
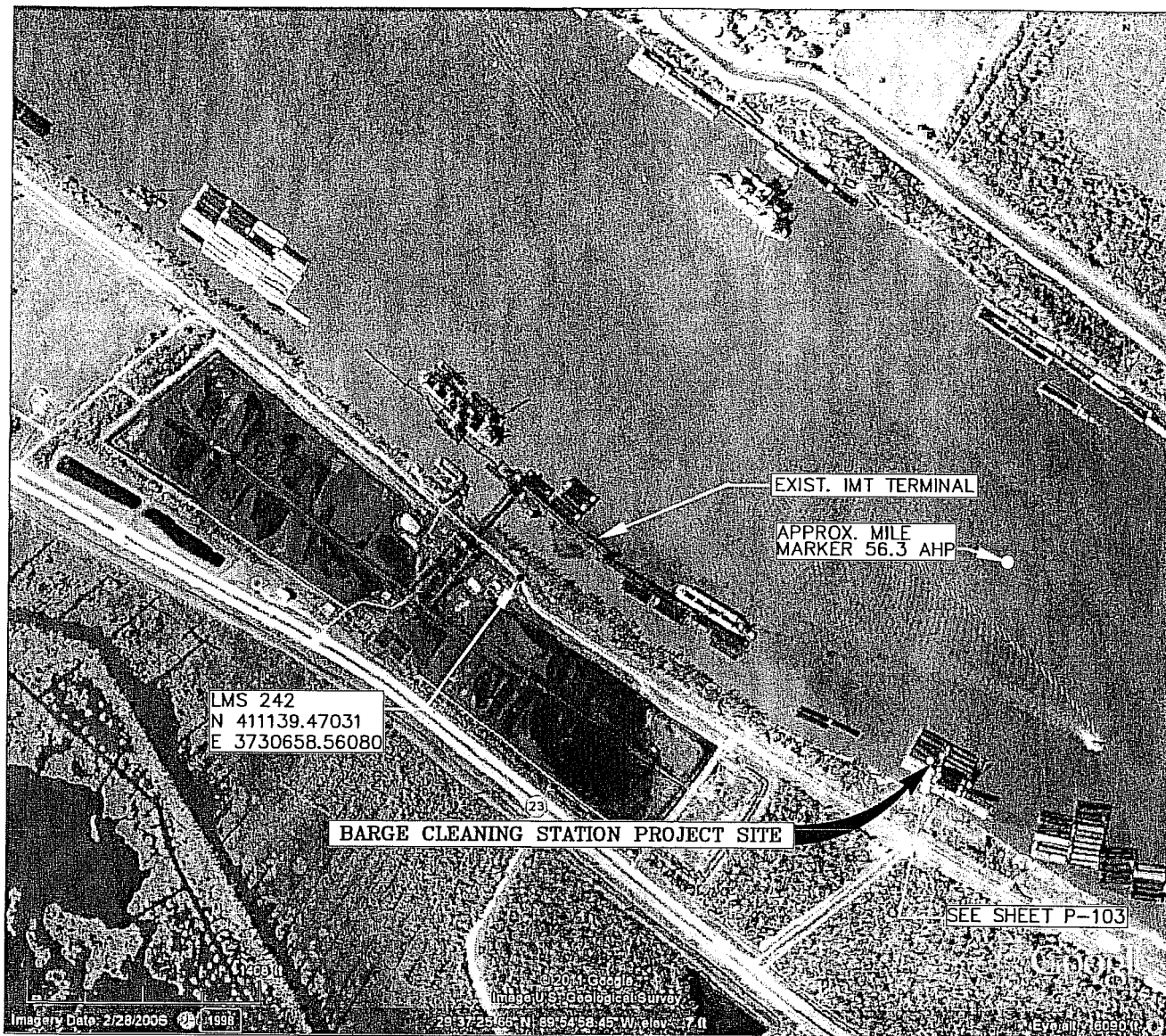






NOT TO SCALE.

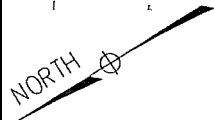
APPROVAL	DATE	KINDER MORGAN TERMINALS BARGE CLEANING STATION IMT TERMINAL, PORT SULPHUR VICINITY MAP				
DESIGN HPR	09/14/11					
CHECK HPR	09/14/11					
DRAFT TMP	09/14/11					
		JOB NO.	5358.001	DWG. NO.		P-101



PROJECT SITE LOCATION  
 N 410247.69  
 E 3732860.34  
 LAT 29°37'13.36"  
 LONG 89°54'38.39"

SEE BAR SCALE

APPROVAL		DATE	KINDER MORGAN TERMINALS BARGE CLEANING STATION IMT TERMINAL, PORT SULPHUR, LA SITE PLAN			
DESIGN	HPR	09/14/11				
CHECK	HPR	09/14/11				
DRAFT	TMP	09/14/11				
JOB NO.		5358.001	DWG. NO.		P-102	



MISSISSIPPI RIVER FLOW

USCOE SAILING LINE

EXIST. SHIP DOCK

SHIP DOCK  
RIVER FENDERLINE

UPRIVER  
FENDER FACE  
N: 410536.78  
E: 3732411.58

DOWNRIVER  
FENDER FACE  
N: 410019.92  
E: 37333343.14

W.P./MIDPOINT BARGE

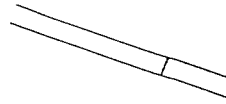
FENDERLINE  
N 60°58'38.1" W

EXIST. BARGE OPERATION

L.W.R.P.

SEE P-104  
FOR BARGE ARRANGEMENT

LMS 245  
N: 409175.37  
E: 3733584.71



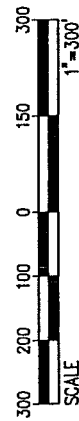
LEGEND

- 60"Ø STEEL PIPE MONOPILES
- (4 PLCS. WATERSIDE FENDER)
- \* (4 PLCS. LANDSIDE FENDER)
- (2 PLCS. BARGE HAUL)

NOTE:  
PORTIONS OF  
JUNIOR REVETMENT  
NOT SHOWN  
FOR CLARITY (TYP.)

LMS 245  
N: 410162.18  
E: 3731935.47

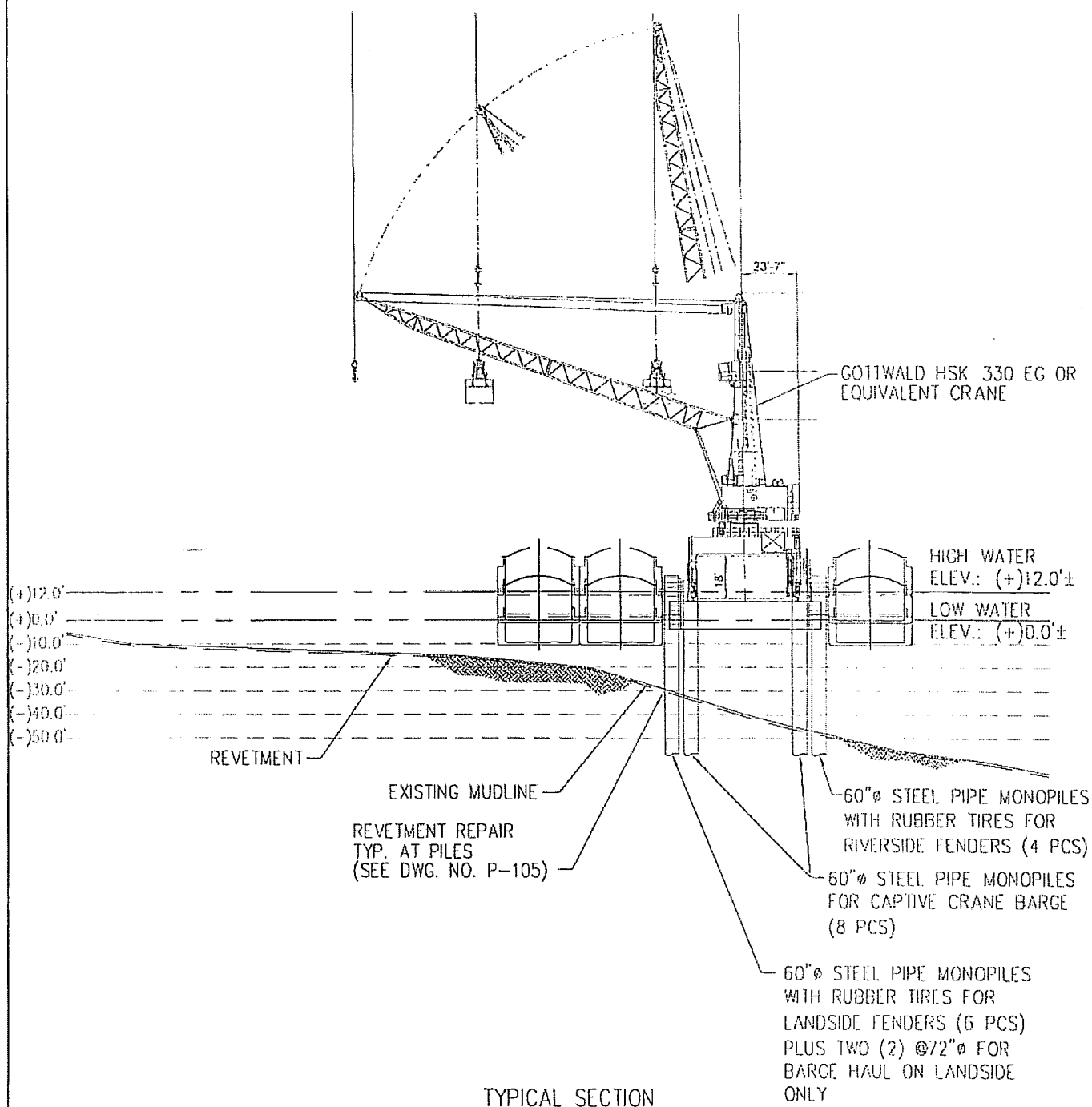
BARGE CLEANING STATION SITE PLAN





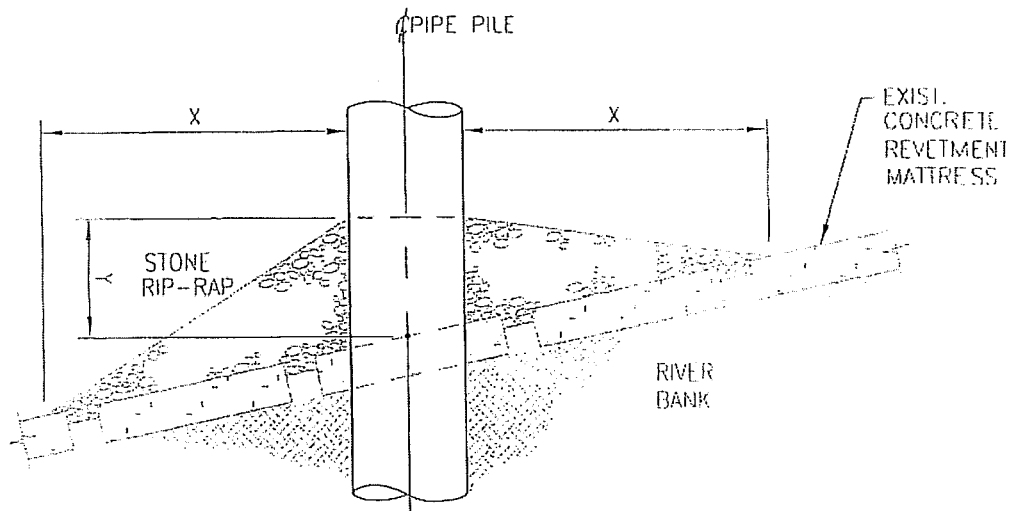
SEE BAR SCALE

APPROVAL		DATE	KINDER MORGAN TERMINALS BARGE CLEANING STATION IMT TERMINAL, PORT SULPHUR, LA SITE LAYOUT			
DESIGN	HPR	09/14/11				
CHECK	HPR	09/14/11				
DRAFT	TMP	09/14/11				
			JOB NO.	5358.001	DWG. NO.	P-103
			A			





APPROVAL	DATE	KINDER MORGAN TERMINALS BARGE CLEANING SYSTEM IMT TERMINAL, PORT SULPHUR, LA TYPICAL SECTION "A"					
DESIGN HPR	09/14/11						
CHECK HPR	09/14/11						
DRAFT TMP	09/14/11	JOB NO.	5358.001	DWG. NO.	P--104		

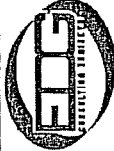



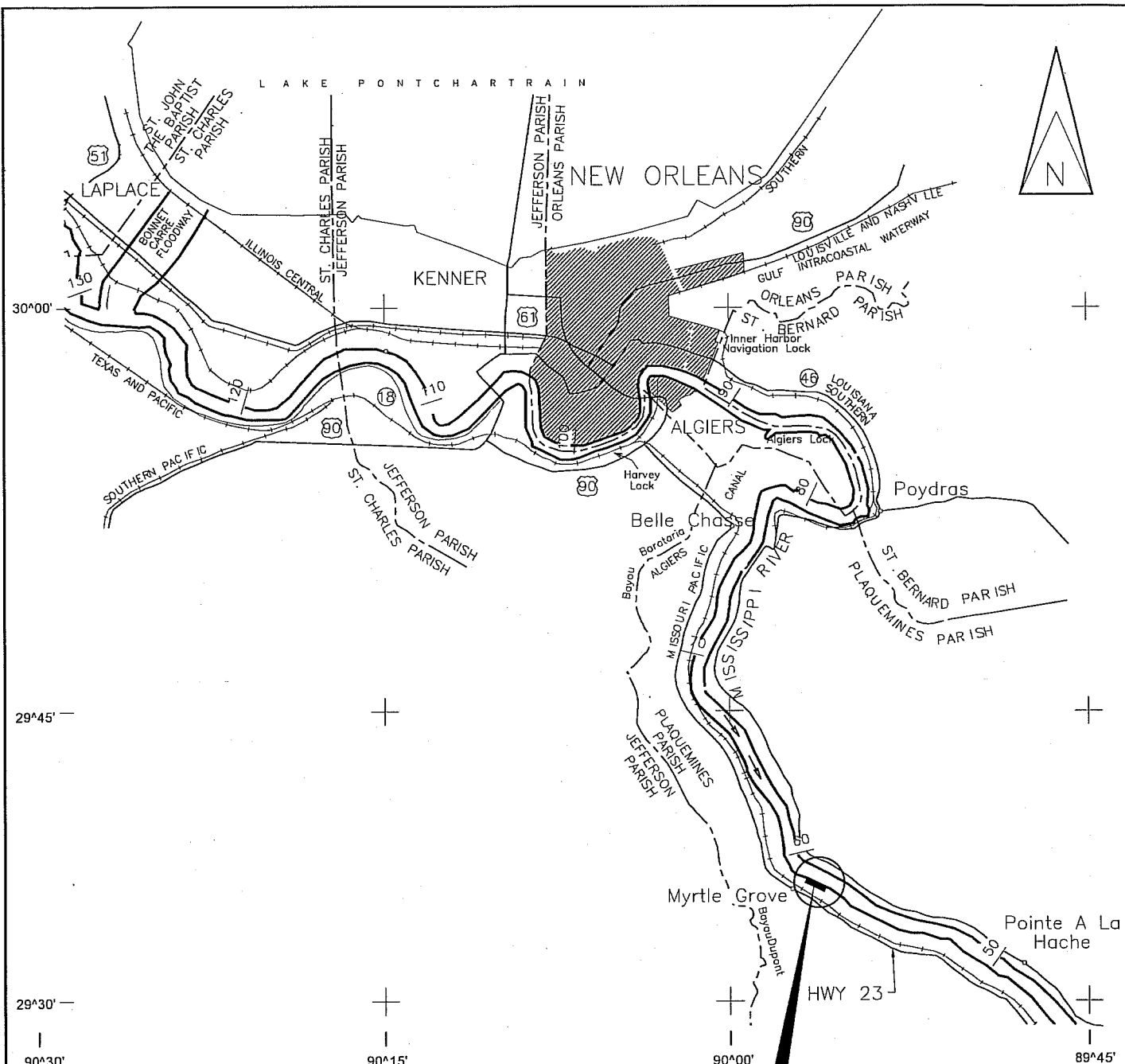
**STANDARD REVETMENT REPAIR DETAIL N.T.S.**  
(FOR PILING DRIVEN THROUGH REVETMENT)

**NOTES:**

1. SIZE OF RIP-RAP TO VARY BETWEEN 6 POUNDS AND 125 POUNDS WITH 40% TO 60% OF THE STONE WITHIN THE RANGE OF 25 POUNDS TO 75 POUNDS.

DEPTH OF WATER IN FEET AT POINT OF PILE PENETRATION	DISTANCE IN FEET		APPROXIMATE TONS OF STONE REQUIRED
	X	Y	
0 TO 10	3	1.5	1.5
11 TO 40	5	2	6.5
41 TO 60	8	3	22
61 TO 100	12	4	57

APPROVAL	DATE	KINDER MORGAN TERMINALS BARGE CLEANING SYSTEM IMT TERMINAL, PORT SULPHUR, LA STANDARD REVETMENT REPAIR DETAIL					
DESIGN HPR	09/14/11						
CHECK HPR	09/14/11						
DRAFT TMP	09/14/11	JOB NO.	5358.001	DWG. NO.		P-105	



## VICINITY MAP

PROJECT SITE  
APPROX. RIVER MILE 57 AHP  
LAT = 29° 37' 21.56" N  
LONG = 89° 55' 10.65" W



Rev:	Description:	Date:	By:
Rev:	Description:	Date:	By:
Rev:	Description:	Date:	By:
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:	JS
Drawn by:	AML
Checked by:	EAW
Approved by:	CEM

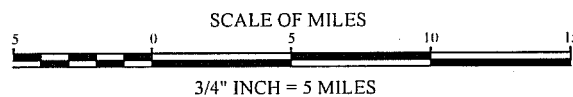


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FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
VICINITY MAP

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
VM0001  
1 OF 34





## DRAWING INDEX

VM0001	SHT 1 OF 34	VICINITY MAP
INDEX	SHT 2 OF 34	DRAWING INDEX
VM0002	SHT 3 OF 34	ENLARGED VICINITY MAP
SP0001	SHT 4 OF 34	PROJECT SITE PLAN – LANDSIDE WORK
SP0002	SHT 5 OF 34	PROJECT SITE PLAN – MARINE WORK
GN0001	SHT 6 OF 34	QUANTITY TABLES
P0001	SHT 7 OF 34	EXISTING CONDITIONS AND DEMOLITION PLAN SHEET 1 OF 2
P0002	SHT 8 OF 34	EXISTING CONDITIONS AND DEMOLITION PLAN SHEET 2 OF 2
P0003	SHT 9 OF 34	ENLARGED PROJECT SITE PLAN – NORTH HALF
P0004	SHT 10 OF 34	ENLARGED PROJECT SITE PLAN – SOUTH HALF
P0005	SHT 11 OF 34	STORMWATER DISCHARGE PIPE LEVEE CROSSING PLAN
P0006	SHT 12 OF 34	STORMWATER DISCHARGE PIPE LEVEE CROSSING PROFILE
P0007	SHT 13 OF 34	NOT USED
P0008	SHT 14 OF 34	NOT USED
P0009	SHT 15 OF 34	SITE CROSS SECTIONS – SHEET 1 OF 6
P0010	SHT 16 OF 34	SITE CROSS SECTIONS – SHEET 2 OF 6
P0011	SHT 17 OF 34	SITE CROSS SECTIONS – SHEET 3 OF 6
P0012	SHT 18 OF 34	SITE CROSS SECTIONS – SHEET 4 OF 6
P0013	SHT 19 OF 34	SITE CROSS SECTIONS – SHEET 5 OF 6
P0014	SHT 20 OF 34	SITE CROSS SECTIONS – SHEET 6 OF 6
P0015	SHT 21 OF 34	SHIP LOADING DOCK
P0016	SHT 22 OF 34	SHIP LOADING DOCK
P0017	SHT 23 OF 34	SHIP LOADING DOCK
P0018	SHT 24 OF 34	SHIP LOADING DOCK
P0019	SHT 25 OF 34	BARGE UNLOADING DOCK
P0020	SHT 26 OF 34	BARGE UNLOADING DOCK
P0021	SHT 27 OF 34	BARGE LOADING DOCK
P0022	SHT 28 OF 34	BARGE LOADING DOCK
P0023	SHT 29 OF 34	BARGE LOADING DOCK
P0024	SHT 30 OF 34	DREDGING CROSS SECTIONS
P0025	SHT 31 OF 34	NOT USED
P0026	SHT 32 OF 34	NOT USED
P0027	SHT 33 OF 34	STANDARD REVETMENT REPAIR DETAIL
P0028	SHT 34 OF 34	NDSI NOTES

2



Rev:	Description:	Date:	By:
2	REVISED PIPE LEVEE CROSSING	10/24/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:	JS
Drawn by:	AML
Checked by:	EAW
Approved by:	CEM



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FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA  
DRAWING INDEX

PROJ. NO.  
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JULY, 2011  
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INDEX  
2 OF 34

PLAQUEMINES  
PARISH

St. Joseph  
Ch. & Cam.  
Pierix  
High Sch.

