

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 1 of 26.



Texas LNG Terminal
 Federal & State Land
 Texas LNG Lateral
 U.S. or State Highways

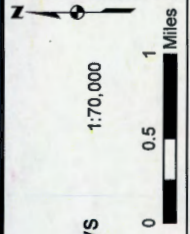
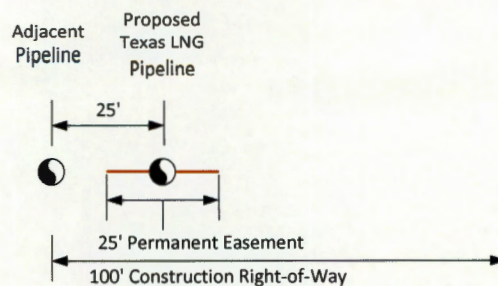


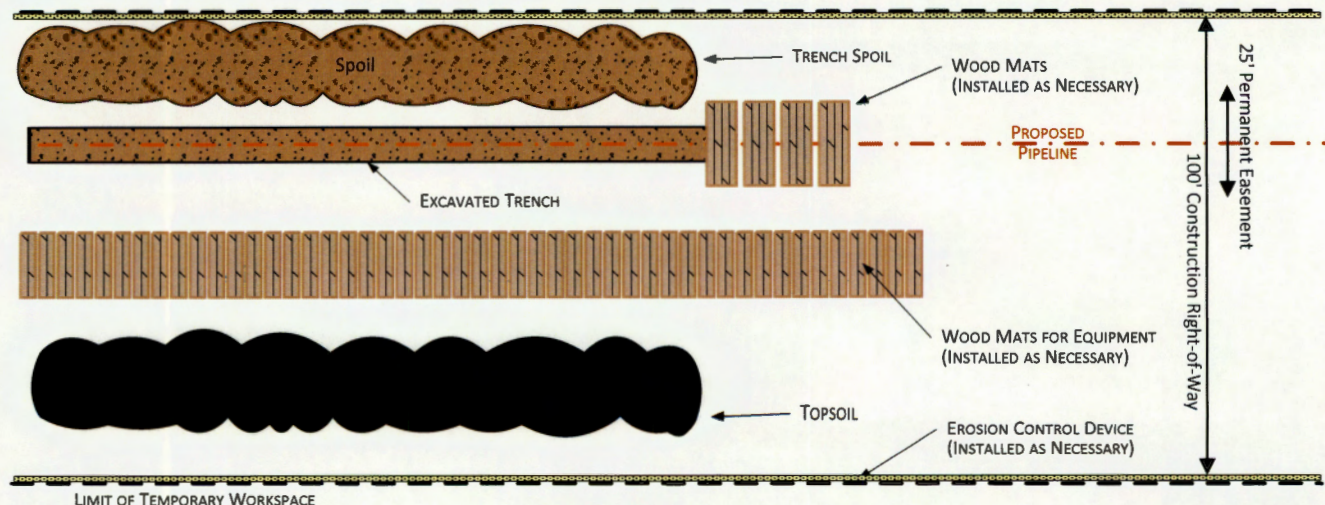
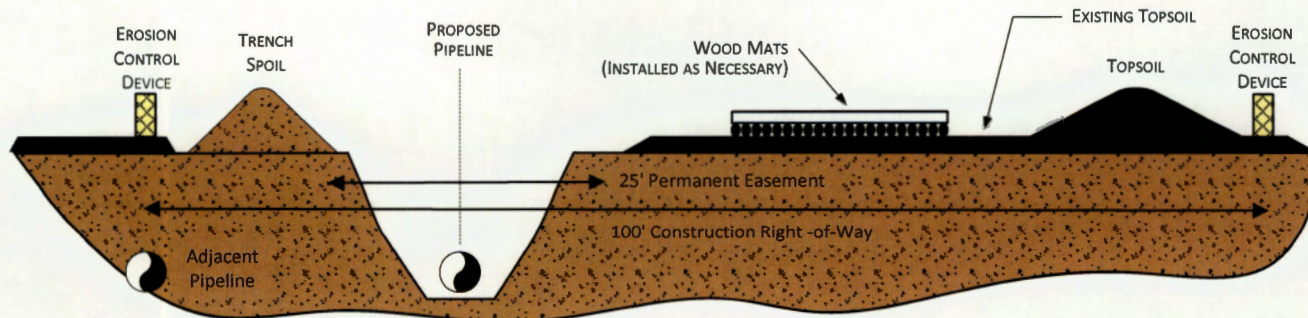
Figure 1
Texas LNG Lateral





CROSS-SECTION

CONSTRUCTION TYPICALS

PLAN
PROFILE

NOTES:

1. PIPELINE TO BE INSTALLED AT DEPTH CONSISTENT WITH US DOT REQUIREMENTS.
2. EROSION CONTROL DEVICES TO BE INSTALLED AS NECESSARY.
3. MILEPOST RANGES FOR STANDARD CONSTRUCTION ARE 0-0.4, 2.6-3.9, 4.8-5.5, 6.8-8.9.
4. MILEPOST RANGES FOR NON-COLLOCATED CONSTRUCTION ARE 1.6-2.6 AND 8.9-10.2.
5. MILEPOST RANGE WHERE THE CONSTRUCTION CONFIGURATION IS REVERSED IS 0.4-1.6.
6. ADDITIONAL TEMPORARY WORKSPACE OF 50' IS ADDED AT ROAD AND UTILITY CROSSINGS AND FOR HDD WORKSPACES FOR EQUIPMENT STAGING AND ADDITIONAL TRENCH SPOIL STORAGE.

