

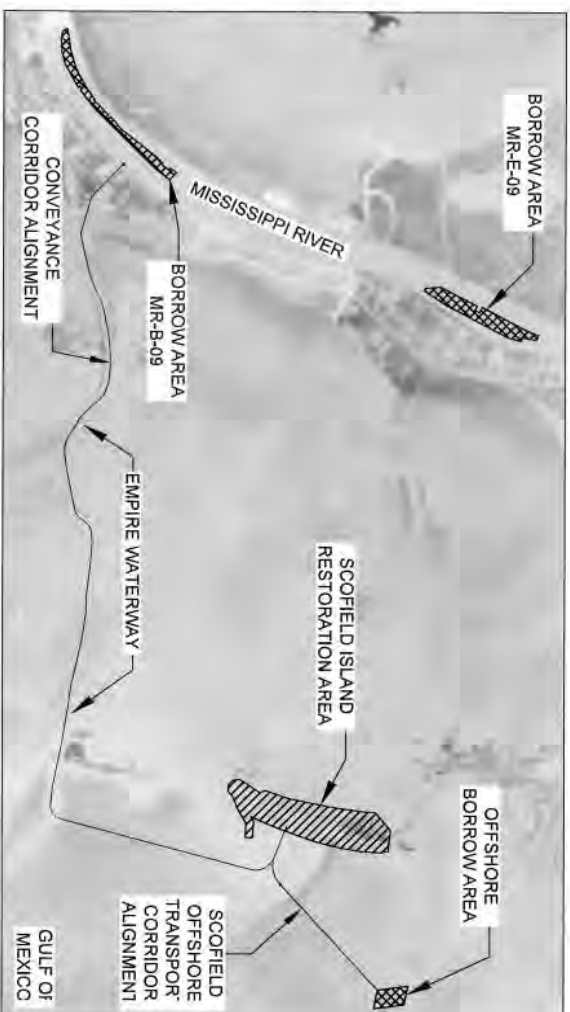
STATE OF LOUISIANA
OFFICE OF COASTAL PROTECTION & RESTORATION
RESTORATION DIVISION

RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION
STATE PROJECT NO. BA-40

PLAQUEMINES PARISH, LOUISIANA
PERMIT (MVN2008-3033-EFF)

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

BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC. QUALITY BY DESIGN	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	TITLE SHEET
MTP	COMMISSION RESPONSE	02/10 2011				
					STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
					FEDERAL PROJECT NUMBER: BA-40	SHEET 1 OF 37

DRAWN BY: DARTZ \ ZWERNEMAN

DESIGNED BY: MICHAEL T. POFF, P.E.

APPROVED BY: MAURY CHATELLIER, P.E.

MR-B-09 BORROW AREA BOUNDARY

PT NO	LATITUDE	LONGITUDE	PT NO	LATITUDE	LONGITUDE
1	29°24'45.2422" N	89°36'09.7483" W	20	29°23'11.6833" N	89°35'03.4489" W
2	29°24'30.3631" N	89°36'07.7234" W	21	29°23'00.4670" N	89°34'48.9994" W
3	29°24'15.9938" N	89°36'03.4018" W	22	29°22'59.7247" N	89°34'49.7472" W
4	29°24'10.0886" N	89°36'00.3781" W	23	29°22'56.8699" N	89°34'46.0534" W
5	29°24'01.3914" N	89°35'54.9725" W	24	29°22'53.4417" N	89°34'40.4374" W
6	29°23'53.0554" N	89°35'48.7700" W	25	29°22'54.4229" N	89°34'39.6726" W
7	29°23'50.2020" N	89°35'46.5346" W	26	29°22'52.7815" N	89°34'36.9278" W
8	29°23'49.9505" N	89°35'45.6878" W	27	29°22'47.7779" N	89°34'40.5824" W
9	29°23'48.4521" N	89°35'45.9032" W	28	29°22'57.2088" N	89°34'53.8569" W
10	29°23'48.7401" N	89°35'45.3894" W	29	29°23'19.9927" N	89°35'19.0513" W
11	29°23'44.4509" N	89°35'41.5285" W	30	29°23'42.7544" N	89°35'44.2973" W
12	29°23'40.6841" N	89°35'37.8185" W	31	29°23'58.3182" N	89°35'57.8853" W
13	29°23'38.3587" N	89°35'35.2866" W	32	29°23'59.2200" N	89°35'56.5363" W
14	29°23'37.4665" N	89°35'36.1662" W	33	29°24'01.3403" N	89°35'58.1950" W
15	29°23'34.8338" N	89°35'32.8702" W	34	29°24'00.4385" N	89°35'59.5450" W
16	29°23'35.4160" N	89°35'32.2638" W	35	29°24'19.2686" N	89°36'11.4018" W
17	29°23'32.4613" N	89°35'29.2276" W	36	29°24'28.8394" N	89°36'14.2831" W
18	29°23'25.3109" N	89°35'21.3253" W	37	29°24'39.0177" N	89°36'14.5405" W
19	29°23'21.9137" N	89°35'17.2617" W	38	29°24'44.4853" N	89°36'13.0293" W

MR-E-09 BORROW AREA BOUNDARY


PT NO	LATITUDE	LONGITUDE	PT NO	LATITUDE	LONGITUDE
1	29°21'20.8645" N	89°30'56.4875" W	10	29°20'43.0908" N	89°29'19.6368" W
2	29°21'21.2146" N	89°30'44.0254" W	11	29°20'40.3163" N	89°29'21.3729" W
3	29°21'06.3499" N	89°30'12.5101" W	12	29°20'42.4396" N	89°29'32.9235" W
4	29°21'02.9005" N	89°30'14.6683" W	13	29°20'39.7609" N	89°29'34.6176" W
5	29°21'00.6061" N	89°30'09.8938" W	14	29°20'42.6691" N	89°29'44.3668" W
6	29°21'04.9547" N	89°30'07.1773" W	15	29°20'56.9765" N	89°30'14.0907" W
7	29°20'51.3796" N	89°29'38.9345" W	16	29°21'08.7091" N	89°30'38.9650" W
8	29°20'48.9944" N	89°29'33.9820" W	17	29°21'19.1750" N	89°30'57.5448" W
9	29°20'46.7365" N	89°29'28.9520" W			

OFFSHORE BORROW
AREA BOUNDARY

PT NO	LATITUDE	LONGITUDE
1	29°12'01.4418" N	89°31'51.2472" W
2	29°12'15.7567" N	89°31'47.5434" W
3	29°12'18.4314" N	89°31'20.8025" W
4	29°12'04.1188" N	89°31'24.5073" W

GENERAL NOTES:

1. ALL AERIAL IMAGERY FROM U.S. DEPARTMENT OF AGRICULTURE, NOVEMBER 2007.
2. COORDINATES ARE NAD83, LOUISIANA STATE PLANE, SOUTHERN ZONE, U.S. SURVEY FEET.
3. ALL ELEVATIONS ARE IN NAVD88, U.S. SURVEY FEET.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS AT TIME OF CONSTRUCTION. ALL PIPELINES AND UNDERGROUND UTILITIES SHALL BE FIELD LOCATED AND MARKED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS 72 HOURS PRIOR TO ANY EXCAVATION.
6. NO CONSTRUCTION EQUIPMENT OR ACTIVITIES MAY OPERATE, TRANSIT, STAGE, OR STORE OUTSIDE THE CONVEYANCE CORRIDOR ALONG THE EMPIRE WATERWAY FROM THE MISSISSIPPI RIVER TO THE GULF OF MEXICO.
7. THIS DRAWING SET IS FOR PERMITTING PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY IN DESIGN</small>		OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION <small>450 LAUREL STREET</small> <small>BATON ROUGE, LOUISIANA 70801</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		ALIGNMENT TABLES AND GENERAL NOTES	
MDP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011								
DRAWN BY: DARTEZ IZMERENMAN			DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELIER, P.E.		FEDERAL PROJECT NUMBER: BA-40		SHEET 3 OF 37	
							STATE PROJECT NUMBER: BA-40		DATE: NOVEMBER, 2010	

CONVEYANCE CORRIDOR ALIGNMENT

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
000+00	29 29 00.3065° N	89 36 21.0524° W	270+00	29 18 59.6538° N	89 36 13.3325° W	530+00	29 14 50.9387° N	89 36 31.4444° W	665+00	29 14 01.9447° N	89 34 22.1047° W
010+00	29 22 53.2297° N	89 35 28.9566° W	280+00	29 18 49.9386° N	89 36 11.1830° W	535+00	29 14 46.0171° N	89 36 32.0462° W	670+00	29 14 00.6087° N	89 34 16.6706° W
020+00	29 22 46.1528° N	89 35 36.8604° W	290+00	29 18 40.2198° N	89 36 09.0329° W	540+00	29 14 41.0863° N	89 36 32.5280° W	675+00	29 13 56.2747° N	89 34 11.2365° W
030+00	29 22 39.0789° N	89 35 44.7640° W	300+00	29 18 30.4979° N	89 36 06.8822° W	545+00	29 14 36.3812° N	89 36 30.9343° W	680+00	29 13 57.9386° N	89 34 05.8024° W
040+00	29 22 31.0274° N	89 35 50.7693° W	310+00	29 18 23.2624° N	89 35 59.5454° W	550+00	29 14 32.9411° N	89 36 26.9680° W	685+00	29 13 56.6044° N	89 34 00.3684° W
050+00	29 22 21.5221° N	89 35 53.8276° W	320+00	29 18 15.5040° N	89 35 53.0454° W	555+00	29 14 31.2881° N	89 36 21.6683° W	690+00	29 13 55.2682° N	89 33 54.9344° W
060+00	29 22 11.0168° N	89 35 57.0858° W	330+00	29 18 05.6179° N	89 35 52.7994° W	560+00	29 14 24.8141° N	89 36 21.1980° W	695+00	29 13 53.9339° N	89 33 49.5004° W
070+00	29 22 02.3642° N	89 35 58.2315° W	340+00	29 17 55.7533° N	89 35 53.6010° W	565+00	29 14 28.6309° N	89 36 05.3613° W	700+00	29 13 52.5986° N	89 33 44.0665° W
080+00	29 21 52.6688° N	89 35 55.9907° W	350+00	29 17 45.6178° N	89 35 54.8850° W	570+00	29 14 27.2872° N	89 36 05.3613° W	705+00	29 13 51.2632° N	89 33 38.6326° W
090+00	29 21 43.0032° N	89 35 53.6542° W	360+00	29 17 36.1063° N	89 35 56.4002° W	575+00	29 14 25.9834° N	89 35 55.9284° W	710+00	29 13 50.9551° N	89 33 33.1030° W
100+00	29 21 33.3539° N	89 35 50.8804° W	370+00	29 17 26.2981° N	89 35 57.9232° W	580+00	29 14 23.2857° N	89 35 54.4915° W	715+00	29 13 50.9551° N	89 33 27.5271° W
110+00	29 21 24.0816° N	89 35 47.0577° W	380+00	29 17 16.4162° N	89 35 58.4648° W	585+00	29 14 21.6296° N	89 35 48.0567° W	720+00	29 13 53.1534° N	89 33 22.4803° W
120+00	29 21 15.0438° N	89 35 42.4590° W	390+00	29 17 06.5917° N	89 35 59.6439° W	590+00	29 14 21.9617° N	89 35 43.6219° W	725+00	29 13 56.6800° N	89 33 18.5512° W
130+00	29 21 05.5763° N	89 35 39.2974° W	400+00	29 16 56.8243° N	89 36 01.4832° W	595+00	29 14 20.6277° N	89 35 38.1871° W	730+00	29 14 01.1131° N	89 33 16.0479° W
140+00	29 20 55.8215° N	89 35 37.3316° W	410+00	29 16 47.1322° N	89 36 03.7865° W	600+00	29 14 19.2936° N	89 35 32.7524° W	735+00	29 14 05.6857° N	89 33 13.8871° W
150+00	29 20 46.0465° N	89 35 35.5453° W	420+00	29 16 37.5224° N	89 36 06.4349° W	605+00	29 14 17.5594° N	89 35 27.3177° W	740+00	29 14 10.2593° N	89 33 11.7263° W
160+00	29 20 36.1935° N	89 35 34.5421° W	430+00	29 16 27.8019° N	89 36 09.0875° W	610+00	29 14 16.6252° N	89 35 21.8931° W	745+00	29 14 14.8427° N	89 33 09.5981° W
170+00	29 20 26.3015° N	89 35 34.3180° W	440+00	29 16 18.2872° N	89 36 11.7867° W	615+00	29 14 15.2808° N	89 35 16.4485° W	750+00	29 14 13.4161° N	89 33 07.4395° W
180+00	29 20 16.4413° N	89 35 33.2308° W	450+00	29 16 08.5886° N	89 36 13.9973° W	620+00	29 14 13.9566° N	89 35 11.0139° W	755+00	29 14 13.9865° N	89 33 05.2809° W
190+00	29 20 06.8939° N	89 35 37.8701° W	460+00	29 15 58.6043° N	89 36 15.7170° W	625+00	29 14 12.6222° N	89 35 05.5794° W			
200+00	29 19 58.3517° N	89 35 43.2516° W	470+00	29 15 49.0734° N	89 36 17.7924° W	630+00	29 14 11.2877° N	89 35 00.1449° W			
210+00	29 19 51.8830° N	89 35 51.7533° W	480+00	29 15 39.3407° N	89 36 19.8571° W	635+00	29 14 09.6532° N	89 34 54.7105° W			
220+00	29 19 45.0247° N	89 35 59.8186° W	490+00	29 15 29.6674° N	89 36 22.2272° W	640+00	29 14 08.6186° N	89 34 48.2761° W			
230+00	29 19 36.7821° N	89 36 06.0428° W	500+00	29 15 20.0433° N	89 36 24.8483° W	645+00	29 14 07.2839° N	89 34 43.8418° W			
240+00	29 19 28.6648° N	89 36 12.4979° W	510+00	29 15 10.3615° N	89 36 27.1973° W	650+00	29 14 05.9492° N	89 34 38.4074° W			
250+00	29 19 19.3089° N	89 36 15.7284° W	520+00	29 15 00.6940° N	89 36 29.6276° W	655+00	29 14 04.6144° N	89 34 32.9732° W			
260+00	29 19 09.4375° N	89 36 15.0531° W	525+00	29 14 55.6803° N	89 36 30.8427° W	660+00	29 14 03.2786° N	89 34 27.5389° W			

PROBABLE

BOOSTER PUMP LOCATIONS


BOOSTER	LATITUDE	LONGITUDE
NO. 1	29 22 00.4216° N	89 35 57.7521° W
NO. 2	29 21 45.3690° N	89 35 54.1330° W
NO. 3	29 21 00.1155° N	89 35 38.1793° W
NO. 4	29 19 32.6358° N	89 36 09.1849° W
NO. 5	29 18 19.4324° N	89 35 54.8845° W
NO. 6	29 16 10.7988° N	89 36 13.6053° W
NO. 7	29 15 42.3009° N	89 36 19.2305° W

NAVIGATION CROSSINGS

BOOSTER	LATITUDE	LONGITUDE
NC-1	28 21 12.3540° N	89 35 41.2901° W
NC-2	29 20 16.2645° N	89 35 35.2511° W
NC-3	29 18 00.9327° N	89 35 52.9824° W
NC-4	29 16 50.8808° N	89 36 02.6113° W
NC-5	29 16 01.4430° N	89 36 15.2594° W
NC-6	29 15 32.0311° N	89 36 21.5317° W

EARTHEN CONTAINMENT
DIKE ALIGNMENT

POINT NO.	LATITUDE	LONGITUDE
01	29 14 48.4746° N	89 33 43.3224° W
02	29 14 52.9330° N	89 33 38.6532° W
03	29 14 50.5848° N	89 33 34.8530° W
04	29 14 48.5601° N	89 33 30.6524° W
05	29 14 39.5060° N	89 33 34.0191° W
06	29 14 38.2954° N	89 33 35.2905° W
07	29 14 36.3339° N	89 33 31.4171° W
08	29 14 38.7819° N	89 33 31.0494° W
09	29 14 47.9867° N	89 33 28.5328° W
10	29 14 43.2966° N	89 33 23.2019° W
11	29 14 47.5329° N	89 33 17.9254° W
12	29 14 45.7289° N	89 33 12.6689° W
13	29 14 44.8808° N	89 33 10.2611° W
14	29 14 43.0972° N	89 33 04.5552° W
15	29 14 42.0532° N	89 32 59.4342° W
16	29 14 40.9672° N	89 32 53.9255° W
17	29 14 39.9281° N	89 32 48.4031° W
18	29 14 38.8405° N	89 32 42.9848° W
19	29 14 37.89251° N	89 32 37.3886° W
20	29 14 36.8868° N	89 32 31.8629° W
21	29 14 35.7746° N	89 32 26.5565° W
22	29 14 34.7293° N	89 32 20.6860° W
23	29 14 34.0312° N	89 32 15.2145° W
24	29 14 33.3259° N	89 32 09.5951° W
25	29 14 32.5855° N	89 32 03.8859° W
26	29 14 31.8717° N	89 31 58.3860° W
27	29 14 31.1760° N	89 31 48.6378° W
28	29 14 19.1227° N	89 31 37.3441° W
29	29 14 08.0183° N	89 31 39.1399° W

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. STB GROUP LLC <small>DESIGN & CONSTRUCTION</small>	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	ALIGNMENT TABLES AND GENERAL NOTES
CM/DUSAGE/STAKEHOLDER	02/10					
COMMENT RESPONSE	2011					
DRAWN BY: DARTIE ZWERENMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 4 OF 37

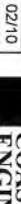

LEGEND:

- BORROW AREA PERIMETER (BOTTOM OF CUT)
- BORROW AREA PERIMETER (TOP OF CUT)
- REVEMENT
- BATHYMETRIC CONTOUR, 2008
- MR-B-09 SURVEY BASELINE
- RIVER MILE MARKER

MR-B-09 BORROW AREA PARAMETERS

BORROW AREA LENGTH	14.700'
BORROW AREA WIDTH	360' TO 800'
BORROW AREA THICKNESS	24'
BORROW AREA VOLUME (-73' NAVD88)	3.77 MCY

