

Exhibit J Waters of the State

Boardman to Hemingway Transmission Line Project



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Amended Preliminary Application for Site Certificate

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	J-1
2.0	APPLICABLE RULES AND AMENDED PROJECT ORDER PROVISIONS	J-1
2.1	Site Certificate Application Requirements	J-1
2.2	Application Requirements for Individual Removal-Fill Permits	J-2
2.3	Determinations and Considerations in Evaluating Individual Removal-Fill Permit Applications	J-6
2.4	Amended Project Order	J-7
3.0	ANALYSIS.....	J-7
3.1	Oregon Removal-Fill Permit and Army Corps Clean Water Act Section 404 Permit	J-7
3.1.1	State	J-8
3.1.2	Federal.....	J-8
3.2	Analysis Area.....	J-9
3.3	Survey and Delineation Methods	J-10
3.3.1	Phase 1: Wetland Desktop Study.....	J-11
3.3.2	Phase 2: Wetland Delineation	J-11
3.3.3	Phase 3: Wetland Survey and Reporting on Unsurveyed Parcels	J-13
3.4	Site Certificate Application Requirements	J-14
3.4.1	Description and Location of Waters of this State	J-14
3.4.2	Impacts to Waters of this State.....	J-14
3.4.3	Description of Significance of Impacts to Waters of this State	J-16
3.4.4	Why Removal-Fill Authorization is Not Needed	J-17
3.4.5	Information to Support Removal-Fill Authorization.....	J-17
3.4.6	Mitigation.....	J-17
3.5	Application Requirements for Individual Removal-Fill Permit	J-18
3.5.1	Written Application Required	J-18
3.5.2	Complete and Accurate Information Required.....	J-18
3.5.3	Fee Required for a Complete Application	J-19
3.5.4	Level of Detail Required May Vary	J-19
3.5.5	Required Information.....	J-19
3.5.6	Additional Requirements for Estuarine Fill.....	J-26
3.5.7	Additional Information as Requested.....	J-26
3.5.8	Waiver of Required Information.....	J-27
3.5.9	Permit Application Modifications.....	J-27
3.5.10	Pre-Application Conference	J-27
3.5.11	Status of Joint Permit Application Completeness	J-27
3.6	Determinations and Considerations in Evaluating Individual Removal-Fill Permit Applications	J-33
3.6.1	Department Determinations	J-33
3.6.2	Determination Considerations	J-34
4.0	IPC'S PROPOSED SITE CERTIFICATE CONDITIONS.....	J-37
5.0	CONCLUSIONS.....	J-37
6.0	COMPLIANCE CROSS-REFERENCES.....	J-37
7.0	REFERENCES.....	J-41

LIST OF TABLES

Table J-1. JPA Required Information and Status of Submittal	J-28
Table J-2. Path Forward to Fulfill Requirements for and Conditions to Removal-Fill Permit.....	J-31
Table J-3. Submittal Requirements Matrix.....	J-37

LIST OF ATTACHMENTS

Attachment J-1. Figures
Attachment J-2. Wetland Characteristics and Impacts Tables
Attachment J-3. Joint Permit Application

ACRONYMS AND ABBREVIATIONS

BMP	best management practice
CWNWMP	Compensatory Wetland and Non-Wetland Mitigation Plan
DSL	Oregon Department of State Lands
EFSC or Council	Energy Facility Siting Council
GPS	Global Positioning System
GRMW	Grande Ronde Model Watershed
HUC	Hydrologic Unit Code
IPC	Idaho Power Company
JPA	Joint Permit Application
kV	kilovolt
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
OAR	Oregon Administrative Rules
ODOE	Oregon Department of Energy
OHW	Ordinary High Water
ORS	Oregon Revised Statutes
ORWAP	Oregon Rapid Wetland Assessment Protocol
OSDAM	Oregon Streamflow Duration Assessment Methodology
Project	Boardman to Hemingway Transmission Line Project
ROE	right of entry
SDAM	Streamflow Duration Assessment Method
USACE	U.S. Army Corps of Engineers
USFS	United States Forest Service
WOS	waters of the state
WOTUS	waters of the United States

Exhibit J Waters of this State

1.0 INTRODUCTION

Exhibit J provides information regarding wetlands and other waters of this state (WOS) within the Site Boundary for the Boardman to Hemingway Transmission Line Project (Project). Additionally, Exhibit J includes evidence supporting issuance of an Oregon Department of State Lands (DSL) Removal-Fill Permit for those parcels IPC has had access to and has surveyed for WOS, and Idaho Power Company (IPC) requests that the Energy Facility Siting Council (EFSC or Council) approve a Removal-Fill Permit under Oregon Revised Statute (ORS) 469.401(3) covering those parcels and that the approval be included in and governed by the site certificate. For the parcels IPC has not yet had access to, IPC request that the Council include a condition in the site certificate providing IPC shall complete WOS surveys for those parcels after gaining access to the same, IPC shall supplement its Removal-Fill Permit application to finalize the information relevant to the previously unsurveyed parcels, and the Oregon Department of Energy (ODOE) may approve the supplemented Removal-Fill Permit covering all relevant Project parcels, including those that were previously unsurveyed.

2.0 APPLICABLE RULES AND AMENDED PROJECT ORDER PROVISIONS

2.1 Site Certificate Application Requirements

Oregon Administrative Rule (OAR) 345-021-0010(1)(j) provides that Exhibit J must include the following:

(A) A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features.

(B) An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state.

(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).

(D) If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.

(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.

(F) A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.

2.2 Application Requirements for Individual Removal-Fill Permits

OAR 141-085-0550 sets forth the following requirements for an application for an DSL Removal-Fill Permit:

(1) Written Application Required. A person who is required to have an individual permit to remove material from the bed or banks, or fill any waters of this state, must file a written application with the Department for each individual project. A permit must be issued by the Department before performing any regulated removal-fill activity.

(2) Complete and Accurate Information Required. Failure to provide complete and accurate information in the application may be grounds for administrative closure of the application file or denial, suspension or revocation of the authorization.

(3) Fee Required for a Complete Application. For an application to be determined complete, the Department must have received the appropriate fee.

(4) Level of Detail Required May Vary. The applicant is responsible for providing sufficient detail in the application to enable the Department to render the necessary determinations and decisions. The level of documentation may vary depending on the degree of adverse impacts, the level of public interest and other factors that increase the complexity of the project.

(5) Required Information: A completed and signed application on current forms provided by the Department, including any maps, necessary photos and drawings, is required. The information must be entered in the appropriate blocks on the application form. The Department may require the applicant to submit any or all application materials electronically. The application must include all of the following:

(a) Applicant information including name, mailing address, phone number and e-mail address. When the applicant is a business entity, the business must be registered with the Oregon Secretary of State Corporate Division. The exact name of the business entity, as listed with Secretary of State Corporate Division, must be entered on the application.

(b) Landowner information including name and mailing address where any removal-fill activity is proposed, and if applicable, where permittee-responsible compensatory mitigation is proposed.

(A) For the construction of a new linear facility, the applicant must provide a complete list of landowner names and mailing addresses for all landowners whose land is identified in the permit application within the alignment of the new linear facility. Mailing labels must be provided when there are more than five landowners listed in the application.

(B) For the purpose of this rule, a condemner is the landowner when:

(i) If using state condemnation authority, the condemner has complied with ORS Chapter 35, filed an eminent domain action in court and deposited the condemner's estimate of just compensation with the court for the use and benefit of the defendants, or it has a court's order authorizing its possession of the land; or

(ii) If using federal authority, the condemner has complied with Federal Rules of Civil Procedure 71.1 and, if other than the United States, has a court's order authorizing its possession of the land.

(c) Project site location information including Township, Range, Quarter-quarter Section and Tax Lot(s), latitude and longitude, street location if any, and location maps with site location indicated.

(d) The location of any off-site disposal or borrow sites, if these sites contain waters of this state.

(e) Project information including:

(A) Description of all removal-fill activities associated with the project;

(B) Demonstration of independent utility to include all phases, projects or elements of the proposed project which will require removal-fill activities;

(C) Volumes of fill and removal within jurisdictional areas expressed in cubic yards;

(D) Area of removal and fill within jurisdictional areas expressed in acres to the nearest 0.01-acre for impacts greater than 0.01 of an acre or expressed in acres to the nearest 0.001-acre for impacts less than 0.01 of an acre; and

(E) Description of how the project will be accomplished including construction methods, site access and staging areas.

(f) A description of the project purpose and need for the removal or fill. All projects must have a defined purpose or purposes and the need for removal or fill activity to accomplish the project purpose must be documented. The project purpose statements and need for the removal or fill documentation must be specific enough to allow the Department to determine whether the applicant has considered a reasonable range of alternatives.

(g) Project plan views and cross-sectional views drawn to scale that clearly identify the jurisdictional boundaries of the waters of this state (e.g., wetland delineation or ordinary high water determination). Project details, such as work area footprint, impact area and approximate property boundaries must also be included so that the amount and extent of the impact to jurisdictional areas can be readily determined.

(h) A written analysis of potential changes that the project may make to the hydrologic characteristics of the waters of this state, and an explanation of measures taken to avoid or minimize any adverse impacts of those changes, such as:

(A) Impeding, restricting or increasing flows;

(B) Relocating or redirecting flow; and

(C) Potential flooding or erosion downstream of the project.

(i) A description of the existing biological and physical characteristics of the water resources, along with the identification of the adverse impacts that will result from the project.

(ii) A description of the navigation, fishing and public recreation uses, when the project is proposed on state-owned land.

(k) If the proposed activity involves wetland impacts, a wetland determination or delineation report that meets the requirements in OAR 141-090 must be submitted, unless otherwise approved in writing by the Department. A wetland delineation is usually required to determine the precise acreage of wetland impact and compensatory wetland mitigation requirements. Whenever possible, wetland determination and delineation reports should be submitted for review well in advance of the permit application. Although an approved wetland delineation report is not required for application completeness, a jurisdictional determination must be obtained prior to the permit decision.