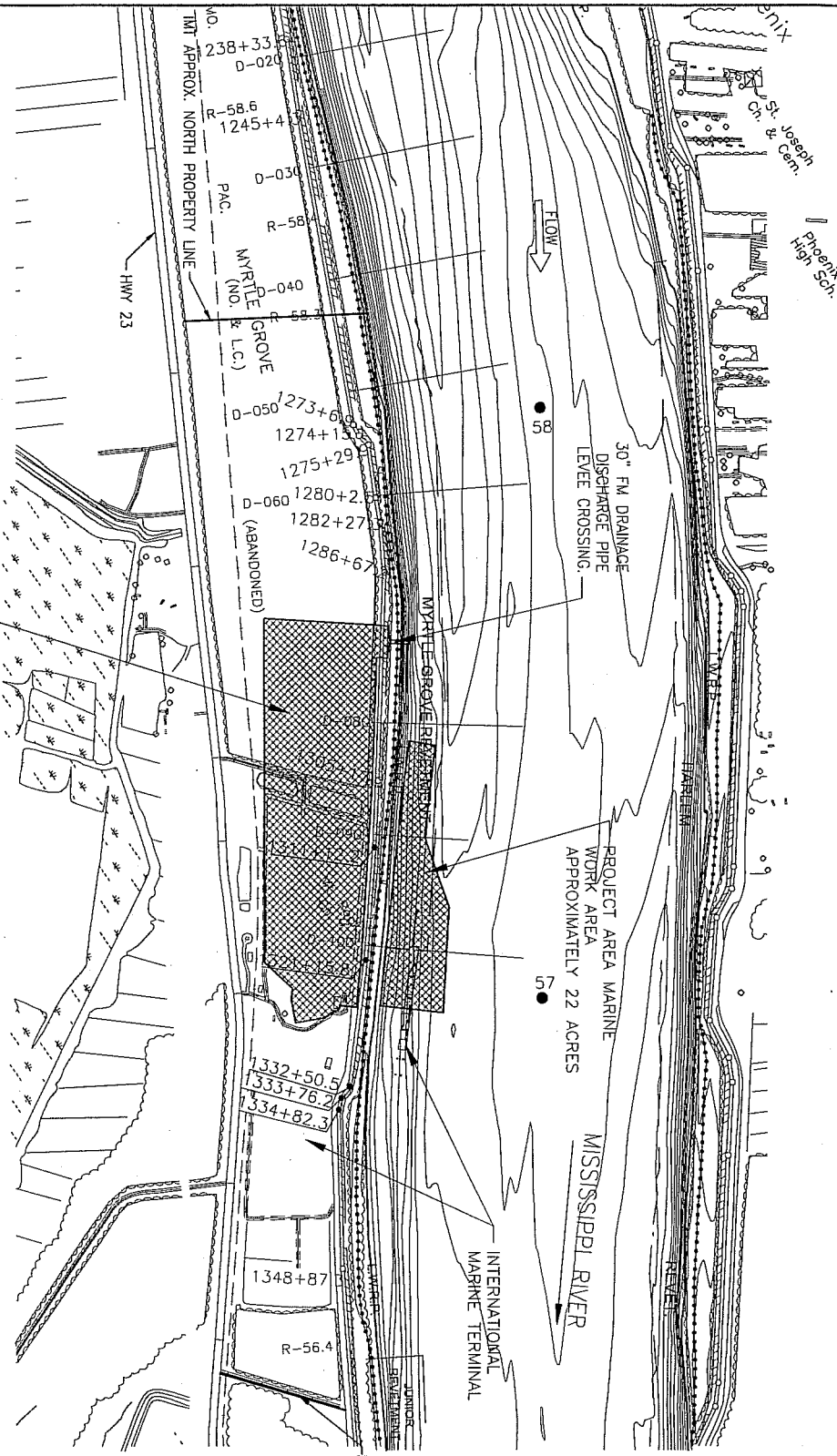
30" FM DRAINAGE  
DISCHARGE PIPE  
LEVEE CROSSING.

PROJECT AREA MARINE  
WORK AREA  
APPROXIMATELY 22 ACRES

MISSISSIPPI RIVER

INTERNATIONAL  
MARINE TERMINAL

INT APPROX.  
SOUTH  
PROPERTY LINE



NOTE:

SITE PLAN GENERATED  
FROM USACE DWG. NO. 59.

PROJECT AREA LANDSIDE WORK AREA  
MISSISSIPPI RIVER MILE 57.5  
PLAQUEMINES PARISH, LA  
LAT = 29° 37' 21.56" N  
LONG = 89° 55' 10.65" W  
APPROXIMATELY 74 ACRES



PROJECT AREA MAP

1" = 1500'-0"



Rev:	Description:	Date:	By:
Rev:	Description:	Date:	By:
Rev:	Description:	Date:	By:
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS  
Drawn by:  
AML  
Checked by:  
EAW  
Approved by:  
CEM



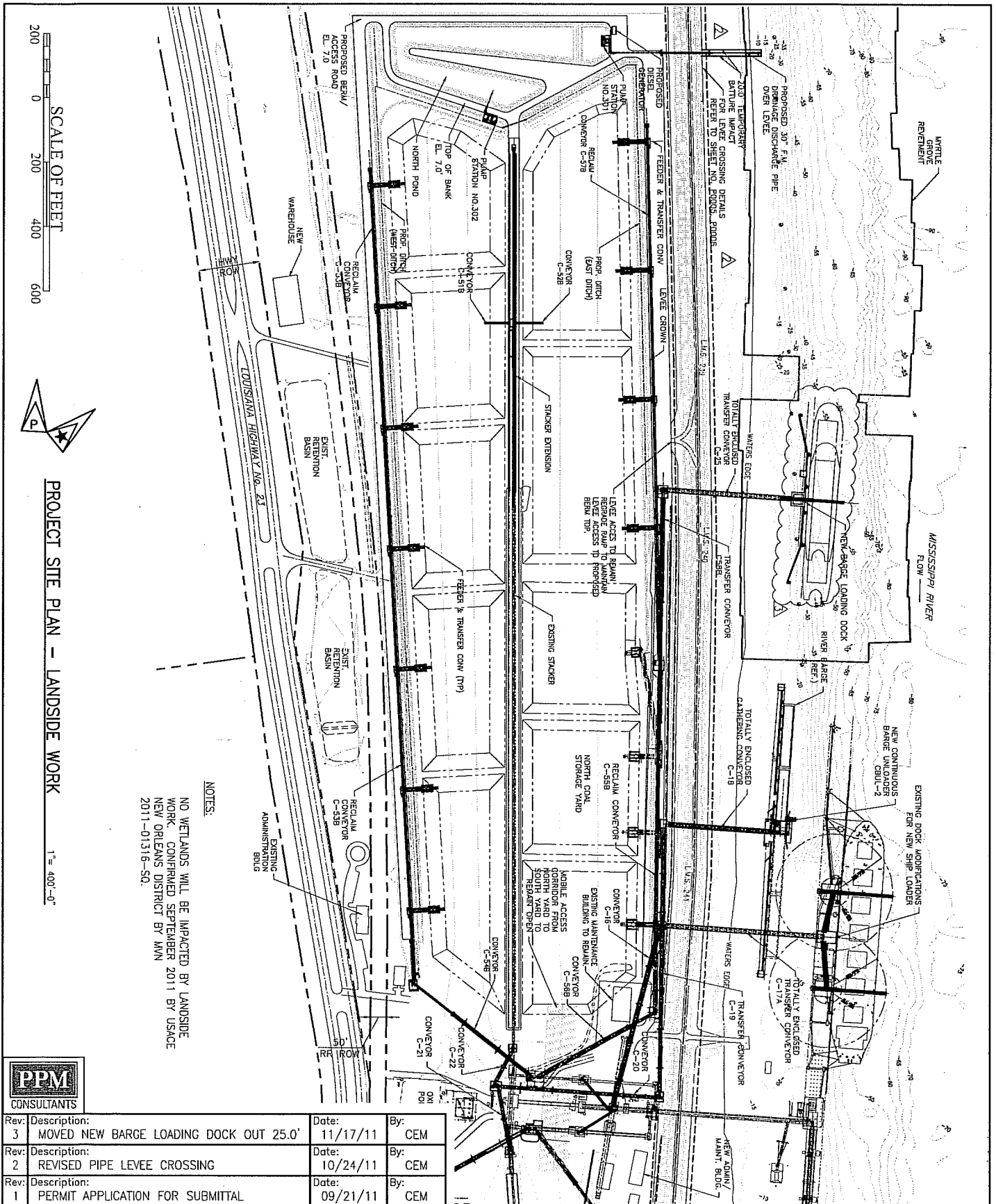
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FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
ENLARGED VICINITY MAP

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
VM0002  
3 OF 34





NOTES:  
NO WETLANDS WILL BE IMPACTED BY LANDSIDE WORK. CONFIRMED SEPTEMBER 2011 BY USACE NEW ORLEANS DISTRICT BY MWN 2011-01316-SQ.



Rev:	Description:	Date:	By:
3	MOVED NEW BARGE LOADING DOCK OUT 25.0'	11/17/11	CEM
2	REVISED PIPE LEVEE CROSSING	10/24/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS  
Drawn by:  
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Checked by:  
EAW  
Approved by:  
CEM



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FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
PROJECT SITE PLAN - LANDSIDE WORK

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
SP0001  
4 OF 34

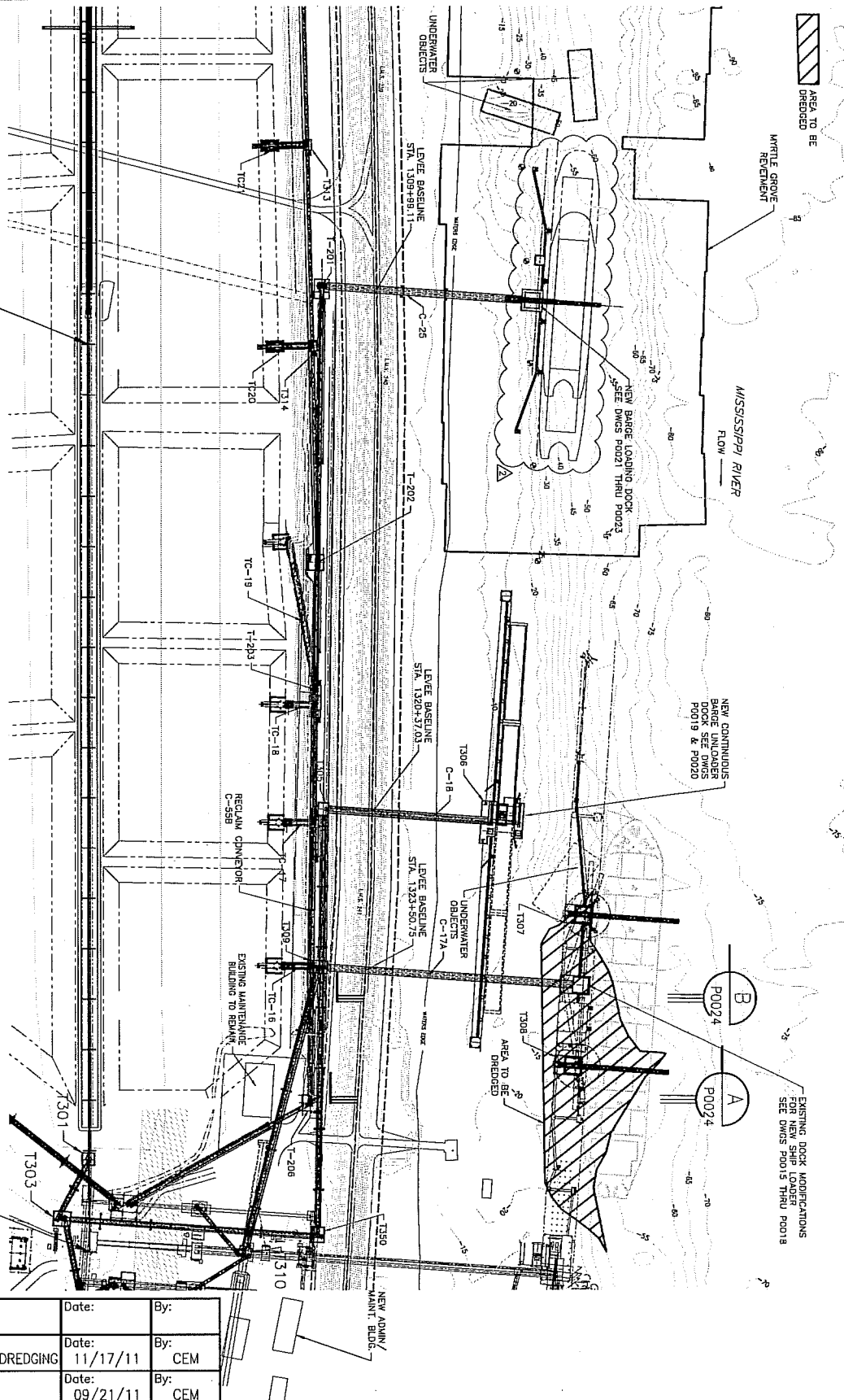


# PROJECT SITE PLAN - MARINE WORK

1" = 300'-0"

ALIGNMENT-CENTERLINE BERM  
STATION 218+00  
N = 412134.8095  
E = 3728621.7055

ALIGNMENT-CENTERLINE BERM  
BEGINNING STATION 200+00  
N = 411015.7109  
E = 3730031.5347



Rev:	Description:	Date:	By:
2	MOVED BARGE LOADING DOCK; ELIMINATE DREDGING	11/17/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS  
Drawn by:  
AML  
Checked by:  
EAW  
Approved by:  
CEM



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COAL TERMINAL UPGRADES-NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
PROJECT SITE PLAN - MARINE WORK

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
SP0002  
5 OF 34

TABLE A - EXCAVATION QUANTITY BREAKDOWN (SEE NOTE 1)				
ITEM	LOCATION	TYPE	UNIT	QUANTITY
A-1	LANDSIDE RIVER SIDE (BATTURE)	GENERAL	CY	59,000
A-2		GENERAL	CY	550
A-3	RIVERSIDE	DREDGING	CY	21,995
<b>TOTAL EXCAVATION</b>	<b>ALL</b>	<b>GENERAL</b>	<b>CY</b>	<b>81,545</b>
				INCLUDES FOUNDATION EXCAVATION FOR DRAINAGE POND DISCHARGE PIPE FOR VESSEL DRAFT @ SHIP LOADER DOCK (SEE NOTE 2)

TABLE B - FILL QUANTITY BREAKDOWN (SEE NOTE 1)				
ITEM	LOCATION	TYPE	UNIT	QUANTITY
B-1	LANDSIDE	EXCAVATED MATERIAL	CY	10,000
B-3	LANDSIDE	RIVER SAND	CY	458,500
B-4	LANDSIDE	AGGREGATE	CY	76,500
B-5	LANDSIDE	SOIL CEMENT	CY	86,000
B-6	LANDSIDE	CONCRETE	CY	3,500
B-7	RIVER SIDE (BATTURE)	EXCAVATED MATERIAL	CY	550
B-8	LANDSIDE	ROCK RIP-RAP	CY	100
<b>TOTAL FILL</b>	<b>ALL</b>	<b>VARIOUS</b>	<b>CY</b>	<b>635,150</b>
				REDISTRIBUTE USABLE EXCAVATED MATERIAL ON SITE (FROM ITEM A-1) (SEE NOTE 4) <sup>2</sup> HAULED IN FOR SURCHARGE MATERIAL (SEE NOTE 3) HAULED IN STORAGE PAD FOUNDATIONS BACKFILL TRENCH WITH EXCAVATED MATERIAL (ITEM A-2) MISC. EROSION CONTROL

NOTES:

- (1) EXCAVATION, DREDGE, FILL AND SURCHARGE QUANTITIES ARE NET IN-PLACE QUANTITIES.
- (2) DREDGED MATERIAL TO BE DISPOSED OF OFF-SITE AND SHALL BE PROPERLY DISPOSED OF IN NON-WETLANDS AREAS.
- (3) AFTER SURCHARGE PERIOD, EXCESS HAULED-IN RIVERSAND SURCHARGE MATERIAL <sup>2</sup> (APPROXIMATELY 178,346 CY) IS TO BE SOLD OR GIVEN TO OTHERS. APPROXIMATELY 280,154 CY TO BE LEFT IN-PLACE.
- (4) ALL EXCESS UNSUITABLE MATERIAL IS TO BE HAULED OFF-SITE SHALL BE PROPERLY DISPOSED OF IN NON-WETLANDS AREAS.

