414,513.64 |
| 32 | 3,683,792.94 | 414,308.27 |
| 33 | 3,684,035.91 | 414,239.78 |
| 34 | 3,684,285.57 | 414,253.96 |
| 35 | 3,684,542.75 | 414,352.05 |
| 36 | 3,684,764.87 | 414,409.57 |
| 37 | 3,685,015.36 | 414,387.73 |
| 38 | 3,685,168.42 | 414,252.81 |
| 39 | 3,685,281.66 | 414,088.33 |
| 40 | 3,685,359.42 | 414,002.16 |
| 41 | 3,685,450.50 | 413,949.56 |
| 42 | 3,685,898.07 | 413,778.66 |
| 43 | 3,686,447.21 | 413,686.62 |
| 44 | 3,686,740.16 | 413,671.24 |
| 45 | 3,687,188.62 | 413,691.73 |
| 46 | 3,687,438.03 | 413,721.65 |
| 47 | 3,687,616.06 | 413,782.04 |
| 48 | 3,687,710.79 | 413,852.06 |
| 49 | 3,687,766.22 | 414,034.24 |
| 50 | 3,687,811.91 | 414,175.11 |
| 51 | 3,687,930.02 | 414,339.53 |
| 52 | 3,688,053.13 | 414,460.19 |
| 53 | 3,688,138.44 | 414,524.38 |
| 54 | 3,688,306.59 | 414,717.17 |
| 55 | 3,688,397.69 | 414,842.33 |
| 56 | 3,688,450.73 | 414,937.10 |
| 57 | 3,688,547.73 | 415,047.00 |
| 58 | 3,688,627.47 | 415,092.91 |
| 59 | 3,688,728.60 | 415,115.08 |
| 60 | 3,688,878.22 | 415,127.36 |
| 61 | 3,689,243.43 | 415,004.47 |

## ACCESS CORRIDOR BASELINE

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,709,295.15 | 439,287.46 |
| 2 | 3,708,833.00 | 439,073.60 |
| 3 | 3,708,745.00 | 439,037.80 |
| 4 | 3,708,378.00 | 438,874.90 |
| 5 | 3,708,210.00 | 438,777.60 |
| 6 | 3,707,468.37 | 438,457.08 |
| 7 | 3,708,010.71 | 436,924.44 |
| 8 | 3,708,151.13 | 433,271.33 |
| 9 | 3,708,274.87 | 432,470.08 |
| 10 | 3,709,020.90 | 428,442.06 |
| 11 | 3,709,207.34 | 427,358.82 |
| 12 | 3,709,640.03 | 426,810.80 |
| 13 | 3,701,112.29 | 423,381.44 |
| 14 | 3,700,741.69 | 423,294.08 |
| 15 | 3,700,538.00 | 423,185.19 |
| 16 | 3,700,424.62 | 422,753.89 |
| 17 | 3,700,308.53 | 422,659.59 |
| 18 | 3,700,145.88 | 422,615.52 |
| 19 | 3,699,761.50 | 422,478.14 |
| 20 | 3,699,047.76 | 421,979.44 |
| 21 | 3,698,472.93 | 421,778.59 |
| 22 | 3,698,209.03 | 421,735.03 |
| 23 | 3,697,614.62 | 421,819.58 |
| 24 | 3,697,345.59 | 421,817.02 |
| 25 | 3,696,976.65 | 421,653.04 |
| 26 | 3,696,595.44 | 421,288.58 |
| 27 | 3,696,457.72 | 420,983.63 |
| 28 | 3,696,265.66 | 420,853.30 |
| 29 | 3,695,810.63 | 420,487.43 |
| 30 | 3,695,480.80 | 420,305.26 |
| 31 | 3,694,958.57 | 420,150.54 |
| 32 | 3,694,425.06 | 420,098.06 |
| 33 | 3,693,702.83 | 420,090.22 |
| 34 | 3,693,324.98 | 419,970.64 |
| 35 | 3,693,181.49 | 419,664.54 |
| 36 | 3,693,138.44 | 419,339.30 |
| 37 | 3,693,047.57 | 419,061.89 |
| 38 | 3,692,722.33 | 418,884.92 |
| 39 | 3,692,387.88 | 418,732.22 |
| 40 | 3,691,538.80 | 418,212.58 |
| 41 | 3,690,560.34 | 417,459.37 |
| 42 | 3,689,830.18 | 416,790.07 |
| 43 | 3,689,499.31 | 416,263.43 |
| 44 | 3,689,218.65 | 415,281.97 |
| 45 | 3,689,054.74 | 414,815.39 |
| 46 | 3,688,249.91 | 413,214.21 |
| 47 | 3,688,283.09 | 407,203.22 |
| 48 | 3,687,861.43 | 407,299.85 |
| 49 | 3,687,344.87 | 407,141.21 |
| 50 | 3,687,223.27 | 406,938.83 |
| 51 | 3,687,273.39 | 403,722.11 |
| 52 | 3,686,355.04 | 403,722.11 |
| 53 | 3,685,124.98 | 403,693.14 |
| 54 | 3,684,546.62 | 403,857.35 |
| 55 | 3,681,882.06 | 403,197.09 |

## UNCONTAINED EDGE OF LDSP MARSH PLATFORM (BASE BID)

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,688,089.34 | 413,316.89 |
| 2 | 3,688,410.48 | 413,111.56 |
| 3 | 3,688,442.56 | 407,300.12 |
| 4 | 3,688,116.89 | 408,326.85 |
| 5 | 3,687,015.74 | 408,326.84 |
| 6 | 3,685,931.55 | 407,992.90 |
| 7 | 3,685,273.81 | 406,903.71 |
| 8 | 3,685,294.51 | 405,575.04 |
| 9 | 3,685,470.07 | 405,269.79 |
| 10 | 3,686,151.82 | 405,269.79 |
| 11 | 3,686,399.76 | 405,298.96 |
| 12 | 3,686,998.79 | 405,298.96 |
| 13 | 3,687,018.06 | 404,062.11 |
| 14 | 3,686,351.04 | 404,062.11 |
| 15 | 3,685,168.38 | 404,034.26 |
| 16 | 3,684,552.56 | 404,209.10 |
| 17 | 3,681,661.43 | 403,492.70 |

## UNCONTAINED EDGE OF LDSP MARSH PLATFORM (ADDITIVE ALTERNATE #2)

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,688,089.34 | 413,316.89 |
| 2 | 3,688,410.48 | 413,111.56 |
| 3 | 3,688,442.56 | 407,300.12 |
| 10 | 3,686,151.82 | 405,269.79 |
| 11 | 3,686,399.76 | 405,298.96 |
| 12 | 3,686,998.79 | 405,298.96 |
| 13 | 3,687,018.06 | 404,062.11 |
| 14 | 3,686,351.04 | 404,062.11 |
| 15 | 3,685,168.38 | 404,034.26 |
| 16 | 3,684,552.56 | 404,209.10 |
| 17 | 3,681,661.43 | 403,492.70 |
| 18 | 3,688,111.22 | 409,354.11 |
| 19 | 3,687,644.88 | 409,213.84 |
| 20 | 3,687,532.64 | 408,616.81 |
| 21 | 3,687,426.13 | 408,326.84 |
| 22 | 3,685,716.18 | 408,326.83 |
| 23 | 3,684,870.37 | 407,986.52 |
| 24 | 3,684,542.16 | 407,318.88 |
| 25 | 3,684,453.34 | 406,480.36 |
| 26 | 3,684,641.94 | 405,726.20 |
| 27 | 3,685,053.07 | 405,269.79 |

## BA-48 MARSH CREATION AREA 1 RIDGE CENTERLINE

| PT. | EASTING | NORTHING |
|---|---|---|
| 101 | 3,688,685.12 | 414,926.73 |
| 102 | 3,688,807.66 | 414,920.45 |
| 103 | 3,688,979.37 | 414,862.45 |
| 104 | 3,689,284.52 | 414,676.93 |
| 105 | 3,689,539.21 | 414,458.03 |
| 106 | 3,689,948.49 | 414,037.66 |
| 107 | 3,690,164.91 | 413,911.04 |
| 108 | 3,690,292.37 | 413,777.58 |
| 109 | 3,690,308.12 | 413,684.78 |
| 110 | 3,690,512.10 | 413,311.03 |
| 111 | 3,690,721.30 | 413,003.74 |
| 112 | 3,691,080.37 | 412,821.00 |
| 113 | 3,691,341.26 | 412,841.31 |
| 114 | 3,691,796.51 | 413,142.10 |
| 115 | 3,692,045.36 | 413,272.46 |
| 116 | 3,692,138.83 | 413,294.38 |
| 117 | 3,692,230.95 | 413,248.15 |
| 118 | 3,692,297.50 | 413,129.13 |
| 119 | 3,692,563.39 | 411,957.08 |
| 120 | 3,693,047.02 | 411,570.55 |
| 121 | 3,693,360.87 | 411,620.05 |
| 122 | 3,693,473.71 | 411,660.02 |
| 123 | 3,693,535.90 | 411,686.46 |
| 124 | 3,693,570.66 | 411,529.48 |
| 125 | 3,693,968.54 | 411,046.31 |
| 126 | 3,694,188.54 | 410,903.53 |
| 127 | 3,694,370.25 | 410,970.16 |

## BA-48 MARSH CREATION AREA 2 RIDGE CENTERLINE

| PT. | EASTING | NORTHING |
|---|---|---|
| 143 | 3,694,559.39 | 410,893.65 |
| 144 | 3,694,617.44 | 410,781.98 |
| 145 | 3,694,700.51 | 410,748.66 |
| 146 | 3,694,868.81 | 410,794.00 |
| 147 | 3,695,085.51 | 410,742.99 |
| 148 | 3,695,315.74 | 410,755.04 |
| 149 | 3,695,697.07 | 410,525.59 |
| 150 | 3,695,996.10 | 410,361.99 |
| 151 | 3,696,208.23 | 410,020.43 |
| 152 | 3,696,718.16 | 409,783.31 |
| 153 | 3,696,824.64 | 409,773.03 |
| 154 | 3,696,896.86 | 409,687.61 |

## BA-48 MARSH CREATION AREA 1 DIKE CENTERLINE (BASE BID)

| PT. | EASTING | NORTHING |
|---|---|---|
| 127 | 3,694,370.25 | 410,970.16 |
| 128 | 3,694,253.99 | 410,883.82 |
| 129 | 3,694,182.42 | 410,714.72 |
| 130 | 3,694,193.81 | 410,533.53 |
| 131 | 3,693,811.05 | 409,657.93 |
| 135 | 3,688,014.65 | 413,364.65 |
| 136 | 3,688,140.09 | 413,607.73 |
| 137 | 3,688,080.16 | 413,633.83 |
| 138 | 3,688,102.65 | 413,824.93 |
| 139 | 3,688,269.81 | 413,981.74 |
| 140 | 3,688,364.03 | 414,297.22 |
| 141 | 3,688,623.93 | 414,552.38 |
| 142 | 3,688,611.91 | 414,702.21 |

## BA-48 MARSH CREATION AREA 1 DIKE CENTERLINE (ADDITIVE ALTERNATE #1)

| PT. | EASTING | NORTHING |
|---|---|---|
| 127 | 3,694,370.25 | 410,970.16 |
| 128 | 3,694,253.99 | 410,883.82 |
| 129 | 3,694,182.42 | 410,714.72 |
| 130 | 3,694,193.81 | 410,533.53 |
| 131 | 3,693,811.05 | 409,657.93 |
| 132 | 3,693,657.44 | 409,572.62 |
| 133 | 3,693,539.78 | 409,330.02 |
| 134 | 3,688,410.48 | 413,111.56 |
| 135 | 3,688,014.65 | 413,364.65 |
| 136 | 3,688,140.09 | 413,607.73 |
| 137 | 3,688,080.16 | 413,633.83 |
| 138 | 3,688,102.65 | 413,824.93 |
| 139 | 3,688,269.81 | 413,981.74 |
| 140 | 3,688,364.03 | 414,297.22 |
| 141 | 3,688,623.93 | 414,552.38 |
| 142 | 3,688,611.91 | 414,702.21 |

## BA-48 MARSH CREATION AREA 2 DIKE CENTERLINE (BASE BID)

| PT. | EASTING | NORTHING |
|---|---|---|
| 155 | 3,696,872.28 | 409,120.95 |
| 156 | 3,696,811.15 | 408,965.92 |
| 157 | 3,695,997.44 | 408,988.55 |
| 158 | 3,695,868.64 | 409,055.56 |
| 159 | 3,695,664.04 | 409,080.84 |
| 168 | 3,694,000.86 | 409,571.71 |
| 169 | 3,694,321.89 | 410,328.98 |

## BA-48 MARSH CREATION AREA 2 DIKE CENTERLINE (ADDITIVE ALTERNATE #1)

| PT. | EASTING | NORTHING |
|---|---|---|
| 155 | 3,696,872.28 | 409,120.95 |
| 156 | 3,696,811.15 | 408,965.92 |
| 157 | 3,695,997.44 | 408,988.55 |
| 158 | 3,695,868.64 | 409,055.56 |
| 159 | 3,695,664.04 | 409,080.84 |
| 160 | 3,695,515.38 | 408,985.45 |
| 161 | 3,695,514.46 | 408,756.82 |
| 162 | 3,696,104.99 | 408,742.48 |
| 163 | 3,696,562.87 | 408,756.46 |
| 164 | 3,696,840.92 | 408,779.94 |
| 165 | 3,696,776.10 | 408,011.11 |
| 166 | 3,695,298.37 | 408,143.91 |
| 167 | 3,693,843.37 | 409,119.96 |
| 168 | 3,694,000.86 | 409,571.71 |
| 169 | 3,694,321.89 | 410,328.98 |

## BA-48 MAGNETOMETER POINTS OF INTEREST

| PT. | EASTING | NORTHING |
|---|---|---|
| A | 3,694,287.90 | 410,693.90 |
| B | 3,693,645.30 | 409,269.10 |
| C | 3,694,361.60 | 408,361.30 |
| D | 3,695,623.10 | 408,925.00 |

## PROPOSED SETTLEMENT PLATE COORDINATES (SEE NOTE 1)

| PT. | EASTING | NORTHING |
|---|---|---|
| SP-1 | 3,690,346.00 | 417,174.75 |
| SP-2 | 3,689,599.45 | 416,311.37 |
| SP-3 | 3,688,988.73 | 413,624.32 |
| SP-4 | 3,691,187.51 | 412,829.34 |
| SP-5 | 3,692,507.99 | 412,201.30 |
| SP-6 | 3,695,614.94 | 410,575.01 |
| SP-7 | 3,695,106.00 | 409,584.64 |
| SP-8 | 3,692,984.51 | 410,488.20 |
| SP-9 | 3,690,378.09 | 412,083.78 |
| SP-10 | 3,688,345.11 | 412,869.88 |
| SP-11 | 3,688,164.76 | 410,911.60 |
| SP-12 | 3,688,364.21 | 408,756.60 |
| SP-13 | 3,688,192.82 | 407,305.17 |
| SP-14 | 3,687,157.27 | 408,252.04 |
| SP-15 | 3,685,567.48 | 407,271.38 |
| SP-16 | 3,686,333.68 | 406,843.12 |
| SP-17 | 3,687,138.92 | 406,228.17 |
| SP-18 | 3,685,467.48 | 405,604.94 |
| SP-19 | 3,687,167.97 | 404,417.01 |
| SP-20 | 3,685,549.51 | 403,789.06 |
| SP-21 | 3,683,336.24 | 403,637.51 |

NOTE:

1. LOCATION OF SETTLEMENT PLATES SHALL BE COORDINATED WITH THE FIELD ENGINEER.

## POTENTIAL BOOSTER PUMP LOCATIONS

| PT. | EASTING | NORTHING |
|---|---|---|
| 1 | 3,709,411.03 | 439,325.16 |
| 2 | 3,708,539.05 | 426,588.51 |
| 3 | 3,701,331.20 | 423,629.94 |
| 4 | 3,689,153.49 | 415,096.49 |

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

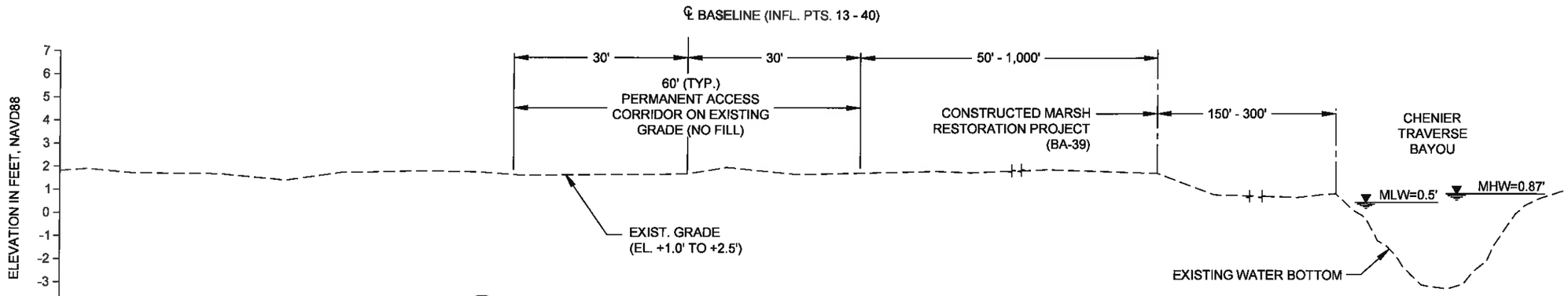
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

PROJECT FEATURES COORDINATES

DATE: MARCH 8, 2013

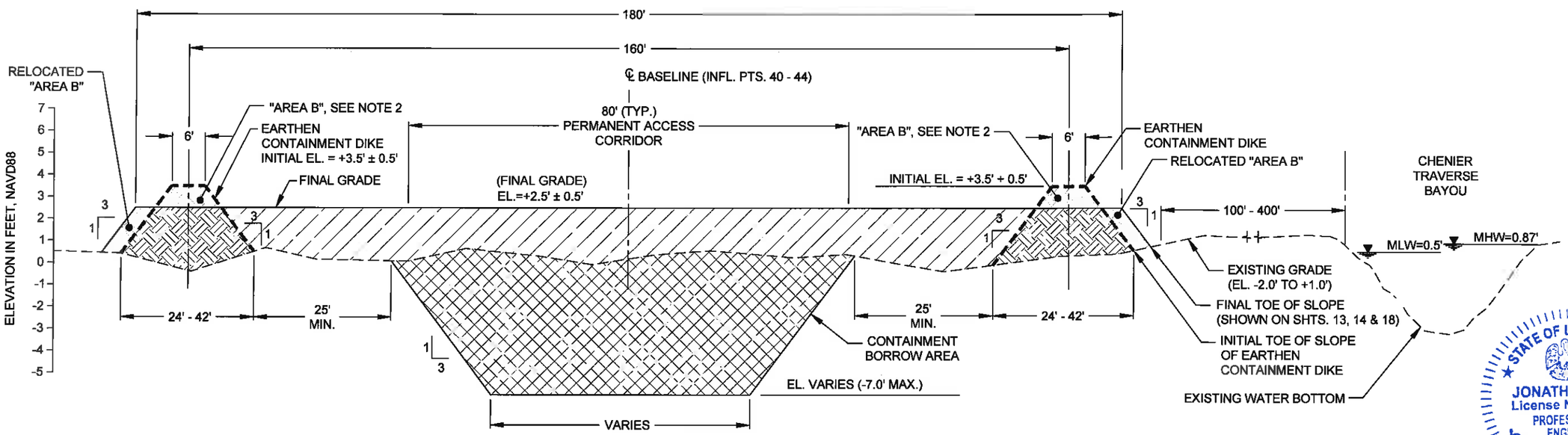
SHEET 23 OF 81




## 1/12 TYPICAL LDSP REACH 1 SECTION (ACROSS BA-39 PROJECT AREA)

13

(STA. 232+12.07 TO STA. 349+27.88)




## 2/13 TYPICAL LDSP REACH 2 SECTION (BETWEEN BA-39 & BAYOU DUPONT)

14, 18 & 22

(STA. 349+27.88 TO STA. 388+04.74)

NOTES:

1. EXISTING GROUND ELEVATIONS BASED ON TOPOGRAPHIC SURVEYS PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011 BY T. BAKER SMITH, LLC.
2. THE CONTRACTOR SHALL MECHANICALLY RELOCATE "AREA B" MATERIAL TO THE LOCATION LABELED "RELOCATED AREA B" PRIOR TO DEMOBILIZATION.

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

03/12/2013

**FINAL BID SET**

5' 2.5' 0' 5' 10'
VERTICAL SCALE

20' 10' 0' 20' 40'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

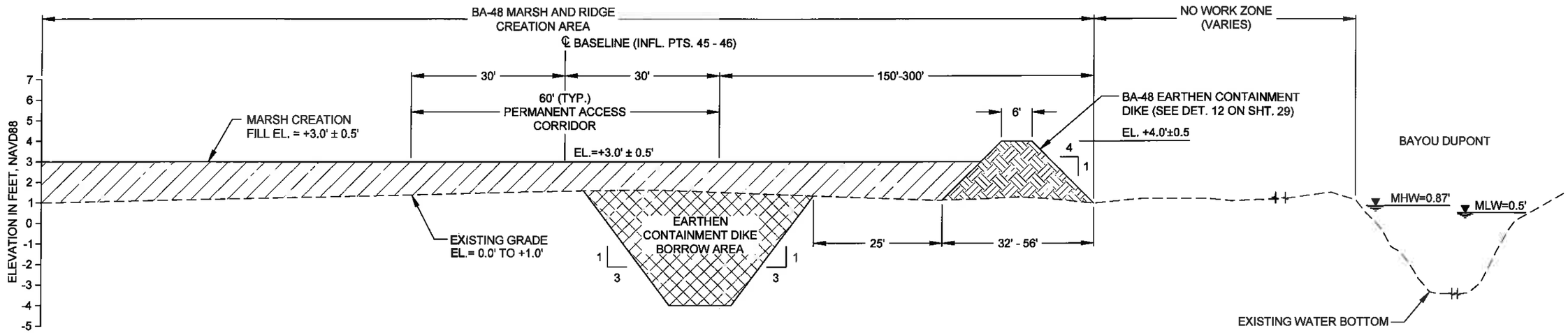
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID:
TYPICAL LDSP
FILL SECTIONS
(SHEET 1 OF 3)

DATE: MARCH 8, 2013

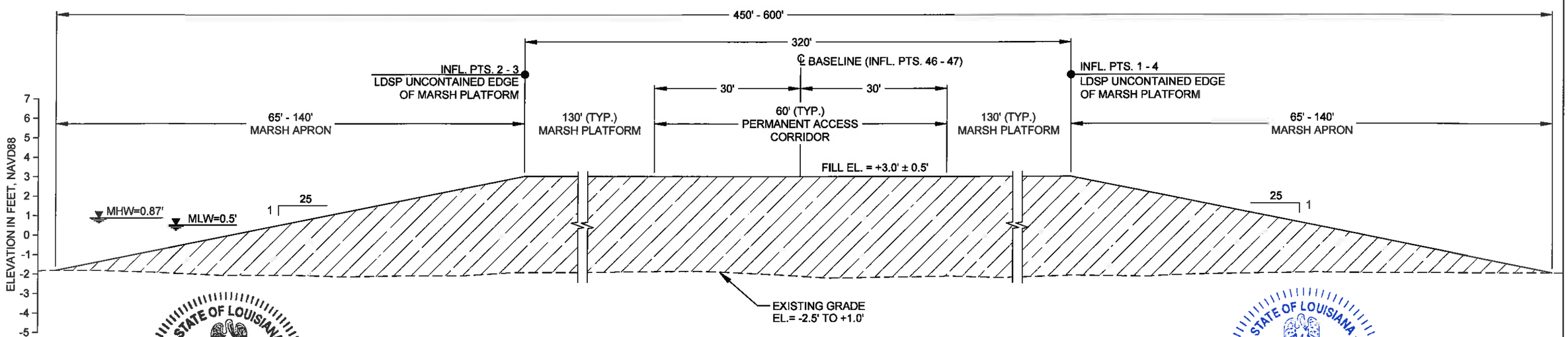
SHEET 24 OF 81




3/14 TYPICAL LDSP REACH 3 SECTION (ACROSS BA-48 MARSH CREATION AREA)

18

(STA. 392+97.96 TO STA. 410+90.02)




4/14 TYPICAL LDSP REACH 4 SECTION (FROM BA-48 TO THE FISH CAMP)

16,18, 20

(STA. 410+90.02 TO STA. 468+07.02)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
5.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

5' 2.5' 0' 5' 10'
VERTICAL SCALE

20' 10' 0' 20' 40'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

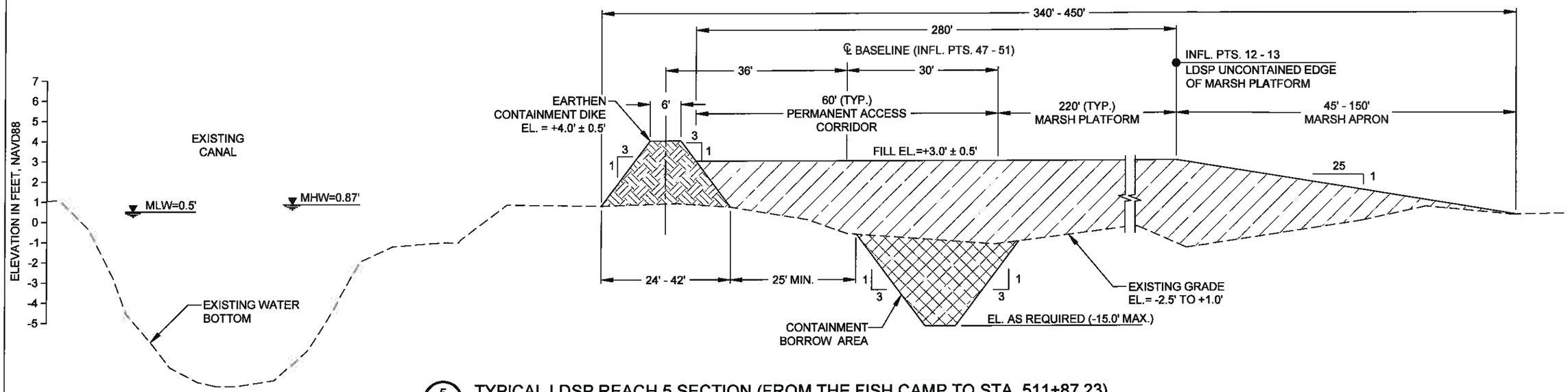
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

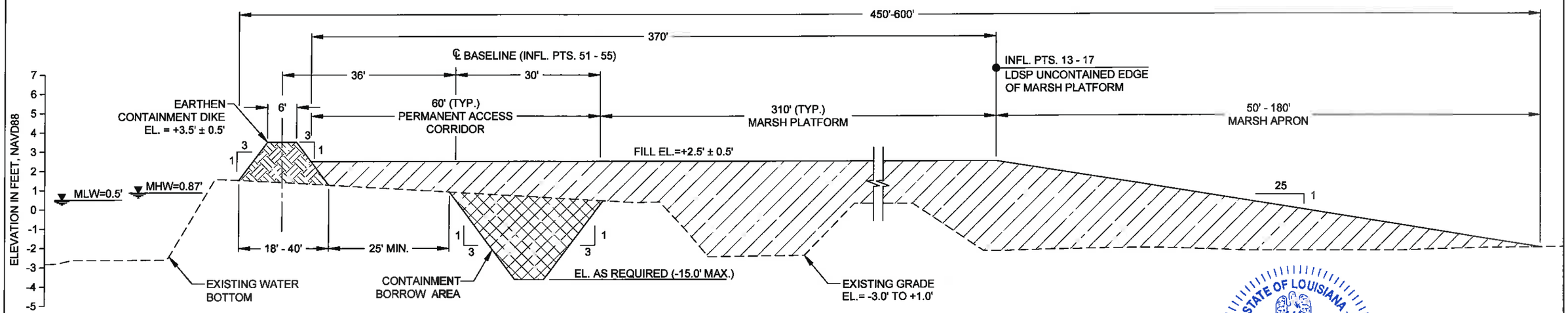
BASE BID: TYPICAL LDSP FILL SECTIONS (SHEET 2 OF 3)

DATE: MARCH 8, 2013

SHEET 25 OF 81




5/16 TYPICAL LDSP REACH 5 SECTION (FROM THE FISH CAMP TO STA. 511+87.23)
(STA. 468+07.02 TO STA. 511+87.23)
17, 20, 21 & 22




6/17 TYPICAL LDSP REACH 6 SECTION (FROM STA. 511+87.23 TO BARATARIA WATERWAY)
(STA. 511+87.23 TO STA. 570+22.0)
21 & 22

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
08/12/2013

**FINAL BID SET**

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

5' 2.5' 0' 5' 10'
VERTICAL SCALE
20' 10' 0' 20' 40'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

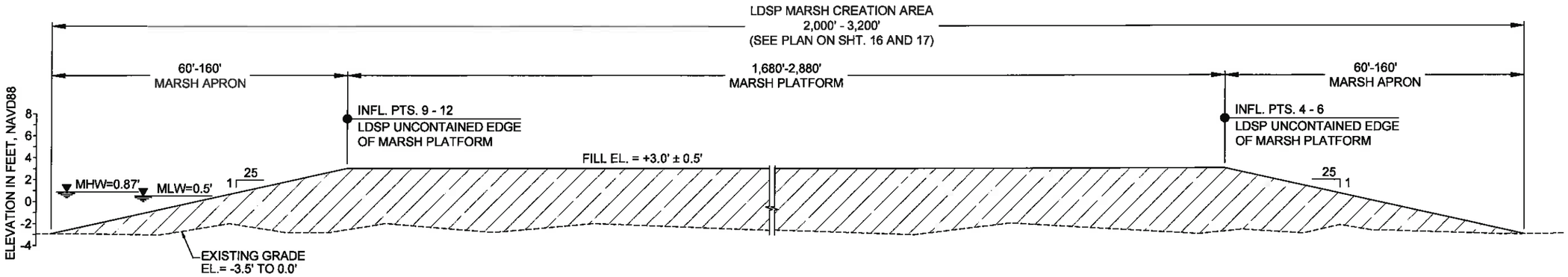
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

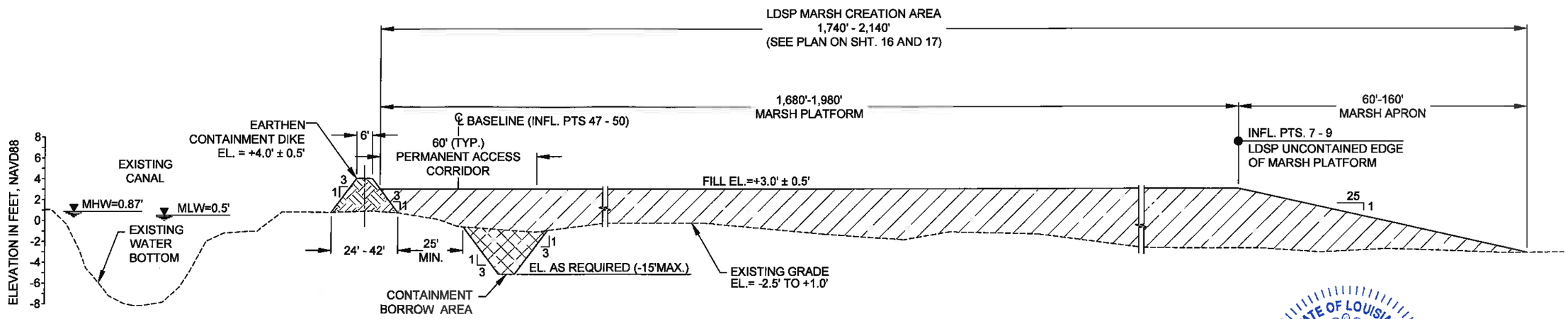
BASE BID: TYPICAL LDSP FILL SECTIONS (SHEET 3 OF 3)
DATE: MARCH 8, 2013
SHEET 26 OF 81




## 7/16 TYPICAL FILL SECTION ACROSS LDSP MARSH CREATION AREA

(SOUTH TO NORTH)

17




## 8/16 TYPICAL FILL SECTION ACROSS LDSP MARSH CREATION AREA

(WEST TO EAST)

17

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

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

Jonathan Hird
03/12/2013

**FINAL BID SET**

10' 5' 0' 10' 20'
VERTICAL SCALE

40' 20' 0' 40' 80'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

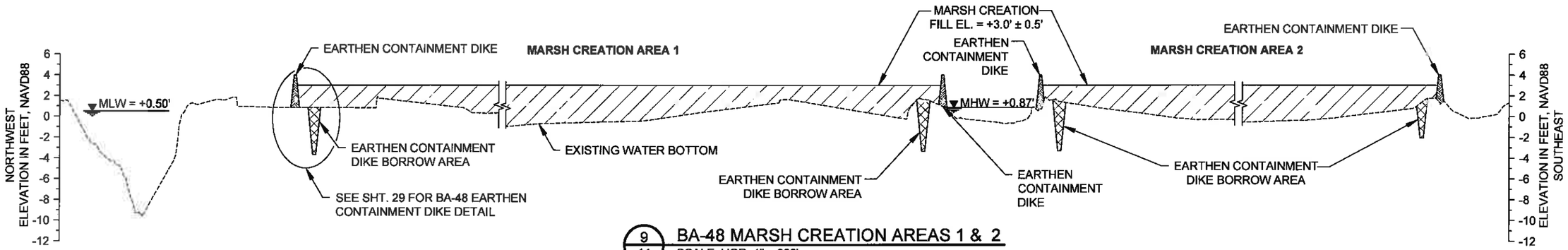
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID:
LDSP MARSH CREATION AREA
TYPICAL SECTIONS

DATE: MARCH 8, 2013

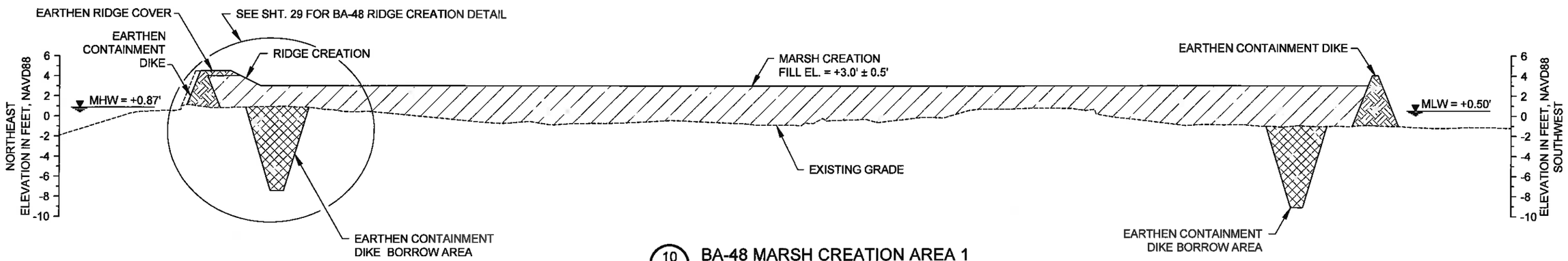
SHEET 27 OF 81




9/14 BA-48 MARSH CREATION AREAS 1 & 2

15, 18, 19

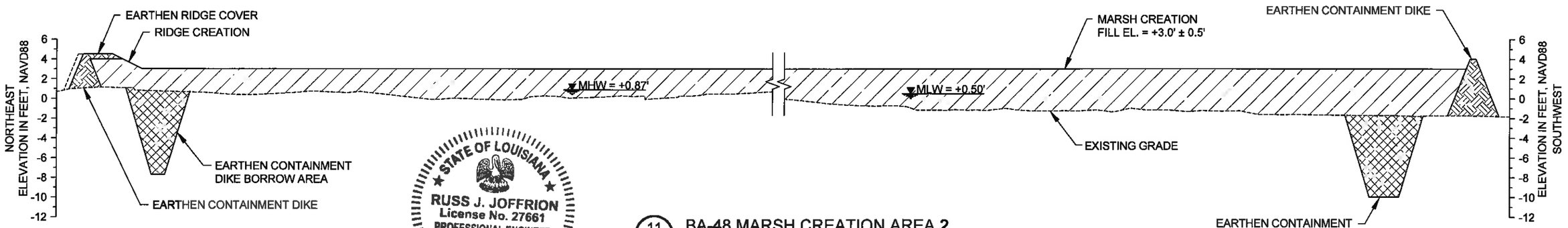
SCALE: HOR. 1" = 300'
VER. 1" = 10'




10/14 BA-48 MARSH CREATION AREA 1

15, 18, 19

SCALE: HOR. 1" = 100'
VER. 1" = 10'




11/15 BA-48 MARSH CREATION AREA 2

SCALE: HOR. 1" = 100'
VER. 1" = 10'

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

10' 5' 0' 10' 20'
VERTICAL SCALE

100' 50' 0' 100' 200'
HORIZONTAL SCALE

300' 150' 0' 300' 600'
HORIZONTAL SCALE

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

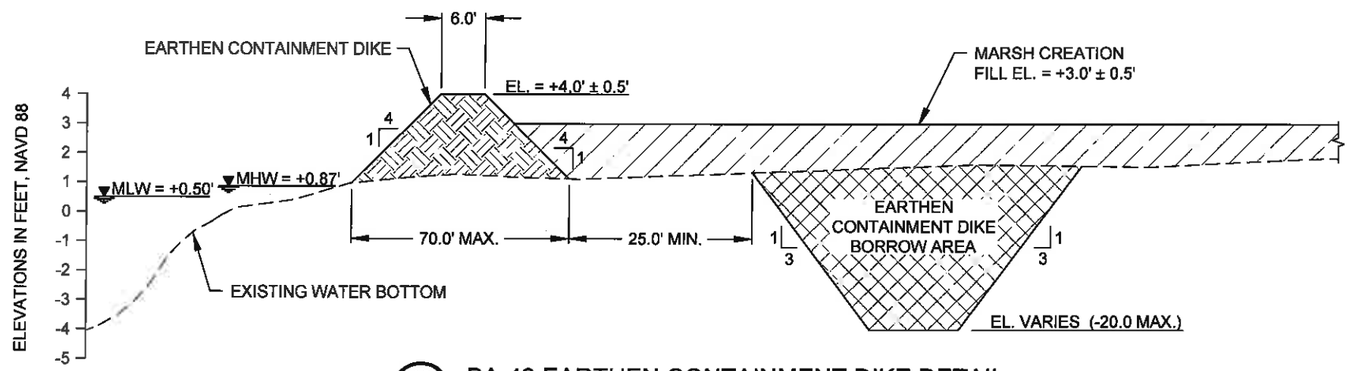
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID:
BA-48 MARSH CREATION AREA TYPICAL SECTIONS

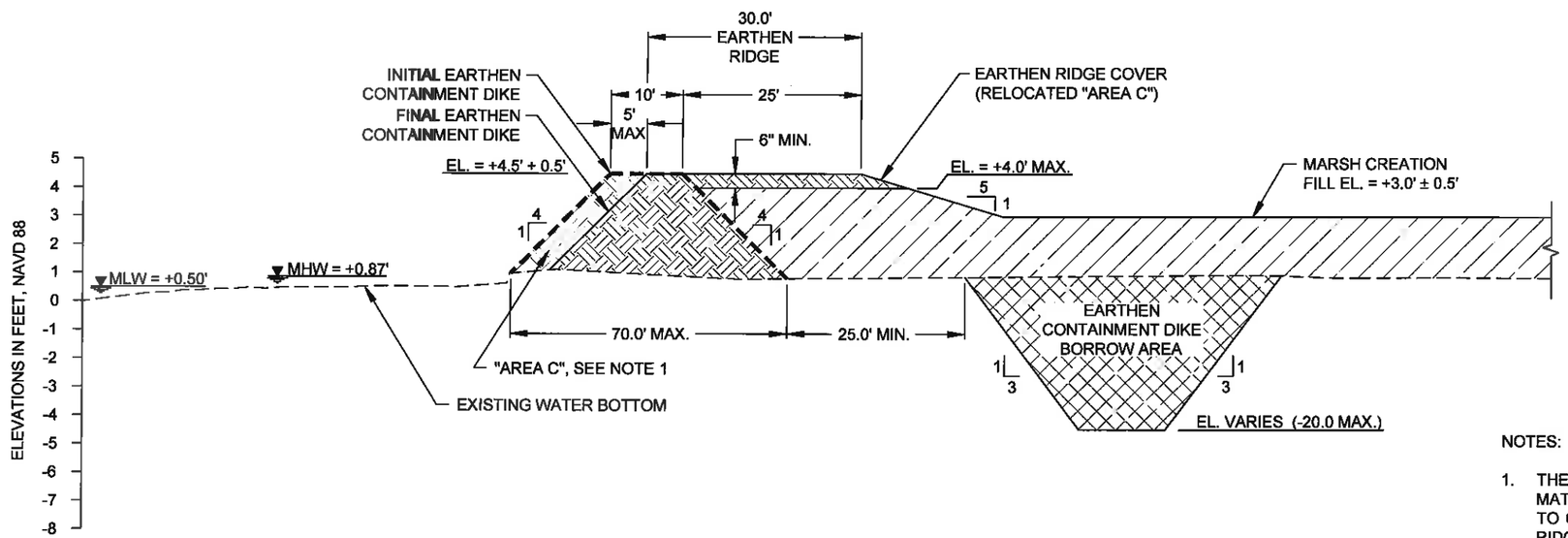
DATE: MARCH 8, 2013

SHEET 28 OF 81




12/14 BA-48 EARTHEN CONTAINMENT DIKE DETAIL

15, 18, 19, 25, 30




13/14 BA-48 EARTHEN RIDGE CREATION DETAIL

15, 18, 19, 30

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

NOTES:

1. THE CONTRACTOR SHALL MECHANICALLY RELOCATE "AREA C" MATERIAL TO THE LOCATION LABELED "RELOCATED AREA C" TO CREATE THE 6 INCHES MINIMUM COVER OF THE EARTHEN RIDGE.
2. MARSH FILL MATERIAL MAY BE PLACED ABOVE THE MAXIMUM TOLERANCE FOR THE CONSTRUCTION OF THE EARTHEN RIDGE TEMPLATE. THE EARTHEN RIDGE WORK SHALL BE SUBMITTED IN THE WORK PLAN. SEE TECHNICAL SPECIFICATIONS FOR EARTHEN RIDGE PLACEMENT AND PAYMENT.

