

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Mileposts
- Tenth-mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

#### Other Waters

- Field Survey Streams

#### Stream Impact Type

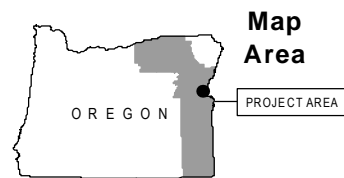
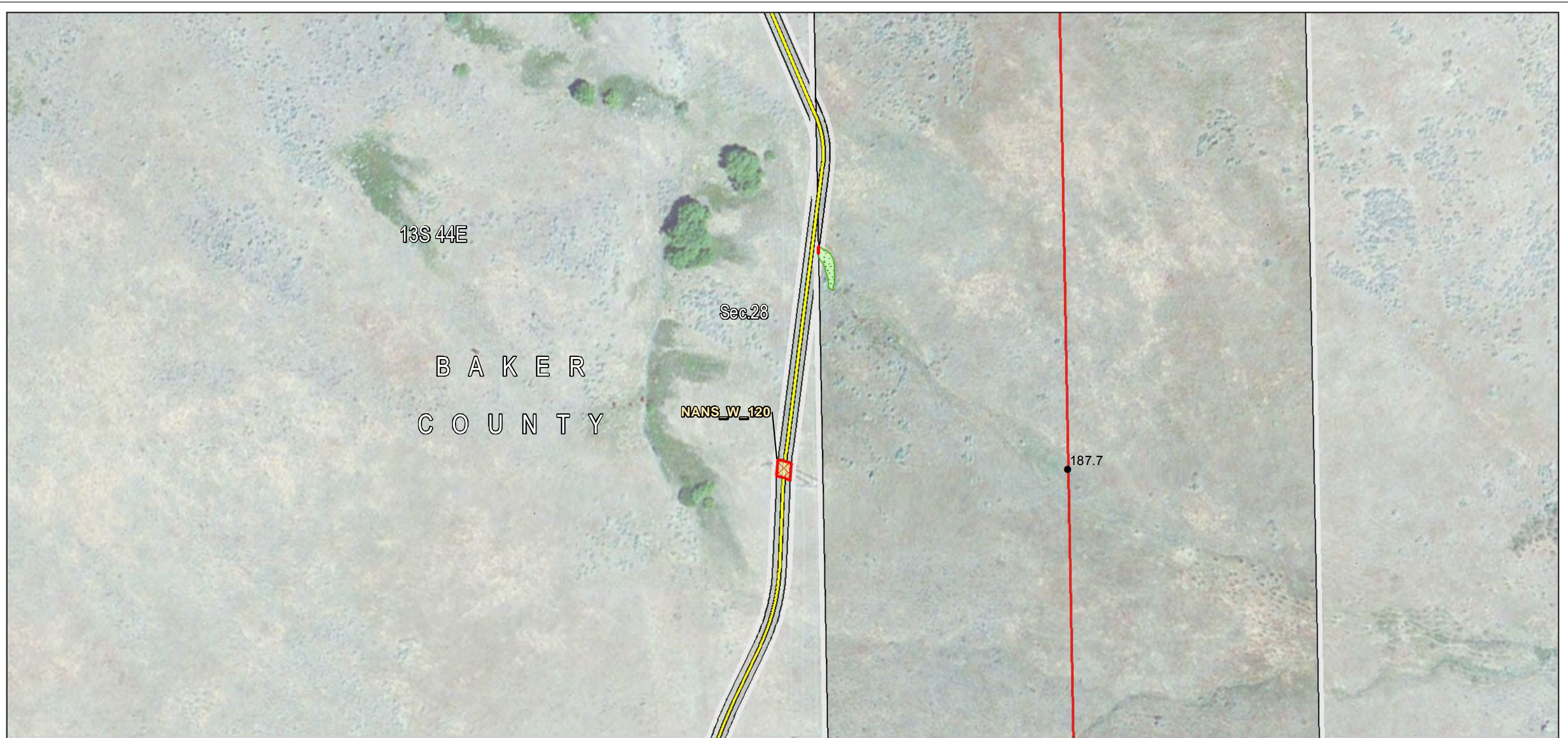
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-289**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Mileposts
- Tenth-mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

#### Wetland

- Field Survey Wetland

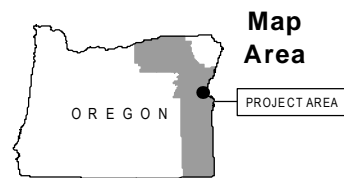
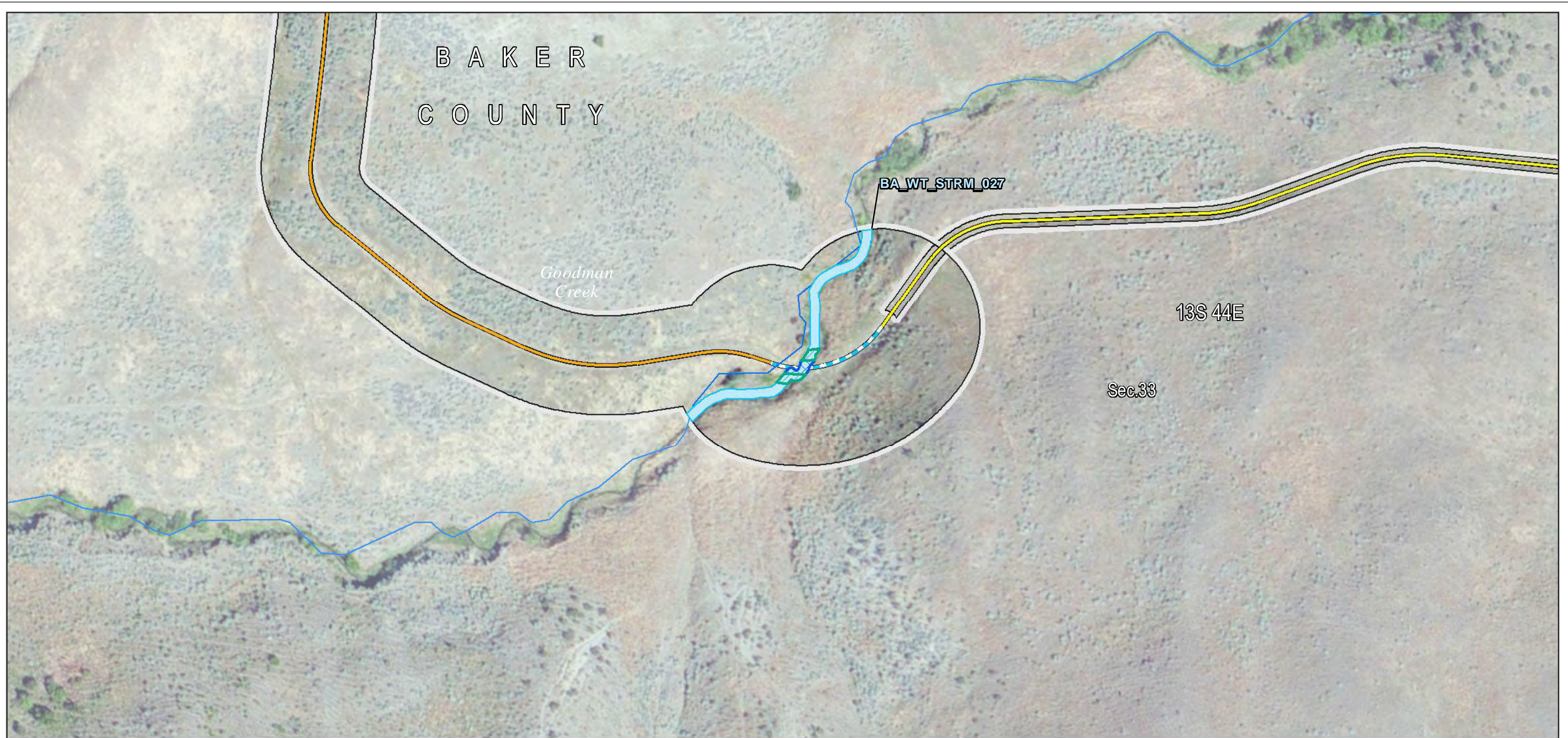
- NANS Wetland (NWI)
- Wetland Impact Type
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-290**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Bladed

Rivers, Streams, and Canals

#### Other Waters

Field Survey Streams

Stream Impact Type

Temporary

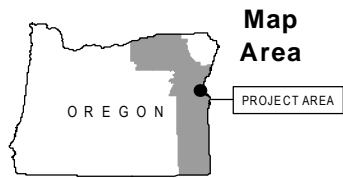
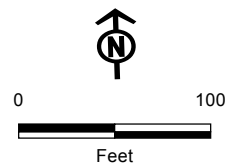
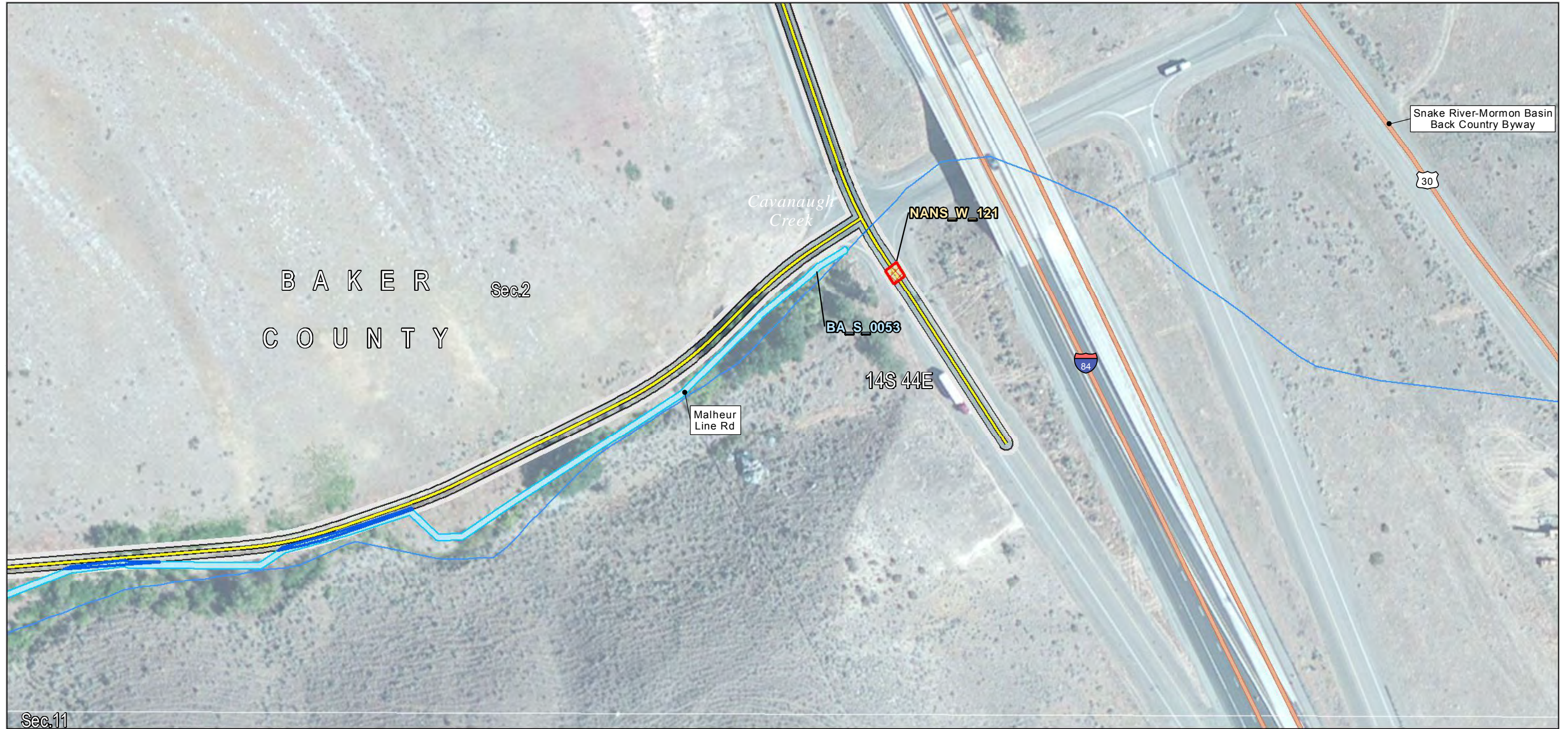
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-291**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Baker County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

- Interstates or Highways
- Rivers, Streams, and Canals

#### Other Waters

- Field Survey Streams

##### Stream Impact Type

- Permanent

#### Wetland

- NANS Wetland (NWI)

#### Wetland Impact Type

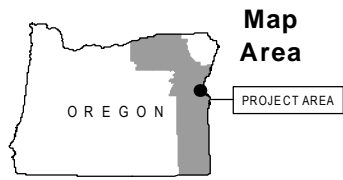
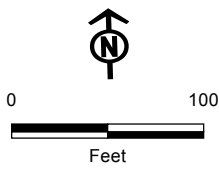
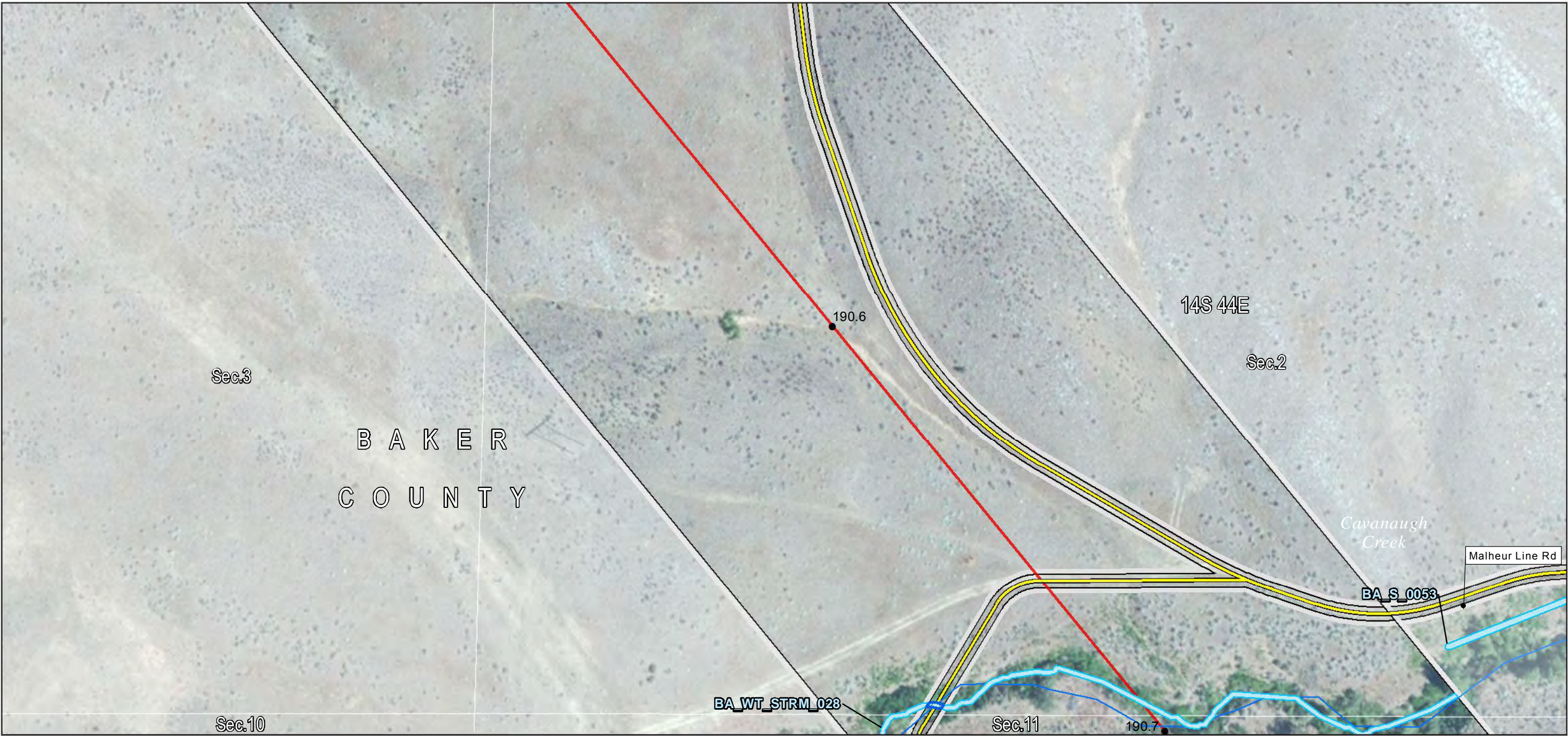
- Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-292 Wetland and Other Waters Joint Permit Application Detail Maps Baker County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Mileposts
- Tenth-mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals

- Other Waters
- Field Survey Streams

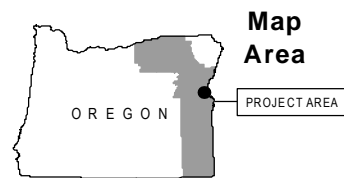
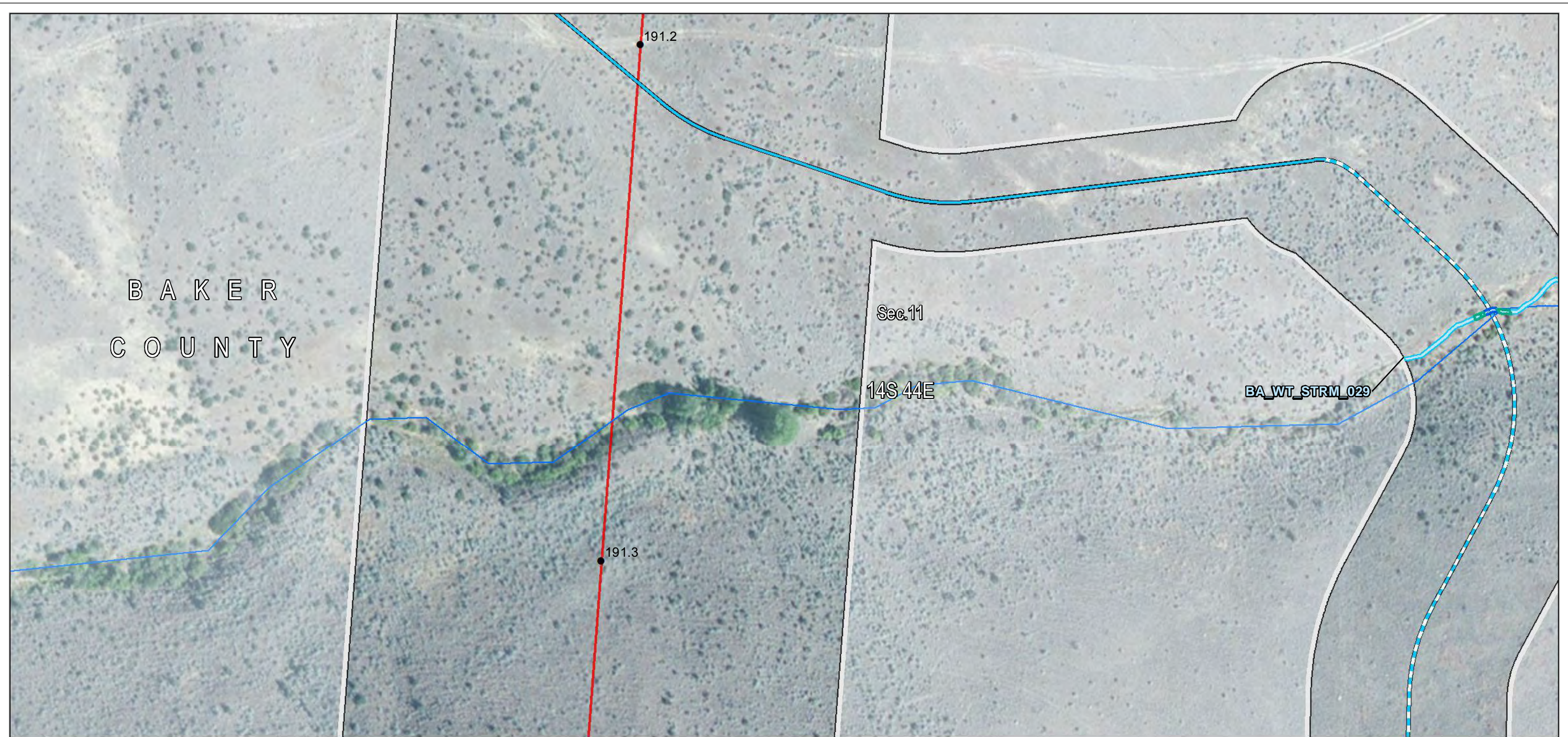
- Stream Impact Type
- Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-293**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Route Centerline
- Proposed Route
- Mileposts
- Tenth-mile

#### Construction Access

- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- Rivers, Streams, and Canals

#### Other Waters

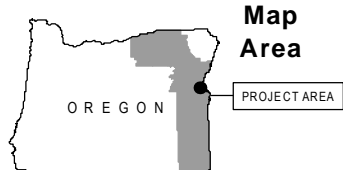
- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

### Attachment K-294 Wetland and Other Waters Joint Permit Application Detail Maps Baker County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Other Waters**

- NANS Streams (NHD)

**Stream Impact Type**

- Permanent

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

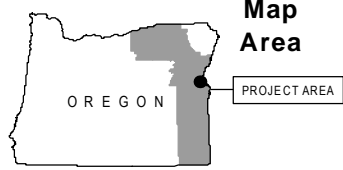
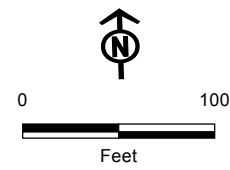
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-295**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements

**Transportation**

- Interstates or Highways
- Rivers, Streams, and Canals

**Other Waters**

- NANS Streams (NHD)

**Stream Impact Type**

- Permanent

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

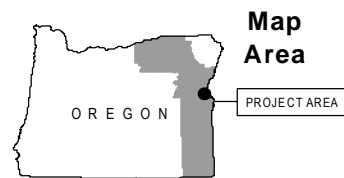
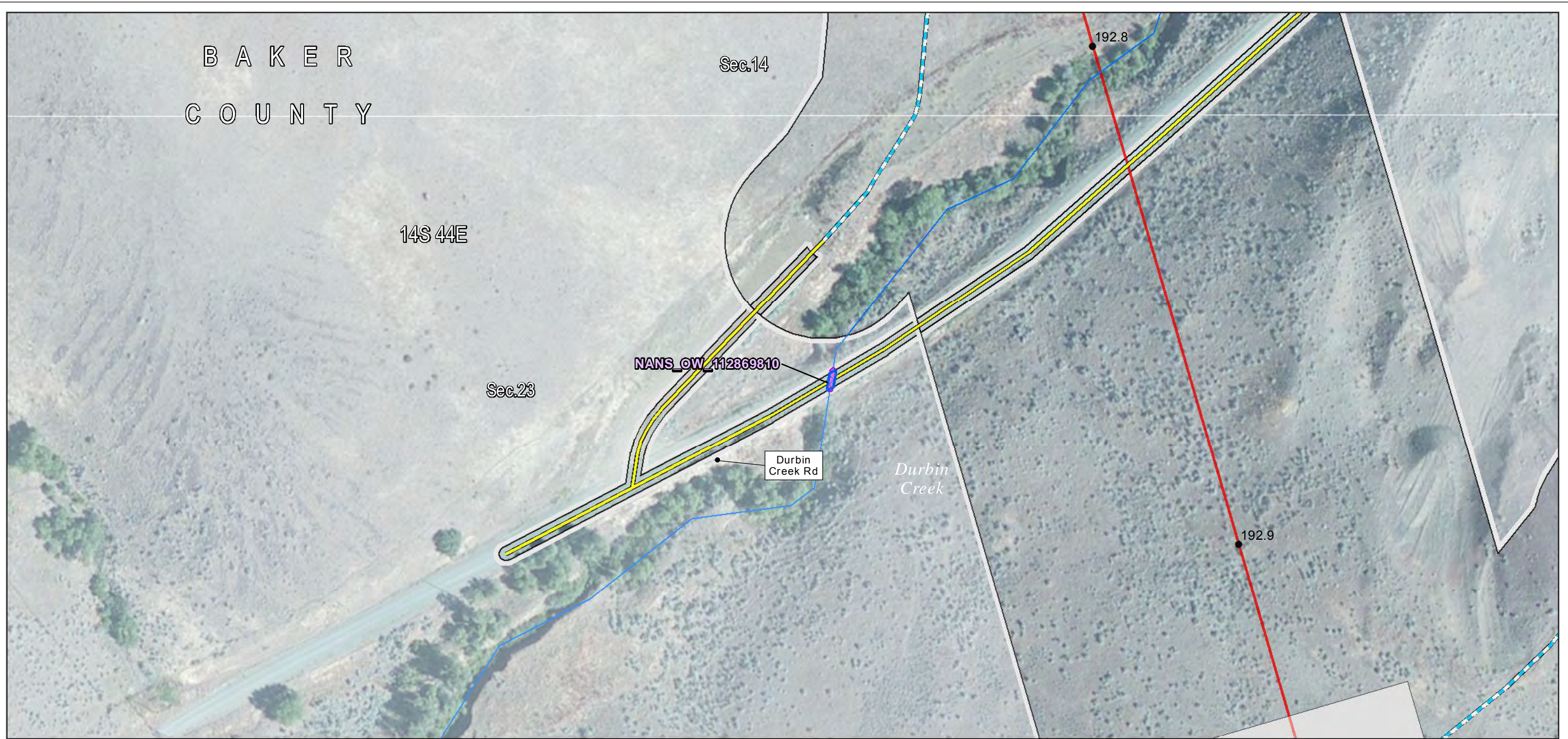
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-296**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Bladed

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

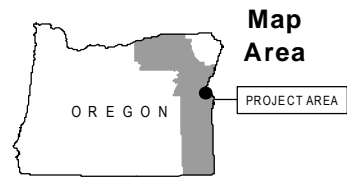
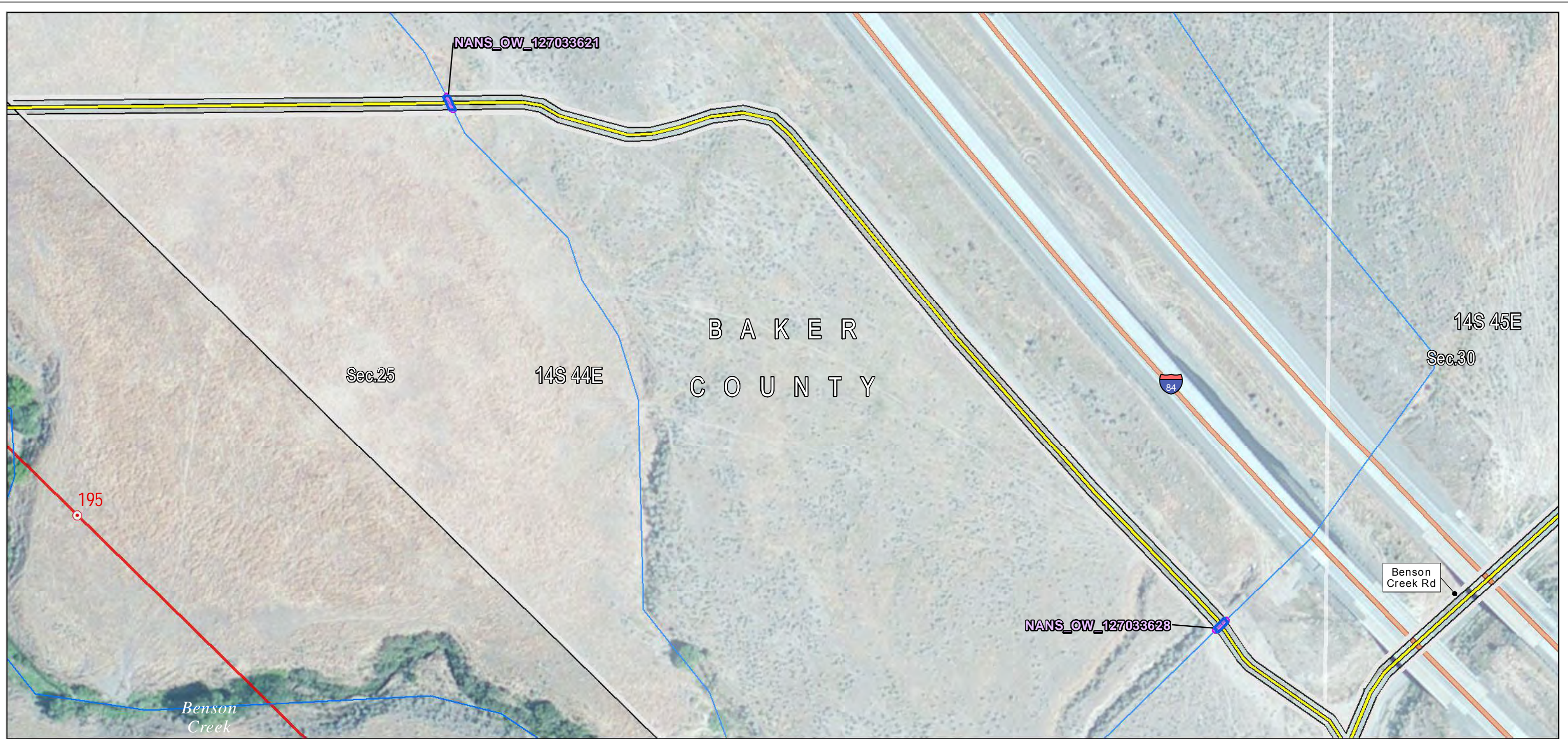
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-297**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Mileposts
- Mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Transportation
- Interstates or Highways
- Rivers, Streams, and Canals

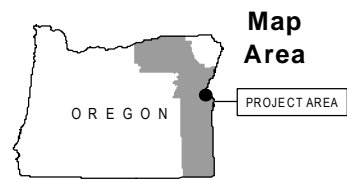
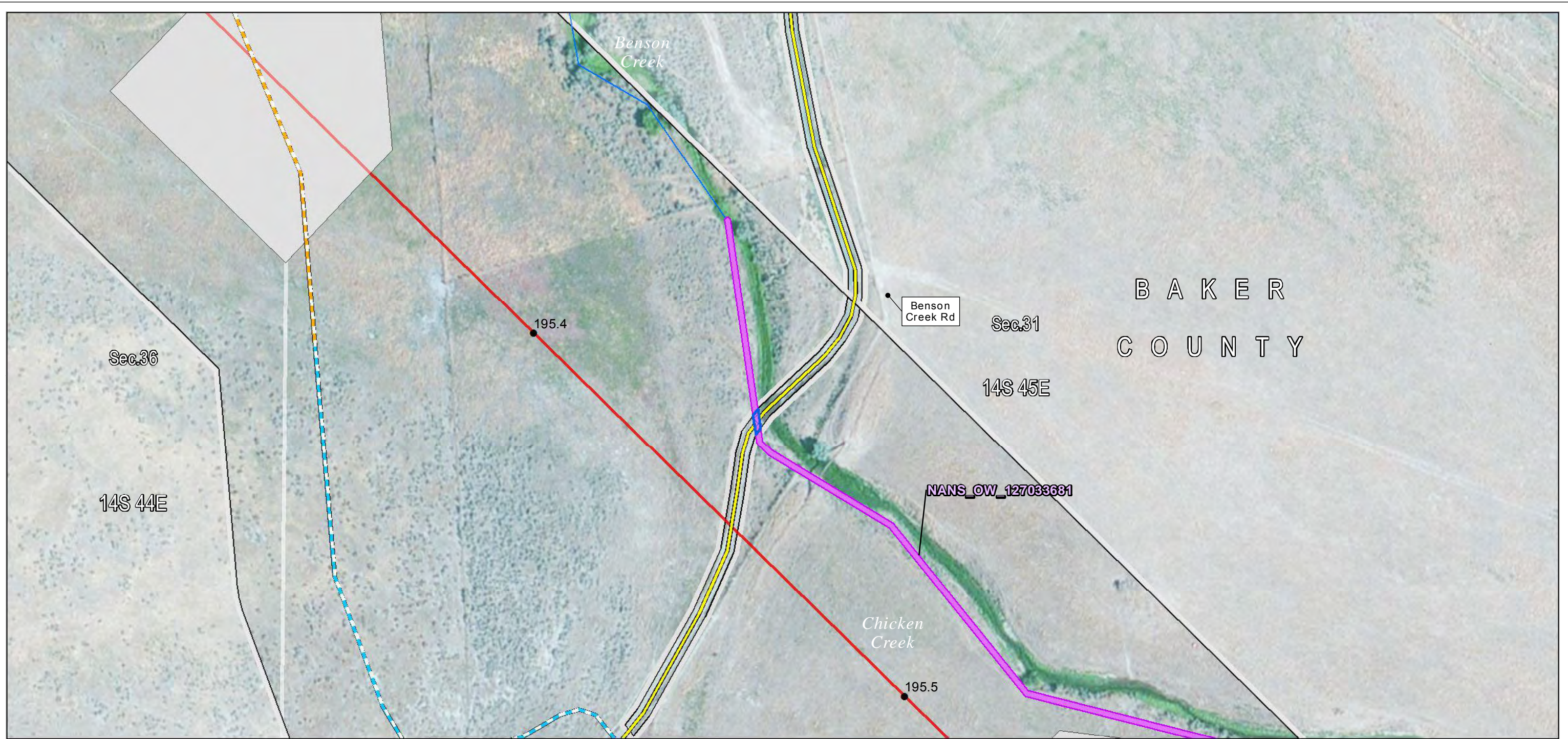
- Other Waters
- NANS Streams (NHD)
- Stream Impact Type
- Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-298**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
 Baker County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Bladed

New Road, Primitive

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

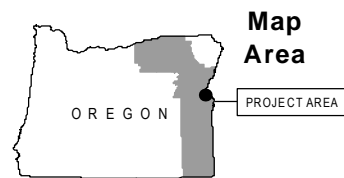
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Boardman to Hemingway Transmission Line Project

**Attachment K-299**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

New Road, Bladed

Rivers, Streams, and  
Canals

#### Other Waters

Field Survey Streams

Stream Impact Type

Temporary

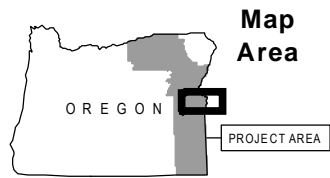
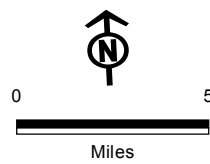
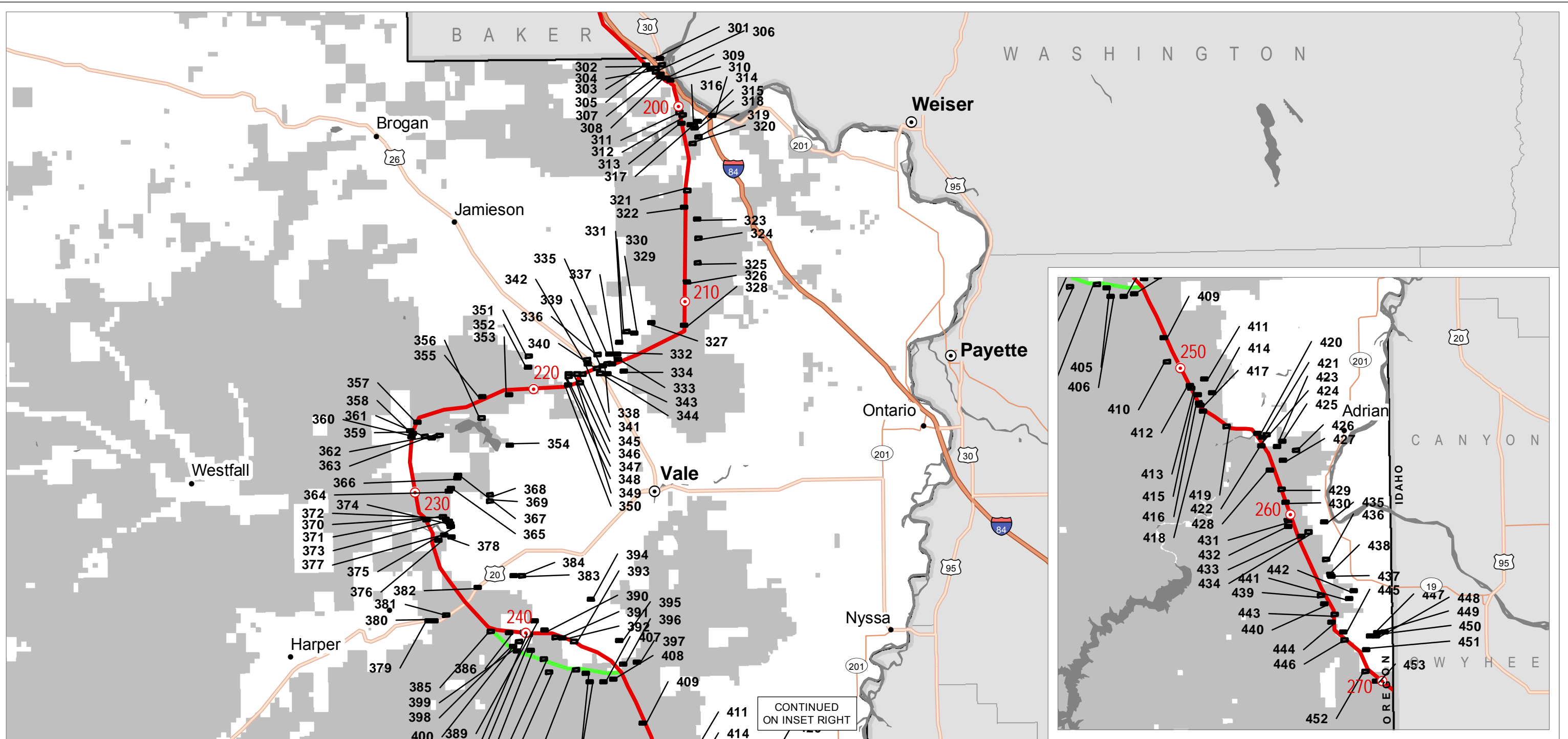
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-300**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Baker County**





#### Project Features

- Proposed Route
- Alternative
- Ten Mile Marker

#### Map Index

- Map Tile (Map #)

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



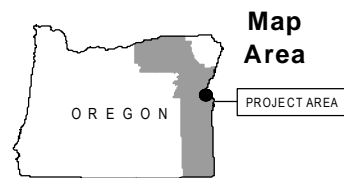
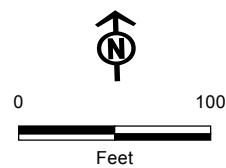
Boardman to Hemingway  
Transmission Line Project

## Appendix K Joint Permit Application Location Map

Malheur County

Map Index





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

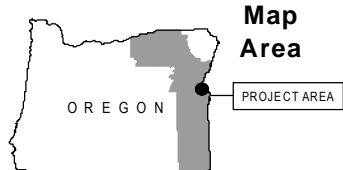
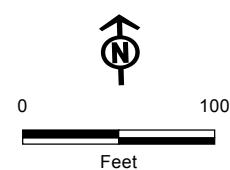
Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-301 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements

**Transportation**

- Interstates or Highways
- Rivers, Streams, and Canals

**Other Waters**

- NANS Streams (NHD)

**Stream Impact Type**

- Permanent

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

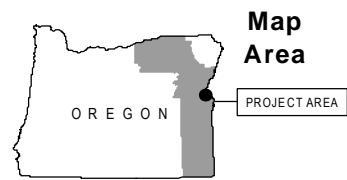
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-302**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





#### Project Features

- Site Boundary
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

- Mileposts
- Tenth-mile
- Construction Access
- New Road, Bladed
- Rivers, Streams, and Canals

- Other Waters
- NANS Streams (NHD)
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

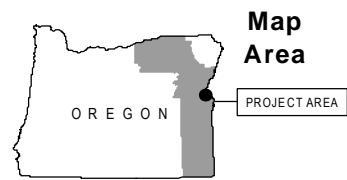
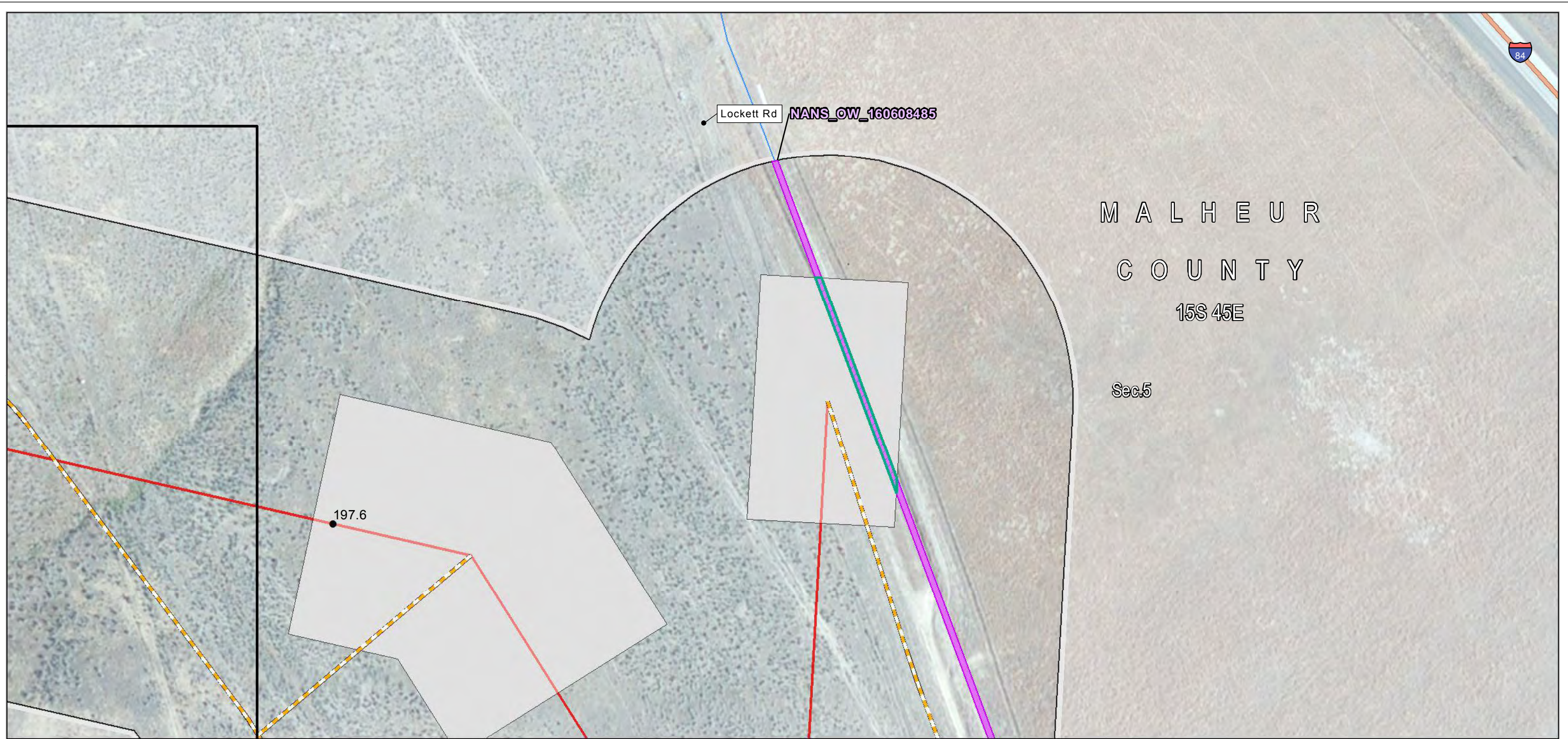
Source(s): BLM, IPC, ODFW, ODOT, NPS, USDA, USFS, USGS, Ventyx, Esri, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Attachment K-303**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

##### Construction Access

New Road, Primitive

##### Transportation

Interstates or Highways

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

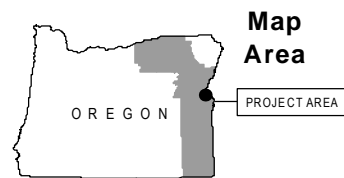
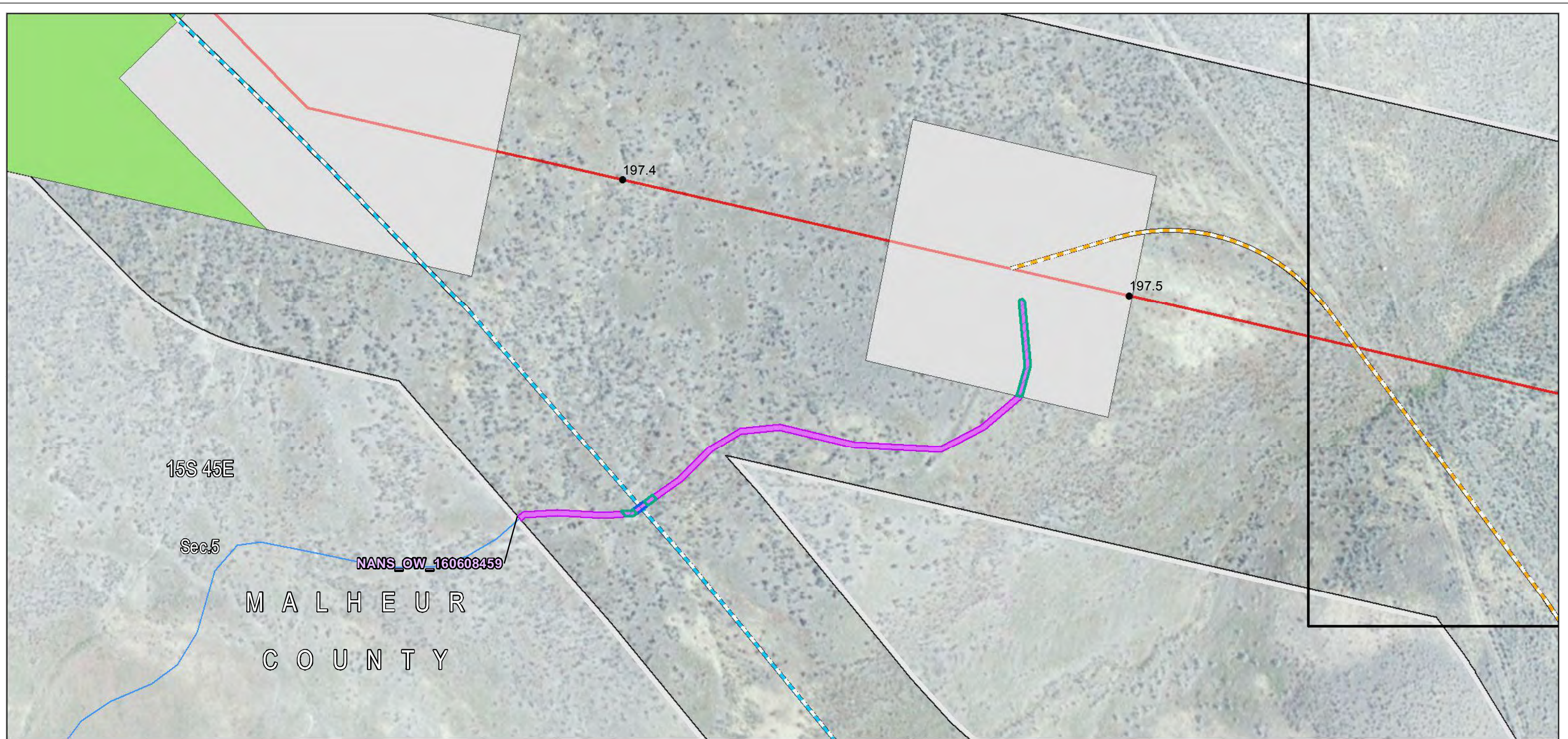
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-304**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Route Centerline
- Work Areas
- Pulling and Tensioning
- Structure Work Area

- Mileposts
- Construction Access
- Rivers, Streams, and Canals

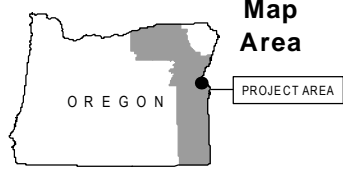
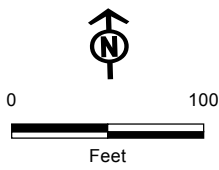
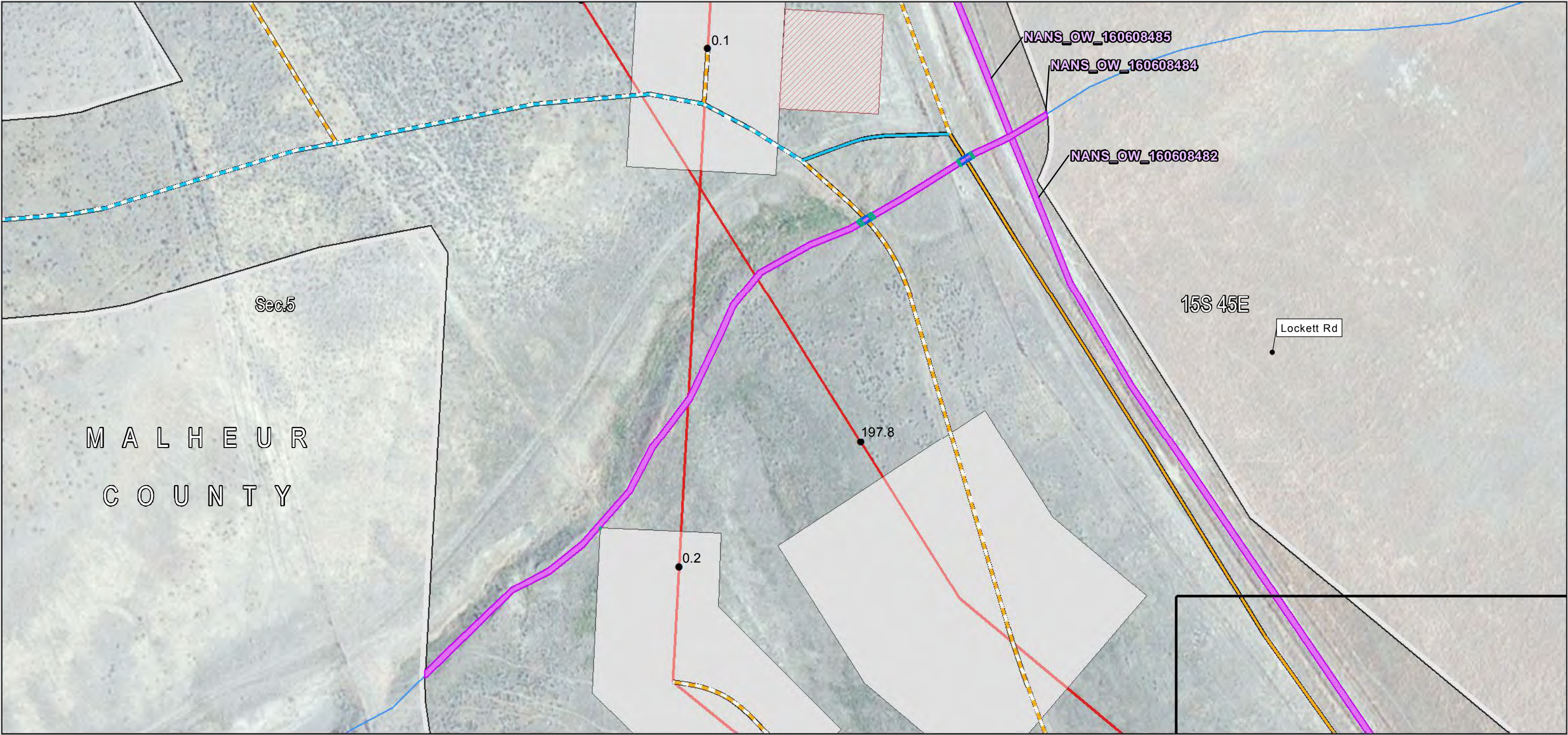
- Other Waters
- Stream Impact Type



Boardman to Hemingway  
Transmission Line Project

### Attachment K-305 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Structure Work Area

- Structure Work Area (Removal Only)
- Mileposts
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive
- Rivers, Streams, and Canals

**Other Waters**

- NANS Streams (NHD)
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

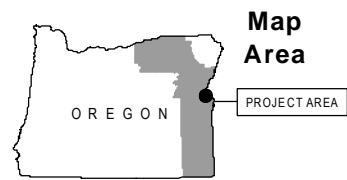
**Attachment K-306**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Pulling and Tensioning

Structure Work Area

##### Mileposts

Mile

Tenth-mile

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Primitive

##### Transportation

Interstates or Highways

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

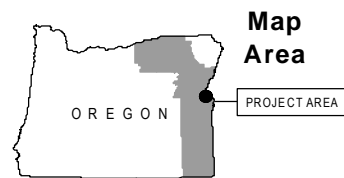
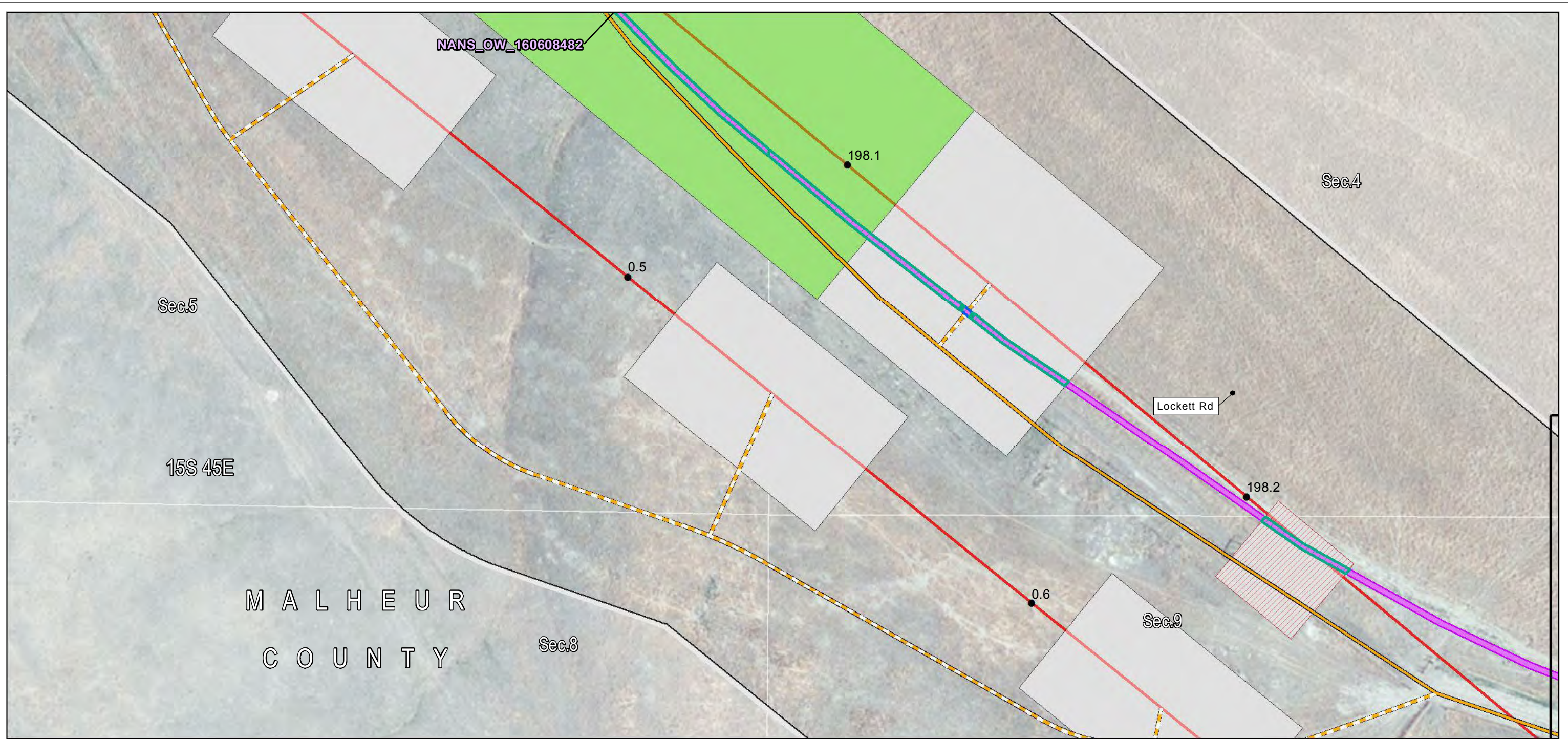
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-307**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Structure Work Area

Structure Work Area (Removal Only)

