Trans Pacific Pkwy
Access Channel
Jordan Cove Rd
South Dunes
F E D E R A L  N A V I G A T I O N  C H A N N E L
Southwest Oregon
Regional Airport
Temporary Dredge Line
Temporary Dredge Off-Loading Area
Temporary Dredge Transfer Line
APCO Site 2

Multipurpose Easement to USACE
Pile Dike
Temporary Dredge Line
Existing Pile Dike
Proposed Aid to Navigation Buoy
JCEP Project Area
Pacific Connector Gas Pipeline (PCGP)
Federal Navigation Channel
Channel Mile
USACE Easement
Adjacent Tax Lot
Tax Lot
PLSS (Section Township Range)
City Limits

Jordan Cove Energy Project
USACE 408 Authorization
Real Estate Map
Access Channel and South Dunes

FIGURE NO.

Drawing 5

0 0.1 0.2 Miles
NWP-2017-41
J1-000-RGL-PMT-DEA-00001-00 Rev. B

Enclosure
The Temporary Dredge Lines and Off-Loading Areas are expected to have Temporary Estuarine Impacts.
Dredge Areas and Temporary Dredge Lines are expected to have Temporary Estuarine Impacts

Dredge line will be submerged below FNC or floated across FNC - to be determined by future feasibility studies

Temporary Dredge Line

DREDGE AREA 2

223 (RM 4.3)

North Spit

DREDGE AREA 1

128 (RM 2.4)

JCEP Project Area

Mitigation Area

Dredge Area

Temporary Estuarine Impact

Temporary Eelgrass Impact

Wetland

Eelgrass*

Flow Direction (subject to tidal fluctuations)

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Federal Navigation Channel (FNC)

We are enclosing the following documents for your review:

- 404 Completeness Response 2018-03: Attachment B
- 404/10 & 408 - Public Notice
- Eelgrass Mitigation Site

Please review these documents and let me know if you have any questions or concerns.

Best regards,

[Your Name]
Mitsubishi Electric Corporation

Infrastructural Development Project

MITIGATION AREA AND WETLAND IMPACTS

NOTE:
1. Wetland impacts are measured from the 8.5" contour of the interior proposed levee and road fill slopes and with delineated wetland boundaries.
2. Temporary impacts only shown for proposal construction detour. However, temporary wetland impacts will occur across the site as a result of grading.
3. Permanent restoration areas within historic tidal flood plain zones but outside current delineated wetlands.
NOTE:
1. WETLAND IMPACTS ARE MEASURED FROM THE 8.5'-CONTOUR OF THE INTERIOR PROPOSED LEVEE AND ROAD FILL SLOPES AND WITH DELINEATED WETLAND BOUNDARIES.
2. TEMPORARY IMPACTS ONLY SHOWN FOR PROPOSAL CONSTRUCTION DETOUR. HOWEVER, TEMPORARY WETLAND IMPACTS WILL OCCUR ACROSS THE SITE AS A RESULT OF GRADING.
3. PERMANENT RESTORATION AREAS WITHIN HISTORIC TIDAL FLOOD PLAIN ZONES BUT OUTSIDE CURRENT DELINEATED WETLANDS.
*Structure heights are preliminary and subject to change.
*The widths of structures appear compressed due to the scale.

Profile Looking North
See Plan View for Location

Legend

- Finished Grade
- Existing Grade

Jordan Cove Energy Project

USACE 404/10 & 408 - Public Notice
Potential Dredge Disposal Locations
Profile A - Ingram Yard

NWP-2017-41

J1-000-RGL-TNT-DEA-00007-00 Rev. B
Simulated structure elevations, looking east from North Spit.

Legend
- Finished Grade
- Existing Grade

Profile Looking East
See Plan View for Location

*Structure heights are preliminary and subject to change.
*The widths of structures appear compressed due to the scale.
*See inset photo for simulated structure elevations.
*Structure heights are preliminary and subject to change.
*The widths of structures appear compressed due to the scale.

