US Army Corps
of Engineers
New Orleans District

HSDRRS - LPV MITIGATION

BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION

ORLEANS PARISH, LA

SOLICITATION NO.: W912P8-15-B-xxxx
CONTRACT NO.: W912P8-15-C-xxxx

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US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.L.OR.W.B.P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-#####
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PLOT DATE: MARCH 2015
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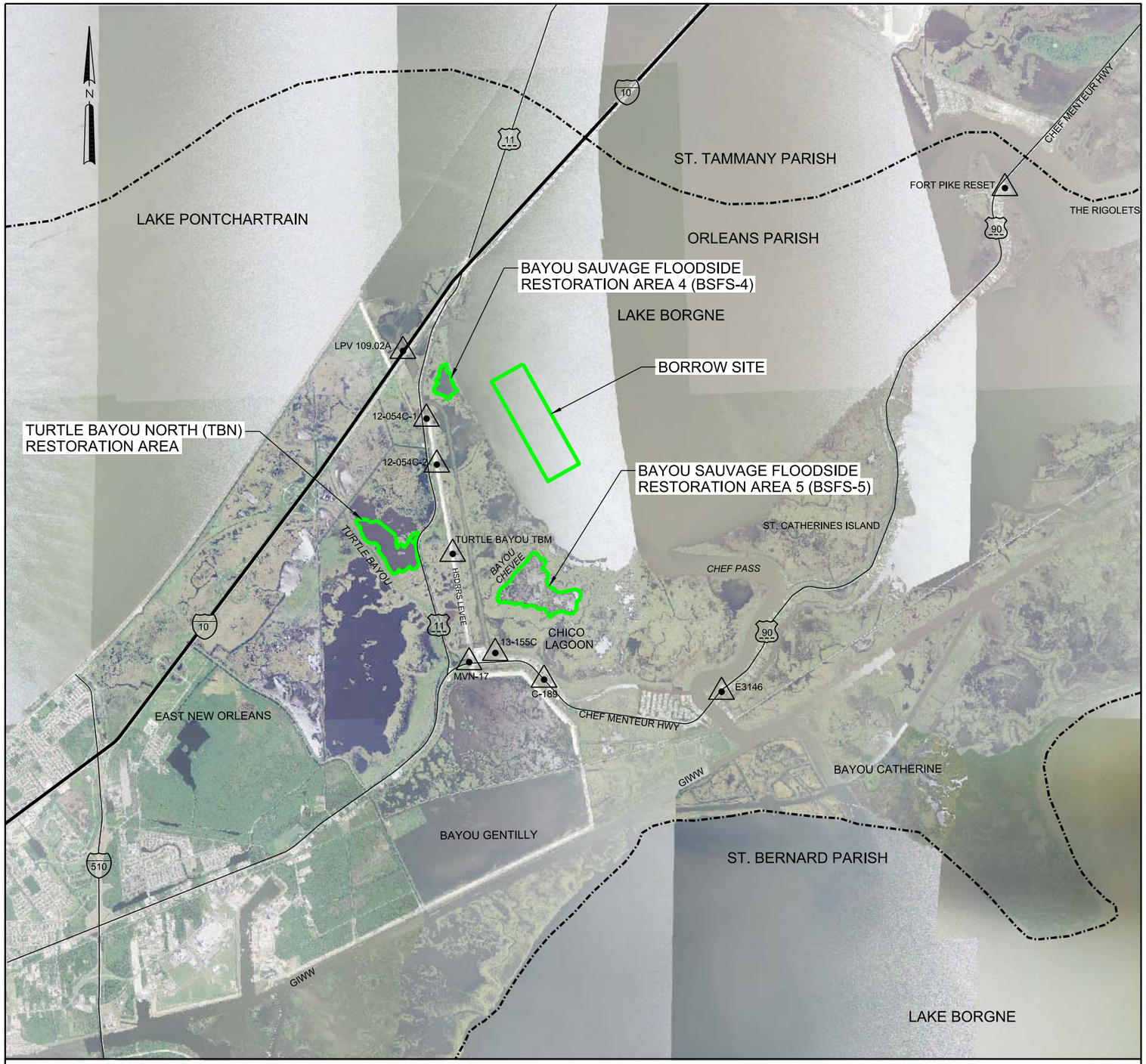
HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

COVER SHEET

SHEET IDENTIFICATION
G-01



LOCATION MAP
SCALE: 1" = 4000'
4000' 0' 4000' 8000' 12000' 16000'

VICINITY MAP
SCALE OF MILES
40 0 40 80 120 160 200

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DESIGNED BY: K.J.DR.W.B.P.R.G.
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PLOT SCALE: AS NOTED
PLOT DATE: MARCH 2015
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HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAY DIRECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

PROJECT LOCATION MAP, VICINITY MAP, AND INDEX

SHEET IDENTIFICATION
G-02

ABBREVIATIONS

* UNLESS OTHERWISE NOTED ON EACH SHEET

AC	ACRE	(+/-)	APPROXIMATE
APPROX	APPROXIMATE	BSFS	BAYOU SAUVAGE FLOOD SIDE
B/L	BASELINE	BSFS-4	BAYOU SAUVAGE FLOOD SIDE MARSH CREATION AREA 4
BS	BORROW SITE	BSFS-5	BAYOU SAUVAGE FLOOD SIDE MARSH CREATION AREA 5
BEC	BOTTOM EDGE OF CUT	TBN	TURTLE BAYOU NORTH
C/L	CENTERLINE	TEC	TOP EDGE OF CUT
CA	CUT AREA	BEC	BOTTOM EDGE OF CUT
DWG	DRAWING		
DIST	DISTANCE		
EL.	ELEVATION		
EXIST	EXISTING		
FA	FILL AREA		
FT	FEET		
H	HORIZONTAL		
GS	GRADE STAKE		
MAX	MAXIMUM		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
N.T.S.	NOT TO SCALE		
P.I.	POINT OF INFLECTION		
P/S	PROTECTED SIDE		
SF	SQUARE FEET		
STA	STATION		
TYP	TYPICAL		
V	VERTICAL		

GENERAL LEGEND

- BENCHMARK
- UNDISTURBED BORING
- GENERAL BORING
- EXISTING POWER POLE
- EXISTING GROUND
- EXISTING GRADE
- BASELINE
- DIKE CENTERLINE
- ACCESS LIMITS

BSFS-4 AND BSFS-5 GENERAL NOTES:

1) THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTAINING ALL DREDGED MATERIAL WITHIN THE BOUNDARIES OF THE RESTORATION AREA. RETENTION DIKES ARE REQUIRED TO RETAIN THE MATERIAL WITHIN THE RESTORATION BOUNDRIES, AND SHALL BE CONSTRUCTED FORM IN-SITU MATERIAL OBTAINED FROM WITHIN THE MARSH CREATION BOUNDRY AS SHOWN ON THE PLAN SHEETS.

2) INTERIOR WEIRS MAY BE CONSTRUCTED IF DESIRED BY THE CONTRACTOR, AND SHALL BE INCLUDED IN THE DISPOSAL PLAN FOR APPROVAL BY THE COR. WEIRS, IF CONSTRUCTED BY THE CONTRACTOR SHALL NOT EXCEED ELEVATION 2.5' NAVD88.

3) ANY VEGETATIVE OR WOODY DEBRIS, CLEARED FOR THE PURPOSE OF DIKE CONSTRUCTION, MAY BE DISPOSED OF WITHIN THE MARSH CREATION SITE AND BURIED DURING THE FILLING OPERATION.

4) UNDISTURBED PLUGS/NATURAL CROSSINGS AT LEAST EVERY 500-FEET ARE REQUIRED IN ANY BORROW PITS FOR THE PERIMETER RETAINING DIKES TO PREVENT EROSIVE CHANNELING BY THE EFFLUENT WATERS ALONG THE DIKES AND TO INCREASE RETENTION TIME. THE DISCHARGE LINE INTO THE DISPOSAL AREA SHALL HAVE MANIFOLDS OR BAFFLES ON THE POINT DISCHARGE.

5) LENGTHS OF THE RETENTION DIKE SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.

6) THE ACCESS CORRIDORS FOR BSFS-4 AND BSFS-5 ARE AVAILABLE FOR USE BY THE CONTRACTOR. NO EXCAVATION WITHIN THE CORRIDORS ARE ALLOWED.

7) BORROW DEPTH WITHIN LAKE PONTCHARTRAIN HAS BEEN ESTABLISHED AT ELEVATION -18.0' NAVD88, WITH ALLOWABLE 1' OVERDEPTH TO -19.0' NAVD88. EXCAVATION SHALL AT NO TIME EXCEED ELEVATION -19.0' NAVD88. THIS DEPTH RESTRICTION ALSO APPLIES TO THE SUCTION DEPTH. AT NO TIME SHALL MATERIAL BELOW ELEVATION -19.0' NAVD88 BE DISTURBED.

8) EFFLUENT WEIRS OR SPILL BOXES SHALL BE CONSTRUCTED AND MAINTAINED TO MANAGE EFFLUENT WATER LEVELS, WHICH SHALL NOT EXCEED ELEVATION +3.0' NAVD88 FOR BSFS-4 AND ELEVATION +3.5' FOR BSFS-5. THE CONTRACTORS PLAN FOR MANAGING EFFLUENT WATER ELEVATIONS SHALL BE INCLUDED IN THE DISPOSAL OF DREDGE MATERIAL PLAN.

9) THE CONTRACTOR SHALL ESTABLISH A GRID OF STAFF GAGES WITHIN THE MARSH CREATION FOOTPRINT AS SHOWN ON THE BSFS-4 AND BSFS-5 SURVEY PLAN DRAWINGS. STAFF GAGES SHALL CONSIST OF 3 INCH PVC PIPE OR 4 INCH BY 4 INCH WOODEN POSTS, MARKED AT HALF FOOT INTERVALS.

10) THE ALLOWABLE BORROW PIT POLYGOM AND COORDINATES DEFINED ON SHEET C-20 REPRESENT THE ULTIMATE TOP EDGE OF CUT. IS A BOX CUT IS IMPLEMENTED, IT SHALL ACCOUNT FOR ALL EXCAVATION REMAINING WITHIN THIS DEFINED BOUNDRY. AT NO TIME SHALL EXCAVATION FOR BORROW BE PERFORMED OUTSIDE THIS ALLOWABLE BOUNDRY.

11) COORDINATES SHOWN ON THESE DRAWINGS REFERENCE STATE PLANE, NAD 83, LOUISIANA SOUTH ZONE 1702, U.S., SURVEY FEET.

12) PLANVIEW BACKDROPS ARE FROM PHOTOGRAPHY DATED 2013.

13) ALL BSFS-4 AND BORROW SITE ELEVATIONS ARE IN U.S. SURVEY FEET NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) 2006.81 EPOCH. THE ELEVATIONS IN THESE PLANS AND SPECIFICATIONS FOR BSFS-4 AND THE BORROW SITE WERE SURVEYED IN USACE SURVEY JOB #12-054C.

14) ALL BSFS-5 ELEVATIONS ARE IN U.S. SURVEY FEET NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) 2006.81 EPOCH. THE ELEVATIONS IN THESE PLANS AND SPECIFICATIONS FOR BSFS-5 WERE SURVEYED IN USACE SURVEY JOB #13-155C.

BSFS-4 & BORROW TABULATION OF BENCHMARKS

BENCHMARK	ELEVATION	DESCRIPTION
C-189 (PRIMARY)		
LPV 109.02A		
12-054-C-1		
12-054C-2		

BSFS-5 TABULATION OF BENCHMARKS

BENCHMARK	ELEVATION	DESCRIPTION
MVN-17 (PRIMARY)		
12-054C-2		
12-155C		
PIKE RESET		

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U.S. ARMY CORPS OF ENGINEERS
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NEW ORLEANS, LOUISIANA

DESIGNED BY: K.I.OR.W.B.P.P.R.G.
DWN BY: R.W.B. / P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OLJAN
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-#####
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HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND THE BAYOU SAUVAGE FLOOD SIDE INTERMEDIATE MARSH RESTORATION, ORLEANS PARISH, LA.

BSFS-4 & BSFS-5 LEGEND, ABBREVIATIONS BENCHMARKS, AND GENERAL NOTES

SHEET IDENTIFICATION
G-03

ABBREVIATIONS

* UNLESS OTHERWISE NOTED ON EACH SHEET

AC	ACRE	(+/-)	APPROXIMATE
APPROX	APPROXIMATE	EOS	EDGE OF SHOULDER
B/L	BASELINE	EOP	EDGE OF PAVEMENT
BS	BORROW SITE	GS	GRADE STAKE
BEC	BOTTOM EDGE OF CUT	POB	POINT OF BEGINNING
C/L	CENTERLINE	POE	POINT OF ENDING
CA	CUT AREA	PPL	POWER POLE
DWG	DRAWING		
DIST	DISTANCE		
EL.	ELEVATION		
EXIST	EXISTING		
FA	FILL AREA		
FT	FEET		
H	HORIZONTAL		
MAX	MAXIMUM		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
N.T.S.	NOT TO SCALE		
P.I.	POINT OF INFLECTION		
P/S	PROTECTED SIDE		
SF	SQUARE FEET		
STA	STATION		
TYP	TYPICAL		
V	VERTICAL		

GENERAL LEGEND

- BENCHMARK
- UNDISTURBED BORING
- GENERAL BORING
- EXISTING POWER POLE
- EXISTING GROUND
- EXISTING OVERHEAD P0WER
- EXISTING GRADE
- BASELINE
- DIKE CENTERLINE

TURTLE BAYOU NORTH (TBN) - TABULATION OF BENCHMARKS

BENCHMARK	ELEVATION	DESCRIPTION
E 3146 (PRIMARY BM)	LAT: 30^04'14.05567 LONG: 89^48'05.39106 NORTHING: 574395.08 EASTING: 3765350.72 EL. 5.18' NAVD88 (2009.55)	THE MONUMENT IS LOCATED IN ORLEANS PARISH, LA, 15.0 MILES SOUTH OF SLIDELL, LA, 19.0 MILES EAST OF NEW ORLEANS, LA, AND 19.0 MILES NORTHEAST OF BELLE CHASSE, LA. TO REACH THE STATION FROM THE INTERSECTION OF HWY 11 AND HWY 90 IN ORLEANS PARISH, LA, GO EAST ON HWY 90 4.1 MILES TO THE STATION ON THE RIGHT. THE STATION IS A SURVEY DISK FOUND FLUSH WITH THE TOP OF CONCRETE, 106 FEET NORTHWEST OF A POWER POLE MARKED #461, 37.0 FEET SOUTHEAST OF THE CENTERLINE OF HWY 90, AND 23.0 FEET SOUTHWEST OF THE CENTERLINE OF DRIVEWAY.
H 375	LAT: 30^01'41.85873 N LONG: 89^59'14.36299 W NORTHING: 558283.46 EASTING: 3706757.86 EL. -6.43' NAVD88 (2009.55)	THE MONUMENT IS LOCATED IN ORLEANS PARISH, LA, 5.2 MILES NORTH OF ARABI, LA, 6.1 MILES NORTHWEST OF CHALMETTE, LA, AND 7.3 MILES NORTHEAST OF NEW ORLEANS, LA. TO REACH THE STATION FROM THE INTERSECTION OF I-10 EAST AND HWY 90 IN NEW ORLEANS EAST, HEAD EAST ON HWY 90 FOR 1.6 MILES TO THE INTERSECTION OF CROWDER BLVD., HEAD NORTH ON CROWDER BLVD. FOR 0.9 MILES TO THE INTERSECTION OF LAKE FOREST BLVD., TURN RIGHT ONTO LAKE FOREST BLVD AND HEAD EAST FOR 0.3 MILES TO THE STATION ON THE LEFT. THE STATION IS A STEEL ROD FOUND IN GOOD CONDITION IN THE MEDIAN OF LAKE FOREST BLVD. THE ROD IS 60.0 FEET WEST OF A 28 INCH LIVE OAK IN THE MEDIAN OF LAKE FOREST BLVD., 19.0 FEET NORTH OF THE CENTERLINE OF THE EAST BOUND LANE OF LAKE FOREST BLVD., AND 25.5 FEET SOUTH OF THE CENTERLINE OF THE WEST BOUND LANE OF LAKE FOREST BLVD.
TURTLE BAYOU	LAT: 30^05'51.60058 N LONG: 89^51'37.36701 W NORTHING: 584003.92 EASTING: 3746600.75 EL. 18.04' NAVD88 (2009.55)	THE MONUMENT IS LOCATED IN ORLEANS PARISH, LA, 9.8 MILES SOUTH OF EDEN ISLE, LA, 12.2 MILES NORTH OF MERAUX, LA, AND 12.9 MILES NORTHEAST OF ARABI, LA. TO REACH THE STATION FROM THE INTERSECTION OF I-10 AT IRISH BAYOU EXIT AND HWY 11 AT EXIT 254, PROCEED SOUTH ON HWY 11 FOR 1.7 MILES, PASS THROUGH A FLOOD GATE, TURN LEFT AND FOLLOW THE LEVEE EAST THEN SOUTH FOR 1.8 MILES. THE BENCHMARK IS LOCATED IN THE CENTERLINE OF THE LEVEE. THE STATION IS AN ALUMINUM CAP SET ON A 2.0 FOOT REBAR, LOCATED IN THE CENTERLINE OF LEVEE, 5.8 FEET LANDSIDE OF THE FLOOD SIDE CROWN, 5.5 FEET FLOOD SIDE OF THE PROTECTED SIDE CROWN, LOCATED APPROX. 6260 FEET SOUTH OF THE SOUTH PROTECTED SIDE ON THE LEVEE
52 V 075 RESET	LAT: 30^17'07.26229 LONG: 89^46'15.52853 NORTHING: 652627.73 EASTING: 3773937.79 EL. 10.47' NAVD88 (2009.55)	THE MONUMENT IS LOCATED IN ST. TAMMANY PARISH, LA, 1.7 MILES NORTHEAST OF SLIDELL, LA, 7.6 MILES SOUTH OF PEARL RIVER, LA, AND 11.1 MILES EAST OF LACOMBE, LA. TO REACH THE STATION FROM THE INTERSECTION OF I-10 (EXIT 266) AND U.S. HWY 190 (CAUSE BLVD) IN SLIDELL, LA, GO WEST 1.3 MILES ON CAUSE BLVD. TO ROBERT BLVD., TURN RIGHT AND PROCEED 200 FEET NORTH TO THE MONUMENT ON THE RIGHT BETWEEN ROBERT BLVD. AND THE SIDEWALK. THE STATION IS A BRASS CAP RECESSED IN CONCRETE, LOCATED 97.5 FEET NORTH OF A POWER POLE (#49312-59174) , 32.0 FEET EAST OF THE CENTERLINE OF ROBERT BLVD., 3.0 FEET NORTHWEST OF A STREET SIGN (LA 1091) , AND 9.5 FEET WEST OF A 6.0 FOOT CHAIN LINK FENCE AND AN ORANGE CARSONITE WITNESS POST.

GENERAL NOTES:

1) THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTAINING ALL DREDGED MATERIAL WITHIN THE BOUNDARIES OF THE RESTORATION AREA, EXCEPT FOR DREDGE DISCHARGE EFFLUENT WHICH SHALL BE DISCHARGED NORTH OF THE MARSH CREATION SITE. RETENTION DIKES ARE REQUIRED TO RETAIN THE MATERIAL WITHIN THE RESTORATION BOUNDARIES, AND SHALL BE CONSTRUCTED FROM ADJACENT IN-SITU MATERIAL OBTAINED FROM WITHIN THE MARSH CREATION BOUNDARY. HOWEVER, BORROW FOR DIKE CONSTRUCTION ALONG THE NORTHERN PORTION OF THE RESTORATION AREA MAY BE TAKEN EITHER FROM WITHIN OR OUTSIDE OF THE MARSH CREATION AREA WHERE THE DIKE IS TO BE CONSTRUCTED STRICTLY WITHIN OPEN WATERS AND NOT ADJACENT TO WETLANDS. (BETWEEN DIKE C/L POINTS 1 AND 2, AND 4 AND 5)

   THE TOP OF CUT FOR ALL BORROW PITS SHALL BE AT LEAST 40 FEET FROM THE INSIDE TOE OF THE RETENTION DIKES. PERIMETER RETENTION DIKES SHALL BE CONSTRUCTED WITH A MINIMUM 5' CROWN WIDTH TO ELEVATION +3.5 NAVD88. (SEE THEORETICAL RETENTION DIKE/BORROW SECTION PROVIDED ON THE DRAWING ENTITLED "THEORETICAL SECTIONS - TURTLE BAYOU")

2) INTERIOR WEIRS MAY BE CONSTRUCTED IF DESIRED BY THE CONTRACTOR, AND SHALL BE INCLUDED IN THE DISPOSAL PLAN FOR APPROVAL BY THE COR. WEIRS, IF CONSTRUCTED BY THE CONTRACTOR SHALL NOT EXCEED ELEVATION 0.0' NAVD88.

3) ANY VEGETATIVE OR WOODY DEBRIS, CLEARED FOR THE PURPOSE OF DIKE CONSTRUCTION, MAY BE DISPOSED OF WITHIN THE MARSH CREATION SITE AND BURIED DURING THE FILLING OPERATION.

4) UNDISTURBED PLUGS/NATURAL CROSSINGS AT LEAST EVERY 500-FEET ARE REQUIRED IN ANY BORROW PITS FOR THE PERIMETER RETAINING DIKES TO PREVENT EROSIVE CHANNELING BY THE EFFLUENT WATERS ALONG THE DIKES AND TO INCREASE RETENTION TIME. THE DISCHARGE LINE INTO THE DISPOSAL AREA SHALL HAVE MANIFOLDS OR BAFFLES ON THE POINT DISCHARGE.

5) PI'S DEFINING THE PROPOSED LOCATION OF THE RETENTION DIKE ARE PROVIDED ON THE CONTRACT PLANS. THESE LOCATIONS MAY BE FIELD ADJUSTED PRIOR TO CONSTRUCTION IN ORDER TO EITHER MINIMIZE WETLAND IMPACTS FROM THE LAND SIDE PORTION OF THE DIKE FOOTPRINT AND/OR MAXIMIZE THE SIZE OF THE MARSH CREATION SITE AND PREVENT OPEN WATER AREAS BETWEEN THE OUTSIDE TOE OF THE DIKE AND THE ADJACENT MARSH.

6) A 400' WIDE ACCESS CORRIDOR, LEADING FROM THE LAKE BORROW SITE TO AND THROUGH AN EXISTING GAP IN THE FORESHORE DIKE, IS AVAILABLE FOR USE BY THE CONTRACTOR FOR PIPELINE ACCESS TO THE MARSH CREATION SITE. NO EXCAVATION WITHIN THIS CORRIDOR IS ALLOWED. THIS CORRIDOR SHALL BE USED FOR DISCHARGE PIPELINE ACCESS TO THE TURTLE BAYOU RESTORATION SITE. (SEE DRAWING C-11 FOR FURTHER DETAILS)

7) A 2600'L BY 150'W ACCESS CORRIDOR, WEST OF AND ADJACENT TO LA HWY 11, IS AVAILABLE FOR STAGING AND ACCESS OF PIPELINE AND EQUIPMENT REQUIRED TO CONSTRUCT THE TURTLE BAYOU MARSH CREATION SITE. THE EASTERN LIMIT OF THIS CORRIDOR BEGINS AT THE CENTERLINE OF LA HWY 11 AND EXTENDS 150' PARALLEL TO AND WEST OF THE HIGHWAY. THE EASTERN PORTION OF THIS CORRIDOR INCLUDES 42' WHICH ENCOMPASSES THE THE WEST SIDE OF THE ROAD AND A 30' UTILITY R/W CORRIDOR. MATS SHALL BE USED IN ORDER TO MINIMIZE DAMAGE TO THE WETLANDS WITHIN THIS CORRIDOR AND UPON COMPLETION OF THIS MARSH CREATION PROJECT, THE AREA WITHIN THIS CORRIDOR IMPACTED BY CONSTRUCTION SHALL BE BACKFILLED WITH 1' TO 2' OF EARTHEN FILL IN AN EFFORT TO RESTORE THE AREA TO PRE-EXISTING CONDITIONS.