(l) A functions and values assessment that meets the requirements in OAR 141-085-0685 when permanent impacts to wetlands are proposed.

(m) Any information known by the applicant concerning the presence of any state listed species.

(n) Any information known by the applicant concerning historical, cultural and archeological resources. Information may include but is not limited to a statement on the results of consultation with impacted tribal governments and/or the Oregon State Historic Preservation Office of the Oregon Parks and Recreation Department.

(o) An analysis of alternatives to derive the practicable alternative that has the least reasonably expected adverse impacts on waters of this state. The alternatives analysis must provide the Department all the underlying information to support its considerations enumerated in OAR 141-085-0565, such as:

(A) A description of alternative project sites and designs that would avoid impacts to waters of this state altogether, with an explanation of why each alternative is, or is not practicable, in light of the project purpose and need for the fill or removal;

(B) A description of alternative project sites and designs that would minimize adverse impacts to waters of this state with an explanation of why each alternative is, or is not practicable, in light of the project purpose and need;

(C) A description of methods to repair, rehabilitate or restore the impact area to rectify the adverse impacts; and

(D) A description of methods to further reduce or eliminate the impacts over time through monitoring and implementation of corrective measures.

(p) If applicable, a complete compensatory mitigation plan that meets the requirements listed in OAR 141-085-0680 through 141-085-0715 and 141-085-0765 to compensate for unavoidable permanent impacts to waters of this state and a complete rehabilitation plan if unavoidable temporary impacts to waters of this state are proposed.

(q) For each proposed removal-fill activity and physical mitigation site applied for in the application, a list of the names and addresses of the adjacent landowners, including those properties located across a street or stream from the proposed project.

(A) For a new linear facility, the applicant must provide a list of the names and mailing addresses of the adjacent landowners for the new linear facility.

(B) Mailing labels must be provided by the applicant, when there are more than five names and addresses of adjacent landowners listed.

(r) A signed local government land use affidavit.

(s) A signed Coastal Zone Certification statement, if the project is in the coastal zone.

(t) Applicant Signature. Signature of the applicant must be provided. If the application is on behalf of a business entity, a certificate of incumbency must be provided to certify that the individual signing the application is authorized to do so.

(u) Landowner Signature. If the applicant is not the landowner upon which the removal-fill activity (including mitigation) is to occur and does not hold an easement allowing the activity on that land, a written authorization from the owner of the land consenting to the application must be provided.

(A) Notwithstanding the requirement set forth under Subsection (u) above, a landowner signature is not required for applications for the construction and maintenance of linear facilities; and

(B) The condemner may sign as landowner when the requirements of OAR 141-085-0550(5)(b)(B) have been met.

(v) Mitigation Site Landowner Signature. If the applicant is not the owner of the land upon which the mitigation is to occur and does not hold an easement allowing the activity on that land, a written authorization from the owner of the land consenting to the application must be provided.

(w) Inventory and Evaluation if Related to Marine Resources or Removal-Fill in Oregon's Territorial Sea. A resource inventory and effects evaluation consistent with the requirements contained in the Oregon Territorial Sea Plan Part 2 is required. The resource inventory and effects evaluation must be provided as a stand-alone attachment to the applicant's Joint Permit Application.

(6) Additional Requirements for Estuarine Fill. If the activity is proposed in an estuary for a non-water-dependent use, a complete application must also include a written statement that describes the following:

(a) The public use of the proposed project;

(b) The public need for the proposed project; and

(c) The availability of alternative, non-estuarine sites for the proposed use.

(7) *Additional Information as Requested.* The Department may request additional information as necessary to make an informed decision on whether or not to issue the authorization.

(8) *Waiver of Required Information.* At its discretion, the Department may waive any of the information requirements listed in Section (5) of this rule for voluntary restoration projects.

(9) *Permit Application Modifications.* A modification to a permit application may be submitted at any time prior to the permit decision. If the modification is received after the public review period, the Department may circulate the revised application again for public review. Modifications proposing significantly different or additional adverse impacts will generally be resubmitted for public review. The Department may set an expedited time frame for public review.

(10) *Pre-Application Conference.* An applicant may request the Department to hold a pre-application meeting. In considering whether to grant the request, the Department will consider the complexity of the project and the availability of Department staff.

2.3 Determinations and Considerations in Evaluating Individual Removal-Fill Permit Applications

Under the relevant provisions of OAR 141-085-0565, an application for a Removal-Fill Permit is subject to the following determinations and considerations:

(3) *Department Determinations.* The Department will issue a permit if it determines the project described in the application:

(a) *Has independent utility;*

(b) *Is consistent with the protection, conservation and best use of the water resources of this state as specified in ORS 196.600 to 196.990; and*

(c) *Would not unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing and public recreation, when the project is on state-owned lands.*

(4) *Department Considerations.* In determining whether to issue a permit, the Department will consider all of the following:

(a) *The public need for the proposed fill or removal and the social, economic or other public benefits likely to result from the proposed fill or removal. When the applicant for a permit is a public body, the Department may accept and rely upon the public body's findings as to local public need and local public benefit;*

(b) *The economic cost to the public if the proposed fill or removal is not accomplished;*

(c) *The availability of alternatives to the project for which the fill or removal is proposed;*

(d) *The availability of alternative sites for the proposed fill or removal;*

(e) *Whether the proposed fill or removal conforms to sound policies of conservation and would not interfere with public health and safety;*

(f) Whether the proposed fill or removal is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and land use regulations;

(g) Whether the proposed fill or removal is compatible with the acknowledged comprehensive plan and land use regulations for the area where the proposed fill or removal is to take place or can be conditioned on a future local approval to meet this criterion;

(h) Whether the proposed fill or removal is for stream bank protection; and

(i) Whether the applicant has provided all practicable mitigation to reduce the adverse effects of the proposed fill or removal in the manner set forth in ORS 196.800.

2.4 Amended Project Order

The Amended Project Order includes the following discussion:

The application shall include identification of wetlands and waters of the state for all areas the applicant anticipates will be affected by the proposed facility, including access roads and temporary laydown areas. The applicant has proposed a “phased survey” approach for data collection during the site certificate review process. The Department understands that the entirety of the site boundary for the proposed facility may not yet have been surveyed for wetlands and waters. Nevertheless, Exhibit J should include as much information as possible about the results of the field surveys conducted to date and the schedule for future surveys.

The applicant should include in Exhibit J as much of the information required by OAR 345-021-0010(1)(j) as possible, and the proposed path forward to obtain the information necessary for the Council to find that the requirements for a removal-fill permit have been met. Information would include an itemized demonstration of each applicable provision of ORS 196.825 (Criteria for Issuance of a Permit) and OAR 141-085-0550 (Application Requirements for All Authorizations). DSL requires a compensatory wetland, compensatory non-wetland, and temporary impacts mitigation plan be submitted with a removal-fill application.

(Amended Project Order, Section III(j))

3.0 ANALYSIS

3.1 Oregon Removal-Fill Permit and Army Corps Clean Water Act Section 404 Permit

DSL and the U.S. Army Corps of Engineers (USACE) both administer wetland and waterway regulatory programs in Oregon, and a Joint Permit Application (JPA) that can be used to apply for removal-fill authorizations from both agencies. IPC will submit a JPA to DSL and USACE, applying for the relevant authorizations necessary to address the Project’s impacts on wetlands and waterways. Regarding DSL, IPC will obtain a Removal-Fill Permit under Chapter 141, Division 85, of the OAR (see below Section 3.5 and Section 3.6). With respect to USACE, Section 404 of the federal Clean Water Act establishes a program for regulating the discharge of dredged or fill material into waters of the United States (WOTUS). Proposed activities are regulated through a permit review process. An individual permit is required for potentially

significant impacts. The USACE has issued general permits for certain categories of discharges that will have only minimal adverse effects. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions of the general permit are met. Here, the Project will be authorized under the USACE's Nationwide General Permit 12, which authorizes activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in WOTUS, provided the activity does not result in the loss of greater than 0.5 acres of WOTUS for each single and complete project (see 82 Fed. Reg. 1985-86 (Jan. 6, 2017)).

Consistent with OAR 345-021-0010(1)(j), Exhibit J addresses the relevant DSL Removal-Fill permitting requirements and does not address USACE's Section 404 permitting process. IPC will obtain the necessary Section 404 permit directly from USACE, and the USACE authorization is not included in or governed by the site certificate (see Exhibit E, Section 3.2.4).

However, while Exhibit J does not address USACE's Section 404 permitting process, the JPA applies to both DSL's and USACE's regulatory programs and each agency has jurisdiction over different types of water bodies. For information purposes, the following discussion describes the jurisdictional limitations of the DSL and USACE wetland and waterway regulatory programs in Oregon.

3.1.1 State

The Removal-Fill Permit requirements apply to "waters of this state," which include "all natural waterways, tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, that portion of the Pacific Ocean that is in the boundaries of this state, all other navigable and non-navigable bodies of water in this state and those portions of the ocean shore, as defined in ORS 390.605, where removal or fill activities are regulated under a state-assumed permit program as provided in 33 U.S.C. 1344(g) of the Federal Water Pollution Control Act, as amended" (OAR 141-085-0510)(95)).

Based on discussions with DSL, IPC understands that DSL does not consider ephemeral streams to be WOS. This is consistent with the regulation definition of WOS, which includes two forms of streams: constantly flowing streams and intermittent streams. Constantly flowing streams hold water continuously.¹ Intermittent streams are defined as "any stream which flows during a portion of every year and which provides spawning, rearing or food-producing areas for food and game fish" (OAR 141-085-0510(46)). By comparison, ephemeral streams flow "only in direct response to precipitation. Water typically flows only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the stream bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water" (Topping et al. 2009). Because ephemeral streams do not flow continuously or during a portion of every year, and may not provide fish spawning, rearing or food-producing areas; ephemeral streams are not considered constantly flowing streams or intermittent streams, and in turn, are not considered WOS.