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas
 Sheet 2 of 26.

Figure 1

Texas LNG – Pipeline Project
Pipeline Facilities Cross-Section and
Open Cut Pipeline Construction Typical
 Cameron County, Texas

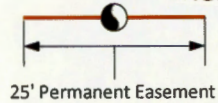
For environmental review purposes only.



NOTE:

1. MILEPOST RANGES FOR HDD CONSTRUCTION ARE 3.9-4.8 AND 5.5-6.8

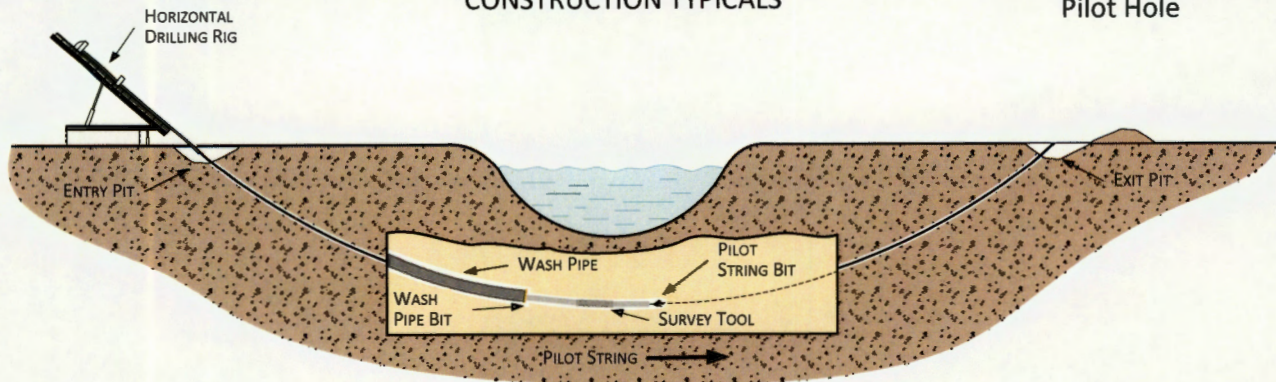
Proposed
Texas LNG
Pipeline



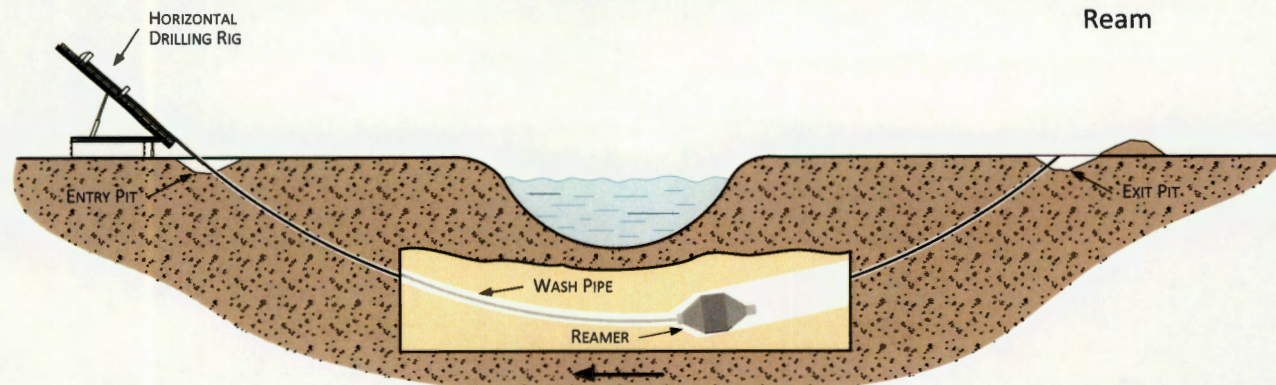
SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 3 of 26.

