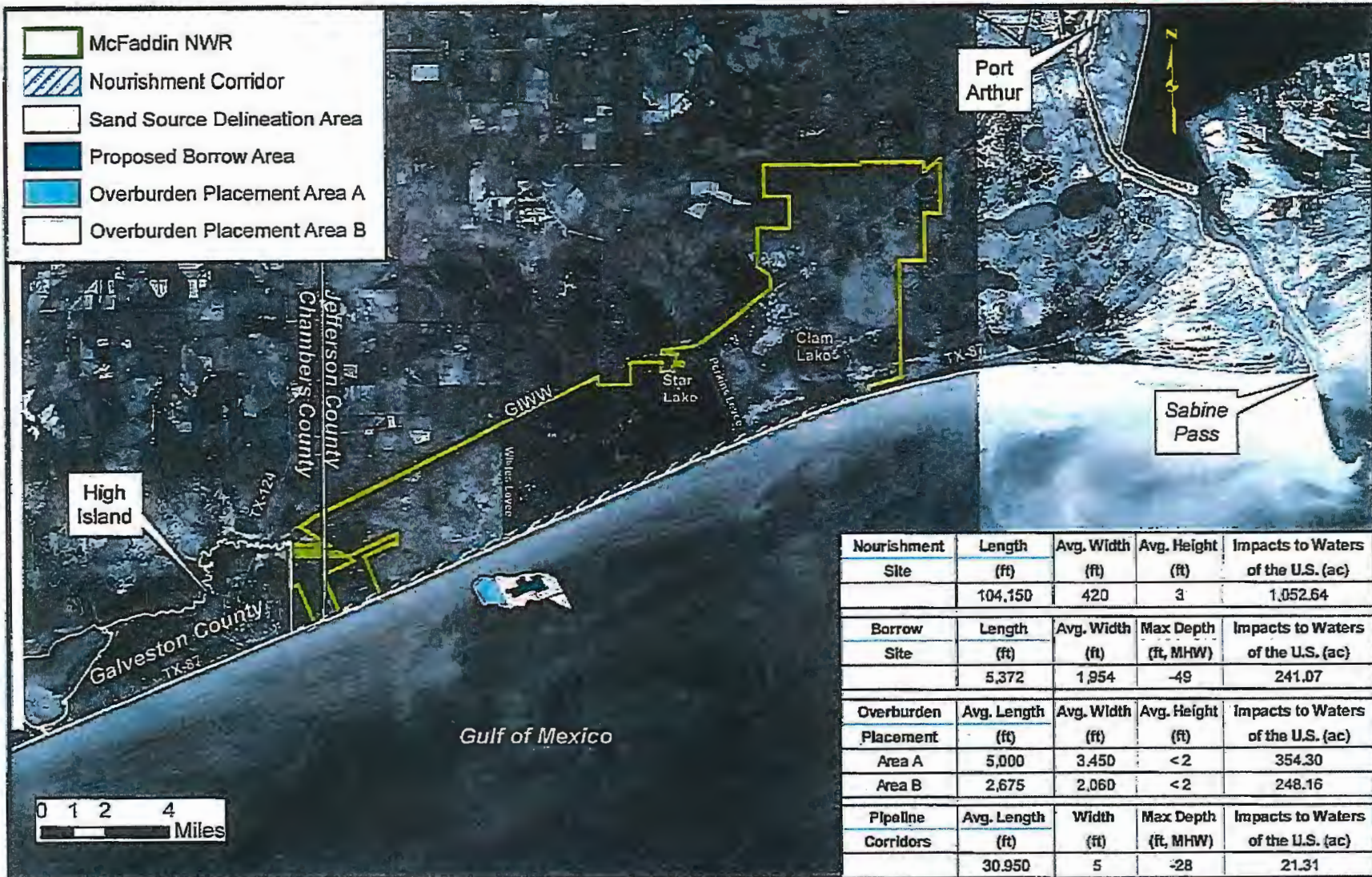


PERMITTED PLANS**EXHIBIT B
PROJECT OVERVIEW MAP**JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

APPROVED:

SWG-2015-00444

DATE:
06/20/2016LJA PROJ #:
B395-1005REV:
B**LJA Engineering, Inc.**Coastal Group
905 Orleans Street
Beaumont, Texas 77701Phone 409.813.1862
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FRN - F-1388