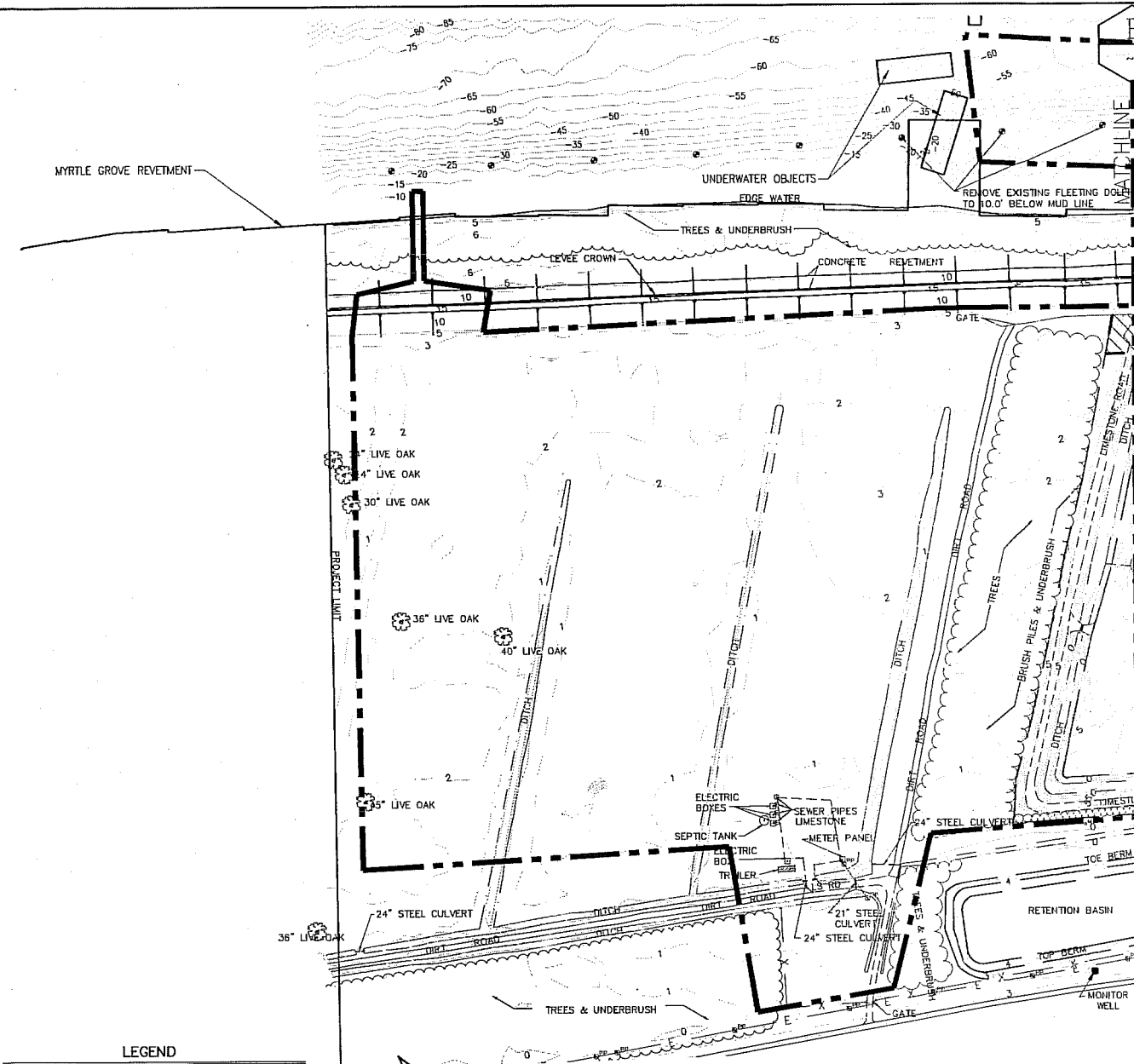
Rev: 4	Description: REMOVED ITEM A-4-DREDGING FOR BARGE LOADER DOCK	Date: 11/17/11	By: CEM
Rev: 3	Description: REVISED PIPE LEVEE CROSSING	Date: 10/24/11	By: CEM
Rev: 2	Description: REVISED PER USACE COMMENT	Date: 10/14/11	By: JAS
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 09/21/11	By: CEM

Designed by: JS	 <b>RIVER CONSULTING</b> WWW.RIVERCONSULTING.COM  <b>KINDER MORGAN</b>
Drawn by: AML	
Checked by: EAW	
Approved by: CEM	



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION		PROJ. NO. 11-C328
FOR		DATE JULY, 2011
INTERNATIONAL MARINE TERMINALS		DRAWING NO. GN0001
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA		6 OF 34
QUANTITY TABLES		

SHEET P0002



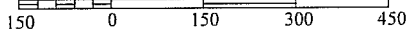
**LEGEND**

- TREES & UNDERBRUSH
- FENCE
- POWER POLE / OVERHEAD LINES  
ELECTRIC, TELEPHONE, CABLE TV
- ANCHOR
- PROJECT AREA BOUNDARY

**EXISTING CONDITIONS AND DEMOLITION PLAN**

1" = 300'-0"

**SCALE OF FEET**



**NOTE:**

1. ALL ELEVATIONS SHOWN REFER TO NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 88).  
B.M. = BENCH MARK, EL. = ELEVATION
2. REFERENCE BENCH MARKS: DSTR, NOLA, ENG6 AND GRIS CONTINUOUS OPERATING REFERENCE STATIONS (CORS). SITE BENCH MARK ELEVATION DETERMINED BY GPS OBSERVATION.
3. T.B.M. SITE BENCH MARK = 1/2" IRON ROD SET ON CROWN OF MISSISSIPPI RIVER LEVEE. COORDINATES N=410,163.93, E=3,731,916.31 (STATE PLANE COORDINATES LOUISIANA SOUTH ZONE, NAD 83, EXPRESSED IN U.S. FEET) EL. = 13.13' N.A.V.D.
4. SURVEY BY TURNER SURVEYS, LLC, OF PONCHATOULA, LA
5. HYDROGRAPHIC SURVEY BY LANIER & ASSOCIATES, NEW ORLEANS, LA
6. EXISTING TREES AND VEGETATION WITHIN THE PROJECT AREA WILL BE REMOVED AND DISPOSED OF OFF-SITE AT A STATE APPROVED NON-WETLAND FACILITY.
7. PILES SUPPORTING STRUCTURES INDICATED TO BE REMOVED TO BE CUT OFF AT MUDLINE.



Rev: 3	Description: ADDED NOTE NO. 7	Date: 11/17/11	By: CEM
Rev: 2	Description: REVISED PER USACE COMMENTS	Date: 10/14/11	By: JAS
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 09/21/11	By: CEM

Designed by:  
JS

Drawn by:  
AML

Checked by:  
EAW

Approved by:  
CEM



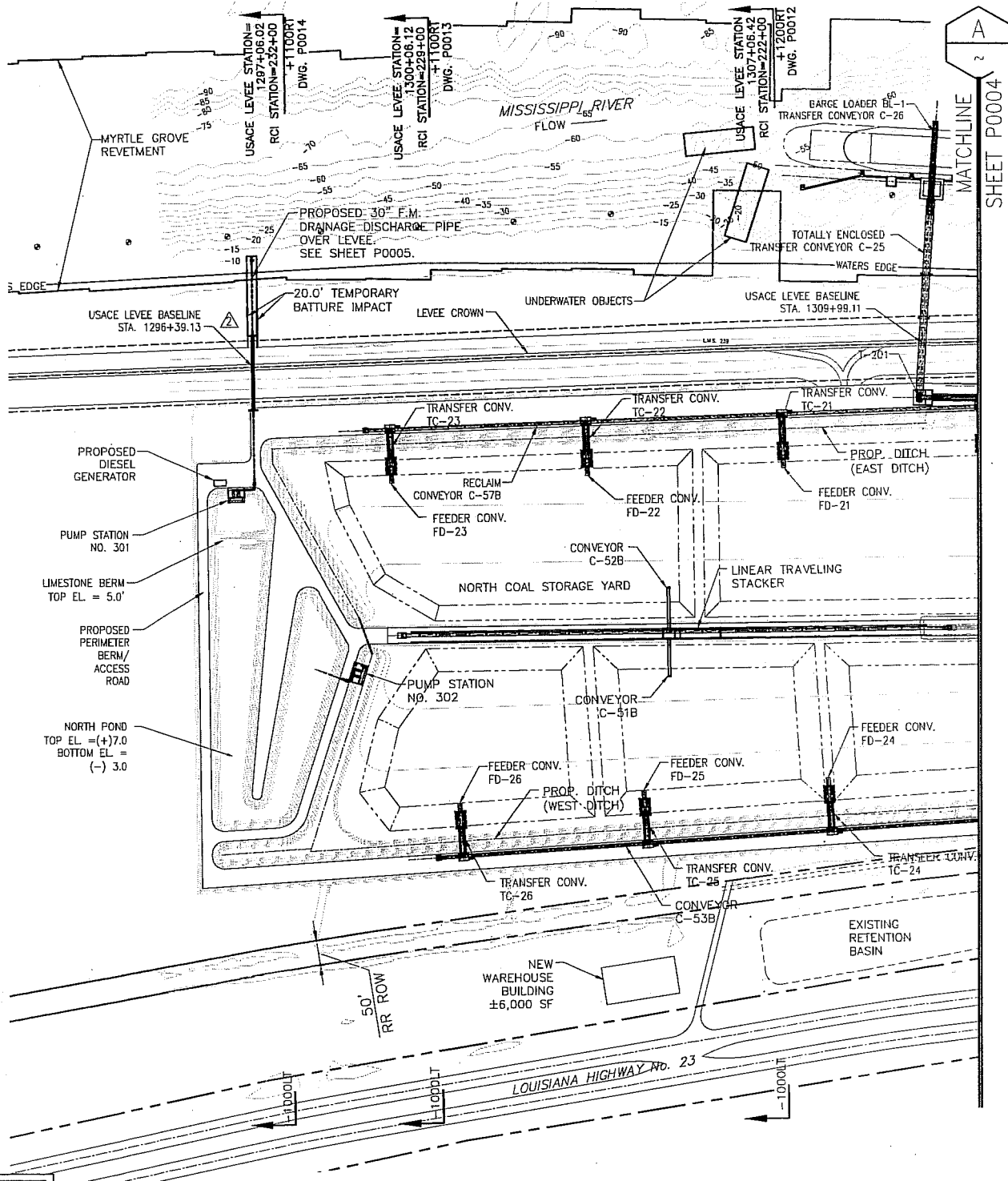
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COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA  
EXISTING CONDITIONS AND DEMOLITION PLAN  
SHEET 1 OF 2

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0001  
7 OF 34





A  
MATCHLINE  
SHEET P0004

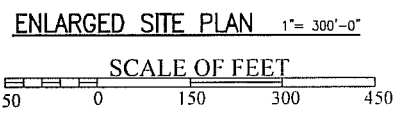
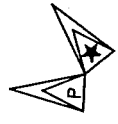


Rev: 4	Description: REVISED PER USACE COMMENTS	Date: 11/09/11	By: CEM
Rev: 3	Description: REVISED PIPE LEVEE CROSSING	Date: 10/24/11	By: CEM
Rev: 2	Description: REVISED PER USACE COMMENTS	Date: 10/14/11	By: CEM
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 09/21/11	By: CEM

Designed by: JS  
 Drawn by: AML  
 Checked by: EAW  
 Approved by: CEM

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COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
 FOR  
 INTERNATIONAL MARINE TERMINALS  
 PORT SULPHUR, PLAQUEMINES PARISH  
 LOUISIANA

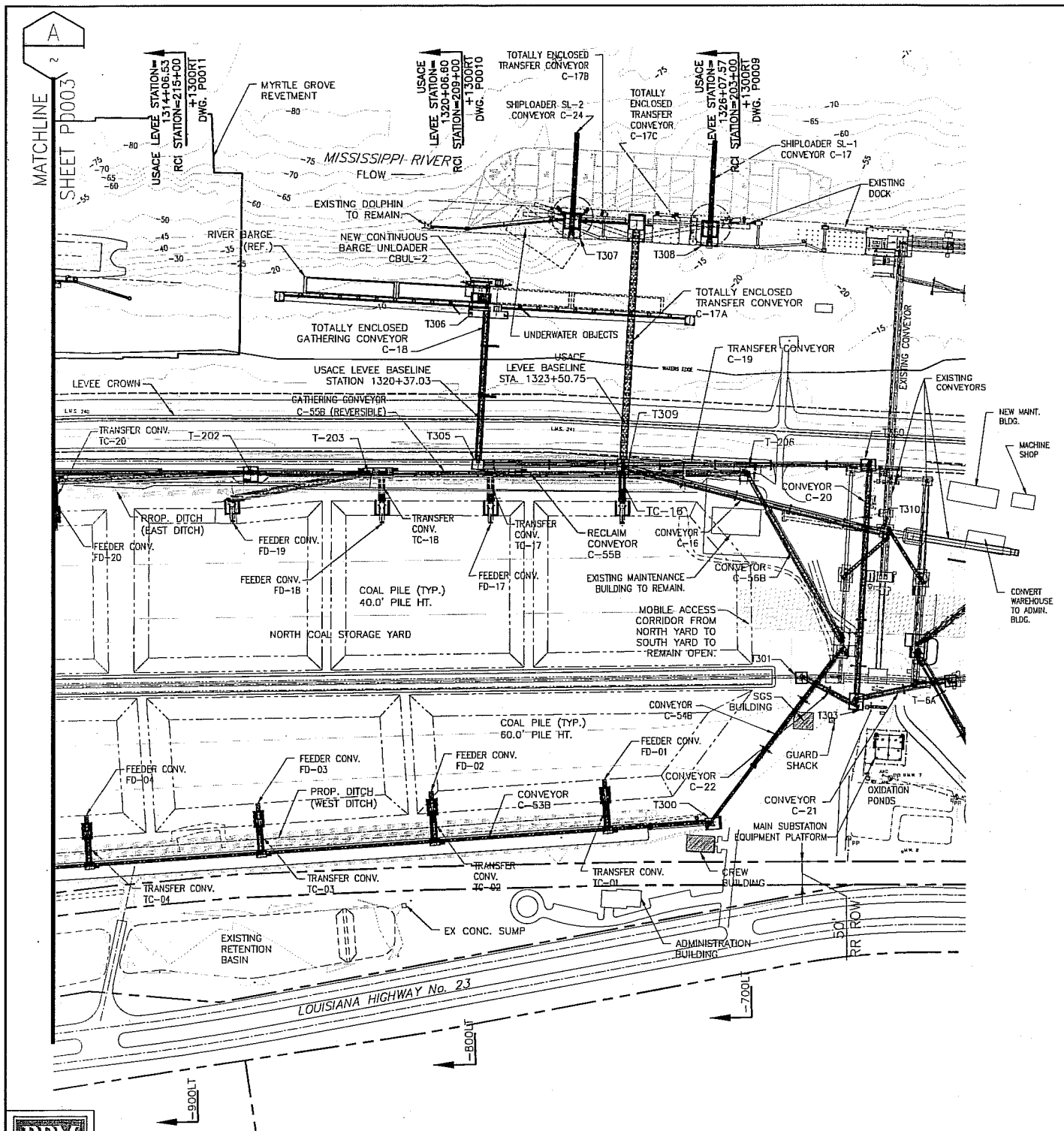
ENLARGED PROJECT SITE PLAN – NORTH HALF

PROJ. NO.  
11-C328

DATE  
JULY, 2011

DRAWING NO.  
P0003  
9 OF 34

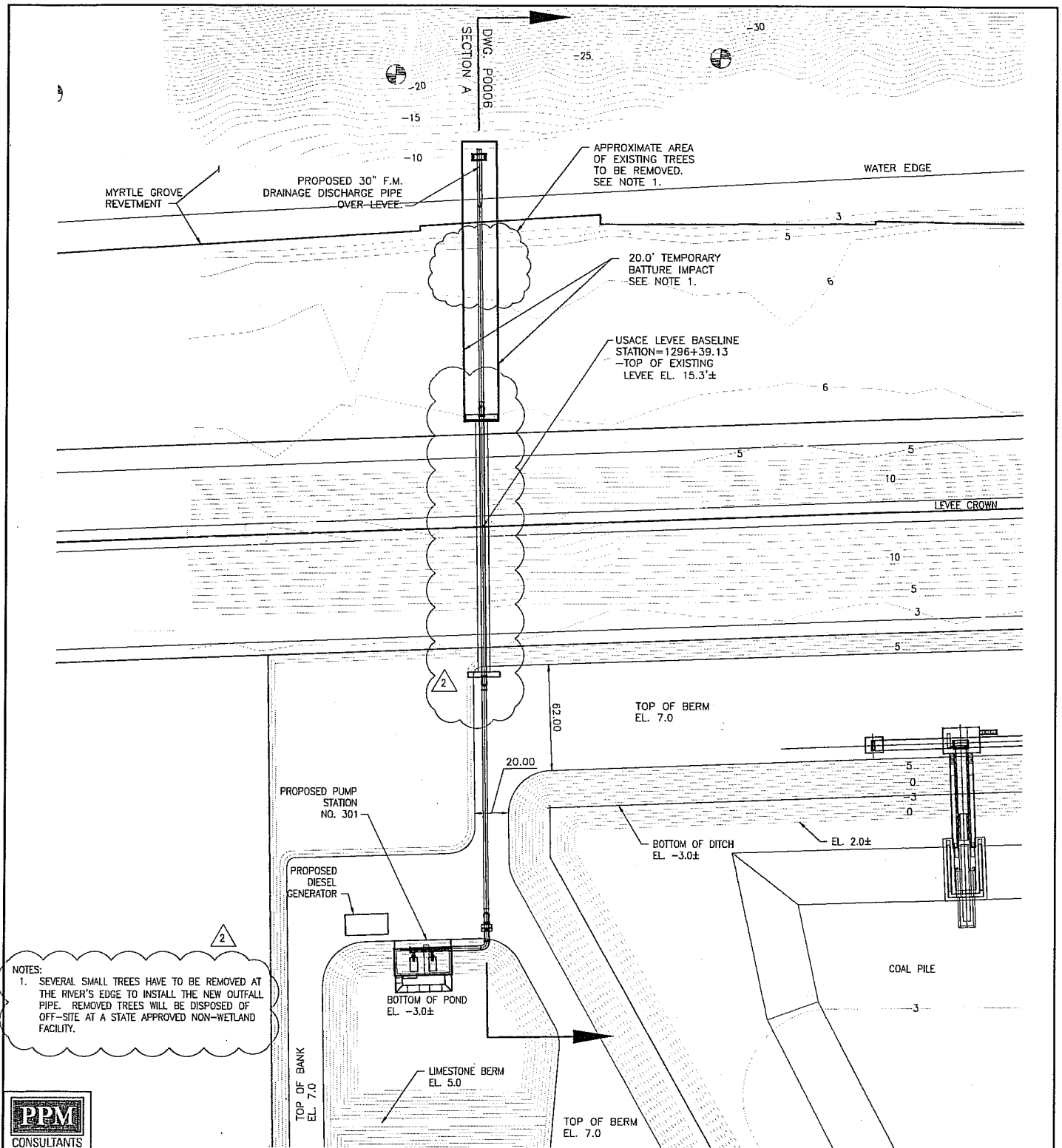




Rev.	Description:	Date:	By:
3	REVISED PER USACE COMMENTS	11/09/11	CEM
2	REVISED PER USACE COMMENTS	10/14/11	JAS
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by: JS	 <b>RIVER CONSULTING</b> WWW.RIVERCONSULTING.COM
Drawn by: AML	
Checked by: EAW	
Approved by: CEM	