3.1.2 Federal

The USACE's Clean Water Act jurisdiction applies to activities affecting "waters of the United States," which include the following water body categories:

¹ See http://www.oxforddictionaries.com/us/definition/american_english/constantly (defining "constantly" as meaning "continuously over a period of time; always").

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

(8) Waters of the United States do not include prior converted cropland. . . .

33 CFR 238.3(a).²

The term “wetlands” means “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” 33 CFR 238.3(b).

Based on consultation with the USACE (Turaski and Nelson 2013) and for purpose of this Project, IPC is treating ephemeral streams as WOTUS; therefore, ephemeral streams are included in the JPA for the USACE’s consideration. In contrast, as discussed above, ephemeral streams are not considered WOS subject to DSL’s jurisdiction and are not addressed in Exhibit J.

3.2 Analysis Area

The analysis area for Exhibit J includes all areas within the Site Boundary, which is defined as “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” (OAR 345-001-0010(55)). The Site Boundary encompasses the following facilities in Oregon:

- The Proposed Route, consisting of 270.8 miles of new 500-kilovolt (kV) electric transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of

² In 2015, USACE and the U.S. Environmental Protection Agency adopted a final rule amending the definition of “waters of the United States” (see 80 Fed. Reg. 37054 (June 29, 2015)). However, the Court of Appeals in *In re EPA*, 803 F.3d 804 (6th Cir. 2015) stayed the final rule pending determination of the court’s jurisdiction to consider the validity of the rule. The definition considered here appeared in 33 CFR 238.3 prior to the 2015 amendment.

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.

The Project features are fully described in Exhibit B and the Site Boundary for each Project feature is described in Exhibit C, Table C-24. The location of the Project features and the Site Boundary is outlined in Exhibit C.

3.3 Survey and Delineation Methods

In response to the size and complexity of the Project and after consultation with applicable federal and state agencies, IPC determined that data collection and field surveys for the Project would be conducted via a phased study approach which utilizes three distinct phases. During Phase 1, IPC obtained existing information regarding the occurrence of wetlands and other waters within the Site Boundary. IPC used this information to conduct desk-top studies, which were used for preliminary facility siting. In Phase 2, IPC's consultants undertook comprehensive field surveys of all portions of the Site Boundary to which IPC was granted access. Phase 3 will consist of all preconstruction surveys that may be necessary to identify wetland locations, micro-siting route changes, or to close data gaps on previously unsurveyed parcels that did not have right-of-entry (ROE) prior to conducting wetland delineations.

Using the phased study approach, wetland data is being acquired, analyzed, and submitted for approval in an iterative process:

- In 2011, IPC delineated wetlands in the Site Boundary. The 2011 wetland delineations were subitted to DSL for review and concurrence. The 2011 data was used to determine preliminary impact acreage, removal-fill quantities, and partial mitigation needs for the JPA, which was submitted with the pASC.
- In 2012, IPC delineated wetlands on previously inaccessible parcels within the Site Boundary and land in alternative routes proposed since 2011 fieldwork was completed. 2012 wetland delineations were submitted to DSL for review.
- In 2013, IPC delineated wetlands on four new alternative routes in the Site Boundary of the Proposed Route.
- In 2016, IPC delineated wetlands on four new proposed route locations and on three new alternatives within the Project Site Boundary.

- 1 • Combined data from the 2011, 2012, 2013, and 2016 wetland delineations were used to
2 determine preliminary impact acreage for the JPA. These data were combined with
3 separate preliminary impact acreage from National Wetlands Inventory (NWI) and National
4 Hydrography Dataset (NHD) data for areas without ROE in order to make a preliminary
5 determination of mitigation needs for the JPA.
- 6 • Combined data from 2011, 2012, 2013, and 2016 will be rectified and submitted as one
7 comprehensive delineation report to DSL in 2017 for concurrence and ODOE for
8 completeness determination for Exhibit J..
- 9 • After EFSC issues the site certificate and before construction, IPC will conduct additional
10 wetland surveys to close data gaps on previously unsurveyed parcels within the Site
11 Boundary.

12 It is anticipated that wetland delineation will occur on previously undelineated parcels or where a
13 change in project location or design indicates there may be an impact to WOS.

14 Portions of these phases will overlap chronologically, as explained in detail in Section 3.3.7,
15 Ultimately, the outcomes of the phased data submittal process will be:

- 16 • Wetland survey on all parcels within the Site Boundary where there is potential for
17 impacts to WOS;
- 18 • Concurrence by DSL of delineations of all wetland and other waters where impacts will
19 occur;
- 20 • Calculation of removal-fill impacts based on delineated wetland boundary data;
- 21 • Full accounting of impacts to wetlands and other waters to ODOE and DSL; and
- 22 • Mitigation sufficient to compensate for wetland functions and values impacted by the
23 project.

24 **3.3.1 Phase 1: Wetland Desktop Study**

25 IPC consultants performed a desktop study to provide preliminary information about the
26 possible number, location, and extent of wetlands or other waters that occur within the analysis
27 area. This geographic information system exercise identified probable wetlands and other
28 waters mapped by the U.S. Fish and Wildlife Service NWI; probable waters mapped by the NHD
29 (USGS 2012); and potential wetland or other waters mapped by Oregon Department of
30 Transportation Salmon Resources and Sensitive Area Mapping (OBDP 2004). It also identified
31 areas of hydric soil mapped by Natural Resources Conservation Service (NRCS 2010).

32 **3.3.2 Phase 2: Wetland Delineation**

33 Prior to initiating the wetland delineation, representatives from IPC and its consulting team
34 (Tetra Tech) met with DSL staff on May 25, 2011, to discuss procedures that would facilitate
35 successful review of the wetland delineation and ensure that fieldwork would collect all
36 necessary data.

37 In preparation for the field work, Tetra Tech collected available pre-survey data and prepared
38 field maps to be used for identifying the locations of probable wetlands and non-wetland waters
39 within the Site Boundary. Pre-survey data included three feature types:

- 40 • Wetlands – data came from the Oregon Wetlands database (Oregon Spatial Data
41 Library 2011) which includes NWI, approved Local Wetland Inventories and

1 miscellaneous wetland mapping by state and federal agencies, nongovernmental
2 organizations, academia, consultants, and desktop aerial photo-interpretation.

- 3 • Hydric soils – data came from the Oregon Wetlands database (Oregon Spatial Data
4 Library 2011) which includes statewide polygon cover of hydric, partially hydric, and
5 related wetland soils from NRCS soil surveys.

- 6 • Surface water – data came from NHD (USGS 2012), and desktop aerial photo-
7 interpretation.

8 Data from these sources were plotted on high resolution aerial photography (ESRI 2012). The
9 resulting field figures were used by the wetland delineation field staff to guide their
10 investigations.

11 To improve consistency of the delineations, wetland delineation field staff attended a 2-day
12 session on June 20 and 21, 2011, conducted by Tetra Tech staff. The training was comprised of
13 an office day where the Oregon Streamflow Duration Assessment Methodology (OSDAM) and
14 project specific methods of wetland documentation were reviewed, and a field day where
15 different wetland and stream types were observed. The following guidance documents and
16 procedures were reviewed:

- 17 • 1987 USACE Wetlands Delineation Manual (Environmental Laboratory 1987);
- 18 • Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region
19 (Version 2.0) (USACE 2008);
- 20 • Regional Supplement to the USACE Wetland Delineation Manual: Western Mountains,
21 Valleys, and Coast Region (Version 2.0) (USACE 2010);
- 22 • OAR Chapter 141, Division 090, Administrative Rules for Wetland Delineation Report
23 Requirements and for Jurisdictional Determinations for the Purpose of Regulating Fill
24 and removal Within Waters of the State;
- 25 • OSDAM methodology (Topping et al. 2009); and
- 26 • In-the-field examples of sample plot location and documenting field conditions to meet
27 the requirements and guidance of the USACE and DSL.

28 Wetland presence was determined according to the 1987 USACE Wetlands Delineation Manual
29 (Environmental Laboratory 1987) methods and the regional supplements, as appropriate. The
30 USACE Arid West Regional Supplement was used in the majority of the study area with the
31 exception of higher elevation areas around the Wallowa-Whitman National Forest. In these
32 higher elevation areas, the Western Mountains, Valleys, and Coast Regional Supplement was
33 used. Delineations used the Routine Determination, as described in the 1987 USACE Wetlands
34 Delineation Manual (Environmental Laboratory 1987) and amended by the applicable regional
35 supplement.

- 36 • Sample plots were established in wetlands identified by NWI data and hydric soil map
37 units (Oregon Spatial Data Library 2011). The sample plots were located within the
38 feature where it was judged most likely to have wetland characteristics (i.e., the lowest
39 or greenest place).
- 40 • Paired sample plots were established in logical locations to document irregularities in
41 wetland boundaries.

- 1 • The number of sample plots established in wetlands was commensurate with the size
2 and complexity of the wetland; and ranged from 2 to several.
- 3 • All soil pits were excavated to 20 inches unless excavation refusal was encountered. If
4 excavation was not conducted to 20 inches, an explanation was entered on the wetland
5 delineation form.
- 6 • Each wetland boundary was recorded as a polygon using a resource grade Trimble®
7 global positioning system (GPS) unit.
- 8 • OSDAM was the standard method used to evaluate non-wetland waters.
- 9 • An individual OSDAM form was filled out for all streams that, in the field, appeared to be
10 intermittent or perennial.
- 11 • In 2013 and 2016, individual SDAM forms were not filled out for all intermittent and
12 perennial streams; however, the SDAM methodology was used by field staff as needed
13 for determining flow duration, and forms were filled out only at select representative
14 streams.
- 15 • Streams were mapped at bankfull elevation rather than at ordinary high water (OHW)
16 per DSL linear project guidance (DSL 2011).
- 17 • For features that were greater than 6 feet wide, bankfull width of streams was
18 documented with a GPS by recording each bank with a GPS line. For features that were
19 less than 6 feet wide or the opposite bank was not accessible, the centerline was
20 documented with a GPS by recording the center of the channel with a GPS line and
21 recording the associated channel width.