CROSS-SECTION CONSTRUCTION TYPICALS

Pilot Hole



Ream



Pullback

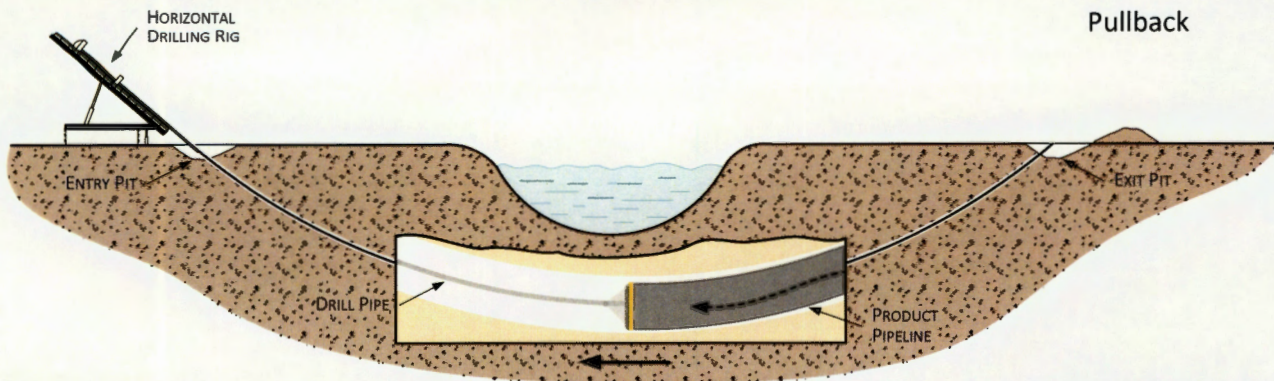
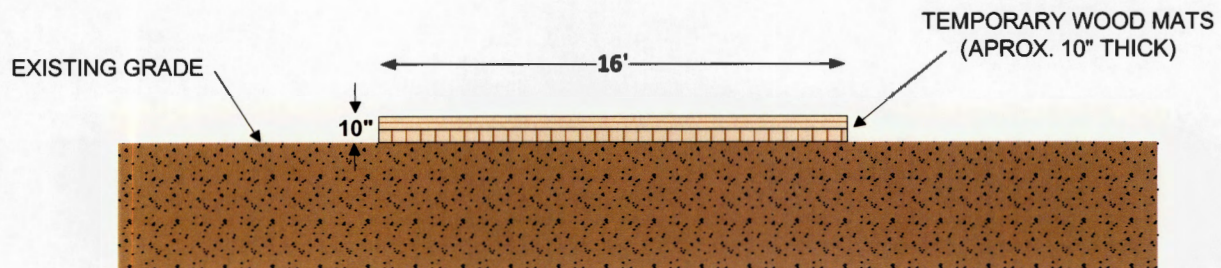


Figure 2
Texas LNG – Pipeline Project
Pipeline Facilities Cross-Section and
HDD Pipeline Construction Typical
Cameron County, Texas

For environmental review purposes only.



SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 4 of 26.



**TYPICAL TEMPORARY ACCESS ROAD
 CROSS SECTION**

NOTES:

1. TEMPORARY CULVERTS WILL BE INSTALLED, WHERE REQUIRED.

For environmental review purposes only.

Figure 3
Texas LNG – Pipeline Project
Typical Temporary Wood Mat Access Road
 Cameron County, Texas

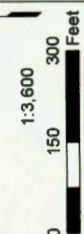


SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 5 of 26.



Page 1 of 22

- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Additional Temporary Workspace
- Permanent Facility
- Milepost
- EEM, Desktop Estimation
- Valley Crossing Pipeline



Texas LNG Lateral **Wetlands and Waterbodies Crossed by Pipeline** Cameron County, Texas



SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 6 of 26.



This information is for environmental review purposes only.

- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Additional Temporary Workspace
- Permanent Facility
- Milepost
- EEM, Desktop Estimation
- Valley Crossing Pipeline

Page 2 of 22

1:3,600
0 150 300 Feet



Texas LNG Lateral Wetlands and Waterbodies Crossed by Pipeline

Cameron County, Texas



SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 7 of 26.



This information is for informational purposes only.

Page 3 of 22

Proposed Centerline
Permanent Easement
Temporary Workspace
Permanent Facility
Milepost
EEM, Desktop Estimation