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial

Modification, 21-70%

Improvements

New Road, Primitive

Rivers, Streams, and

Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

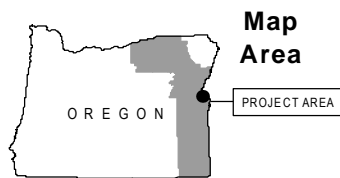
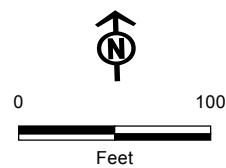
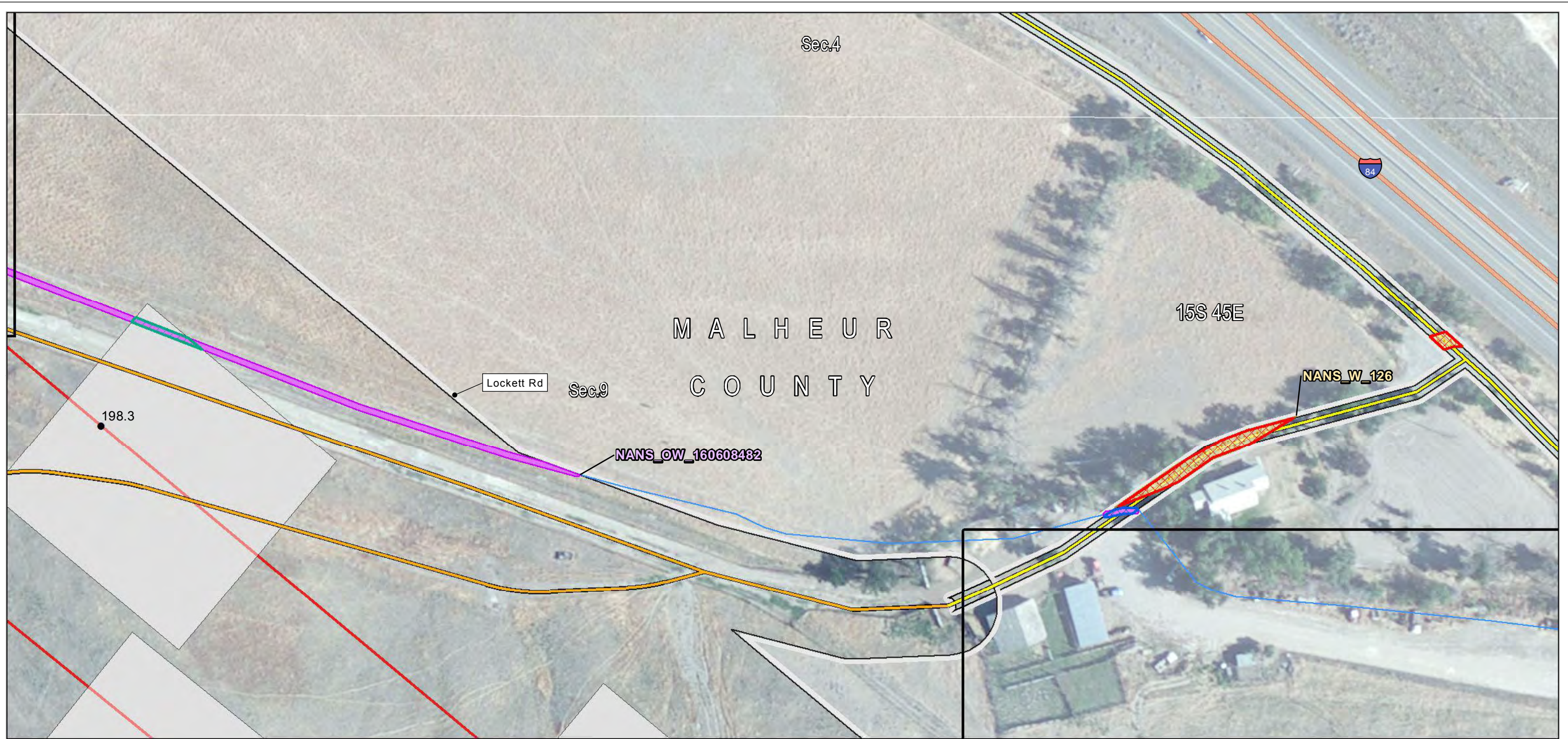
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-308**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

##### Transportation

Interstates or Highways

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

Permanent

##### Wetland

NANS Wetland (NWI)

Wetland Impact Type

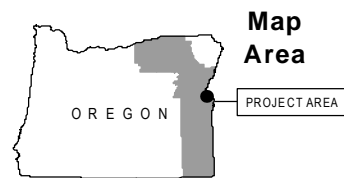
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-309**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Structure Work Area

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Primitive

##### Transportation

Interstates or Highways

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

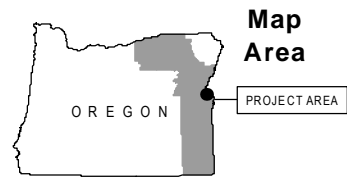
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-310**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Primitive

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

Permanent



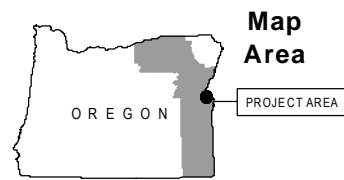
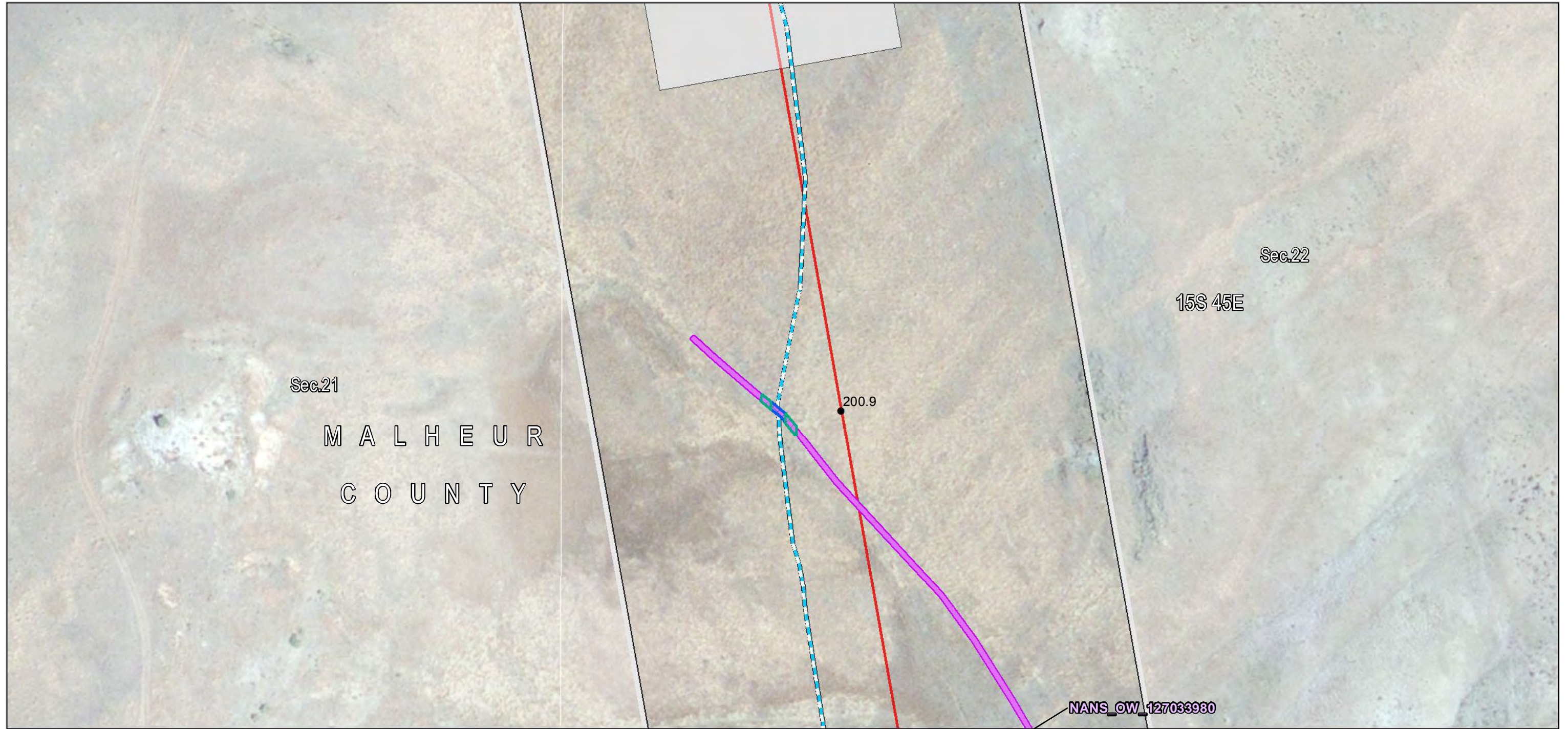
Boardman to Hemingway Transmission Line Project

**Attachment K-311**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**









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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

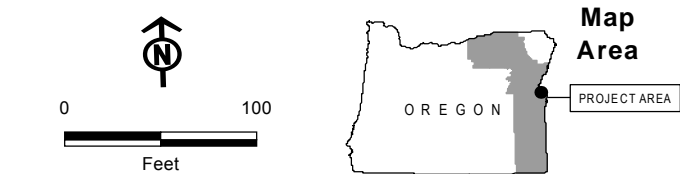
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-313**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

#### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Permanent

#### Wetland

NANS Wetland (NWI)

#### Wetland Impact Type

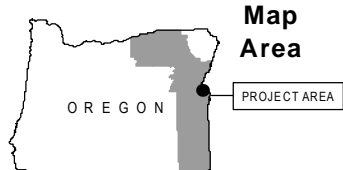
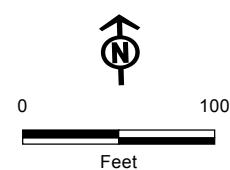
Permanent



Boardman to Hemingway  
Transmission Line Project

### Attachment K-314 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
  - Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

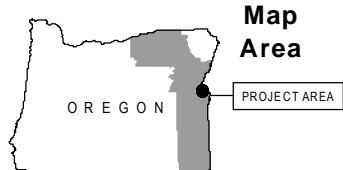
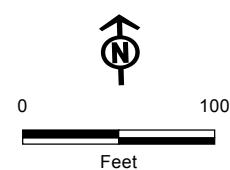
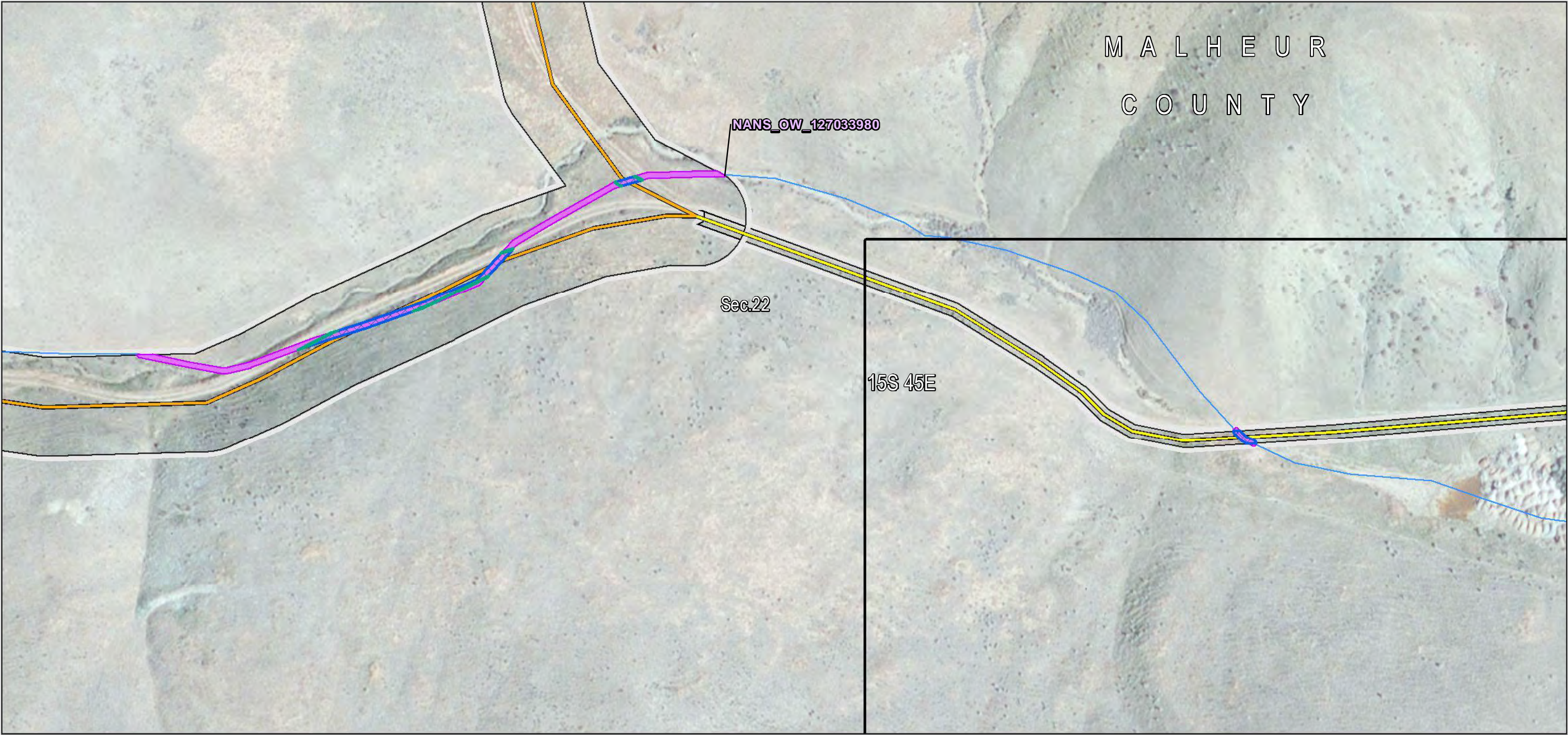
- Stream Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-315**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

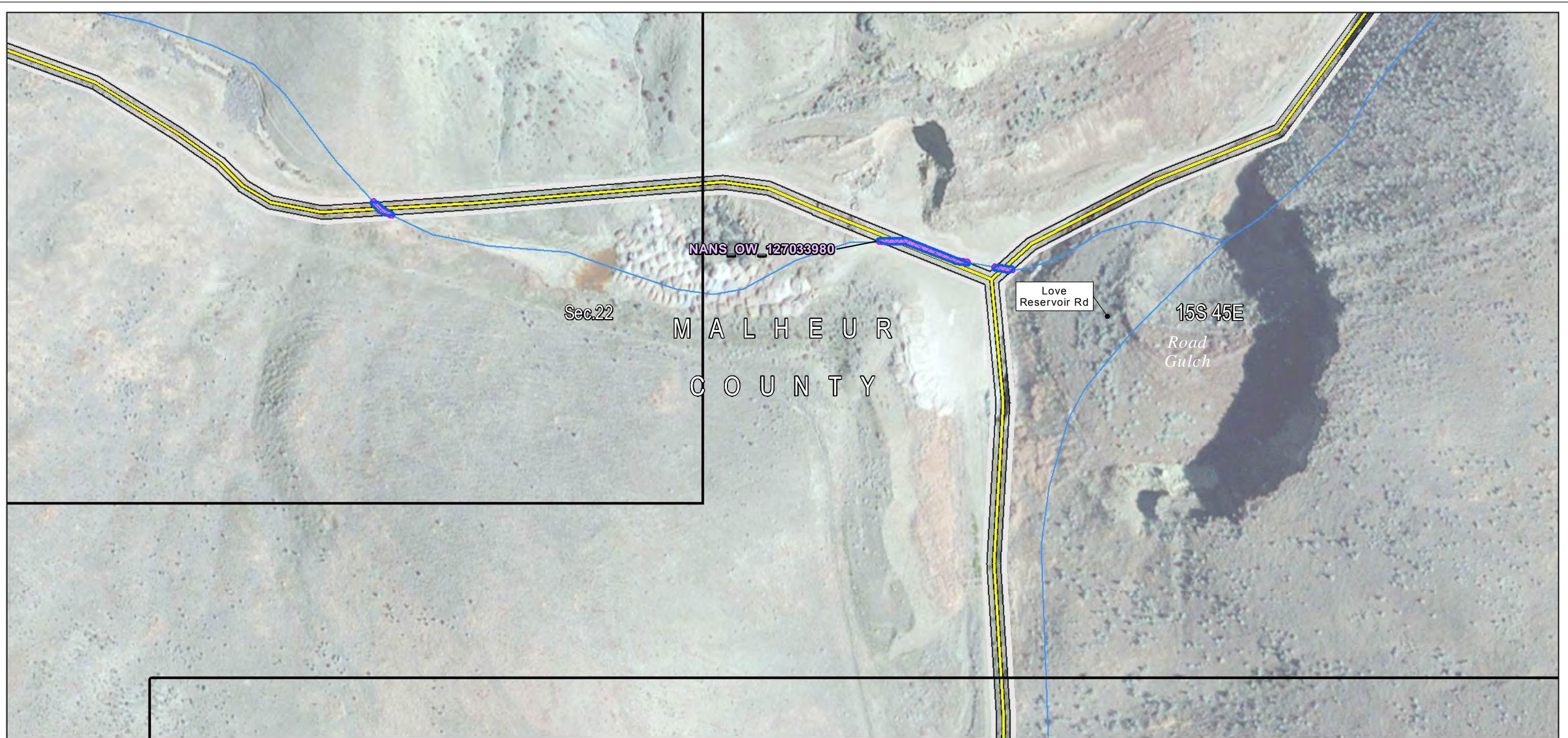
- Project Features**
- Site Boundary
  - Proposed Route
  - Construction Access
  - Existing Road, No Substantial Modification, 0-20% Improvements
  - Existing Road, Substantial Modification, 21-70% Improvements
- Other Waters**
- Rivers, Streams, and Canals
  - NANS Streams (NHD)
  - Stream Impact Type
    - Temporary
    - Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-316**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





**Project Features**

**Construction Access**

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

Rivers, Streams, and  
Canals

**Other Waters**

NANS Streams (NHD)

**Stream Impact Type**

Permanent



Boardman to Hemingway  
Transmission Line Project

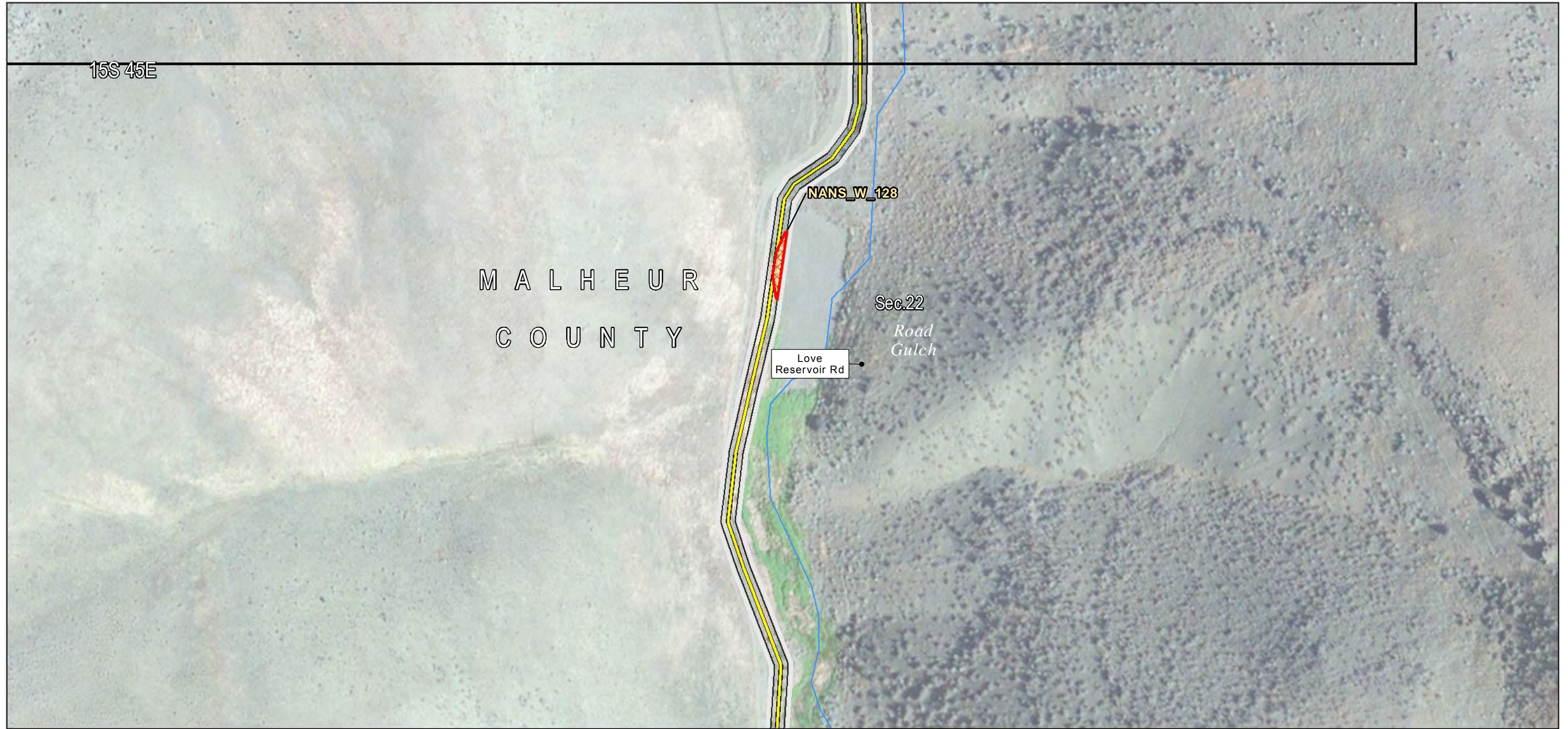
**Attachment K-317**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

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

Notes: Elevation contour lines are not available at this time  
and will be added at a later date.

December 2016





#### Project Features

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

##### Wetland

- NANS Wetland (NWI)

##### Wetland Impact Type

- Permanent



Boardman to Hemingway  
Transmission Line Project

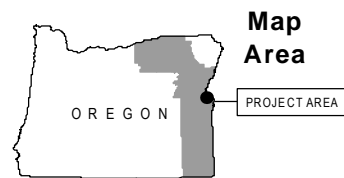
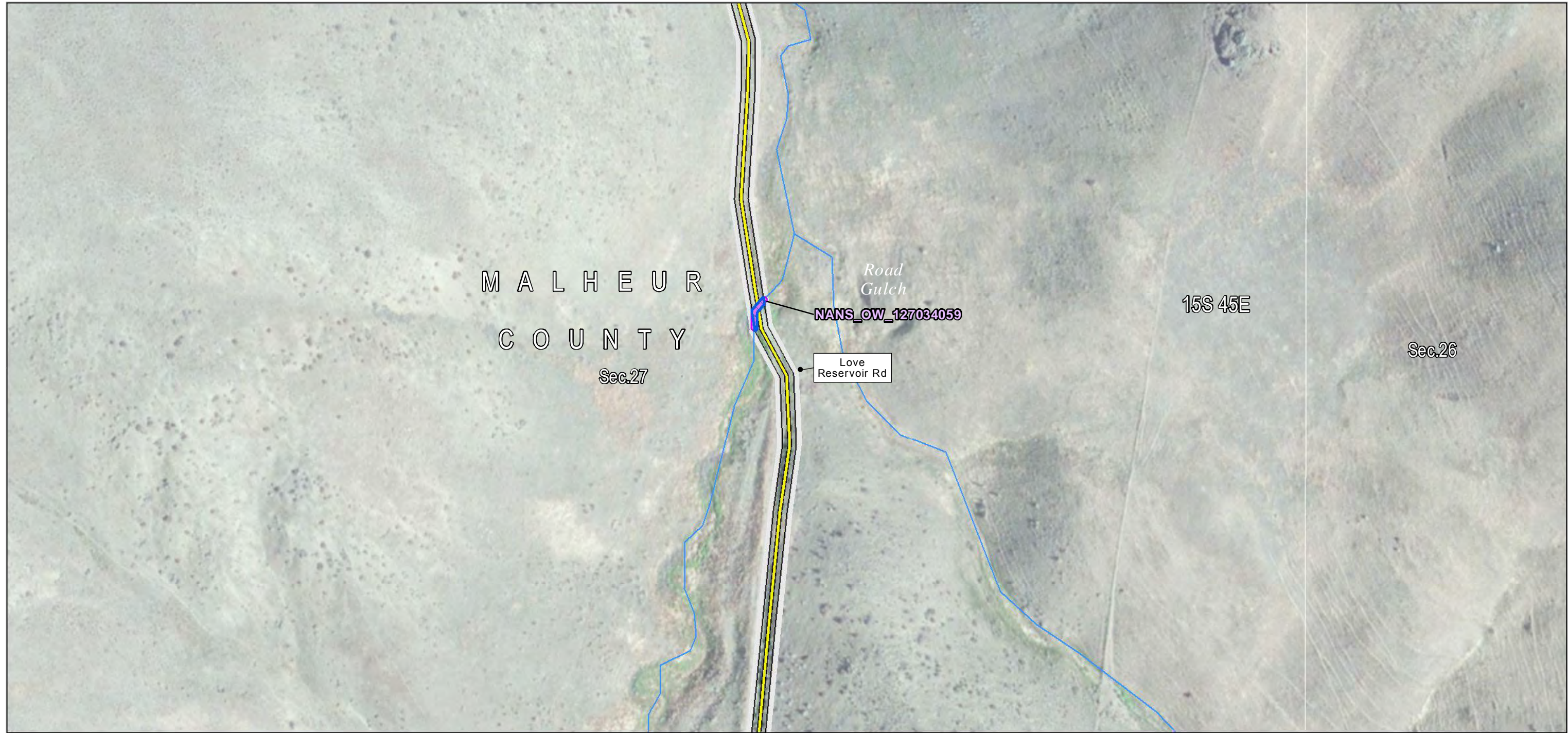
## Attachment K-318 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

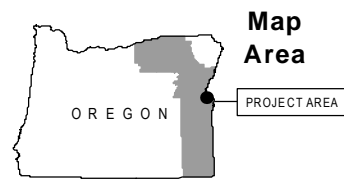
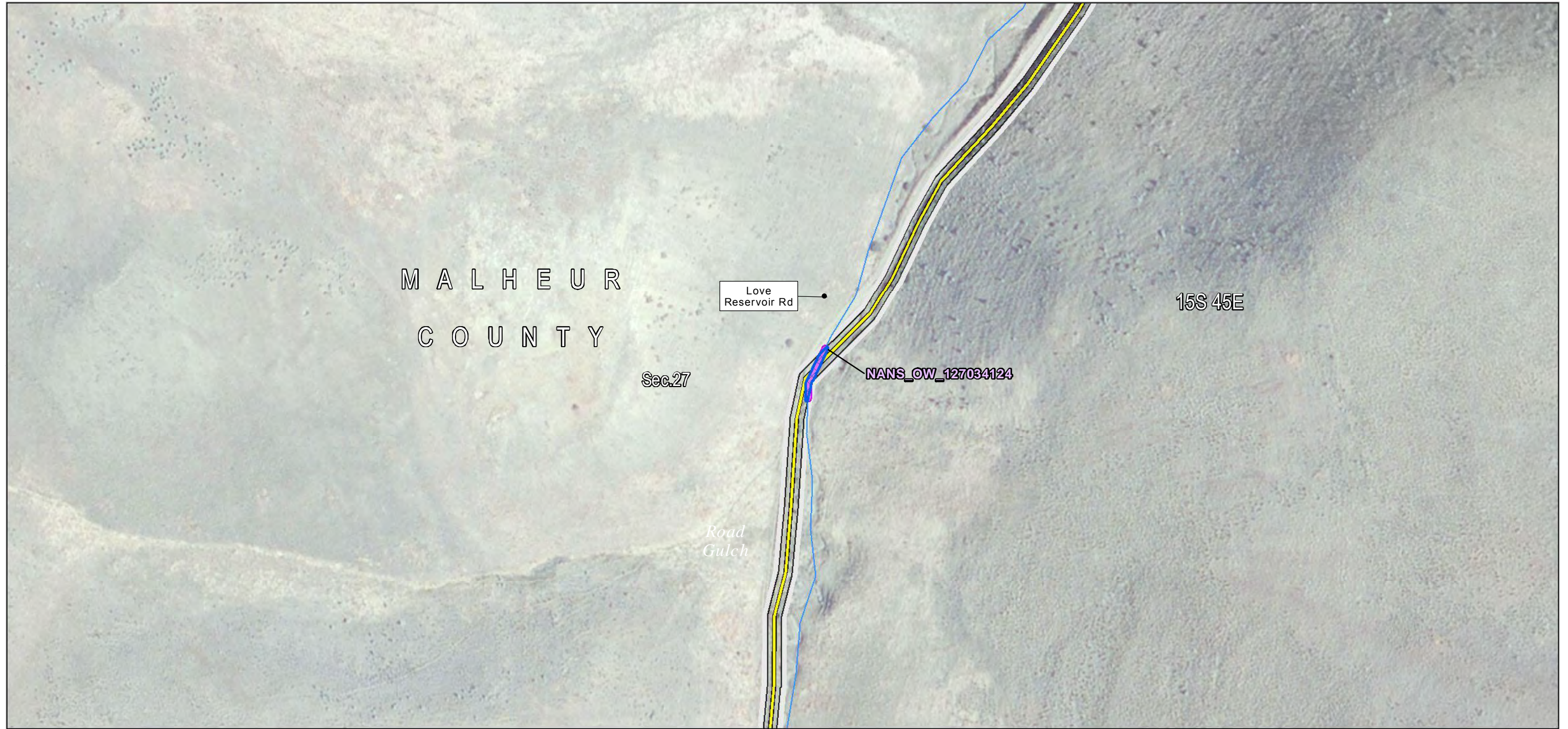
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-319**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

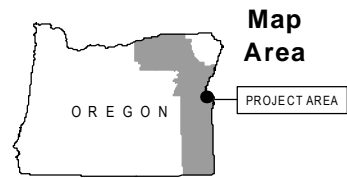
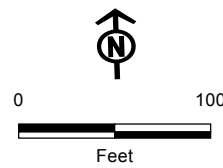
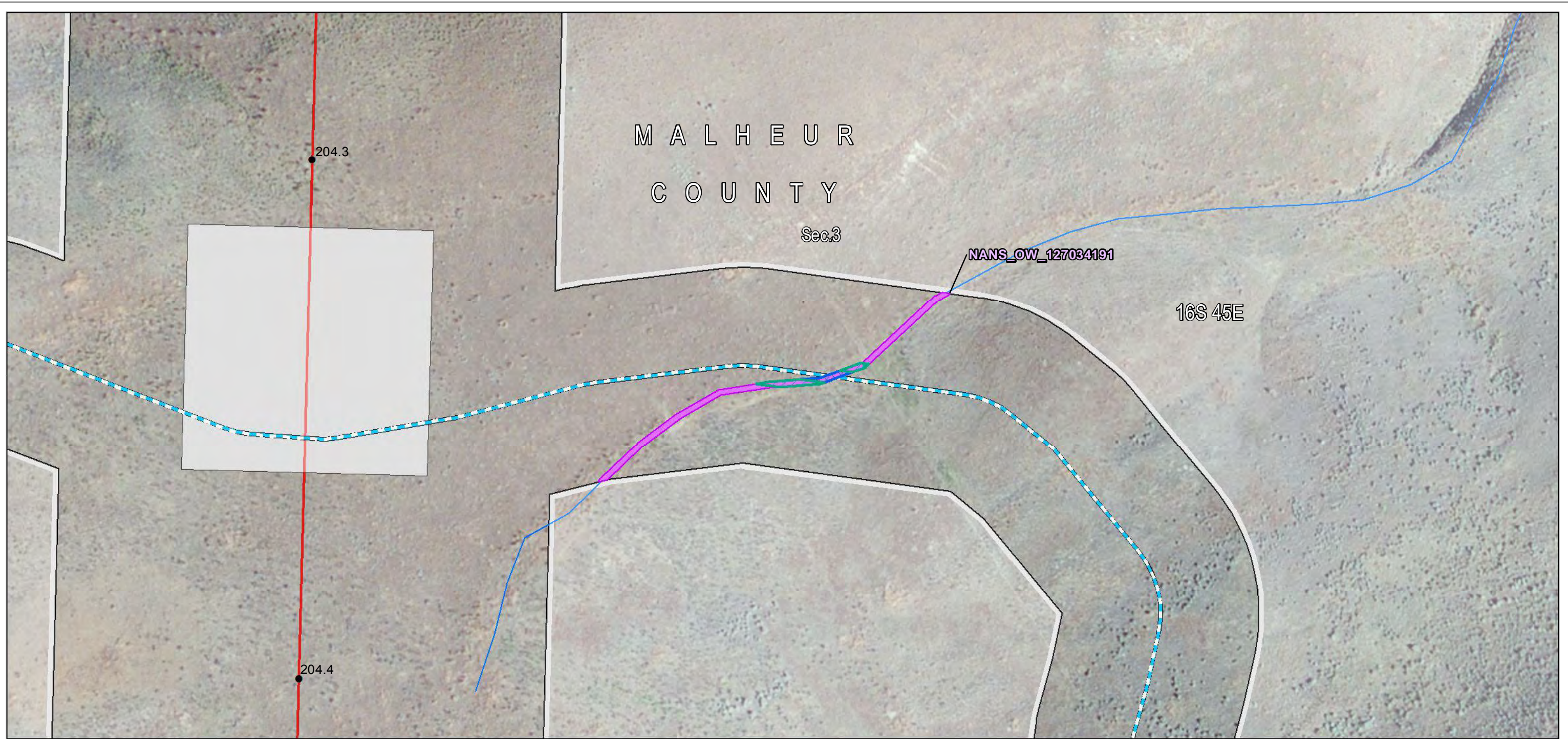
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-320**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

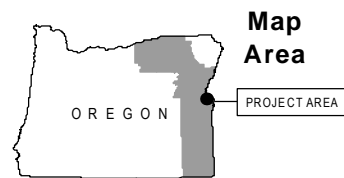
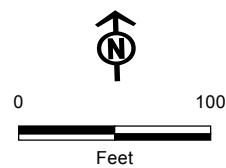
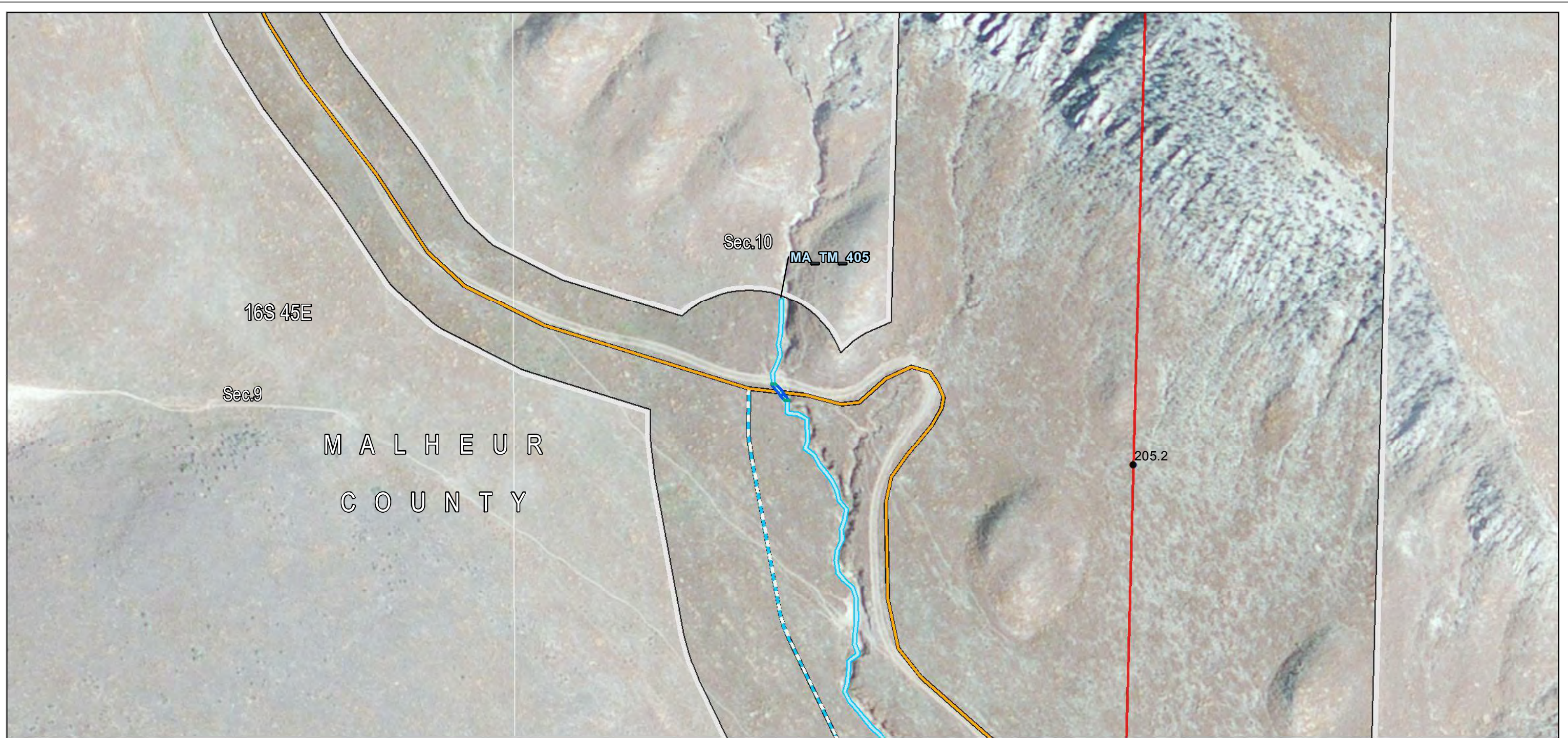
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-321**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Route Centerline
- Mileposts
- Proposed Route
- Proposed Route
- Tenth-mile

- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Bladed
- Rivers, Streams, and Canals

#### Other Waters

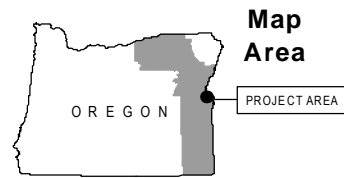
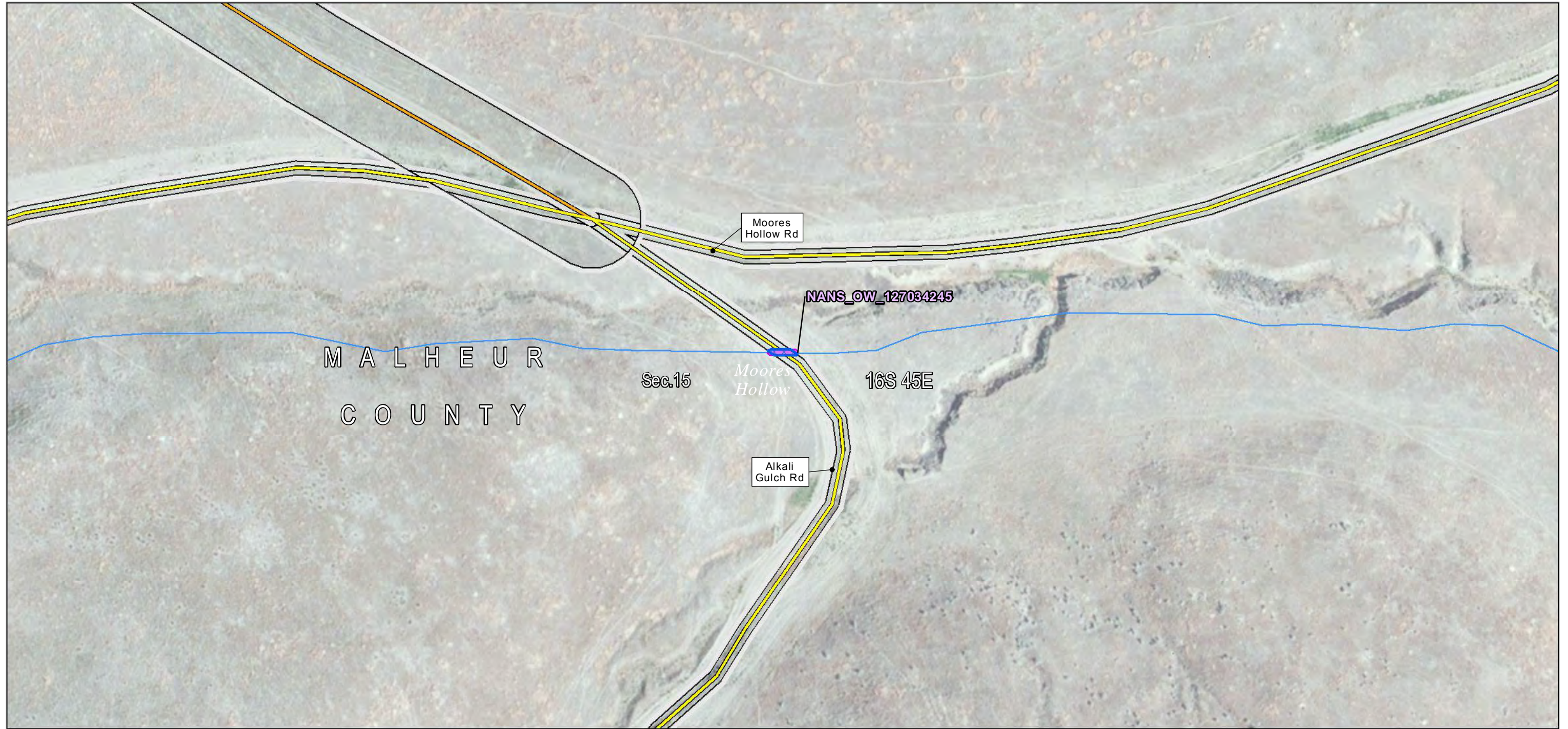
- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-322**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

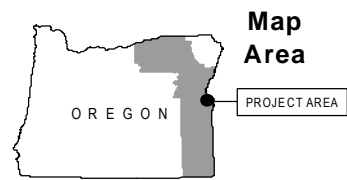
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-323**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

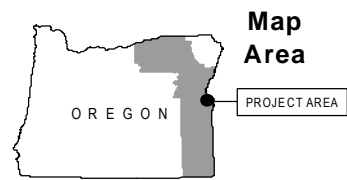
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-324**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

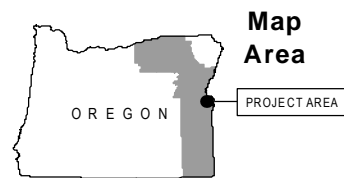
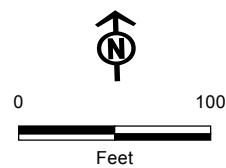
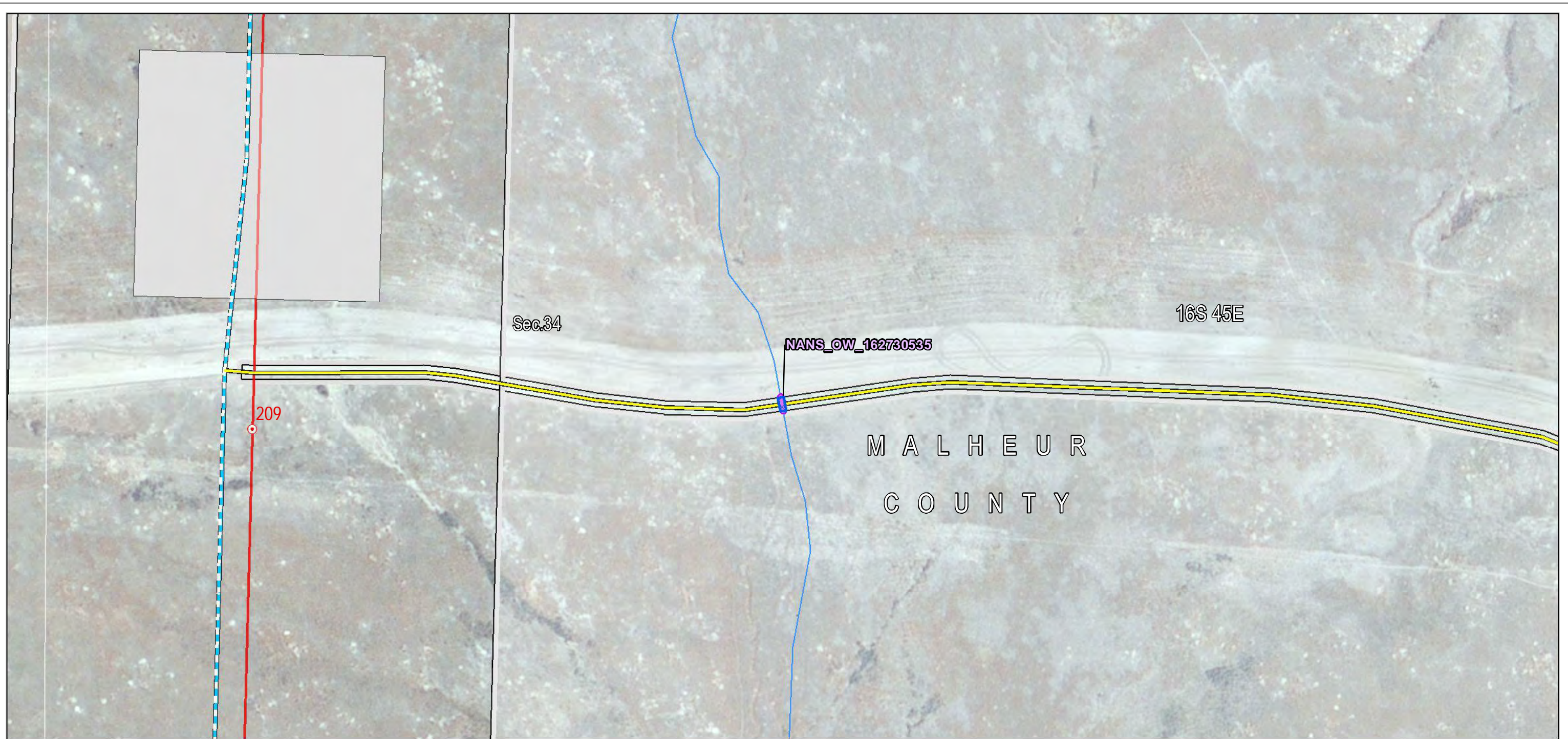
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-325**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Mile

Construction Access

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

New Road, Bladed

Rivers, Streams, and  
Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

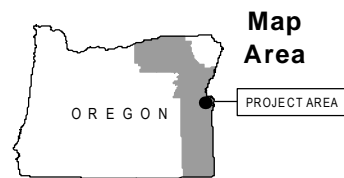
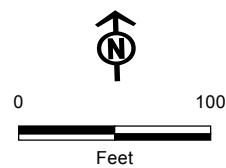
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-326**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

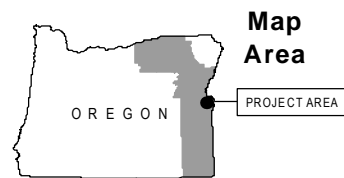
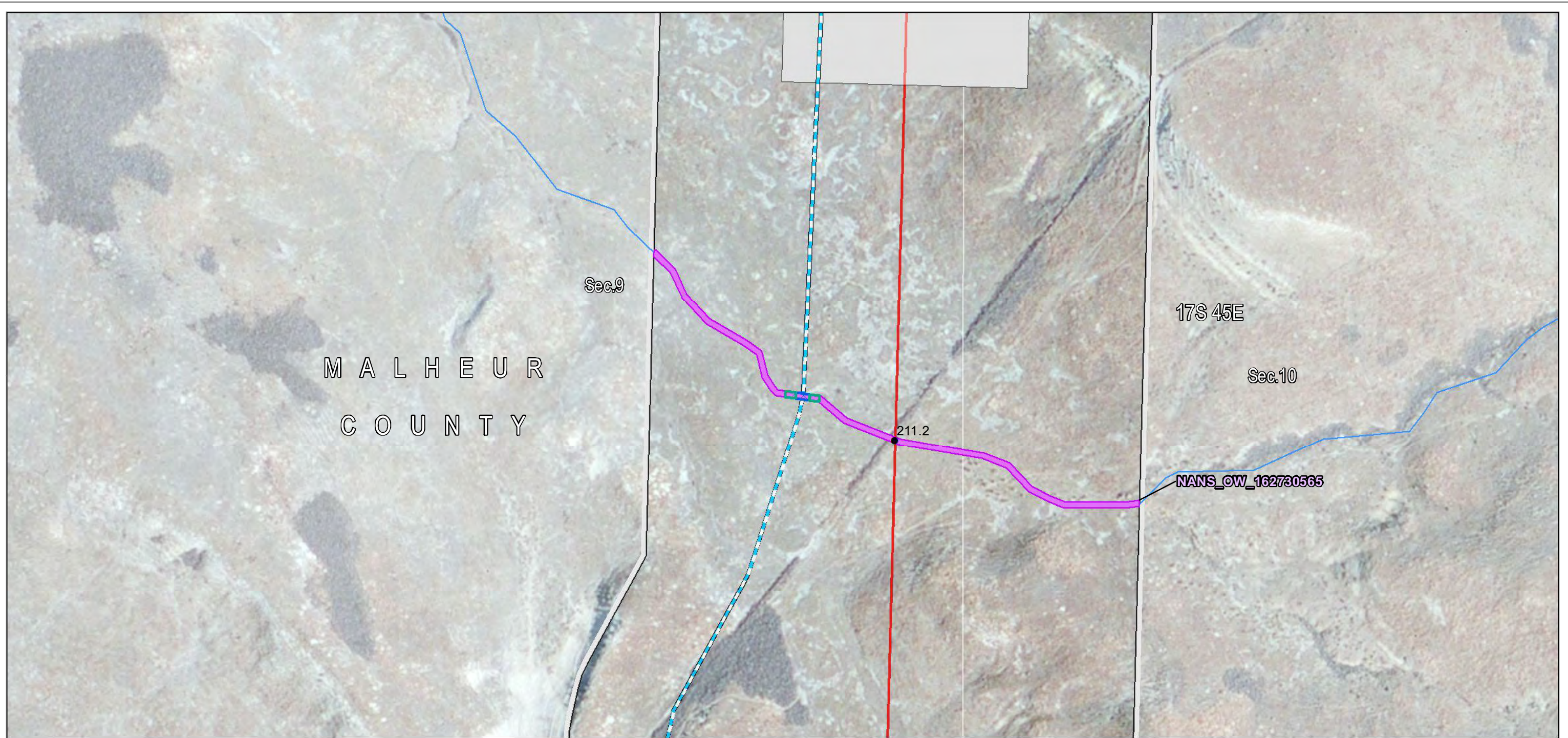
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-327**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

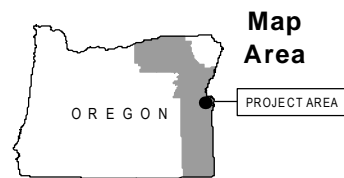
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-328**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

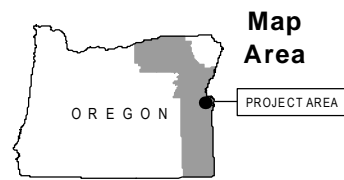
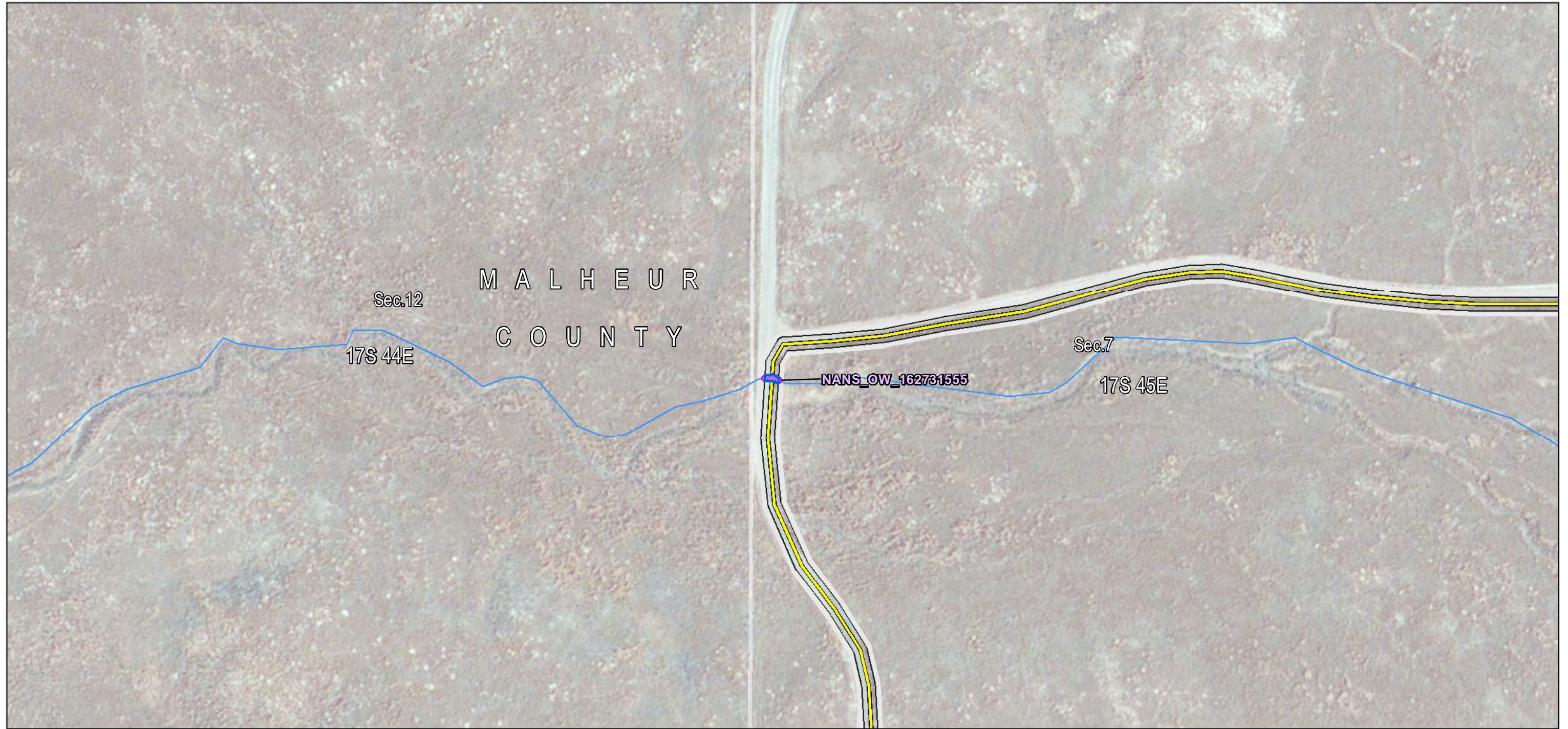
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-329**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

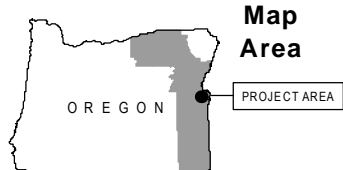
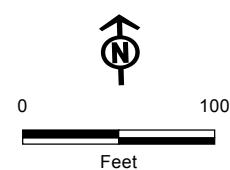
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-330**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

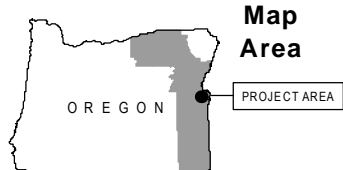
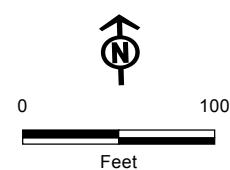
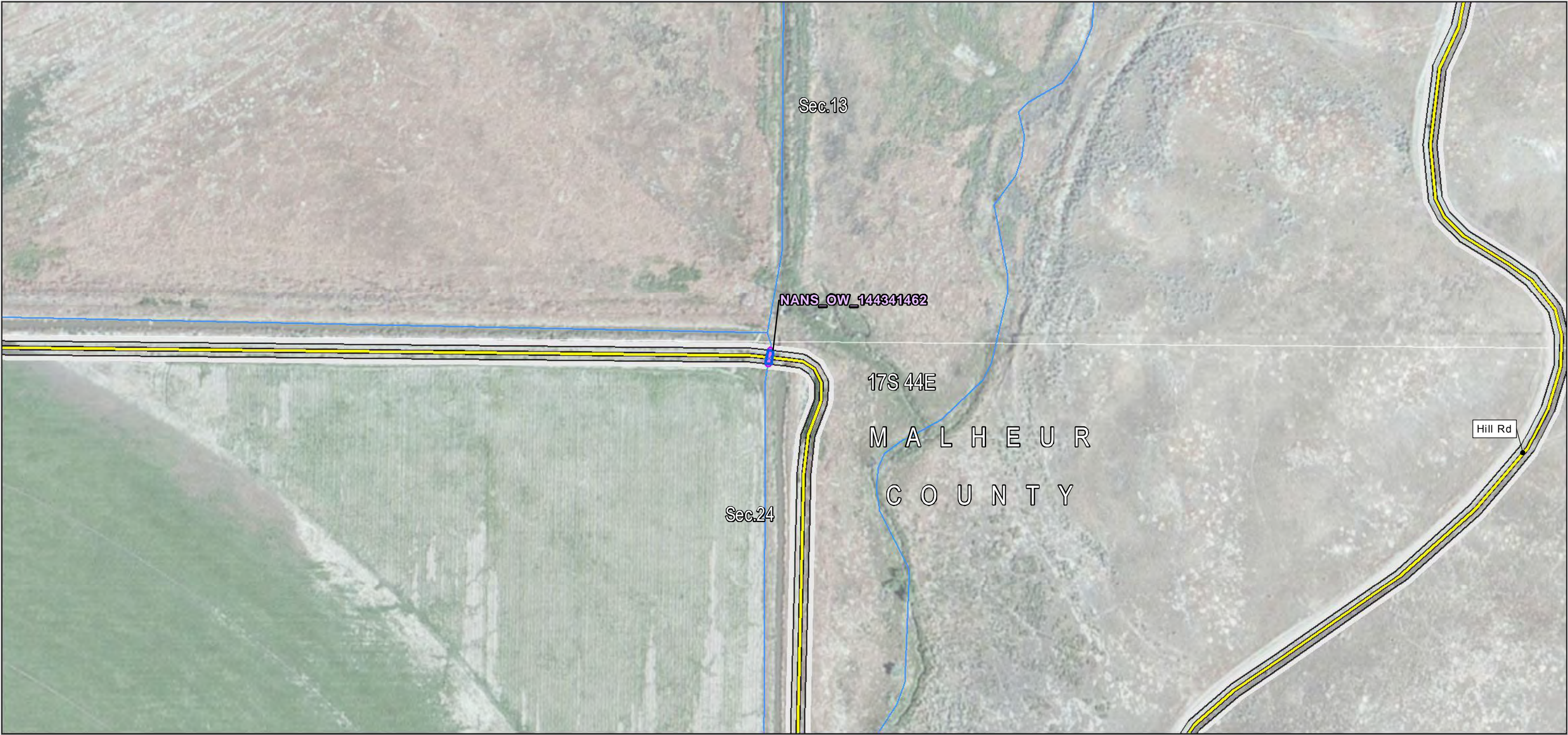
- Stream Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-331**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
    - Existing Road, No Substantial Modification, 0-20% Improvements
    - Rivers, Streams, and Canals
  - Other Waters**
    - NANS Streams (NHD)

