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Annova LNG Common Infrastructure, LLC
SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 1 of 34.

Legend

- Access Road Alternative 1
- Access Road Alternative 2 (Preferred Option)
- Project Site
- Dredged Material Placement Area
- State Highway

SCALE
0 1 2 3 Miles

SOURCE Annova LNG 2015; ESRI 2015; TX DOT 2014; NAIP 2014

Figure 1
Project Location and Vicinity (Aerial)
Annova LNG Brownsville Project
Cameron County, Texas

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USACE Application # SWG-2015-00110

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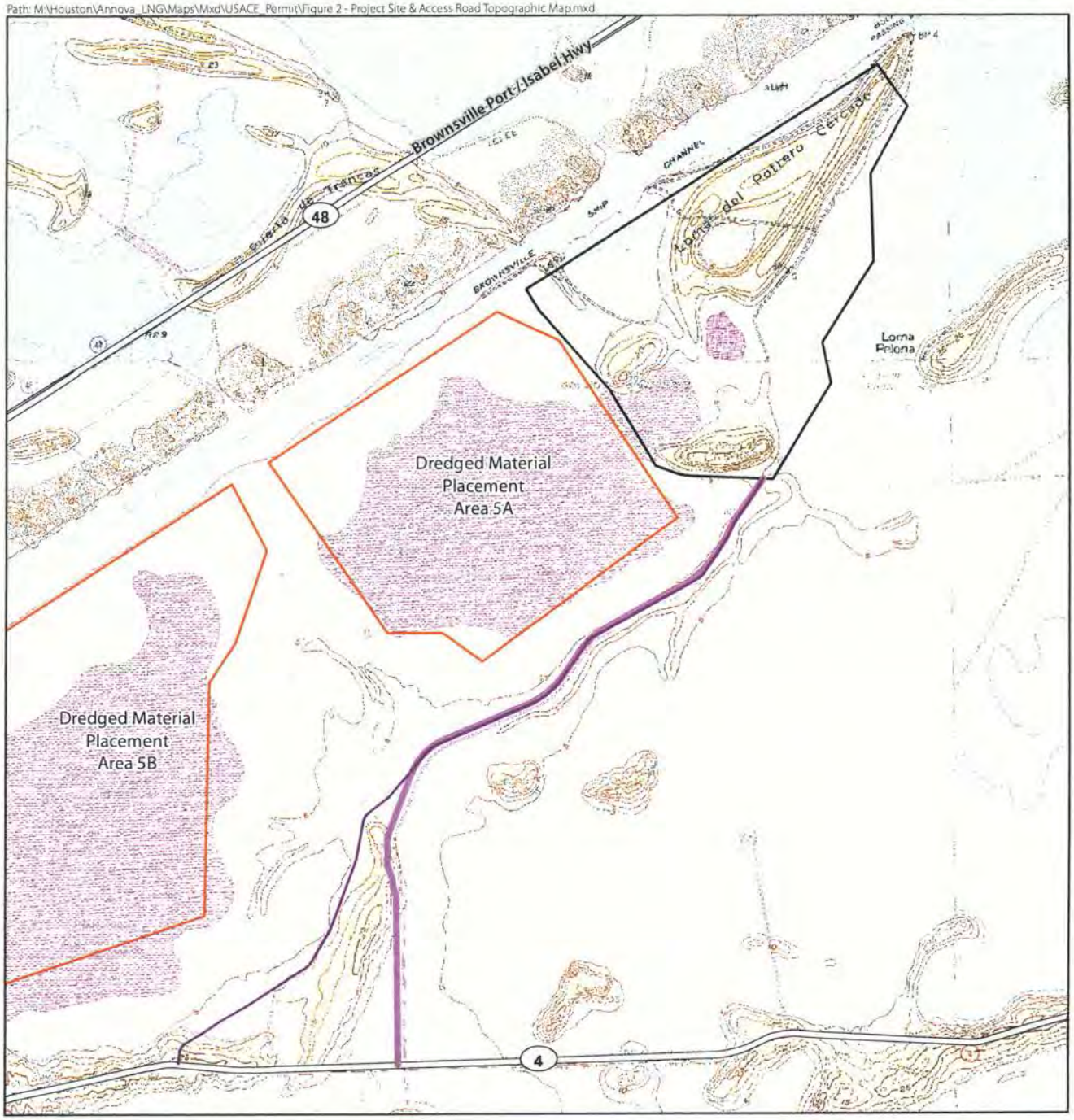
Path: M:\Houston\Annova_LNG\Maps\Mxd\USACE_Permit\Figure 2 - Project Site & Access Road Topographic Map.mxd



Legend

- Access Road Alternative 1
- Access Road Alternative 2 (Preferred Option)
- Project Site
- Dredged Material Placement Area
- State Highway

SCALE

0 1,000 2,000 Feet

SOURCE: Annova LNG 2015; ESRI 2014; TCEQ/USGS DRG 1970-1984 (Laguna Vista/Palmito Hill 7.5' Quadrangles)

Figure 2
Project Site and Main Access Road Topographic Map
Annova LNG Brownsville Project
Cameron County, Texas

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SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 2 of 34.

JUL 2 2 2016

Path: M:\Houston\Annova_LNG\Maps\Mxd\USACE_Permit\Figure 3 - Project Site & Access Road Aerial Map.mxd

N

SCALE

0 1,000 2,000 Feet

SOURCE: Annova LNG 2015, ESRI 2014, NAIP 2014

Legend

- Access Road Alternative 1
- Access Road Alternative 2 (Preferred Option)
- Project Site
- Dredged Material Placement Area
- State Highway

Figure 3

Project Site and Main Access Road Aerial Map

Annova LNG Brownsville Project

Cameron County, Texas

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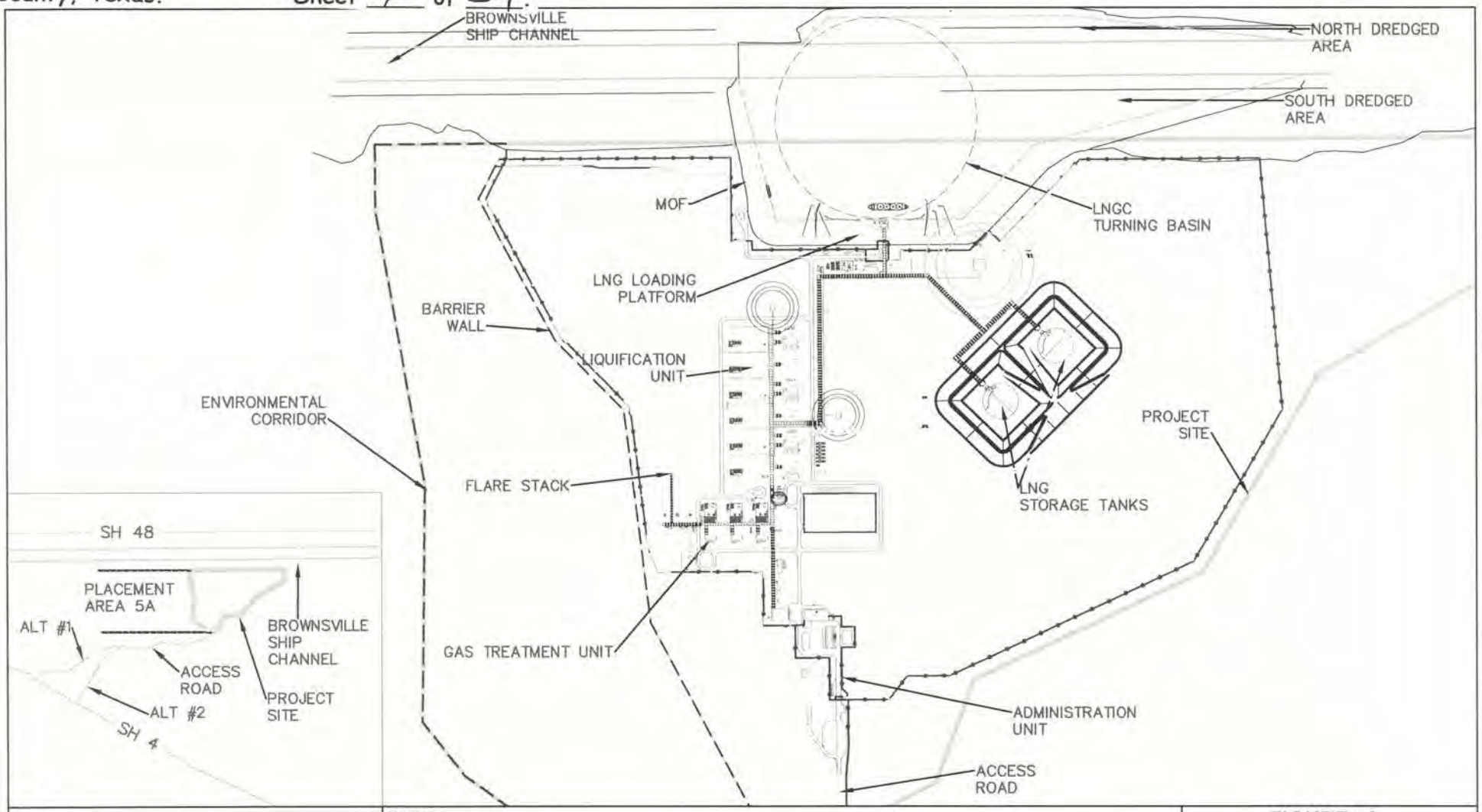
Annova LNG Common Infrastructure, LLC
SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 4 of 34.

ALT_C FIGURE 4A 2018 P SIZE.dwgGeeV

DEC 1 8 2018



550' 0' 550' 1100'
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-FERC-G2000

NOTES:

1. ALT #1 = ALTERNATE ACCESS ROAD #1.
2. ALT #2 = ALTERNATE ACCESS ROAD #2.

LEGEND

- BARRIER WALL
- BUILDINGS
- CHANNEL CENTERLINE
- CHANNEL LIMIT
- DREDGED AREA
- MATERIAL OFFLOADING FACILITY (MOF)
- FENCE
- FLARE RADIUS
- ROADS
- ENVIRONMENTAL CORRIDOR
- SHORE
- TANKS
- PROJECT SITE
- GAS TREATMENT UNITS
- LIQUIFICATION UNITS
- ADMINISTRATION UNIT

FIGURE 4A
GENERAL SITE LAYOUT

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CAMERON COUNTY, TEXAS

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MAY 29 2018

Path: M:\Houston\Annova_LNG\Ma

Legend

- Navigational Channel Limit
- Outfall
- Pipe Rack
- Chain Link Security Fence
- Barrier Wall
- Temporary Access Road
- Access Road Alternative 1 LOD
- Access Road Alternative 2 LOD (Preferred Option)
- Environmental Corridor
- Dredged Material Placement Area
- Limits of Disturbance
- Project Site
- Rock Shoreline Protection
- Loading Platform
- Material Offload Facility and Tug Dock
- LNG Mooring System
- Marine Basin
- Asphalt Roads
- Detention Pond
- Evaporation Pond
- Facilities
- Gravel and Impervious
- Low Maintenance Vegetation
- Maintained Vegetation
- Non-Maintained Restored to Natural
- Restored Temporary Workspace (Boundary)
- Restored Temporary Workspace (Fencelines)

N

SCALE
0 1,000 Feet

SOURCE: Annova LNG 2015; ESRI 2014; USDA NAIP 2014

Figure 4B
Proposed Site Layout
Annova LNG Brownsville Project
Cameron County, Texas

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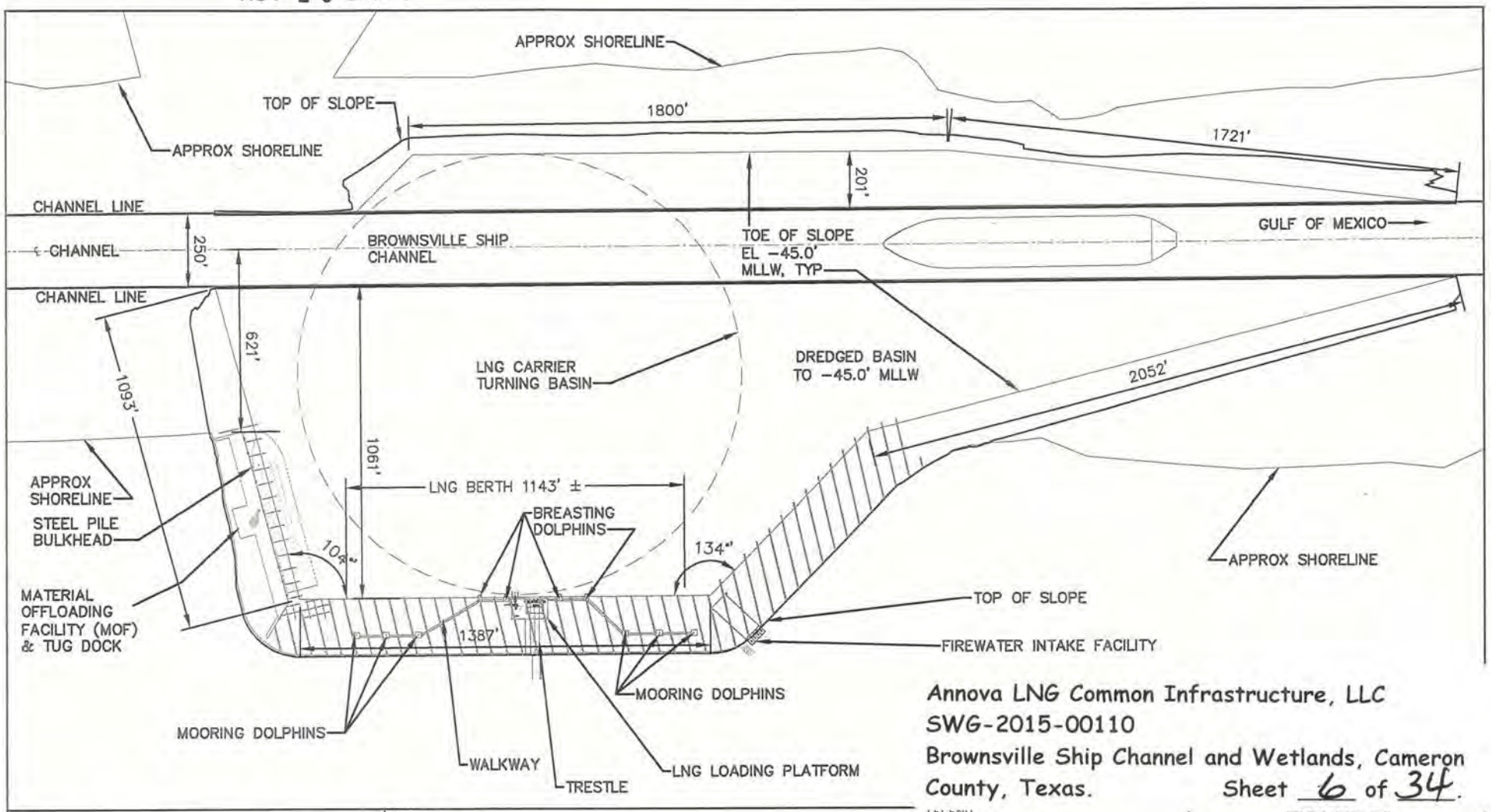

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SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas.

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250' 0' 250' 500'
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0005 RevC

NOTES:

1. DIMENSIONS SHOWN IN FEET.
2. TOPOGRAPHIC INFORMATION REFERENCE FROM OCEAN GRAPHIX (NOAA) CHART 11302 33RD ED, SEP. 2011 VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. 177,000m³ LNG CARRIER AND BARGE SHOWN FOR REFERENCE.
4. DREDGED AREA SLOPE IS TOP TO TOE 3H:1V.