22 Any water feature possessing wetland characteristics based on the USACE 1987 methods and
23 appropriate supplements was assumed to be preliminarily jurisdictional at the state and at the
24 federal level. All non-wetland water features that have characteristics of perennial or intermittent
25 streams based on OSDAM results, or non-wetland other waters, are also assumed to be
26 preliminarily jurisdictional at the state and federal level.

27 Ephemeral streams are not included in the definition of WOS (ORS 196.800 (15)); therefore,
28 they are not reported in this document. Ephemeral stream are being considered preliminarily
29 jurisdictional at the federal level and are included in the JPA (Attachment J-3).

30 GPS data documenting boundaries of wetlands and other waters was collected using Trimble
31 GeoExplorer GPS units.

32 Methods for the 2012 wetland delineation were consistent with the 2011 methods, including the
33 training session, wetland determination methods, data collection and mapping protocols, and
34 equipment.

35 Methods for the 2013 and 2016 wetland delineations were consistent with 2011 and 2012
36 methods, except Streamflow Duration Assessment Method for Oregon (SDAM; Nadeau 2011)
37 was used instead of OSDAM, to differentiate ephemeral from intermittent streams.

38 **3.3.3 Phase 3: Wetland Survey and Reporting on Unsurveyed Parcels**

39 Following issuance of the site certificate and prior to construction, IPC will perform wetland
40 surveys, delineations and reporting on any parcels not yet surveyed at the time of issuance of
41 the site certificate or where a change in project location or design indicates there may be an

1 impact to WOS. In some cases, IPC may not obtain access rights until after issuance of the site
2 certificate. All such surveys will be conducted in compliance with applicable conditions to the
3 site certificate, and wetland delineation methods will be consistent with methods used in 2011,
4 2012, 2013, and 2016.

5 **3.4 Site Certificate Application Requirements**

6 **3.4.1 Description and Location of Waters of this State**

7 OAR 345-021-0010(1)(j)(A): A description of all areas within the site boundary that might be
8 waters of this state and a map showing the location of these features.

9 A description of all areas within the Site Boundary that might be WOS is provided in the
10 delineation results of this section. Attachment J-1 includes maps showing the locations of these
11 features.

12 IPC conducted surveys for the presence of wetlands and other waters in 2011, 2012, 2013, and
13 2016. Information reported in this exhibit includes results of all four years of wetland surveys.

14 Delineated wetlands and other waters were mapped according to DSL map standards.
15 Wetlands or other waters to which crews did not have access were mapped according to the
16 best available data. For NWI-mapped or NHD-mapped features, the boundaries or locations of
17 the features as mapped by NWI or NHD were used. A stream width of 6 feet was applied to
18 NHD-mapped features that have not yet been accessed in the field. The boundaries for NHD
19 stream features (e.g., canals) that are clearly wider than 6 feet when analyzed using aerial
20 photo-interpretation were digitized.

21 The wetland delineation report for the Project was organized by each county crossed by the
22 Project. To preserve this county-by-county organization and facilitate possible cross referencing
23 between the wetland delineation report and this exhibit, that organization is maintained in the
24 figures and tables in this exhibit. Addenda to the 2011 delineation report were prepared in 2013
25 and 2014, reporting the results of 2012 and 2013 fieldwork, respectively (all features delineated
26 in 2011 were included in the wetland delineation report. In 2013 and 2014, only those additional
27 features proposed for impact were included in the delineation report).

28 Locations of all WOS (delineated features, NWI, NHD, and from aerial-photo interpretation) are
29 displayed in Attachment J-1 figures. Their individual characteristics are reported in Attachment
30 J-2, Tables 1 through 5. Ephemeral streams, which are not WOS, are not included on the maps
31 or in the tables of this Exhibit. Ephemeral streams (which are assumed to be federally
32 jurisdictional) are included in the Other Waters impact tables and the Wetlands and Waters
33 Impact Location maps of the JPA (Attachment J-3), which will be reviewed (for federal
34 jurisdiction) by the USACE for a Section 404 permit.

35 **3.4.2 Impacts to Waters of this State**

36 OAR 345-021-0010(1)(j)(B): An analysis of whether construction or operation of the
37 proposed facility would adversely affect any waters of this state.

38 **3.4.2.1 Description of Avoidance and Minimization Efforts**

39 Since the start of Project planning and design, IPC has consistently made efforts to avoid and
40 minimize impacts to wetlands and other waters. While developing the initial Project layout, IPC
41 utilized NWI, NHD, and aerial photo-interpreted data to inform the preliminary engineering of
42 towers, roads, and other project infrastructure. These Project components were located outside

of wetlands and other waters to the maximum extent feasible. After the wetland delineations in 2011, 2012 and 2013, the resulting wetland data were used to inform the relocation of all proposed facilities. Wetland data from the 2016 delineation will be assessed for additional potential relocation of proposed facilities.

After preliminary analyses of impacts were conducted (based on 2011, 2012, and 2013 delineations) the impact sites identified in the analyses were returned to the Project engineers to further avoid and reduce impacts. This iterative process of Project layout being informed by wetland and other waters data, resulting in relocation of Project facilities where possible to avoid or minimize impacts, will continue throughout the Project design.

The effectiveness of the Project's avoidance and minimization effort is demonstrated by the quantity of wetlands and waters occurring within the Site Boundary that are avoided by the Project. Tables 6 through 10 in Attachment J-2 summarize impacts by affected feature. Many wetlands and other waters have both a permanent and temporary impact reported, so the total number of unique features impacted is less than the sum of the permanent and temporary impact sites.

Tables 6 through 10 in Attachment J-2 summarize impacts by affected feature. Detailed avoidance and minimization information is provided in Attachment J-3, JPA, Appendices L and M.

3.4.2.2 Methods for Estimating Impacts

A preliminary estimate of impacts to wetlands and other waters was conducted based on data available in 2016. Data used in the analysis included:

- Delineated boundaries of wetlands and other waters from 2011, 2012, 2013, and 2016 fieldwork;
- NWI and NHD mapping, and desktop aerial photo-interpretation on parcels that have not been granted ROE; and
- Most current Project layout (September 2016), including impact buffers.

The four water resource data sets listed above (2011, 2012, 2013, and 2016 delineations; NWI; NHD; and desktop aerial photo-interpretation) were compared to the Project layout. Points where the Project layout intersected with the wetland data sets were considered impacts. Preliminary impacts are listed by site in Attachment J-2, Tables 6 through 10.

Because this analysis includes NWI, NHD, and desktop aerial photo-interpreted wetlands and other waters that have not been evaluated or delineated, actual Project impacts are expected to change once delineations and final avoidance and minimization planning are complete.

3.4.2.3 Impacts Identified

During operation, the Project will not adversely affect WOS. There will be no removal or fill of WOS during the Project's operation. Roads will be constructed using best management practices (BMPs). The Project's Erosion and Sediment Control Plan (Exhibit I; Attachment I-3) lists construction BMPs to prevent erosion and sediment delivery to WOS. Road crossings will be constructed such that they do not affect existing flow characteristics of WOS, including duration, extent of wetted channel, overflow or bypass channels, meander opportunities or downstream hydraulic and hydrologic characteristics.

As part of construction of the Project, portions of some wetlands and waters will be permanently removed or filled, converting them to uplands. These impacts will be mitigated concurrent with Project construction, in accordance with the compensatory wetland and non-wetland mitigation plans. Temporal effects to wetland functions and values will be mitigated because the mitigation

will be constructed concurrent with or prior to project construction and wetland impacts. Therefore, the time lag between the wetland impact, and when the functions are replaced by the mitigation, will be as short as possible, with a result of no net adverse effect to WOS.

Any temporary impacts on WOS during construction or operation will be rehabilitated within 24 months according to the Wetland Site Rehabilitation Plan, which is included as part of the JPA.

3.4.3 Description of Significance of Impacts to Waters of this State

OAR 345-021-0010(1)(j)(C): A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).

By using NWI and NHD data, and field surveys, IPC identified 177 potential wetlands and 477 potential non-wetland WOS. All of these features are tabulated in Attachment J-2, Tables J-2-1A through J-2-5B. Of these features, 47 of the wetlands and 178 of the non-wetland WOS may be subject to some temporary or permanent impact. The remaining 135 wetlands and 326 non-wetland WOS will not be disturbed by the project, so there will be no adverse impacts to them.

Wetlands and non-wetland WOS within the Site Boundary that may be temporarily and/or permanently impacted by the project, are tabulated in Attachment J-2, Tables J-2-6A through J-2-10A.³

IPC identified 11 wetland locations (delineated wetlands) that may be temporarily impacted by construction. The total potential temporary impact to these wetlands is 0.174 acre, for an average temporary impact of 0.016 acre. IPC identified 26 non-wetland, WOS sites (delineated non-wetland WOS) that may be temporarily impacted by construction. The total potential temporary impact to these non-wetland WOS sites is 0.075 acres, for an average temporary potential impact of 0.003 acre per site.

IPC identified 34 additional potential wetlands and 139 additional non-wetland WOS mapped by NWI, NHD, or desktop aerial photo-interpretation that may be temporarily impacted by construction. These features have not been field-verified and delineated due to right of entry constraints, but may be visited in the future once right of entry has been secured. One wetland site is a 25.203-acre potential temporary impact. The total potential temporary impact to the remaining 30 sites is 1.595 acres, for an average potential temporary impact of 0.053 acres per site. Total potential impact to the 125 undelineated non-wetland WOS is 0.98 acres, for an average impact of 0.008 acres per site.