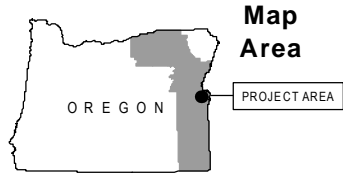
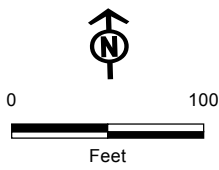
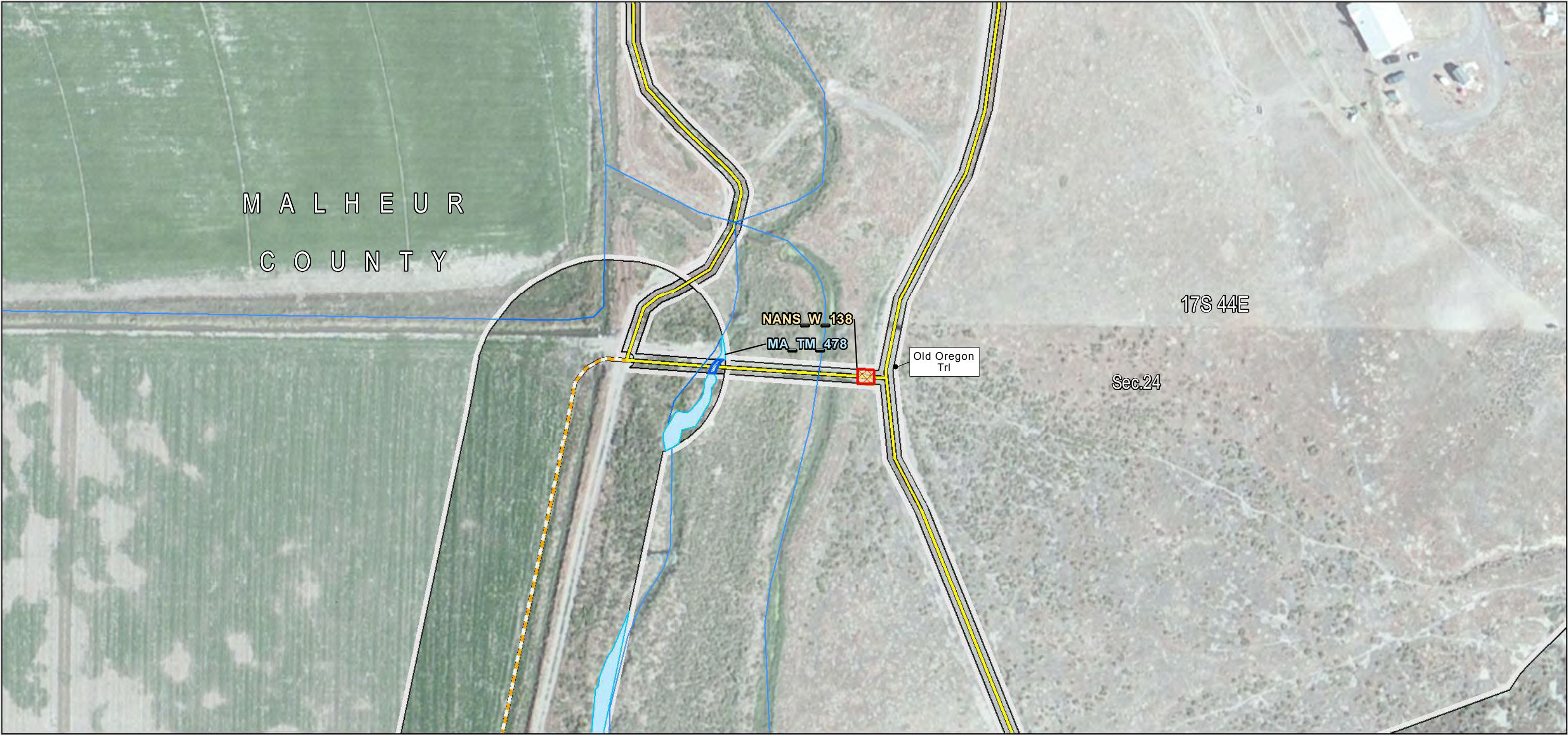
- Stream Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-332**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





**Project Features**

- Site Boundary
- Proposed Route
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- New Road, Primitive

- Rivers, Streams, and Canals
- Field Survey Streams
- Stream Impact Type
- Permanent

**Wetland**

- NANS Wetland (NWI)
- Wetland Impact Type
- Permanent

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

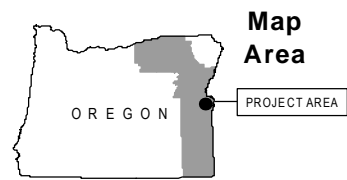
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-333**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Work Areas

Multi-Use Area

Construction Access

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

Rivers, Streams, and  
Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

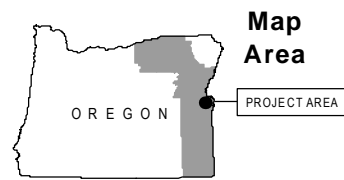
Temporary



Boardman to Hemingway  
Transmission Line Project

**Attachment K-334**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

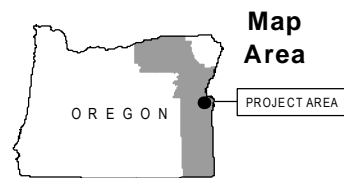
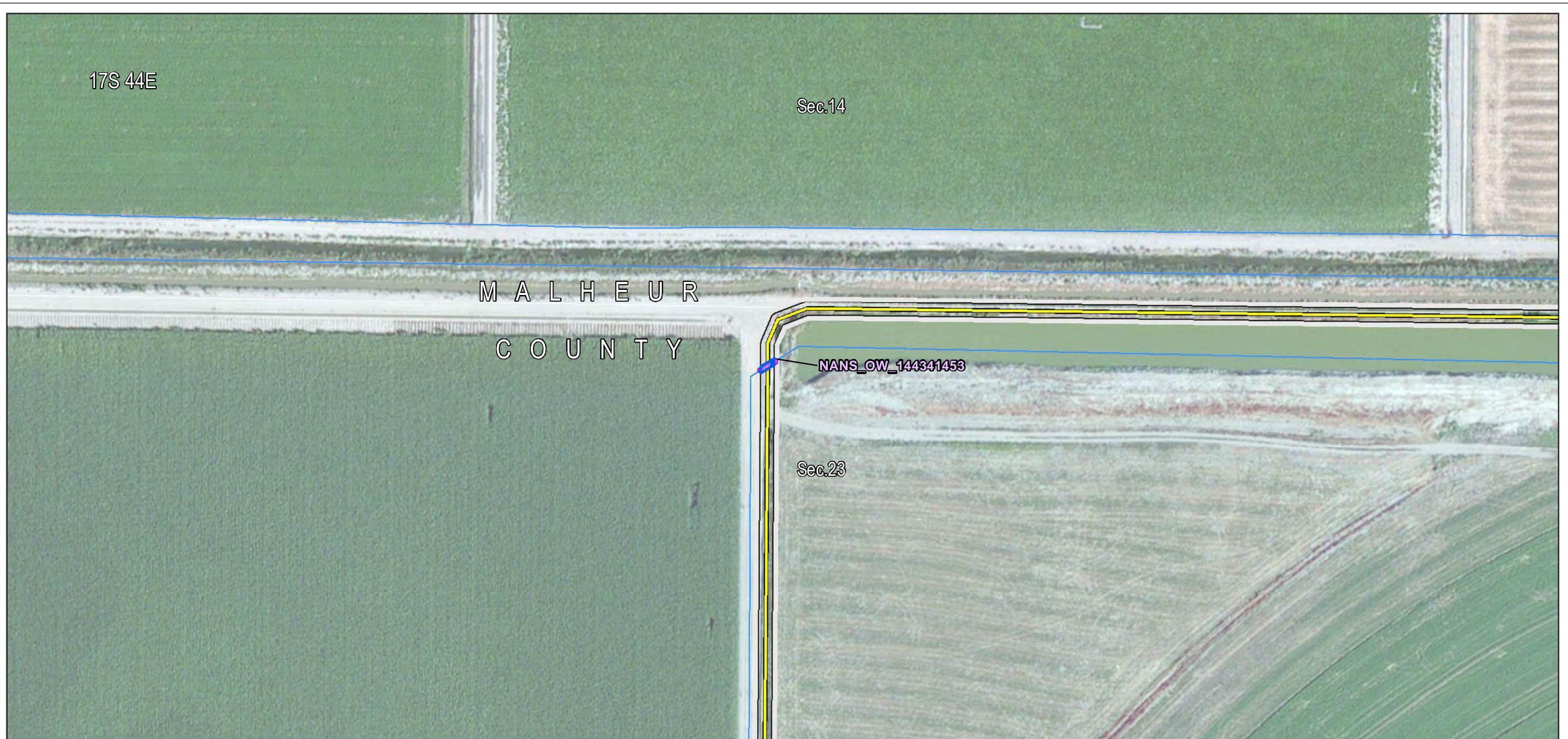
Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-335 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

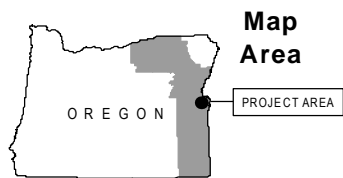
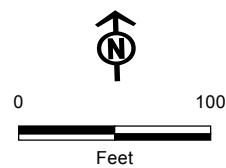
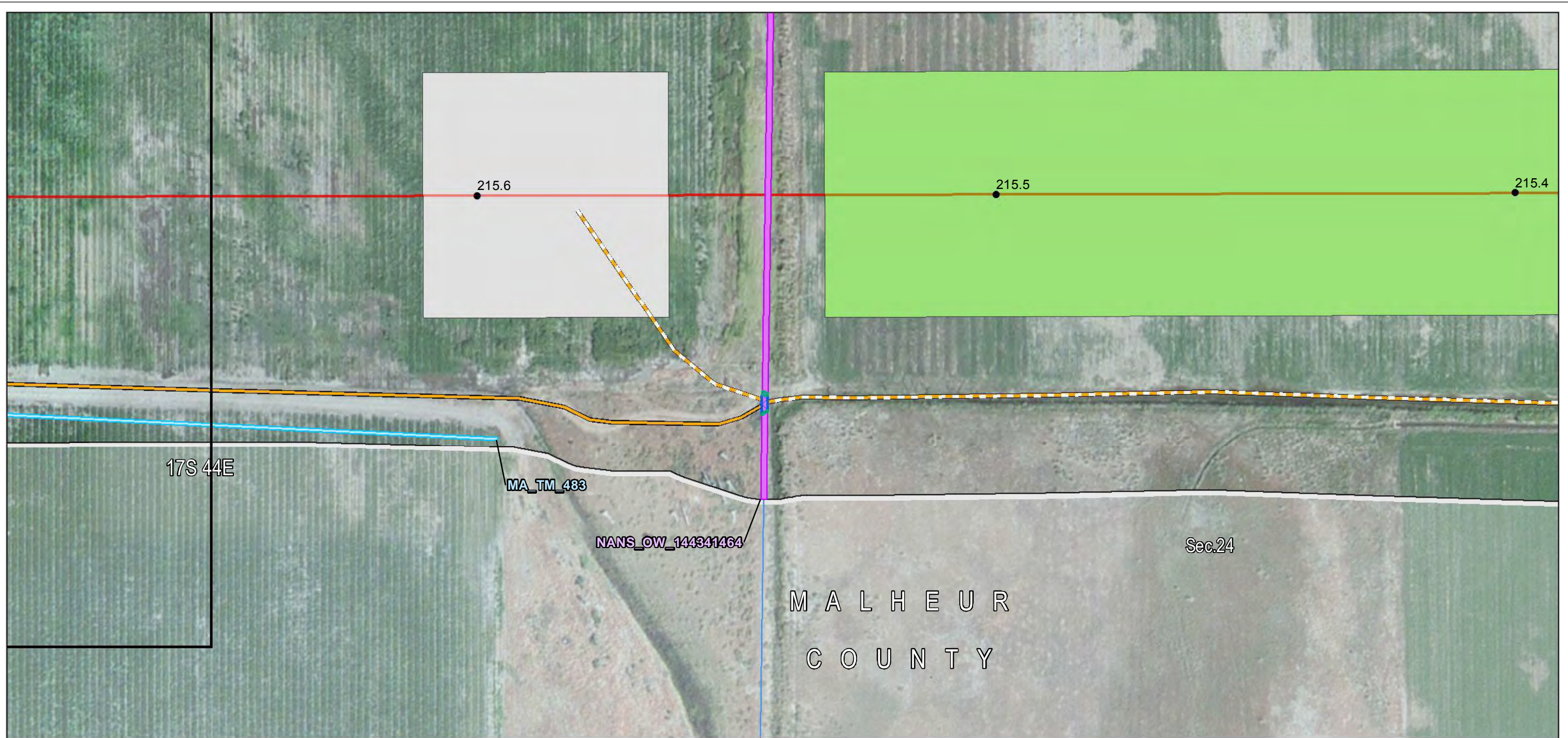
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-336**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





#### Project Features

Site Boundary

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial

Modification, 21-70%

Improvements

New Road, Primitive

Rivers, Streams, and Canals

Field Survey Streams

NANS Streams (NHD)

Stream Impact Type

Temporary

Permanent

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

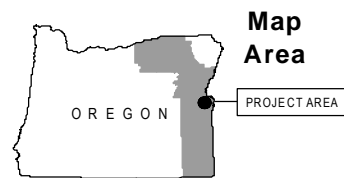
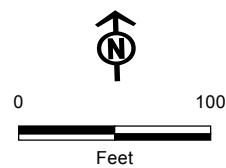
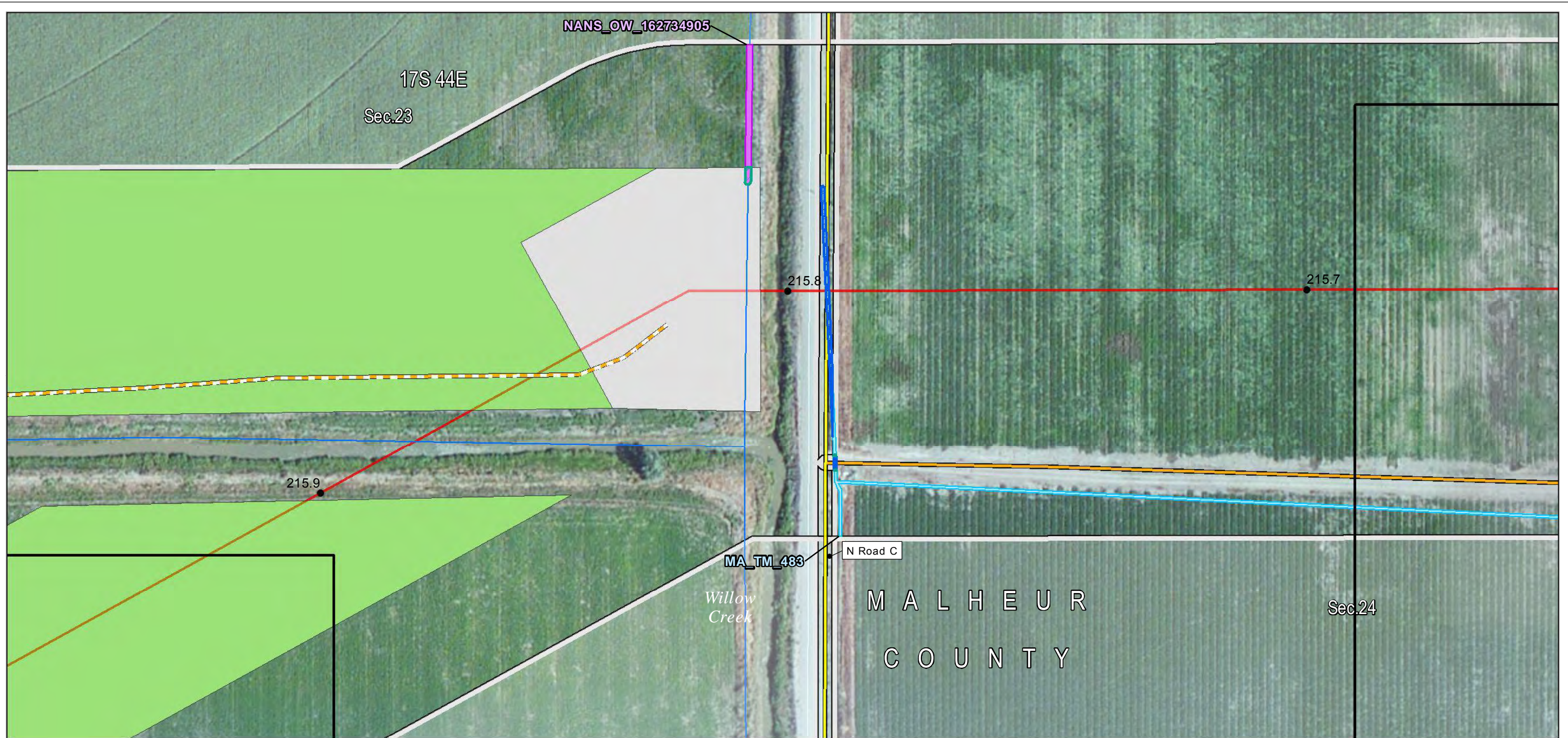
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-337**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Pulling and Tensioning

Structure Work Area

##### Mileposts

Tenth-mile

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Primitive

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

NANS Streams (NHD)

##### Stream Impact Type

Temporary

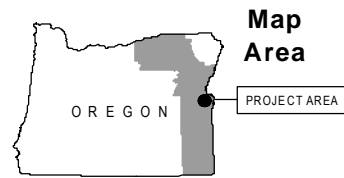
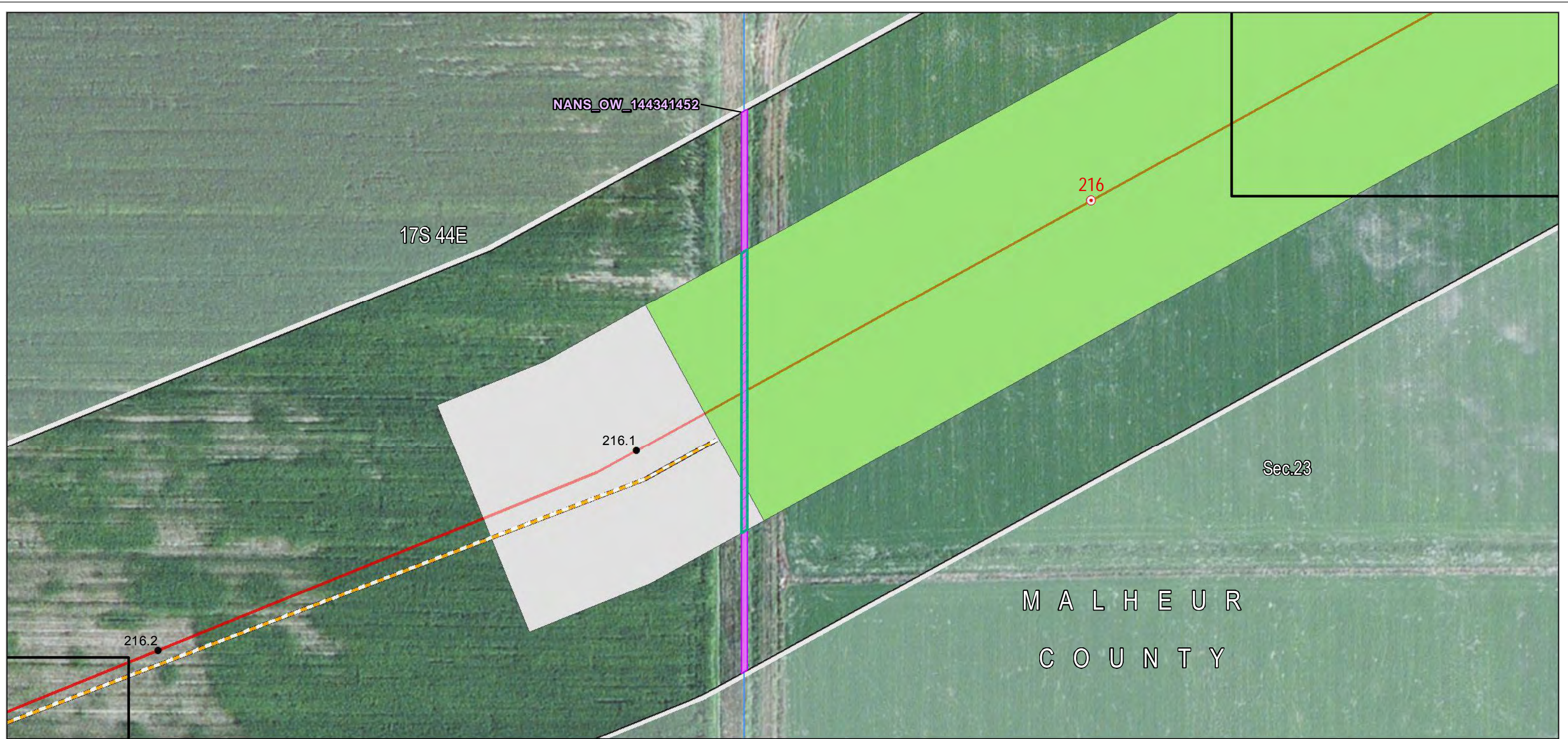
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-338**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

- Mileposts
- Mile
- Tenth-mile
- Construction Access
- New Road, Primitive
- Rivers, Streams, and Canals

#### Other Waters

- NANS Streams (NHD)
- Stream Impact Type
- Temporary

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

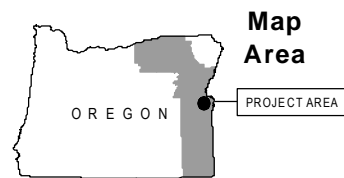
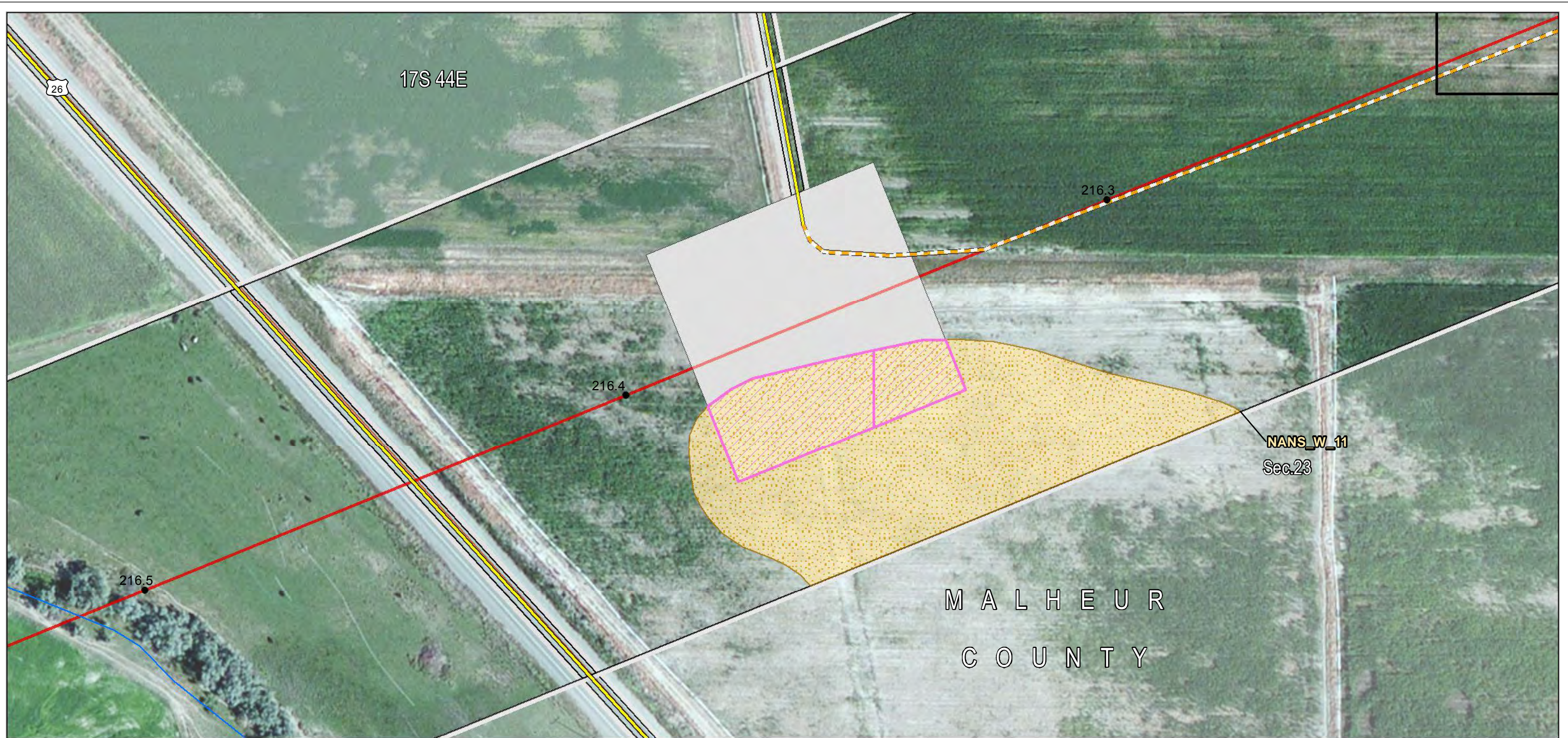
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-339**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Primitive

#### Transportation

Interstates or Highways

Rivers, Streams, and Canals

#### Wetland

NANS Wetland (NWI)

Wetland Impact Type

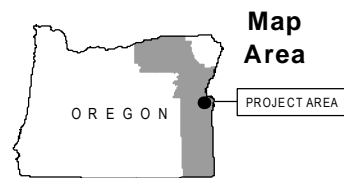
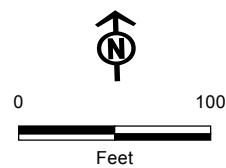
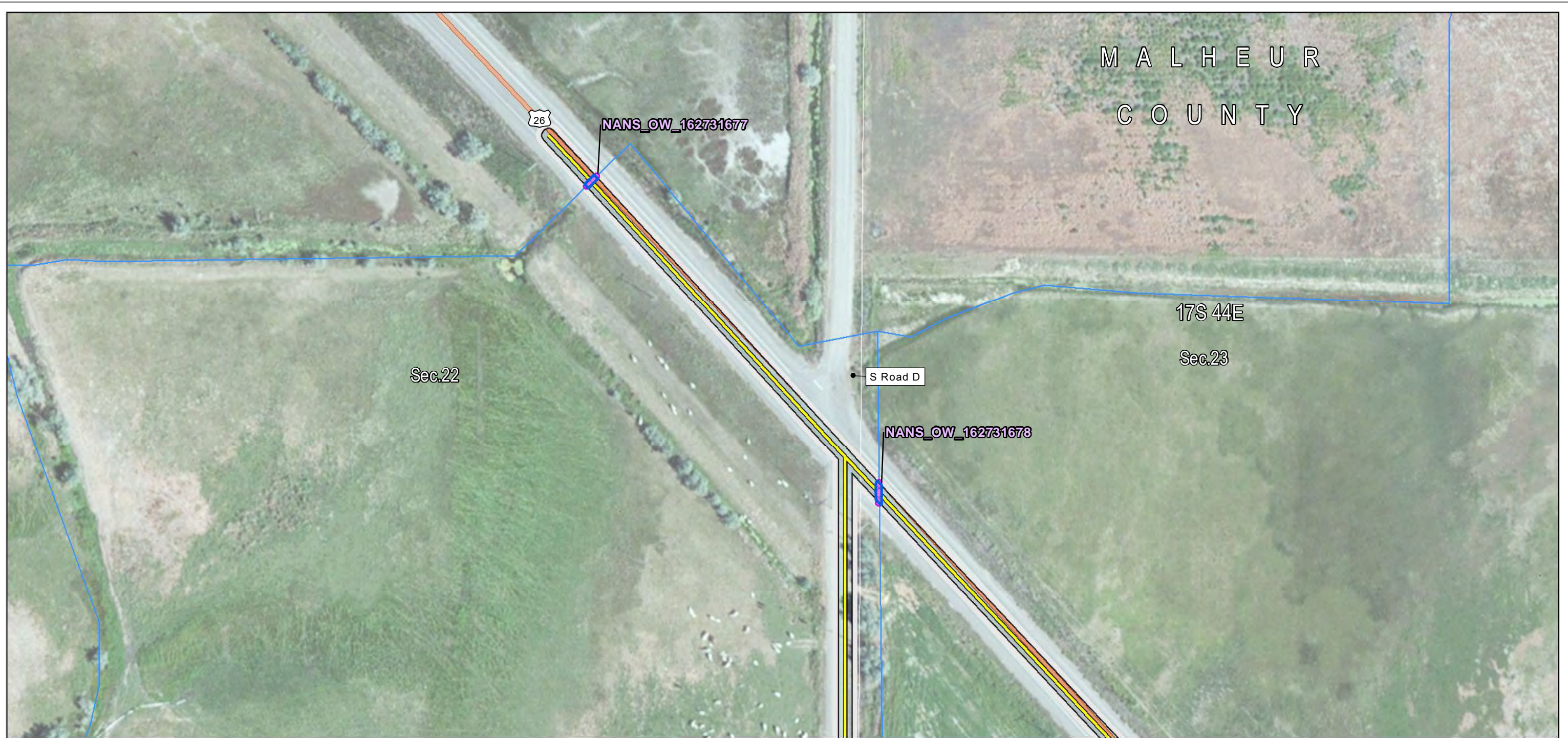
Temporary



Boardman to Hemingway  
Transmission Line Project

**Attachment K-340**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

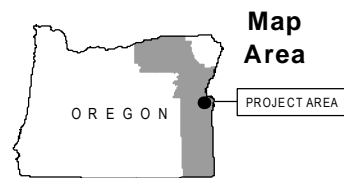
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-341**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

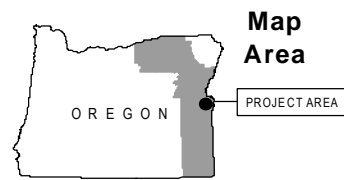
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-342**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

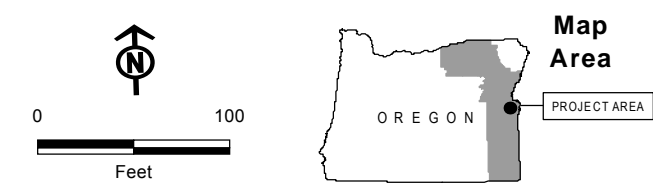
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-343**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

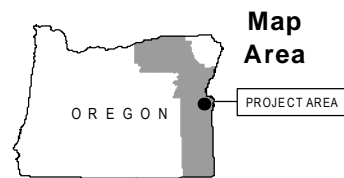
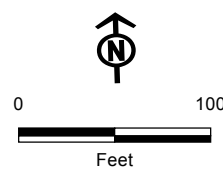
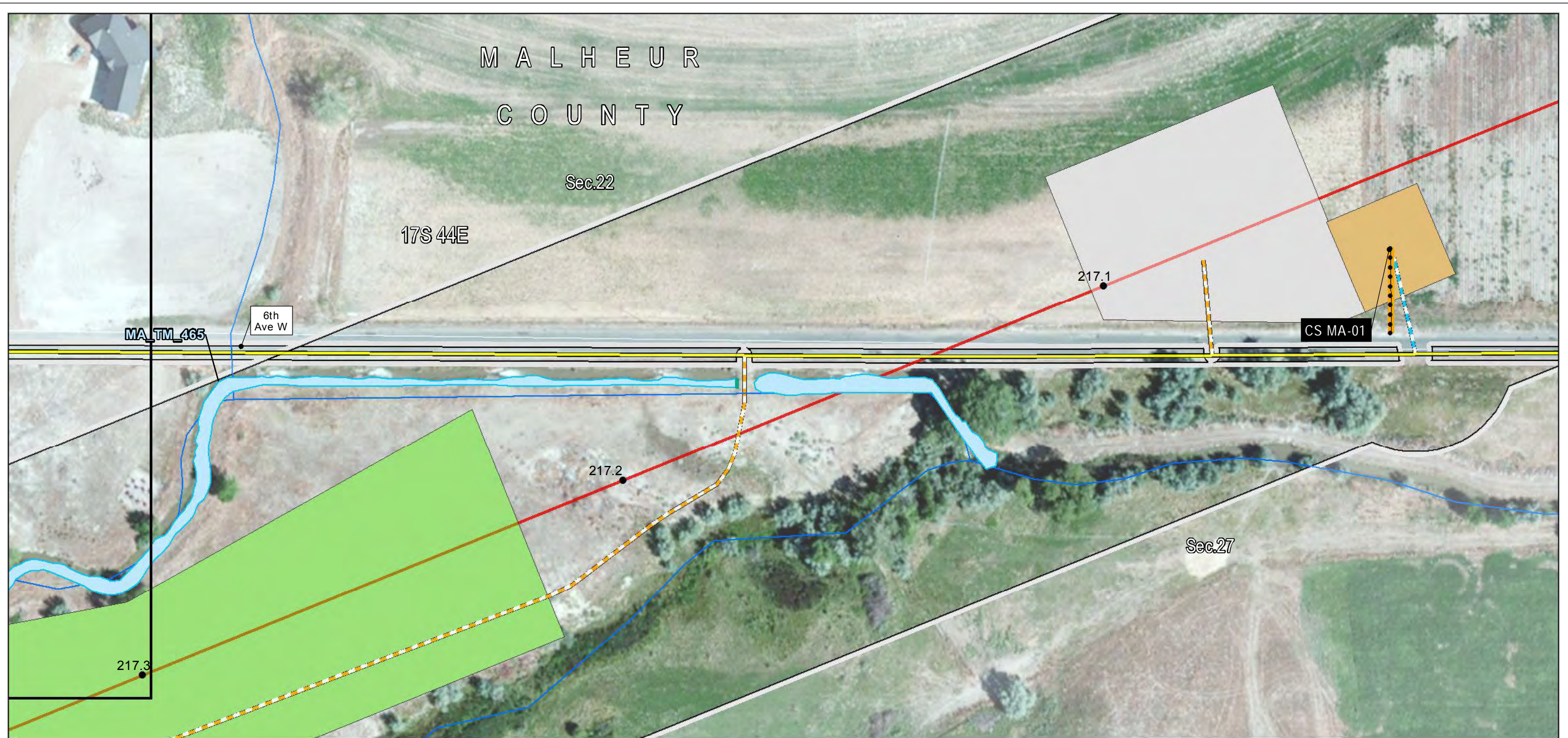
Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-344 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Communication Station
- Pulling and Tensioning

- Structure Work Area
- Distribution Line to Communication Station (IPC Service Territory Only)
- Mileposts
- Tenth-mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- New Road, Bladed
- New Road, Primitive
- Rivers, Streams, and Canals

- Other Waters
- Field Survey Streams
- Stream Impact Type
- Temporary

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

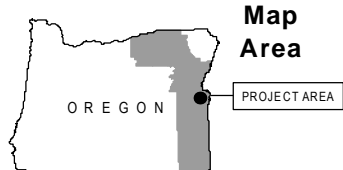
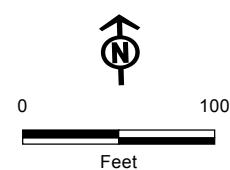
December 2016



Boardman to Hemingway  
Transmission Line Project

### Attachment K-345 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

**Mileposts**

- Tenth-mile
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Other Waters**

- Field Survey Streams
- NANS Streams (NHD)
- Stream Impact Type
- Permanent
- Wetland
- NANS Wetland (NWI)

**Wetland Impact Type**

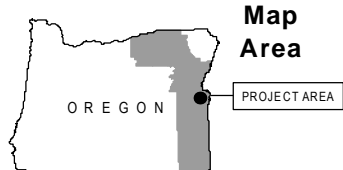
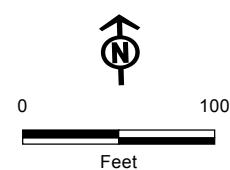
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-346**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

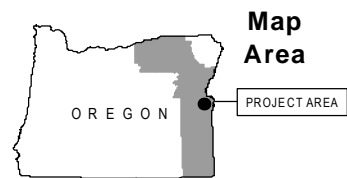
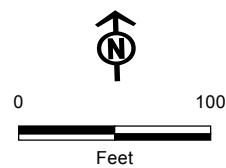
Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

- Stream Impact Type**
- Permanent
- Wetland**
- NANS Wetland (NWI)
- Wetland Impact Type**
- Permanent





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

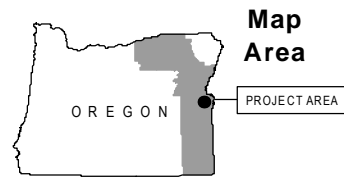
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-348**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

#### Mileposts

- Tenth-mile
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

#### Other Waters

- NANS Streams (NHD)
- Stream Impact Type
- Temporary

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

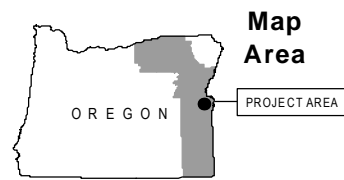
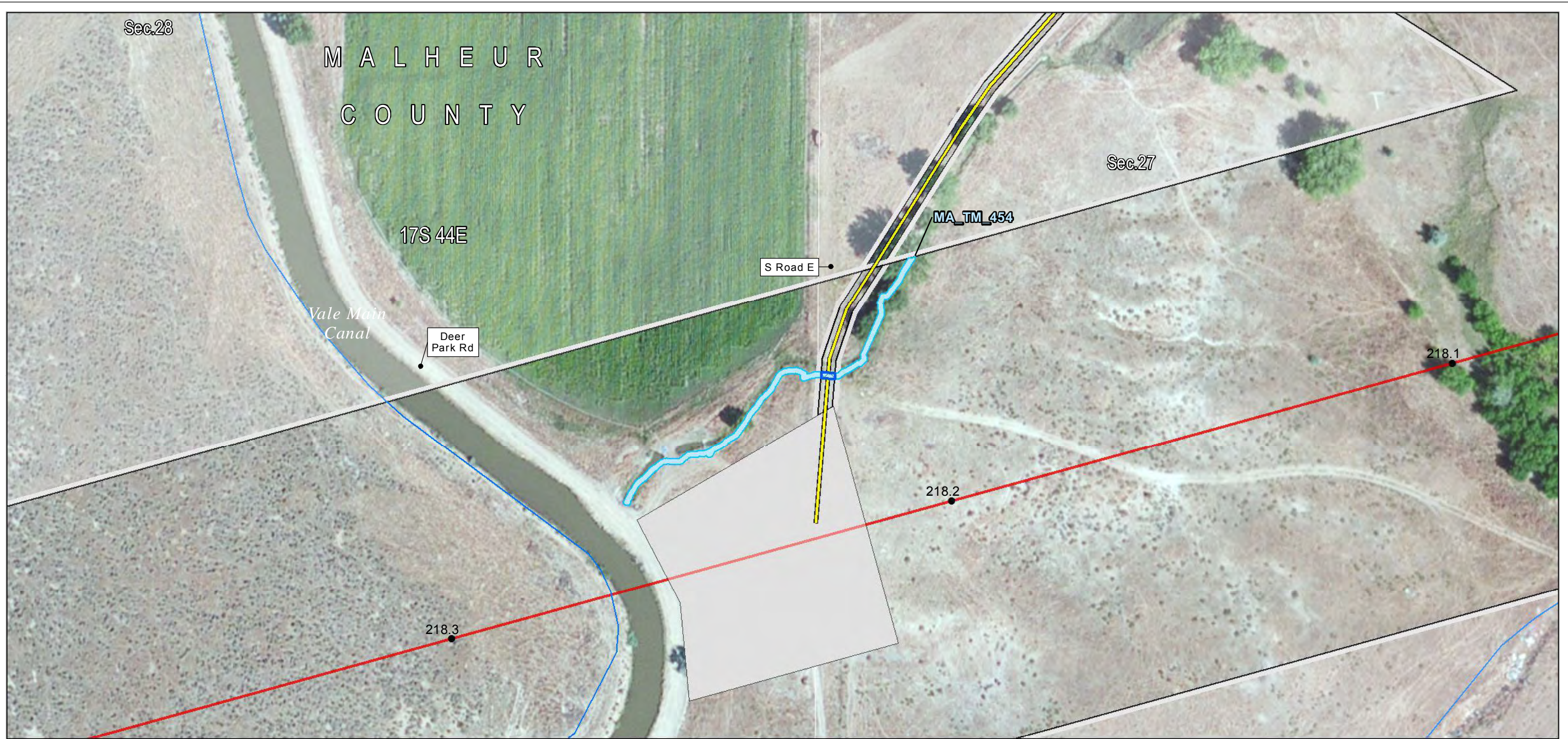
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-349**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

□ Proposed Route

— Route Centerline

— Proposed Route

##### Work Areas

□ Structure Work Area

##### Mileposts

● Tenth-mile

##### Construction Access

— Existing Road, No Substantial Modification, 0-20% Improvements

— Rivers, Streams, and Canals

##### Other Waters

□ Field Survey Streams

— Stream Impact Type

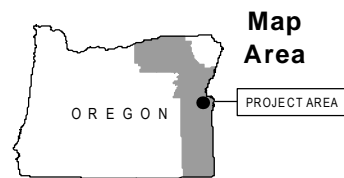
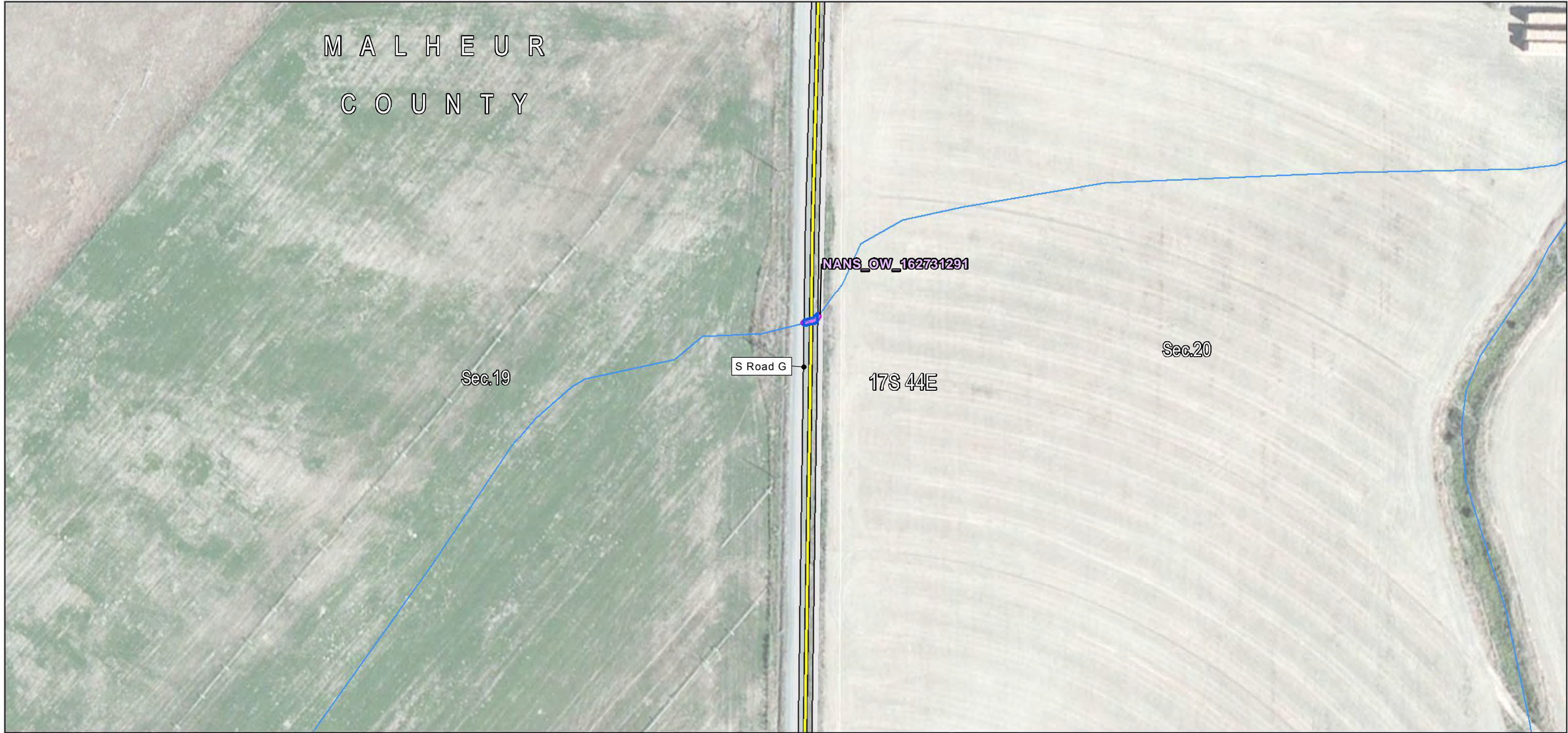
□ Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-350**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

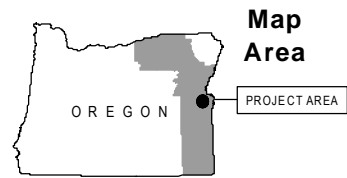
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-351**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

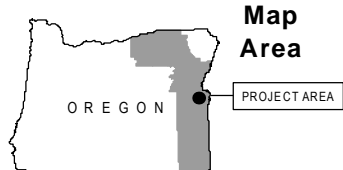
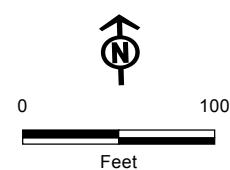
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-352**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**

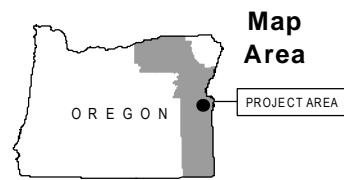




- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

- Stream Impact Type**
- Permanent





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

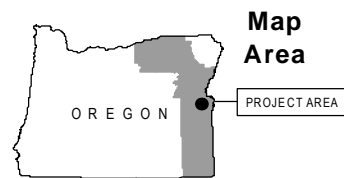
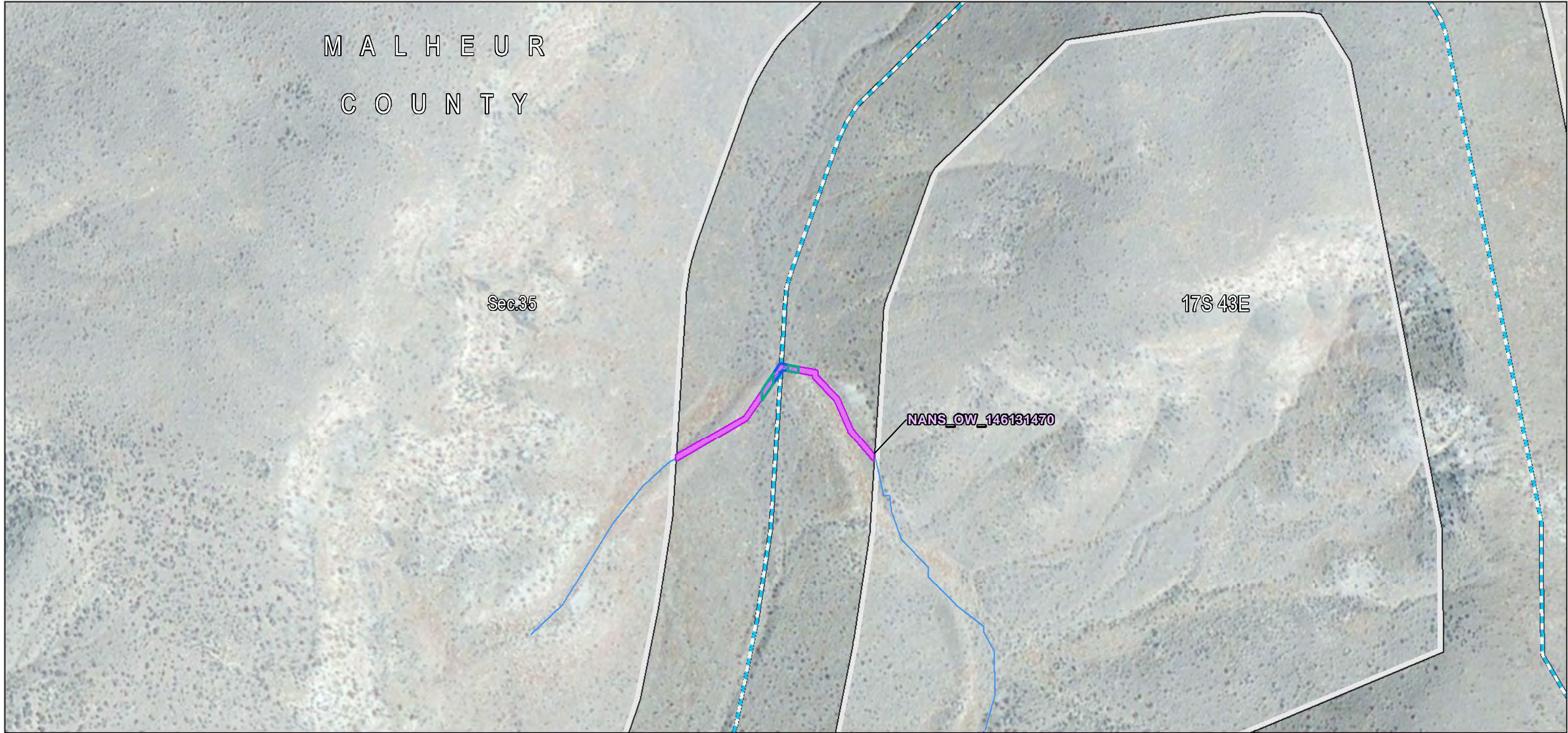
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-354**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

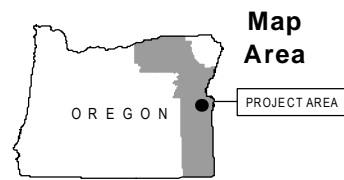
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-355**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

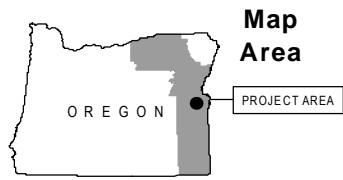
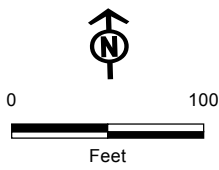
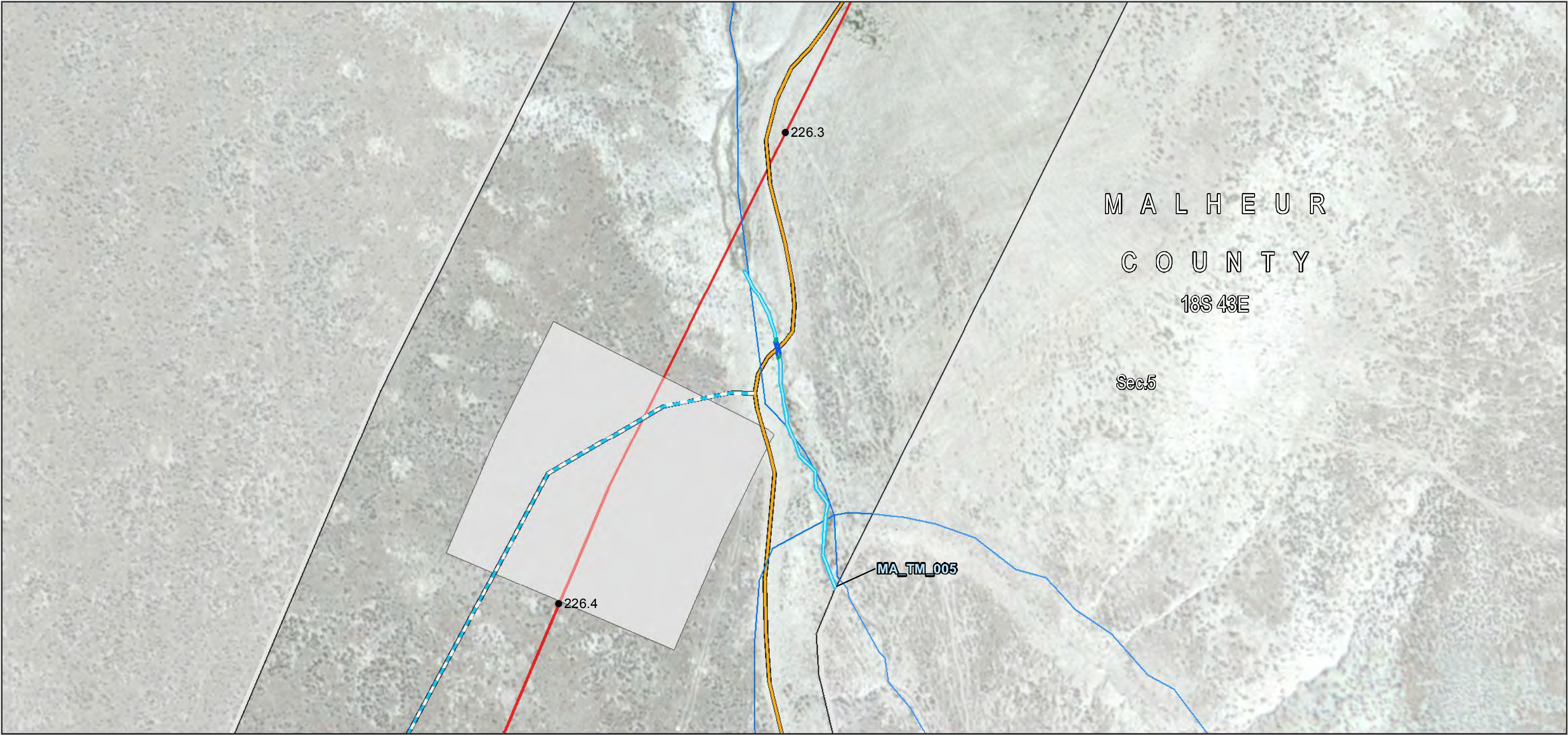
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-356**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Site Boundary**

Proposed Route

Route Centerline

Proposed Route

**Work Areas**

Structure Work Area

**Mileposts**

Tenth-mile

**Construction Access**

Existing Road, Substantial

Modification, 21-70%

Improvements

New Road, Bladed

Rivers, Streams, and

Canals

**Other Waters**

Field Survey Streams

**Stream Impact Type**

Temporary

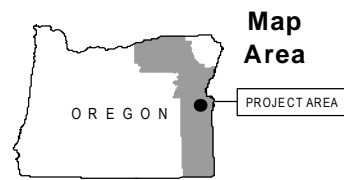
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-357**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

**Other Waters**

NANS Streams (NHD)

Stream Impact Type

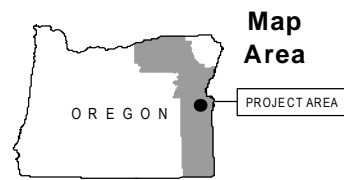
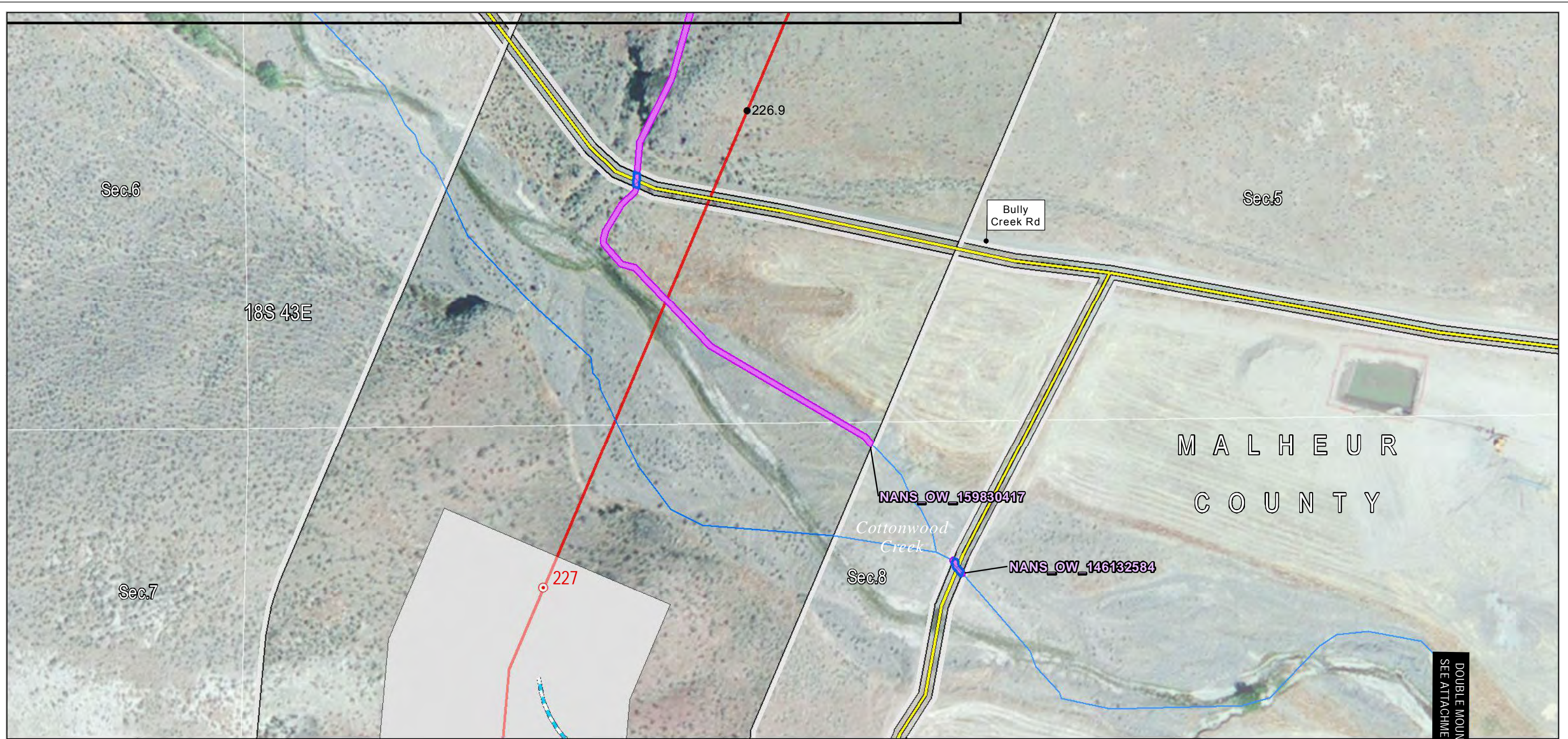
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-358**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Structure Work Area