LEGEND

CLASS I: 1500# ROCK (3.5' THICKNESS, 10.80 AC, 60,985 CY)

CLASS II: 2200# ROCK (3.5' THICKNESS, 0.21 AC, 1,191 CY)

CLASS III: 5000# ROCK (5.0' THICKNESS, 0.82 AC, 6,636 CY)

FIGURE 5A
MARINE FACILITIES LAYOUT

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CAMERON COUNTY, TEXAS

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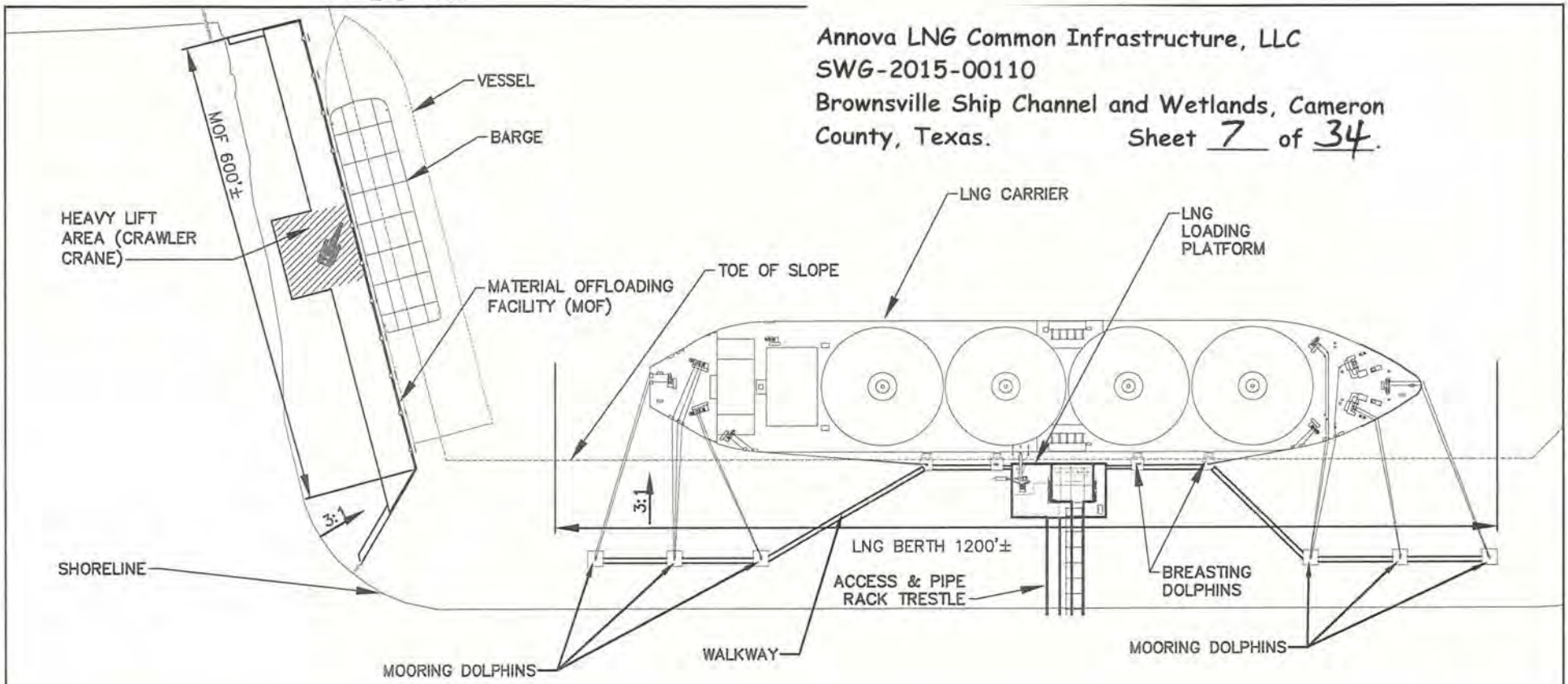
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 7 of 34.



100'–0" 0'–0" 100'–0" 200'–0"
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0050

NOTES:

1. DIMENSIONS SHOWN IN FEET MLLW BELOW SHORELINE.

FIGURE 6A
LNG BERTH, MATERIAL OFFLOADING FACILITY & TUG DOCK, PLAN VIEW
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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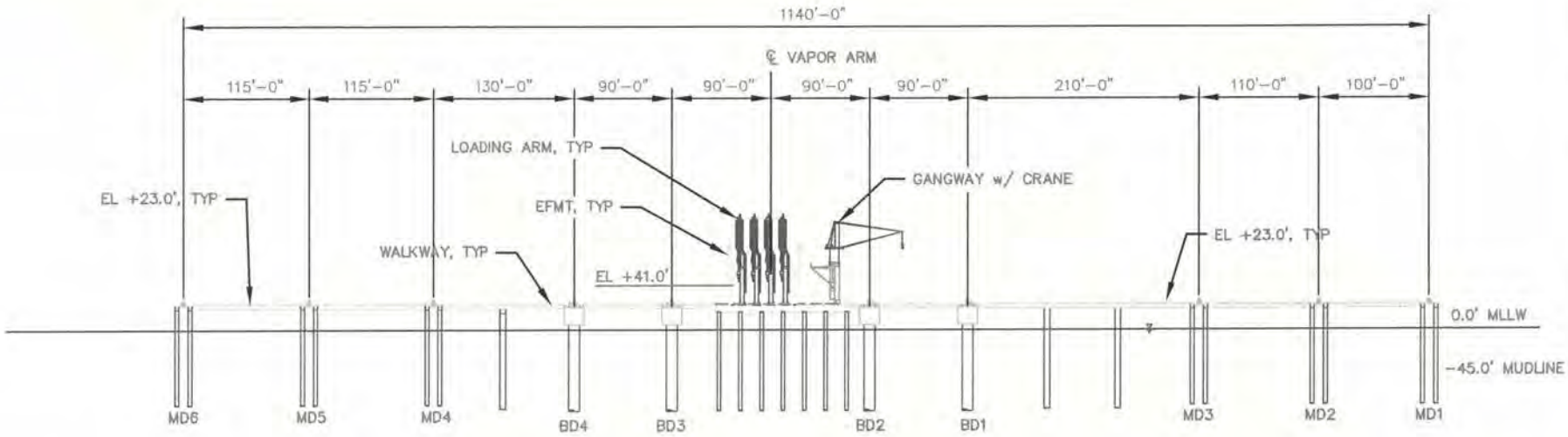

A1 W-0025 BERTH ELEVATION

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75' 0' 75' 150'
SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0022

NOTES:

1. CROSS-SECTION LOCATION IS PRESENTED IN B&V DRAWING # 183169-00G0-W-0025.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. TYPICAL MD PILE DEPTH: TOC EL -130.0' MLLW.
4. TYPICAL BD PILE DEPTH: TOC EL -132.0' MLLW.

LEGEND

MD = MOORING DOLPHIN

BD = BREASTING DOLPHIN

FIGURE 7
LNG BERTH ELEVATION, CROSS-SECTION

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CAMERON COUNTY, TEXAS

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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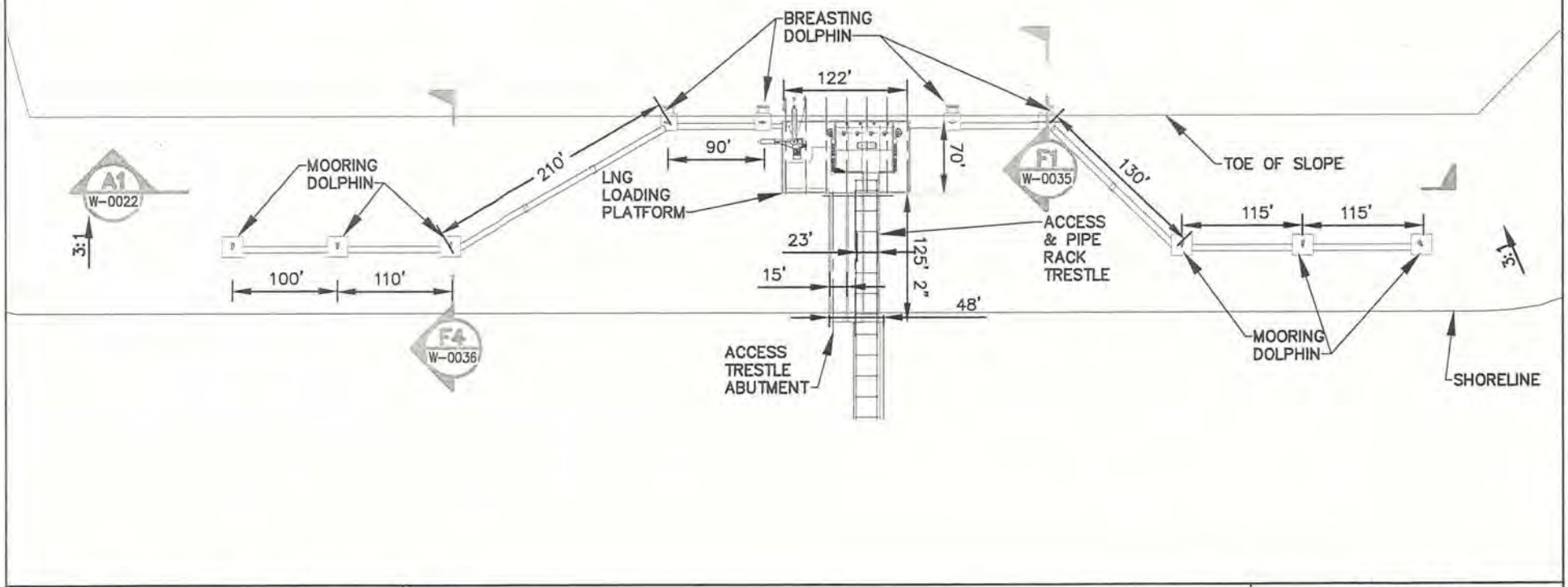

75'–0" 0'–0" 750" 150'–0"
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0025

NOTES:

1. DIMENSIONS SHOWN IN FEET AND INCHES.
2. CROSS–SECTION PROFILES ARE PRESENTED IN B&V DRAWING # 183169–00G0–W–0022, B&V DRAWING # 183169–00G0–W–0035, AND B&V DRAWING # 183169–00G0–W–0036.

D1 W-0007 CROSS SECTION CALL OUT

FIGURE 8A
BREASTING AND MOORING DOLPHINS, PLAN VIEW

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CAMERON COUNTY, TEXAS

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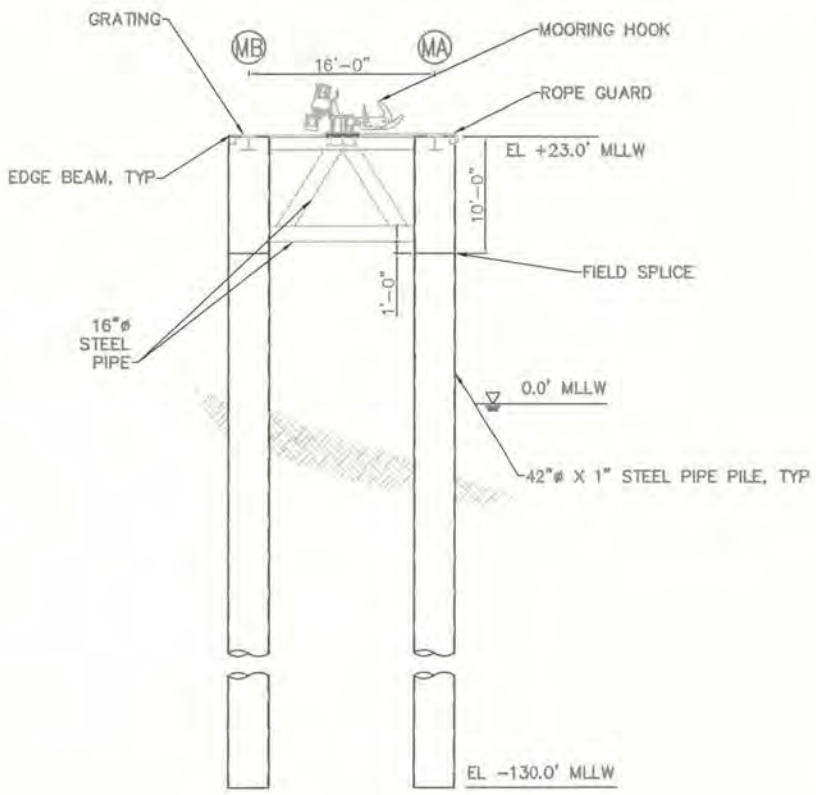
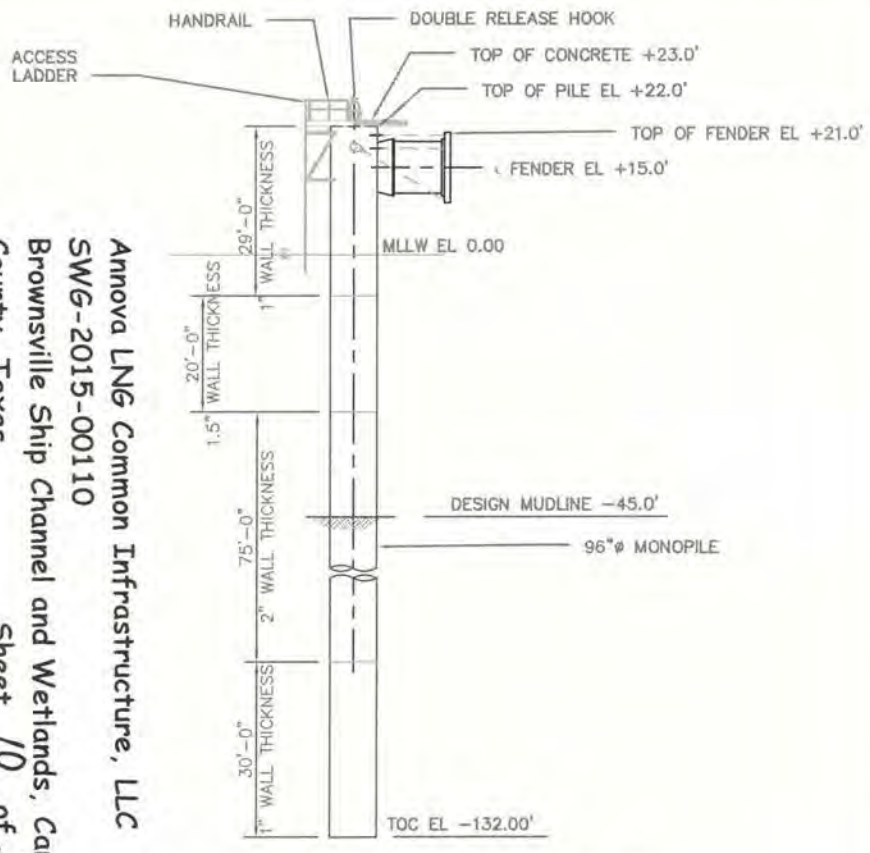


F4 W-0036 MOORING DOLPHIN SECTION

8'-0" 0'-0" 8'-0" 16'-0"

SCALE



F1 W-0035 BREASTING DOLPHIN SECTION

16'-0" 0'-0" 16'-0" 32'-0"

SCALE

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
Sheet 10 of 34.

NOTES:

1. DIMENSIONS SHOWN IN FEET AND INCHES.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. CROSS-SECTION LOCATIONS ARE PRESENTED IN B&V DRAWING # 183169-0000-W-0025.