8) NO FLOTATION ACCESS EXCAVATION IS ALLOWED ADJACENT TO THE LAKE PONTCHARTRAIN SHORELINE OR WITHIN THE SPECIFIED ACCESS ROUTE DEFINED ON THE CONTRACT DRAWINGS.

   DREDGE PIPELINE ACCESS SHALL BE RESTRICTED TO WATERWAYS, EXCEPT WHEN CROSSING FROM BAYOU SAUVAGE/ IRISH BAYOU CANAL TO THE DRAINAGE CANAL RUNNING ALONG THE EAST SIDE OF LA HWY 11 WHERE THE PIPE WILL HAVE TO CROSS SOME WETLANDS AND THE HSDRRS HURRICANE PROTECION LEVEE SYSTEM. IN THIS AREA, THE PIPELINE SHALL BE ROUTED TO BEST UTILIZE EXISTING WATER BODIES/ SWALES/ PONDS IN ORDER TO MINIMIZE IMPACTS TO WETLANDS, AND A MAXIMUM CORRIDOR WIDTH OF 100' WILL BE ALLOWED IN THIS REACH. SPECIAL PRECAUTIONS SHALL ALSO BE TAKEN TO ASSURE THAT THE HSDRRS LEVEE SYSTEM DOES NOT SUSTAIN ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S ACCESS OPERATIONS. RANDOM VEHICULAR TRAFFIC WILL NOT BE ALLOWED WITHIN THE CORRIDOR CROSSING THE LEVEE, AS WELL AS ALONG THE LEVEE ITSELF. AT NO TIME SHALL THE PIPELINE RESTRICT BOAT TRAFFIC IN IRISH BAYOU CANAL/ BAYOU SAUVAGE, OR VEHICULAR TRAFFIC ALONG THE HSDRRS LEVEE.

9) EFFLUENT WEIRS OR SPILL BOXES SHALL BE CONSTRUCTED AND MAINTAINED TO MANAGE EFFLUENT WATER LEVELS, WHICH SHALL NOT EXCEED ELEVATION +2.5' NAVD88. THE CONTRACTORS PLAN FOR MANAGING EFFLUENT WATER ELEVATIONS SHALL BE INCLUDED IN THE DISPOSAL OF DREDGE MATERIAL PLAN. ALL WASTEWATER SHALL BE DISCHARGED THROUGH EITHER OF THE TWO (2) CLOSURES ON THE NORTHERN SIDE OF THE MARSH CREATION AREA (OR AT BOTH SITES IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE COR). ALL WEIR(S) SHALL BE SUITABLE FOR PROVIDING ADEQUATE DRAINAGE DURING PUMPING OPERATIONS IN ORDER FOR THE CONTRACTOR AND GOVERNMENT TO PROPERLY DETERMINE THE ELEVATION OF THE DREDGE SLURRY DURING DISPOSAL OPERATIONS, AS WELL AS UPON COMPLETION OF DISPOSAL.

   THE CONTRACTOR'S PLAN FOR PROVIDING EFFLUENT DRAINAGE SHALL BE PROVIDED FOR REVIEW PRIOR TO CONSTRUCTION.

10) THE CONTRACTOR SHALL ESTABLISH STAFF GAGES WITHIN THE TURTLE BAYOU MARSH CREATION FOOTPRINT AS SHOWN ON THE DRAWING ENTITLED "TURTLE BAYOU MARSH CREATION SURVEY LAYOUT". STAFF GAGES SHALL CONSIST OF 3-INCH PVC PIPE OR 4-INCH BY 4-INCH WOODEN POSTS, MARKED AT HALF FOOT INTERVALS.

11) THE ALLOWABLE BORROW PIT POLYGON AND COORDINATES DEFINED ON THE DRAWING ENTITLED "BORROW PLAN" REPRESENT THE ANTICIPATED TOP EDGE OF CUT. IF A BOX CUT IS IMPLEMENTED, IT SHALL ACCOUNT FOR ALL EXCAVATION REMAINING WITHIN THIS DEFINED BOUNDARY. AT NO TIME SHALL EXCAVATION FOR BORROW BE PERFORMED OUTSIDE THIS ALLOWABLE BOUNDARY.

12) BORROW FOR CONSTRUCTION OF THE TURTLE BAYOU MARSH CREATION SITE SHALL FOLLOW THE PLACEMENT OF THE FIRST LIFTS AT THE BAYOU SAUVAGE FLOODSIDE SITES. TURTLE BAYOU BORROW MATERIAL SHALL COME FROM WITHIN THE EASTERN PORTION OF THE BORROW AREA, WITH DREDGING PERFORMED TO, BUT NOT TO EXCEED, THE MAXIMUM SPECIFIED DIMENSIONS AND TOLERANCE. DREDGING SHALL BE PERFORMED IN CONTINUOUS CUTS (EITHER NORTH -SOUTH, OR WEST- EAST), WORKING FROM THE SOUTH EASTERN END OF THE BORROW SITE TOWARDS THE NORTH WEST. EXCAVATION SHALL BE MONITORED BY BEFORE AND AFTER DREDGING CROSS SECTIONS.

13) BORROW DEPTH WITHIN LAKE PONTCHARTRAIN HAS BEEN ESTABLISHED AT ELEVATION -18.0' NAVD88 (2006.81), WITH AN ALLOWABLE 1' OVERDEPTH TO -19.0' NAVD88 (2006.81). AT NO TIME SHALL EXCAVATION EXCEED ELEVATION -19.0' NAVD88 (2006.81).

14) COORDINATES SHOWN ON THESE DRAWINGS REFERENCE STATE PLANE, NAD 83, LOUISIANA SOUTH ZONE 1702, U.S. SURVEY FEET.

15) PLAN VIEW BACKDROPS WERE DEVELOPED FROM AERIAL PHOTOGRAPHY DATED 2010.

16) ALL SURVEY DATA ASSOCIATED WITH CONSTRUCTION OF THE TURTLE BAYOU MARSH CREATION SITE, INCLUDING SURVEYS OF THE ACCESS ROUTE LEADING FROM LAKE PONTCHARTRAIN TO THE TURTLE BAYOU SITE, WERE TAKEN IN JULY 2014 UNDER USACE SURVEY JOB# 14-108C. THE ELEVATIONS IN THESE PLANS AND SPECIFICATIONS ARE BASED OFF OF THE MONUMENTATION INCLUDED ON THIS SHEET AND ESTABLISHED IN USACE SURVEY JOB# 14-108C. ALL ELEVATIONS ARE IN SURVEY FEET AND IN NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88), 2009.55 EPOCH.

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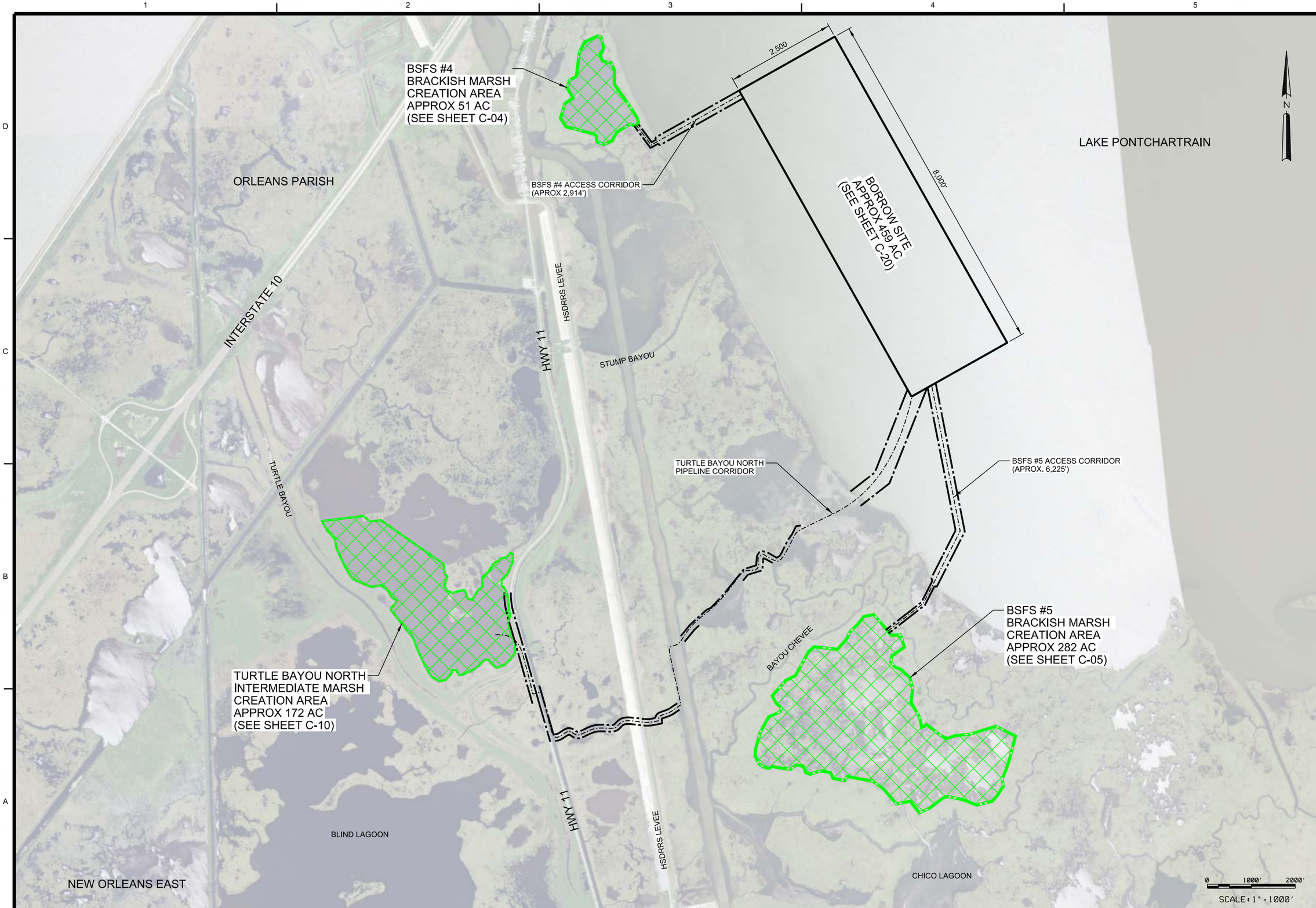
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.D/R.W./B.P./R.G.
DWN BY: R.W./B.P./R.G.
CKD BY: R.W./B.
SUBMITTED BY: KEITH J. COLAN
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
PLOT SCALE: 1:1
PLOT DATE: MARCH 2015
FILE NUMBER: H-14-47949
SIZE: ANSI D
FILE NAME: H-14-47949-G-04

HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

TURTLE BAYOU NORTH - LEGEND, ABBREVIATIONS, BENCHMARKS, AND GENERAL NOTES

SHEET IDENTIFICATION
G-04



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NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR

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U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.O/R.W.B./P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 1000:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-01
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH
RESTORATION, AND TURTLE BAYOU PROTECTED
SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

OVERALL BSFS-4, BSFS-5, &TURTLE
BAYOU NORTH MARSH CREATION PLAN

SHEET IDENTIFICATION
C-01

RETENTION DIKE C/L COORDINATES

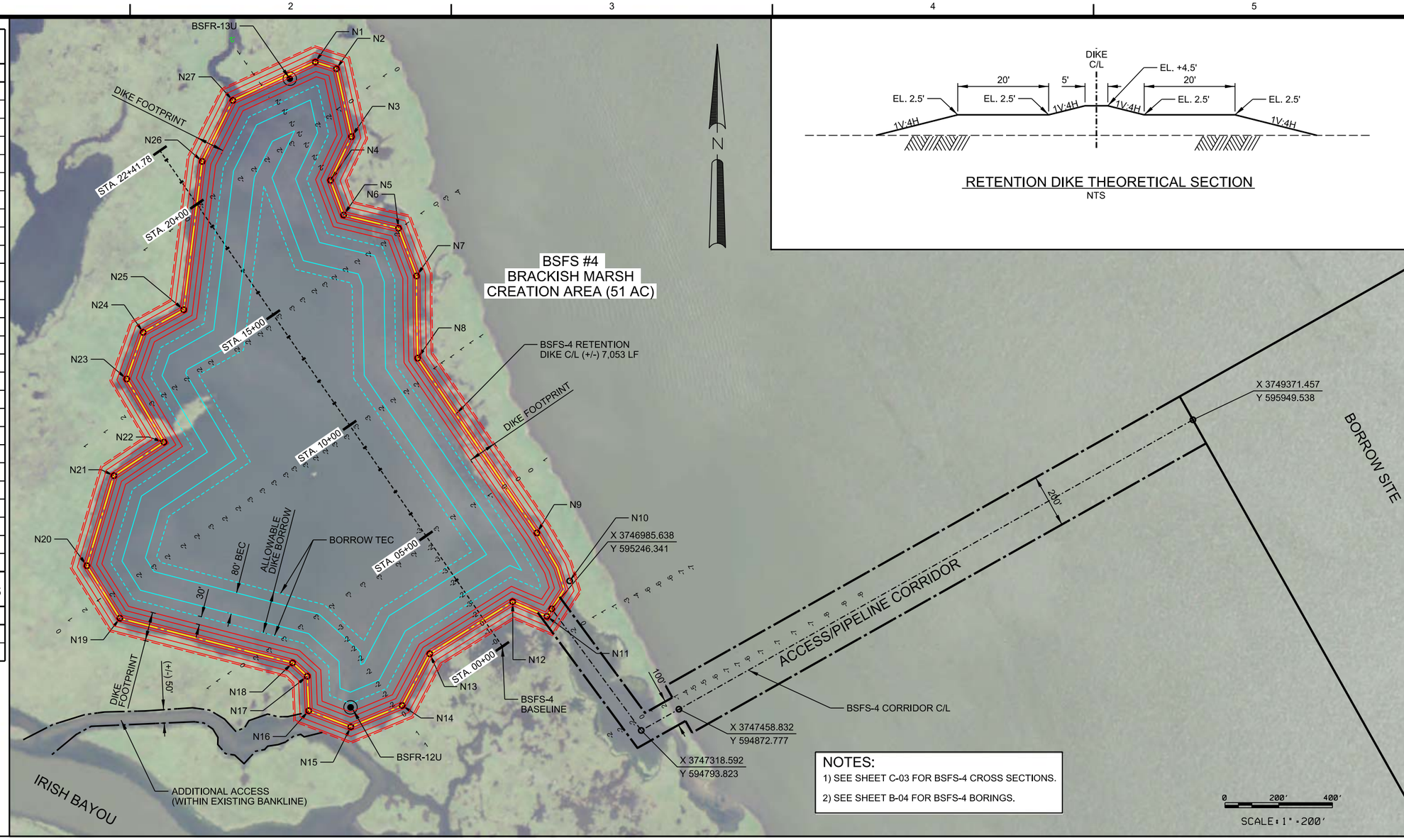
POINT	X-COORD	Y-COORD
N1	3746106	597280
N2	3746184	597255
N3	3746240	597002
N4	3746162	596840
N5	3746211	596711
N6	3746415	596661
N7	3746482	596484
N8	3746486	596178
N9	3746493	595528
N10	3747052	595350
N11	3746967	595218
N12	3746840	595272
N13	3746531	595079
N14	3746429	595079
N15	3746238	594807
N16	3746081	594867
N17	3746076	594995
N18	3746021	595045
N19	3745378	595211
N20	3745256	595406
N21	3745356	595741
N 22	3745543	595866
N23	3745403	596101
N24	3745465	596274
N25	3745616	596358
N26	3745685	596910
N27	3745798	597137

BASELINE COORDINATES

STA.	X-COORD	Y-COORD
0+00	X 3746801.87	Y 595106.17
22+41.78	X 3745527.98	Y 596950.84

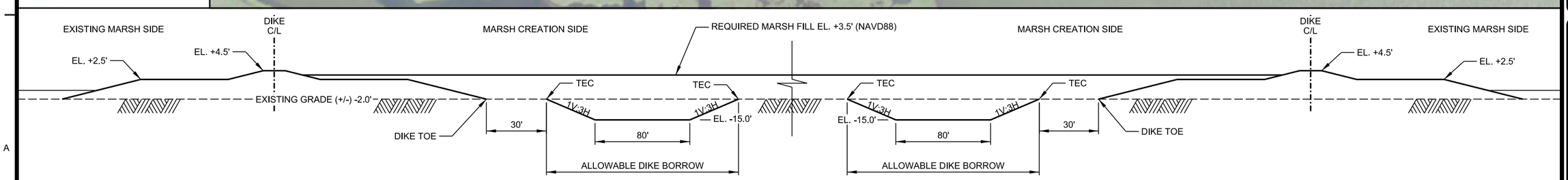
SHEET LEGEND

- RETENTION DIKE FOOTPRINT
- RETENTION DIKE C/L
- ALLOWABLE DIKE BORROW FOOTPRINT



RETENTION DIKE THEORETICAL SECTION
NTS

NOTES:
1) SEE SHEET C-03 FOR BSFS-4 CROSS SECTIONS.
2) SEE SHEET B-04 FOR BSFS-4 BORINGS.



BSFS-4 MARSH THEORETICAL SECTION
NTS

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NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

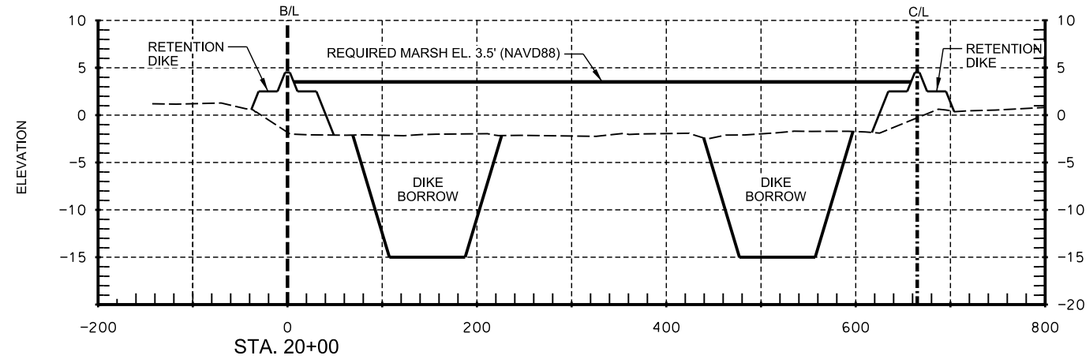
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.OR.W.B.P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OLIAN
DATES: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-14-47848
PLOT SCALE: 1:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-15-47848-C-02

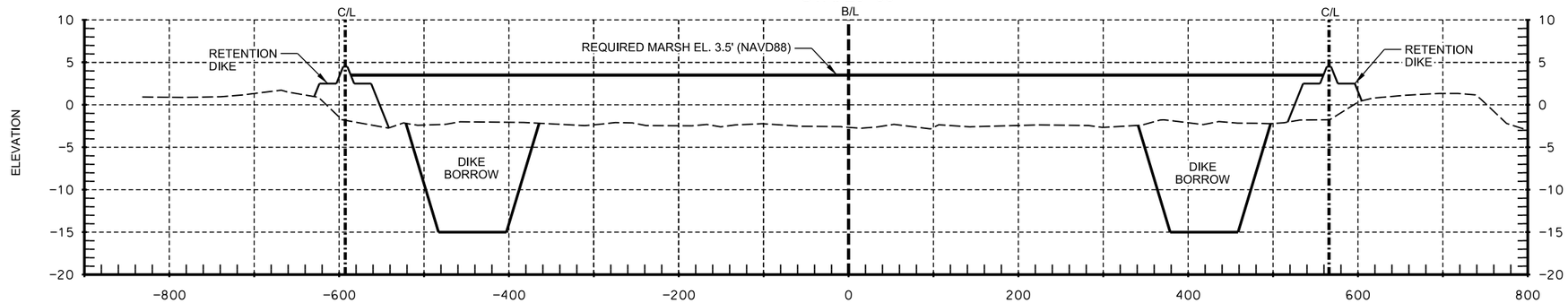
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURF MARSH PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS #4 MARSH CREATION PLAN

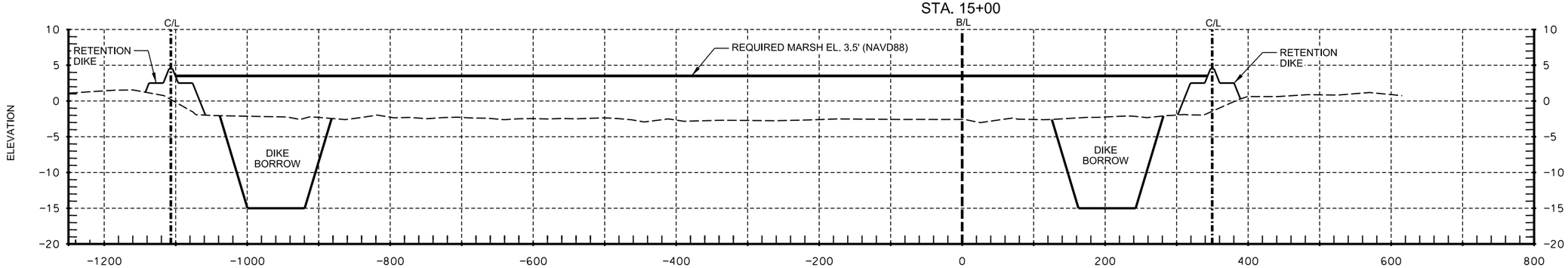
SHEET IDENTIFICATION
C-02



STA. 20+00



STA. 15+00



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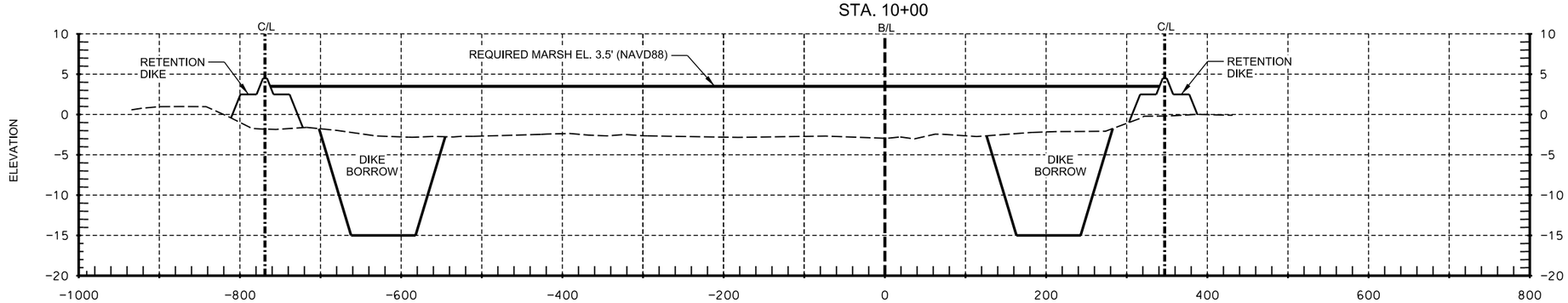

