Exhibit C
Project Location

Boardman to Hemingway Transmission Line Project

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Application for Site Certificate

September 2018
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Attachment C-2. Proposed Route Location
Attachment C-3. Alternative Route Locations
ACRONYMS AND ABBREVIATIONS

ACEC   Area of Critical Environmental Concern
BLM   Bureau of Land Management
BOR   Bureau of Reclamation
BPA   Bonneville Power Administration
CS    communication station
DoD   Department of Defense
EFSC or Council   Energy Facility Siting Council
ft    feet
GIS   geographic information system
HMA   Habitat Management Area
I-84  Interstate 84
IPC   Idaho Power Company
kV    kilovolt
LDFY  light-duty fly yard
MP    milepost
MUA   multi-use area
NF    National Forest
NWSTF Naval Weapons Systems Training Facility
OAR   Oregon Administrative Rule
ODOE  Oregon Department of Energy
OPRD  Oregon Parks and Recreation Department
Project Boardman to Hemingway Transmission Line Project
RNA   Research Natural Area
ROW   right-of-way
SAG   Special Advisory Groups
Second Amended Second Amended Project Order, Regarding Statutes, Administrative
Project Order Rules, and Other Requirements Applicable to the Proposed
BOARDMAN TO HEMINGWAY TRANSMISSION LINE (July 26, 2018)
U.S.   United States
USFS  United States Forest Service
WMA   Wildlife Management Area
Exhibit C
Project Location

1.0 INTRODUCTION

Exhibit C provides information about the location of the Boardman to Hemingway Transmission Line Project (Project). The Project may be located anywhere within the Site Boundary, which represents the perimeter of the site of the proposed Project, its related and supporting facilities, the temporary laydown and staging areas, and the proposed and alternative transmission line routes. The final location of the Project within the Site Boundary will depend on topography, landowner preference, and other factors.

The following Project features will be located within the Site Boundary:

- The Proposed Route, consisting of 270.8 miles of new 500-kilovolt (kV) electric transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of 0.9 mile of a 230-kV transmission line, and rebuilding of 1.1 miles of an existing 138-kV transmission line;
- Four alternatives that each could replace a portion of the Proposed Route, including the West of Bombing Range Road Alternative 1 (3.7 miles), West of Bombing Range Road Alternative 2 (3.7 miles), Morgan Lake Alternative (18.5 miles), and Double Mountain Alternative (7.4 miles);
- One proposed 20-acre station (Longhorn Station);
- Ten communication station (CS) sites of less than ¼-acre each and two alternative communication station sites;
- Permanent access roads for the Proposed Route, including 206.3 miles of new roads and 223.2 miles of existing roads requiring substantial modification, and for the Alternative Routes, including 30.2 miles of new roads and 22.7 miles of existing roads requiring substantial modification; and
- Thirty temporary multi-use areas and 299 pulling and tensioning sites of which four will have light-duty fly yards within the pulling and tensioning sites.

The Site Boundary width or size is described in Section 3.5 and Table C-24 of this exhibit. The Project features are described in detail in Exhibit B.

The following map, Figure C-1 on the following page, shows the location of the Proposed Route. Figure C-2 shows the alternative routes and the 230-kV and 138-kV rebuilds.
Figure C-1. Map of Proposed Route
Figure C-2. Map of Alternative Routes and 230-kV and 138-kV Rebuilds
2.0 APPLICABLE RULES AND SECOND AMENDED PROJECT ORDER PROVISIONS

2.1 Site Certificate Application Requirements

Oregon Administrative Rule (OAR) 345-021-0010(1)(c) provides that Exhibit C must include:

(A) A map or maps showing the proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features, using a scale of 1 inch = 2000 feet or smaller when necessary to show detail.

(B) A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility and areas of temporary disturbance, including the total land area (in acres) within the proposed site boundary, the total area of permanent disturbance, and the total area of temporary disturbance. If a proposed pipeline or transmission line is to follow an existing road, pipeline or transmission line, the applicant shall state to which side of the existing road, pipeline or transmission line the proposed facility will run, to the extent this is known.

(C) For energy generation facilities, a map showing the approximate locations of any other energy generation facilities that are known to the applicant to be permitted at the state or local level within the study area as defined in OAR 345-001-0010 for impacts to public services.1

2.2 Second Amended Project Order Provisions

The Second Amended Project Order includes the following discussion regarding Exhibit C:

Maps shall indicate the “site boundary” as defined in OAR 345-001-0010(55). Maps shall provide enough information for property owners potentially affected by the facility to determine whether their property is within or adjacent to the site boundary. Major roads shall be named. IPC shall include maps drawn to a scale of 1 inch = 2,000 feet or smaller when necessary to show detail. The Department requests that IPC share GIS data for the proposed facility in a format that is compatible with current Department software programs; accurate GIS data will help streamline the application review process for the Department and reviewing agencies.

Maps shall clearly show the boundaries of the proposed corridor within which the transmission line would be constructed, and shall include familiar landmarks such as roads and existing power lines that reviewing agencies and affected landowners may use to identify the proposed route. Aerial photographs with all roads identified are helpful for public interpretation and review. The site boundaries of all proposed related or supporting facilities, including but not limited to access roads, temporary laydown areas, switching stations/substations, must also be identified. Maps showing access roads included as related or supporting facilities shall clearly depict where existing roads or road segments are proposed to be in the site boundary. Also, clearly identify the county and city jurisdictions in which facility components are proposed to be located. All county and city jurisdictions in which facility components are proposed to be located are appointed as SAGs by EFSC.

1 The Project does not include an energy generation facility, and therefore, OAR 345-021-0010(1)(c) is not applicable to the Project.
Exhibit C shall contain a table listing the approximate land areas for both temporary disturbance associated with construction and permanent footprint of structures associated with facility operation for each type of disturbance or structure. This information needs to be consistent with information provided in other exhibits.

(Second Amended Project Order, Section III(c)).

3.0 ANALYSIS

3.1 Maps Showing the Proposed Locations

OAR 345-021-0010(1)(c): Exhibit C: Information about the location of the proposed facility, including: (A) A map or maps showing the proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features, using a scale of 1 inch = 2000 feet or smaller when necessary to show detail.

The location of the Proposed Route, alternative routes, the related or supporting facilities, and the areas that might be temporarily disturbed during the construction of the facilities are provided in Attachment C-1, Attachment C-2, and Attachment C-3 as follows.

- Attachment C-1 provides a map showing the location of the Longhorn Station. The scale of the map is 1 inch equals 1,000 feet.
- Attachment C-2 contains a map-set organized by county proceeding north to south showing the location of the Proposed Route. Each set of county maps includes a county overview map and a series of detailed maps that are at a scale of 1 inch equals 1,000 feet. Project features shown include the Site Boundary, access roads, stations, communication station sites, and communication distribution lines within the Idaho Power Company (IPC) service area. Temporary project features are also shown, including structure work areas, multi-use areas, pulling and tensioning sites, and light-duty fly yards.
- Attachment C-3 contains a map-set showing the alternative routes. This map-set is organized by alternative proceeding north to south and is at a scale of 1 inch equals 1,000 feet.

3.2 Description of the Proposed Locations

OAR 345-021-0010(1)(c)(B): A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility and areas of temporary disturbance including the approximate land area of each. If a proposed pipeline or transmission line is to follow an existing road, pipeline or transmission line, the applicant shall state to which side of the existing road, pipeline or transmission line the proposed facility will run, to the extent this is known;

The Project will occur on federal, state, and private lands in five counties in Oregon and one county in Idaho. The description of the Project contained herein is limited to the Project features located in Oregon. Table C-1 describes the ownership of the lands where the Proposed Route and alternative routes will be located.
### Table C-1. Route Mileage Summary by Land Manager/Owner

<table>
<thead>
<tr>
<th>Route Name</th>
<th>County</th>
<th>Total Miles</th>
<th>BLM Miles</th>
<th>BLM %</th>
<th>BOR Miles</th>
<th>BOR %</th>
<th>DoD/USACE Miles</th>
<th>DoD/USACE %</th>
<th>State Miles</th>
<th>State %</th>
<th>Private Miles</th>
<th>Private %</th>
<th>USFS Miles</th>
<th>USFS %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morrow</td>
<td></td>
<td>47.5</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>10.5</td>
<td>22%</td>
<td>–</td>
<td>–</td>
<td>36.9</td>
<td>78%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Umatilla</td>
<td></td>
<td>40.9</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>40.9</td>
<td>100%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Union</td>
<td></td>
<td>39.9</td>
<td>0.2</td>
<td>&lt;1%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.1</td>
<td>3%</td>
<td>31.5</td>
<td>81%</td>
<td>7.1</td>
<td>18%</td>
</tr>
<tr>
<td>Baker</td>
<td></td>
<td>68.4</td>
<td>11.9</td>
<td>17%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>56.5</td>
<td>83%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Malheur</td>
<td></td>
<td>74.1</td>
<td>53.3</td>
<td>72%</td>
<td>0.5</td>
<td>1%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>20.2</td>
<td>27%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>230-kV Rebuild</td>
<td></td>
<td>0.9</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.9</td>
<td>100%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>138-kV Rebuild</td>
<td></td>
<td>1.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.1</td>
<td>100%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>69-kV Removal²</td>
<td></td>
<td>12.0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>10.5</td>
<td>88%</td>
<td>–</td>
<td>–</td>
<td>1.5</td>
<td>13%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Alternative Routes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West of Bombing Range Road 1</td>
<td>Morrow</td>
<td>3.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.1</td>
<td>3%</td>
<td>–</td>
<td>–</td>
<td>3.6</td>
<td>97%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>West of Bombing Range Road 2</td>
<td>Morrow</td>
<td>3.7</td>
<td>1.8</td>
<td>49%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.9</td>
<td>51%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Morgan Lake</td>
<td>Union</td>
<td>18.5</td>
<td>0.8</td>
<td>4%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>17.7</td>
<td>96%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Double Mountain</td>
<td>Malheur</td>
<td>7.4</td>
<td>7.4</td>
<td>100%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

1 All totals are rounded and may not sum exactly. Dash indicates zero.
2 Miles of 69-kV removal are not included in total route summary.

Certain multi-use areas (MUA) will be located within the cities of North Powder (27 acres) and Huntington (8.8 acres). MUAs are identified by the first two letters of the county they are in and numbered from north to south. For example, the first multi-use area in Morrow County is labeled as MUA MO-01. Light-duty fly yards (LDFY) are labeled in a similar fashion.

3.2.1 Proposed Longhorn Station and Proposed Route

3.2.1.1 Proposed Longhorn Station

The northern terminus for the Project is the proposed Longhorn Station. Bonneville Power Administration (BPA) has planned the Longhorn Station on land it purchased from the Port of Morrow. In this application, IPC is requesting authorization to develop (construct and operate) the Longhorn Station if BPA does not develop the Longhorn Station on a timely basis.

The Longhorn Station will be approximately 20 acres in size and will be located just west of the Port of Morrow, about 0.25 to 0.5 mile north of Interstate 84 (I-84) (see Attachment C-1, Figure C-1). BPA has planned the Longhorn Station to allow a 230-kV connection to the 500-kV transmission grid for an unrelated wind project. Typical equipment proposed to support the Project termination is described in Exhibit B, Section 3.2.

3.2.1.2 Proposed Route

The Proposed Route is described below by county.

Segment 1 – Morrow County

The Proposed Route crosses approximately 47.5 miles in Morrow County beginning at the proposed Longhorn Station (see Attachment C-2, Maps 1-23). The predominant land uses are irrigated agriculture, dryland farming, rangeland, and the Naval Weapons Systems Training Facility (NWSTF) Boardman. Table C-2 lists the Project features and existing roads, railroads, and transmission lines crossed by the Proposed Route. Table C-18 lists the acres that would be disturbed during Project construction or affected during operations.

Table C-2. Proposed Route Features – Morrow County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
<td>147</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV H-Frame</td>
<td>73</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV 3-Pole Dead-end</td>
<td>1</td>
</tr>
<tr>
<td>Communication Station(s)</td>
<td>1</td>
</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Use Areas</td>
<td>5</td>
</tr>
<tr>
<td>Pulling and Tensioning Sites</td>
<td>39</td>
</tr>
<tr>
<td>Station</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access Roads</th>
<th>Total Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing, 21-70% Improved</td>
<td>19.4</td>
</tr>
<tr>
<td>Existing, 71-100% Improved</td>
<td>10.8</td>
</tr>
<tr>
<td>New, Bladed</td>
<td>1.4</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>10.6</td>
</tr>
<tr>
<td>Crossings by Proposed Route</td>
<td>Number of Crossings</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>High-Voltage Transmission Line Crossings(^1)</td>
<td>1</td>
</tr>
<tr>
<td>Existing Road Crossings(^2)</td>
<td>3</td>
</tr>
<tr>
<td>Existing Railroad Crossings(^3)</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.
\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.
\(^3\) Source: Oregon Department of Transportation (2013).

The Proposed Route exits the Longhorn Station to the west, generally paralleling an existing 500-kV transmission line for about 0.3 miles. The Proposed Route then turns south and crosses I-84, coming in parallel with Bombing Range Road on the east side until milepost (MP) 1.2. At that point, the Proposed Route crosses but stays in parallel with the west side of Bombing Range Road. At MP 3.0, the Proposed Route enters the NWSTF Boardman property utilizing the existing 90-foot-wide BPA 69-kV right-of-way (ROW). Structures for the portion of the Project within the existing BPA ROW will be 100 feet or less in height. From MP 7 to MP 9, the Proposed Route passes through the NWSTF Boardman approach zone easement; tower heights in this stretch also will be less than 100 feet.

From MP 10 to MP 11.2, the Proposed Route crosses a portion of the Boardman Research Natural Area (RNA) located on NWSTF Boardman. The Boardman RNA was established in 1978 as part of a federal government system established for research and educational purposes. It is co-managed by the Navy and The Nature Conservancy.

From MP 11.7 to MP 13.5 the Proposed Route crosses a portion of the NWSTF Boardman’s Habitat Management Area (HMA). The Boardman HMA was established in 2016 as mitigation for training impacts to the Washington ground squirrel.

At MP 13.5, the Proposed Route leaves the existing BPA 69-kV ROW and the NWSTF Boardman and proceeds in a southeasterly direction. At MP 15.4, the irrigated agriculture along the Proposed Route comes to an end and dryland farming becomes the dominant land use. At MP 18, the Proposed Route turns southeast and then at MP 19.3 turns due east crossing Bombing Range Road. The Proposed Route continues due east crossing lands under dryland farming practices. At MP 21.2 the Proposed Route crosses State Highway 207, at MP 27.5 it crosses Pine City Road and Little Butter Creek, at MP 28.3 it crosses Butter Creek and Big Butter Creek Lane, and at MP 34 it again crosses Big Butter Creek Lane and Butter Creek.