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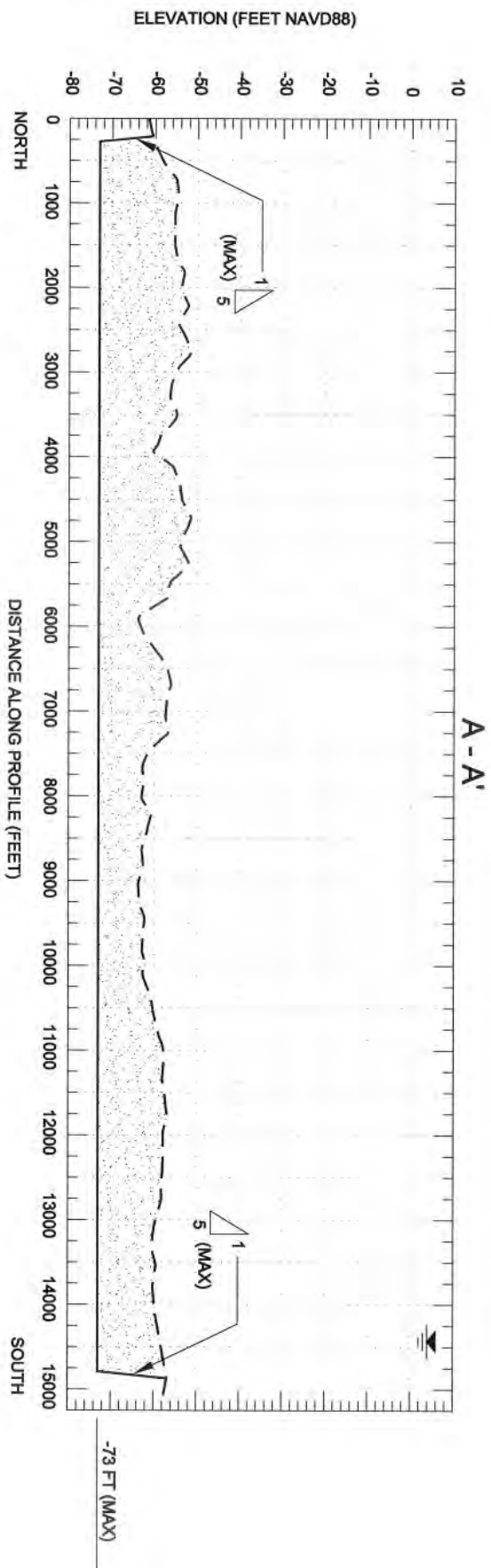
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFFIELD ISLAND RESTORATION	BORROW AREA MR-B-09 PLAN VIEW
MTP	CMID/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011				
			 SIB GROUP LLC QUALITY BY DESIGN			
DRAWN BY: DARTEZ \ ZVERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 5 OF 37

SCALE:
H: 1" = 2000'
V: 1" = 40'



 BEACH/DUNE FILL CUT

NOVEMBER 2008





DESIGN



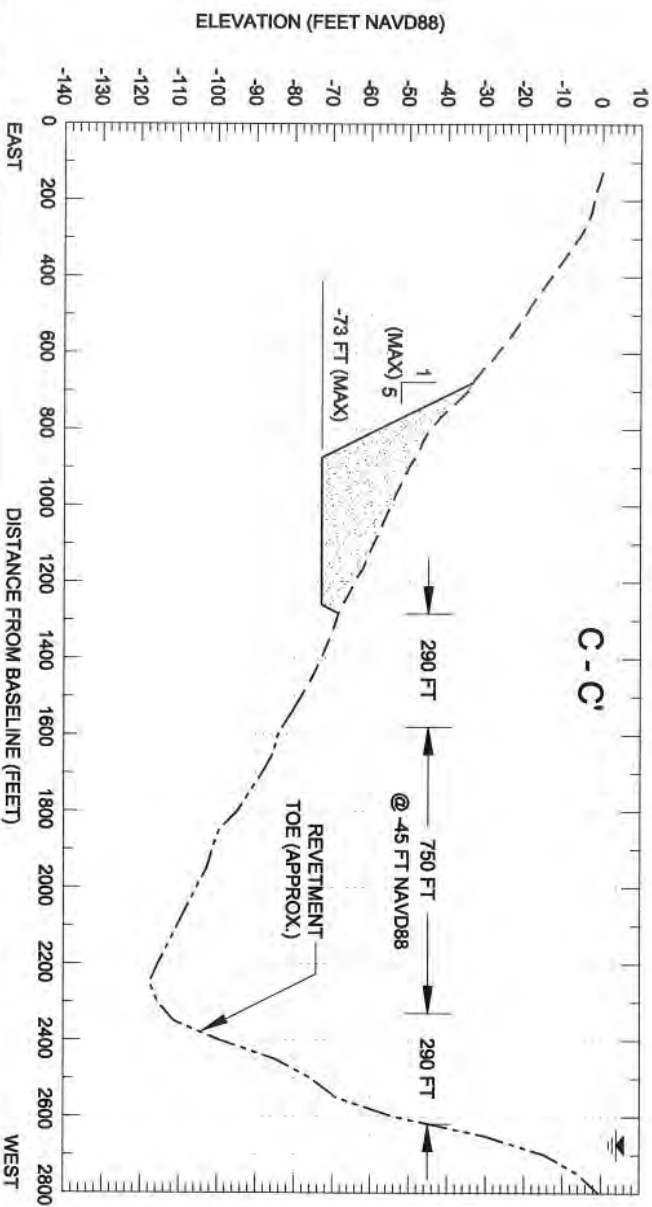
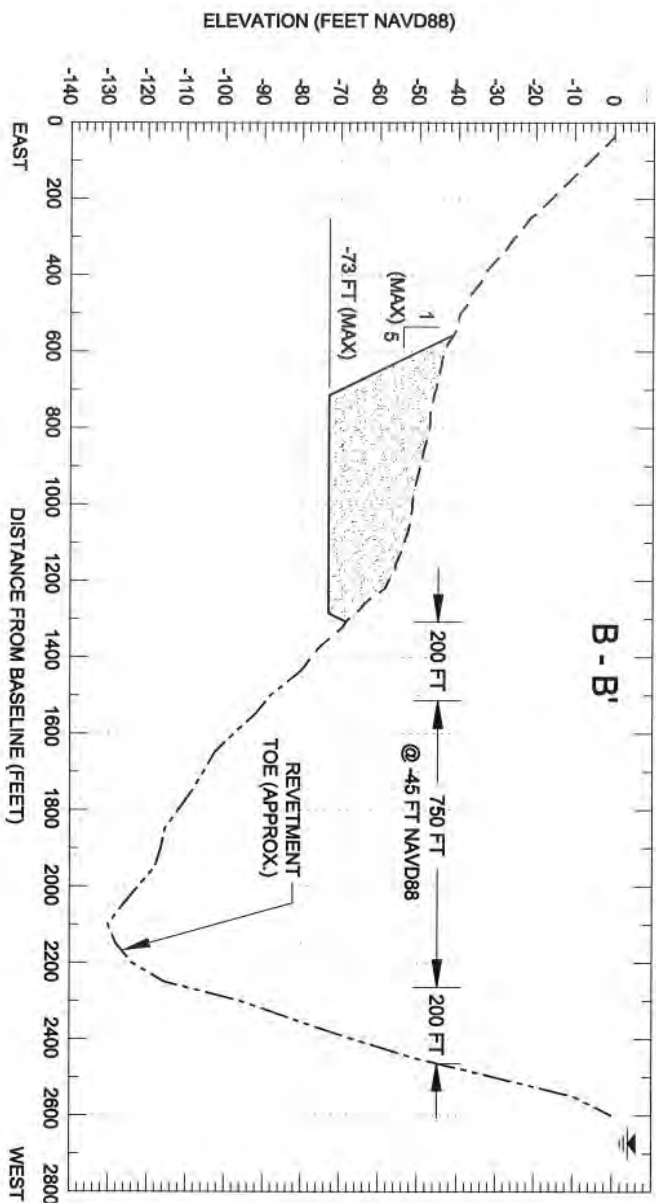
1. BATHYMETRIC SURVEYS PERFORMED BY ALPINE OCEAN SEISMIC SURVEY, INC., 2008.

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFFIELD ISLAND RESTORATION	BORROW AREA MR-B-09 DESIGN SECTION	
MTP	CMDUSACE/STAKEHOLDER COMMENT RESPONSE	02/7/2011					
DRAWN BY: DARTZ \ ZWERNEMAN			 STB GROUP, LLC QUALITY BY DESIGN	DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 6 OF 37

LEGEND:

-  BEACH/DUNE FILL CUT
-  NOVEMBER 2008
-  USACE 2004
HYDROGRAPHIC SURVEY
-  DESIGN

SCALE:
H: 1" = 500'
V: 1" = 50'



NOTES:

1. BATHYMETRIC SURVEYS PERFORMED BY
ALPINE OCEAN SEISMIC SURVEY, INC., 2008
& USACE, 2004

BY	DESCRIPTION	DATE
CM/DUS/ACE/TAKEHOLDER	02/10	2011
COMMENT RESPONSE		

DRAWN BY: DARTIEZ ZWERNEMAN	DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.
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COASTAL ENGINEERING CONSULTANTS, INC. QUALITY BY DESIGN	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION
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STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
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FEDERAL PROJECT NUMBER: BA-40	SHEET 7 OF 37
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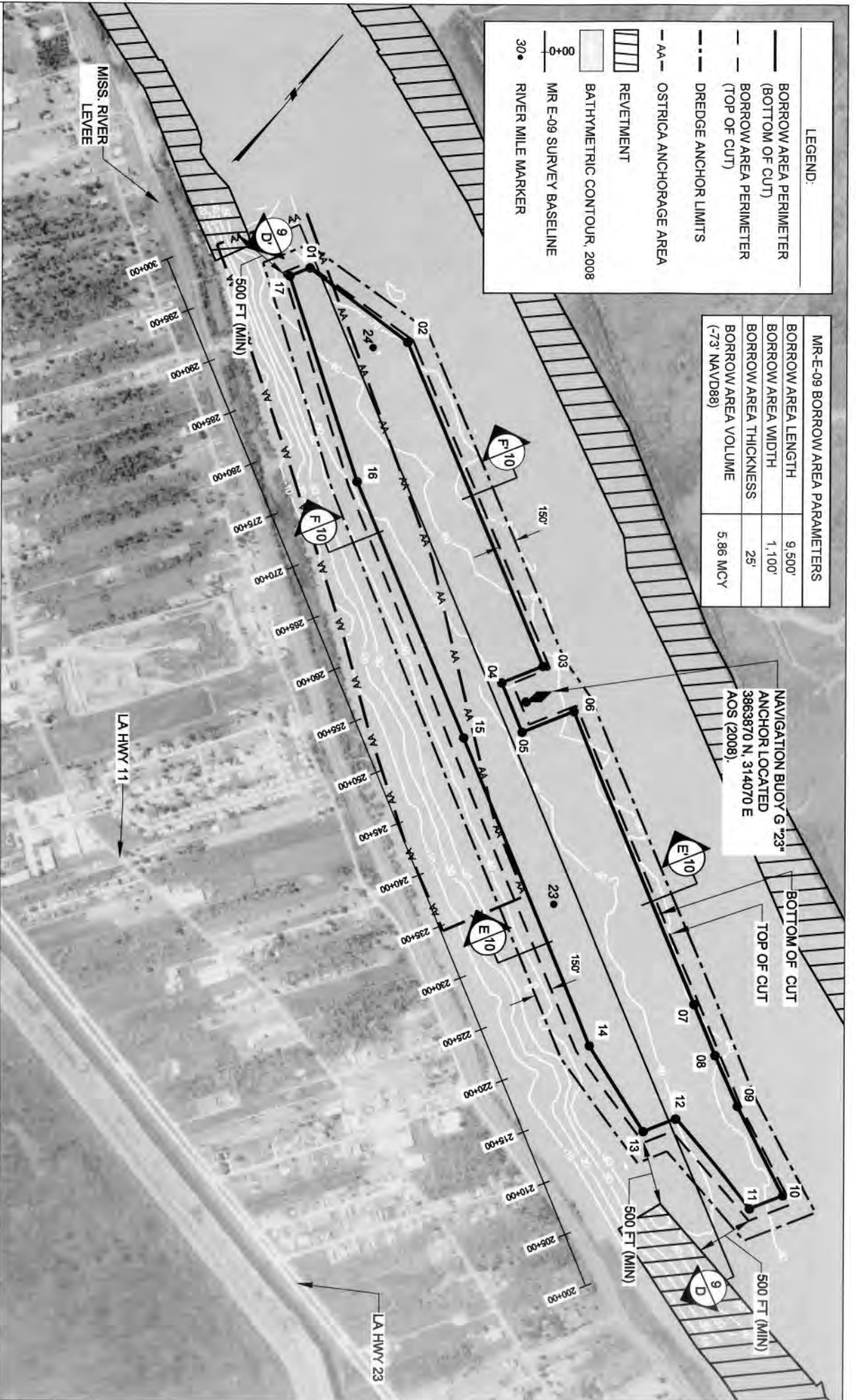
BORROW AREA MR-B-09 DESIGN SECTIONS
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LEGEND:

- BORROW AREA PERIMETER (BOTTOM OF CUT)
- BORROW AREA PERIMETER (TOP OF CUT)
- - - DREDGE ANCHOR LIMITS
- AA - OSTRICA ANCHORAGE AREA
- ▨ REVELMENT
- ▨ BATHYMETRIC CONTOUR, 2008
- 0+0 MR E-09 SURVEY BASELINE
- 30' RIVER MILE MARKER

MR-E-09 BORROW AREA PARAMETERS	
BORROW AREA LENGTH	9,500'
BORROW AREA WIDTH	1,100'
BORROW AREA THICKNESS	25'
BORROW AREA VOLUME	5.86 MCY
(73 NAVD88)	

NAVIGATION BUOY G-23*
ANCHOR LOCATED
3863870 N, 314070 E
AOS (2008).



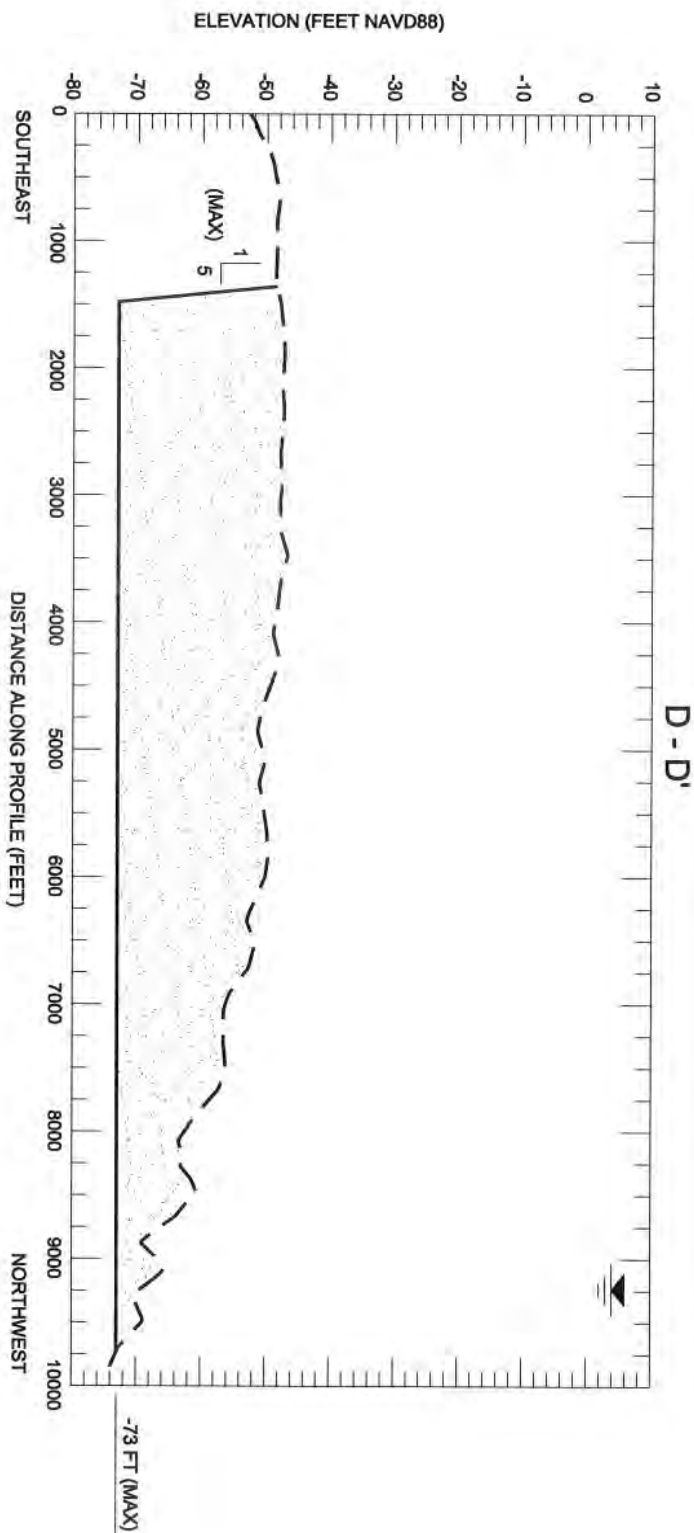
NOTES:

1. SEE SHEETS 9 & 10 FOR TYPICAL DESIGN CROSS SECTIONS. SEE SHEET 3 FOR PERIMETER POINTS OF INFLECTION.
2. BATHYMETRIC SURVEYS PERFORMED BY ALPINE OCEAN SEISMIC SURVEY, INC., 2008.
3. REQUEST PERMIT FOR BOTH MISSISSIPPI RIVER BORROW AREAS, MR-B-09 AND MR-E-09, TO PROMOTE COMPETITIVE CONSTRUCTION CONTRACT BIDS BASED ON AVAILABLE DREDGE EQUIPMENT. SHALL ONLY EXCAVATE VOLUME REQUIRED TO COMPLETE PROJECT.
4. HOPPER OR CUTTERHEAD DREDGE MAY BE UTILIZED TO EXCAVATE BORROW AREA MR-E-09.