STA. 5+00

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

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MARK	DESCRIPTION	DATE	APPR

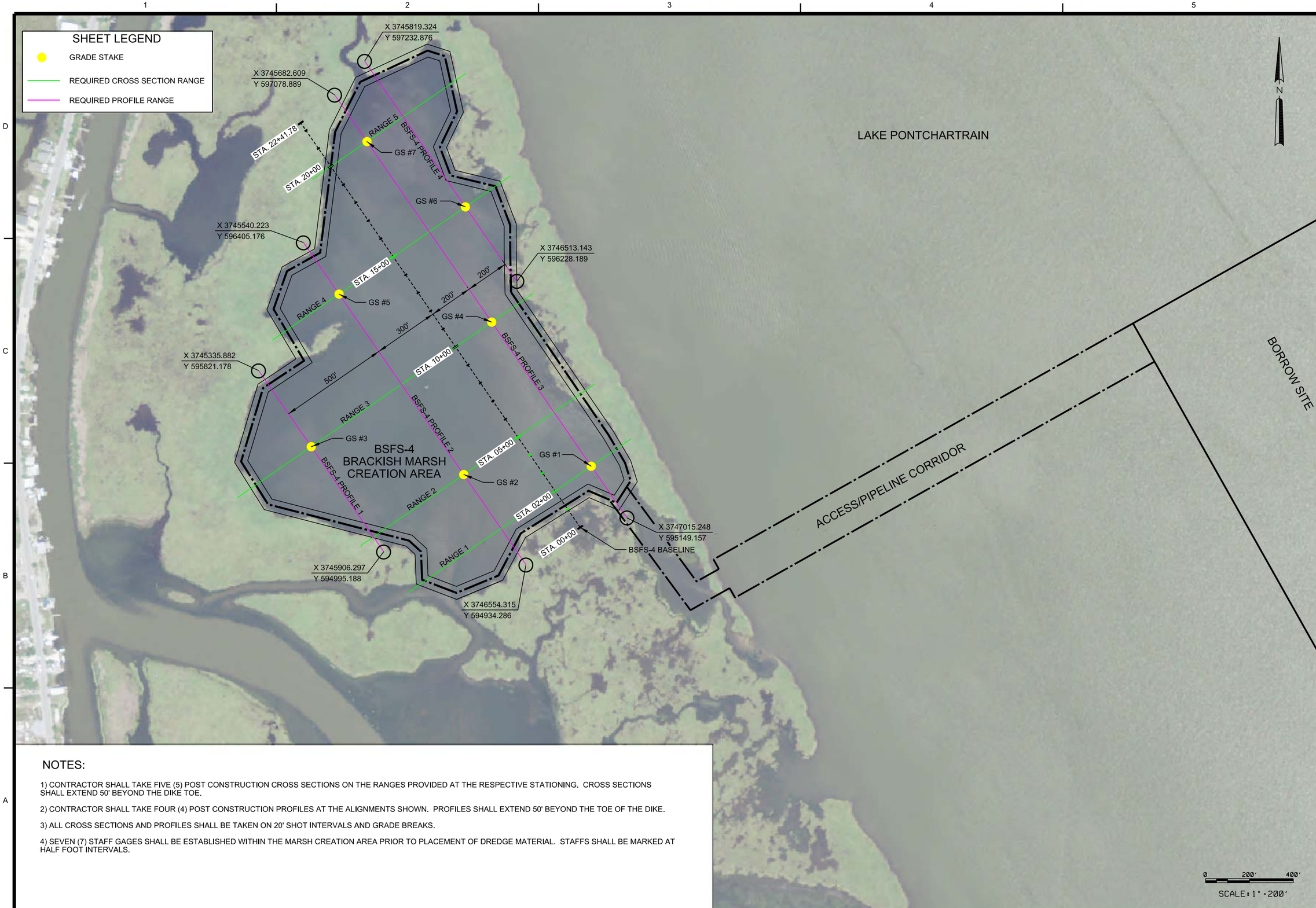
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.O/R.W.B./P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 960:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-03
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-4 CROSS SECTIONS

SHEET IDENTIFICATION
C-03



NOTES:

1) CONTRACTOR SHALL TAKE FIVE (5) POST CONSTRUCTION CROSS SECTIONS ON THE RANGES PROVIDED AT THE RESPECTIVE STATIONING. CROSS SECTIONS SHALL EXTEND 50' BEYOND THE DIKE TOE.

2) CONTRACTOR SHALL TAKE FOUR (4) POST CONSTRUCTION PROFILES AT THE ALIGNMENTS SHOWN. PROFILES SHALL EXTEND 50' BEYOND THE TOE OF THE DIKE.

3) ALL CROSS SECTIONS AND PROFILES SHALL BE TAKEN ON 20' SHOT INTERVALS AND GRADE BREAKS.

4) SEVEN (7) STAFF GAGES SHALL BE ESTABLISHED WITHIN THE MARSH CREATION AREA PRIOR TO PLACEMENT OF DREDGE MATERIAL. STAFFS SHALL BE MARKED AT HALF FOOT INTERVALS.

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U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.O'R.W.B./P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 2400:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-04
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-4 SURVEY PLAN

SHEET IDENTIFICATION
C-04

RETENTION DIKE CENTERLINE COORDINATES

POINT	X COORDINATE	Y COORDINATE
N-1	X 3753049.64	Y 583378.49
N-2	X 3752864.216	Y 583254.140
N-3	X 3752752.952	Y 582966.926
N-4	X 3753224.917	Y 582700.177
N-5	X 3753116.415	Y 581989.817
N-6	X 3753488.822	Y 581558.125
N-7	X 3753982.169	Y 581275.692
N-8	X 3755154.448	Y 581517.362
N-9	X 3755531.730	Y 581361.786
N-10	X 3755486.836	Y 580826.683
N-11	X 3755240.485	Y 580690.446
N-12	X 3755212.164	Y 580151.518
N-13	X 3754981.410	Y 579829.855
N-14	X 3754045.684	Y 580023.219
N-15	X 3753837.597	Y 579884.972
N-16	X 3753398.705	Y 579633.982
N-17	X 3753047.795	Y 580176.523
N-18	X 3752583.582	Y 580149.261
N-19	X 3752295.393	Y 580367.929
N-20	X 3752036.719	Y 580449.690
N-21	X 3751586.055	Y 580325.681
N-22	X 3751453.231	Y 580522.996
N-23	X 3751182.032	Y 580559.898
N-24	X 3750838.433	Y 580537.631
N-25	X 3750812.545	Y 580745.025
N-26	X 3750708.565	Y 580794.803
N-27	X 3750551.563	Y 580632.725
N-28	X 3749801.677	Y 580639.140
N-29	X 3749691.177	Y 580916.051
N-30	X 3749825.794	Y 580978.544
N-31	X 3749993.386	Y 581564.322
N-32	X 3750627.625	Y 582054.021
N-33	X 3751204.035	Y 582806.497
N-34	X 3751318.806	Y 583025.483
N-35	X 3751959.298	Y 583794.050
N-36	X 3752183.477	Y 584018.636
N-37	X 3752413.651	Y 584028.207
N-38	X 3752746.519	Y 583606.195
N-39	X 3752970.979	Y 583616.720

CROSS DIKE CENTERLINE COORDINATES

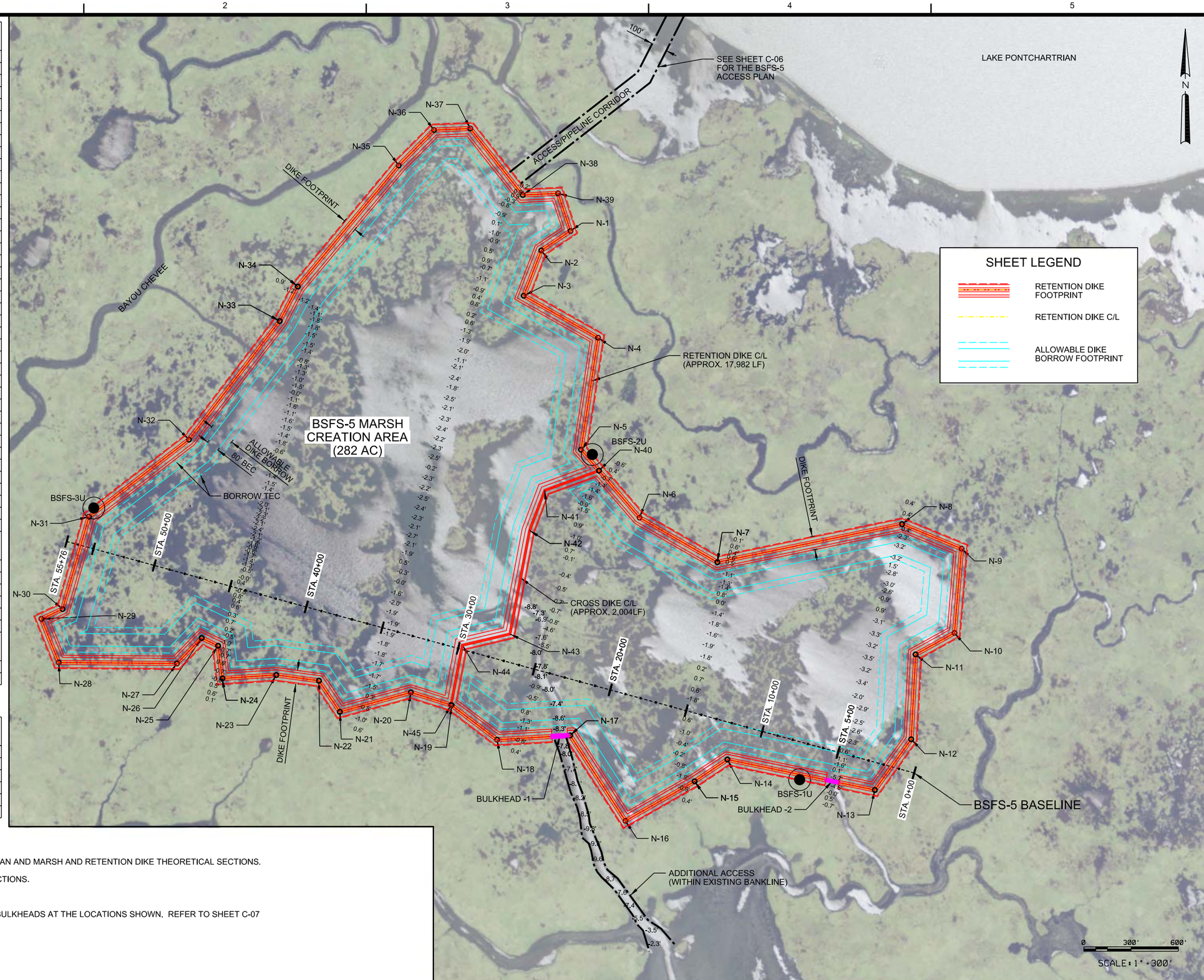
N-40	X 3753230.878	Y 581857.048
N-41	X 3752886.380	Y 581731.375
N-42	X 3752790.170	Y 581477.102
N-43	X 3752665.217	Y 580819.871
N-44	X 3752363.795	Y 580748.880
N-45	X 3752291.506	Y 580369.157

BASELINE COORDINATES

STA. 0+00	X 3755231.24	Y 579938.25
STA. 55+76	X 3749852.13	Y 581406.89

BULKHEAD APPROX. LENGTHS

BULKHEAD	APPROX. LENGTH (FT)
BH-1	110'
BH-2	100'



NOTES:

1) SEE SHEET C-06 FOR BSFS-5 ACCESS PLAN AND MARSH AND RETENTION DIKE THEORETICAL SECTIONS.

2) SEE SHEET C-08 FOR BSFS-5 CROSS SECTIONS.

3) SEE SHEET B-04 FOR BSFS-5 BORINGS.

4) THE CONTRACTOR SHALL CONSTRUCT BULKHEADS AT THE LOCATIONS SHOWN. REFER TO SHEET C-07 FOR BULKHEAD GENERAL DETAILS.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

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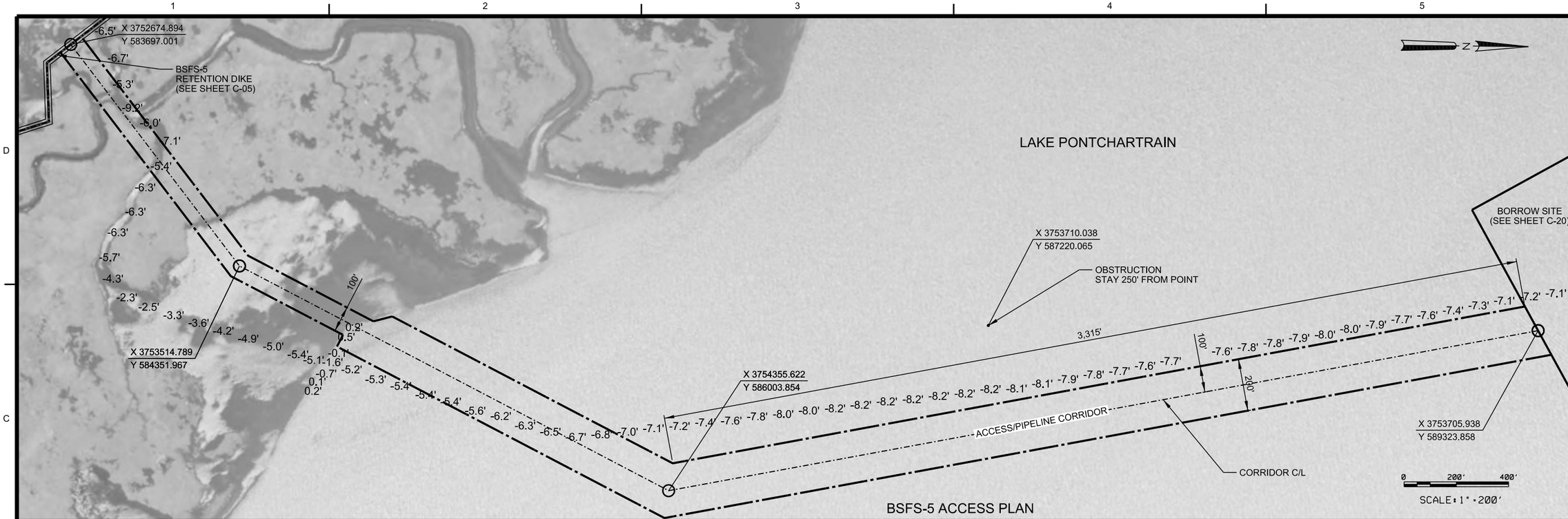
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.L.OR.W.B.P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-14-47848
PLOT SCALE: 1:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-15-47848-C-05

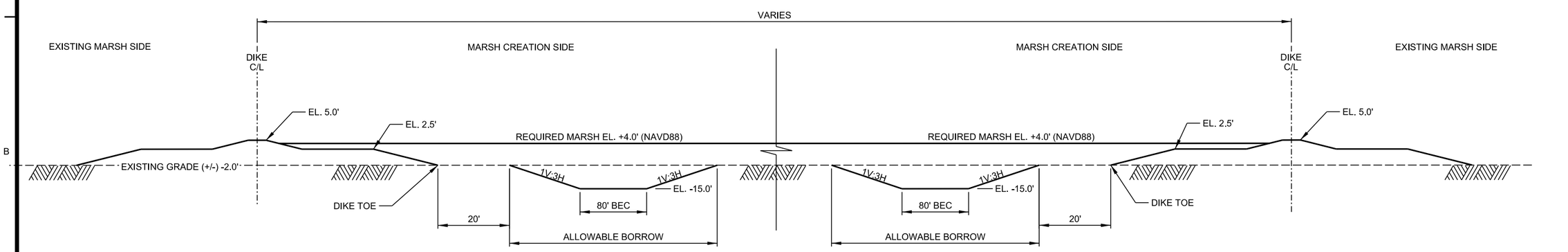
HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND THE BAYOU CHEVEE FLOOD SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-5 MARSH CREATION PLAN

SHEET IDENTIFICATION
C-05

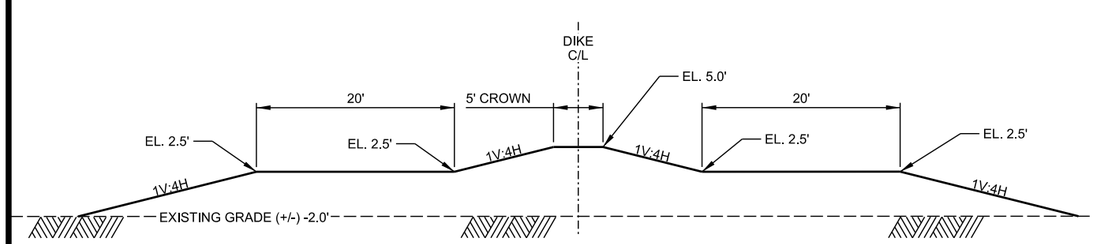


BSFS-5 ACCESS PLAN



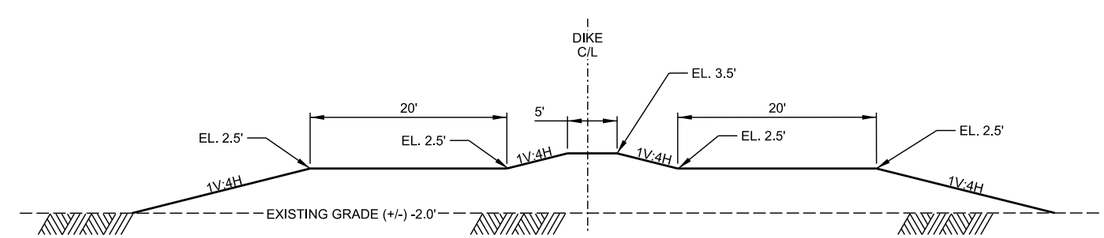
MARSH THEORETICAL SECTION (BSFS-5)

NTS



RETENTION DIKE THEORETICAL SECTION (BSFS-5)

NTS



CROSS DIKE THEORETICAL SECTION (BSFS-5)

NTS

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NEW ORLEANS DISTRICT

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NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

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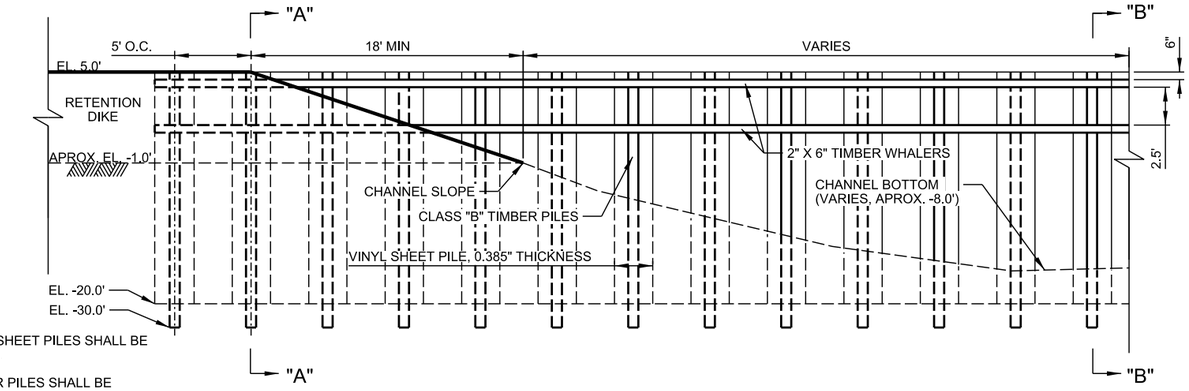
DWN BY: R.W.B./P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 2400:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-06
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-5 ACCESS PLAN AND THEORETICAL SECTIONS

SHEET IDENTIFICATION
C-06



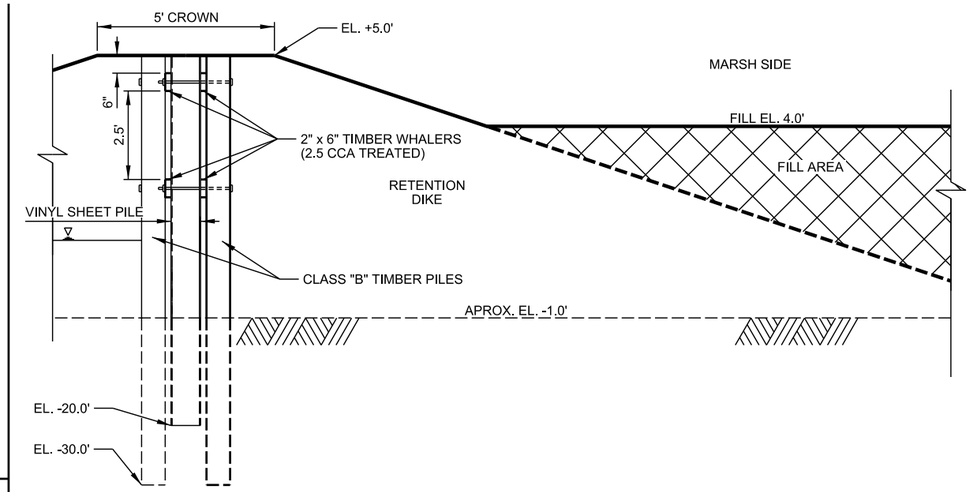
NOTES:

1) VINYL SHEET PILES SHALL BE 25' LONG.

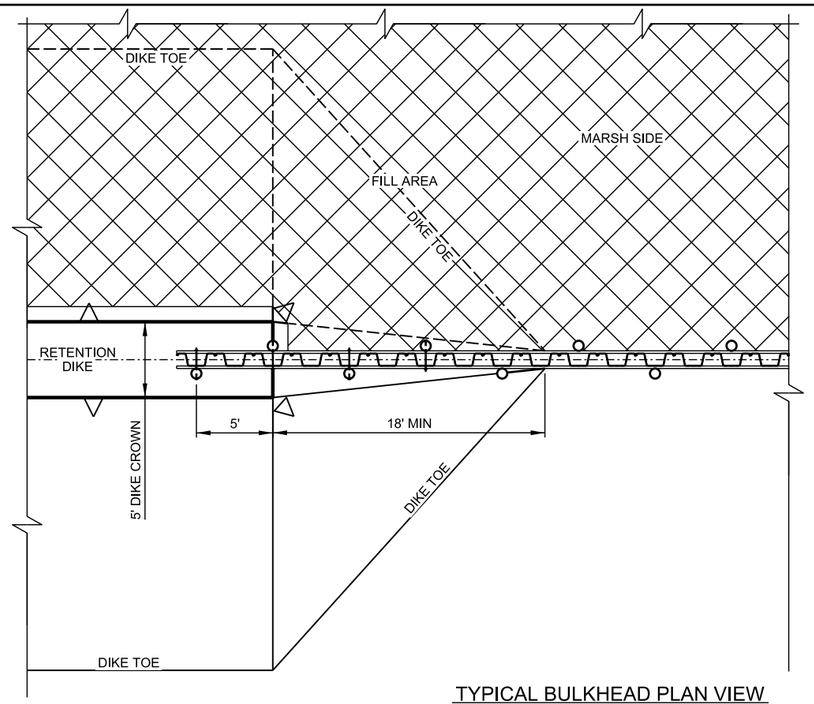
2) TIMBER PILES SHALL BE 35' LONG.

3) TIMBER PILES SHALL BE CLASS "B" CCA TREATED TIMBER PILINGS.