Valley Crossing Pipeline

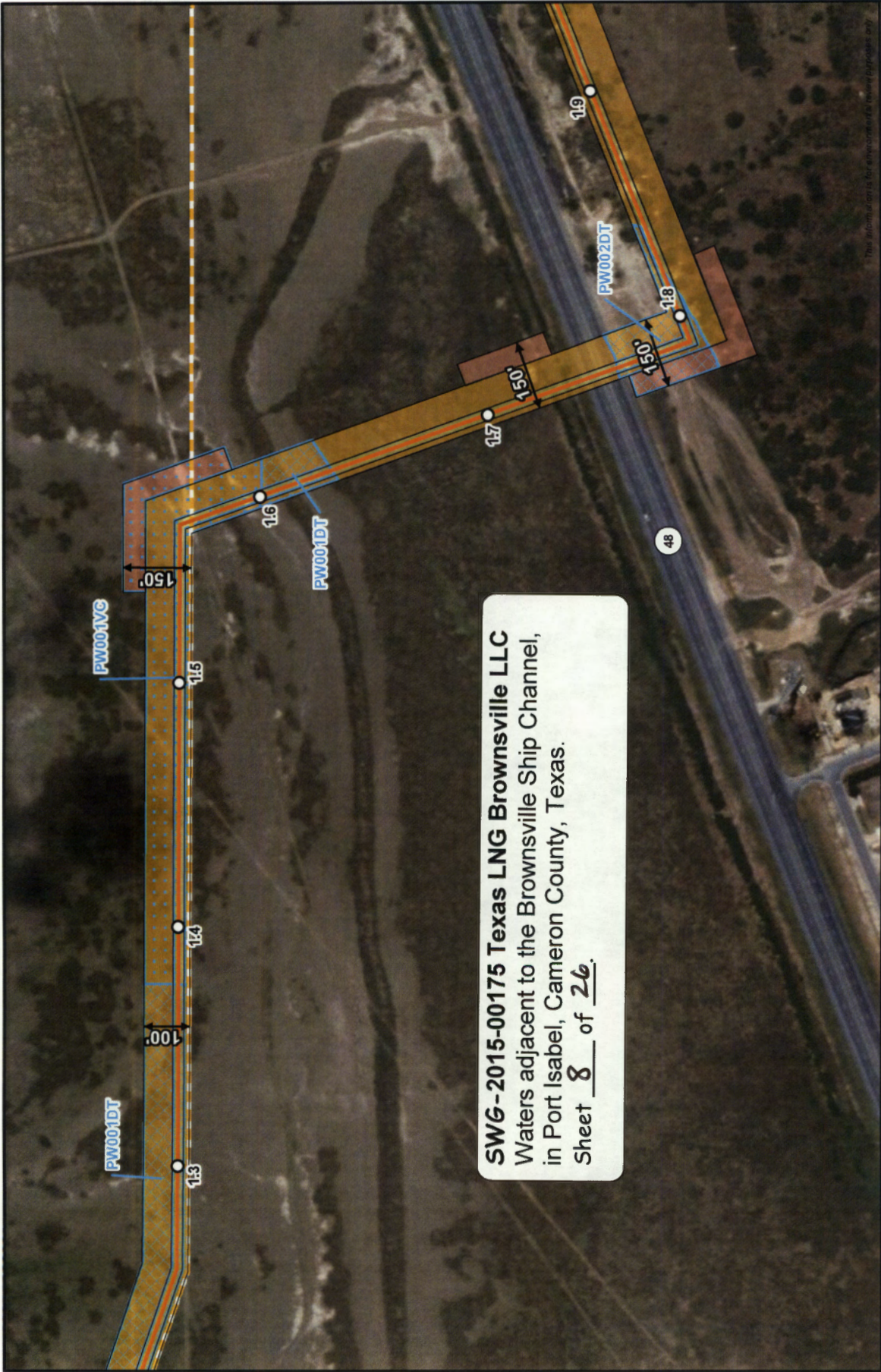


Texas LNG Lateral

Wetlands and Waterbodies Crossed by Pipeline

Cameron County, Texas





Proposed Centerline
Permanent Easement
Temporary Workspace
Additional Temporary Workspace
Permanent Facility
Milepost

EEM, Desktop Estimation
EEM, Digitized Delineation
Valley Crossing Pipeline

Page 4 of 22

TEXAS LNG

1:3,600

0 150 300 Feet

Wetlands and Waterbodies Crossed by Pipeline
Cameron County, Texas

ERM

DRAWN BY: 0239

FILE: M:\Clients\IS-UTXL\Texas LNG_ArcGIS\2018\08\USACE_TXLNG_USACE_Wetland_MapSet_20180606.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 9 of 26.



This information is for informational purposes only.

- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Temporary Access Road
- Permanent Facility
- Milepost
- EEM, Desktop Estimation
- Valley Crossing Pipeline

Page 5 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas

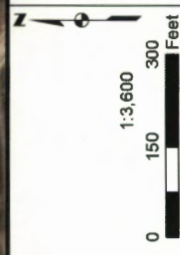


SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 10 of 20.



This information is for environmental review purposes only.

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
Cameron County, Texas



- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Temporary Access Road
- Permanent Facility
- EEM, Desktop Estimation
- EEM, Digitized Delineation
- Proposed Rio Bravo Pipeline
- Valley Crossing Pipeline

SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 11 of 26.



- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Temporary Access Road
- Permanent Facility
- Milepost
- EEM, Digitized Delineation
- Proposed Rio Bravo Pipeline
- Valley Crossing Pipeline

Page 7 of 22

Texas LNG Lateral Wetlands and Waterbodies Crossed by Pipeline Cameron County, Texas



DRAWN BY: 0239

FILE: M:\Clients\SW\TXL\Texas LNG_ArcGIS\2018\08\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 12 of 26.