BY	DESCRIPTION	DATE	OFFICE OF COASTAL PROTECTION & RESTORATION		STATE PROJECT NUMBER	DATE
BY	CMD/USACE/STAKEHOLDER	02/10	COASTAL ENGINEERING CONSULTANTS, INC. STB GROUP LLC <small>QUALITY BY DESIGN</small>		BA-40	NOVEMBER, 2010
MTP	COMMENT RESPONSE	2011				
DRAWN BY: DARTEZI, ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELLIER, P.E.	
			COASTAL ENGINEERING CONSULTANTS, INC. STB GROUP LLC <small>QUALITY BY DESIGN</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION BORROW AREA MR-E-09 PLAN VIEW	
			OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		FEDERAL PROJECT NUMBER: BA-40 SHEET 8 OF 37	

SCALE:



$$\begin{aligned} H: 1'' &= 1500' \\ V: 1'' &= 30' \end{aligned}$$


1. BATHYMETRIC SURVEYS PERFORMED BY ALPINE OCEAN SEISMIC SURVEY, INC., 2008.

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY BY DESIGN</small>	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	BORROW AREA MR-E-09 DESIGN SECTION
MTP	CMDUSAGE/TAKEHOLDER	02/10				
	COMMENT RESPONSE	2011				
					STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
DRAWN BY: DARTIEZ\ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 9 OF 37

	BEACH/DUNE FILL CUT
	NOVEMBER 2008
	USACE 2004 HYDROGRAPHIC SURVEY
	DESIGN



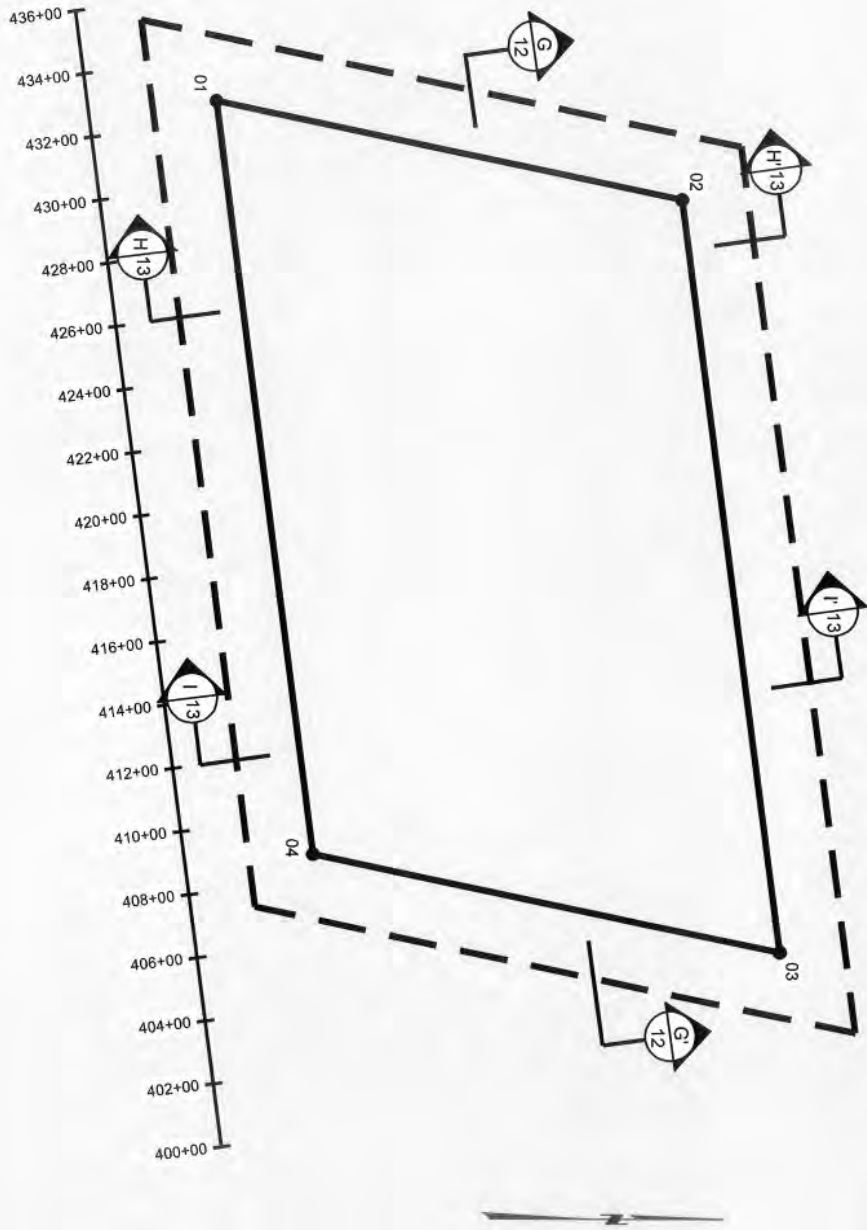
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	BORROW AREA MR-E-09 DESIGN SECTIONS
MTP	CMD/USACE/TAKEHOLDER	02/10 2011				
	COMMENT RESPONSE					
			 SJB GROUP, LLC QUALITY BY DESIGN			
DRAWN BY: DARTEZ, ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELLIER, P.E.	
					FEDERAL PROJECT NUMBER: BA-40	SHEET 10 OF 37

OFFSHORE BORROW AREA PARAMETERS		
BORROW AREA LENGTH	2,800'	
BORROW AREA WIDTH	1,900'	
BORROW AREA THICKNESS	20' TO 22'	
BORROW AREA VOLUME	3.30 MCY	(+40' NAVD88)

LEGEND:

- BORROW AREA PERIMETER (BOTTOM OF CUT)
- BORROW AREA PERIMETER (TOP OF CUT)
- BATHYMETRIC CONTOURS, FT NAVD88 (CP&E, 2003)
- OFFSHORE BORROW AREA SURVEY BASELINE

400+00



NOTES:
 1. SEE SHEETS 12 & 13 FOR SECTIONS. SEE SHEET 3 FOR PERIMETER POINTS OF INFLECTION.
 2. BATHYMETRY DATA FROM BARATARIA/PLAQUEMINES BARRIER SHORELINE RESTORATION, (CP&E, 2003).



BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY BY DESIGN</small>		OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION <small>450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		OFFSHORE BORROW AREA PLAN VIEW	
MTP	COMMENT RESPONSE									
		02/10 2011								
DRAWN BY: DARTIZ ZMERENMAN			DESIGNED BY: MICHAEL T. POFF, P.E.			APPROVED BY: MAURY CHATELLIER, P.E.			FEDERAL PROJECT NUMBER: BA-40	
									STATE PROJECT NUMBER: BA-40	
									DATE: NOVEMBER, 2010	
									SHEET 11 OF 37	

LEGEND:



MARSH FILL CUT

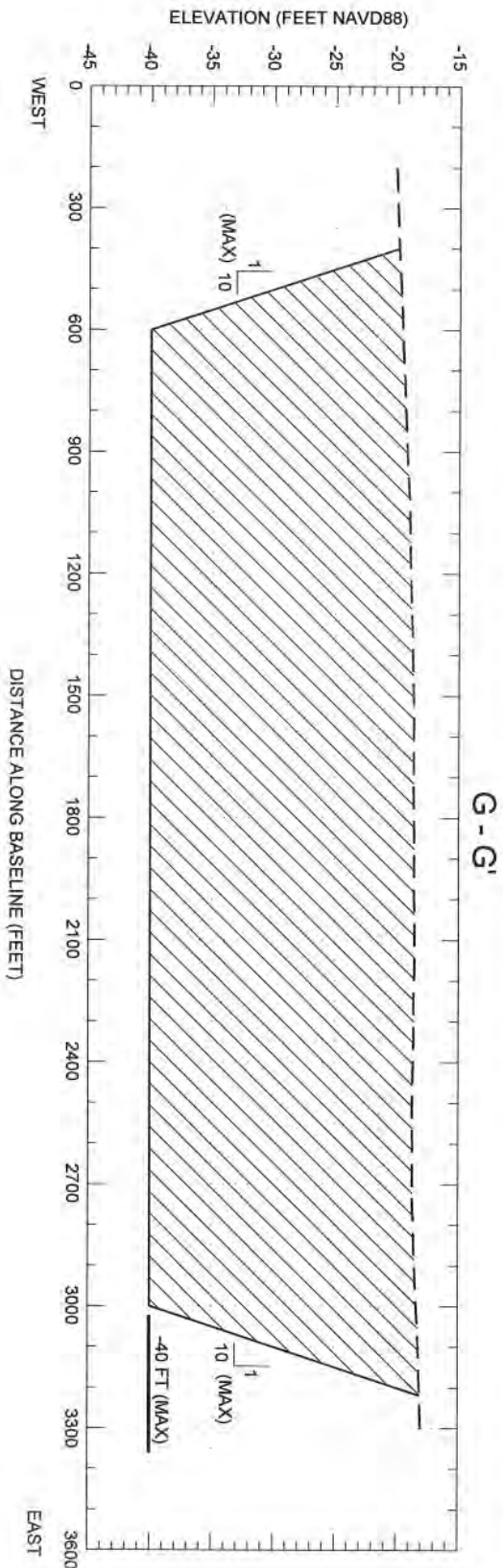


JULY 2003




DESIGN




SCALE:
H: 1" = 450'
V: 1" = 15'



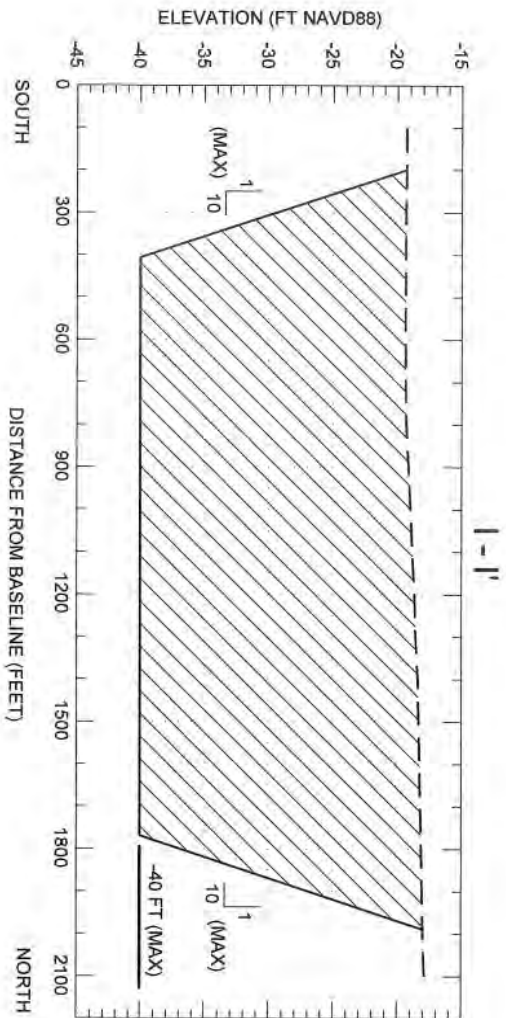
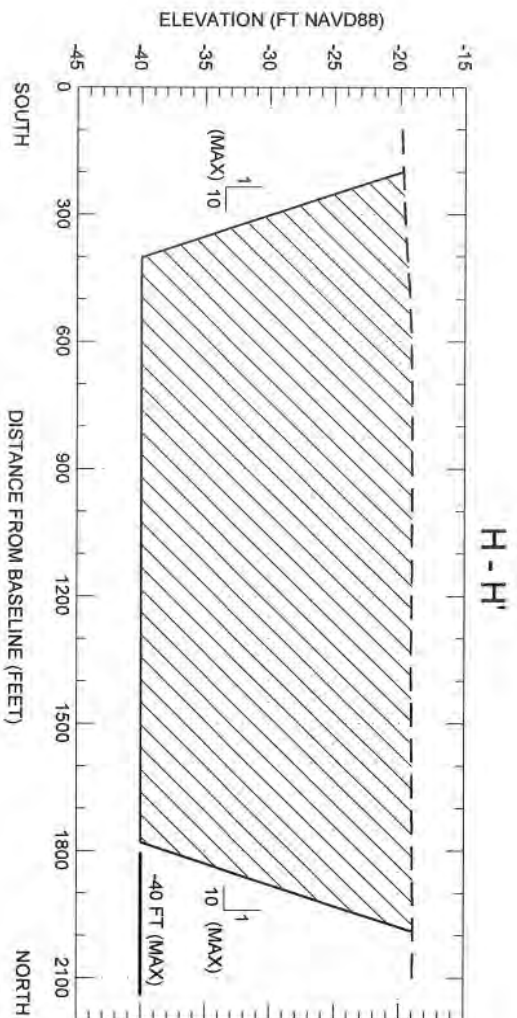
- NOTES:
1. BATHYMETRY DATA FROM BARATARIA/PLAQUEMINES BARRIER SHORELINE RESTORATION, (CP&E, 2003).
 2. MHW = 1.60 FT NAVD88, MLW = 0.55 FT NAVD88

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY BY DESIGN</small>		OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION <small>450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		OFFSHORE BORROW AREA DESIGN SECTION	
MTP	CMD/ISAGE/STAKEHOLDER COMMENT RESPONSE	02/10 2011								
			DRAWN BY: DARTEZ / ZVERENEMAN		DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELIER, P.E.		FEDERAL PROJECT NUMBER: BA-40	
									STATE PROJECT NUMBER: BA-40	
									DATE: NOVEMBER, 2010	
									SHEET 12 OF 37	


LEGEND:

-  MARSH FILL CUT
-  JULY 2003
-  DESIGN

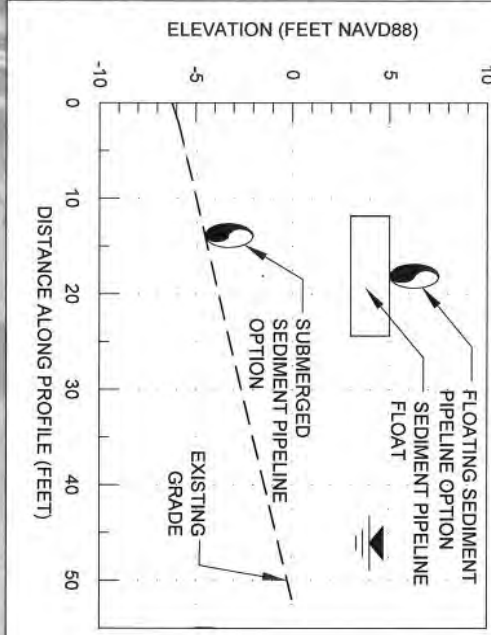
SCALE:
H: 1" = 450'
V: 1" = 15'



- NOTES:
1. BATHYMETRY DATA FROM BARATARIA/PLAQUEMINES BARRIER SHORELINE RESTORATION, (CP&E, 2003)
 2. MHW = 1.60 FT NAVD88, MLW = 0.55 FT NAVD88

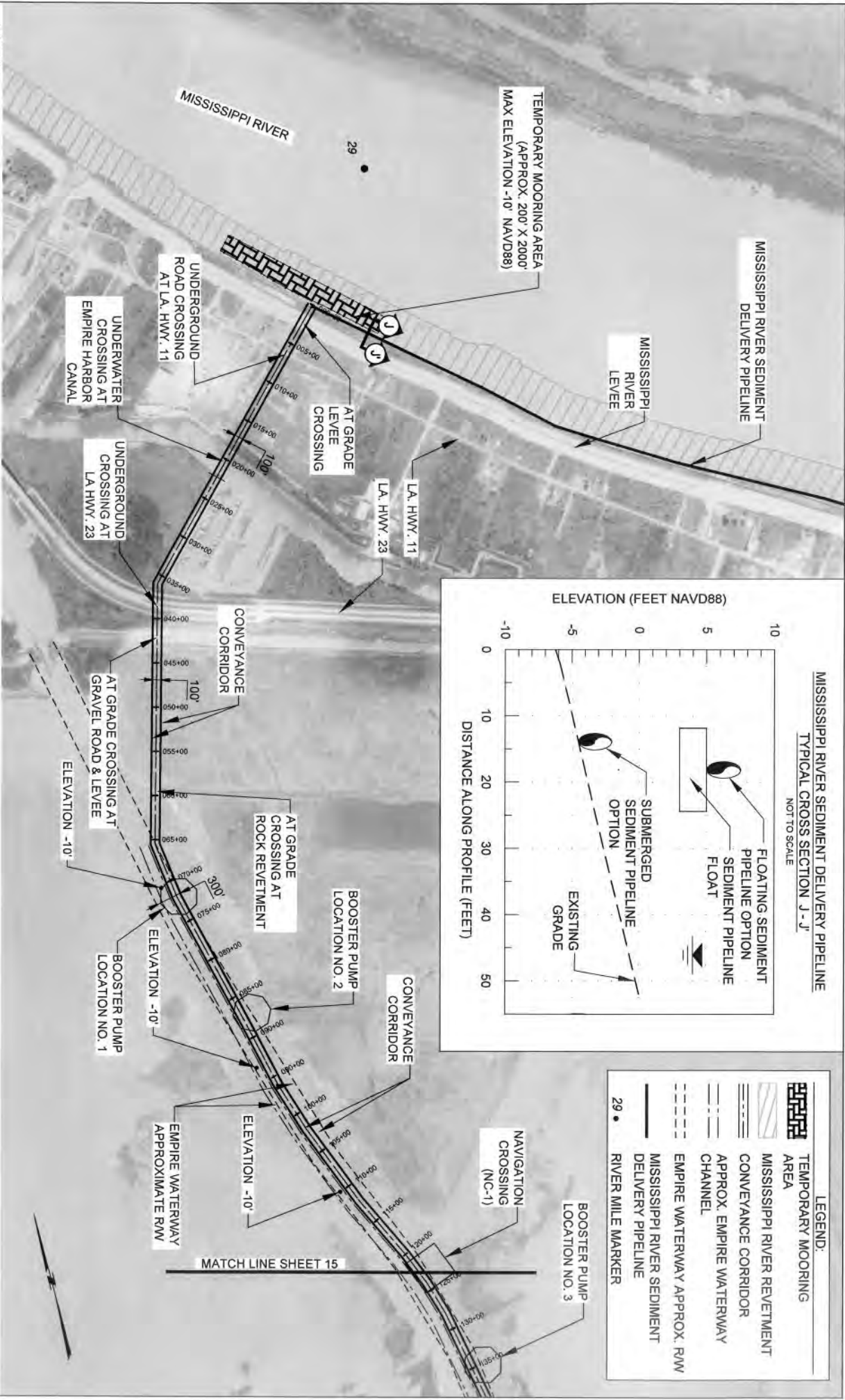
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. STB GROUP, LLC <small>QUALITY BY DESIGN</small>		OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION <small>450 LAUREL STREET</small> <small>BATON ROUGE, LOUISIANA 70801</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		OFFSHORE BORROW AREA DESIGN SECTIONS	
MTP	CMD/USAGE/STAKEHOLDER COMMENT RESPONSE	02/10 2011								
DRAWN BY: DARTEZ / ZVERENEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.			APPROVED BY: MAURY CHATELLIER, P.E.			FEDERAL PROJECT NUMBER: BA-40	
									SHEET 13 OF 37	

MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE
TYPICAL CROSS SECTION J-J'
NOT TO SCALE



LEGEND:

	TEMPORARY MOORING AREA
	MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE
	MISSISSIPPI RIVER LEVEE
	MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE
	EMPIRE WATERWAY CHANNEL
	EMPIRE WATERWAY APPROX. R/W
	MISSISSIPPI RIVER SEDIMENT DELIVERY PIPELINE
	29 • RIVER MILE MARKER



NOTES:

1. SEE SHEET 26 - 36 FOR LEVEE CROSSING, HIGHWAY CROSSING, HARBOR CANAL CROSSING, MARSH AND ROCK REVELMENT CROSSING, NAVIGATION CROSSING, AND BOOSTER SITE DETAILS.
2. CONVEYANCE CORRIDOR CONSTRUCTION EQUIPMENT RIGHT OF WAY IS TO THE 100 FOOT WIDE EXTENTS OF THE CONVEYANCE CORRIDOR.
3. SURVEYS CONDUCTED BY SJB GROUP, LLC & C.H. FENSTERMAKER & ASSOC., INC. JULY 2008.
4. SEDIMENT PIPELINE SHALL BE LIGHTED AND MARKED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.



BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	CONVEYANCE CORRIDOR LAYOUT
CM/DRAWING/TAKEHOLDER	02/10	2011	STB GROUP, LLC	450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
MTP COMMENT RESPONSE						

DRAWN BY: DARTIEZ ZWERNEMAN

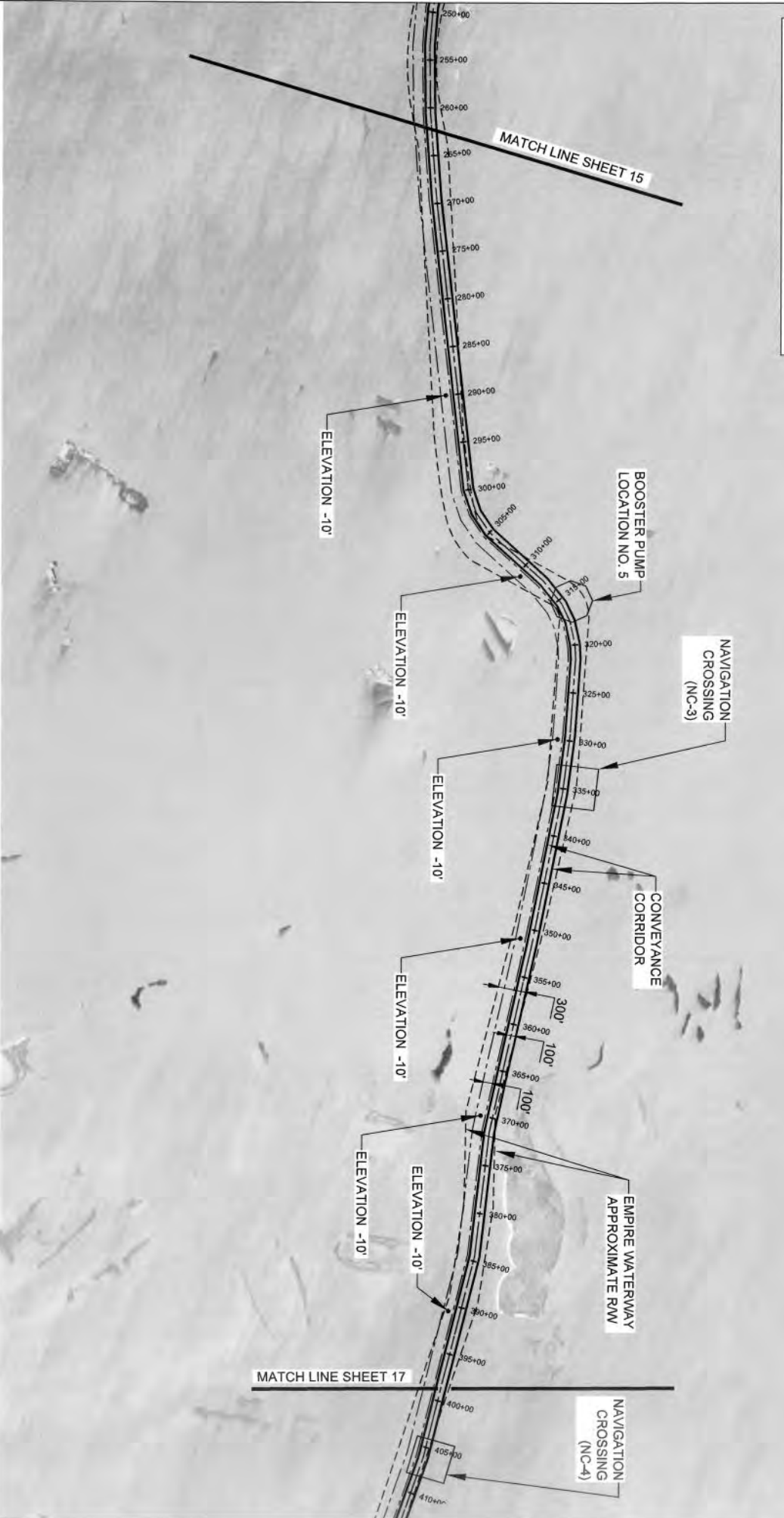
DESIGNED BY: MICHAEL T. POFF, P.E.

APPROVED BY: MAURY CHATELLIER, P.E.

FEDERAL PROJECT NUMBER: BA-40


SHEET 14 OF 37

LEGEND:	
=====	CONVEYANCE CORRIDOR
-----	APPROX. EMPIRE WATERWAY CHANNEL
-----	EMPIRE WATERWAY APPROX. R/W

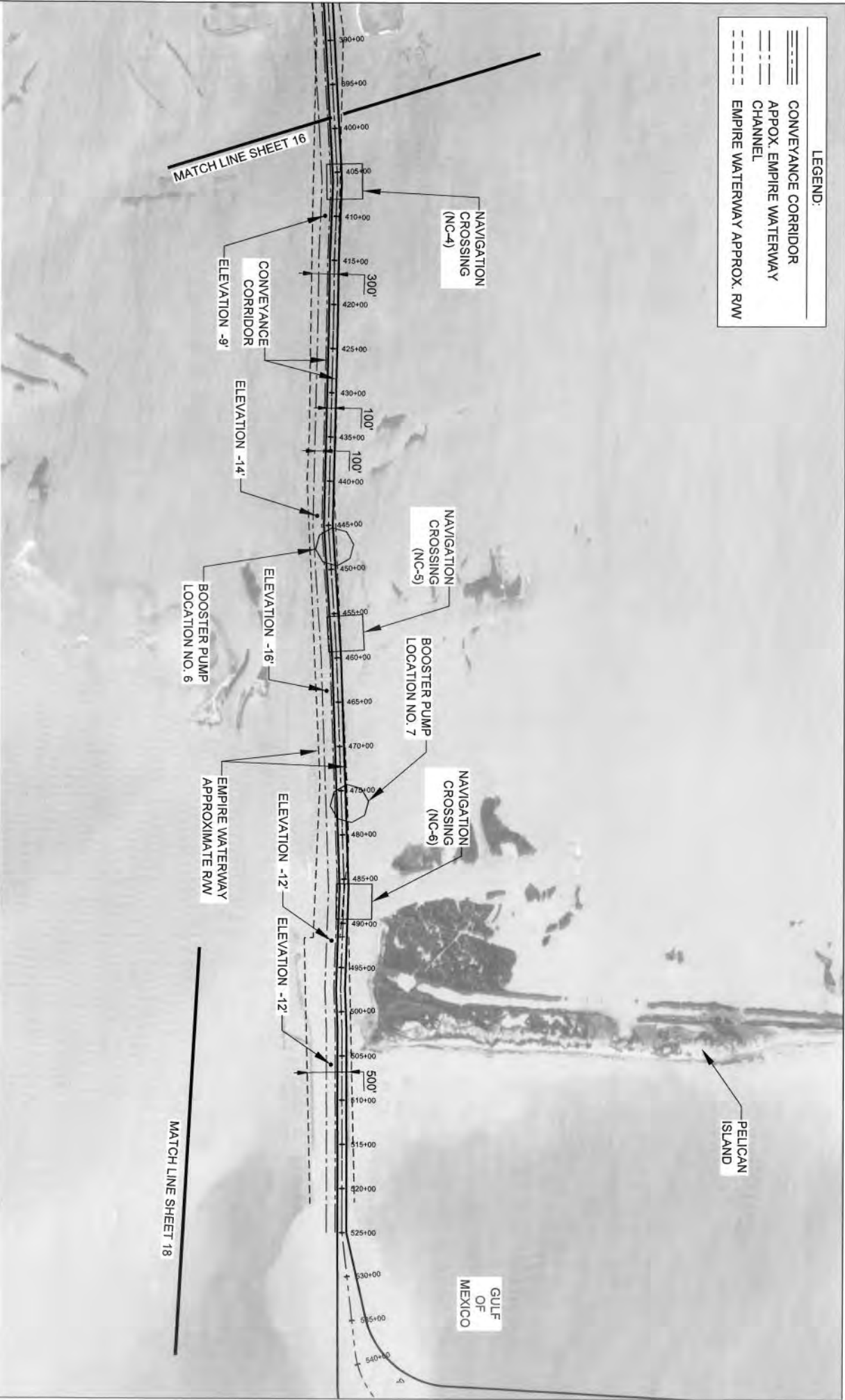


- NOTES:
1. SEE SHEET 34 & 35 FOR NAVIGATION CROSSING AND BOOSTER SITE DETAILS.
 2. SURVEY CONDUCTED BY C.H. FENSTERMAKER & ASSOC., INC. JULY 2008.
 3. SEDIMENT PIPELINE SHALL BE LIGHTED AND MARKED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.




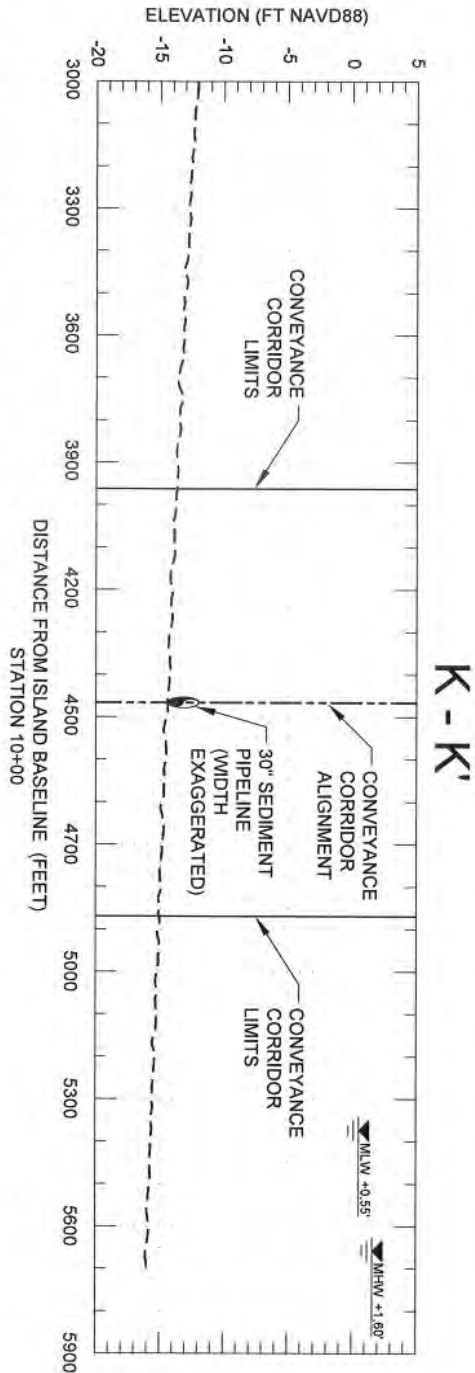
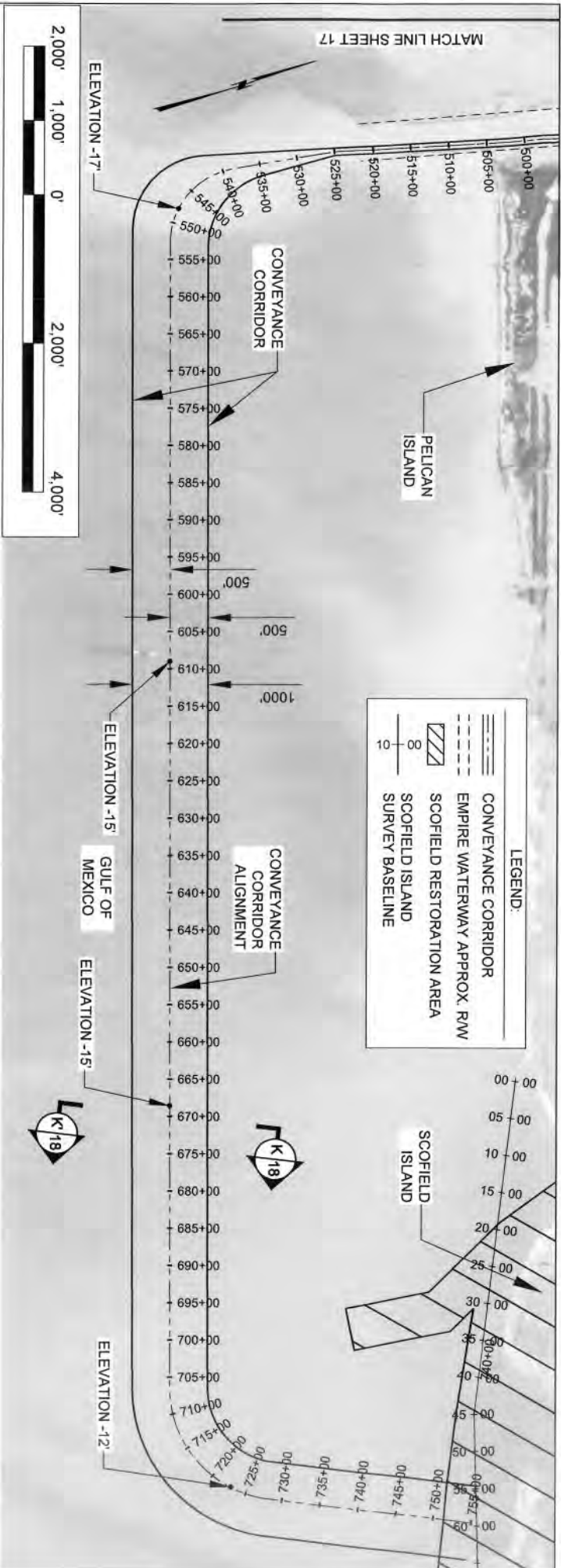
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY BY DESIGN</small>		OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION <small>450 LAUREL STREET</small> <small>BATON ROUGE, LOUISIANA 70801</small>		RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		CONVEYANCE CORRIDOR LAYOUT	
MTP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE									
		02/10 2011								
DRAWN BY: DARTZ\ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.			APPROVED BY: MAURY CHATELLIER, P.E.			FEDERAL PROJECT NUMBER: BA-40	
									DATE: NOVEMBER, 2010	
									SHEET 16 OF 37	

=====	CONVEYANCE CORRIDOR
-----	APPOX. EMPIRE WATERWAY
-----	CHANNEL
-----	EMPIRE WATERWAY APPROX. RW



- NOTES:
1. SEE SHEET 34 & 35 FOR NAVIGATION CROSSING AND BOOSTER SITE DETAILS.
 2. SURVEY CONDUCTED BY C.H. FENSTERMAKER & ASSOC., INC. JULY 2008.
 3. SEDIMENT PIPELINE SHALL BE LIGHTED AND MARKED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	CONVEYANCE CORRIDOR LAYOUT
MTP	CM/DUS/AGE/STAKEHOLDER	02/10				
	COMMENT RESPONSE	2011				
DRAWN BY: DARTZ \ ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 17 OF 37



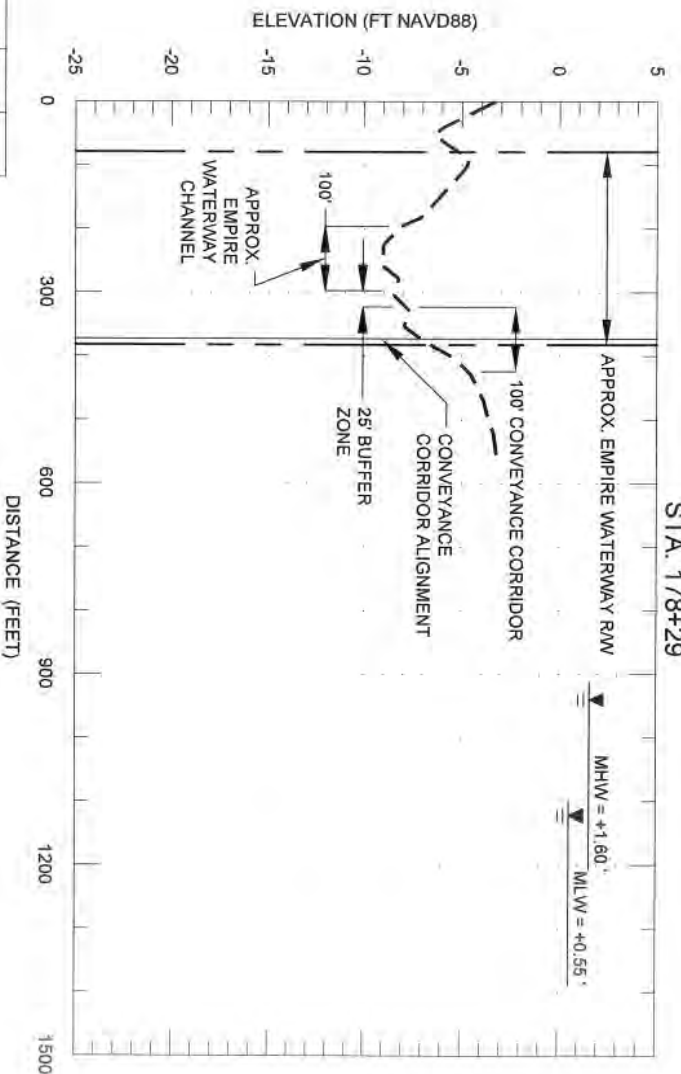
- NOTES:**
1. SURVEY PROVIDED BY SHAW, JULY 2010 (FILENAME: W-10_DATA TO DATE_7-29-10_COMPLETE_CORRECTED.CSV).
 2. NO EXCAVATIONS OR FILLS ARE REQUIRED FOR THE CONVEYANCE CORRIDOR FROM THE EMPIRE JETTIES TO SCOFIELD ISLAND.
 3. A MINIMUM 12 FOOT OF WATER ABOVE SEDIMENT PIPELINE IN THE GULF OF MEXICO SECTION OF THE CONVEYANCE CORRIDOR UNTIL APPROACH OF FILL TEMPLATE.
 4. SEDIMENT PIPELINE SHALL BE LIGHTED AND MARKED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

BY	DESCRIPTION	DATE		
MTP	CMD/USACE/TAKEHOLDER COMMENT RESPONSE	02/10 2011		
			COASTAL ENGINEERING CONSULTANTS, INC. QUALITY BY DESIGN	
			OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	
			RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	
			CONVEYANCE CORRIDOR LAYOUT (GULF OF MEXICO)	
DRAWN BY: DARTEZ \ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.
			FEDERAL PROJECT NUMBER: BA-40	SHEET 18 OF 37

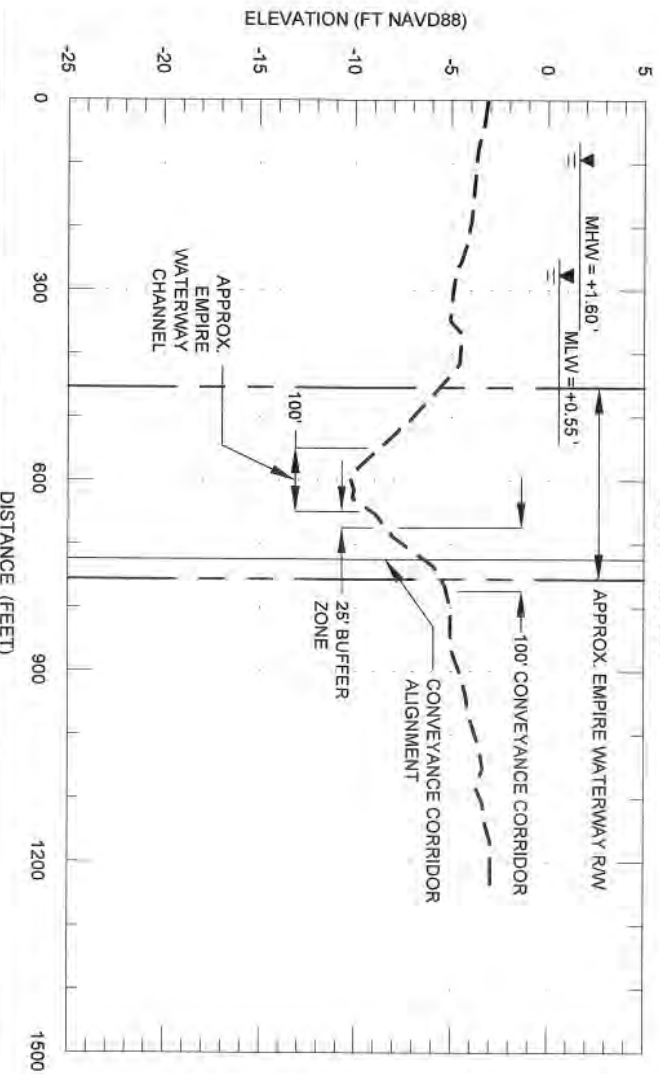
NOTES:

1. APPROXIMATE EMPIRE WATERWAY RIGHT OF WAY (RW) DIGITIZED FROM WATERWAY FROM EMPIRE, LA TO THE GULF OF MEXICO, RW AND SPOIL DISPOSAL AREAS MAPS, (USACE, 1948).
2. SURVEY CONDUCTED BY C.H. FENSTERMAKER & ASSOC., INC, JULY 2008.