**FINAL BID SET**

5' 2.5' 0' 5' 10'
VERTICAL SCALE

20' 10' 0' 20' 40'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

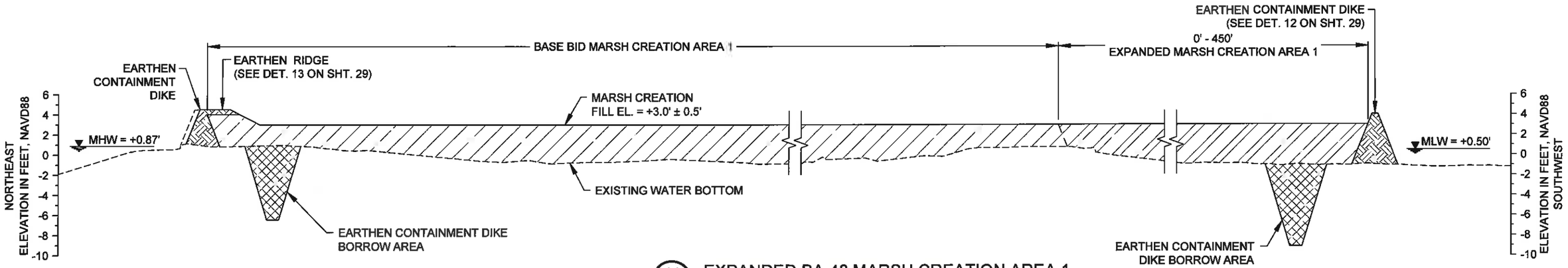
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

BASE BID:
BA-48 CONTAINMENT DIKE AND RIDGE TYPICAL DETAILS

DATE: MARCH 8, 2013

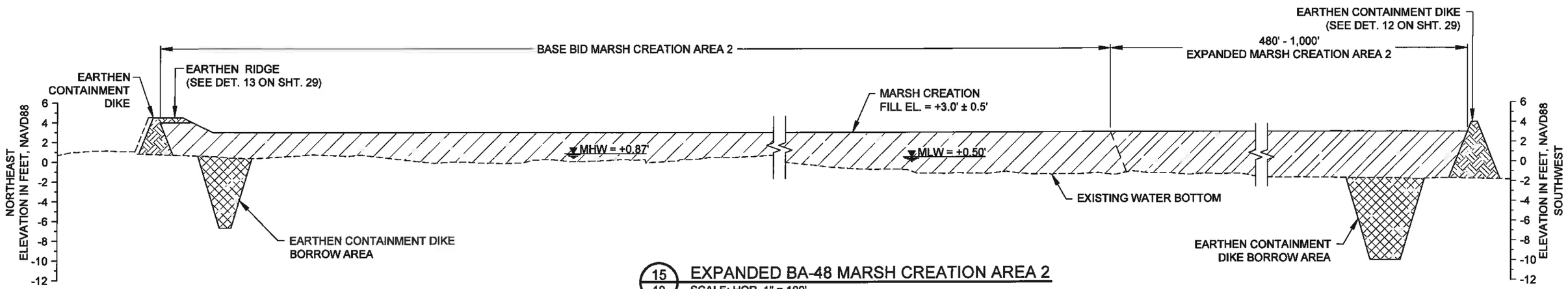
SHEET 29 OF 81




14/18 EXPANDED BA-48 MARSH CREATION AREA 1

19

SCALE: HOR. 1" = 100'
VER. 1" = 10'




15/19 EXPANDED BA-48 MARSH CREATION AREA 2

SCALE: HOR. 1" = 100'
VER. 1" = 10'

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

**FINAL BID SET**

10' 5' 0' 10' 20'
VERTICAL SCALE

100' 50' 0' 100' 200'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

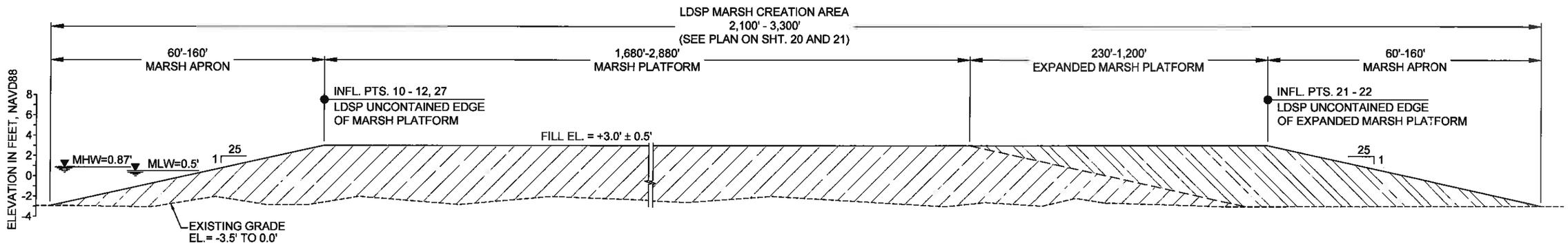
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

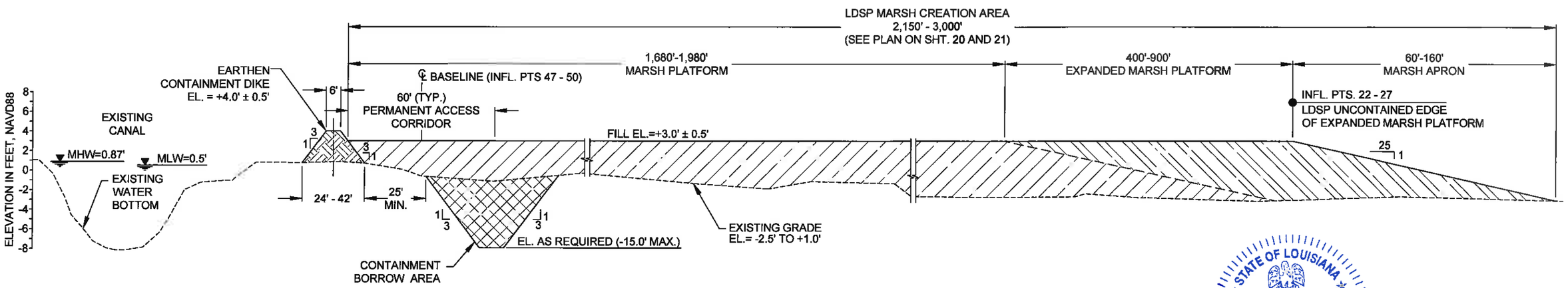
ADDITIVE ALTERNATE #1: BA-48 MARSH CREATION AREA TYPICAL SECTIONS

DATE: MARCH 8, 2013

SHEET 30 OF 81




16/20 21 TYPICAL FILL SECTION ACROSS LDSP EXPANDED MARSH CREATION AREA
(SOUTH TO NORTH)




17/20 21 TYPICAL FILL SECTION ACROSS LDSP EXPANDED MARSH CREATION AREA
(EAST TO WEST)

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

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

10' 5' 0' 10' 20'
VERTICAL SCALE

40' 20' 0' 40' 80'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

ADDITIVE ALTERNATE #2:
LDSP MARSH CREATION AREA
TYPICAL SECTIONS

DATE: MARCH 8, 2013

SHEET 31 OF 81

BA41-SM-01
N 417,912.61
E 3,673,985.63

BA-03C WEIR STRUCTURE (SEE DETAILS ON SHT. 34)

THE PEN

TEMPORARY WARNING SIGN (TYP., SEE DET. 16 ON SHT. 55)

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

ACCESS CHANNEL BOTTOM OF CUT (MAX. 80 FEET WIDE, SEE SECTIONS ON SHT. 33)

4" ENBRIDGE-MIDCOAST PIPELINE

JEFFERSON PARISH

24" PLAINS PIPELINE

NO WORK ZONE
BAYOU DUPONT BOOSTER PUMP SITE (SEE DETAILS ON SHT. 47)

BAYOU DUPONT

BAYOU BARATARIA WATERWAY

NO DREDGING WITHIN 500' OF EXISTING PIPELINES

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

12" LGS PIPELINE

NO DREDGING WITHIN 500' OF EXISTING PIPELINES

NO WORK ZONE

ACCESS CORRIDOR BASELINE

18" PLAINS PIPELINE

G-G 32 33

H-H 32 33

0+00 10+00 20+00 30+00 40+00 50+00 60+00 70+00 80+00 90+00 100+00 110+00 120+00 130+00 140+00 150+00 160+00 170+00 179+92 380+00 390+00 400+00 410+00 420+00

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3/12/2013

FINAL BID SET

## LEGEND

- NO WORK ZONE
- TEMPORARY SPOIL
- ACCESS CHANNEL
- 20+00 ACCESS CHANNEL BASELINE
- 1 INFLECTION POINT ALONG ACCESS CHANNEL BASELINE
- PL EXISTING PIPELINES
- TEMPORARY WARNING SIGN
- SURVEY BENCHMARK

NOTES:

1. NO DREDGING WITHIN 500' OF EXISTING PIPELINES.
2. FOR ACCESS CHANNEL ALIGNMENT COORDINATES SEE TABLE ON SHEET 23.
3. ACCESS CHANNEL TO BE DREDGED AS PART OF CONSTRUCTION. CHANNEL SHALL BE BACKFILLED PRIOR TO FINAL INSPECTION.
4. BA-03C WEIR STRUCTURE WAS PARTIALLY REMOVED AS PART OF BA-41 CONSTRUCTION TO ALLOW EQUIPMENT ACCESS. CONTRACTOR SHALL RECONSTRUCT WEIR STRUCTURE TO THE LINES AND GRADES SHOWN ON SHEET 34.

1,000' 0' 1,000' 2,000'

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

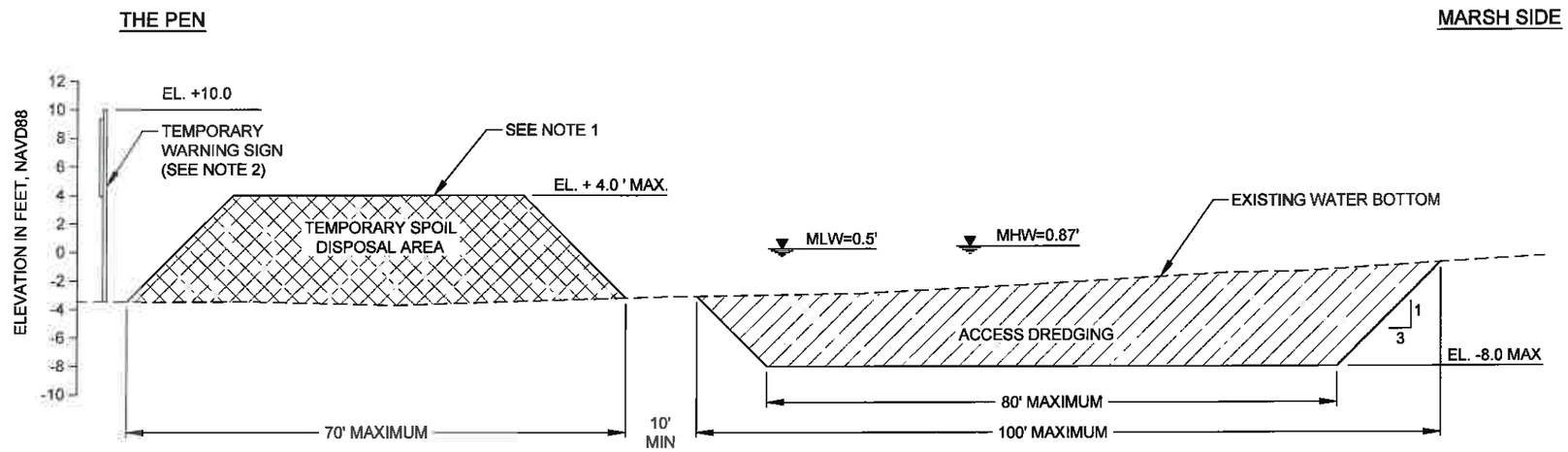
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

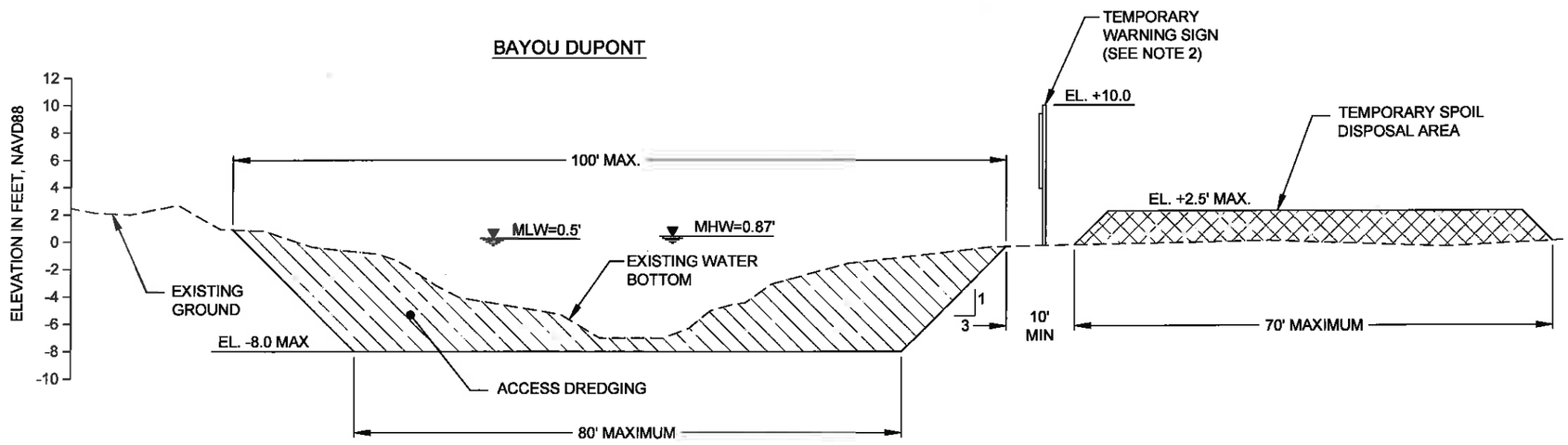
ACCESS CHANNEL LAYOUT

DATE: MARCH 8, 2013

SHEET 32 OF 81




G-G 32 TYPICAL ACCESS CHANNEL SECTION @ THE PEN




H-H 32 TYPICAL ACCESS CHANNEL SECTION @ BAYOU DUPONT

## NOTES:

1. MATERIAL EXCAVATED TO CONSTRUCT THE ACCESS CHANNEL SHALL BE PLACED ON THE LAKE SIDE AND BACKFILLED INTO THE ACCESS CHANNEL PRIOR TO FINAL INSPECTION. TEMPORARY SPOIL SHALL NOT BE PLACED ON EXISTING MARSH.
2. TEMPORARY WARNING SIGNS SHALL BE PLACED AT A MAXIMUM SPACING OF 1,000 FT ALONG ALL TEMPORARY SPOIL DISPOSAL AREAS.
3. ACCESS CHANNEL TO BE DREDGED AS PART OF CONSTRUCTION. CHANNEL SHALL BE BACKFILL PRIOR TO FINAL INSPECTION.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

**FINAL BID SET**

10' 5' 0' 10' 20'
VERTICAL SCALE
20' 10' 0' 20' 40'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

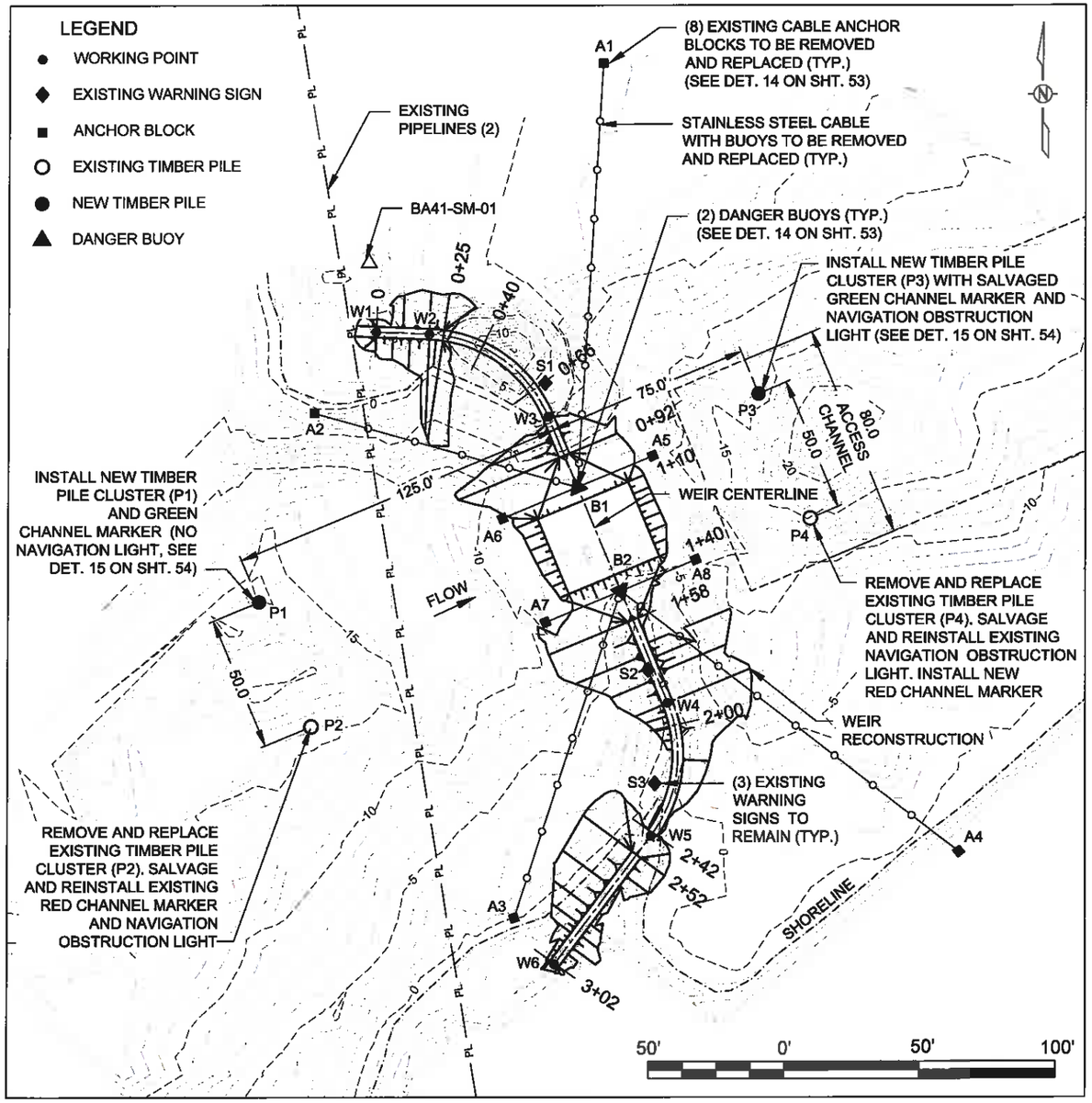
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

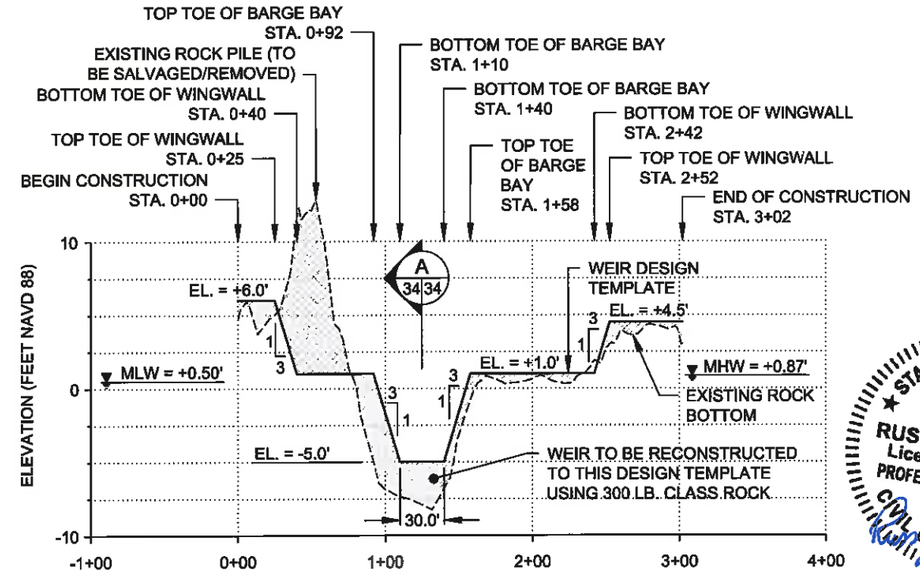
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

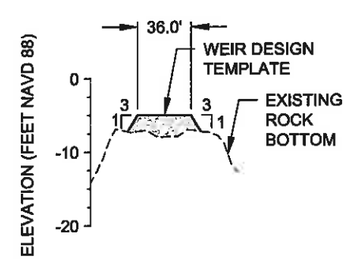
TYPICAL ACCESS CHANNEL SECTIONS
DATE: MARCH 8, 2013
SHEET 33 OF 81




PLAN VIEW
SCALE: 1" = 50'




PROFILE
SCALE: HOR. 1" = 100
VER. 1" = 10'




TYPICAL CROSS SECTION 'A'
(STA. 1+25.00)
SCALE: HOR. 1" = 100
VER. 1" = 10'

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

| NAVIGATION SIGNS AND OBSTRUCTION LIGHTS COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| P1 | 3,673,944.08 | 417,788.05 |
| P2 | 3,673,963.36 | 417,741.92 |
| P3 | 3,674,128.60 | 417,865.19 |
| P4 | 3,674,147.89 | 417,819.06 |

| ANCHOR BLOCK COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| A1 | 3,674,070.89 | 417,987.48 |
| A2 | 3,673,964.21 | 417,858.02 |
| A3 | 3,674,038.87 | 417,671.12 |
| A4 | 3,674,203.23 | 417,695.60 |
| A5 | 3,674,089.51 | 417,842.12 |
| A6 | 3,674,034.15 | 417,818.97 |
| A7 | 3,674,050.22 | 417,780.53 |
| A8 | 3,674,105.58 | 417,803.68 |

| WEIR CENTERLINE COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| W1 | 3,673,987.11 | 417,888.11 |
| W2 | 3,674,006.87 | 417,887.29 |
| W3 | 3,674,050.93 | 417,856.62 |
| W4 | 3,674,095.27 | 417,750.57 |
| W5 | 3,674,089.21 | 417,701.38 |
| W6 | 3,674,053.83 | 417,653.97 |

| NAVIGATIONAL BUOY COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| B1 | 3,674,061.83 | 417,830.55 |
| B2 | 3,674,077.90 | 417,792.11 |

D / 32 BAYOU DUPONT WEIR STRUCTURE DETAILS
AS NOTED

**FINAL BID SET**

NOTES:
1. CONTOURS SHOWN ARE BASED ON SIGMA SURVEY DATED DECEMBER 2011.
2. FOR TIMBER PILE CLUSTER AND NAVIGATIONAL AID DETAILS SEE SHEET 54.

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

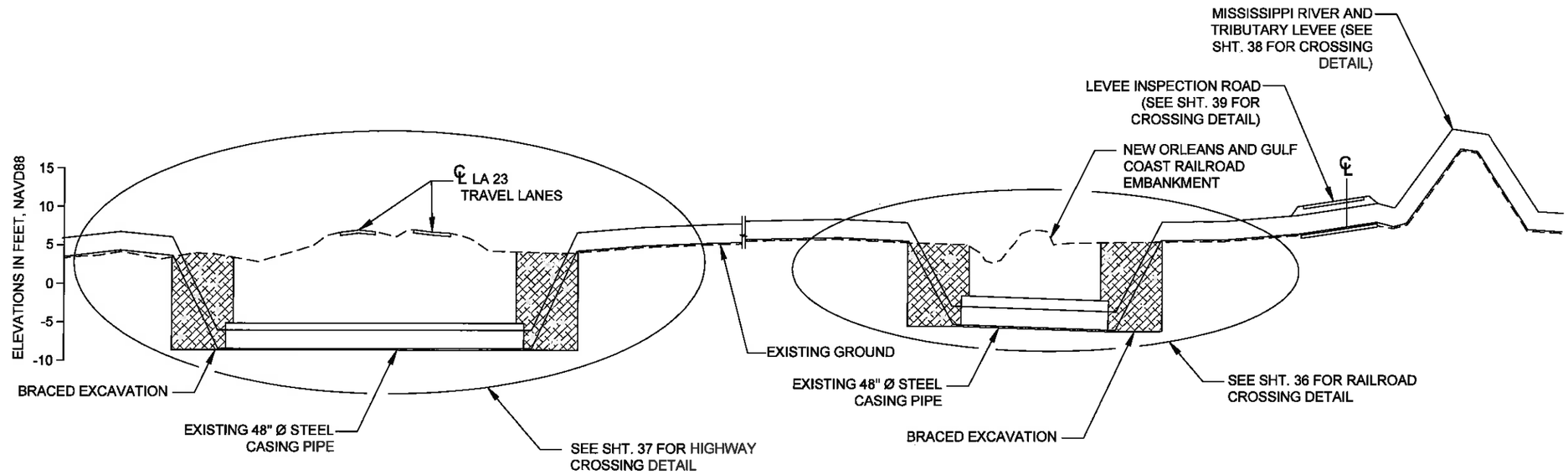
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

BAYOU DUPONT WEIR STRUCTURE
DATE: MARCH 8, 2013
SHEET 34 OF 81




## E-E / 11 DREDGE PIPELINE CORRIDOR SECTION

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

80' 40' 0' 80' 160'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

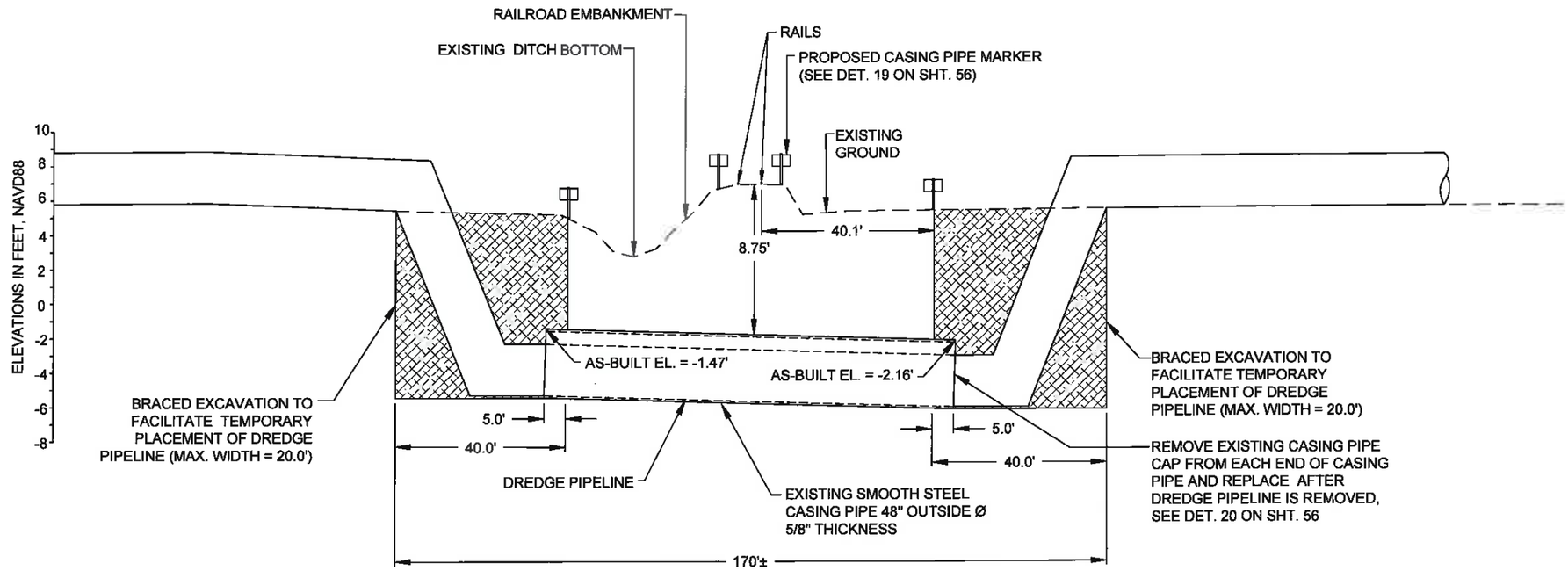
COASTAL PROTECTION AND RESTORATION AUTHORITY
450 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-43

APPROVED BY: MAURY CHATELLIER, P.E.

DREDGE PIPELINE CORRIDOR SECTION
DATE: MARCH 8, 2013
SHEET 35 OF 81




1/11 RAILROAD CROSSING DETAIL

35

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

**NOTES**:

1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT TO THE EXCAVATION ON BOTH SIDES. LOCATION TO BE APPROVED BY ENGINEER AND INCLUDED IN WORK PLAN.
2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION AFTER COMPLETION OF CONSTRUCTION.
3. THE BRACED EXCAVATION SHALL BE DESIGNED AND CONSTRUCTED AS PER APPENDIX L OF THE SPECIFICATIONS.

**FINAL BID SET**

| LEGEND | |
|---|---|
| | BRACED EXCAVATION |
| - - - | EXISTING GROUND |

30' 15' 0' 30' 60'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

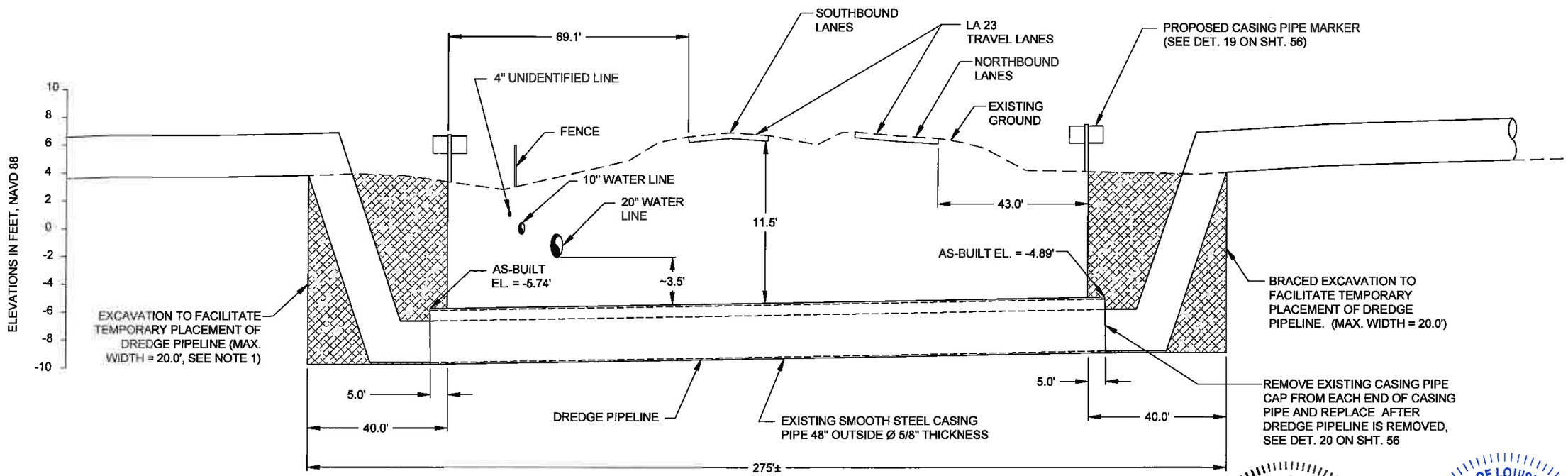
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

RAILROAD CROSSING DETAIL

DATE: MARCH 8, 2013

SHEET 36 OF 81




2/11 HIGHWAY CROSSING DETAIL

35

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

**NOTES:**

1. TEMPORARY SPOIL SHALL BE PLACED ADJACENT TO THE EXCAVATION ON BOTH SIDES WITHIN CONSTRUCTION LIMITS. LOCATION TO BE APPROVED BY ENGINEER AND INCLUDED IN WORK PLAN.
2. THE TEMPORARY SPOIL SHALL BE BACKFILLED INTO EXCAVATION AFTER COMPLETION OF CONSTRUCTION.
3. THE BRACED EXCAVATION SHALL BE DESIGNED AND CONSTRUCTED AS PER APPENDIX L OF THE SPECIFICATIONS.

**FINAL BID SET**

**LEGEND**

- BRACED EXCAVATION
- EXISTING GROUND

30' 15' 0' 30' 60'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

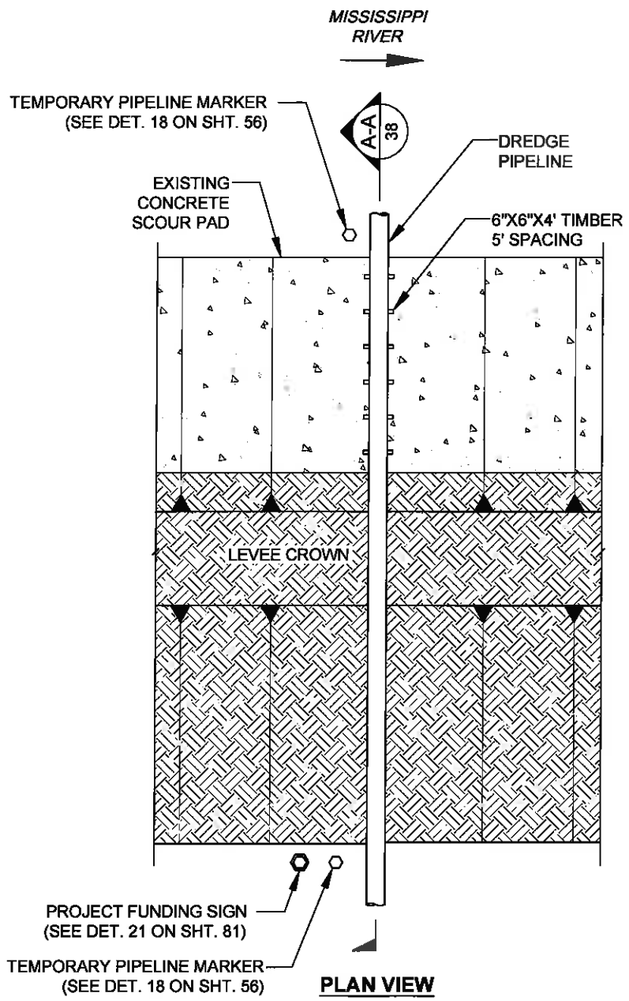
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

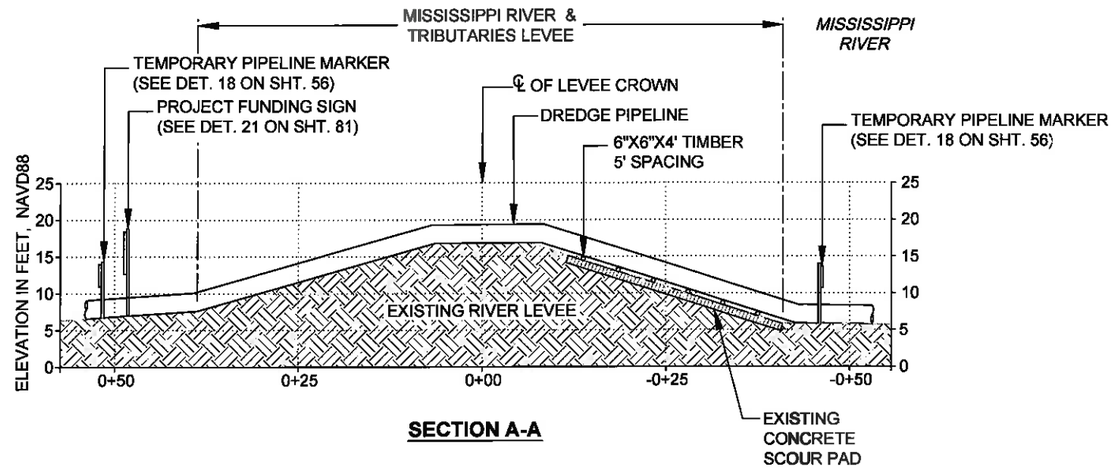
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

HIGHWAY CROSSING DETAIL
DATE: MARCH 8, 2013
SHEET 37 OF 81




**PLAN VIEW**




**SECTION A-A**

NOTES:

1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF LEVEE NEAR DREDGE PIPELINE. LOCATION TO BE APPROVED BY ENGINEER AND INCLUDED IN WORK PLAN.
2. EXISTING GRADE BASED ON JANUARY 2012 TBS SURVEY.