<b>COAL TERMINAL UPGRADES—NORTH YARD EXPANSION</b> FOR <b>INTERNATIONAL MARINE TERMINALS</b> PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA	
<b>ENLARGED PROJECT SITE PLAN – SOUTH HALF</b>	



Rev.	Description:	Date:	By:
3	REVISED PER USACE COMMENTS	11/09/11	CEM
2	REVISED PIPE LEVEE CROSSING	10/24/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS  
Drawn by:  
AML  
Checked by:  
EAW  
Approved by:  
CEM



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COAL TERMINAL UPGRADES—SOUTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA  
STORMWATER DISCHARGE PIPE LEVEE CROSSING PLAN

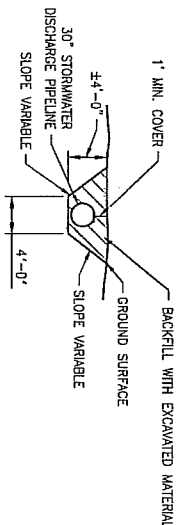
PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0005  
11 OF 34

STORMWATER DISCHARGE PIPE  
LEVEE CROSSING PLAN

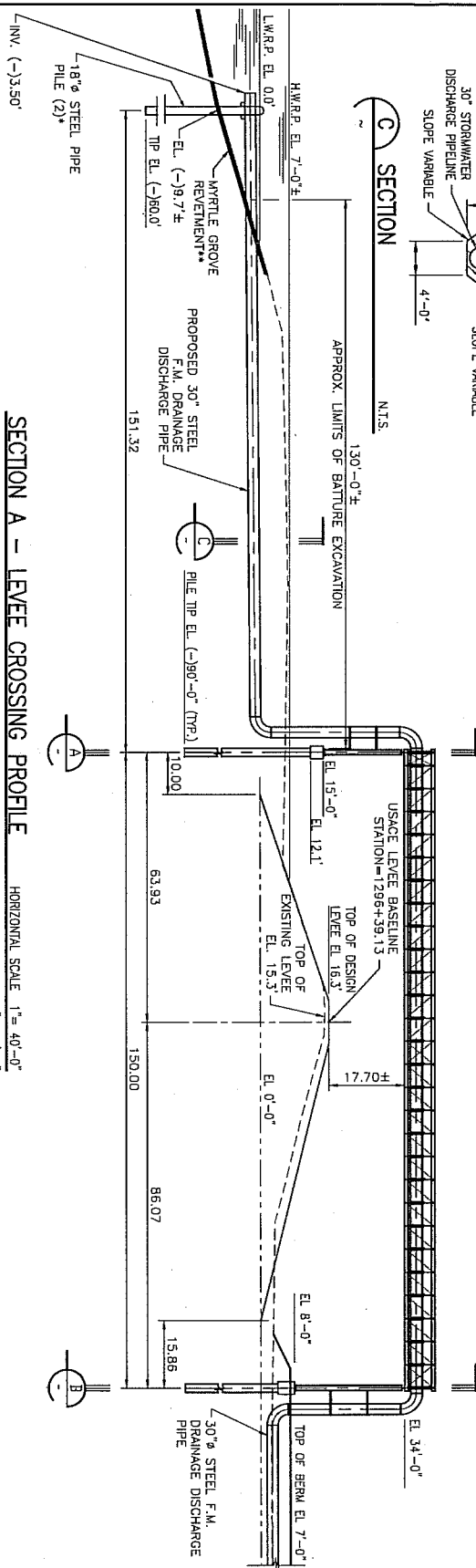
1"= 80'-0"

SCALE OF FEET

40 0 40 80 120

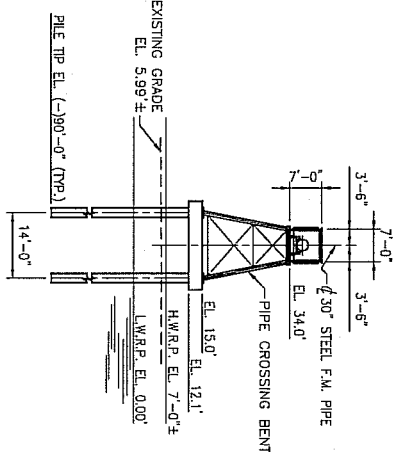


**C SECTION**  
N.T.S.

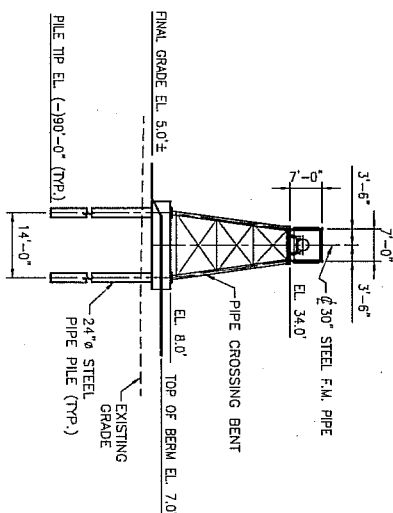


**SECTION A - LEVEE CROSSING PROFILE**  
(SEE DWG. P0005)

HORIZONTAL SCALE 1"= 40'-0"  
VERTICAL SCALE 1"= 40'-0"



**TYPICAL PIPE CROSSING**  
**A BENT (1 REQ'D)**  
1"=40'-0"



**TYPICAL PIPE CROSSING**  
**B BENT (1 REQ'D)**  
1"=40'-0"



\* SEE DWG. P0027 FOR STANDARD REVENEMENT REPAIR DETAIL  
\*\* REVENEMENT REPAIR OF PIPE PENETRATION THROUGH EXISTING REVENEMENT SIMILAR TO DWG. P0027.



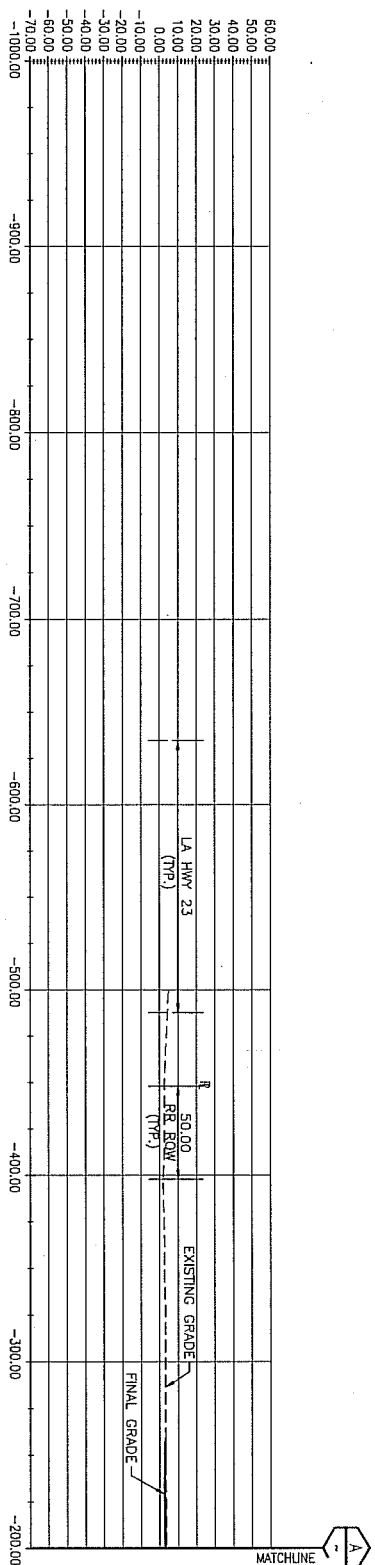
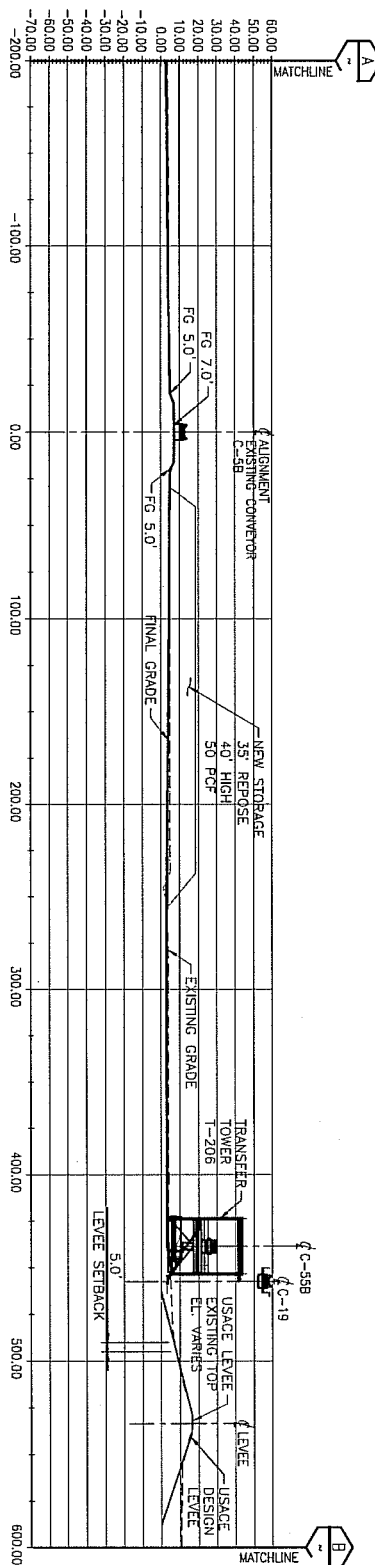
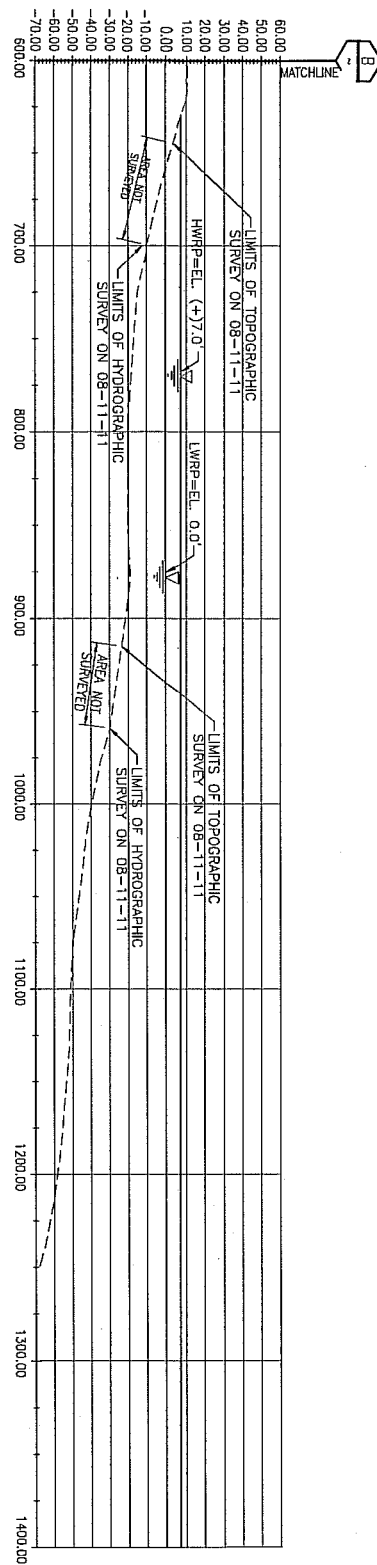
Rev: 4	Description: ADDED BOTTOM OF BENT ELEVATION	Date: 11/17/11	By: CEM
Rev: 3	Description: REVISED PER USACE COMMENTS	Date: 11/09/11	By: CEM
Rev: 2	Description: REVISED PIPE LEVEE CROSSING	Date: 10/24/11	By: CEM
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 09/21/11	By: CEM

Designed by: JS  
Drawn by: AML  
Checked by: EAW  
Approved by: CEM



COAL TERMINAL UPGRADES-SOUTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA  
STORMWATER DISCHARGE PIPE LEVEE CROSSING PROFILE

PROJ. NO. 11-C328  
DATE JULY, 2011  
DRAWING NO. P0006  
12 OF 34



RCI STATION= 203+00.00  
 USAGE LEVEE BASELINE STA.= 1326+07.57

HORIZONTAL SCALE 1:100  
 VERTICAL SCALE 1:100

CUT  
 FILL

SITE CROSS SECTIONS



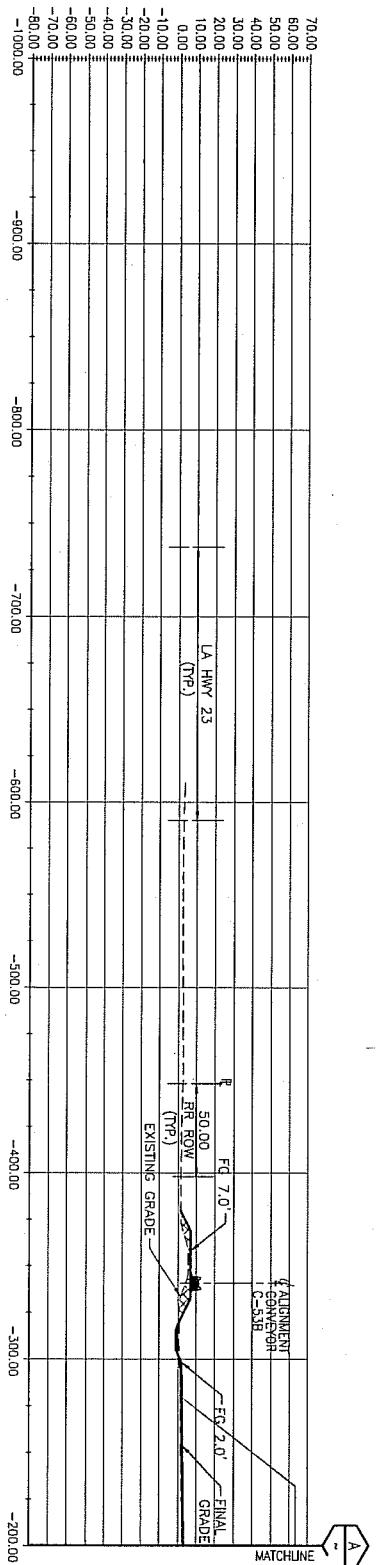
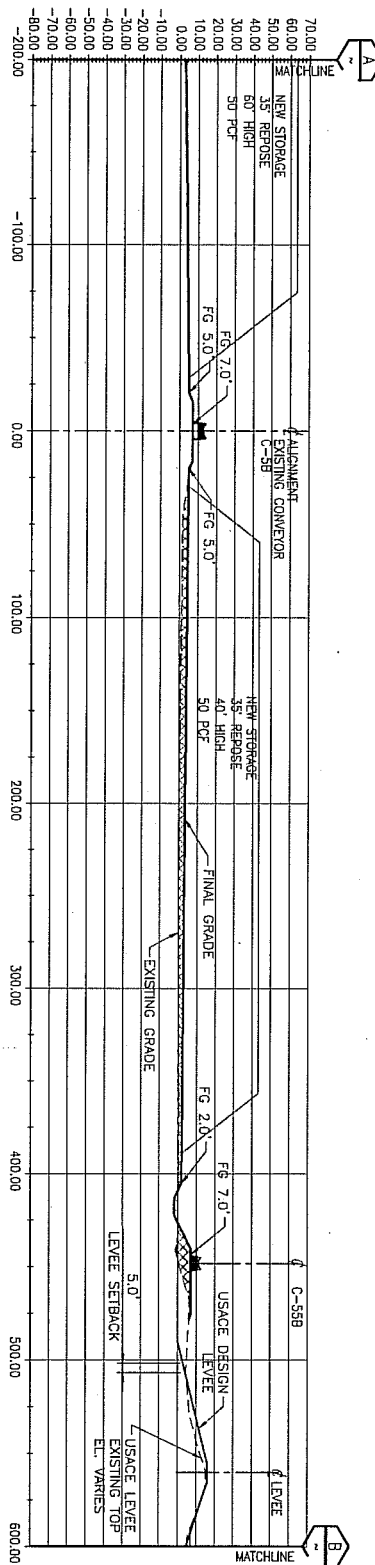
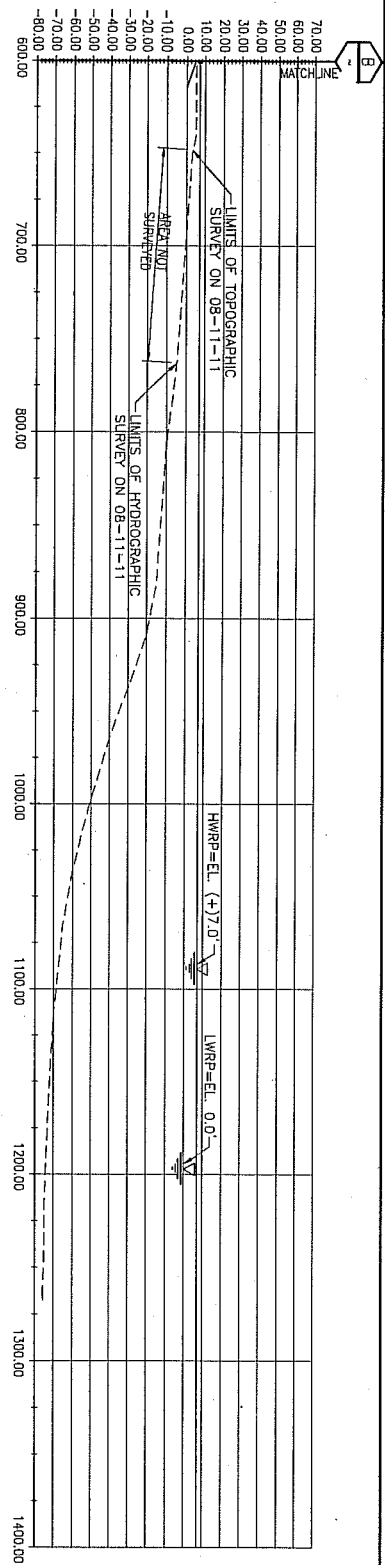
Rev:	Description:	Date:	By:
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
 JS  
 Drawn by:  
 AML  
 Checked by:  
 EAW  
 Approved by:  
 CEM



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION  
 FOR  
 INTERNATIONAL MARINE TERMINALS  
 PORT SULPHUR, PLAQUEMINES PARISH  
 LOUISIANA