TYPICAL BULKHEAD PROFILE
NTS



TYPICAL SECTION "A"
NTS



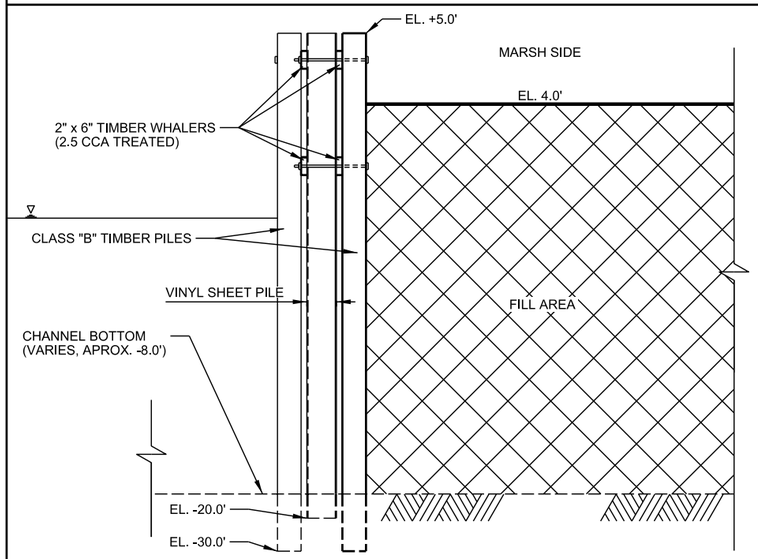
NOTES:

1) THE EARTHEN RETENTION DIKE SHALL TRANSITION AROUND THE BULKHEAD.

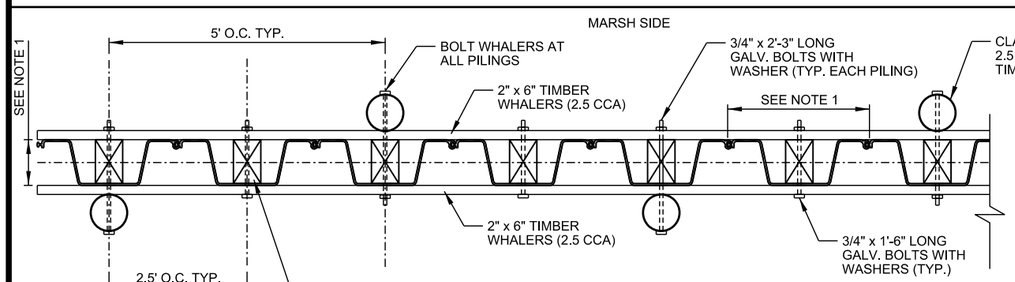
2) THE DIKE CROWN SHALL END WITH A MINIMUM OF TWO TIMBER PILES (5 LF) BURIED WITHIN THE CROWN. THE EDGE OF THE CROWN SHALL TRANSITION TO A MINIMUM OF 18LF TO THE EXISTING MARSH GRADE AT THE POINT THE CHANNEL SLOPES BEGIN.

3) EVERY OTHER TIMBER PILE SHALL BE ON THE OPPOSITE SITE OF THE BULK HEAD OF THE PREVIOUS TIMBER PILE.

TYPICAL BULKHEAD PLAN VIEW
NTS



TYPICAL SECTION "B"
NTS

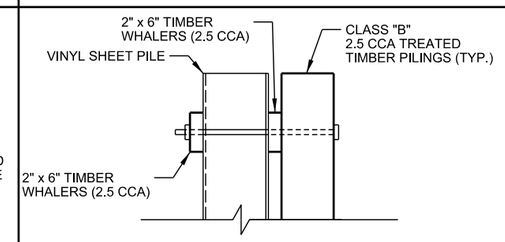


NOTES:

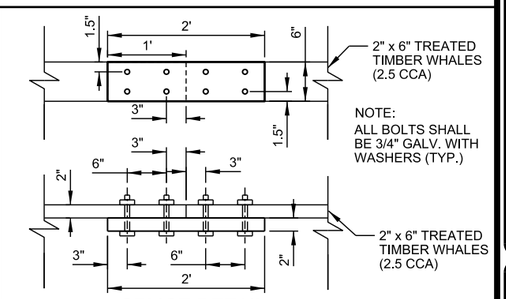
1) SECTION HORIZONTAL DEPTH AND WIDTH SHALL DEPEND ON VINYL PILE SELECTED BY THE CONTRACTOR.

2) VINYL SHEET PILE SHALL HAVE 0.385" THICKNESS.

BULKHEAD DETAIL
NTS



TIMBER WHALER DETAIL
NTS



NOTE:
ALL BOLTS SHALL BE 3/4" GALV. WITH WASHERS (TYP.)

SPLICE DETAIL
NTS

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

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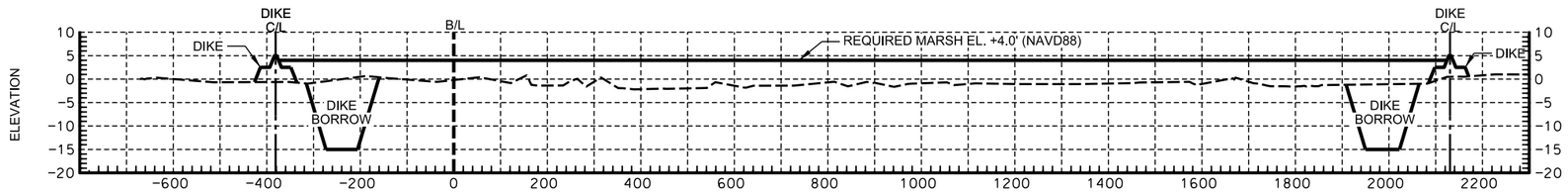
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAN
PLOT SCALE:
PLOT DATE: MARCH 2015
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-#####
CONTRACT NO.: W912P8-15-C-#####
FILE NUMBER: H16-#####
SIZE: ANSI D
FILE NAME: H:16-#####B-C-07

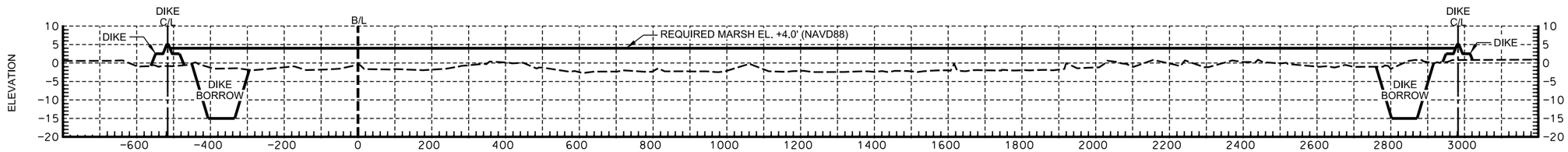
HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH
RESTORATION AND TURTLE BAYOU OFFSET FLOOD
SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-5 BULKHEAD DETAILS

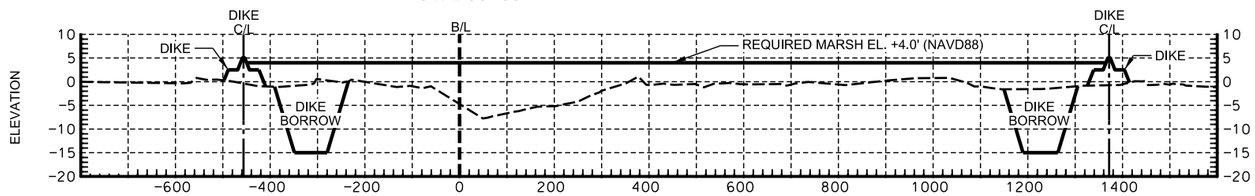
SHEET IDENTIFICATION
C-07



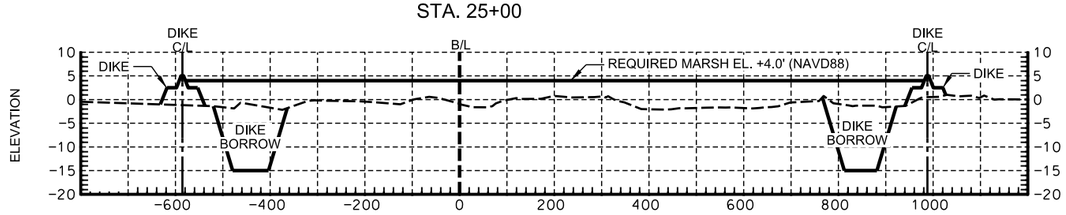
STA. 45+00



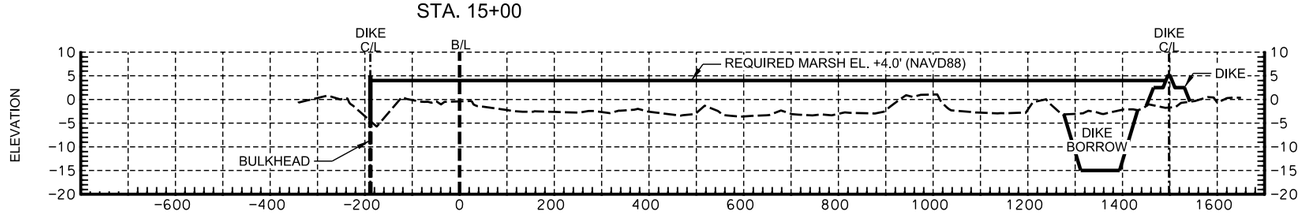
STA. 35+00



STA. 25+00



STA. 15+00



STA. 5+00

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

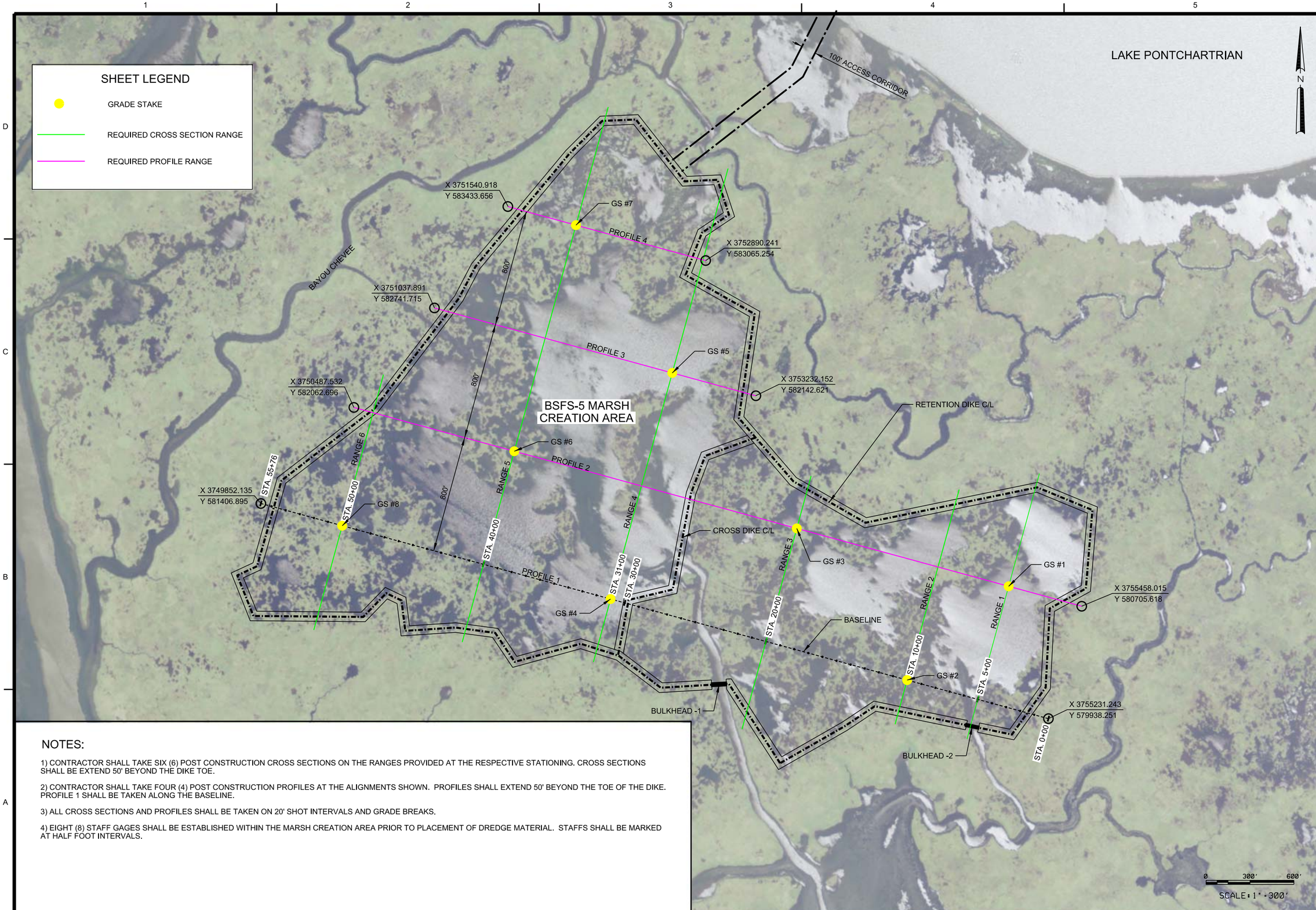
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.L.OR.W.B.P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
DATE: MARCH 2015
SOLICITATION NO.: W912PS-15-B-####
CONTRACT NO.: W912PS-15-C-####
PLOT SCALE: NOTED
PLOT DATE: MARCH 2015
FILE NUMBER: H-15-47845
SIZE: ANSI D
FILE NAME: H-15-47845-C-08

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-5 CROSS SECTIONS

SHEET IDENTIFICATION
C-08



NOTES:

1) CONTRACTOR SHALL TAKE SIX (6) POST CONSTRUCTION CROSS SECTIONS ON THE RANGES PROVIDED AT THE RESPECTIVE STATIONING. CROSS SECTIONS SHALL BE EXTEND 50' BEYOND THE DIKE TOE.

2) CONTRACTOR SHALL TAKE FOUR (4) POST CONSTRUCTION PROFILES AT THE ALIGNMENTS SHOWN. PROFILES SHALL EXTEND 50' BEYOND THE TOE OF THE DIKE. PROFILE 1 SHALL BE TAKEN ALONG THE BASELINE.

3) ALL CROSS SECTIONS AND PROFILES SHALL BE TAKEN ON 20' SHOT INTERVALS AND GRADE BREAKS.

4) EIGHT (8) STAFF GAGES SHALL BE ESTABLISHED WITHIN THE MARSH CREATION AREA PRIOR TO PLACEMENT OF DREDGE MATERIAL. STAFFS SHALL BE MARKED AT HALF FOOT INTERVALS.

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MARK	DESCRIPTION	DATE	APPR.

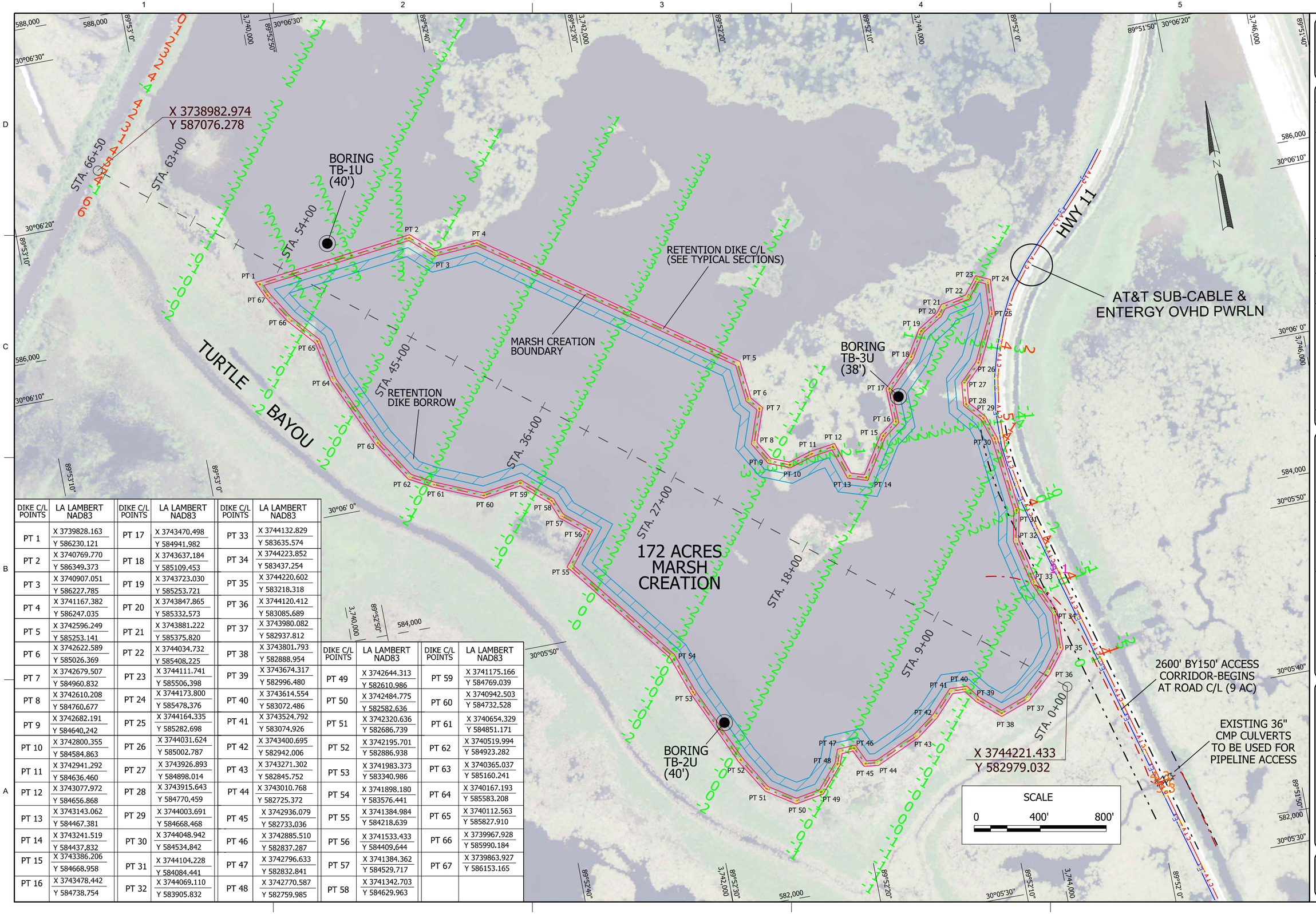
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.O/R.W.B./P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
PLOT SCALE: 3600:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-05
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BSFS-5 SURVEY PLAN

SHEET IDENTIFICATION
C-09



DIKE C/L POINTS	LA LAMBERT NAD83	DIKE C/L POINTS	LA LAMBERT NAD83	DIKE C/L POINTS	LA LAMBERT NAD83
PT 1	X 3739828.163 Y 586230.121	PT 17	X 3743470.498 Y 584941.982	PT 33	X 3744132.829 Y 583635.574
PT 2	X 3740769.770 Y 586349.373	PT 18	X 3743637.184 Y 585109.453	PT 34	X 3744223.852 Y 583437.254
PT 3	X 3740907.051 Y 586227.785	PT 19	X 3743723.030 Y 585253.721	PT 35	X 3744220.602 Y 583218.318
PT 4	X 3741167.382 Y 586247.035	PT 20	X 3743847.865 Y 585332.573	PT 36	X 3744120.412 Y 583085.689
PT 5	X 3742596.249 Y 585253.141	PT 21	X 3743881.222 Y 585375.820	PT 37	X 3743980.082 Y 582937.812
PT 6	X 3742622.589 Y 585026.369	PT 22	X 3744034.732 Y 585408.225	PT 38	X 3743801.793 Y 582888.954
PT 7	X 3742679.507 Y 584960.832	PT 23	X 3744111.741 Y 585506.398	PT 39	X 3743674.317 Y 582996.480
PT 8	X 3742610.208 Y 584760.677	PT 24	X 3744173.800 Y 585478.376	PT 40	X 3743614.554 Y 583072.486
PT 9	X 3742682.191 Y 584640.242	PT 25	X 3744164.335 Y 585282.698	PT 41	X 3743524.792 Y 583074.926
PT 10	X 3742800.355 Y 584584.863	PT 26	X 3744031.624 Y 585002.787	PT 42	X 3743400.695 Y 582942.006
PT 11	X 3742941.292 Y 584636.460	PT 27	X 3743926.893 Y 584898.014	PT 43	X 3743271.302 Y 582845.752
PT 12	X 3743077.972 Y 584656.868	PT 28	X 3743915.643 Y 584770.459	PT 44	X 3743010.768 Y 582725.372
PT 13	X 3743143.062 Y 584467.381	PT 29	X 3744003.691 Y 584668.468	PT 45	X 3742936.079 Y 582733.036
PT 14	X 3743241.519 Y 584437.832	PT 30	X 3744048.942 Y 584534.842	PT 46	X 3742885.510 Y 582837.287
PT 15	X 3743386.206 Y 584668.958	PT 31	X 3744104.228 Y 584084.441	PT 47	X 3742796.633 Y 582832.841
PT 16	X 3743478.442 Y 584738.754	PT 32	X 3744069.110 Y 583905.832	PT 48	X 3742770.587 Y 582759.985

DIKE C/L POINTS	LA LAMBERT NAD83	DIKE C/L POINTS	LA LAMBERT NAD83
PT 49	X 3742644.313 Y 582610.986	PT 59	X 3741175.166 Y 584769.039
PT 50	X 3742484.775 Y 582582.636	PT 60	X 3740942.503 Y 584732.528
PT 51	X 3742320.636 Y 582686.739	PT 61	X 3740654.329 Y 584851.171
PT 52	X 3742195.701 Y 582886.938	PT 62	X 3740519.994 Y 584923.282
PT 53	X 3741983.373 Y 583340.986	PT 63	X 3740365.037 Y 585160.241
PT 54	X 3741898.180 Y 583576.441	PT 64	X 3740167.193 Y 585583.208
PT 55	X 3741384.984 Y 584218.639	PT 65	X 3740112.563 Y 585827.910
PT 56	X 3741533.433 Y 584409.644	PT 66	X 3739967.928 Y 585990.184
PT 57	X 3741384.362 Y 584529.717	PT 67	X 3739863.927 Y 586153.165
PT 58	X 3741342.703 Y 584629.963		

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.D.R.W.B.J.P.R.G.
DWN BY: R.W.B./ P.R.G./ R.V.B.
CKD BY: R.V.B.
SUBMITTED BY: KEITH J. COLAN
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
PLOT SCALE: 1:1
PLOT DATE: MARCH 2015
FILE NUMBER: H-15-07268
SIZE: ANSI D
FILE NAME: 14-15-07846-C-10

HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAY OFFSET FLOOD SIDE INTERMEDIATE MARSH RESTORATION, ORLEANS PARISH, LA.

TURTLE BAYOU NORTH (TBN) MARSH CREATION PLAN

SHEET IDENTIFICATION
C-10

LAKE PONTCHARTRAIN

EAST LAKE PONTCHARTRAIN

172 ACRE MARSH CREATION SITE

LAKE PONTCHARTRAIN BORROW AREA

MIN 2,000' TO BORROW

I-10

HWY 11

BAYOU SAUVAGE/ IRISH BAYOU CANAL

STUMP BAYOU

TURTLE BAYOU

EXISTING FORESHORE DIKE

X 3753154.541
Y 589221.427

X 3753601.742
Y 589265.198

X 3752412.157
Y 587337.891

X 3751839.427
Y 586891.265

400' WIDE P/L ACCESS AND STAGING CORRIDOR

X 3752085.404
Y 586575.836

X 3752744.250
Y 587089.617

DREDGE PIPELINE TO ACCESS SITE FROM LAKE VIA AN EXISTING GAP IN THE FORESHORE DIKE
APPROX LOCATION OF GAP:
X=3752048.52
Y=586858.61
ELEV. -3.6' NAVD88
NO EXCAVATION ALLOWED FOR PIPELINE ACCESS

TBM "TURTLE BAYOU"

SEE INSET

BAYOU CHEVEE

TEMPORARY DREDGE PIPELINE ACCESS TO BE WITHIN BANKS OF WATERWAYS, BAYS, CANALS, ETC IN ORDER TO MINIMIZE IMPACTS TO WETLANDS. EXCAVATION FOR ACCESS IS NOT PERMITTED.