##### Mileposts

Mile

Tenth-mile

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

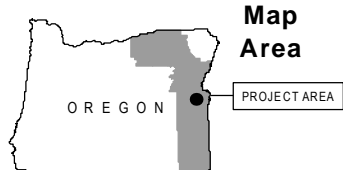
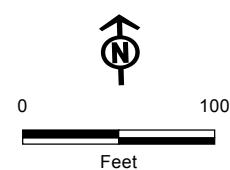
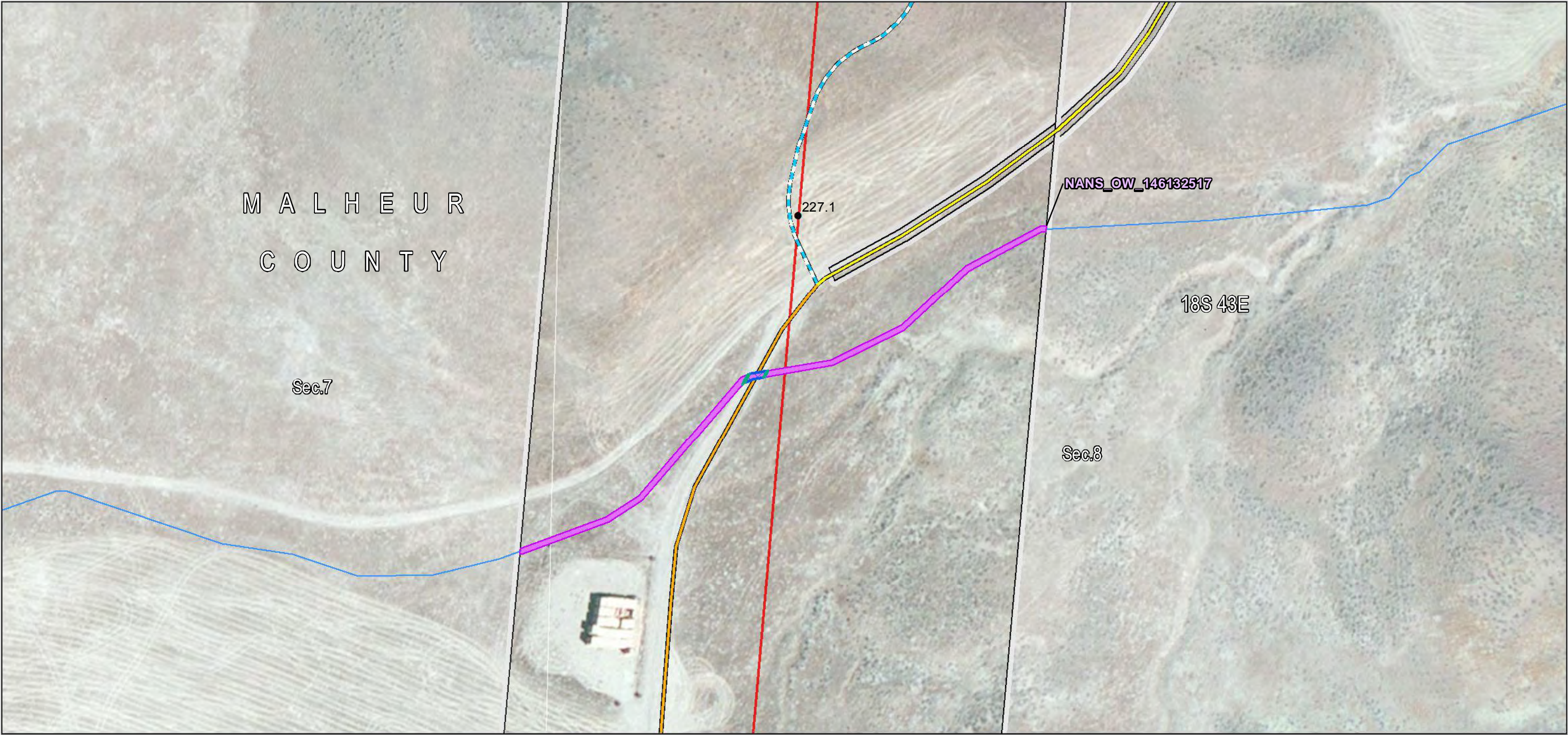
Permanent



Boardman to Hemingway Transmission Line Project

## Attachment K-359 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- |                         |                                                                |                             |
|-------------------------|----------------------------------------------------------------|-----------------------------|
| <b>Project Features</b> | <b>Construction Access</b>                                     | <b>Other Waters</b>         |
| Site Boundary           | Existing Road, No Substantial Modification, 0-20% Improvements | Rivers, Streams, and Canals |
| Proposed Route          | Existing Road, Substantial Modification, 21-70% Improvements   | NANS Streams (NHD)          |
| Route Centerline        | New Road, Bladed                                               | Stream Impact Type          |
| Proposed Route          |                                                                | Temporary                   |
| Mileposts               |                                                                | Permanent                   |
| Tenth-mile              |                                                                |                             |





**Project Features**

**Construction Access**

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

**Other Waters**

NANS Streams (NHD)

**Stream Impact Type**

Permanent



Boardman to Hemingway  
Transmission Line Project

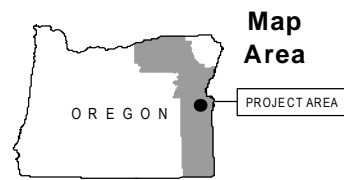
**Attachment K-361**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

##### Wetland

- NANS Wetland (NWI)

##### Wetland Impact Type

- Permanent

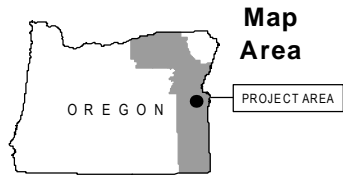
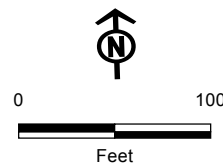


Boardman to Hemingway  
Transmission Line Project

**Attachment K-362**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**



M A L H E U R  
C O U N T Y



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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

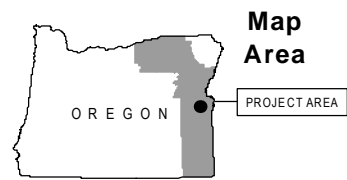
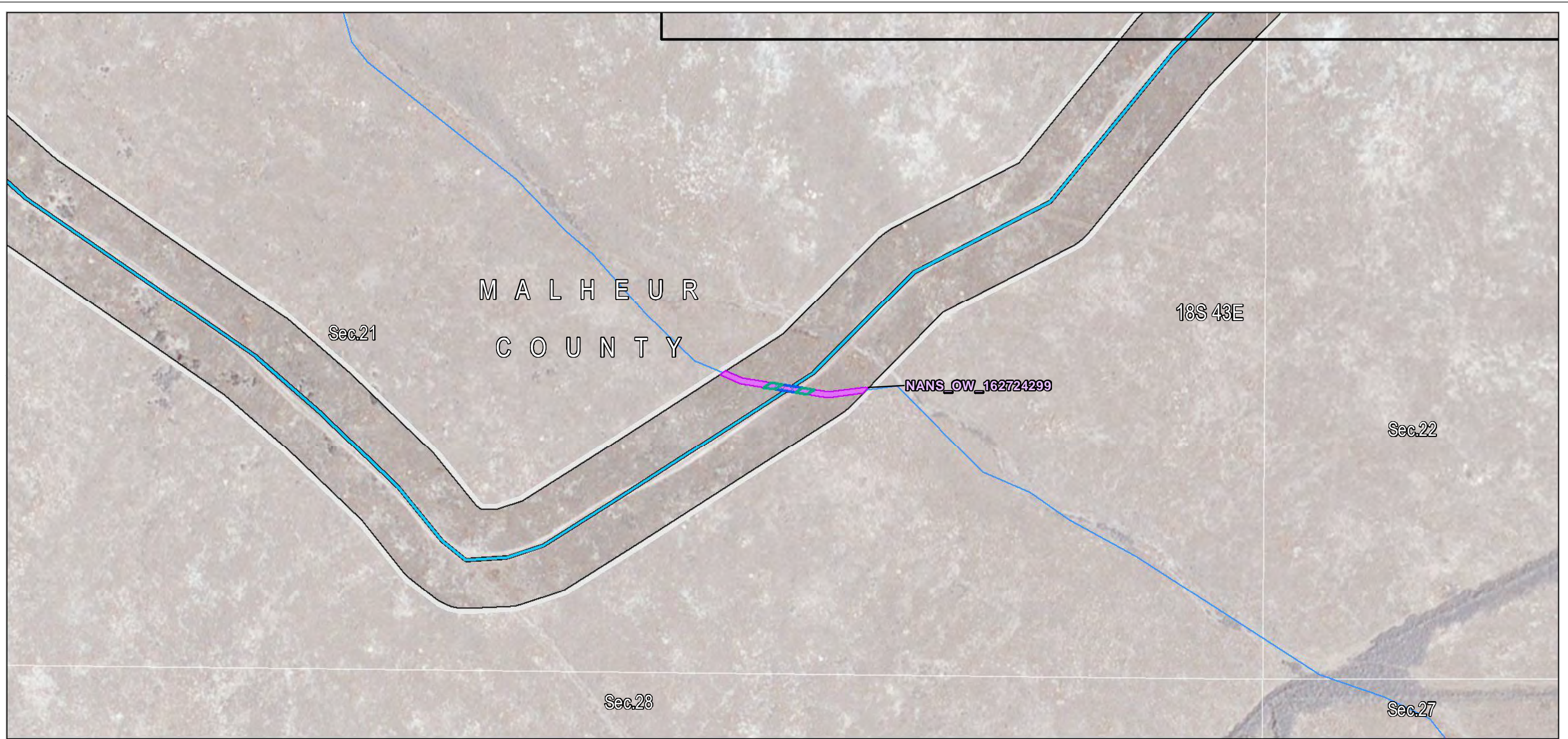
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-363**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

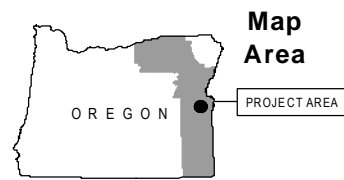
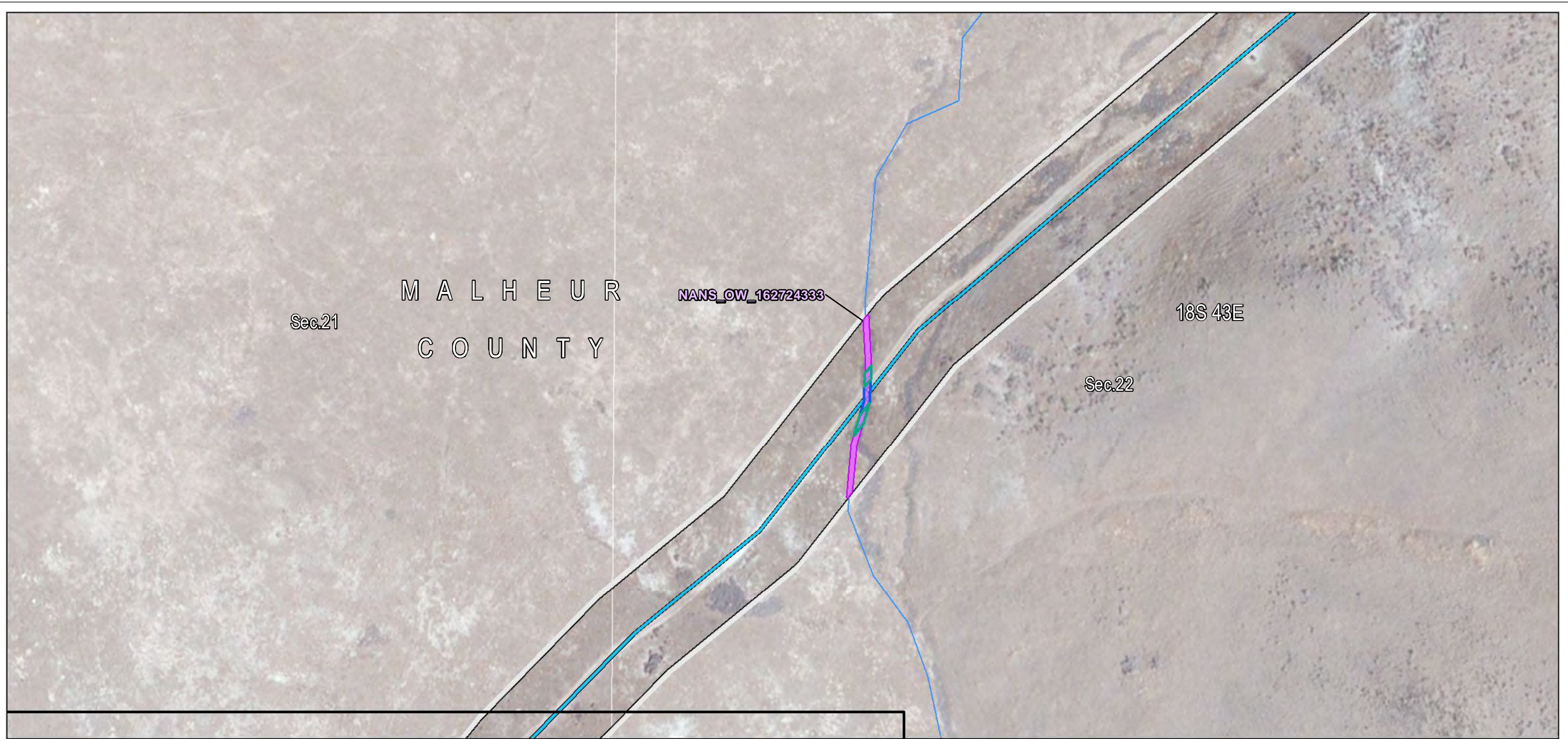
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-364**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

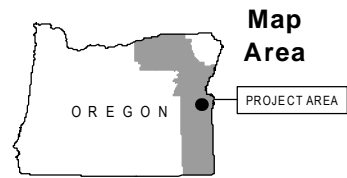
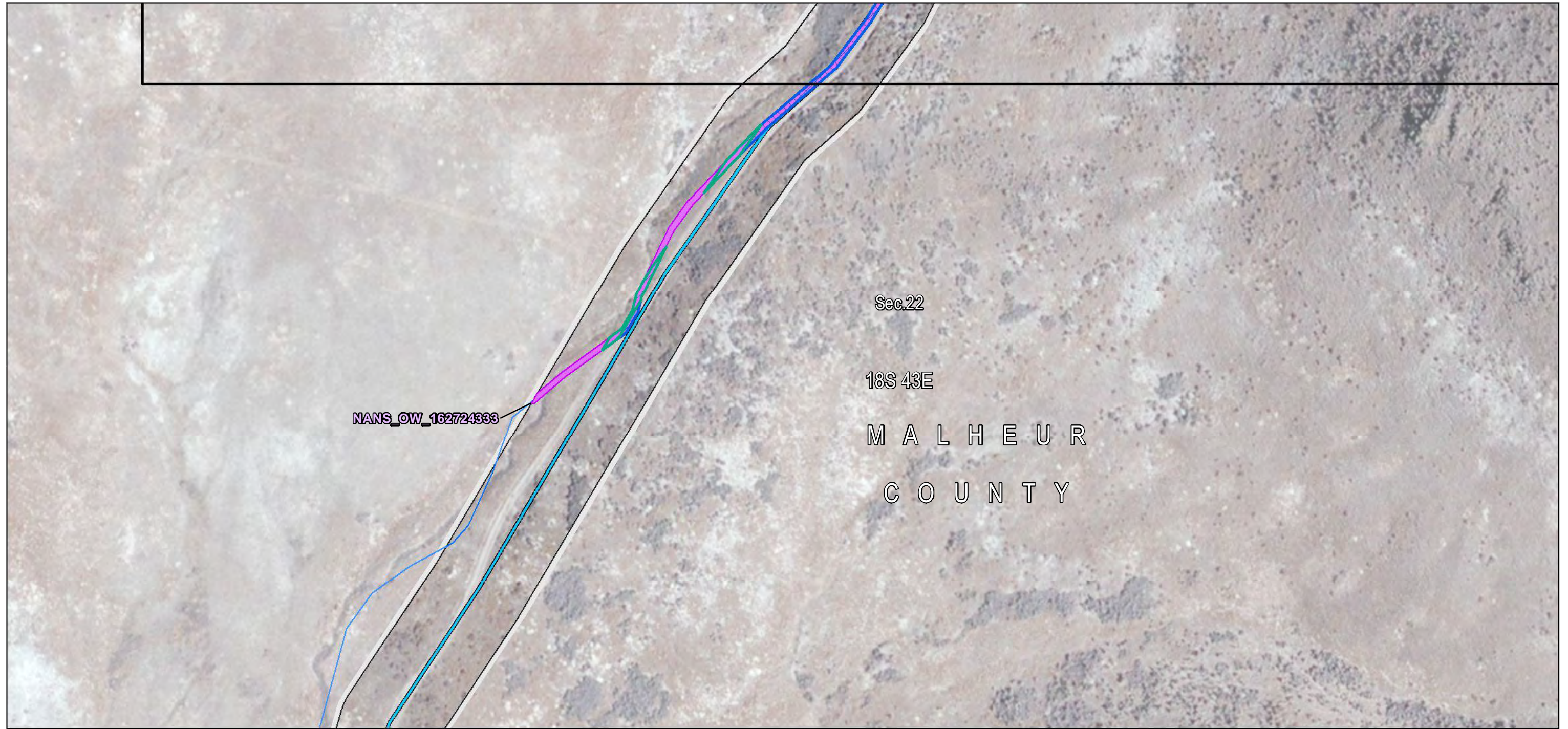
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-365**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-366**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

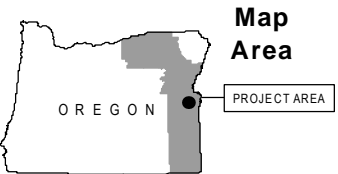
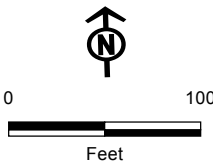


M A L H E U R  
C O U N T Y

NANS\_OW\_162724333

Sec.22

18S 43E



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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial  
Modification, 71-100%  
Improvements

Rivers, Streams, and  
Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

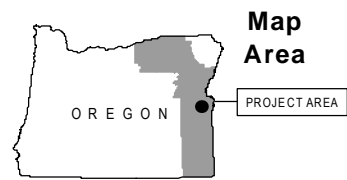
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-367**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

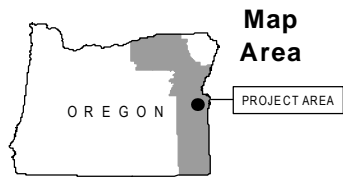
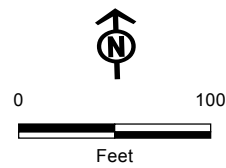
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-368**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

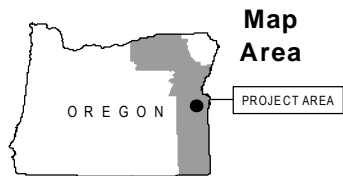
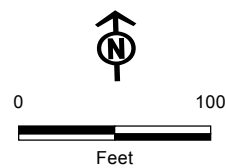
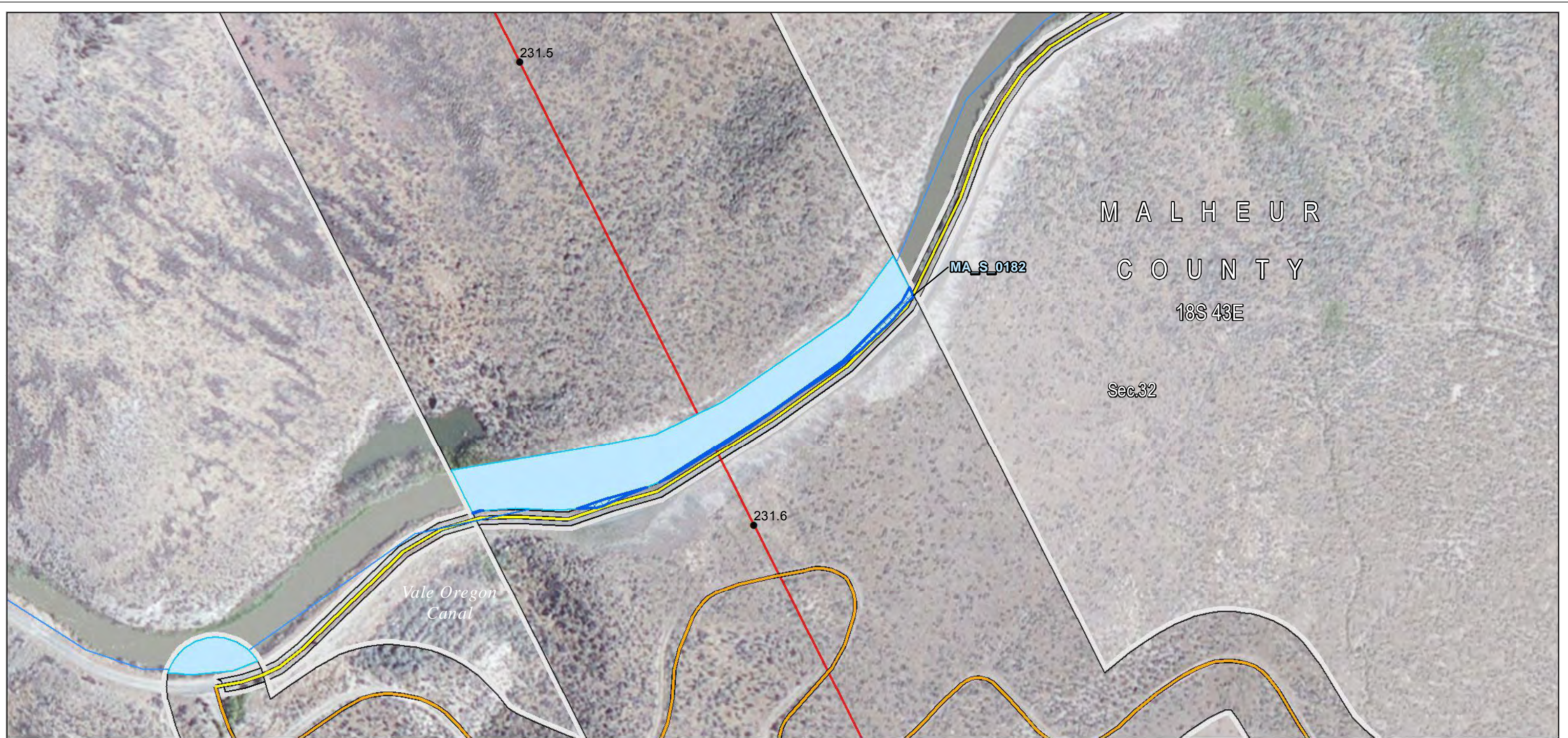
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-369**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Mileposts
- Tenth-mile

- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Existing Road, Substantial Modification, 21-70% Improvements
- Rivers, Streams, and Canals

#### Other Waters

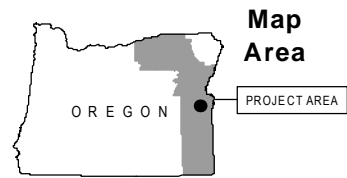
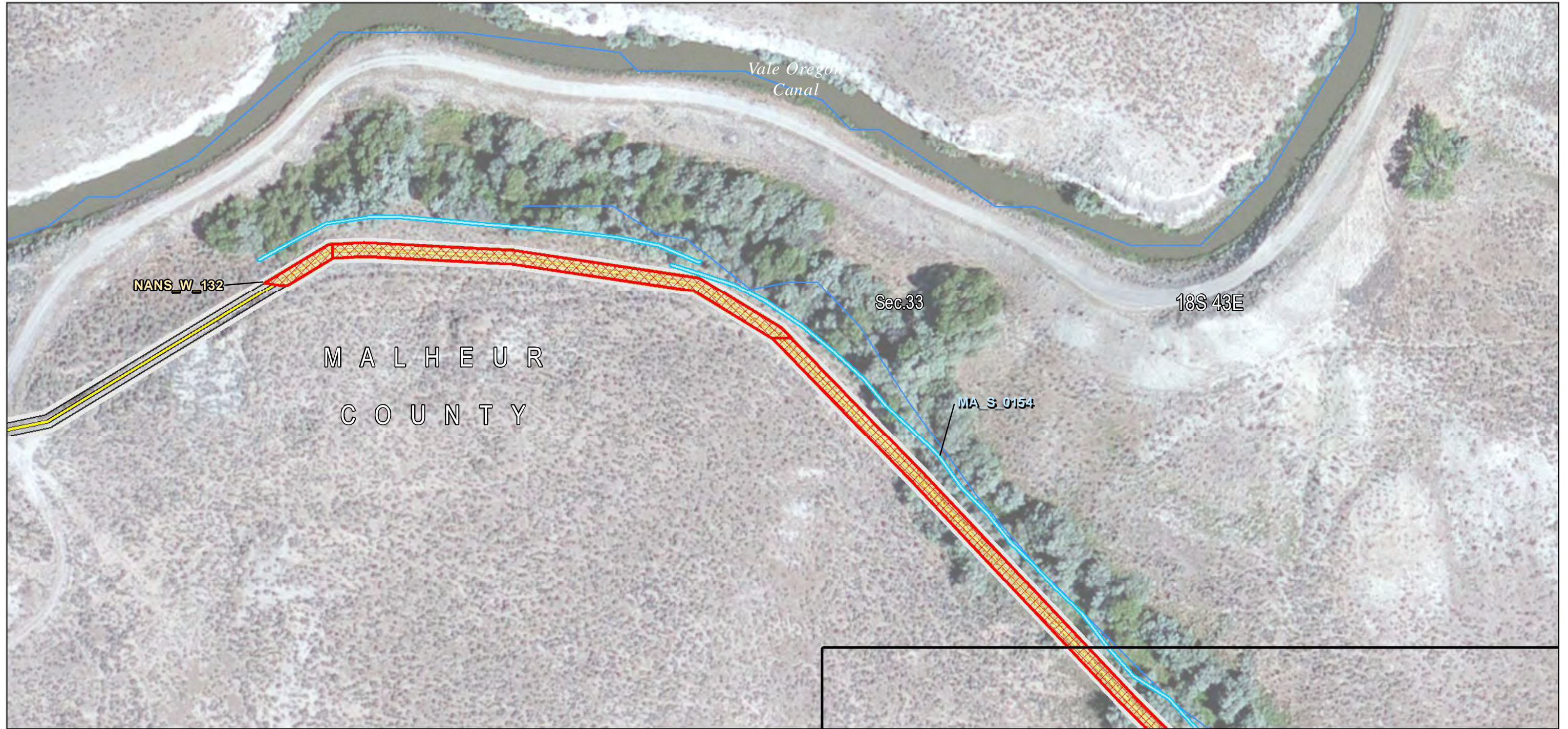
- Field Survey Streams
- Stream Impact Type
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-370**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

##### Other Waters

- Field Survey Streams

#### Wetland

- NANS Wetland (NWI)

##### Wetland Impact Type

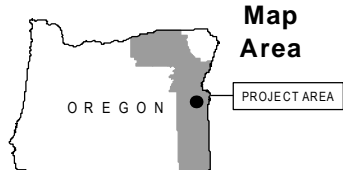
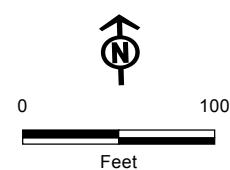
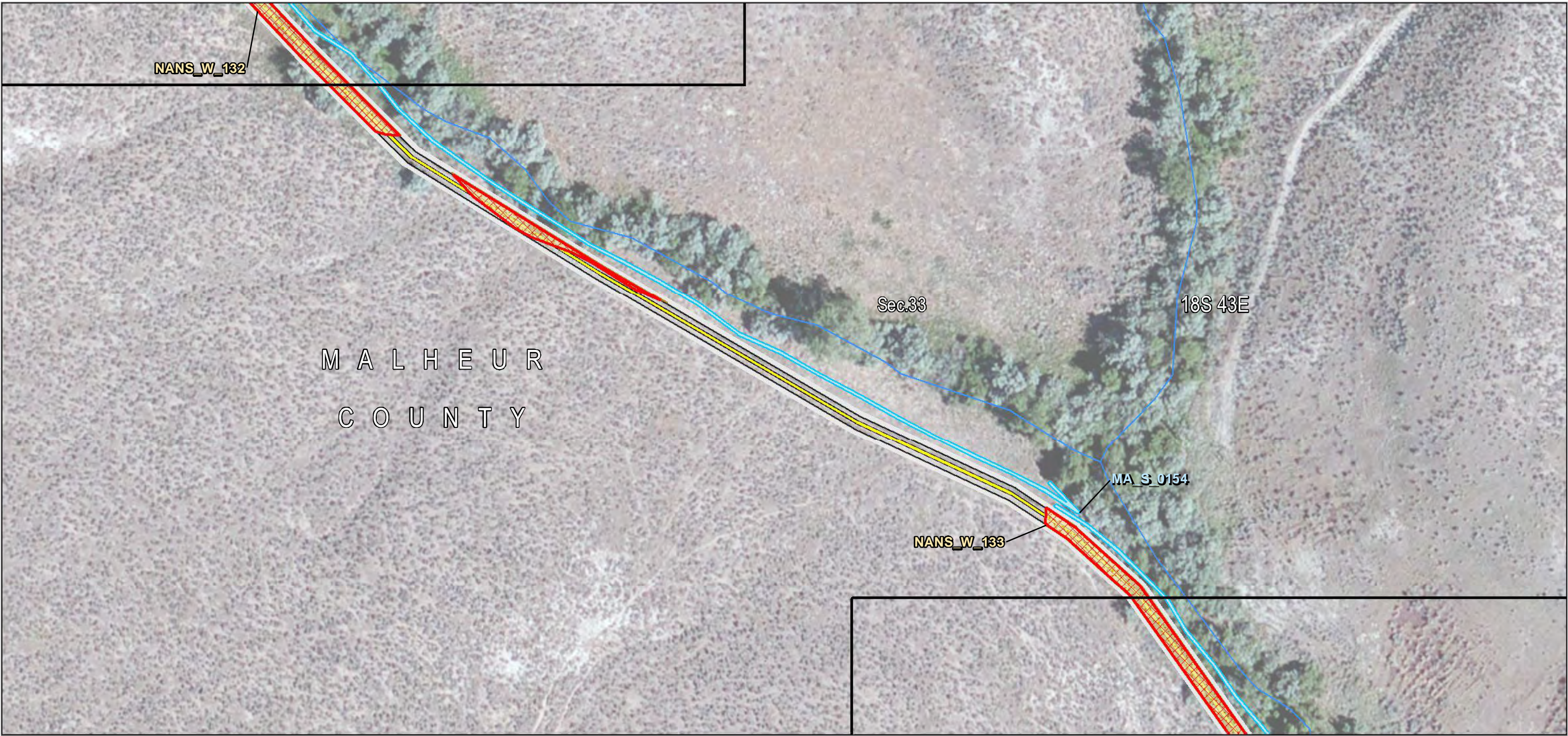
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-371**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- Field Survey Streams

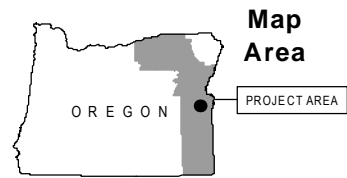
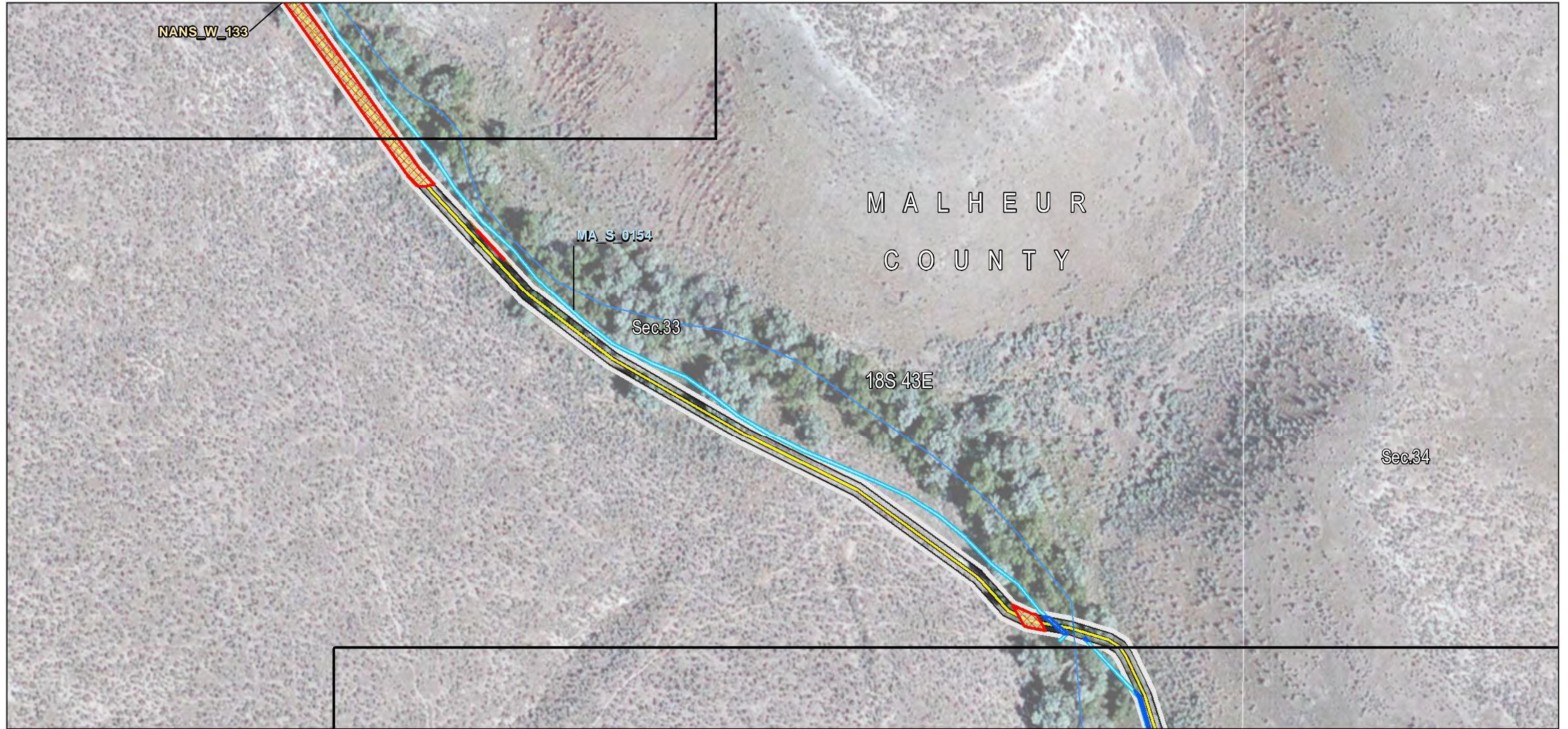
- Wetland**
- NANS Wetland (NWI)
- Wetland Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-372**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

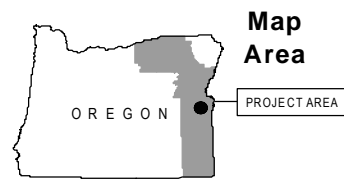
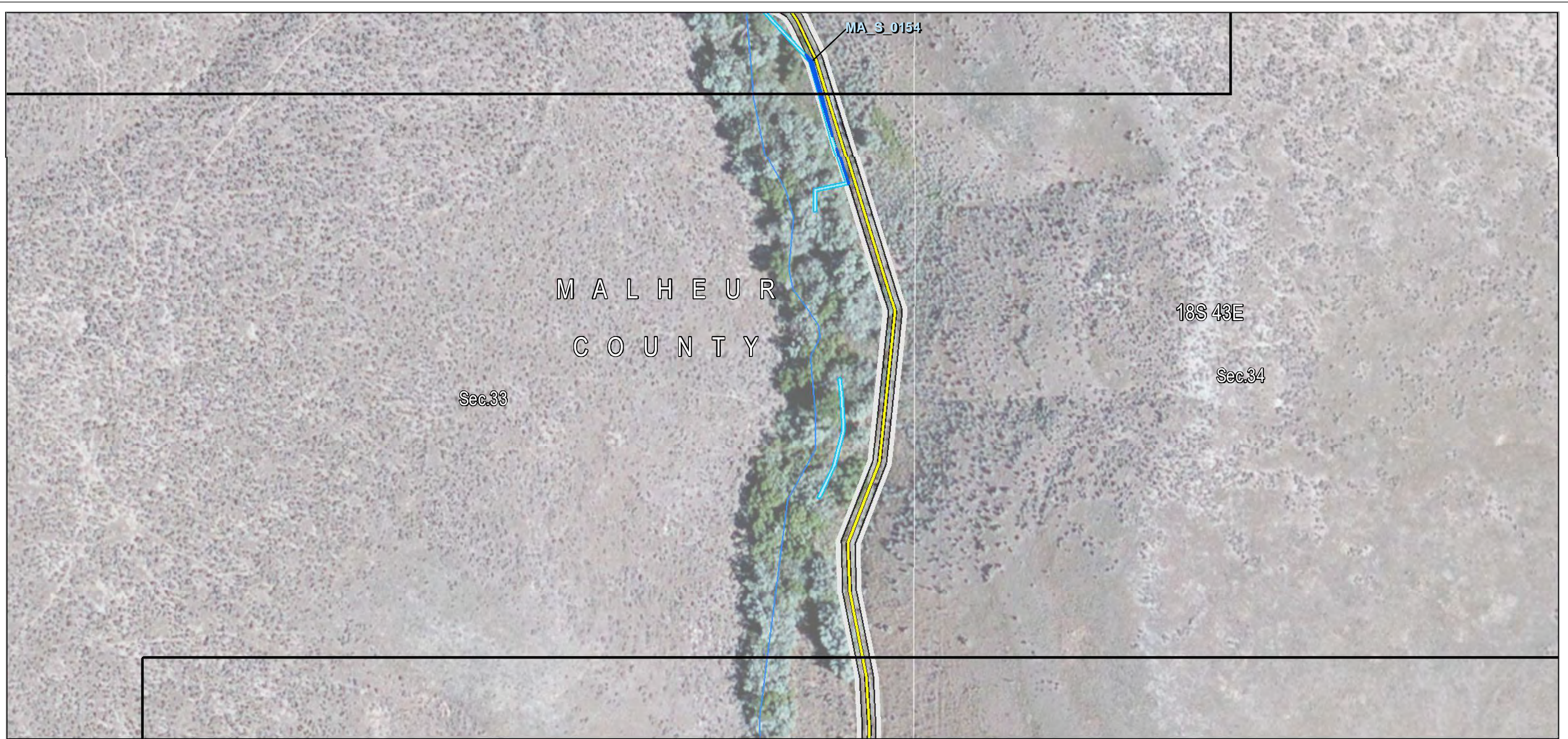
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-373**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
 Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

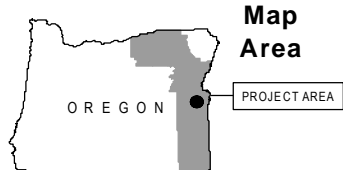
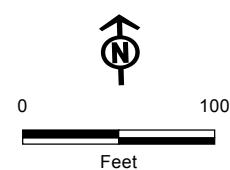
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-374**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Other Waters**

- Field Survey Streams

**Stream Impact Type**

- Permanent

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

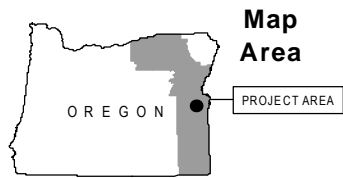
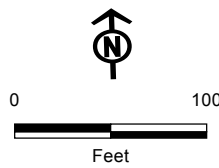
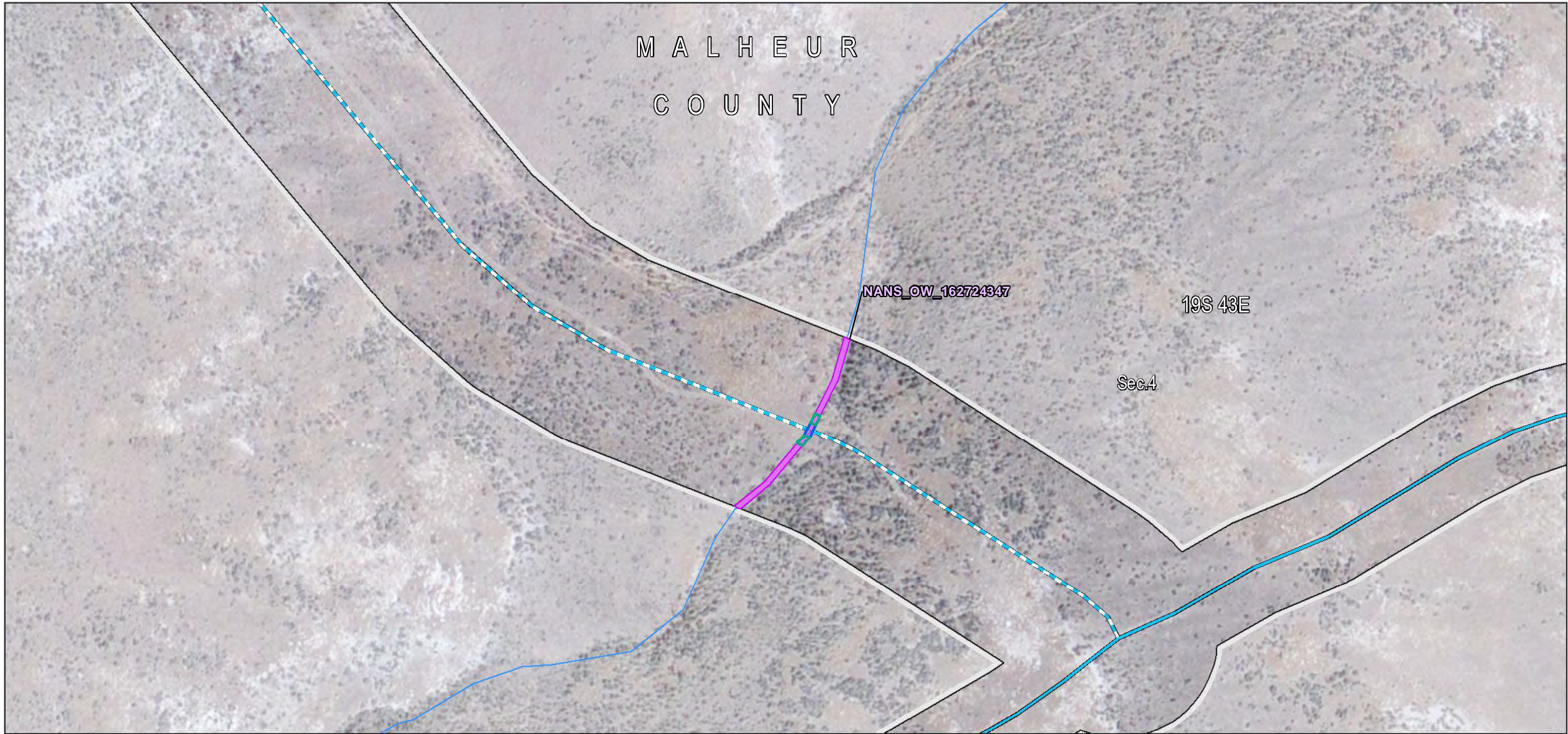
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-375  
Wetland and Other Waters  
Joint Permit Application  
Detail Maps  
Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

New Road, Bladed

Rivers, Streams, and Canals

**Other Waters**

NANS Streams (NHD)

Stream Impact Type

Temporary

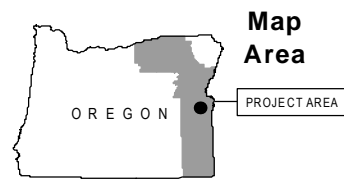
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-376**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

Field Survey Streams

Stream Impact Type

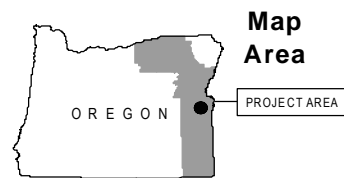
Temporary



Boardman to Hemingway Transmission Line Project

**Attachment K-377**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
 Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

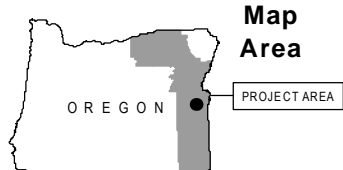
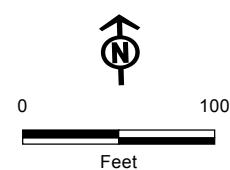
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-378**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Transportation**
- Interstates or Highways
  - Rivers, Streams, and Canals

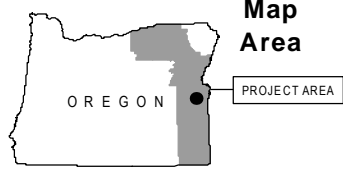
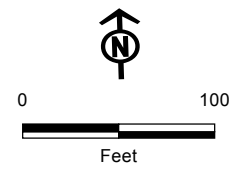
- Other Waters**
- NANS Streams (NHD)
- Stream Impact Type
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-379**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

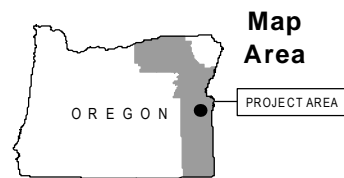




- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Transportation**
- Interstates or Highways
  - Rivers, Streams, and Canals

- Other Waters**
- NANS Streams (NHD)
- Stream Impact Type**
- Permanent





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

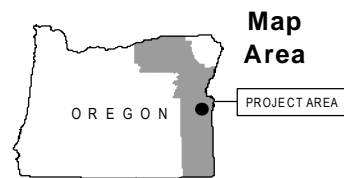
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-381**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

##### Transportation

Interstates or Highways  
Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

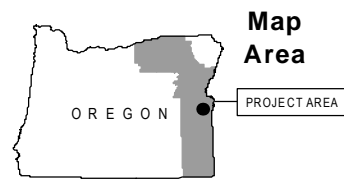
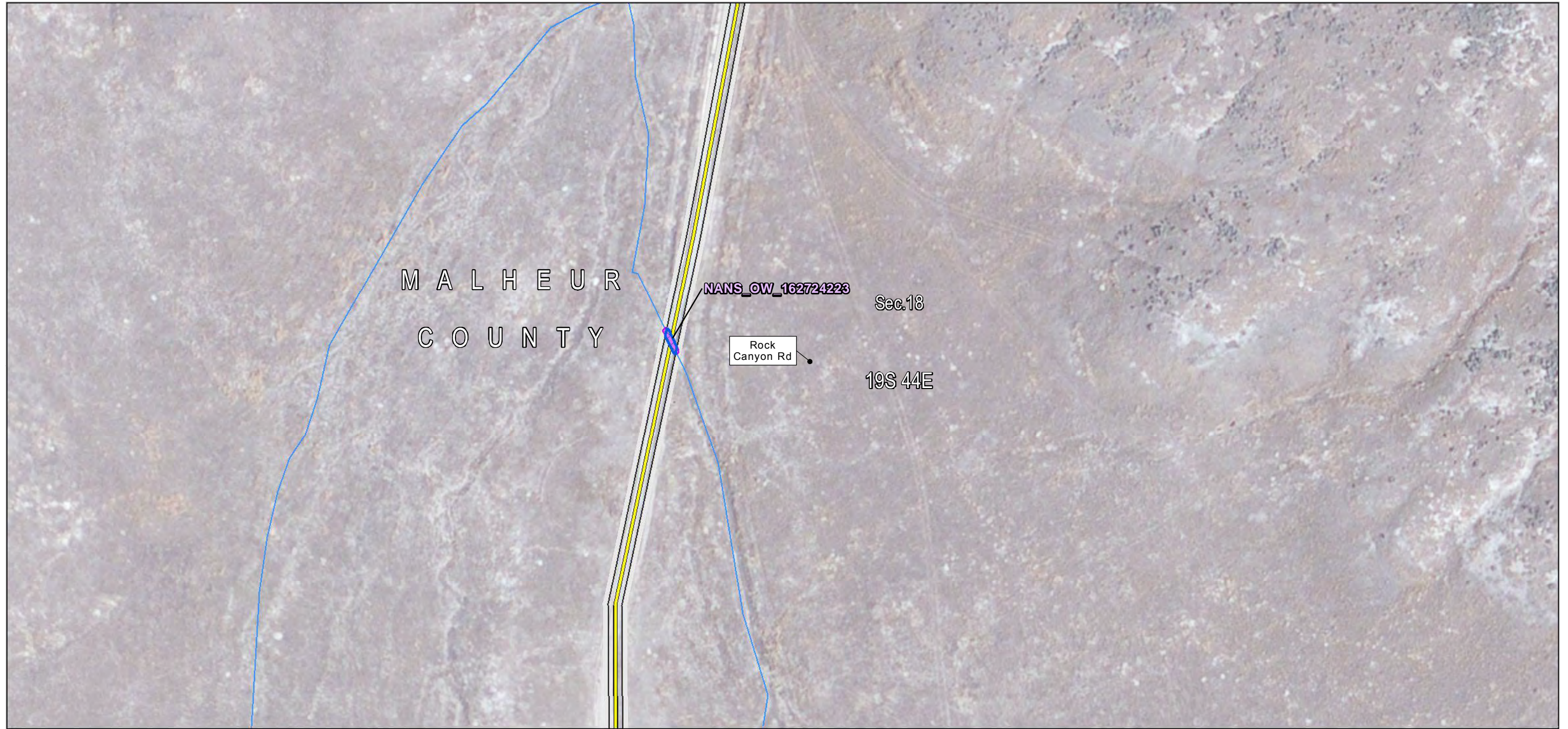
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-382**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

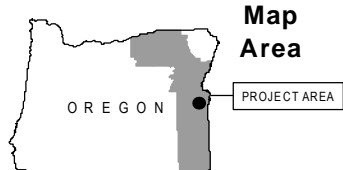
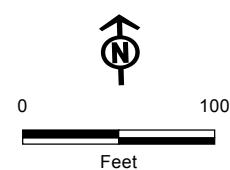
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-383**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
 Malheur County





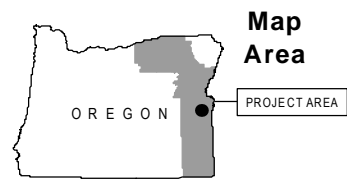
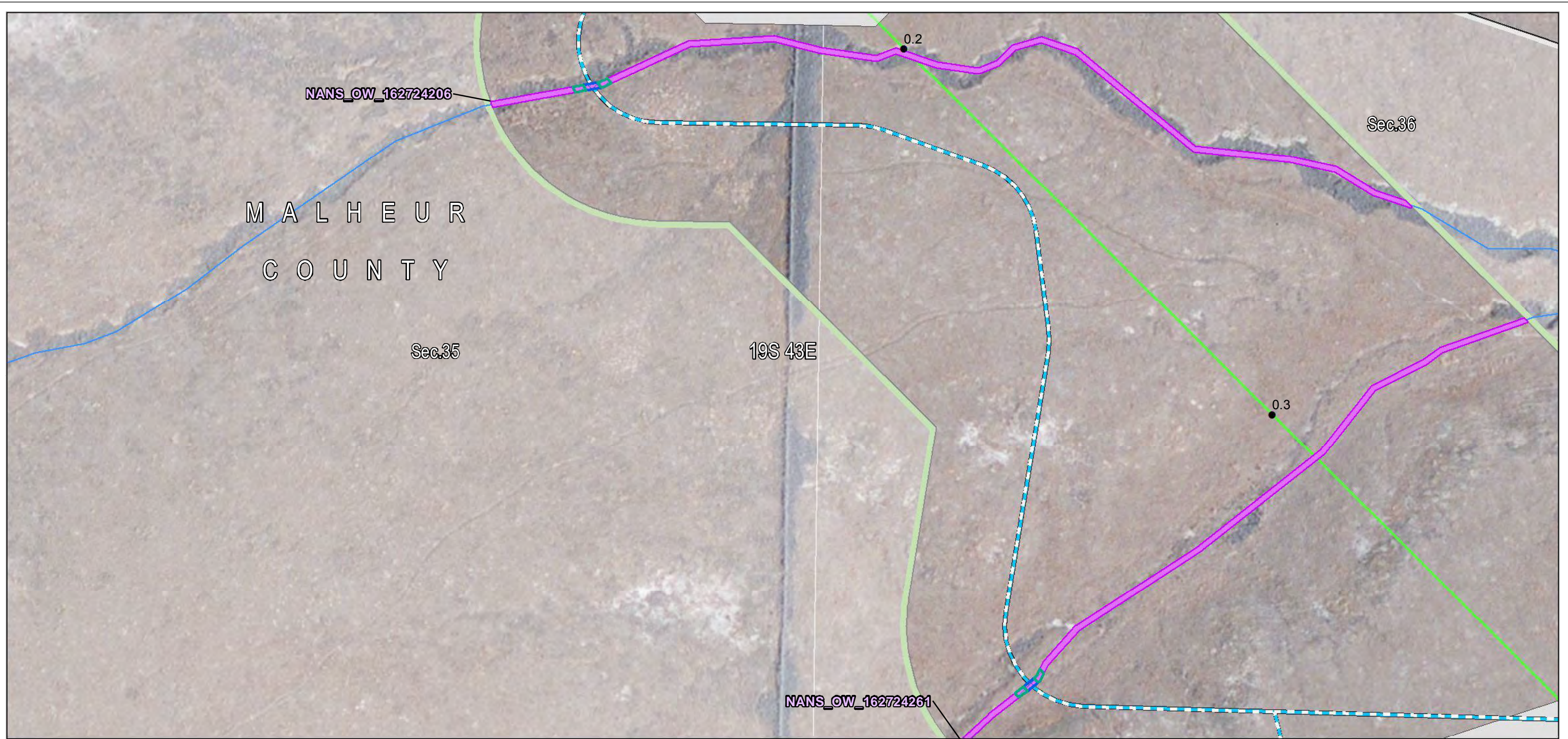
- Project Features**
- Construction Access
  - Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