STA. 178+29

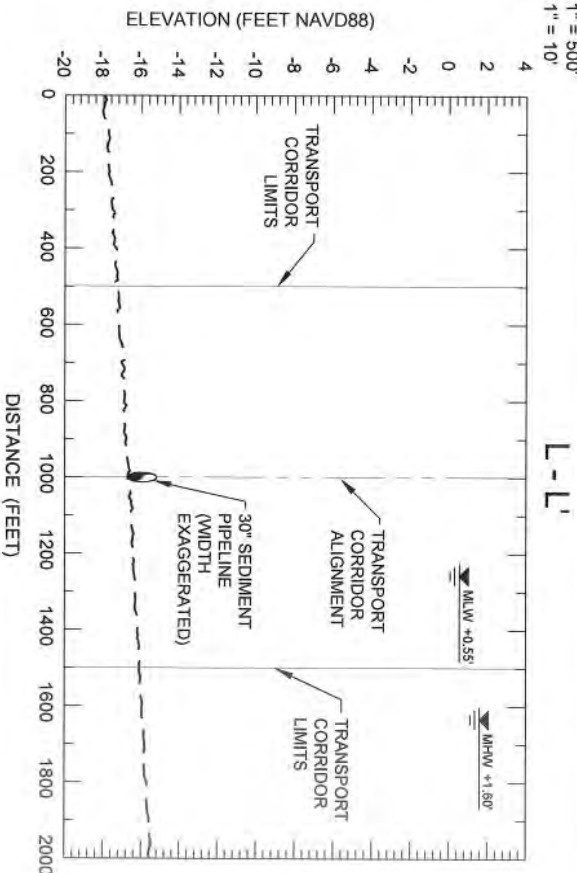
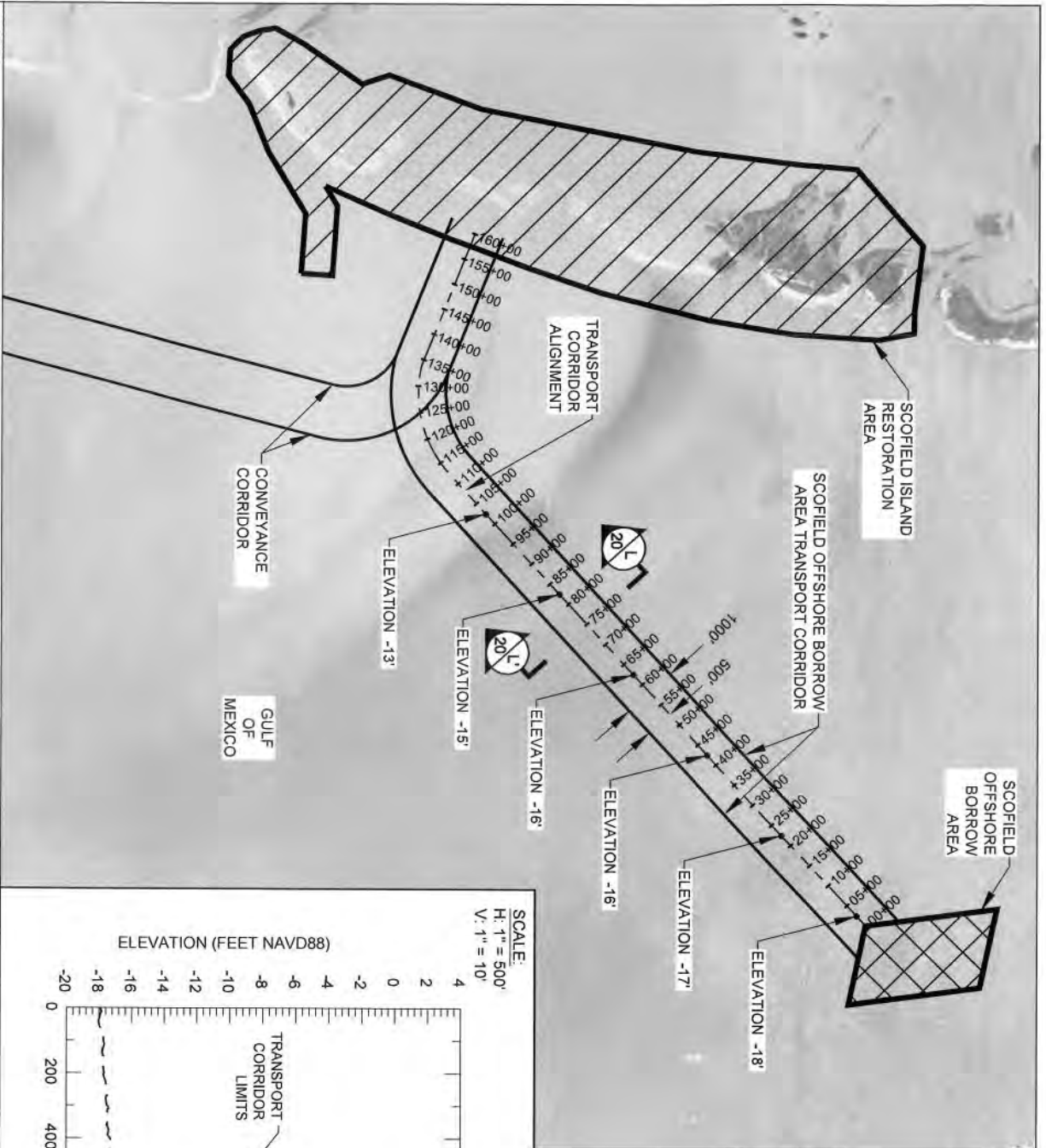


STA. 405+50



SCALE
H: 1" = 300'
V: 1" = 10'

BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC	OFFICE OF COASTAL PROTECTION & RESTORATION	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	CONVEYANCE CORRIDOR TYPICAL CROSS SECTIONS
MTP	CMDD/SAGE/STAKEHOLDER COMMENT RESPONSE	02/10 2011	STB GROUP, LLC	450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
DRAWN BY:	DARTEZI ZWERNEMAN	DESIGNED BY:	MICHAEL T. POFF, P.E.	APPROVED BY:	MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40
						SHEET 19 OF 37



NOTES:

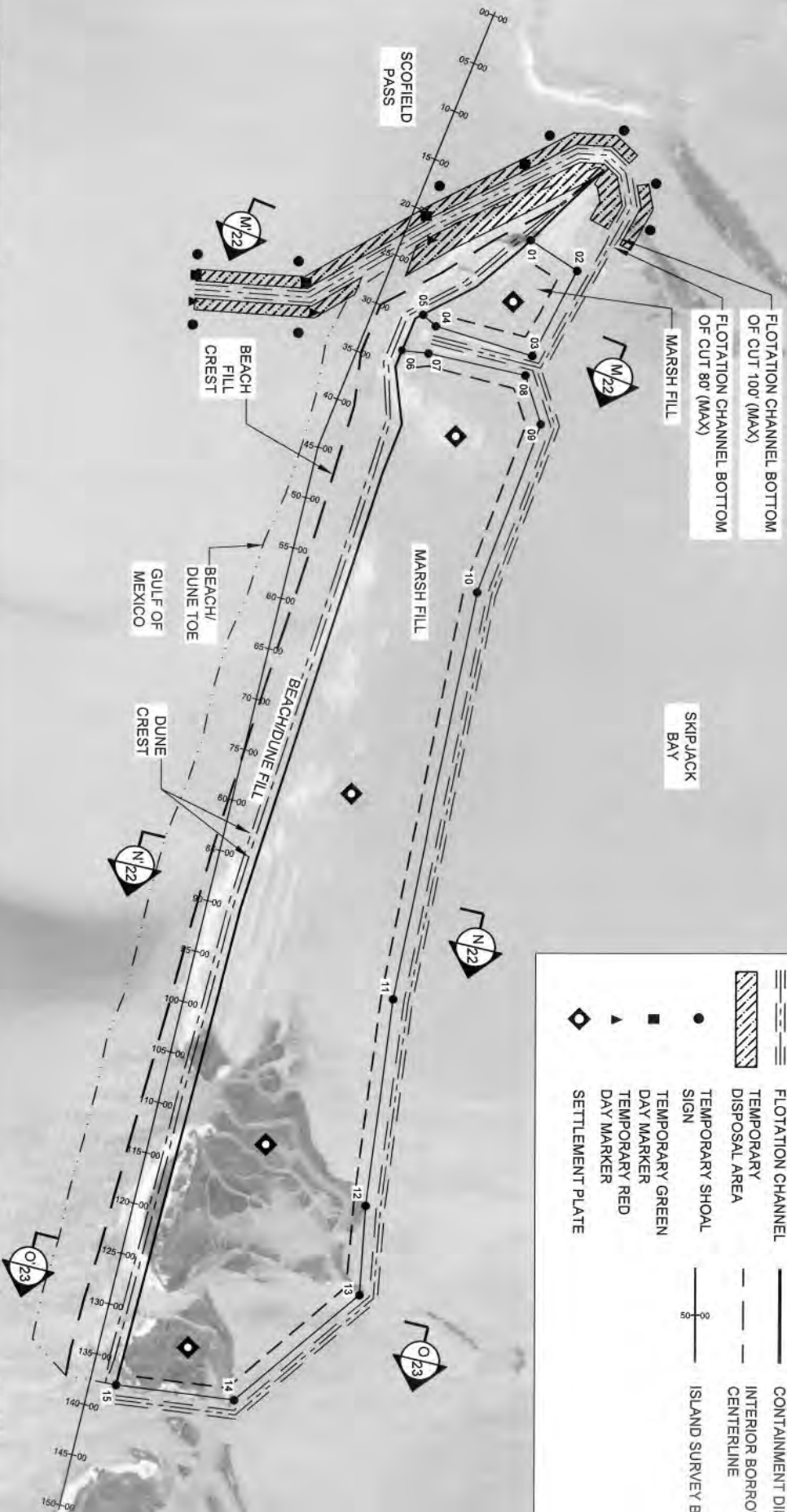
1. SURVEY PROVIDED BY SHAW, JULY 2010 (FILENAME: W-10_DATA TO DATE_7-29-10_COMPLETE_CORRECTED.CSV).
2. NO EXCAVATIONS OR FILLS ARE REQUIRED FOR THE CONVEYANCE CORRIDOR FROM THE EMPIRE JETTIES TO SCOFIELD ISLAND.
3. A MINIMUM 12 FOOT OF WATER ABOVE SEDIMENT PIPELINE IN THE GULF OF MEXICO SECTION OF THE CONVEYANCE CORRIDOR UNTIL APPROACH OF FILL TEMPLATE.
4. SEDIMENT PIPELINE SHALL BE LIGHTED AND MARKED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	SCOFIELD OFFSHORE BORROW AREA TRANSPORT CORRIDOR ALIGNMENT
MTP	CM/DUS/AGE/STAKEHOLDER	02/10	STB GROUP LLC	RESTORATION DIVISION	450 LAUREL STREET	DATE: NOVEMBER, 2010
	COMMENT RESPONSE	2011	QUALITY BY DESIGN	BATON ROUGE, LOUISIANA 70801	STATE PROJECT NUMBER: BA-40	
					FEDERAL PROJECT NUMBER: BA-40	
						SHEET 20 OF 37

DRAWN BY: DARTEZI ZWERNEMAN

DESIGNED BY: MICHAEL T. POFF, P.E.

APPROVED BY: MAURY CHATELLIER, P.E.



LEGEND:

	FLotation CHANNEL		CONTAINMENT DIKE
	TEMPORARY DISPOSAL AREA		INTERIOR BORROW AREA CENTERLINE
	TEMPORARY SHOAL SIGN		ISLAND SURVEY BASELINE
	TEMPORARY GREEN DAY MARKER		
	TEMPORARY RED DAY MARKER		
	SETTLEMENT PLATE		

ISLAND SURVEY BASELINE INFLECTION POINTS		
POINT NO.	NORTHING	EASTING
00+00	275598.21	3843545.11
45+00	273943.02	3847726.17
150+00	271506.42	3857942.90









NOTES:

1. SEE SHEETS 22 & 23 FOR TYPICAL SECTIONS. SEE SHEET 3 FOR PERIMETER POINTS OF INFLECTION.
2. FLotation CHANNEL TOTAL LENGTH EQUALS 19,825'.
3. REQUEST PERMIT FOR BOTH MISSISSIPPI RIVER BORROW AREAS, MR-B-09 AND MR-E-09, TO PROMOTE COMPETITIVE CONSTRUCTION CONTRACT BIDS BASED ON AVAILABLE DREDGE EQUIPMENT. SHALL ONLY EXCAVATE VOLUME REQUIRED TO COMPLETE PROJECT.


SCOFIELD ISLAND VOLUME REQUIREMENTS		
REQUIRED FILL VOLUME	DUNE	MARSH
CUT-TO-FILL RATIO	1.63 MCY	1.76 MCY
REQUIRED EXCAVATION VOLUME	1.3	1.6
	2.12 MCY	2.82 MCY











BY MTP COMMENT RESPONSE	DESCRIPTION CAM/DUSAGE/STAKEHOLDER 02/10 2011	DATE 02/10 2011	 COASTAL ENGINEERING CONSULTANTS, INC <small>QUALITY BY DESIGN</small>	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	ISLAND RESTORATION PLAN VIEW
DRAWN BY: DARTIEZ					DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.
			FEDERAL PROJECT NUMBER: BA-40			
			SHEET 21 OF 37			

	BEACH / DUNE FILL
	MARSH FILL
	CONTAINMENT DIKE
	CONTAINMENT DIKE
	FLATATION CHANNEL / CONTAINMENT DIKE BORROW AREA
	TEMPORARY DISPOSAL AREA
	2010 SURVEY
	DESIGN