A 100' WIDE ACCESS CORRIDOR (50' EACH SIDE OF THE C/L WHICH SHALL BE ALIGNED SO AS TO FOLLOW EXISTING WATERWAYS AND MINIMIZE IMPACTS TO WETLANDS) WILL BE ALLOWED BETWEEN IRISH BAYOU CANAL AND THE HWY 11 DRAINAGE CANAL.

C/L OF LEVEE

CHICO LAGOON

0 2000' 4000'
SCALE

INSET
NTS

AT&T SUB-CABLE & ENTERGY OVHD PWRLN

2600'L BY 150'W CORRIDOR ADJACENT TO AND WEST OF HWY 11 FOR STAGING AND ACCESS OF DREDGE PIPELINE AND EQUIPMENT. CORRIDOR BEGINS AT ROAD C/L AND EXTENDS 150' WEST OF HWY 11 CENTERLINE. SOUTH END OF CORRIDOR BEGINS 125' SOUTH OF CMP LOCATIONS TO BE USED FOR PIPELINE ACCESS. A BOARD ROAD SHALL BE INSTALLED PRIOR TO OFFLOADING OF EQUIPMENT AND PIPELINE, AND SHALL BE BACKFILLED WITH 1-2' OF FILL AS NEEDED TO RESTORE THE MARSH CORRIDOR TO PRE-EXISTING CONDITION.

C/L OF LEVEE

BAYOU SAUVAGE/ IRISH BAYOU CANAL

TBM "TURTLE BAYOU" (TO BE USED FOR VERTICAL CONTROL)
X=3746600.75
Y=584003.92

EXISTING 36" CMP CULVERTS UNDER HWY 11 TO BE USED FOR PIPELINE ACCESS
X=3744705.752
Y= 582312.665

TEMPORARY DREDGE PIPELINE ACCESS TO BE WITHIN BANKS OF IRISH BAYOU CANAL, AS WELL AS ALL OTHER NATURAL WATERWAYS TO THE MAXIMUM EXTENT POSSIBLE IN ORDER TO MINIMIZE IMPACTS TO WETLANDS.

1300'L BY 115'W ACCESS CORRIDOR EAST OF ROAD C/L AND ENDING AT EAST BANK OF CANAL. CORRIDOR EXTENDS 125' NORTH OF CMP LOCATIONS FOR PIPELINE ACCESS

10' WIDE CRUSHED STONE BYPASS ROAD (1"-2" THICK) FOR VEHICULAR ACCESS ALONG LEVEE. ROAD TO BE NO CLOSER THAT 10' FROM PROTECTED SIDE SLOPE OF LEVEE. A MINIMUM 1' OF STONE TO BE MAINTAINED OVER THE DREDGE PIPELINE, AT A 10' CROWN AND APPROACH SLOPES NO STEEPER THAN 1V ON 20H.

LEVEE BERM

LEVEE C/L W/10' CROWN

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

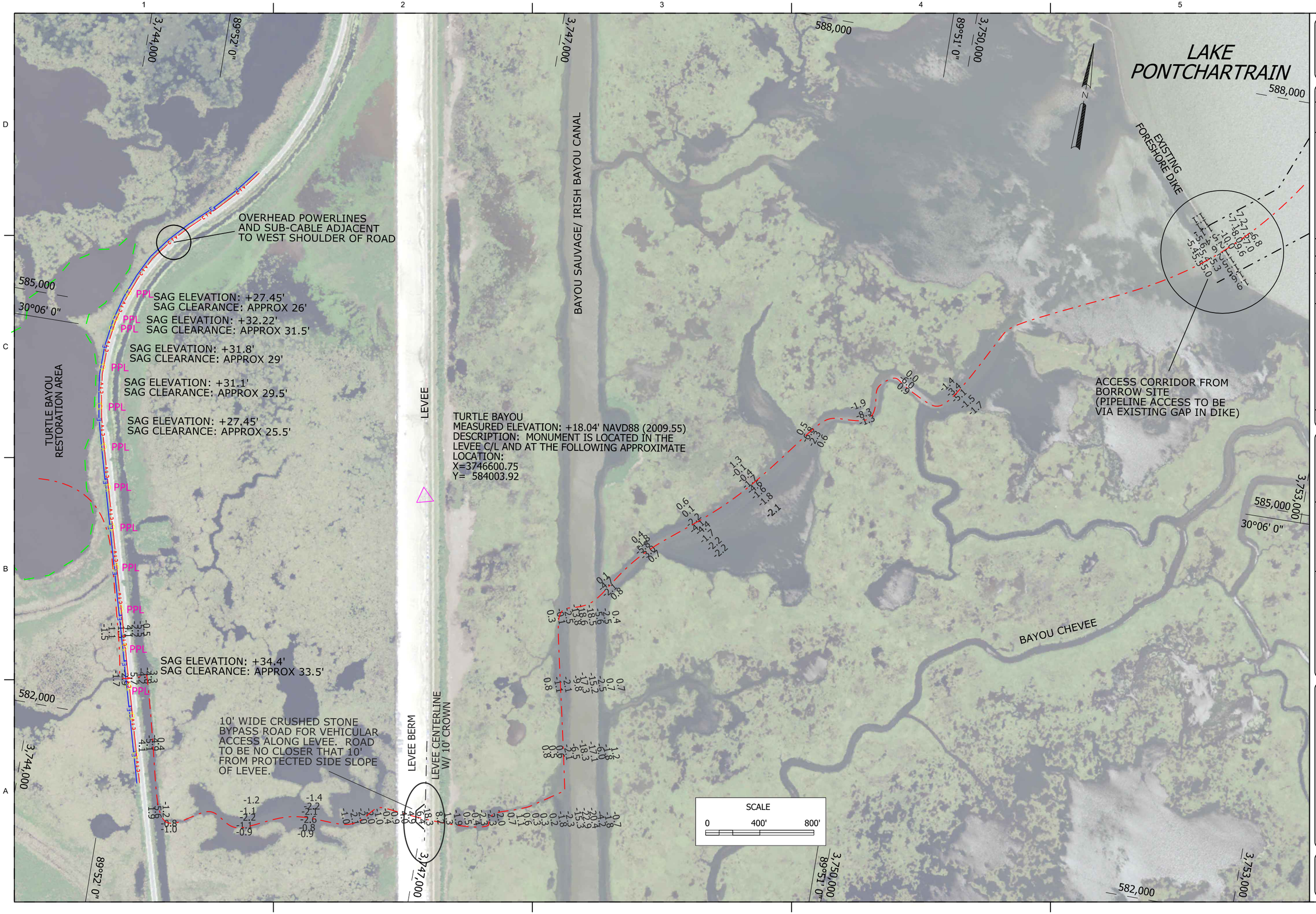
DESIGNED BY: RWB
DWN BY: RWB
CKD BY: KJO
SUBMITTED BY: KEITH O'CANN
DATE: MARCH 2015
SOLICITATION NO.:
CONTRACT NO.:
PLOT DATE: 7/27/2015
PLOT SCALE: 1:3000
FILE NUMBER: H-16-47846
SIZE: ANSI D
FILE NAME: H:\16-47846-C-11_TBN_ACCESS PLAN.DGN

HSDRRS - LPV MITIGATION

BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH, LA

TURTLE BAYOU ACCESS PLAN

SHEET IDENTIFICATION
C-11



US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

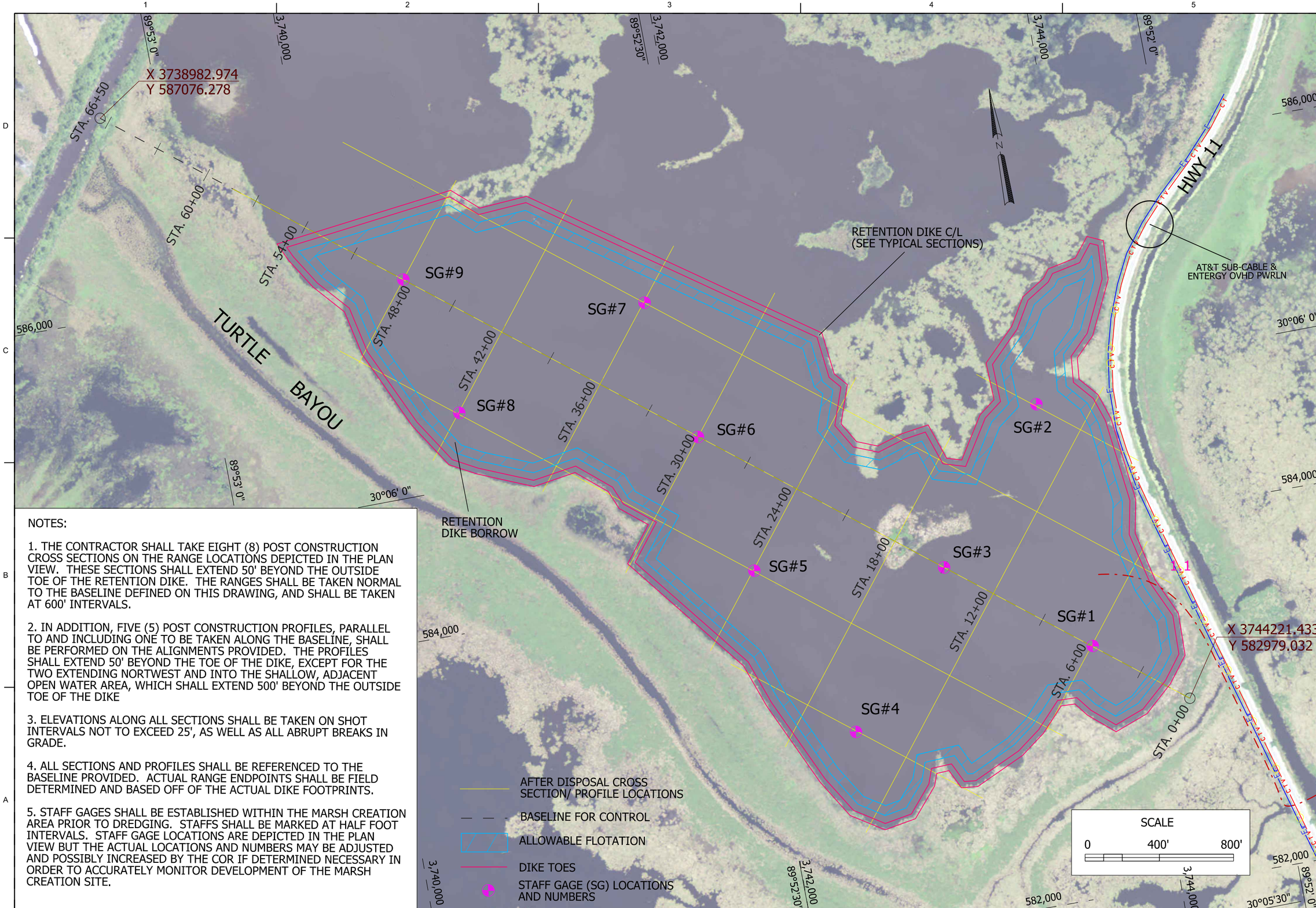
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: RWB
DWN BY: RWB
CKD BY: KJO
SUBMITTED BY: KEITH O'CAIN
PLOT SCALE: 1:20,000
PLOT DATE: 2/23/2016
DATE: MARCH 2015
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
H-16-47846
SIZE: ANSI D
FILE NAME: H-16-47846-C-12 TBN ACCESS SURVEYS.DGN

HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH, LA

TURTLE BAYOU ACCESS SURVEYS

SHEET IDENTIFICATION
C-12



NOTES:

1. THE CONTRACTOR SHALL TAKE EIGHT (8) POST CONSTRUCTION CROSS SECTIONS ON THE RANGE LOCATIONS DEPICTED IN THE PLAN VIEW. THESE SECTIONS SHALL EXTEND 50' BEYOND THE OUTSIDE TOE OF THE RETENTION DIKE. THE RANGES SHALL BE TAKEN NORMAL TO THE BASELINE DEFINED ON THIS DRAWING, AND SHALL BE TAKEN AT 600' INTERVALS.

2. IN ADDITION, FIVE (5) POST CONSTRUCTION PROFILES, PARALLEL TO AND INCLUDING ONE TO BE TAKEN ALONG THE BASELINE, SHALL BE PERFORMED ON THE ALIGNMENTS PROVIDED. THE PROFILES SHALL EXTEND 50' BEYOND THE TOE OF THE DIKE, EXCEPT FOR THE TWO EXTENDING NORTWEST AND INTO THE SHALLOW, ADJACENT OPEN WATER AREA, WHICH SHALL EXTEND 500' BEYOND THE OUTSIDE TOE OF THE DIKE

3. ELEVATIONS ALONG ALL SECTIONS SHALL BE TAKEN ON SHOT INTERVALS NOT TO EXCEED 25', AS WELL AS ALL ABRUPT BREAKS IN GRADE.

4. ALL SECTIONS AND PROFILES SHALL BE REFERENCED TO THE BASELINE PROVIDED. ACTUAL RANGE ENDPOINTS SHALL BE FIELD DETERMINED AND BASED OFF OF THE ACTUAL DIKE FOOTPRINTS.

5. STAFF GAGES SHALL BE ESTABLISHED WITHIN THE MARSH CREATION AREA PRIOR TO DREDGING. STAFFS SHALL BE MARKED AT HALF FOOT INTERVALS. STAFF GAGE LOCATIONS ARE DEPICTED IN THE PLAN VIEW BUT THE ACTUAL LOCATIONS AND NUMBERS MAY BE ADJUSTED AND POSSIBLY INCREASED BY THE COR IF DETERMINED NECESSARY IN ORDER TO ACCURATELY MONITOR DEVELOPMENT OF THE MARSH CREATION SITE.

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MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

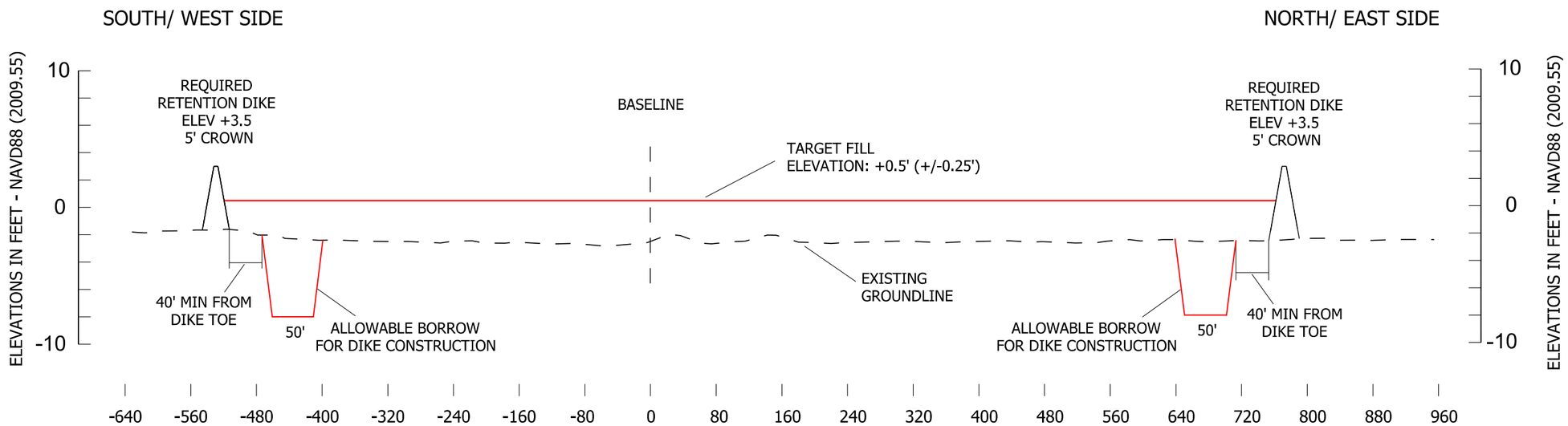
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: RWB
DWN BY: RWB
CKD BY: KJD
SUBMITTED BY: R. BROUSSARD
PLOT SCALE: 236.5
PLOT DATE: 3/17/2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-13 TBN MARSH SURVEY PLAN.DGN
DATE: MARCH 2015
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER: H-16-47848

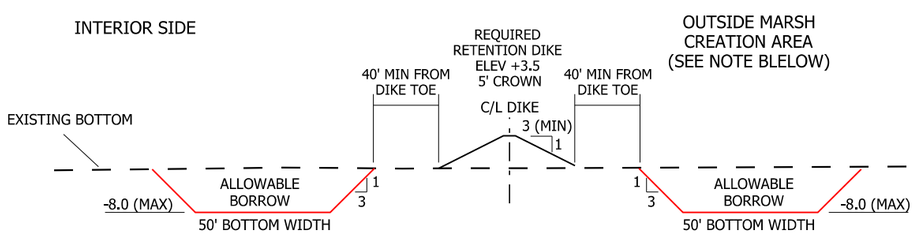
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU PROTECTED SIDE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH, LA

TURTLE BAYOU MARSH CREATION SURVEY PLAN

SHEET IDENTIFICATION
C-13

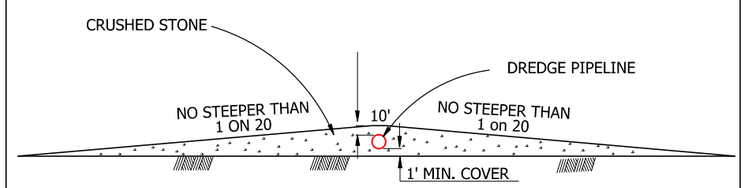


THEORETICAL SECTION
TURTLE BAYOU MARSH CREATION
(NTS)



THEORETICAL RETENTION DIKE / BORROW SECTION
(NTS)

NOTE:
BORROW FOR RETENTION DIKES TO BE CONSTRUCTED, BETWEEN DIKE C/L POINTS 1 AND 2, AND POINTS 4 AND 5, MAY BE OBTAINED FROM EITHER WITHIN OR OUTSIDE THE MARSH CREATION DIKE.



THEORETICAL SECTION OF PIPELINE
CROSSING LEVEE
(SAME CRITERIA WOULD APPLY TO CROSSING
UNDER ACCESS ROAD ON PROTECTED SIDE OF LEVEE)

NOTE: AT THIS TIME, PLANS ARE BEING ASSESSED TO DETERMINE WHETHER OR NOT A PIPELINE CROSSING WITH RAMP ALONG THE HSDRRS HURRICANE PROTECTION LEVEE WILL BE ALLOWED. IF NOT, THEN A CRUSHED STONE ACCESS ROAD ALONG THE PROTECTED SIDE BERME OF THE LEVEE, WILL BE REQUIRED. THIS IS CURRENTLY BEIN EVALUATED BY THE DISTRICT AND WILL BE FINALIZED FOR 95% SUBMITTAL.

THE CONTRACTOR SHALL SUBMIT, FOR REVIEW AND APPROVAL, A DETAILED PLAN, INCLUDING A CROSS SECTION OF HIS/HERS PROPOSED RAMP TO RUN OVER/ ACROSS THE DISCHARGE PIPELINE. WHILE INSTALLING THE RAMP, AS WELL AS ANY MATS ALONG THE SLOPES AND TOES OF THE LEVEE, CAUTION SHALL BE TAKEN TO PREVENT DAMAGE TO THE LEVEE. WHILE IN PLACE, THE RAMP SHALL ALSO BE MONITORED AND MAINTAINED DAILY BY THE CONTRACTOR IN ORDER TO ASSURE SAFE AND UNIMPEDED ACCESS ALONG THE LEVEE FOR CORPS AND OTHER PERSONNEL WHO MAY NEED TO TRAVERSE THE LEVEE. WORK ON THE LEVEE (CROWN, SLOPES AND BERMS), INCLUDING ACCESS, SHALL BE RESTRICTED ONLY TO WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF THE DREDGE PIPELINE AND NOT FOR DAILY ACCESS BY THE CONTRACTOR, OTHER THAN TO INSPECT, AND/OR MAKE REPAIRS TO THE DREDGE PIPELINE. UPON COMPLETION OF WORK, THE PIPELINE, RAMP AND MATS SHALL BE REMOVED AND THE LEVEE RESTORED TO PRE- CONSTRUCTION CONDITIONS.

NOTES:
1. ALL RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5' NAVD88(2009.55), AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. TOP OF CUT FOR BORROW OBTAINED FOR CONSTRUCTION OF RETENTION DIKES SHALL INITIATE NO CLOSER THAN 40' FROM THE INSIDE TOE OF THE DIKES. EXCAVATION FOR BORROW SHALL BE NO DEEPER THAN ELEVATION -8.0' NAVD88(2009.55) AND NOT EXCEEED 50' IN WIDTH AT THIS DEPTH. (SEE THEORETICAL RETENTION DIKE/ BORROW SECTION FOR FURTHER DETAILS)
4. THE TARGET ELEVATION OF THE DREDGE FILL AFTER INITIAL DEWATERING IS +0.5' (+/-0.25') NAVD88 (2009.55).