PERMITTED PLANS

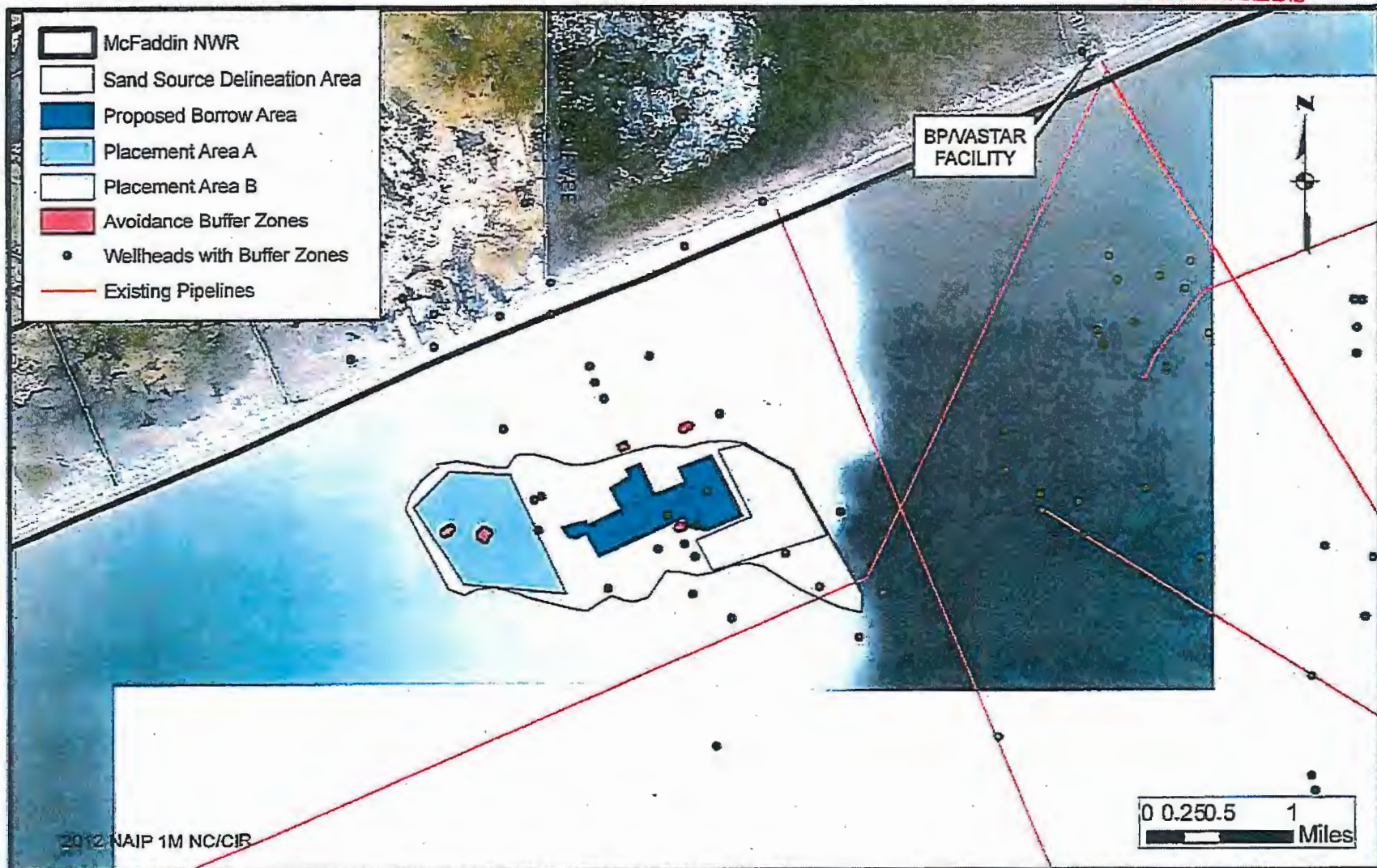


EXHIBIT C OVERBURDEN PLACEMENT AND HAZARDS MAP

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

APPROVED:

SWG-2015-00444

DATE:

06/24/2016

LJA PROJ #:

B395-1005

REV:

B

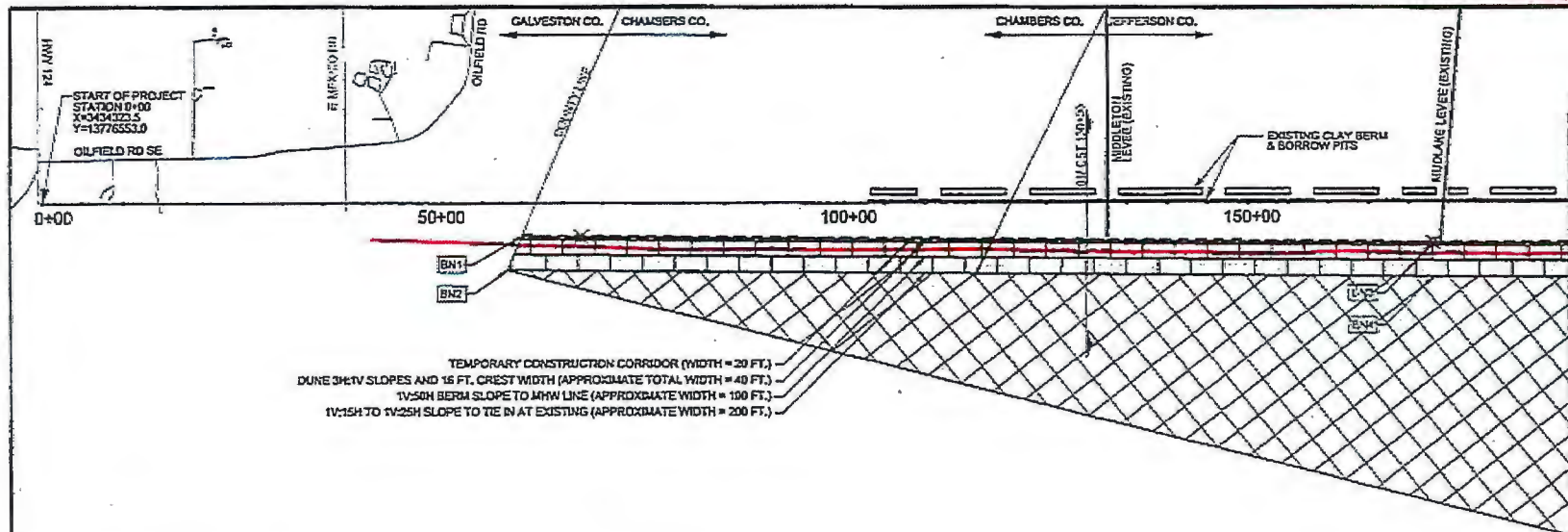
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Beaumont, Texas 77701

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FRN - F-1386



PERMITTED PLANS



COORDINATE REFERENCE POINTS

BEACH MOURNING (BNA)		SIDE CAST (SOI)	
#	NORTHING	EASTING	EASTING
1	13778815.1	3458985.56	347116.43
2	13778815.1	3458985.56	347116.43
3	13778974.44	3450057.30	347332.59
4	13783734.47	3450238.27	347415.79
5	13783861.44	345524.43	347430.97
6	13783861.44	345524.43	347430.97
7	13793106.46	3469075.00	347557.40
8	1379729.87	3469210.58	347562.98
9	1379729.87	3469210.58	347562.98
10	1379506.01	34754.81	347687.15
11	1379549.13	3478651.25	348023.44
12	1379549.13	3478651.25	348023.44
13	1380007.77	3478651.25	348023.44
14	1379568.03	3483665.57	348023.44
15	1380007.77	3478651.25	348023.44
16	1380025.67	3488154.26	348155.62
17	1380025.67	3488154.26	348155.62
18	1380747.44	3491774.13	348155.62
19	1380747.44	3491774.13	348155.62
20	1380747.44	3491774.13	348155.62
21	1381134.78	3496954.54	348155.62
22	1381134.78	3496954.54	348155.62
23	1381562.55	351644.90	348155.62
24	1381562.55	351644.90	348155.62
25	1381764.00	3519623.75	348155.62
26	1381777.79	3519623.75	348155.62
27	13819436.39	3526049.14	348155.62
28	13819436.39	3526049.14	348155.62
29	13820661.37	3526049.14	348155.62
30	13820625.72	352625.10	348155.62
31	13820625.72	352625.10	348155.62
32	1382177.28	3533875.34	348155.62