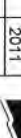


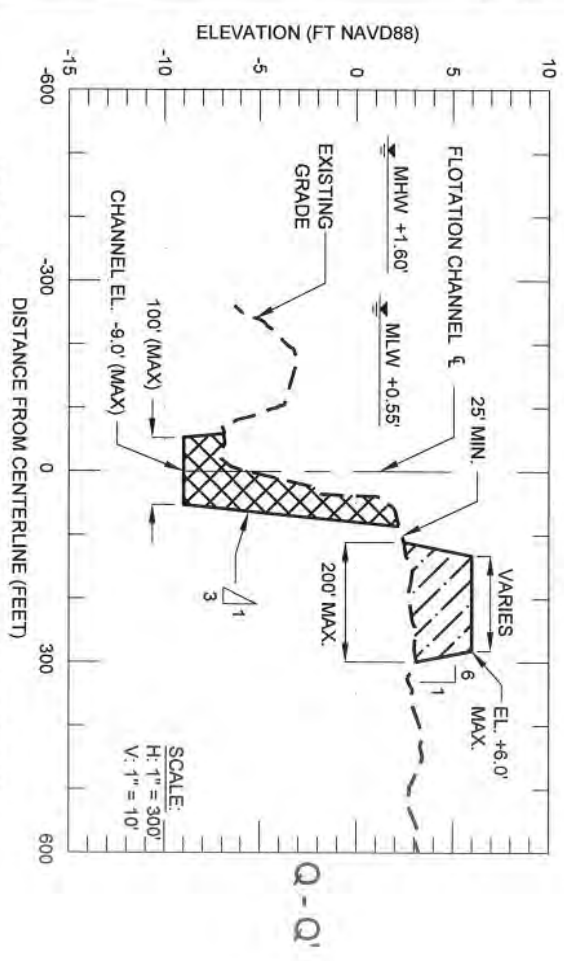
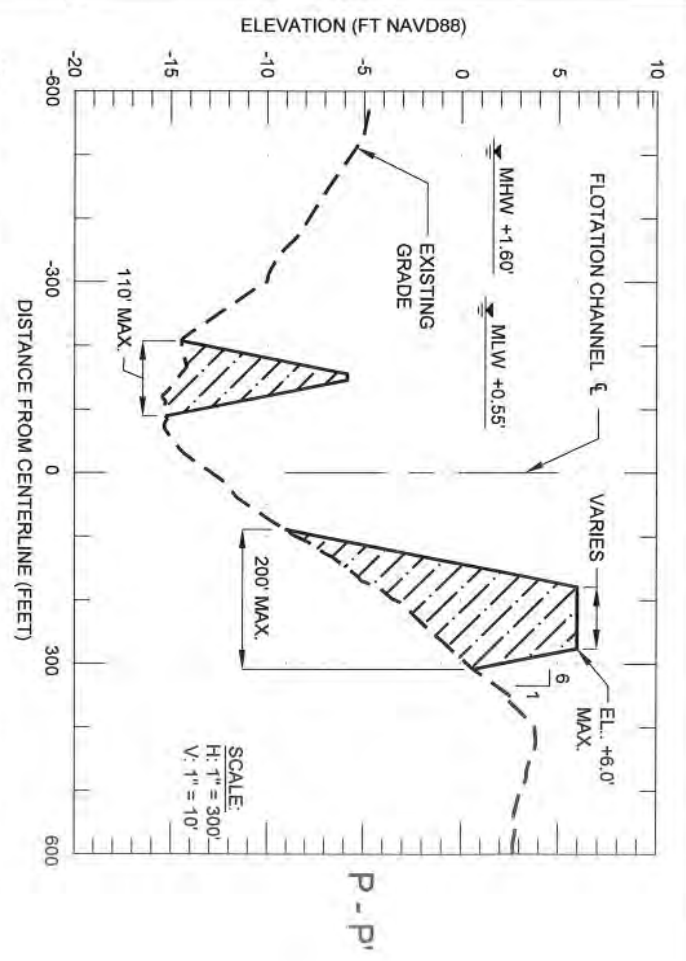
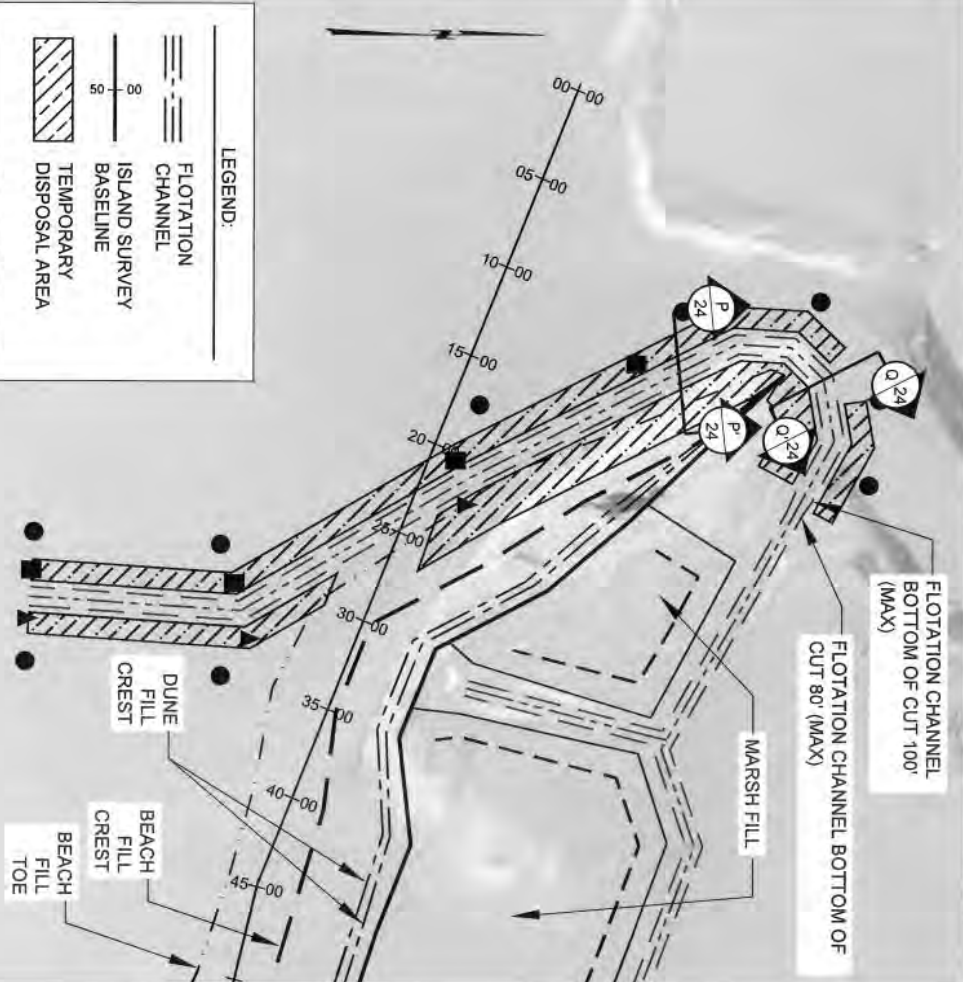
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFFIELD ISLAND RESTORATION	ISLAND RESTORATION DESIGN SECTIONS
MTP	CM/JUSACE/TAKEHOLDER COMMENT RESPONSE	02/10 2011				
 SIB GROUP, LLC QUALITY SERVICE DESIGNER						
DRAWN BY: DARTZ			DESIGNED BY: MICHAEL T. POFF, P.E.			
			APPROVED BY: MAURY CHATELLIER, P.E.			
			FEDERAL PROJECT NUMBER: BA-40			
			SHEET 22 OF 37			
			DATE: NOVEMBER, 2010			


○-○

	BEACH / DUNE FILL
	MARSH FILL
	CONTAINMENT DIKE
	CONTAINMENT DIKE
	FLOATATION CHANNEL / CONTAINMENT DIKE BORROW AREA
	TEMPORARY DISPOSAL AREA
	2010 SURVEY
	DESIGN

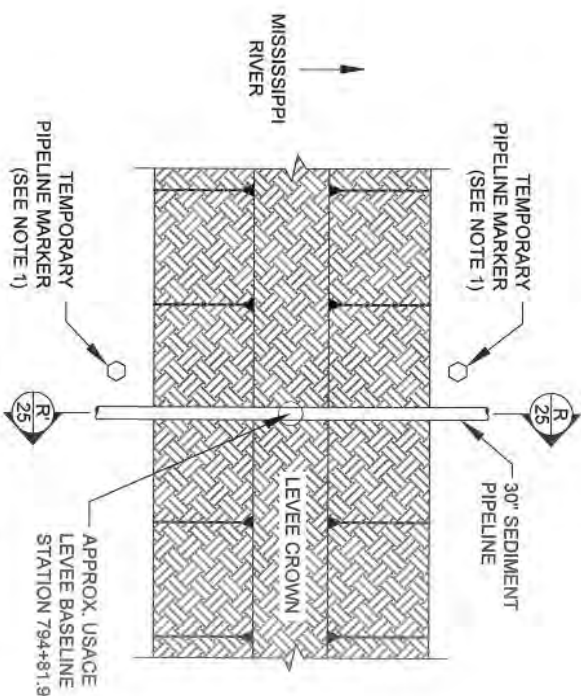
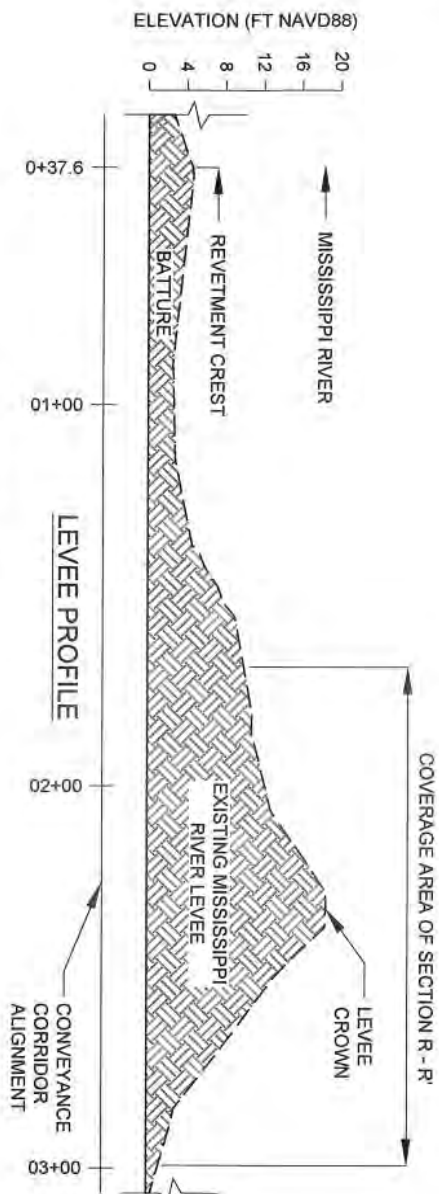


BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	ISLAND RESTORATION DESIGN SECTION			
MTP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011							
			 STB GROUP LLC QUALITY BY DESIGN	DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010	SHEET 23 OF 37
DRAWN BY: DARTEZ									

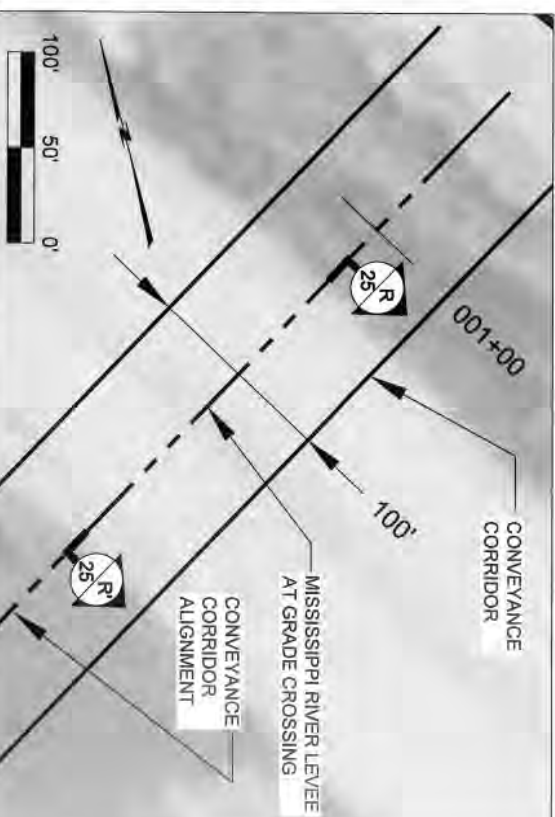
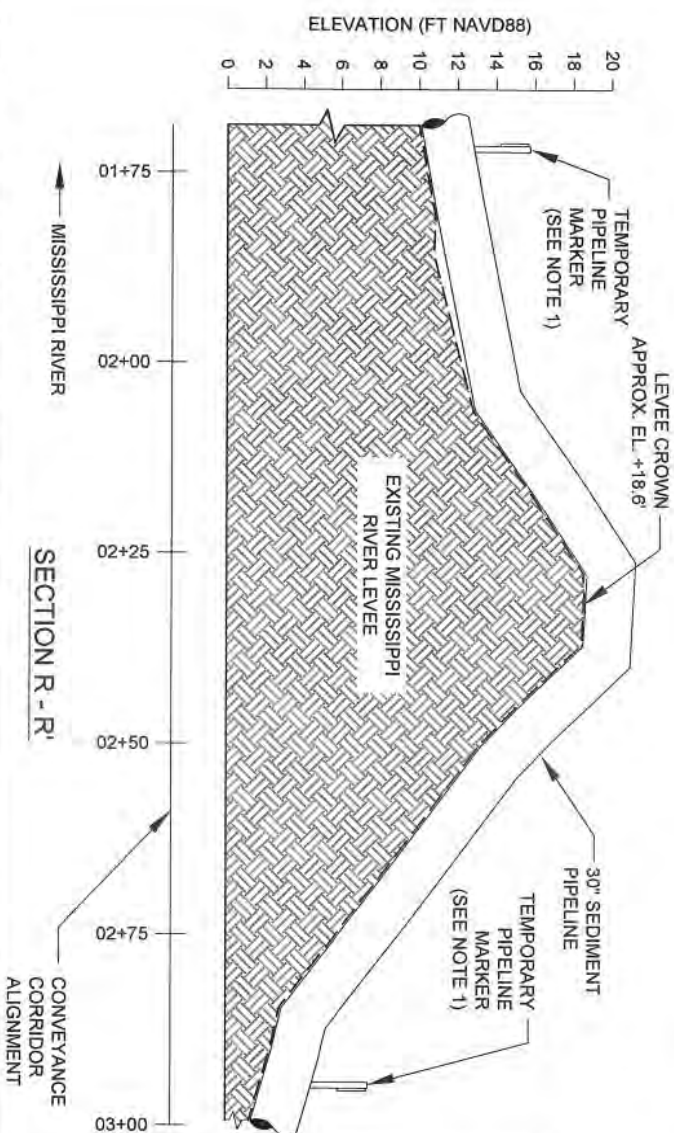


BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. SJB GROUP, LLC <small>QUALITY BY DESIGN</small>	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION STATE PROJECT NUMBER: BA-40	FLOTATION CHANNEL GULF APPROACH PLAN VIEW AND DESIGN SECTIONS DATE: NOVEMBER, 2010
MTP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011				
DRAWN BY: DARTIEZ			DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELLER, P.E.	
					FEDERAL PROJECT NUMBER: BA-40	
					SHEET 24 OF 37	

- NOTES:
1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF EACH INFRASTRUCTURE CROSSING BY THE SEDIMENT PIPELINE.
 2. SURVEYS CONDUCTED BY SJB GROUP, LLC, JULY 2008.
 3. SEE SHEETS 14 - 18 FOR CONVEYANCE CORRIDOR ALIGNMENT.

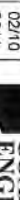



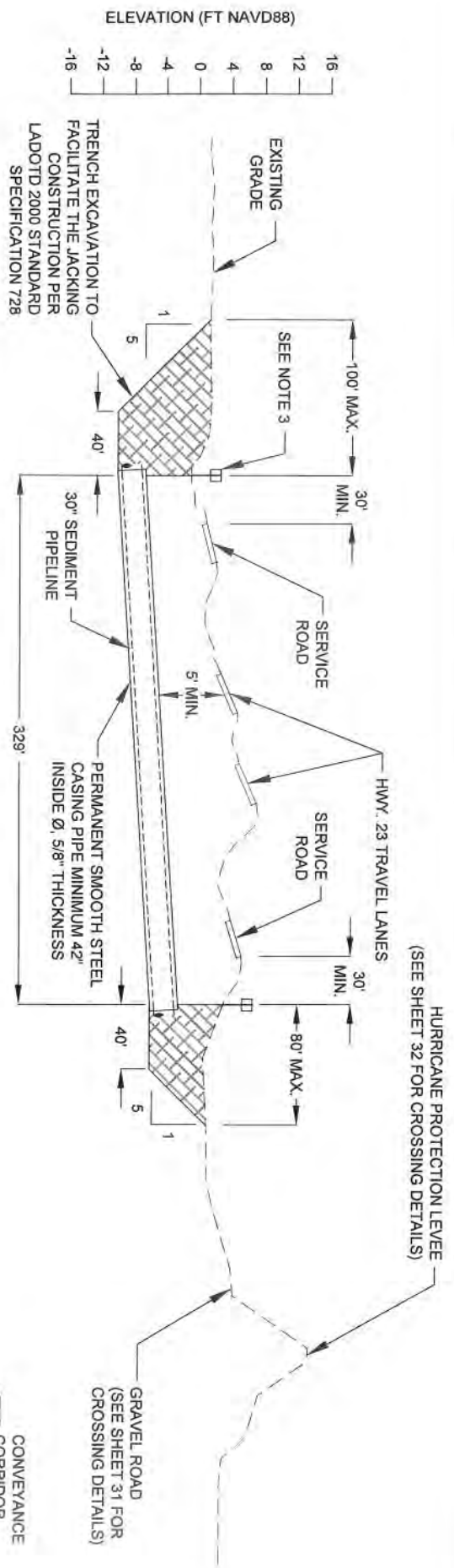
MISSISSIPPI RIVER LEVEE CROWN
PLAN VIEW
NOT TO SCALE



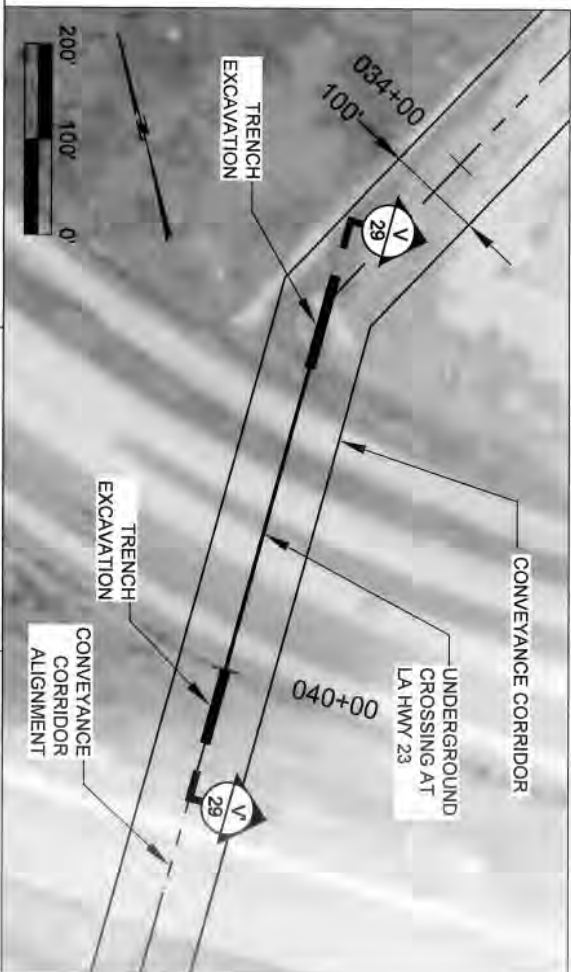
BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	MISSISSIPPI RIVER LEVEE CROSSING DETAIL
CMD/USACE/TAKEHOLDER	02/10	2011	SJB GROUP, LLC	450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010
MTP COMMENT RESPONSE						
DRAWN BY: DARTIEZ ZMERENMAN			DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	FEDERAL PROJECT NUMBER: BA-40	SHEET 25 OF 37



BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	BANK STABILIZATION TYPICAL DETAIL
MTP	CMD/USACE/TAKEHOLDER	02/10				
	COMMENT RESPONSE	2011				
			 SJB GROUP LLC QUALITY BY DESIGN	DESIGNED BY: MICHAEL T. POFF, P.E.	APPROVED BY: MAURY CHATELLIER, P.E.	
DRAWN BY: DARTEZ I. ZERNEMAN					FEDERAL PROJECT NUMBER BA-40	SHEET 28 OF 37



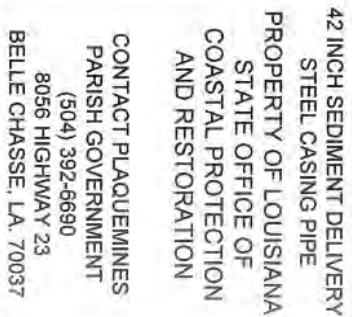
HIGHWAY 23 CROSSING DETAIL
SECTION V - V'



- NOTES:
1. THE CONTRACTOR SHALL JACK THE MINIMUM 42" STEEL CASING PIPE UNDER THE TRAVEL LANES OF LOUISIANA HIGHWAY 23 IN ACCORDANCE WITH LADOTD 2000.
 2. STANDARD SPECIFICATION 728. CASING PIPE DIAMETER SHALL BE NO GREATER THAN 48".
 3. THE CASING PIPE SHALL BE MADE OF SMOOTH STEEL, ASTM A 139 GRADE B, WITH MINIMUM YIELD STRENGTH OF 35,000 PSI AND SHALL BE COATED WITH COAL TAR EPOXY-POLYAMIDE PAINT, IN ACCORDANCE WITH THE LADOTD 2000 STANDARD SPECIFICATION 1008.04.
 4. SEE SHEET 29 FOR PERMANENT CASING PIPE MARKER CONSTRUCTION DETAILS.
 5. THE 40' MINIMUM JACK PIT DISTANCE SHOWN IS BASED ON THE PROPOSED ALIGNMENT AND THE STANDARD HIGHWAY SPECIFICATIONS WHICH ARE INCLUDED IN THE PROJECT SPECIFICATIONS.
 6. TRENCH EXCAVATION SIDE SLOPES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 7. SURVEYS CONDUCTED BY SJB GROUP, LLC., JULY 2008.
 8. SEE SHEETS 14 - 18 FOR CONVEYANCE CORRIDOR ALIGNMENT.