- Stream Impact Type**
- Permanent

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Alternative Route

Route Centerline

Alternative

##### Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

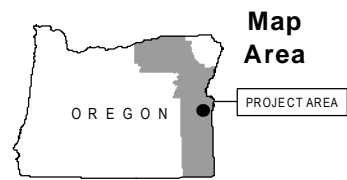
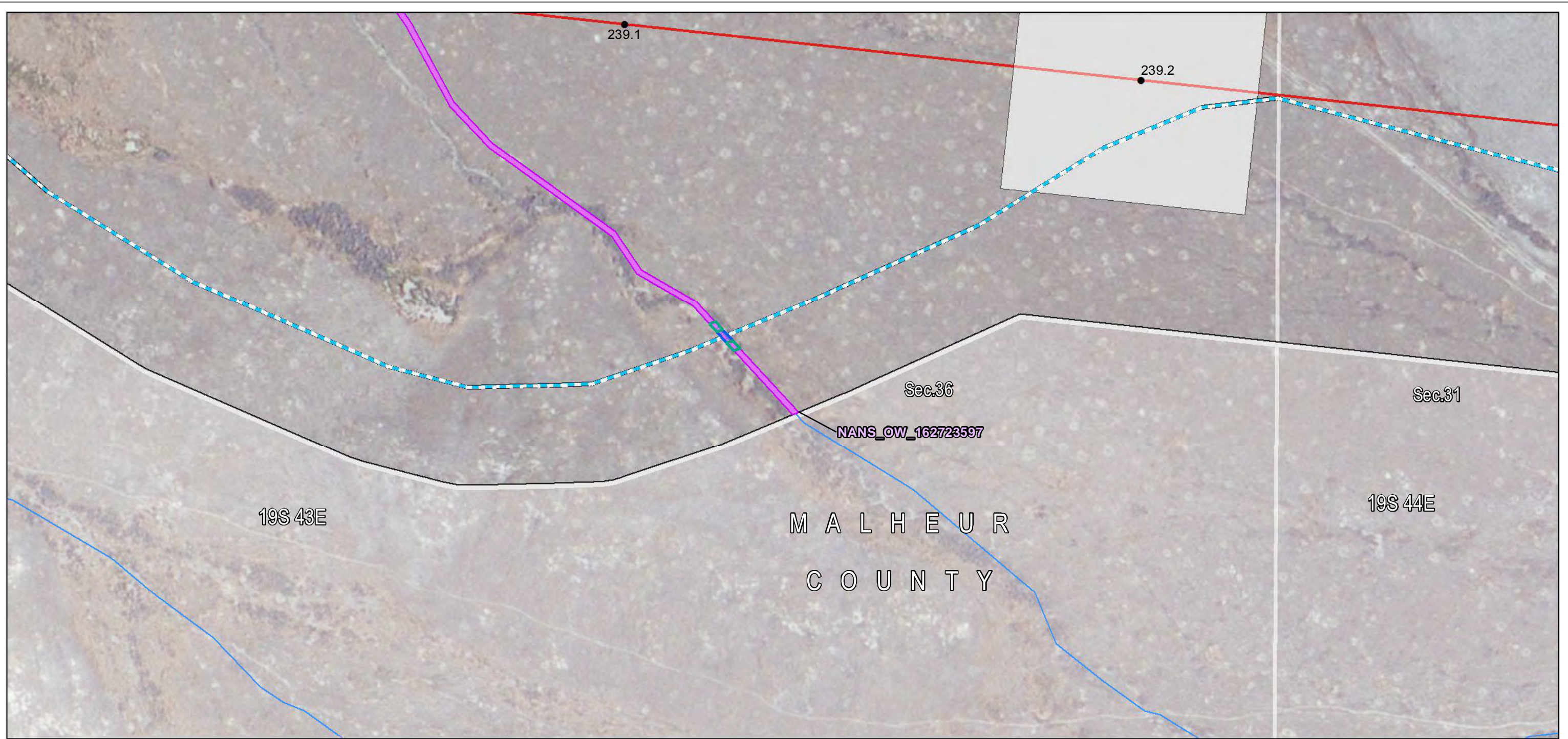
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-385**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

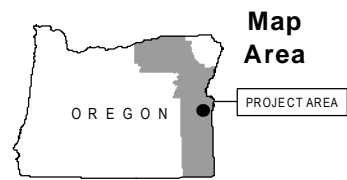
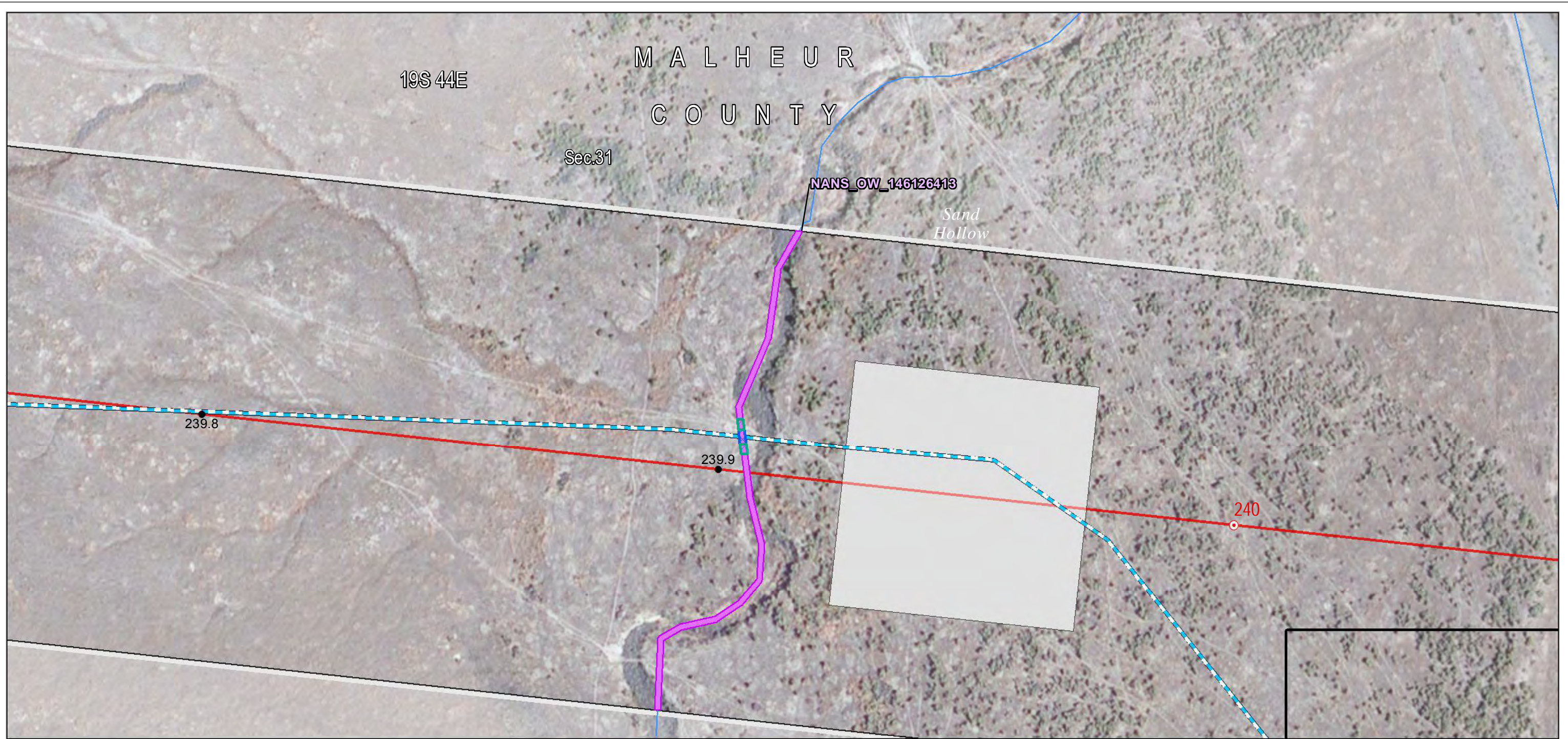
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-386**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Mile

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

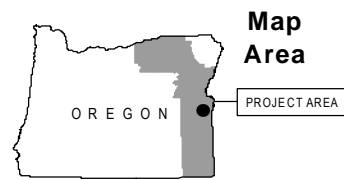
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-387**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

- Proposed Route
- Alternative Route

##### Route Centerline

- Proposed Route

##### Work Areas

- Structure Work Area

##### Mileposts

- Tenth-mile

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements

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

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

- New Road, Bladed

- Rivers, Streams, and Canals

##### Other Waters

- NANS Streams (NHD)

##### Stream Impact Type

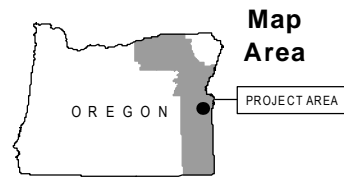
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-388**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

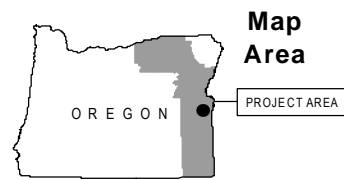
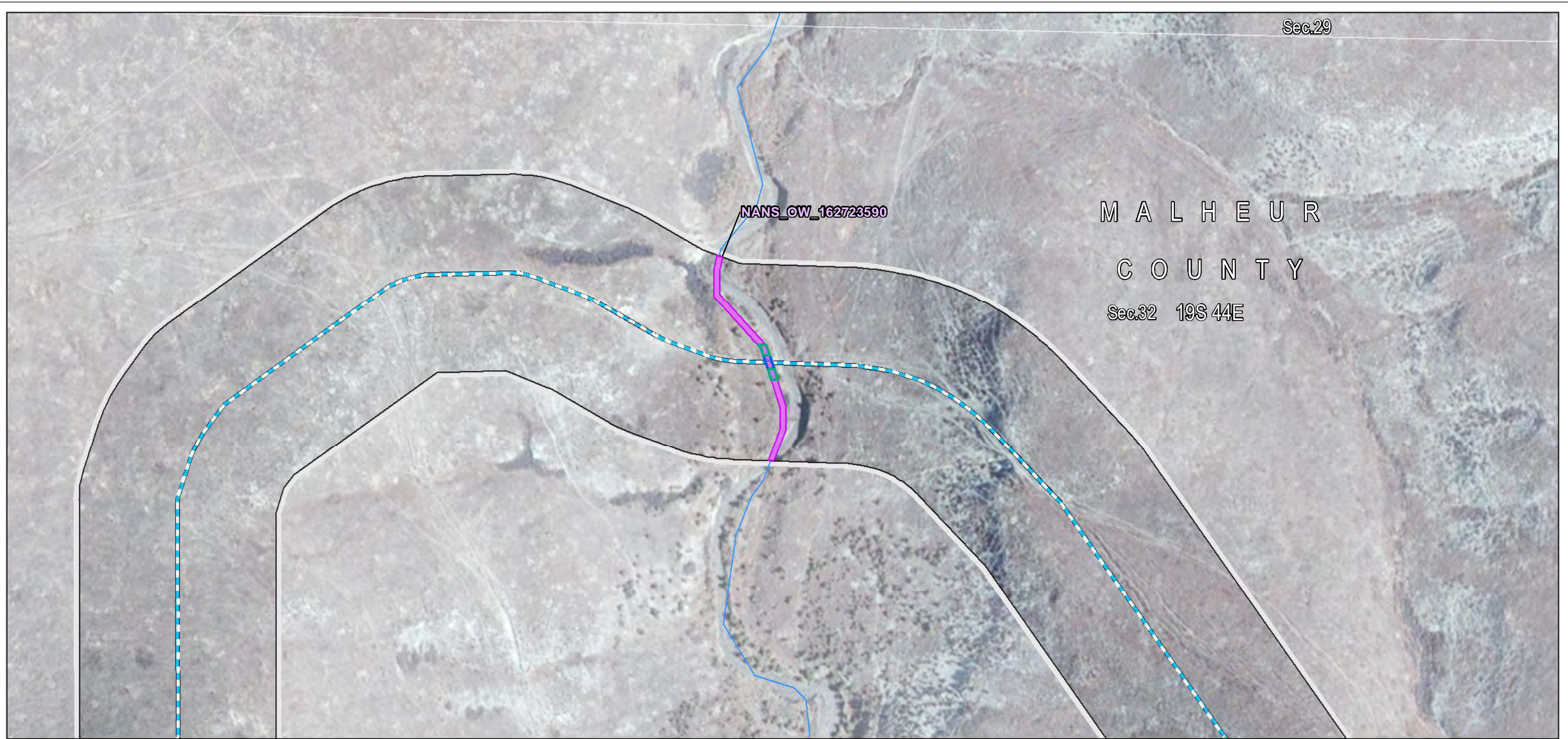
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-389**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

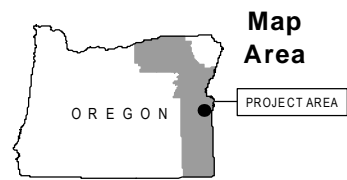
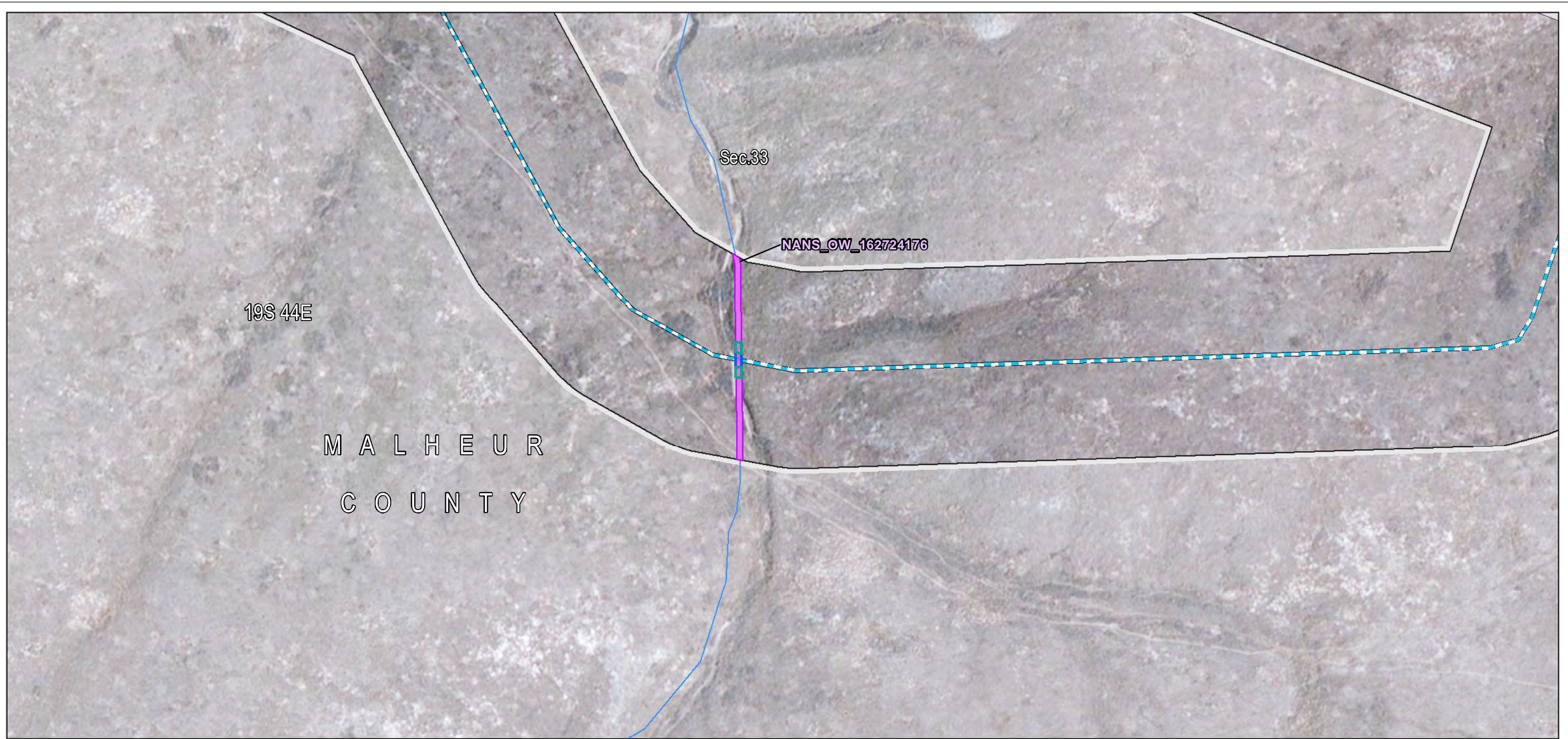
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-390**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Proposed Route
- Work Areas
- Structure Work Area
- Construction Access
- New Road, Bladed

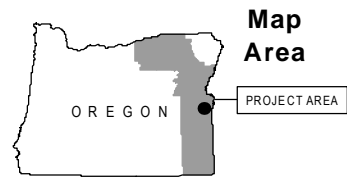
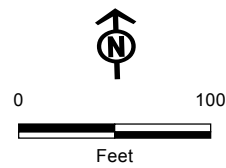
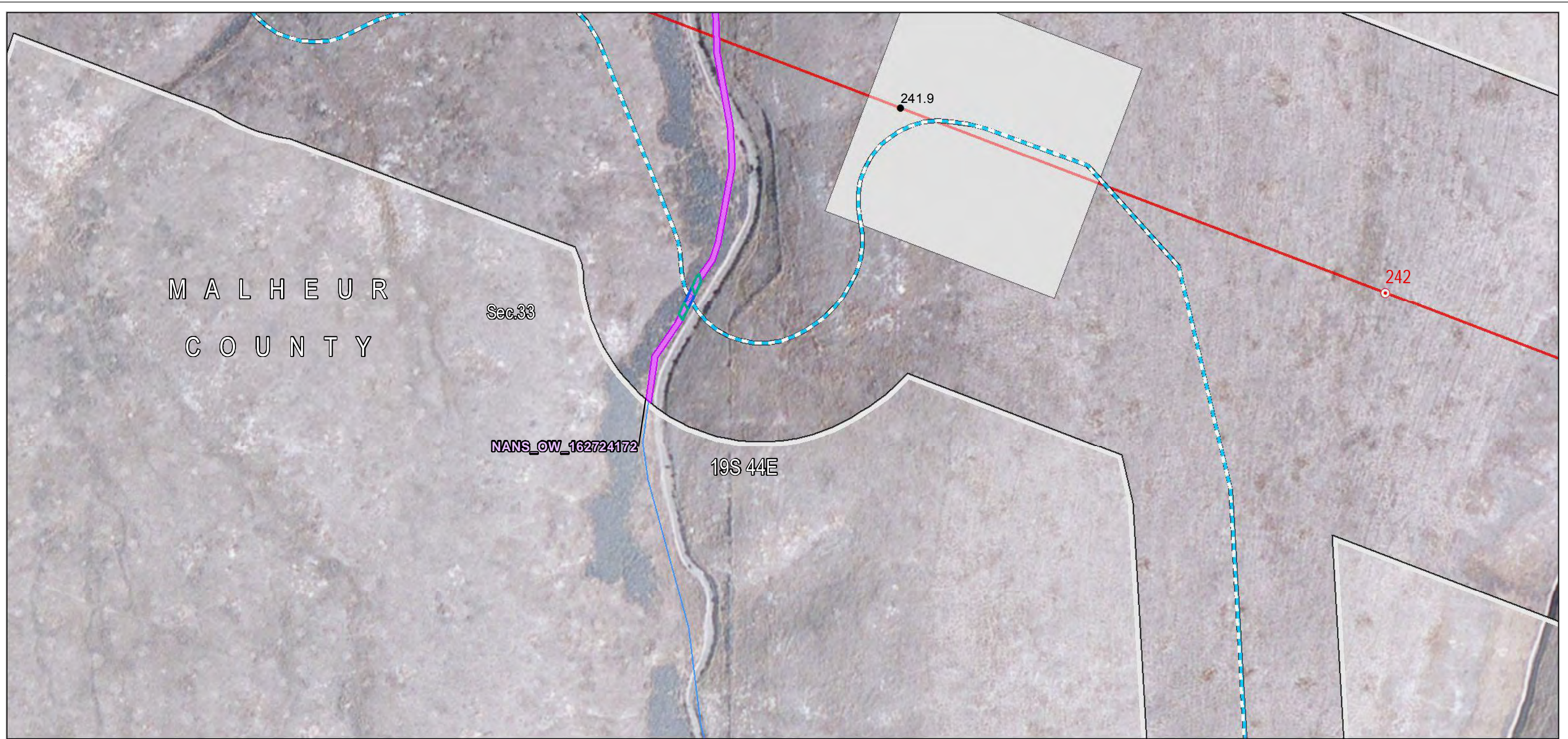
- Rivers, Streams, and Canals
- NANS Streams (NHD)
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-391**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Mile

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

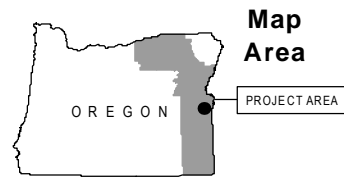
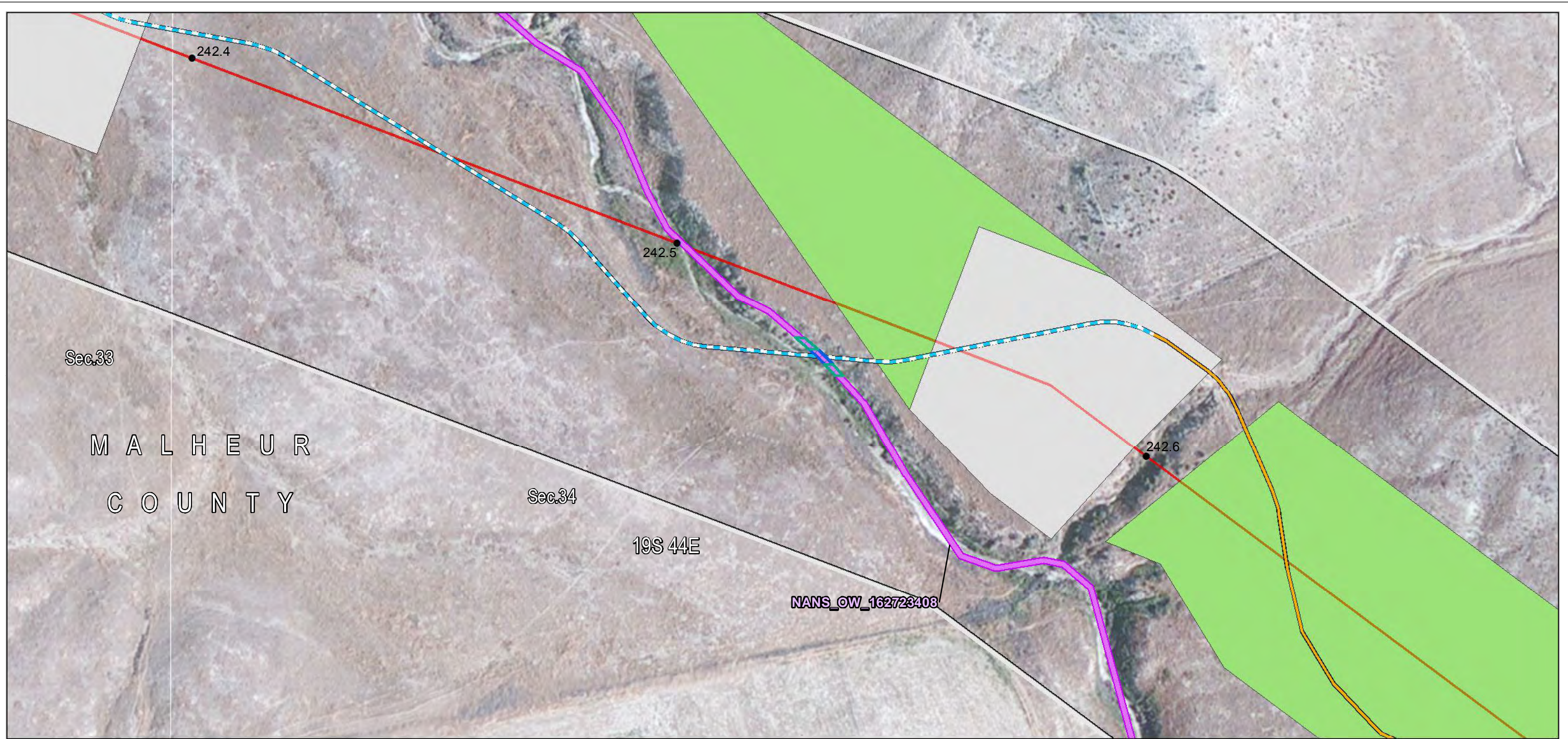
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-392**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial  
Modification, 21-70%  
Improvements

New Road, Bladed

Rivers, Streams, and  
Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

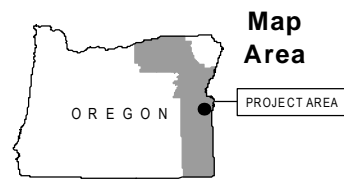
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-393**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

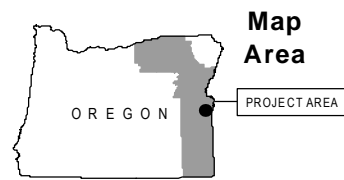
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-394**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

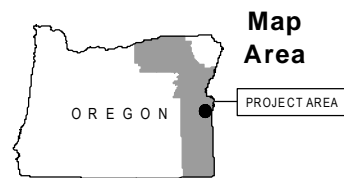
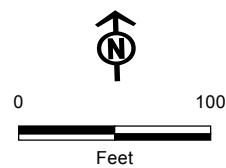
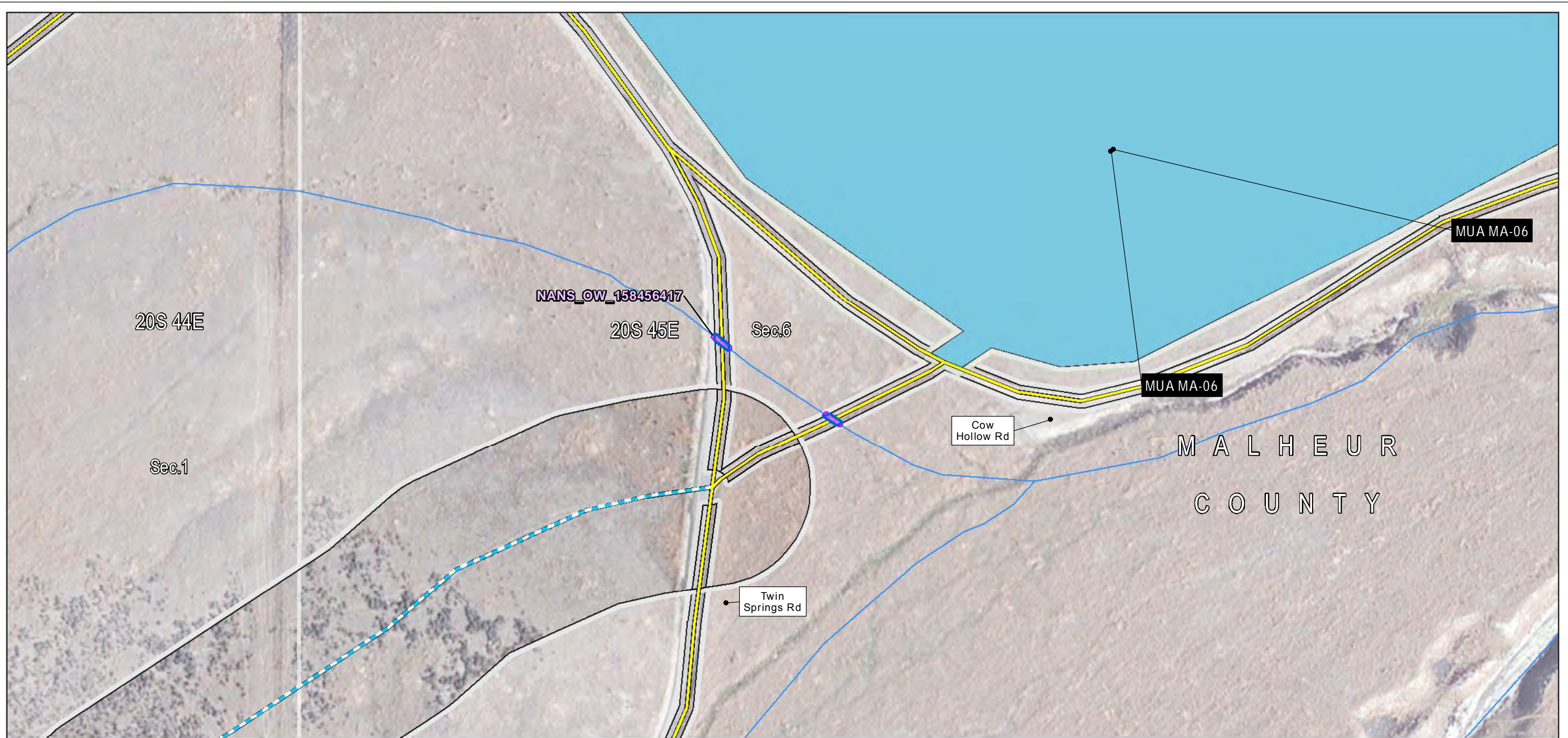
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-395**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

- Proposed Route
- Alternative Route

##### Work Areas

- Multi-Use Area

##### Construction Access

- Existing Road, No Substantial Modification, 0-20% Improvements
- New Road, Bladed
- Rivers, Streams, and Canals

##### Other Waters

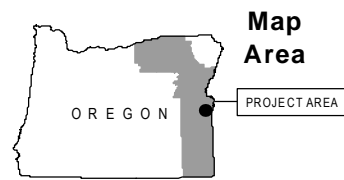
- NANS Streams (NHD)
- Stream Impact Type
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-396**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

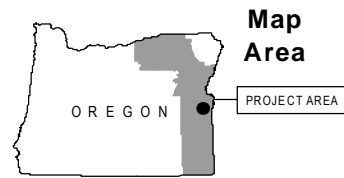
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-397**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Alternative Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

New Road, Primitive

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

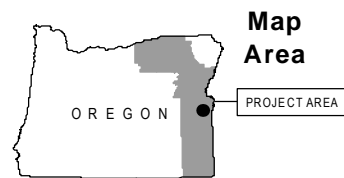
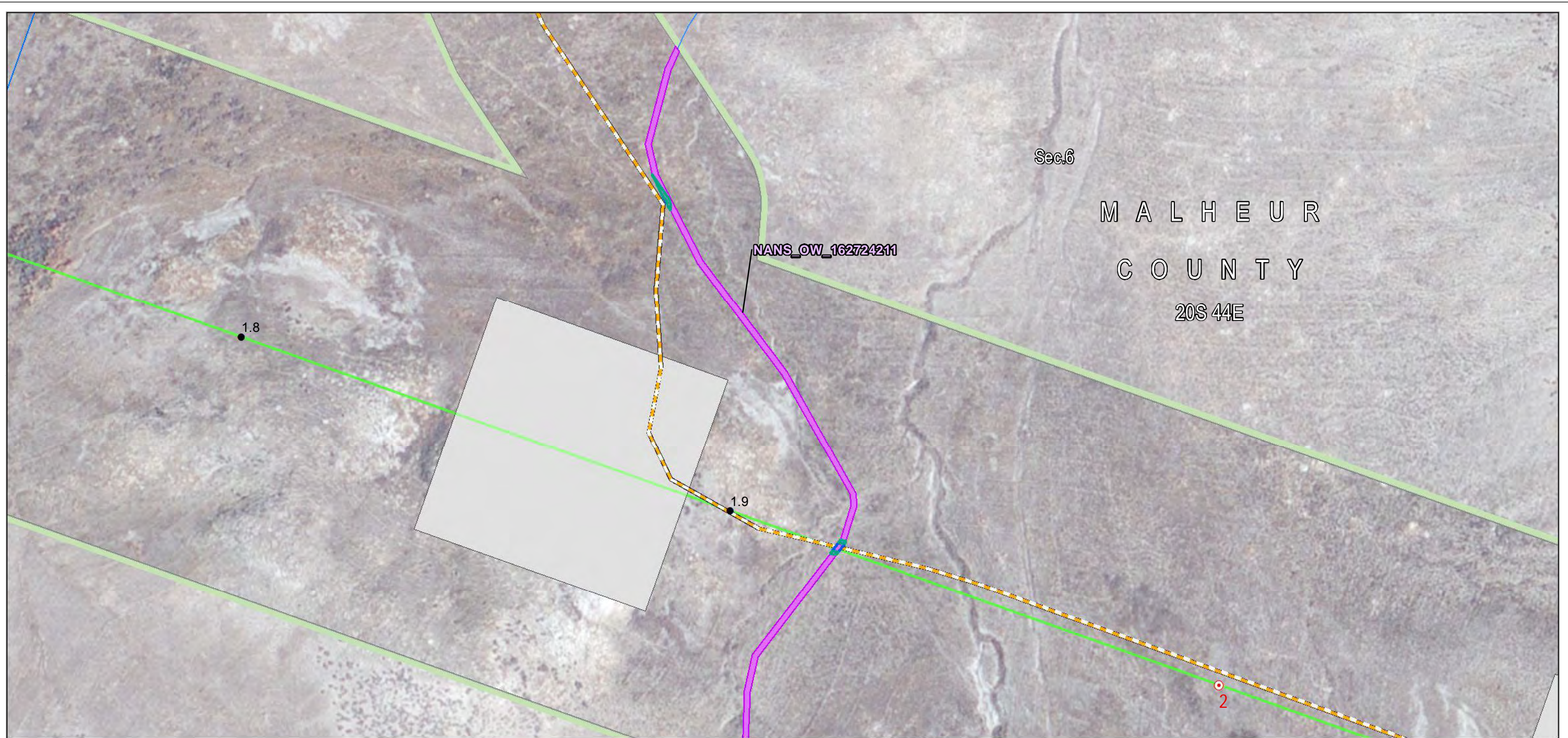
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-398**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

Route Centerline

Alternative

Work Areas

Structure Work Area

##### Mileposts

Mile

Tenth-mile

Construction Access

New Road, Primitive

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

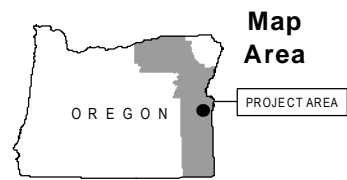
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-399**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

##### Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

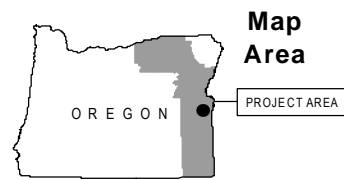
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-400**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

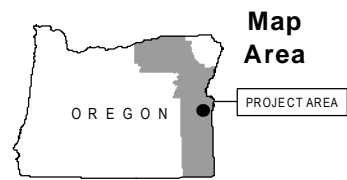
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-401**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

Route Centerline

Alternative

##### Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

Construction Access

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

Stream Impact Type

Temporary

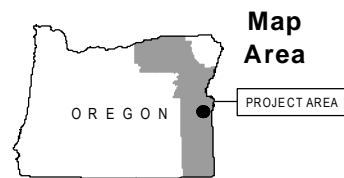
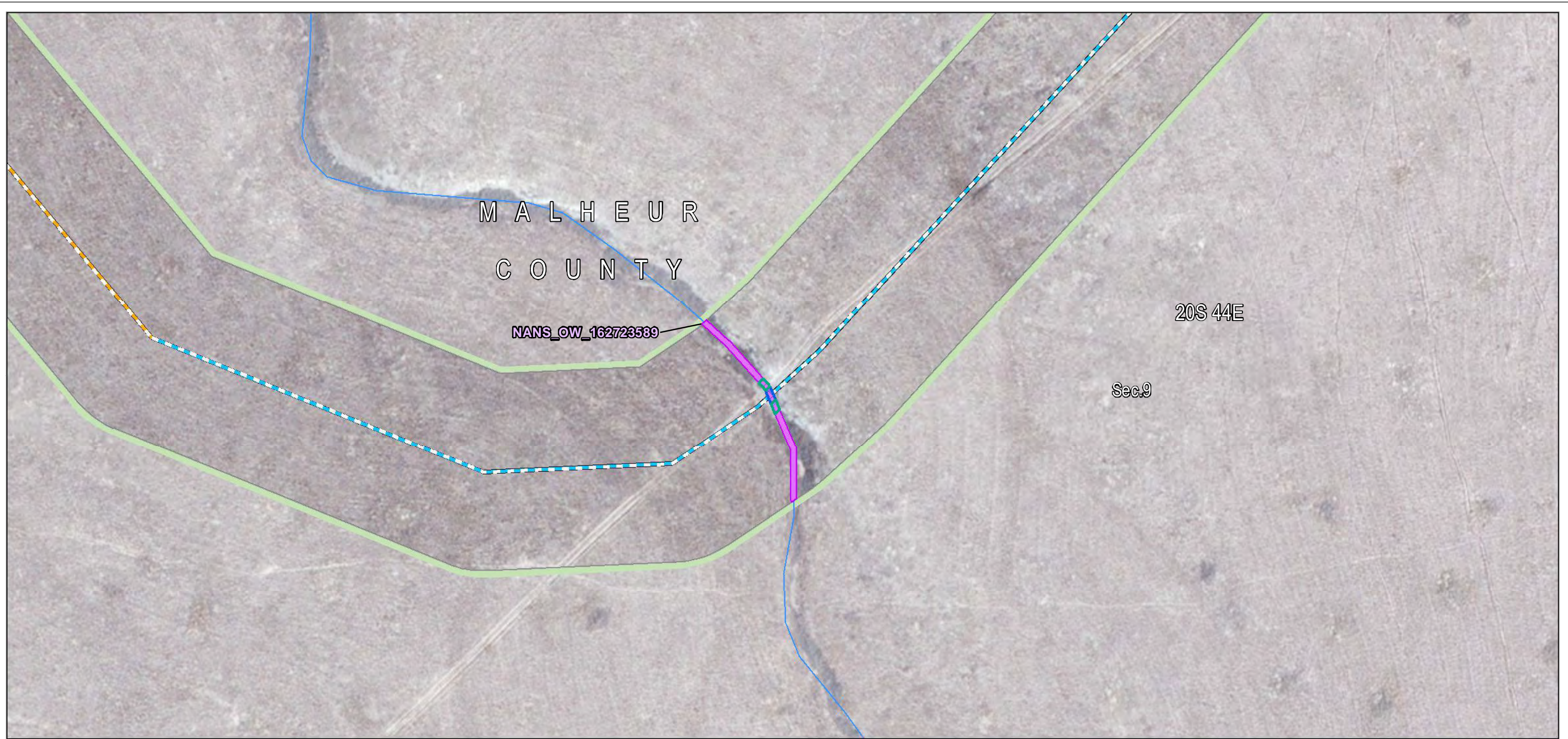
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-402**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

Construction Access

New Road, Bladed

New Road, Primitive

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

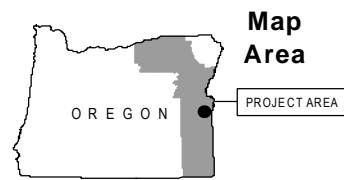
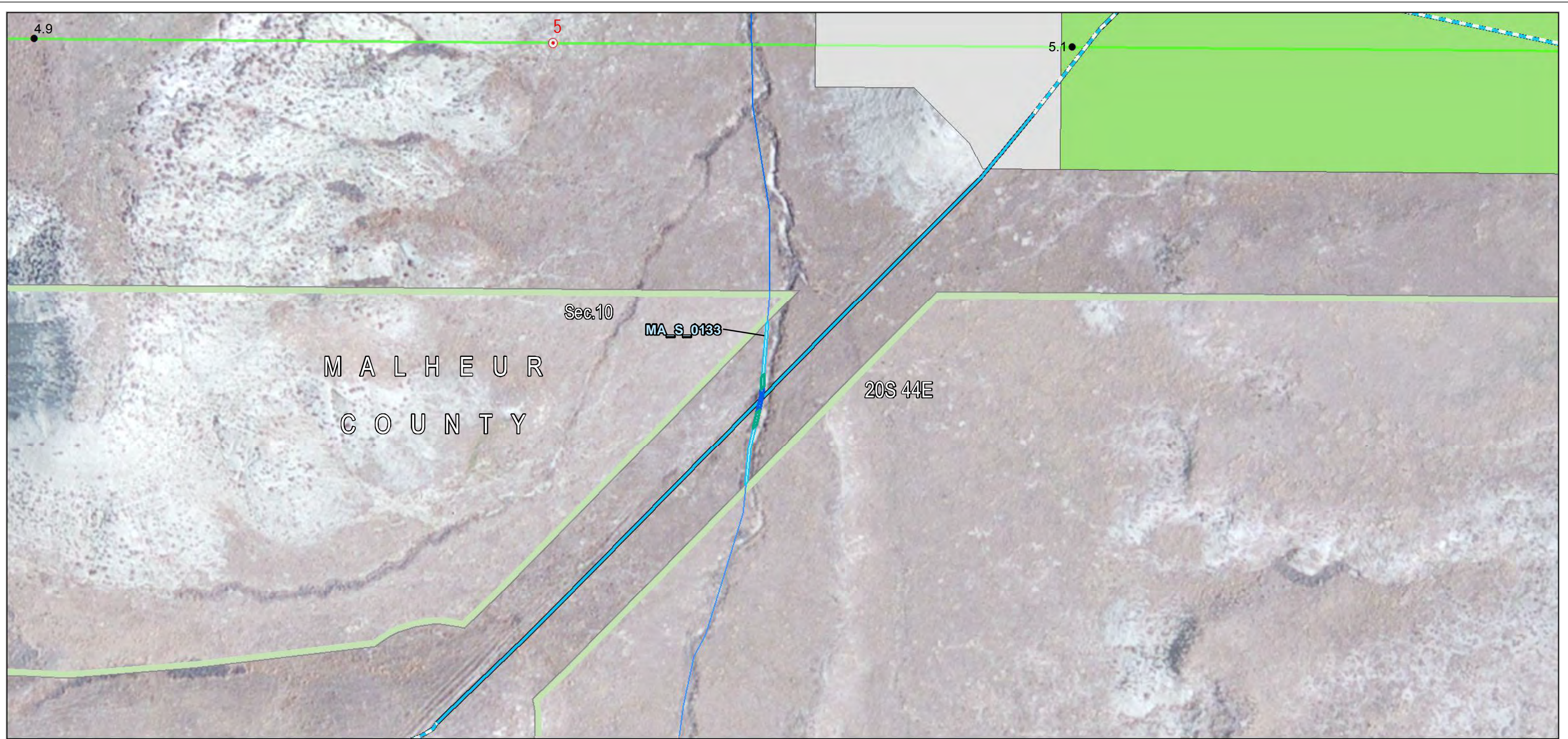
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-403**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

- Alternative Route
- Route Centerline
- Alternative

##### Work Areas

- Pulling and Tensioning
- Structure Work Area

##### Mileposts

- Mile
- Tenth-mile

##### Construction Access

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

##### Rivers, Streams, and Canals

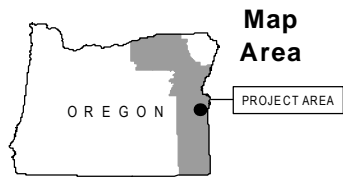
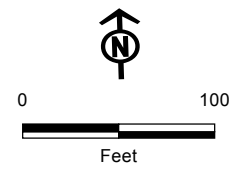
- Rivers, Streams, and Canals
- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-404 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Site Boundary**

Alternative Route

**Construction Access**

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

**Other Waters**

NANS Streams (NHD)

**Stream Impact Type**

Temporary

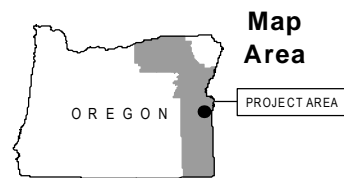
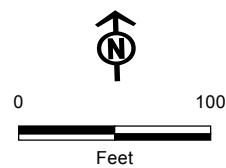
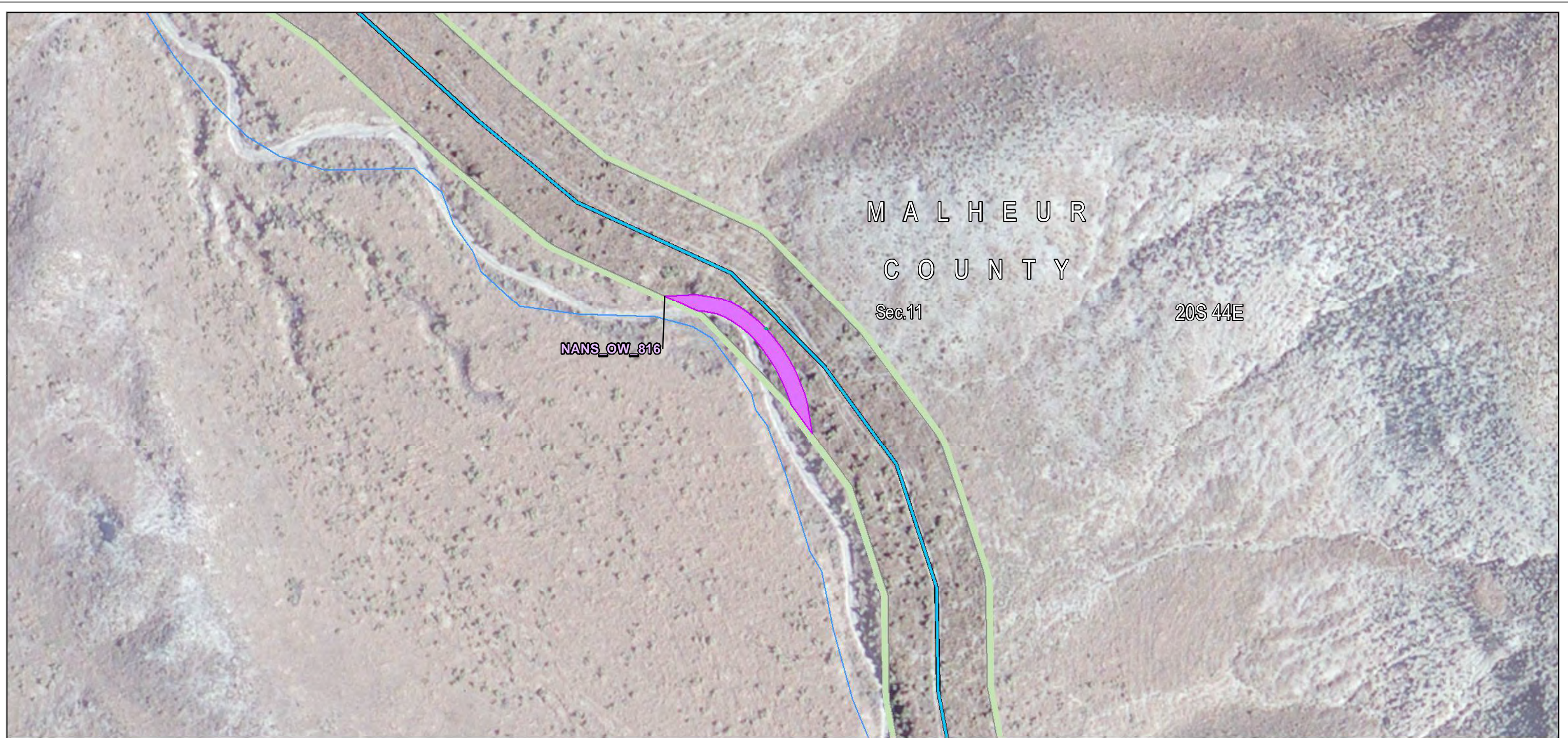
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-405**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

##### Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

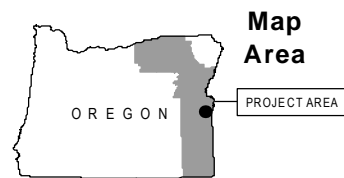
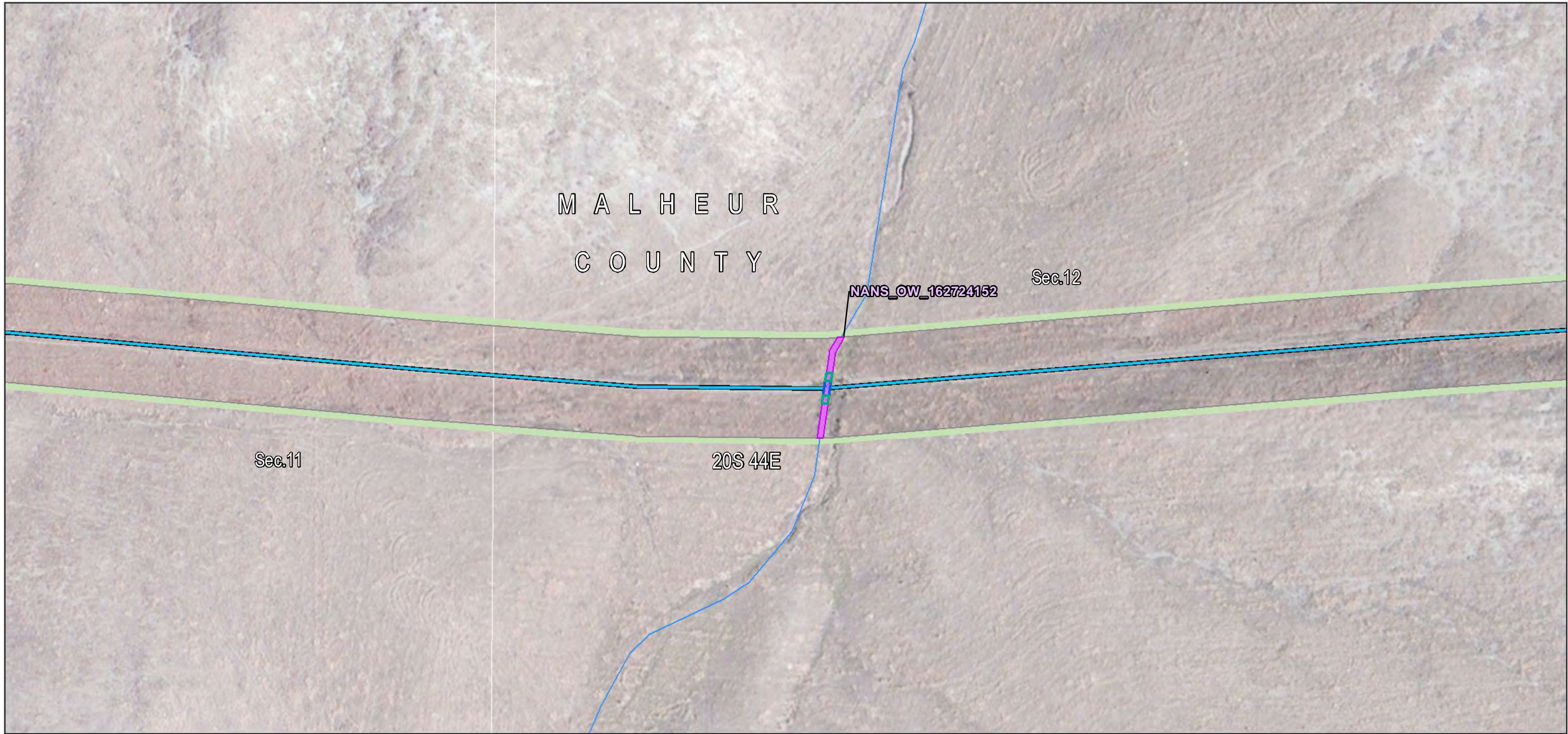
Temporary



Boardman to Hemingway  
Transmission Line Project

**Attachment K-406**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Alternative Route

##### Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-407**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





**Project Features**

**Site Boundary**

Alternative Route

**Construction Access**

Existing Road, Substantial  
Modification, 71-100%  
Improvements

New Road, Primitive

Rivers, Streams, and  
Canals

**Other Waters**

NANS Streams (NHD)

**Stream Impact Type**

Temporary

Permanent



Boardman to Hemingway  
Transmission Line Project

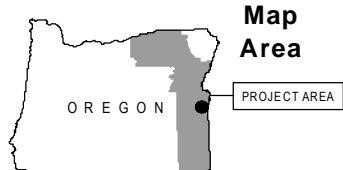
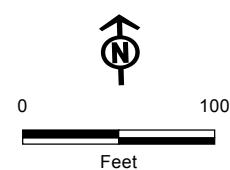
**Attachment K-408**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

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

Notes: Elevation contour lines are not available at this time  
and will be added at a later date.