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

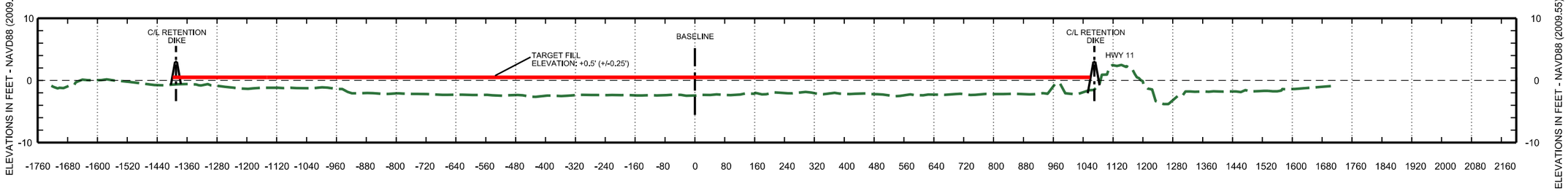
DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: K.J.O.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 1:1
PLOT DATE: 3/27/2015
SIZE: ANSI D
FILE NAME: H:\16-47898-C-14 TBN THEORETICAL-5.dgn
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47898

HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU PROTECTED SIDE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH
THEORETICAL SECTIONS - TURTLE BAYOU

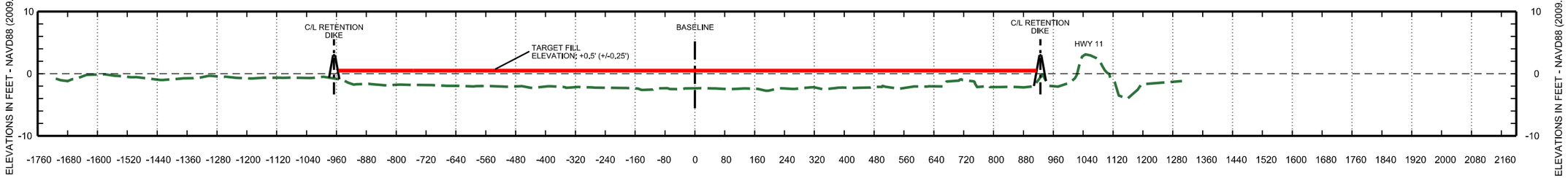
SHEET IDENTIFICATION
C-14

SOUTH/ WEST SIDE

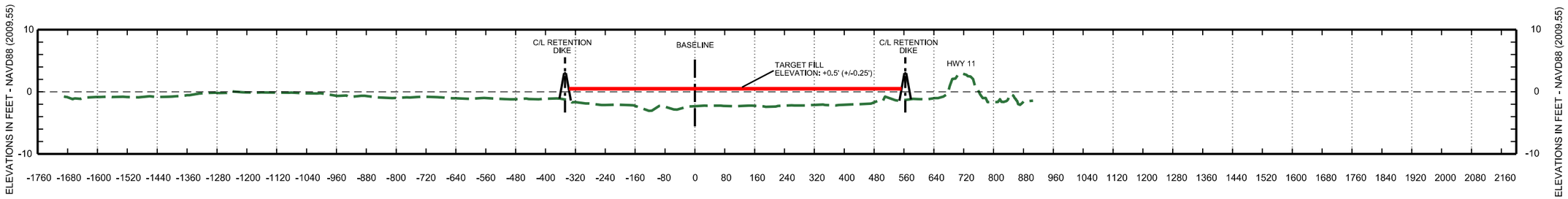
NORTH/ EAST SIDE



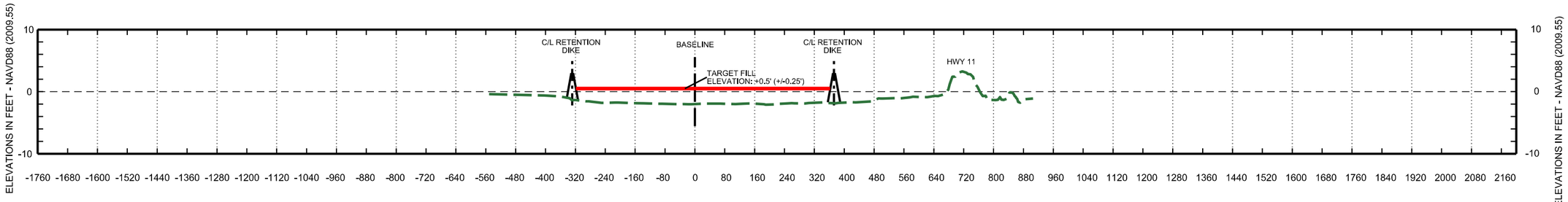
B/L STA. 12+00



B/L STA. 9+00



B/L STA. 6+00



B/L STA. 3+00

NOTES:
1. RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5', AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. STATIONING SHOWN IS IN REFERENCE TO THE PAPER BASELINE DEFINED ON THE TURTLE BAYOU PLAN OVERVIEW SHEET.
4. GROUNDLINES SHOWN ARE REFLECTIVE OF A SURVEY PERFORMED IN JULY 2014.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: K.J.O.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 200
PLOT DATE: 01/06/2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-15 TBN CROSS SECTION 1.dgn
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

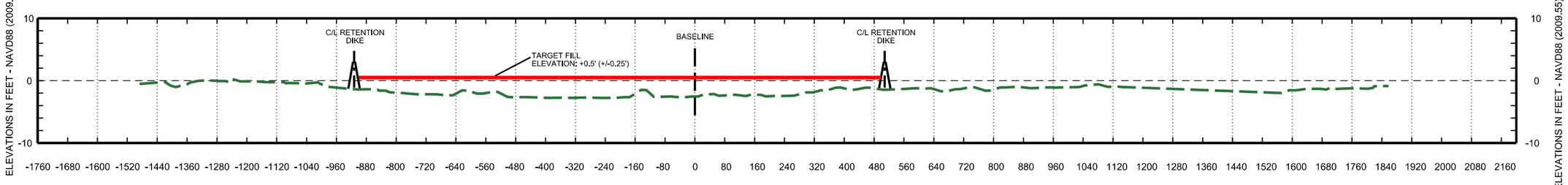
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU PROTECTED SIDE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH

TURTLE BAYOU CROSS SECTIONS

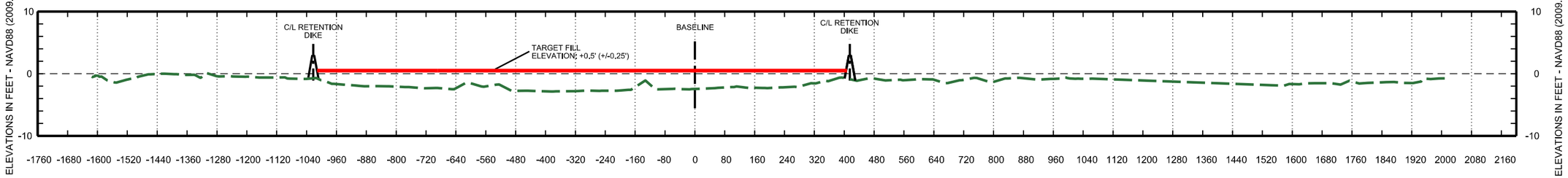
SHEET IDENTIFICATION
C-15

SOUTH/ WEST SIDE

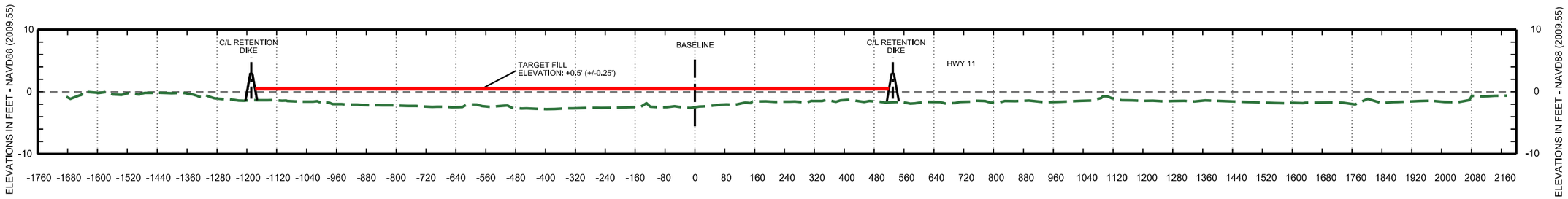
NORTH/ EAST SIDE



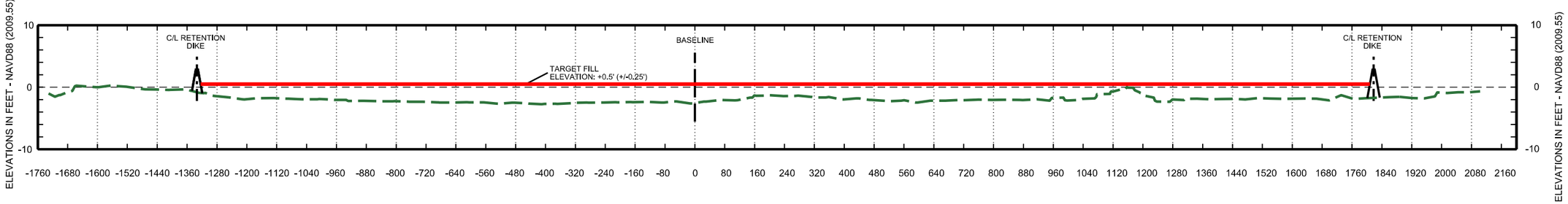
B/L STA. 24+00



B/L STA. 21+00



B/L STA. 18+00



B/L STA. 15+00

NOTES:
1. RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5', AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. STATIONING SHOWN IS IN REFERENCE TO THE PAPER BASELINE DEFINED ON THE TURTLE BAYOU PLAN OVERVIEW SHEET.
4. GROUNDLINES SHOWN ARE REFLECTIVE OF A SURVEY PERFORMED IN JULY 2014.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: K.J.O.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 200
PLOT DATE: 01/06/2015
SIZE: ANSI D
FILE NAME: H-16-47848-C-16 TBN CROSS SECTION 2.dgn
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

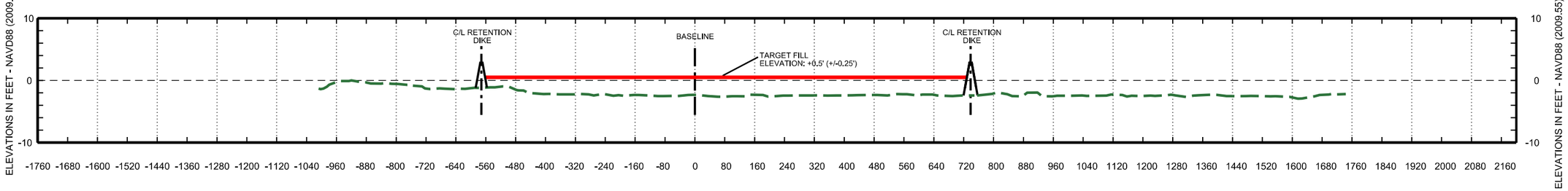
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU PROTECTED SIDE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH

TURTLE BAYOU CROSS SECTIONS

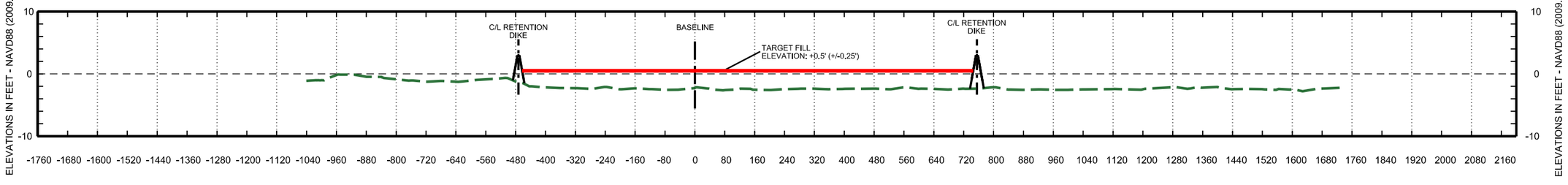
SHEET IDENTIFICATION
C-16

SOUTH/ WEST SIDE

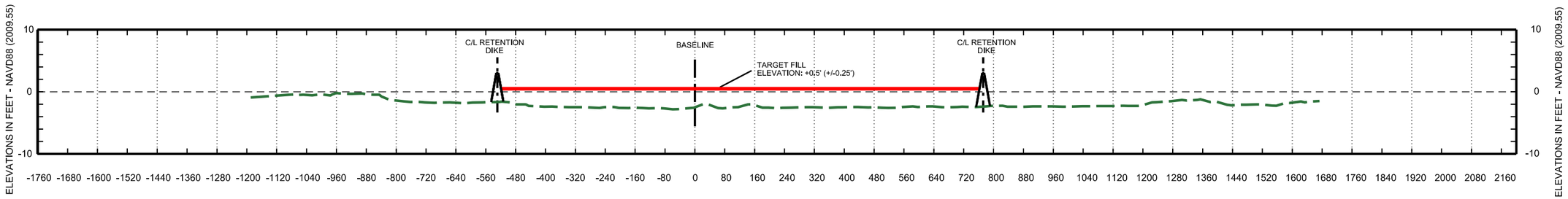
NORTH/ EAST SIDE



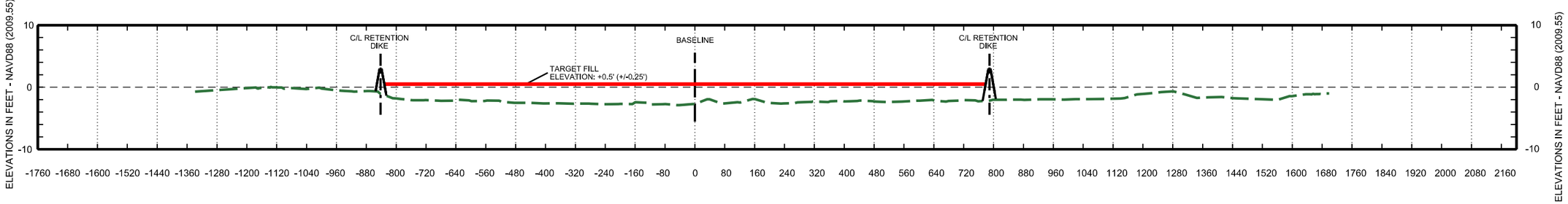
B/L STA. 36+00



B/L STA. 33+00



B/L STA. 30+00



B/L STA. 27+00

NOTES:
1. RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5', AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. STATIONING SHOWN IS IN REFERENCE TO THE PAPER BASELINE DEFINED ON THE TURTLE BAYOU PLAN OVERVIEW SHEET.
4. GROUNDLINES SHOWN ARE REFLECTIVE OF A SURVEY PERFORMED IN JULY 2014.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: K.J.O.
SUBMITTED BY: KEITH J. O'CAIN
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-14-29284
PLOT DATE: 10/19/2015
PLOT SCALE: 1:200
SIZE: ANSI D
FILE NAME: H-16-47948-C-17 TRN CROSS SECTION 3.dgn

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

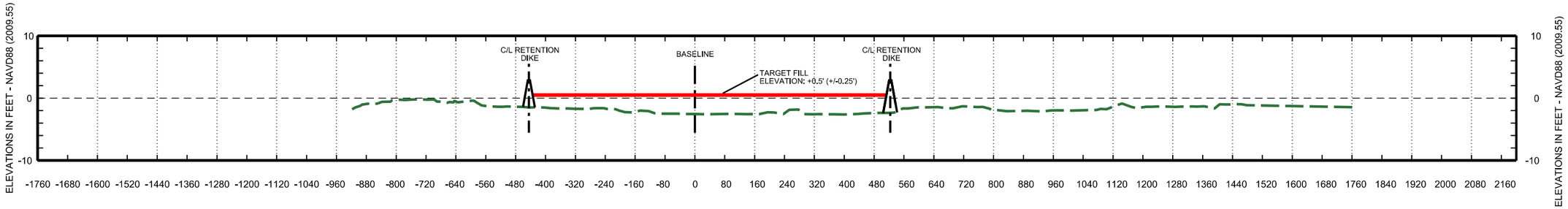
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU, BOUTTE, CITE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH

TURTLE BAYOU CROSS SECTIONS

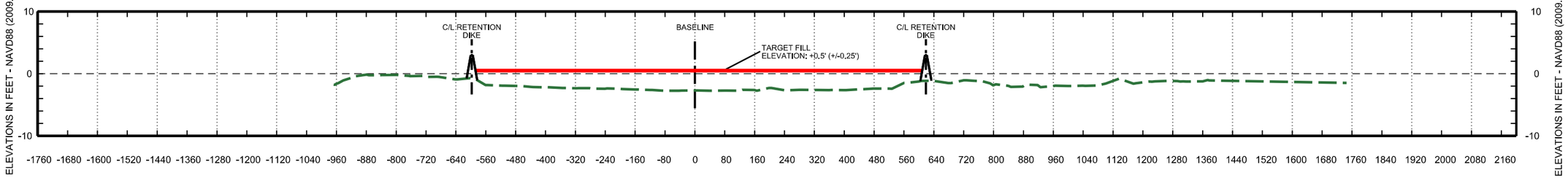
SHEET IDENTIFICATION
C-17

SOUTH/ WEST SIDE

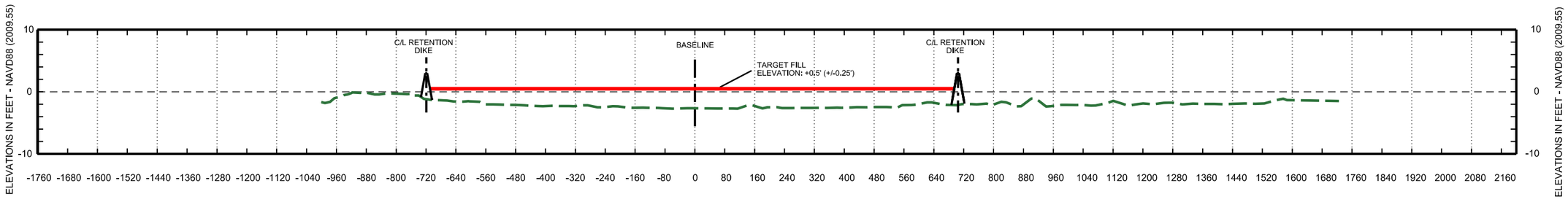
NORTH/ EAST SIDE



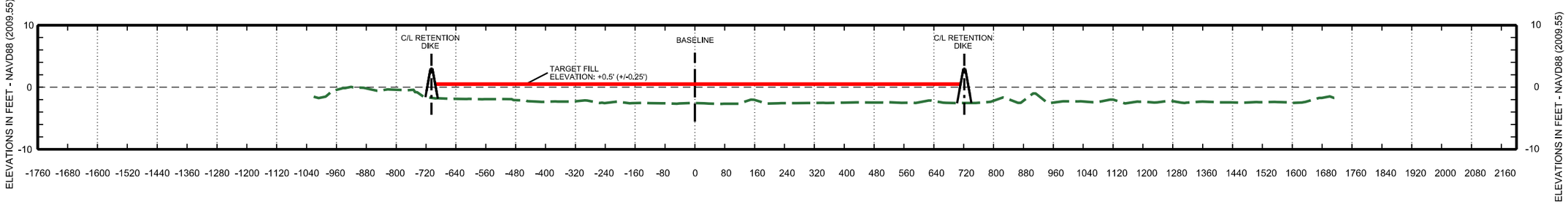
B/L STA. 48+00



B/L STA. 45+00



B/L STA. 42+00



B/L STA. 39+00

NOTES:
1. RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5', AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. STATIONING SHOWN IS IN REFERENCE TO THE PAPER BASELINE DEFINED ON THE TURTLE BAYOU PLAN OVERVIEW SHEET.
4. GROUNDLINES SHOWN ARE REFLECTIVE OF A SURVEY PERFORMED IN JULY 2014.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: C.J.D.
SUBMITTED BY: KEITH J. O'CAIN
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-14-29284
PLOT DATE: 10/19/2015
PLOT SCALE: 1:200
SIZE: ANSI D
FILE NAME: H-16-47948-C-18 TRN CROSS SECTION 4.dgn

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

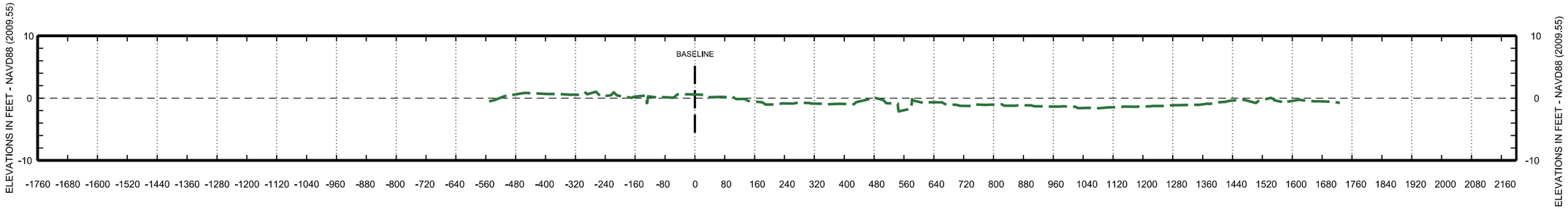
HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU RIDGE CREST
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH

TURTLE BAYOU CROSS SECTIONS

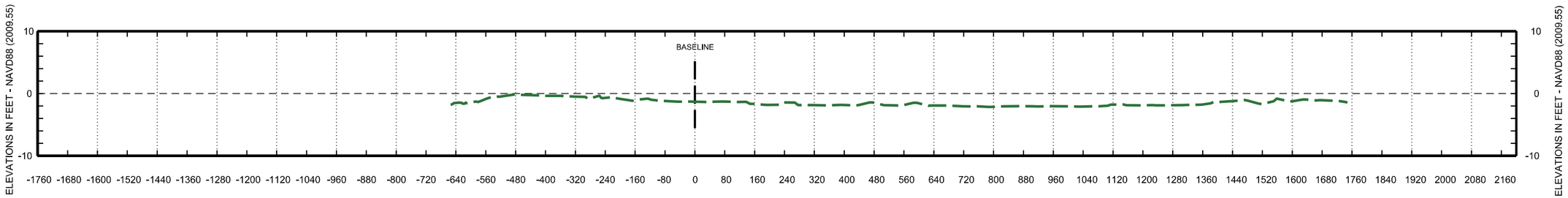
SHEET IDENTIFICATION
C-18

SOUTH/ WEST SIDE

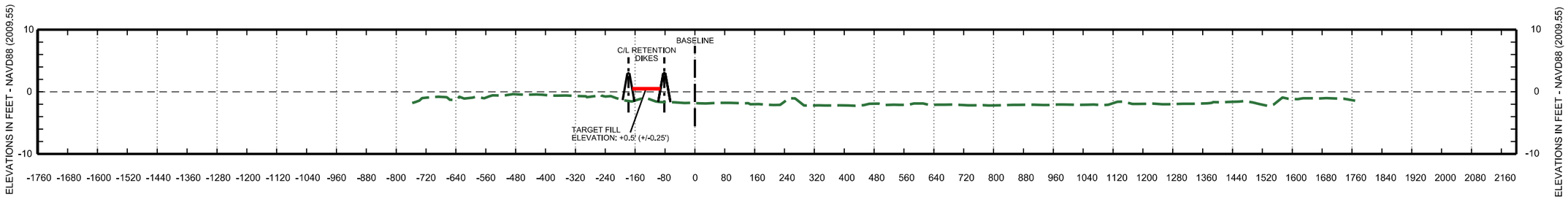
NORTH/ EAST SIDE



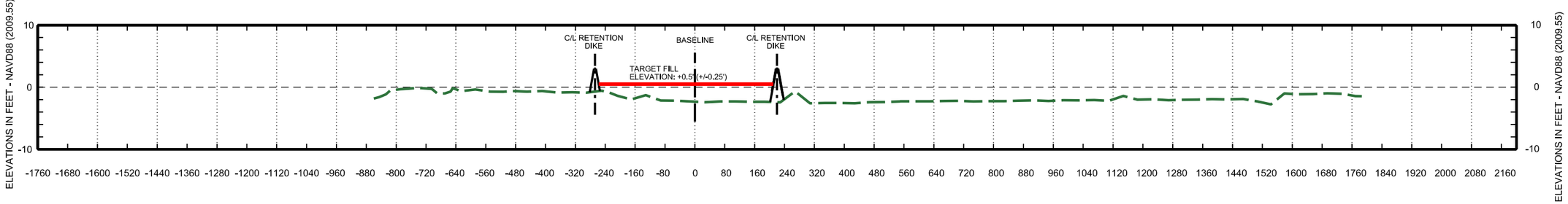
B/L STA. 60+00



B/L STA. 57+00



B/L STA. 54+00



B/L STA. 51+00

NOTES:
1. RETENTION DIKES SHALL BE CONSTRUCTED TO AN ELEVATION OF +3.5', AND A MIN CROWN WIDTH OF 5', AND SIDE SLOPES NO STEEPER THAN 1V ON 3H.
2. A FREE BOARD OF 1.5' TO 2' SHALL BE MAINTAINED AT ALL TIMES DURING PLACEMENT OF DREDGED MATERIAL.
3. STATIONING SHOWN IS IN REFERENCE TO THE PAPER BASELINE DEFINED ON THE TURTLE BAYOU PLAN OVERVIEW SHEET.
4. GROUNDLINES SHOWN ARE REFLECTIVE OF A SURVEY PERFORMED IN JULY 2014.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