CUT AND FILL VOLUMES

MAXIMUM FILL VOLUME (CY)	
BEACH NOURISHMENT:	4100000 CY
GRADE RESTORATION AREA / SIDE CAST AREA:	1800000 CY
BORROW AREA:	0 CY
MAXIMUM CUT VOLUME (CY)	
BEACH NOURISHMENT:	0 CY
GRADE RESTORATION / SIDE CAST-	11 CY
BORROW AREA:	5900000 CY

IMPACTS TO WATERS OF THE U.S.

BEACH NOURISHMENT:	1052.64 AC
SIDE CAST AREAS:	602.46 AC
BORROW AREA:	241.07 AC
PIPELINE CORRIDORS:	21.31C

- NOTE:
1. HORIZONTAL DATUM IS NAD83 - STATE PLANE TEXAS SOUTH CENTRAL ZONE 4204 (FEET)
2. THE BEACH NOURISHMENT TEMPLATE GAUGED WITH THE EXISTING DUNE CREST.
3. BEACH FILL IS PROPOSED TO EXTEND FROM EXISTING DUNE CREST SEAWARD.
4. COORDINATES ARE BASED ON CURRENT EXISTING CONDITIONS. THE DISTANCE FROM THE BASELINE EXHIBIT WILL REDECE AS THE SHORELINE CONTINUES TO ERODE.
5. APPROXIMATE EROSIONAL RATES ARE BETWEEN 10 AND 60 FT PER YEAR BASED ON GEOGRAPHIC LOCATION.

LEGEND

-
- CONTROL POINT**
- TOP OF DUNE**
- 18W (2010) 1:2' NAVD**
- POTENTIAL PIPE CORRIDOR**
- PROPOSED WORK**
- CROSS SECTION**
NOTE: ELEVATION
DETAIL AVAILABLE
IN EXHIBIT E.
- BASILINE**
- 0' 2000'

EXHIBIT D PLAN VIEW
SHEET 1 OF 7

APPROVED:

SWG-2015-00444

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

DATE:
06/30/16

LJA PROJ. #:
395-1005

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B

LJA Engineering, Inc.