Temporary impacts to wetland and non-wetland WOS (located inside and outside the Site Boundary) will be mitigated by restoring the sites to existing conditions, according to the site restoration plan, so adverse effects to these sites are not anticipated.

IPC identified 13 wetland locations (delineated wetlands) that may be permanently impacted. The total impact to these wetlands is 0.211 acres for an average impact of 0.016 acres per wetland. IPC identified 35 non-wetland, WOS sites (delineated non-wetland WOS) that may be permanently impacted. The total impact to these non-wetland, WOS sites is 0.139 acres, for an average impact of 0.004 acres per stream.

³ Temporary and permanent impacts to wetlands and non-wetland WOS reported in the JPA vary from the impacts reported in this Exhibit. Impacts to WOS caused by minor work on some roads that will be used to access the project, but that are outside of the Site Boundary, are included in the JPA. Because they are outside the Site Boundary, they are excluded from this Exhibit.

IPC identified 23 additional potential wetlands and 129 additional non-wetland WOS mapped by NWI, NHD, and desktop aerial photo-interpretation that may be permanently impacted. These features have not been field-verified and delineated due to right of entry constraints, but will be visited in the future once right of entry has been secured. Total potential impact to the 23 undelineated wetlands is 0.351 acre, an average of 0.015 acre per wetland. Total potential impact to the 129 undelineated non-wetland WOS is 0.687 acre, an average of 0.005 acre per feature. Impact calculations for these features are included in the JPA, as well as impacts occurring outside of the Site Boundary, and they were used for calculating mitigation acreage.

Calculations of removal and fill for each WOS site are included in the JPA, Appendix G and Appendix O.

IPC evaluated wetland functions and values using the Oregon Rapid Wetland Assessment Protocol (ORWAP) (Adamus et al. 2010). Results of ORWAP evaluations will be used to assess wetland functions that will be affected by wetland impacts. ORWAP results will assist in the determination of significance of proposed wetland impacts by providing an analysis of changes to affected wetlands. ORWAP results and the analysis of impacts to functions, is incorporated in the draft Compensatory Wetland and Non-Wetland Mitigation Plan (CWNWMP) attached to the JPA, Appendix T. Changes to wetland functions will be mitigated through implementation of the CWNWMP, approved by both DSL and USACE.

3.4.4 Why Removal-Fill Authorization is Not Needed

OAR 345-021-0010(1)(j)(D): If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.

OAR 345-021-0010(1)(j)(D) requires an explanation if a removal-fill authorization (Removal-Fill Permit) is not needed. Here, because the Project will require a Removal-Fill Permit, OAR 345-021-0010(1)(j)(D) does not apply.

3.4.5 Information to Support Removal-Fill Authorization

OAR 345-021-0010(1)(j)(E): If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.

Section 3.5 below discusses the application submission requirements and agency review standards relevant to an Removal-Fill Permit application.

3.4.6 Mitigation

OAR 345-021-0010(1)(j)(F): A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.

3.4.6.1 Wetland and Stream Functional Assessments

For linear projects, DSL requires, at a minimum, a functional assessment of the predominant wetland type in each fourth-field Hydrologic Unit Code (HUC). In addition to this requirement, typical wetlands of each wetland type (Cowardin class; Cowardin et al. 1979) in representative landscape settings were assessed using ORWAP (Adamus et al. 2010). Results of the wetland assessments were used to help determine the significance of potential wetland impacts and the

appropriate types of wetland mitigation. Results of the wetland assessments are attached to the CWNWMP.

To meet DSL requirements for stream functional assessments, IPC requested draft stream function assessment material from DSL and used the material provided by DSL to develop a stream function assessment tool specifically for use on the Project. IPC provided the assessment tool to DSL for review, and incorporated DSL's comments into the assessment tool. This tool was then used to assess the functions of representative streams. Results of the stream assessments are attached to the CWNWMP.

3.4.6.2 Wetland Mitigation Planning

IPC developed a preliminary CWNWMP included as Appendix T to the JPA (Attachment J-3) to address both wetland and non-wetland WOS compensatory mitigation. The CWNWMP provides for the creation of functioning wetlands and enhancement of existing wetlands at a mitigation site in Union County, Oregon, referred to as the Hassinger Mitigation Site. IPC chose the site through a careful selection process. In 2011, IPC investigated several potential mitigation sites. Based in part on guidance received during meetings with DSL regarding wetland mitigation for the Project, IPC met with and developed a collaborative mitigation partnership with the Grande Ronde Model Watershed (GRMW) based in La Grande, Oregon. The preliminary CWNWMP is the product of IPC's partnership with GRMW and was developed in cooperation with GRMW.

The preliminary CWNWMP is intended to provide mitigation for all foreseeable unavoidable Project impacts to WOS, and DSL has indicated that the mitigation actions in the CWNWMP are sufficient to mitigate the relevant potential Project impacts. The CWNWMP provides for a combination of wetland and stream restoration by creation and enhancement on approximately 6.21 acres of floodplain and stream channel along Catherine Creek, a tributary of the Grande Ronde River. The quantity of compensatory mitigation—i.e., 6.21 acres—is a conservative estimate intended to cover impacts to WOS in areas IPC has already surveyed and delineated, and potential WOS in areas that IPC has not yet had access to survey. The CWNWMP is considered "preliminary" because the quantity of required compensatory mitigation will be finalized only after the final design for the Project is completed, at which time, IPC will finalize the CWNWMP to align with the final compensatory mitigation requirement and to adjust the scope of the mitigation actions accordingly.

3.5 Application Requirements for Individual Removal-Fill Permit

3.5.1 Written Application Required

OAR 141-085-0550(1): A person who is required to have an individual permit to remove material from the bed or banks, or fill any waters of this state, must file a written application with the Department for each individual project. A permit must be issued by the Department before performing any regulated removal-fill activity.

OAR 141-085-0550(1) requires that, if an Removal-Fill Permit is required, the project proponent must submit a written application for such permit. Here, a complete application for an Removal-Fill Permit in the form required by DSL is attached hereto as the JPA, Attachment J-3.

3.5.2 Complete and Accurate Information Required

OAR 141-085-0550(2): Failure to provide complete and accurate information in the application may be grounds for administrative closure of the application file or denial, suspension or revocation of the authorization.

OAR 141-085-0550(2) requires an application for an Removal-Fill Permit be complete and accurate. In this instance, the information in the JPA is complete and accurate. Information provided in the JPA is based on current wetland delineations, indicative project design, and impact assessment. Changes to the Project after submittal may result in the need to submit additional or modified information to DSL.

3.5.3 Fee Required for a Complete Application

OAR 141-085-0550(3): For an application to be determined complete, the Department must have received the appropriate fee.

Under OAR 141-085-0550(2), a fee is required for an Removal-Fill Permit application. For this Project, the Removal-Fill fee which is based on a base fee plus the fee for cubic yardage of removal and fee volumes will be paid to DSL by IPC. The Removal-Fill fee will be paid prior to approval of the permit or as DSL stipulates. DSL may recover costs incurred to the agency for the B2H review of the wetland delineation and permit review through the cost recovery agreement with ODOE.

3.5.4 Level of Detail Required May Vary

OAR 141-085-0550(4): The applicant is responsible for providing sufficient detail in the application to enable the Department to render the necessary determinations and decisions. The level of documentation may vary depending on the degree of adverse impacts, the level of public interest and other factors that increase the complexity of the project.

OAR 141-085-0550(4) provides that the level of detail required to complete an Removal-Fill Permit application may vary depending on certain factors. Here, IPC has met with Dan Cary and Sarah Kelly, DSL permit coordinators, as well as the ODOE siting officer to determine the level of detail that will be needed for the Removal-Fill Permit. Consistent with those discussions, IPC has used wetland delineation data from 2011, 2012, 2013, and 2016; and the indicative design as detailed in Exhibit C of this Application as the basis for preparing the JPA, which:

- Identifies all areas of impact;
- Includes typical drawings of impact sites; and
- Includes a wetland and non-wetland mitigation plan, and restoration plan for temporary impacts.
- Final Removal-Fill quantities will be provided in the final JPA after final design is completed.

Consequently, the JPA and CWNWMP account for all proposed impacts.

3.5.5 Required Information

3.5.5.1 Complete and Signed Application

OAR 141-085-0550(5): A completed and signed application on current forms provided by the Department, including any maps, necessary photos and drawings, is required. The information must be entered in the appropriate blocks on the application form. The Department may require the applicant to submit any or all application materials electronically. The application must include all of the following:

DSL requires that an applicant seeking an Removal-Fill Permit submit a complete and signed JPA (see OAR 141-085-0550(5)). Here, DSL will receive a copy of IPC's Amended pASC from ODOE, including a signed and complete JPA.

3.5.5.2 Applicant Information

OAR 141-085-0550(5)(a): Applicant information including name, mailing address, phone number and e-mail address. When the applicant is a business entity, the business must be registered with the Oregon Secretary of State Corporate Division. The exact name of the business entity, as listed with Secretary of State Corporate Division, must be entered on the application.

OAR 141-085-0550(5)(a) requires an Removal-Fill Permit applicant to provide certain contact information. In this instance, IPC's contact information is provided in the JPA form, including the name that IPC has listed with the Secretary of State Corporate Division (see JPA, Section 1).

3.5.5.3 Landowner Information

OAR 141-085-0550(5)(b): Landowner information including name and mailing address where any removal-fill activity is proposed, and if applicable, where permittee-responsible compensatory mitigation is proposed. (A) For the construction of a new linear facility, the applicant must provide a complete list of landowner names and mailing addresses for all landowners whose land is identified in the permit application within the alignment of the new linear facility. Mailing labels must be provided when there are more than five landowners listed in the application. (B) For the purpose of this rule, a condemner is the landowner when: (i) If using state condemnation authority, the condemner has complied with ORS Chapter 35, filed an eminent domain action in court and deposited the condemner's estimate of just compensation with the court for the use and benefit of the defendants, or it has a court's order authorizing its possession of the land; or (ii) If using federal authority, the condemner has complied with Federal Rules of Civil Procedure 71.1 and, if other than the United States, has a court's order authorizing its possession of the land.