SOURCE: B&V DRAWING # 183169-0G00-W-0035 & 0036

LEGEND

M = MOORING DOLPHIN

= FILL MATERIAL

FIGURE 9

BREASTING AND MOORING DOLPHINS, CROSS-SECTION

ANNOVA LNG BROWNSVILLE PROJECT

CAMERON COUNTY, TEXAS

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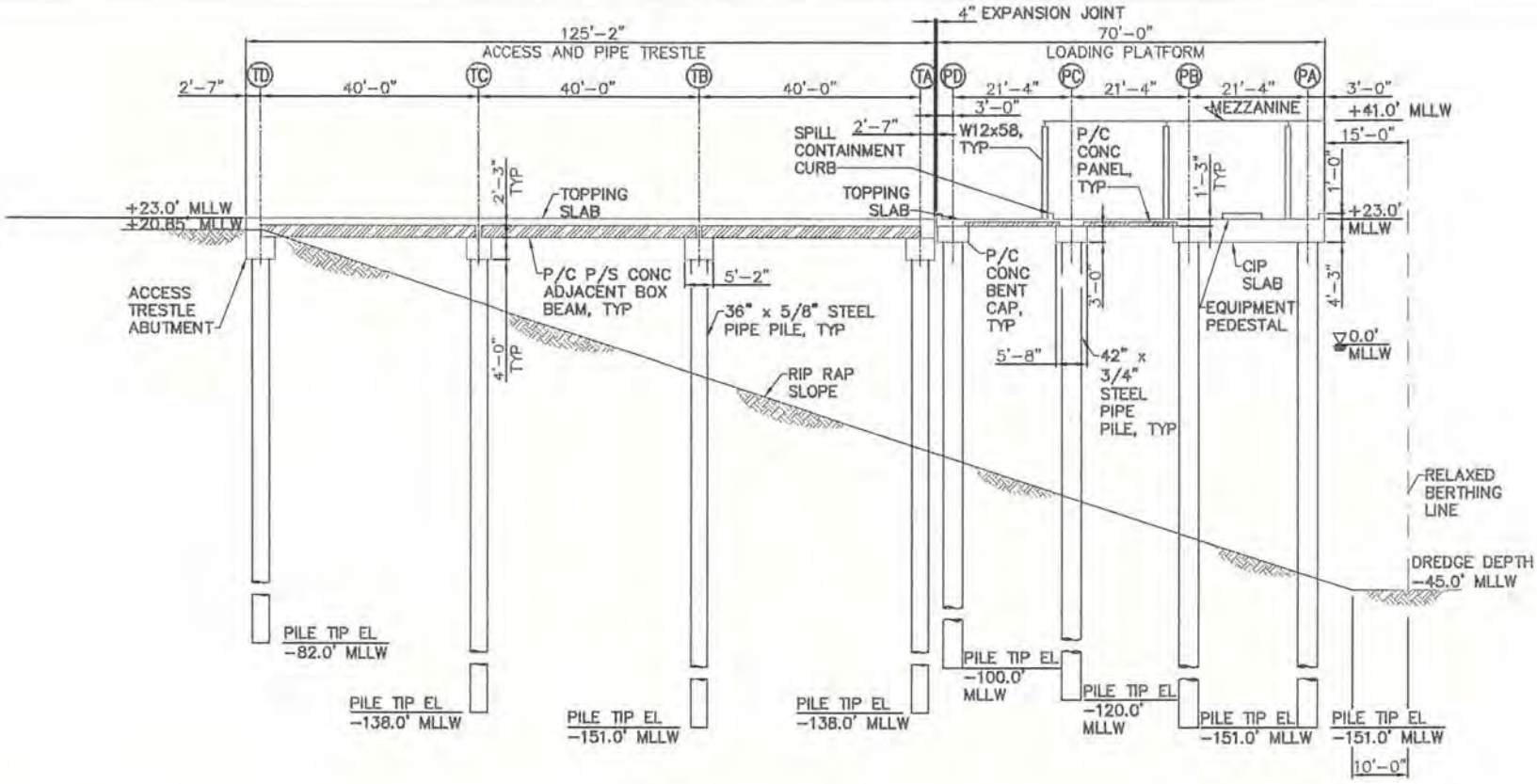

F1 W-0024 TRESTLE AND PLATFORM LONGITUDINAL SECTION

16' 0' 16' 32'
SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0029

NOTES:

1. CROSS-SECTION LOCATION IS PRESENTED IN B&V DRAWING # 183169-00G0-W-0029.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).

LEGEND

T = TRESTLE
P = PLATFORM

Annova LNG Common Infrastructure, LLC
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Brownsville Ship Channel and Wetlands, Cameron County, Texas.

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FIGURE 10
TRESTLE AND PLATFORM, CROSS-SECTION

ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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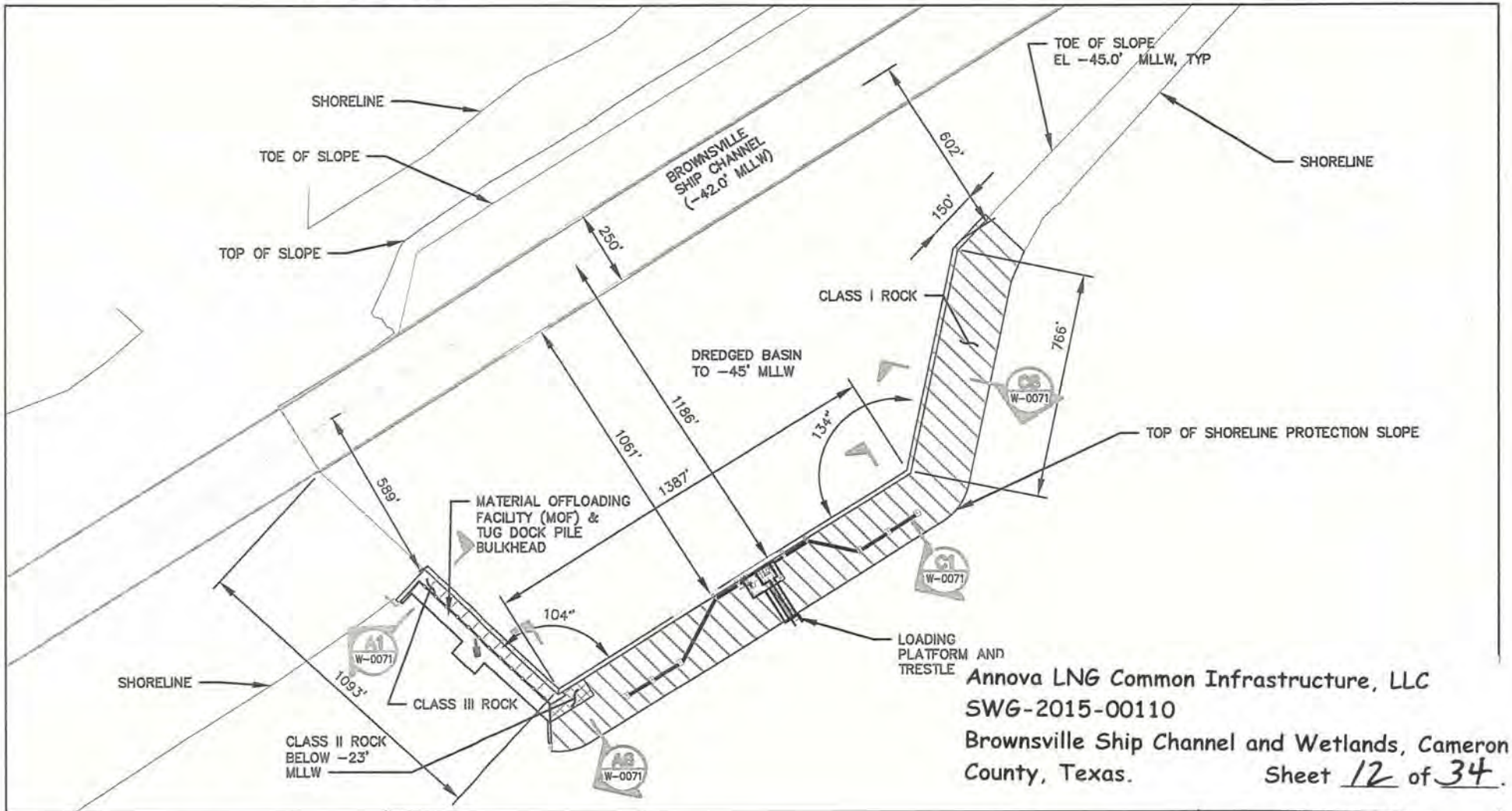

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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250' 0' 250' 500'
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0070_RevB

NOTES:

1. DIMENSIONS SHOWN IN FEET.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. BATHYMETRY DATA REFERENCED FROM USACE CHANNEL SURVEY, DECEMBER 10, 2014.
4. TOPOGRAPHIC DATA REFERENCED FROM ANNOVA LNG SURVEY MARCH 24, 2015 BY FRONTIER SURVEYING COMPANY.
5. CROSS-SECTION PROFILES ARE PRESENTED IN B&V DRAWING # 183169-00G0-W-0071 RevB.
6. APPROXIMATE LOCATION OF SHORELINE.

LEGEND

CLASS I: 1500# ROCK (3.5' THICKNESS, 10.80 AC, 60,985 CY)

CLASS II: 2200# ROCK (3.5' THICKNESS, 0.21 AC, 1,191 CY)

CLASS III: 5000# ROCK (5.0' THICKNESS, 0.82 AC, 6,636 CY)

FIGURE 11A
MARINE BERTH SHORE PROTECTION LAYOUT, PLAN VIEW
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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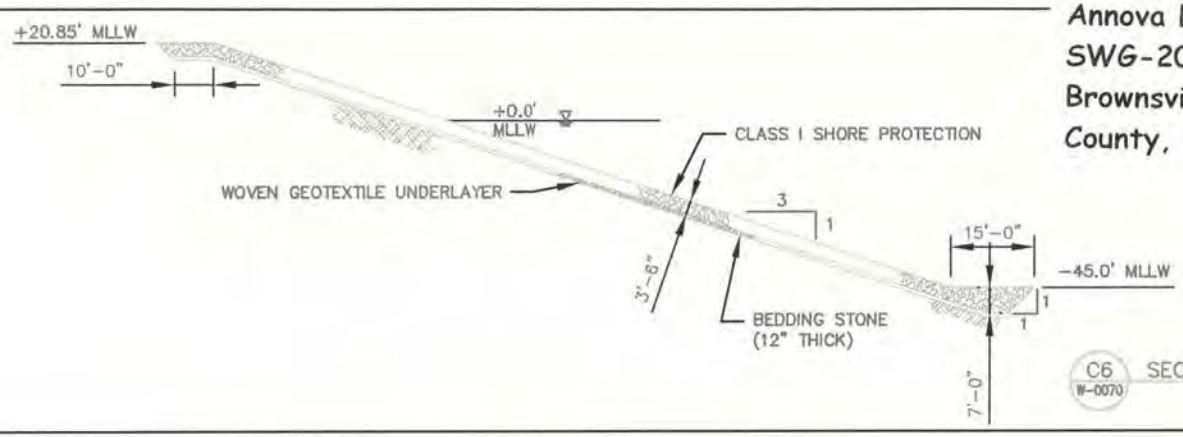
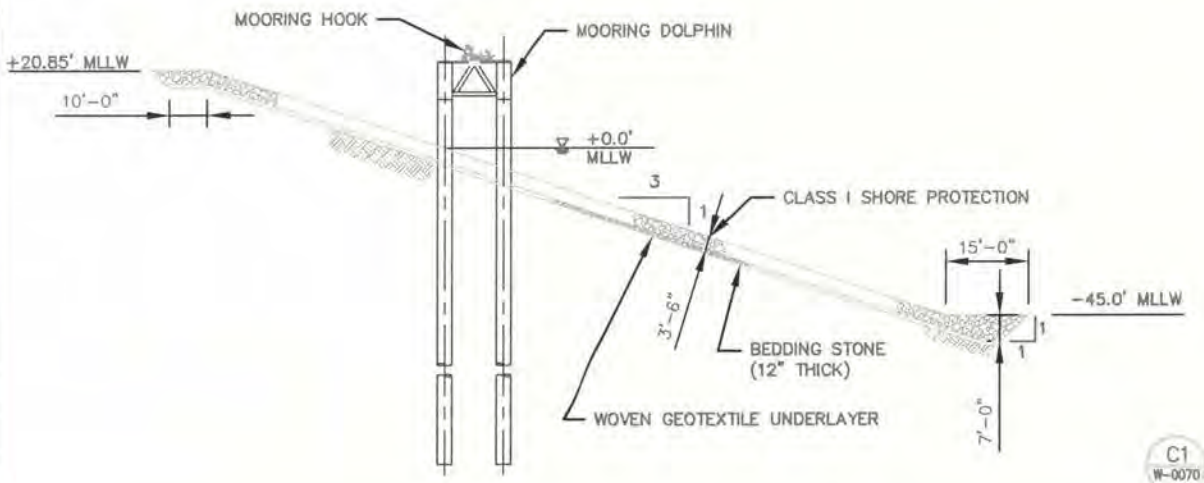


C6 W-0070 SECTION – SHORE PROTECTION AT EAST END OF SLIP



C1 W-0070 SECTION – SHORE PROTECTION AT BERTH

25' 0' 25' 50'
SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0071_RevB

NOTES:

1. DIMENSIONS IN FEET AND INCHES.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. CROSS-SECTION LOCATIONS ARE PRESENTED IN B&V DRAWING # 183169-00G0-W-0070 Rev B.

LEGEND

- BEDDING STONE (12" THICK)
- CLASS 1 SHORE PROTECTION
- FILL MATERIAL

FIGURE 12
SHORELINE PROTECTION AT LNGC BERTH, CROSS-SECTION

ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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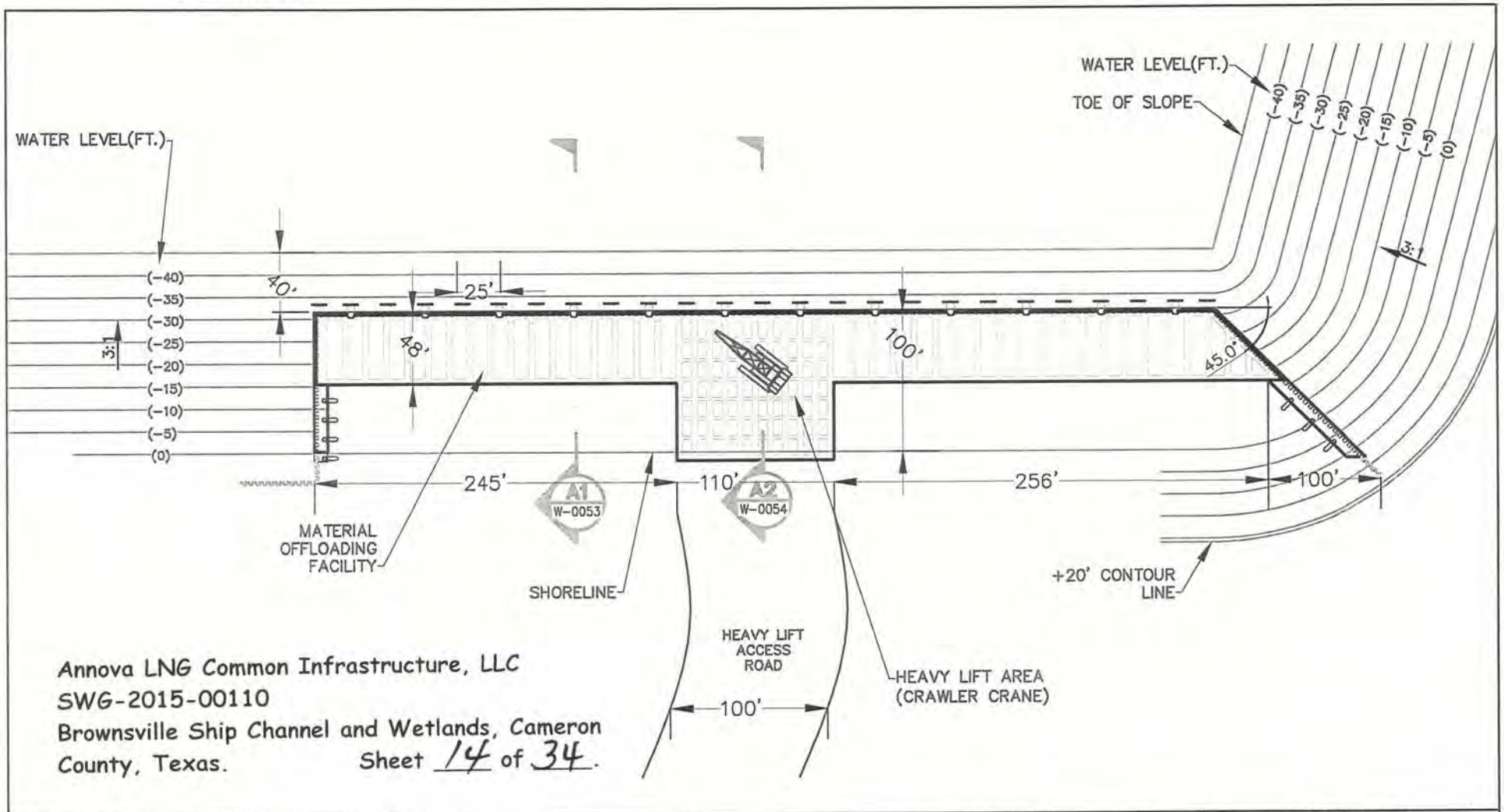

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Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 14 of 34.