Page 8 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



- Proposed Centerline
- Permanent Easement
- Permanent Easement (HDD)
- Temporary Workspace
- Additional Temporary Workspace
- Temporary Access Road
- Permanent Facility
- Milepost
- EEM, Desktop Estimation
- EEM, Digitized Delineation
- HDD Entry/Exit
- Proposed Rio Bravo Pipeline
- Valley Crossing Pipeline

1:3,600
 0 150 300 Feet

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 13 of 26.



Proposed Centerline

Permanent Easement

Temporary Easement (HDD)

Temporary Workspace

Additional Temporary Workspace

Permanent Facility

Milepost

HDD Entry/Exit

EEM, Desktop Estimation

EEM, Digitized Delineation

EEM/EUS, Digitized Delineation

Waterbody, Desktop Estimation

Waterbody, Digitized Delineation

Page 9 of 22

Texas LNG Lateral

Wetlands and Waterbodies Crossed by Pipeline

Cameron County, Texas

TEXAS LNG

ERM

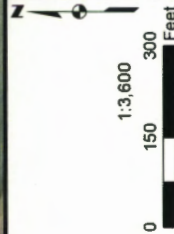
DRAWN BY: 0239

FILE: M:\Clients\SWG-2015-00175\Texas LNG\ArcGIS\20180808\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas
 Sheet 14 of 26.



- Proposed Centerline
- Permanent Easement
- Permanent Easement (HDD)
- Temporary Workspace
- Additional Temporary Workspace
- Temporary Access Road
- Permanent Facility
- Milepost
- EEM, Digitized Delineation



Page 10 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



SW6-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.

Sheet 15 of 26.



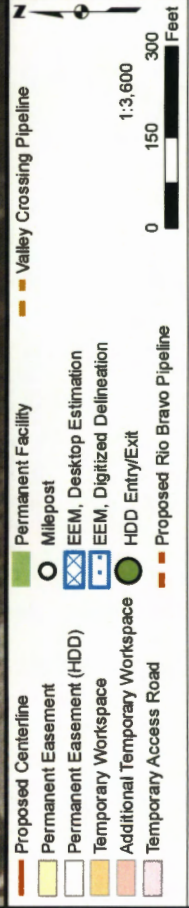
This is a preliminary map for informational purposes only. It is not to be used for construction or other purposes.

Page 11 of 22

Texas LNG Lateral **Wetlands and Waterbodies Crossed by Pipeline** Cameron County, Texas



DRAWN BY: 0239



FILE: M:\Clients\IS-UITX\Texas LNG_ArcGIS\201808\USACE_TX\TX_LNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 16 of 26.



Page 12 of 22

TEXAS LNG

Wetlands and Waterbodies Crossed by Pipeline

Cameron County, Texas

ERM

DRAWN BY: 0239

Proposed Centerline

Permanent Easement

Permanent Easement (HDD)

Temporary Workspace

Additional Temporary Workspace

Permanent Facility

Milepost

EEM, Desktop Estimation

EEM, Digitized Delineation

HDD Entry/Exit

Proposed Rio Bravo Pipeline

Valley Crossing Pipeline

Scale: 1:3,600

Revised: 08/10/2018

File: M:\Clients\S-U\TXL\Texas LNG\ArcGIS\2018\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas
 Sheet 17 of 26.



- Proposed Centerline
- Waterbody, Digitized Delineation
- Permanent Easement (HDD)
- Proposed Rio Bravo Pipeline
- Permanent Facility
- Valley Crossing Pipeline
- Milepost
- EEM, Digitized Delineation
- ESS, Digitized Delineation