BY	DESCRIPTION	DATE
MD/USACE/TAKEHOLDER	02/10	
COMMENT RESPONSE	2011	
<div> COASTAL ENGINEERING CONSULTANTS, INC. QUALITY BY DESIGN </div>		
OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		
RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		
HIGHWAY 23 CROSSING DETAIL		
STATE PROJECT NUMBER: BA-40		DATE: NOVEMBER, 2010
FEDERAL PROJECT NUMBER: BA-40		SHEET 29 OF 37
DRAWN BY: DARTIEZ IZMERENMAN DESIGNED BY: MICHAEL T. POFF, P.E. APPROVED BY: MAURY CHATELLIER, P.E.		

**CONTACT PLAQUEMINES
PARISH GOVERNMENT
(504) 392-6690
8056 HIGHWAY 23
BELLE CHASSE, LA. 70037**



MARKER DETAIL

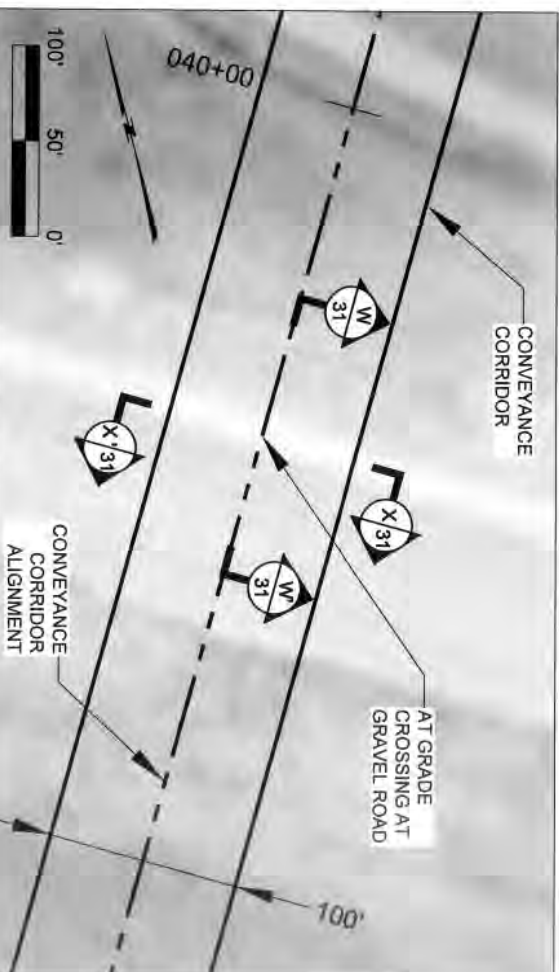
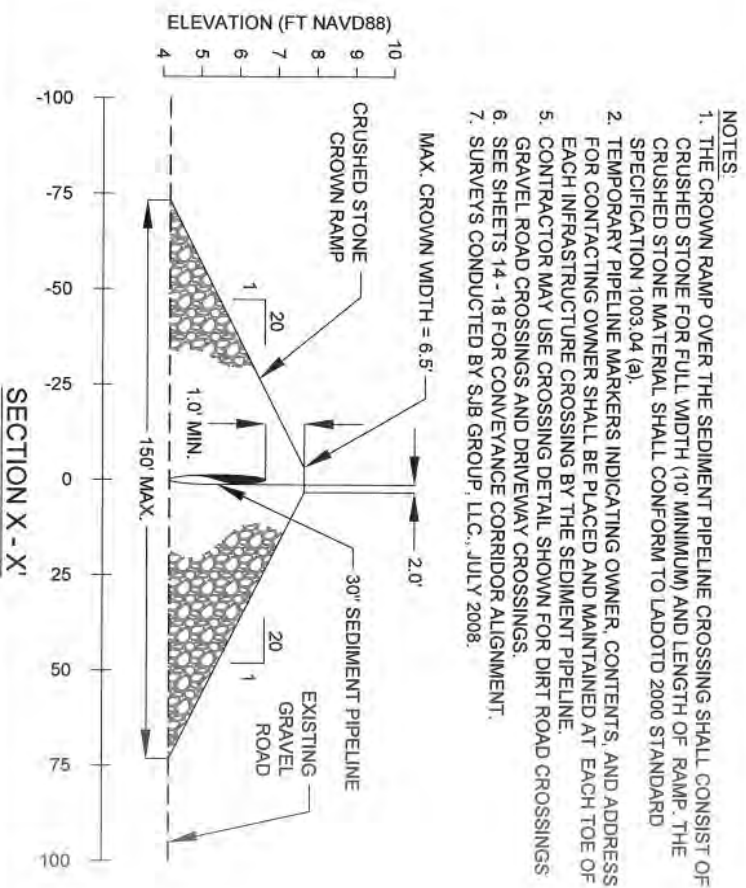
NOTES:


- ## NOTES

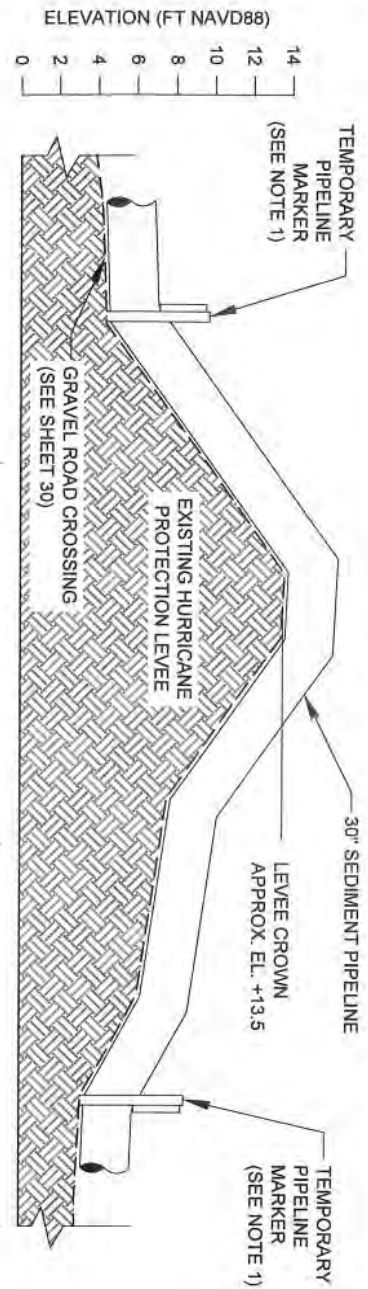
- ### CASING PIPE CAP DETAIL

NOTES:

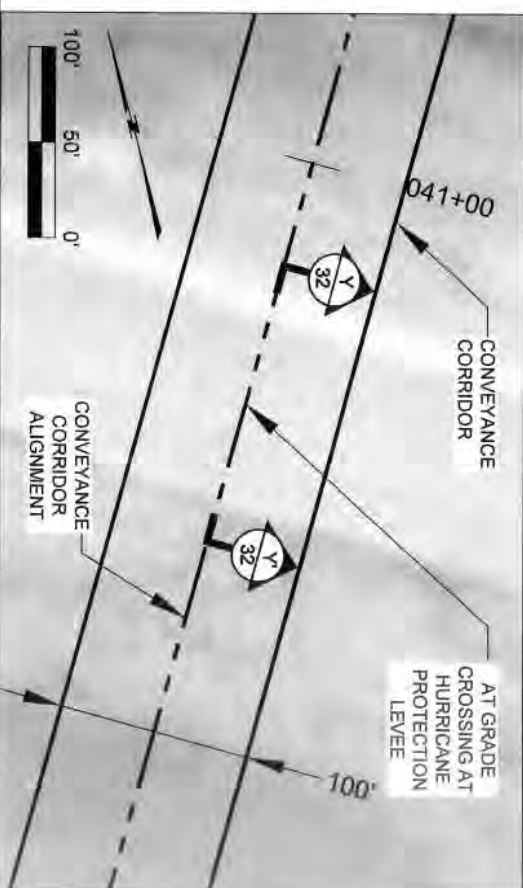
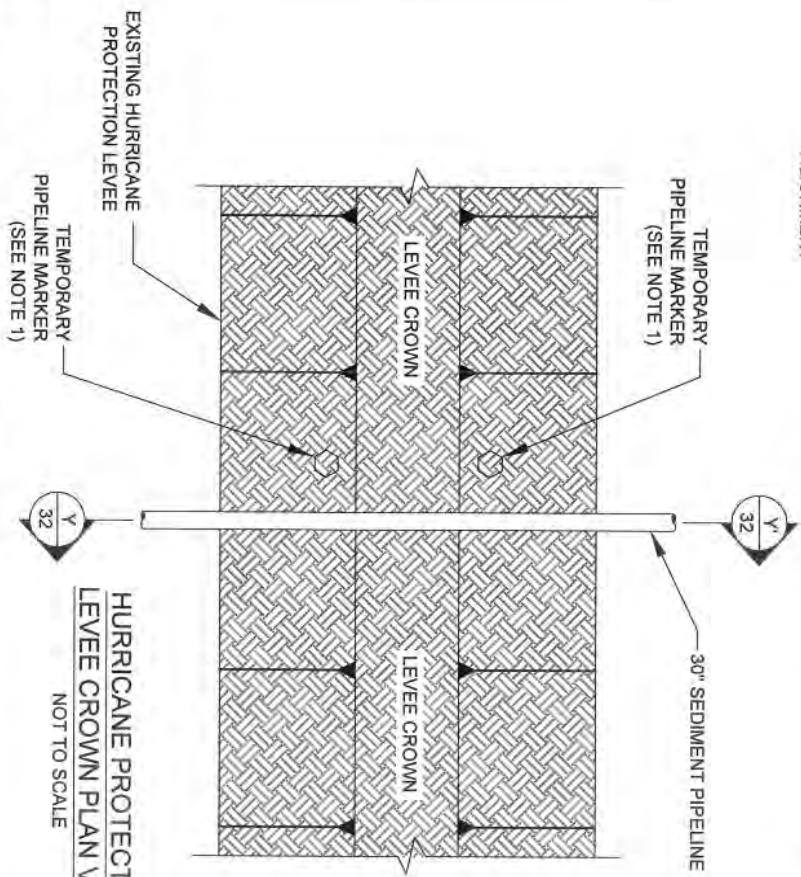
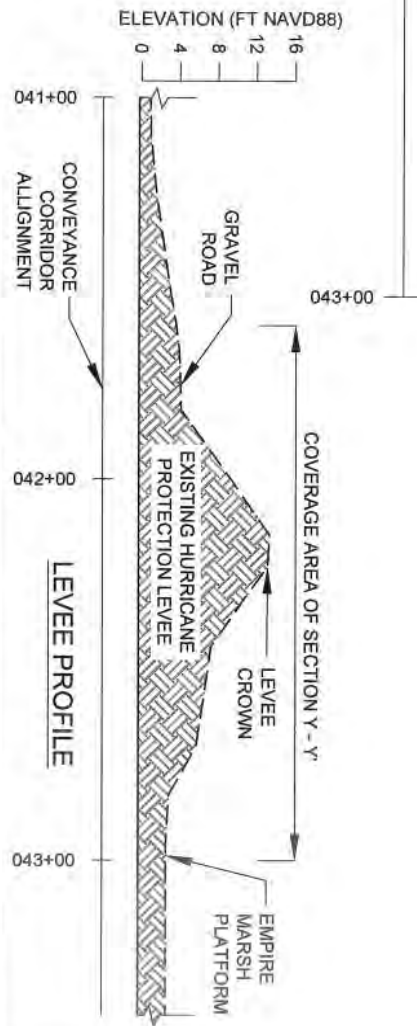
1. ONE MARKER SHALL BE PLACED ON EACH SIDE OF LOUISIANA HIGHWAYS 23 & 11 AND AT EACH END OF THE CASING PIPES.
2. MARKERS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH LADOTD 2000 STANDARD SPECIFICATION 729.
3. A PROPOSED DRAWING SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN THE WORK PLAN PRIOR TO CONSTRUCTION.
4. MARKERS SHALL BE PLACED SUBSEQUENT TO BACKFILLING THE JACKING PIT AND PRIOR TO DEMOBILIZATION.



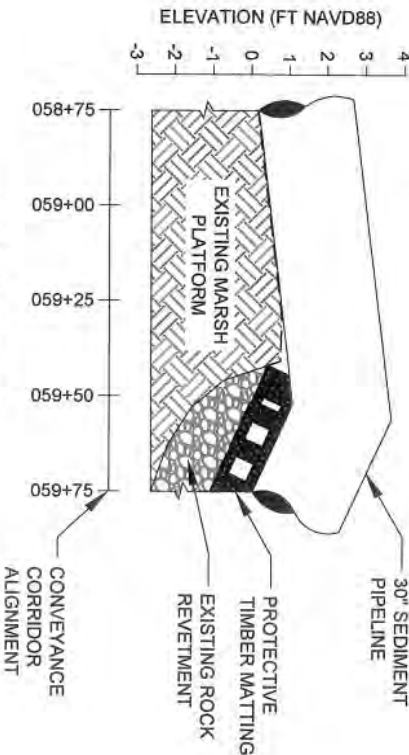
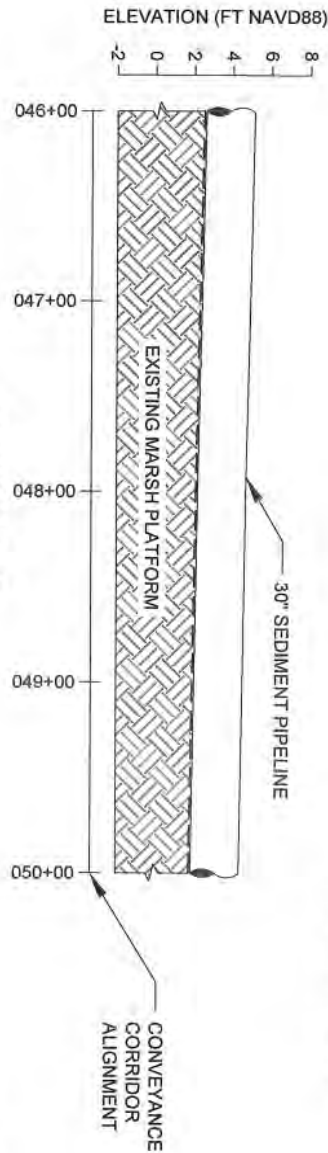
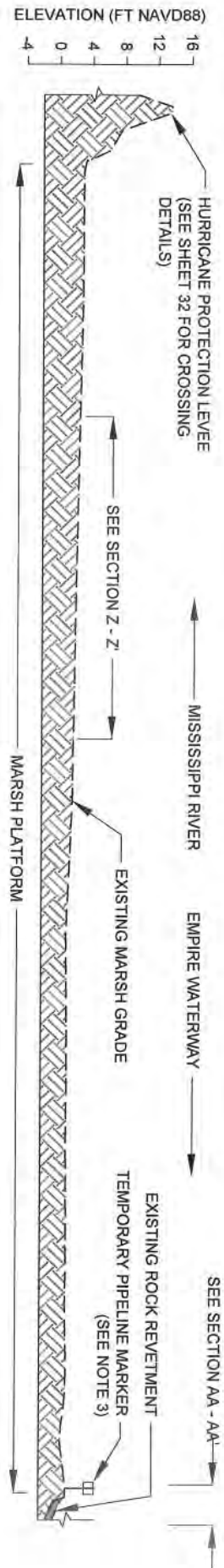
BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY ASSURANCE DESIGN</small>	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	GRAVEL ROAD CROSSING DETAIL
MTP	CM/DUS/AGE/TAKEHOLDER	02/10				
	COMMENT RESPONSE	2011				
DRAWN BY: DARTIEZ, ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.		APPROVED BY: MAURY CHATELLIER, P.E.	
					FEDERAL PROJECT NUMBER: BA-40	SHEET 31 OF 37
					STATE PROJECT NUMBER: BA-40	DATE: NOVEMBER, 2010



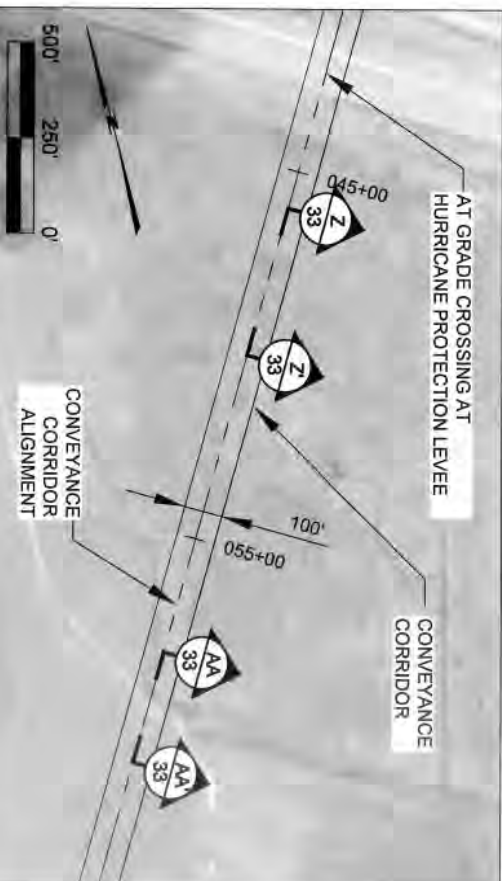
- NOTES:**
1. TEMPORARY PIPELINE MARKERS INDICATING OWNER, CONTENTS, AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF EACH INFRASTRUCTURE CROSSING BY THE SEDIMENT PIPELINE.
 2. SEE SHEETS 14 - 18 FOR CONVEYANCE CORRIDOR ALIGNMENT.
 3. SURVEYS CONDUCTED BY SJB GROUP, LLC., JULY 2008.



BY	DESCRIPTION	DATE	OFFICE OF COASTAL PROTECTION & RESTORATION		FEDERAL PROJECT NUMBER
MTP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011	COASTAL ENGINEERING CONSULTANTS, INC. SJB GROUP LLC <small>QUALITY & DESIGN</small>		BA-40
					BA-40
DRAWN BY: DARTEZI, ZVERENMAN			DESIGNED BY: MICHAEL T. POFF, P.E.		SHEET 32 OF 37
			APPROVED BY: MAURY CHATELLIER, P.E.		