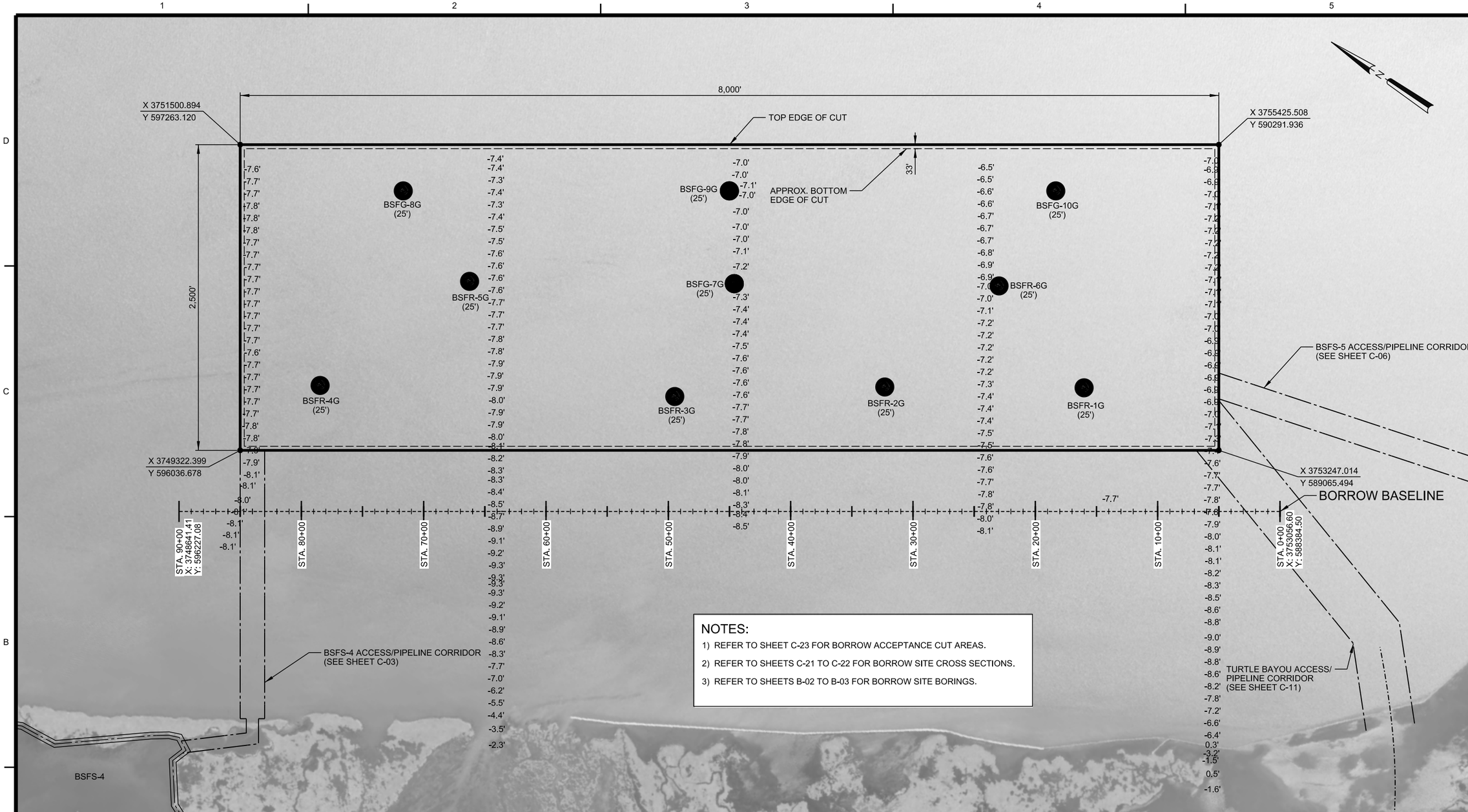
DESIGNED BY: R.W.B.
DWN BY: R.W.B.
CKD BY: C.J.D.
SUBMITTED BY: KEITH J. O'CAIN
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-14-029284
PLOT DATE: 10/19/2015
PLOT SCALE: 1:200
SIZE: ANSI D
FILE NAME: C-19 TRN CROSS SECTION 5.dgn

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

HSDRRS - LPV MITIGATION
BAYOU SAUVAGE FLOOD SIDE
BRACKISH MARSH RESTORATION, AND
TURTLE BAYOU PROTECTION, CPE
INTERMEDIATE MARSH RESTORATION
ORLEANS PARISH

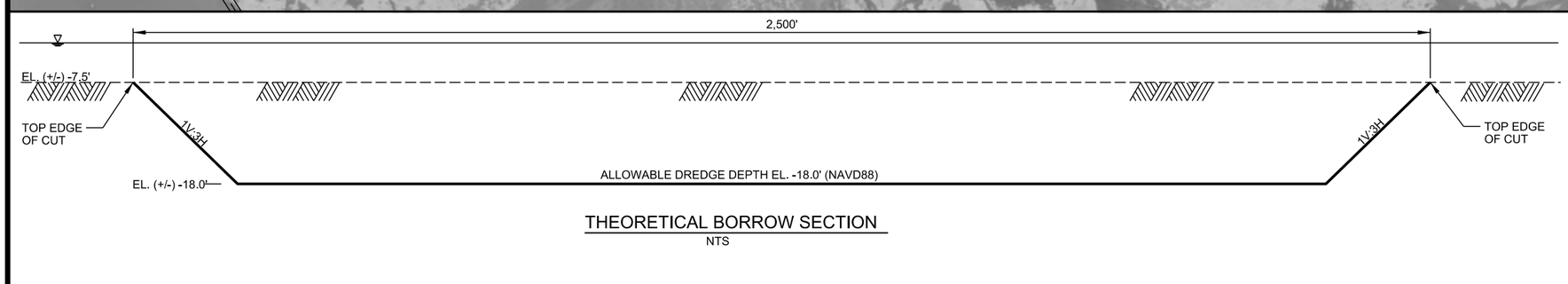
TURTLE BAYOU CROSS SECTIONS

SHEET IDENTIFICATION
C-19



NOTES:

1) REFER TO SHEET C-23 FOR BORROW ACCEPTANCE CUT AREAS.
2) REFER TO SHEETS C-21 TO C-22 FOR BORROW SITE CROSS SECTIONS.
3) REFER TO SHEETS B-02 TO B-03 FOR BORROW SITE BORINGS.



THEORETICAL BORROW SECTION

NTS

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

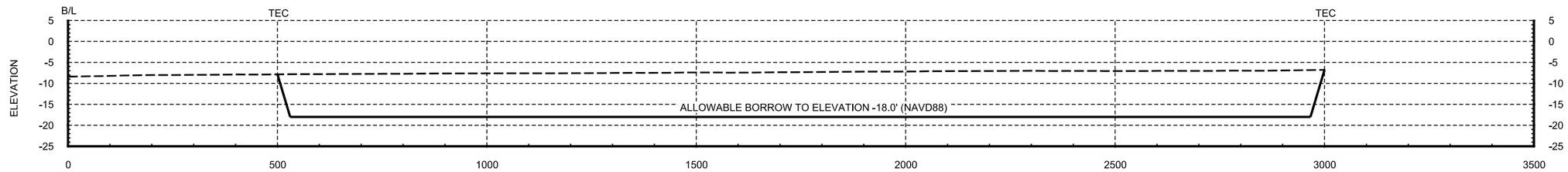
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.L.OR.W.B./P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
PLOT SCALE: AS SHOWN
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47845-C-20
DATE: MARCH 2015
SOLICITATION NO.: W912PS-15-B-####
CONTRACT NO.: W912PS-15-C-####
FILE NUMBER: H-16-47845

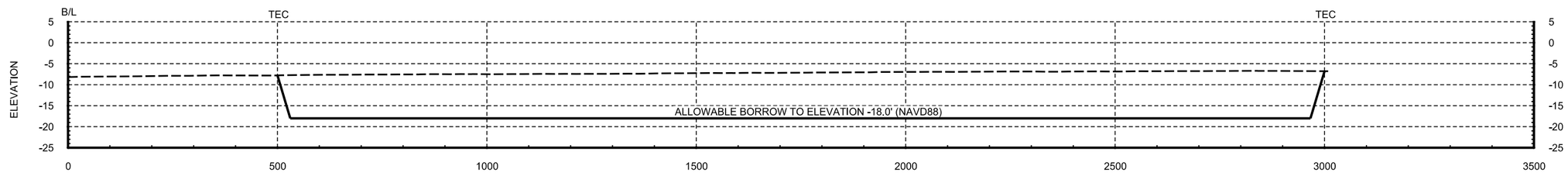
HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW PLAN

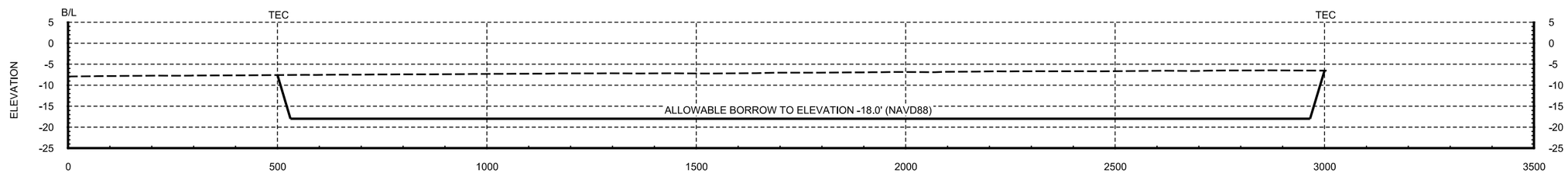
SHEET IDENTIFICATION
C-20



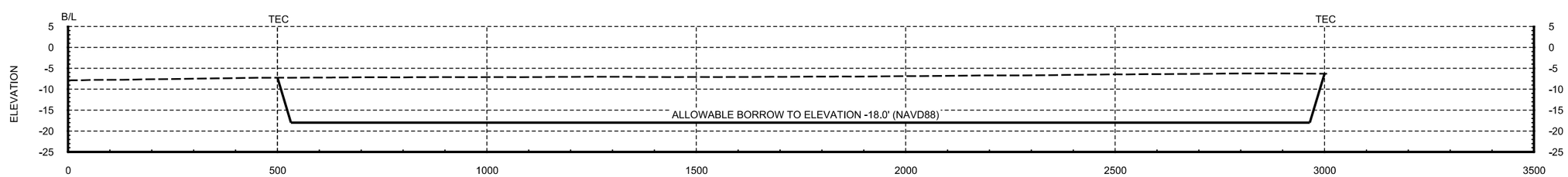
STA. 45+00



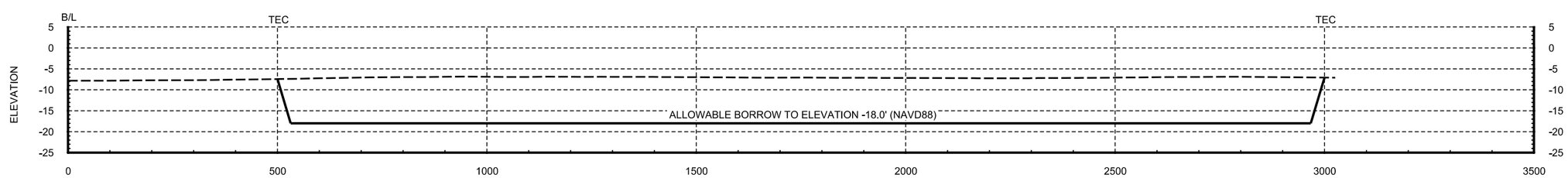
STA. 35+00



STA. 25+00



STA. 15+00



STA. 6+00

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

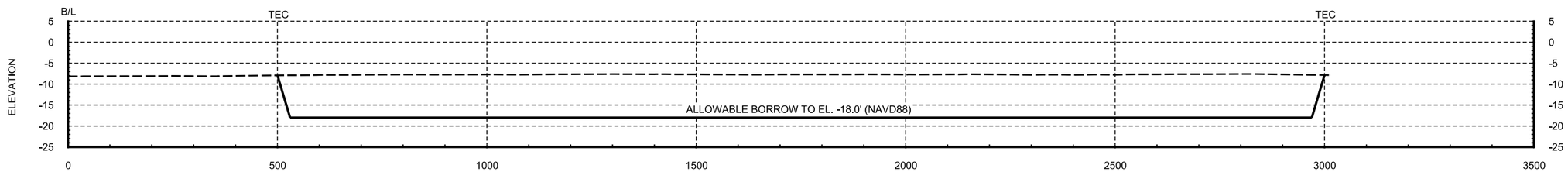
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.;DR;W.B;P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAN
PLOT SCALE: 1:500
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-15-47845-C-21
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-#####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-15-47845

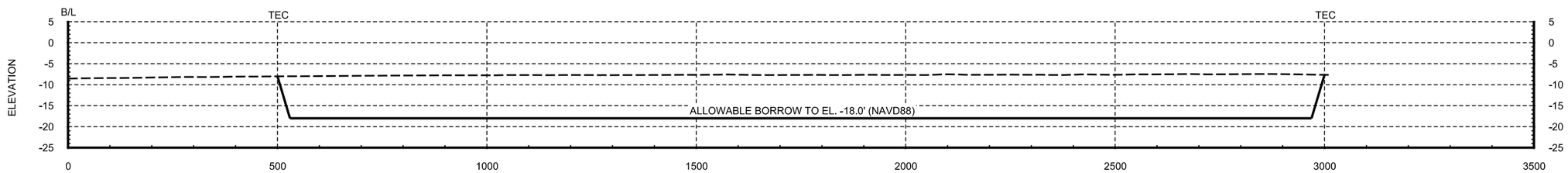
HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH
RESTORATION AND FRESH BOUTTE BOUTTE FLOOD
SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW CROSS SECTIONS
STA. 6+00 TO STA. 45+00

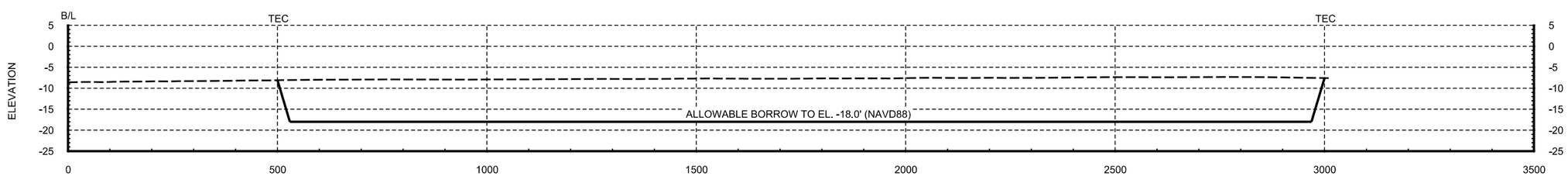
SHEET IDENTIFICATION
C-21



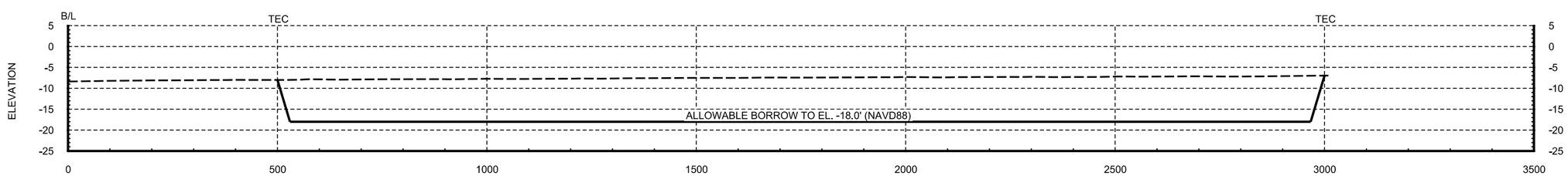
STA. 84+00



STA. 75+00



STA. 65+00



STA. 55+00

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

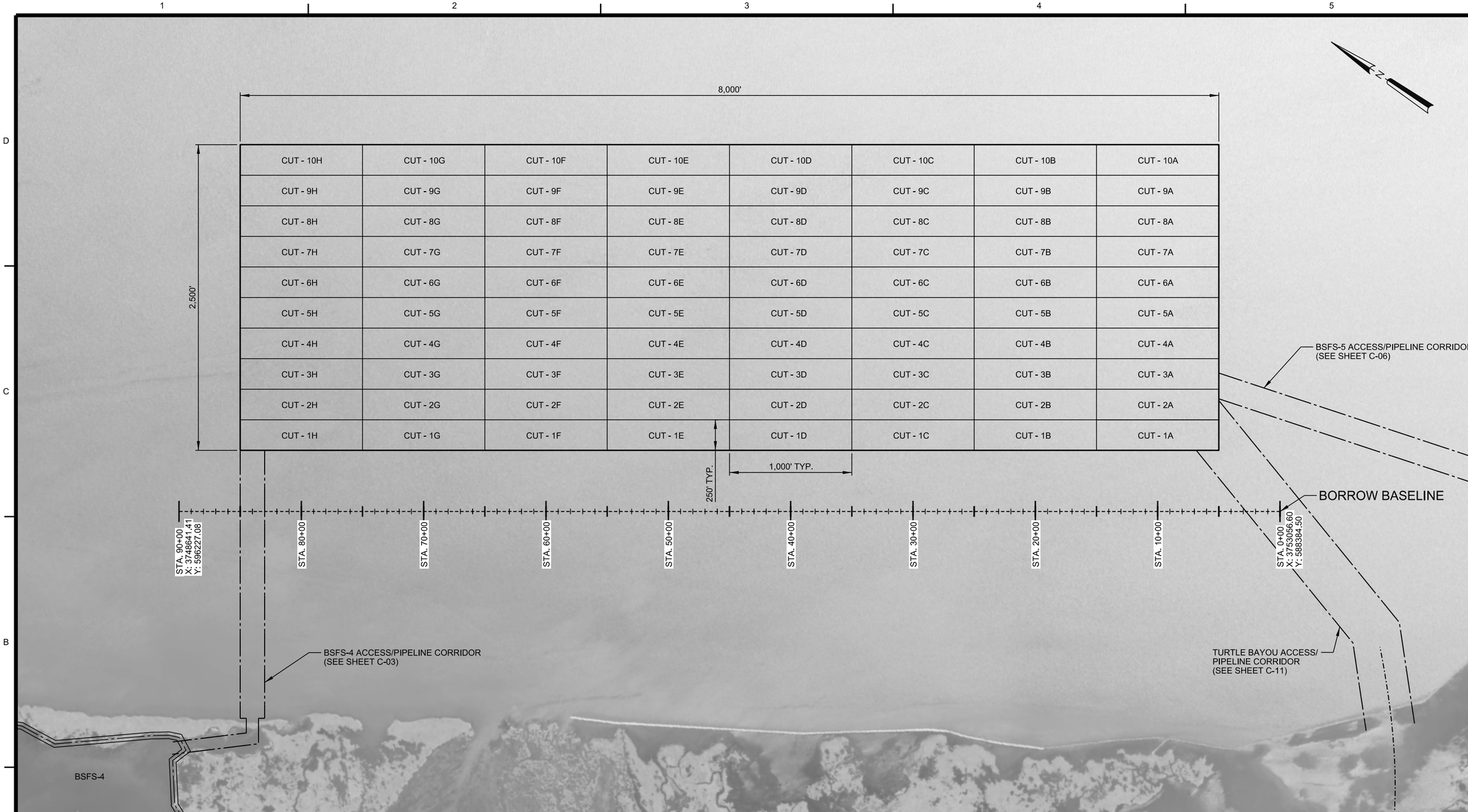
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.OR,W.B,P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAN
PLOT SCALE: NWP
PLOT DATE: 11-MAR-2015
SIZE: ANSI D
FILE NAME: H:\15-147946-C-22
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H1-147946

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW CROSS SECTIONS
STA. 55+00 TO STA. 84+00

SHEET IDENTIFICATION
C-22



NOTES:

1) CONTRACTOR SHALL USE DREDGE CUT PROVIDED, OR PROVIDE A BORROW CUT LAYOUT PLAN FOR GOVERNMENT APPROVAL PRIOR TO DREDGING.

2) DREDGING SHALL BE PERFORMED TO THE FULL LIMITS AND ALLOWABLE DEPTH IN EACH CUT PRIOR TO MOVING TO THE NEXT CUT.

3) CONTRACTOR SHALL PERFORM BEFORE AND AFTER DREDGING CROSS SECTIONS AT 200' INTERVALS FOR EACH CUT PERFORMED AND AT THE END OF THE CUT. SECTIONS SHALL EXTEND 50' BEYOND EDGE OF CUT ON EACH SIDE.

4) ALL SECTIONS SHALL REFERENCE THE BORROW BASELINE PROVIDED WITH SHOTS TAKEN ON 20' INTERVALS.

5) SEE SHEET C-20 FOR BORROW LOCATION.

US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.OR.W.B.P.R.G.
DWN BY: R.W.B./ P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
DATE: MARCH 2015
SOLICITATION NO.: W912PS-15-B-####
CONTRACT NO.: W912PS-15-C-####
FILE NUMBER: H-1-47845
PLOT DATE: MARCH 2015
PLOT SCALE: 400:1
SIZE: ANSI D
FILE NAME: H-16-47845-C-23

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW CUT LAYOUT PLAN

SHEET IDENTIFICATION
C-23

SOIL BORING LEGEND

UNIFIED SOIL CLASSIFICATION

MAJOR DIVISION		TYPE	LETTER SYMBOL	SYMBOL	TYPICAL NAMES
COARSE - GRAINED SOILS More than half of material is larger than No. 200 sieve size.	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size.	CLEAN GRAVEL (Little or No fines)	GW		GRAVEL,Well Graded,gravel-sand mixtures,little or no fines
			GP		GRAVEL,Poorly Graded,gravel-sand mixtures,little or no fines
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GM		SILTY GRAVEL,gravel-sand-silt mixtures
			GC		CLAYEY GRAVEL,gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SAND (Little or No Fines)	SW		SAND,Well-Graded,gravelly sands
			SP		SAND,Poorly-Graded,gravelly sands
		SANDS WITH FINES (Appreciable Amount of Fines)	SM		SILTY SAND,sand-silt mixtures
			SC		CLAYEY SAND,sand-clay mixtures
FINE - GRAINED SOILS More than half the material is smaller than No. 200 sieve size.		SILTS AND CLAYS (Liquid Limit < 50)	ML		SILT & very fine sand,silty or clayey fine sand or clayey silt with slight plasticity
			CL		LEAN CLAY,Sandy Clay,Silty Clay,of low to medium plasticity
			OL		ORGANIC SILTS,and organic silty clays of low plasticity
		SILTS AND CLAYS (Liquid Limit > 50)	MH		SILT,fine sandy or silty soil with high plasticity
			CH		FAT CLAY,inorganic clay of high plasticity
			OH		ORGANIC CLAYS of medium to high plasticity,organic silts
HIGHLY ORGANIC SOILS			Pt		PEAT,and other highly organic soil
WOOD			Wd		WOOD
SHELLS			Sl		SHELLS
NO SAMPLE			NS		No Sample Retrieved

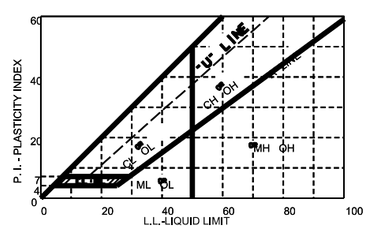
NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols.