December 2016





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
  - Pulling and Tensioning
  - Structure Work Area

- Mileposts
  - Tenth-mile
- Construction Access
  - Existing Road, Substantial Modification, 21-70% Improvements
  - New Road, Bladed

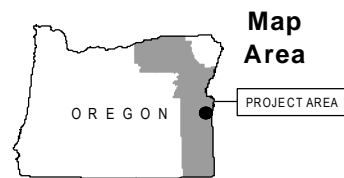
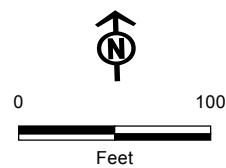
- Rivers, Streams, and Canals
- Other Waters
  - NANS Streams (NHD)
- Stream Impact Type
  - Temporary
  - Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-409**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

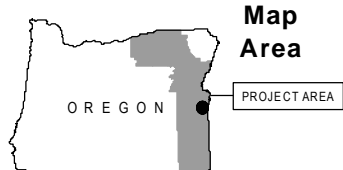
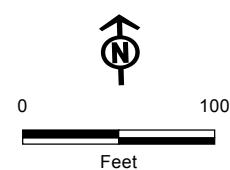
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-410**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

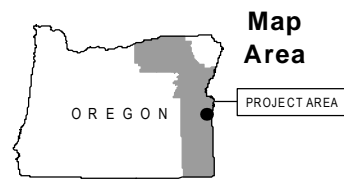
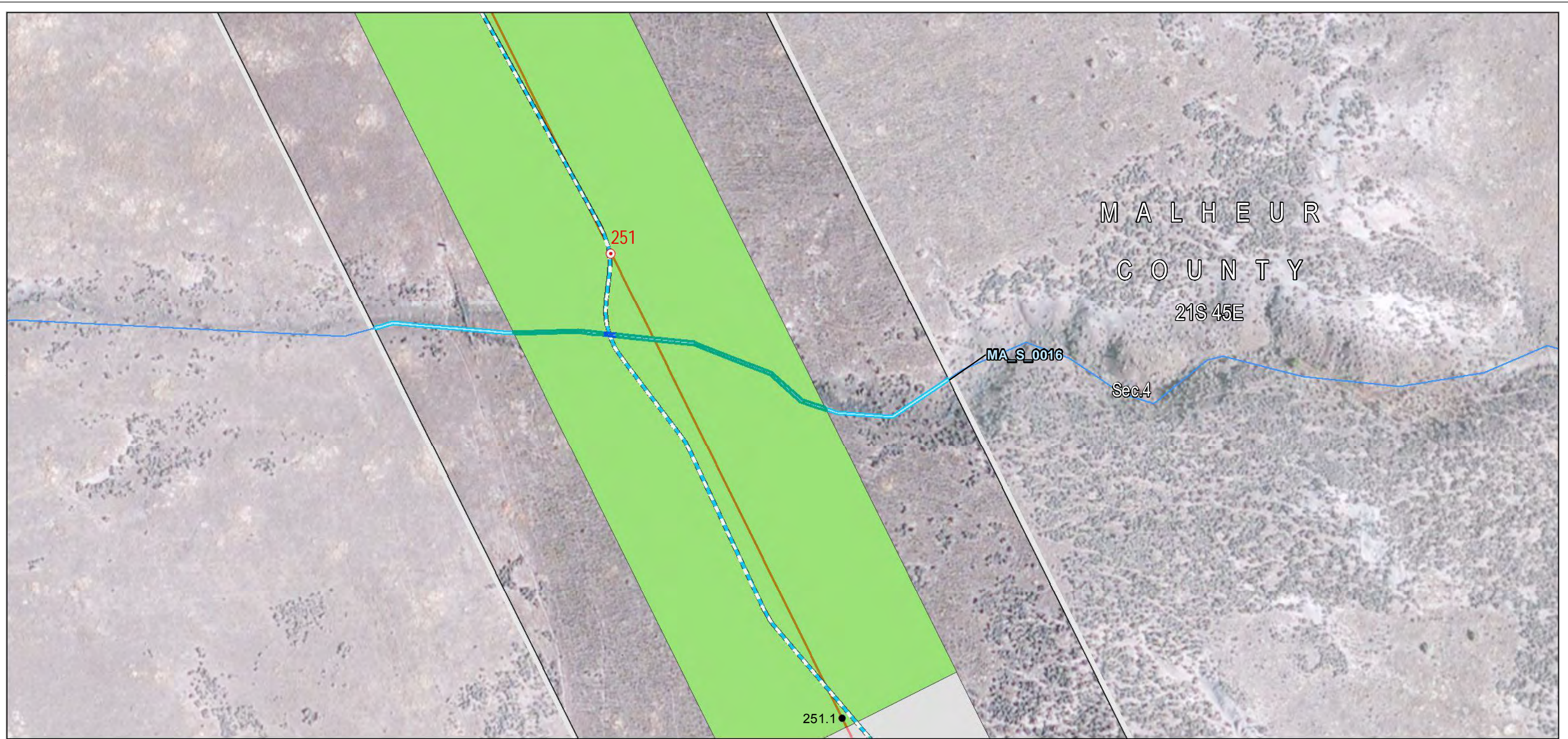
- Stream Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-411**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

#### Mileposts

- Mile
- Tenth-mile
- Construction Access
- New Road, Bladed
- Rivers, Streams, and Canals

#### Other Waters

- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

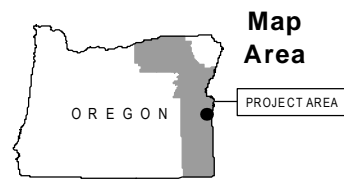
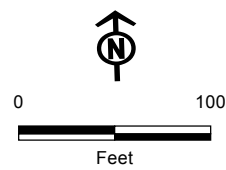
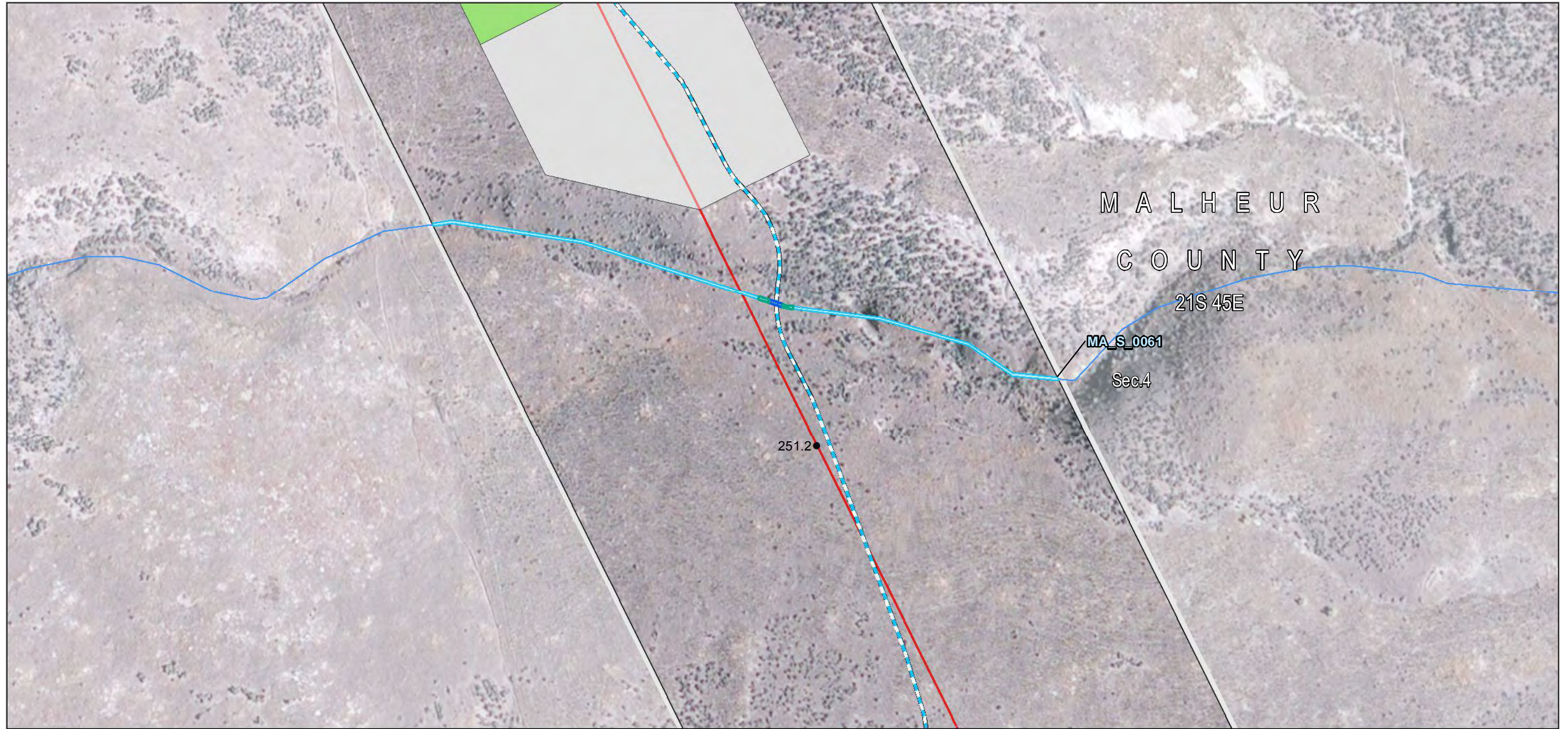
December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-412**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

#### Mileposts

- Tenth-mile
- Construction Access
- New Road, Bladed
- Rivers, Streams, and Canals

#### Other Waters

- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

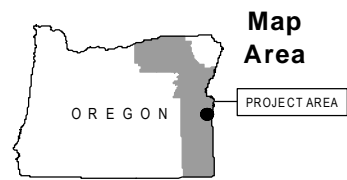
### Attachment K-413 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

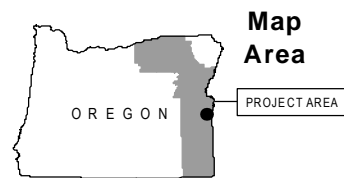
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-414**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

##### Work Areas

Structure Work Area

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Bladed

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

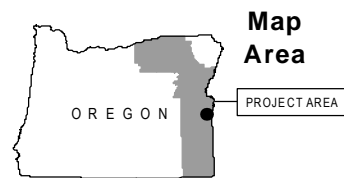
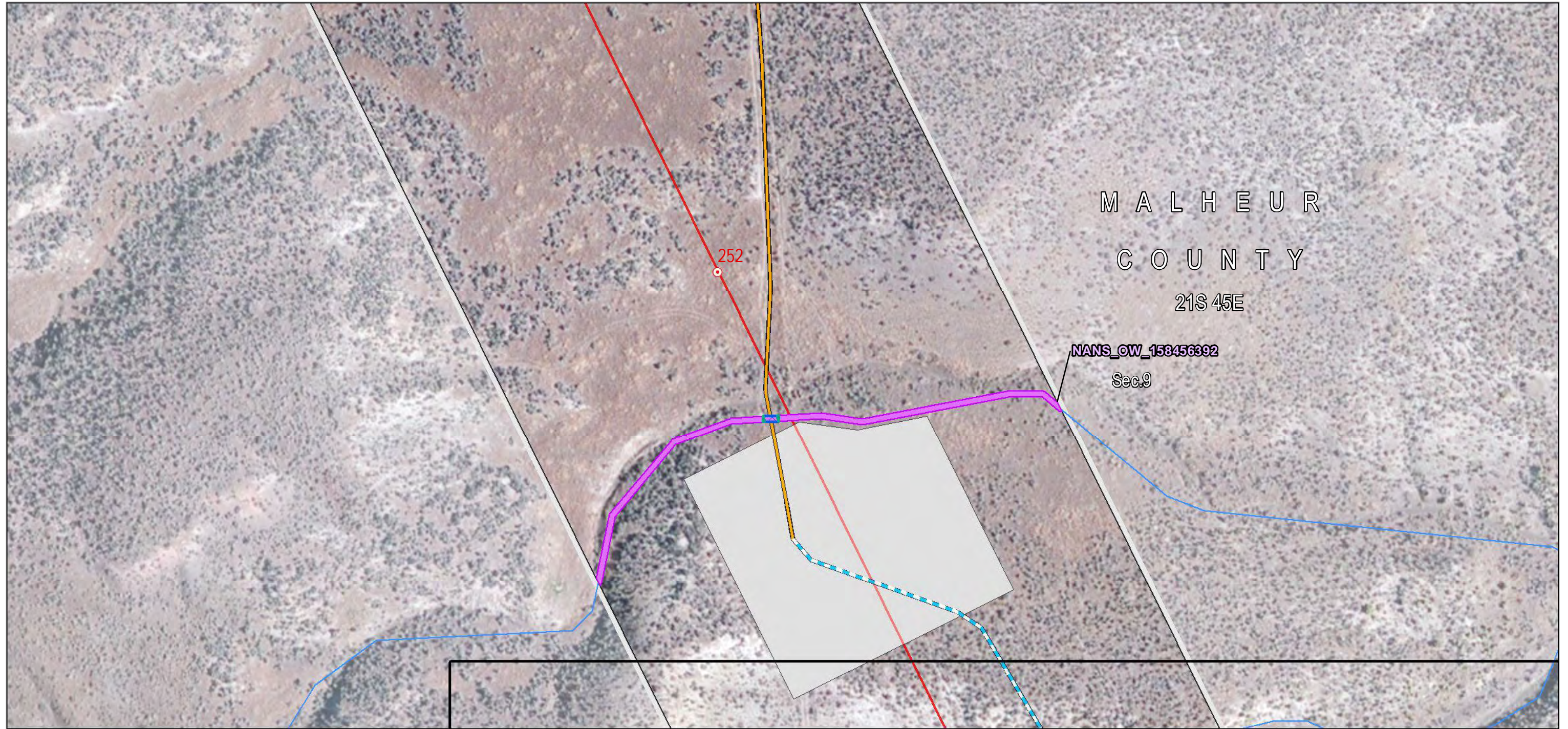
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-415**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Mile

Construction Access

Existing Road, Substantial

Modification, 21-70%

Improvements

New Road, Bladed

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

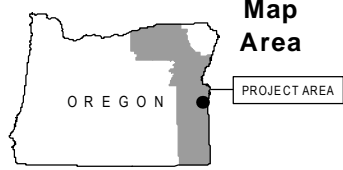
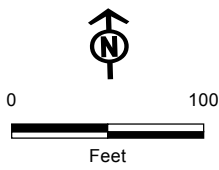
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-416**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning
- Structure Work Area

**Mileposts**

- Tenth-mile
- Construction Access
- New Road, Bladed
- Rivers, Streams, and Canals

**Other Waters**

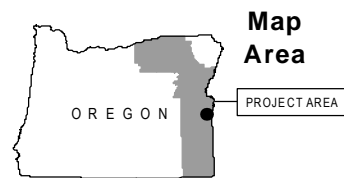
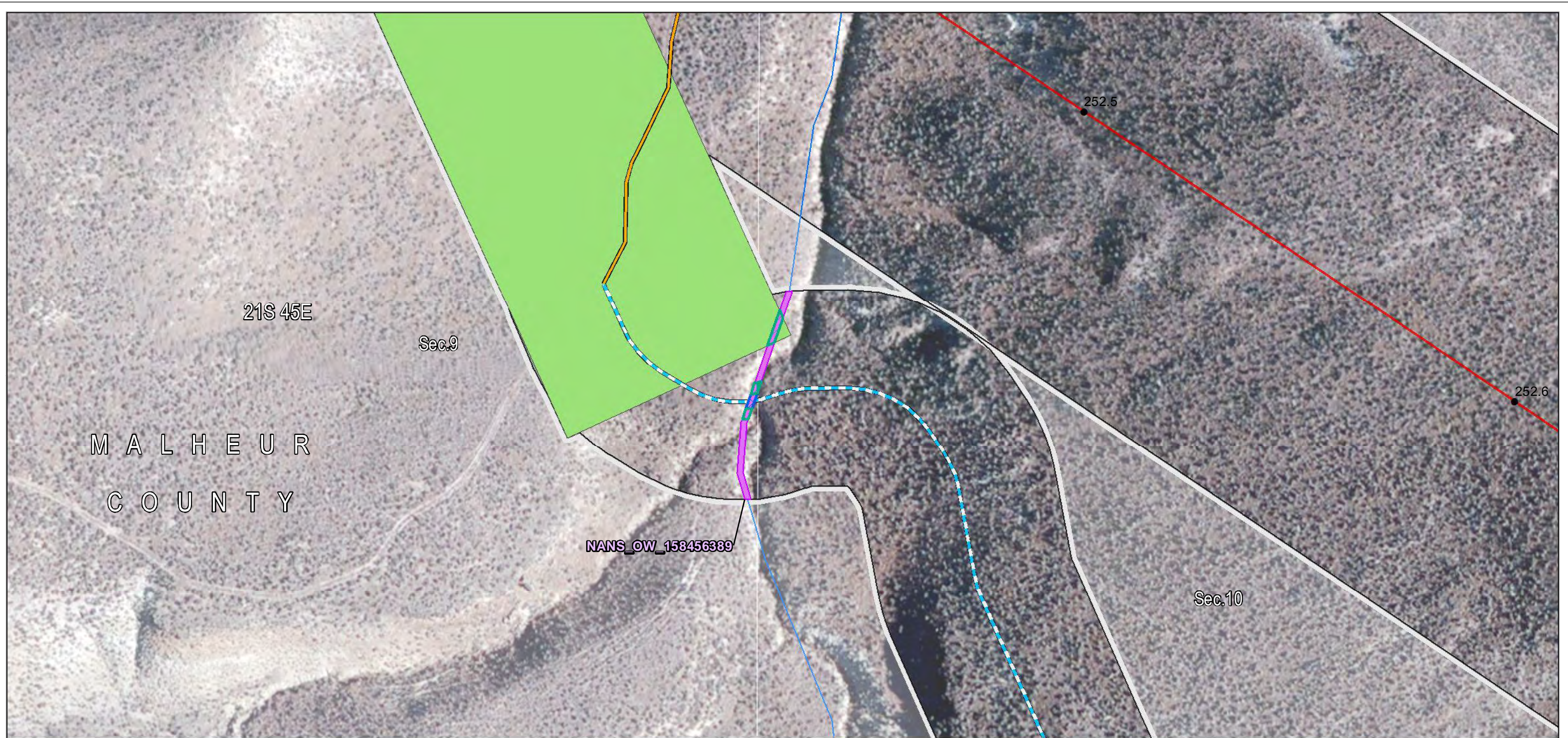
- NANS Streams (NHD)
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-417**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Bladed

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

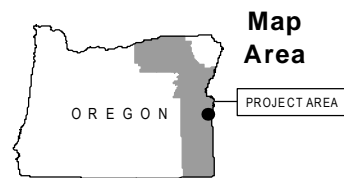
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-418**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

- Site Boundary
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning

#### Mileposts

- Mile
- Tenth-mile
- Construction Access
- New Road, Bladed
- Rivers, Streams, and Canals

#### Other Waters

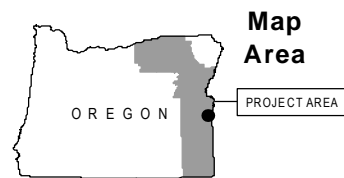
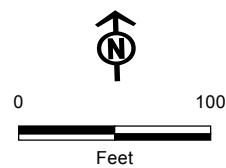
- NANS Streams (NHD)
- Stream Impact Type
- Temporary
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-419**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial  
Modification, 21-70%  
Improvements

New Road, Bladed

New Road, Primitive

Rivers, Streams, and  
Canals

#### Wetland

NANS Wetland (NWI)

Wetland Impact Type

Temporary

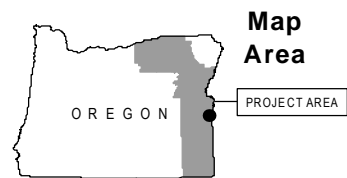
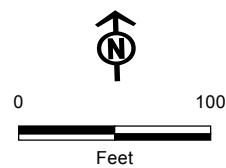
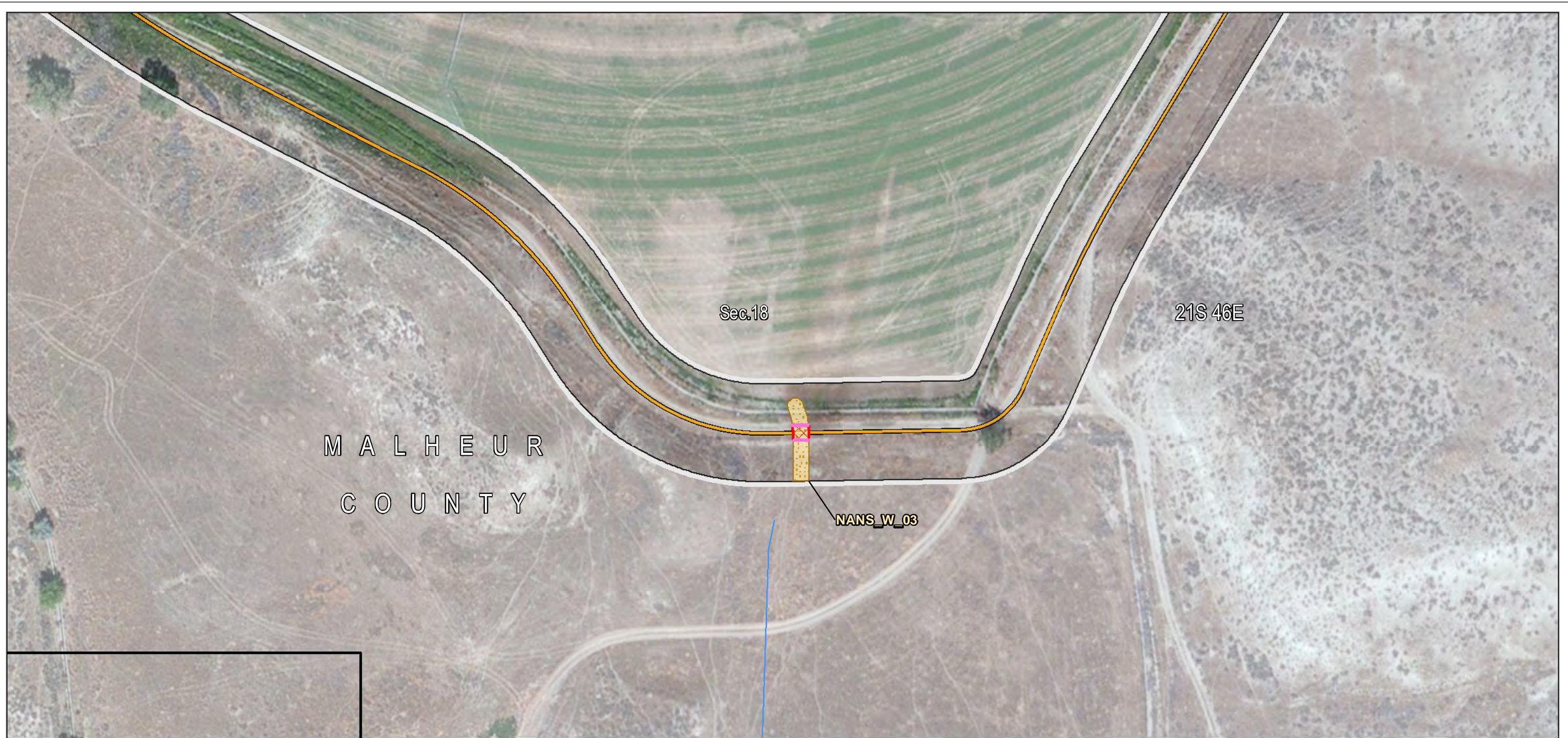
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-420**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

Temporary

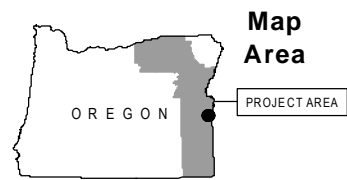
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-421**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Work Areas

Structure Work Area

Construction Access

Existing Road, Substantial  
Modification, 71-100%  
Improvements

New Road, Primitive

Rivers, Streams, and  
Canals

#### Wetland

NANS Wetland (NWI)

Wetland Impact Type

Temporary

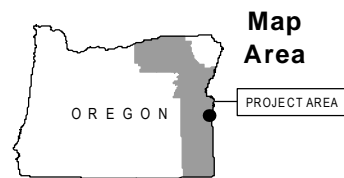
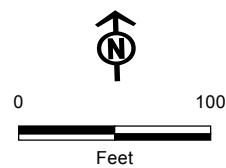
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-422**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Permanent



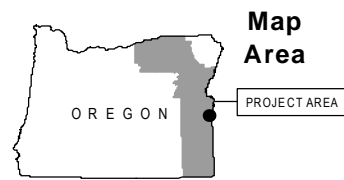
Boardman to Hemingway  
Transmission Line Project

**Attachment K-423**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County









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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

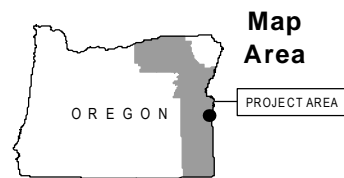
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-425**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
 Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

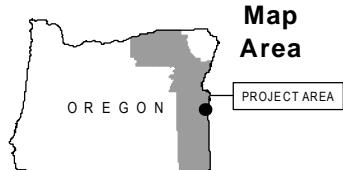
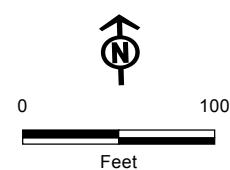
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-426**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

**Other Waters**

NANS Streams (NHD)

Stream Impact Type

Temporary

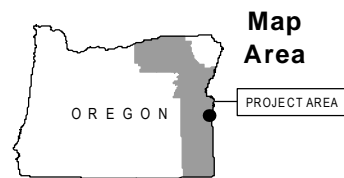
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-427**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

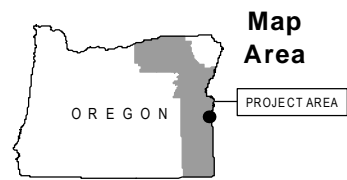
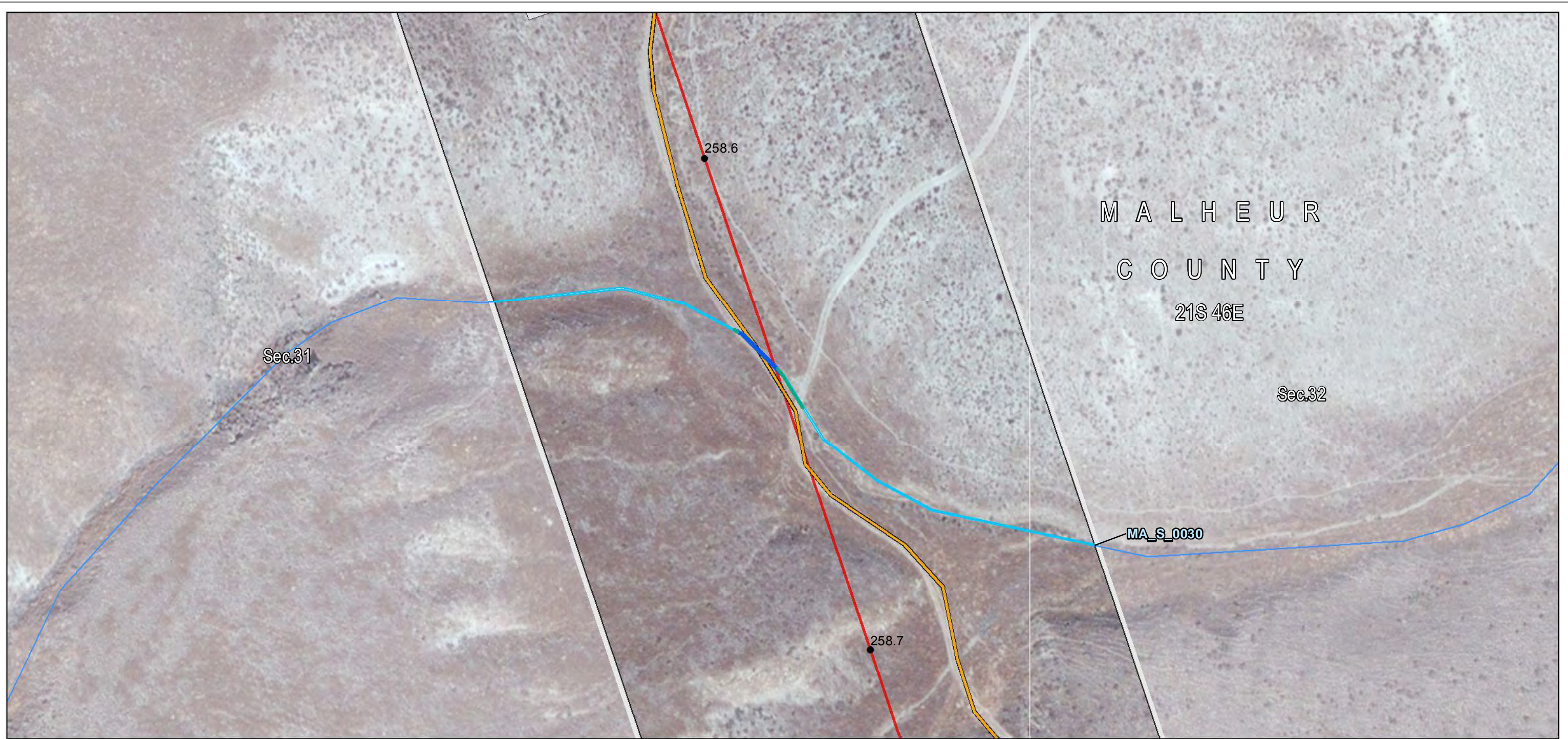
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-428**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

##### Mileposts

Tenth-mile

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

Stream Impact Type

Temporary

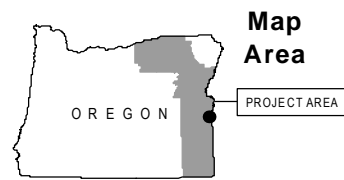
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-429**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





#### Project Features

- Site Boundary
- Proposed Route
- Route Centerline
- Proposed Route
- Work Areas
- Pulling and Tensioning

- Mileposts
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements
- Rivers, Streams, and Canals

- Other Waters
- Field Survey Streams
- Stream Impact Type
- Temporary
- Permanent

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016



Boardman to Hemingway  
Transmission Line Project

**Attachment K-430**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County



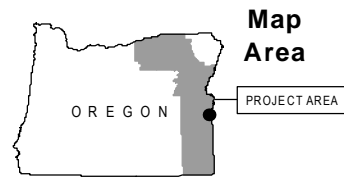
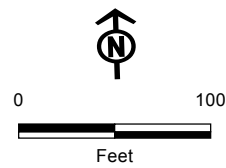


Sec.8

MALHEUR  
COUNTY

MA\_S\_0076

22S 46E



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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

Temporary

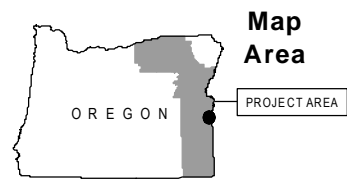
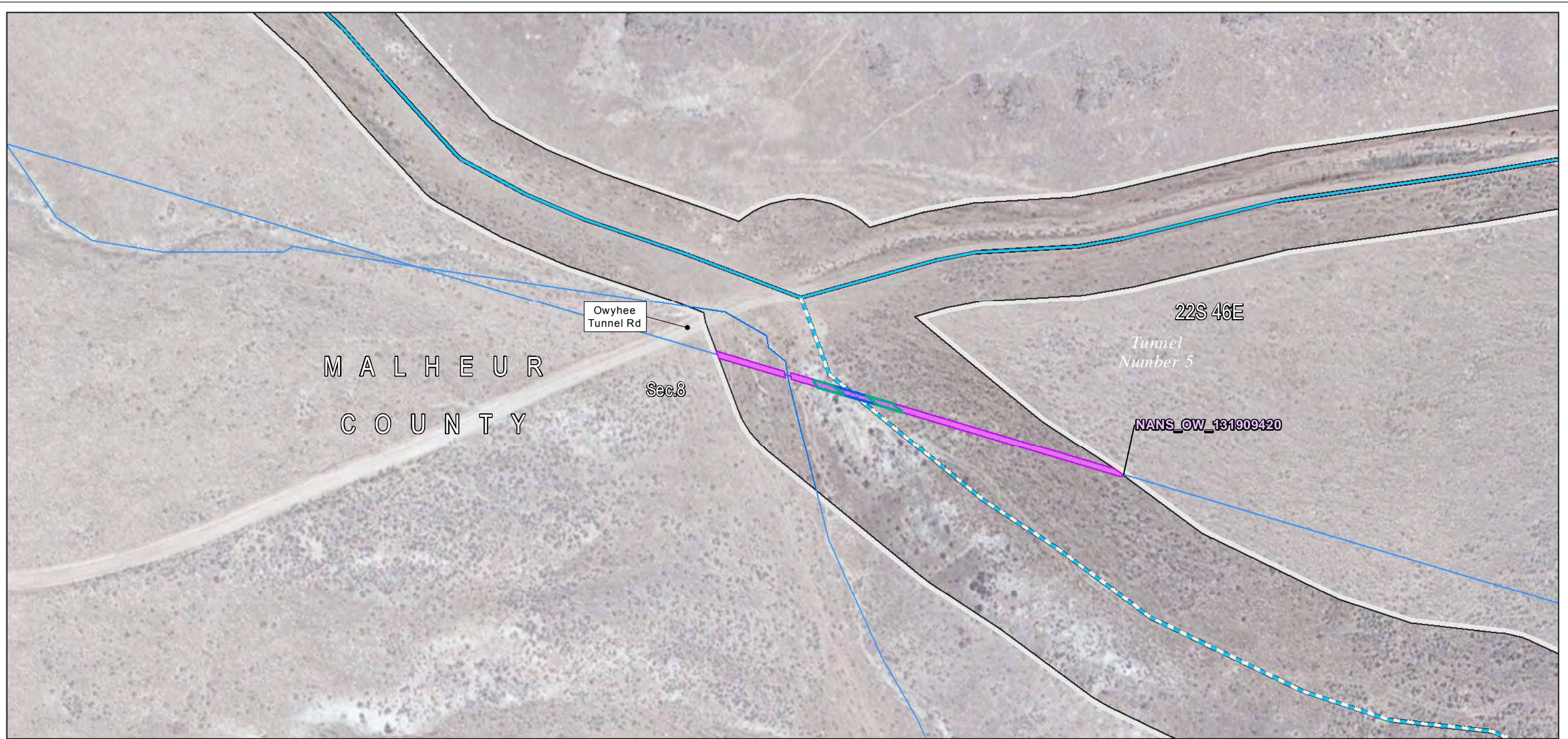
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-431**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

New Road, Bladed

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

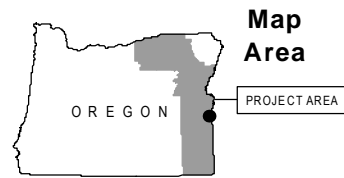
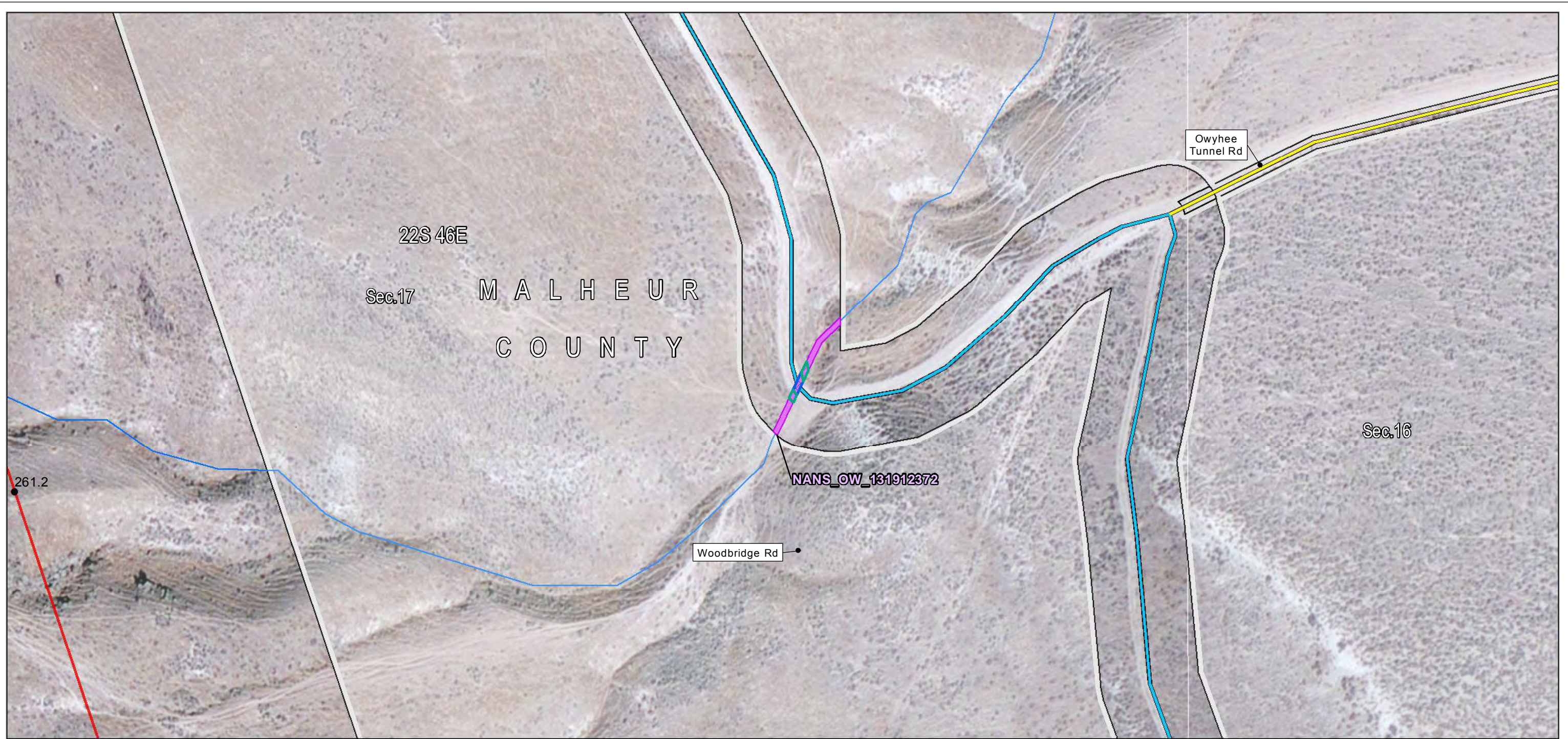
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-432**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 71-100% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

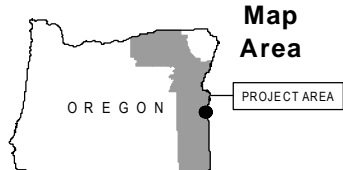
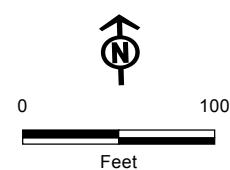
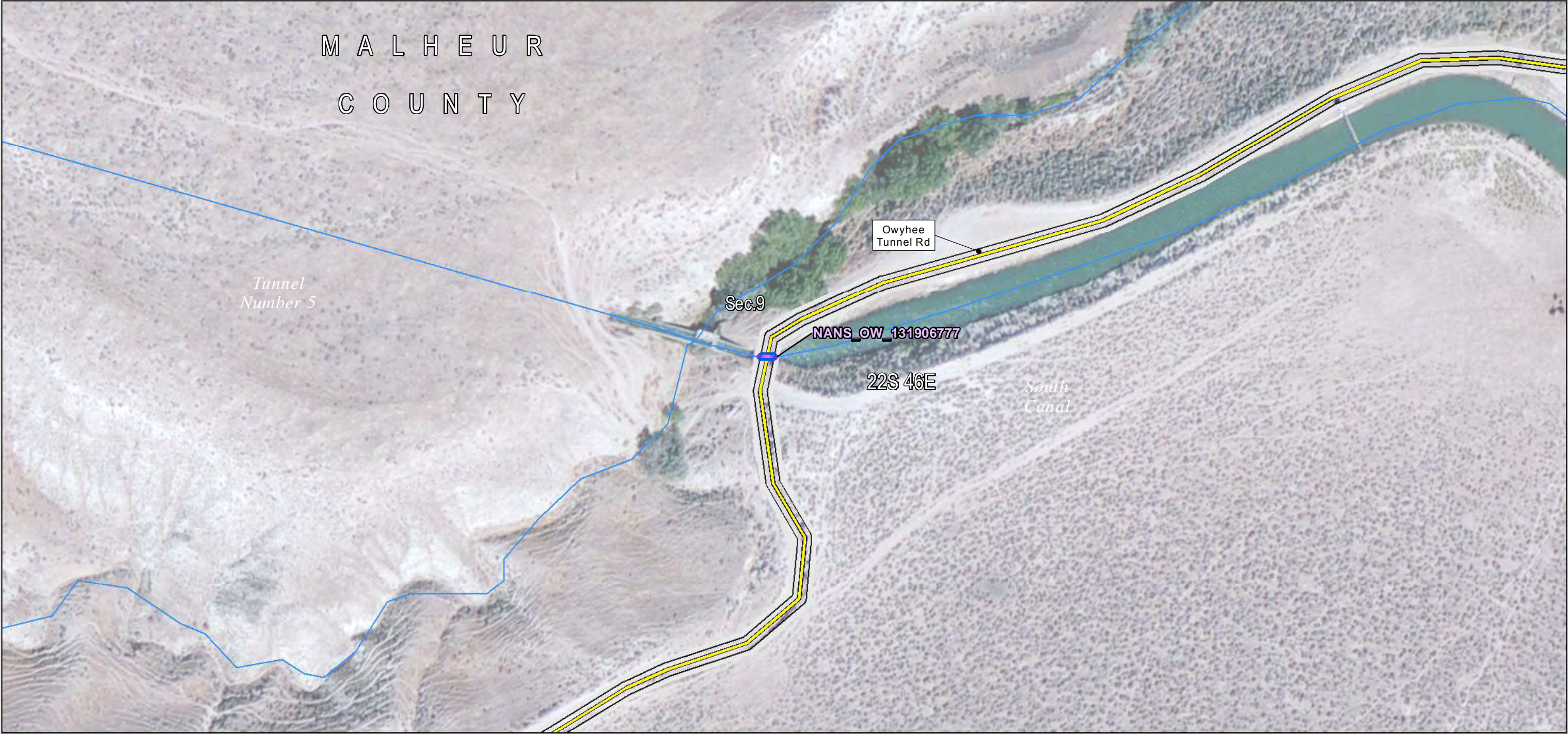
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-433**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

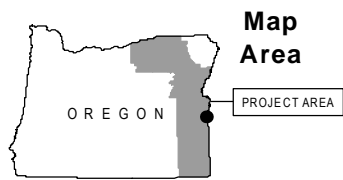
- Stream Impact Type**
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-434**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Work Areas

Multi-Use Area

Construction Access

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

Rivers, Streams, and  
Canals

#### Wetland

NANS Wetland (NWI)

Wetland Impact Type

Permanent

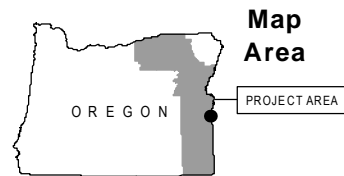
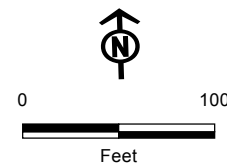


Boardman to Hemingway  
Transmission Line Project

**Attachment K-435**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County



MALHEUR  
COUNTY



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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Wetland**

- NANS Wetland (NWI)

**Wetland Impact Type**

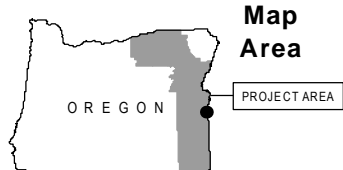
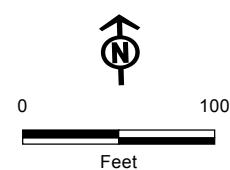
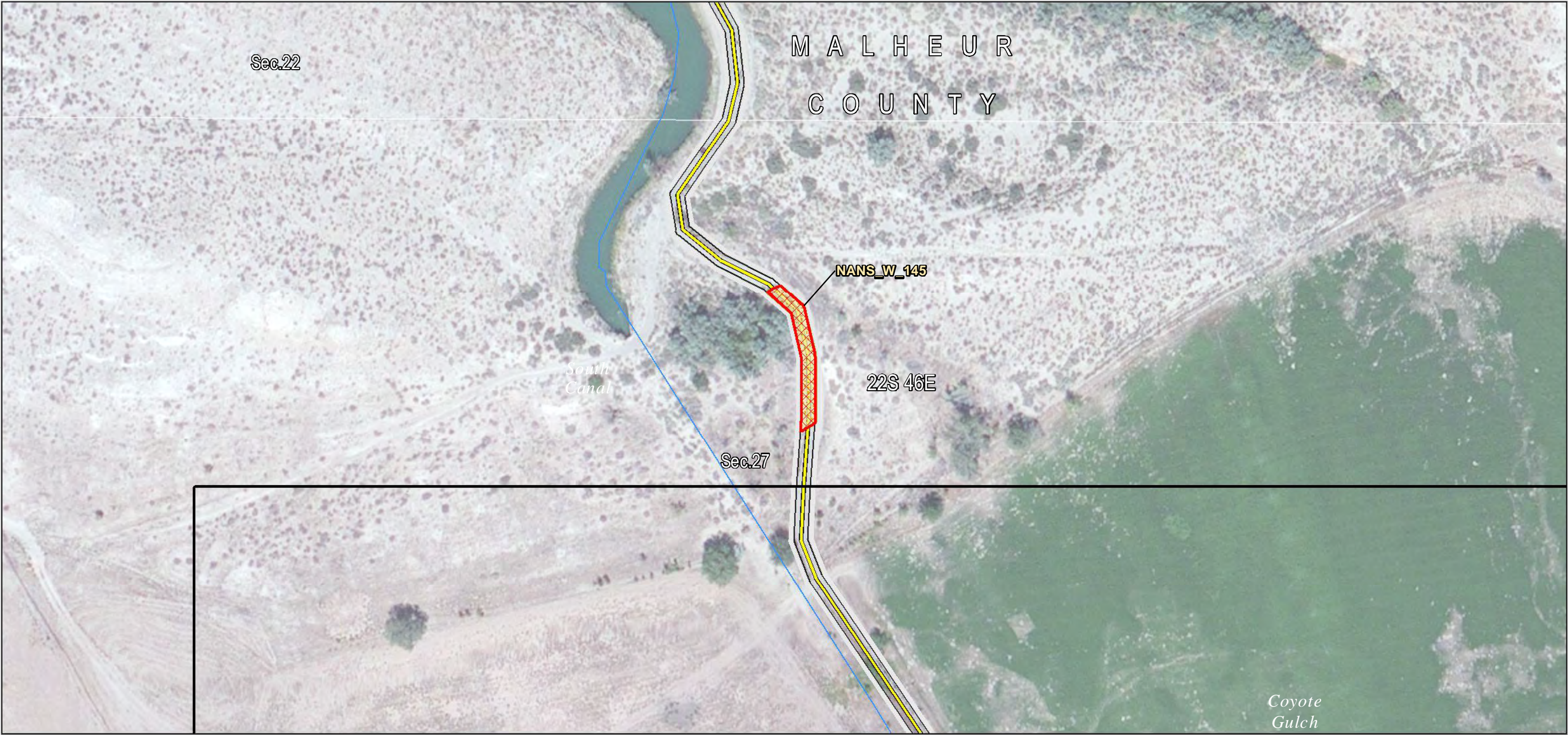
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-436**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
    - Existing Road, No Substantial Modification, 0-20% Improvements
    - Rivers, Streams, and Canals
  - Wetland**
    - NANS Wetland (NWI)

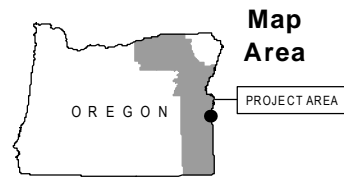
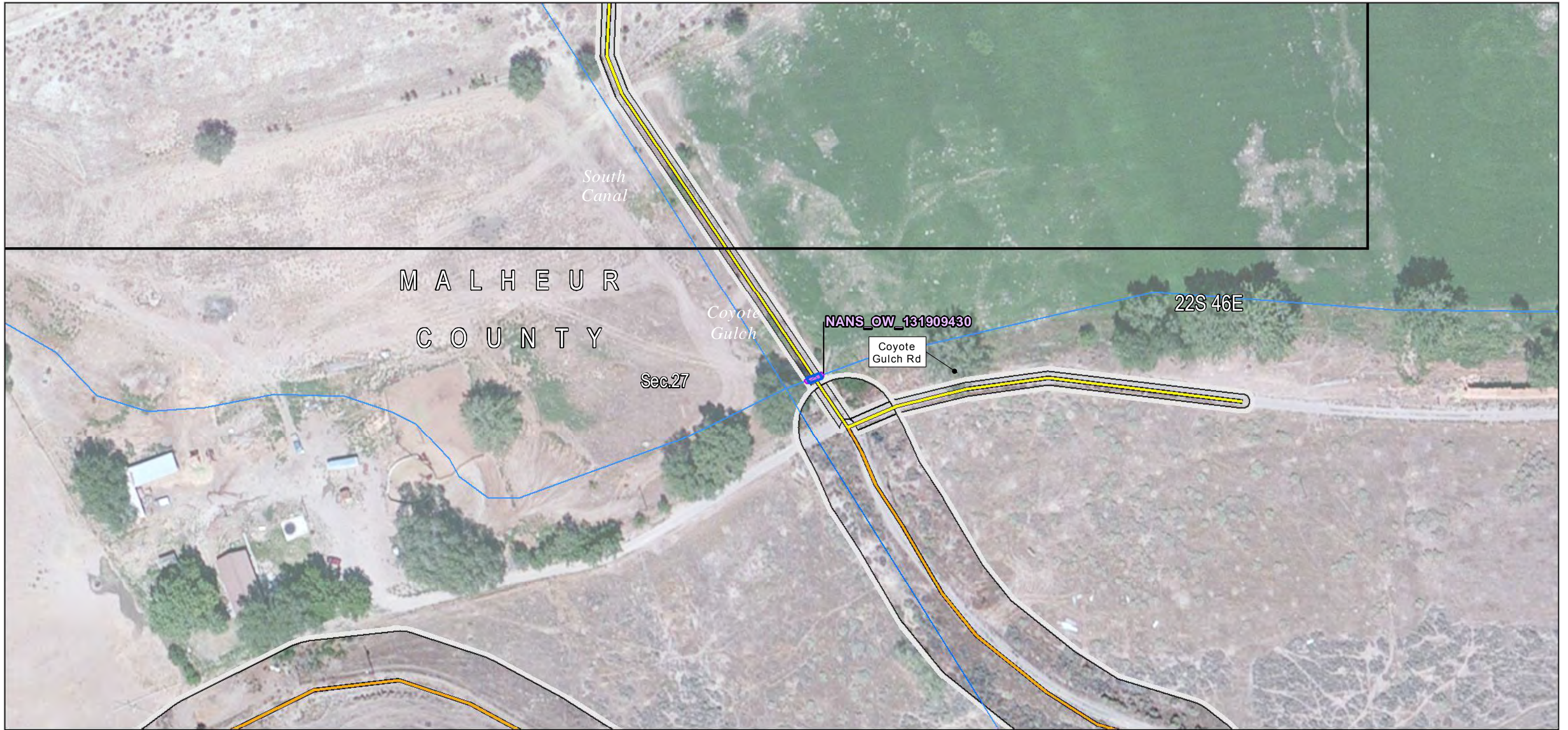
- Wetland Impact Type**
- Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-437**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

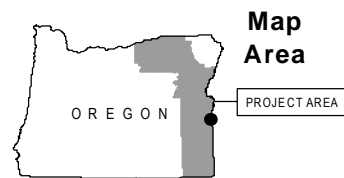
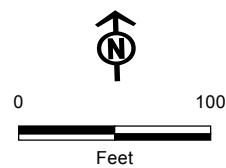
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-438**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

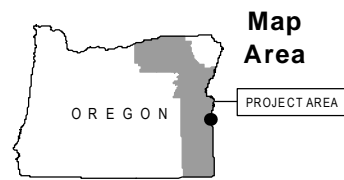
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-439**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

**Construction Access**

- Existing Road, No Substantial Modification, 0-20% Improvements
- Rivers, Streams, and Canals

**Other Waters**

- NANS Streams (NHD)

**Stream Impact Type**

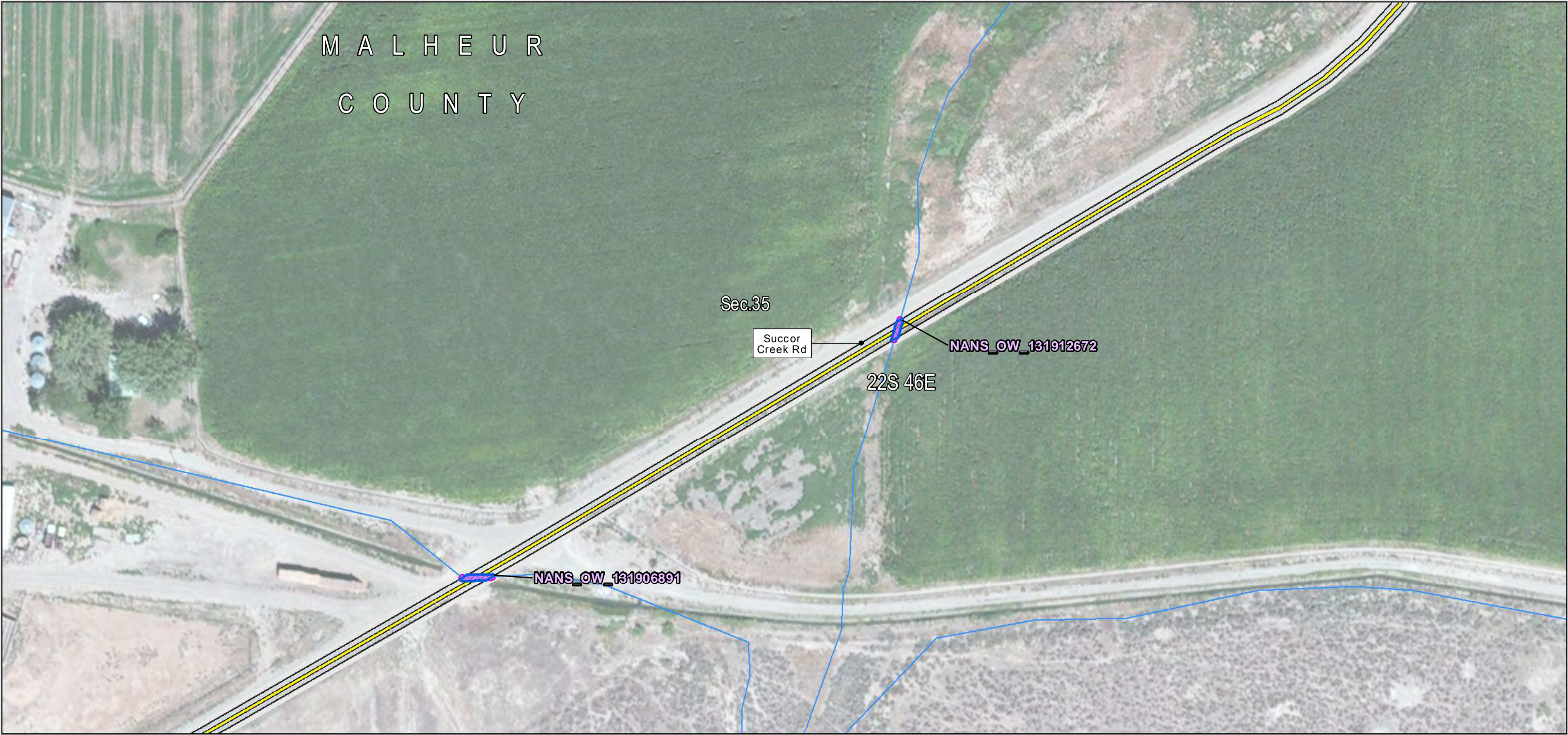
- Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-440**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





- Project Features**
- Construction Access
  - Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

- Stream Impact Type**
- Permanent

**IDAHO POWER**  
An IDACORP Company

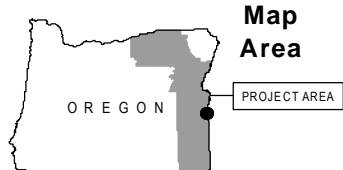
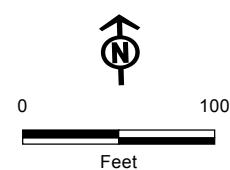
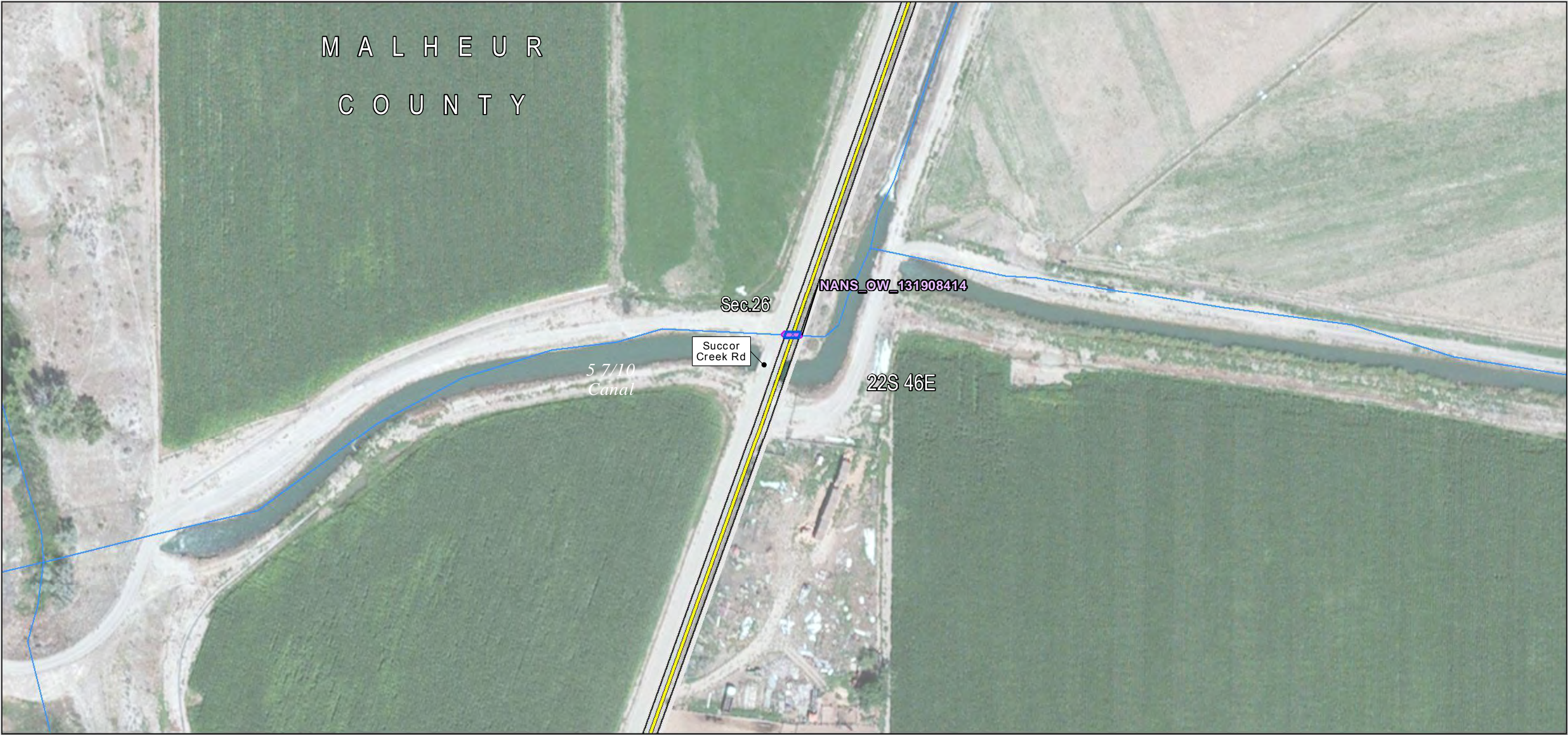
Boardman to Hemingway  
Transmission Line Project

**Attachment K-441**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

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

Notes: Elevation contour lines are not available at this time and will be added at a later date.