OAR 141-085-0550(5)(b) requires certain information about the owner of the land where the removal-fill activity and compensatory mitigation will take place. Here, property owner information for each Removal-Fill site and all associated mitigation sites will be provided in Exhibit F of the ASC as instructed by ODOE, and in JPA Appendix A. Mailing labels will be provided when requested by ODOE. IPC will provide the name and mailing address for all landowners whose land is identified in the JPA for Removal-Fill activity. In the event that IPC is not able to obtain either landowner consent or an easement for use of private property where Removal-Fill activity is proposed, IPC will seek to obtain either (1) title to the property through a negotiated purchase; or (2) a court order or judgment authorizing use of the property through exercise of IPC's condemnation authority under ORS Chapter 772. If IPC later becomes a "landowner" for purposes of this rule, either by purchase or use of condemnation authority, IPC will provide ODOE and DSL with updated property owner information reflecting that change in ownership.

3.5.5.4 Project Location

OAR 141-085-0550(5)(c): Project site location information including Township, Range, Quarter/Quarter Section and Tax Lot(s), latitude and longitude, street location if any, and location maps with site location indicated.

Under OAR 141-085-0550(5)(c), the JPA must include certain project location information. For the Project, the relevant location information is provided in Appendix C of the JPA (see JPA, Section 2).

3.5.5.5 Disposal or Borrow Site Locations

OAR 141-085-0550(5)(d): The location of any off-site disposal or borrow sites, if these sites contain waters of this state.

OAR 141-085-0550(5)(d) requires identification of disposal or borrow sites. Because the Project will not include any disposal or borrow sites that contain WOS, OAR 141-085-0550(5)(d) does not apply to the Project.

3.5.5.6 Project Description

OAR 141-085-0550(5)(e): Project information including: (A) Description of all removal-fill activities associated with the project; (B) Demonstration of independent utility to include all phases, projects or elements of the proposed project which will require removal-fill activities; (C) Volumes of fill and removal within jurisdictional areas expressed in cubic yards; (D) Area of removal and fill within jurisdictional areas expressed in acres to the nearest 0.01-acre for impacts greater than 0.01 of an acre or expressed in acres to the nearest 0.001-acre for impacts less than 0.01 of an acre; and (E) Description of how the project will be accomplished including construction methods, site access and staging areas.

OAR 141-085-0550(5)(e) requires a description of (A) the removal-fill activities, (B) the Project's independent utility, (C) the volume of materials being removed or filled, (D) the area affected by the removal-fill activities, and (E) how the project will be completed. Here, the information requested under OAR 141-085-0550(5)(e)(A), (C), and (D) is described in JPA Section 6. The independent utility of the Project, as required under OAR 141-085-0550(5)(e)(B), is addressed in JPA Section 3. Finally, with respect to OAR 141-085-0550(5)(e)(E), a description of how the Project will be accomplished, including construction methods, is submitted in Appendix K of the JPA.

3.5.5.7 Project Purpose and Need

OAR 141-085-0550(5)(f): A description of the purpose and need for the project. All projects must have a defined purpose or purposes and be based on a documented need or needs. The project purpose and need statement must be specific enough to allow the Department to determine whether the applicant has considered a reasonable range of alternatives.

Under OAR 141-085-0550(5)(f), an Removal-Fill Permit application must include a description of the Project's purpose and need and the alternatives considered. Here, the Project purpose and need is discussed in the JPA, Appendix F, as well as in Exhibits B and N. Alternatives evaluated are discussed in the JPA, Appendix I, and in Exhibits B and N. At the impact site level, Table I-1 in Appendix I of the JPA includes information about alternative sites for proposed removal or fill at some impact sites.

3.5.5.8 Project Plans

OAR 141-085-0550(5)(g): Project plan views and cross-sectional views drawn to scale that clearly identify the jurisdictional boundaries of the waters of this state (e.g., wetland delineation or ordinary high water determination). Project details, such as footprint and impact area must also be included so that the amount and extent of the impact to jurisdictional areas can be readily determined.

OAR 141-085-0550(5)(g) requires submission of project plan views. In this instance, Project plan views and typical cross sections are submitted in Appendix K of the JPA.

3.5.5.9 Hydrologic Characteristic Changes

OAR 141-085-0550(5)(h): A written analysis of potential changes that the project may make to the hydrologic characteristics of the waters of this state, and an explanation of measures taken to avoid or minimize any adverse impacts of those changes, such as: (A) Impeding, restricting or increasing flows; (B) Relocating or redirecting flow; and (C) Potential flooding or erosion downstream of the project.

Information about a project's changes to the hydrological characteristics of WOS is required under OAR 141-085-0550(5)(h). Here, JPA Appendix I includes information on the changes to the hydrological characteristics associated with the Project. Avoidance and minimization measures to address such changes are addressed in the erosion and sediment control plan (1200-C), which is attached to Exhibit I as Attachment I-3.

3.5.5.10 Existing Biological and Physical Characteristics

OAR 141-085-0550(5)(i): A description of the existing biological and physical characteristics of the water resources, along with the identification of the adverse impacts that will result from the project.

OAR 141-085-0550(5)(i) requires a description of the biological and physical characteristics of the relevant WOS and adverse impacts thereto. For the Project, the biological and physical characteristics of the impacted water resources and the impacts to such resources are described in the JPA Appendix G.

3.5.5.11 State Land Uses

OAR 141-085-0550(5)(j): A description of the navigation, fishing and public recreation uses, when the project is proposed on state-owned land.

OAR 141-085-0550(5)(j) requires information about impacts on navigation, fishing, and public recreation uses on state-owned land. Here, the Project will not involve any removal-fill activities on state-owned land within the Site Boundary (see JPA Section 4.b). Therefore, OAR 141-085-0550(5)(j) does not apply to the Project.

3.5.5.12 Wetland Delineation Report

OAR 141-085-0550(5)(k): If the proposed activity involves wetland impacts, a wetland determination or delineation report that meets the requirements in OAR 141-090 must be submitted, unless otherwise approved in writing by the Department. A wetland delineation is usually required to determine the precise acreage of wetland impact and compensatory wetland mitigation requirements. Whenever possible, wetland determination and delineation reports should be submitted for review well in advance of the permit application. Although an approved wetland delineation report is not required for application completeness, a jurisdictional determination must be obtained prior to the permit decision.

OAR 141-085-0550(5)(k) requires preparation of a wetland delineation report for projects affecting wetlands. With respect to the Project, IPC submitted a 2011 wetland delineation report to DSL. Additional wetland delineations were conducted in 2012, 2013, and 2016 on previously unsurveyed parcels, and on portions of the Site Boundary that were not included in the wetland delineation study area in 2011. Information for the 2012 survey was submitted to DSL as an addendum to the 2011 wetland delineation report. A comprehensive Project wetland delineation report will be submitted in 2017 and will include relevant information from 2011, 2012, 2013, and 2016.

3.5.5.13 Functions and Values Assessment

OAR 141-085-0550(5)(l): A functions and values assessment that meets the requirements in OAR 141-085-0685 when permanent impacts to wetlands are proposed.

Under OAR 141-085-0550(5), DSL requires a functions and values assessment when wetlands are permanently impacted. Here, wetland functions and values were assessed with ORWAP on a sample of wetlands of each class in each fourth-field HUC watershed crossed by the Project. The results of these wetland assessments are included in the Project's CWNWMP, and will be used to estimate the wetland functions and values that will be impacted by the Project (see JPA Section 8.D and Appendix T).

3.5.5.14 State Listed Species

OAR 141-085-0550(5)(m): Any information known by the applicant concerning the presence of any federal or state listed species.

OAR 141-085-0550(5)(m) requires information on state listed species. In this instance, IPC conducted surveys of the Project for state listed species. Results of the surveys are reported in Exhibit Q. Listed species identified in the Site Boundary are provided in the JPA, Appendix H.

3.5.5.15 Historical, Cultural, and Archeological Resources

OAR 141-085-0550(5)(n): Any information known by the applicant concerning historical, cultural and archeological resources. Information may include but is not limited to a statement on the results of consultation with impacted tribal governments and/or the Oregon State Historic Preservation Office of the Oregon Parks and Recreation Department.

OAR 141-085-0550(5)(m) requires information on historical, cultural, and archeological resources. For the Project, surveys of historic, cultural, and archaeological resources are ongoing. The surveys are being conducted in consultation with tribal governments and the Oregon State Historic Preservation Office. Additionally, discussion of historical, cultural and archeological resources is provided in Exhibit S. A statement regarding surveys of historic, cultural and archaeological resources is included in JPA Section 7 and Appendix Q.

3.5.5.16 Alternatives Analysis

OAR 141-085-0550(5)(o): An analysis of alternatives to derive the practicable alternative that has the least reasonably expected adverse impacts on waters of this state. The alternatives analysis must provide the Department all the underlying information to support its considerations enumerated in OAR 141-085-0550 (o), such as: (A) A description of alternative project sites and designs that would avoid impacts to waters of this state altogether, with an explanation of why each alternative is, or is not practicable, in light of the project purpose and need; (B) A description of alternative project sites and designs that would minimize adverse impacts to waters of this state with an explanation of why each alternative is, or is not practicable, in light of the project purpose and need; (C) A description of methods to repair, rehabilitate or restore the impact area to rectify the adverse impacts; and (D) A description of methods to further reduce or eliminate the impacts over time through monitoring and implementation of corrective measures.