3/11 MISSISSIPPI RIVER LEVEE CROSSING DETAIL

SCALE: 1"=20'

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

20' 10' 0' 20' 40'

HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

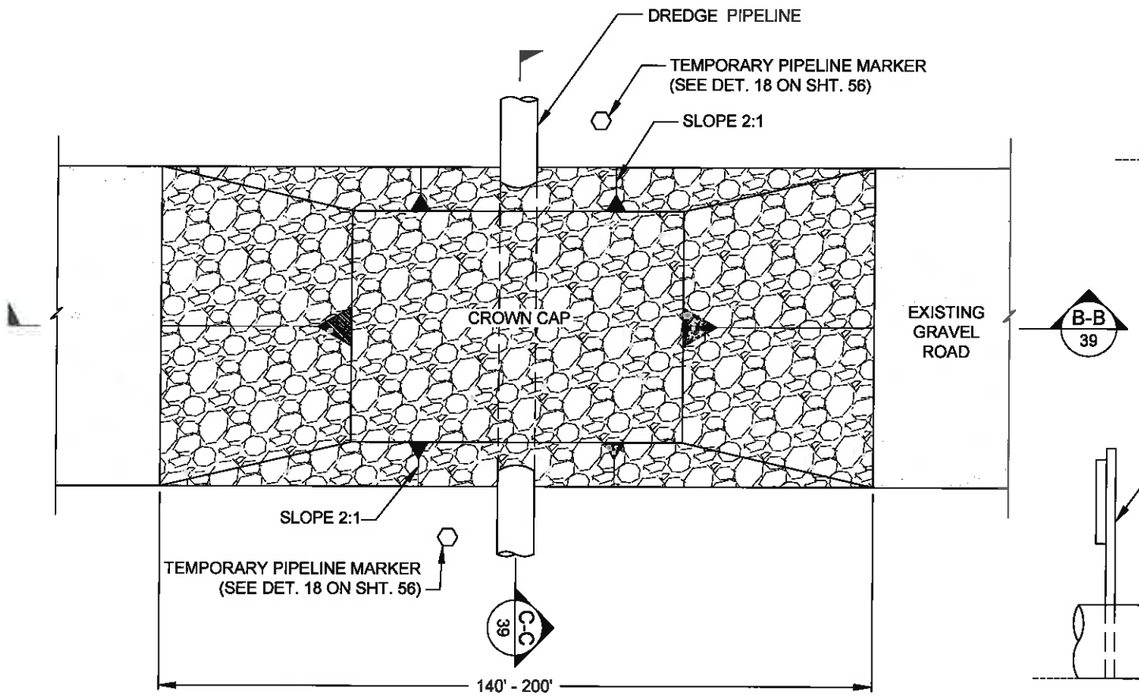
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

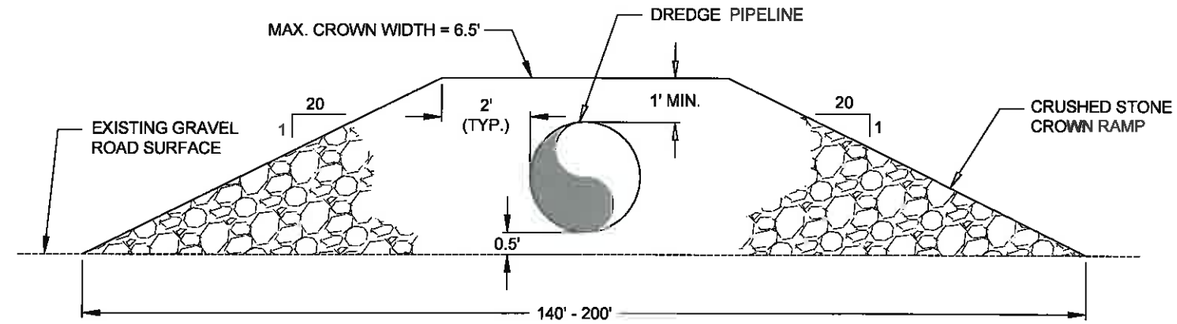
MISSISSIPPI RIVER LEVEE CROSSING DETAIL

DATE: MARCH 8, 2013

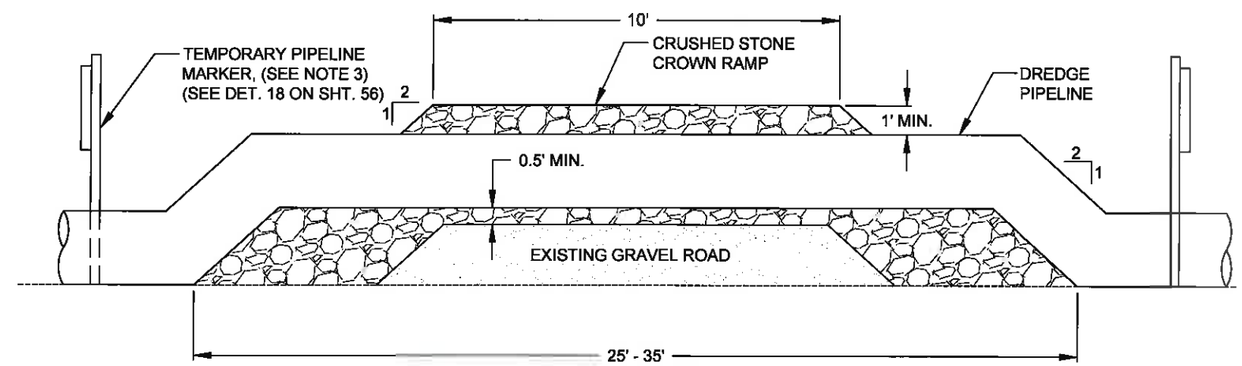
SHEET 38 OF 81




**PLAN VIEW**




**SECTION B-B**




**SECTION C-C**

4
11
## MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL
NOT TO SCALE

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 LA DOTD 2006 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 DREDGE PIPELINE.LOCATION TO BE APPROVED BY ENGINEER AND INCLUDED IN WORK PLAN.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

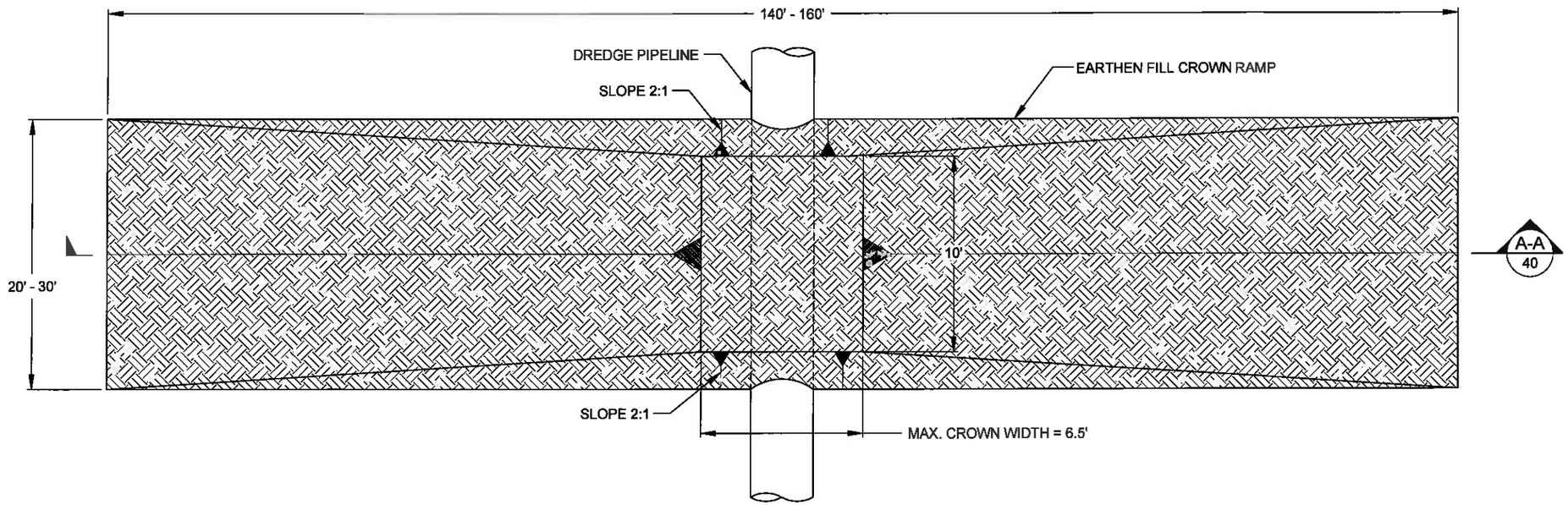
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

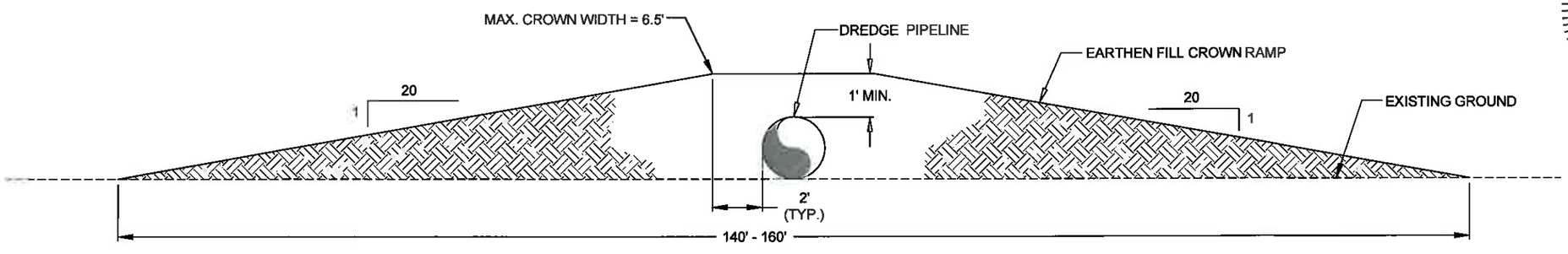
MISSISSIPPI RIVER LEVEE INSPECTION ROAD CROSSING DETAIL

DATE: MARCH 8, 2013

SHEET 39 OF 81




**PLAN VIEW**




**SECTION A-A**

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

5/10 CATTLE CROSSING DETAIL
NOT TO SCALE

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

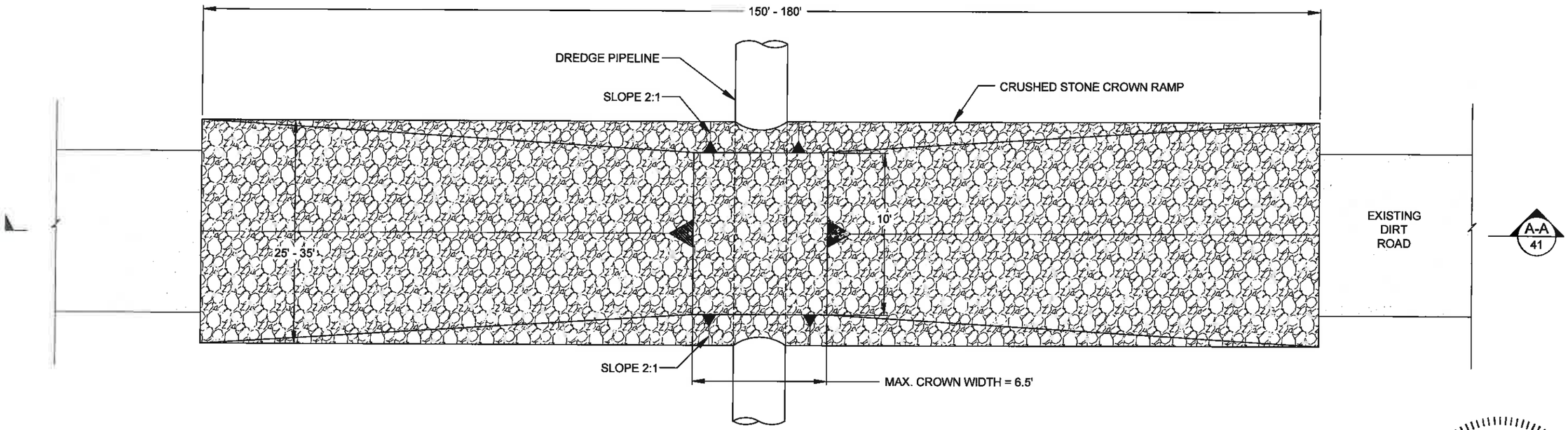
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

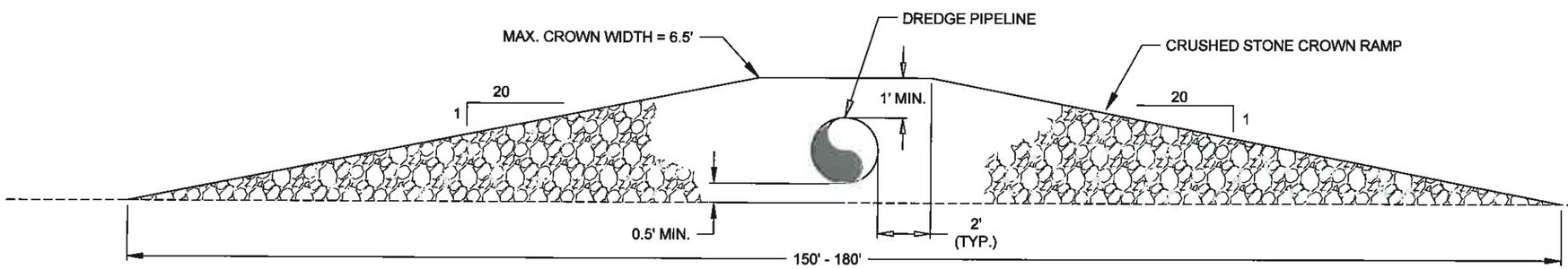
CATTLE CROSSING DETAIL

DATE: MARCH 8, 2013

SHEET 40 OF 81




**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 LA DOTD 2006 SPECIFICATION 1003.04 (a).

6/10 DIRT ROAD CROSSING DETAIL
NOT TO SCALE

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

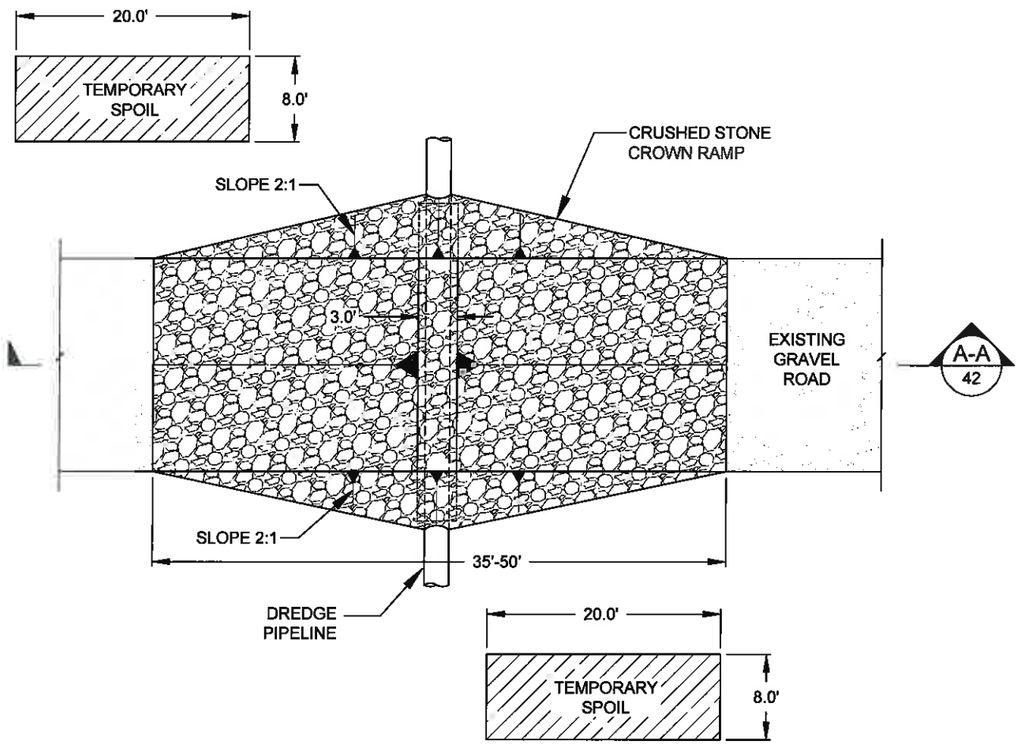
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

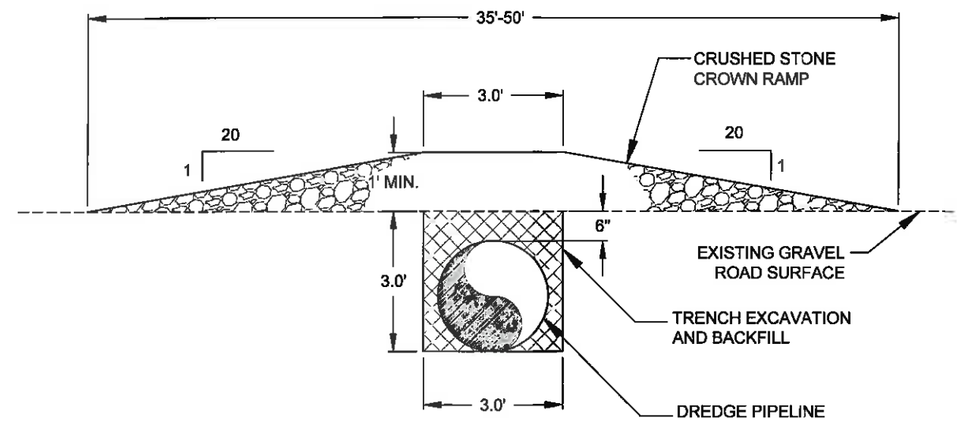
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

DIRT ROAD CROSSING DETAIL
DATE: MARCH 8, 2013
SHEET 41 OF 81




**PLAN VIEW**




**SECTION A-A**

7/10 GRAVEL ROAD CROSSING DETAIL
NOT TO SCALE

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

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 LA DOTD 2006 SPECIFICATION 1003.04 (a).

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

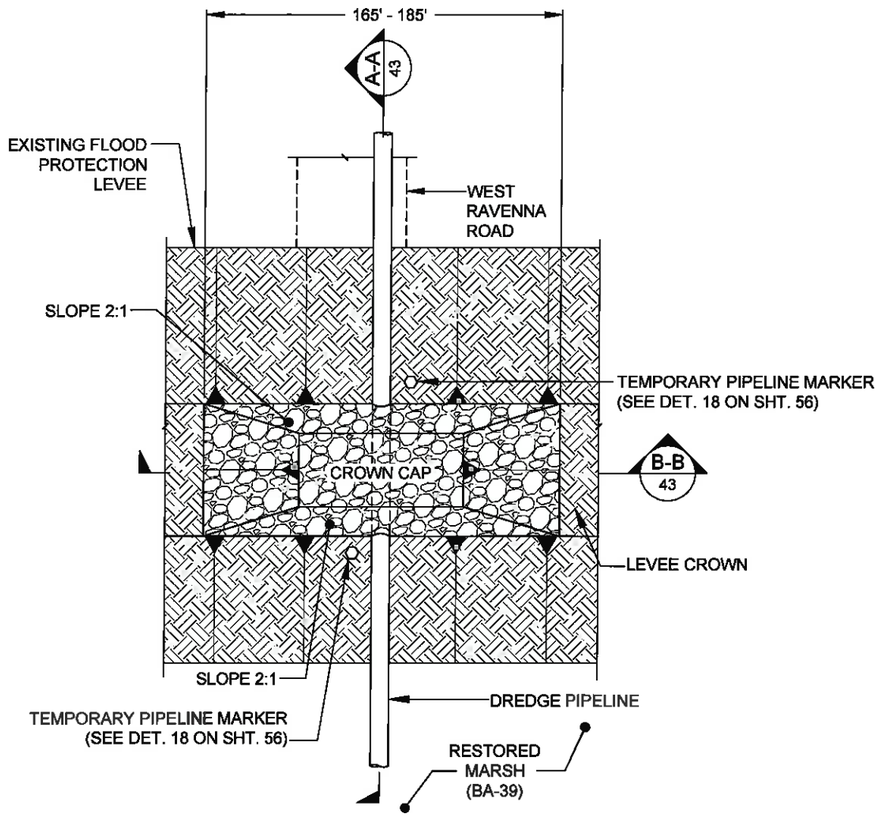
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

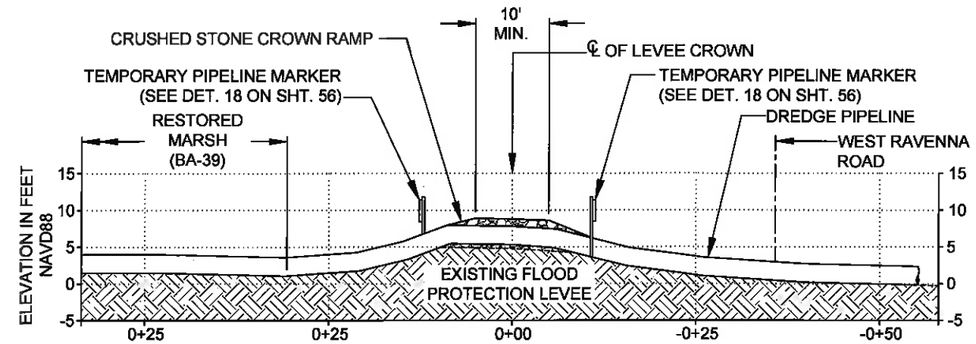
MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

GRAVEL ROAD CROSSING DETAIL
DATE: MARCH 8, 2013
SHEET 42 OF 81



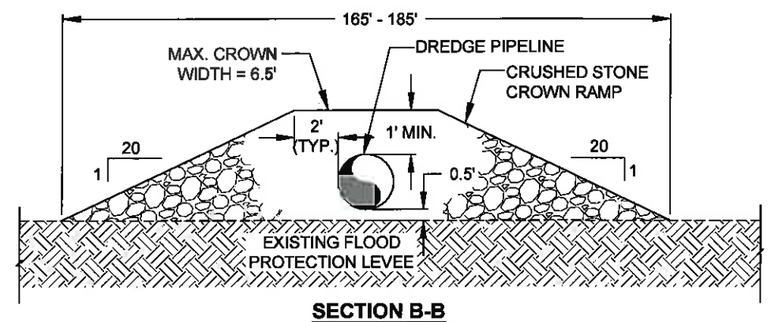

**PLAN VIEW**

SCALE: 1" = 20'




**SECTION A-A**

SCALE: 1" = 20'




**SECTION B-B**

NOT TO SCALE

NOTES:

1. 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 LA DOTD 2006 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. LOCATION TO BE APPROVED BY ENGINEER AND INCLUDED IN WORK PLAN.
3. EXISTING GRADE BASED ON JANUARY 2012 TBS SURVEY.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

8/12 FLOOD PROTECTION LEVEE CROSSING DETAIL

NOT TO SCALE

10

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

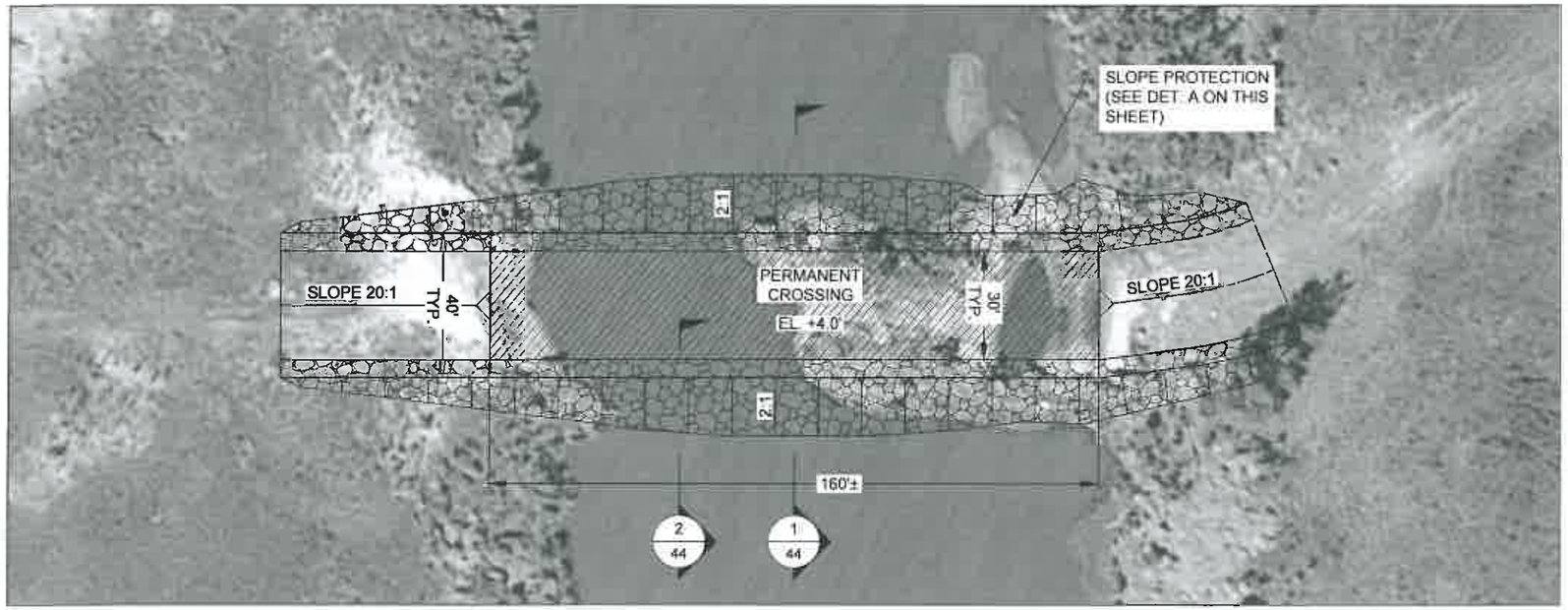
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

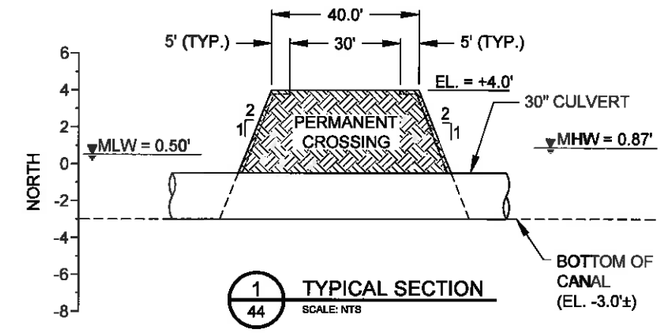
FLOOD PROTECTION LEVEE CROSSING DETAIL

DATE: MARCH 8, 2013

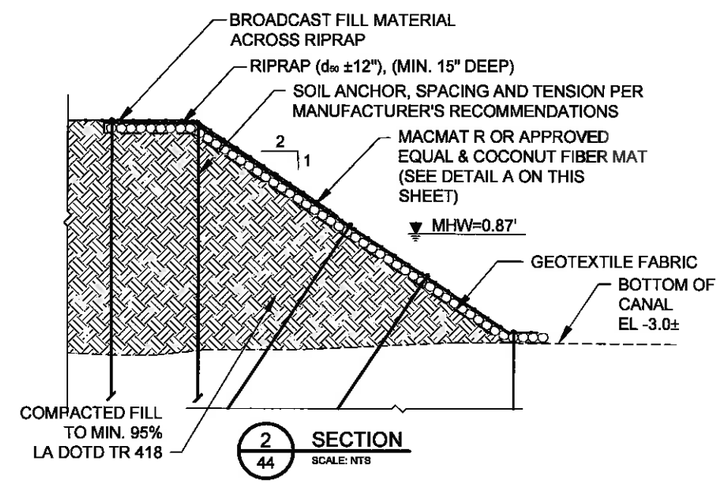
SHEET 43 OF 81



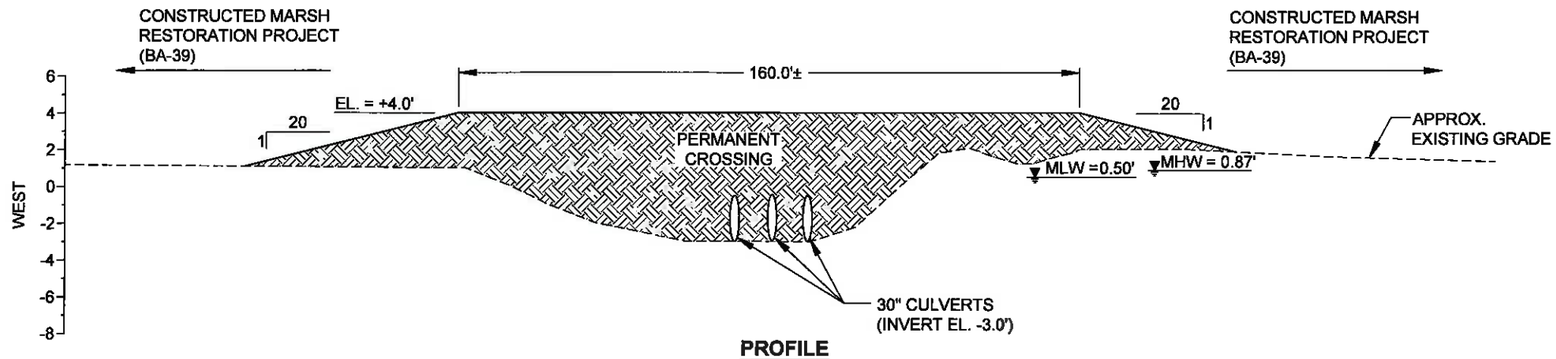

**PLAN**




1/44 **TYPICAL SECTION**
SCALE: NTS

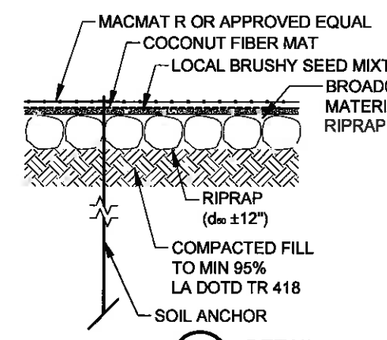



2/44 **SECTION**
SCALE: NTS




**PROFILE**

9/12 **PERMANENT CANAL CROSSING DETAIL**
SCALE: HOR. 1" = 40'
VER. 1" = 8'




A/44 **DETAIL**
SCALE: NTS

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

8' 4' 0' 8' 16'
VERTICAL SCALE
40' 20' 0' 40' 80'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

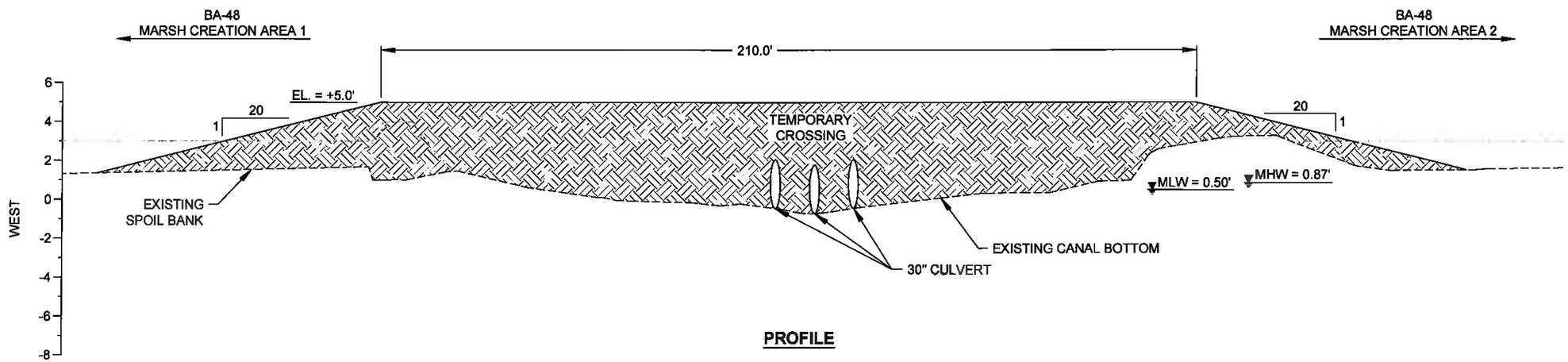
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

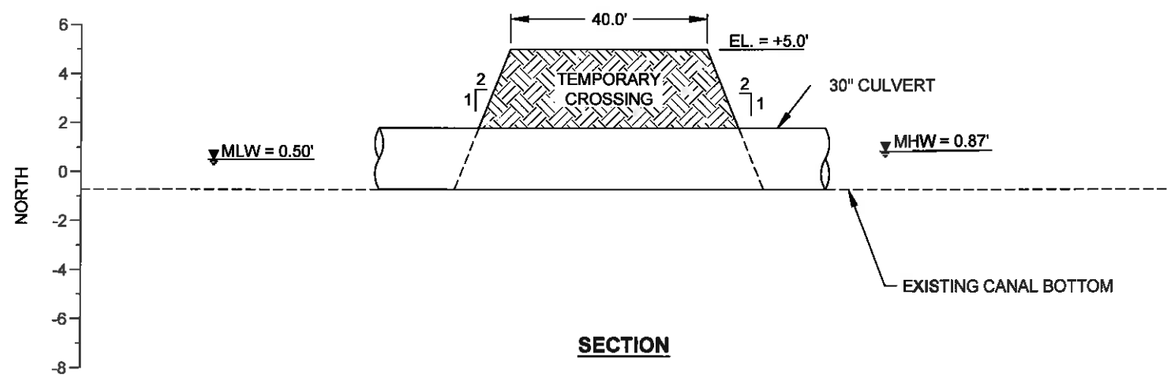
PERMANENT CANAL CROSSING DETAIL

DATE: MARCH 8, 2013

SHEET 44 OF 81




**PROFILE**




**SECTION**

10/15 19 **TEMPORARY CANAL CROSSING DETAIL**

SCALE: HOR. 1" = 50'
VER. 1" = 10'

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

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

10' 5' 0' 10' 20'
VERTICAL SCALE

50' 25' 0' 50' 100'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

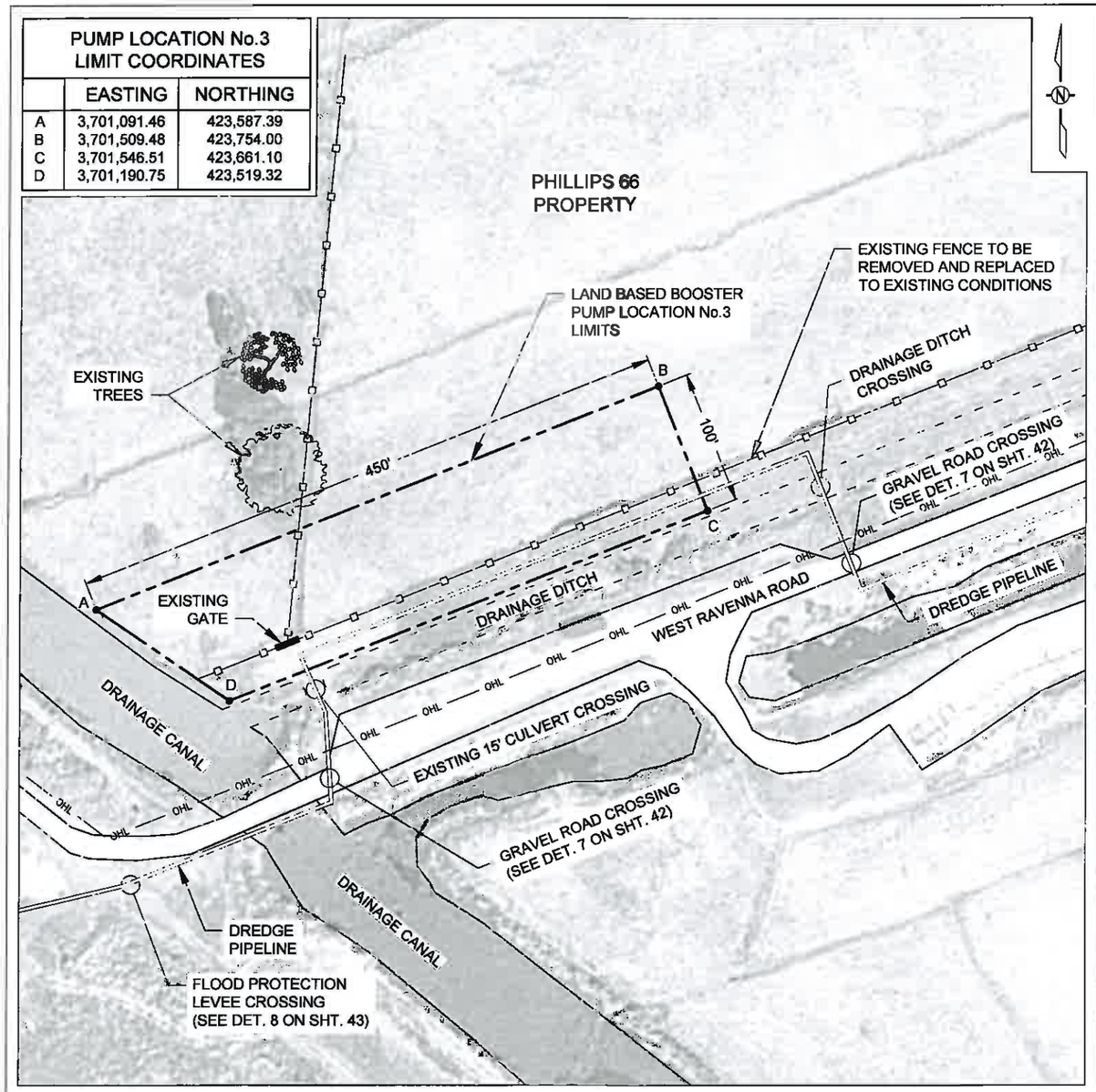
COASTAL PROTECTION AND RESTORATION AUTHORITY
450 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

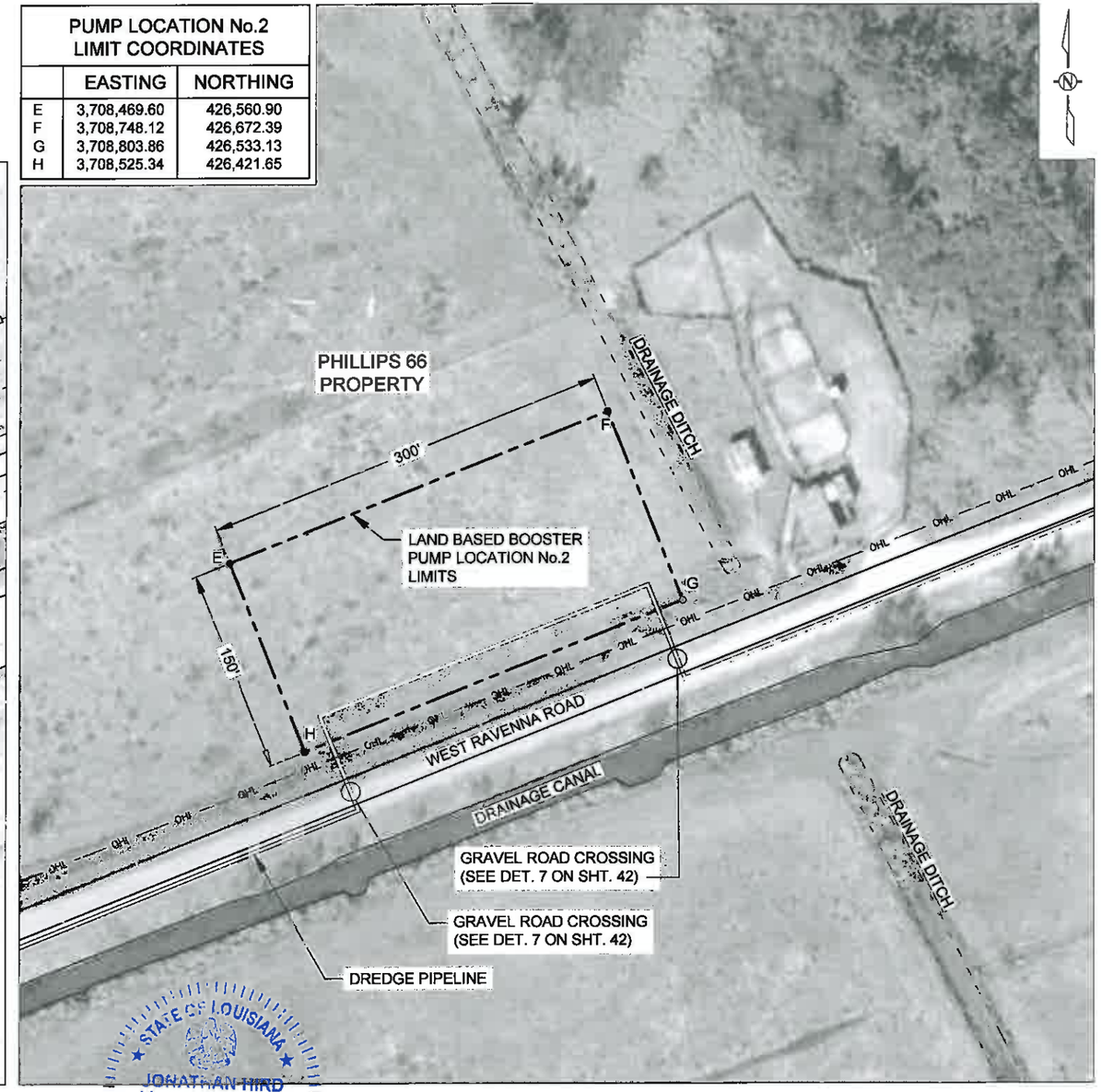
TEMPORARY CANAL CROSSING DETAIL
DATE: MARCH 8, 2013
SHEET 45 OF 81

| PUMP LOCATION No.3 LIMIT COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| A | 3,701,091.46 | 423,587.39 |
| B | 3,701,509.48 | 423,754.00 |
| C | 3,701,546.51 | 423,661.10 |
| D | 3,701,190.75 | 423,519.32 |




11/10 PUMP LOCATION No.3 DETAIL
SCALE: 1" = 60'

| PUMP LOCATION No.2 LIMIT COORDINATES | | |
|---|---|---|
| | EASTING | NORTHING |
| E | 3,708,469.60 | 426,560.90 |
| F | 3,708,748.12 | 426,672.39 |
| G | 3,708,803.86 | 426,533.13 |
| H | 3,708,525.34 | 426,421.65 |




12/10 PUMP LOCATION No. 2 DETAIL
SCALE: 1" = 60'

NOTES:
1. EXISTING DRAINAGE MUST NOT BE IMPEDED.
2. THE LAND BASED BOOSTER LOCATION SHALL BE SUBMITTED IN THE CONTRACTOR'S WORK PLAN FOR APPROVAL.
3. OVERHEAD POWER LINE INFORMATION SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY POWER LINE LOCATION(S) PRIOR TO BEGINNING CONSTRUCTION.