From MP 34, the Proposed Route proceeds generally south paralelling a tributary of Buttermilk Creek. At MP 43.2, the Proposed Route crosses Huges-Hirl Road and Matlock Canyon. At MP 44.9, the Proposed Route turns due east and, at MP 47.1, it crosses State Highway 74. The Proposed Route exits Morrow County at MP 47.5 and continues into Umatilla County.

There will be five multi-use areas in Morrow County. Table C-14 identifies the location, size, and land status of each of the multi-use areas.

- MUA MO-01 will be located approximately 0.75 mile northeast of MP 1.0 and approximately 0.25 mile southeast of the Longhorn Station. This site is immediately north of U.S. Highway 730. The land comprises grassland and is zoned Port Industrial by Morrow County (Attachment C-2, Map 1).
- MUA MO-02 will be located approximately 2 miles southeast of MP 18.8, adjacent to State Highway 207. The land comprises grassland and is zoned as Agriculture – Exclusive Farm Use by Morrow County (Attachment C-2, Map 10).
MUA MO-03 will be located along Big Butter Creek Lane. The land comprises grassland and is zoned as Agriculture – Exclusive Farm Use by Morrow County (Attachment C-2, Map 13).

- MUA MO-04 will be located approximately 0.1 mile south of MP 34 along Big Butter Creek Lane. The land comprises grassland and is zoned as Agriculture – Exclusive Farm Use by Morrow County (Attachment C-2, Map 15).
- MUA MO-05 will be located approximately 1.6 miles south of MP 46 along State Highway 74. The land comprises grassland and is zoned as Agriculture – Exclusive Farm Use by Morrow County (Attachment C-2, Map 23).

There are no light-duty fly yards in Morrow County.

There is one communication station in Morrow County. Table C-11 identifies the location of each of the communication stations.

- CS MO-01 will be located at approximately MP 21.2 and is directly north of State Highway 207. The land comprises a dryland wheat field and is zoned as Agriculture – Exclusive Farm Use by Morrow County (Attachment C-2, Map 9).

**Segment 2 – Umatilla County**

The Proposed Route crosses approximately 40.8 miles of privately-owned land in Umatilla County (see Attachment C-2, Maps 24-44). Table C-3 lists the Project features and existing roads, railroads, and transmission lines crossed by the Proposed Route. Table C-18 lists the acres that would be disturbed during construction or affected during operations.

### Table C-3. Proposed Route Features – Umatilla County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
<td>161</td>
</tr>
<tr>
<td>Communication Station(s)</td>
<td>2</td>
</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>1</td>
</tr>
<tr>
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<td><strong>Crossings by Proposed Route</strong></td>
<td><strong>Number of Crossings</strong></td>
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<tr>
<td>High-Voltage Transmission Line Crossings¹</td>
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<tr>
<td>Existing Road Crossings²</td>
<td>1</td>
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<tr>
<td>Existing Railroad Crossings³</td>
<td>0</td>
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</tbody>
</table>

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.
² Source: Esri (2013); includes Interstate, federal, and state highways.
³ Source: Oregon Department of Transportation (2013).

The Proposed Route crosses into Umatilla County from Morrow County at MP 47.5, approximately 4 miles southwest of the community of Vinson, Oregon. The Proposed Route proceeds due east through lands predominantly under dryland farming practice and zoned as...
Exclusive Farm Use. At MP 50.0, the Proposed Route crosses U.S. Route 395 and Butter Creek. At MP 58.6, the Proposed Route crosses Bear Creek, and then at MP 59.7 it crosses West Birch Creek. At MP 64.7, the Proposed Route crosses East Birch Creek. At this point, the Proposed Route is approximately 5.5 miles south of the town of Pilot Rock. Now heading northeast, the Proposed Route begins climbing into the foothills of the Blue Mountains. Land use transitions from dryland farming to open rangeland with scattered timber stands along north-facing slopes. At MP 75.6, the Proposed Route crosses McKay Creek.

After crossing McKay Creek, the Proposed Route turns north and proceeds across rangeland with scattered stands of trees for about 2.5 miles before turning again to the east. Here the Proposed Route enters predominantly forested lands for roughly the next 10 miles. Between MP 84 and MP 85, approximately 2.8 miles southwest of the community of Meacham, the Proposed Route remains west of a segment of the Blue Mountain Forest State Scenic Route, passing into Union County at MP 88.3.

There will be seven multi-use areas in Umatilla County. Table C-14 identifies the location, size, and land status of each of the multi-use areas.

- MUA UM-01 will be in the northwest part of the county adjacent to Interstate 82 approximately 0.6 mile north of I-84. The land is bare. The western two-thirds is zoned by Umatilla County as Light Industrial while the eastern third is zoned Rural Tourist Commercial (Attachment C-2, Map 24).
- MUA UM-02 will be approximately 3.0 miles east of MP 37, on the west side of Butter Creek Road. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 25).
- MUA UM-03 will be located just north of MP 54.9 and west of U.S. Highway 395. The land comprises rangeland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 28).
- MUA UM-04 will be located approximately 2.8 miles south of Pilot Rock and west of East Birch Creek Road. The land comprises grassland and zoned by Umatilla County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 32).
- MUA UM-05 will be located approximately 1.2 mile south of MP 68 on the south side of East Birch Creek Road. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 37).
- MUA UM-06 will be located approximately 0.2 mile northwest of MP 75.5 on the west side of McKay Creek Road. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use and Critical Winter Range Overlay (Attachment C-2, Map 39).
- MUA UM-07 will be located approximately 0.3 mile northeast of MP 78. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use and Critical Winter Range Overlay (Attachment C-2, Map 41).

There will be one light-duty fly yard in Umatilla County. Table C-17 identifies the location, size, and land use status of each of the light-duty fly yards.

- LDFY UM-01 will be located at MP 87.6 and is zoned by Umatilla County as Grazing Farm Zone (Attachment C-2, Map 44).

There are two communication station in Umatilla County. Table C-11 identifies the location of each of the communication stations.
- CS UM-01 will be located at approximately MP 54.6 and is 0.4 mile west of U.S. Route 395. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 28).

- CS UM-02 will be located at approximately MP 79.2 and just south of Ross Road. The land comprises grassland and is zoned by Umatilla County as Agriculture – Exclusive Farm Use and Critical Winter Range Overlay (Attachment C-2, Map 41)

Segment 3 – Union County

The Proposed Route traverses Union County for 39.9 miles (see Attachment C-2, Maps 45-63). Table C-4 lists the Project features and existing roads, railroads and transmission lines crossed by the Proposed Route. Table C-18 lists the acres in Union County that would be disturbed during construction or affected during operations.

Table C-4. Proposed Route Features – Union County

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<thead>
<tr>
<th>Project Features</th>
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<tbody>
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<td>Towers – Single Circuit 500-kV Lattice</td>
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<td>Multi-Use Areas</td>
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<td>Pulling and Tensioning Sites</td>
<td>43</td>
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<td>Station</td>
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Access Roads

<table>
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<th>Total Miles</th>
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<td>7.2</td>
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<tr>
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<td>0.4</td>
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Crossings by Proposed Route

<table>
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<tr>
<th>Crossings by Proposed Route</th>
<th>Number of Crossings</th>
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</thead>
<tbody>
<tr>
<td>High-Voltage Transmission Line Crossings(^1)</td>
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<tr>
<td>Existing Road Crossings(^2)</td>
<td>4</td>
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<td>Existing Railroad Crossings(^3)</td>
<td>3</td>
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</tbody>
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\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.
\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.
\(^3\) Source: Oregon Department of Transportation (2013).

After entering Union County at MP 88.3, the Proposed Route turns southeast, passing between two segments of the Blue Mountain Forest State Scenic Corridor, adjacent and offset to the southwest from the existing BPA 230-kV transmission line. At MP 91.4, the Proposed Route enters the Wallowa-Whitman National Forest (NF), where it is within the designated utility corridor for 6.3 of the total 7.5 miles of Wallowa-Whitman NF land crossed. The utility corridor of the Wallowa-Whitman NF is designated NF Management Area 17, and is identified as the Power Transportation Facility Retention Corridor (USFS 1990). The Proposed Route shares the Wallowa-Whitman NF utility corridor with I-84, portions of old US Route 30 (Old Oregon Trail Highway), a Union Pacific railway line, a 230-kV transmission line, a refined petroleum products pipeline, and a large diameter natural-gas pipeline. The land is predominantly forested with areas of open shrub and grassland on some south facing slopes.

Between MP 94.6 and 94.8, while still inside the designated utility corridor, the Proposed Route crosses Railroad Canyon, a portion of the Blue Mountain Forest State Scenic Corridor. The Blue
Mountain Forest State Scenic Corridor comprises six separate areas located along I-84 and the Old Oregon Trail Highway. These parcels extend from Deadman’s Pass Rest Area in Umatilla County south to Spring Creek in Union County (OPRD 2011a).

Between MP 96 and 105.8, the Proposed Route parallels within 250 feet of BPA’s existing Round Up to La Grande 230-kV transmission line.

At MP 98.8, the Proposed Route exits the Wallowa-Whitman NF and the designated utility corridor. At MP 99.6, the Proposed Route crosses over the Grande Ronde River approximately 1.0 mile south of Hilgard Junction State Park. Hilgard Junction State Park is located 8 miles west of La Grande at the intersection of I-84 and State Highway 244 near the Grande Ronde River (OPRD 2011b). At MP 100, the Proposed Route proceeds easterly for approximately 5.8 miles, generally parallel to the south side and offset 250 feet from the existing BPA 230-kV transmission line.

At MP 105.8, the Proposed Route angles to the south, away from the existing 230-kV line, which continues east into the city of La Grande. At this point, the Proposed Route is approximately 0.4 mile west of the La Grande city limits. The Proposed Route continues south until reaching MP 107.9, at which point it again turns to the east. At MP 110, the Proposed Route turns to the southeast. For the next 43.4 miles, the Proposed Route parallels at varying distances to the existing Quartz to La Grande 230-kV transmission line. In most cases, the two lines will be separated by 250 feet for this distance.

Between MP 110.5 and MP 111.5, the Proposed Route crosses over the Glass Hill Unit of the Ladd Marsh Wildlife Management Area (WMA). The Ladd Marsh WMA was established in 1949, with the primary objectives of protecting and improving waterfowl habitat and providing a public hunting area. The portion of the Ladd Marsh WMA crossed by the Project is an area that supports forest and mixed shrub uplands and the existing Quartz to La Grande 230-kV transmission line. The Proposed Route crosses over Ladd Creek and I-84 at MP 114.1, crosses I-84 again at MP 115.6 and a third time at MP 119.4.

The Proposed Route continues southeast crossing mostly open rangeland. At MP 126.8, the Proposed Route crosses State Highway 237, which is a segment of the state designated scenic byway called the Grande Tour Route. At MP 128.2, the Proposed Route is approximately 3.5 miles northeast of the city of North Powder. At this point, the Proposed Route crosses the Union Pacific Railroad and the Powder River, and exits Union County crossing into Baker County.

There will be three multi-use areas in Union County. Table C-14 identifies the location, size, and land status of each of the multi-use areas.

- MUA UN-01 was dropped from consideration. In an effort to maintain consistency throughout the application, the remaining multi-use areas in Union County were not renumbered.
- MUA UN-02 will be located approximately 0.2 mile west of the Oregon Department of Transportation Charles Reynolds East Bound Rest Area on I-84. The land is under agricultural production and zoned by Union County as Exclusive Farm Use A-1 (Attachment C-2, Map 54 and Attachment C-3, Map 14).
- MUA UN-03 will be located approximately 1.8 miles west of MP 125 on the corner of Olsen and Bagwell roads. The land is grassland but may have previously supported agricultural production and is zoned by Union County as Exclusive Farm Use A-1 (Attachment C-2, Map 60).
• MUA UN-04 will be southwest of North Powder along the west side of I-84 and along the north side of U.S. Highway 30. It will be partially within the city limits of North Powder. This MUA will be located on a parcel of land that is bare ground. A portion of the site is zoned by North Powder as Commercial Interchange. The remainder of the parcel is zoned by Union County as Exclusive Farm Use A-1 (Attachment C-2, Map 62).

There are no light-duty fly yards in Union County.

There are two communication stations in Union County. Table C-11 identifies the location of each of the communication stations.

• CS UN-01 will be located at approximately MP 105.8 and approximately 0.4 mile west of the La Grande city limits. The land comprises shrub land with scattered trees and is zoned by Union County as Timber-Grazing (Attachment C-2, Map 51).

• CS UN-02 will be located at approximately MP 127.5 and is 0.7 mile south of State Highway 237. The land comprises shrub land and is zoned by Union County as Agriculture – Grazing (Attachment C-2, Map 61).

**Segment 4 – Baker County**

The portion of the Project in Baker County includes 68.4 miles of new transmission line and the 0.9-mile 230-kV rebuild (see Attachment C-2, Maps 63-92). The majority of the route in Baker County traverses open rangeland with little or no development. Table C-5 lists the Project features and existing roads, railroads, and transmission lines crossed by the Proposed Route. Table C-18 lists the acres in Baker County that would be disturbed during construction or affected during operations.

**Table C-5. Proposed Route Features – Baker County**

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
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<tbody>
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<td>Towers – Single Circuit 500-kV Lattice</td>
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<td>Towers – Single Circuit 230-kV H-Frame</td>
<td>5</td>
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<td>Towers – Single Circuit 230-kV 3-Pole Dead-end</td>
<td>4</td>
</tr>
<tr>
<td>Communication Station(s)</td>
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<tr>
<td>Light Duty Fly Yards</td>
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<td>Multi-Use Areas</td>
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<td>Pulling and Tensioning Sites</td>
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<th>Access Roads</th>
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<td>New, Primitive</td>
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<tr>
<th>Crossings by Proposed Route</th>
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<td>Existing Road Crossings(^2)</td>
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<td>Existing Railroad Crossings(^3)</td>
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</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.

\(^3\) Source: Oregon Department of Transportation (2013).
Once across the Powder River (the border between Baker and Union Counties in this location) and into Baker County, the Proposed Route crosses about 13.1 miles of rangeland as it continues southeast, parallel and offset about 250 feet west of the existing IPC Quartz to La Grande 230-kV transmission line. At MP 132, the Proposed Route passes about 2 miles west of the Thief Valley Reservoir, which is located on the North Powder River.