50'-0" 0'-0" 50'-0" 100'-0"
SCALE

PLANT TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0052 Rev B

NOTES:

1. DIMENSIONS SHOWN IN FEET AND INCHES.
2. CROSS SECTION PROFILES ARE PRESENTED IN B&V DRAWING # 183169-00G0-W-0053 AND B&V DRAWING # 183169-00G0-W-0054.

LEGEND

D1 W-0007 — CROSS SECTION CALL OUT

DOCK PILE

CAP BEAM

FIGURE 13A
MATERIAL OFFLOADING FACILITY, TUG DOCK PILE, & CAP BEAM, PLAN VIEW
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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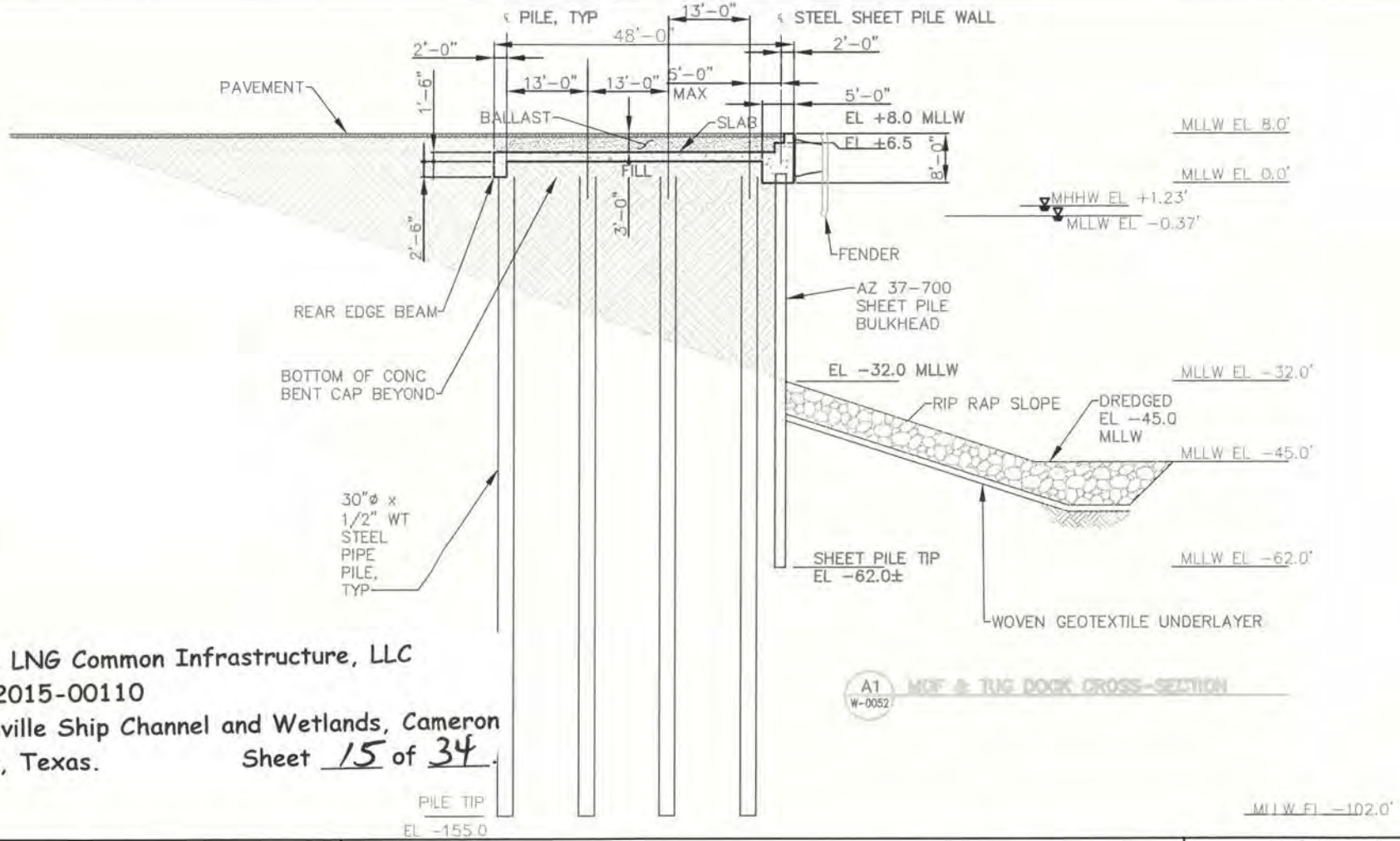

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12.5'-0" 0'-0" 12.5'-0" 25'-0"
SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0053

NOTES:

1. DIMENSIONS SHOWN IN FEET AND INCHES.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW) ELEVATION AND MEAN HIGHER HIGH WATER (MHHW) ELEVATION.
3. CROSS SECTION LOCATION IS PRESENTED IN B&V DRAWING # 183169-00G0-W-0052 Rev B.

LEGEND

- RIP RAP
- FILL MATERIAL
- BALLAST
- CONCRETE SLAB
- PAVEMENT

FIGURE 14
MATERIAL OFFLOADING FACILITY & TUG DOCK, CROSS-SECTION
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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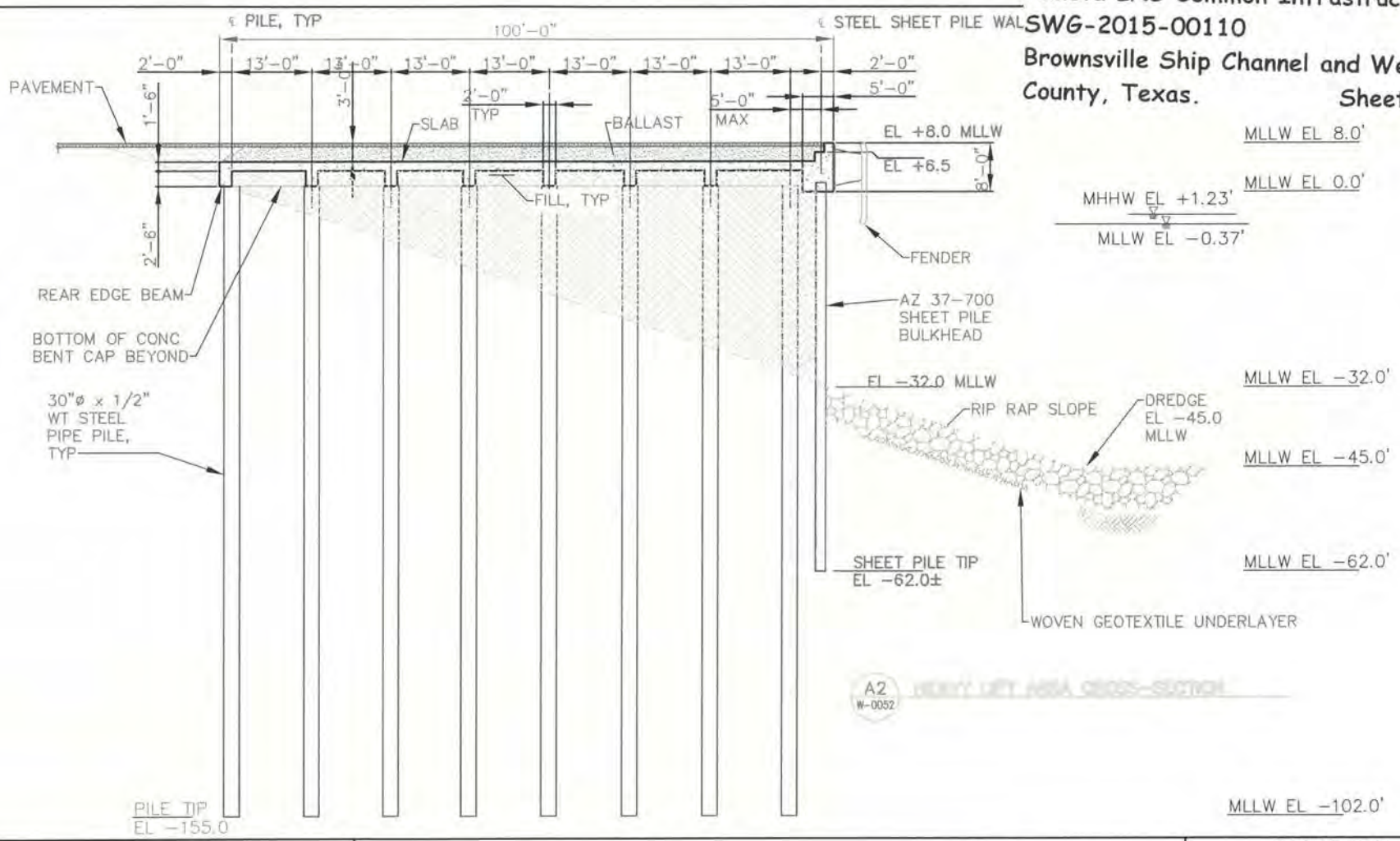

12.5'-0" 0'-0" 12.5'-0" 25'-0"
SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0054

NOTES:

1. DIMENSIONS SHOWN IN FEET AND INCHES.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW) ELEVATION AND MEAN HIGHER HIGH WATER (MHHW) ELEVATION.
3. CROSS SECTION LOCATION IS PRESENTED IN B&V DRAWING # 183169-00G0-W-0052 Rev B.

LEGEND

- RIP RAP
- FILL MATERIAL
- BALLAST
- CONCRETE SLAB
- PAVEMENT

FIGURE 15
HEAVY LIFT AREA FACILITY & TUG DOCK, CROSS-SECTION
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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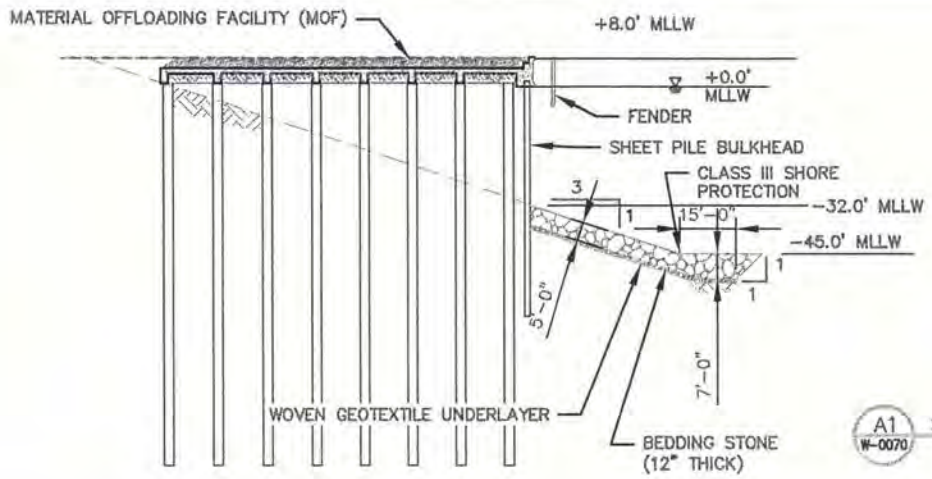

Annova LNG Common Infrastructure, LLC
SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas.

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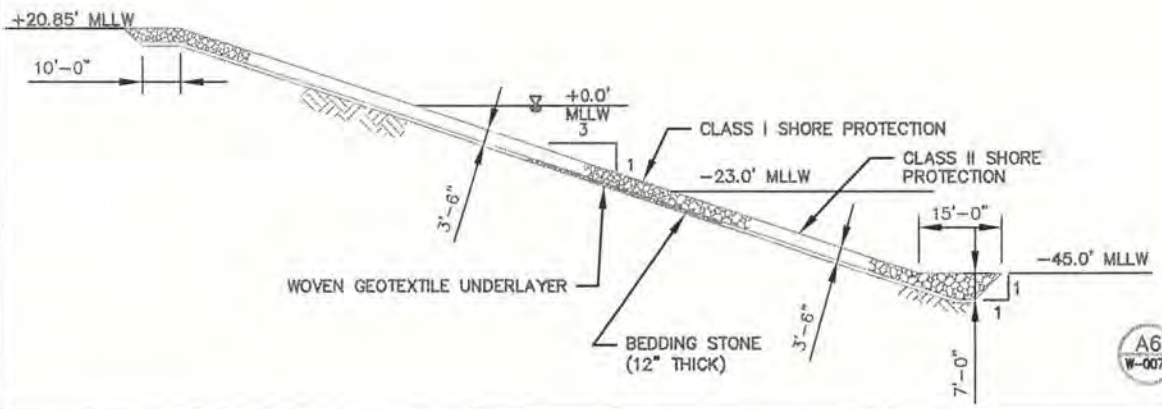
A1 W-0070 SECTION – SHORE PROTECTION AT MOF



A6 W-0070 SECTION – SHORE PROTECTION SOUTH END OF SLIP

25' 0' 25' 50'

SCALE

SOURCE: B&V DRAWING # 183169-00G0-W-0071_RevB

NOTES:

1. PLAN VIEW OF CROSS-SECTIONS IS SHOWN ON MARINE FACILITIES LAYOUT.
2. DIMENSIONS SHOWN IN FEET AND INCHES.
3. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
4. CROSS-SECTION LOCATIONS ARE PRESENTED IN B&V DRAWING # 183169-00G0-W-0070 Rev B.