60' 0' 60' 120'
HORIZONTAL SCALE

STATE OF LOUISIANA
JONATHAN THIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Jonathan Third
8/12/2013

FINAL BID SET

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

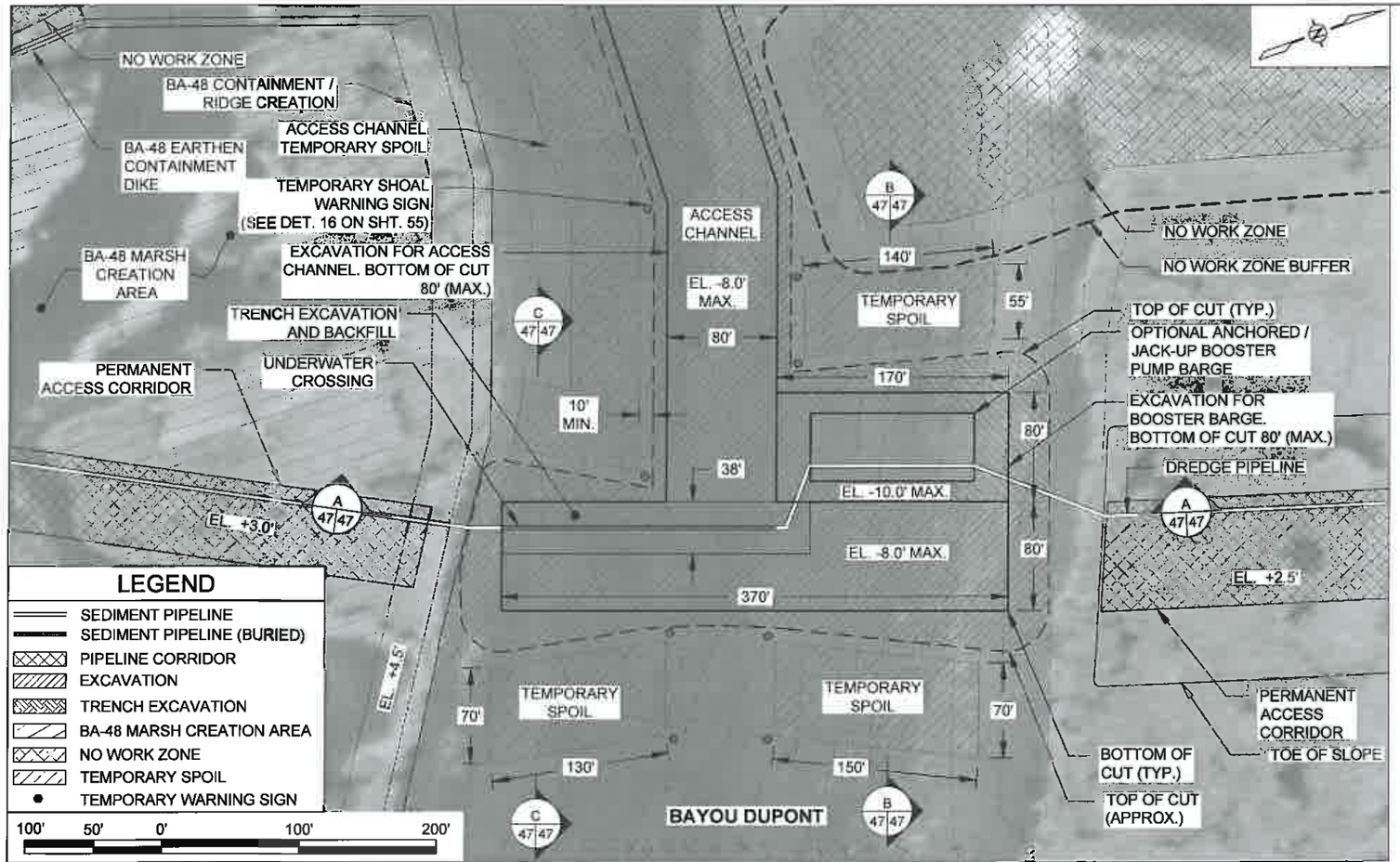
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

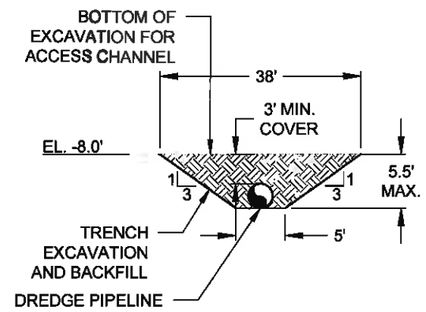
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

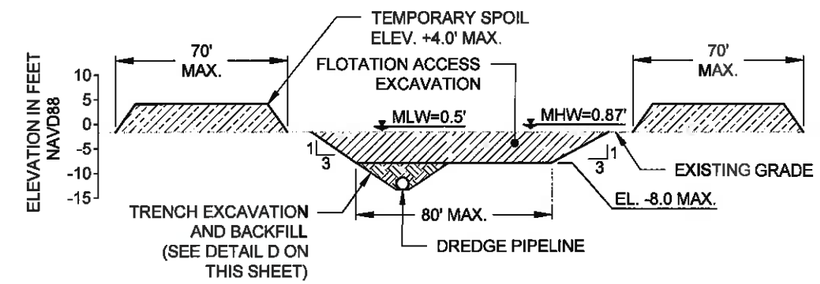
PROPOSED LAND BASED BOOSTER PUMP LOCATION DETAILS
DATE: MARCH 8, 2013
SHEET 46 OF 81



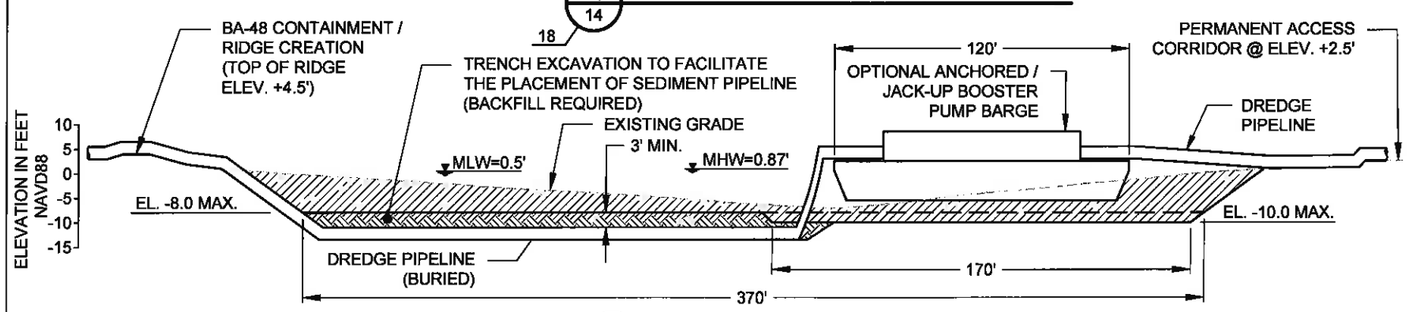

13/14 BAYOU DUPONT CROSSING DETAIL



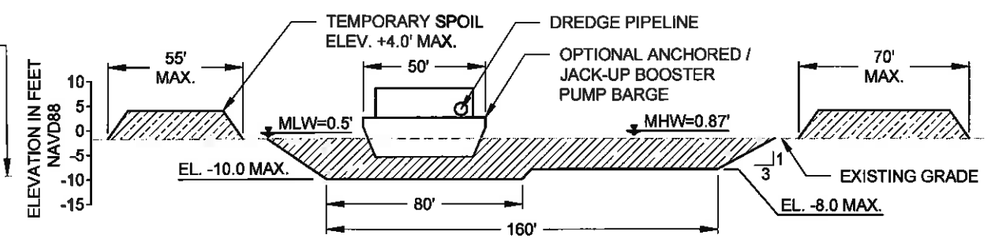

D/47 TRENCH DETAIL
N.T.S.




C/47 CROSS SECTION




A/46 PROFILE




B/47 CROSS SECTION

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

FINAL BID SET

60' 30' 0' 60' 120'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

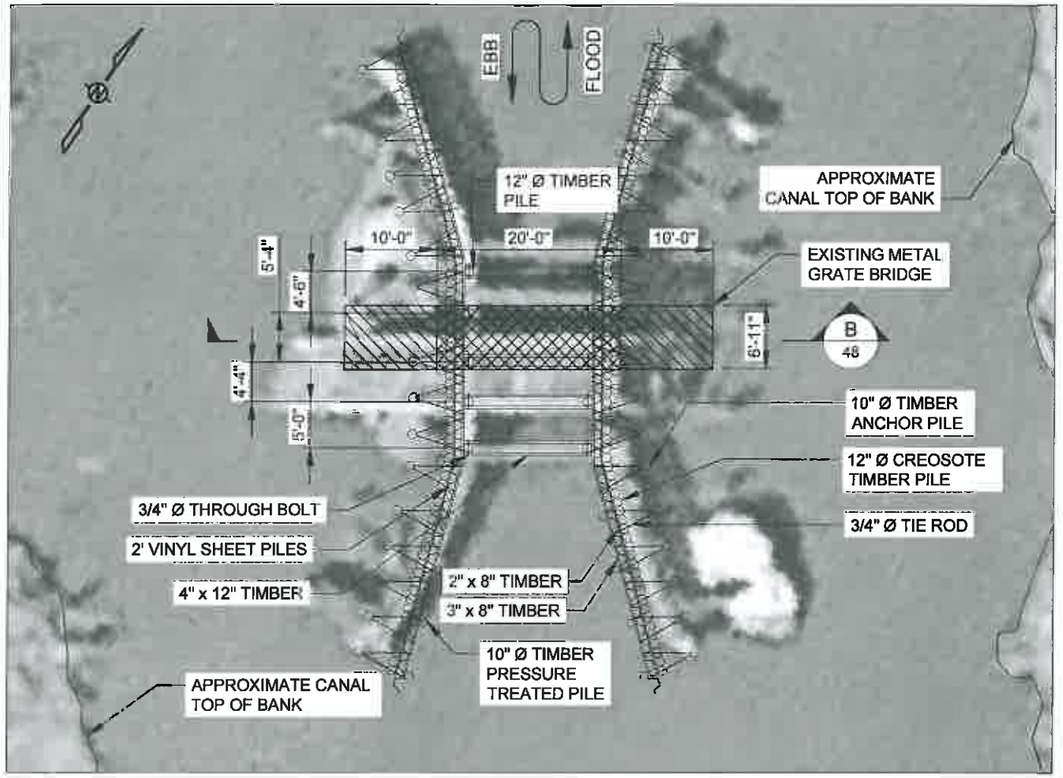
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

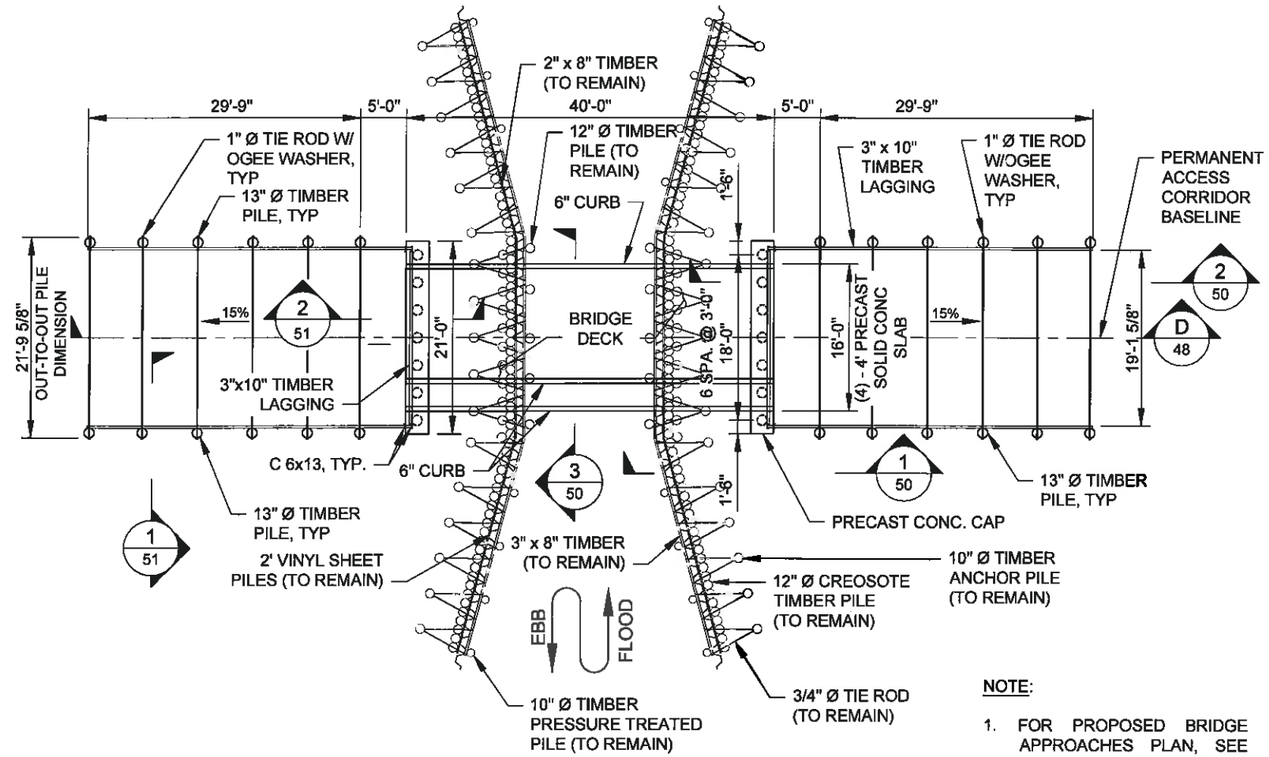
DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

BAYOU DUPONT BOOSTER PUMP SITE TYPICAL DETAILS
DATE: MARCH 8, 2013
SHEET 47 OF 81



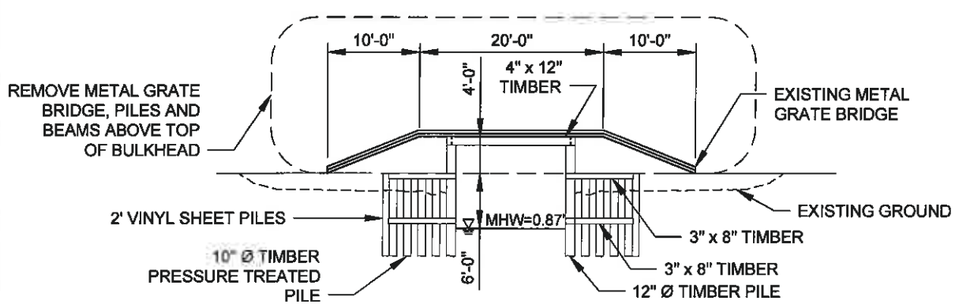

A 12 PLAN EXISTING BRIDGE
SCALE: 1/16" = 1'-0"



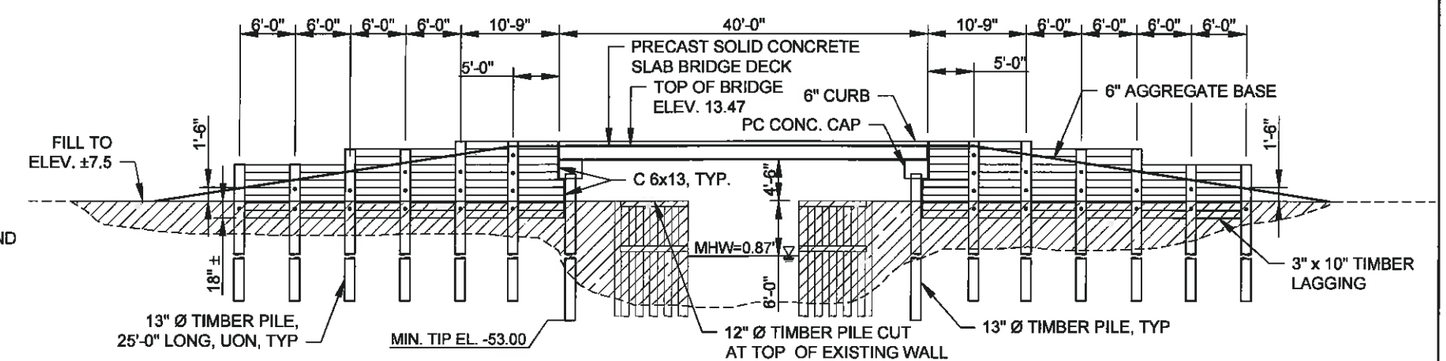

NOTE:

1. FOR PROPOSED BRIDGE APPROACHES PLAN, SEE DETAIL 'A' ON SHEET 49.

C 12 PLAN PROPOSED BRIDGE
SCALE: 1/16" = 1'-0"




B 48 ELEVATION EXISTING BRIDGE
SCALE: 1/16" = 1'-0"




D 48 ELEVATION PROPOSED BRIDGE
SCALE: 1/16" = 1'-0"

**FINAL BID SET**

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

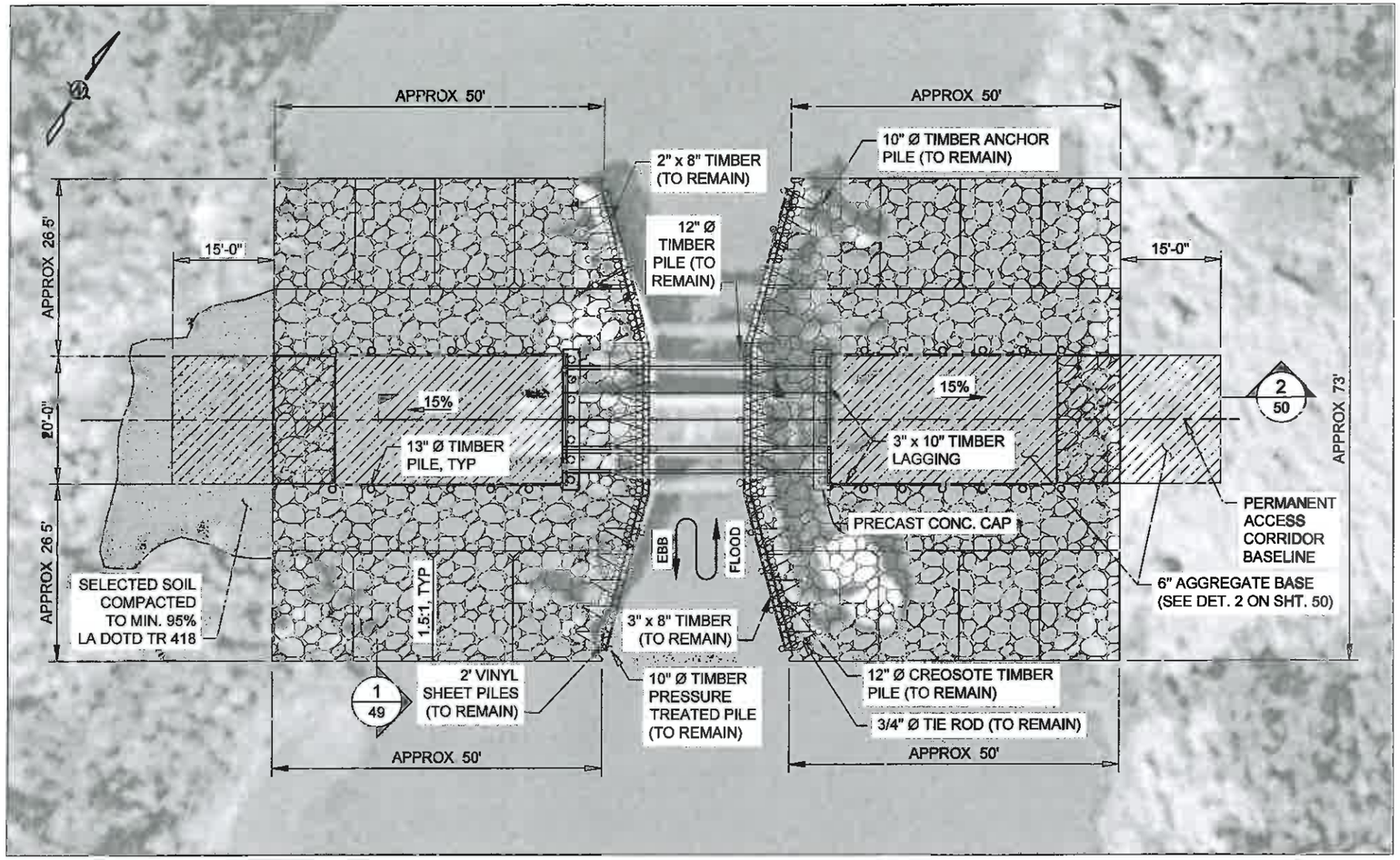
COASTAL PROTECTION AND RESTORATION AUTHORITY
450 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

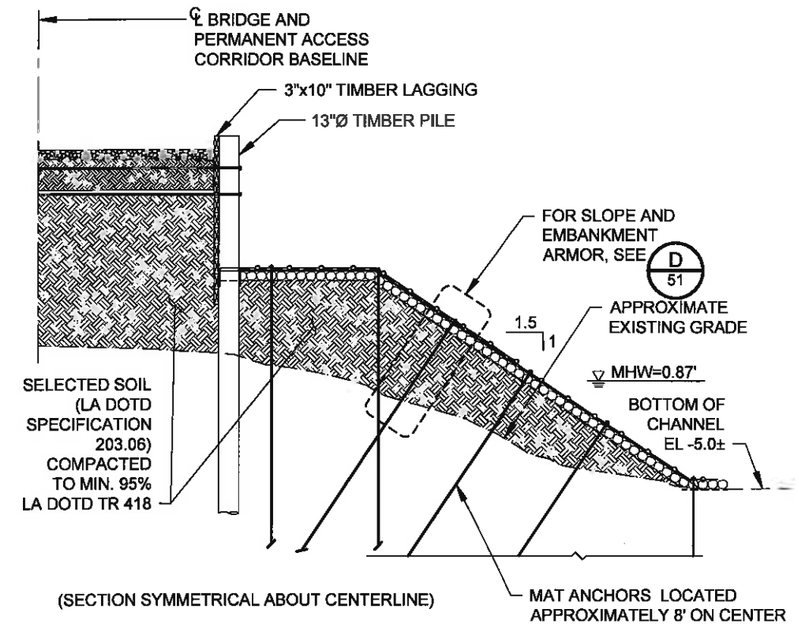
BRIDGE/PIPE CROSSING PLANS
SHEET 1 OF 2

DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E. | SHEET 48 OF 81




A / 48 PLAN PROPOSED BRIDGE APPROACHES
SCALE: 1" = 20'-0"




1 / 49 SECTION THROUGH APPROACH
SCALE: 1/4" = 1'-0"

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. CONTRACTOR SHALL CAREFULLY PLACE RIP-RAP NEAR EXISTING BULKHEAD TO AVOID DAMAGE TO EXISTING TIE-RODS AND PILES.
2. FOR PROPOSED BRIDGE PLAN, SEE DETAIL C SHEET 48.

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

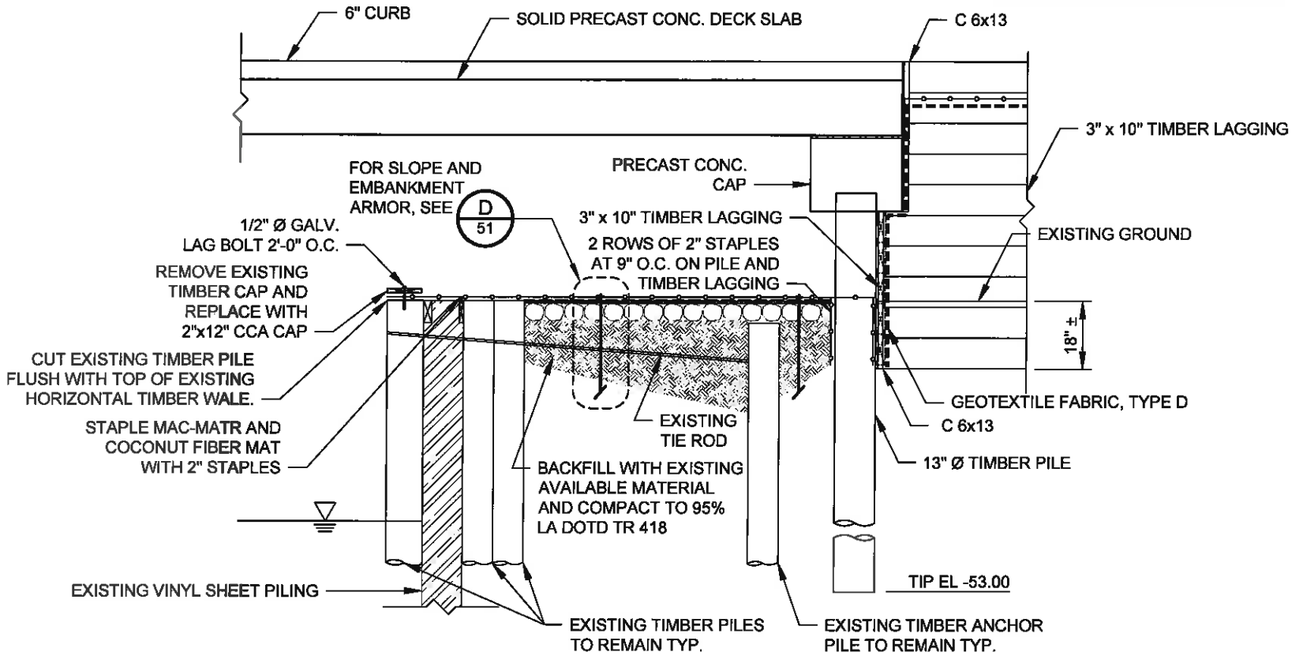
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

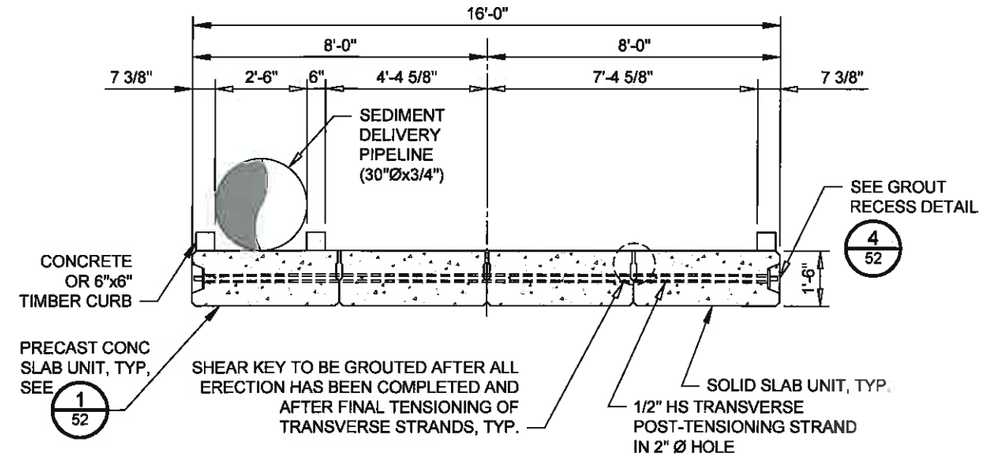
DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

BRIDGE/PIPE CROSSING PLANS SHEET 2 OF 2
DATE: MARCH 8, 2013
SHEET 49 OF 81

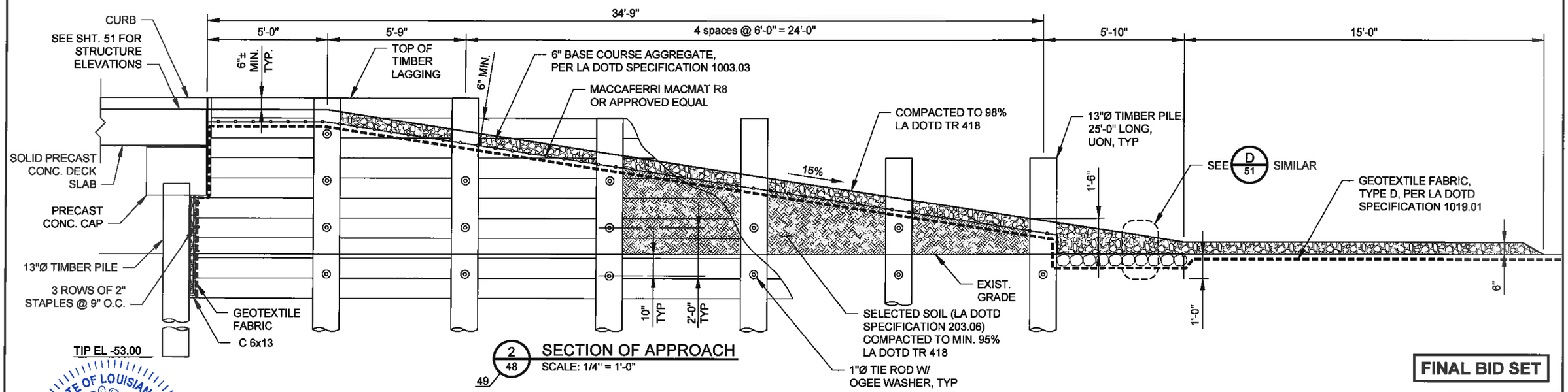



1/48 SECTION AT END BENT
SCALE: 1/4" = 1'-0"




NOTE:
TRANSVERSE POST TENSIONING STRAND SHALL BE STRESSED TO $P_{jack}$ = 40 KIPS PER STRAND MINIMUM.

3/48 TYPICAL SECTION
SCALE: 1/4" = 1'-0"




2/48 SECTION OF APPROACH
SCALE: 1/4" = 1'-0"
49

FINAL BID SET

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Jonathan Hird
03/12/2013

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

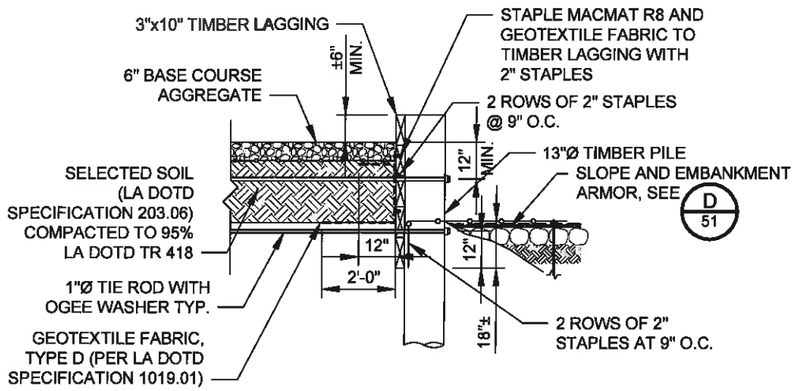
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

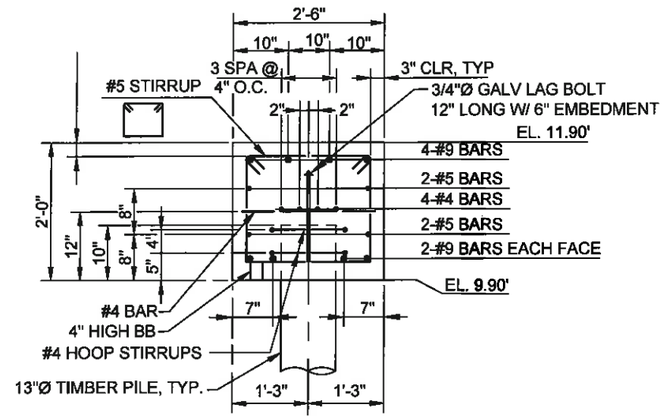
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

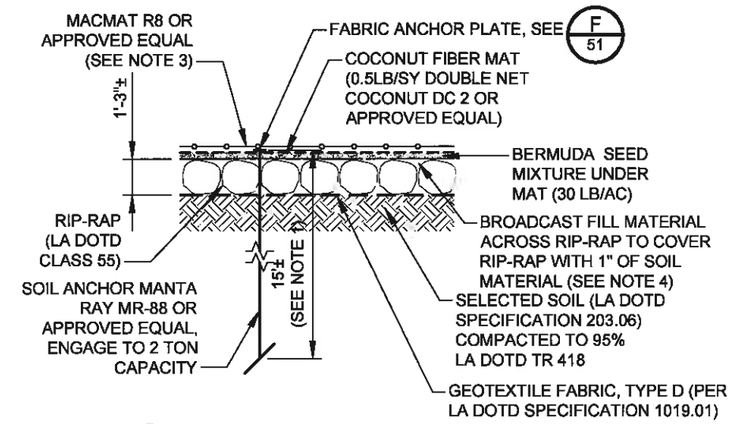
BRIDGE/PIPE CROSSING SECTIONS
DATE: MARCH 8, 2013
SHEET 50 OF 81



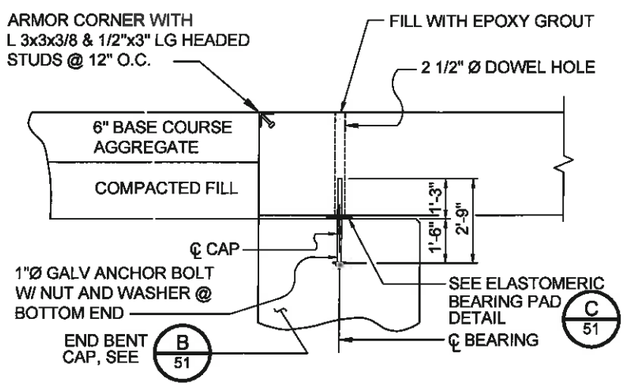

1 / 49 SECTION THROUGH TIMBER LAGGING
SCALE: 1/4" = 1'-0"



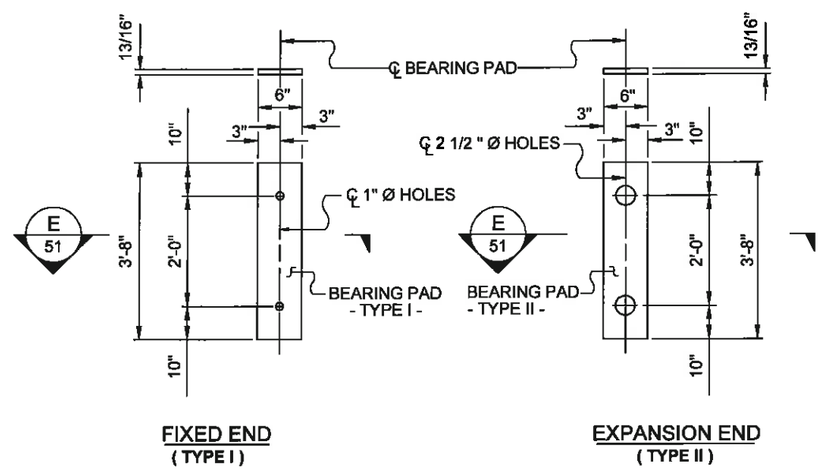

B / 51 SECTION AT END BENT
SCALE: NTS



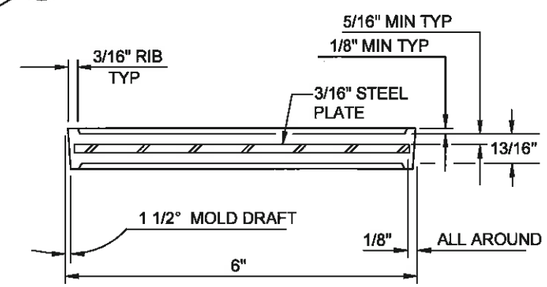

D / 49 SLOPE AND EMBANKMENT ARMOR
SCALE: NTS
50, 51



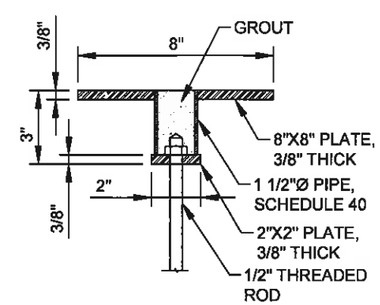

2 / 48 SECTION AT END BENT
SCALE: NTS
52




C / 51 ELASTOMERIC BEARING DETAILS
SCALE: NTS




E / 51 TYPICAL SECTION BEARING PAD
SCALE: NTS




F / 51 FABRIC ANCHOR PLATE DETAIL
SCALE: NTS
(GALVANIZE AFTER FABRICATION)

NOTES:

1. REVISE ANCHOR LENGTH AS REQUIRED TO ACHIEVE 2 TON PULLOUT CAPACITY.
2. ALL SOIL ANCHOR COMPONENTS TO BE GALVANIZED.
3. EDGES OF WIRE MESH TO BE LACED WITH WIRE OR HOG-RINGED PER MANUFACTURER'S RECOMMENDATION.
4. USABLE SOIL PER LA DOTD SPECIFICATION 203.06 UTILIZED FOR RIP-RAP FILL COVER.

**FINAL BID SET**

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

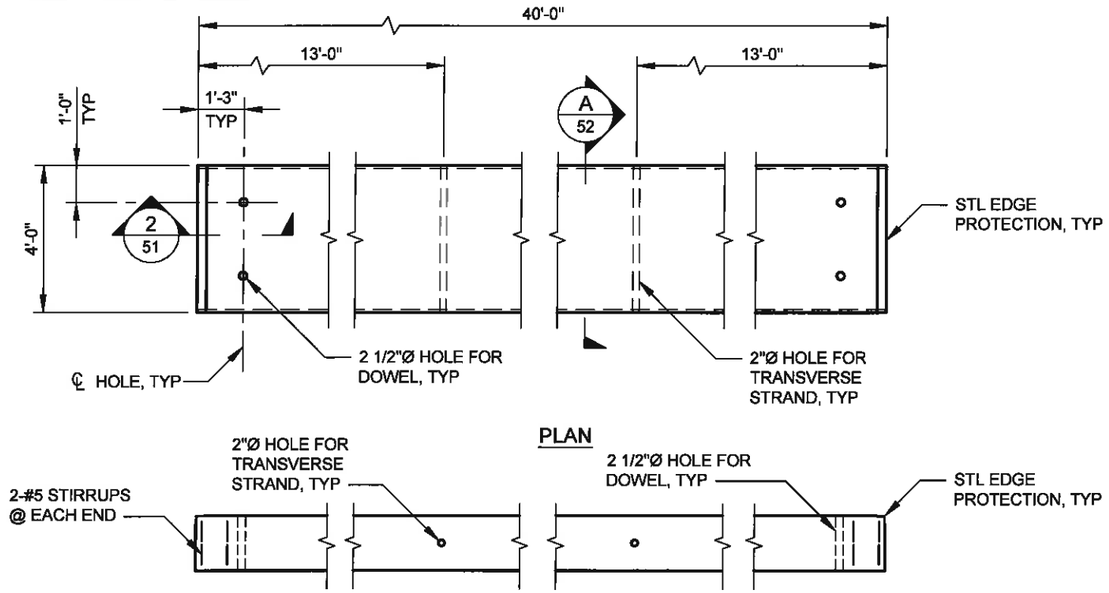
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

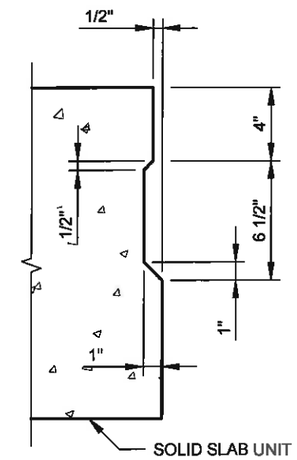
DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

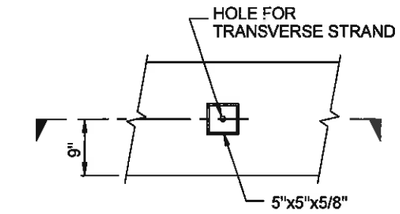
BRIDGE/PIPE CROSSING DETAILS (1 OF 2)
DATE: MARCH 8, 2013
SHEET 51 OF 81



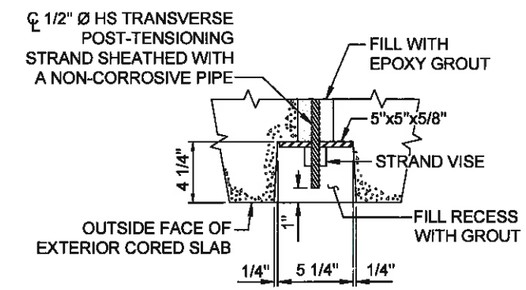

1 / 50 PRECAST CONCRETE SLAB UNIT
SCALE: 1/4" = 1'-0"




2 / 52 SECTION
SCALE: 1 1/2" = 1'-0"

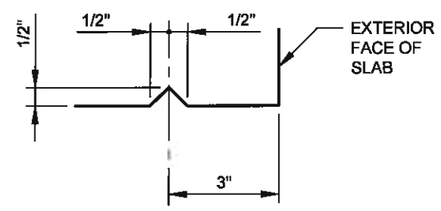



ELEVATION

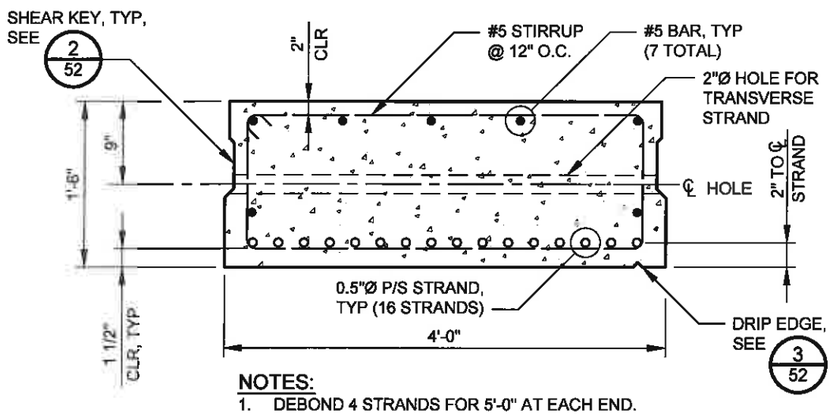



SECTION

4 / 50 GROUT RECESS DETAIL
SCALE: 1/4" = 1'-0"




3 / 52 DRIP EDGE
NOT TO SCALE




NOTES:
1. DEBOND 4 STRANDS FOR 5'-0" AT EACH END.
2. REPLACE SHEAR KEY WITH GROUT RECESS ON OUTER SIDE OF EACH EXTERIOR SECTION.
3. DRIP EDGE ONLY REQUIRED ON OUTER SIDE OF EACH EXTERIOR SECTION.