Page 13 of 22



1:3,600

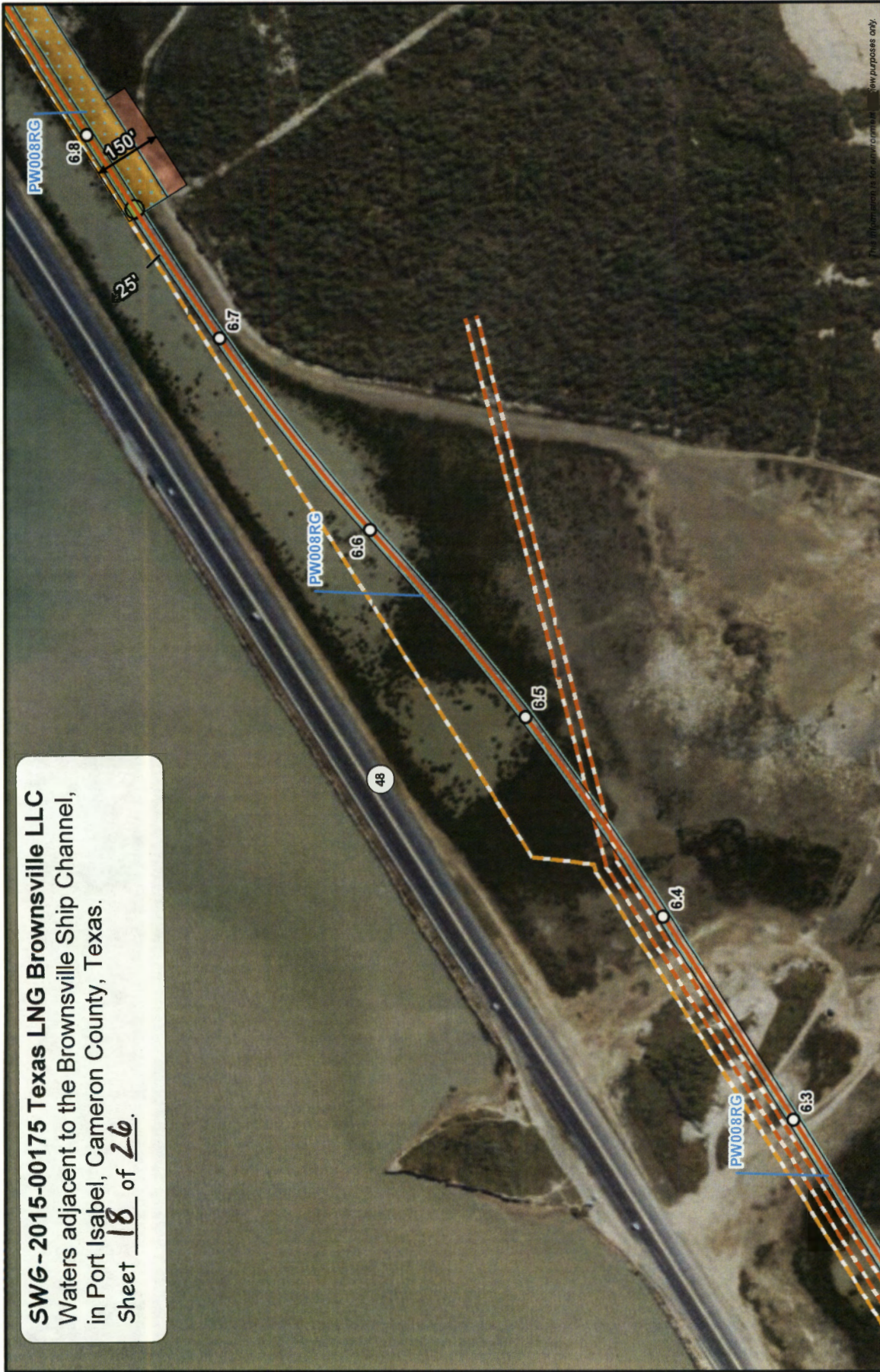
Feet



Texas LNG Lateral **Wetlands and Waterbodies Crossed by Pipeline** Cameron County, Texas



SW6-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 18 of 26.



Legend

- Proposed Centerline
- Permanent Easement
- Permanent Easement (HDD)
- Temporary Workspace
- Additional Temporary Workspace
- Permanent Facility
- Milepost
- ESS, Digitized Delineation
- HDD Entry/Exit
- Proposed Rio Bravo Pipeline
- Valley Crossing Pipeline

Page 14 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas

1:3,600

0 150 300 Feet

FILE: M:\Client\S-U\TXL\Texas LNG_ArcGIS\2018\08\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

This information is for engineering purposes only.

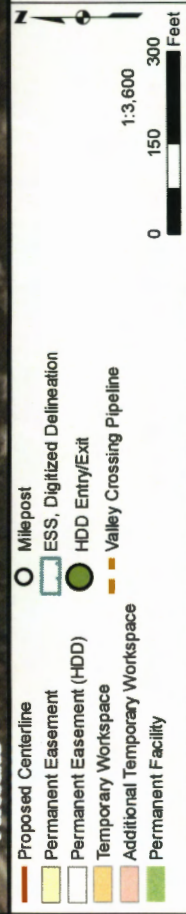
ERM

DRAWN BY: 0239

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 19 of 26.



Page 15 of 22



Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 20 of 26.



This information is for environmental review purposes only.