**Legend**
- Finished Grade
- Existing Grade

**Jordan Cove Energy Project**
- USACE 404/10 & 408 - Public Notice
- Potential Dredge Disposal Locations

See Plan View for Locations
ENCLOSURE NO. 234/20/2018

Cross Section A-A

Access Channel

FEDERAL NAVIGATION CHANNEL

Temporary Materials

Barge Berth

Temporary Sand Fill Area

Vertical datum for all elevations is MLLW

JCEP Project Area

Design (May 2017)

Permanent Estuarine Impact

Temporary Estuarine Impact

Permanent Eelgrass Impact

Temporary Eelgrass Impact

Upland Impact Below HMT

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Flow Direction (subject to tidal fluctuations)

Eelgrass (2017 DEA Survey)

Dredge Area

Wetland

Sheet Pile Wall

Federal Navigation Channel

Jordan Cove Energy Project

USACE 404/10 Public Notice

Cross Section A-A

Access Channel

Vertical datum for all elevations is MLLW

JCEP Project Area

Temporary Sand Fill Area

Design (May 2017)

Permanent Estuarine Impact

Temporary Estuarine Impact

Permanent Eelgrass Impact

Temporary Eelgrass Impact

Upland Impact Below HMT

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Vertical datum for all elevations is MLLW

JCEP Project Area

Temporary Sand Fill Area

Design (May 2017)

Permanent Estuarine Impact

Temporary Estuarine Impact

Permanent Eelgrass Impact

Temporary Eelgrass Impact

Upland Impact Below HMT

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

JCEP Project Area

Temporary Sand Fill Area

Design (May 2017)

Permanent Estuarine Impact

Temporary Estuarine Impact

Permanent Eelgrass Impact

Temporary Eelgrass Impact

Upland Impact Below HMT

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Vertical datum for all elevations is MLLW

JCEP Project Area

Temporary Sand Fill Area

Design (May 2017)

Permanent Estuarine Impact

Temporary Estuarine Impact

Permanent Eelgrass Impact

Temporary Eelgrass Impact

Upland Impact Below HMT

Mean Lower Low Water (MLLW) (0 ft MLLW)

High Tide Line (HTL) (7.7 ft MLLW)

Mean High Water (MHW) (7.38 ft MLLW)

Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Vertical datum for all elevations is MLLW
Cross Section B-B

Material Offloading Facility (MOF)

Vertical datum for all elevations is MLLW

Mean Lower Low Water (MLLW) (0 ft MLLW)
High Tide Line (HTL) (7.7 ft MLLW)
Mean High Water (MHW) (7.38 ft MLLW)
Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)
Flow Direction (subject to tidal fluctuations)

Jordan Cove Energy Project
USACE 404/10 Public Notice
Cross Section B-B
Material Offloading Facility (MOF)
Cross Section F-F
South Dunes - Workforce Housing and Parking Area

Vertical datum for all elevations is MLLW
ENCLOSURE NO. 274/20/2018

Cross Section G-G
South Dunes - Workforce Housing and Parking Area

JCEP Project Area
Cross Section Location
Permanent Freshwater Wetland Impact
Upland Impact Below HMT
Permanent Fill Area
*Wetland not subject to 404 regulation

Vertical datum for all elevations is MLLW

Jordan Cove Energy Project
USACE 404/10 & 408 - Public Notice

Design (May 2017)
High Tide Line (HTL) (7.7 ft MLLW)
Mean High Water (MHW) (7.38 ft MLLW)
Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Wetland
Open Water

Wetland M
Wetland H (West)
Wetland G
Wetland G (West)
Wetland I (North)
Wetland I (South)

J1-000-RGL-TNT-DEA-00007-00 Rev. B
ENCLOSURE

NO.

284/20/2018

Cross Section H-H
South Dunes - Wetland J

Wetland M

JCEP Project Area
Cross Section Location
Permanent Freshwater Wetland Impact
Upland Impact Below HMT
No Work Zone
Design (May 2017)

Mean Lower Low Water (MLLW) (0 ft MLLW)
High Tide Line (HTL) (7.7 ft MLLW)
Mean High Water (MHW) (7.38 ft MLLW)
Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)

Vertical datum for all elevations is MLLW

NWP-2017-41

J1-000-RGL-TNT-DEA-00007-00 Rev. B
Cross Section I-I
Trans Pacific Parkway/US-101
Intersection Widening

Vertical datum for all elevations is MLLW

JCEP Project Area
Cross Section Location
Permanent Estuarine Impact

- Design (2017)
- High Tide Line (HTL) (7.7 ft MLLW)
- Mean High Water (MHW) (7.38 ft MLLW)
- Highest Measured Tide (HMT) (11.03 ft MLLW, 10.26 ft NAVD88)
Proposed PCGP Pipeline Location Map

Reference: _____________

Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP
Proposed PCGP Pipeline Wetland Impacts - Coos County

USACE 404/10 & 408 - Public Notice

Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP

Proposed PCGP Centerline
Surface Ownership
- BLM
- USFS
- State
- Private

Wetlands with Permanent Conversion

NOTE:
Naming conventions correlate to potential waters of the U.S.
Proposed PCGP Pipeline Wetland Impacts - Jackson County

NOTE: Naming conventions correlate to potential waters of the U.S.