A / 52 SECTION
SCALE: 3/4" = 1'-0"

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Jonathan Hird
03/12/2013

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

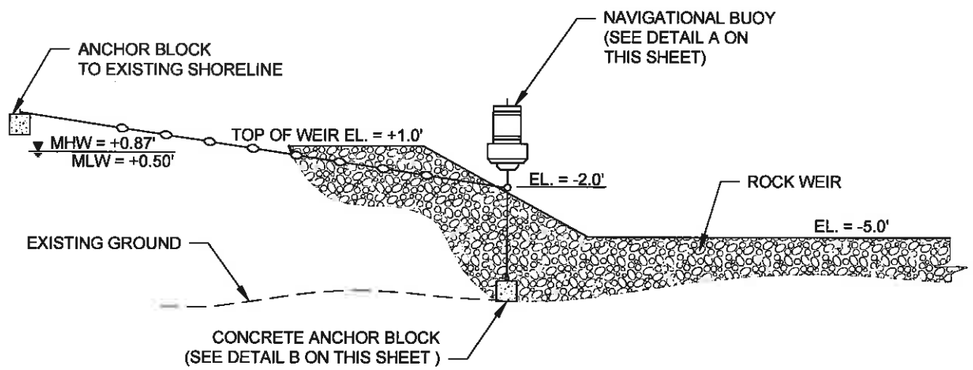
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

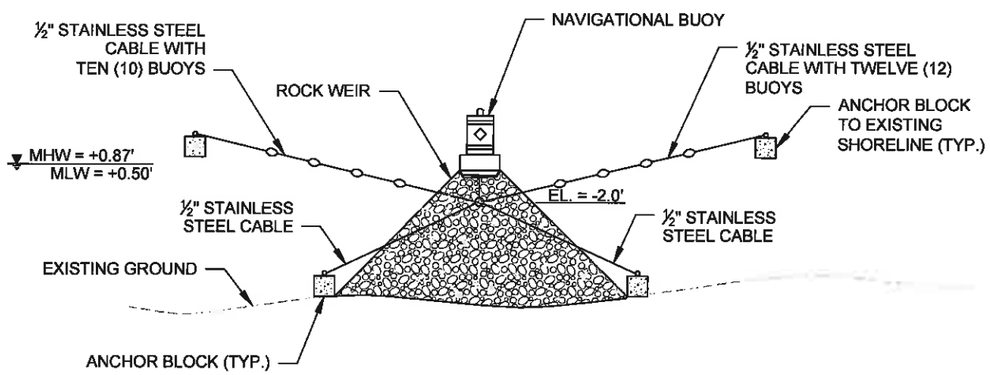
DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

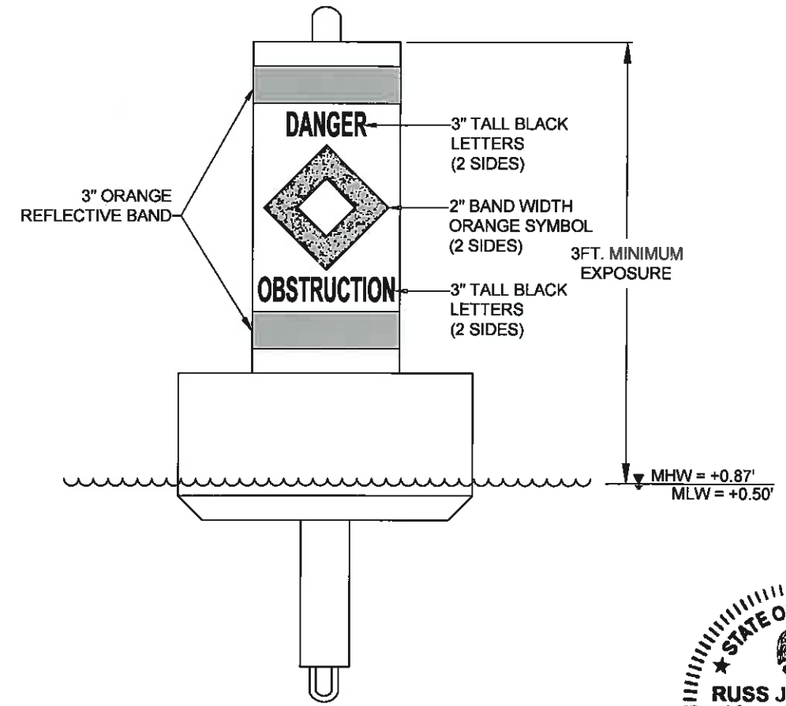
BRIDGE/PIPE CROSSING DETAILS (2 OF 2)
DATE: MARCH 8, 2013
SHEET 52 OF 81



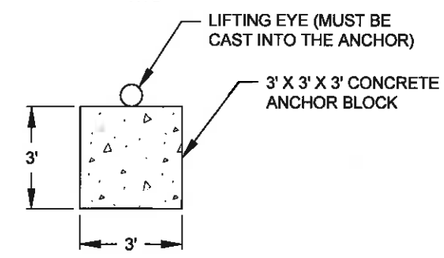

ELEVATION - BUOY DETAILS
NTS




SECTION - BUOY DETAILS
NTS




DETAIL A
NAVIGATIONAL BUOY
NTS




DETAIL B
CONCRETE ANCHOR BLOCK
NTS

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

14
34
BOUY AND CONCRETE ANCHOR BLOCK DETAILS
NOT TO SCALE

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

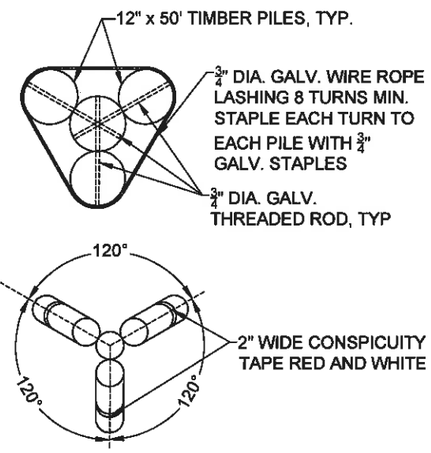
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

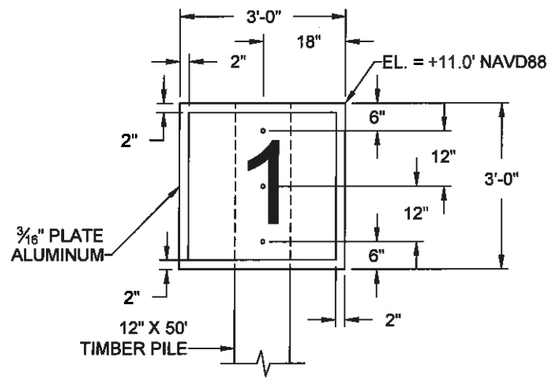
BUOY AND CONCRETE ANCHOR BLOCK DETAILS
DATE: MARCH 8, 2013
SHEET 53 OF 81

NOTES:
1. ALL 3/4 " DIA. ALL THREAD TIE RODS SHALL BE SECURED BY NOTCHED IN PLACE WITH GALVANIZED OGEE WASHERS AND GALVANIZED NUTS.
2. BOLTS AND NUTS SHOULD CONFORM TO ASTM A307 GALV.
3. WASHERS SHALL BE GALVANIZED OGEE CONFORMING TO ANSI B18.22.1
4. GALVANIZED ROPE SHALL BE IN ACCORDANCE WITH ASTM A641.
5. THE 3/4 " DIA. GALVANIZED THREADED ROD SHALL BE A MINIMUM OF 6" BELOW TOP OF BATTER PILE AND AND 3" VERTICAL CLEARANCE FROM ADJACENT TIE ROD.
6. TIMBER PILING SHALL BE 50 FEET IN LENGTH WITH A NOMINAL 12-INCH DIA. AND CONFORM WITH REQUIREMENTS OF ASTM D25.
7. ALL TIMBER PILES SHALL BE CCA TREATED IN ACCORDANCE WITH AWPA USE CATEGORY 5C. FIELD TREAT CUTS, BEVELS, AND NOTCHES IN ACCORDANCE WITH AWPA M4, AND APPROPRIATE MSDS AND CIS.

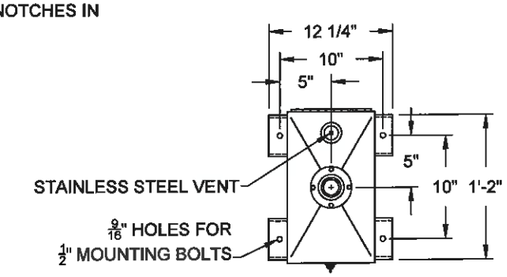
NOTES:
1. NOTCH ROUND TIMBER PILE FOR FLUSH ALUMINUM MOUNTING BRACKET ATTACHMENT. FIELD COAT EXPOSED PORTIONS OF NOTCH IN ACCORDANCE WITH AWPA M4.
2. HOLES IN ALUMINUM SHALL BE 1/16" OVERSIZE AND HOLES IN ROUND TIMBER PILE SHALL BE 1/8" OVERSIZE FOR THEIR CORRESPONDING BOLTS.



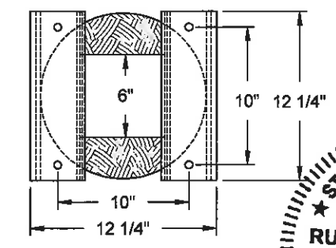

TOP VIEW



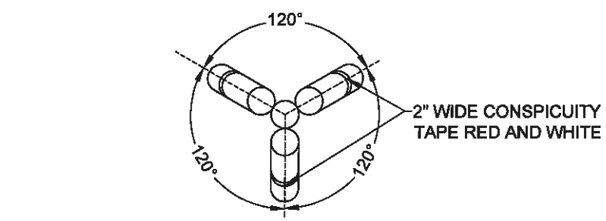

DAYMARK NAVIGATION AID
PORT SIDE - ODD NUMBER



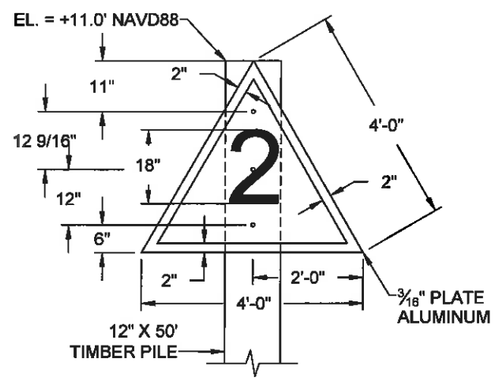

SECTION-PLAN
A-A



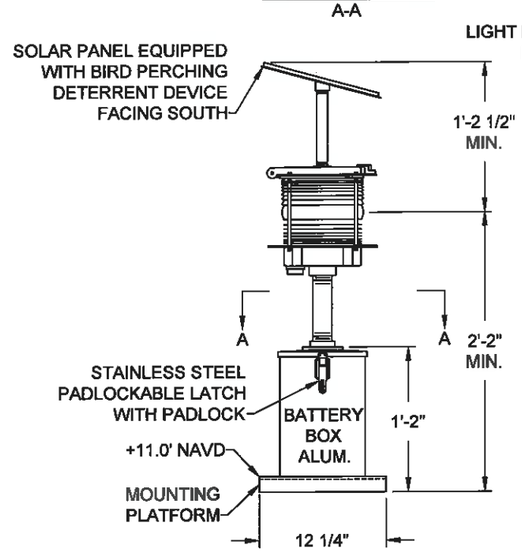

PLAN



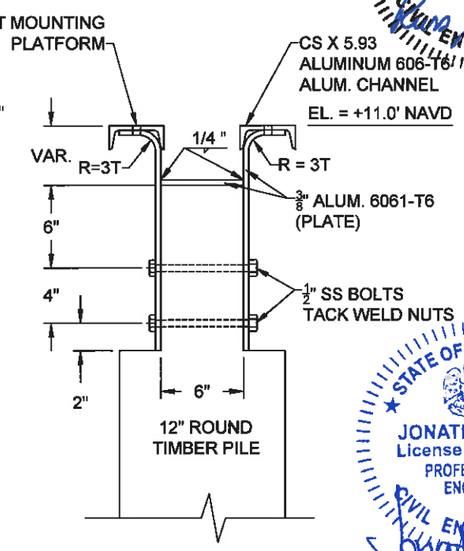

ELEVATION VIEW




DAYMARK NAVIGATION AID
STARBOARD SIDE - EVEN NUMBER




ELEVATION
2.5 SEC. DAYLIGHT ALUM.




ELEVATION
MOUNTING DETAILS-2.5 SEC. DAYLIGHT ALUM.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
08/12/2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
08/12/2013

NOTES:
1. SEE SHEET 34 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.

15/34 NAVIGATIONAL AID DETAILS
NOT TO SCALE

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

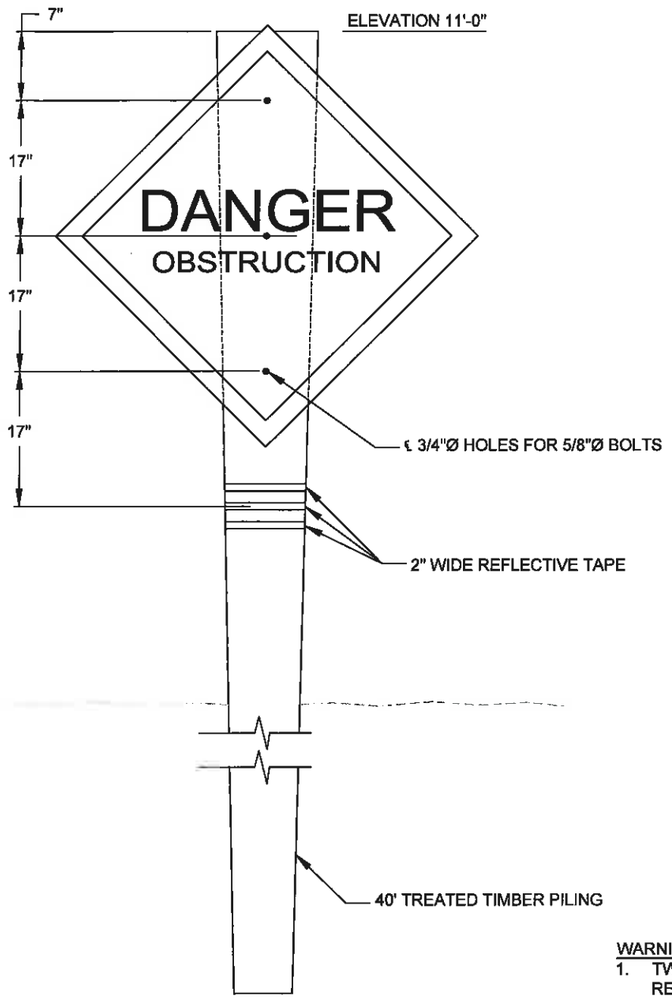
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

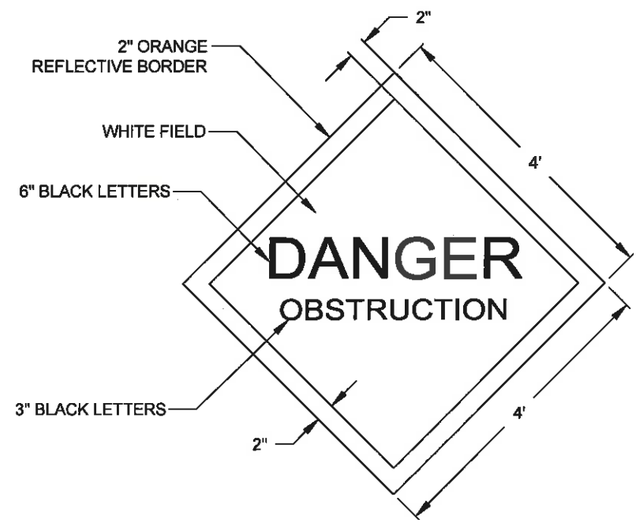
DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

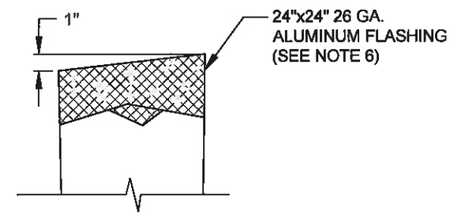
PILE CLUSTER AND NAVIGATIONAL AID DETAILS
DATE: MARCH 8, 2013
SHEET 54 OF 81



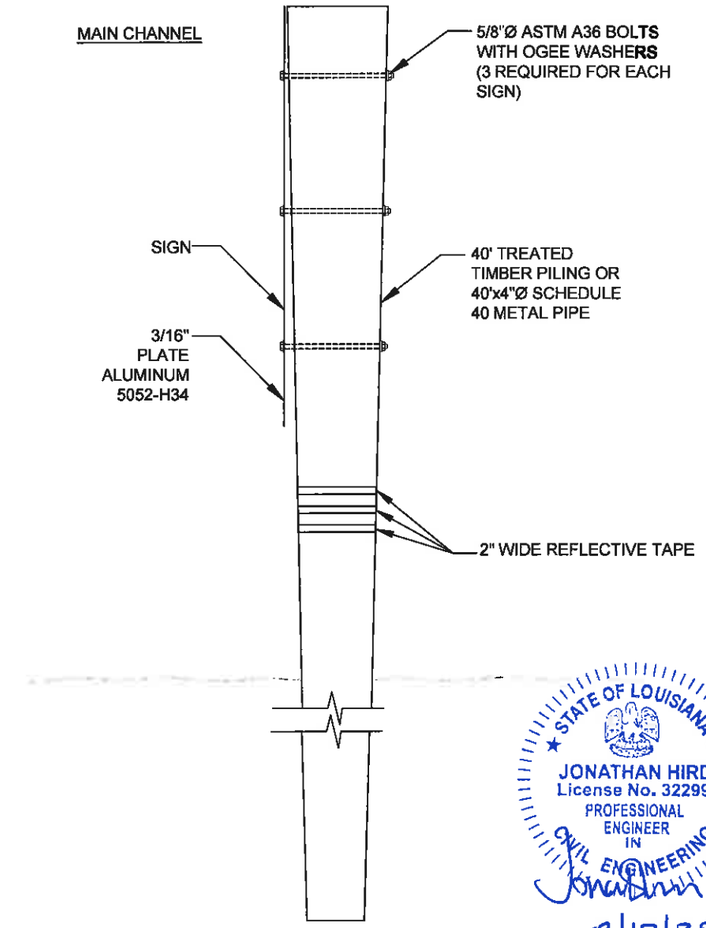

WARNING SIGN ELEVATION




SIGN DETAIL




TYPICAL TIMBER PILE CAP




WARNING SIGN SIDE DETAIL

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

WARNING SIGN NOTES

1. TWENTY-SEVEN (27) TEMPORARY WARNING SIGNS, INCLUDING TIMBER PILES, SHALL BE INSTALLED AT LOCATIONS SHOWN ON SHEETS 32 AND 46. THE 2" BORDER ON THE WARNING SIGN WILL BE REFLECTIVE MATERIAL OF ORANGE COLOR. THE LETTERING FIELD WE 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 DE DOWNLOADED AT http://www.access.gpo.gov/nara/cfr/waisidx_0233cfr330_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 AWPA P2 TO A MINIMUM RETENTION OF 20 PCF AND CAPPED ACCORDING TO LA DOTD SPECIFICATION 812.06.
5. TIMBER PILINGS 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.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
3.12.2013

16 / 32 — 47

## TEMPORARY SHOAL WARNING SIGN DETAILS

NOT TO SCALE

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

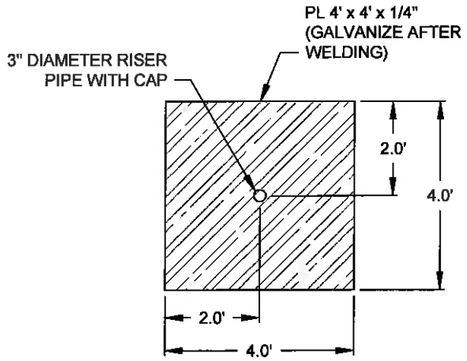
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

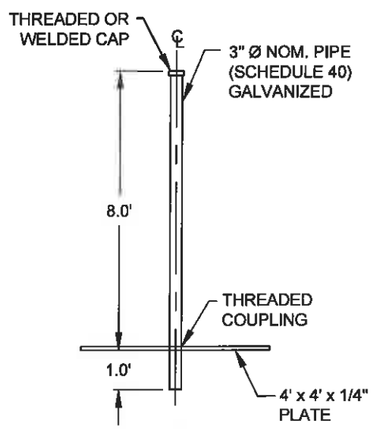
TEMPORARY SHOAL WARNING SIGN DETAILS

DATE: MARCH 8, 2013

SHEET 55 OF 81




**PLAN**




**ELEVATION**

## 17/13 SETTLEMENT PLATE DETAILS
NOT TO SCALE

SETTLEMENT PLATE NOTES:

1. SETTLEMENT PLATES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
2. SETTLEMENT PLATES SHALL BE PLACED NOT TO IMPEDE WORK. LOCATION AND ELEVATION WILL BE RECORDED DURING CONSTRUCTION AND AS-BUILT SURVEY PER TS-3.
3. FOR INSTALLATION METHOD REFER TO TS-10 OF THE PROJECT SPECIFICATIONS.
4. SEE SHEETS 13 THROUGH 21 FOR SETTLEMENT PLATE LOCATIONS.

## 18/38 TEMPORARY PIPELINE MARKER DETAIL
39, 43
NOT TO SCALE

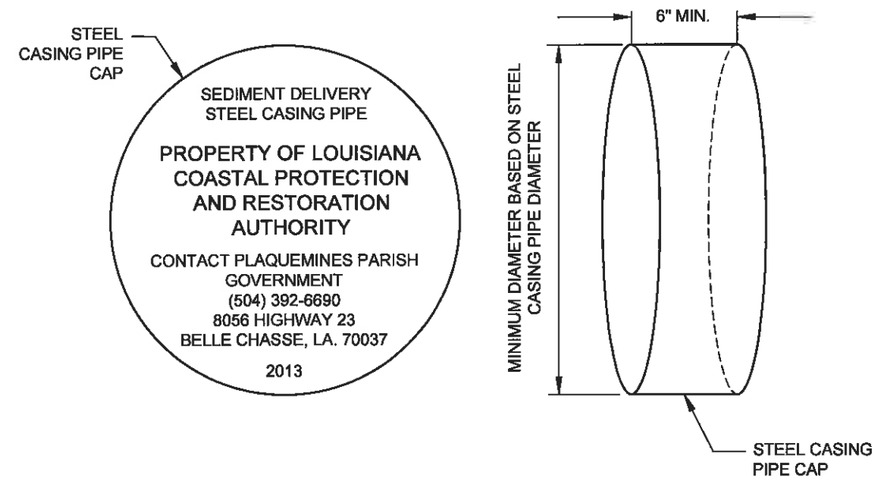
TEMPORARY PIPELINE MARKER NOTES:

1. MARKERS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH LA DOTD 2006 STANDARD SPECIFICATION 729.
2. PROPOSED DRAWING SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN THE WORK PLAN PRIOR TO CONSTRUCTION.
3. MARKERS SHALL BE PLACED PRIOR TO DREDGE PIPELINE INSTALLATION AND REMOVED FOLLOWING THE DREDGE PIPELINE REMOVAL.
4. SEE THE SPECIFICATIONS FOR TEMPORARY PIPELINE MARKER DETAILS.

## 19/36 CASING PIPE MARKER DETAIL
37
NOT TO SCALE

CASING PIPE MARKER NOTES:

1. EXISTING MARKERS ON EACH SIDE OF **LOUISIANA HIGHWAY 23** AT EACH END OF THE CASING PIPES SHALL BE TEMPORARILY REMOVED AND RE-INSTALLED IN ACCORDANCE WITH LADOTD 2006 STANDARD SPECIFICATION 729.
2. PROPOSED DRAWING SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN THE WORK PLAN PRIOR TO CONSTRUCTION.
3. MARKERS SHALL BE REPLACED SUBSEQUENT TO BACKFILLING THE PIT AND PRIOR TO DEMOBILIZATION.
4. SEE THE SPECIFICATIONS FOR CASING PIPE MARKER DETAILS.




## 20/11 CASING PIPE CAP DETAIL
NOT TO SCALE

CASING PIPE CAP NOTES:

1. STEEL CASING PIPE CAPS SHALL BE 1/2" THICK AND SHALL BE COATED WITH COAL TAR EPOXY-POLYAMIDE PAINT, IN ACCORDANCE WITH THE LADOTD 2006 STANDARD SPECIFICATION 1008.04.
2. EXISTING STEEL CASING PIPE CAPS SHALL BE CUT FROM EXISTING CASING PIPE TO FACILITATE THE TEMPORARY PLACEMENT OF THE DREDGE PIPELINE. AFTER MARSH FILL ELEVATION HAS BEEN ACCEPTED AND DREDGE PIPELINE HAS BEEN REMOVED, NEW CAPS SHALL BE INSTALLED IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS. CAPS SHALL BE WELDED TO CASING PIPE AND SHALL BE WATER TIGHT.
3. ALL COSTS ASSOCIATED WITH CASING PIPE CAPS SHALL BE PAID FOR PER BID ITEM NO. 1, "MOBILIZATION AND DEMOBILIZATION".
4. SEE THE SPECIFICATIONS FOR CASING CAP DETAILS.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

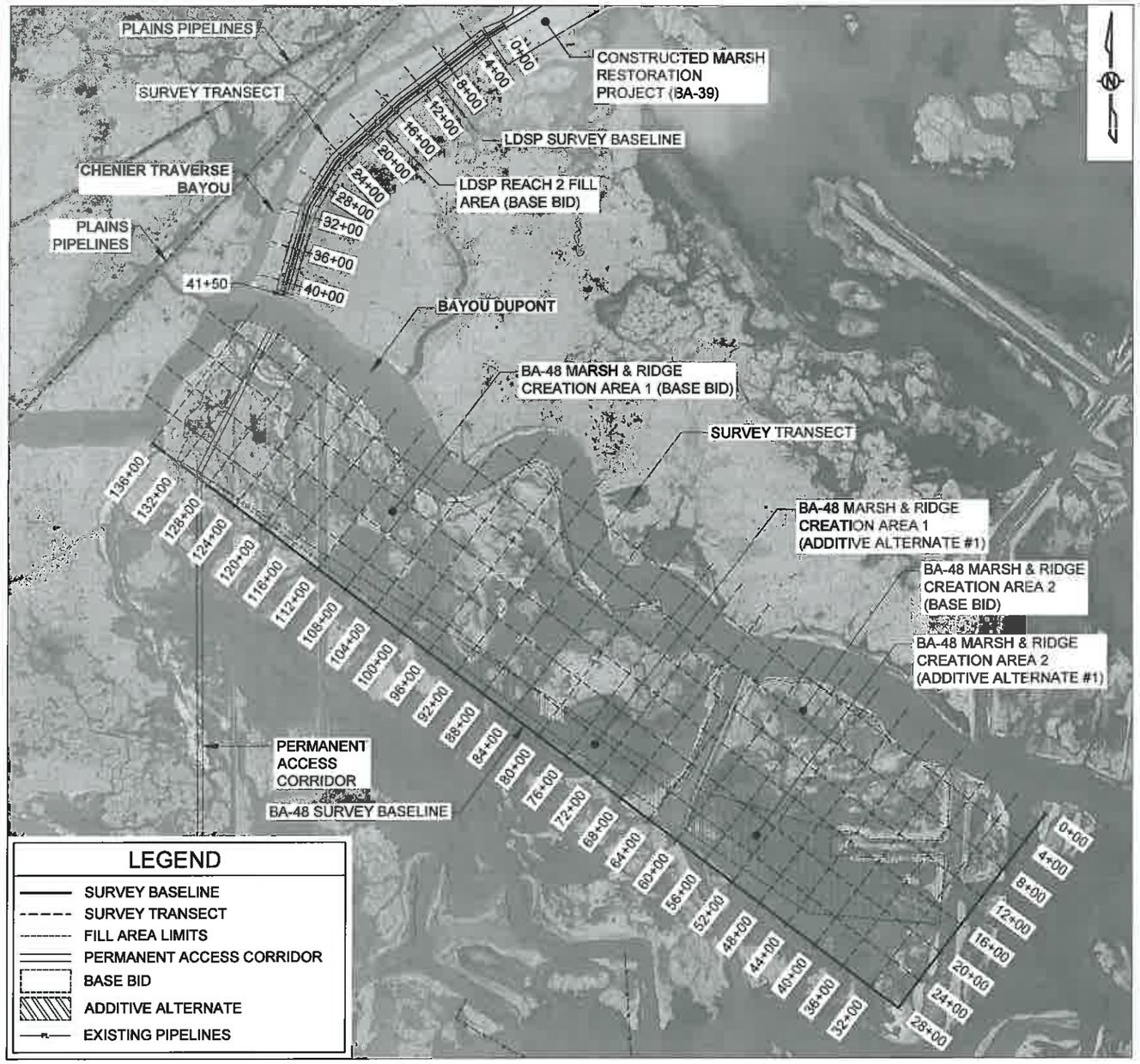
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

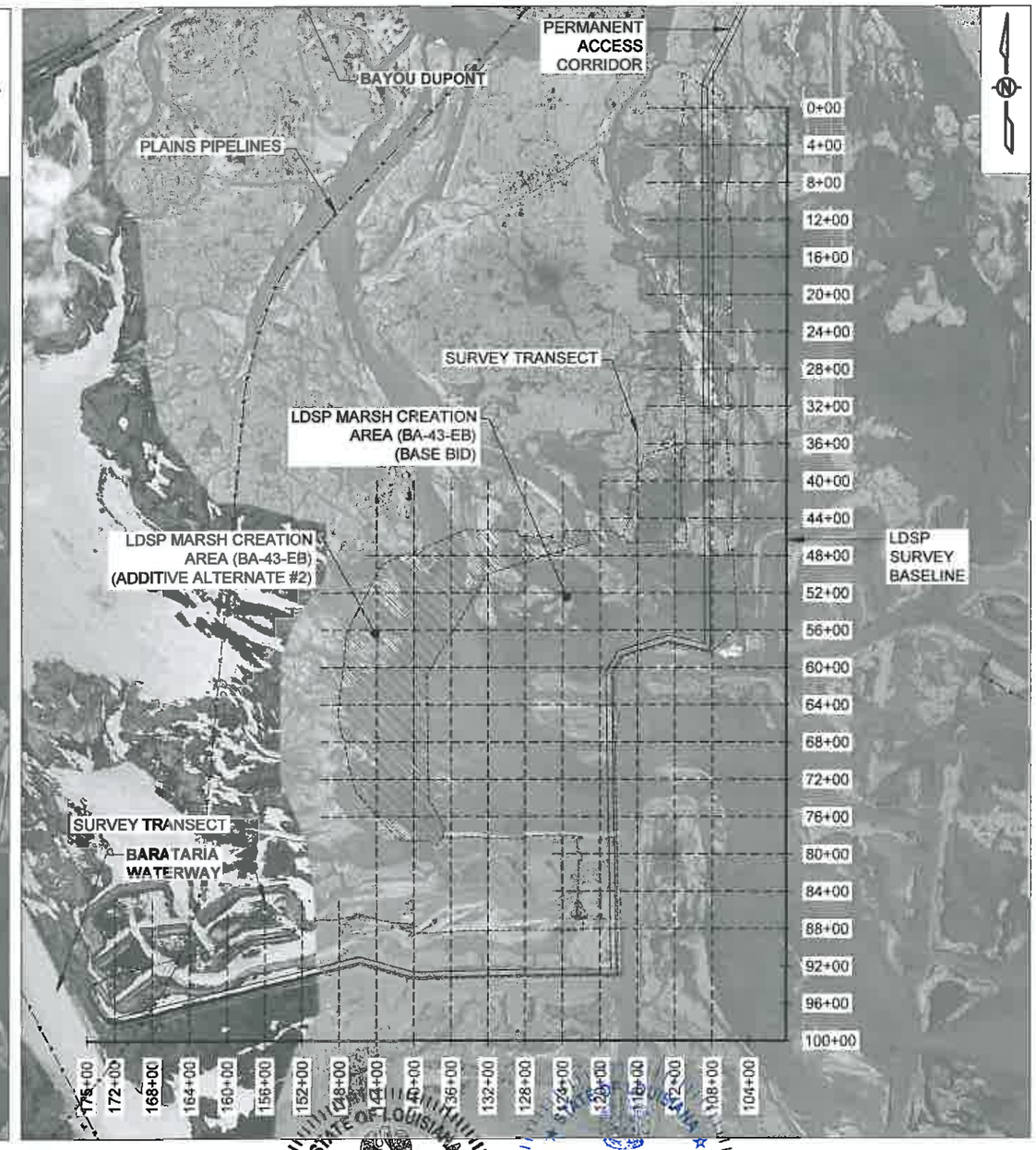
APPROVED BY: MAURY CHATELLIER, P.E.

CASING PIPE CAP, MARKER AND SETTLEMENT PLATE DETAILS

DATE: MARCH 8, 2013

SHEET 56 OF 81




NOTES:
1. THE CONTRACTOR SHALL SURVEY FILL AREAS AT THE LOCATIONS SHOWN AS PER SECTION TS-3.
2. LDSP FILL AREA SURVEYS WERE PERFORMED IN AUGUST 2011 BY TBS. BA-48 FILL AREA SURVEYS WERE PERFORMED IN OCTOBER 2008 BY PBS&J. SURVEY SECTIONS POINT FILES ARE AVAILABLE UPON REQUEST.
3. SEE SHEETS 58 TO 76 FOR FILL AREA SECTIONS.
4. BA-48 FILL SECTIONS 4+00 THROUGH 24+00 SHALL BE TAKEN DURING CONSTRUCTION AS PER TS-3.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
04/12/2013

**FINAL BID SET**

1,500' 750' 0' 1,500' 3,000'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

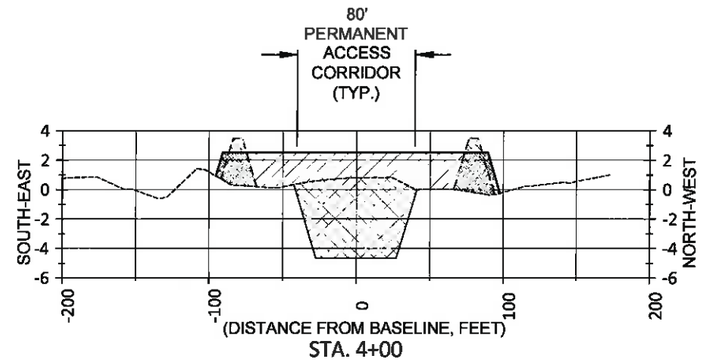
FILL AREA SECTIONS LAYOUT

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

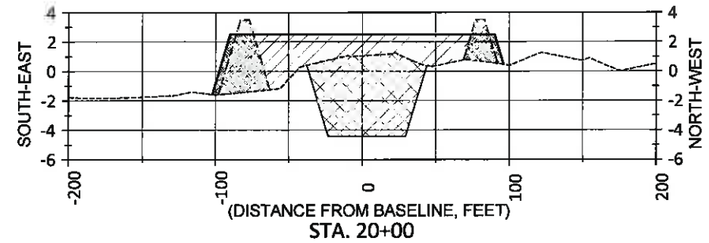
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA & RJ | APPROVED BY: MAURY CHATELLIER, P.E.

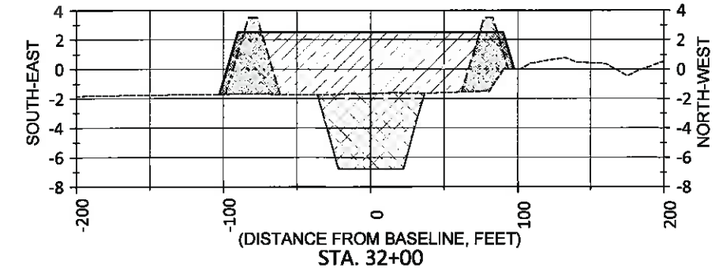
SHEET 57 OF 81



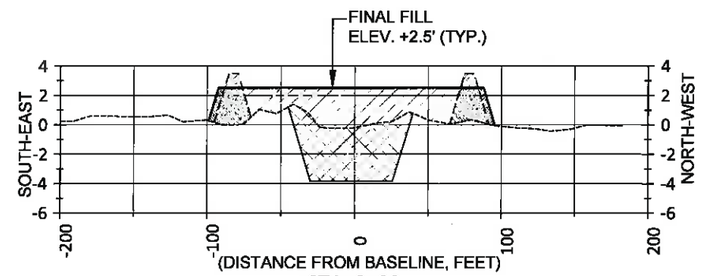
STA. 4+00



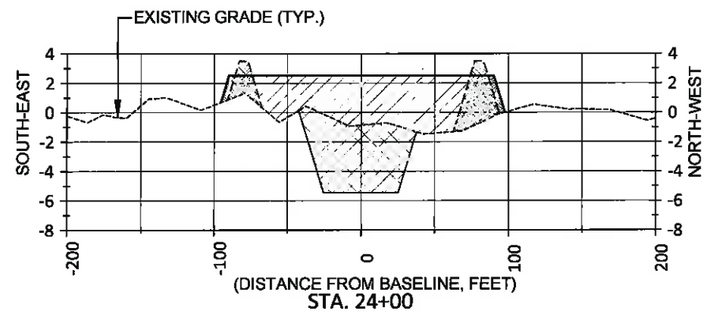
STA. 20+00



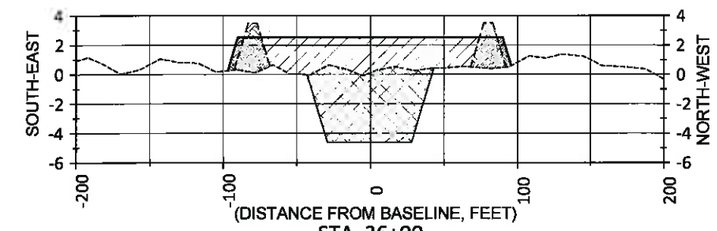
STA. 32+00



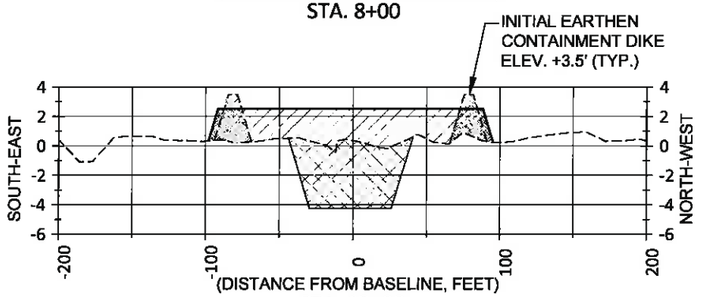
STA. 8+00



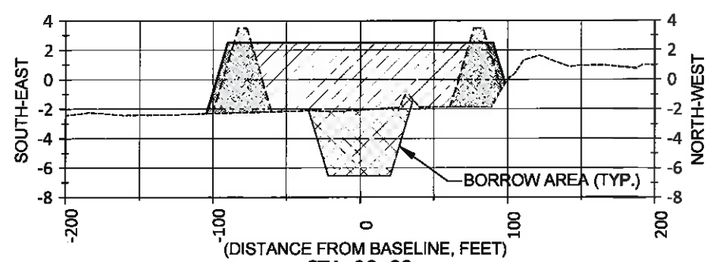
STA. 24+00



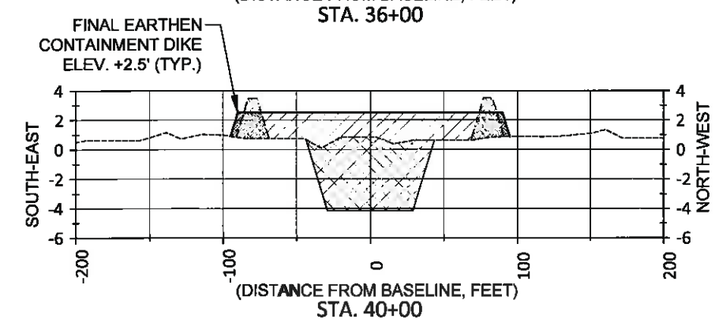
STA. 36+00



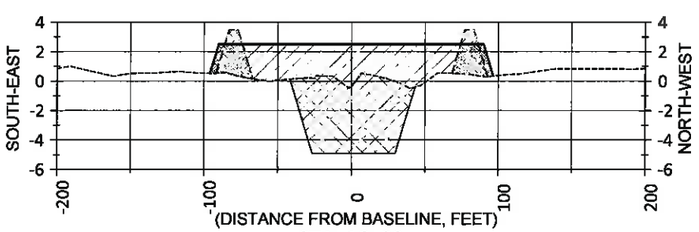
STA. 12+00



STA. 28+00



STA. 40+00



STA. 16+00

**FINAL BID SET**

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- INITIAL FILL
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR & MARSH CREATION

100' 50' 0' 100' 200'
HORIZONTAL SCALE

10' 5' 0' 10' 20'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

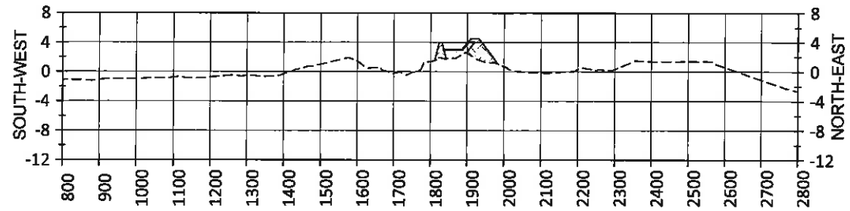
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: LDSP REACH 2 FILL AREA SECTIONS

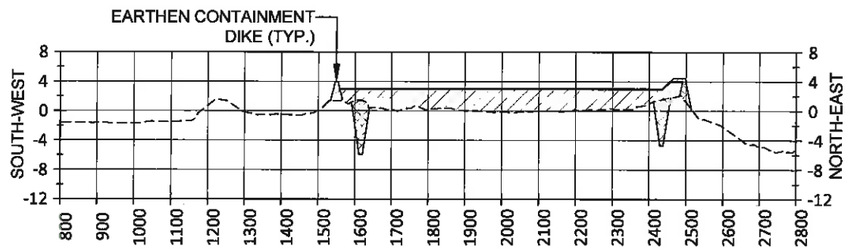
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

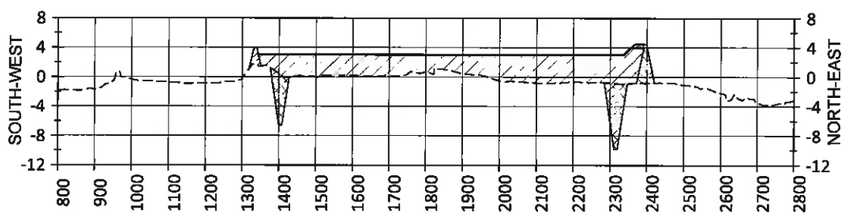
SHEET 58 OF 81



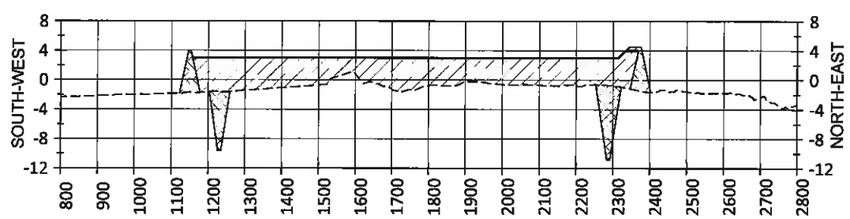

STA. 36+00 (DISTANCE FROM BASELINE, FEET)