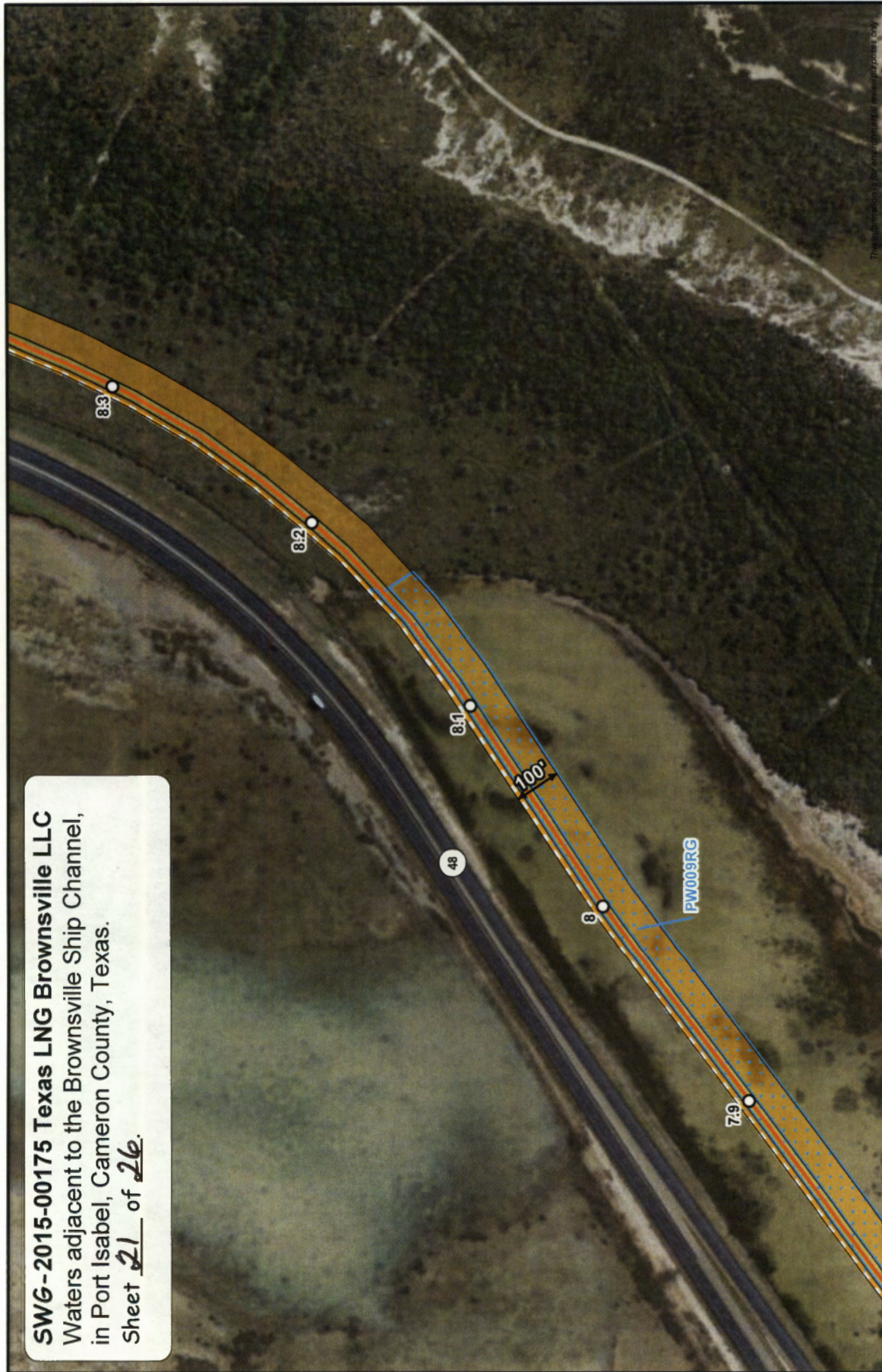
Page 16 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Permanent Facility
- Milepost
- EEM, Digitized Delineation
- Valley Crossing Pipeline

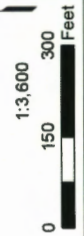
SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 21 of 26.



- Proposed Centerline
- Valley Crossing Pipeline
- Permanent Easement
- Temporary Workspace
- Permanent Facility
- Milepost
- EEM, Digitized Delineation

Page 17 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



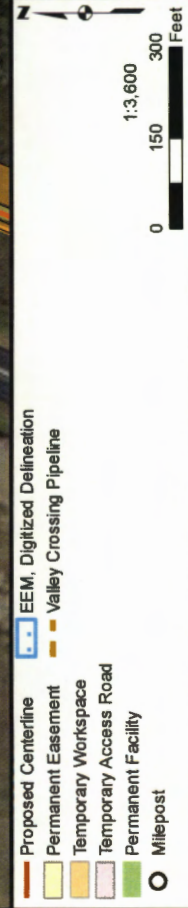
SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 22 of 26.



This information is for environmental review purposes only.

Page 18 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 23 of 26.