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JAN 02 2019

Attachment A

Previously authorized plans

PERMITTED PLANS

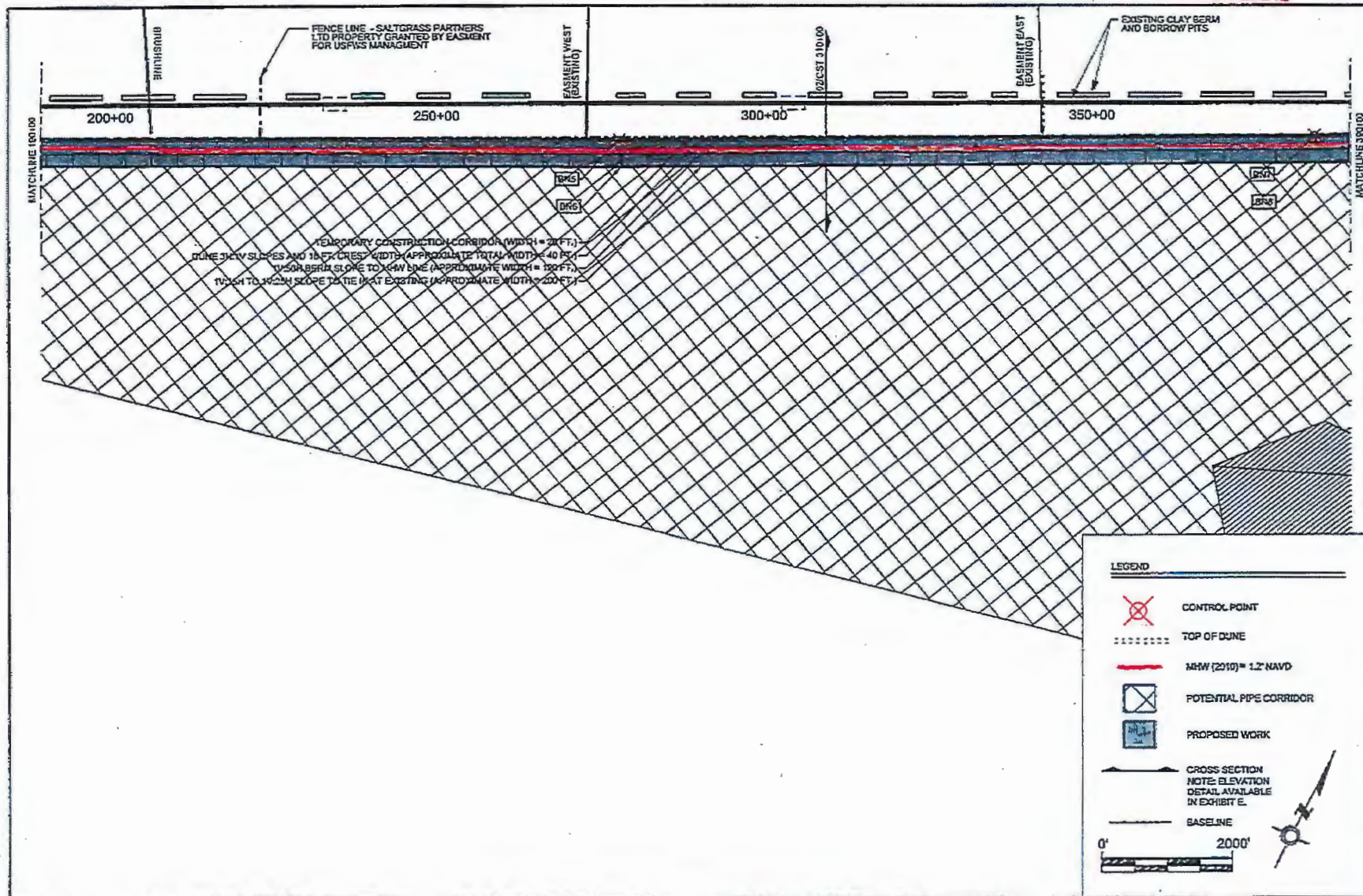


EXHIBIT D PLAN VIEW
SHEET 2 OF 7

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

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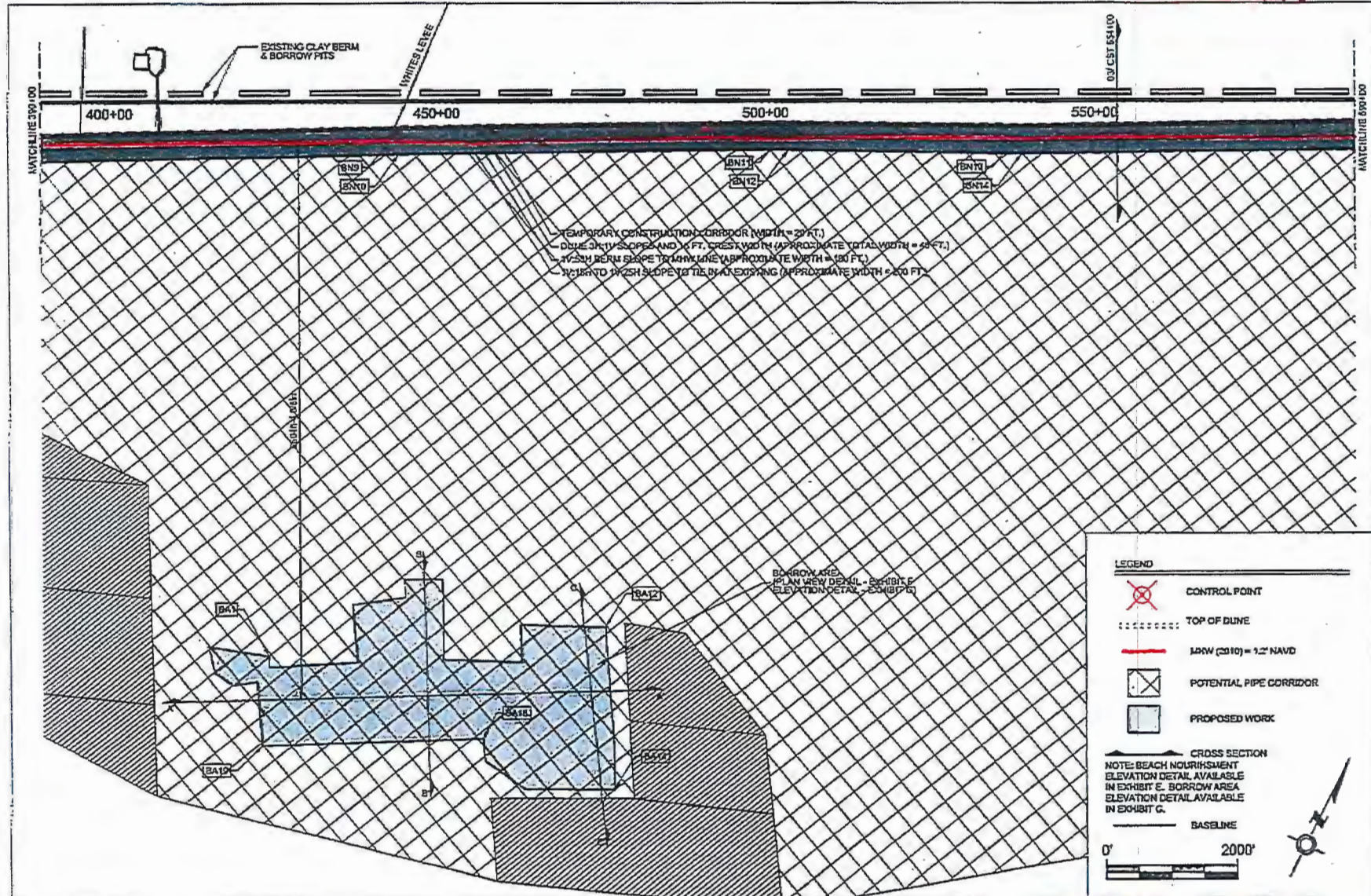
APPROVED:

SWG-2015-00444

DATE:
06/30/16

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395-1005

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B

PERMITTED PLANSEXHIBIT D PLAN VIEW
SHEET 3 OF 7JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

APPROVED:

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06/30/16LJA PROJ. #:
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PERMITTED PLANS