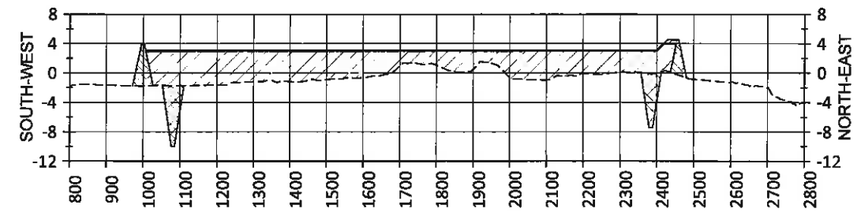

STA. 40+00 (DISTANCE FROM BASELINE, FEET)



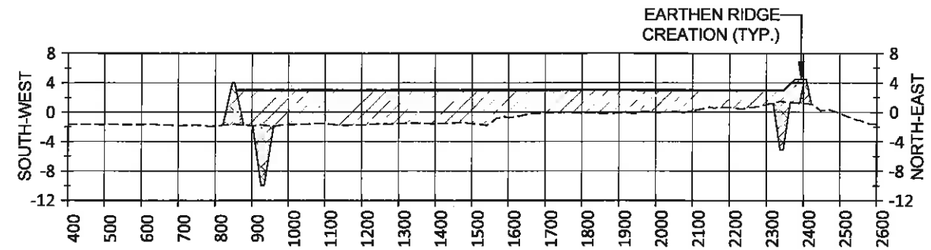

STA. 44+00 (DISTANCE FROM BASELINE, FEET)



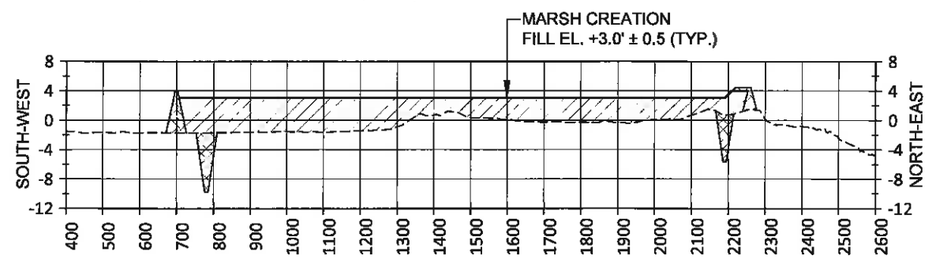

STA. 48+00 (DISTANCE FROM BASELINE, FEET)



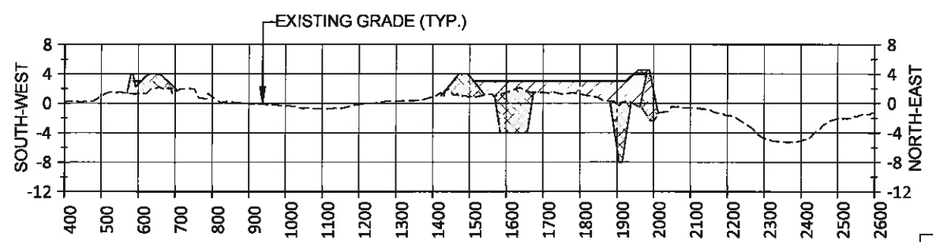

STA. 52+00 (DISTANCE FROM BASELINE, FEET)




STA. 56+00 (DISTANCE FROM BASELINE, FEET)




STA. 60+00 (DISTANCE FROM BASELINE, FEET)




STA. 64+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

**FINAL BID SET**

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/ RIDGE CREATION
- BORROW AREA
- MARSH CREATION

400' 200' 0' 400' 800'
HORIZONTAL SCALE
20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

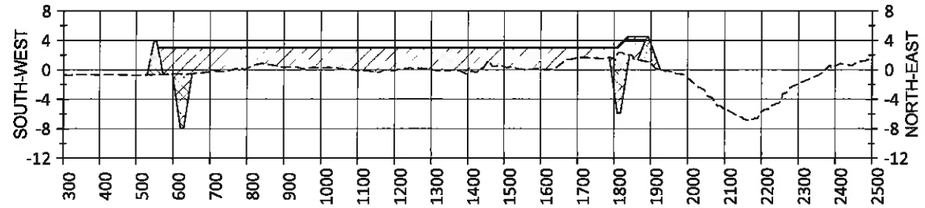
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: BA-48 FILL AREA SECTIONS (SHEET 1 OF 4)

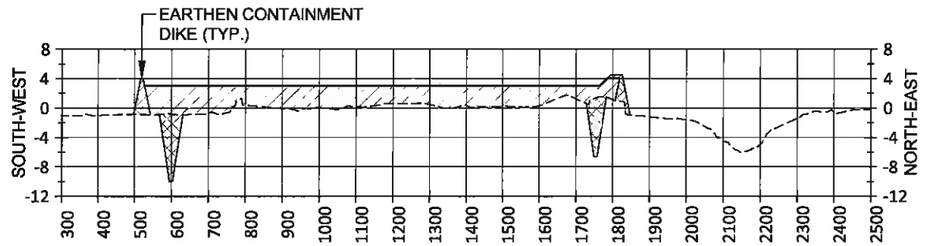
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

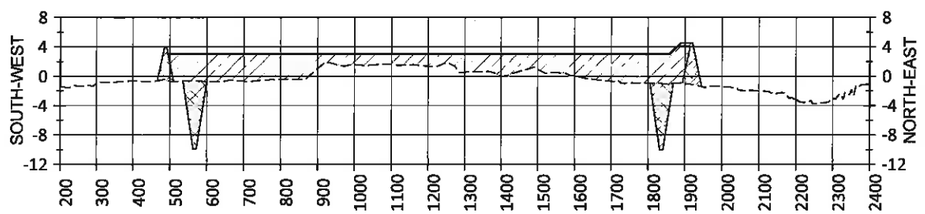
SHEET 59 OF 81



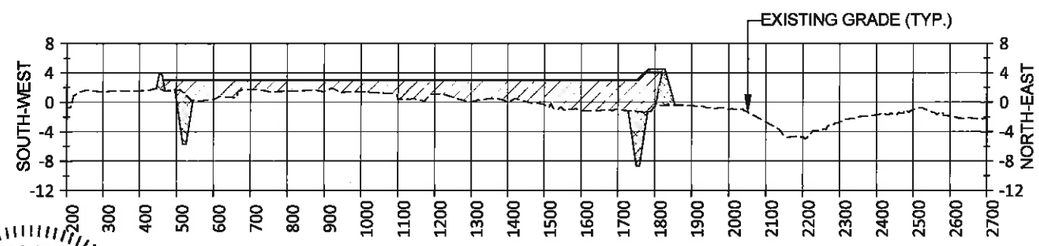

STA. 68+00 (DISTANCE FROM BASELINE, FEET)



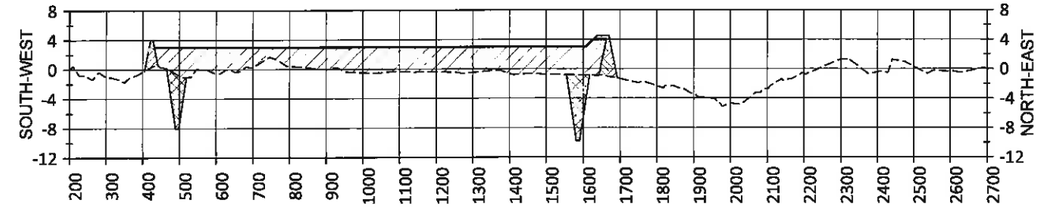

STA. 72+00 (DISTANCE FROM BASELINE, FEET)



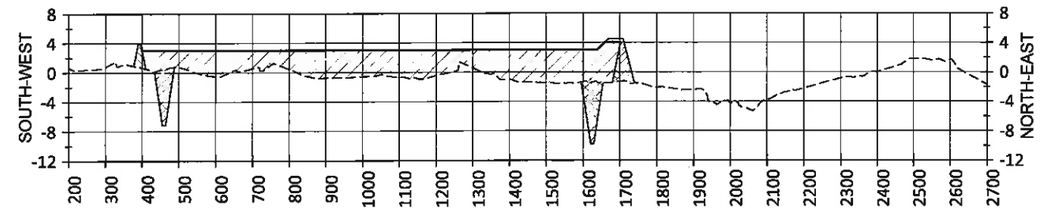

STA. 76+00 (DISTANCE FROM BASELINE, FEET)



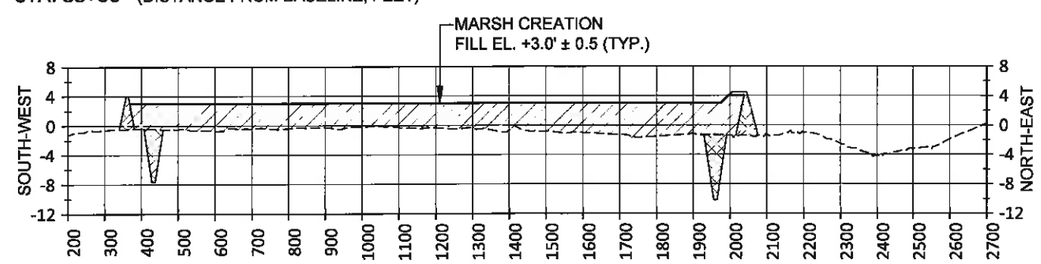

STA. 80+00 (DISTANCE FROM BASELINE, FEET)



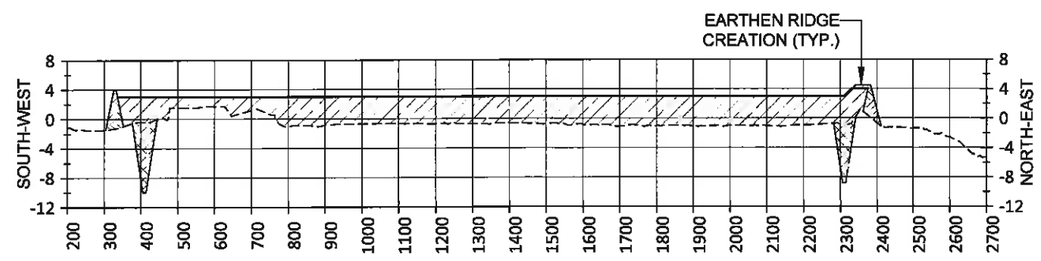

STA. 84+00 (DISTANCE FROM BASELINE, FEET)




STA. 88+00 (DISTANCE FROM BASELINE, FEET)




STA. 92+00 (DISTANCE FROM BASELINE, FEET)




STA. 96+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

**FINAL BID SET**

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/ RIDGE CREATION
- BORROW AREA
- MARSH CREATION

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70625
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

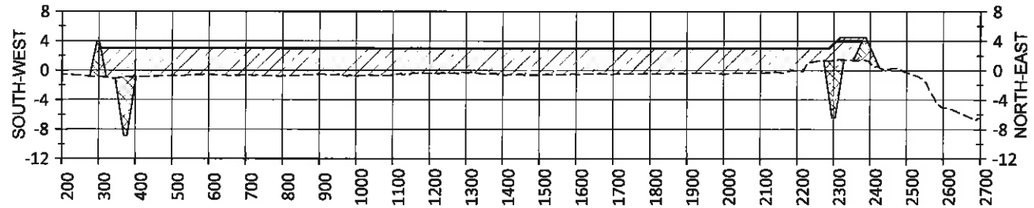
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: BA-48 FILL AREA SECTIONS (SHEET 2 OF 4)

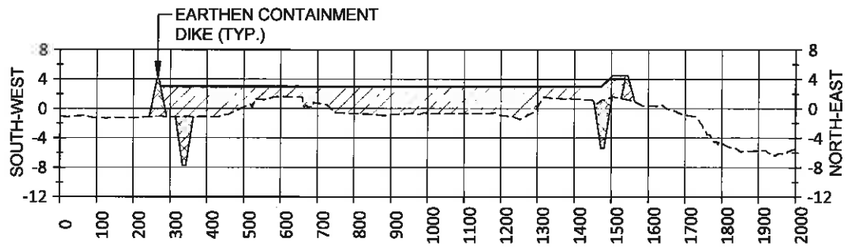
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

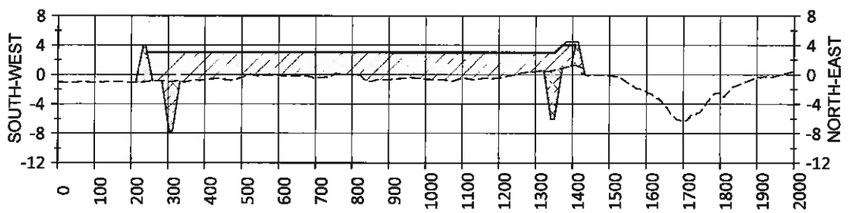
SHEET 60 OF 81



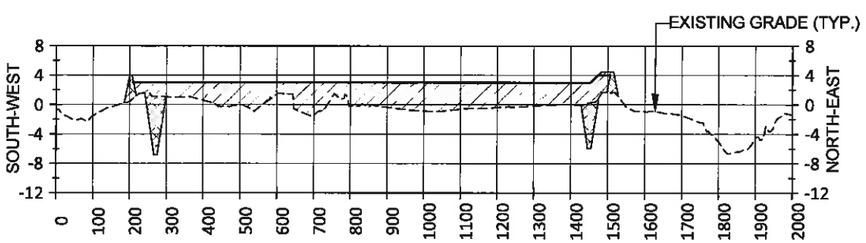

STA. 100+00 (DISTANCE FROM BASELINE, FEET)



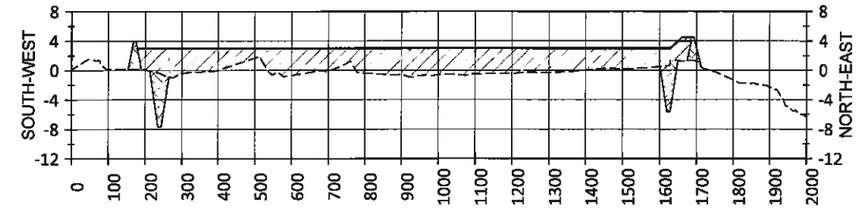

STA. 104+00 (DISTANCE FROM BASELINE, FEET)



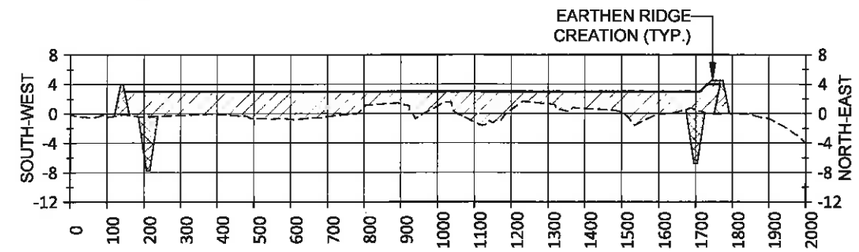

STA. 108+00 (DISTANCE FROM BASELINE, FEET)



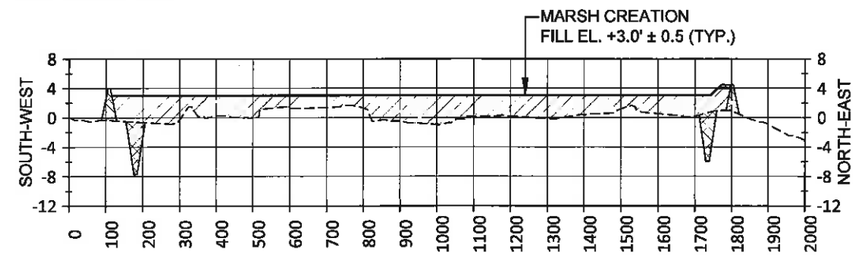

STA. 112+00 (DISTANCE FROM BASELINE, FEET)



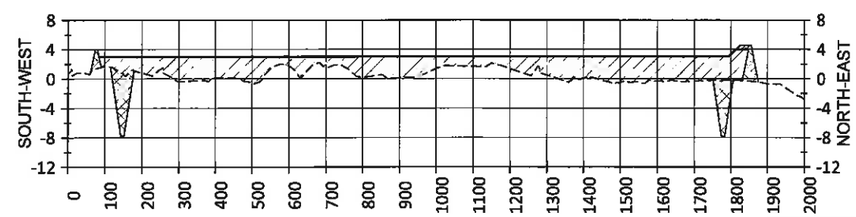

STA. 116+00 (DISTANCE FROM BASELINE, FEET)




STA. 120+00 (DISTANCE FROM BASELINE, FEET)




STA. 124+00 (DISTANCE FROM BASELINE, FEET)




STA. 128+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/ RIDGE CREATION
- BORROW AREA
- MARSH CREATION

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

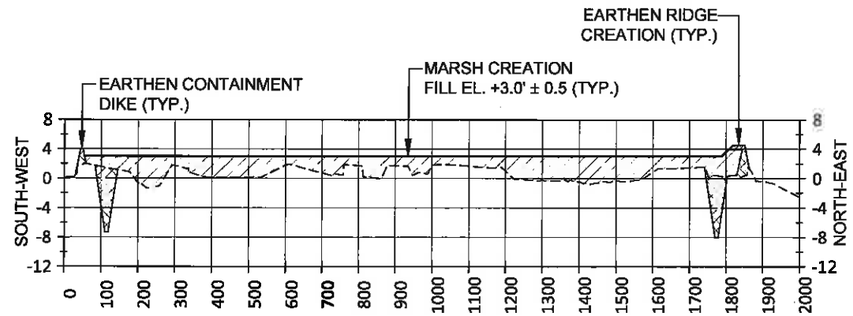
MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

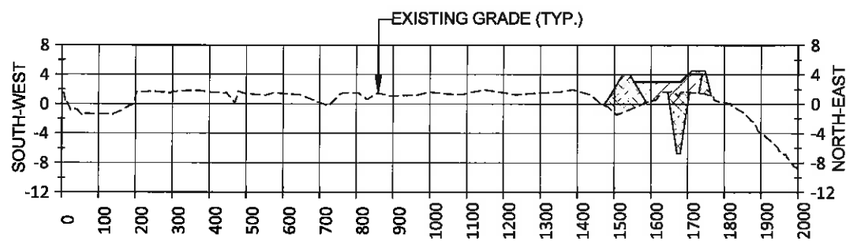
BASE BID: BA-48 FILL AREA SECTIONS (SHEET 3 OF 4)

DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E. | SHEET 61 OF 81




STA. 132+00 (DISTANCE FROM BASELINE, FEET)




STA. 136+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/ RIDGE CREATION
- BORROW AREA
- MARSH CREATION

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-338-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

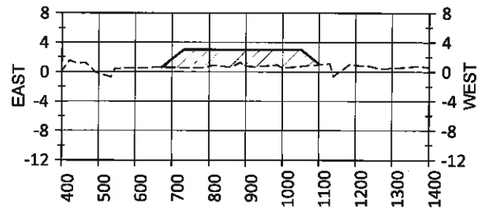
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: BA-48 FILL AREA SECTIONS (SHEET 4 OF 4)

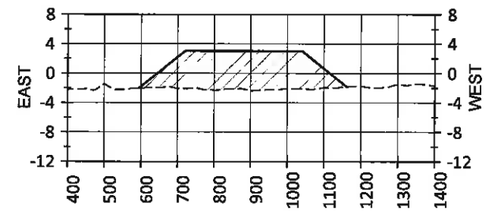
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

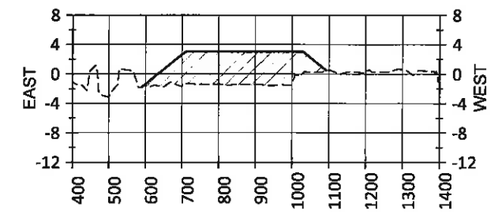
SHEET 62 OF 81



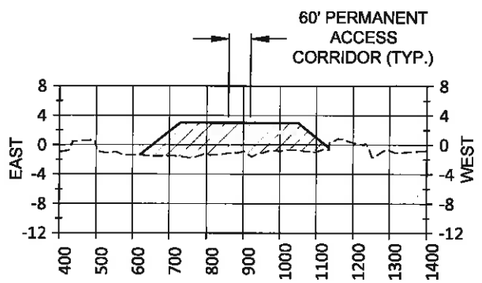

STA. 0+00 (DISTANCE FROM BASELINE, FEET)



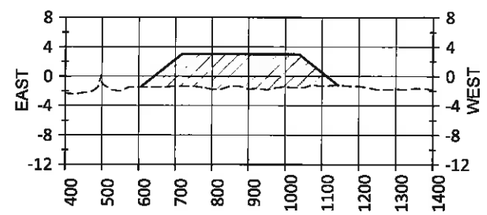

STA. 16+00 (DISTANCE FROM BASELINE, FEET)



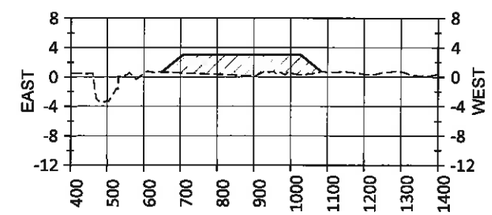

STA. 32+00 (DISTANCE FROM BASELINE, FEET)



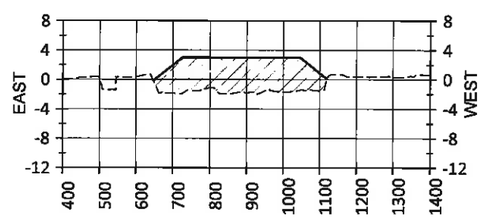

STA. 4+00 (DISTANCE FROM BASELINE, FEET)



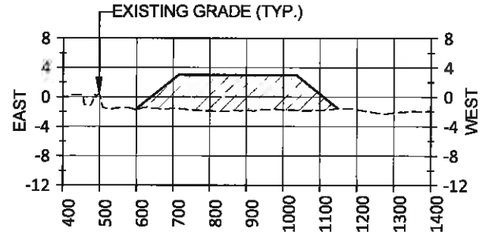

STA. 20+00 (DISTANCE FROM BASELINE, FEET)



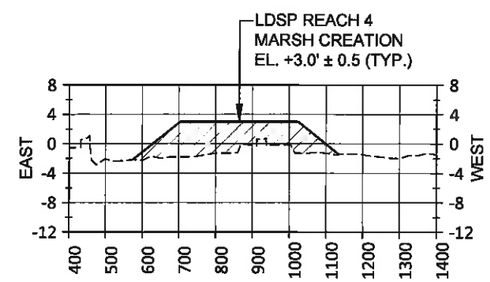

STA. 36+00 (DISTANCE FROM BASELINE, FEET)



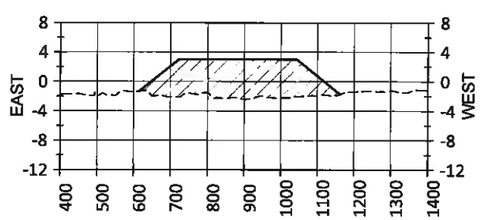

STA. 8+00 (DISTANCE FROM BASELINE, FEET)



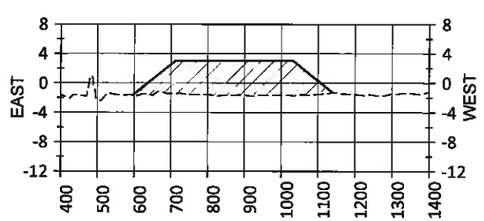

STA. 24+00 (DISTANCE FROM BASELINE, FEET)



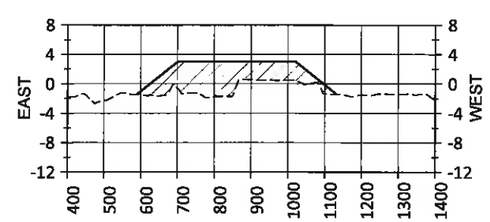

STA. 40+00 (DISTANCE FROM BASELINE, FEET)




STA. 12+00 (DISTANCE FROM BASELINE, FEET)




STA. 28+00 (DISTANCE FROM BASELINE, FEET)




STA. 44+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- ----- EXISTING GRADE
- ——— FINISHED GRADE
- CORRIDOR & MARSH CREATION

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

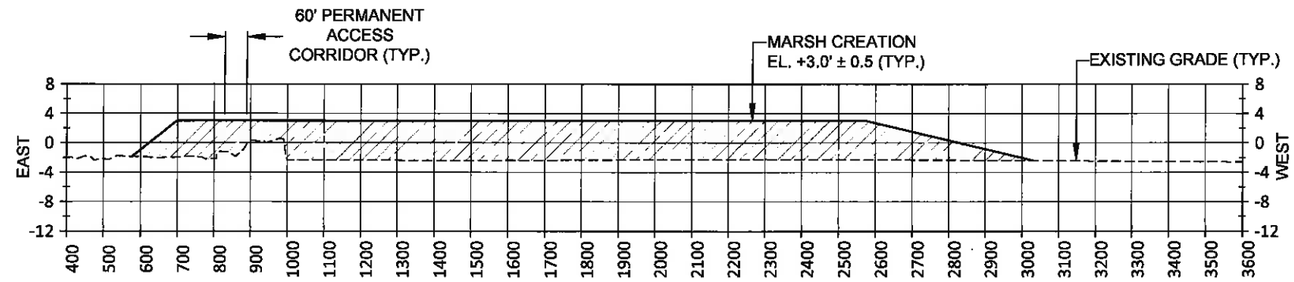
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

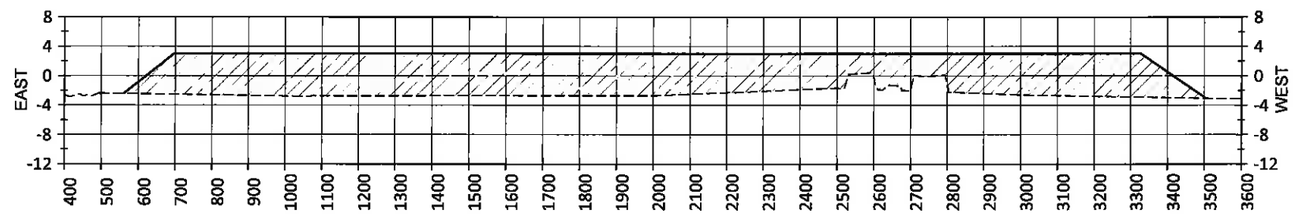
BASE BID:
LDSP FILL AREA SECTIONS
(SHEET 1 OF 6)

DATE: MARCH 8, 2013

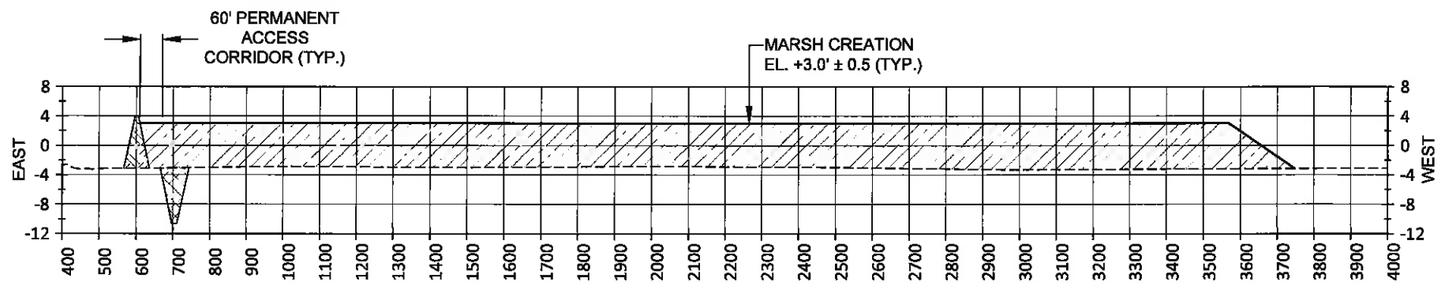
SHEET 63 OF 81



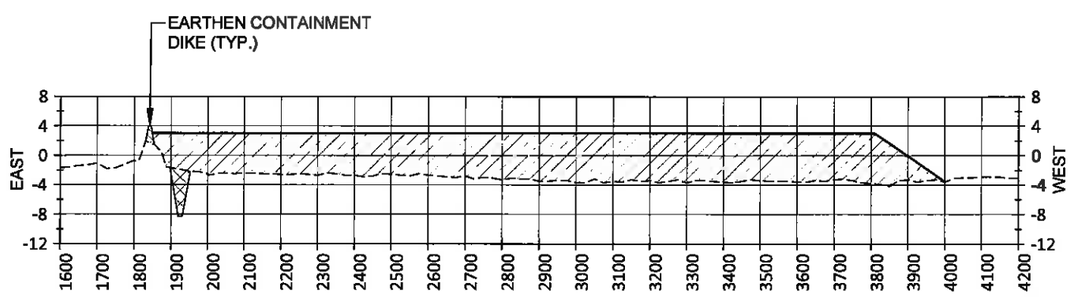

STA. 48+00 (DISTANCE FROM BASELINE, FEET)




STA. 52+00 (DISTANCE FROM BASELINE, FEET)




STA. 56+00 (DISTANCE FROM BASELINE, FEET)




STA. 60+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR & MARSH CREATION

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

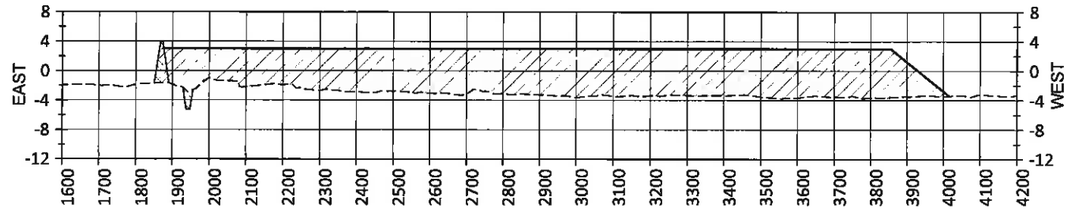
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

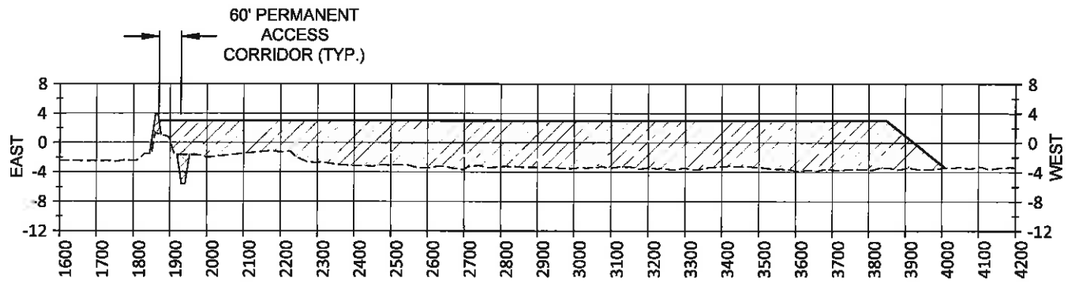
BASE BID:
LDSP FILL AREA SECTIONS
(SHEET 2 OF 6)

DATE: MARCH 8, 2013

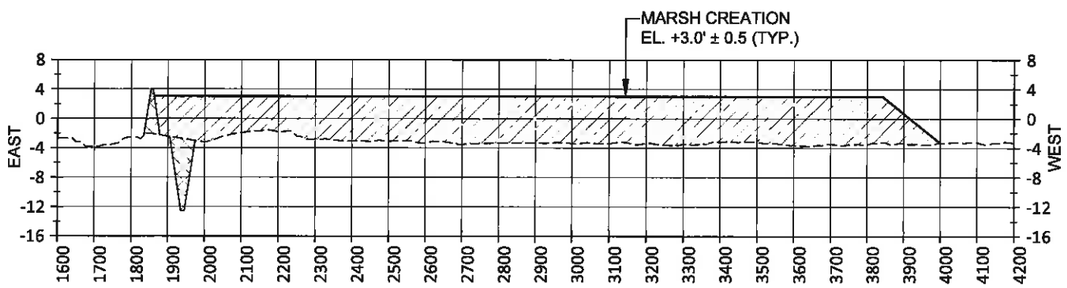
SHEET 64 OF 81



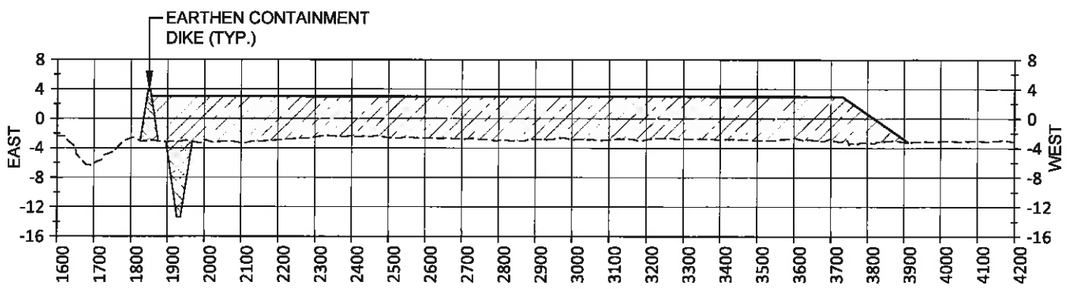

STA. 64+00 (DISTANCE FROM BASELINE, FEET)



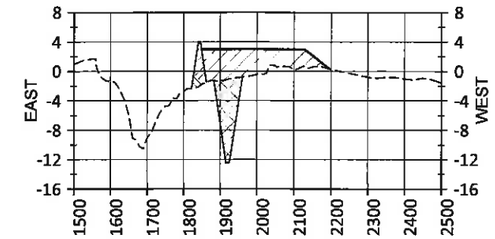

STA. 68+00 (DISTANCE FROM BASELINE, FEET)



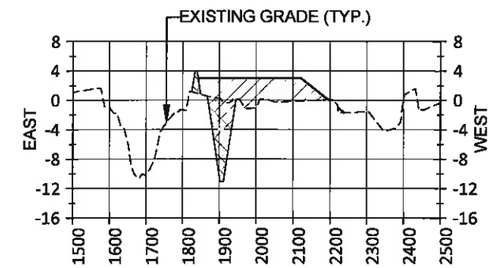

STA. 72+00 (DISTANCE FROM BASELINE, FEET)



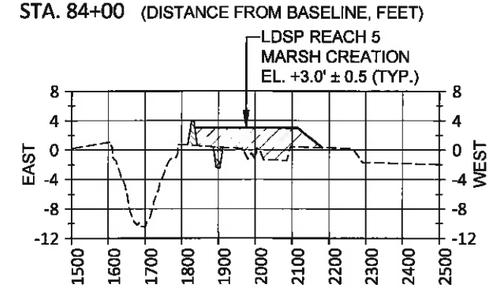

STA. 76+00 (DISTANCE FROM BASELINE, FEET)




STA. 80+00 (DISTANCE FROM BASELINE, FEET)




STA. 84+00 (DISTANCE FROM BASELINE, FEET)




STA. 88+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

Jonathan Hird
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR & MARSH CREATION

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

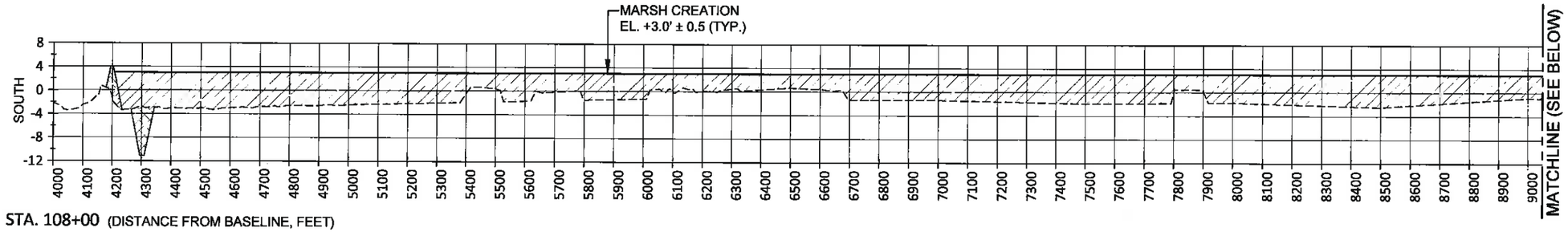
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BASE BID: LDSP FILL AREA SECTIONS (SHEET 3 OF 6)

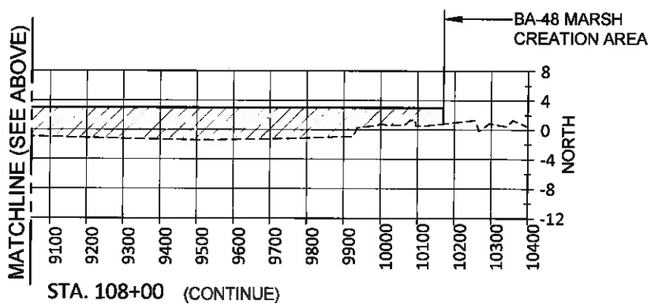
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

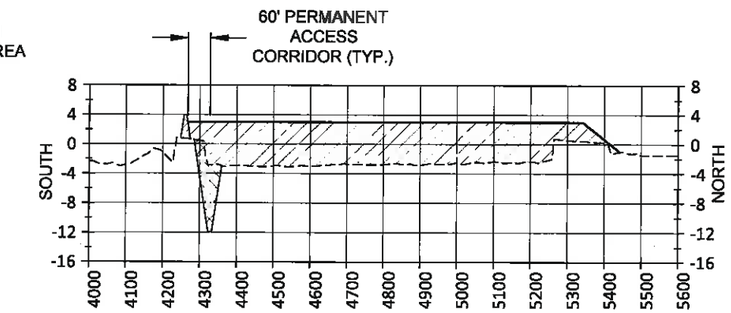
SHEET 65 OF 81



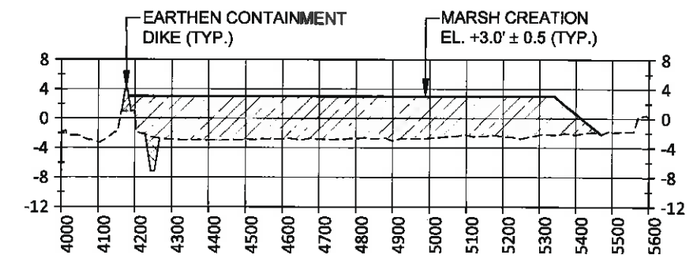

STA. 108+00 (DISTANCE FROM BASELINE, FEET)



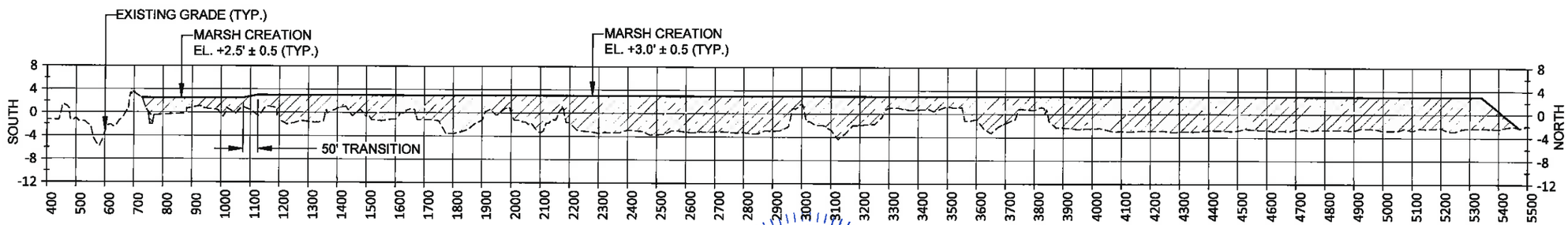

STA. 108+00 (CONTINUE)




STA. 112+00 (DISTANCE FROM BASELINE, FEET)




STA. 116+00




STA. 120+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

**FINAL BID SET**

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR & MARSH CREATION

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

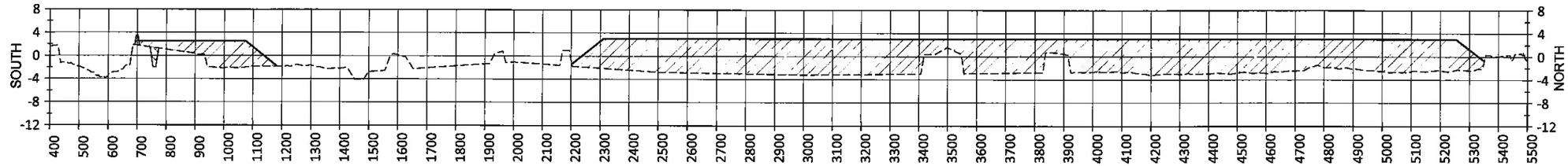
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