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

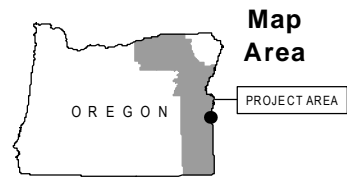
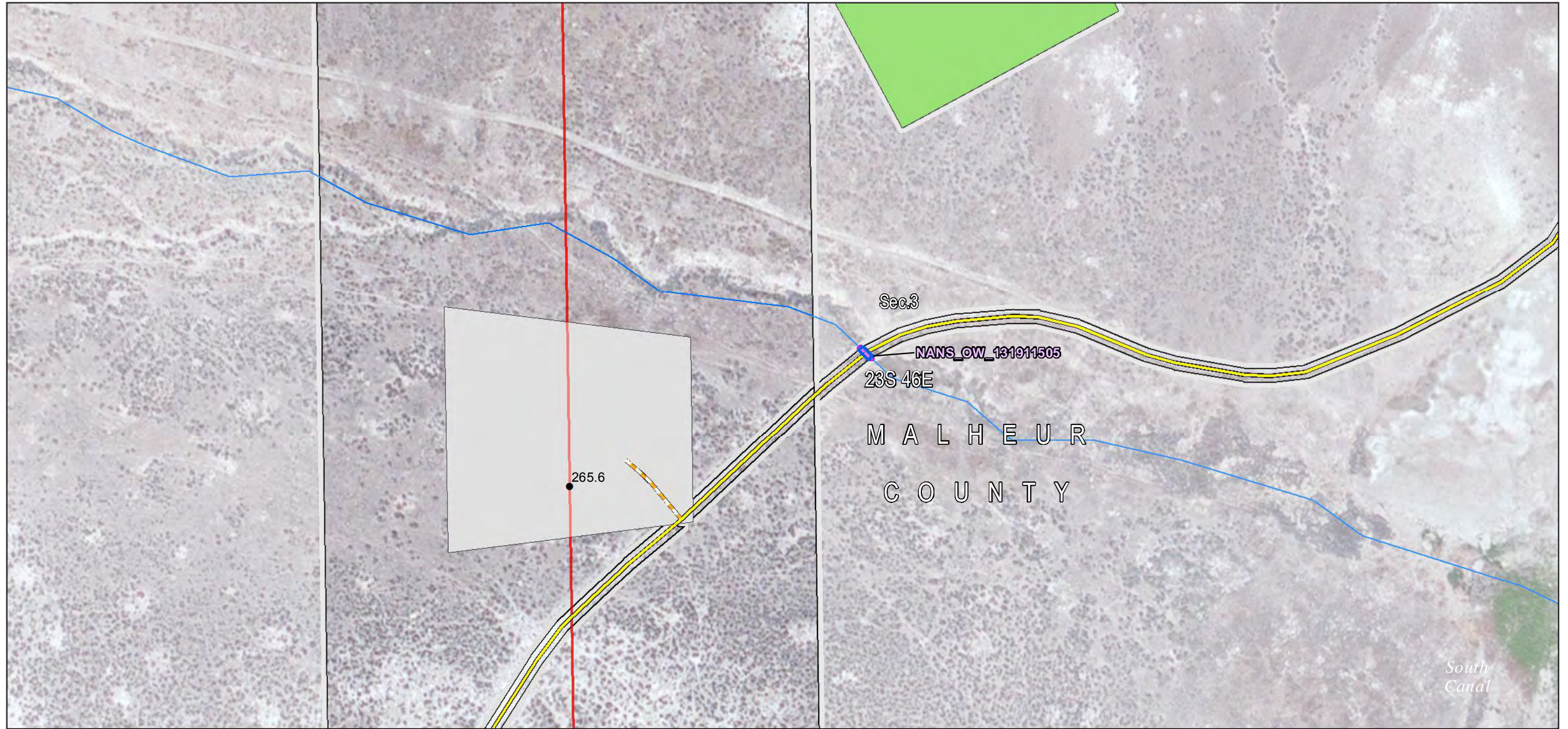
Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

- Project Features**
- Construction Access
  - Existing Road, No Substantial Modification, 0-20% Improvements
  - Rivers, Streams, and Canals
- Other Waters**
- NANS Streams (NHD)

- Stream Impact Type**
- Permanent





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Primitive

Rivers, Streams, and Canals

Other Waters

NANS Streams (NHD)

Stream Impact Type

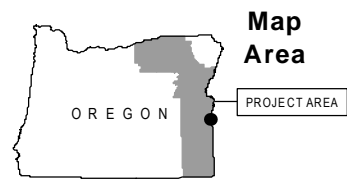
Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-443**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Work Areas

Structure Work Area

Construction Access

Existing Road, No  
Substantial Modification, 0-  
20% Improvements

New Road, Bladed

Rivers, Streams, and  
Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

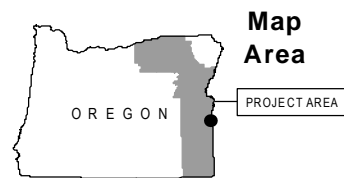
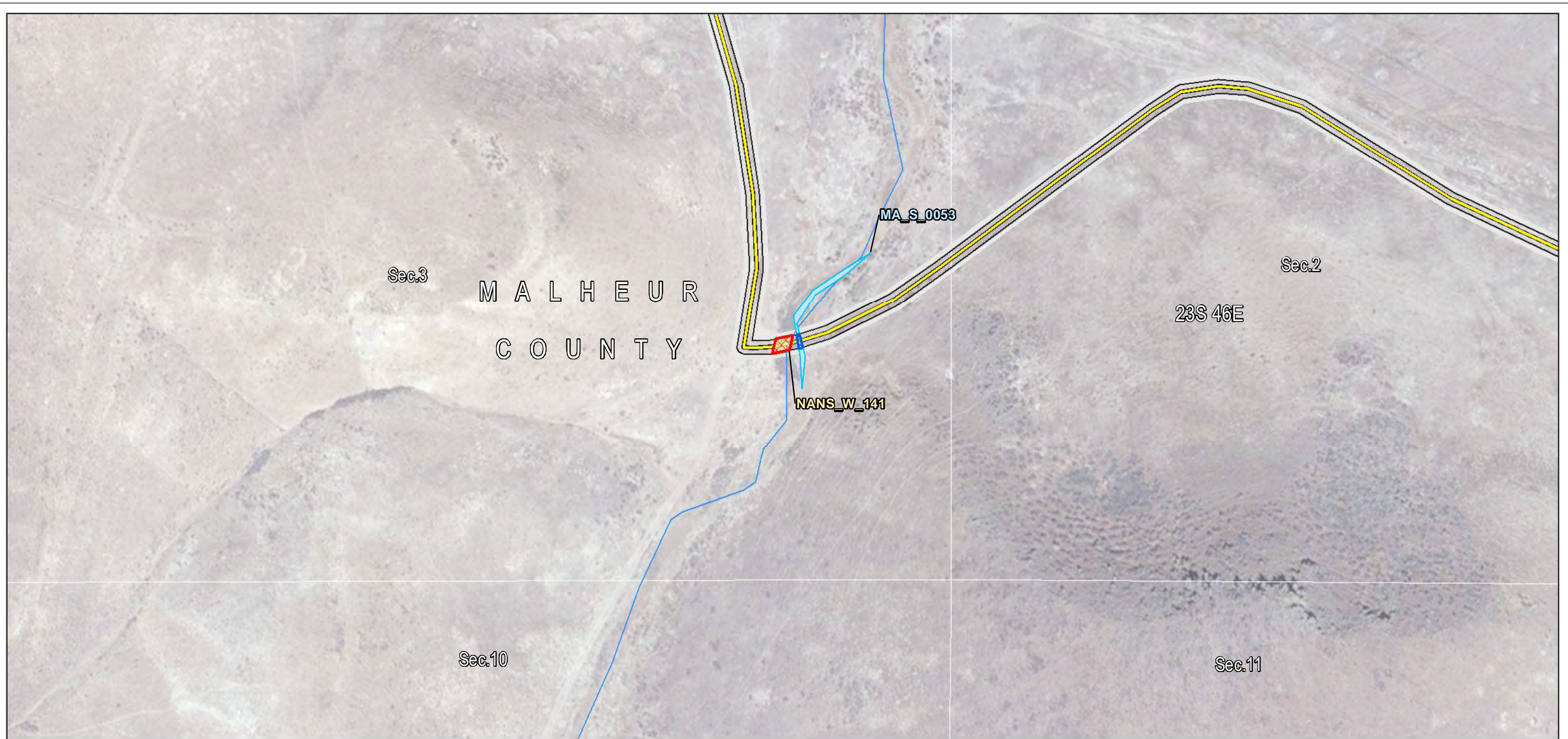
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-444**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

Permanent

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

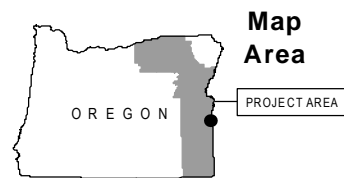
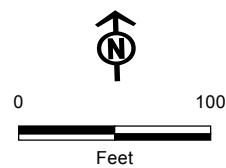
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-445**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

Existing Road, No Substantial Modification, 0-20% Improvements

New Road, Bladed

New Road, Primitive

Rivers, Streams, and Canals

Other Waters

Field Survey Streams

Stream Impact Type

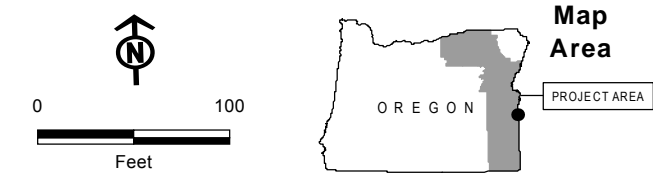
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-446**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
**Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Other Waters

NANS Streams (NHD)

##### Stream Impact Type

Temporary

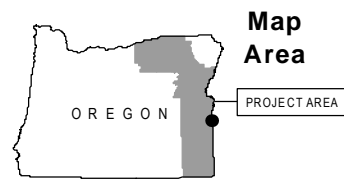
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-447**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

Temporary

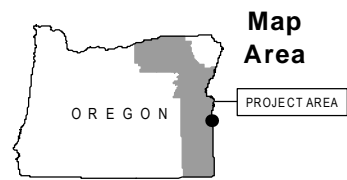
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-448**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Wetland

NANS Wetland (NWI)

##### Wetland Impact Type

Temporary

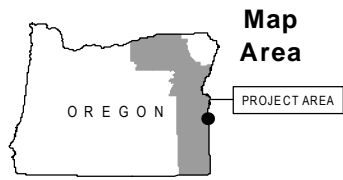
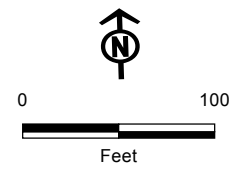
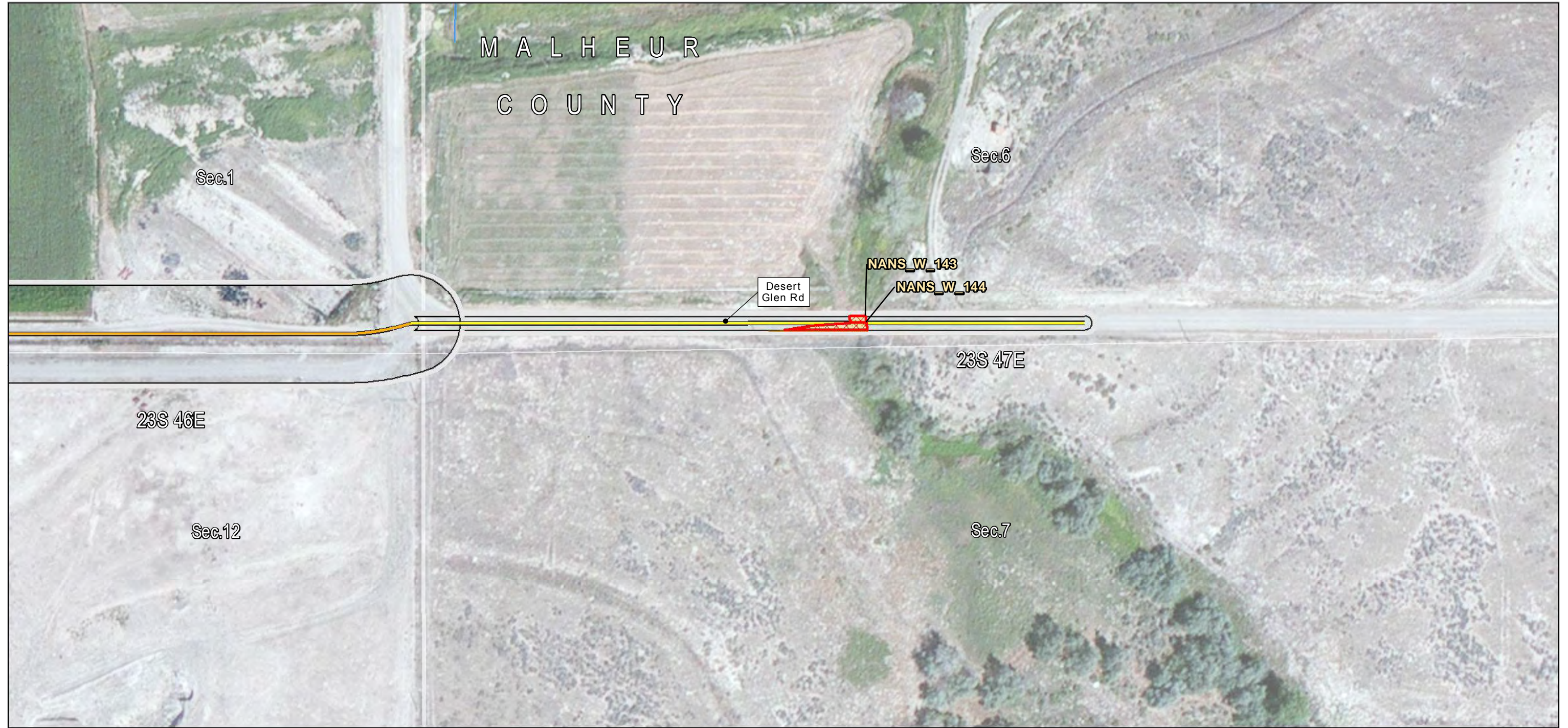
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-449**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

**Project Features**

- Site Boundary
- Proposed Route
- Construction Access
- Existing Road, No Substantial Modification, 0-20% Improvements
- Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

**Wetland**

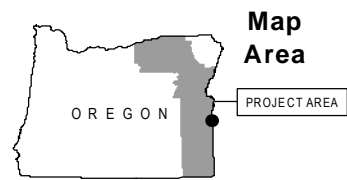
- NANS Wetland (NWI)
- Wetland Impact Type
- Permanent



Boardman to Hemingway Transmission Line Project

**Attachment K-450  
Wetland and Other Waters  
Joint Permit Application  
Detail Maps  
Malheur County**





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

Site Boundary

Proposed Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Primitive

Rivers, Streams, and Canals

#### Other Waters

NANS Streams (NHD)

Stream Impact Type

Temporary

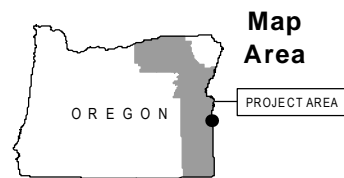
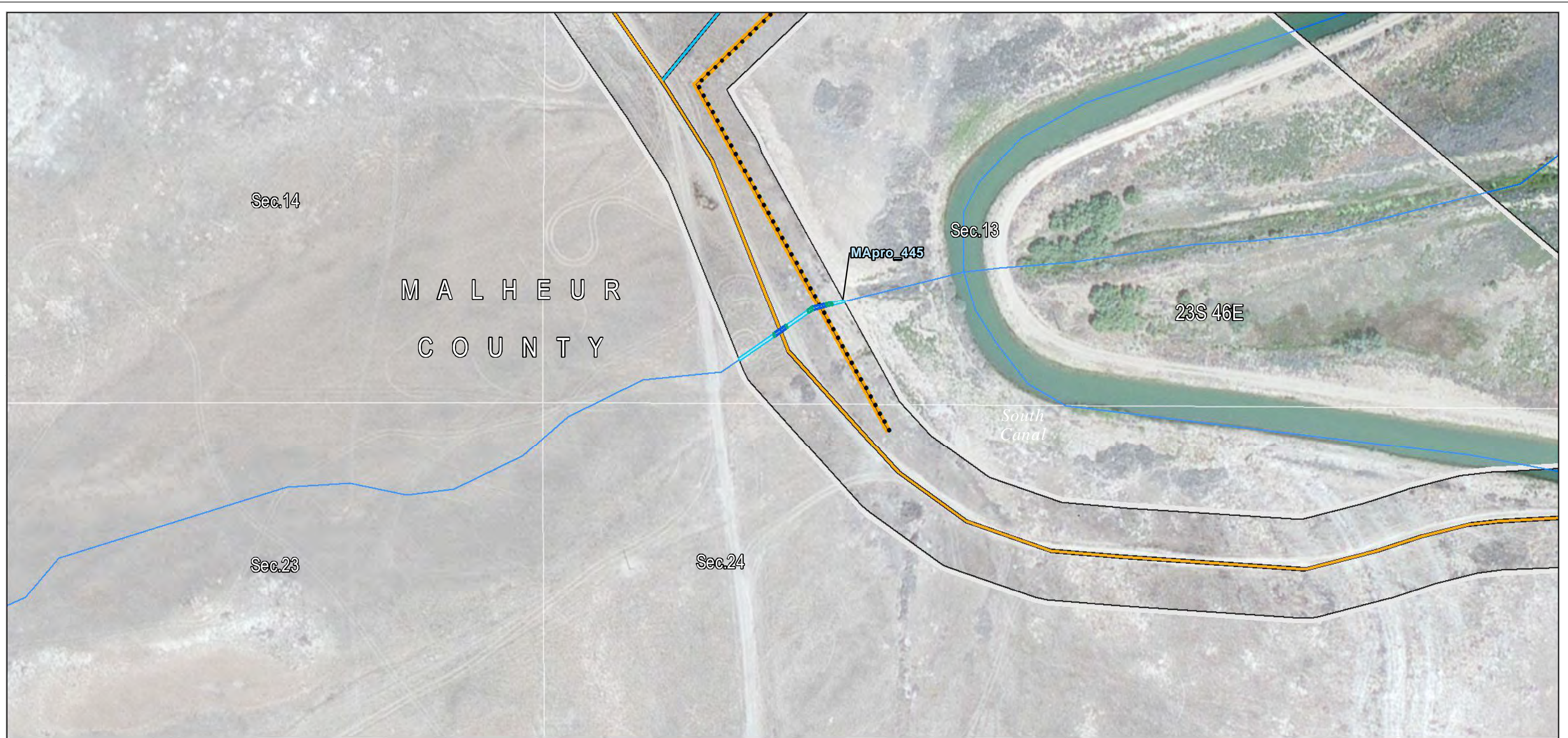
Permanent



Boardman to Hemingway  
Transmission Line Project

**Attachment K-451**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

- Proposed Route
- Distribution Line to Communication Station (IPC Service Territory Only)

##### Construction Access

- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- Rivers, Streams, and Canals

##### Other Waters

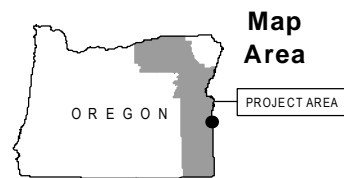
- Field Survey Streams
- Stream Impact Type
  - Temporary
  - Permanent



Boardman to Hemingway  
Transmission Line Project

## Attachment K-452 Wetland and Other Waters Joint Permit Application Detail Maps Malheur County





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

Notes: Elevation contour lines are not available at this time and will be added at a later date.

December 2016

#### Project Features

##### Site Boundary

Proposed Route

##### Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Rivers, Streams, and Canals

##### Other Waters

Field Survey Streams

##### Stream Impact Type

Temporary

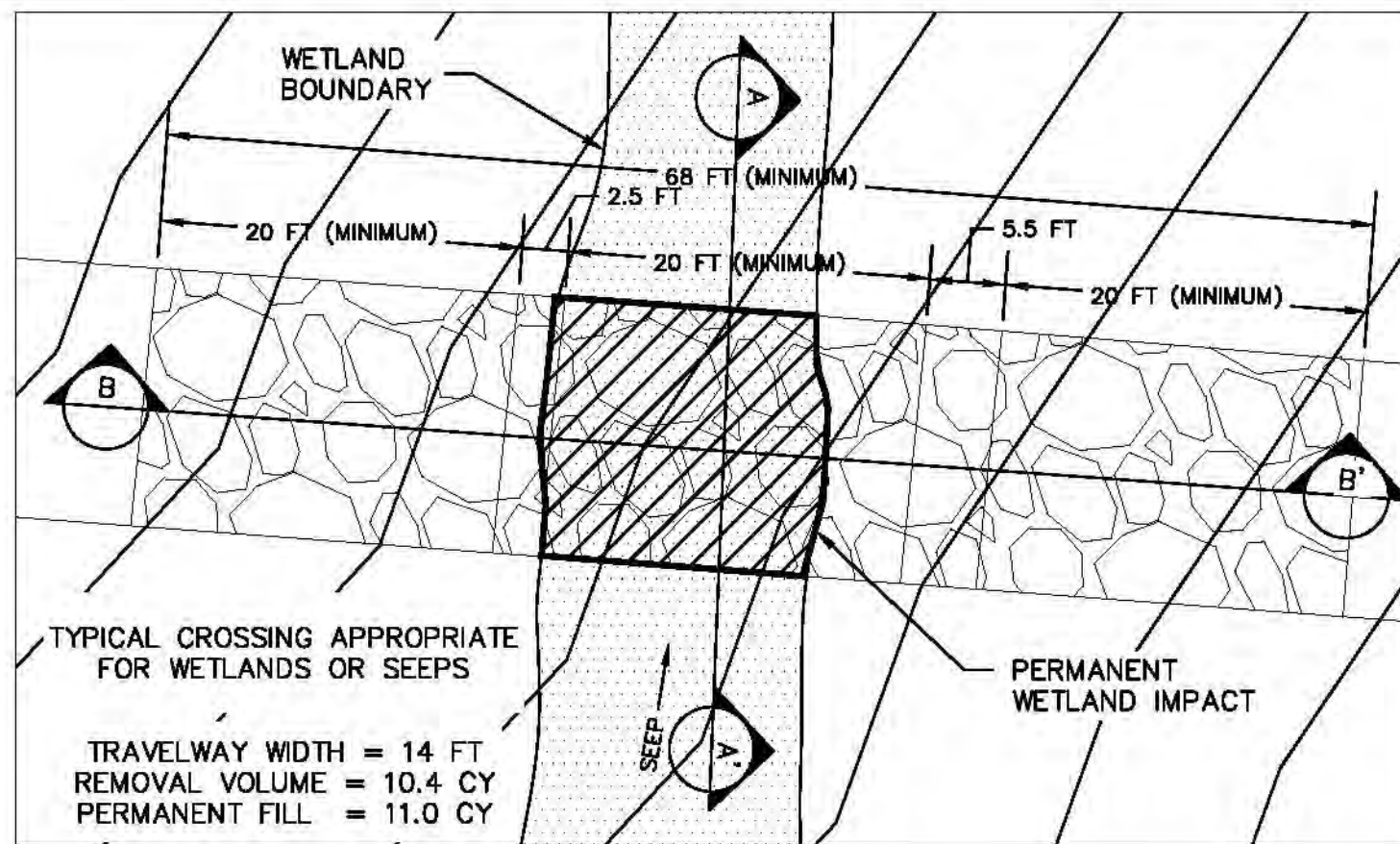
Permanent



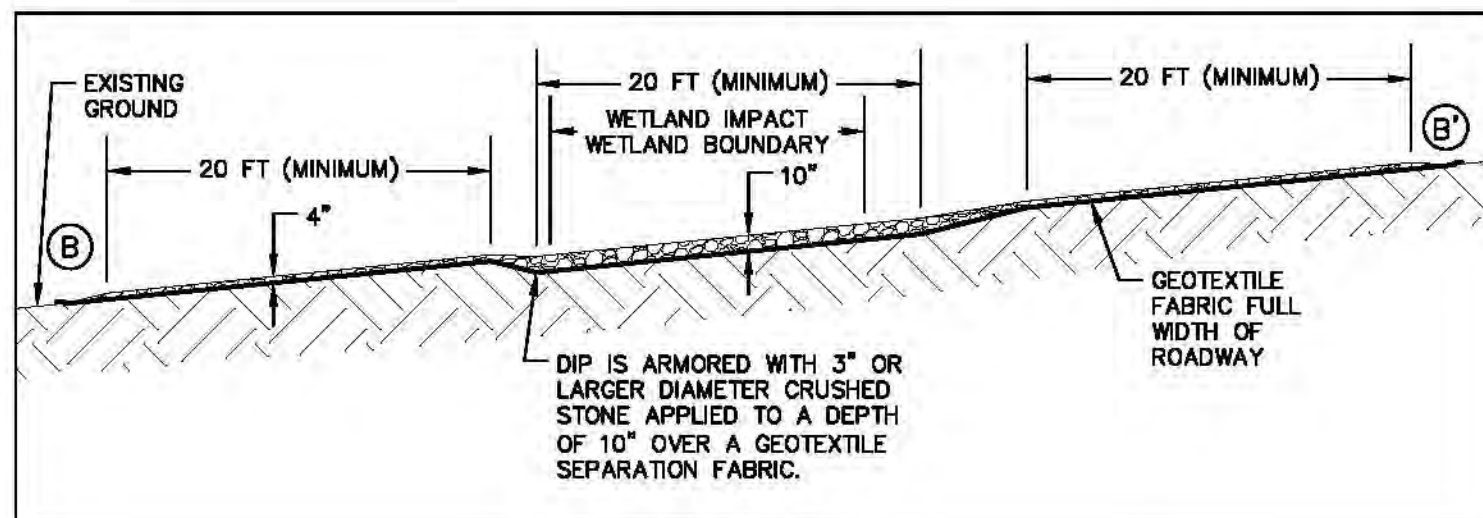
Boardman to Hemingway  
Transmission Line Project

**Attachment K-453**  
**Wetland and Other Waters**  
**Joint Permit Application**  
**Detail Maps**  
Malheur County

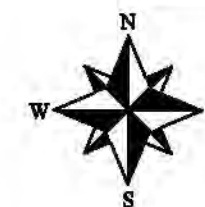
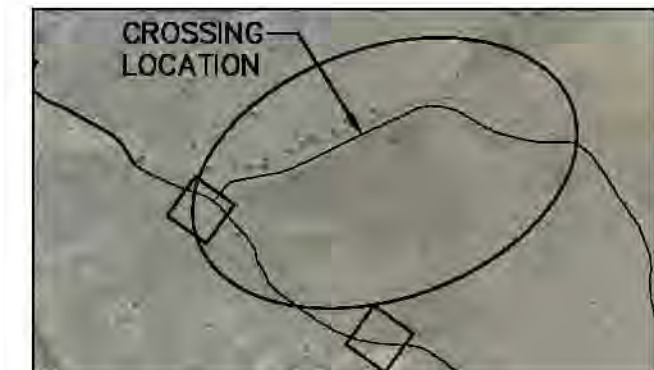




1 INCH = 10 FEET

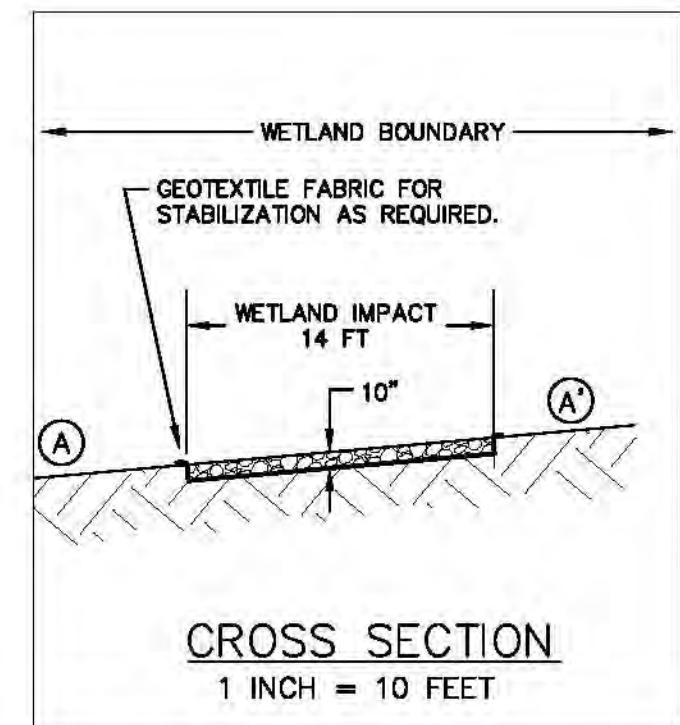


1 INCH = 10 FEET



VICINITY MAP  
1 INCH = 1000 FEET

SEEP  
LAT/LONG NXX.XXX, -XXX,XXX



1 INCH = 10 FEET

SCALE AS SHOWN

PLAN SCALE

0 10

FEET



NON-STREAM WETLAND CROSSING - BROAD BASED DIP

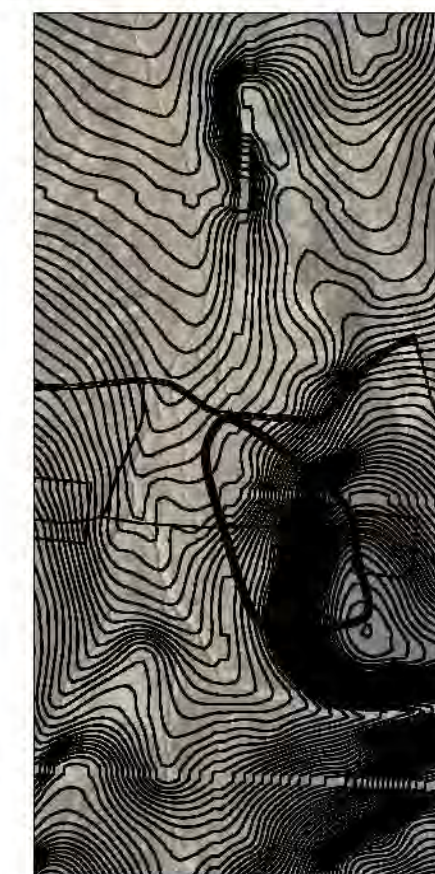
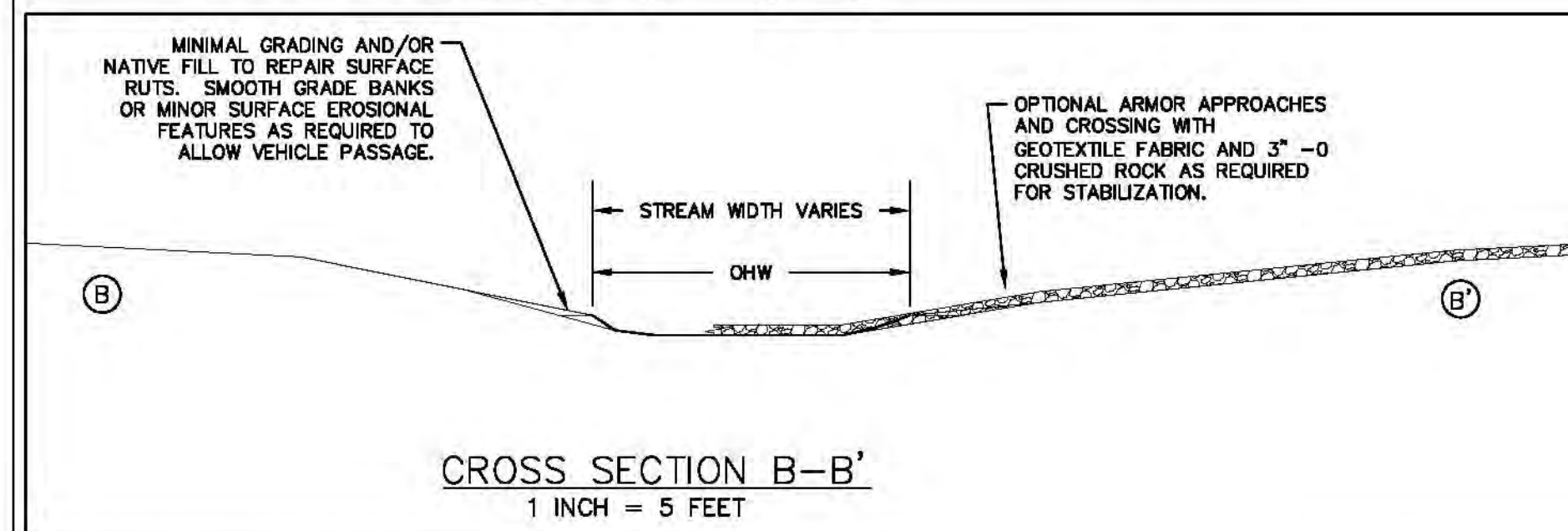
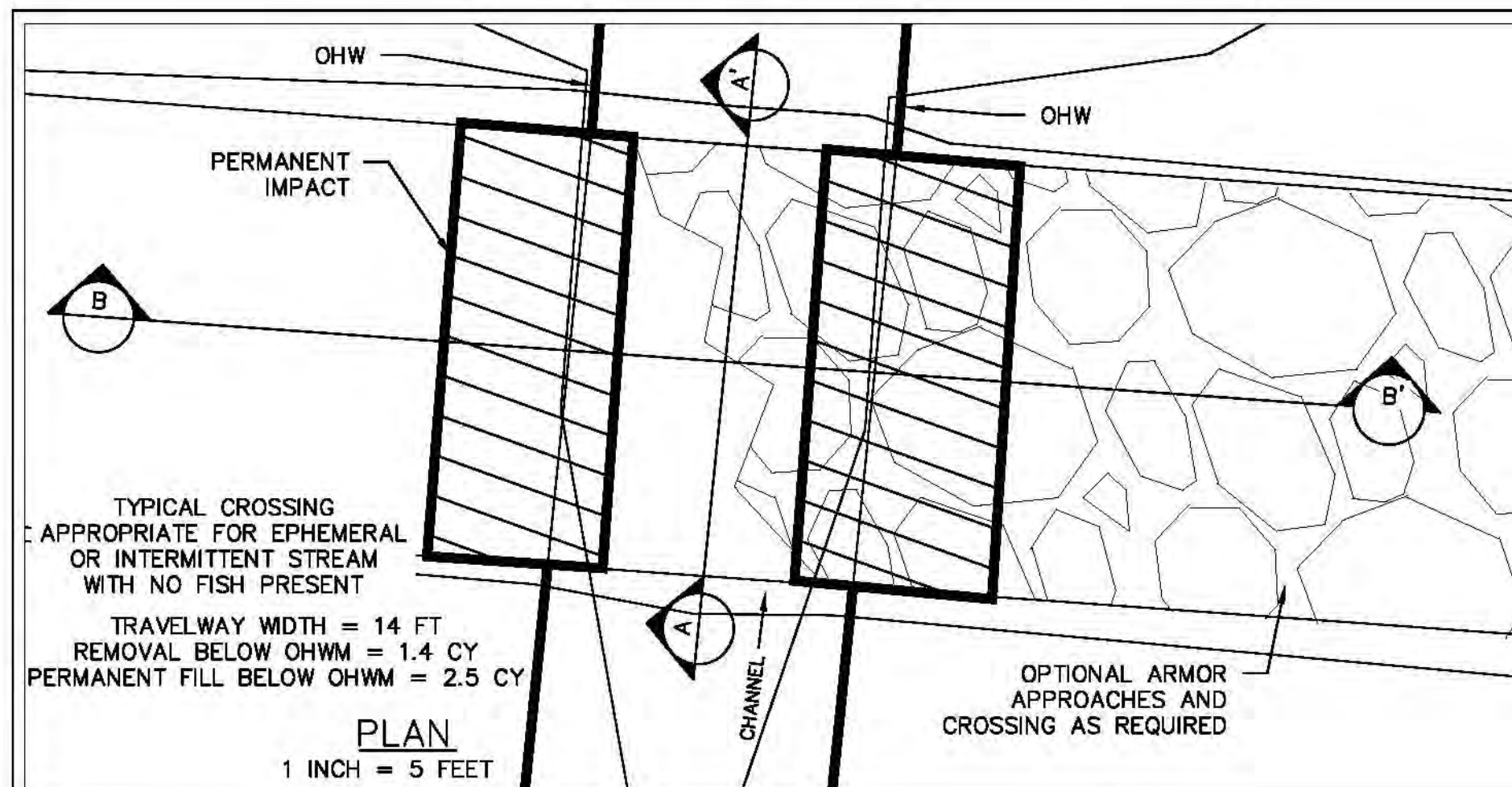
PRELIMINARY-DO-NOT-USE-FOR-CONSTRUCTION

COORDINATE SYSTEM:  
NAD 1983 UTM ZONE 11N.

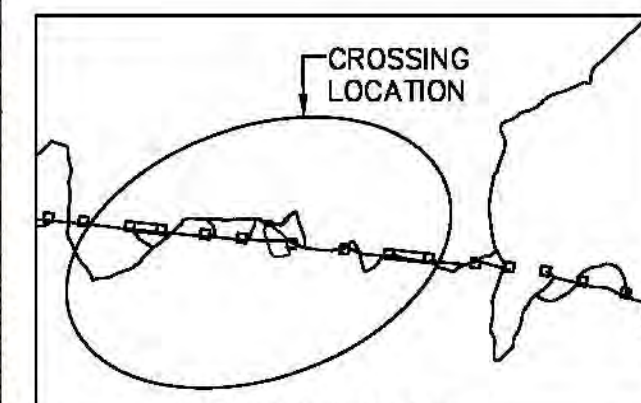
STREAM CROSSING SAMPLES  
NON-STREAM WETLAND CROSSING  
BROAD BASED DIP  
Appendix K-454  
IDAHO POWER COMPANY  
BOARDMAN TO HEMINGWAY  
500KV TRANSMISSION LINE PROJECT

January 2017

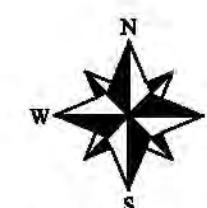




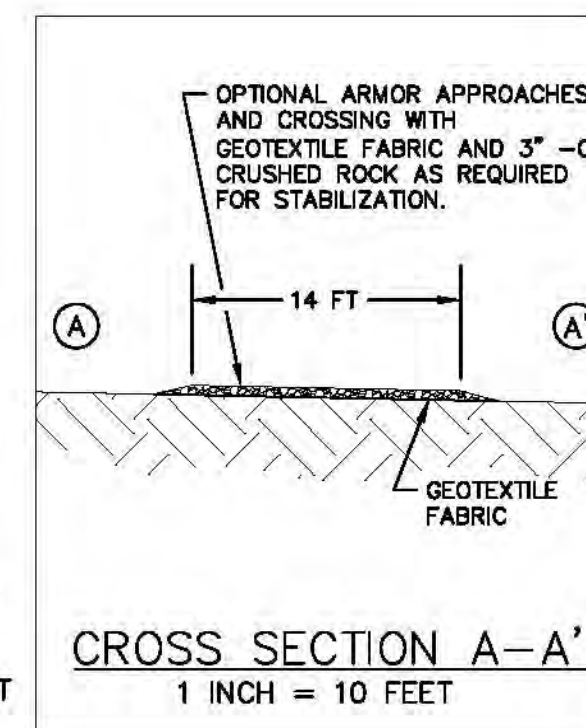
**BASIN AREA**  
1 INCH = 800 FEET



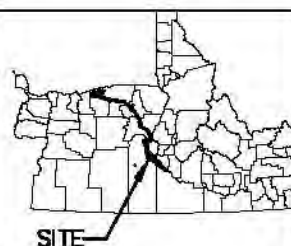
**VICINITY MAP**  
1 INCH = 1 MILE



EPHEMERAL STREAM  
LAT/LONG NXX.XXX, -XXX,XXX  
BASIN AREA = XX ACRES  
CHANNEL SLOPE = X.X%  
ACTIVE CHANNEL WIDTH = XX.X FT



SCALE AS SHOWN



## TYPE 1 CROSSING - DRIVE THROUGH

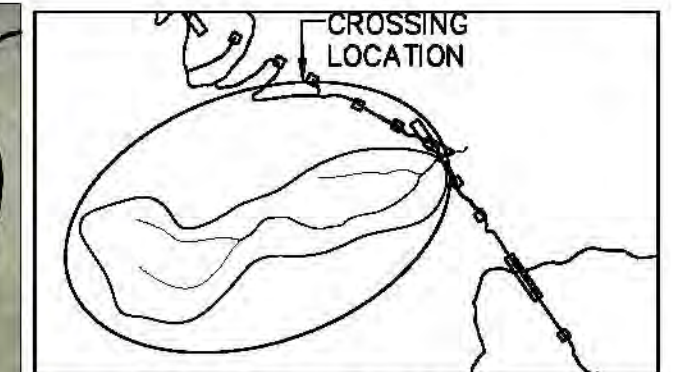
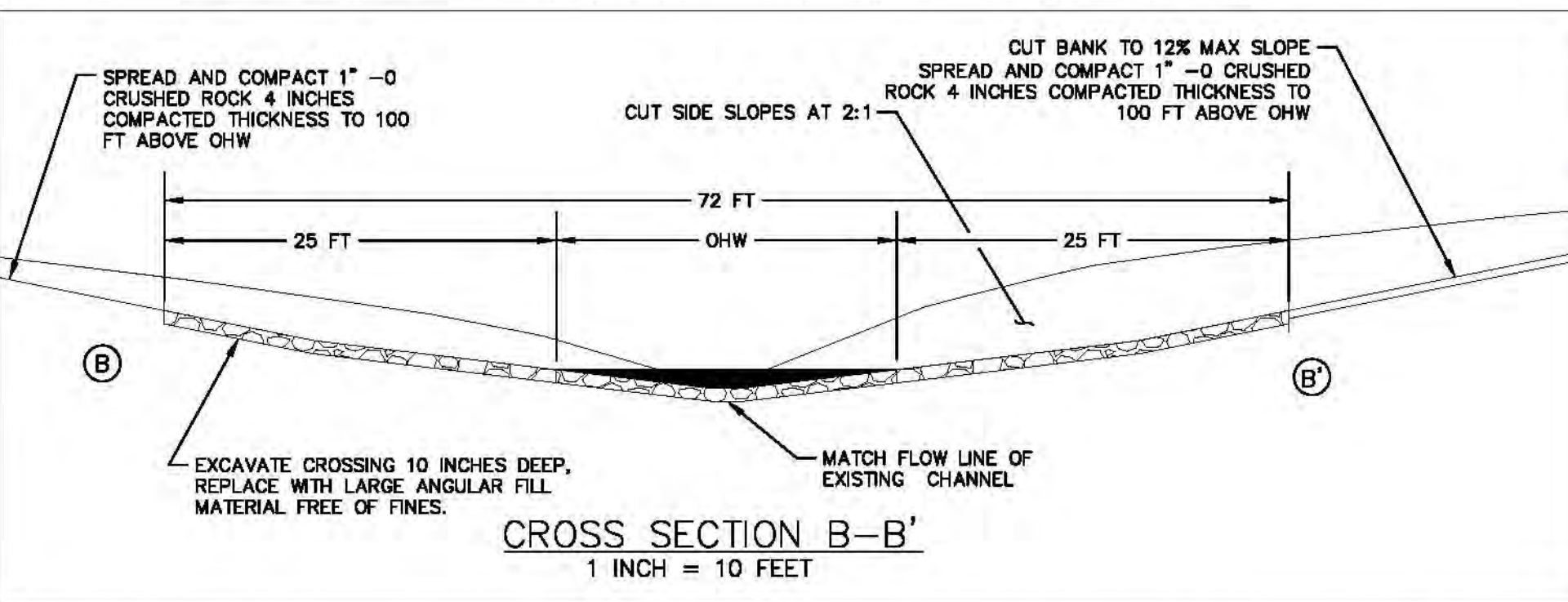
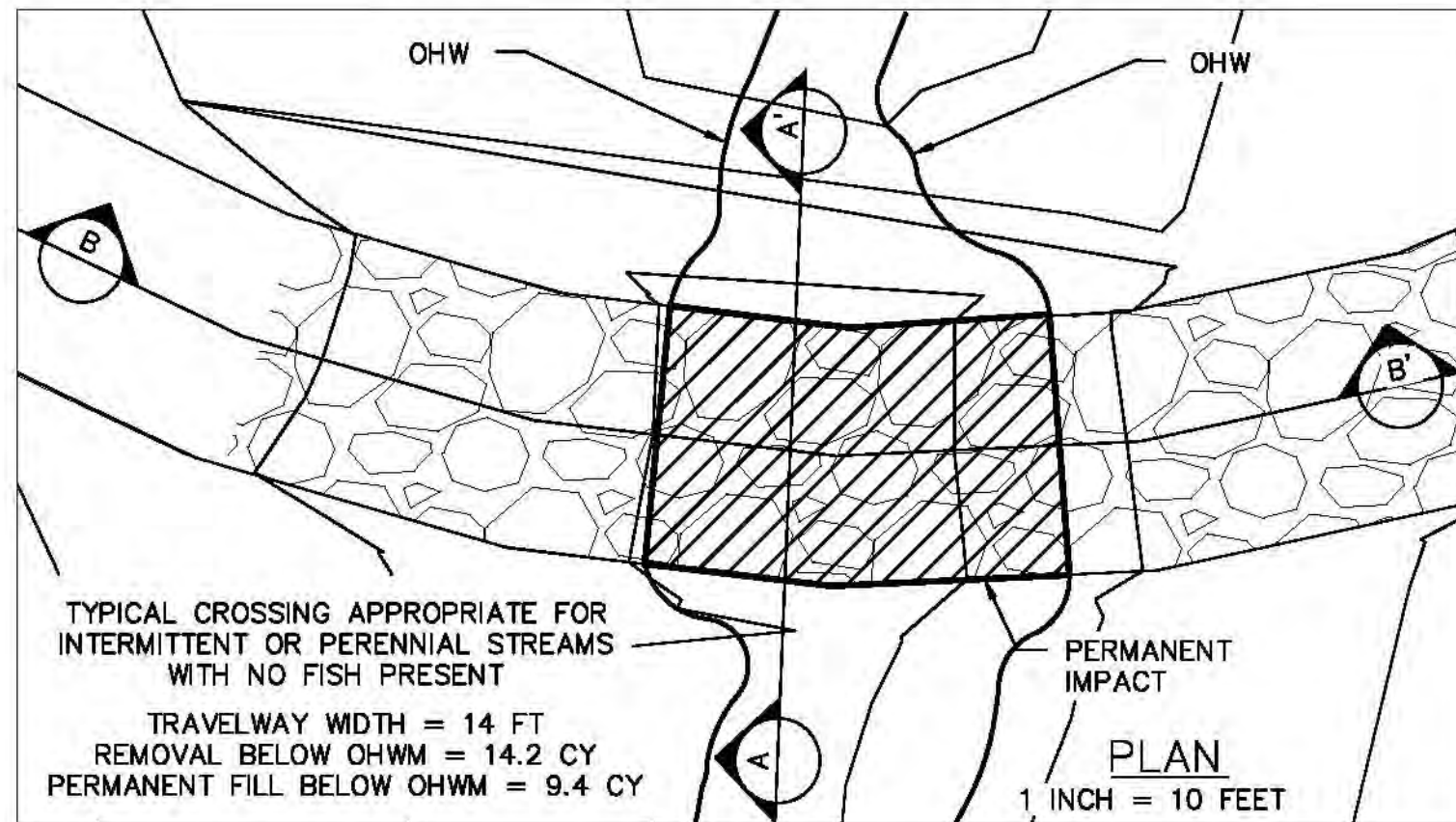
**PRELIMINARY-DO-NOT-USE-FOR-CONSTRUCTION**

COORDINATE SYSTEM:  
NAD 1983 UTM ZONE 11N.

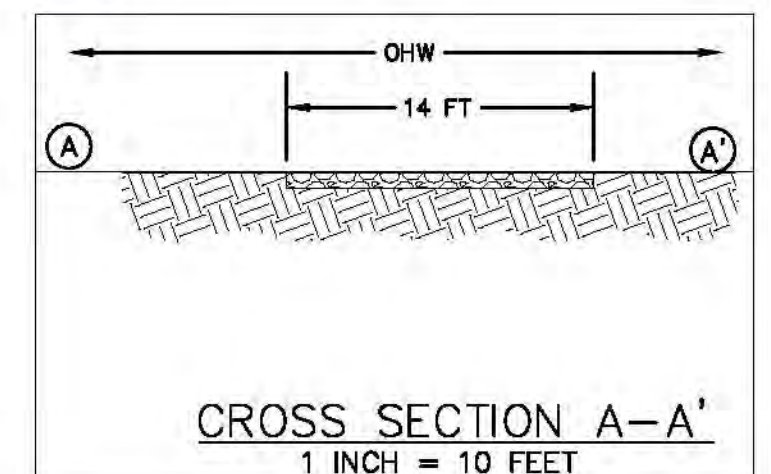
**STREAM CROSSING SAMPLES**  
**TYPE 1 CROSSING**  
**DRIVE THROUGH**  
Appendix K-455  
IDAHO POWER COMPANY  
BOARDMAN TO HEMINGWAY  
500KV TRANSMISSION LINE PROJECT

January 2017

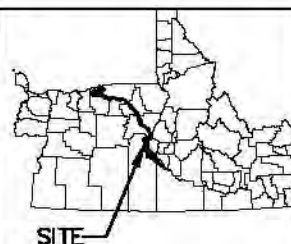




INTERMITTENT STREAM  
 LAT/LONG NXX.XXX, -XXX,XXX  
 BASIN AREA = XX ACRES  
 CHANNEL SLOPE = X.X%  
 ACTIVE CHANNEL WIDTH = XX.X FT



SCALE AS SHOWN



## TYPE 2 CROSSING - IMPROVED FORD

PRELIMINARY-DO-NOT-USE-FOR-CONSTRUCTION

COORDINATE SYSTEM:  
 NAD 1983 UTM ZONE 11N.

STREAM CROSSING SAMPLES  
 TYPE 2 CROSSING  
 IMPROVED FORD  
 Appendix K-456  
 IDAHO POWER COMPANY  
 BOARDMAN TO HEMINGWAY  
 500KV TRANSMISSION LINE PROJECT

January 2017



## **Appendix L, Measures to Minimize Impacts**

IPC is actively engaged in avoiding and minimizing impacts to wetlands and waters.

IPC will use BMPs to minimize impacts to wetland and streams. Typical BMPs for stream crossings are listed below.

### **Typical BMP's for Stream Crossings:**

- No streams will be dewatered.
- Avoid crossing streams when practical.
- Cross at right angles at a point where the stream bed is straight and uniform.
- Minimize the use of equipment in the stream bed.
- Limit construction activity to periods of low flow or when streams are dry
- Avoid activity in streams outside of preferred in-stream work windows.
- Minimize excavation and fill at stream crossings and other disturbances to stream banks and channels.
- Use materials that are clean, non-erodible and non-toxic.
- Avoid using soil as fill except when installing culverts.
- Avoid altering stream flow.
- Divert runoff from roads and trails leading to stream crossings into undisturbed vegetation. Avoid directing runoff directly into streams, including ephemeral streams.
- Stabilize approaches to stream crossings with aggregate or other suitable material.
- Stabilize exposed soil as soon as practicable.
- Maintain crossings in safe, functional condition.
- Restore natural stream flow as soon as temporary crossings are no longer needed.
- The use of a temporary matting may be considered to accommodate construction traffic.

## **Appendix M Erosion and Sediment Control Plan**

The Project's Erosion and Sediment Control Plan will be provided in Exhibit I, Attachment I-3 of the ASC, and is included in the Supplemental Reference Documents section of the JPA.



## **Appendix N Fill Material and Disposal Locations**

Fill material will consist of gravel, silt, clay, sand, loam, rock, and crushed rock, depending on the construction site and job to be accomplished. No material will be excavated from waters of the state specifically for use as fill material. Balanced cut and fill practices will likely be used during construction, with excavated material being used as fill as close to the excavation site as necessary and practicable. Excavated material will only be placed in waters of the state as permitted based on this application. BMPs will be implemented to prevent runoff of sediment to wetlands and streams. Soils excavated to create footings and foundations for facilities will be temporarily stockpiled in upland areas near the construction sites and used as backfill at the completion of the footing or facility. While the material is stockpiled, perimeter controls such as silt fencing or equivalent control measures will be established and the stockpiled material will be covered as necessary with mulch, by plastic sheeting and other methods to prevent erosion and sedimentation.

## **Appendix O Removal and Fill Volumes and Dimensions**

Table O-1A provides removal and fill area and permanent fill volume for temporary and permanent impacts for each delineated wetland. Table O-2A provides removal and fill area and permanent fill volume for temporary and permanent impacts for each delineated water. Table O-3 (for USACE jurisdiction only) provides removal and fill area and permanent fill volume for temporary and permanent impacts for each ephemeral water. These tables include features delineated in 2011, 2012, 2013, and 2016. Impact areas for un-delineated NWI and NHD features with preliminary boundaries are provided in Tables O-1B and Table O-2B and are used only for mitigation planning. Temporary removal and fill volume amounts will be provided in the final JPA after final engineering design is complete.



Table O-1A. Temporary and Permanent Impacts to Delineated Wetlands

County	Feature ID	Crossing Type (Appendix K)	R/F Dimensions	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Umatilla	UM_W_0031	K-454	Variable	0.001	0	3	3
Union	UN_LM_W_301	K-454	Variable	0.002	0	5	6
Union	UN_LM_W_302	K-454	Variable	0.001	0	3	3
Union	UN_MC_W_001	K-454	Variable	0.001	0	3	3
Union	UN_MC_W_018	K-454	Variable	0.15	0.026	390	413
Union	UN_MC_W_019	K-454	Variable	0.01	0.089	26	28
Union	UN_ML_W_004	K-454	Variable	0.003	0.003	8	8
Union	UN_ML_W_005	K-454	Variable	0.015	0	39	41
Union	UN_ML_W_006	K-454	Variable	0.041	0	107	113
Union	UN_ML_W_015	K-454	Variable	0.003	0.005	8	8
Union	UN_W_0412	K-454	Variable	0.436	0	1134	1199
Union	UN_W_0419	K-454	Variable	0.054	0	140	149
Baker	BA_BR_W446	K-454	Variable	0.003	0.004	8	8
Baker	BA_BR_W455	K-454	Variable	0.015	0	39	41
Baker	BA_FL_W_011	K-454	Variable	0.006	0.002	16	17
Baker	BA_FL_W_012	K-454	Variable	0.008	0.011	21	22
Baker	BA_WT_W_010	K-454	Variable	0.002	<0.001	5	6
Baker	BA_WT_W_013	K-454	Variable	<0.001	0	<2	<2
Baker	BA_WT_W_202	K-454	Variable	0.003	0.005	8	8
Baker	BA_WT_W_204	K-454	Variable	0.015	0.022	39	41
Baker	BA_WT_W_206	K-454	Variable	0.006	0.007	16	17
Baker	BA_WT_W_300	K-454	Variable	0.002	0	5	6
			Totals	0.777	0.174	2025	2142



**Table O-1B.** Temporary and Permanent Impacts to Wetlands (Not Accessed/Not Delineated)

County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Morrow	NANS_W_104	0	0.131	TBD	TBD
Morrow	NANS_W_105	0.009	0.09	TBD	TBD
Morrow	NANS_W_117	0.005	0	TBD	TBD
Morrow	NANS_W_118	0.008	0.237	TBD	TBD
Morrow	NANS_W_119	0	0.078	TBD	TBD
Morrow	NANS_W_151	0.008	0	TBD	TBD
Umatilla	NANS_W_108	0	0.004	TBD	TBD
Umatilla	NANS_W_109	<0.001	0.005	TBD	TBD
Umatilla	NANS_W_112	0.001	0.002	TBD	TBD
Umatilla	NANS_W_115	0	0.114	TBD	TBD
Umatilla	NANS_W_152	0.006	0	TBD	TBD
Umatilla	NANS_W_153	0.006	0	TBD	TBD
Umatilla	NANS_W_154	0.005	0	TBD	TBD
Umatilla	NANS_W_161	0.151	0	TBD	TBD
Umatilla	NANS_W_162	0.102	0	TBD	TBD
Umatilla	NANS_W_164	0.006	0	TBD	TBD
Umatilla	NANS_W_165	0.006	0	TBD	TBD
Umatilla	NANS_W_166	0.012	0	TBD	TBD
Umatilla	NANS_W_167	0.005	0	TBD	TBD
Umatilla	NANS_W_168	0.005	0	TBD	TBD
Umatilla	NANS_W_18	0.003	0.002	TBD	TBD
Umatilla	NANS_W_22	0.007	0.008	TBD	TBD
Umatilla	NANS_W_68	0.011	0.001	TBD	TBD
Umatilla	NANS_W_85	0.004	0.01	TBD	TBD
Umatilla	NANS_W_86	0.004	0.006	TBD	TBD
Umatilla	NANS_W_87	0.008	0.01	TBD	TBD
Umatilla	NANS_W_89	0.01	0.01	TBD	TBD
Umatilla	NANS_W_96	0	0.001	TBD	TBD
Umatilla	NANS_W_98	0	0.002	TBD	TBD
Umatilla	NANS_W_99	0.012	0.016	TBD	TBD
Union	NANS_W_155	0.006	0	TBD	TBD
Union	NANS_W_156	0.005	0	TBD	TBD
Union	NANS_W_157	0.024	0	TBD	TBD
Union	NANS_W_158	0.005	0	TBD	TBD
Union	NANS_W_159	0.008	0	TBD	TBD
Union	NANS_W_160	0.01	0	TBD	TBD
Union	NANS_W_163	0.009	0	TBD	TBD
Union	NANS_W_169	0.006	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Union	NANS_W_170	0.012	0	TBD	TBD
Union	NANS_W_175	0.026	0	TBD	TBD
Union	NANS_W_176	0.041	0	TBD	TBD
Union	NANS_W_177	0.144	0	TBD	TBD
Union	NANS_W_179	0.004	0	TBD	TBD
Union	NANS_W_180	0.05	0	TBD	TBD
Union	NANS_W_26	0.016	0.002	TBD	TBD
Union	NANS_W_28	0.011	0	TBD	TBD
Union	NANS_W_51	0.029	0.004	TBD	TBD
Union	NANS_W_55	0.016	0.002	TBD	TBD
Union	NANS_W_80	0.08	0.331	TBD	TBD
Baker	NANS_W_120	0.005	0	TBD	TBD
Baker	NANS_W_121	0.005	0	TBD	TBD
Baker	NANS_W_124	0.005	0	TBD	TBD
Baker	NANS_W_127	0.004	0	TBD	TBD
Baker	NANS_W_147	0.029	0	TBD	TBD
Baker	NANS_W_148	0.006	0	TBD	TBD
Baker	NANS_W_149	0.008	0	TBD	TBD
Baker	NANS_W_150	0.072	0	TBD	TBD
Baker	NANS_W_171	0.002	0	TBD	TBD
Baker	NANS_W_172	0.004	0	TBD	TBD
Baker	NANS_W_173	0.005	0	TBD	TBD
Baker	NANS_W_181	0.162	0	TBD	TBD
Baker	NANS_W_182	0.006	0	TBD	TBD
Baker	NANS_W_185	0.006	0	TBD	TBD
Baker	NANS_W_187	0.009	0	TBD	TBD
Baker	NANS_W_36	0	25.202	TBD	TBD
Baker	NANS_W_37	0	0.055	TBD	TBD
Baker	NANS_W_75	0.057	0.006	TBD	TBD
Malheur	NANS_W_03	0.005	0.001	TBD	TBD
Malheur	NANS_W_11	0	0.454	TBD	TBD
Malheur	NANS_W_122	0.033	0	TBD	TBD
Malheur	NANS_W_123	0.003	0	TBD	TBD
Malheur	NANS_W_125	0.003	0	TBD	TBD
Malheur	NANS_W_126	0.052	0	TBD	TBD
Malheur	NANS_W_128	0.009	0	TBD	TBD
Malheur	NANS_W_129	0.043	0	TBD	TBD
Malheur	NANS_W_130	0.061	0	TBD	TBD
Malheur	NANS_W_131	0.005	0	TBD	TBD
Malheur	NANS_W_132	0.375	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Malheur	NANS_W_133	0.166	0	TBD	TBD
Malheur	NANS_W_134	<0.001	0	TBD	TBD
Malheur	NANS_W_135	0.005	0	TBD	TBD
Malheur	NANS_W_136	0.007	0	TBD	TBD
Malheur	NANS_W_137	0.006	0	TBD	TBD
Malheur	NANS_W_138	0.005	0	TBD	TBD
Malheur	NANS_W_139	0.036	0	TBD	TBD
Malheur	NANS_W_140	0.003	0	TBD	TBD
Malheur	NANS_W_141	0.006	0	TBD	TBD
Malheur	NANS_W_142	0.026	0	TBD	TBD
Malheur	NANS_W_143	0.002	0	TBD	TBD
Malheur	NANS_W_144	0.009	0	TBD	TBD
Malheur	NANS_W_145	0.049	0	TBD	TBD
Malheur	NANS_W_146	0.038	0	TBD	TBD
Malheur	NANS_W_61	0.005	0.006	TBD	TBD
Malheur	NANS_W_62	0.008	0.001	TBD	TBD
Malheur	NANS_W_91	0.034	0.005	TBD	TBD
Malheur	NANS_W_92	0.007	0.001	TBD	TBD
Grand Total		2.282	26.797		



Table O-2A. Temporary and Permanent Impacts to Delineated Other Waters

County	Feature ID	Crossing Type (Appendix K)	R/F Dimensions	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Morrow	MO_SW_STRM_300	K-455	Variable	0.007*	0.008*	14	9
Umatilla	UM_S_0145	K-456	Variable	<0.001*	0	0	0
Umatilla	UM_S_0146	K-456	Variable	<0.001	0	0	0
Umatilla	UM_S_0146b	K-456	Variable	0.002	0	4	3
Umatilla	UM_SW_STRM_004	K-455	Variable	0.013*	0.015*	26	17
Umatilla	UM_SW_STRM_008	K-456	Variable	0	0.015	0	0
Umatilla	UM_SW_STRM_011	K-455	Variable	0.006*	0.003*	12	8
Umatilla	UM_SW_STRM_013	K-455	Variable	0.011*	0.002*	22	15
Union	UN_MC_STRM_001	K-455	Variable	0.002	0.002	4	3
Union	UN_MC_STRM_005	K-455	Variable	0.004	0.001	8	5
Union	UN_MC_STRM_006	K-455	Variable	0.001	<0.001	2	1
Union	UN_MC_STRM_011	K-456	Variable	<0.001	0	0	0
Union	UN_MC_STRM_300	K-455	Variable	<0.001	<0.001	0	0
Union	UN_MC_STRM_301	K-455	Variable	0.001	<0.001	2	1
Union	UN_ML_STRM_014	K-456	Variable	0.001	0	2	1
Union	UN_ML_STRM_015	K-456	Variable	0.016*	0	32	21
Union	UN_ML_STRM_300	K-455	Variable	0.002*	0.003*	1	3
Union	UN_ML_STRM_305	K-456	Variable	0.018*	0	37	24
Union	UN_S_0005	K-456	Variable	<0.001*	0	0	0
Union	UN_S_0030	K-456	Variable	0.007*	0	14	9
Baker	BA_FL_008	K-456	Variable	<0.001	0.001	0	0
Baker	BA_FL_STRM_021	K-456	Variable	0.003	0	6	4
Baker	BA_FL_STRM_023	K-456	Variable	0.002	0.001	4	3
Baker	BA_FL_STRM_024	K-456	Variable	0	0.004	0	0
Baker	BA_S_0053	K-456	Variable	0.015*	0	30	20
Baker	BA_WT_STRM_017	K-455	Variable	0.006	<0.001	12	8
Baker	BA_WT_STRM_020	K-455	Variable	0.002*	<0.001*	4	3
Baker	BA_WT_STRM_027	K-455	Variable	0.005*	0.007*	4	6
Baker	BA_WT_STRM_028	K-456	Variable	0.002*	0	4	3
Baker	BA_WT_STRM_029	K-455	Variable	0.001	0.002	1	1
Baker	BA_WT_STRM_211	K-455	Variable	0.001	0.001	2	1
Baker	BA_WT_STRM_213	K-455	Variable	0.001	0.001	2	1
Baker	BA_WT_STRM_214	K-455	Variable	0.001	<0.001	2	1
Baker	BA_WT_STRM_215	K-455	Variable	0.007	0.001	14	9
Baker	BA_WT_STRM_225	K-455	Variable	0.002	0.002	4	3
Baker	BA_WT_STRM_301	K-456	Variable	0.002	0	4	3
Baker	BA_WT_STRM_302	K-456	Variable	0.002*	0	4	3
Malheur	MA_S_0053	K-456	Variable	0.001	0	2	1



County	Feature ID	Crossing Type (Appendix K)	R/F Dimensions	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Malheur	MA_S_0154	K-456	Variable	0.008	0	16	11
Malheur	MA_S_0182	K-456	Variable	0.026	0	53	35
Malheur	MA_TM_005	K-455	Variable	0.001	<0.001	2	1
Malheur	MA_TM_454	K-456	Variable	0.002	0	4	3
Malheur	MA_TM_465	K-455	Variable	0	<0.001	0	0
Malheur	MA_TM_478	K-456	Variable	0.002	0	4	3
Malheur	MApro_225	K-456	Variable	0	0.004	0	0
Malheur	MApro_435	K-456	Variable	<0.001	0	0	0
Malheur	MApro_437	K-456	Variable	0.002	0	4	3
Malheur	MA_TM_452	K-456	Variable	0.004	0	8	5
			Totals	0.196	0.081	370	251

\* Project impacts currently listed at streams with fish presence will be avoided after final design, before the project is completed.