At MP 142.7, the Proposed Route angles to the southeast, across State Highway 203. Approximately 0.8 mile beyond this road crossing, the Proposed Route crosses over the existing IPC 230-kV transmission line proceeding almost due south about 2.2 miles along the eastern edge of agricultural fields to MP 146.2.

Between MP 146.2 and MP 146.9, the Proposed Route crosses the Oregon Trail and passes west of the National Historic Oregon Trail Interpretive Center. Between MP 146.5 and 147.3, the existing 230-kV line would be rebuilt to allow both the 500-kV and 230-kV towers to be co-located in a valley between ridgelines in the Prospects Range. The rebuild shifts the 230-kV towers several hundred feet to the east to make room for the 500-kV towers within this valley, minimizing visibility from surrounding vantage points by locating the towers at the lowest elevation for maximum screening from topography of the surrounding landscape. At MP 146.8, the Proposed Route crosses over State Highway 86, a designated scenic route by Baker County.

Land use in the area between State Highway 203 to State Highway 86 includes 0.1 miles of irrigated agricultural land and 4.0 miles of shrub-steppe and grassland at the eastern edge of the Baker Valley. The Proposed Route passes within 125 feet of a segment of the Oregon Trail Area of Critical Environmental Concern (ACEC) and within about 0.7 mile of the National Historic Oregon Trail Interpretive Center.

At MP 147.3, the Proposed Route temporarily leaves the corridor with the existing IPC 230-kV transmission line. The Proposed Route then crosses an abandoned gravel pit and continues south around an agricultural pivot. At MP 150.3, the Proposed Route again parallels the existing 230-kV transmission line. After crossing another 3.0 miles of rangeland, the Proposed Route turns southeast at MP 153.4.

The Proposed Route angles and proceeds southeasterly from MP 153.4 and begins to parallel the existing IPC Quartz to Weiser 138-kV transmission line and a 69-kV line and an existing pipeline along the northeast side of I-84. At MP 157.0, the existing transmission line is crossed to avoid indirect impacts to sage-grouse habitat. At MP 159.4, the existing 69-kV line is crossed again and at MP 162.7 the 138-kV transmission line is again crossed to avoid the Oregon Trail Straw Ranch 1 ACEC, an Oregon Department of Energy (ODOE) protected area. Once around the ACEC, the Proposed Route once again crosses to the south side of the existing transmission lines at MP 164.7 and MP 165.4, and at MP 166 crosses I-84, the Union Pacific Railroad, and an existing underground pipeline.

For the next 5 miles, the route diverts from I-84 heading south and crosses open rangeland with little or no development. At MP 171.2, the Proposed Route crosses the Burnt River about 1.2 miles upstream from the mouth of the Burnt River Canyon. The Proposed Route at this point is approximately 3.9 miles east of the community of Durkee. At MP 172.3, the Proposed Route turns east crossing the hills to the south and east of the irrigated farmlands of the Durkee Valley. After crossing the Burnt River, the Proposed Route climbs steeply, crossing the hills south of Durkee reaching over 5,000 feet in elevation as it crosses the shoulder of Juniper Mountain. This area consists of open range land with scattered stands of juniper and ponderosa pine on
north facing slopes. At MP 185.4, the Proposed Route crosses Dixie Creek and Dixie Creek Road. From here, the Proposed Route turns south and again parallels the existing IPC Quartz to Weiser 138-kV transmission line and an existing underground pipeline. In this section, the Proposed Route crosses through steep terrain that supports open range lands.

At the southern end of the Weatherby Mountains, near MP 191, the Proposed Route leaves the Burnt River Canyon and no longer parallels the existing 138-kV transmission line. From here, the Proposed Route begins paralleling the west side of I-84 at a distance of approximately 0.3 mile. At MP 193, the Proposed Route is about 1.3 miles west of the city of Huntington. From MP 192 to MP 194.4 and again from MP 196.2 to MP 196.8, the Proposed Route is located within the West-wide Energy corridor. The Proposed Route exits Baker County and crosses into Malheur County at MP 196.5.

There will be six multi-use areas in Baker County. Table C-14 identifies the location, size, and land status of each of the multi-use areas.

- MUA BA-01 will be located approximately 0.6 mile east of MP 142.7 on State Highway 203. The area is vacant land and appears to support shrub-steppe, and is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 68).
- MUA BA-02 will be located approximately one-quarter mile east of I-84 immediately east and south of Baker City. It will be about 1.6 miles northwest of the Proposed Route at MP 150. The area is vacant and appears to be predominantly shrub-steppe; however, there is evidence that it may have been farmed in the past. It is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 71).
- MUA BA-03 will be located just southwest of MP 166 on Hill Creek Road. The land consists of grassland and shrub-steppe, and is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 78).
- MUA BA-04 will be located approximately 1.2 miles west of the community of Durkee and 2.5 miles northeast of MP 174 on Oxman Ranch Road. The land is vacant and predominantly shrub-steppe, and is zoned by Baker County as Agriculture – Exclusive Farm Use EFU. It is bounded on three sides by irrigated agriculture (Attachment C-2, Maps 81 and 82).
- MUA BA-05 will be located approximately 0.25 mile southwest of the I-84 Exit 340 on Rye Valley Lane. It is directly adjacent to the Proposed Route between MP 185.4 and MP 185.5 The land is currently vacant but may have supported agriculture in the past. It is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 88).
- MUA BA-06 will be inside city limits of Huntington, approximately 1 mile east of the Proposed Route at MP 192.5. The area currently has some development but is mostly vacant. In the undeveloped portion, grasslands or shrub-steppe habitats dominate. Zoning is also split, with approximately 85 percent being Commercial Industrial and the remaining portion being Commercial Residential (Attachment C-2, Map 91).

There will be one light-duty fly yard in Baker County. Table C-17 identifies the location, size, and land use status of each of the light-duty fly yards.

- LDFY BA-01 will be located at MP 162.7. The area is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 76).
There will be two communication stations in Baker County. Table C-11 identifies the location of each of the communication stations.

- **CS BA-01** will be located at approximately MP 158.9 and is approximately 0.5 mile northeast of I-84. The land comprises shrub land and is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 75)
- **CS BA-02** will be located at approximately MP 178.6 and is just west of Shirttail Creek Road. The land comprises shrub land and is zoned by Baker County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 85)

**Segment 5 – Malheur County**

The Proposed Route traverses 74.1 miles across northeast Malheur County (see Attachment C-2, Maps 93-125). Most of the land along the route in Malheur County is rangeland and shrub-steppe with little or no development. Table C-6 lists the Project features and existing roads, railroads, and transmission lines crossed by the Proposed Route. Table C-18 lists the acres in Malheur County that would be disturbed during construction or affected during operations.

**Table C-6. Proposed Route Features – Malheur County**

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<th>Project Features</th>
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<td>Towers – Single Circuit 500-kV H-Frame</td>
<td>6</td>
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<td>Towers – Single Circuit 500-kV 3-Pole Dead-end</td>
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<td>Towers – Single Circuit 138-kV H-Frame</td>
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<td>Towers – Single Circuit 138-kV 3-Pole Dead-end</td>
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<tr>
<td><strong>Crossings by Proposed Route</strong></td>
<td><strong>Number of Crossings</strong></td>
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<td>High Voltage Transmission Line Crossings¹</td>
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</tbody>
</table>

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69-kV.
² Source: Esri (2013); includes Interstate, federal, and state highways.
³ Source: Oregon Department of Transportation (2013).

Heading southeast across rangeland from the Malheur County line, the Proposed Route crosses several small segments of the West-wide Energy corridor. The Proposed Route crosses several parallel sections of the Oregon National Historic Trail and it passes directly to the east of the Oregon Trail Birch Creek ACEC, an ODOE protected area at MP 199. Between MP 197.6
and MP 198.8, the Proposed Route will be located in the existing IPC 138-kV transmission line ROW. The 138-kV transmission line will be rebuilt to the southwest of the Proposed Route in a new ROW. This is being done to reduce visual impacts to the Oregon Trail Birch Creek ACEC. In addition, between MP 198 and MP 199, the Proposed Route will use H-frame structures ranging in height from 65 to 100 feet.

Shortly thereafter, the Proposed Route turns sharply south at MP 199 and continues until reaching MP 211.5 and some challenging topography. The Oregon Trail Tub Mountain ACEC, another ODOE protected area, is located approximately 1 mile west of the Proposed Route for nearly this entire segment. To avoid steep terrain and the South Alkali Sand Hills ACEC, another ODOE protected area, the Proposed Route angles southwest and crosses Willow Creek and U.S. Highway 26 at MP 216.4. The highway is a designated utility corridor under the Bureau of Land Management’s (BLM) Southeastern Oregon Resource Management Plan (BLM 2002). The Proposed Route crosses through approximately 3 miles of irrigated agriculture along both sides of Willow Creek. From MP 218, the Proposed Route continues to the west passing north of Bully Creek Reservoir until it is about 1 mile north of Cottonwood Creek at MP 226. At this point, the Proposed Route turns abruptly south, crosses Cottonwood Creek, and proceeds south along the eastern foothills of the Cottonwood Mountains.

The Proposed Route continues south, crossing Bully Creek at MP 228.5, the Vale Irrigation Canal at MP 231.6, the Union Pacific Railroad at MP 232, and the Malheur Canyon, which the Malheur River flows through, at MP 232.1. Headed southeasterly, the Proposed Route crosses U.S. Highway 20 near Vines Hill at MP 236.4. U.S. Highway 20 is a BLM designated utility corridor under BLM’s Southeastern Oregon Resource Management Plan (BLM 2002). The Proposed Route passes to the north avoiding the Double Mountain Wilderness Characteristic Unit between MP 238.1 and MP 245.4. The Proposed Route continues southeasterly, crossing Cow Hollow and passing west of Leaky Reservoir and east of Chalk Reservoir.

At MP 253.2, the Proposed Route enters a BLM designated utility corridor. This segment of the utility corridor was developed to provide a corridor that avoided the area of the Owyhee Dam, and to provide an alternative to the utility corridor designated along the existing PacifiCorp 500-kV line that crosses the Owyhee River below the Owyhee Dam.

At MP 254.2, the Proposed Route turns to the east to avoid crossing the Owyhee River Below the Dam ACEC (an ODOE protected area). At MP 254, the Proposed Route passes within 1,000 feet of the northeast boundary of the Owyhee River Below the Dam ACEC. At MP 254.8, the Proposed Route exits the utility corridor and proceeds across the Owyhee River at approximately MP 255.3. From here, the Proposed Route turns to the south and, at MP 256, re-enters the BLM utility corridor. At MP 266.1, the Proposed Route crosses the existing PacifiCorp Summer Lake to Hemingway 500-kV transmission line at MP 266.1. At MP 266.4, the Proposed Route exits the utility corridor and turns to the southeast. From here, the Proposed Route proceeds parallel to and offset approximately 1,500 to 3,500 feet from the southwest side of the existing 500-kV line to the Oregon/Idaho state line at MP 270.7.

There will be nine multi-use areas in Malheur County. Table C-14 identifies the location, size, and land status of each of the multi-use areas.

- **MUA MA-01** will be approximately 0.2 mile east of MP 203 on Love Reservoir Road. The area is undeveloped and comprises shrub-steppe habitat, and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 95).
- **MUA MA-02** will be approximately 0.5 mile south of MP 215 and 1 mile east of U.S. Highway 26 on Old Oregon Trail Road and is zoned by Malheur County as Agriculture – Exclusive Range Use and Agriculture – Exclusive Farm Use (Attachment C-2, Map 100).
• MUA MA-03 will be approximately 4 miles east of MP 233 and 0.75 mile north of U.S. Highway 20 on Loop Road. The area is vacant land but previously supported agricultural production. It now supports non-native grasses and mixed shrubs, and is zoned by Malheur County as both Agriculture – Exclusive Farm Use and Rural Industrial (Attachment C-2, Map 108).

• MUA MA-04 will be adjacent to the Proposed Route between MP 236.5 and MP 236.6 and directly south of U.S. Highway 20. The area supports shrub-steppe and grassland habitat, and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 109).

• MUA MA-05 will be 0.1 mile north of MP 240 on Rock Canyon Road. The area supports shrub-steppe and grassland habitat, and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 111).

• MUA MA-06 will be located 0.5 mile northeast of MP 245 at the intersection of Cow Hollow Road and Twin Springs Road. The area supports shrub-steppe and grassland habitat, and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Maps 112 and 113).

• MUA MA-07 will be approximately 2.1 miles south of the town of Adrian, Oregon. It will be immediately adjacent to State Highway 201 and the Snake River and is about 2.4 miles east of MP 258. The area is vacant and comprised entirely of non-native grassland habitat. Zoning is split nearly equally between Agriculture – Exclusive Farm Use and Agriculture – Exclusive Range Use. Industrial, agricultural, and residential uses are apparent on all sides of this area except the west side. (Attachment C-2, Map 119).

• MUA MA-08 will be approximately 1.3 miles east of MP 260.5 and 0.4 miles west of State Highway 201. The area is vacant and comprised of non-native grassland, and is zoned by Malheur County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 121).

• MUA MA-09 will be located approximately 0.3 mile east of MP 265 on Succor Creek Road. The area is undeveloped and supports shrub-steppe habitat, and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 123).

There will be two light-duty fly yards in Malheur County. Table C-17 identifies the location, size, and land use status of each of the light-duty fly yards.

• LDFY MA-01 will be located at approximately MP 222.4. The area is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 102).

• LDFY MA-02 will be located at approximately MP 232.9. The area is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 107).

There will be three communication stations in Malheur County. Table C-11 identifies the location of each of the communication stations.

• CS MA-01 will be located at approximately MP 218.9 and is 0.6 mile southwest of U.S. Route 26. The land comprises irrigated farm field and is zoned by Malheur County as Agriculture – Exclusive Farm Use (Attachment C-2, Map 100).

• CS MA-02 will be located at approximately MP 242.8. The land comprises shrub and grass land and is zoned by Malheur County as Agriculture – Exclusive Range Use (Attachment C-2, Map 112).
• CS MA-03 will be located at approximately MP 269 and is 1.7 miles west of the Oregon-
Idaho state line. The land comprises shrub and grass land and is zoned by Malheur
County as Agriculture – Exclusive Range Use (Attachment C-2, Map 125).