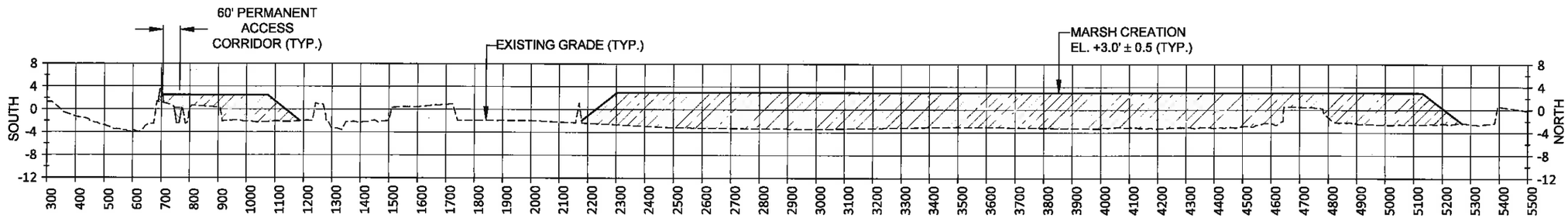
BASE BID:
LDSP FILL AREA
SECTIONS
(SHEET 4 OF 6)

DATE: MARCH 8, 2013

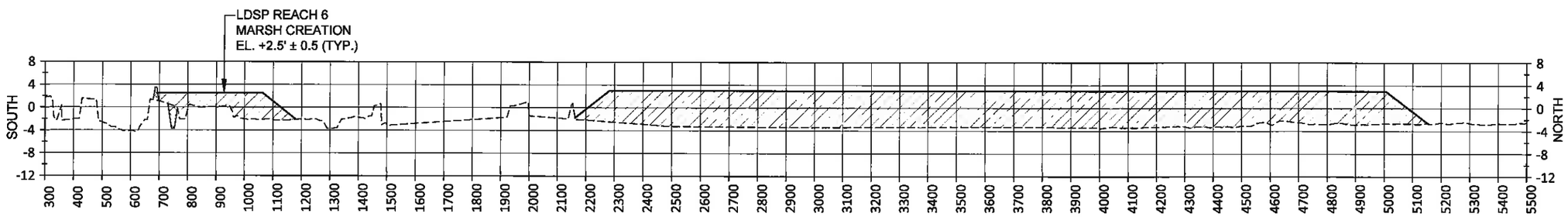
SHEET 66 OF 81



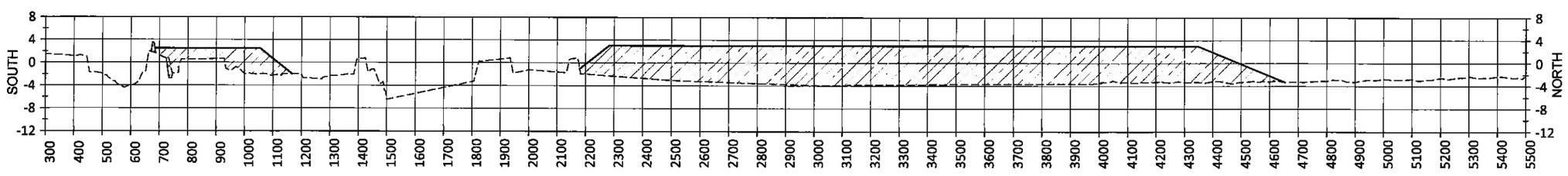

STA. 124+00 (DISTANCE FROM BASELINE, FEET)




STA. 128+00 (DISTANCE FROM BASELINE, FEET)




STA. 132+00 (DISTANCE FROM BASELINE, FEET)




STA. 136+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR AND MARSH CREATION

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

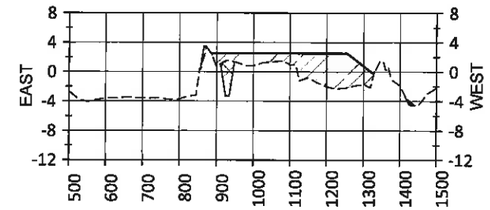
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

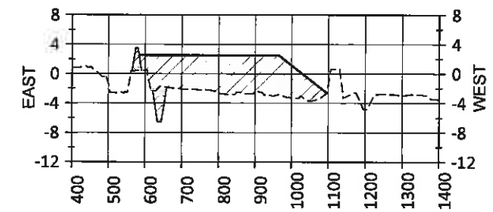
BASE BID:
LDSP FILL AREA SECTIONS
(SHEET 5 OF 6)

DATE: MARCH 8, 2013

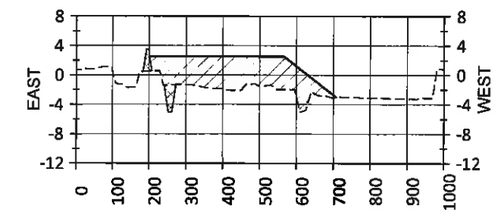
SHEET 67 OF 81



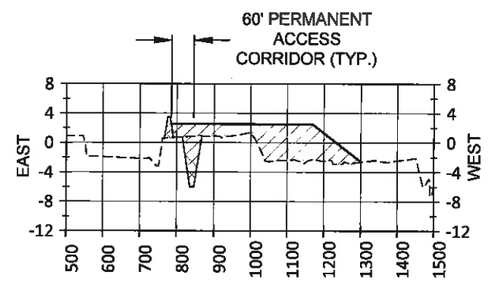

STA. 140+00 (DISTANCE FROM BASELINE, FEET)



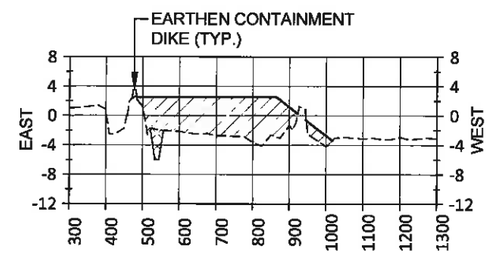

STA. 156+00 (DISTANCE FROM BASELINE, FEET)



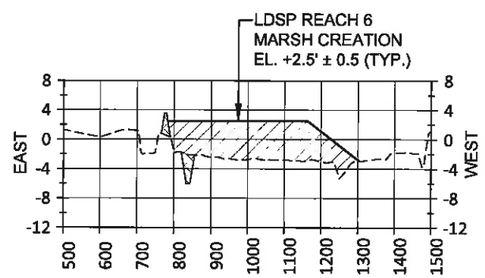

STA. 172+00 (DISTANCE FROM BASELINE, FEET)



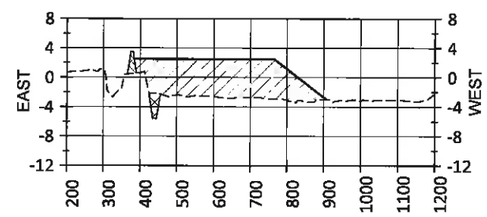

STA. 144+00 (DISTANCE FROM BASELINE, FEET)



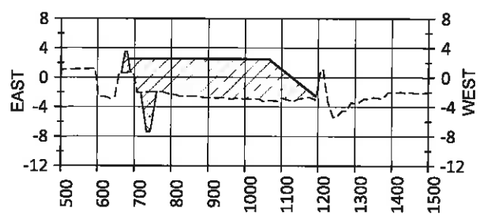

STA. 160+00 (DISTANCE FROM BASELINE, FEET)



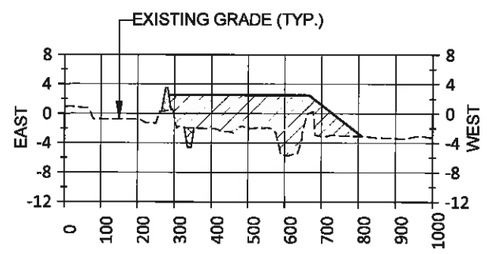

STA. 148+00 (DISTANCE FROM BASELINE, FEET)




STA. 164+00 (DISTANCE FROM BASELINE, FEET)




STA. 152+00 (DISTANCE FROM BASELINE, FEET)




STA. 168+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 TO OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- CORRIDOR & MARSH CREATION

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-338-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

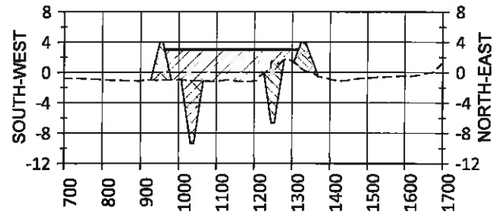
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

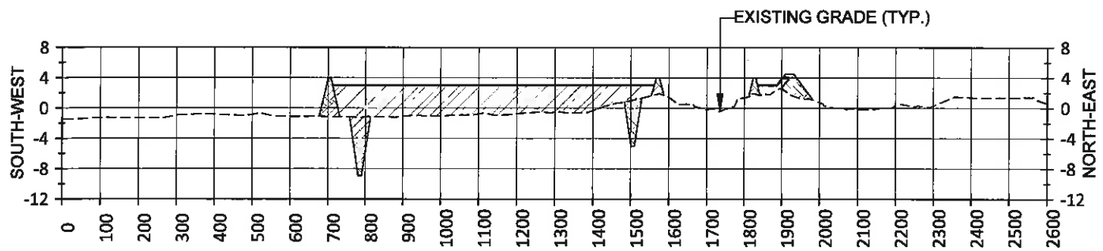
BASE BID:
LDSP FILL AREA SECTIONS
(SHEET 6 OF 6)

DATE: MARCH 8, 2013

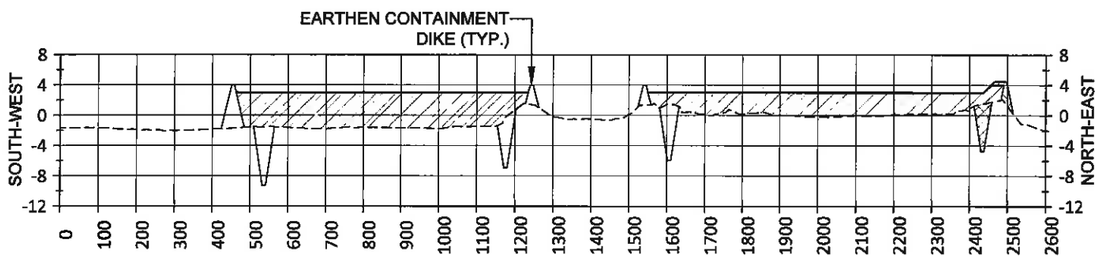
SHEET 68 OF 81



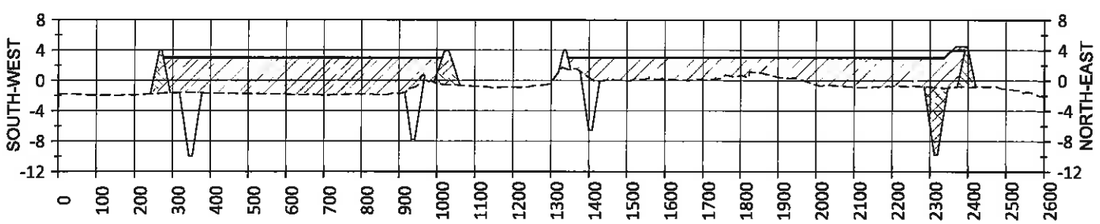

STA. 32+00 (DISTANCE FROM BASELINE, FEET)



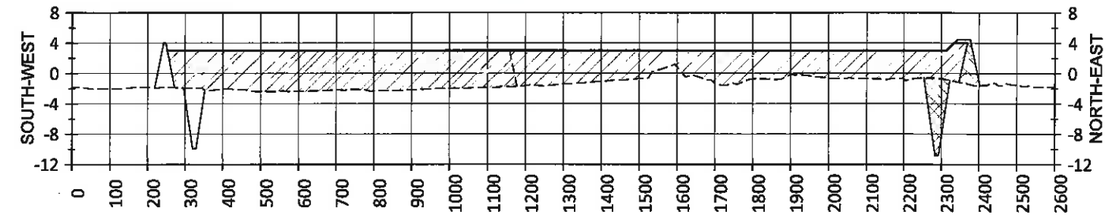

STA. 36+00 (DISTANCE FROM BASELINE, FEET)



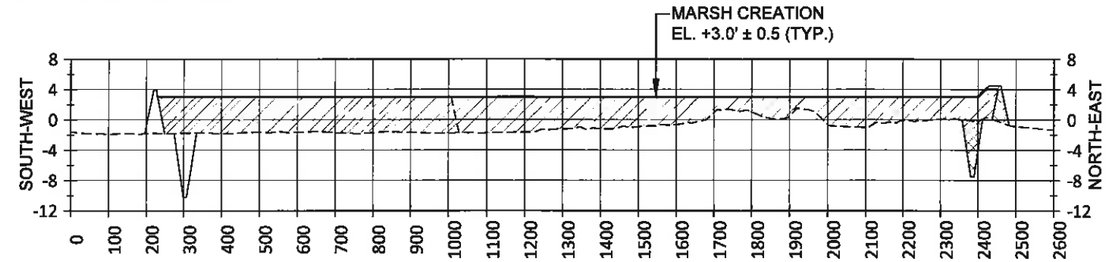

STA. 40+00 (DISTANCE FROM BASELINE, FEET)



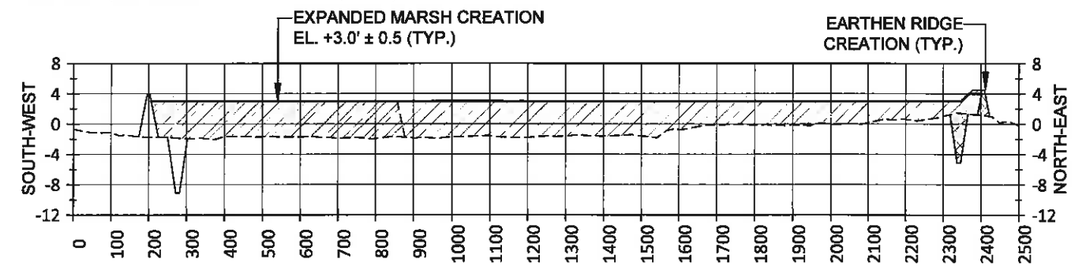

STA. 44+00 (DISTANCE FROM BASELINE, FEET)



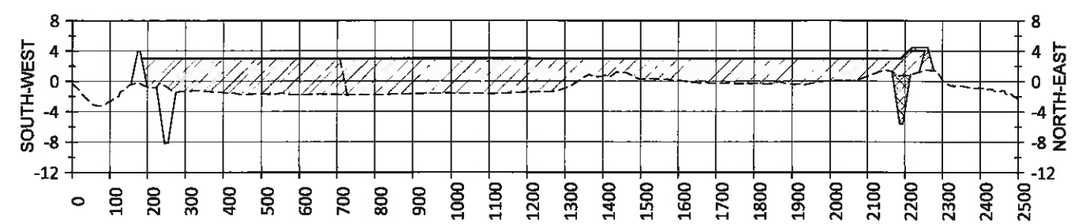

STA. 48+00 (DISTANCE FROM BASELINE, FEET)




STA. 52+00 (DISTANCE FROM BASELINE, FEET)




STA. 56+00 (DISTANCE FROM BASELINE, FEET)




STA. 60+00 (DISTANCE FROM BASELINE, FEET)

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/RIDGE CREATION
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #1)

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
ENGINEERING

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

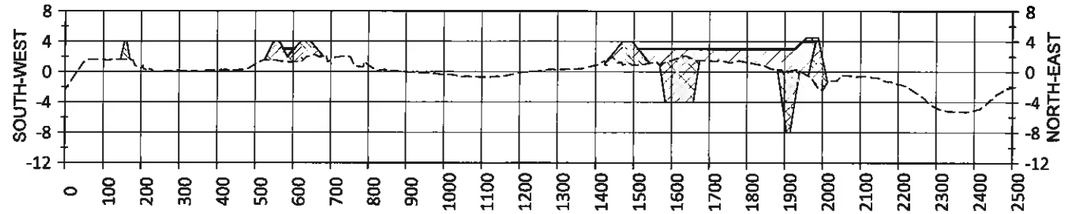
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

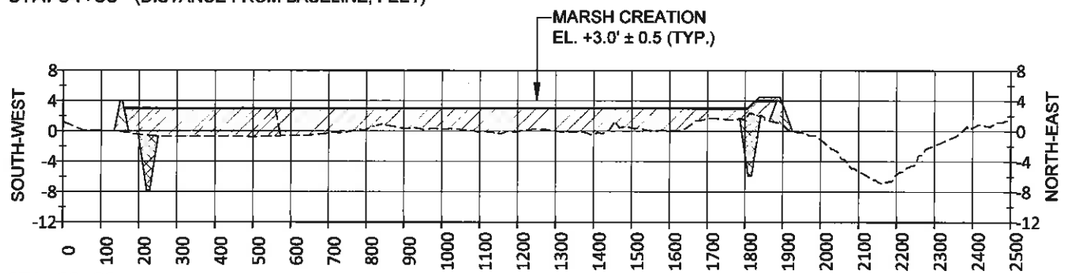
ADDITIVE ALTERNATE #1
BA-48 FILL AREA
SECTIONS
(SHEET 1 OF 3)

DATE: MARCH 8, 2013

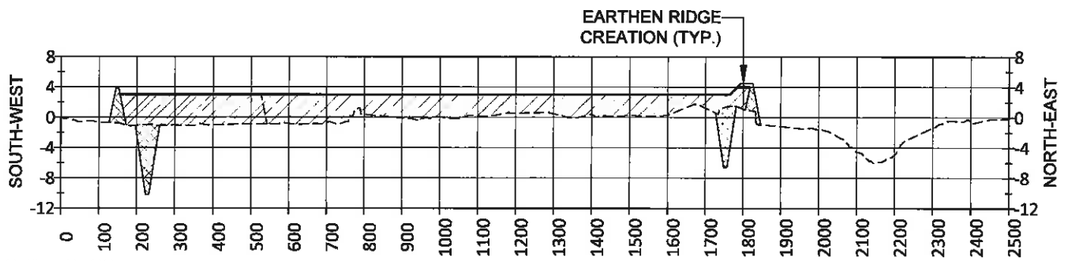
SHEET 69 OF 81



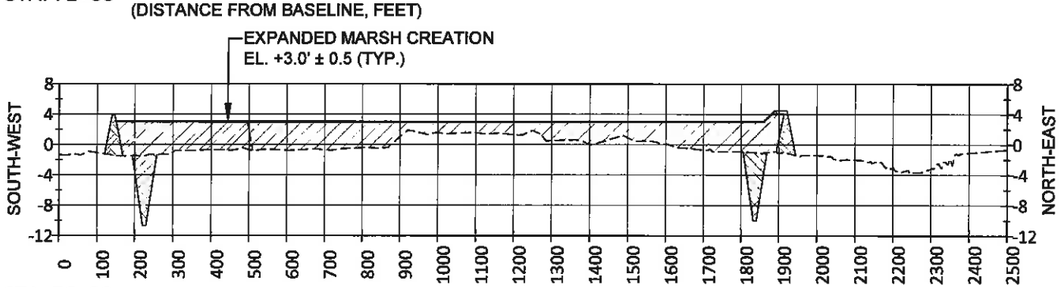

STA. 64+00 (DISTANCE FROM BASELINE, FEET)



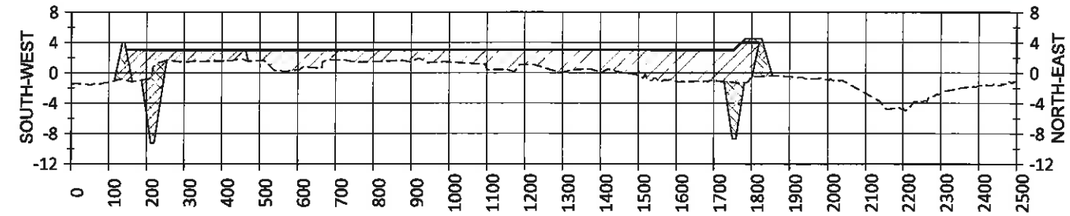

STA. 68+00 (DISTANCE FROM BASELINE, FEET)



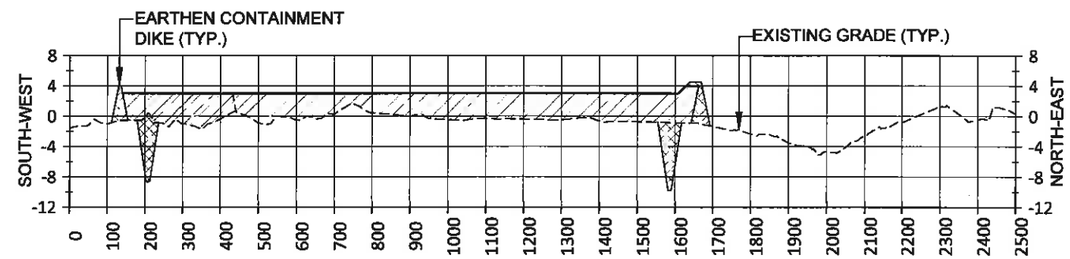

STA. 72+00 (DISTANCE FROM BASELINE, FEET)



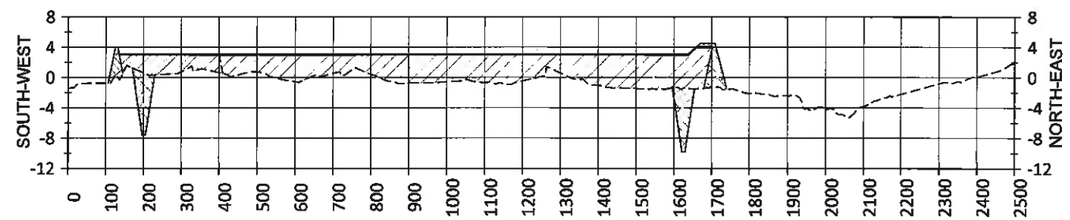

STA. 76+00 (DISTANCE FROM BASELINE, FEET)



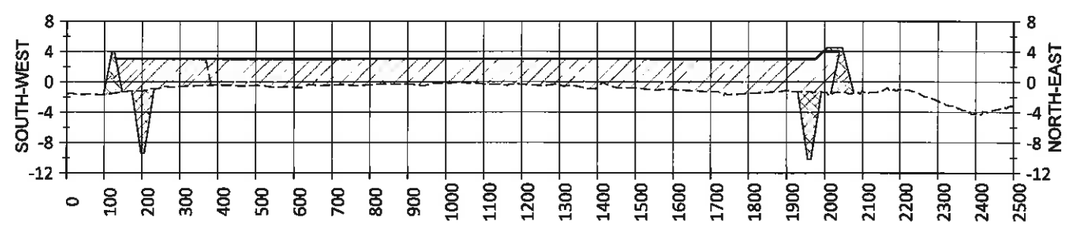

STA. 80+00 (DISTANCE FROM BASELINE, FEET)




STA. 84+00 (DISTANCE FROM BASELINE, FEET)




STA. 88+00 (DISTANCE FROM BASELINE, FEET)




STA. 92+00 (DISTANCE FROM BASELINE, FEET)

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/RIDGE CREATION
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #1)

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3-12-2013

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

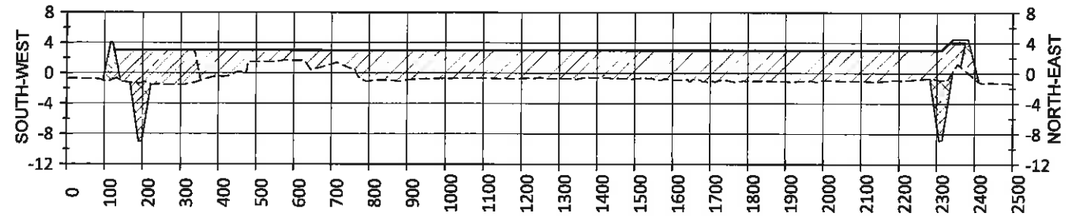
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

ADDITIVE ALTERNATE #1: BA-48 FILL AREA SECTIONS (SHEET 2 OF 3)

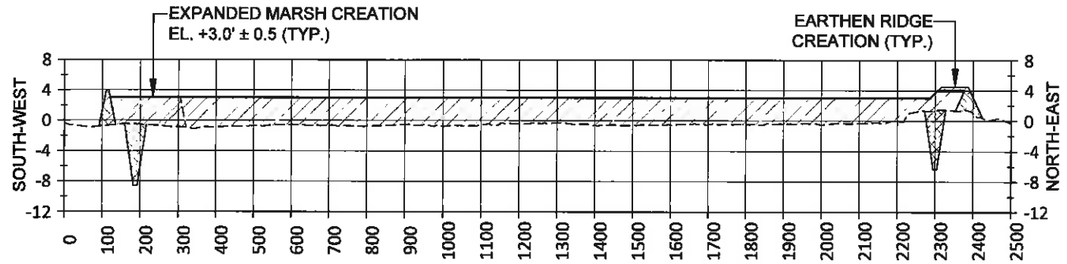
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: RJ | APPROVED BY: MAURY CHATELLIER, P.E.

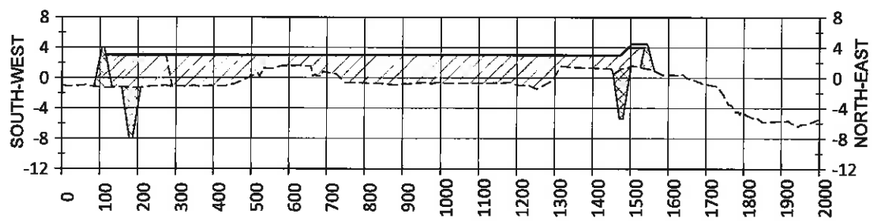
SHEET 70 OF 81



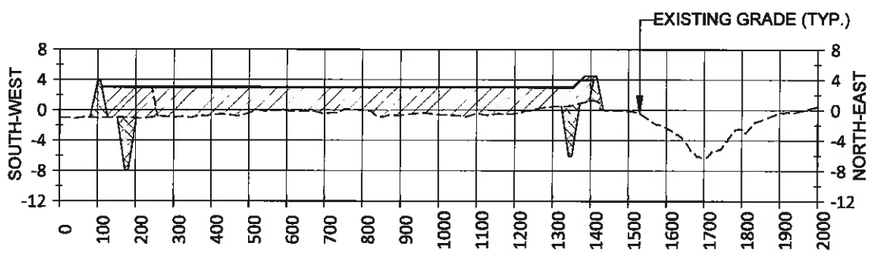

STA. 96+00 (DISTANCE FROM BASELINE, FEET)



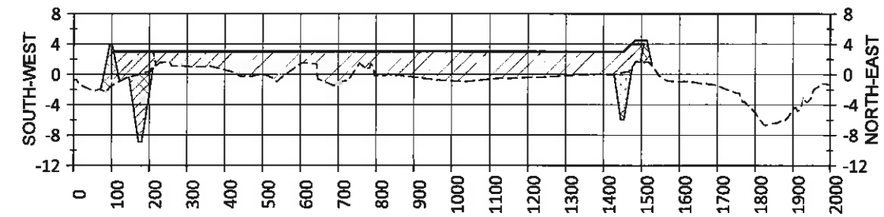

STA. 100+00 (DISTANCE FROM BASELINE, FEET)



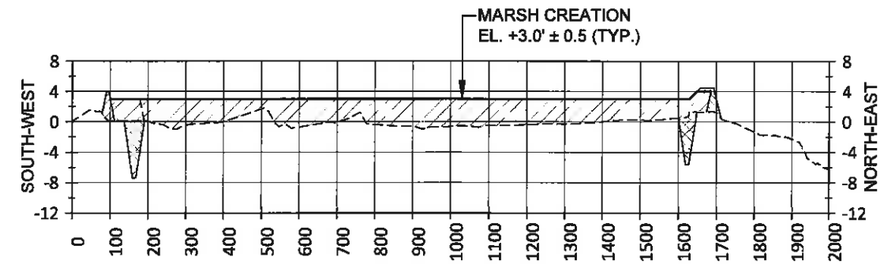

STA. 104+00 (DISTANCE FROM BASELINE, FEET)



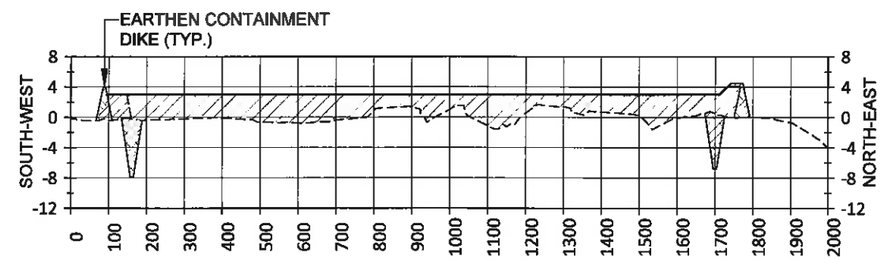

STA. 108+00 (DISTANCE FROM BASELINE, FEET)



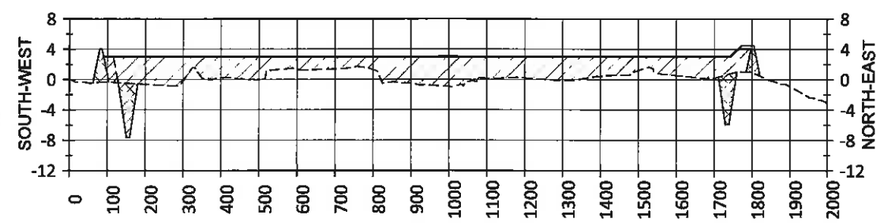

STA. 112+00 (DISTANCE FROM BASELINE, FEET)




STA. 116+00 (DISTANCE FROM BASELINE, FEET)




STA. 120+00 (DISTANCE FROM BASELINE, FEET)




STA. 124+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

400' 200' 0 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON PBS&J SURVEY PERFORMED IN OCTOBER 2008.

**FINAL BID SET**

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE/RIDGE CREATION
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #1)

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: RJ

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

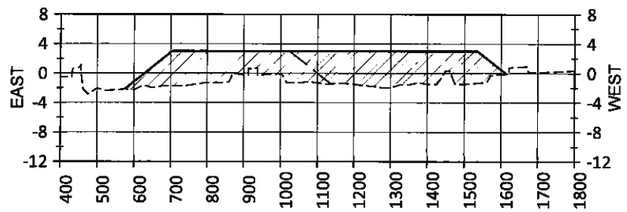
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

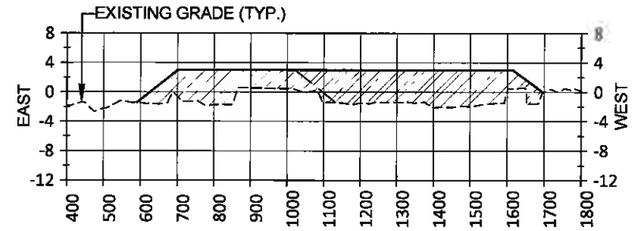
ADDITIVE ALTERNATE #1: BA-48 FILL AREA SECTIONS (SHEET 3 OF 3)

DATE: MARCH 8, 2013

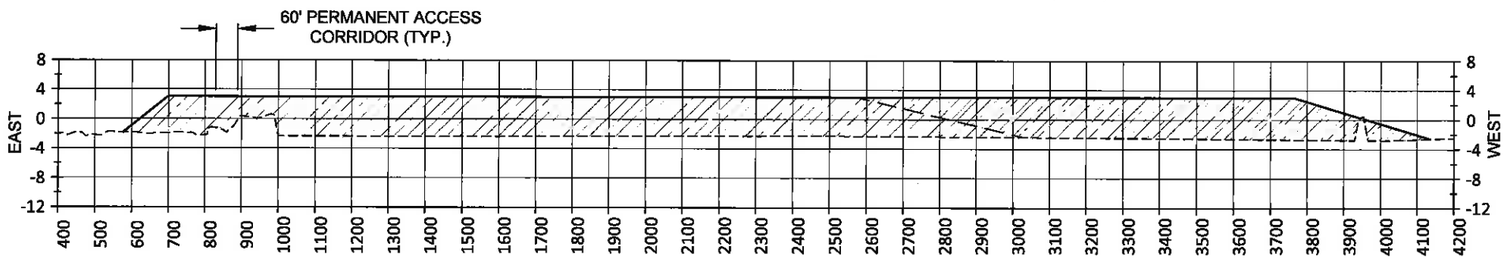
SHEET 71 OF 81



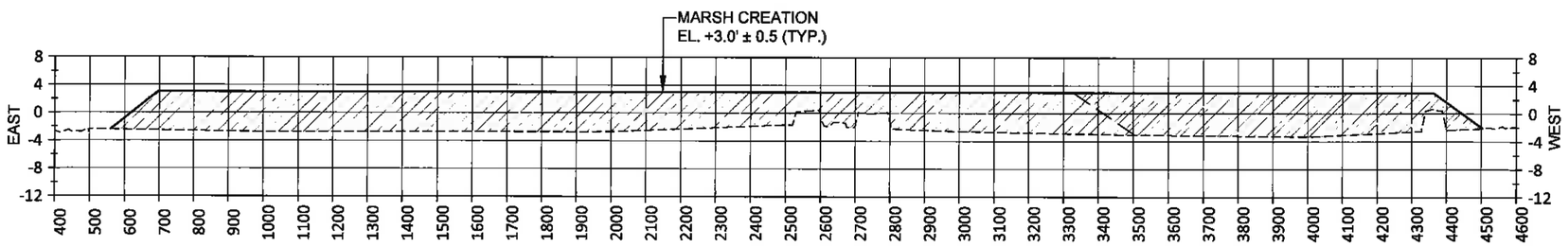

STA. 40+00 (DISTANCE FROM BASELINE, FEET)



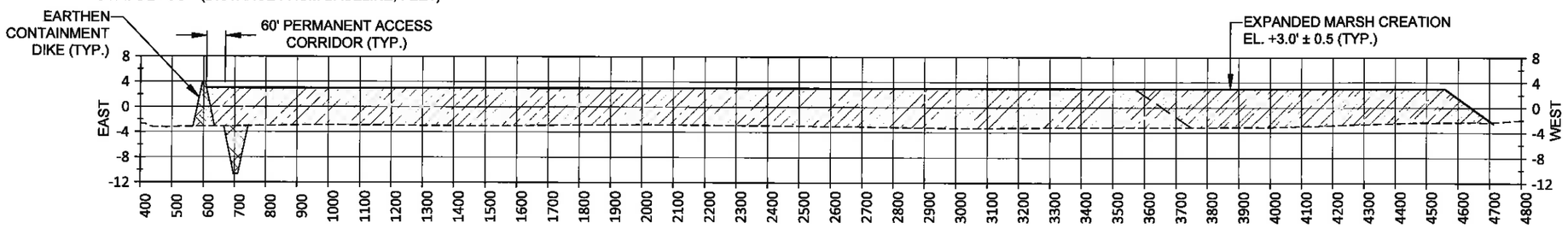

STA. 44+00 (DISTANCE FROM BASELINE, FEET)




STA. 48+00 (DISTANCE FROM BASELINE, FEET)




STA. 52+00 (DISTANCE FROM BASELINE, FEET)




STA. 56+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #2)

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

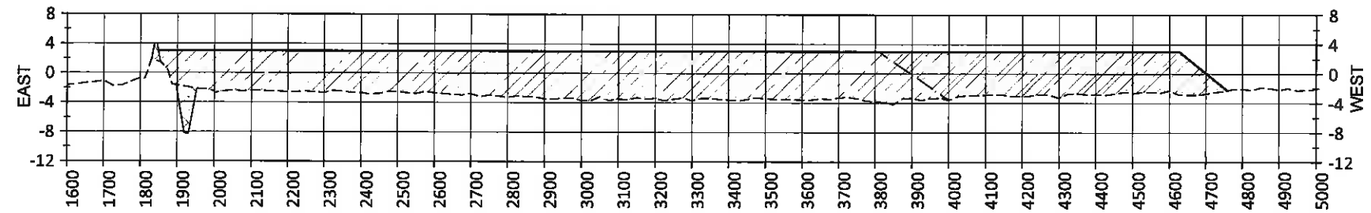
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

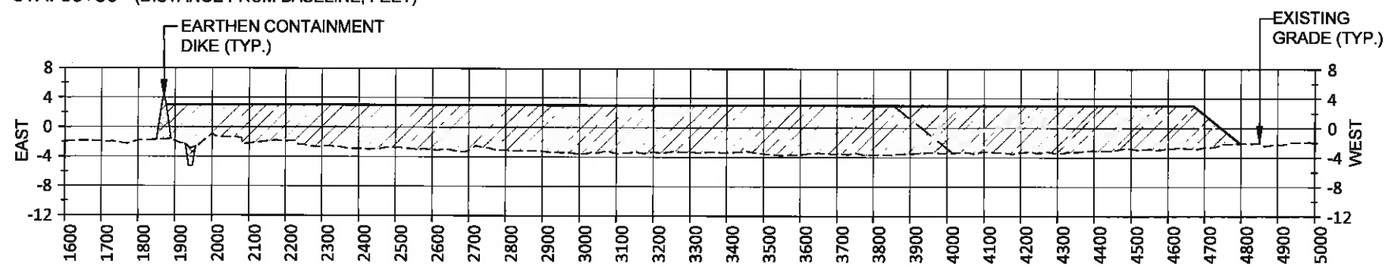
ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (SHEET 1 OF 5)

DATE: MARCH 8, 2013

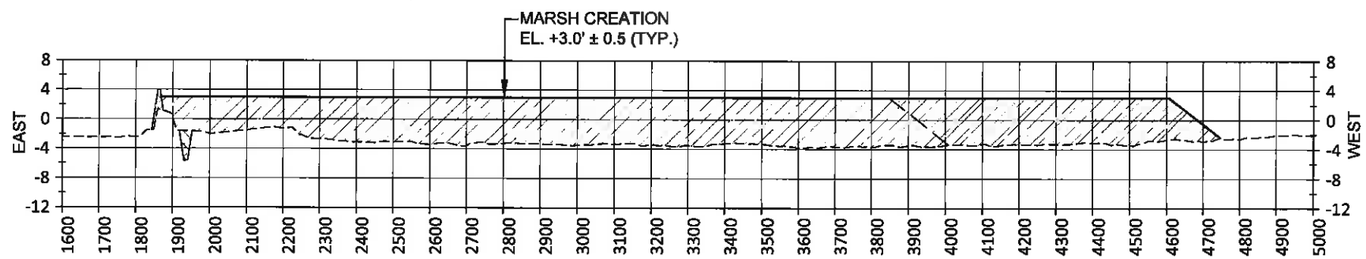
SHEET 72 OF 81



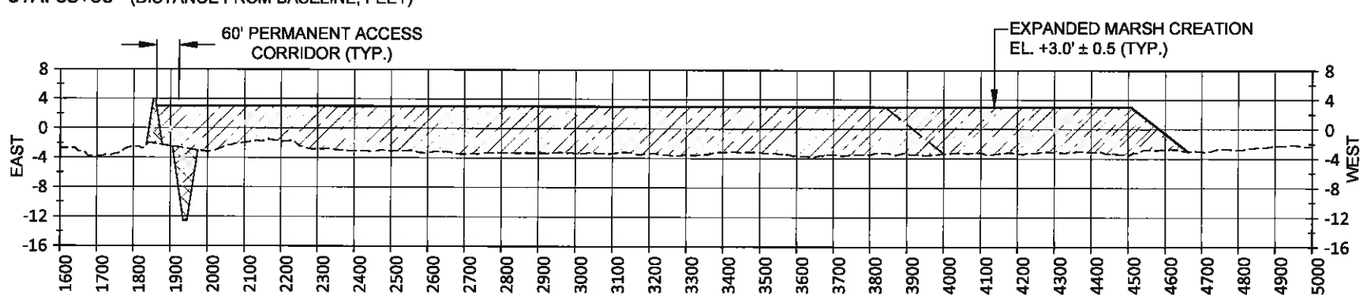

STA. 60+00 (DISTANCE FROM BASELINE, FEET)




STA. 64+00 (DISTANCE FROM BASELINE, FEET)




STA. 68+00 (DISTANCE FROM BASELINE, FEET)




STA. 72+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Jonathan Hird
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**LEGEND**

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #2)

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

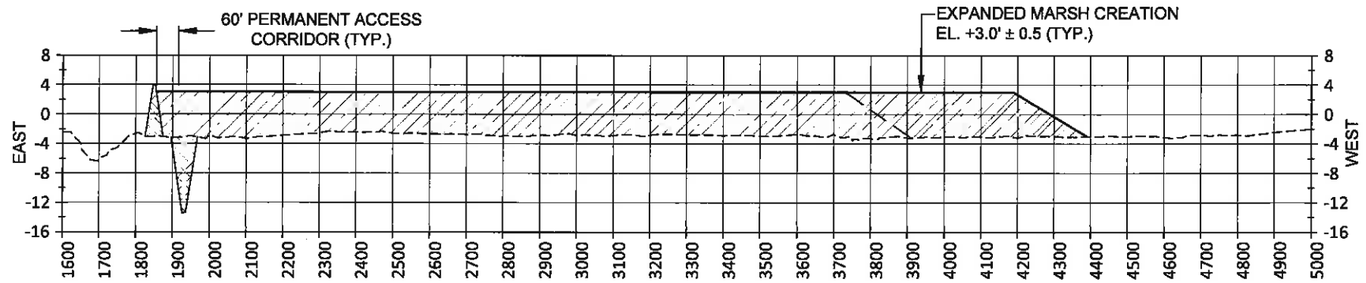
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