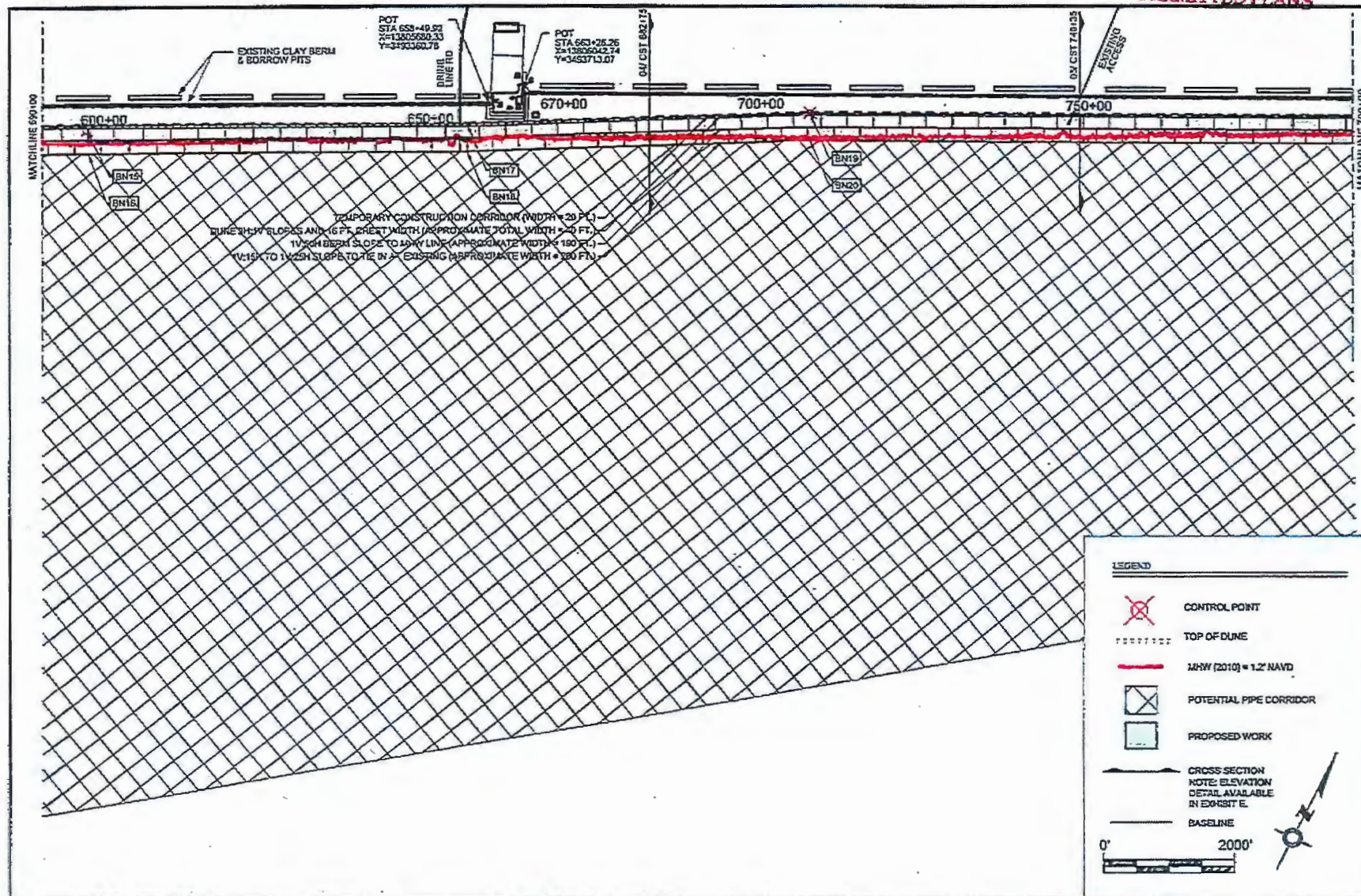


EXHIBIT D PLAN VIEW
SHEET 4 OF 7

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

LJA Engineering, Inc.

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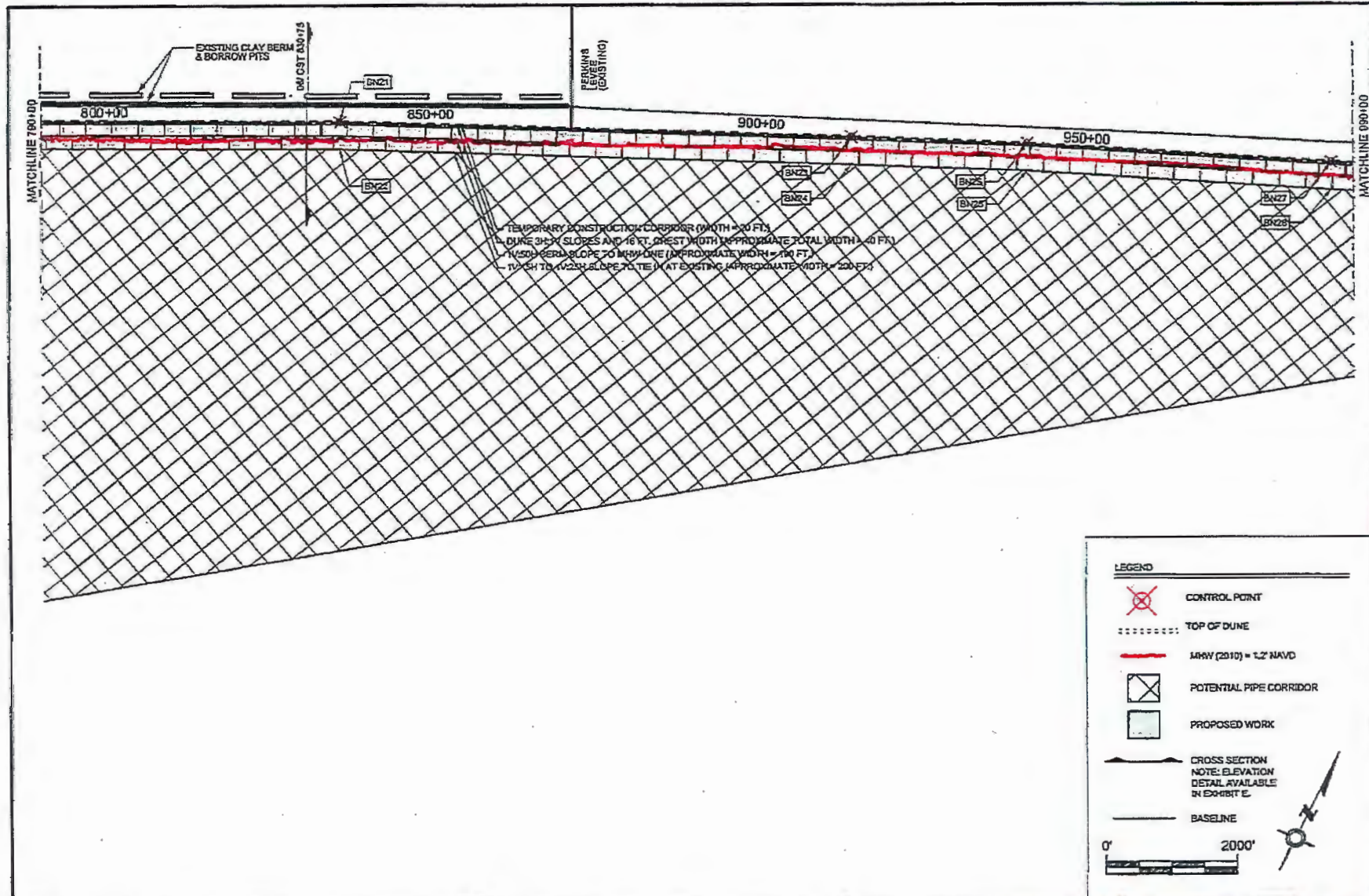
APPROVED:

SWG-2015-00444

DATE:
06/30/16

LJA PROJ. #:
395-1005

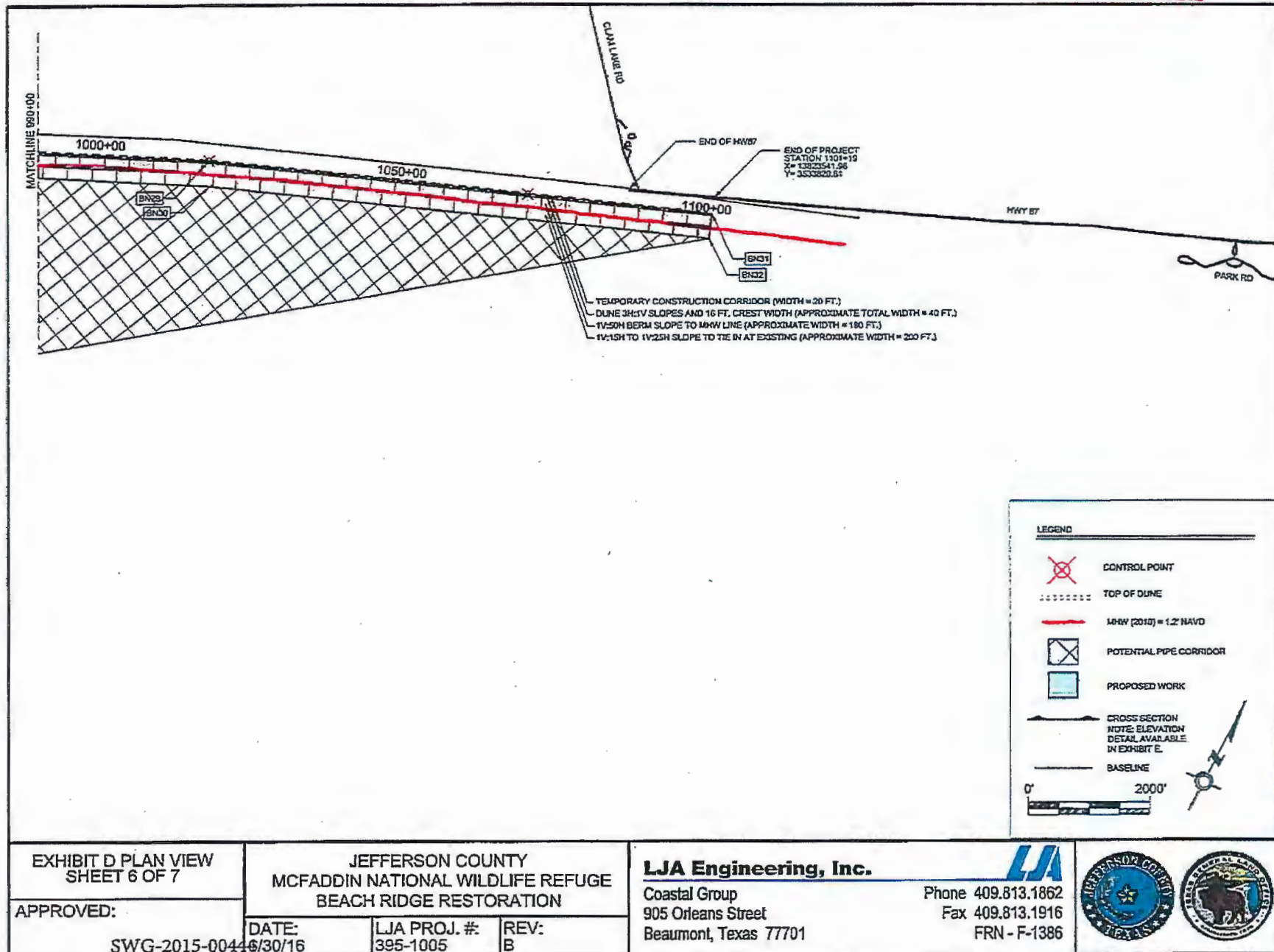
REV:
B

PERMITTED PLANSEXHIBIT D PLAN VIEW
SHEET 5 OF 7JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION**LJA Engineering, Inc.**Coastal Group
905 Orleans Street
Beaumont, Texas 77701Phone 409.813.1862
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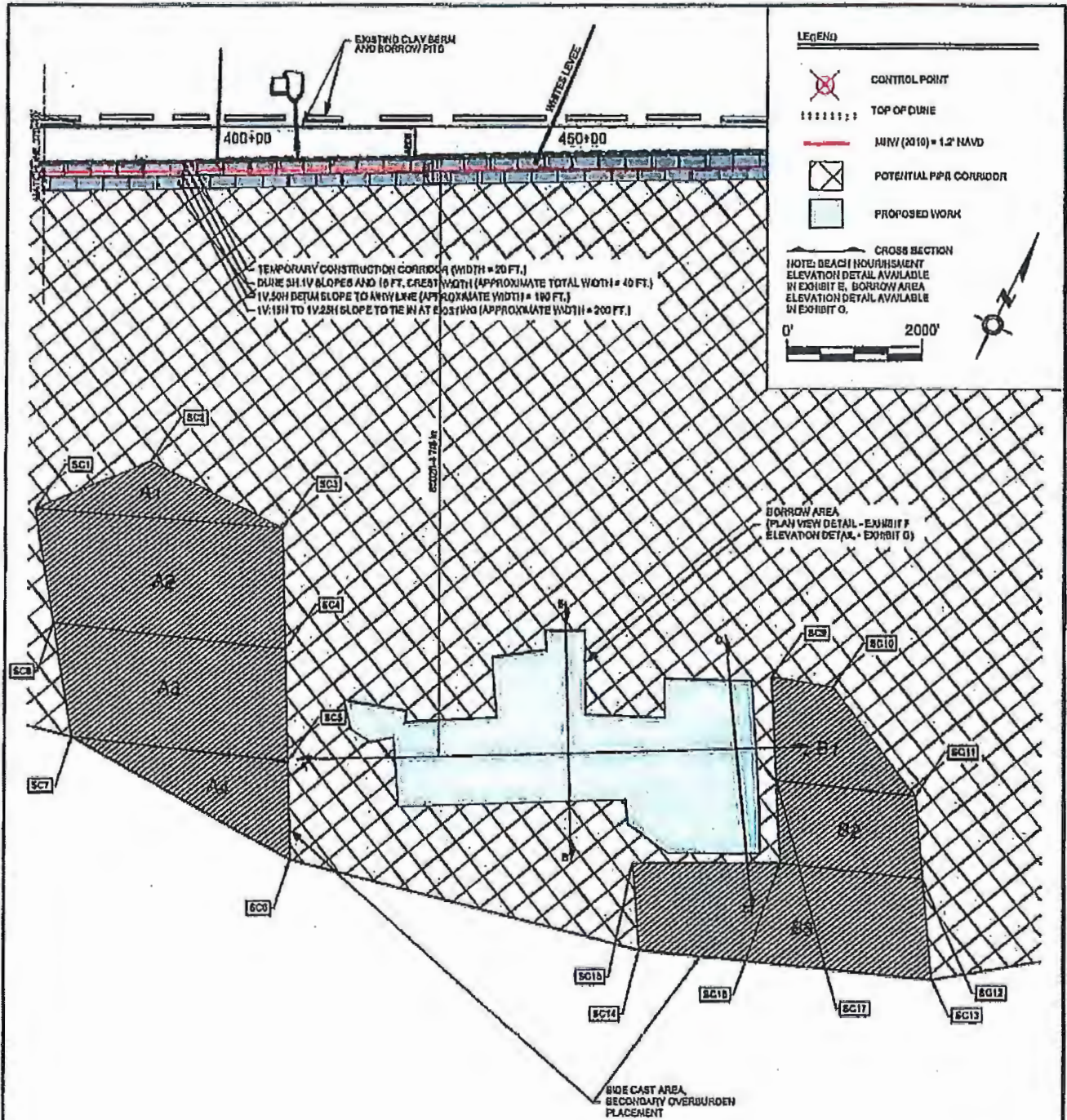
APPROVED:

SWG-2015-00444

DATE:
06/30/16LJA PROJ. #:
395-1005REV:
B



PERMITTED PLANS



SWG-2015-00444
Page 9 of 13

EXHIBIT D PLAN VIEW
SHEET 7 OF 7