LEGEND

- BEDDING STONE (12" THICK)
- CLASS III SHORE PROTECTION
- CLASS II SHORE PROTECTION
- CLASS I SHORE PROTECTION
- CONCRETE SLAB
- FILL MATERIAL
- PAVEMENT
- BALLAST

FIGURE 16
SHORELINE PROTECTION AT MATERIAL OFFLOADING FACILITY (MOF)

ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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SWG-2015-00110
Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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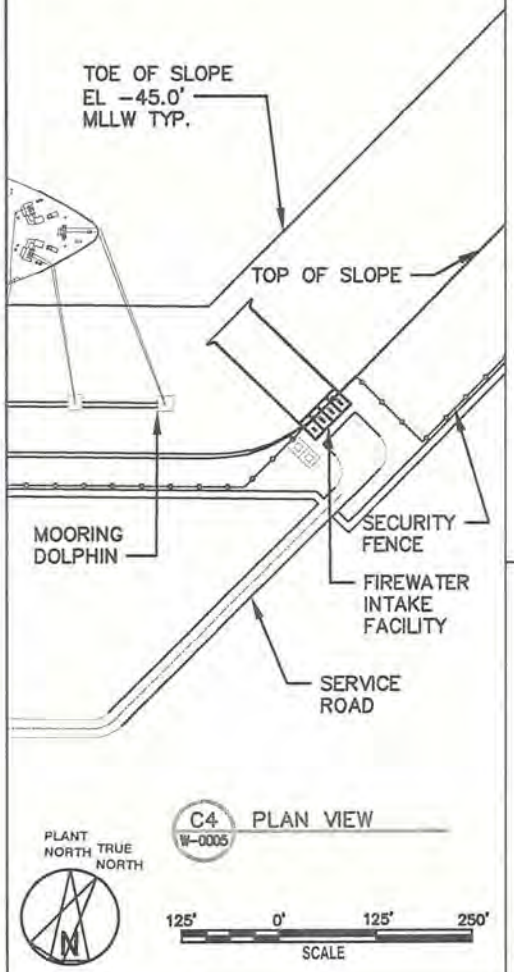
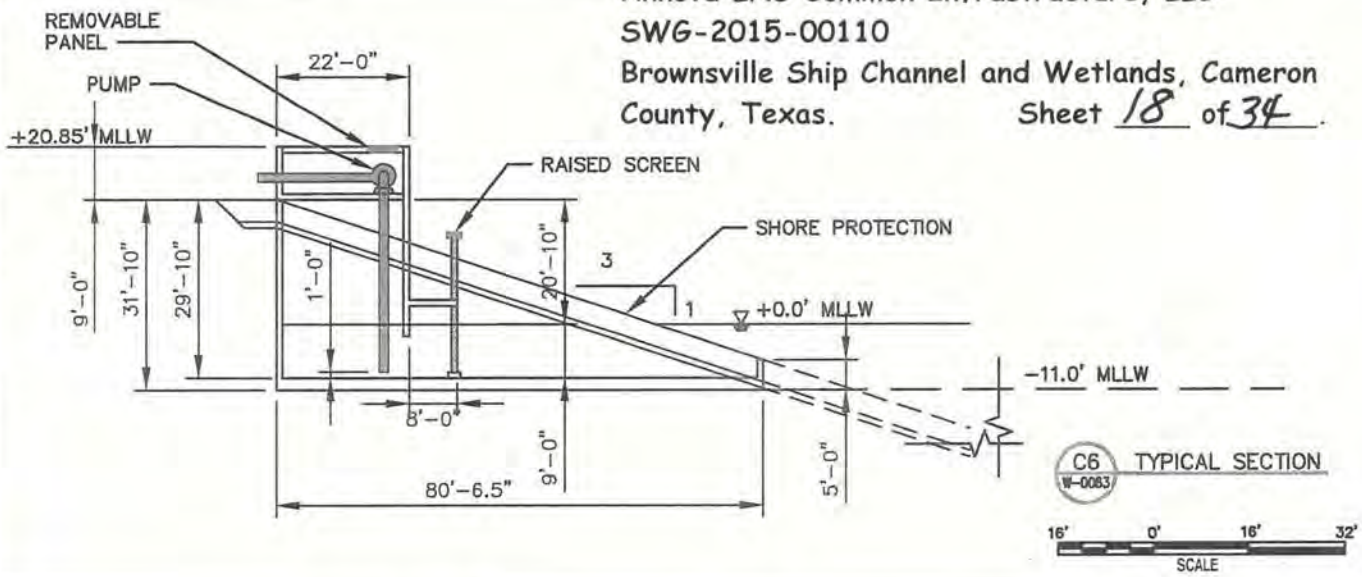
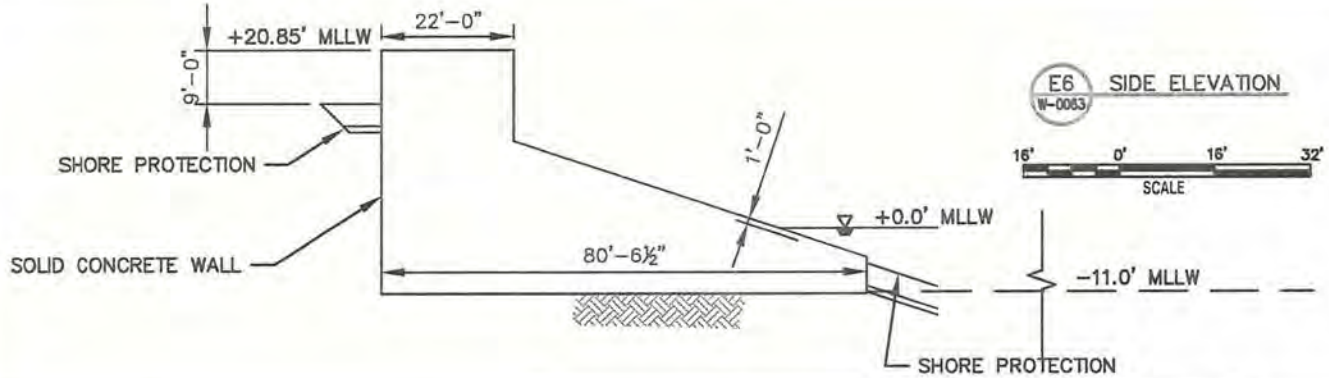


C4 W-0005 PLAN VIEW



C6 W-0063 TYPICAL SECTION



E6 W-0063 SIDE ELEVATION

SOURCE: B&V DRAWING # 183169-00G0-W-0063

NOTE:

1. SEE PROPOSED SITE LAYOUT FOR PLAN VIEW OF FIREWATER INTAKE.
2. DIMENSIONS SHOWN IN FEET AND INCHES.
3. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW) ELEVATIONS.

LEGEND

FILL MATERIAL

FIGURE 17
FIREWATER INTAKE STRUCTURE, PLAN & CROSS-SECTION
ANNOVA LNG BROWNSVILLE PROJECT

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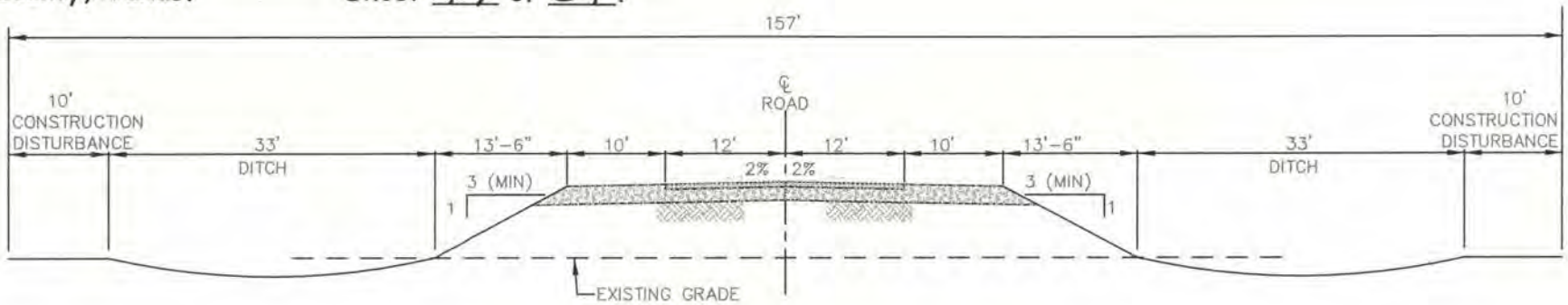
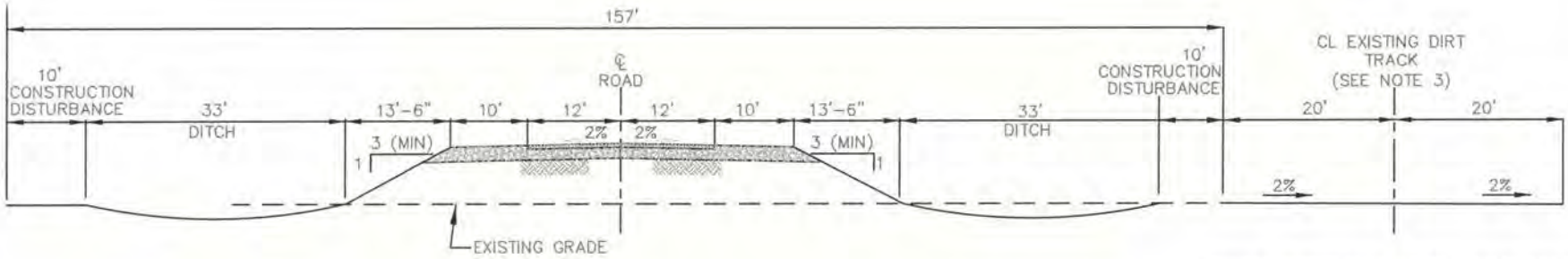
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 19 of 34.



TYPICAL PERMANENT ACCESS ROAD SECTION
NOT TO SCALE



TYPICAL PERMANENT ACCESS ROAD SECTION
NOT TO SCALE

TYPICAL TEMPORARY ACCESS ROAD SECTION
NOT TO SCALE

NOTES:

1. SEE GENERAL SITE LAYOUT FOR PLAN VIEW OF ACCESS ROAD.
2. EDGE OF ROAD ELEVATION SHALL BE 95.0' MINIMUM, TO BE ABOVE 100-YR FLOOD ELEVATION. EDGE OF ROAD ELEVATION SHALL ALSO BE 4.5 FEET MINIMUM ABOVE EXISTING GRADE TO ALLOW FOR CULVERT CROSSINGS.
3. THE EXISTING DIRT TRACK RANGES FROM APPROXIMATELY 10-40 FEET WIDE.

LEGEND

- HOT MIX ASPHALTIC CONCRETE, ITEM 341, TYPE "C"
- BASE, ITEM 247, GRADE 1, LIMESTONE
- SUB-BASE, FILL MATERIAL

SOURCE: B&V DRAWING # 183169-0000-S9311

FIGURE 18
ACCESS ROAD, CROSS-SECTION
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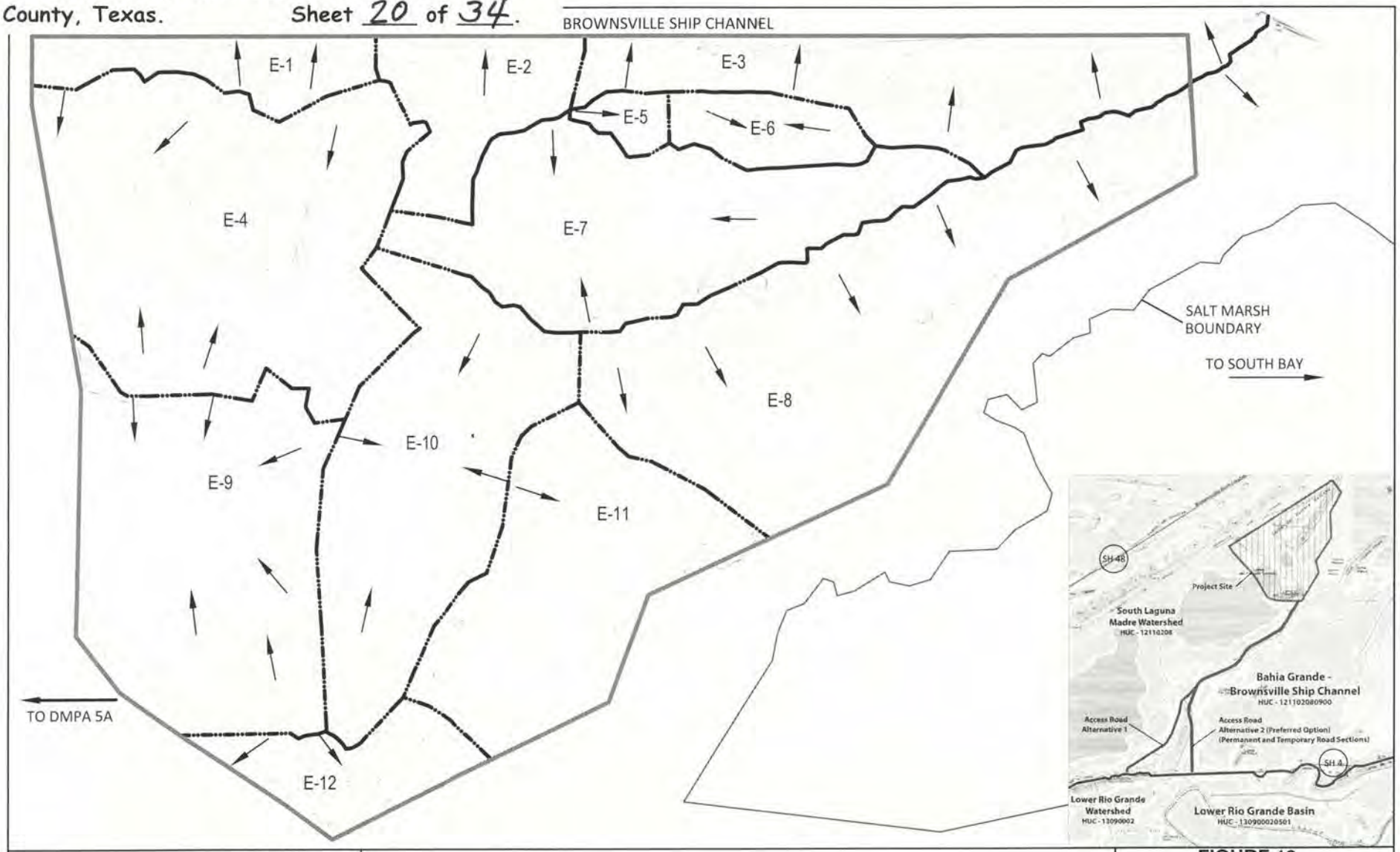
Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 20 of 34.



500' 0' 500' 1000'
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-FERC-S3000

NOTES:

1. PLANT GRID ELEVATION 83.5 FEET IS EQUAL TO 0 FEET NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

DRAINAGE BASIN LIMITS
FLOW DIRECTION
E-11 EXISTING DRAINAGE BASIN NO.
SITE BOUNDARY

FIGURE 19
EXISTING SITE DRAINAGE PATTERNS
ANNOVA LNG BROWNSVILLE PROJECT
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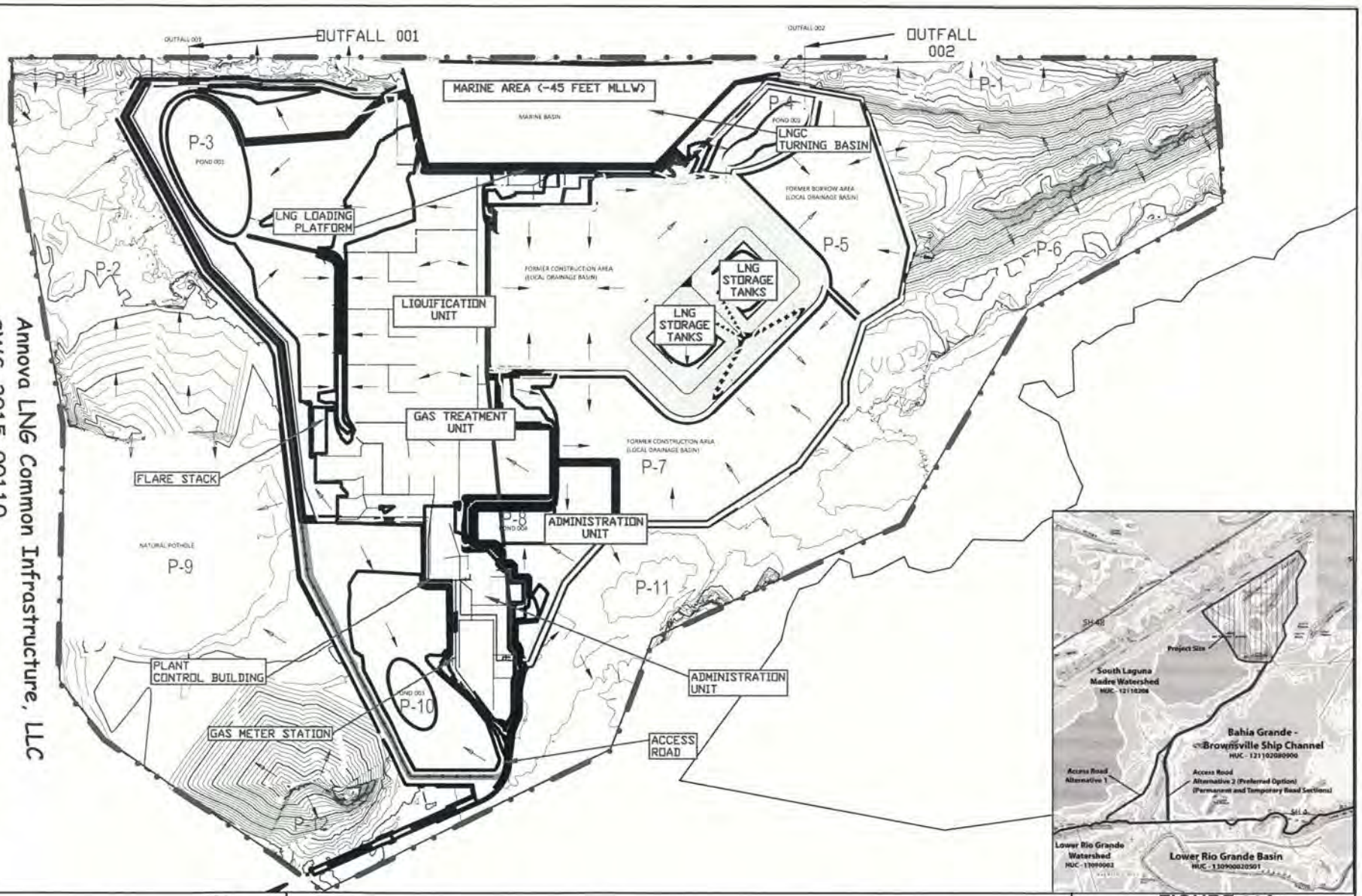
MAY 29 2018

MAY 31 2018



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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
Sheet 21 of 34.