OAR 141-085-0550(5)(o) provides for information regarding the alternatives analysis and the practicable alternative having the least reasonably expected adverse impacts on WOS. Here, JPA Section 5 and Appendix I, as well as in Exhibits B and N (see OAR 141-085-0550(5)(o)(A), (B)). Moreover, potential impacts to WOS are one of many considerations included in the evaluation of each potential alternative route. Planning efforts for the Project included locating Project components to avoid probable wetlands and other waters identified in the desktop study. Additional information obtained from the 2011, 2012, and 2013 wetland delineations was also used to help site facilities to avoid and minimize impacts to the extent practicable.

With respect to repairing Project impacts, a restoration plan for temporary wetland impacts has been provided as Appendix S of the JPA (see OAR 141-085-0550(5)(o)(C)). The plan provides specific information for the restoration of hydrologic, soil and vegetation characteristics of temporarily impacted wetlands and other waters, to existing conditions.

To further reduce or eliminate impacts over time, future planning will include specific measures to avoid and minimize impacts to wetlands and other waters as well as other resources (see OAR 141-085-0550(5)(o)(D)).

3.5.5.17 Compensatory Mitigation Plan

OAR 141-085-0550(5)(p): If applicable, a complete compensatory mitigation plan that meets the requirements listed in OAR 141-085-0680 through 141-085-0715 and 141-085-0765 to compensate for unavoidable permanent impacts to waters of this state and a complete rehabilitation plan if unavoidable temporary impacts to waters of this state are proposed.

OAR 141-085-0550(5)(p) requires a compensatory mitigation plan, if applicable. IPC has prepared its draft CWNWMP in full compliance with applicable OARs and additional Project-specific guidance from DSL. The CWNWMP is provided as JPA Appendix T. IPC is developing the CWNWMP in partnership with the GRMW. When complete and approved as final, the CWNWMP will, among other things, describe construction and monitoring of the mitigation site.

3.5.5.18 Adjacent Landowners

OAR 141-085-0550(5)(q): For each proposed removal-fill activity and physical mitigation site applied for in the application, a list of the names and addresses of the adjacent landowners, including those properties located across a street or stream from the proposed project. (A) For a new linear facility, the applicant must provide a list of the names and mailing addresses of the adjacent landowners for the new linear facility. (B) Mailing labels must be provided by the applicant, when there are more than five names and addresses of adjacent landowners listed.

Under OAR 141-085-0550(5)(q), Removal-Fill Permit applicants must provide contact information for owners of land adjacent to the removal-fill activities and mitigation sites. Under OAR 141-085-0550(5)(q)(A), Removal-Fill Permit applicants must provide contact information for owners of land adjacent a new linear facility. IPC will include a list of the names and addresses of all landowners who own properties adjacent to the Project including properties proposed for either Removal-Fill activity or a mitigation activity; IPC understands “adjacent” to include properties adjacent to the Project located across a street or stream, and include adjacent large properties within 0.25 mile from the Project. The adjacent landowner information will be provided in Exhibit F of the ASC as instructed by ODOE (see also JPA Section 9 and Appendix V). Mailing labels will be provided when requested by ODOE.

3.5.5.19 Local Government Land Use Affidavit

OAR 141-085-0550(5)(r): A signed local government land use affidavit.

OAR 141-085-0550(5)(r) requires a signed local government land use affidavit. Here, because IPC will seek a determination from the Council that the Project complies with local land use standards under ORS 469.504(1)(b), a local government land use affidavit is not required. IPC understands that the local government land use affidavit is covered by the site certificate.

3.5.5.20 Coastal Zone Certification Statement

OAR 141-085-0550(5)(s): A signed Coastal Zone Certification statement, if the project is in the coastal zone.

OAR 141-085-0550(5)(s) requires, if a project is in the coastal zone, the Removal-Fill Permit applicant provide a signed Coastal Zone Certification statement. Because the Project is not in the coastal zone, OAR 141-085-0550(5)(s) does not apply to the Project.

3.5.5.21 Applicant Signature

OAR 141-085-0550(5)(t): Applicant Signature. Signature of the applicant must be provided. If the application is on behalf of a business entity, a certificate of incumbency must be provided to certify that the individual signing the application is authorized to do so.

OAR 141-085-0550(5)(t) requires that an application for an Removal-Fill Permit be signed by the applicant. Here, IPC is submitting its JPA to ODOE as part of its application for a site certificate along with evidence in Exhibit A regarding Applicant Information that includes proof of

authority for the application on IPC's behalf, which should be sufficient to meet the purpose or provisions of OAR 141-085-0550(5)(t). In addition, IPC will provide a signed certificate of incumbency.

3.5.5.22 Landowner Signature

OAR 141-085-0550(5)(u): Landowner Signature. If the applicant is not the landowner upon which the removal-fill activity (including mitigation) is to occur and does not hold an easement allowing the activity on that land, a written authorization from the owner of the land consenting to the application must be provided. (A) Notwithstanding the requirement set forth under (u) above, a landowner signature is not required for applications for the construction and maintenance of linear facilities; and (B) The condemner may sign as landowner when the requirements of OAR 141-085-0550(5)(b)(B) have been met.

OAR 141-085-0550(5)(u) requires signatures of landowners affected by the removal-fill activities. However, landowner signatures are not required for linear facility projects (see OAR 141-085-0550(5)(u)(A)). Here, the Project is a linear project, and therefore, landowner signatures are not required.

3.5.5.23 Mitigation Site Landowner Signature

OAR 141-085-0550(5)(v): Mitigation Site Landowner Signature. If the applicant is not the owner of the land upon which the mitigation is to occur and does not hold an easement allowing the activity on that land, a written authorization from the owner of the land consenting to the application must be provided.

OAR 141-085-0550(5)(v) requires signatures of owners of the mitigation sites if the project proponent does not hold an easement for the mitigation activities. In the event that IPC will undertake mitigation activities on land it does not own or hold an easement on, IPC will submit a written authorization from the owner of the land to ODOE before beginning any ground-disturbing activities.

3.5.6 Additional Requirements for Estuarine Fill

OAR 141-085-0550(6): If the activity is proposed in an estuary for a non-water-dependent use, a complete application must also include a written statement that describes the following: (a) The public use of the proposed project; (b) The public need for the proposed project; and (c) The availability of alternative, non-estuarine sites for the proposed use.

OAR 141-085-0550(6) sets forth requirements for fill in estuary areas. Here, the Project will not impact any estuaries. Therefore, OAR 141-085-0550(6) does not apply to the Project.

3.5.7 Additional Information as Requested

OAR 141-085-0550(7): The Department may request additional information as necessary to make an informed decision on whether or not to issue the authorization.

OAR 141-085-0550(7) provides DSL may request additional information related to an Removal-Fill Permit application. In this instance, the JPA includes all information requested to date by DSL. If DSL needs additional information, DSL will discuss the same with ODOE and include such request in ODOE's forthcoming Request for Additional Information No. 3.

3.5.8 Waiver of Required Information

OAR 141-085-0550(8): At its discretion, the Department may waive any of the information requirements listed in section (5) of this rule for voluntary restoration projects.

OAR 141-085-0550(8) provides DSL may waive certain application submission requirements for voluntary restoration projects. Here, the Project is not a voluntary restoration project. Therefore, OAR 141-085-0550(8) does not apply to the Project.

3.5.9 Permit Application Modifications

OAR 141-085-0550(9): A modification to a permit application may be submitted at any time prior to the permit decision. If the modification is received after the public review period, the Department may circulate the revised application again for public review. Modifications proposing significantly different or additional adverse impacts will generally be resubmitted for public review. The Department may set an expedited time frame for public review.

OAR 141-085-0550(9) allows for modifications to an Removal-Fill Permit. In this instance, IPC is applying for a new permit and not a permit modification. Therefore, OAR 141-085-0550(9) does not apply to the Project at this time.

3.5.10 Pre-Application Conference

OAR 141-085-0550(10): An applicant may request the Department to hold a pre-application meeting. In considering whether to grant the request, the Department will consider the complexity of the project and the availability of Department staff.

Under OAR 141-085-0550(10), an Removal-Fill Permit applicant must request a pre-application meeting with DSL. IPC requested and participated in eight pre-application conferences with DSL, some of which included the USACE. These meetings were:

- April 22, 2011, at DSL, Salem;
- May 25, 2011, at DSL, Salem;
- July 26, 2011, at USACE, Portland; attended by DSL;
- October 27, 2011, at USACE, Portland; attended by DSL;
- May 31, 2012, at USACE, Portland; attended by DSL;
- December 11, 2013, USACE, Portland, attended by DSL;
- September 2, 2015, at DSL, Salem; and
- February 24, 2016, at McDowell Rackner and Gibson, PC, Portland, attended by DSL.

Topics of discussion at these meetings include wetland delineation methods, reporting and concurrence schedules, JPA requirements, mitigation requirements, and conceptual mitigation plans. IPC requested and participated in these meetings to foster sufficient communication between IPC, DSL, and USACE with the goal of ensuring that all requirements associated with wetlands and other waters will be met.

3.5.11 Status of Joint Permit Application Completeness

3.5.11.1 DSL Concurrence with Wetland Delineation Report

IPC submitted to DSL a wetland delineation report with 2011 delineation data and an addendum to the wetland delineation report with 2012 delineation data. A revised, comprehensive wetland

delineation report will be submitted in 2017 which will include relevant wetland delineation data and maps from 2011, 2012, 2013, and 2016 wetland surveys. These revised maps will be based on the current Project Site Boundary as detailed in Exhibit C of this application. IPC anticipates concurrence from DSL on the 2011, 2012, 2013, and 2016, wetland delineation data in 2017.

After issuance of the site certificate and prior to construction, IPC will submit additional wetland delineation data to DSL and ODOE identifying any additional waters of the state that will be subject to disturbance (which are currently not accessible by IPC), at which point IPC will obtain concurrence from DSL on the additional wetland delineation data. This will constitute DSL's final concurrence with the complete wetland delineation report (including all addenda) for the Project.