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

LJA Engineering, Inc.

Coastal Group
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Beaumont, Texas 77701

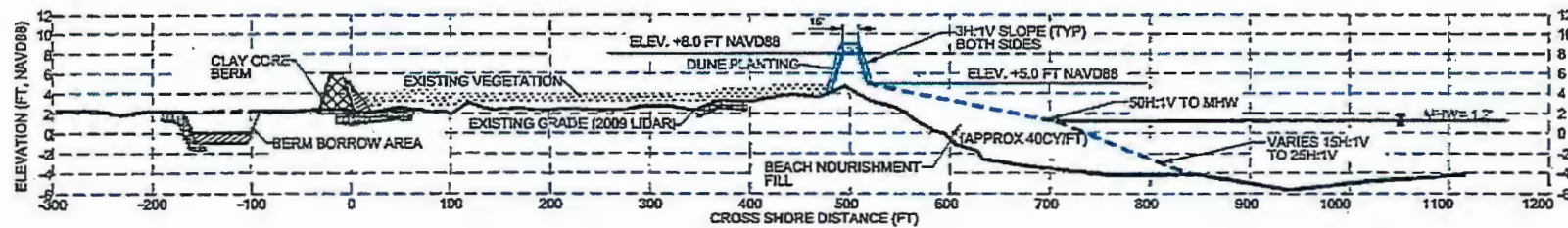
Phone 409.813.1862
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FRN - F-1386

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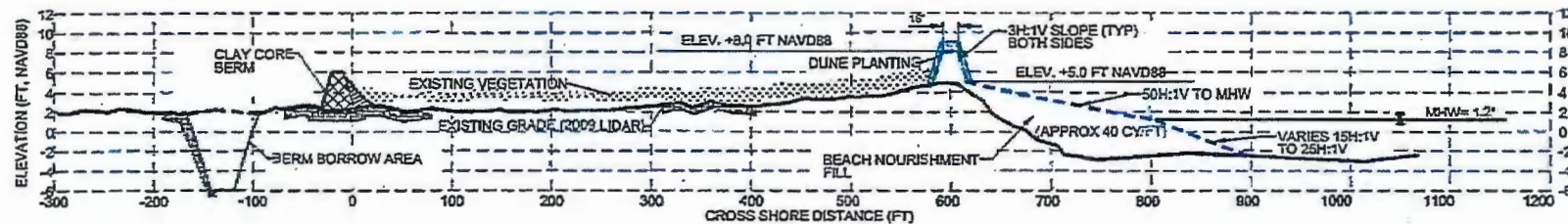
DATE:
06/30/2016

LJA PROJ. #:
395-1005

REV:
B

PERMITTED PLANS

01 PROJECT SECTION STA 130+00



02 PROJECT SECTION STA 310+00

EXHIBIT E(TYP) SECTIONS
SHEET 1 OF 3

APPROVED:

SWG-2015-00444

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

DATE:
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LJA PROJ. #:
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REV:
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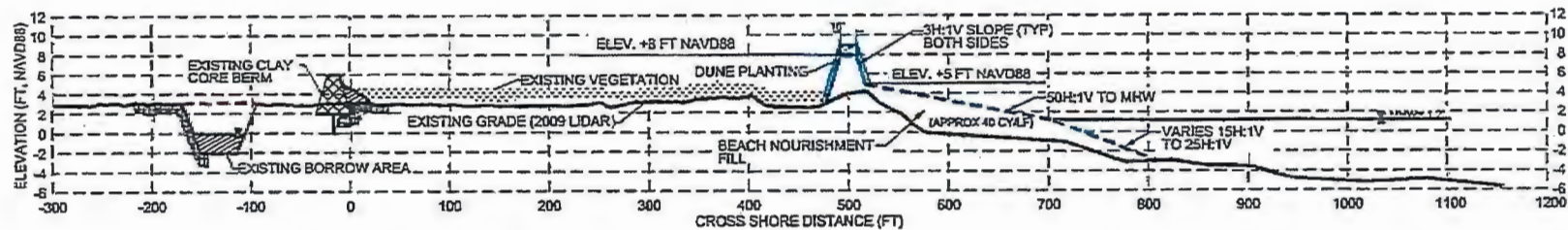
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Beaumont, Texas 77701

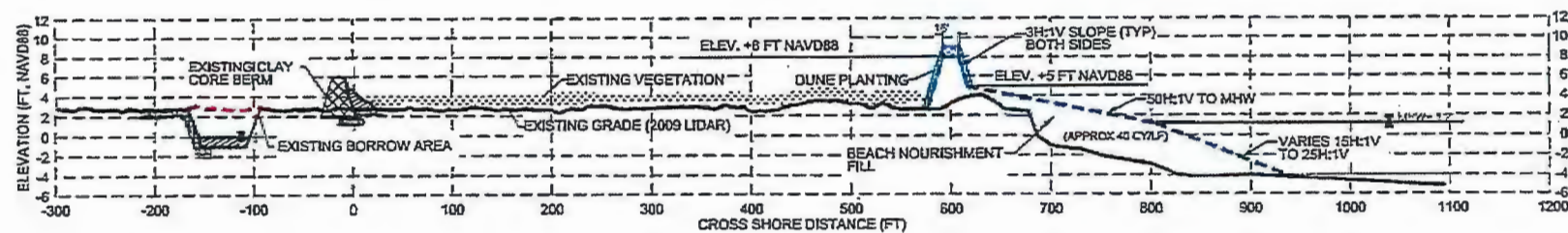
Phone 409.813.1862
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FRN - F-1386



PERMITTED PLANS



03 PROJECT SECTION STA 554+00



04 PROJECT SECTION STA 682+75

EXHIBIT E TYP SECTIONS
SHEET 2 OF 3

APPROVED:

SWG-2015-00444

JEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

DATE:
06/29/16

LJA PROJ. #:
B395-1005

REV:
B

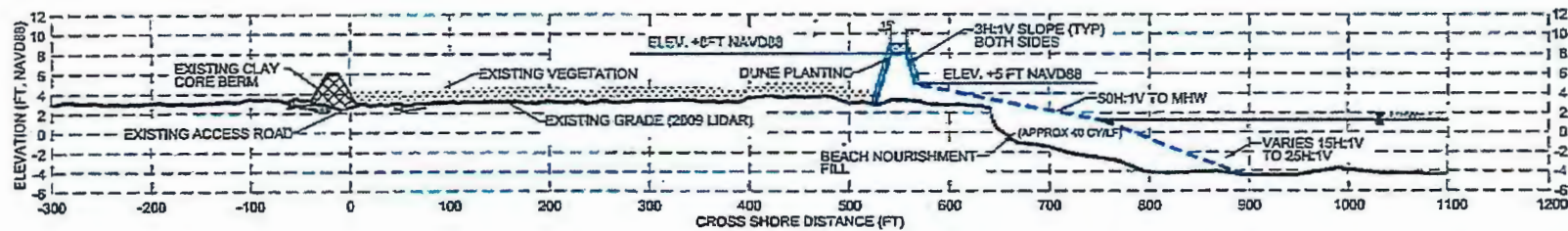
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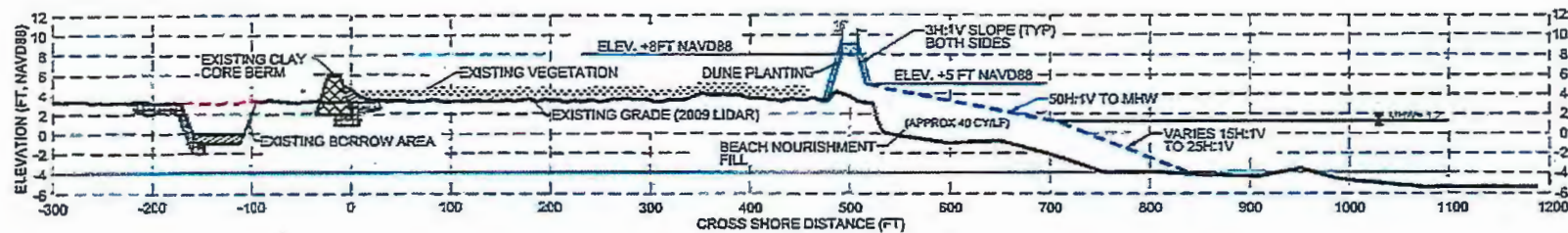
Phone 409.813.1862
Fax 409.813.1916
FRN - F-1386



PERMITTED PLANS



05 PROJECT SECTION STA 748+35



06 PROJECT SECTION STA 830+75

EXHIBIT E TYP SECTIONS
SHEET 3 OF 3

APPROVED:

SWG-2015-004

DATE:
6/28/16LJA PROJ. #:
B395-1005REV:
BJEFFERSON COUNTY
MCFADDIN NATIONAL WILDLIFE REFUGE
BEACH RIDGE RESTORATION

LJA Engineering, Inc.

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PERMITTED PLANS