PROJ. NO.  
 11-C328  
 DATE  
 JULY, 2011  
 DRAWING NO.  
 P0009  
 15 OF 34



RCI STATION= 209+00.00

USACE LEVEE BASELINE STA.= 1320+06.60

HORIZONTAL SCALE 1:100  
VERTICAL SCALE 1:100

SEE DRAWING P0004  
LOOKING NORTH WEST

SITE CROSS SECTIONS

CUT  
FILL



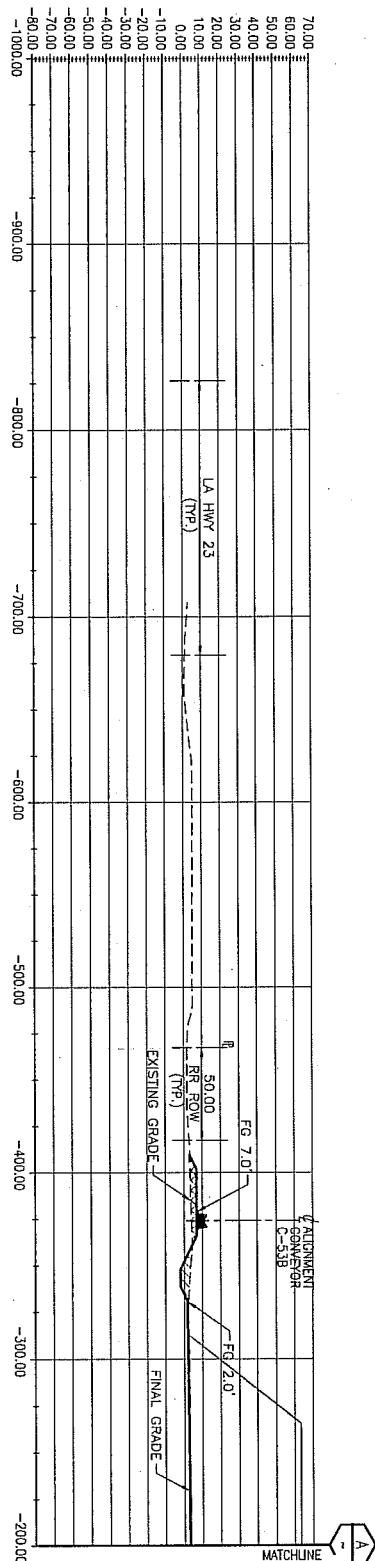
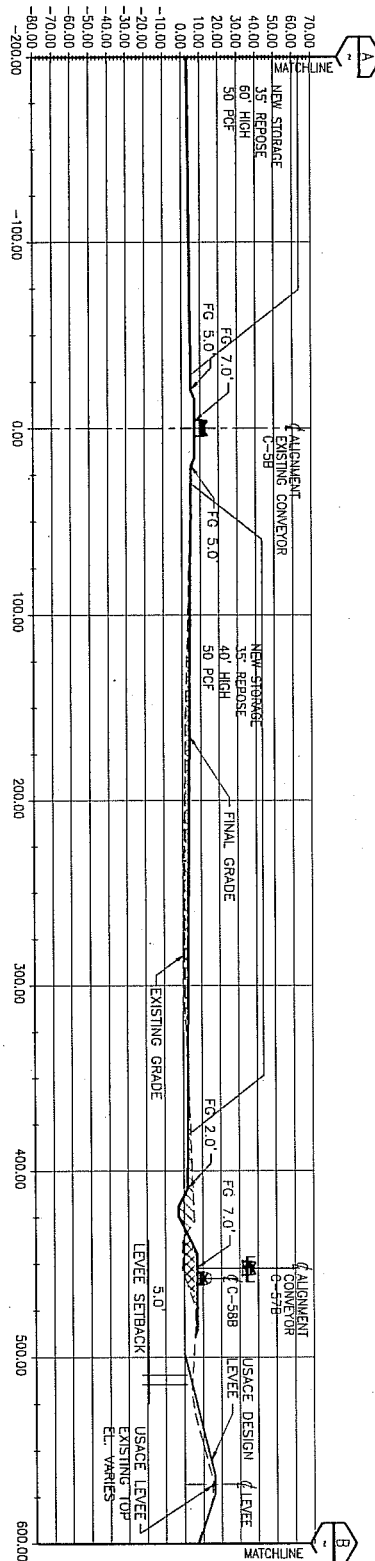
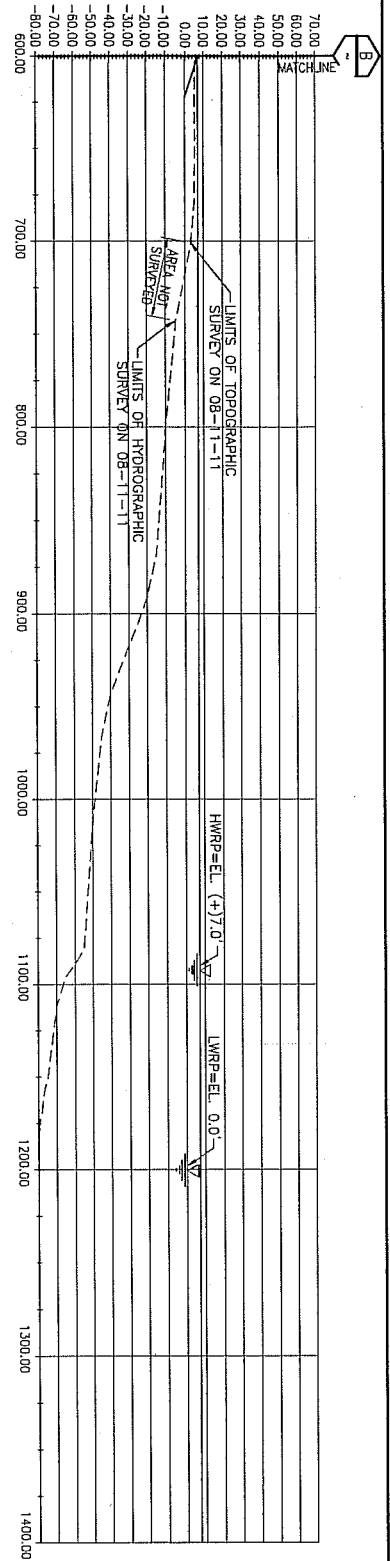
Rev:	Description:	Date:	By:
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by: JS  
Drawn by: AML  
Checked by: EAW  
Approved by: CEM



COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
SITE CROSS SECTIONS – SHEET 2 OF 6

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0010  
16 OF 34



RC1 STATION= 215+00.00

USACE LEVEE BASELINE STA.= 1314+06.53

SEE DRAWING P004.  
LOOKING NORTH WEST

HORIZONTAL SCALE 1:100  
VERTICAL SCALE 1:100



# SITE CROSS SECTIONS



Rev:	Description:	Date:	By:
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

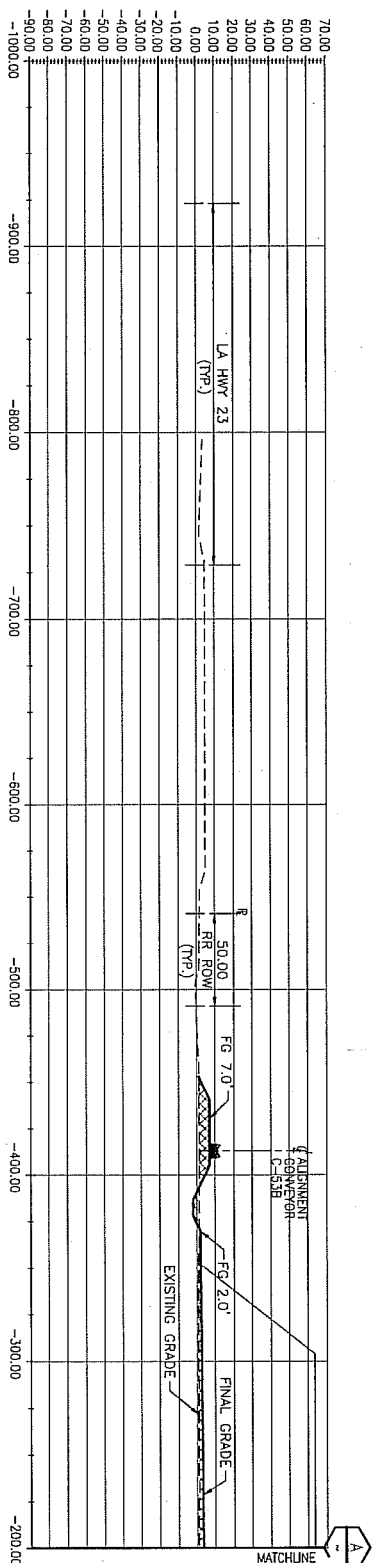
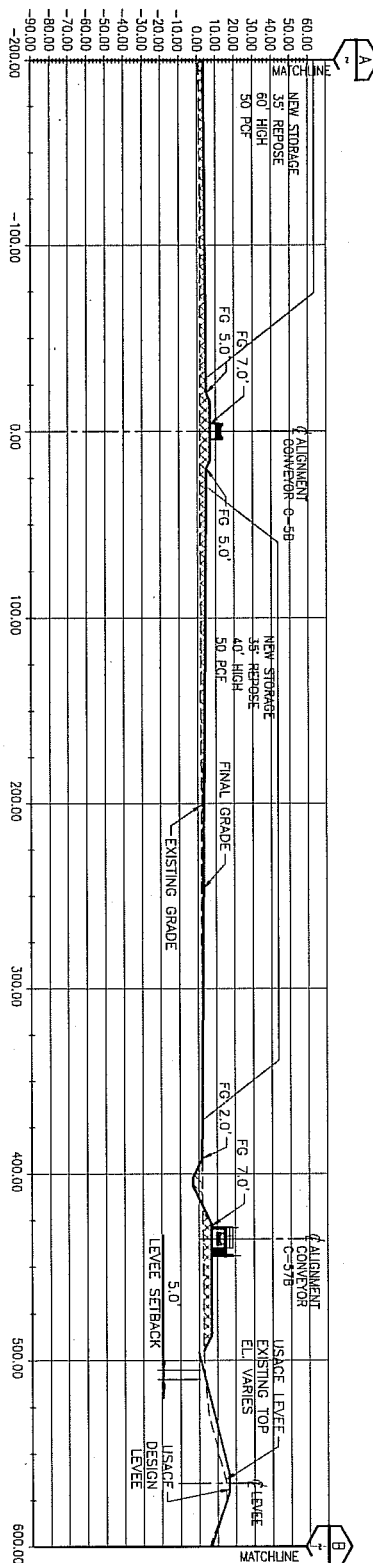
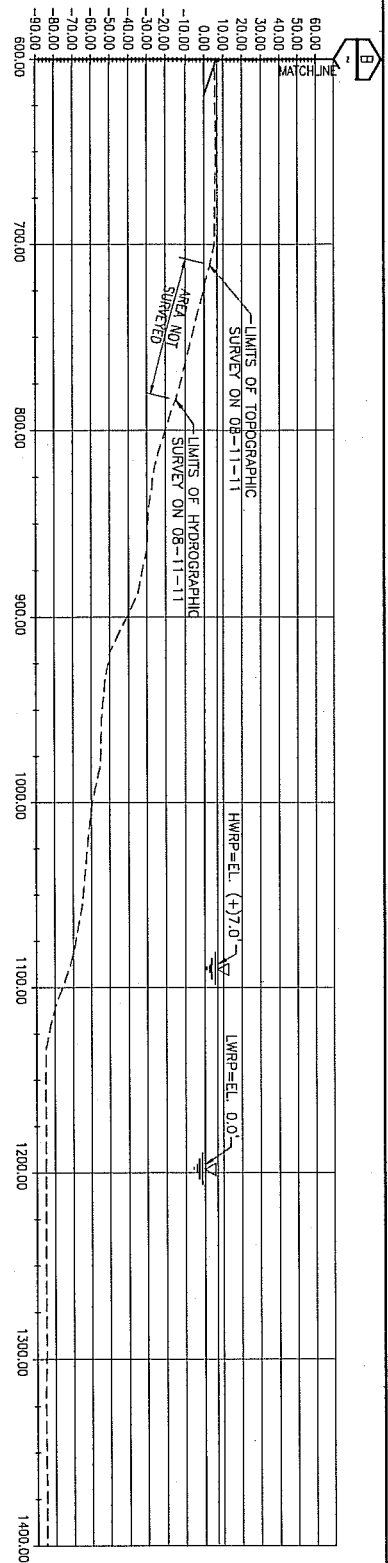
Designed by:  
JS  
Drawn by:  
AML  
Checked by:  
EAW  
Approved by:  
CEM



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
SITE CROSS SECTIONS - SHEET 3 OF 6

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0011  
17 OF 34





RCI STATION= 222+00.00

USACE LEVEE BASELINE STA.= 1307+06.42

HORIZONTAL SCALE 1:100  
VERTICAL SCALE 1:100

SEE DRAWING P0003  
LOOKING NORTH WEST

Legend:  
CUT (hatched area)  
FILL (cross-hatched area)

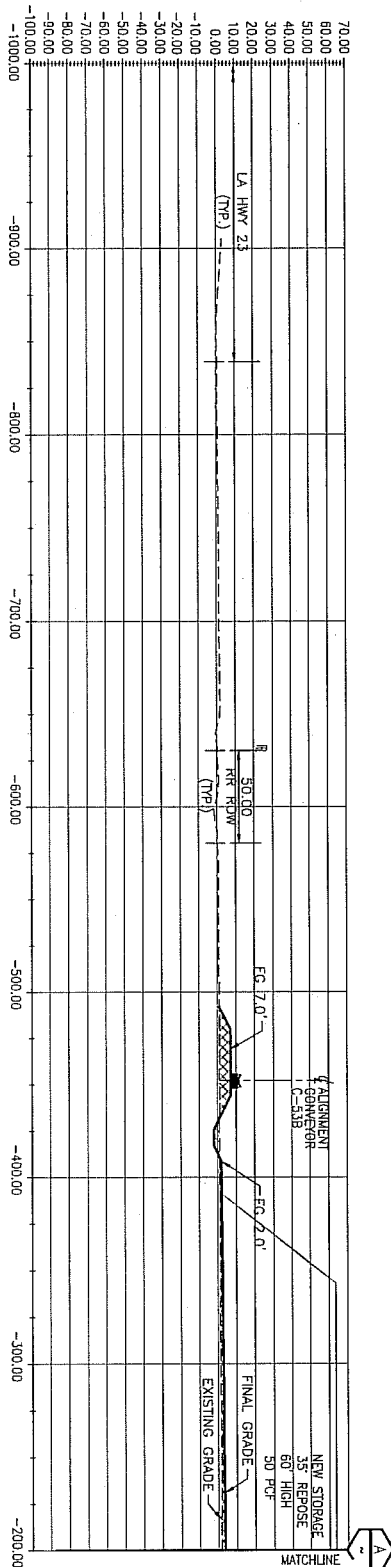
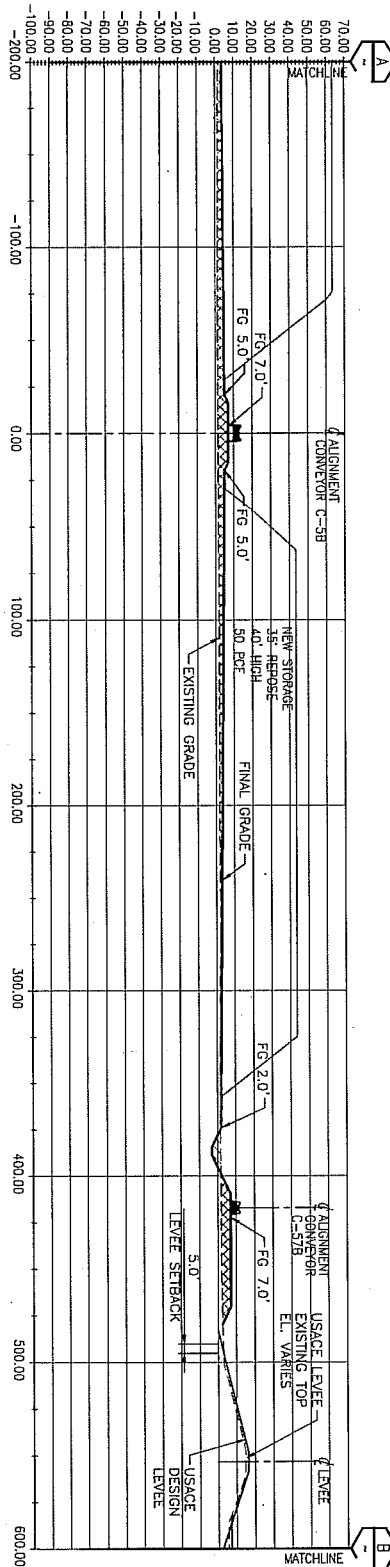
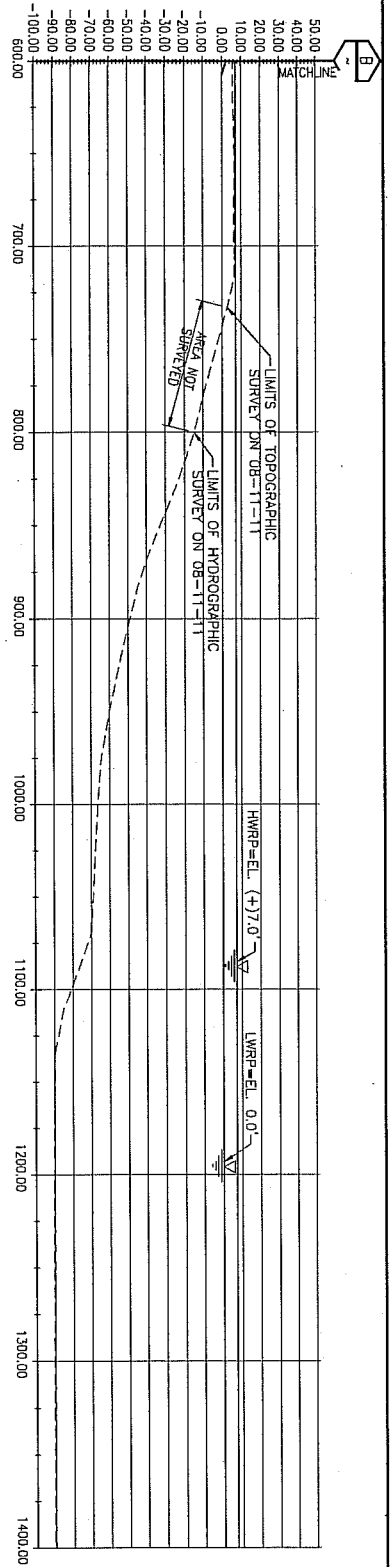


Rev: Description:	Date:	By:
2 REVISED PER USACE COMMENTS	11/09/11	CEM
1 PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:	JS
Drawn by:	AML
Checked by:	EAU
Approved by:	CEM



COAL TERMINAL UPGRADES—NORTH YARD EXPANSION		PROJ. NO. 11-C328
FOR		DATE JULY, 2011
INTERNATIONAL MARINE TERMINALS		DRAWING NO. P0012
PORT SULPHUR, PLAQUEMINES PARISH		18 OF 34
LOUISIANA		
SITE CROSS SECTIONS – SHEET 4 OF 6		