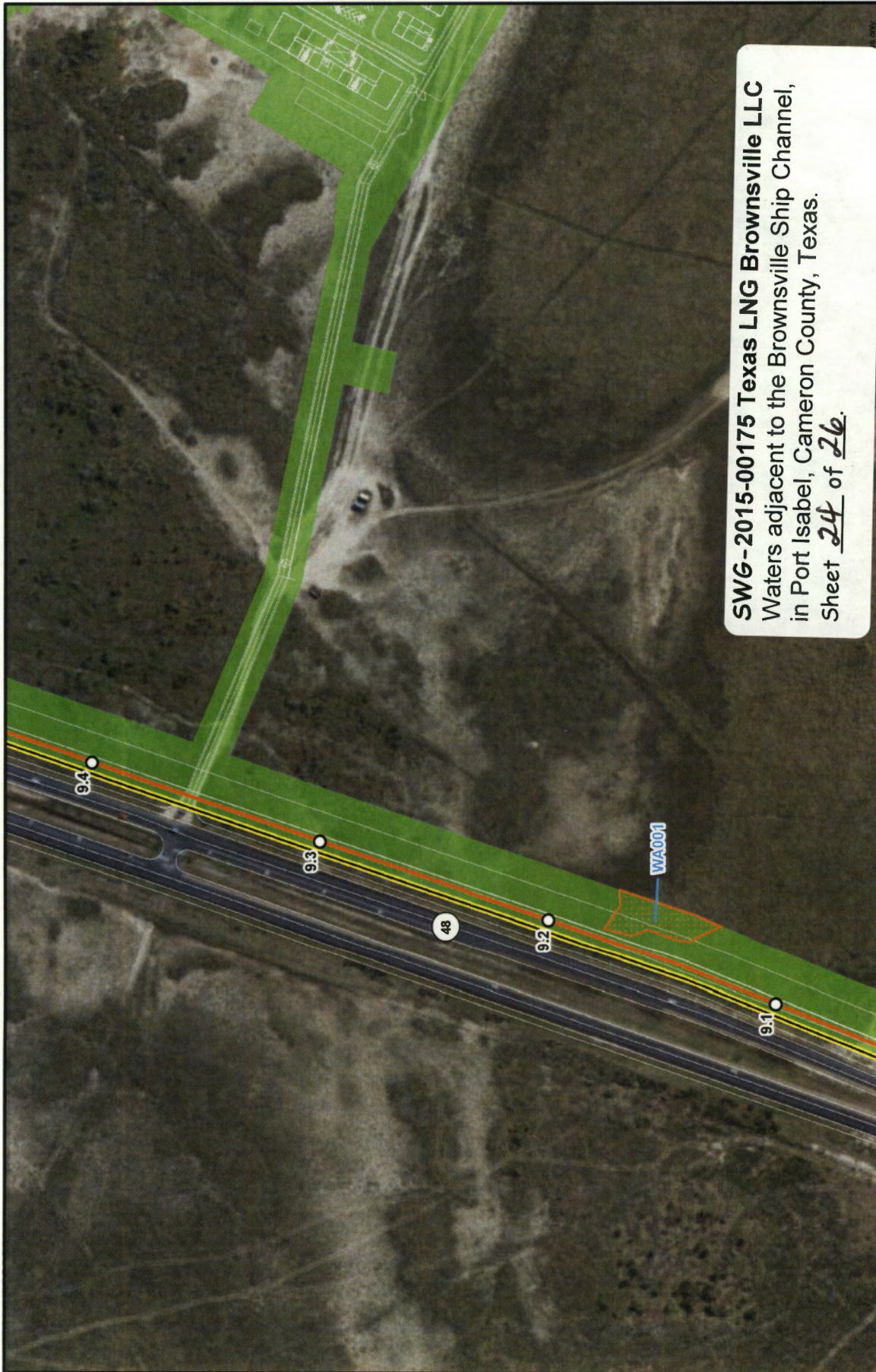
This information is for environmental review purposes only.

Page 19 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas



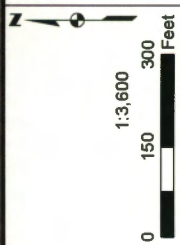
- Proposed Centerline
- Permanent Easement
- Temporary Workspace
- Additional Temporary Workspace
- Permanent Facility
- Milepost
- EEM, Digitized Delineation
- PEM, Delineation
- Proposed Project Site
- Project Facilities
- Valley Crossing Pipeline



SWG-2015-00175 Texas LNG Brownsville LLC
Waters adjacent to the Brownsville Ship Channel,
in Port Isabel, Cameron County, Texas.
Sheet 24 of 26.

- Proposed Centerline
- Permanent Facility
- Milepost
- PEM, Delineation
- Proposed Project Site
- Project Facilities

Page 20 of 22



Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
Cameron County, Texas



SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 25 of 26.



Page 21 of 22

Texas LNG Lateral
Wetlands and Waterbodies Crossed by Pipeline
 Cameron County, Texas

ERM

FILE: M:\Clients\SWG-2015-00175\Texas LNG\ArcGIS\2018\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

DRAWN BY: 0239



DRAWN BY: 0239

Texas LNG Lateral **Wetlands and Waterbodies Crossed by Pipeline** Cameron County, Texas



Page 22 of 22



FILE: M:\Clients\GIS\UTX\TX\Texas LNG\ArcGIS\2018\08\USACE\TXLNG_USACE_Wetland_MapSet_20180808.mxd | REVISED: 08/10/2018 | SCALE: 1:3,600

SWG-2015-00175 Texas LNG Brownsville LLC
 Waters adjacent to the Brownsville Ship Channel,
 in Port Isabel, Cameron County, Texas.
 Sheet 26 of 26.



- Project Facilities**
- Proposed Centerline
 - Permanent Facility
 - Milepost
 - Mudflat, Delineation
 - PEM, Delineation
 - Proposed Project Site