3.2.2 Alternative Routes

3.2.2.1 West of Bombing Range Road Alternative 1

The 3.7-mile West of Bombing Range Road Alternative 1 leaves the Proposed Route at MP
10.0 and crosses to the east side of Bombing Range Road (see Attachment C-3, Maps 1-2).
This alternative continues along the east side of road until it rejoins the Proposed Route at MP
13.6.

The primary difference between West of Bombing Range Road Alternative 1 and the Proposed
Route is that the alternative route shifts a portion of the Project from Navy land on the west side
of the road to private land on the east side of the road. This alternative will result in impacts to
agricultural operations on the east side that otherwise would be avoided with the Proposed
Route. West of Bombing Range Road Alternative 1 was developed to avoid the Navy’s RNA
and HMA.

Table C-7 lists the Project features and existing roads, railroads, and transmission lines crossed
by the West of Bombing Range Road Alternative 1. Table C-19 lists the acres along the
alternative route that would be disturbed during construction or affected during operations.

Table C-7. West of Bombing Range Road Alternative 1 Features – Morrow County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
<td>1</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV H-Frame</td>
<td>22</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV 3-Pole Dead-end</td>
<td>1</td>
</tr>
<tr>
<td>Communication Station(s)</td>
<td>0</td>
</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Use Areas</td>
<td>0</td>
</tr>
<tr>
<td>Pulling and Tensioning Sites</td>
<td>4</td>
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<tr>
<td>Station</td>
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<tr>
<td><strong>Access Roads</strong></td>
<td><strong>Total Miles</strong></td>
</tr>
<tr>
<td>Existing, 21-70% Improved</td>
<td>1.1</td>
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<tr>
<td>Existing, 71-100% Improved</td>
<td>0</td>
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<tr>
<td>New, Bladed</td>
<td>0</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>0</td>
</tr>
<tr>
<td>High Voltage Transmission Line Crossings(^1)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crossings by Proposed Alternative</th>
<th>Number of Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Road Crossings(^2)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Railroad Crossings(^3)</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.
\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.
\(^3\) Source: Oregon Department of Transportation (2013).

3.2.2.2 West of Bombing Range Road Alternative 2

The 3.7-mile West of Bombing Range Road Alternative 2 starts at MP 10.0 (see Attachment C-
3, Maps 3-4). From MP 10.0 to MP 11.6, the alternative is located on Navy land on the west
side of Bombing Range Road. At MP 11.6, it crosses to the east side of the road, continuing along the road until it rejoins the Proposed Route at MP 13.6.

Both the Proposed Route and West of Bombing Range Road Alternative 2 are located on Navy land between MP 10.0 to MP 11.6. However, the alternative differs from the Proposed Route along that stretch by making use of an alternative Y-frame structure-type and by avoiding the Boardman RNA. After the alternative crosses the road onto private lands at MP 11.6, it follows the same path as West of Bombing Range Road Alternative 1. The West of Bombing Range Road Alternative 2 was developed to avoid the agricultural impacts associated with West of Bombing Range Road Alternative 1 on the east side of the Bombing Range, while also avoiding the Boardman RNA.

Table C-8 lists the Project features and existing roads, railroads, and transmission lines crossed by the West of Bombing Range Road Alternative 2. Table C-20 lists the acres along the alternative route that would be disturbed during construction or affected during operations.

### Table C-8. West of Bombing Range Road Alternative 2 Features – Morrow County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
<td>1</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV H-Frame</td>
<td>12</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV H-Frame Dead-end</td>
<td>3</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV Y-Frame</td>
<td>8</td>
</tr>
<tr>
<td>Towers – Single Circuit 500-kV 3-Pole Dead-end</td>
<td>1</td>
</tr>
<tr>
<td>Communication Station(s)</td>
<td>0</td>
</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Use Areas</td>
<td>0</td>
</tr>
<tr>
<td>Pulling and Tensioning Sites</td>
<td>2</td>
</tr>
<tr>
<td>Station</td>
<td>0</td>
</tr>
</tbody>
</table>

**Access Roads**

<table>
<thead>
<tr>
<th></th>
<th>Total Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing, 21-70% Improved</td>
<td>0.8</td>
</tr>
<tr>
<td>Existing, 71-100% Improved</td>
<td>0</td>
</tr>
<tr>
<td>New, Bladed</td>
<td>0</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>0</td>
</tr>
</tbody>
</table>

**Crossings by Proposed Alternative**

<table>
<thead>
<tr>
<th></th>
<th>Number of Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Voltage Transmission Line Crossings(^1)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Road Crossings(^2)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Railroad Crossings(^3)</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.
\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.
\(^3\) Source: Oregon Department of Transportation (2013).

### 3.2.2.3 Morgan Lake Alternative

The 18.5-mile Morgan Lake Alternative leaves the Proposed Route at MP 98.8 approximately 1.0 mile west of the Hilgard Junction State Park (see Attachment C-3, Maps 5-14). The Morgan Lake Alternative proceeds south and then southeast crossing the Grand Ronde River at MP 0.8. This alternative then turns east crossing open rangeland with scattered forest stands on north facing slopes. At MP 4.7, the alternative turns southeast and at MP 6.3 passes about 0.2 mile southwest of Morgan Lake. Morgan Lake is a park managed by the City of La Grande. The
Morgan Lake Alternative continues to the southwest and MP 11.0 crosses just to the west of the Ladd Marsh WMA. At that point, the alternative crosses lands that are predominantly forested or have undergone recent timber harvest. At MP 15, the Morgan Lake Alternative crosses over Ladd Canyon and at MP 18.5 rejoins the Proposed Route at MP 117.9.

In comparison with the Proposed Route, the Morgan Lake Alternative crosses fewer parcels with residences, does not cross the Ladd Marsh WMA, does not cross I-84, and is 0.5 mile shorter. The Morgan Lake Alternative was developed by IPC based on input from land owners.

Table C-9 lists the Project features and existing roads, railroads, and transmission lines crossed by the Morgan Lake Alternative. Table C-21 lists the acres along the alternative route that would be disturbed during construction or affected during operations.

### Table C-9. Morgan Lake Alternative Features – Union County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
<td>82</td>
</tr>
<tr>
<td>Communication Station(s)</td>
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</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Use Areas</td>
<td>1</td>
</tr>
<tr>
<td>Pulling and Tensioning Sites</td>
<td>19</td>
</tr>
<tr>
<td>Station</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access Roads</th>
<th>Total Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing, 21-70% Improved</td>
<td>12.0</td>
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<tr>
<td>Existing, 71-100% Improved</td>
<td>2.5</td>
</tr>
<tr>
<td>New, Bladed</td>
<td>5.9</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crossings by Proposed Alternative</th>
<th>Number of Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Voltage Transmission Line Crossings(^1)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Road Crossings(^2)</td>
<td>1</td>
</tr>
<tr>
<td>Existing Railroad Crossings(^3)</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.

\(^3\) Source: Oregon Department of Transportation (2013).

There is one alternative communication station in Union County:

- CS UN-02 ALT will be located at approximately MP 6.6 of the Morgan Lake Alternative Route and is 0.3 mile south of Morgan Lake. The land comprises grass land and is zoned by Union County as Timber – Grazing (Attachment C-3, Map 8).

### 3.2.2.4 Double Mountain Alternative

The 7.4-mile Double Mountain Alternative leaves the Proposed Route at MP 238.1, stays north of the Double Mountains, and rejoins the Proposed Route at MP 245.4 (see Attachment C-3, Maps 15-19).

The large majority of land along the Double Mountain Alternative, which is located entirely on BLM-managed land, is rangeland and sagebrush. Almost the entire length of this alternative route is located within the BLM-designated Double Mountain Wilderness Characteristic Unit.
Table C-10 lists the Project features and existing roads, railroads, and transmission lines crossed by the Double Mountain Alternative. Table C-22 lists the acres along the alternative route that would be disturbed during construction or affected during operations.

### Table C-10. Double Mountain Alternative Features – Malheur County

<table>
<thead>
<tr>
<th>Project Features</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towers – Single Circuit 500-kV Lattice</td>
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<td>Communication Station(s)</td>
<td>1</td>
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<td>Light Duty Fly Yards</td>
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<td>Multi-Use Areas</td>
<td>2</td>
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<tr>
<td>Pulling and Tensioning Sites</td>
<td>7</td>
</tr>
<tr>
<td>Station</td>
<td>0</td>
</tr>
<tr>
<td><strong>Access Roads</strong></td>
<td><strong>Total Miles</strong></td>
</tr>
<tr>
<td>Existing, 21-70% Improved</td>
<td>1.2</td>
</tr>
<tr>
<td>Existing, 71-100% Improved</td>
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<tr>
<td>New, Bladed</td>
<td>7.0</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crossings by Proposed Alternative</th>
<th>Number of Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Voltage Transmission Line Crossings(^1)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Road Crossings(^2)</td>
<td>0</td>
</tr>
<tr>
<td>Existing Railroad Crossings(^3)</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

\(^2\) Source: Esri (2013); includes Interstate, federal, and state highways.

\(^3\) Source: Oregon Department of Transportation (2013).

There is one alternative communication station in Malheur County:

- CS MA-02 ALT will be located at approximately MP 226.8 of the Proposed Route and is 0.2 mile north of Bully Creek Road. The land comprises shrub and grass land and is zoned by Malheur County as Exclusive Range Use (Attachment C-3, Map 19).

#### 3.2.3 Proposed and Alternative Communication Station Sites

Communication station sites and associated map locations are listed in Tables C-11, C-12, and C-13 and shown in Attachments C-2 and C-3.
### Table C-11. Proposed Route – Communication Station Sites

<table>
<thead>
<tr>
<th>County/Feature ID</th>
<th>Map</th>
<th>Land Status</th>
<th>Nearest Milepost</th>
<th>Dist. to Milepost (ft)</th>
<th>Constr. Acres</th>
<th>Oper. Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Morrow County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CS MO-01</td>
<td>9</td>
<td>Private</td>
<td>21.2</td>
<td>90</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Umatilla County</strong></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>CS UM-01</td>
<td>28</td>
<td>Private</td>
<td>54.6</td>
<td>257</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>CS UM-02</td>
<td>41</td>
<td>Private</td>
<td>79.2</td>
<td>127</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Union County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS UN-01</td>
<td>51</td>
<td>Private</td>
<td>105.8</td>
<td>167</td>
<td>0.2</td>
<td>0.1</td>
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<tr>
<td>CS UN-02</td>
<td>62</td>
<td>Private</td>
<td>127.5</td>
<td>79</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Baker County</strong></td>
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<td>CS BA-01</td>
<td>76</td>
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<td>158.9</td>
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<td>0.2</td>
<td>0.1</td>
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<td>CS BA-02</td>
<td>86</td>
<td>Private</td>
<td>178.7</td>
<td>257</td>
<td>0.2</td>
<td>0.1</td>
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<td><strong>Malheur County</strong></td>
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<td></td>
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<td></td>
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<td>CS MA-01</td>
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<td>Private</td>
<td>217.0</td>
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<td>0.1</td>
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<td>CS MA-02</td>
<td>113</td>
<td>Private</td>
<td>242.8</td>
<td>87</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>CS MA-03</td>
<td>126</td>
<td>Private</td>
<td>296.0</td>
<td>106</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

1. Attachment C-2 map set reference.
2. Land status, milepost, and distance all from centroid of feature.

### Table C-12. Morgan Lake Alternative – Communication Station Site

<table>
<thead>
<tr>
<th>County/Feature ID</th>
<th>Map</th>
<th>Land Status</th>
<th>Nearest Milepost</th>
<th>Dist. to Milepost (ft)</th>
<th>Constr. Acres</th>
<th>Oper. Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malheur County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS UN-02 ALT</td>
<td>8</td>
<td>Private</td>
<td>6.6</td>
<td>228</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

1. Attachment C-3 map set reference.
2. Land status, milepost, and distance all from centroid of feature.

### Table C-13. Double Mountain Alternative – Communication Station Site

<table>
<thead>
<tr>
<th>County/Feature ID</th>
<th>Map</th>
<th>Land Status</th>
<th>Nearest Milepost</th>
<th>Dist. to Milepost (ft)</th>
<th>Constr. Acres</th>
<th>Oper. Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malheur County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS MA-02 ALT</td>
<td>19</td>
<td>Private</td>
<td>226.8</td>
<td>110</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

1. Attachment C-3 map set reference.
2. Land status, milepost, and distance all from centroid of feature.
3.3 Temporary Uses

3.3.1 Multi-use Areas

Multi-use areas and associated map locations are listed in Tables C-14, C-15, and C-16 and shown in Attachments C-2 and C-3.

<table>
<thead>
<tr>
<th>County/ Feature ID</th>
<th>Map¹</th>
<th>Land Status²</th>
<th>Nearest Milepost²</th>
<th>Dist. to Milepost (ft)²</th>
<th>Constr. Acres</th>
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</thead>
<tbody>
<tr>
<td><strong>Morrow County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUA MO-01</td>
<td>1</td>
<td>Private</td>
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<td>757</td>
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<td>5,402</td>
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<td>MUA MA-01</td>
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<td>BLM/Private</td>
<td>202.8</td>
<td>904</td>
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<td>240.2</td>
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<td>BLM</td>
<td>245.2</td>
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<td>MUA MA-08</td>
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<td>Private</td>
<td>261.0</td>
<td>7,743</td>
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Table C-15. Morgan Lake Alternative – Multi-use Area Sites

<table>
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<tr>
<th>County/Feature ID</th>
<th>Map¹</th>
<th>Land Status²</th>
<th>Nearest Milepost²</th>
<th>Dist. to Milepost (ft)²</th>
<th>Constr. Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malheur County</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUA UN-02</td>
<td>14</td>
<td>Private</td>
<td>12.9</td>
<td>10,883</td>
<td>19.3</td>
</tr>
</tbody>
</table>

1 Attachment C-3 map set reference.
2 Land status, milepost, and distance all from centroid of feature.

Table C-16. Double Mountain Alternative – Multi-use Area Sites

<table>
<thead>
<tr>
<th>County/Feature ID</th>
<th>Map¹</th>
<th>Land Status²</th>
<th>Nearest Milepost²</th>
<th>Dist. to Milepost (ft)²</th>
<th>Constr. Acres</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>MUA MA-05</td>
<td>18</td>
<td>Private</td>
<td>2.2</td>
<td>6,686</td>
<td>14.9</td>
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<td>17</td>
<td>BLM</td>
<td>7.3</td>
<td>3,019</td>
<td>16.5</td>
</tr>
</tbody>
</table>

1 Attachment C-3 map set reference.
2 Land status, milepost, and distance all from centroid of feature.

3.3.2 Light-Duty Fly Yards

Light-duty fly yards and associated map locations are listed in Table C-17 and are shown in Attachment C-2.