RCI STATION = 229+00.00

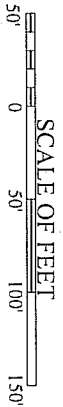
USACE LEVEE BASELINE STA. = 1300+06.12

SEE DRAWING P0003  
LOOKING NORTH WEST

HORIZONTAL SCALE 1:100  
VERTICAL SCALE 1:100

CUT  
FILL

SITE CROSS SECTIONS



Rev:	Description:	Date:	By:
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by: JS  
Drawn by: AML  
Checked by: EAW  
Approved by: CEM

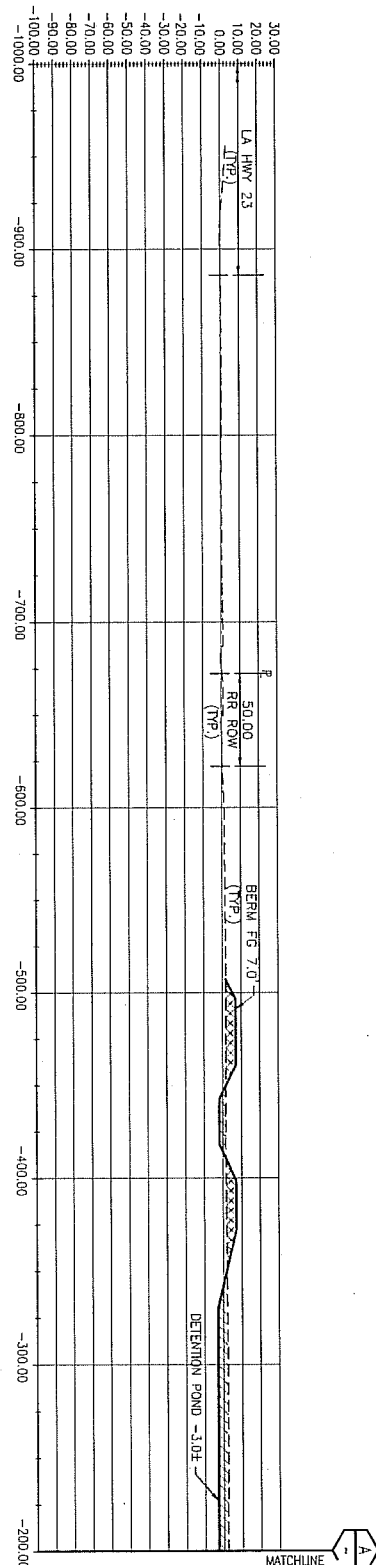
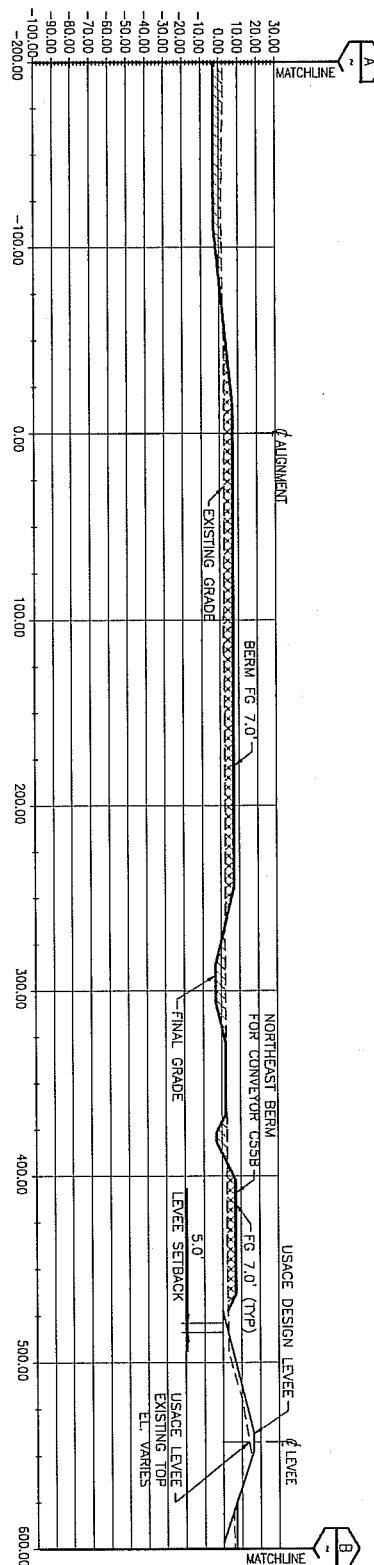
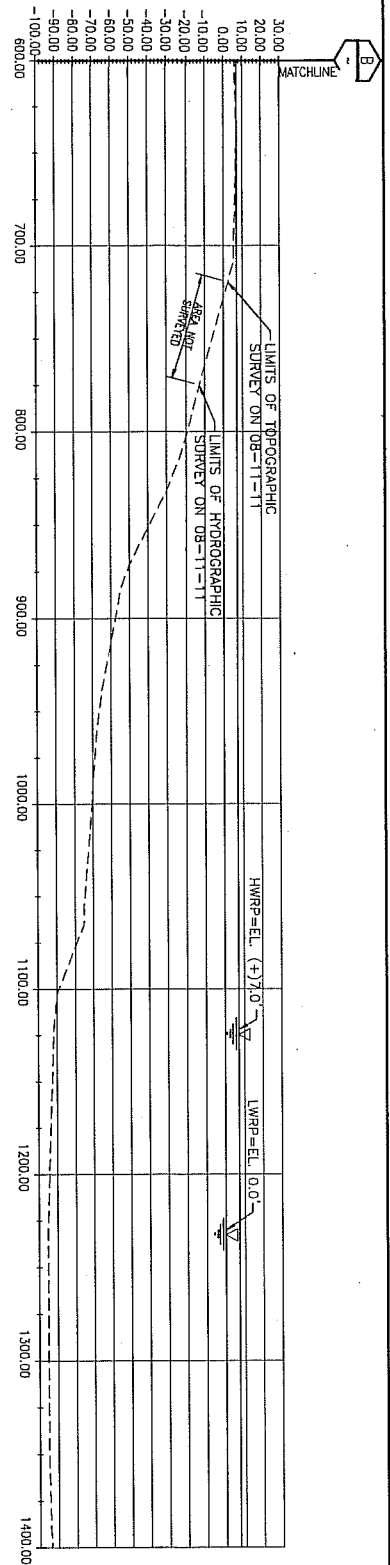
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**KINDER MORGAN**

COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA

SITE CROSS-SECTIONS - SHEET 5 OF 6

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0013  
19 OF 34



RCI STATION= 232+00.00  
USACE LEVEE BASELINE STA.= 1297+06.02  
HORIZONTAL SCALE 1:100  
VERTICAL SCALE 1:100

SEE DRAINING POOLS  
LOOKING NORTH WEST

SITE CROSS SECTIONS

CUT  
FILL



Rev:	Description:	Date:	By:
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS  
Drawn by:  
AML  
Checked by:  
EAW  
Approved by:  
CEM

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COAL TERMINAL UPGRADES-NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA

SITE CROSS SECTIONS - SHEET 6 OF 6

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0014  
20 OF 34

MATCHLINE

A  
P0016

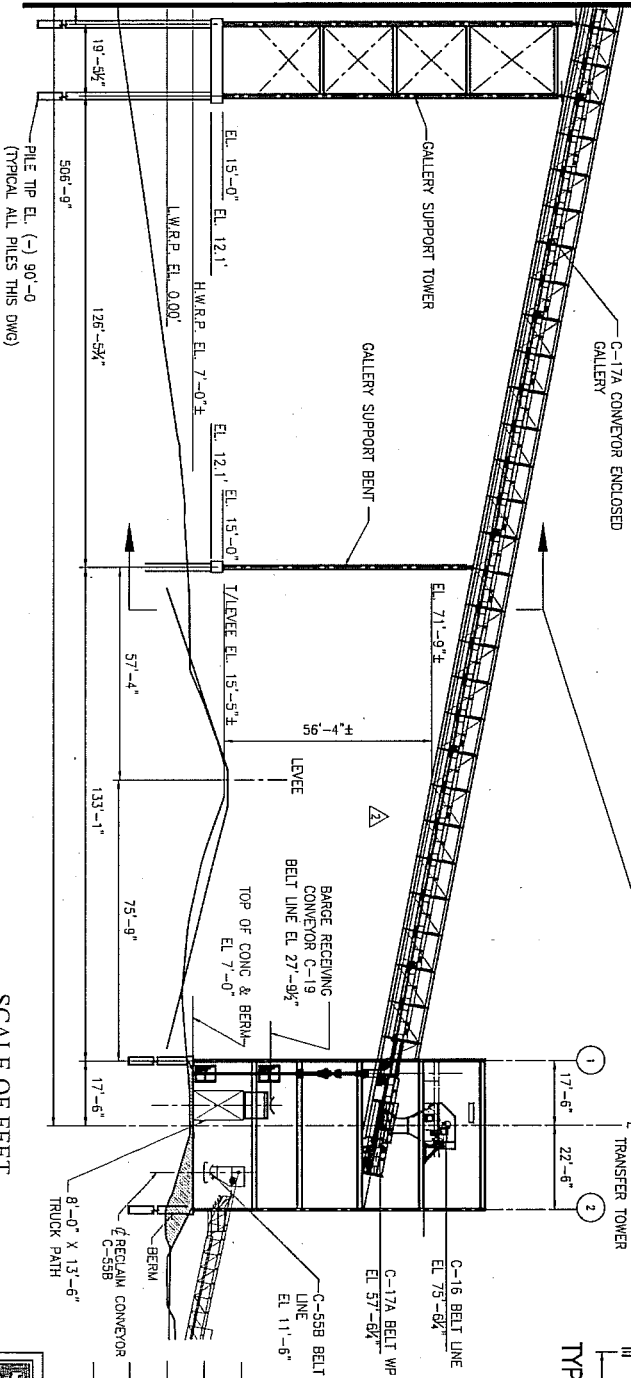
GALLERY SUPPORT TOWER

GALLERY BENT

PLAN C-17A

1" = 50'-0"

- NOTE:
1. ALL PILES ARE STEEL PIPE PILES UNLESS OTHERWISE NOTED (UON)
  2. PIPE PILES WILL BE OPEN ENDED WITH SIZES RANGING FROM 24" TO 72" DIAMETER DEPENDING ON LOCATION. TYPICAL FOR SHEETS P0015 TO P0023.



PROFILE C-17A

1" = 50'-0"

USACE LEVEE BASELINE STATION = 1323+50.75



4	ADDED BOTTOM OF DOCK ELEVATIONS	11/17/11	CEM
Rev:	Description:	Date:	By:
3	REVISED PER USACE COMMENTS	11/09/11	CEM
Rev:	Description:	Date:	By:
2	ADDED CLEARANCE DIMENSIONS	10/24/11	CEM
Rev:	Description:	Date:	By:
1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM

Designed by:

JS

Drawn by:

JH

Checked by:

EAW

Approved by:

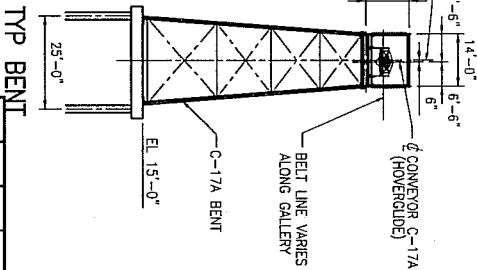
CEM



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TYP BENT



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION

FOR

INTERNATIONAL MARINE TERMINALS

PORT SULPHUR, PLAQUEMINES PARISH

LOUISIANA

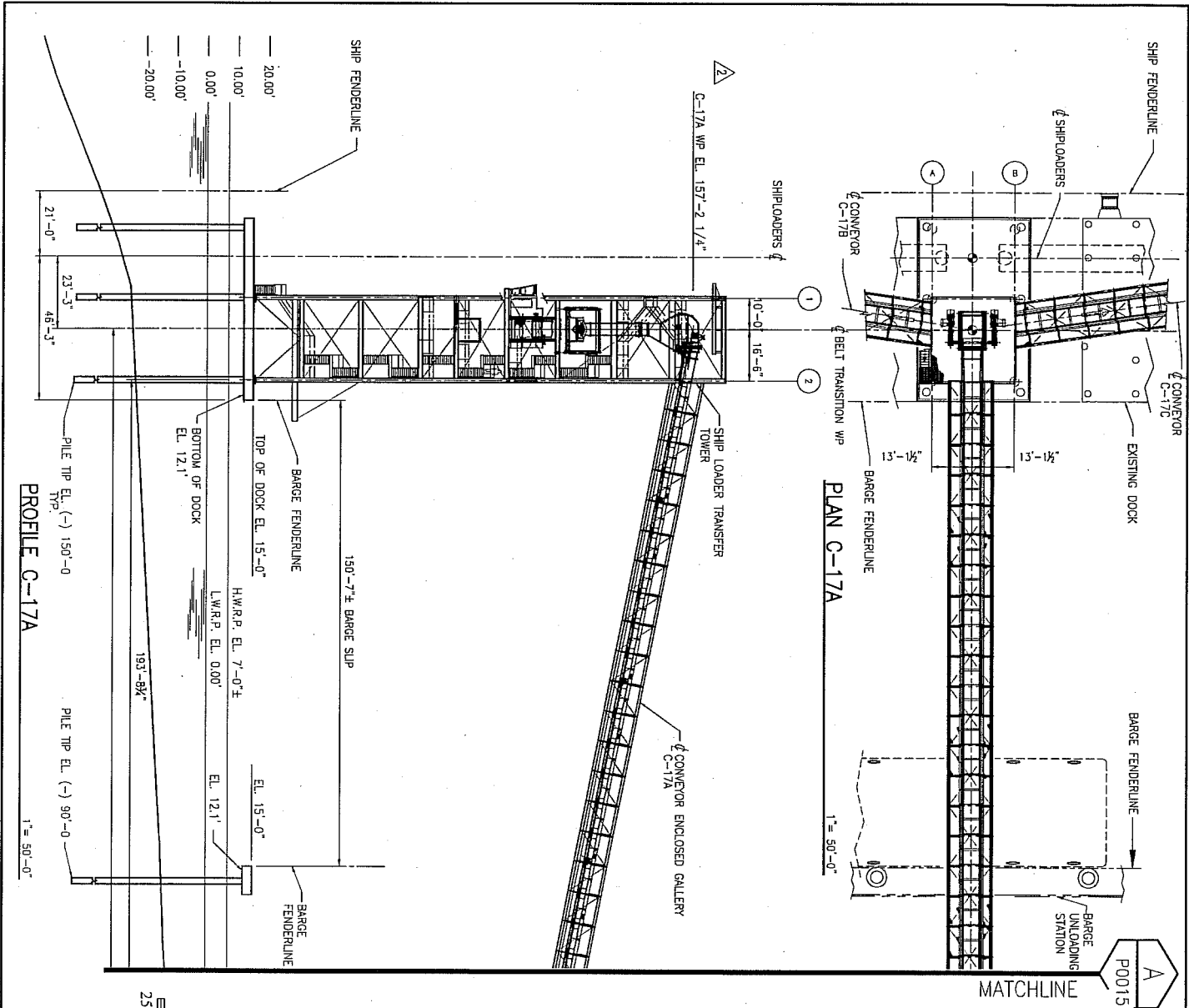
SHIP LOADING DOCK

PROJ. NO.  
11-C328

DATE  
JULY, 2011

DRAWING NO.  
P0015

21 OF 34



Rev:	Description:	Date:	By:
3	ADDED BOTTOM OF DOCK ELEVATIONS	11/17/11	CEM
2	ADDED WP ELEVATION	10/24/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM

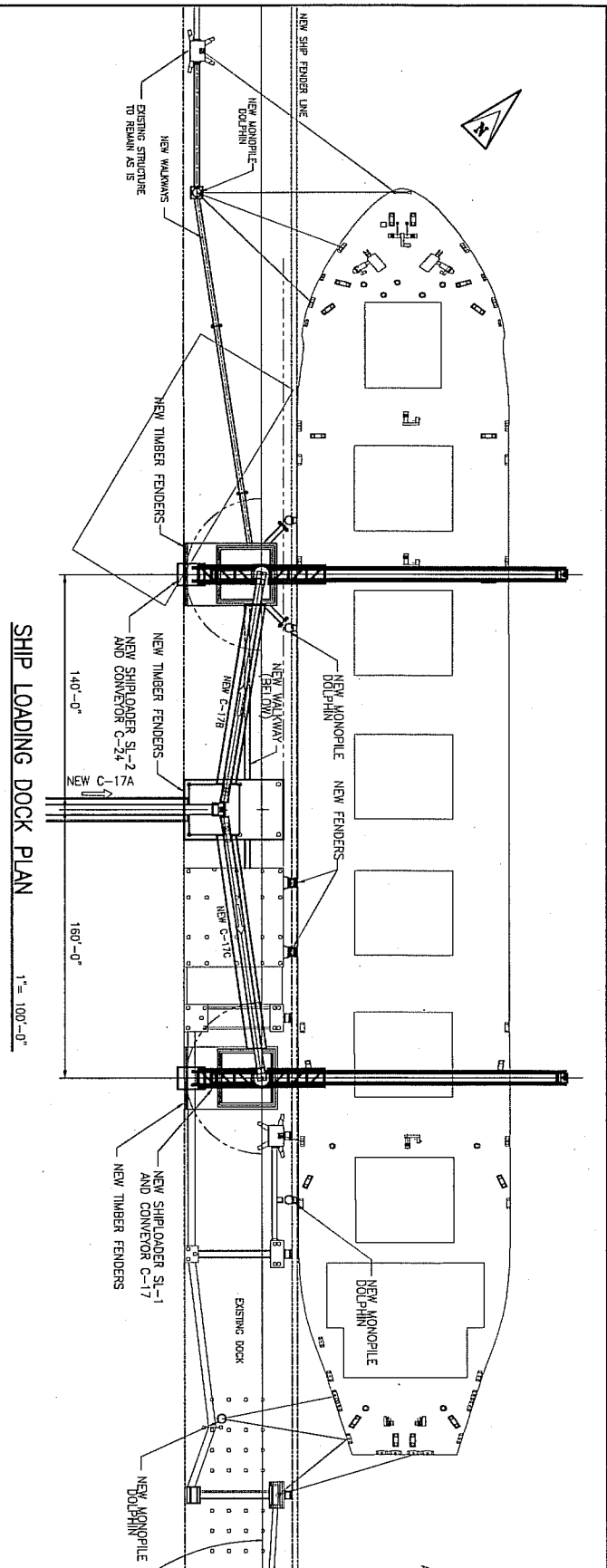
Designed by:  
JS  
Drawn by:  
JH  
Checked by:  
EAW  
Approved by:  
CEM