500' 0' 500' 1000'
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-FERC-S3000

NOTES:
1. PLANT GRID ELEVATION 83.5 FEET IS EQUAL TO 0 FEET NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. APPROXIMATE TERMINAL ELEVATION IS 87 FEET.
3. APPROXIMATE ELEVATION WITHIN BASIN P5 AND P7 IS 89.5 FEET PLANT GRID (6'NAVD88 - RANGE 4'-8').

LEGEND
- - - - - DRAINAGE BASIN LIMITS
→ FLOW DIRECTION
P-11 PROPOSED DRAINAGE BASIN NO.
——— SITE BOUNDARY

FIGURE 20A
PROJECT STORMWATER MANAGEMENT SYSTEM
ANNOVA LNG BROWNSVILLE PROJECT
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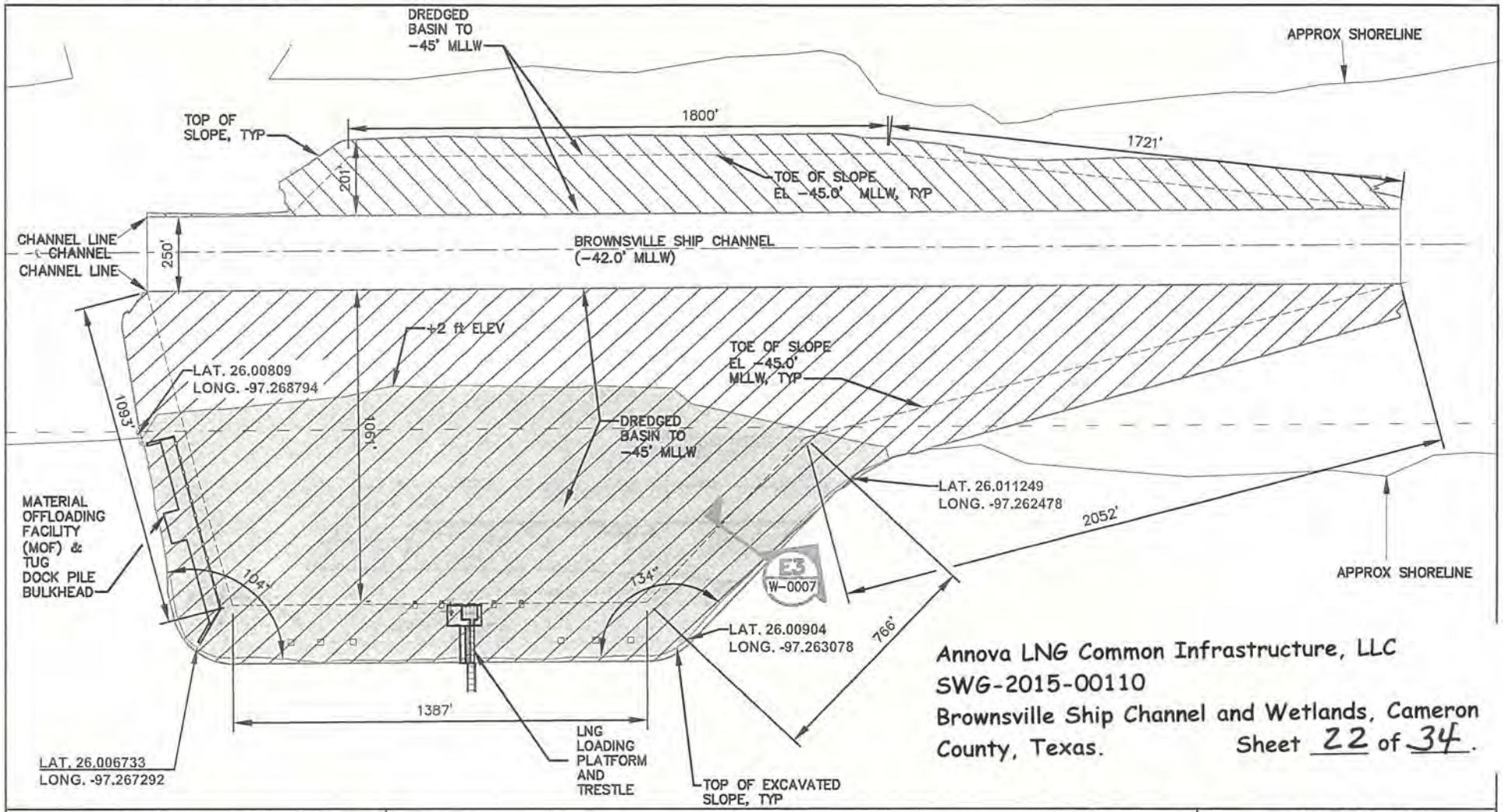

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Sheet 22 of 34.

250' 0' 250' 500'
SCALE

PLANT NORTH
TRUE NORTH

SOURCE: B&V DRAWING # 183169-00G0-W-0006 RevB

LEGEND

ABOVE ELEV -20.0' MLLW
BASIN SOUTH SIDE OF CHANNEL
BASIN NORTH SIDE OF CHANNEL
BROWNSVILLE SHIP CHANNEL CENTERLINE
MOORING DOLPHIN
BREASTING DOLPHIN
D1 W-0007 CROSS SECTION CALL OUT

FIGURE 21A
DREDGING FOOTPRINT, PLAN VIEW
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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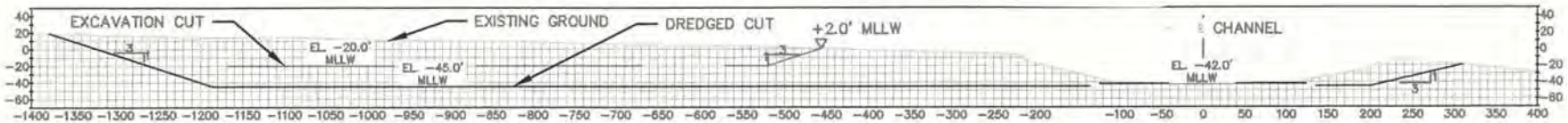
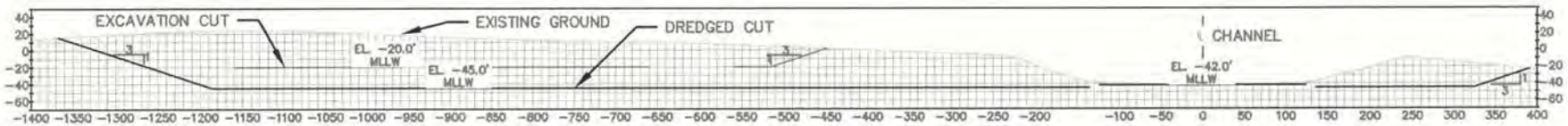
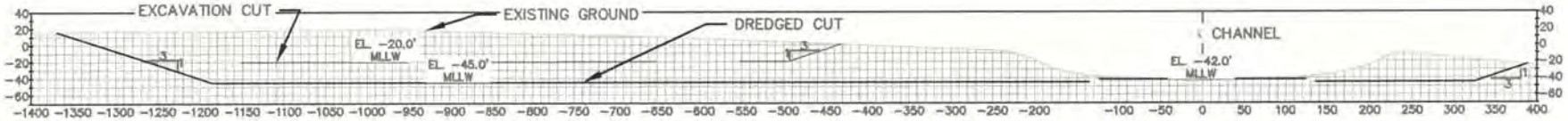


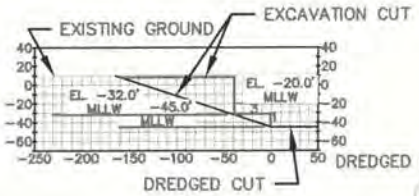
A1 W-0006 SECTION AT WEST END MOORING DOLPHINS



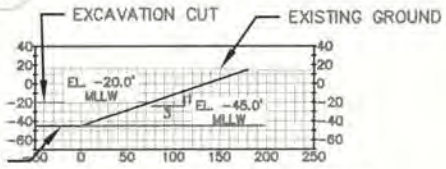
B1 W-0006 SECTION AT LNG PLATFORM



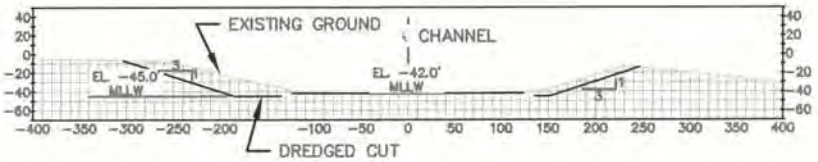
D1 W-0006 SECTION AT EAST END MOORING DOLPHINS



E1 W-0006 SECTION AT MATERIAL OFFLOADING FACILITY (MOF)



E3 W-0006 SECTION AT EAST END OF SLIP



E6 W-0006 SECTION AT HEAD OF BASIN

SOURCE: B&V DRAWING # 183169-00G0-W-0007 RevB

NOTES:

1. DIMENSIONS SHOWN IN FEET.
2. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).
3. BATHYMETRY DATA REFERENCED FROM USACE CHANNEL SURVEY, DECEMBER 10, 2014.
4. TOPOGRAPHIC DATA REFERENCED FROM ANNOVA LNG SURVEY MARCH 24, 2015 BY FRONTIER SURVEYING COMPANY.
5. CROSS-SECTION LOCATIONS ARE PRESENTED ON B&V DRAWING # 183169-00G0-W-0006 RevB.
6. VERTICAL DATUM BASED ON MEAN LOWER LOW WATER (MLLW).

FIGURE 22
DREDGING AREA, CROSS-SECTION
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CAMERON COUNTY, TEXAS

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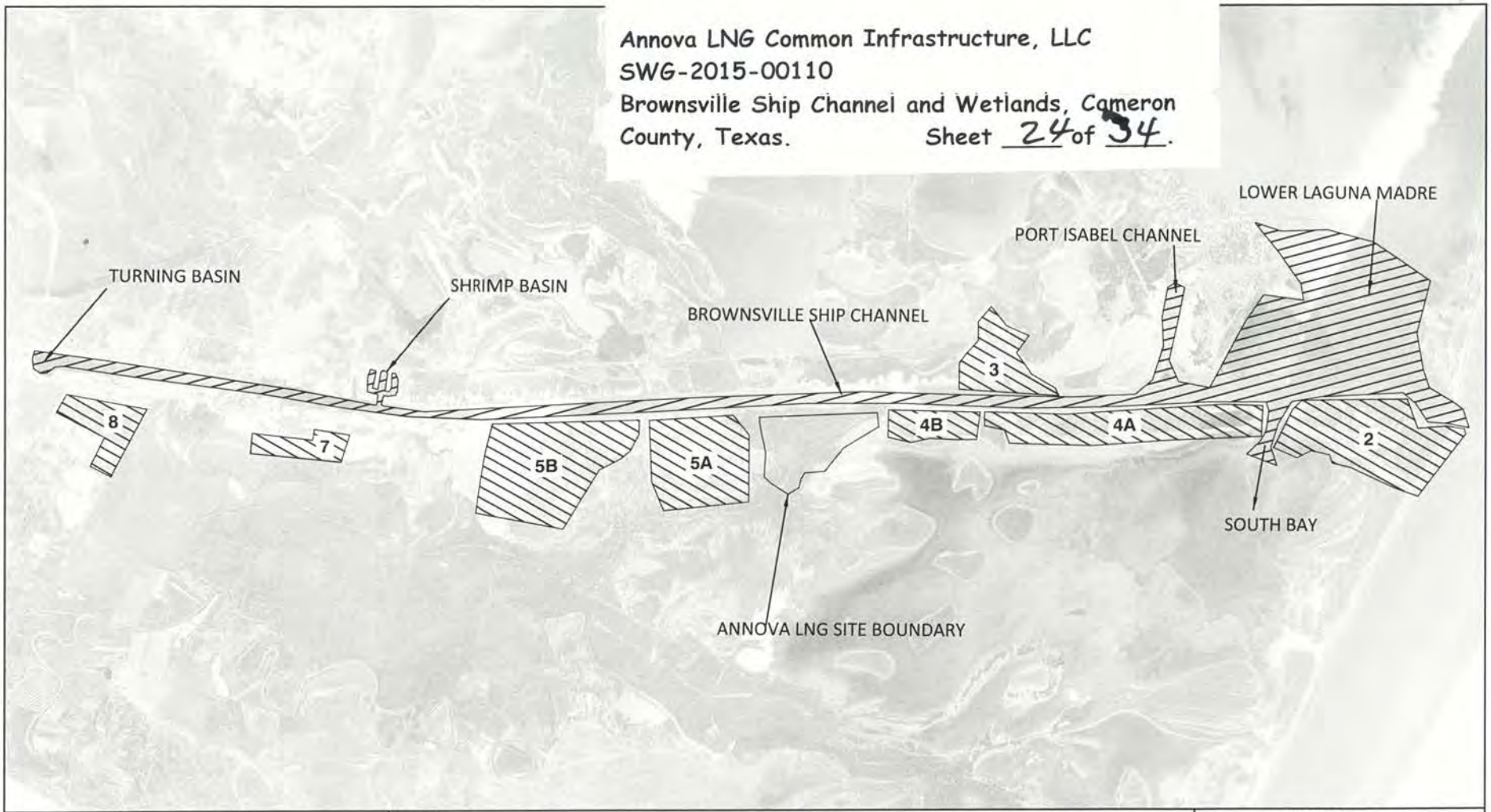

1 miles 0 miles 1 miles 2 miles
SCALE

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169.44.0160-Rev. C
NAIP 2014

NOTES:

1. LINE DRAWING REPRESENTS APPROXIMATE BOUNDARY OF DREDGED MATERIAL PLACEMENT AREA /SURFACE WATER.

LEGEND

BROWNSVILLE SURFACE WATER

DREDGED MATERIAL PLACEMENT AREA

FIGURE 23
BROWNSVILLE NAVIGATION DISTRICT DREDGED MATERIAL PLACEMENT AREAS
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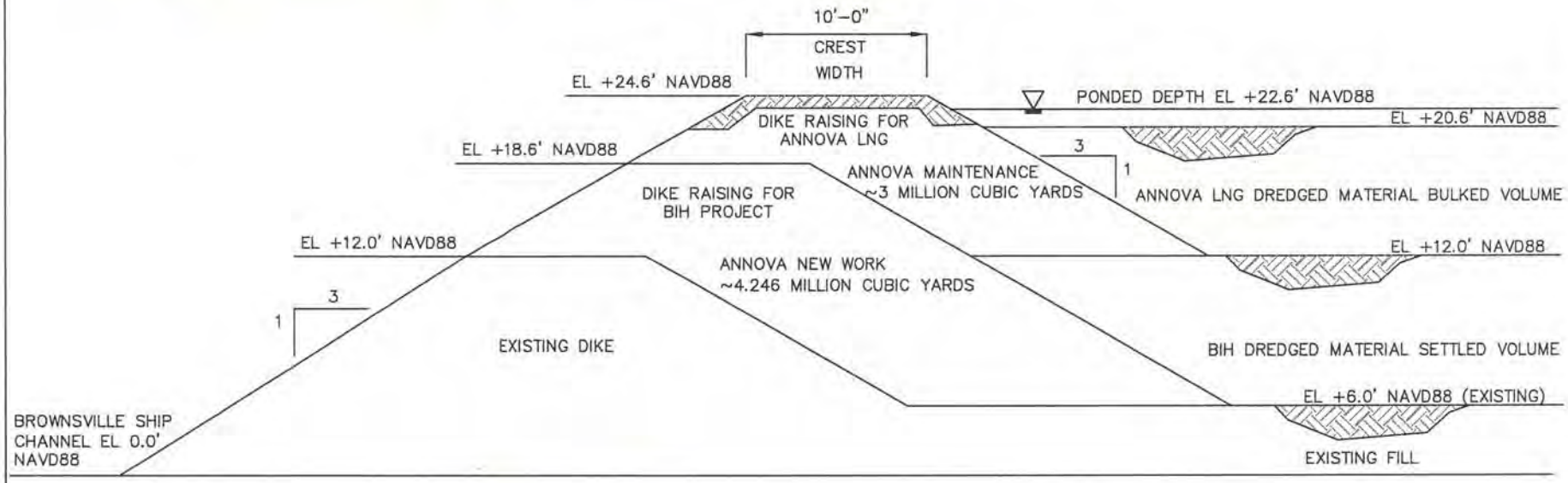

NOTES:

1. ALL VALUES ARE APPROXIMATE.
2. TOP OF DIKE ELEVATION – FEET ABOVE EXISTING GRADE (NAVD88).
3. BRAZOS ISLAND HARBOR (BIH).