Table C-17. Light-Duty Fly Yards

<table>
<thead>
<tr>
<th>County/Feature ID</th>
<th>Map¹</th>
<th>Easting²</th>
<th>Northing²</th>
<th>Land Status²</th>
<th>Nearest Milepost²</th>
<th>Dist. to Milepost (ft)²</th>
<th>Constr. Acres</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
</tr>
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<td>LDFY UM-01</td>
<td>44</td>
<td>388966.8</td>
<td>5032313.5</td>
<td>Private</td>
<td>87.6</td>
<td>266</td>
<td>3.6</td>
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<tr>
<td>Baker County</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>LDFY BA-01</td>
<td>77</td>
<td>452626.2</td>
<td>4946956.5</td>
<td>Private</td>
<td>162.8</td>
<td>338</td>
<td>2.9</td>
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<td>103</td>
<td>468552.7</td>
<td>4878344.3</td>
<td>BLM</td>
<td>222.4</td>
<td>118</td>
<td>5.7</td>
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<td>LDFY MA-02</td>
<td>108</td>
<td>462575.7</td>
<td>4865837.9</td>
<td>BLM/Private</td>
<td>232.9</td>
<td>147</td>
<td>7.6</td>
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</tbody>
</table>

1 Attachment C-2 map set reference.
2 Coordinates (North American Datum 1983 Universal Transverse Mercator Zone 11 – meters), land status, milepost, and distance all from centroid of feature.

3.4 Disturbance

The following discussion estimates construction disturbances and lands permanently required for operations, based on best professional judgment and experience with linear transmission projects. Components included in disturbance estimates are: transmission support structures; their associated construction work areas; pulling sites for tensioning conductors; access roads to each structure; multi-use areas; light-duty fly yards; communications stations; and stations.
As part of the preliminary design and to aid in the quantification of effects, locations were assigned for all components of the Proposed Route and the alternative routes. Table C-18 shows the estimated amount of land that will be disturbed during construction or required to be permanently converted to operational uses for the Proposed Route. Tables C-19, C-20, C-21, and C-22 show this same information for the four alternative routes. In addition, Tables C-23a and C-23b detail the approximate acres of forest clearing required for the Project. Facility locations are shown in Attachments C-1, C-2, and C-3.

Table C-18. Proposed Route – Acres of Land Disturbed during Construction and Operation

<table>
<thead>
<tr>
<th>County/Project Component</th>
<th>Land Affected During Construction (acres)</th>
<th>Land Reclaimed After Construction (acres)</th>
<th>Land Permanently Converted to Operations (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morrow County</td>
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<td></td>
<td></td>
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<td>55.8</td>
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<td>Communication Station(s), including Distribution Lines (if needed)</td>
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<td>0.1</td>
<td>0.1</td>
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<tr>
<td>Multi-use Areas</td>
<td>100.8</td>
<td>100.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Station – Longhorn</td>
<td>24.4</td>
<td>4.8</td>
<td>19.6</td>
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<tr>
<td>Structure and Other Work Areas</td>
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<td>343.6</td>
<td>9.3</td>
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<td>Morrow County – Total</td>
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<td>505.2</td>
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<td>Umatilla County</td>
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<td></td>
</tr>
<tr>
<td>Access Roads – New or Substantial Improvements</td>
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<td>78.9</td>
<td>105.9</td>
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<tr>
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<td>0.2</td>
<td>0.3</td>
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<td>Multi-use Areas</td>
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<td>Umatilla County – Total</td>
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<td>Access Roads – New or Substantial Improvements</td>
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<td>87.2</td>
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<td>Land Permanently Converted to Operations (acres)</td>
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<tr>
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<td>672.1</td>
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<tr>
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Note: Acreages are rounded and may not sum exactly.

**Table C-19. West of Bombing Range Road Alternative 1 – Acres of Land Disturbed during Construction and Operation**

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<th>County/ Project Component</th>
<th>Land Affected During Construction (acres)</th>
<th>Land Reclaimed After Construction (acres)</th>
<th>Land Permanently Converted to Operations (acres)</th>
</tr>
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<tbody>
<tr>
<td>Morrow County</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Access Roads – New or Substantial Improvements</td>
<td>6.5</td>
<td>1.8</td>
<td>4.7</td>
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<tr>
<td>Communication Station(s), including Distribution Lines (if needed)</td>
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<td>0.0</td>
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<tr>
<td>Multi-use Areas</td>
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<td>0.0</td>
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<td>Structure and Other Work Areas</td>
<td>25.1</td>
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<td>0.4</td>
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</table>

Note: Acreages are rounded and may not sum exactly.
Table C-20. West of Bombing Range Road Alternative 2 – Acres of Land Disturbed during Construction and Operation

<table>
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<th>County/Project Component</th>
<th>Land Affected During Construction (acres)</th>
<th>Land Reclaimed After Construction (acres)</th>
<th>Land Permanently Converted to Operations (acres)</th>
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</thead>
<tbody>
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<td>Access Roads – New or Substantial Improvements</td>
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<td>Multi-use Area</td>
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Note: Acreages are rounded and may not sum exactly.

Table C-21. Morgan Lake Alternative – Acres of Land Disturbed during Construction and Operation

<table>
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<th>County/Project Component</th>
<th>Land Affected During Construction (acres)</th>
<th>Land Reclaimed After Construction (acres)</th>
<th>Land Permanently Converted to Operations (acres)</th>
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<td>Malheur County</td>
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<td>Access Roads – New or Substantial Improvements</td>
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<td>Multi-use Area</td>
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<td>Structure and Other Work Areas</td>
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<td><strong>Union County – Total</strong></td>
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<td><strong>235.6</strong></td>
<td><strong>53.0</strong></td>
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Note: Acreages are rounded and may not sum exactly.

Table C-22. Double Mountain Alternative – Acres of Land Disturbed during Construction and Operation

<table>
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<tr>
<th>County/Project Component</th>
<th>Land Affected During Construction (acres)</th>
<th>Land Reclaimed After Construction (acres)</th>
<th>Land Permanently Converted to Operations (acres)</th>
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<tbody>
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<td>Malheur County</td>
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<tr>
<td>Access Roads – New or Substantial Improvements</td>
<td>51.7</td>
<td>26.0</td>
<td>25.7</td>
</tr>
<tr>
<td>Communication Station(s), including Distribution Lines (if needed)</td>
<td>0.9</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Multi-use Area</td>
<td>31.4</td>
<td>31.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Structure and Other Work Areas</td>
<td>72.9</td>
<td>70.9</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Malheur County – Total</strong></td>
<td><strong>156.9</strong></td>
<td><strong>128.7</strong></td>
<td><strong>28.2</strong></td>
</tr>
</tbody>
</table>

Note: Acreages are rounded and may not sum exactly.
Table C-23a. Estimated Forest Clearing for All Project Features – Proposed Route

<table>
<thead>
<tr>
<th>County</th>
<th>Forest Clearing (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umatilla County</td>
<td>245.6</td>
</tr>
<tr>
<td>Union County</td>
<td>530.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>775.7</strong></td>
</tr>
</tbody>
</table>

Note: The operation area used to estimate forest clearing is a 250-foot corridor and all Project features outside of the centerline corridor and a 30-foot buffer for proposed new road. This estimate is approximate and preliminary in nature and is not intended to serve as a forest inventory. Clearing estimate was based on field survey data (see Exhibit BB).

Table C-23b. Estimated Forest Clearing for All Project Features – Morgan Lake Alternative

<table>
<thead>
<tr>
<th>County</th>
<th>Forest Clearing (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union County</td>
<td>296.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>296.8</strong></td>
</tr>
</tbody>
</table>

Note: The operation area used to estimate forest clearing is a 250-foot corridor and all Project features outside of the centerline corridor and a 30-foot buffer for proposed new road. This estimate is approximate and preliminary in nature and is not intended to serve as a forest inventory. Clearing estimate was based on field survey data (see Exhibit BB).

### 3.5 Site Boundary

The Site Boundary is the area within which IPC will locate all facilities. The requested Site Boundary size varies based on the specific facility component as listed in Table C-24.

Table C-24. Site Boundary and Average Temporary/Permanent Disturbance Areas by Project Component

<table>
<thead>
<tr>
<th>Component</th>
<th>Length or Count</th>
<th>Site Boundary</th>
<th>Construction Disturbance</th>
<th>Operations Disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transmission Lines</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Circuit 500-kV</td>
<td>270.8 miles (Proposed)/33.3 miles (Alternatives)</td>
<td>500 feet (width)</td>
<td>_²</td>
<td>_²</td>
</tr>
<tr>
<td>Single-Circuit 230-kV</td>
<td>0.9 mile (Proposed)</td>
<td>500 feet (width)</td>
<td>_²</td>
<td>_²</td>
</tr>
<tr>
<td>Single-Circuit 138-kV</td>
<td>1.1 miles (Proposed)</td>
<td>500 feet (width)</td>
<td>_²</td>
<td>_²</td>
</tr>
<tr>
<td><strong>Transmission Structures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500-kV Lattice</td>
<td>1,085 (Proposed)/118 (Alternative)</td>
<td>_³</td>
<td>250 x 250 feet (1.4 acres)</td>
<td>50 x 50 feet (0.06 acre)</td>
</tr>
<tr>
<td>500-kV H-Frame (NWSTF area)</td>
<td>73 (Proposed)/34 (Alternative)</td>
<td>_³</td>
<td>250 x 90 feet (0.5 acres) on NWSTF / 250 x 150 feet (0.9 acres) off NWSTF</td>
<td>10 x 40 feet (0.001 acre)</td>
</tr>
<tr>
<td>500-kV H-Frame (Birch Creek area)</td>
<td>6 (Proposed)</td>
<td>_³</td>
<td>250 x 250 feet (1.4 acre)</td>
<td>10 x 40 feet (0.001 acre)</td>
</tr>
<tr>
<td>500-kV Y-Frame</td>
<td>8 (Alternative)</td>
<td>_³</td>
<td>Varies (0.4 acres)</td>
<td>8 x 8 feet (0.001 acre)</td>
</tr>
<tr>
<td>500-kV 3-Pole Dead-end (NWSTF area)</td>
<td>1 (Proposed)/2 (Alternative)</td>
<td>_³</td>
<td>250 x 90 feet (0.5 acre)</td>
<td>10 x 90 feet (0.02 acre)</td>
</tr>
<tr>
<td>Component</td>
<td>Length or Count</td>
<td>Site Boundary</td>
<td>Construction Disturbance</td>
<td>Operations Disturbance</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>500-kV 3-Pole Dead-end (Birch Creek area)</td>
<td>3 (Proposed)</td>
<td>_3</td>
<td>250 x 250 feet (1.4 acre)</td>
<td>10 x 90 feet (0.02 acre)</td>
</tr>
<tr>
<td>500-kV H-Frame Dead-end (NWSTF area)</td>
<td>3 (Alternative)</td>
<td>_3</td>
<td>250 x 90 feet (0.5 acre)</td>
<td>10 x 50 feet (0.01 acre)</td>
</tr>
<tr>
<td>230-kV H-Frame</td>
<td>5 (Proposed)</td>
<td>_3</td>
<td>250 x 100 feet (0.6 acre)</td>
<td>25 x 5 feet (0.01 acre)</td>
</tr>
<tr>
<td>230-kV H-Frame (Removal)</td>
<td>9 (Proposed)</td>
<td>_3</td>
<td>150 x 100 feet (0.3 acre)</td>
<td>_4</td>
</tr>
<tr>
<td>230-kV 3-Pole Dead-end</td>
<td>4 (Proposed)</td>
<td>_3</td>
<td>250 x 150 feet (0.6 acre)</td>
<td>40 x 130 feet (0.1 acre)</td>
</tr>
<tr>
<td>138-kV H-Frame</td>
<td>8 (Proposed)</td>
<td>_3</td>
<td>150 x 250 feet (0.9 acre)</td>
<td>16.5 x 5 feet (0.001 acre)</td>
</tr>
<tr>
<td>138-kV H-Frame (Removal)</td>
<td>10 (Proposed)</td>
<td>_3</td>
<td>100 x 100 feet (0.2 acre)</td>
<td>_4</td>
</tr>
<tr>
<td>138-kV 3-Pole Dead-end</td>
<td>3 (Proposed)</td>
<td>_3</td>
<td>250 x 150 feet (0.9 acre)</td>
<td>30 x 130 feet (0.09 acre)</td>
</tr>
<tr>
<td>69-kV H-Frame (Removal)</td>
<td>94 (Proposed)</td>
<td>_3</td>
<td>90 x 90 feet (0.2 acre)</td>
<td>_4</td>
</tr>
<tr>
<td><strong>Stations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longhorn</td>
<td>1</td>
<td>188.9 acres</td>
<td>24.4 acres</td>
<td>19.6 acres</td>
</tr>
<tr>
<td><strong>Access Roads</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Road, Moderate Improvements (21-70%)</td>
<td>148.8 miles (Proposed)/ 13.2 miles (Alternatives)</td>
<td>100 feet (width)</td>
<td>16 feet (width)</td>
<td>14 feet (width)</td>
</tr>
<tr>
<td>Existing Road, Extensive Improvements (71-100%)</td>
<td>73.4 miles (Proposed)/ 6.3 miles (Alternatives)</td>
<td>100 feet (width)</td>
<td>30 feet (width)</td>
<td>14 feet (width)</td>
</tr>
<tr>
<td>New, Bladed</td>
<td>88.8 miles (Proposed)/ 12.8 miles (Alternatives)</td>
<td>200 feet (width)</td>
<td>35 feet (width)</td>
<td>14 feet (width)</td>
</tr>
<tr>
<td>New, Primitive</td>
<td>117.5 miles (Proposed)/ 12.8 miles (Alternatives)</td>
<td>200 feet (width)</td>
<td>16 feet (width)</td>
<td>10 feet (width)</td>
</tr>
<tr>
<td><strong>Permanent Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Station</td>
<td>10 (Proposed)/ 2 (Alternative)</td>
<td>_2</td>
<td>100 x 100 feet (0.2 acre)</td>
<td>75 x 75 feet (0.1 acre)</td>
</tr>
<tr>
<td>Distribution Power Lines to Communication Station</td>
<td>7 (Proposed)/ 2 (Alternative)</td>
<td>50 feet (width)</td>
<td>25 feet (width)</td>
<td>14 feet (width)</td>
</tr>
<tr>
<td><strong>Temporary Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-use Areas</td>
<td>30 (Proposed)/ 4 (Alternative)</td>
<td>Mapped Area Outside of Transmission Line Site Boundary</td>
<td>23 acres</td>
<td>–</td>
</tr>
<tr>
<td>Component</td>
<td>Length or Count</td>
<td>Site Boundary1</td>
<td>Construction Disturbance</td>
<td>Operations Disturbance</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Light Duty Fly Yards</td>
<td>4 (Proposed)</td>
<td>Mapped Area Outside of Transmission Line Site Boundary</td>
<td>5 acres</td>
<td>–</td>
</tr>
<tr>
<td>Pulling and Tensioning Sites</td>
<td>299 (Proposed)/32 (Alternative)</td>
<td>Mapped Area Outside of Transmission Line Site Boundary</td>
<td>4 acres</td>
<td>–</td>
</tr>
</tbody>
</table>

1 Site Boundary size may be less than indicated in specific areas to avoid impacts to protected areas or for other reasons.
2 No temporary or permanent disturbance expected along centerline, other than for specific Project features indicated below.
3 Component will be sited entirely within centerline site boundary.
4 No permanent disturbance expected once existing towers are removed.
5 See the Road Classification Guide and Access Control Plan (Exhibit B, Attachment B-5) for more information about road types.
6 Existing roads with no substantial improvements are defined as existing roads that require improvements along 20% or less of the entire road segment. These roads have minimal to no temporary or permanent disturbance impacts beyond their existing road surface/profile, are not included in site boundary.
7 IPC will construct distribution lines to communication stations within their service territory.