DESCRIPTIVE SYMBOLS

COLOR	SYMBOL
TAN	T
YELLOW	Y
RED	R
BLACK	BK
GRAY	Gr
LIGHT GRAY	lGr
DARK GRAY	dGr
BROWN	Br
LIGHT BROWN	lBr
DARK BROWN	dBr
BROWNISH-GRAY	brGr
GRAYISH-BROWN	gyBr
GREENISH-GRAY	gnGr
GRAYISH-GREEN	gyGn
GREEN	Gn
BLUE	Bl
BLUE-GREEN	BlGn
WHITE	Wh
MOTTLED	Mot

CONSISTENCY FOR COHESIVE SOILS

CONSISTENCY	COHESION IN LBS./SQ.FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL
VERY SOFT	< 250	vSo
SOFT	250-500	So
MEDIUM	500-1000	M
STIFF	1000-2000	St
VERY STIFF	2000-4000	vSt
HARD	> 4000	H



PLASTICITY CHART

For classification of fine-grained soils in accordance with ASTM D 2487

MODIFICATIONS	
MODIFICATION	SYMBOL
Traces	Tr
Fine	F
Medium	M
Coarse	C
Concretions	cc
Rootlets	rt
Lignite fragments	lg
Shale fragments	sh
Sandstone fragments	sds
Shell fragments	slf
Organic matter	O
Clay strata or lenses	CS
Silt strata or lenses	SIS
Sand strata or lenses	SS
Sandy	S
Gravelly	G
Boulders	B
Slickensides	SL
Wood	Wd
Oxidized	Ox

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN " W OR D 10 "

Are natural water contents in percent dry weight

When underlined denotes D10 size in mm *

FIGURES TO LEFT OF BORING UNDER COLUMNS " LL" AND " PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

- Ground-water surface and date observed
- C — Denotes location of consolidation test * *
- S — Denotes location of consolidated-drained direct shear test * *
- R — Denotes location of consolidated-undrained triaxial compression test * *
- C — Denotes location of unconsolidated-undrained triaxial compression test * *
- T — Denotes location of sample subjected to consolidation test and each of the above three types of shear test * *
- FW — Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq.ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler (1 3/8 " I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permability in centimeters per second of sample remoulded to the estimated natural void ratio

* The D 10 size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D10.

* * Results of these tests are available for inspection in the U.S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings.

TYPICAL NOTES:

1. While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of the contract clause entitled "Differing Site Conditions".

2. Ground-water elevations shown on the boring logs represent ground-water surfaces encountered in such borings on the dates shown. Absence of water surface data on certain borings indicates that no ground-water data are available from the boring but does not necessarily mean that ground-water will not be encountered at the locations or within the vertical reaches of such borings.

3. Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.

4. Unless otherwise noted:

   a. Undisturbed borings, indicated by the letter "U", are taken with a 5" I.D. Piston Type Sampler.

   b. General type borings are taken with a 1 7/8" I.D. Tube Sampler and/or a 1 3/8" I.D. Split Spoon Sampler.

US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

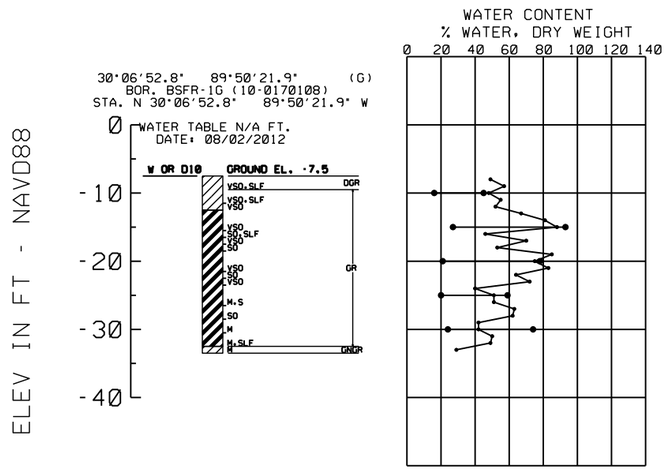
DESIGNED BY: K.L.O.R.W.B.,P.R.G.
DWN BY: P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAN
DATE: JANUARY 2015
SOLICITATION NO.: W912PR-15-B-#####
CONTRACT NO.: W912PR-15-C-####
FILE NUMBER: H14-047949
PLOT SCALE: NONE
PLOT DATE: NONE
SIZE: ANSI D
FILE NAME: H-15-47949-B-01

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND THE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

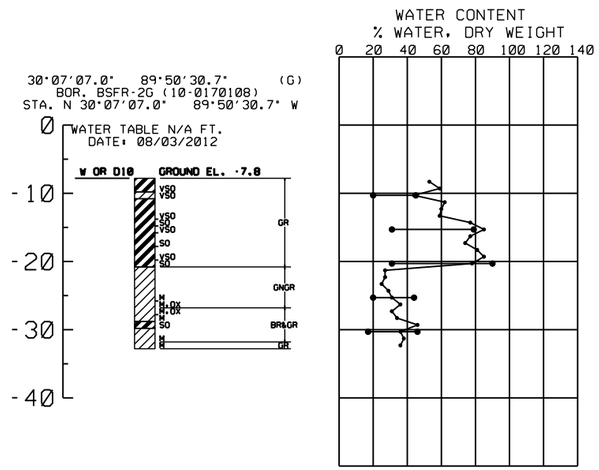
BORING LEGEND

SHEET IDENTIFICATION
B-01

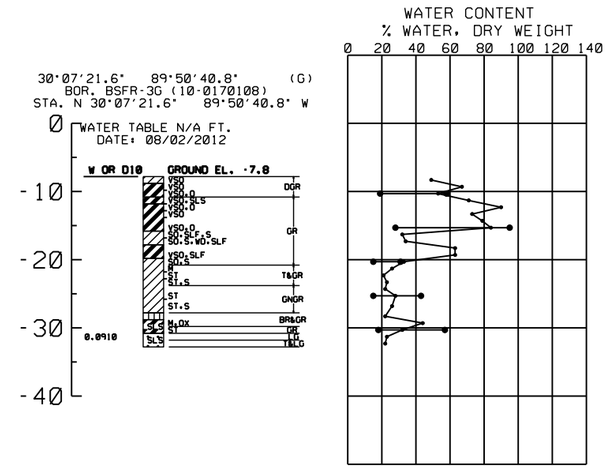
BORROW BORINGS - LAKE PONTCHARTRAIN



BSFR-1G



BSFR-2G



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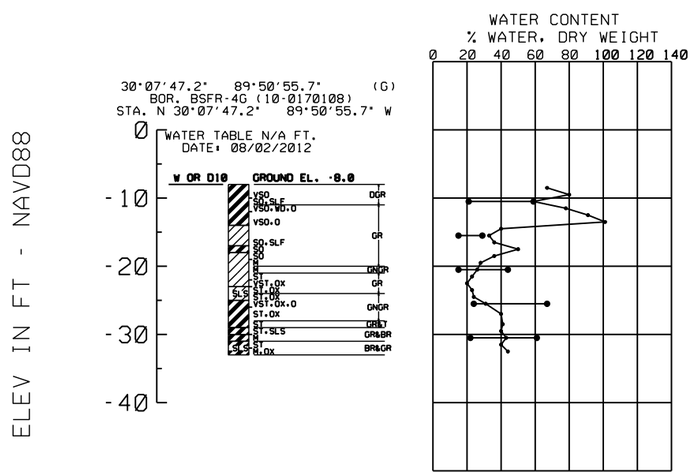

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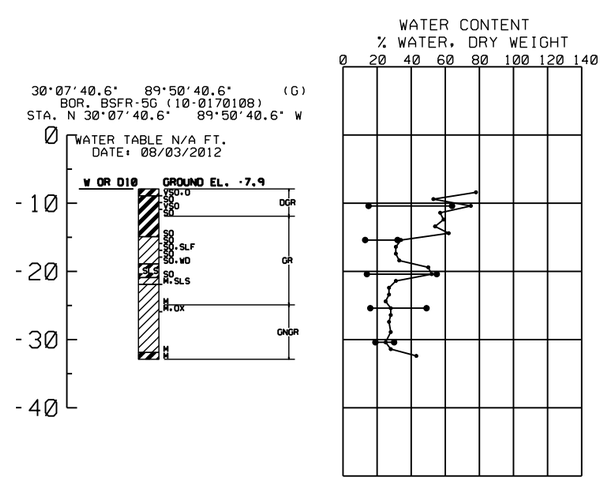

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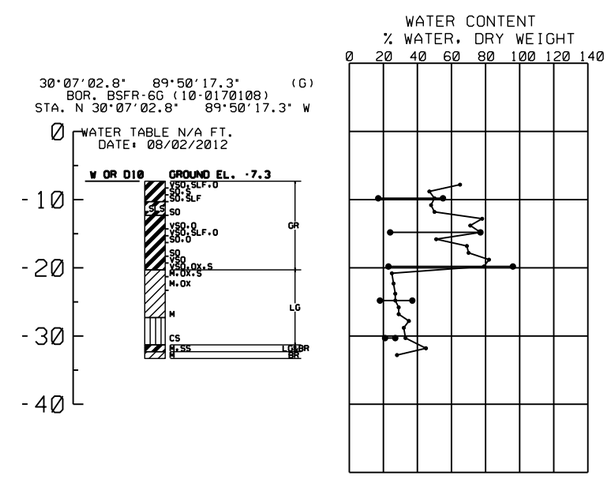


BSFR-6G

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.J.O'R.W.B./P.R.G.
DWN BY: P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 160:1
PLOT DATE: JAN. 2015
SIZE: ANSI D
FILE NAME: H-16-47848-B-02
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW BORINGS
BSFR-1G TO BSFR-6G

SHEET IDENTIFICATION
B-02

BORROW BORINGS - LAKE PONTCHARTRAIN

BOR. BSFG-7G (14-116B)

30°7'21.731" 89°50'28.946" (P)
STA.

DATE: 7/24/2014

LL	PI	ORG CNT	% COARSE	W	D10		GROUND EL. -7	
50	36	2.9		62			VSO.SLF	DGR
			9.5	71		SLS	VSO.SLF	
58	40	3.4		60			SO.SLF	GR
			43.1	41			SO.SLF	
		3.6		62			VSO.SLF.SL	
37	24		47	21		SS	ST.OX	GNGR
		4.2		75			VSO.SLF.SL	GR
38	25		40.9	26			ST.OX	GNGR
		3.9		70		SS	VSO.SLF	GR
37	24		47.6	33			SS.SO.OX	GNGR

ELEVATIONS IN FEET N.A.V.D. 88: 0, -10, -20, -30, -40

BOR. BSFG-8G (14-116B)

30°7'48.842" 89°50'36.132" (P)
STA.

DATE: 7/24/2014

LL	PI	ORG CNT	% COARSE	W	D10		GROUND EL. -7	
62	43	2.6		79		S	VSO.SLF.SL	DGR
			20.6	53			SO.SL.SLF	GR&DGR
36	22			59		S	VSO.SL.SLF	
				36			SO.SL.SLF	GR
		2.3		53			S.SO.SLS.SLF.WD	
			43.9	27			M	GR&LGR
			43.7	45		SS	SO.OX.SLF	GR
		1.2		28			M.OX	
50	31			26			ST.OX	GNGR
51	32	1.3	8.5	37		SLS	M.OX	
								NO SAMPLE
34	20	1.2		30			SO.OX	GNGR
			12.5	32		S	SO.OX	GR&LGR

ELEVATIONS IN FEET N.A.V.D. 88: 0, -10, -20, -30, -40

BOR. BSFG-9G (14-116B)

30°7'25.676" 89°50'21.584" (P)

DATE: 7/24/2014

LL	PI	ORG CNT	% COARSE	W	D10		GROUND EL. -7	
43	26		24.6	74		S	VSO.SLF.SL	
		5.1		90			VSO.O.WD.SLF.SL	
55	38	4.7		81			VSO.SLF.WD	GR
			9.9	69		SLS	VSO.SLF	
		3.7		65			VSO.SLF.OX	
48	35		29.3	29		S	M.OX	GNGR
		4.2		79		SLS	VSO.OX	GR
51	36			33			M.OX.SLF	
			9.1	39		SLS	SO.OX	GNGR
			70.7	20			~~CS.SLF.SL~~	~~GR~~
								NO SAMPLE

ELEVATIONS IN FEET N.A.V.D. 88: 0, -10, -20, -30, -40

BOR. BSFG-10G (14-116B)

30°7'2.496" 89°50'7.026" (P)

DATE: 7/24/2014

LL	PI	ORG CNT	% COARSE	W	D10		GROUND EL. -6	
54	36	3.7	~~87.8~~	23		~~CS~~	~~SLS.VSO.OX.SLF~~	~~GR&T~~
				59			SLS.VSO.OX.SLF	GR
								NO SAMPLE
			76	28			CS.SLF	
57	38	4.2		66			SLS.VSO.SLF	GR
								NO SAMPLE
39	24		37.2	50		SS	VSO.OX.SLF	
		4.3		73			VSO.OX.SLF	GR
		4.1		74		SLS	VSO.SLF	
42	25		8.1	26		SLS	ST.OX	GNGR
		3.9		71		SLS	VSO.SLF	GR
35	18		7.4	28			SLS.ST.OX	GNGR

ELEVATIONS IN FEET N.A.V.D. 88: 0, -10, -20, -30, -40

CH - FAT CLAY

CL - LEAN CLAY

SM - SILTY SAND

NOTES:
LL - LIQUID LIMIT.
PI - PLASTICITY INDEX.
ORG CNT - ORGANIC CONTENT IN PERCENT.
% COARSE - CUMULATIVE PERCENT RETAINED ON THE #200 SIEVE.
W - WATER CONTENT BY PERCENT DRY WEIGHT.
D10 - GRAIN DIAMETER IN MILLIMETERS WHERE 10% OF SAMPLE IS FINER.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

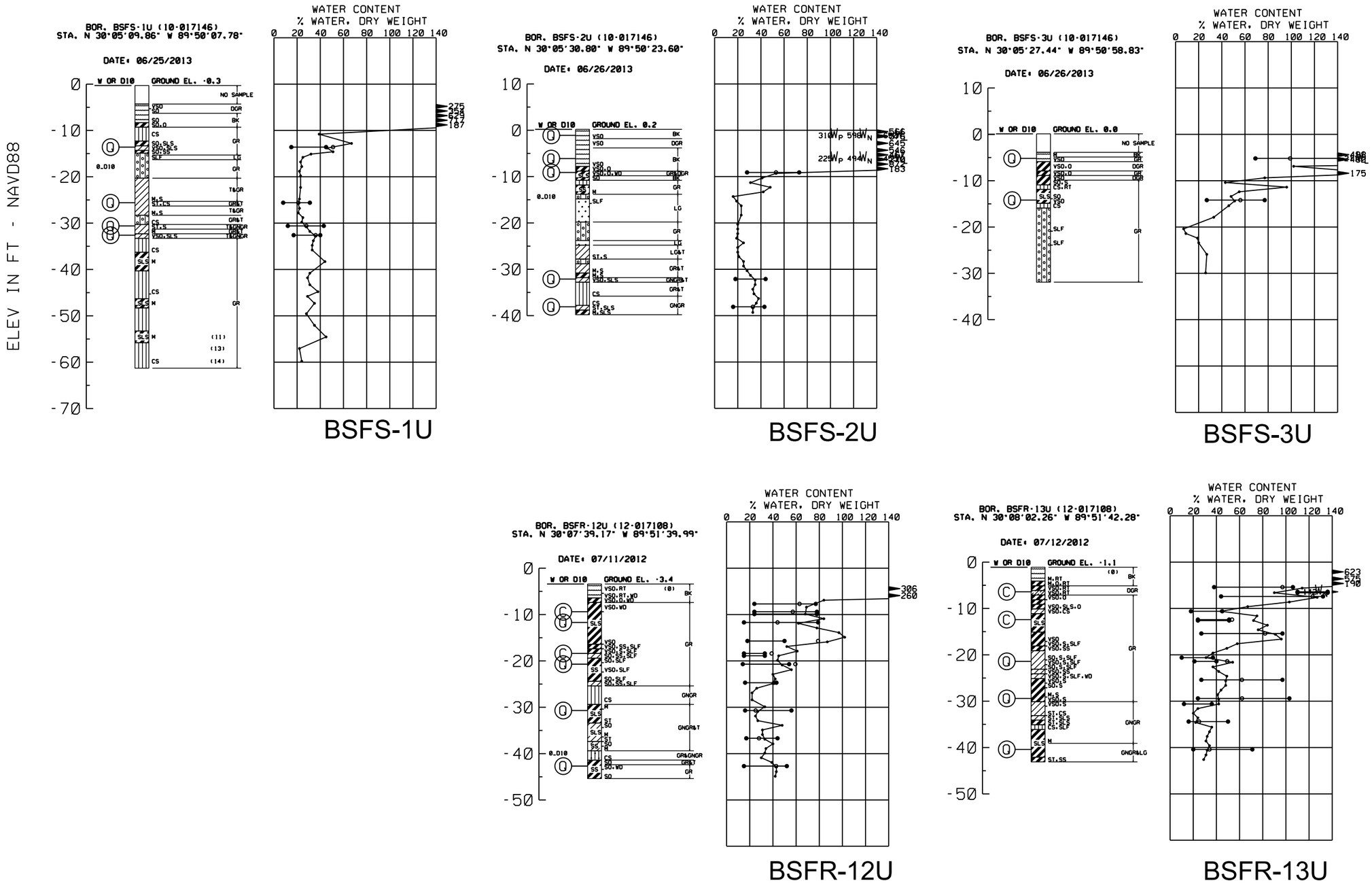
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: KJ,DR,WJ,B,P,R,G.
DWN BY: P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-#####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H:\14047.\B-03
PLOT SCALE: NTS
PLOT DATE: 1/4/2015
SIZE: ANSI D
FILE NAME: H-15-47849-B-03

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION AND TURF BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

BORROW BORINGS
BSFR-7G TO BSFR-10G

SHEET IDENTIFICATION
B-03



US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR

MARK	DESCRIPTION	DATE	APPR

DESIGNED BY: K.J.O.R.W.B./P.R.G.
DWN BY: R.W.B./P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. O'CAIN
PLOT SCALE: 160:1
PLOT DATE: MARCH 2015
SIZE: ANSI D
FILE NAME: H-16-47848-B-03
DATE: MARCH 2015
SOLICITATION NO.: W912P8-15-B-####
CONTRACT NO.: W912P8-15-C-####
FILE NUMBER: H-16-47848

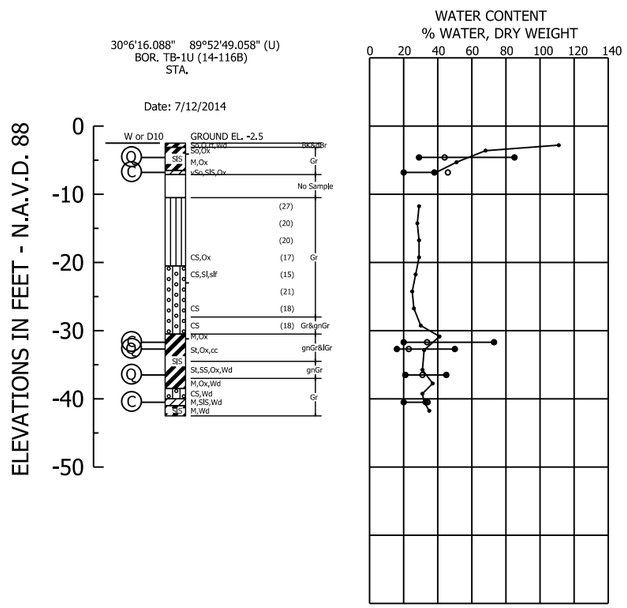
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH RESTORATION, AND TURTLE BAYOU PROTECTED SIDE INTERMEDIATE MARSH RESTORATION, ORLEANS PARISH, LA.

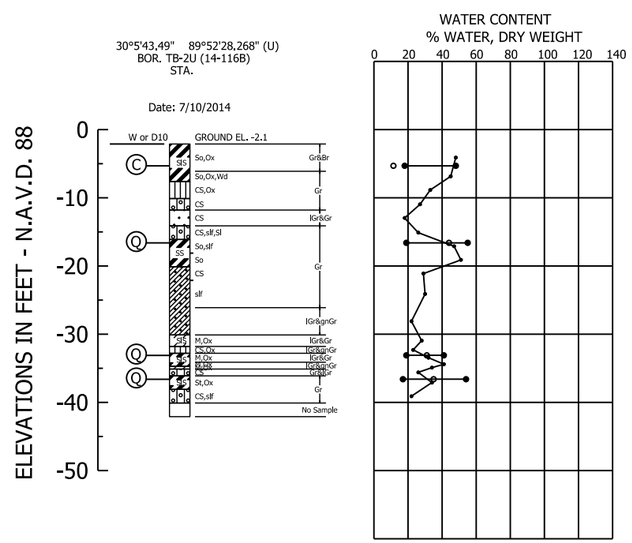
BSFS-4 AND BSFS-5 BORINGS
BSFS-1U TO 3U & BSFR 12U TO 13U

SHEET IDENTIFICATION
B-04

TURTLE BAYOU NORTH (TBN)
MARSH CREATION SITE BORINGS



TB-1U



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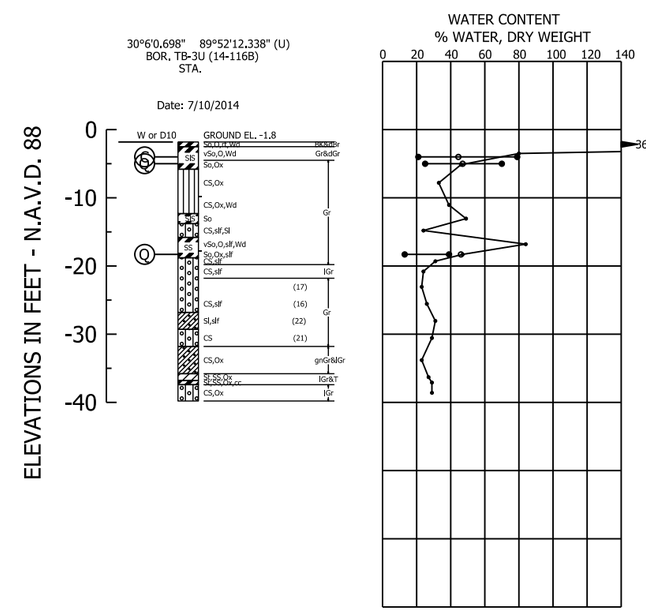

TB-3U

US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: K.L.O.R.W.B.,P.R.G.
DWN BY: P.R.G.
CKD BY: R.W.B.
SUBMITTED BY: KEITH J. OCAIN
PLOT SCALE: 1:50:1
PLOT DATE: 1/8/2015
SIZE: ANSI D
FILE NAME: H:\16-079#8-B-05
DATE: JANUARY 2015
SOLICITATION NO.: W912P8-15-B-#####
CONTRACT NO.: W912P8-15-C-#####
FILE NUMBER: H16-079#8

HSDRRS - LPV MITIGATION,
BAYOU SAUVAGE FLOOD SIDE BRACKISH MARSH
RESTORATION AND TURTLE BAYOU PROTECTED
SIDE INTERMEDIATE MARSH RESTORATION,
ORLEANS PARISH, LA.

TURTLE BAYOU NORTH BORINGS
TBN - 1U TO TBN -3U

SHEET IDENTIFICATION
B-05