**Table O-2B.** Temporary and Permanent Impacts to Other Waters (Not Accessed/Not Delineated)

County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Morrow	NANS_OW_145365444	0.002	<0.001	TBD	TBD
Morrow	NANS_OW_152904366	0.001	0.002	TBD	TBD
Morrow	NANS_OW_152904546	0.005	0.001	TBD	TBD
Morrow	NANS_OW_152906926	0.002	0.039	TBD	TBD
Morrow	NANS_OW_160621028	0.001	0.001	TBD	TBD
Morrow	NANS_OW_160621034	0.001	0.001	TBD	TBD
Morrow	NANS_OW_160621220	0.001	0.001	TBD	TBD
Morrow	NANS_OW_160621268	0.003	0	TBD	TBD
Morrow	NANS_OW_160621288	0.002	0.001	TBD	TBD
Morrow	NANS_OW_160621738	0.002	0	TBD	TBD
Morrow	NANS_OW_160622166	0.002	0	TBD	TBD
Morrow	NANS_OW_160622634	0.002	0	TBD	TBD
Morrow	NANS_OW_167136394	0.002	0	TBD	TBD
Morrow	NANS_OW_167136395	0.002	0	TBD	TBD
Morrow	NANS_OW_167136396	0.002	0	TBD	TBD
Morrow	NANS_OW_167136398	0.009	<0.001	TBD	TBD
Umatilla	NANS_OW_145365523	0.001	0	TBD	TBD
Umatilla	NANS_OW_145365948	0.003	0.003	TBD	TBD
Umatilla	NANS_OW_145366346	0.002	0	TBD	TBD
Umatilla	NANS_OW_145367254	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_145367720	0.002	0	TBD	TBD
Umatilla	NANS_OW_145367778	0.004	0	TBD	TBD
Umatilla	NANS_OW_145367832	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160620715	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160620752	0.009	0.004	TBD	TBD
Umatilla	NANS_OW_160621491	0.003	0	TBD	TBD
Umatilla	NANS_OW_160621909	0.001	0.001	TBD	TBD
Umatilla	NANS_OW_160622367	0.044	0.005	TBD	TBD
Umatilla	NANS_OW_160622394	0.002	0.002	TBD	TBD
Umatilla	NANS_OW_160630009	0.003	0.001	TBD	TBD
Umatilla	NANS_OW_160630010	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630019	0.006	0	TBD	TBD
Umatilla	NANS_OW_160630031	0.006	0	TBD	TBD
Umatilla	NANS_OW_160630032	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630039	0.004	0	TBD	TBD
Umatilla	NANS_OW_160630041	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160630259	0.01	0.009	TBD	TBD
Umatilla	NANS_OW_160630269	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Umatilla	NANS_OW_160630274	0.003	0	TBD	TBD
Umatilla	NANS_OW_160630276	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630286	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630291	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630293	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630305	0.005	0	TBD	TBD
Umatilla	NANS_OW_160630306	0.005	0.001	TBD	TBD
Umatilla	NANS_OW_160630309	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630311	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630315	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630321	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630352	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630366	0.005	0.001	TBD	TBD
Umatilla	NANS_OW_160630515	0.013	0.081	TBD	TBD
Umatilla	NANS_OW_160630625	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630696	0.003	0	TBD	TBD
Umatilla	NANS_OW_160630713	0.004	0	TBD	TBD
Umatilla	NANS_OW_160630733	0.004	0	TBD	TBD
Umatilla	NANS_OW_160630819	0.004	0	TBD	TBD
Umatilla	NANS_OW_160630848	0.002	0	TBD	TBD
Umatilla	NANS_OW_160630885	0.003	0	TBD	TBD
Umatilla	NANS_OW_160630894	0.073	0.001	TBD	TBD
Umatilla	NANS_OW_160630920	0.002	0	TBD	TBD
Umatilla	NANS_OW_160631202	0.017	0.002	TBD	TBD
Umatilla	NANS_OW_160631236	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160631462	0.002	0	TBD	TBD
Umatilla	NANS_OW_160631504	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160631595	0	0.035	TBD	TBD
Umatilla	NANS_OW_160631666	0.01	0.001	TBD	TBD
Umatilla	NANS_OW_160631674	0.002	<0.001	TBD	TBD
Umatilla	NANS_OW_160631692	0.004	0.002	TBD	TBD
Umatilla	NANS_OW_160631790	0.001	0	TBD	TBD
Umatilla	NANS_OW_1F24254E	0.002	0	TBD	TBD
Umatilla	NANS_OW_7F6298CB	0.003	0	TBD	TBD
Umatilla	NANS_OW_8E7B1EBC	0.005	0	TBD	TBD
Union	NANS_OW_109317495	0.002	0	TBD	TBD
Union	NANS_OW_109317655	0.002	0	TBD	TBD
Union	NANS_OW_109317923	0.002	0	TBD	TBD
Union	NANS_OW_109318015	0.002	0	TBD	TBD
Union	NANS_OW_109318181	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Union	NANS_OW_109318241	0.002	0	TBD	TBD
Union	NANS_OW_109318361	0.002	0	TBD	TBD
Union	NANS_OW_109318511	0.01	0	TBD	TBD
Union	NANS_OW_109318683	0.002	0	TBD	TBD
Union	NANS_OW_109318777	0.002	0	TBD	TBD
Union	NANS_OW_109318935	0.002	0	TBD	TBD
Union	NANS_OW_109319641	0.002	0	TBD	TBD
Union	NANS_OW_109319883	0.004	<0.001	TBD	TBD
Union	NANS_OW_109319909	0.004	0	TBD	TBD
Union	NANS_OW_109320319	0.003	0	TBD	TBD
Union	NANS_OW_109322453	0.003	<0.001	TBD	TBD
Union	NANS_OW_109323479	0.002	0	TBD	TBD
Union	NANS_OW_109324161	0.002	0	TBD	TBD
Union	NANS_OW_109324275	0.002	<0.001	TBD	TBD
Union	NANS_OW_109324277	0.002	0.001	TBD	TBD
Union	NANS_OW_109324431	0.004	<0.001	TBD	TBD
Union	NANS_OW_109325251	0.003	0	TBD	TBD
Union	NANS_OW_109325279	0.004	0.001	TBD	TBD
Union	NANS_OW_109325311	0.006	0.001	TBD	TBD
Union	NANS_OW_109325525	0.002	0	TBD	TBD
Union	NANS_OW_109325685	0.002	0	TBD	TBD
Union	NANS_OW_109325751	0.002	0	TBD	TBD
Union	NANS_OW_109325763	0.002	0	TBD	TBD
Union	NANS_OW_109325939	0.002	0	TBD	TBD
Union	NANS_OW_109326955	0.005	0	TBD	TBD
Union	NANS_OW_109327141	0.002	0	TBD	TBD
Union	NANS_OW_109327743	0.038	0.008	TBD	TBD
Union	NANS_OW_109328415	0.002	0	TBD	TBD
Union	NANS_OW_109329261	0.002	0	TBD	TBD
Union	NANS_OW_109329377	0.002	0	TBD	TBD
Union	NANS_OW_109329861	0.002	0	TBD	TBD
Union	NANS_OW_109330151	0.004	0	TBD	TBD
Union	NANS_OW_109330263	0.002	0	TBD	TBD
Union	NANS_OW_109330287	0.002	0	TBD	TBD
Union	NANS_OW_109330399	0.03	0	TBD	TBD
Union	NANS_OW_109330871	0.002	0	TBD	TBD
Union	NANS_OW_109331429	0.002	0	TBD	TBD
Union	NANS_OW_112935147	0.004	0	TBD	TBD
Union	NANS_OW_112935185	0.002	<0.001	TBD	TBD
Union	NANS_OW_112935729	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Union	NANS_OW_112936335	0.005	0.001	TBD	TBD
Union	NANS_OW_112936337	0.002	<0.001	TBD	TBD
Union	NANS_OW_112936437	0.005	<0.001	TBD	TBD
Union	NANS_OW_112936455	0.002	0.043	TBD	TBD
Union	NANS_OW_112936487	0.002	0	TBD	TBD
Union	NANS_OW_160026237	0.009	0	TBD	TBD
Union	NANS_OW_160026464	0	0.037	TBD	TBD
Union	NANS_OW_160026502	0.002	0	TBD	TBD
Union	NANS_OW_160026630	0.002	0	TBD	TBD
Union	NANS_OW_160026671	0.002	0	TBD	TBD
Union	NANS_OW_160026739	0.002	0	TBD	TBD
Union	NANS_OW_160026751	0.002	0	TBD	TBD
Union	NANS_OW_160026866	0.002	0	TBD	TBD
Union	NANS_OW_160026869	0.002	<0.001	TBD	TBD
Union	NANS_OW_160026877	0.001	0	TBD	TBD
Union	NANS_OW_160026951	0.002	0	TBD	TBD
Union	NANS_OW_160027351	0.002	0	TBD	TBD
Union	NANS_OW_160027377	0.026	<0.001	TBD	TBD
Union	NANS_OW_160027389	0.02	0.004	TBD	TBD
Union	NANS_OW_160028130	0.004	0	TBD	TBD
Union	NANS_OW_160028421	0.003	0	TBD	TBD
Union	NANS_OW_160028467	0.002	<0.001	TBD	TBD
Union	NANS_OW_160028497	0.003	0	TBD	TBD
Union	NANS_OW_160028498	0.002	0	TBD	TBD
Union	NANS_OW_160028535	0.019	0	TBD	TBD
Union	NANS_OW_160030623	0.002	0	TBD	TBD
Union	NANS_OW_160030655	0.003	<0.001	TBD	TBD
Union	NANS_OW_160030657	0.004	0.001	TBD	TBD
Union	NANS_OW_160030712	0.002	<0.001	TBD	TBD
Union	NANS_OW_160030717	0.003	0	TBD	TBD
Union	NANS_OW_160030761	0.004	0	TBD	TBD
Union	NANS_OW_160031548	0.002	0	TBD	TBD
Union	NANS_OW_160032104	0.003	0	TBD	TBD
Union	NANS_OW_160032203	0.011	0	TBD	TBD
Union	NANS_OW_160032318	0.002	0	TBD	TBD
Union	NANS_OW_160032329	0.002	0	TBD	TBD
Union	NANS_OW_160032433	0.045	0	TBD	TBD
Union	NANS_OW_160559766	0.007	0.029	TBD	TBD
Union	NANS_OW_160559774	0.004	0.046	TBD	TBD
Union	NANS_OW_160559777	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Union	NANS_OW_160559782	0.003	<0.001	TBD	TBD
Union	NANS_OW_160559783	0.002	<0.001	TBD	TBD
Baker	NANS_OW_112857470	0.002	0	TBD	TBD
Baker	NANS_OW_112857578	0.032	0.004	TBD	TBD
Baker	NANS_OW_112857756	0.002	0	TBD	TBD
Baker	NANS_OW_112857806	0.002	0	TBD	TBD
Baker	NANS_OW_112857922	0.002	0	TBD	TBD
Baker	NANS_OW_112858528	0.001	0	TBD	TBD
Baker	NANS_OW_112858530	0.002	0	TBD	TBD
Baker	NANS_OW_112859680	0.004	<0.001	TBD	TBD
Baker	NANS_OW_112859752	0.009	0.001	TBD	TBD
Baker	NANS_OW_112859912	0.003	<0.001	TBD	TBD
Baker	NANS_OW_112860772	0.002	0	TBD	TBD
Baker	NANS_OW_112861154	0.002	0	TBD	TBD
Baker	NANS_OW_112861558	0.002	0	TBD	TBD
Baker	NANS_OW_112861560	0.001	0	TBD	TBD
Baker	NANS_OW_112861670	0.002	0	TBD	TBD
Baker	NANS_OW_112861708	0.002	0.003	TBD	TBD
Baker	NANS_OW_112862186	0.002	0	TBD	TBD
Baker	NANS_OW_112862662	0.018	0.003	TBD	TBD
Baker	NANS_OW_112862680	0.002	0.002	TBD	TBD
Baker	NANS_OW_112865936	0.002	0	TBD	TBD
Baker	NANS_OW_112866106	0.003	0	TBD	TBD
Baker	NANS_OW_112866870	0.004	0.002	TBD	TBD
Baker	NANS_OW_112868862	0.003	0	TBD	TBD
Baker	NANS_OW_112868888	0.002	0	TBD	TBD
Baker	NANS_OW_112869774	0.002	0	TBD	TBD
Baker	NANS_OW_112869810	0.002	0	TBD	TBD
Baker	NANS_OW_112869816	0.002	0	TBD	TBD
Baker	NANS_OW_112938793	0.003	0	TBD	TBD
Baker	NANS_OW_112939663	0.002	0	TBD	TBD
Baker	NANS_OW_112939759	0.002	0	TBD	TBD
Baker	NANS_OW_112940887	0.002	0	TBD	TBD
Baker	NANS_OW_112941139	0.004	0	TBD	TBD
Baker	NANS_OW_112941407	0.006	0	TBD	TBD
Baker	NANS_OW_112943637	0.002	0	TBD	TBD
Baker	NANS_OW_112944499	0.005	<0.001	TBD	TBD
Baker	NANS_OW_112944717	0.002	0	TBD	TBD
Baker	NANS_OW_112945637	0.002	0	TBD	TBD
Baker	NANS_OW_112947391	0.002	0.044	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Baker	NANS_OW_112947399	0.002	0.003	TBD	TBD
Baker	NANS_OW_112947411	0	0.005	TBD	TBD
Baker	NANS_OW_112947525	0.007	0.029	TBD	TBD
Baker	NANS_OW_112947751	0.009	0.02	TBD	TBD
Baker	NANS_OW_112947947	0.017	0.02	TBD	TBD
Baker	NANS_OW_112947973	0.002	0	TBD	TBD
Baker	NANS_OW_112948241	0.002	0	TBD	TBD
Baker	NANS_OW_112948537	0.002	0	TBD	TBD
Baker	NANS_OW_112948619	0.003	0	TBD	TBD
Baker	NANS_OW_127033621	0.002	0	TBD	TBD
Baker	NANS_OW_127033628	0.002	0	TBD	TBD
Baker	NANS_OW_127033681	0.003	0	TBD	TBD
Baker	NANS_OW_160559681	0.002	0	TBD	TBD
Malheur	NANS_OW_127033740	0.002	0.011	TBD	TBD
Malheur	NANS_OW_127033755	0.002	0	TBD	TBD
Malheur	NANS_OW_127033915	0.001	0.001	TBD	TBD
Malheur	NANS_OW_127033935	0.003	<0.001	TBD	TBD
Malheur	NANS_OW_127033979	0.006	0	TBD	TBD
Malheur	NANS_OW_127033980	0.048	0.007	TBD	TBD
Malheur	NANS_OW_127034004	0.002	0	TBD	TBD
Malheur	NANS_OW_127034059	0.004	0	TBD	TBD
Malheur	NANS_OW_127034124	0.007	0	TBD	TBD
Malheur	NANS_OW_127034191	0.005	0.009	TBD	TBD
Malheur	NANS_OW_127034245	0.003	0	TBD	TBD
Malheur	NANS_OW_131906777	0.002	0	TBD	TBD
Malheur	NANS_OW_131906891	0.004	0	TBD	TBD
Malheur	NANS_OW_131908414	0.002	0	TBD	TBD
Malheur	NANS_OW_131908868	0.002	0	TBD	TBD
Malheur	NANS_OW_131909420	0.005	0.007	TBD	TBD
Malheur	NANS_OW_131909430	0.002	0	TBD	TBD
Malheur	NANS_OW_131909450	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_131909460	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_131909466	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_131911505	0.002	0	TBD	TBD
Malheur	NANS_OW_131912372	0.002	0.003	TBD	TBD
Malheur	NANS_OW_131912672	0.003	0	TBD	TBD
Malheur	NANS_OW_131912674	0.002	0	TBD	TBD
Malheur	NANS_OW_144341180	0.002	0	TBD	TBD
Malheur	NANS_OW_144341452	0	0.039	TBD	TBD
Malheur	NANS_OW_144341453	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Malheur	NANS_OW_144341456	0.002	0	TBD	TBD
Malheur	NANS_OW_144341462	0.002	0	TBD	TBD
Malheur	NANS_OW_144341464	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_144342126	0.002	0	TBD	TBD
Malheur	NANS_OW_144342808	0.002	0	TBD	TBD
Malheur	NANS_OW_146126126	0.002	0	TBD	TBD
Malheur	NANS_OW_146126139	0.002	0	TBD	TBD
Malheur	NANS_OW_146126150	0.003	0	TBD	TBD
Malheur	NANS_OW_146126171	0.002	0	TBD	TBD
Malheur	NANS_OW_146126411	0.002	0	TBD	TBD
Malheur	NANS_OW_146126413	0.002	0.003	TBD	TBD
Malheur	NANS_OW_146127958	0.002	0.002	TBD	TBD
Malheur	NANS_OW_146131470	0.003	0.004	TBD	TBD
Malheur	NANS_OW_146132517	0.003	<0.001	TBD	TBD
Malheur	NANS_OW_146132534	0.002	0	TBD	TBD
Malheur	NANS_OW_146132540	0.002	0	TBD	TBD
Malheur	NANS_OW_146132584	0.002	0	TBD	TBD
Malheur	NANS_OW_146136317	0.002	0	TBD	TBD
Malheur	NANS_OW_146136330	0.002	0	TBD	TBD
Malheur	NANS_OW_146136922	0.002	0.003	TBD	TBD
Malheur	NANS_OW_158456326	0.003	<0.001	TBD	TBD
Malheur	NANS_OW_158456344	0.006	0.001	TBD	TBD
Malheur	NANS_OW_158456345	0.003	<0.001	TBD	TBD
Malheur	NANS_OW_158456380	0.002	0	TBD	TBD
Malheur	NANS_OW_158456389	0.002	0.007	TBD	TBD
Malheur	NANS_OW_158456390	0.005	<0.001	TBD	TBD
Malheur	NANS_OW_158456392	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_158456401	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_158456415	0.002	0.002	TBD	TBD
Malheur	NANS_OW_158456417	0.005	0	TBD	TBD
Malheur	NANS_OW_158456448	0.002	0.002	TBD	TBD
Malheur	NANS_OW_158456453	0.002	0	TBD	TBD
Malheur	NANS_OW_158456510	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_158456533	0.004	<0.001	TBD	TBD
Malheur	NANS_OW_158456538	0.002	0.003	TBD	TBD
Malheur	NANS_OW_159830417	0.002	0	TBD	TBD
Malheur	NANS_OW_159830420	0.002	0	TBD	TBD
Malheur	NANS_OW_159830485	0.002	0	TBD	TBD
Malheur	NANS_OW_160608459	0.002	0.017	TBD	TBD
Malheur	NANS_OW_160608482	0.011	0.178	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Malheur	NANS_OW_160608484	0.003	0.001	TBD	TBD
Malheur	NANS_OW_160608485	0	0.031	TBD	TBD
Malheur	NANS_OW_160612946	0.002	0	TBD	TBD
Malheur	NANS_OW_162723299	0.002	0	TBD	TBD
Malheur	NANS_OW_162723408	0.003	0.005	TBD	TBD
Malheur	NANS_OW_162723589	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162723590	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162723597	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162723632	0.009	0	TBD	TBD
Malheur	NANS_OW_162724150	0.002	0	TBD	TBD
Malheur	NANS_OW_162724152	0.002	0.002	TBD	TBD
Malheur	NANS_OW_162724156	0.003	0.004	TBD	TBD
Malheur	NANS_OW_162724172	0.002	0.004	TBD	TBD
Malheur	NANS_OW_162724176	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162724202	0.002	<0.001	TBD	TBD
Malheur	NANS_OW_162724206	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162724211	0.004	0.005	TBD	TBD
Malheur	NANS_OW_162724223	0.003	0	TBD	TBD
Malheur	NANS_OW_162724225	0.002	0.002	TBD	TBD
Malheur	NANS_OW_162724261	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162724262	0.003	0	TBD	TBD
Malheur	NANS_OW_162724299	0.003	0.003	TBD	TBD
Malheur	NANS_OW_162724333	0.044	0.061	TBD	TBD
Malheur	NANS_OW_162724344	0.002	0	TBD	TBD
Malheur	NANS_OW_162724347	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162724370	0.002	0	TBD	TBD
Malheur	NANS_OW_162724389	0.003	0	TBD	TBD
Malheur	NANS_OW_162724994	0.002	0	TBD	TBD
Malheur	NANS_OW_162730535	0.002	0	TBD	TBD
Malheur	NANS_OW_162730565	0.002	0.003	TBD	TBD
Malheur	NANS_OW_162730612	0	0.02	TBD	TBD
Malheur	NANS_OW_162730618	0.002	0	TBD	TBD
Malheur	NANS_OW_162730653	0.002	0	TBD	TBD
Malheur	NANS_OW_162730676	0.002	0	TBD	TBD
Malheur	NANS_OW_162730678	0	0.008	TBD	TBD
Malheur	NANS_OW_162730694	0.002	0	TBD	TBD
Malheur	NANS_OW_162731110	0.002	0	TBD	TBD
Malheur	NANS_OW_162731190	0.002	0	TBD	TBD
Malheur	NANS_OW_162731246	0.002	0	TBD	TBD
Malheur	NANS_OW_162731291	0.002	0	TBD	TBD



County	Feature ID	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Malheur	NANS_OW_162731343	0.005	0	TBD	TBD
Malheur	NANS_OW_162731515	0.003	0	TBD	TBD
Malheur	NANS_OW_162731555	0.027	0	TBD	TBD
Malheur	NANS_OW_162731677	0.002	0	TBD	TBD
Malheur	NANS_OW_162731678	0.003	0	TBD	TBD
Malheur	NANS_OW_162734905	0.002	0.002	TBD	TBD
Malheur	NANS_OW_166772724	0.003	0	TBD	TBD
Malheur	NANS_OW_816	0	<0.001	TBD	TBD
Totals		1.356	0.974		



Table O-3. Temporary and Permanent Impacts to Delineated Other Waters (Ephemeral)

County	Feature ID	Crossing Type (Appendix K)	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Morrow	MO_SW_STRM_001		0	0.003	0	0
Morrow	MO_SW_STRM_301	K-456	<0.001	0.001	0	0
Umatilla	UM_AS_STRM_300	K-456	0.001	0	2	1
Umatilla	UM_S_0066	K-456	0.002	0	4	3
Umatilla	UM_SW_STRM_002	K-456	0	0.008	0	0
Umatilla	UM_SW_STRM_009	K-455	0.004	0.003	3	5
Umatilla	UM_SW_STRM_010	K-456	0.005	0.001	10	7
Umatilla	UM_SW_STRM_016	K-456	0	0.154	0	0
Union	UN_LM_STRM_209	K-455	0.002	0.001	1	3
Union	UN_LM_STRM_226	K-456	0.003	<0.001	6	4
Union	UN_LM_STRM_227	K-456	0.001	<0.001	2	1
Union	UN_LM_STRM_228	K-456	0.001	<0.001	2	1
Union	UN_LM_STRM_300	K-456	0.004	0.004	8	5
Union	UN_LM_STRM_301	K-455	0.001	0.001	1	1
Union	UN_MC_STRM_002	K-456	0.001	<0.001	2	1
Union	UN_MC_STRM_003	K-456	0.002	<0.001	4	3
Union	UN_MC_STRM_004	K-456	0.001	<0.001	2	1
Union	UN_ML_STRM_007	K-456	0.004	0.029	8	5
Union	UN_ML_STRM_013	K-456	0.002	0	4	3
Union	UN_ML_STRM_030	K-456	0.004	0	8	5
Union	UN_ML_STRM_301	K-456	0.007	0	14	9
Union	UN_ML_STRM_306	K-456	0.002	0	4	3
Union	UN_S_0021	K-455	0.001	0.001	1	1
Union	UN_S_0043	K-456	<0.001	<0.001	0	0
Baker	BA_BR_029	K-456	0.001	<0.001	2	1
Baker	BA_BR_400	K-456	0.002	0	4	3
Baker	BA_BR_416	K-455	0.001	0.001	1	1
Baker	BA_BR_461	K-456	0.001	0.008	2	1
Baker	BA_FL_035	K-456	<0.001	<0.001	0	0
Baker	BA_FL_040	K-456	0	<0.001	0	0
Baker	BA_FL_STRM_308	K-456	0.002	0	4	3
Baker	BA_FL_STRM_310	K-456	0.004	0	8	5
Baker	BA_LM_STRM_200	K-456	0.003	0	6	4
Baker	BA_LM_STRM_202	N/A	0	0.005*	0	0
Baker	BA_LM_STRM_203	K-456	0.001	0	2	1
Baker	BA_LM_STRM_205	K-456	0.001	<0.001	2	1
Baker	BA_LM_STRM_206	K-456	0.004	0.012	8	5
Baker	BA_LM_STRM_208	K-456	0.001	<0.001	2	1



County	Feature ID	Crossing Type (Appendix K)	Permanent Impacts (Acres)	Temporary Impacts (Acres)	Permanent Removal (cubic yard)	Permanent Fill (cubic yards)
Baker	BA_S_0010	K-456	0.001	<0.001	2	1
Baker	BA_WT_STRM_026	K-456	<0.001	0	0	0
Baker	BA_WT_STRM_219	K-456	0.003	0.006	0	0
Baker	BA_WT_STRM_220	K-456	0.03	0.024	61	40
Baker	BA_WT_STRM_224	K-456	0.002	<0.001	4	3
Baker	BA_WT_STRM_226	K-456	0.001	0.001	2	1
Baker	BA_WT_STRM_303	K-456	0.001	0	2	1
Baker	BA_WT_STRM_305	K-455	0	<0.001	0	0
Baker	BA_WT_STRM_307	K-455	0.001	0.002	1	1
Baker	BA_WT_STRM_308	K-455	0.001	0.002	1	1
Baker	MaWllwCrk_370	K-455	0.003	0.003	2	4
Malheur	MA_S_0012	K-456	0.001	<0.001	2	1
Malheur	MA_S_0016	K-455	0.001	0.022	1	1
Malheur	MA_S_0030	K-456	0.002	0.001	4	3
Malheur	MA_S_0061	K-455	0.001	0.001	1	1
Malheur	MA_S_0076	K-456	0.001	0.001	2	1
Malheur	MA_S_0114	K-455	0.002	0.003	1	3
Malheur	MA_S_0133	K-456	0.002	0.002	4	3
Malheur	MA_TM_405	K-455	0.002	<0.001	4	3
Malheur	MA_TM_483	K-455	0.017	<0.001	2	1
Malheur	MApro_445	K-456	0.002	0.001	2	1
Malheur	MApro_447	K-456	0.002	<0.001	4	3
Totals			0.145	0.301	229	161

\*Temporary impacts listed for stream BA\_LM\_STRM\_202 will likely be avoided after final design for the project is completed.



## BLOCK 7 ADDITIONAL INFORMATION

### Appendix P, Fish Passage

The Project has demonstrated compliance with ODFW fish passage requirements. IPC has completed the ODFW Fish Passage Approval process and both IPC and ODFW have concluded that designs comply with fish passage parameters.

Compliance may be achieved by meeting the requirements of some or all of OAR 635-412-0020(3)(a), (b), (d) or (e).

*OAR 635-412-0020*

*(3) If the Department determines, or the owner or operator assumes, that native migratory fish are or were historically present in the waters, prior to construction, fundamental change in permit status, or abandonment of the artificial obstruction the person owning or operating the artificial obstruction shall either:*

*(a) Obtain from the Department an approval determination of a fish passage plan that meets the requirements of OAR 635-412-0035 for the specific artificial obstruction.*

*(b) obtain from the Department a programmatic approval of a fish passage plan for multiple artificial obstructions of the same type...*

*(d) obtain a waiver from fish passage requirements for the artificial obstruction as provided in OAR 635-412-0025, or*

*(e) obtain an exemption from fish passage requirements for the artificial obstruction as provided in OAR 635-412-0025.*

The project design team met with representatives of the ODFW and ODOE on October 28, 2014 to discuss the agencies' review of the Tetra Tech report, Fish Habitat and Stream Crossing Assessment Summary Report (Tetra Tech 2014). During the meeting, the applicable federal, state, and local design criteria and guidelines, as well as the identified crossing types and alternatives for fish-bearing streams were discussed.

In January 2015, the ODFW informed IPC they had reviewed and approved the results and analysis of materials in the Tetra Tech (2014) report, as well as the information presented at the meeting regarding identified preferred and alternative crossing types (Seidel personal comm. 2015a). As part of the approval process, IPC agreed to work with the ODFW in their review of Fish Passage Plans and design drawings for fish-bearing road-stream crossings to ensure that all designs satisfy the ODFW fish passage requirements.

For additional information of IPC's analysis for compliance with the Fish Passage requirements see Exhibit BB of the ASC.

### Appendix Q, Cultural and Historic Resources

Surveys of historic, cultural and archaeological resources have been conducted for the Project in compliance with Section 106 protocols and in consultation with the Native American tribes and the Oregon State Historic Preservation Office. Exhibit S provides information about historic, cultural and archaeological resources.



## BLOCK 8 IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

### **Appendix R Unavoidable Project Impacts**

WOS features that will be impacted by the Project are itemized in Tables G-1A, G-1B, G-2A, G-2B, O-1A, O-1B, O-1C, and O-1D and exhibited in Appendix K, Figures K-1 through K-453.

### **Appendix S, Restoration and Rehabilitation of Temporary Impacts**

A restoration plan for rehabilitation of temporary impacts has been prepared and is attached as a separate document. This plan is based on the Project's vegetation management plan and is separate from the compensatory wetland and non-wetland mitigation plan.



# **Site Rehabilitation Plan**

## **Boardman to Hemingway Transmission Line Project**

*Prepared by:*



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## 1.0 INTRODUCTION

Idaho Power Company (IPC) is proposing to construct and operate approximately 296.6 miles of new transmission line known as the Boardman to Hemingway Transmission Line Project (Project). The Project will include a 500-kilovolt (kV) single-circuit line, rebuilding of a portion of a 230-kV transmission line, rebuilding of a 138-kV transmission line, and a removal of a portion of an existing 69-kV transmission line between Boardman, Oregon, and the Hemingway Substation (located approximately 30 miles southwest of Boise, Idaho). The Project includes ground-disturbing activities associated with the construction of above-ground, single- and double-circuit transmission lines involving towers, access roads, multi-use areas, light-duty fly yards, pulling and tensioning sites as well as associated stations, communication stations, and electrical supply distribution lines.

The Project area, or Site Boundary, as defined in Oregon Administrative Rule (OAR) 345-001-0010(55) includes “the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas, and all corridors and micro-siting corridors proposed by the applicant.” The Site Boundary for this Project includes the following facilities in Oregon:

- The Proposed Route, consisting of 270.8 miles of new 500-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 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-one 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.

Construction of the Project will result in temporary impacts to waters of the state. This site rehabilitation plan presents goals and objectives, jurisdictional authority, implementation, and follow-through methods for restoring temporary wetland impacts. Temporary impacts to wetlands include construction activities that do not result in permanent removal or fill, such as construction of laydown areas, staging areas, or temporary contouring allowing for access of equipment.

### 1.1 Purpose

Rules regulating the rehabilitation of temporary wetland impacts are provided in OAR 141-085-0715: Mitigation for Temporary Impacts (ODSL 2011a).

This OAR provides that a rehabilitation plan should be designed to:

- Re-establish the pre-existing contours of the site;



- Re-establish the pre-existing vegetation community; and
- Provide for rapid site stabilization to prevent erosion.

The Oregon Department of State Lands (ODSL) further provides rehabilitation guidelines for temporary impacts in *A Guide to the Removal-Fill Permit Process* (ODSL 2011b). The rehabilitation plan should include a grading plan and list of seeds and plants to be utilized, as applicable. A monitoring plan (including monitoring method, criteria and duration) must also be included to confirm successful re-establishment of the wetland and vegetation. Temporary impacts that are rectified within 24 months from the date the impacts generally occurred do not require compensatory mitigation; however, site rehabilitation and monitoring is required (ODSL 2011b).

## 1.2 Goals and Objectives

The primary goal of the Plan is to assist IPC and its contractors in restoring wetland habitat affected by temporary impacts within 24 months of disturbance. This goal is established pursuant to the definitions of OAR 141-085-0510, which states:

- "Temporary Impacts" are adverse impacts to waters of this state that are rectified within 24-months from the date the impact occurred; and
- "Wetland Restoration" means to re-establish a former wetland.

The Plan provides measures that will be implemented prior to and during construction with the objective of minimizing wetland habitat impacts. It also provides details and measures that will be implemented following construction with the objectives of reestablishing, maintaining and monitoring wetlands temporarily impacted by construction.

## 2.0 REHABILITATION PLAN

IPC will begin rehabilitation of disturbed sites as soon as practicable after construction is completed. The Plan is applicable to all temporary wetland impacts along the transmission ROW, laydown areas, staging areas, temporary construction areas, and access roads in Oregon. Measures to be implemented to ensure successful rehabilitation include topsoil and subsoil segregation and stockpiling during construction, cleanup, appropriate surface recontouring, soil erosion control, seedbed preparation, application of ecologically site-specific seed mixes, planting, weed abatement, and monitoring.

### 2.1 Site Preparation

As part of the reclamation process, IPC will prepare the seedbed to facilitate the restoration of vegetation to pre-construction conditions. Construction activities within sites identified as temporary impacts shall not exceed two construction seasons, and rehabilitation of temporary impacts will be completed within 24 months of the initiation of impacts.

Initial construction activities include marking wetland boundaries clearly with high visible flagging and signs, installing temporary sediment controls, segregating and stockpiling topsoil, and grading for safe construction passage. Dense stands of noxious and invasive weeds will be treated with approved herbicides prior to vegetation clearing.

Prior to construction, topsoil will be stockpiled and separated from subsoil. IPC will minimize the length of time that topsoil is stockpiled. Surface soil thickness will vary throughout the construction area, depending on soil type; however, the top 1 foot of wetland topsoil shall be



preserved to the greatest extent feasible. Surface topsoil containing the seed reservoir and existing vegetation will be scraped and stored. The topsoil/vegetation mixture will not be mixed with underlying subsoil horizons. Oregon-certified weed-free erosion control blankets and/or certified weed-free straw bales will be used to contain and limit erosion at the stockpiles as needed. Surface soil and sub-surface soils will be replaced in the proper order during cleanup and final grading operations.

## 2.2 Site Restoration

Restoration will include cleanup, soil decompaction, topsoil replacement, surface grading/contouring, installation of soil erosion and sediment control measures, and seedbed preparation. Compacted soils would typically be associated with the access roads and along the transmission ROW, staging areas, laydown areas, temporary construction areas, and access roads. Subsoil decompaction will occur prior to surface soil replacement as necessary to reduce soil bulk density. Identified locations will be decompacted to a minimum depth of 6–12 inches.

The stockpiled topsoil/vegetation mixture will be re-spread after re-contouring is completed. In wetlands, the segregated top 1 foot of topsoil will be restored to its original location. The topsoil/vegetation mixture will provide seeds, vegetative propagules, and soil microbiota to facilitate vegetation establishment in temporary construction areas.

The transmission ROW, staging areas, laydown areas and other temporary construction areas, will be graded and contoured to blend within the surrounding landscape. Temporary roads used for pulling and tensioning of conductors and other construction activities and structure construction pads will be revegetated but not re-contoured unless they were subject to temporary fill or removal. Topsoil will be blended across the construction corridor, creating a roughened surface to capture precipitation, decrease erosion, and provide micro-habitats for plant establishment. Contouring will emphasize restoration of existing drainage and landform patterns, to the greatest extent practicable.

Seedbed preparation will consist of grading/contouring, decompacting soils, and restoring surface soil as described above. Specific wetland Best Management Practices (BMPs) referenced in this plan will be employed in wetland areas to avoid rutting and damage from equipment. The seedbed will be firm but not compacted.

Soil erosion and sediment control will occur through establishing desirable wetland vegetation and adjacent upland/riparian vegetation using measures such as mulch, erosion and control blankets. The Project will establish a desirable wetland plant cover as quickly as possible to minimize soil erosion and control sedimentation. Mulch, certified weed-free erosion control blankets and sediment logs, and certified weed-free straw bales, and/or water bars may also be used as appropriate.

In general, the following construction BMPs for erosion and sediment control shall be followed:

- Exposed soils shall be stabilized during and after construction in order to prevent erosion and sedimentation.
- Filter bags, sediment fences, sediment traps or catch basins, leave strips or berms, or other measures shall be used to prevent movement of soil into waterways and wetlands.
- Compost berms, impervious materials or other equally effective methods, shall be used to protect stockpiled soil during rain events or when the stockpile site is not moved or reshaped for more than 48 hours.



- Where vegetation is used for erosion control on slopes steeper than 2:1, a tackified seed mulch shall be used so the seed does not wash away before germination and rooting.
- Dredged or other excavated material shall be placed on upland areas having stable slopes and shall be prevented from eroding back into waterways and wetlands.
- Erosion control measures shall be inspected and maintained as necessary to ensure their continued effectiveness until soils become stabilized.
- All erosion control structures shall be removed when the project is complete and soils are stabilized and vegetated.

A specific list of the type and timing for each BMP is described in the Erosion and Sediment Control Plan included as an attachment to Exhibit I.

Soil amendments are intended to minimize soil erosion and subsequent sedimentation, conserve soil moisture, provide cover, and moderate temperatures to facilitate the germination of seeds.

## 2.3 Seed Planting Methods

Each site scheduled for rehabilitation will be evaluated to determine the most cost-effective means of establishing a suitable suite of plants as rapidly as possible. This evaluation will include a determination of how the site needs to be prepared to receive seeds and live plants, as well as what species to plant on the site. Planting will be done at the appropriate time of year to facilitate seed germination, based on weather conditions and the time of year when construction-related ground disturbance occurs. Choice of planting methods will be based on site-specific factors such as slope, erosion potential and the size of the site in need of revegetation. Disturbed ground may require chemical or mechanical weed control before weeds have a chance to go to seed.

Drill and broadcasting seeding techniques will be used. Seeding will be done after ground-disturbing activities are complete and at the appropriate time of year (preferably in the fall or, if fall is not an option, the spring). If there is a lag time between the end of ground-disturbing activities and seeding, BMPs from the SWPPP will be implemented. Drill seeding will be the primary method for seeding. Drill seeding uses specialized equipment such as a rangeland seeder. The advantages of drill seeding are efficiency at placing seed at the proper soil depth and economy of bulk seed. Its disadvantages are terrain limitations such as slopes greater than 15 percent and rocky soils. Slopes that cannot be drill seeded will be broadcast seeded. Broadcast seeding distributes the seed on top of the soil surface using a hand-held spreader, all-terrain vehicle–mounted cyclone-type seed spreader, or seed blower. Broadcast seed is not as efficient as drill seeding because in this method seeds are not buried in the soil, and it requires approximately twice the bulk seed. Area where broadcast seeding is used will be hand-raked, or a harrow will be used to cover the seed.

Hydro-seeding and hydro-mulching will not be used in wetland areas or near water bodies. Should the water levels in the restoration areas rise above the hydro-seeded/mulched area prior to seed germination and establishment, the mulch, binder, and seed will float and wash away.

## 2.4 Seed and Plant Mixes by Ecoregion

The following sections provide information about each ecoregion crossed by the Project, and provide suggested species for use in planting mixes for each one. Each ecoregion has different



climate and soil characteristics, requiring seed mixes and plants that will thrive under the site conditions. Species lists for planting presented here are not intended to be either exhaustive or limiting. They represent only a small fraction of species that may be suitable for use in the ecoregions and on a site by site basis.

The Project, from Boardman to Hemingway, crosses four Level III ecoregions, which can be further divided into ten Level IV ecoregions (Thorson *et al.* 2003). Table 1 describes these ecoregions.

**Table 1. Precipitation and Land Cover and Land Use for Study Area by Ecoregion**

<b>Ecoregion III</b>	<b>Ecoregion IV</b>	<b>Precipitation-Mean Annual (inches)</b>	<b>Land Cover and Land Use</b>
Columbia Plateau	10e, Pleistocene Lake Basins	7 to 10	Mostly cropland; some grassland. Non-irrigated winter wheat is grown using the crop– fallow rotation method. Irrigated land grows winter wheat, alfalfa, and barley.
Columbia Plateau	10c, Umatilla Plateau	9 to 15	Mostly cropland; some grassland. Non-irrigated winter wheat is grown using the crop– fallow rotation method. Irrigated land grows winter wheat, alfalfa, and barley.
Columbia Plateau	10n, Umatilla Dissected Uplands	15 to 25	Mostly grass-covered rangeland and wildlife habitat; on higher elevation, north-facing slopes: forest.
Blue Mountains	11c, Maritime-Influenced Zone	20 to 40 97 to 116	Forested. Logging, grazing, wildlife habitat, and recreation.
Blue Mountains	11l, Mesic Forest Zone	30-60. Mostly snow. Snow persists late into spring.	Forested. Logging, woodland livestock grazing, wildlife habitat, and recreation.
Blue Mountains	11k, Blue Mountain Basins	Wallowa and Grande Ronde valleys: 13-25. Baker Valley: 10-16.	Irrigated pastureland, cropland, recreation, and commercial, residential, and rural residential development. Principal crops: alfalfa, peas, winter wheat, and grass seed. Most wetlands on floodplains have been drained for agriculture.
Blue Mountains	11i, Continental Zone Foothills	9 to 18	Shrub- and grass-covered. Livestock grazing and wildlife habitat.
Snake River Plain	12j, Unwooded Alkaline Foothills	9 to 12	Shrub- and grass-covered rangeland and wildlife habitat; some irrigated hayland and pastureland near rivers.
Snake River Plain	12a, Treasure Valley	8 to 11	Irrigated cropland, pastureland, shrubland, grassland, and residential and commercial development. Primary crops: wheat, sugar beets, potatoes, onions, and alfalfa.



<b>Ecoregion III</b>	<b>Ecoregion IV</b>	<b>Precipitation- Mean Annual (inches)</b>	<b>Land Cover and Land Use</b>
Northern Basin and Range	80f, Owyhee Uplands and Canyons	8 to 14	Mostly brush- and grass-covered rangeland and wildlife habitat; some hay and small grain farming. Cheatgrass has replaced depleted bunchgrasses in overgrazed areas.

Adapted from Thorson et al. 2003.

Note: For the purpose of this table, which is to summarize climatic and vegetation information on a broad scale, study area can be considered synonymous with site boundary.

In Morrow County, nearly 80 percent of the study area is contained in ecoregion 10e, the Pleistocene Lake Basins of the Columbia Plateau. While roughly 20 percent of the eastern portion of the project is contained in ecoregion 10c, Umatilla Plateau.

In Umatilla County, the majority (approximately 60 percent) of the study area is contained in 10c, Umatilla Plateau of the Columbia Plateau, while 15 percent is in 10n, Umatilla Dissected Uplands of the Columbia Plateau, 15 percent is in 11c, Maritime-Influenced Zone of the Blue Mountains and less than 10 percent is in 11l, Mesic Forest Zone of the Blue Mountains.

In Union County, the study area is located entirely in the Level III Blue Mountains Ecoregion. The majority (approximately 49 percent) of the study area is contained in 11c, Maritime-Influenced Zone, 20 percent is in 11l, Mesic Forest Zone, 18 percent is in 11i, Continental Zone Foothills, and 13 percent is in 11k, Blue Mountain Basins.

In Baker County, the study area is located within the Level III Blue Mountains Ecoregion and the Level III Snake River Plain Ecoregion. The majority (approximately 93%) of the study area is contained in 11i, Continental Zone Foothills, and 3 percent is in 11k, Blue Mountain Basins of the Blue Mountains Ecoregions, while 4 percent is in 12j, Unwooded Alkaline Foothills of the Snake River Plain Ecoregion.

In Malheur County, the study area is located within the Level III Blue Mountains Ecoregion, Level III Snake River Plain Ecoregion, and the Level III Northern Basin and Range Ecoregion. Approximately 25 percent of the study area is contained in 11i, Continental Zone Foothills of the Blue Mountains Ecoregions, while 10 percent is in the 12a Treasure Valley and 35 percent is in 12j, Unwooded Alkaline Foothills of the Snake River Plain Ecoregion. The remaining 30 percent of the study area in Malheur County is located within 80f, Owyhee Uplands and Canyons of the Northern Basin and Range Ecoregion.

Table 2 shows the native shrubs and herbs that were documented during the 2012 wetland delineations by county that may be used for site revegetation. The choice of seed mixtures will be dependent on the existing vegetation types, the availability of commercial, weed-free live seed at the time of seeding, and landowner approval.



**Table 2. Native Plants Documented During Delineations**

Scientific Name	Common Name	Stratum	Wetland Indicator Status	County
<i>Salix exigua</i>	narrow-leaf willow	Shrub	OBL	Umatilla
<i>Bidens cernua</i>	nodding burr-marigold	Herb	FACW	Baker
<i>Calamagrostis canadensis</i>	bluejoint	Herb	FACW	Baker, Umatilla
<i>Carex nebrascensis</i>	Nebraska sedge	Herb	OBL	Union, Baker, Umatilla
<i>Deschampsia cespitosa</i>	tufted hairgrass	Herb	FACW	Baker
<i>Distichlis spicata</i>	coastal saltgrass	Herb	FACW	Malheur
<i>Eleocharis palustris</i>	common spike-rush	Herb	OBL	Union, Baker, Malheur, Umatilla
<i>Hordeum brachyantherum</i>	meadow barley	Herb	FACW	Malheur
<i>Hordeum jubatum</i>	fox-tail barley	Herb	FAC	Malheur
<i>Juncus balticus</i>	baltic rush	Herb	OBL	Union, Baker, Malheur
<i>Juncus patens</i>	spreading rush	Herb	FACW	Umatilla
<i>Juncus torreyi</i>	Torrey's rush	Herb	FACW	Baker, Malheur
<i>Mimulus guttatus</i>	seep monkey flower	Herb	OBL	Malheur
<i>Ranunculus aquatilis</i>	white water-crowfoot	Herb	OBL	Baker
<i>Ranunculus sceleratus</i>	cursed buttercup	Herb	OBL	Baker
<i>Schoenoplectus acutus</i>	hard-stem club-rush	Herb	OBL	Malheur
<i>Schoenoplectus americanus</i>	chair-maker's club-rush	Herb	OBL	Baker
<i>Schoenoplectus maritimus</i>	saltmarsh club-rush	Herb	OBL	Malheur
<i>Schoenoplectus tabernaemontani</i>	soft-stem club-rush	Herb	OBL	Morrow

## 2.5 Best Management Practices

Pertinent BMPs for wetland rehabilitation are included here for reference.

- Minimize the length of time that topsoil is segregated.
- Limit the operation of construction equipment within wetlands to that needed for clearing, facility installation, and restoration.
- Limit pulling of tree stumps and grading activities in wetlands to directly over the transmission line, except where necessary to ensure safety.



- Limit grading impacts in saturated or standing-water wetlands and/or in wetlands where rutting may occur by using low ground-weight construction equipment or by operating normal equipment on prefabricated timber or terra mats.
- Segregate the top 1 foot of topsoil from the area disturbed, except in areas where standing water is present or soils are saturated or frozen. Immediately after cleanup, restore the segregated topsoil to its original location.
- Prohibit storage of hazardous materials, chemicals, fuels, and lubricating oils within 100 feet of a wetland boundary unless infeasible.
- Prohibit the refueling of equipment within 100 feet of wetlands unless infeasible.
- Establish stable surface and drainage conditions and the use of erosion control devices to minimize soil erosion and sedimentation. Sediment barriers shall be installed prior to initial disturbance in wetlands and adjacent uplands to prevent sediment transport into the wetland.
- Re-establish terrain compatible with the surrounding landscape.
- Use native plant species for revegetation.

### 3.0 DRAFT MONITORING PLAN

The purpose of monitoring is to evaluate vegetative survival and establishment, soil moisture, sustaining hydrology, and occurrence of noxious weeds and to identify corrective measures that may be required to ensure successful restoration

#### 3.1 Performance Standards for Rehabilitation

**Goal 1:** Restore wetland hydrology.

- **Objective 1:** Restore pre-construction soil contours.
- **Performance standard 1:** Restored soil contours match existing contours of undisturbed soil surface adjacent to the disturbance site.
- **Objective 2:** Restore pre-construction soil texture.
- **Performance standard 1:** Restored soil has drainage characteristics like undisturbed soil adjacent to the disturbance site; e.g., does not exhibit inappropriate ponding characteristic of compacted soil.

**Goal 2:** Establish wetland vegetation similar to the native plant component of the temporarily impacted wetlands.

- **Objective 1:** Achieve similar densities of native vegetation at the temporary impact site as were present pre-construction.
- **Performance standard 1:** Meet or exceed woody stem counts per acre as determined from pre-disturbance conditions.
- **Performance standard 2:** Three years post-construction, vegetation communities will have relative cover of tree, shrub and herbaceous species within ten percent of similar adjacent or nearby wetlands.



### 3.2 Monitoring Schedule and Methodology

IPC will monitor temporary impact sites for three years. In years 1, 2, and 3, vegetation will be monitored using guidance described in the ODSL's *Routine Monitoring Guidance for Vegetation*. Monitoring events will occur annually during the growing season.

### 3.3 Reporting and Documentation

IPC will provide a post-construction report demonstrating as-built conditions 90 days from Project completion. It will include representative photographs of completed restoration areas demonstrating pre-impact conditions have been reestablished, documentation of plant and seed materials received from the commercial sources, documentation of soil amendments used, and a summary of pertinent issues encountered during the implementation of the Plan.

For annual reporting, IPC will document the monitoring results in an annual report. Annual reports are described in Section 6.0, below.

## 4.0 MAINTENANCE PLAN

Maintenance of plantings and seeded areas during the establishment period (i.e., the 24 months following construction) is an essential component of the rehabilitation plan, especially for areas receiving less than 20 inches of average annual precipitation. The objectives of post-installation maintenance are to prevent soil erosion, ensure establishment of trees and shrubs, and remove non-native vegetation that could inhibit native herbaceous plant establishment.

After each monitoring visit, a qualified investigator will report to the Project proponent regarding the revegetation progress of each restored site. The investigator will make recommendations for reseeding or other remedial measures for sites that are not showing sufficient progress toward achieving revegetation success. Appropriate action to meet the objectives of this revegetation plan will be made.

## 5.0 CONTINGENCY PLAN

Where initial restoration and plant establishment efforts fail to meet plant establishment standards, reseeding, replanting, live cuttings, and/or transplanting may be required to ensure restoration success. Contingency measures that may be implemented include:

- Harvesting and transplanting herbaceous plugs, shrubs, and trees;
- Live cutting collection, storage, and planting; and
- Planting of commercially grown herbaceous plugs or potted shrubs and trees.

Given the 24-month timeframe associated with rehabilitation of temporary impacts, IPC will make a determination of the requirement for contingency measures at the end of the first growing season based on monitoring results.

## 6.0 REPORTING

IPC will document the monitoring results in an annual report. It is expected that a single annual report will be prepared for the entire Project length, and that this report will be submitted to each of the applicable federal or state agencies. The reports will provide a summary of Project reclamation activities and observations, progress towards or achievement of success, identify



any specific problem areas along the Project, and will include recommendations for additional corrective actions if necessary.

## 7.0 PLAN UPDATES

Once IPC has received a Site Certificate from the State of Oregon and necessary authorizations from the federal agencies, it will do final engineering on the final Project location. At this time, IPC will prepare a final Site Rehabilitation Plan for submittal to state and federal agencies. The final Site Rehabilitation Plan will be updated prior to the submittal of the JPA.

## 8.0 REFERENCES

- ODSL (Oregon Department of State Lands). 2009. Routine Monitoring Guidance for Vegetation. Available at:  
[http://www.oregon.gov/dsl/PERMITS/docs/dsl\\_routine\\_monitoring\\_guidance.pdf](http://www.oregon.gov/dsl/PERMITS/docs/dsl_routine_monitoring_guidance.pdf)
- ODSL. 2011a. Oregon State Archives. Oregon Administrative Rules. Division 85. Administrative Rules Governing the Issuance and Enforcement of Removal-Fill Authorizations within Waters of Oregon Including Wetlands. Available at:  
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- ODSL. 2011b. A Guide to the Removal-Fill Permit Process. Available at:  
[http://www.oregonstatelands.us/DSL/PERMITS/docs/RFG\\_Portfolio\\_March\\_2011.pdf](http://www.oregonstatelands.us/DSL/PERMITS/docs/RFG_Portfolio_March_2011.pdf).
- Thorson, T.D., S.A. Bryce, D.A. Lammers, A.J. Woods, J.M. Omernik, J. Kagan, D.E. Pater, and J.A. Comstock. 2003. Ecoregions of Oregon (color poster with figure, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (figure scale 1:1,500,000). Available online at  
[http://www.epa.gov/wed/pages/ecoregions/or\\_eco.htm](http://www.epa.gov/wed/pages/ecoregions/or_eco.htm). Accessed November 2012.



## **Appendix T, Compensatory Wetland and Non-Wetland Mitigation Plan**

A draft compensatory wetland and non-wetland mitigation plan is attached as a separate document.

The Stream Functional Assessment Methodology is attached to the draft Compensatory Wetland and Non-Wetland Mitigation Plan.