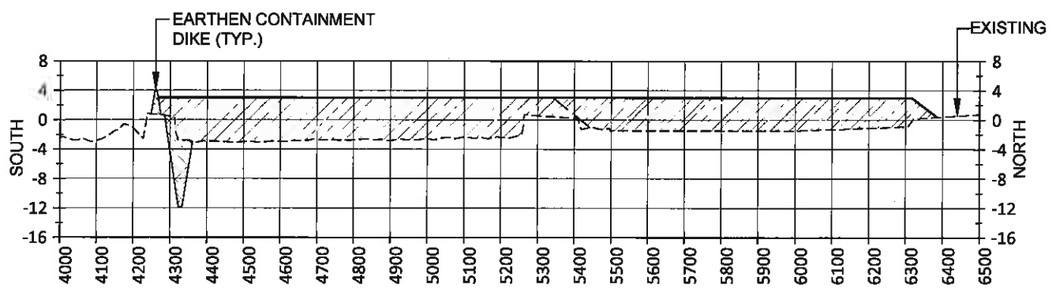
ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (SHEET 2 OF 5)

DATE: MARCH 8, 2013

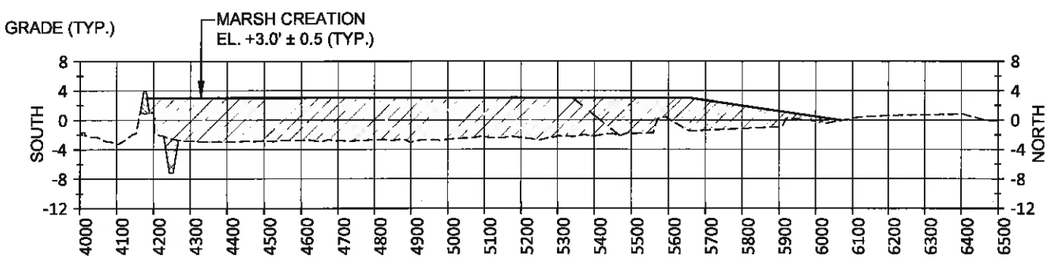
SHEET 73 OF 81



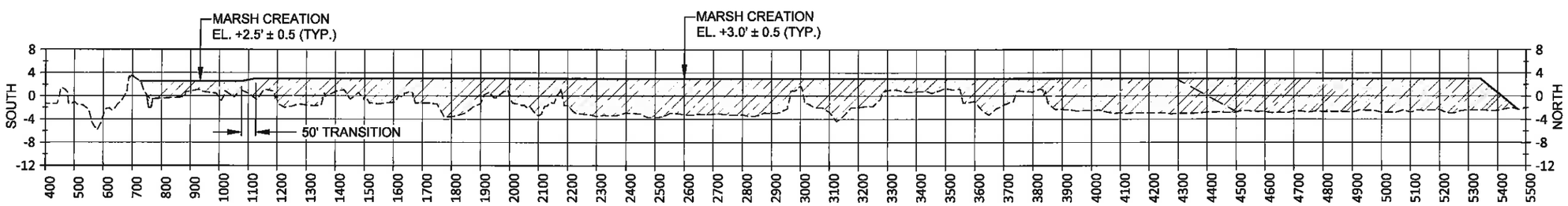

STA. 76+00 (DISTANCE FROM BASELINE, FEET)




STA. 112+00 (DISTANCE FROM BASELINE, FEET)




STA. 116+00 (DISTANCE FROM BASELINE, FEET)




STA. 120+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #2)

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

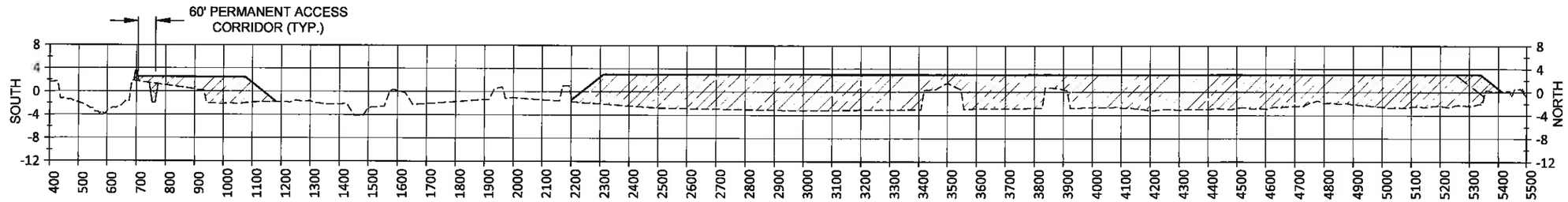
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

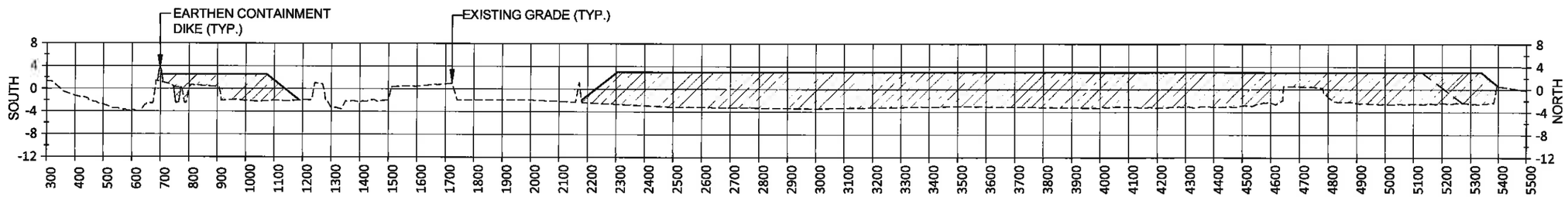
ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (SHEET 3 OF 5)

DATE: MARCH 8, 2013

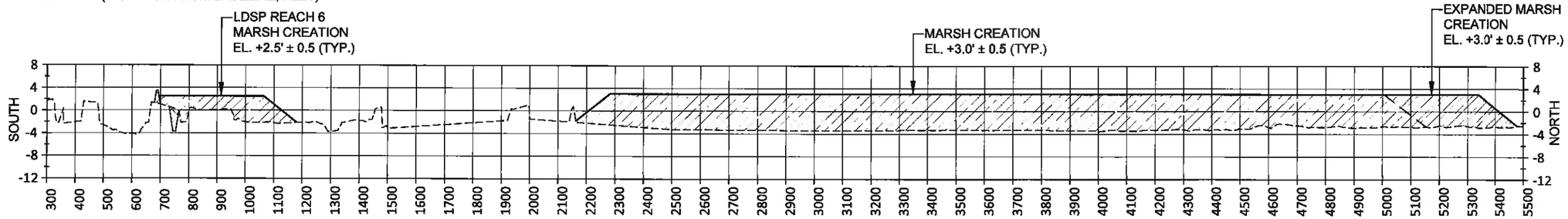
SHEET 74 OF 81




STA. 124+00 (DISTANCE FROM BASELINE, FEET)




STA. 128+00 (DISTANCE FROM BASELINE, FEET)




STA. 132+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
03/12/2013

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #2)

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

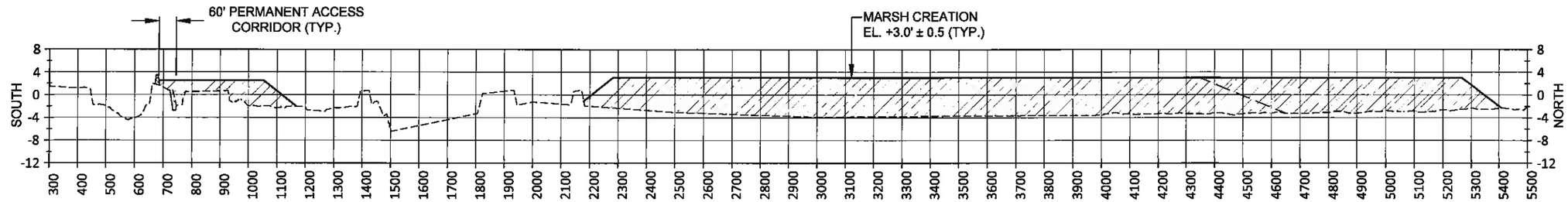
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (SHEET 4 OF 5)

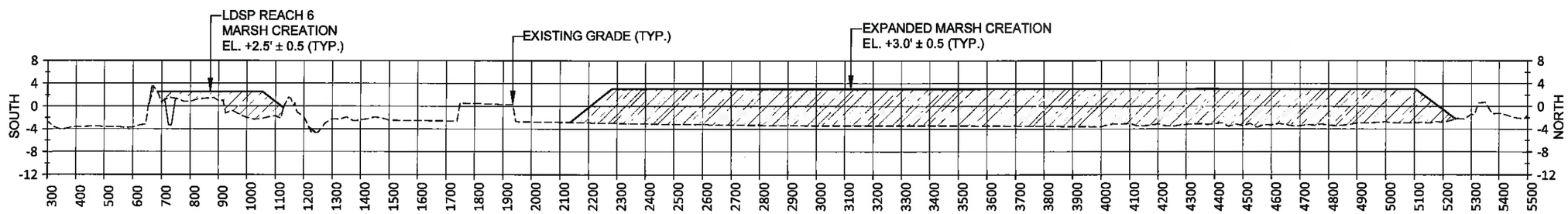
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

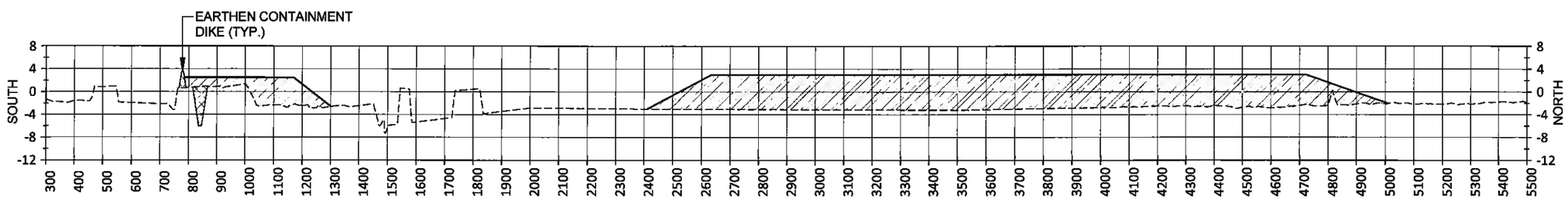
SHEET 75 OF 81




STA. 136+00 (DISTANCE FROM BASELINE, FEET)




STA. 140+00 (DISTANCE FROM BASELINE, FEET)




STA. 144+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
08/12/2013

## LEGEND

- EXISTING GRADE
- FINISHED GRADE
- EARTHEN CONTAINMENT DIKE
- BORROW AREA
- MARSH CREATION (BASE BID)
- EXPANDED MARSH CREATION (ALTERNATE #2)

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. EXISTING GRADE PROFILE BASED ON TBS SURVEY PERFORMED FROM JULY 26 THROUGH OCTOBER 10, 2011.

**FINAL BID SET**

400' 200' 0' 400' 800'
HORIZONTAL SCALE

20' 10' 0' 20' 40'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

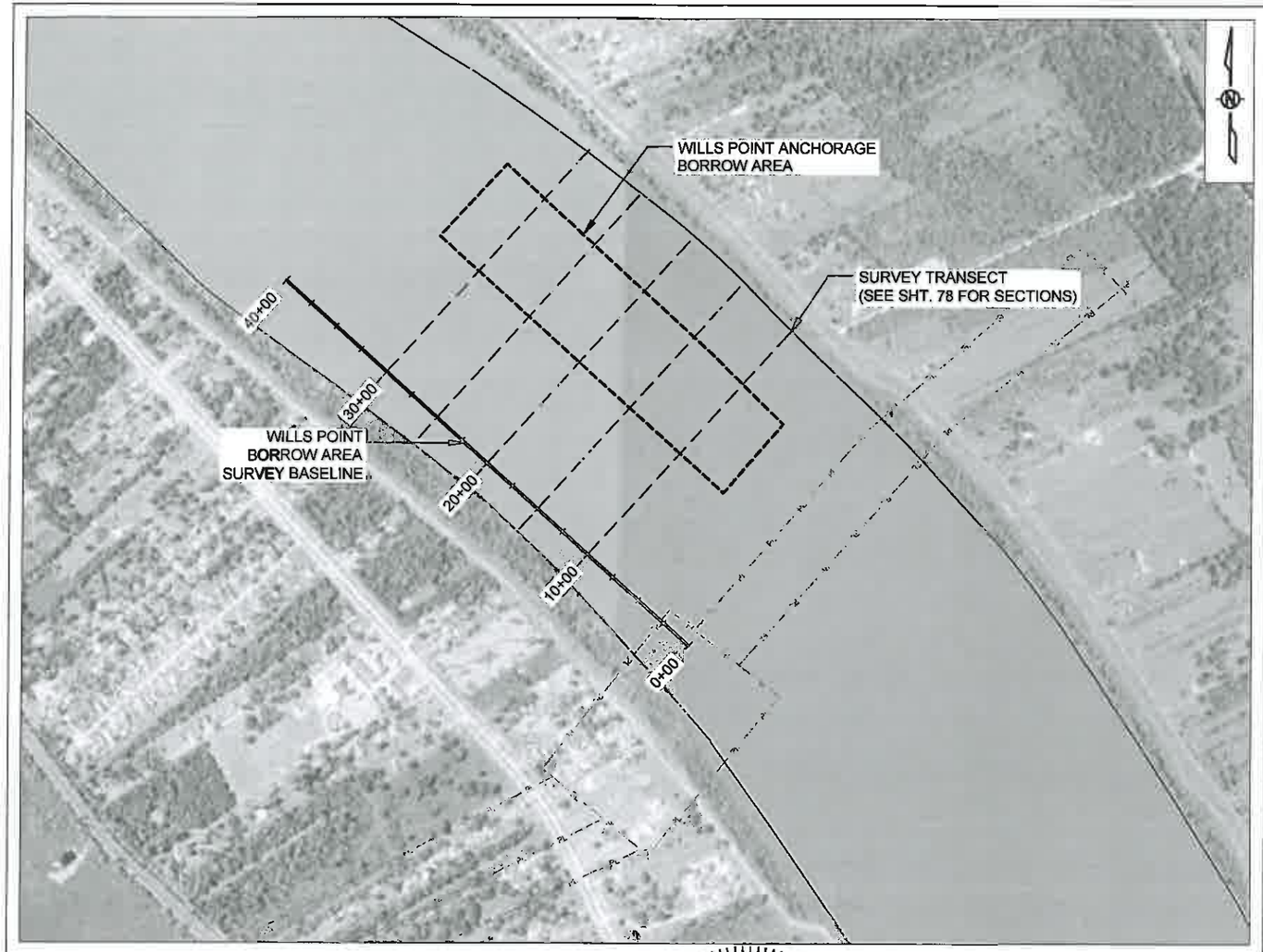
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

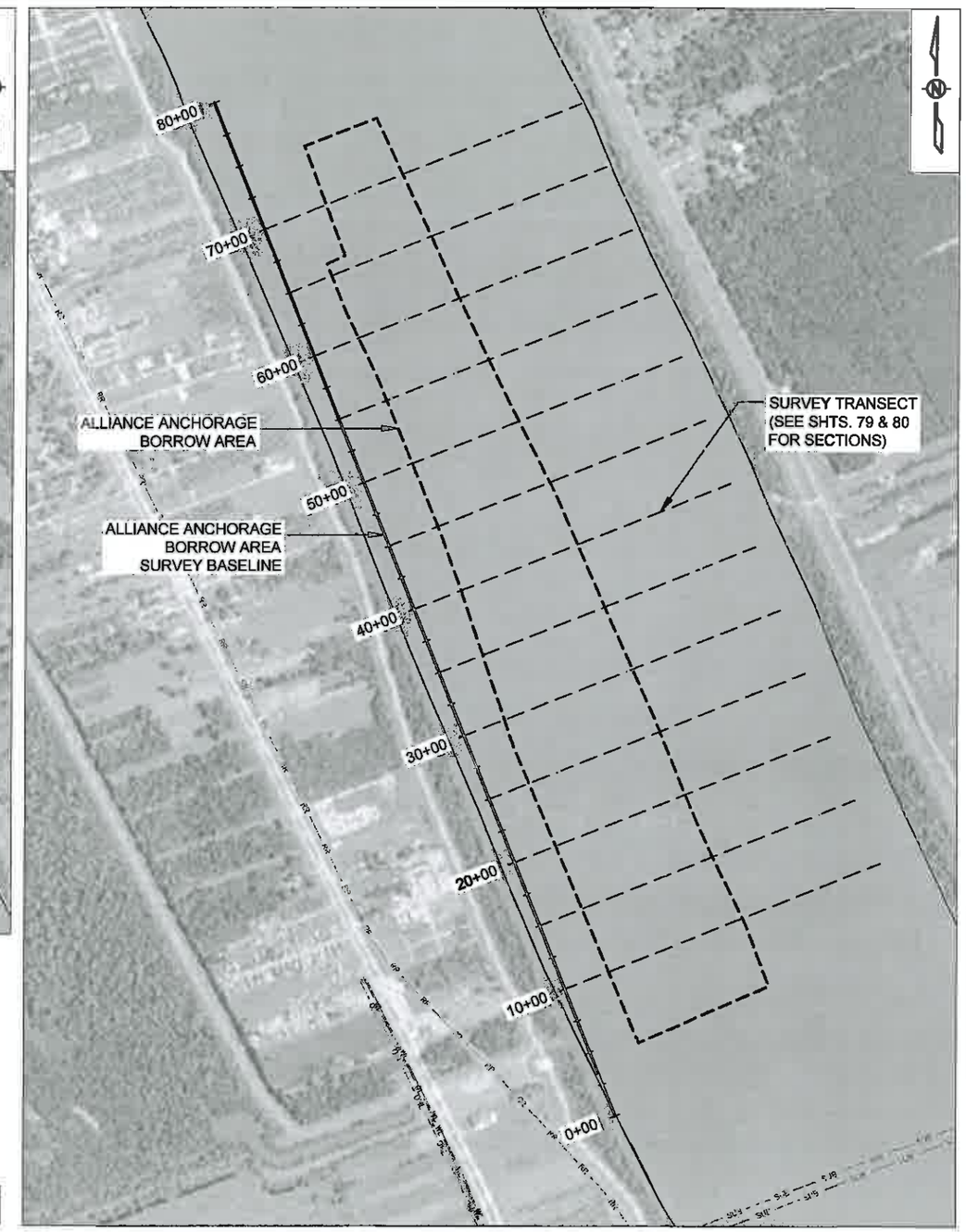
APPROVED BY: MAURY CHATELLIER, P.E.

ADDITIVE ALTERNATE #2: LDSP FILL AREA SECTIONS (SHEET 5 OF 5)

DATE: MARCH 8, 2013

SHEET 76 OF 81




## LEGEND

- SURVEY BASELINE
- SURVEY TRANSECT
- BORROW AREA

NOTES:

1. THE CONTRACTOR SHALL SURVEY THE BORROW AREAS AT THE LOCATIONS SHOWN AS PER SECTION TS-3.
2. BORROW AREA SURVEY WERE PERFORMED IN AUGUST 2011 BY OSI.
3. SEE SHEET 78, 79 & 80 FOR THE BORROW AREA SECTIONS.

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.13

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

FINAL BID SET

1,000' 500' 0' 1,000' 2,000'
HORIZONTAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

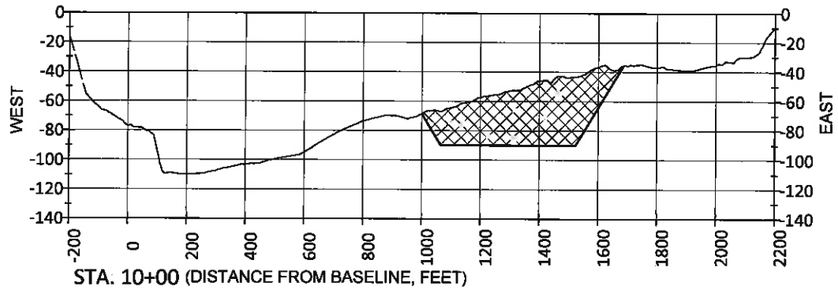
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

BORROW AREAS SECTIONS LAYOUT

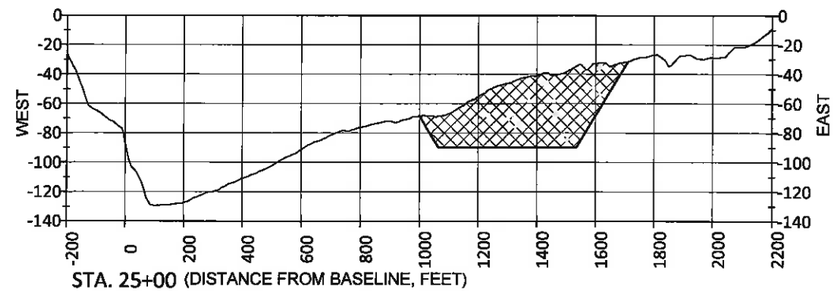
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

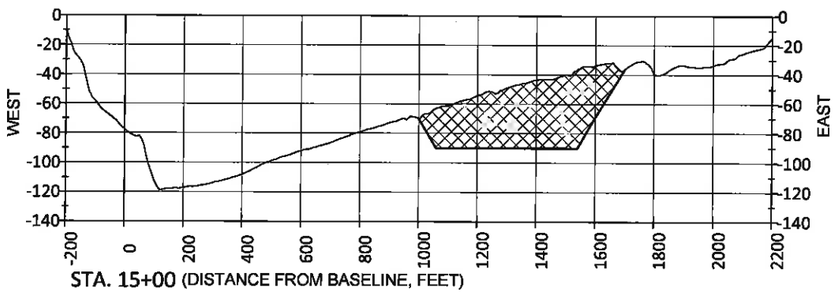
SHEET 77 OF 81



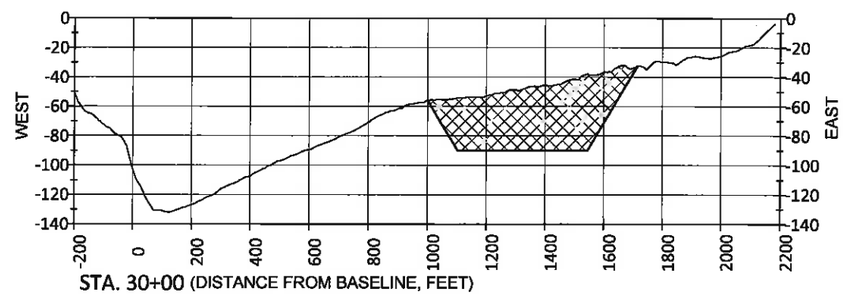

STA. 10+00 (DISTANCE FROM BASELINE, FEET)



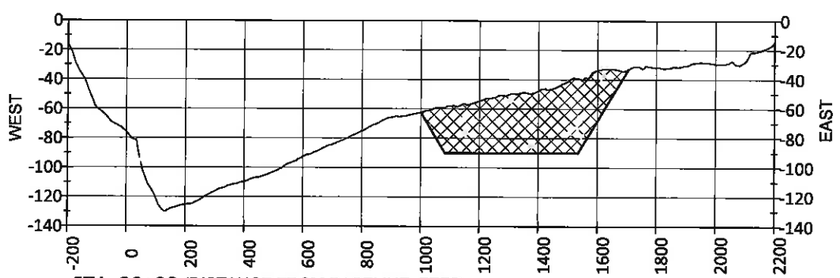

STA. 25+00 (DISTANCE FROM BASELINE, FEET)




STA. 15+00 (DISTANCE FROM BASELINE, FEET)




STA. 30+00 (DISTANCE FROM BASELINE, FEET)




STA. 20+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.

**FINAL BID SET**

| LEGEND | |
|---|---|
| ▨ | BORROW AREA |
| ----- | EXISTING RIVER BOTTOM |

500' 250' 0' 500' 1,000'
HORIZONTAL SCALE

100' 50' 0' 100' 200'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

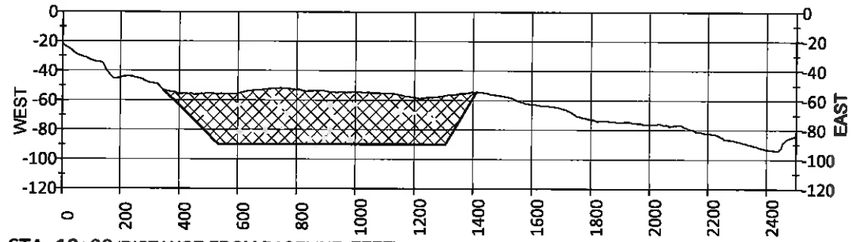
MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

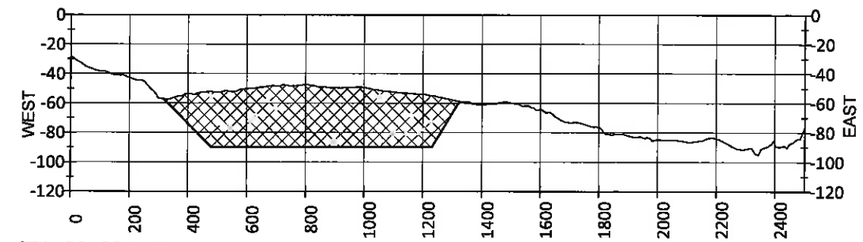
DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

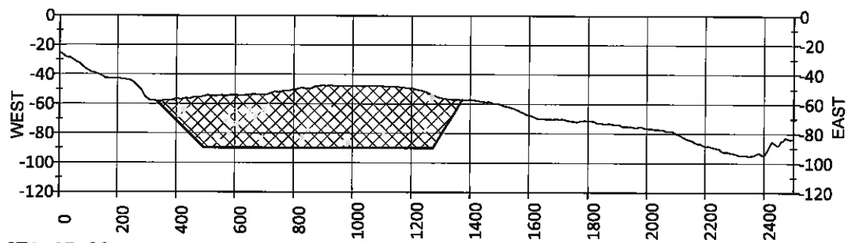
WILLS POINT ANCHORAGE BORROW AREA SECTIONS
DATE: MARCH 8, 2013
SHEET 78 OF 81



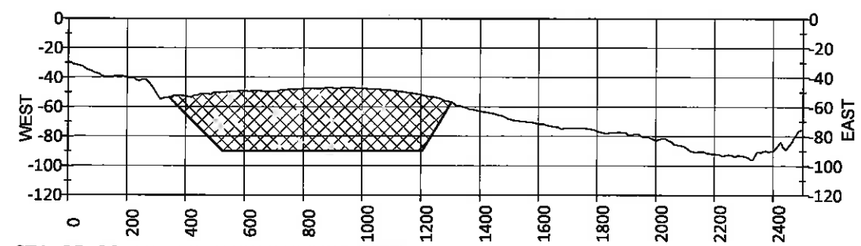

STA. 10+00 (DISTANCE FROM BASELINE, FEET)



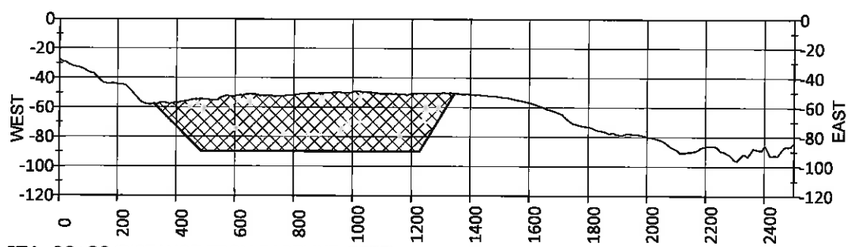

STA. 30+00 (DISTANCE FROM BASELINE, FEET)



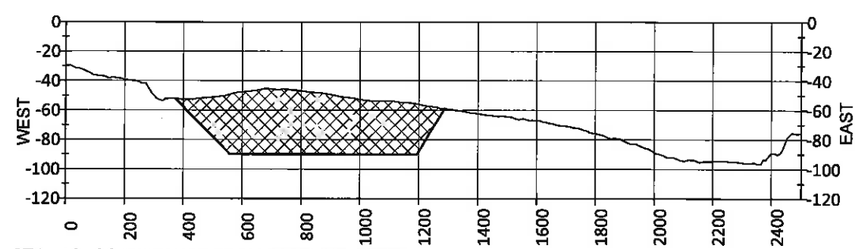

STA. 15+00 (DISTANCE FROM BASELINE, FEET)



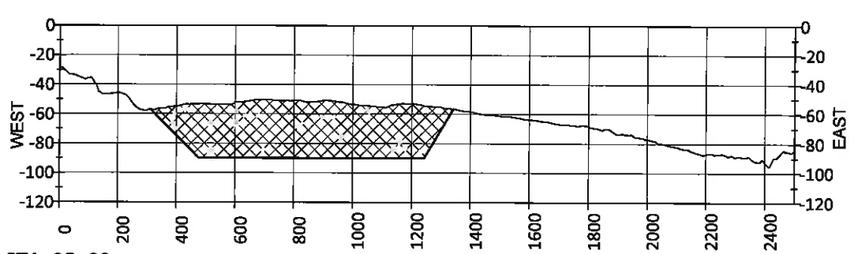

STA. 35+00 (DISTANCE FROM BASELINE, FEET)



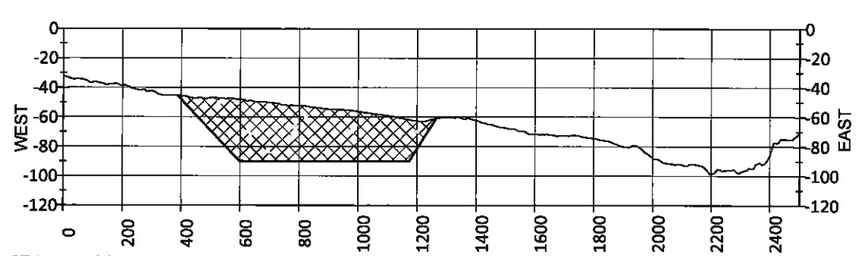

STA. 20+00 (DISTANCE FROM BASELINE, FEET)




STA. 40+00 (DISTANCE FROM BASELINE, FEET)




STA. 25+00 (DISTANCE FROM BASELINE, FEET)




STA. 45+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.

**FINAL BID SET**

| LEGEND | |
|---|---|
| ▨ | BORROW AREA |
| - - - - - | EXISTING RIVER BOTTOM |

500' 250' 0' 500' 1,000'
HORIZONTAL SCALE

100' 50' 0' 100' 200'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

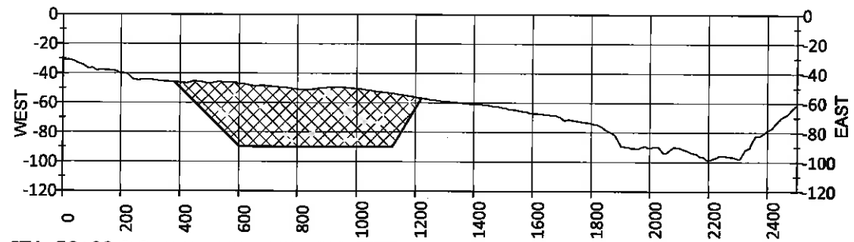
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

ALLIANCE ANCHORAGE BORROW AREA SECTIONS SHEET 1 OF 2

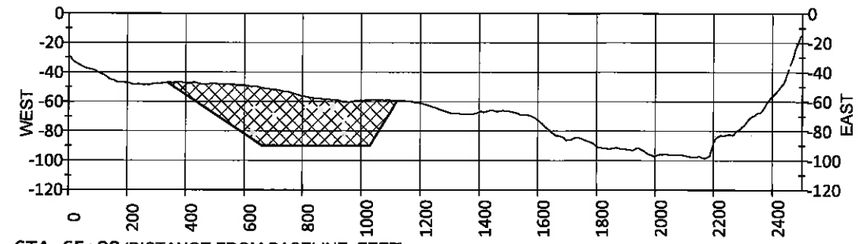
DATE: MARCH 8, 2013

DRAWN BY: YC | DESIGNED BY: SA | APPROVED BY: MAURY CHATELLIER, P.E.

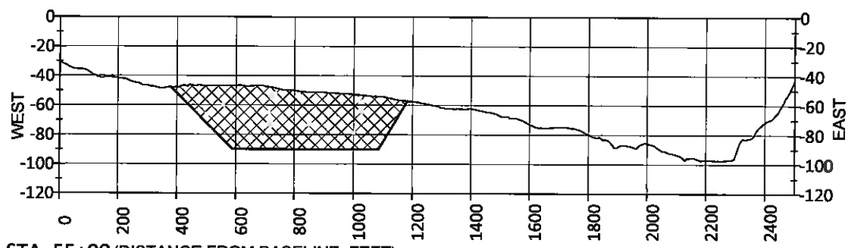
SHEET 79 OF 81



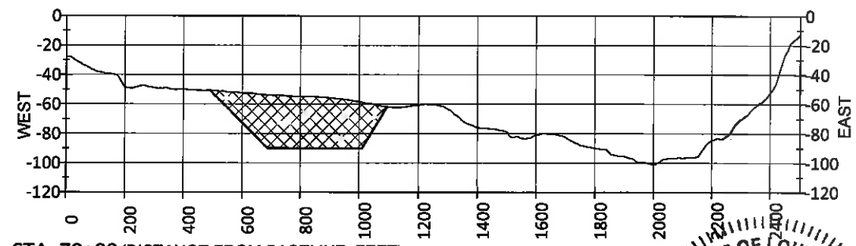

STA. 50+00 (DISTANCE FROM BASELINE, FEET)



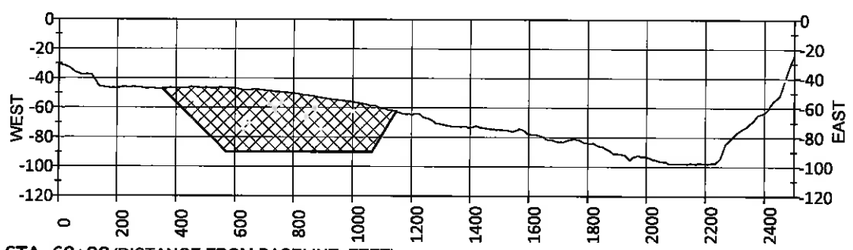

STA. 65+00 (DISTANCE FROM BASELINE, FEET)




STA. 55+00 (DISTANCE FROM BASELINE, FEET)




STA. 70+00 (DISTANCE FROM BASELINE, FEET)




STA. 60+00 (DISTANCE FROM BASELINE, FEET)

STATE OF LOUISIANA
RUSS J. JOFFRION
License No. 27661
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3.12.2013

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING
03/12/2013

NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. RIVER BOTTOM PROFILE BASED ON OSI SURVEY DATED AUGUST 17, 2011.

| LEGEND | |
|---|---|
| ▨ | BORROW AREA |
| ----- | EXISTING RIVER BOTTOM |

**FINAL BID SET**

500' 250' 0' 500' 1,000'
HORIZONTAL SCALE

100' 50' 0' 100' 200'
VERTICAL SCALE

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC
DESIGNED BY: SA

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION

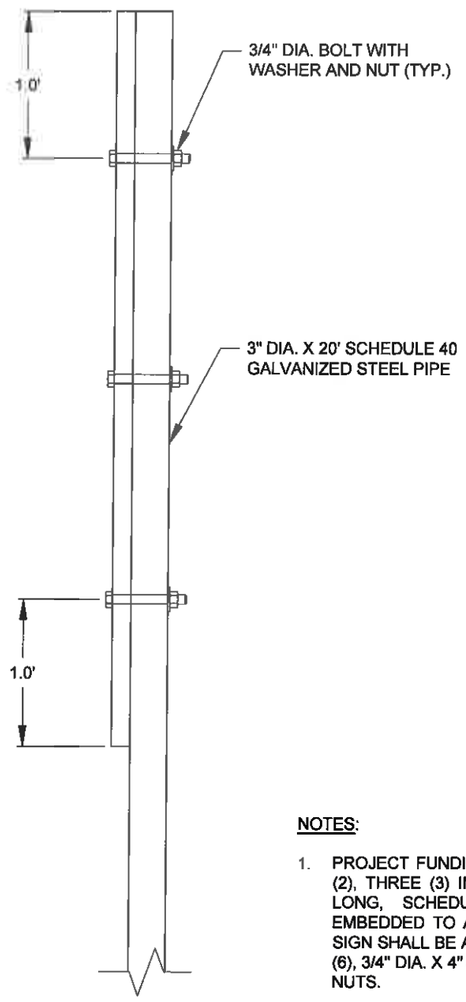
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48

APPROVED BY: MAURY CHATELLIER, P.E.

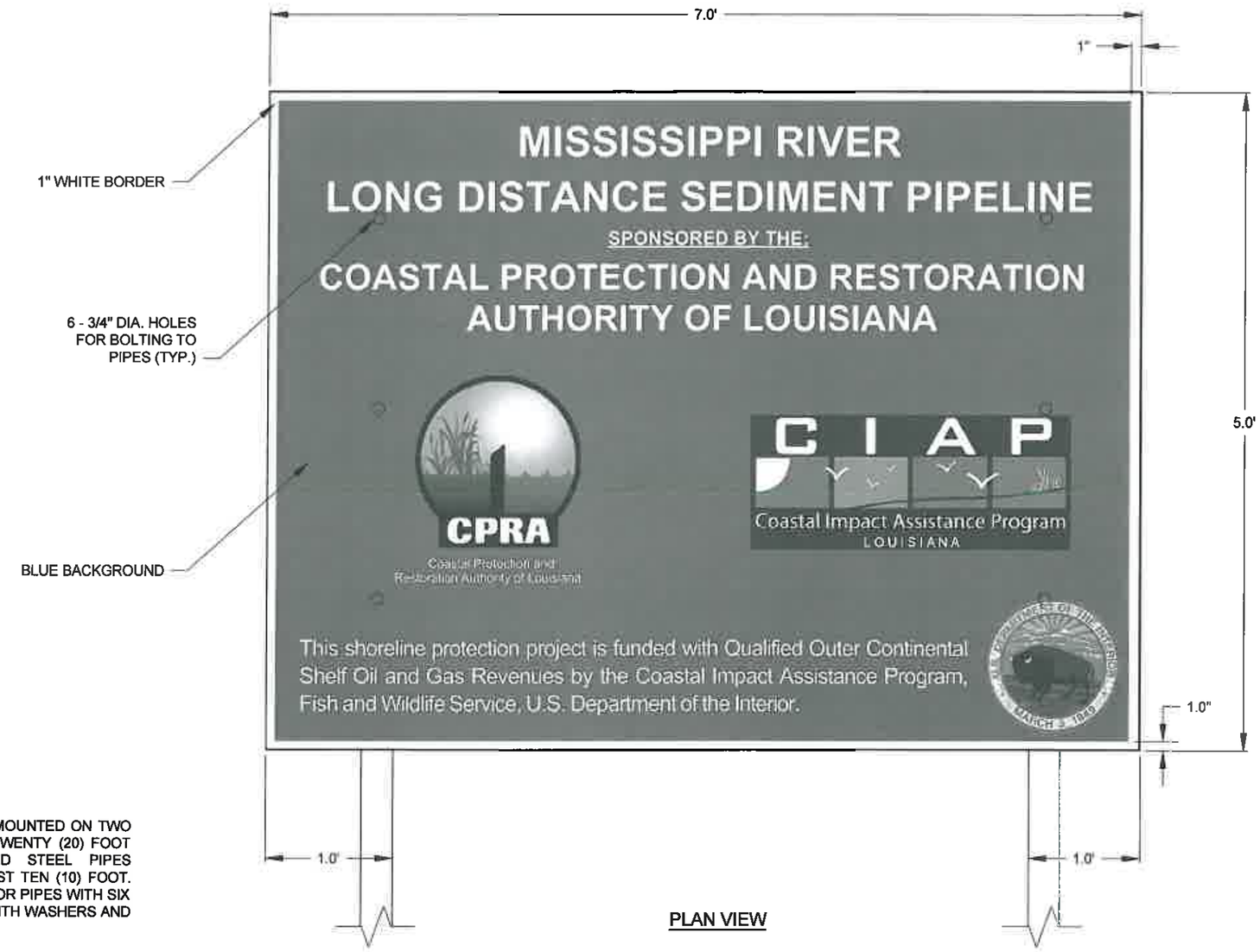
ALLIANCE ANCHORAGE BORROW AREA SECTIONS SHEET 2 OF 2

DATE: MARCH 8, 2013

SHEET 80 OF 81




SIDE VIEW




PLAN VIEW

NOTES:

1. PROJECT FUNDING SIGN SHALL BE MOUNTED ON TWO (2), THREE (3) INCH DIAMETER BY TWENTY (20) FOOT LONG, SCHEDULE 40 GALVANIZED STEEL PIPES EMBEDDED TO A DEPTH OF AT LEAST TEN (10) FOOT. SIGN SHALL BE ATTACHED TO PILES OR PIPES WITH SIX (6), 3/4" DIA. X 4" A307 (HDG) BOLTS WITH WASHERS AND NUTS.
2. BOTTOM EDGE OF SIGN SHALL BE APPROXIMATELY FIVE (5) FOOT ABOVE THE GROUND WITH FRONT FACING THE WATER, PARALLEL TO THE GROUND CREST.

21/38 PROJECT FUNDING SIGN
NOT TO SCALE

FINAL BID SET

STATE OF LOUISIANA
JONATHAN HIRD
License No. 32299
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Jonathan Hird
05/12/2013

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MOFFATT & NICHOL
ONE AMERICAN PLACE
301 MAIN STREET, SUITE 800
BATON ROUGE, LA 70825
225-336-2075

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

DRAWN BY: YC | DESIGNED BY: SF

MISSISSIPPI RIVER LDSP AND BAYOU DUPONT MARSH & RIDGE CREATION
STATE PROJECT NUMBER: BA-43 (EB) AND BA-48
APPROVED BY: MAURY CHATELLIER, P.E.

PROJECT FUNDING SIGN
DATE: MARCH 8, 2013
SHEET 81 OF 81