### 4.0 CONCLUSIONS

Exhibit C includes the information required by OAR 345-021-0010(1)(c) and the Second Amended Project Order regarding the location of the Project.

### 5.0 COMPLIANCE CROSS-REFERENCES

Table C-25 identifies the location within the application for site certificate of the information responsive to the application submittal requirements in OAR 345-021-0010(c) and the relevant Second Amended Project Order provisions.

**Table C-25. Compliance Requirements and Relevant Cross-References**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAR 345-021-0010(c)</td>
<td></td>
</tr>
<tr>
<td>Exhibit C. Information about the location of the proposed facility, including:</td>
<td>Exhibit C, Section 1.0, Attachment C-1, Attachment C-2, and Attachment C-3</td>
</tr>
<tr>
<td>(A) A map or maps showing the proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features, using a scale of 1 inch = 2000 feet or smaller when necessary to show detail.</td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>(B)</strong> A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility and areas of temporary disturbance, including the total land area (in acres) within the proposed site boundary, the total area of permanent disturbance, and the total area of temporary disturbance. If a proposed pipeline or transmission line is to follow an existing road, pipeline or transmission line, the applicant shall state to which side of the existing road, pipeline or transmission line the proposed facility will run, to the extent this is known.</td>
<td>Exhibit C, Section 3.2, Section 3.3, Section 3.4, Section 3.5, Attachment C-1, Attachment C-2, and Attachment C-3</td>
</tr>
<tr>
<td><strong>(C)</strong> For energy generation facilities, a map showing the approximate locations of any other energy generation facilities that are known to the applicant to be permitted at the state or local level within the study area as defined in OAR 345-001-0010 for impacts to public services.</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Second Amended Project Order, Section III(c)</strong></td>
<td></td>
</tr>
<tr>
<td>Maps shall indicate the “site boundary” as defined in OAR 345-001-0010(55). Maps shall provide enough information for property owners potentially affected by the facility to determine whether their property is within or adjacent to the site boundary. Major roads shall be named. IPC shall include maps drawn to a scale of 1 inch = 2,000 feet or smaller when necessary to show detail. The Department requests that IPC share GIS data for the proposed facility in a format that is compatible with current Department software programs; accurate GIS data will help streamline the application review process for the Department and reviewing agencies.</td>
<td>Exhibit C, Attachment C-1, Attachment C-2, and Attachment C-3; Conservation Reserve Program lands are not available to be publicly disclosed. Exclusive Farm Use zoned lands are discussed and shown in Exhibit K, Section 4.0.</td>
</tr>
<tr>
<td>Maps shall clearly show the boundaries of the proposed corridor within which the transmission line would be constructed, and shall include familiar landmarks such as roads and existing power lines that reviewing agencies and affected landowners may use to identify the proposed route. Aerial photographs with all roads identified are helpful for public interpretation and review. The site boundaries of all proposed related or supporting facilities, including but not limited to access roads, temporary laydown areas, switching stations/substations, must also be identified. Maps showing access roads included as related or supporting facilities shall clearly depict where existing roads or road segments are proposed to be in the site boundary. Also, clearly identify the county and city jurisdictions in which facility components are proposed to be located. All county and city jurisdictions in which facility components are proposed to be located are appointed as SAGs by EFSC.</td>
<td>Exhibit C, Attachment C-1, Attachment C-2, and Attachment C-3</td>
</tr>
<tr>
<td>Exhibit C shall contain a table listing the approximate land areas for both temporary disturbance associated with construction and permanent footprint of structures associated with facility operation for each type of disturbance or structure. This information needs to be consistent with information provided in other exhibits.</td>
<td>Exhibit C, Table C-18 through Table C-24</td>
</tr>
</tbody>
</table>
6.0 REFERENCES


ATTACHMENT C-1
PROPOSED STATION LOCATION
Figure C-1. Proposed Longhorn Station
ATTACHMENT C-2
PROPOSED ROUTE LOCATION
Columbia Basin Coyote Springs Wildlife Area

Map Area

0 1,000 Feet

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- New Road, Primitive
- Existing Road, Substantial Modification, 21-70% Improvements
- Pulling and Tensioning
- Existing Transmission Lines
- Structure Work Area
- Structure Work Area (Removal Only)

Access
- Existing Road
- Stream
- Protected Area (EFSC)
- Other Road
- Protected Area (EFSC)
- Bureau of Reclamation
- Military Reservation or Corps of Engineers
- Highway
- Private

Source(s): BLM, ORE, IDOT, NFS, USA, USGS, USFWS, Oregon, Esri, DigitalGlobe, GeoEye, Verisense, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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OREGON Map Area

Boardman to Hemingway Transmission Line Project Application for Site Certificate

Attachment C-2 Proposed Route Location Maps
Morrow County
Map 2
MORROW COUNTY

NAVAL WEAPONS SYSTEMS TRAINING FACILITY (NWSTF) BOARDMAN

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area (Removal Only)

Access
- Existing Road, Substantial Modification, 21-70% Improvements

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Pipeline
- Other Road

Land Status
- Military Reservation or Corps of Engineers
- Private

Source(s): BLM, IPC, ODOT, IDOT, NPS, USFS, USDA, Vertis, En, DigitalGlobe, Geofly, National Geographic, CNE Engineering, ArcGIS, ODA, ORUS, interfly, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Maps\Attachment C-2\Proposed Route_MORROW_rev 20180613.mxd

Boardman to Hemingway Transmission Line Project Application for Site Certificate

Attachment C-2 Proposed Route Location Maps
Morrow County Map 3
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Morrow County

Map Area

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
  - Structure Work Area (Removal Only)

Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive
- 100-foot Contours
- Existing Transmission Lines
- Pipeline
- Other Road

Land Status
- Military Reservation or Corps of Engineers
- Private
- State or Local

Source(s): BLM, FPC, IDOT, NFS, USDA, USGS, U.S. Navy, ODOT, OR-8, Geological Survey, ODI; U.S. DOD, National Geospatial-Intelligence Agency, OR-6, OR-7, OR-8
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OREGON
West of Bombing Range Road Alternatives 1/2 (See Attachment C-3, Maps 1-4)

Proposed Route

Project Features
- Site Boundary
- Alternative
- Transmission Centerline

Milepost
- Mile
- Tenth-mile

Work Areas
- Pulling and Tensioning
- Structure Work Area
- Structure Work Area (Removal Only)

Access
- Existing Road
- Substantial Modification, 21-70% improvements
- New Road, Primitive

Important Siting
- Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)
- Pipeline

Other Road
- Oregon NHT Intact
- Segment (1/4-mile buffer)

Protected Area (EFSC)

Land Status
- Military Reservation or Corps of Engineers
- Private

Source(s): BLM, FPC, OPPM, ODOT, ORDN, ORDEA, USFWS, USGS, Voxx, End, DigitalGlobe, Geofly,.Ghidra, Satellite Geographics, CNES/Spot5/US, AEX, Digitalglobe, Arcgis; OR, US Census, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Map\Attachment C-2\Proposed Route_MORROW_rev 20180613.mxd
Attachment C-2
Proposed Route Location Maps
Morrow County
Map 8
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenths-mile
- Work Areas
  - Communication Station
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- New Road, Primitive
- Important Siting
- Constraints and Other Features
  - 100-foot Contours
  - Existing Transmission Lines

Land Status
- Private

Wheatridge Wind Energy (Project Area)

Source(s): BLM, IPC, ODOT, IDOT, NFS, USDA, USGS, Verex, Env, DigitalGlobe, Geoflynn, GeoEye Geographics, CNES/Airbus, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Border to Hemingway Transmission Line Project Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Morrow County
Map 9
Project Features
- Site Boundary
- Work Areas
- Multi-Use Area
- Access

Existing Road
- Substantial Modification, 21-70% Improvements

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Wheatridge Wind Energy (Project Area)
- Other Road
- Stream
- Land Status
- Private

Source(s): BLM, IPC, ODFW, USDA, ODOT, NPS, USDA, USDA, Veris, Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Attachment C-2
Proposed Route Location Maps
Morrow County
Map 10

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Proposed Route Location Maps
Morrow County

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, 21-70% Improvements
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Wheatridge Wind Energy (Project Area)

Land Status
- Private

Source(s): BLM, IPC, ODFW, ODOT, USDA, USGS, Van Dyke, DigitalGlobe, Esri, GeoEyes, swisstopo

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Project Features:
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
  - Existing Road
  - Substantial Modification, 71-100% Improvements

Important Siting Constraints and Other Features:
- 100-foot Contours
- Other Road
- Stream
- Land Status

Source(s): BLM, IPC, ODOT, USDA, USGS, ODFW, ODOT, NPS, USDA, USFS, GeoEye, DigitalGlobe, Esri, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, swisstopo

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Map 12
Boardman to Hemingway Transmission Line Project Application for Site Certificate
Attachment C-2
Proposed Route Location Maps
Morrow County
Map 12
Project Features
- Site Boundary
- Transmission Centerline Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Multi-Use Area
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Primitive
- Important Siting Constraints and Other Features
  - 100-foot Contours
  - Other Road
  - Stream

Land Status
- Private
Map 14

Map Area

0 1,000 Feet

Source(s): BLM, PC, OSPI, IDOT, NFS, USDA, USGS, Verxy, Envi, DigitalGlobe, Geoflynn, Samerte Geographics, CNES/Airbus DS, AEX, Geomapping, Arcgis, IGI, GF technolopy

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Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Mileposts
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive
- 100-foot Contours
- Other Road
- Stream
- Wheatridge Wind Energy (Project Area)
- Land Status
- Private

Important Siting
- Constraints and Other Features

Boardman to Hemingway Transmission Line Project Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Morrow County

OR O R E G O N
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mile
- Work Areas: Pulling and Tensioning, Structure Work Area, Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Proposed Route, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Other Road
- Stream
- Land Status: Private

Source(s): BLM, IPC, ODOT, ODF, USDA, USFS, USGS, Versys, Eni, DigitalGlobe, Getmapping, Airmap, GeoEye, SWIS, GeoEye, Earthstar Geographics, CNES/Airbus DS, AEX, Geoeye, IGN, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Morrow County
Map 18
Project Features

- Site Boundary
- Access
- Existing Road,
  Substantial Modification,
  71-100% Improvements

Important Siting
Constraints and Other
Features

- 100-foot Contours
- Other Road
- Stream

Land Status

- Private

Source(s): BLM, EIS, ODOT, OSIT, USDA, USGS, USDA, Vera, Int, DigitalGlobe, Google Earth, Esri, Geospatial, Amphoto, OSU, OR State Archives
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Morrow County
Map 19
Project Features
- Site Boundary
- Access
  - Existing Road, Substantial Modification, 21-70% Improvements
  - Existing Road, Substantial Modification, 71-100% Improvements
  - New Road, Primitive
- Important Siting
- Vegetation and Other Features
- 100-foot Contours

Source(s): BLM, OPC, IDOT, NFS, USDA, ODF, ODOT, NPS, USDA, ODF, USDA, ESRI, DigitalGlobe, GeoEyes, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Considerations and Other Features
- 100-foot Contours
- Stream
- Other Road
- Access
- Land Status
- Private

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Attachment C-2
Proposed Route Location Maps
Morrow County
Map 21
Map Area

Source(s): BLM, ODOT, IDOT, NFS, USDA, USGS, USDA, Fish, Trees, Dept of State, Geodetic, National Geographic, CTRM/Irc/Id, AEX, Satellite Imaging, Inc., ESRI, SPW, etc.