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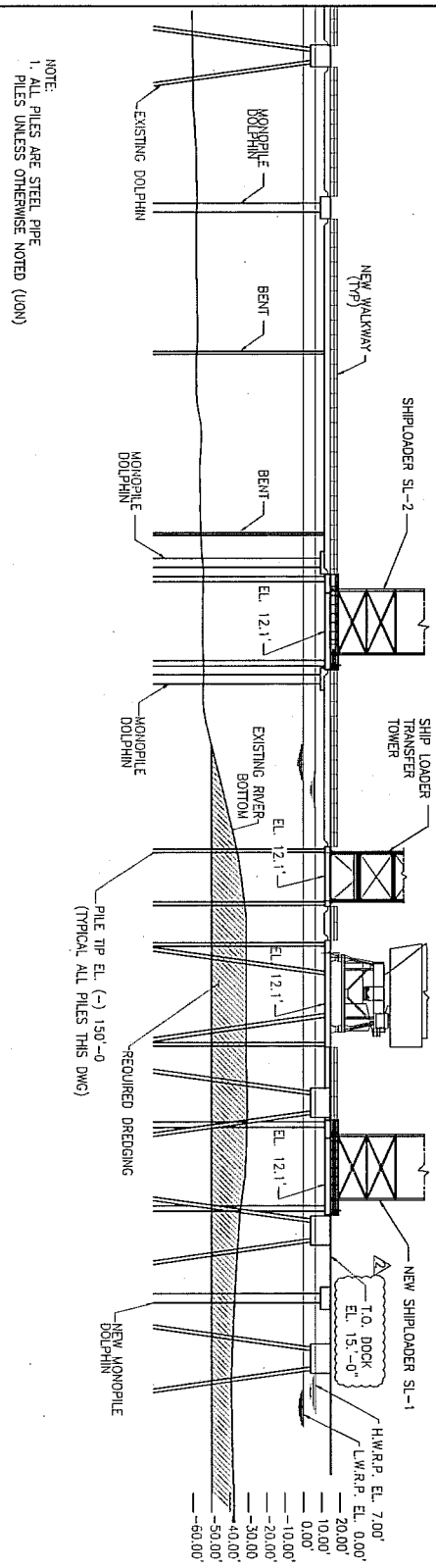
**KINDER MORGAN**

COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
SHIP LOADING DOCK

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0016  
22 OF 34

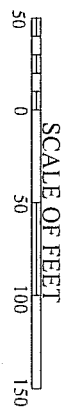


SHIP LOADING DOCK PLAN  
1" = 100'-0"



SHIP LOADING DOCK ELEVATION LOOKING TOWARD RIVER  
1" = 100'-0"

NOTE:  
1. ALL PILES ARE STEEL PIPE  
PILES UNLESS OTHERWISE NOTED (UON)



Rev: 3	Description: ADDED BOTTOM OF DOCK ELEVATIONS.	Date: 11/17/11	By: CEM
Rev: 2	Description: ADDED TOP OF DOCK ELEVATION	Date: 10/24/11	By: CEM
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 9/21/11	By: CEM

Designed by: JS  
Drawn by: JH  
Checked by: EAW  
Approved by: CEM



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION		PROJ. NO. 11-C328
FOR INTERNATIONAL MARINE TERMINALS		DATE JULY, 2011
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA		DRAWING NO. P0017
SHIP LOADING DOCK		23 OF 34



NOTE:  
1. ALL PILES ARE STEEL PIPE  
PILES UNLESS OTHERWISE NOTED (UN)

# SECTION — SHIP LOADERS

1" = 50'-0"



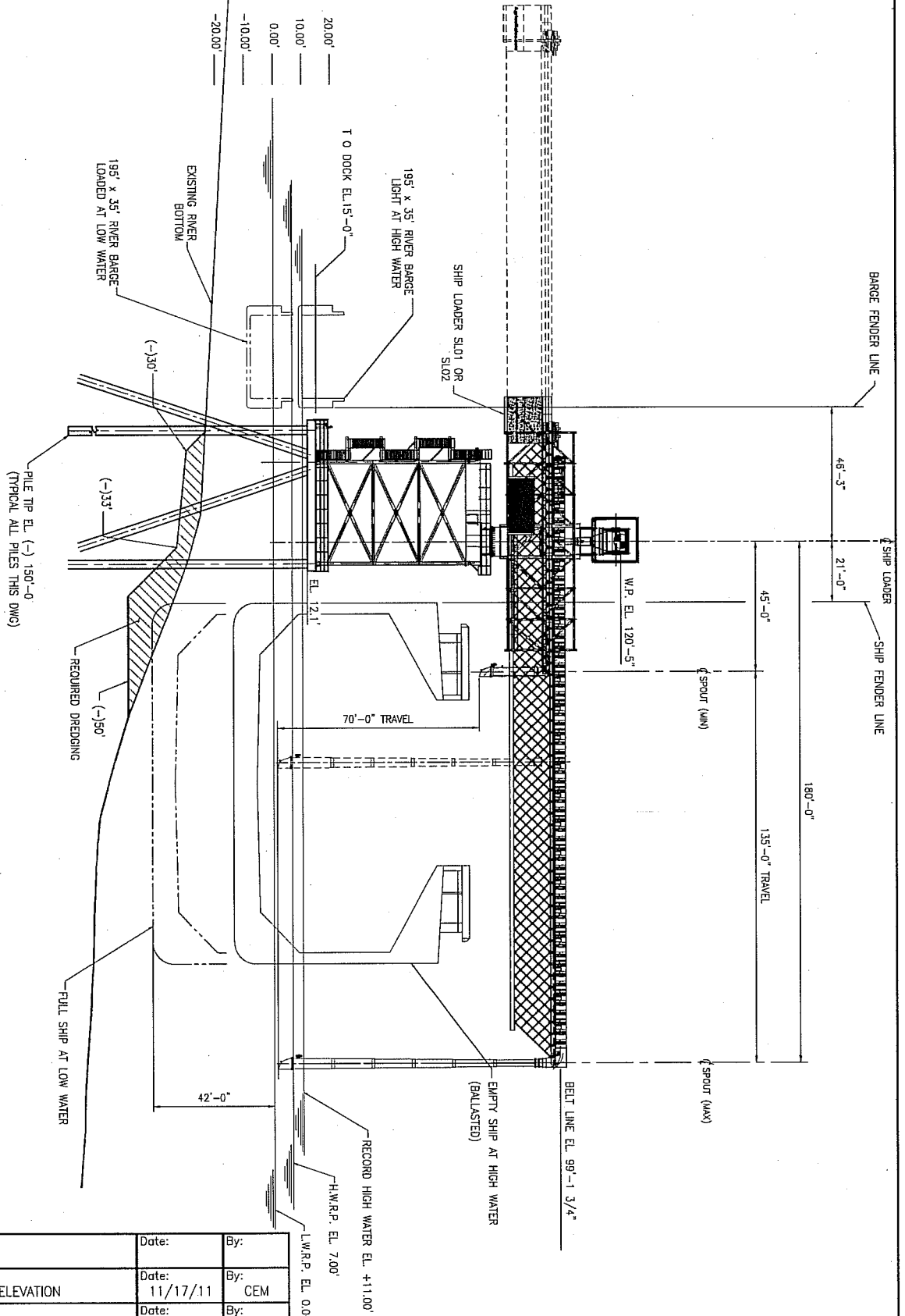
Rev:	Description:	Date:	By:
2	ADDED BOTTOM OF DECK ELEVATION	11/17/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM

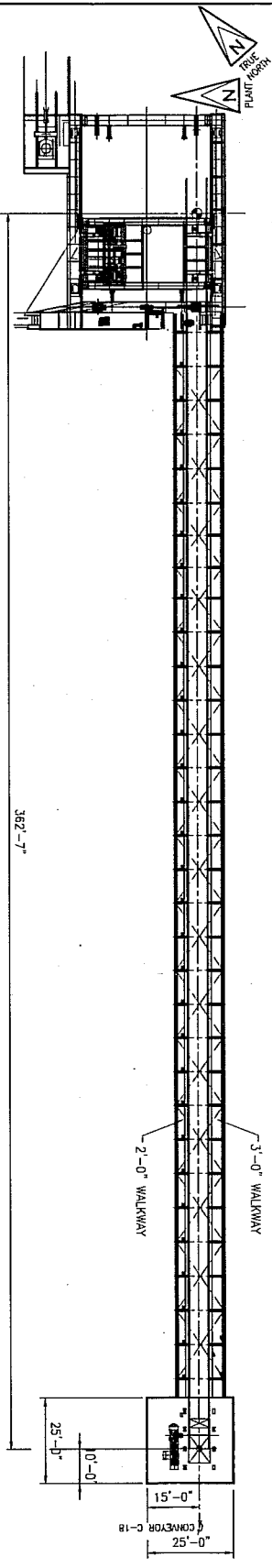
Designed by:  
JS  
Drawn by:  
JH  
Checked by:  
EAW  
Approved by:  
CEM



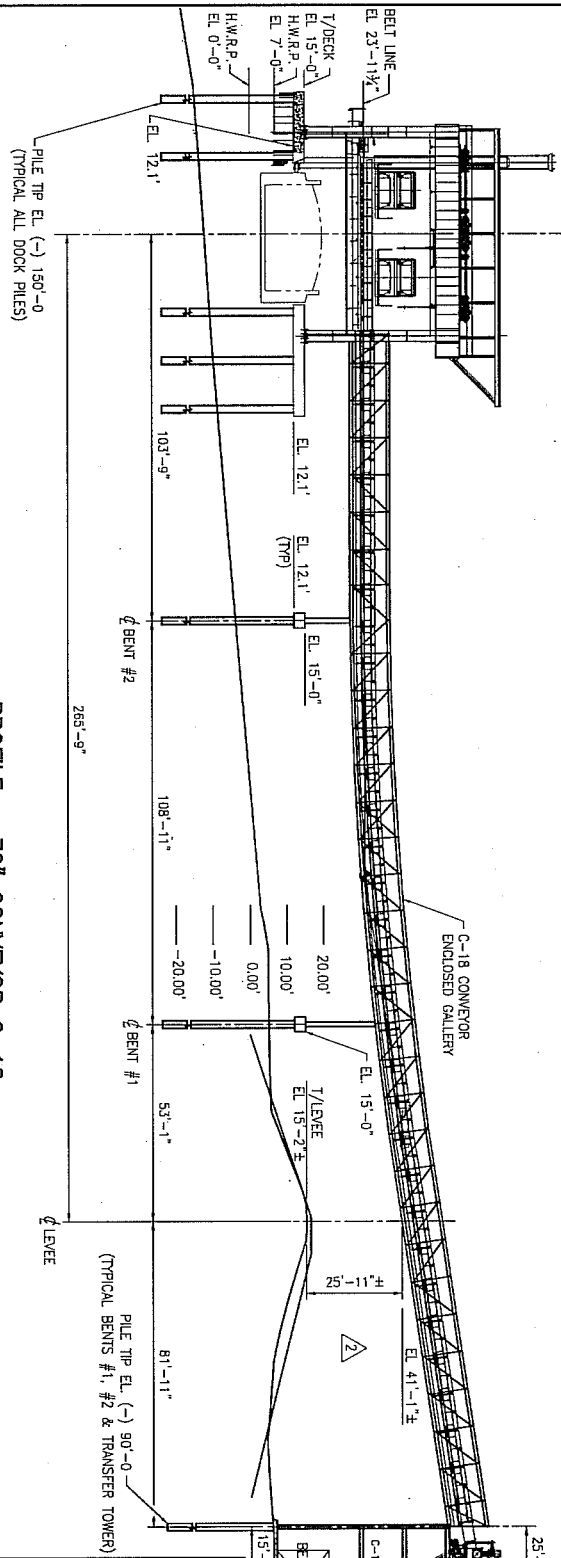
COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA  
SHIP LOADING DOCK

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0018  
24 OF 34





PLAN - 72" CONVEYOR C-18 1" = 50'-0"



PROFILE - 72" CONVEYOR C-18 1" = 50'-0"

NOTE:  
1. ALL PILES ARE STEEL PIPE  
PILES UNLESS OTHERWISE NOTED (UDN)



4	ADDED BOTTOM OF DECK ELEVATIONS	11/17/11	CEM
Rev: 3	Description: REVISED PER USACE COMMENTS	Date: 11/09/11	By: CEM
Rev: 2	Description: ADDED CLEARANCE DIMENSIONS & ELEVATIONS	Date: 10/24/11	By: CEM
Rev: 1	Description: PERMIT APPLICATION FOR SUBMITTAL	Date: 9/21/11	By: CEM

Designed by:	JS
Drawn by:	JH
Checked by:	EAU
Approved by:	CEM



COAL TERMINAL UPGRADES-NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
BARGE UNLOADING DOCK

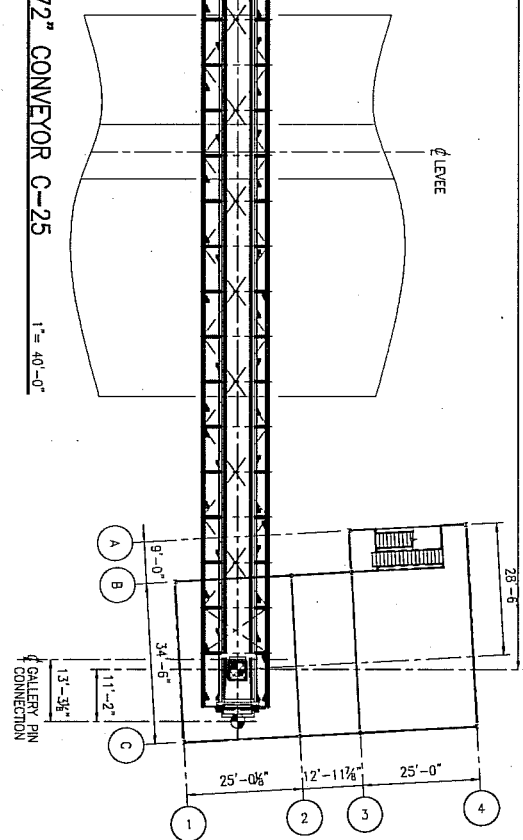
PROJ. NO.	11-C328
DATE	JULY, 2011
DRAWING NO.	P0019
	25 OF 34



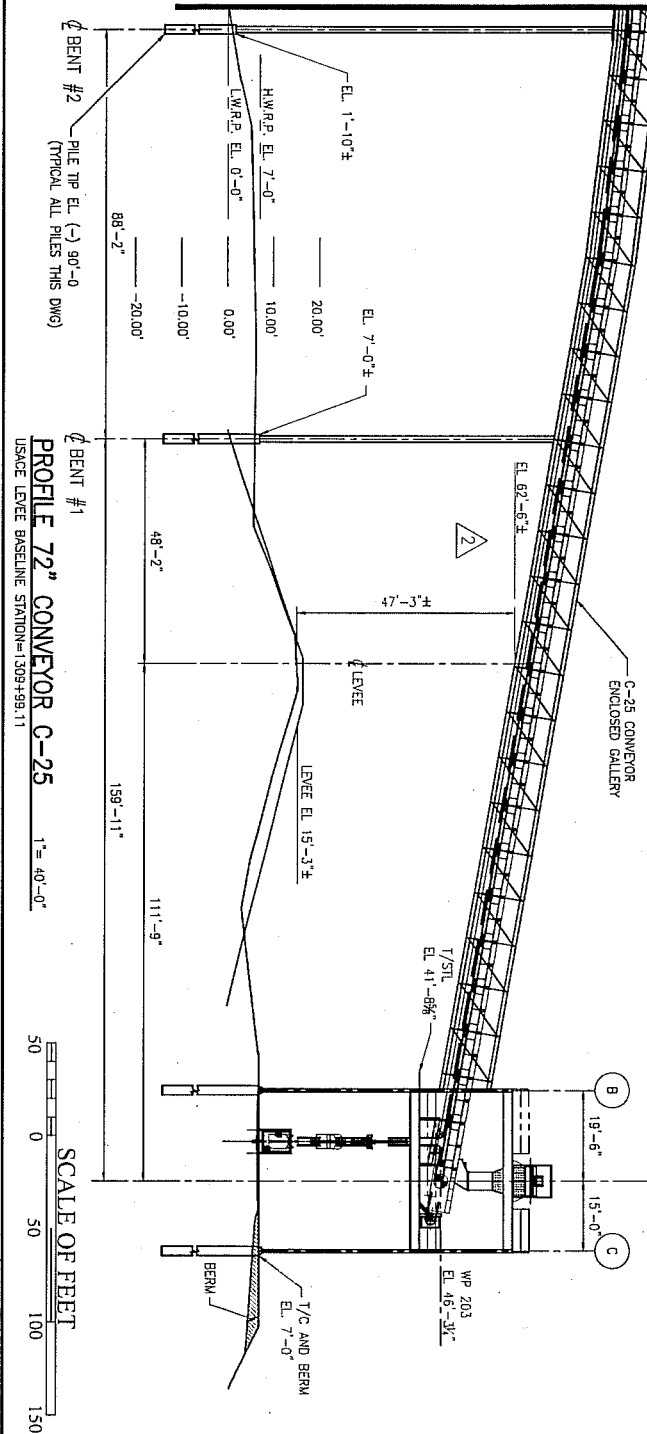
406'-0"

MATCHLINE

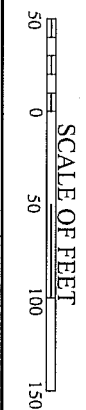
PLAN 72" CONVEYOR C-25  
1" = 40'-0"



NOTE:  
1. ALL PILES ARE STEEL PIPE  
PILES UNLESS OTHERWISE NOTED (UON)



PROFILE 72" CONVEYOR C-25  
1" = 40'-0"



Rev:	Description:	Date:	By:
3	REVISED PER USACE COMMENTS	11/09/11	CEM
2	ADDED CLEARANCE DIMENSION & ELEVATIONS	10/24/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM

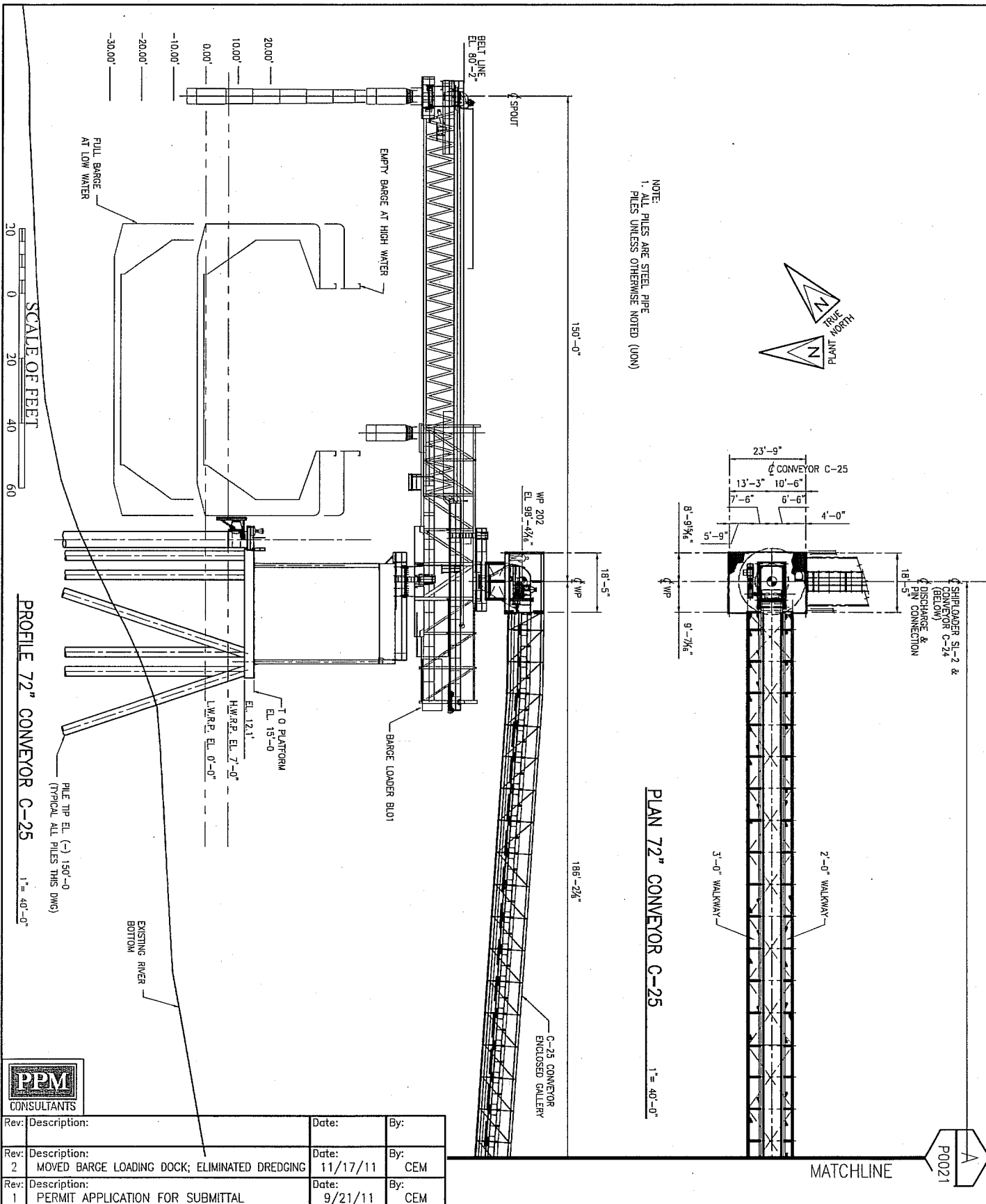
Designed by:  
JS  
Drawn by:  
JH  
Checked by:  
EAW  
Approved by:  
CEM

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COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH  
LOUISIANA  
BARGE LOADING DOCK

PROJ. NO.  
11-C328  
DATE  
JULY, 2011  
DRAWING NO.  
P0021  
27 OF 34



Rev:	Description:	Date:	By:
2	MOVED BARGE LOADING DOCK; ELIMINATED DREDGING	11/17/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM

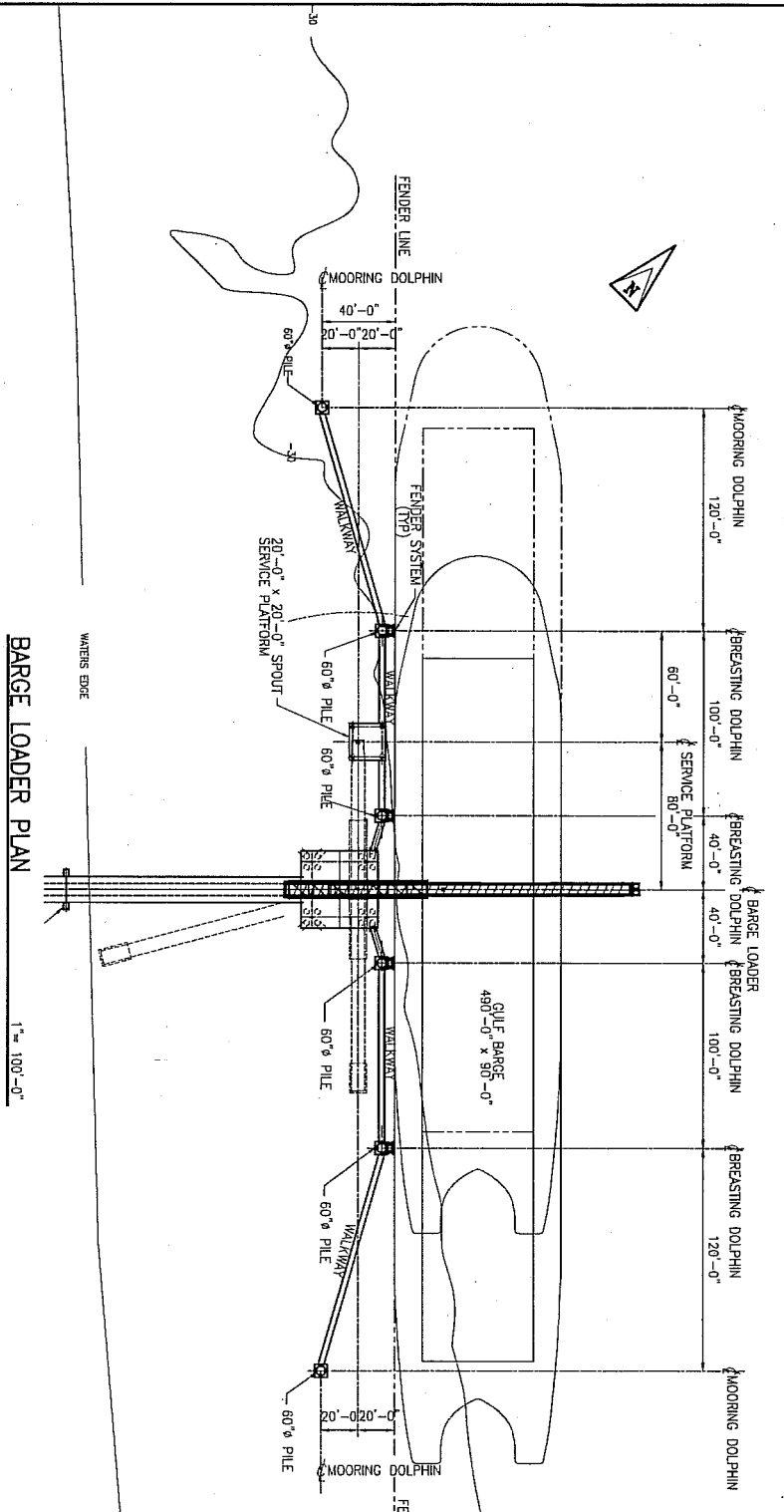
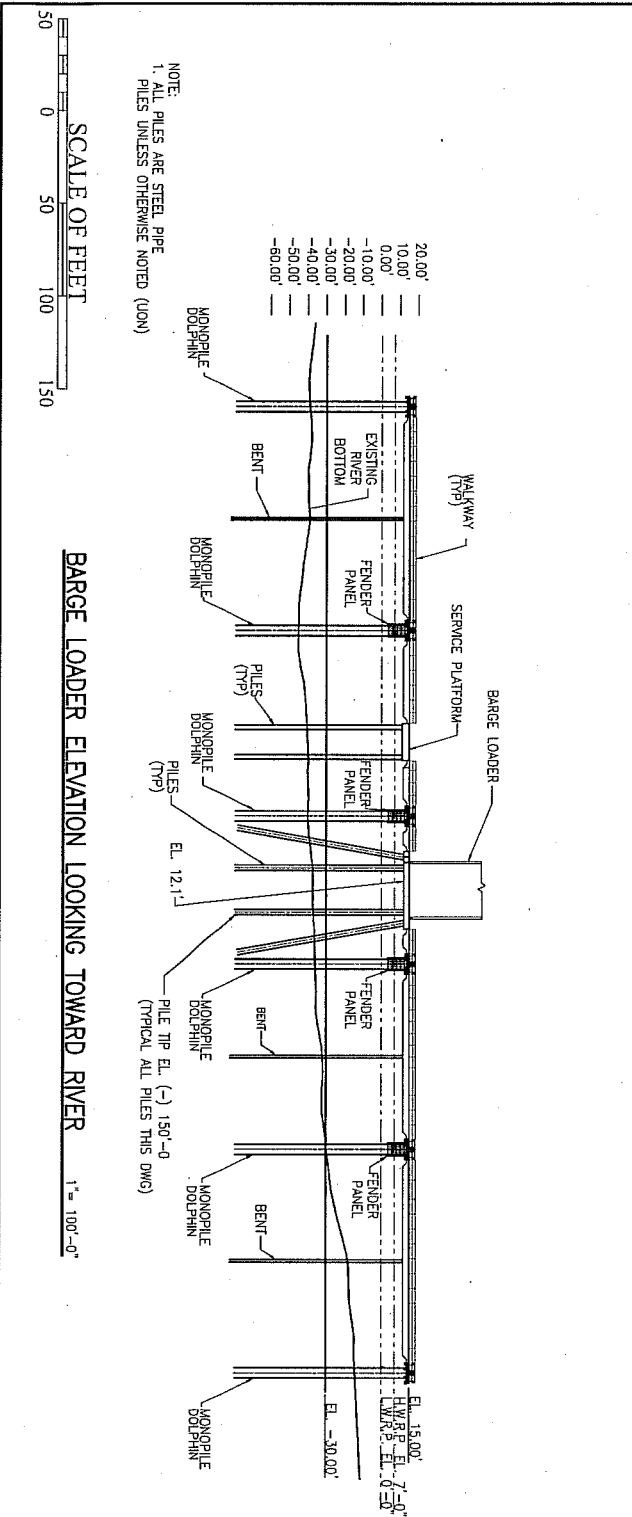
Designed by: JS  
 Drawn by: JH  
 Checked by: EAW  
 Approved by: CEM

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COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
 FOR  
 INTERNATIONAL MARINE TERMINALS  
 PORT SULPHUR, PLAQUEMINES PARISH  
 LOUISIANA  
 BARGE LOADING DOCK

PROJ. NO.  
 11-C328  
 DATE  
 JULY, 2011  
 DRAWING NO.  
**P0022**  
 28 OF 34



		Rev:	Description:	Date:	By:
		2	ADDED BOTTOM OF DOCK ELEVATION; ELIMINATE DREDGE	11/17/11	CEM
		1	PERMIT APPLICATION FOR SUBMITTAL	9/21/11	CEM
Designed by:		JS			
Drawn by:		JH			
Checked by:		EAW			
Approved by:		CEM			

**COAL TERMINAL UPGRADES--NORTH YARD EXPANSION**

FOR

**INTERNATIONAL MARINE TERMINALS**

PORT SULPHUR, PLAQUEMINES PARISH      LOUISIANA

**BARGE LOADING DOCK**

PROJ. NO.  
11-C328

DATE  
JULY, 2011

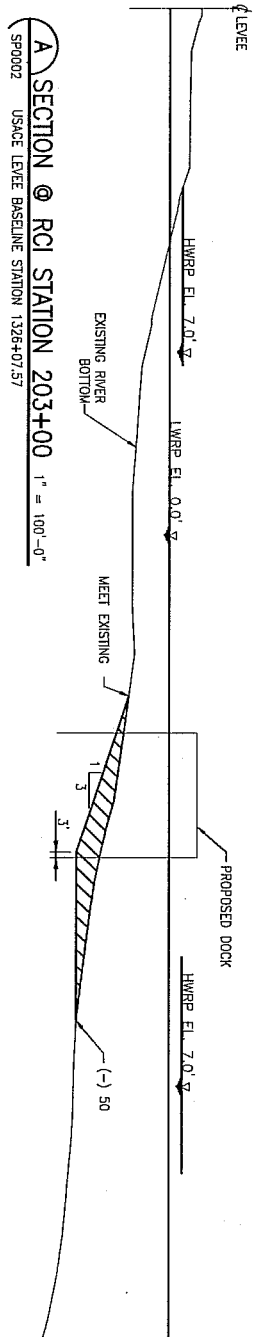
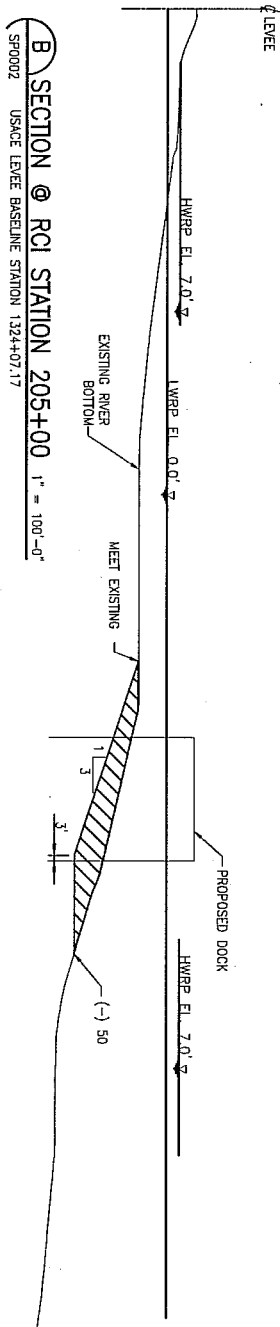
DRAWING NO.  
**P0023**

29 OF 34

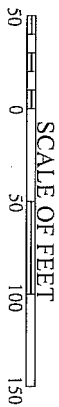
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- NOTE:
1. ALL SECTIONS ARE SHOWN 90° TO ALIGNMENT OF CENTERLINE BERM.
  2. SECTIONS ARE AT ALIGNMENT - CENTERLINE BERM STATIONS.
  3. SEE DWG. SP0002 FOR DREDGING AREAS.



Rev:	Description:	Date:	By:
3	ELIMINATED DREDGING AT CROSS-SECTION C	11/17/11	CEM
2	REVISED PER USACE COMMENTS	11/09/11	CEM
1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

Designed by:  
JS

Drawn by:  
AML

Checked by:  
EAW

Approved by:  
CEM



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**KINDER MORGAN**

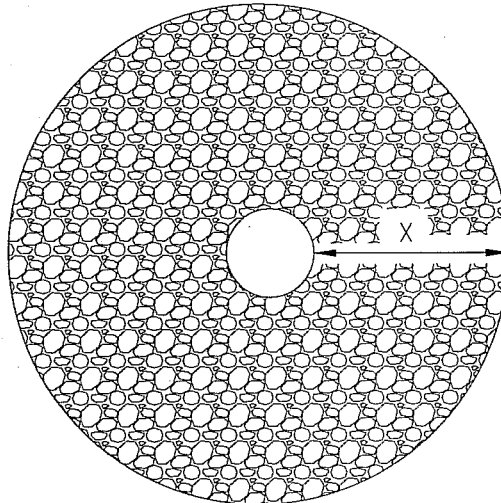
COAL TERMINAL UPGRADES—NORTH YARD EXPANSION  
FOR  
INTERNATIONAL MARINE TERMINALS  
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA

DREDGING CROSS SECTIONS

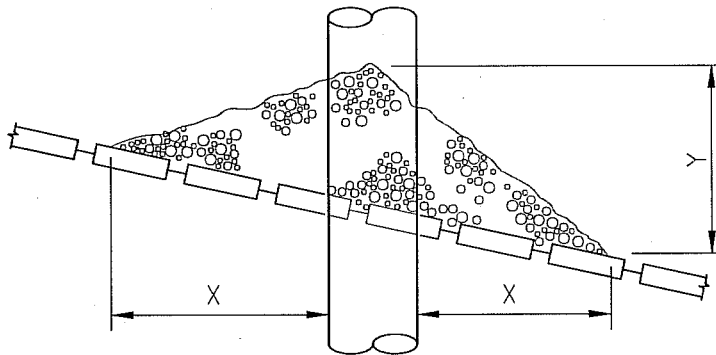
PROJ. NO.  
11-C328

DATE  
JULY, 2011

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30 OF 34



PLAN



SECTION

**STANDARD REVETMENT REPAIR DETAIL** N.T.S.  
(FOR PILES DRIVEN THROUGH REVETMENT)

DEPTH OF WATER IN FEET AT POINT OF PILE PENETRATION	DISTANCE IN FEET		APPROXIMATE TONS OF STONE REQUIRED
	X	Y	
1 TO 10	3	1.5	1.5
11 TO 40	5	2	6.5
41 TO 60	8	3	22
61 TO 100	12	4	57

**NOTE**

1. SIZE OF RIP - RAP TO VARY BETWEEN 6 POUNDS AND 125 POUNDS WITH 40% TO 60% OF THE STONE WITHIN THE RANGE OF 25 POUNDS TO 75 POUNDS.



Rev:	Description:	Date:	By:
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1	PERMIT APPLICATION FOR SUBMITTAL	09/21/11	CEM

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COAL TERMINAL UPGRADES—NORTH YARD EXPANSION	
FOR	
INTERNATIONAL MARINE TERMINALS	
PORT SULPHUR, PLAQUEMINES PARISH	LOUISIANA
STANDARD REVETMENT REPAIR DETAIL	

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## NOTES

1. AS-BUILT DRAWINGS WILL BE SUBMITTED WITHIN 30 DAYS OF COMPLETION OF THIS PROJECT TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION, PIPELINE DIVISION, P. O. BOX 94275, BATON ROUGE, LA 70804, AND TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, COASTAL MANAGEMENT DIVISION, P. O. BOX 44487, BATON ROUGE, LA 70804-4487.
2. ALL STRUCTURES, FACILITIES, WELL AND PIPELINES/FLOWLINES OCCURRING IN OPEN WATER AREAS OR IN OILFIELD CANALS OR SLIPS SHALL BE REMOVED WITHIN 120 DAYS OF ABANDONMENT OR THE FACILITIES FOR THE HEREIN PERMITTED USE UNLESS PRIOR WRITTEN APPROVAL TO LEAVE SUCH STRUCTURES IN PLACE IS RECEIVED FROM THE COASTAL MANAGEMENT DIVISION. THIS CONDITION DOES NOT PRECLUDE THE NECESSITY FOR REVISING THE CURRENT PERMIT OR OBTAINING A SEPARATE COASTAL USE PERMIT, SHOULD ONE BE REQUIRED.
3. STRUCTURES MUST ALSO BE MARKED/LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.
4. IN ORDER TO ENSURE THE SAFETY OF ALL PARTIES, THE PERMITTEE SHALL CONTACT THE LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY.
5. CONSTRUCTION OVER THE LEVEE AND CONSTRUCTION WITHIN 10 FEET OF THE TOE IS LIMITED TO RIVER STAGES BELOW +11 FEET ON THE CARROLLTON GAGE.
6. PILE DRIVING IS LIMITED TO RIVER STAGES BELOW +11 FEET ON THE CARROLLTON GAGE.



Rev: Description:	Date:	By:
Rev: Description:	Date:	By:
Rev: Description: 1 PERMIT APPLICATION FOR SUBMITTAL	Date: 09/21/11	By: CEM

Designed by: JS	 <b>RIVER CONSULTING™</b> <a href="http://WWW.RIVERCONSULTING.COM">WWW.RIVERCONSULTING.COM</a>
Drawn by: AML	
Checked by: EAW	 <b>KINDER MORGAN</b>
Approved by: CEM	

COAL TERMINAL UPGRADES—NORTH YARD EXPANSION
FOR
INTERNATIONAL MARINE TERMINALS
PORT SULPHUR, PLAQUEMINES PARISH LOUISIANA
NDSI NOTES

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