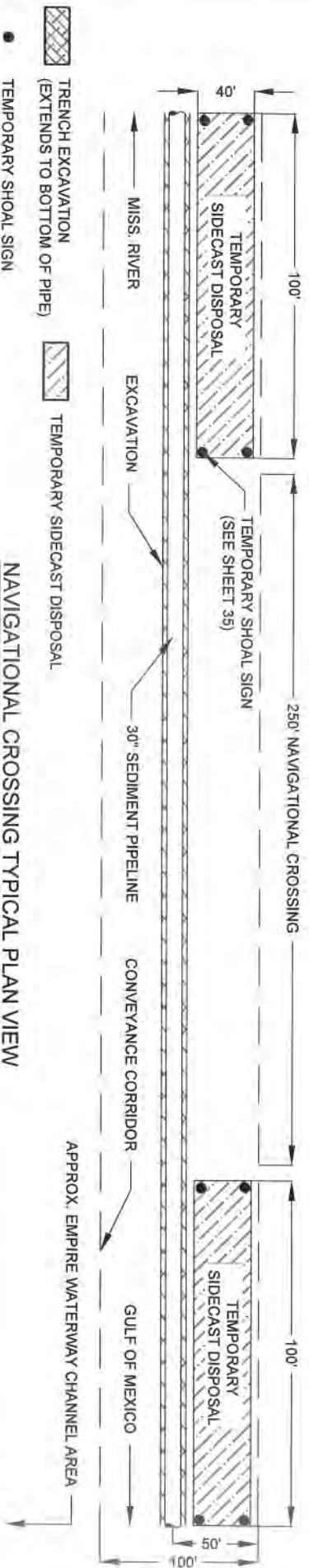
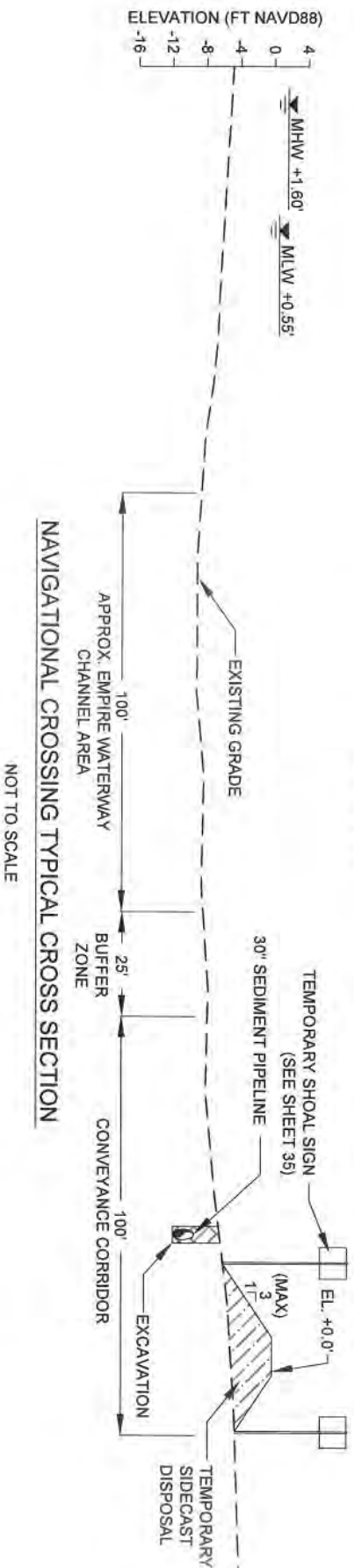
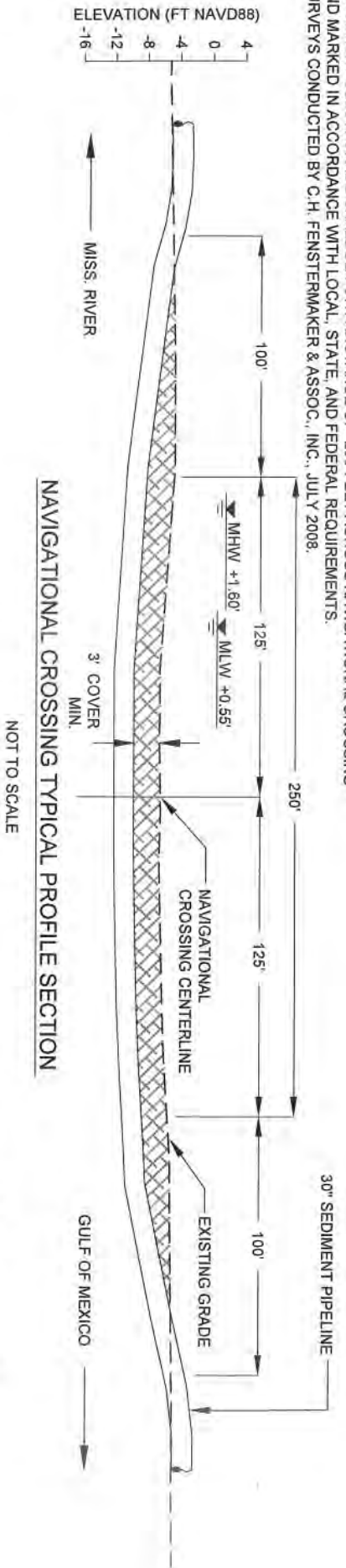


- NOTES:
1. SURVEYS CONDUCTED BY SJB GROUP, LLC, JULY 2008.
 2. SEE SHEETS 14 - 18 FOR CONVEYANCE CORRIDOR ALIGNMENT.
 3. TEMPORARY PIPELINE MARKERS INDICATING OWNER CONTENTS AND ADDRESS FOR CONTACTING OWNER SHALL BE PLACED AND MAINTAINED AT EACH TOE OF EACH INFRASTRUCTURE CROSSING BY THE SEDIMENT PIPELINE



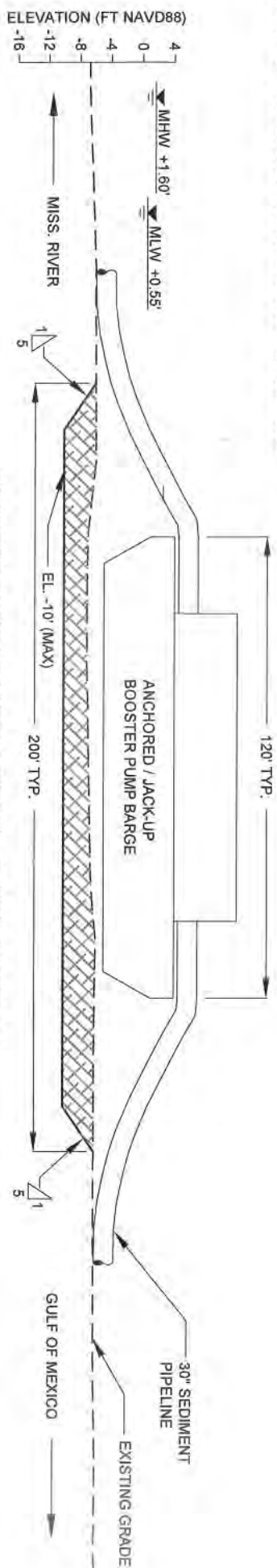
BY	DESCRIPTION	DATE
CM/DUS/ACE/STAKEHOLDER	02/10	
MTP	COMMENT RESPONSE	2011
<div> COASTAL ENGINEERING CONSULTANTS, INC. <small>QUALITY BY DESIGN</small> </div> <div> STB GROUP, LLC <small>QUALITY BY DESIGN</small> </div>		
<div> OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801 </div>		
DRAWN BY: DARTIEZ IZMERENMAN		DESIGNED BY: MICHAEL T. POFF, P.E.
		APPROVED BY: MAURY CHATELLIER, P.E.
RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION		STATE PROJECT NUMBER: BA-40
EMPIRE MARSH & ROCK REVEGETATION CROSSING DETAIL		DATE: NOVEMBER, 2010
FEDERAL PROJECT NUMBER: BA-40		SHEET 33 OF 37

- NOTES:
1. SEDIMENT PIPELINE SHALL BE PLACED A MINIMUM OF 3 FEET BELOW EXISTING GRADE AT NAVIGATIONAL CROSSINGS.
 2. PLACEMENT BELOW GRADE SHALL BE FOR A DISTANCE OF 250 FEET ACROSS NAVIGATIONAL CROSSING AND MARKED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
 3. SURVEYS CONDUCTED BY C.H. FENSTERMAKER & ASSOC., INC., JULY 2008.



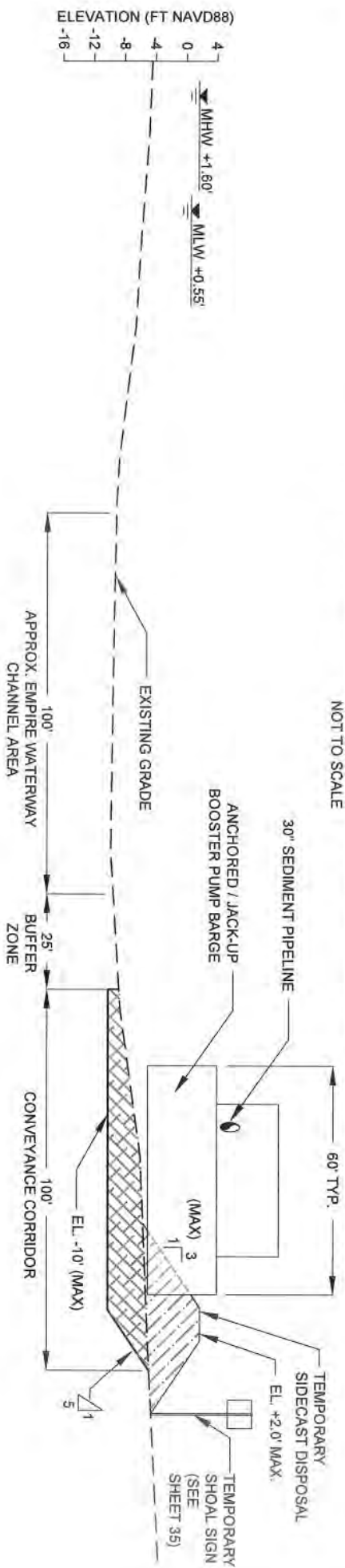
BY	DESCRIPTION	DATE	COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	EMPIRE WATERWAY NAVIGATIONAL TYPICAL CROSSING DETAIL
MTP	CMD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011	STB GROUP, LLC	450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	STATE PROJECT NUMBER BA-40	DATE: NOVEMBER, 2010
DRAWN BY:	DARTIEZ I ZWERNEMAN	DESIGNED BY:	MICHAEL T. POFF, P.E.	APPROVED BY:	MAURY CHATELLER, P.E.	FEDERAL PROJECT NUMBER BA-40
						SHEET 34 OF 37

1. BARGE ANCHORS OR JACK-UP LEGS SHALL NOT BE PLACED WITHIN 50' OF ANY EXISTING PIPELINES OR UTILITIES.
2. SURVEYS CONDUCTED BY C.H. FENSTERMAKER, JULY 2008.



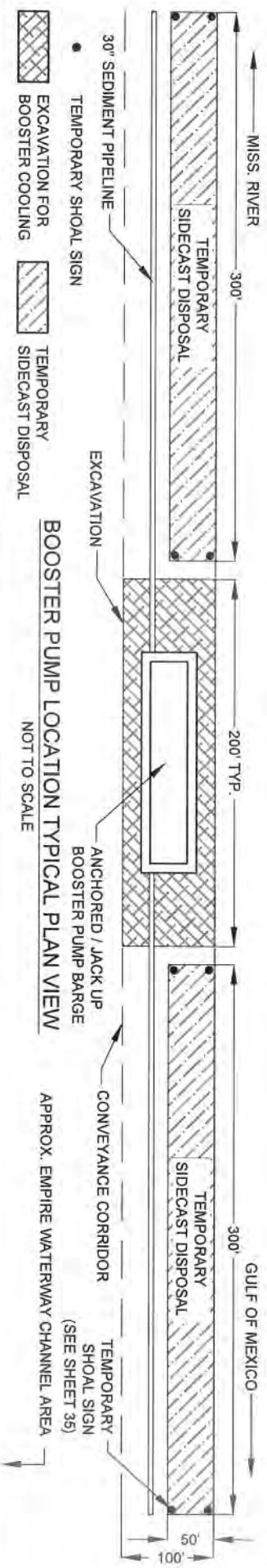
BOOSTER PUMP LOCATION TYPICAL PROFILE SECTION

NOT TO SCALE





BOOSTER PUMP LOCATION TYPICAL CROSS SECTION

NOT TO SCALE

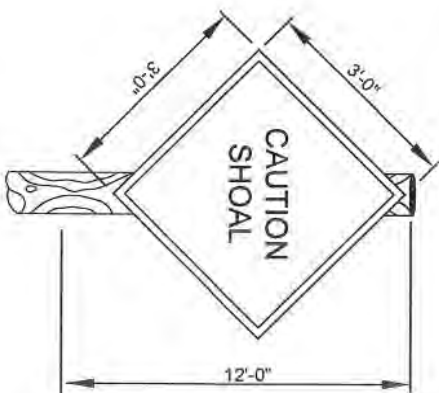
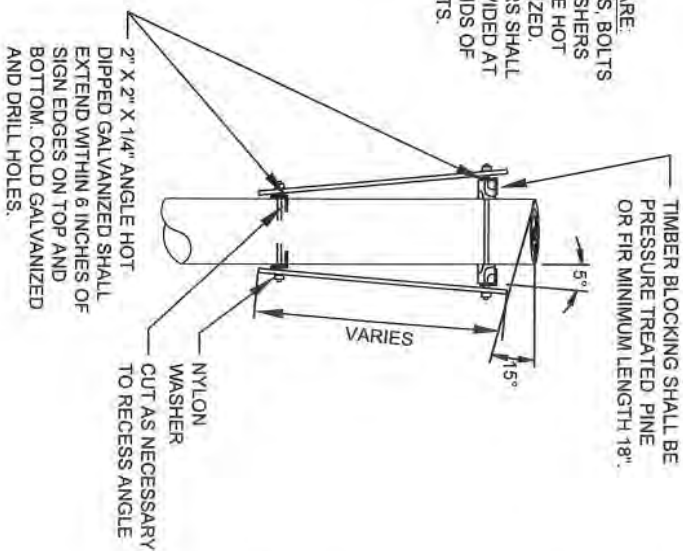


BOOSTER PUMP LOCATION TYPICAL PLAN VIEW

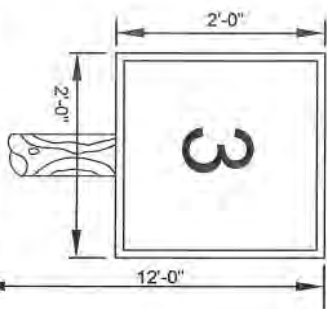
NOT TO SCALE

BY	DESCRIPTION	DATE	 COASTAL ENGINEERING CONSULTANTS, INC.	OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION	BOOSTER PUMP SITE TYPICAL DETAIL
MTP	CMDD/USACE/STAKEHOLDER COMMENT RESPONSE	02/10 2011				
			 SJB GROUP, LLC QUALITY BY DESIGN			
DRAWN BY: DARTZ, ZWERNEMAN			DESIGNED BY: MICHAEL T. POFF, P.E.			APPROVED BY: MAURY CHATELLIER, P.E.
			FEDERAL PROJECT NUMBER: BA-40			SHEET 35 OF 37

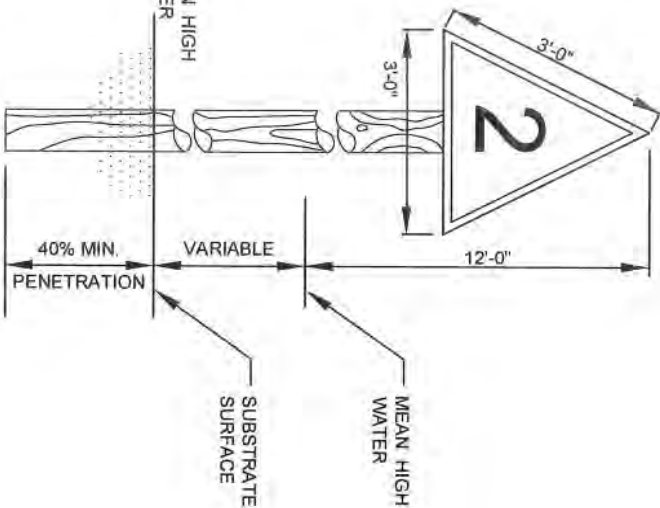
HARDWARE:
ALL NUTS, BOLTS
AND WASHERS
SHALL BE HOT
GALVANIZED.
WASHERS SHALL
BE PROVIDED AT
BOTH ENDS OF
ALL BOLTS.



SHOAL SIGN (S)
NOT TO SCALE




GREEN DAY MARKER (G)
NOT TO SCALE



RED DAY MARKER (R)
NOT TO SCALE

NOTES:

1. SIGNS SHALL BE INSTALLED AT LOCATIONS SHOWN ON SHEETS 20 & 34
2. ALL SIGNS MUST MEET U.S. COAST GUARD STANDARDS IN ACCORDANCE WITH 33 CFR 330.4 (a) (1).
3. THE SIGNS SHALL HAVE THE DIMENSIONS AND MESSAGES SHOWN. THERE ARE TWO SIGNS PER PILE.
4. THE SHOAL SIGNS SHALL BE CONSTRUCTED WITH 125 GAUGE 61TTS ALUMINUM, COVERED WITH WHITE, ENGINEER GRADE, REFLECTIVE SHEETING; BLACK SCREENED LETTERING AND DESIGN; AND ORANGE, ENGINEER GRADE, REFLECTIVE BORDER.
5. NAVIGATION DAY MARKERS SHALL BE CONSTRUCTED OF 125 GAUGE 61TTS ALUMINUM, COVERED WITH THE APPROPRIATE RED OR GREEN SHEETING; BLACK SCREENED LETTERING AND DESIGN; AND APPROPRIATE DARKER RED OR GREEN, ENGINEER GRADE, REFLECTIVE BORDER.
6. TIMBER PILING SHALL BE 40-FEET IN LENGTH WITH A NOMINAL 12-INCH DIAMETER BUTT AND 7-INCH MINIMUM DIAMETER AT THE TIP.
7. HARDWARE FOR TIMBER CONNECTIONS SHALL BE HOT DIPPED 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.
8. THE CONTRACTOR HAS THE OPTION OF USING TEMPORARY BUOYS IN LIEU OF TIMBER PILES. BUOYS MUST BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO MOBILIZATION AND U.S. COAST GUARD STANDARDS.
9. SIGNS AND SUPPORTS SHALL BE REMOVED AND PROPERLY DISPOSED OF PRIOR TO DEMOBILIZATION. IF PILES CANNOT BE REMOVED COMPLETELY, THEY MUST BE REMOVED TO 10 FEET BELOW THE EXISTING MUDLINE.

BY	DESCRIPTION	DATE	
CM/DUS/SGE/STAKEHOLDER	02/10		
MTP	COMMENT RESPONSE	2011	
DRAWN BY: DARTIEZ / ZMERENMAN			
			
DESIGNED BY: MICHAEL T. POFF, P.E.			
APPROVED BY: MAURY CHATELLIER, P.E.			
OFFICE OF COASTAL PROTECTION & RESTORATION RESTORATION DIVISION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801			
RIVERINE SAND MINING / SCOFIELD ISLAND RESTORATION			NAVIGATION AND SHOAL SIGN DETAIL
STATE PROJECT NUMBER BA-40			DATE: NOVEMBER, 2010
FEDERAL PROJECT NUMBER BA-40			SHEET 36 OF 37