USACE 404/10 & 408 - Public Notice

Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP

Drawing 35

J1-000-RGL-TNT-DEA-00007-00 Rev. B
Proposed PCGP Pipeline Horizontal Directional Drilling Crossings – Coos Bay

USACE 404/10 & 408 - Public Notice
Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP

Scale: 1 inch = 5000 feet

Reference: _____________

Coos County - Haynes Inlet & Coos River

- Proposed PCGP Centerline
- Temporary Extra Work Space
- Waterbodies
- Wetlands
- Flow Direction

Date: January, 2018
Sheet 6 of 12

Coos Bay West Horizontal Directional Drill Crossing (Trenchless)

Coos Bay East Horizontal Directional Drill Crossing (Trenchless)

Coos River Horizontal Directional Drill Crossing (Trenchless)
COOS BAY WEST HDD
PACIFIC CONNECTOR GAS PIPELINE PROJECT

PROPOSED HDD EXIT POINT
FEDERAL NAVIGATION CHANNEL
GROUND SURFACE (NOAA 2014 BATHYMETRY)
GROUND SURFACE (BATHYMETRY) (BASED ON POINTS TAKEN FROM CB05_CB5_20170829_CS.PDF PORTLAND DISTRICT USACE)
PROPOSED HDD ENTRY POINT
GROUND SURFACE (LIDAR)

PROPOSED 36" HORIZONTAL DIRECTIONAL DRILL PROFILE

USACE 404/10 & 408 - Public Notice
Proposed Coos Bay West HDD Profile
Coos Bay West HDD
Coos County, Oregon

GeoEngineers

NWP-2017-41
J1-000-RGL-TNT-DEA-00007-00 Rev. B
USACE 404/10 & 408 - Public Notice

Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP

Scale: 1 inch = 2000 feet

Reference: _____________

Proposed PCGP Pipeline Horizontal Directional Drilling Crossing – Rogue River

Rogue River Horizontal Directional Drill Crossing (Trenchless)
Proposed PCGP Pipeline Horizontal Directional Drilling Crossing – Klamath River

Klamath River Horizontal Directional Drill Crossing (Trenchless)

USACE 404/10 & 408 - Public Notice
Proposed: 36-Inch Natural Gas Pipeline
Purpose: Interstate Natural Gas Transmission
Applicant: Pacific Connector Gas Pipeline, LP

Reference: _____________
Date: January, 2018
Sheet 10 of 12

Scale: 1 inch = 2000 feet

NWP-2017-41

Enclosure
NOTE:

95' CONSTRUCTION RIGHT-OF-WAY TYPICAL FOR LEVEL TERRAIN WITH NO CONSTRUCTION OBSTACLES.

WHERE FEASIBLE, THE CONSTRUCTION RIGHT-OF-WAY IN WETLANDS HAS BEEN NARROWED TO 75' IN WIDTH.

LOCATIONS REQUIRING ADDITIONAL WORK SPACE ARE
* TOPSOIL AREAS
* UNLEVEL TERRAIN
* ROAD AND STREAM CROSSINGS
* HORIZONTAL DRILLING
Proposed PCGP Pipeline Construction Sequence

LEGEND:
1 - Right-of-Way Acquisition and Survey
2 - Clearing and Grading
3 - Fencing
4 - Centerline Survey of Ditch
5 - Ditching (Rock-Free)
6 - Ditching (Rock)
7 - Padding Ditch Bottom
8 - Stringing
9 - Bending
10 - Line Up, Stringer Bead and Hot Pass
11 - Fill and Cap Weld
12 - As-Built Footage
13 - X-Ray and Weld Repair
14 - Coating Field and Factory Welds
15 - Inspection (Jeeping) and Repair of Coating
16 - Lowering In and Tie-Ins
17 - As-Built Survey
18 - Pad and Backfill
19 - Test and Final Tie-In
20 - Replace Topsoil and Cleanup