LEGEND

FILL MATERIAL

SOURCE: B&V DRAWING # 183169-00G0-FIG-06

FIGURE 24
PROPOSED DMPA-5A DIKE, CROSS-SECTION, TYPICAL
ANNOVA LNG BROWNSVILLE PROJECT
CAMERON COUNTY, TEXAS

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.
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N

SCALE

0 1,000 2,000 Feet

SOURCE: Annova LNG 2015, ESRI 2014

Legend

- Internal Partitions and Slurry Route
- Hydraulic Dredge Pipeline Route
- Channel Centerline
- Channel Limit
- Dredging Footprint
- Project Site
- Dredged Material Placement Areas

Figure 25
Hydraulic Dredge Pipeline Route
Annova LNG Brownsville Project
Cameron County, Texas

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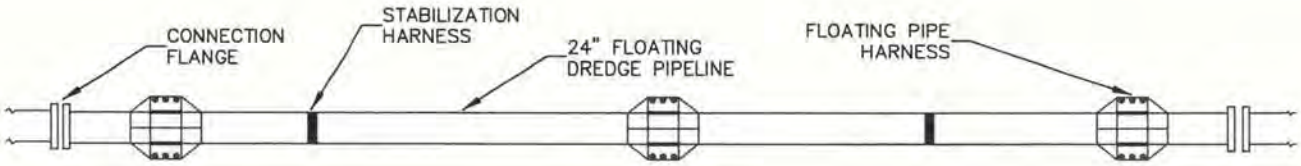
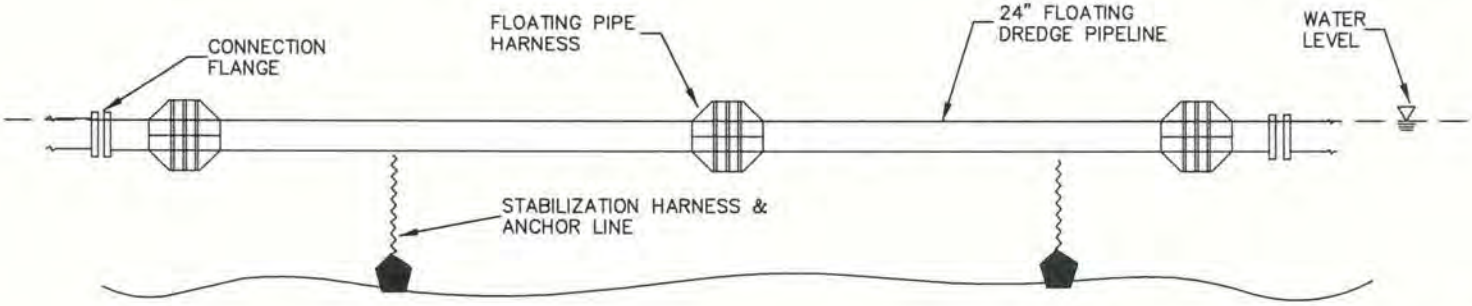


PLAN VIEW
NOT TO SCALE



PROFILE VIEW
NOT TO SCALE

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Brownsville Ship Channel and Wetlands, Cameron County, Texas.

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NOTES:

1. SLACK IN STABILIZING ANCHORS WILL BE KEPT TO A MINIMUM TO PREVENT DRIFT.
2. DREDGE PIPE WILL BE FLUSHED PRIOR TO OPENING TO MINIMIZE TURBIDITY RELEASED FROM PIPE.

FIGURE 26
TYPICAL FLOATING DREDGE PIPE SECTION
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CAMERON COUNTY, TEXAS

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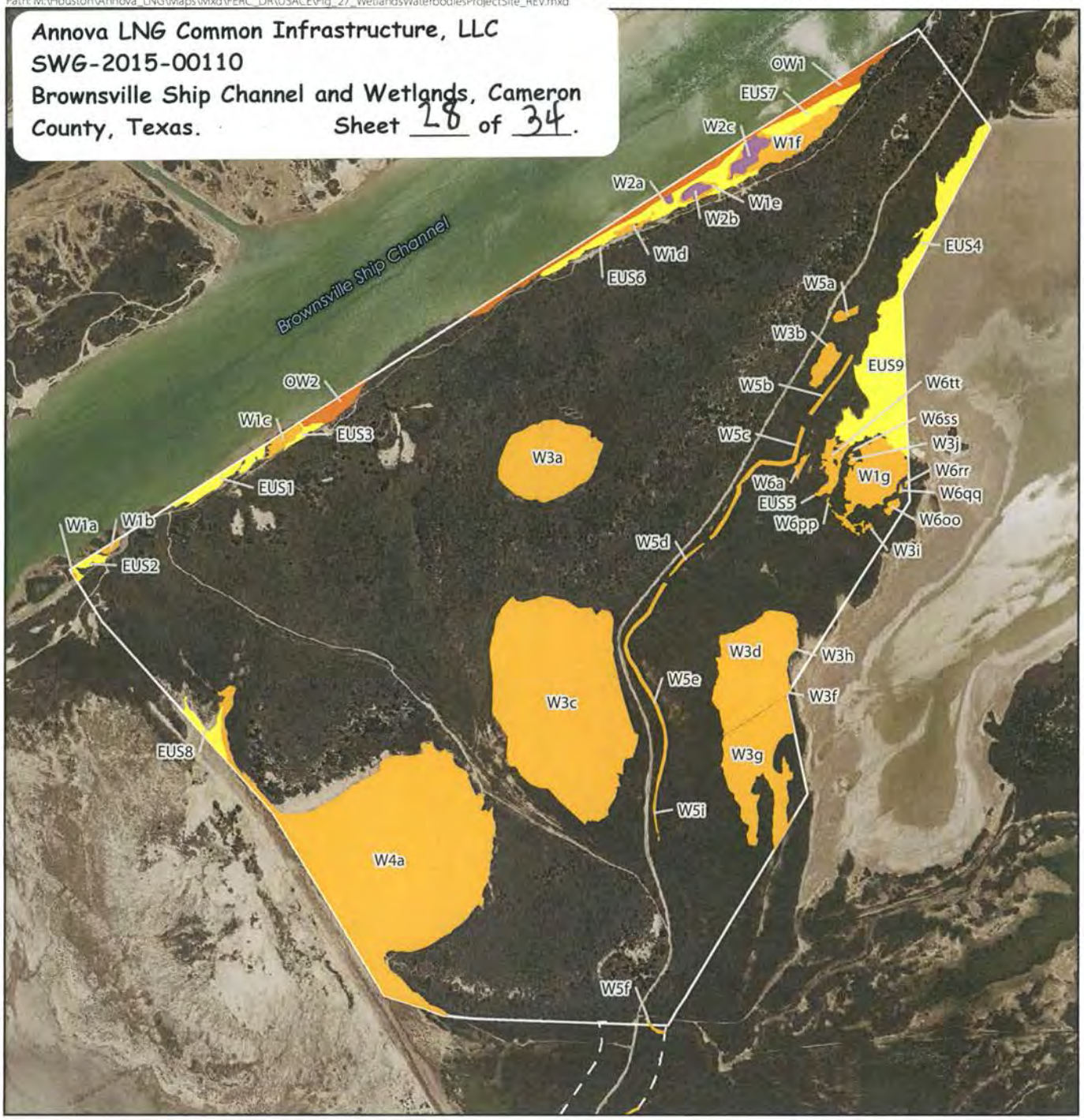

Legend

Wetlands

- Estuarine Emergent
- Estuarine Scrub-Shrub (Mangrove)

Nonwetlands

- Tidal Flats/Washover Areas
- Estuarine Open Water
- Project Site
- Access Road

SCALE

0 1,000 2,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Figure 27 REV 1

Wetlands and Non-Wetland Waterbodies on the Project Site

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Cameron County, Texas

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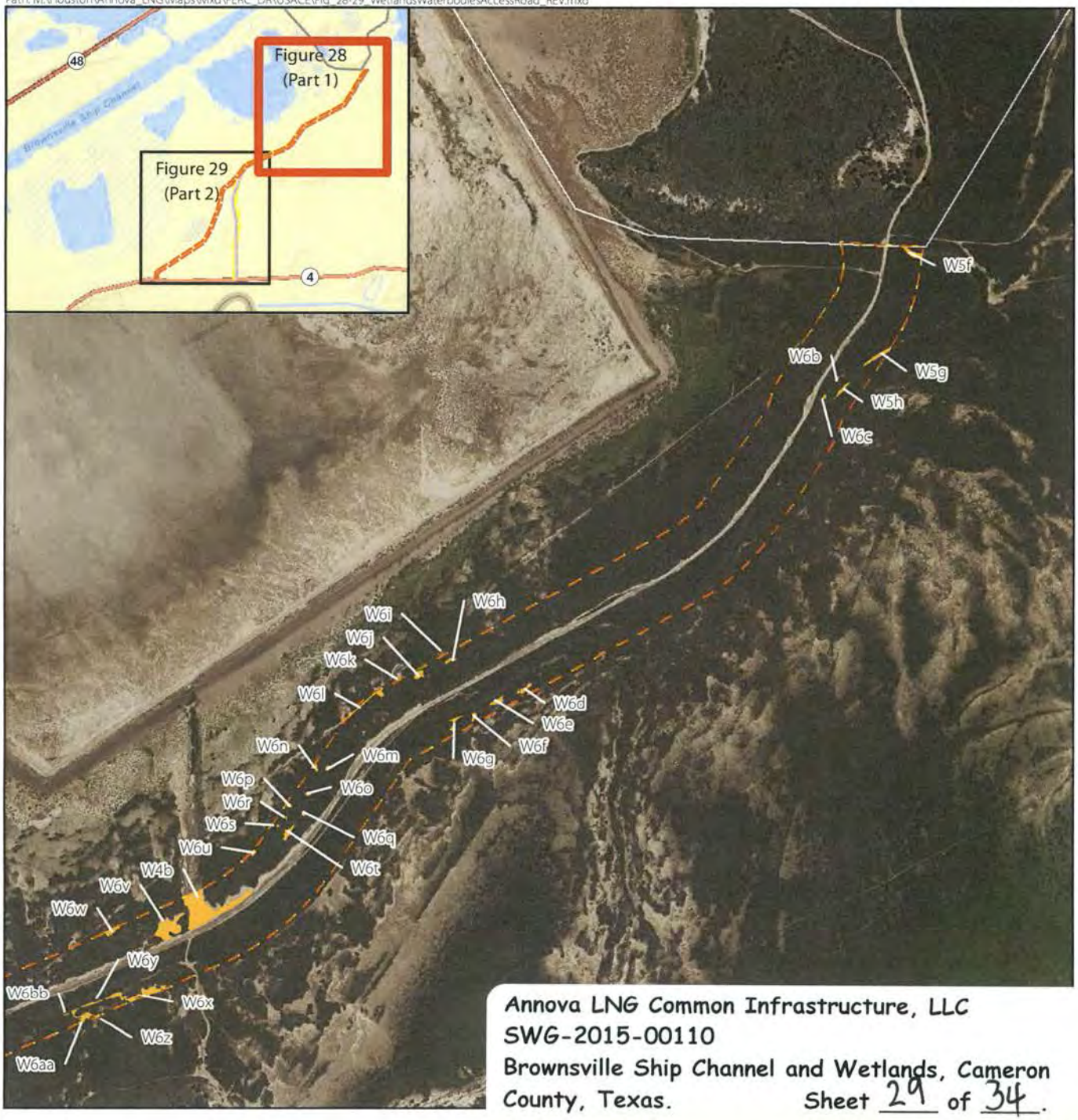

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Brownsville Ship Channel and Wetlands, Cameron County, Texas. Sheet 29 of 34.