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Attachment C-2
Proposed Route Location Maps
Morrow County
Map 22
Attachment C-2
Proposed Route Location Maps
Morrow County
Map 23
**Map 26**

**Boardman to Hemingway Transmission Line Project Application for Site Certificate**

**Attachment C-2**

**Proposed Route Location Maps**

Umatilla County

**Map Area**

- **Source(s):** BLM, IPC, ODOT, ODFW, USDA, USGS, Vera, Envi, DigitalGlobe, Geofly, Service Geographics, CNES/Airbus DS, AEX, GeoEye, GeoEye, IGN, IGP, swisstopo

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**Project Features**

- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
  - Existing Road,
    - Substantial Modification,
    - 71-100% Improvements

- New Road, Bladed
- New Road, Primitive

**Important Siting Constraints and Other Features**

- 100-foot Contours
- Other Road
- Stream
- Land Status
  - Private

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**Site Information**

- Sec. 6, T.55N, R.29E, Umatilla County, Oregon
- Sec. 7, T.55N, R.30E, Umatilla County, Oregon
- 2S, 29E, 30E, 4948 50

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**Map 26**

**Boardman to Hemingway Transmission Line Project Application for Site Certificate**

**Attachment C-2**

**Proposed Route Location Maps**

Umatilla County

**Map 26**

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**Source(s):** BLM, IPC, ODOT, ODFW, USDA, USGS, Vera, Envi, DigitalGlobe, Geofly, Service Geographics, CNES/Airbus DS, AEX, GeoEye, GeoEye, IGN, IGP, swisstopo

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Project Features
- Site Boundary
- Transmission Centerline

Mileposts
- Mile
- Tenth-mile

Work Areas
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road, Substantial Modification, 71-100% Improvements

Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Consequences and Other Features
- 100-foot Contours

Land Status
- Private

Source(s): BLM, IPC, ODF, ODF, OSU, USFS, USDA, Vertax, Earthstar Geographics, CNES/Airbus DS, GeoEys DigitalGlobe, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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OREGON
Map Area

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Umatilla County

Map 27
Map 28

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Proposed Route Location Maps
Umatilla County

Source(s): BLM, FPC, DDOT, NPS, USFS, USDA, TM, Weis, etc., DigitalGlobe, Geofly, Geomatix, Geographicus, CNES/ Astrium, AEX, Getmapping, Apogeo, AGI, ESRI

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Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access

Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Stream

Land Status
- Private

Source(s): BLM, IPC, ODOT, USGS, USDA, USFS, USDA, Veris, Etc. DigitalGlobe, Geofly, Environmental Geographics, CNES/Airbus DS, MTS, Scaled Imaging, Arcgis, QA GIS technology

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Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
  - Existing Road,
    - Substantial Modification,
    - 21-70% Improvements

New Road, Bladed
New Road, Primitive
Important Siting
Constraints and Other Features
  - 100-foot Contours
  - Stream

Land Status
- Public
- Private

Source(s): BLM, IPC, ODFW, ODFE, USFS, USGS, Ventyx, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, swisstopo

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Boardman to Hemingway Transmission Line Project Application for Site Certificate
Attachment C-2
Proposed Route Location Maps
Umatilla County
Map 33
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Umatilla County

Attachment C-2
Proposed Route Location Maps

Map 34
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Umatilla County

Map 41
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting Constraints and Other Features
- 100-foot Contours
- Other Road
- Railroad
- Stream

Land Status
- Indian Reservation
- Private

Source(s): BLM, IPC, ODFW, ODOT, USDA, USFS, Ventyx, Earthstar Geographics, CNES/Airbus DS, GeoEys, IGN, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Umatilla County
Map 43
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mile
- Work Areas
- Light-Duty Fly Yard
- Pulling and Tensioning
- Structure Work Area
- Access
  - Existing Road,
  - Substantial Modification,
  - 71-100% Improvements
  - New Road, Bladed
  - New Road, Primitive

Stream

Land Status
- Indian Reservation
- Private

Source(s): BLM, IPC, ODF, IDOT, NPS, USDA, USGS, Veris, Env. DigitalGlobe, Geofly,
Geospatial Geographics, CNES/Airbus DS, 3DEP, Geocoding Arsenal, GA, GIP, wetlands
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Attachment C-2
Proposed Route Location Maps
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Umatilla County
Map 44
Map 45

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting
- Constraints and Other Features
  - 100-foot Contours
  - Existing Transmission Lines
- Railroad
- Stream
- Wallowa-Whitman NF Utility Corridor (MA-17)
- Oregon NHT Intact
- Segment (1/4-mile buffer)
- Protected Area (EFSC)
- Land Status
  - State or Local Parks and Recreation or Wildlife
  - State or Local
  - Private
  - Bureau of Land Management
  - Forest Service
  - State or Local Parks and Recreation or Wildlife

Source(s): BLM, IPC, ODOT, USFS, USDA, ORS, ODOT, DigitalGlobe, GeoEys, Earthstar Geographics, Z:UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Map\Attachment C-2\Proposed Route_UNION_rev 20180612.mxd
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Attachment C-2
Proposed Route Location Maps
Union County
Map 46
**Project Features**
- Site Boundary
- Alternative
- Transmission Centerline
- Mile
- Tenth-mile

**Work Areas**
- Pulling and Tensioning
- Structure Work Area

**Access**
- Existing Road
- Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

**Important Siting Constraints and Other Features**
- 100-foot Contours
- Existing Transmission Lines
- Pipeline
- Interstate

**Other**
- Road
- Stream
- Wallowa-Whitman NF Utility Corridor (MA-17)
- Protected Area (EFSC)

**Land Status**
- Forest Service
- Private
- State or Local Parks and Recreation or Wildlife
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Union County
Map 49
**Morgan Lake Alternative**  
(See Attachment C-3, Maps 5-14)

**Proposed Route**

**Project Features**
- Site Boundary
- Alternative
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area

**Access**
- Existing Road
- Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

**Important Siting**
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)

**Land Status**
- Private

**Source(s):** BLM, IPC, ODFW, ODOT, USDA, USGS, Verta, 360DigitalMaps, GeoEyes, Esri, DigitalGlobe, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Attachment C-2
Proposed Route Location Maps
Union County
Map 51
Grande Tour (Oregon Tour Route)

Ladd Marsh Wildlife Area

Proposed Route

Idaho Power Co
Quartz-La Grande

Northwest Pipeline Corp

Map 54

Attachment C-2
Proposed Route Location Maps
Union County

Source(s): BLM, IPC, ODFW, IDOT-911, USDA, USGS, Versys, Inc, DigitalGlobe, Google, Esri, Esri Canada, GeoEye, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

OREGON

Map Area

0 1,000 Feet

Project Features
- Site Boundary
- Alternative Transmission Centerline Mileposts
- Mile
- Tenth-mile

Work Areas
- Multi-Use Area
- Pulling and Tensioning Structure Work Area

Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

Important External Regulatory and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Pipeline

Scenic Byway (Type)
- Airport Controlled
- Airspace (Height Restrictions Apply)
- Oregon NHT Intact
- Segment (1/4-mile buffer)

Protected Area (EFSC)

Land Status
- Private
- State or Local Parks and Recreation or Wildlife
Morgan Lake Alternative
(See Attachment C-3, Maps 5-14)

Proposed Route

Project Features
- Site Boundary
- Alternative
- Transmission Centerline Mileposts
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road
- Substantial Modification
- 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)

Land Status
- Private

Source(s): BLM, IPC, ODOT, IDOT-NS, USDA, USFS, USDA, Veris, Etc, DigitalGlobe, Geofly
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Morgan Lake Alternative
(See Attachment C-3, Maps 5-14)

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Union County
Map 56
Project Features

- Site Boundary
- Transmission Centerline Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access

Existing Road, Substantial Modification, 71-100% Improvements
  - New Road, Bladed
  - New Road, Primitive

Important Siting Constraints and Other Features
  - 100-foot Contours
  - Existing Transmission Lines

Existing Road, Substantial Modification, 21-70% Improvements

Land Status
  - Private

Source(s): BLM, IPC, IDOT, NFS, USDA, USGS, USFWS, Versys, Inc. DigitalGlobe, Geofabrics, Sentient Geographics, CNOOCZ/outUS, AEX, Esri, GeoEyes, swisstopo, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Applico, IGN, IGP, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Maps\Attachment C-2\Proposed Route_UNION_rev 20180612.mxd
Source(s): BLM, PDC, ODOT, IDOT, NFS, USDA, USGS, Vertis, Ens. DigitEyez, Geoflyz, Garabou Geographic, CNES/Airbus DS, AEX, Satellite Anaglyph, 3rd party data providers
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Map Area

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Multi-Use Area
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road,
- Substantial Modification, 71-100% Improvements
  - New Road, Bladed
  - New Road, Primitive
- Important Siting
  - Constraints and Other Features
  - 100-foot Contours
  - Existing Transmission Lines
  - Oregon National Historic Trail

Map 60

Attachment C-2
Proposed Route Location Maps
Union County
Map 60

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

OREGON Map Area
Project Features
- Site Boundary
- Work Areas
- Multi-Use Area

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)
- Pipeline

Source(s): BLM, IPC, ODOT, IDOT, NFS, USDA, USGS, Veren, Esri, DigitalGlobe, GeoEye, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 64

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
  - Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive

Important Siting
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Stream
- Sage-grouse Core Area
- Land Status
- Private

Source(s): BLM, IPC, ODFW, ODOT, USDA, USFS, ORE, ODOT, DNBL, OGS, USDA, USDA, USGS, Ventyx, ESRI, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Proposed Route Location Maps

Baker County

Map 65
Project Features
- Site Boundary
- Transmission Centerline
- Milepoints
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting
- Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Magpie Peak ACEC (Proposed)
- Sage-grouse Core Area
- Sage-grouse Areas of Population Richness

Land Status:
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODFW, IDOT, NFS, USDA, USGS, Veris, Env. Digit/State, Geofy
Santafe Geographic, CNES/Airbus DS, 42c, Geomapping, Ampsys, GIA, GF, vector
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Magpie Peak
ACEC (Proposed)

Map Area
0 1,000
Field

Attachment C-2
Proposed Route Location Maps
Baker County
Map 66
Map Area

Project Features
- Site Boundary
- Transmission Centerline
- MILEPOSTS
- Tenth-mile
- Work Areas
  - Multi-Use Area
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting
- 100-foot Contours
- 100-foot Contours
- Oregon NHT Intact
- Sage-grouse Core Area

Land Status
- Private

Source(s): BLM, IPC, ODOR, ODOT, USFS, USDA, USDA, Veren, Etc, DigitalGlobe, Geofly, Garmin Geographics, CNES/Airbus DS, Geomapping, ArcGIS, GSI, USGS (terminals)
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 68
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Baker County

Map 69

Attachment C-2
Proposed Route Location Maps

Project Features
- Site Boundary
- Transmission Centerline Mileposts
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area (Removal Only)

Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Existing Transmission Lines
- Oregon National Historic Trail (NHT)
- Other Road

Scenic Byway (Type)
- Stream
- Oregon NHT Intact Segment (1/4-mile buffer)

Protected Area (EFSC)
- Sage-grouse Core Area

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODOT, IDOT, NFS, USA, USGS, WPP, ODOT, USFS, ODFW, ODOT, DigitalGlobe, Geology, Esri, Earthstar Geographics, CNES/Airbus DS, IGN, 382, GeoEye, CNES/Airbus DS, IGN, DigitalGlobe, GeoEye, Esri, Mapbox

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Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mile

Work Areas
- Multi-Use Area
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines

Source(s): BLM, IPC, IDOT, NFS, USDA, USGS, Veris, Enr, DigitalGlobe, Enviro, Sensitive Geographies, CNS/Mapio.net, AEX, Geomapping, Arcgis, OAIS, GF technolps

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 71
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
  - Access

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Bladed
New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Sage-grouse Core Area

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODFW, IDOT, NFS, USDA, USGS, Ventyx, Inc, DigitalGlobe, Geofly, SphereGeoGraphics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 72
**Project Features**
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

**Work Areas**
- Multi-Use Area
- Pulling and Tensioning
- Structure Work Area

**Access**
- Existing Road
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

**Important Siting and Other Features**
- 100-foot Contours
- Existing Transmission Lines
  - Oregon National Historic Trail (NHT)

**Land Status**
- Bureau of Land Management
- Private

**Sources:** BLM, IPC, ODFW, ODOT, USDA, USGS, Ventyx, Esri, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County

Map 81

Project Features
- Site Boundary
- Work Areas
- Multi-Use Area

Access
- Existing Road
- Substantial Modification, 21-70% Improvements

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines

Source(s): BLM, IPC, ODFW, ODOT, USDA, USFS, Verdex Envt, DigitalGlobe, GeoEyes, Geomatics Geographics, Geosense, Esri, DigitalGlobe, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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**Project Features**
- Site Boundary
- Work Areas
- Multi-Use Area
- Access

**Important Siting Constraints and Other Features**
- 100-foot Contours
- Other Road
- Stream
- VRM 2

**Land Status**
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODFW, ODOT, USDA, USGS, USFS, Veris, Enc, DigitalGlobe, GEON, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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**Map Area**

**Attachment C-2**
Proposed Route Location Maps
Baker County
Map 82
Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-miles
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting Constraints and Other Features
- 100-foot Contours
- Stream
- VRM 2

Existing Road, Substantial Modification, 71-100% Improvements

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODOT, IDOT, NFS, USFS, USGS, Ventyx, Env. Digitizer, GeoEye, Esri, Environmental Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 83
**Project Features**

- Site Boundary
- Transmission Centerline

**Mileposts**

- Mile
- Tenth-mile

**Work Areas**

- Pulling and Tensioning
- Structure Work Area
- Access

**Access**

- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

**Streams**

- 100-foot Contours

**Bureau of Land Management**

- Private

**Map Source:** BLM, IPC, ODFW, USFS, USDA, USGS, Veris, Earthstar Geographics, CNES/Airbus DS, AEX, GeoEye, IGN, IGP, swisstopo

**Map 84**

**Attachment C-2**

**Proposed Route Location Maps**

**Baker County**

**Map 84**
Project Features
- Site Boundary
- Transmission Centerline
- Milepost
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Oregon National Historic Trail (NHT)
- Pipeline
- Interstate
- Other Road
- Stream
- Vale District (BLM) Utility Corridor
- West-wide Energy Corridor (WWECC)
- Sage-grouse Core Area

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, IDOT, MFS, USDA, USGS, Veris, Ent, DigitalGlobe, Google, Sentinel Geographics, CNES/Airbus DS, AEX, Geolog, ESRI, GFES, Ventyx, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\Exhibits\C_Project Location\Maps\Attachment C-2\Proposed Route_BAKER_rev 20180612.mxd

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Baker County
Map 92
Proposed Route Location Maps
Malheur County
Map 94
MALHEUR COUNTY
Road
Gulch
Pine Tree
Ridge Creek
Sec. 27
Sec. 34
Sec. 33
16S 45E
Proposed Route
MUA MA-01
Project Features
Site Boundary
Transmission Centerline
Mileposts
Tenth-mile
Work Areas
Multi-Use Area
Pulling and Tensioning
Structure Work Area
Access
Existing Road, Substantial Modification, 21-70\% Improvements
New Road, Bladed
Important Siting
Constraints and Other Features
100-foot Contours
Other Road
Stream
Vale District (BLM) Utility Corridor
VRM 3
Land Status
Bureau of Land Management
Private
Source(s): BLM, IPC, ODOT, USACE, USGS, USDA, USFS, Versys, Ventyx, DigitalGlobe, Geofabrik, GeoEys, Idaho Power, IGN, USGS, swisstopo, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Maps\Attachment C-2\Proposed Route_MALHEUR_rev 20180612.mxd
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Malheur County
Map 101
The document contains a map of the proposed route for the Boardman to Hemingway Transmission Line Project in Malheur County. The map highlights various project features, existing road categories, and access points.