Legend

Wetlands

- Estuarine Emergent
- Access Road Alternative 1
- Access Road Alternative 2 (Preferred Option)
- Project Site

SCALE

0 1,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Figure 28 REV 1

Wetlands on the Project Main Access Road, Part 1

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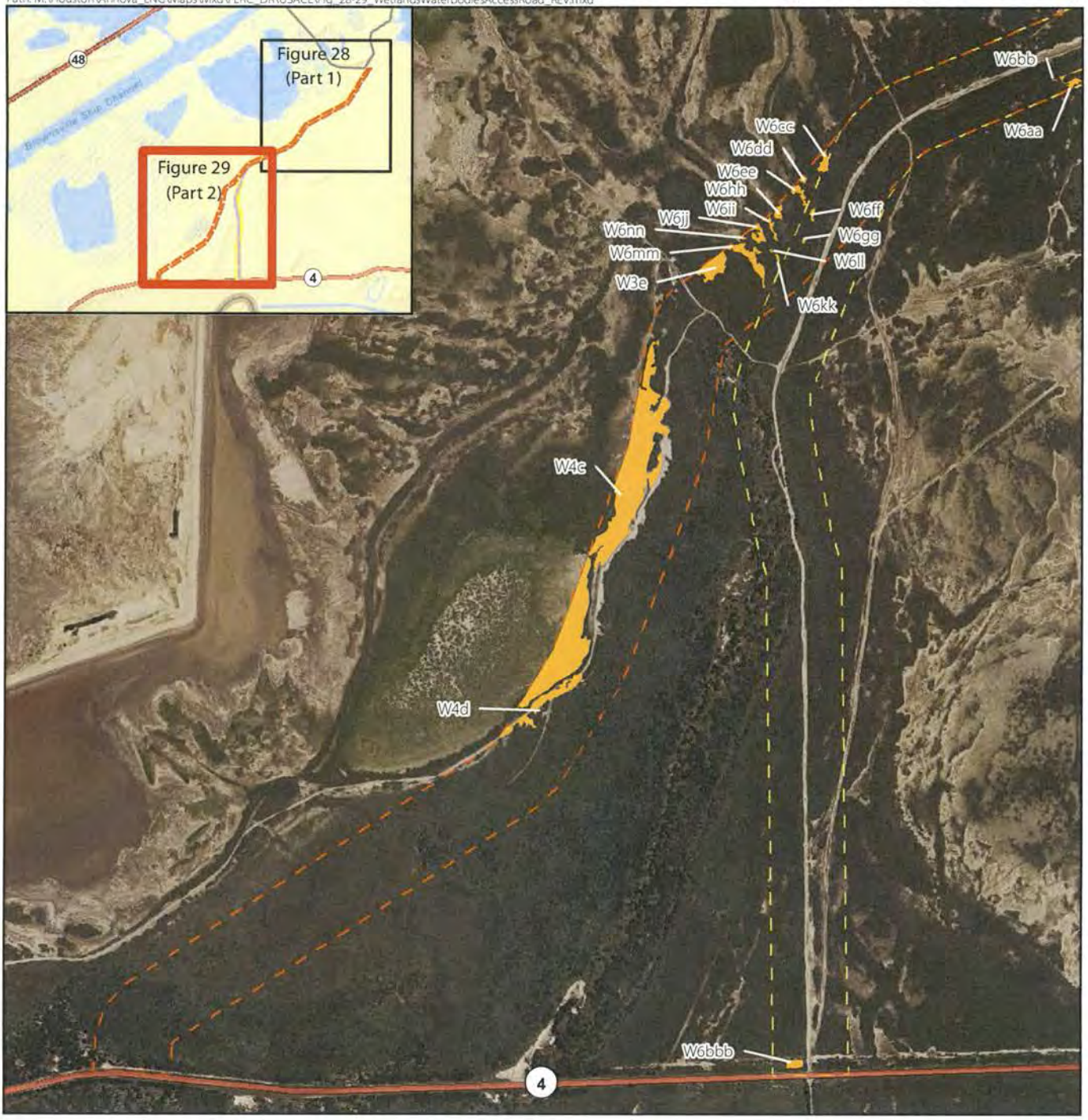

Legend

Wetlands

- Estuarine Emergent
- Access Road Alternative 1
- Access Road Alternative 2 (Preferred Option)
- State Highway

SCALE

0 1,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Figure 29 REV 1

Wetlands on the Project Main Access Road, Part 2

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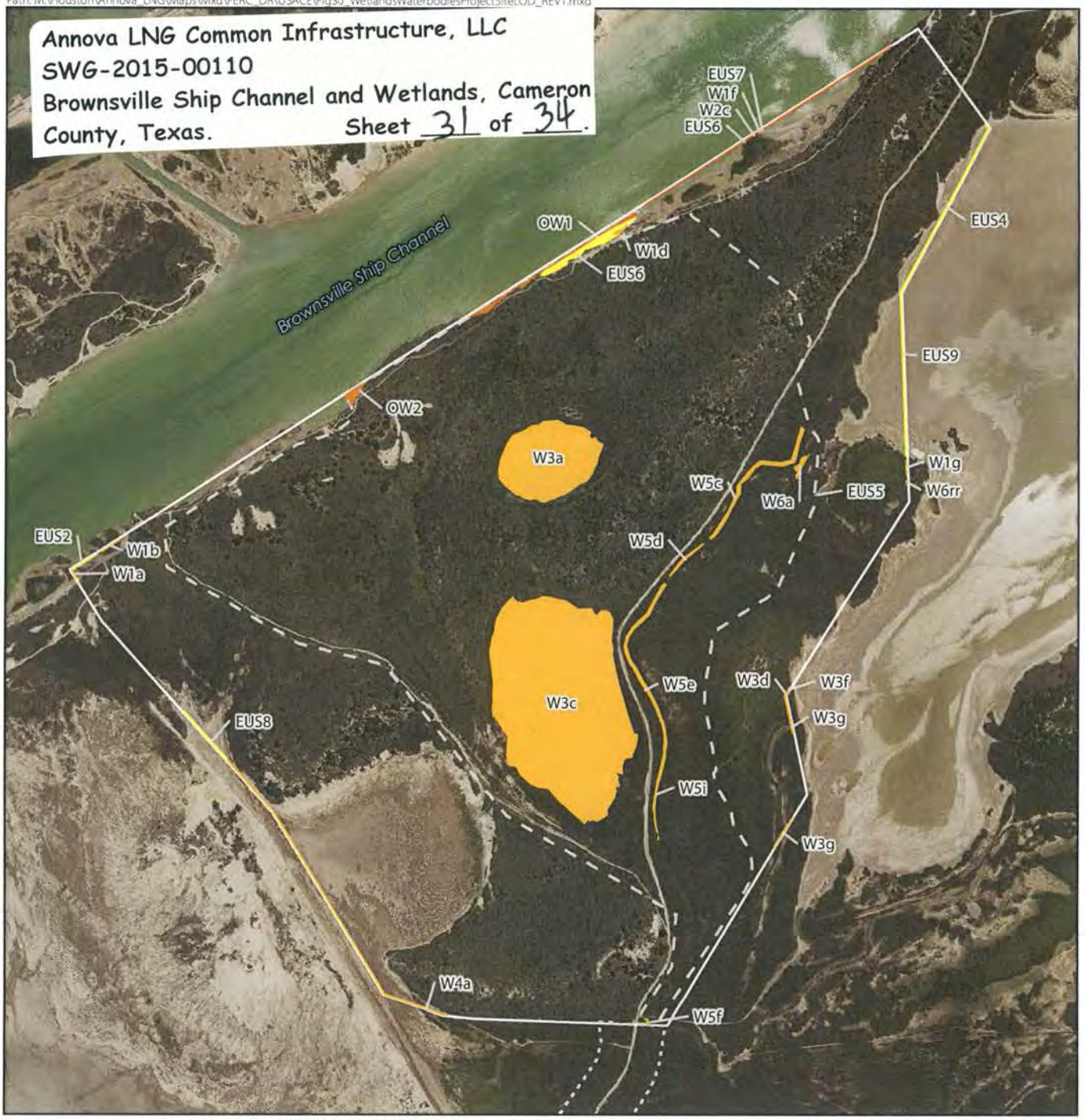

Legend

Wetlands

- Estuarine Emergent
- Estuarine Scrub-Shrub (Mangrove)

Nonwetlands

- Tidal Flats/Washover Areas
- Estuarine Open Water
- Project Site
- Project Site LOD
- Access Road

SCALE

0 1,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Figure 30 REV 1

Wetlands and Non-Wetland Waterbodies on the Project Site within the Limits of Disturbance

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Cameron County, Texas

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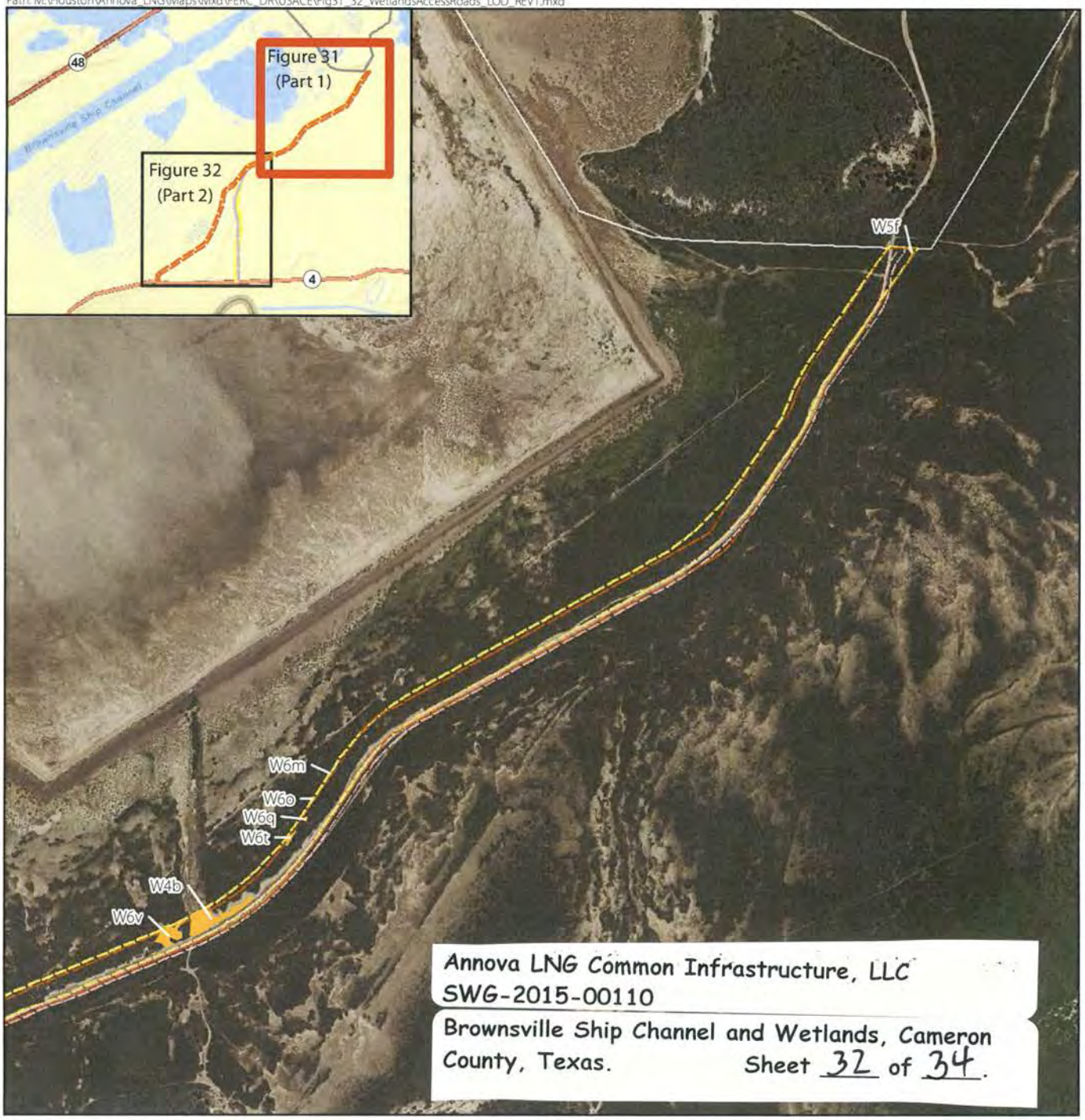

SCALE

0 1,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Legend

- Temporary Access Road
- Access Road Alternative 1 LOD
- Access Road Alternative 2 LOD
- Project Site

Wetlands

- Estuarine Emergent

Figure 31 REV 1

Wetlands on the Project Main Access Road LOD, Part 1

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Cameron County, Texas

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Legend

- Temporary Access Road
- Access Road Alternative 1 LOD
- Access Road Alternative 2 LOD
- State Highway

Wetlands

- Estuarine Emergent

SCALE

0 1,000 Feet

SOURCE: Annova LNG 2015; Blanton and Associates 2015; ESRI 2015

Figure 32 REV 1

Wetlands on the Project Main Access Road LOD, Part 2

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Cameron County, Texas

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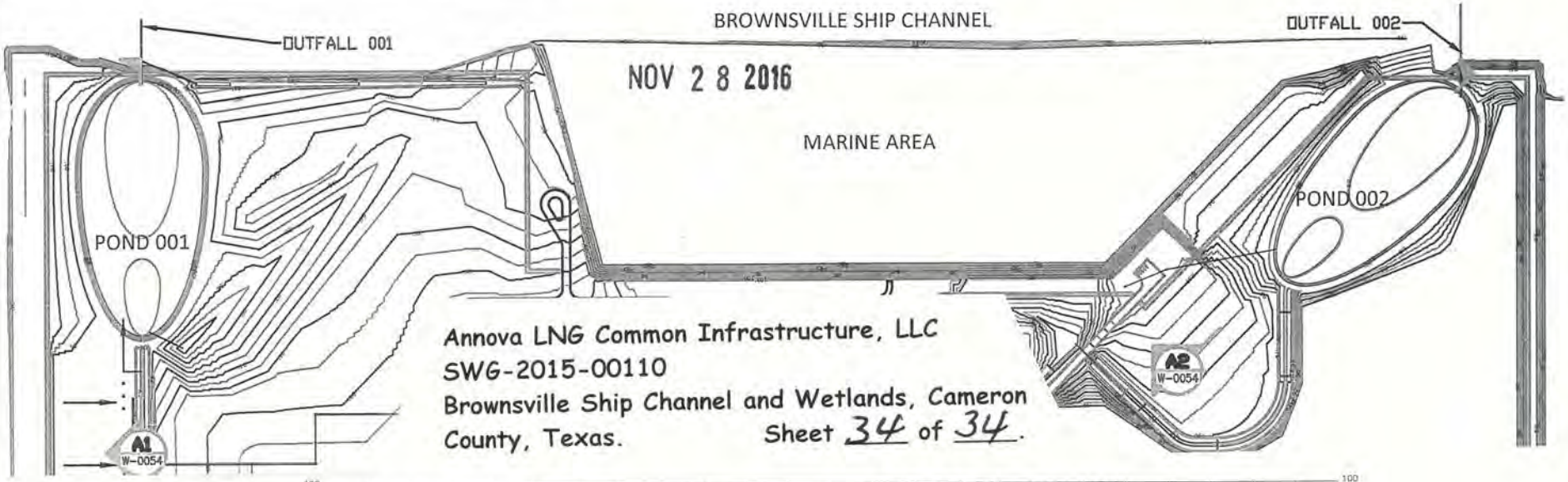

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A1
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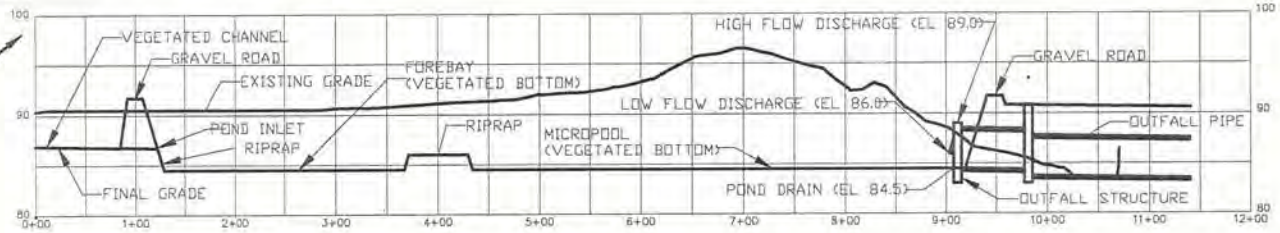
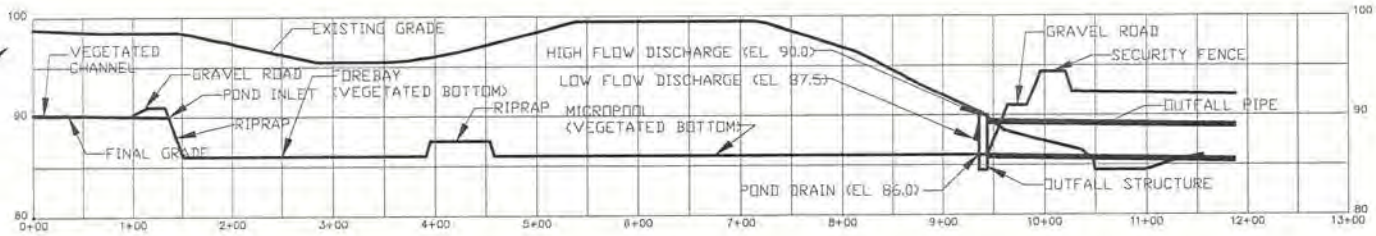


SECTION 1
POND 001 AND OUTFALL 001

A2
W-0054



SECTION 2
POND 002 AND OUTFALL 002

250' 0'-0" 250' 500'

PLANT NORTH TRUE NORTH

SOURCE: B&V DRAWING # 183169-0000--S3101 & S3102

LEGEND

CONTOUR 87.5

D1 W-0007 CROSS SECTION CALL OUT

GRAVEL ROAD

FIGURE 33
POND/ OUTFALL 001 & 002 PLAN VIEW AND CROSS SECTION
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CAMERON COUNTY, TEXAS

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