**Project Features**
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

**Existing Road Features**
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

**Access Points**
- Existing Road, Substantial Modification, 21-70% Improvements

**Important Siting and Other Features**
- 100-foot Contours
- VRM 3

**Land Status**
- Bureau of Land Management
- Bureau of Reclamation

**Source(s):**
- BLM, IPC, ODOT, BOR, USDA, ODFW, NPS, USGS, USDA, DigitalGlobe, GeoEys, Esri, Swisstopo, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, GeoEye, swisstopo, Earthstar Geographics

**Note:** Map 103 - Malheur County - Attachment C-2 - Proposed Route Location Maps - Boardman to Hemingway Transmission Line Project - Application for Site Certificate.
Double Mountain Alternative
See Attachment
C-3, Maps 15-19

Project Features
- Site Boundary
- Alternative
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Access
- Existing Road
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Features
- 100-foot Contours
- Other Road

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODF, USFS, ODFW, ODOT, NPS, USDA, USFS, Veris, Envi, DigitalGlobe, Geofabrik,
Santolina Geographics, CNES/Airbus DS, GeoEye, Imagery, Arcgis, QA GIS webmap
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Malheur County
Map 104
Project Features
- Site Boundary
- Access
- Existing Road, Substantial Modification, 71-100% Improvements

Important Siting constraints and Other Features
- 100-foot Contours
- Other Road
- Stream

Land Status
- Bureau of Land Management
- Bureau of Reclamation
- Private

Source(s): BLM, IPC, ODFW, USGS, USFWS, Ventyx, Esri, DigitalGlobe, GeoEys, Z:UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final ASC\Exhibits\C_Project Location\Maps\Attachment C-2\Proposed Route_MALHEUR_rev 20180612.mxd

Map 106
Attachment C-2
Proposed Route Location Maps
Malheur County
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Proposed Route Location Maps
Malheur County
Map 107

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mi
- Work Areas
  - Light-Duty Fly Yard
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road
- Substantial Modification, 21-70% improvements
- Existing Road
- Substantial Modification, 71-100% improvements
- New Road, Bladed
- New Road, Primitive

Important Siting
- 100-foot Contours
- Stream

Land Status
- Bureau of Land Management
- Bureau of Reclamation
- Private

Source(s): BLM, IPC, ODEQ, ODOT, USDA, USGS, USFWS, VEREN, Xylem, Tableau Software, Google Earth, Salliey CartoGraphica, CNES/Ala â–‘veb, GeoEye, DigitalGlobe, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Project Features
- Site Boundary
- Transmission Centerline Mileposts
- Mile
- Tenth-mile
- Work Areas
- Multi-Use Area
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Considerations and Other Features
- 100-foot Contours

Existing Transmission Lines
- Highway
- Vale District (BLM) Utility Corridor
- VRM 3

Land Status
- Bureau of Land Management
- Private
Sand Hollow
Sec. 26
Sec. 25
Sec. 36
19S 43E
19S 44E
Double Mountain Alternative
(See Attachment C-3, Maps 15-19)

Project Features
- Site Boundary
- Alternative
- Transmission Centerline Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
  - Access
  - New Road, Bladed

Important Siting Constraints and Other Features
- 100-foot Contours
- Stream
- VRM 3

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODFW, USFS, USGS, Vertio, Esri, DigitalGlobe, Geofabrik, Garmin Geographics, CNES/Airbus DS, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Terrain Labels

Malheur County

Source(s): BLM, ODF, ODOT, USFS, USDA, Venture, ODOT, DigitalGlobe, Google Earth, Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGN, swisstopo

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Boardman to Hemingway Transmission Line Project Application for Site Certificate

Attachment C-2
Proposed Route Location Maps
Malheur County
Map 112
Double Mountain Alternative (See Attachment C-3, Maps 15-19)

Proposed Route

246

247

245

MUA MA-06

Project Features

- Site Boundary
- Alternative
- Transmission Centerline

Mileposts

- Mile
- Tenth-mile
- Work Areas

Access

- Existing Road
- Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features

- 100-foot Contours

Wilderness Characteristic Unit Meeting Wilderness Criteria

Land Status

- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODOT, ODF, USFS, USDA, Verly, Env, DigitalGlobe, Geofly, SageEarth Geographics, CNES/Airbus DS, ESRI, Geomapping, Airgmap, Go4, USGS, vicentreprise

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Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
- Access
- Existing Road
  - Substantial Modification, 71-100% Improvements
- New Road
  - Bladed
  - Primitive
- Important Siting
- Constraints and Other Features
  - 100-foot Contours
  - Other Road
  - Stream
- Land Status
- Bureau of Land Management

Source(s): BLM, IPC, ODOT, DOG, USDA, USGS, USDA, Ventyx, Earthstar Geographics, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Map 115
Attachment C-2
Proposed Route Location Maps
Malheur County

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Proposed Route Location Maps
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Malheur County
Map 116

Project Features:
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mile
- Mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- Important Siting
- Constraints and Other Features
  - 100-foot Contours
  - Other Road
  - Stream

Land Status:
- Bureau of Land Management
- Private

Source(s): BLM, IPC, IDOT, NFS, USEA, USFS, USD, Vandy, Envi, DigitalGlobe, Geology,
Geospatial Graphics, CNAI/AirUS, 42G, MapsApp, Amazon, QRA, USGS, website
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Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting
- Concessions and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Stream

Existing Road, Substantial Modification, 21-70% Improvements

Map Area

0
1,000
Feet

Owyhee River

Malheur County

Attachment C-2
Proposed Route Location Maps
Malheur County
Map 118

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Malheur County

Tunnel Number 6
South Canal Tunnel Number 5

Alkali Creek
South Canal

Proposed Route

Map 122

Map Area

Project Features
- Site Boundary
- Transmission Centerline Mileposts
- Tenth-mile Work Areas
- Pulling and Tensioning Structure Work Area
- Access

Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting
- 100-foot Contours
- Other Road
- Stream
- Vale District (BLM) Utility Corridor

Land Status
- Bureau of Land Management
- Bureau of Reclamation
- Private

Source(s): BLM, IPC, ODFW, IDOT, NFS, USDA, USFS, Veris, Esri, DigitalGlobe, Geofabry, GeoEssex, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Malheur County
Attachment C-2
Proposed Route Location Maps
Map 122
Malheur County
South Canal
Succor Creek
Sec. 10
Sec. 11
Sec. 12
23S 46E
Proposed Route
Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road
- Stream
- Vale District (BLM) Utility Corridor
- Land Status
  - Bureau of Land Management
  - Bureau of Reclamation
  - Private
- Source(s): BLM, IPC, ODFW, USDA, USGS, VerEye, Env, DigitalGlobe, Geoflynn, Satellite Geographics, CNES/Airbus DS, K-Line, GeoEye, 100-ft. GIF watermark

Attachment C-2
Proposed Route Location Maps
Malheur County
Map 124
Project Features:
- Site Boundary
- Transmission Centerline Mileposts
- Mile
- Tenth-mile

Work Areas:
- Communication Station
- Pulling and Tensioning
- Structure Work Area

Access:
- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features:
- 100-foot Contours
- Existing Transmission Lines
- Stream
- Vale District (BLM) Utility Corridor
- Vale District (BLM) Utility Corridor and West-wide Energy Corridor (WWEC)

Source(s): BLM, IPC, ODFR, IDOT, NFS, USDA, USGS, Veraes, Etc. DigitalGlobe, GeoEye, Senterra Geographics, CNES/Airbus DS, GeoEyes, Anapsis, QEO, LR Imagepark
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ATTACHMENT C-3
ALTERNATIVE ROUTE LOCATIONS
Proposed Route (See Attachment C-2)

MORROW COUNTY

NAL WEAPONS SYSTEMS TRAINING FACILITY (NWSTF)
BOARDMAN

Sec. 25

Project Features
- Site Boundary
- Proposed Route
- Transmission Centerline

Mileposts
- Mile
- Tenths/mile

Work Areas
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive

Constraints and Other Features
- Important Siting
- 100-foot Contours
- Existing Transmission Lines

Land Status
- Military Reservation or Corps of Engineers
- Private
- State or Local

Source(s): BLM, IPC, IDOT, NFS, USA, USFS, USDA, Verisys, Ltd., DigitalGlobe, Geofly, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

Attachment C-3

Alternative Location Maps
West of Bombing Range Road Alternative 1
Morrow County
Map 1
Proposed Route
(See Attachment C-2)

MORROW COUNTY

NAVAL WEAPONS SYSTEMS TRAINING FACILITY (NWSTF) BOARDMAN

Sec. 6

Sec. 7

2N 25E

Sec. 12

Sec. 13

West of Bombing Range Road Alternative 1

Habitat Management Area (HMA)

Project Features
- Site Boundary
- Proposed Route
- Transmission Centerline

Mileposts
- Mile
- Tenths-mile

Work Areas
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road
- Substantial Modification 21-70% Improvements
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)
- Pipeline

Other Road
- Oregon NHT Intact
- Segment (1/4-mile buffer)

Protected Area (EFSC)

Land Status
- Military Reservation or Corps of Engineers
- Private

Source(s): BLM, IPC, ODPS, ODOT, NPS, USDA, USGS, Ventyx, Esri, DigitalGlobe, GeoEys, Source Geographic, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Attachment C-3
Alternative Location Maps
West of Bombing Range Road Alternative 1
Morrow County
Map 2
Morgan Lake Alternative Location Maps
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-3

Morgan Lake Alternative
Union County

Map 7

Source(s): BLM, FPC, ODFW, IDOT, NFS, USDA, USGS, Vertis, Envi, DigitalGlobe, GeoEyes, Esri, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo
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Map Area

Project Features

- Site Boundary
- Access
- Existing Road,
  Substantial Modification,
  71-100% Improvements
- Important Siting
  Constraints and Other
  Features
- 100-foot Contours
- Other Road
- Stream

Land Status

- Private

OREGON Map

0 1,000 Feet

Morgan Lake Alternative Location Maps
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Attachment C-3
Alternative Location Maps
Morgan Lake Alternative
Union County
Map 8

Morgan Lake
Sheep Creek
Sec. 23
Sec. 24
Sec. 14

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile
- Work Areas
- Communication Station
- Pulling and Tensioning
- Structure Work Area
- Access
- New Road, Bladed
- New Road, Primitive
- Distribution Line to Communication Station
- (IPC Service Territory Only)

Important Siting Constraints and Other Features
- 100-foot Contours
- Pipeline
- Other Road
- Stream
- Land Status
- Private

Source(s): BLM, IPC, IDOT, NFS, USDA, USFS, VDOT, Esri, DigitalGlobe, ArcGIS, NRCan/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, Z:\UtilServ\Boardman_Hemingway\Reports\002_Oregon_Energy_Siting_Council\03_Final\ASC\Exhibits\C_Project Location\Maps\Attachment C-3\Morgan Lake_UNION_rev_20180612.mxd
**Project Features**
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning
- Structure Work Area
- Access

**Existing Road, Substantial Modification, 71-100% Improvements**
- New Road, Bladed
- New Road, Primitive
- Important Siting Constraints and Other Features
  - 100-foot Contours
  - Other Road
  - Stream
  - Glass Hill Rebarrow
  - Protected Area (EFSC)

**Land Status**
- Forest Service
- Private
- State or Local Parks and Recreation or Wildlife

Source(s): BLM, IPC, ODOT, ODF, USDA, USFS, USDA, Ventyx, Inc., DigitalGlobe, GeoEye, Sentinel Geographics, CNES/Airbus DS, Geology, NRCS, USGS, ODOT, NPS, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, 423, Sentinel Geographics, ODA, USGS, USDA.

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Project Features
- Site Boundary
- Proposed Route
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area

Access
- Existing Road
- 21-70% Improvements
- New Road, Bladed
- New Road, Primitive
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Other Road

Map Area

Stream

Land Status
- Forest Service
- Private

Source(s): BLM, IPC, IDOT, NFS, USDA, USGS, Veris, Eri, DigitalGlobe, Geofly, Esri, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Proposed Route (See Attachment C-2)

Morgan Lake Alternative

Map 12

Project Features
- Site Boundary
- Proposed Route
- Transmission Centerline Mileposts
  - Mile
  - Tenth-mile
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area
  - Access
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Other Road Land Status
  - Other
  - Private

Map Area


Attachment C-3
Application for Site Certificate
Boardman to Hemingway Transmission Line Project
Morgan Lake Alternative
Union County
Map 12
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Project Features
- Site Boundary
- Proposed Route
- Work Areas
- Multi-Use Area
- Important Siting
- Constraints and Other Features
- 100-foot Contours
- Existing Transmission Lines
- Oregon National Historic Trail (NHT)

Legend
- Pipeline
- Interstate
- Other Road
- Stream
- Oregon NHT Intact Segment (1/4-mile buffer)
- Protected Area (EFSC)
- Land Status
- Private
- State or Local Parks and Recreation or Wildlife

Source(s): BLM, IPC, ODFW, ODOT, NPS, USDA, USGS, Veris, Env, DigitalGlobe, Geonx, ArcGIS, ORG, GeoEye, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

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Double Mountain Alternative

Project Features
- Site Boundary (Alternative Route)
- Site Boundary (Proposed Route)
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile
- Work Areas
- Pulling and Tensioning Structure Work Area
- Access
- Existing Road
- Substantial Modification, 21-70% Improvements
- Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive
- Important Siting Constraints and Other Features
- 100-foot Contours
- Other Road

Source(s): BLM, IPC, DOT, NPS, USDA, ODFW, ODOT, NPS, USDA, GSI technology
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Attachment C-3
Alternative Location Maps
Double Mountain Alternative
Malheur County
Map 15
Proposed Route (See Attachment C-2)

Double Mountain Alternative

Project Features
- Site Boundary (Alternative Route)
- Site Boundary (Proposed Route)
- Transmission Centerline

Mileposts
- Mile
- Tenth-mile

Work Areas
- Multi-Use Area
- Pulling and Tensioning
- Structure Work Area

Access
- Existing Road
- Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Important Siting Constraints and Other Features
- 100-foot Contours

Wilderness Characteristic Unit Meeting Wilderness Criteria

Land Status
- Bureau of Land Management
- Private

Source(s): BLM, IPC, ODOT, IDOT, NFS, USFS, USGS, Verina, Eot, DigitaGlobe, Geology,
Satellite Geographics, CNES/Airbus DS, 42E, GeoMapping, Axiom, OR URF information

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Attachment C-3
Alternative Location Maps
Double Mountain Alternative Malheur County
Map 17