3.5.11.2 Forthcoming Information to be Included in Joint Permit Application

The status of the completeness of the JPA contents are summarized in Table J-1.

Table J-1. JPA Required Information and Status of Submittal

JPA Required Information	Status
(a) The applicant and property owner information	Property owner information for each removal-fill site and all associated mitigation sites is provided in Exhibit F of the ASC.
(b) Project site location information including Township, Range, Quarter/Quarter Section and Tax Lot(s), latitude and longitude, street location if any, and location maps with site location indicated.	Information is provided for proposed impact sites.
(c) The location of any off-site disposal or borrow sites, if these sites contain waters of this state.	Not applicable; off-site disposal or borrow sites will not contain waters of the state.
(d) Project information including:	
(A) Description of all removal-fill activities associated with the project;	Information is provided for all water resources that have been identified.
(B) Demonstration of independent utility to include all phases, projects or elements of the proposed project which will require removal-fill activities;	Information is provided in the purpose and need statement in the JPA.
(C) Volumes of fill and removal within jurisdictional areas expressed in cubic yards;	Information will be provided in the Final JPA for all water resources that have been identified.
(D) Area of removal and fill within jurisdictional areas expressed in acres to the nearest 0.01-acre for impacts greater than 0.01 of an acre or expressed in acres to the nearest 0.001-acre for impacts less than 0.01 of an acre; and	Information is provided for all water resources that have been identified.
(E) Description of how the project will be accomplished including construction methods, site access and staging areas.	Information is provided including information about BMPs and the Project's Erosion and Sediment control plan.
(e) A description of the purpose and need for the project.	Information is provided .

JPA Required Information	Status
(f) Project plan views and cross-sectional views	Information is provided . Plan views are provided for all wetlands and waters proposed for impact. Cross sections are provided for typical road and tower structure impacts.
(g) A written analysis of potential changes that the project may make to the hydrologic characteristics of the waters of this state,	Information is provided .
(h) A description of the existing biological and physical characteristics of the water resources,	Information is provided for all water resources that have been delineated and are proposed for impact. Information for water resources that have not yet been delineated will be provided when field delineations are complete.
(i) A description of the navigation, fishing and public recreation uses,	This requirement applies only to impacted water resources on state-owned land. No impacts to wetlands or other waters are planned on state-owned land within the Site Boundary.
(j) a wetland delineation report	IPC has already submitted a wetland delineation report with 2011 delineation data and addenda with 2012 data. One comprehensive wetland delineation report that includes relevant data from 2011, 2012, and 2013 wetland surveys and new data collected in 2016 will be submitted to DSL in 2017. Revised 2011, 2012, 2013, and new 2016 wetland delineation maps based on the current Project Site Boundary will be submitted as one comprehensive set of maps in 2017.
(k) A functions and values assessment	Information is provided . Results of the assessments are included in the JPA.
(l) Information concerning the presence of any state listed species.	The best available information is provided .
(m) Information concerning historical, cultural and archeological resources.	An appropriate level of information is provided .
(n) An analysis of alternatives to derive the practicable alternative that has the least reasonably expected adverse impacts on waters of this state.	Information is provided .
(o) A complete compensatory mitigation plan	A final wetland and non-wetland mitigation plan will be submitted to ODOE and DSL.
(p) For each proposed removal-fill impact site and physical mitigation site, a list of the names and addresses of the adjacent property owners	Property owner information for each removal-fill site and all associated mitigation sites is provided in Exhibit F of the ASC.
(q) Mailing labels, when there are more than five names and addresses of adjacent property owners.	Mailing labels will be provided when requested by ODOE.
(r) A signed local government land use affidavit.	Not applicable. EFSC supersedes the local land use affidavit.

JPA Required Information	Status
(s) A signed Coastal Zone Certification statement, if the project is in the coastal zone.	Not applicable.

3.5.11.3 Path Forward to Complete Requirements for a Removal-Fill Permit

With respect to the surveyed parcels, the JPA includes all the information required to obtain a removal-fill permit for work on those parcels. Thus, IPC requests that the Council find that IPC has complied with the law governing Removal-Fill permits for those parcels and that a Removal-Fill permit covering those parcels should be included in and governed by the site certificate.

Regarding the unsurveyed parcels, IPC has not had right-of-entry on all parcels where Project removal-fill activities will take place. Nonetheless, the JPA identifies the potential WOS impacts (based on NHD and NWI data and aerial photography) sufficient for this Exhibit to be considered complete for EFSC purposes. After IPC gains right-of-entry to those parcels and prior to construction, IPC will complete the WOS surveys and finalize the JPA to include the survey information for the unsurveyed parcels. IPC will then submit a final JPA covering all relevant Project parcels, including those previously unsurveyed parcels, to ODOE, and ODOE may approve a final Removal-Fill Permit covering all relevant parcels.

IPC proposes that the Council include the following conditions in the site certificate, providing for the path forward set forth above:

Waters of this State Condition 1: Prior to construction on the parcels that had been surveyed at the time of the ASC, the site certificate holder shall obtain from the Oregon Department of Lands a Removal-Fill Permit based on the Joint Permit Application in ASC Exhibit J, Attachment J-3.

Waters of this State Condition 2: Prior to construction on the parcels that had not been surveyed at the time of the ASC, the site certificate holder shall finalize, and submit to the department for its approval, a final Joint Permit Application.

Waters of this State Condition 3: Prior to construction on the parcels that had not been surveyed at the time of the ASC, the site certificate holder shall obtain from the Oregon Department of Lands a Removal-Fill Permit based on the final Joint Permit Application referenced in Waters of this State Condition 2.

Waters of this State Condition 4: During construction, the site certificate holder shall conduct all work in compliance with a Removal-Fill Permit.

Table J-2 summarizes IPC's proposed approach to finalizing the JPA following final design and surveys of previously unsurveyed parcels.

Table J-2. Path Forward to Fulfill Requirements for and Conditions to Removal-Fill Permit

Description of Tasks	COMPLIANCE STRATEGY for Surveyed Parcels	COMPLIANCE STRATEGY for Unsurveyed Parcels
<i>OAR 345-021-0010(1)(j)(A): A description of all areas within the Project Site Boundary that might be waters of this state and a map showing the location of these features.</i>		
Wetland Field Delineations	IPC completed wetland field delineations on surveyed parcels in 2011, 2012, 2013, and 2016.	After issuance of the site certificate and prior to construction, IPC will complete wetland field delineations on unsurveyed parcels.
Wetland Delineation Report	IPC has submitted to DSL a wetland delineation report and addenda for fieldwork conducted in 2011 and 2012. The comprehensive wetland delineation report for 2011, 2012, 2013, and 2016 will be submitted in 2017, covering all surveyed parcels.	After issuance of the site certificate and prior to construction, IPC will submit additional wetland delineation data to DSL and ODOE identifying all WOS on unsurveyed parcels that will be subject to impact.
DSL Concurrence	IPC anticipates it will receive, prior to issuance of the site certificate, concurrence from DSL on 2011, 2012, 2013, and 2016 wetland delineation data covering surveyed parcels.	After issuance of the site certificate and prior to construction, IPC will obtain concurrence from DSL on the wetland delineation data for the unsurveyed parcels. This will constitute DSL's final concurrence related to wetlands delineations for the Project.
<i>OAR 345-021-0010(1)(j)(B): An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state.</i>		
Analysis of Potential Impacts	Analysis of potential wetland impacts on surveyed parcels is set forth in the JPA, Attachment J-3, Table O-1A and Table O-2A, and Appendix R.	For unsurveyed parcels, IPC estimated potential wetland impacts based on: <ul style="list-style-type: none"> • NHD and NWI data; and • Aerial photo interpretation. The analysis of potential wetland impacts on unsurveyed parcels is set forth in the JPA, Attachment J-3, Table O-1B and Table O-2B, and Appendix R. <p>After issuance of the site certificate and prior to construction, IPC will submit to DSL and ODOE additional</p>

Description of Tasks	COMPLIANCE STRATEGY for Surveyed Parcels	COMPLIANCE STRATEGY for Unsurveyed Parcels
		analysis of potential impacts on unsurveyed parcels based on the forthcoming surveys of those parcels.
OAR 345-021-0010(1)(j)(C): A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).		
Removal-Fill Quantities	After final design is complete, IPC will calculate the quantity of removal-fill material to be removed from or placed in each WOS. These quantities will be included in the final JPA, which IPC will submit to DSL and ODOE after issuance of the site certificate and prior to construction.	After final design is complete, IPC will calculate the quantity of removal-fill material to be removed from or placed in each WOS. These quantities will be included in the final JPA, which IPC will submit to DSL and ODOE after issuance of the site certificate and prior to construction.
OAR 345-021-0010(1)(j)(D): If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.		
Not applicable: IPC has determined that a removal-fill authorization will be needed.	N/A	N/A
OAR 345-021-0010(1)(j)(E): If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.		
Joint Permit Application	For surveyed parcels, the information required by DSL under OAR Chapter 141, Division 85, is set forth in the JPA, Attachment J-3.	For unsurveyed parcels, the information required by DSL under OAR Chapter 141, Division 85, is set forth in the JPA, Attachment J-3. Additional information will be included in the final JPA, which IPC will submit to DSL and ODOE after issuance of the site certificate and prior to construction.
OAR 345-021-0010(1)(j)(F): A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.		
Wetland Mitigation Plan	IPC submits a compensatory wetland mitigation plan (CWNWMP) as Appendix T of the JPA, Attachment J-3. After issuance of the site	The CWNWMP includes sufficient mitigation to cover reasonably foreseeable impacts to both surveyed and unsurveyed parcels.

Description of Tasks	COMPLIANCE STRATEGY for Surveyed Parcels	COMPLIANCE STRATEGY for Unsurveyed Parcels
	certificate and prior to construction, IPC will finalize, and submit to ODOE for its approval, a final CWNWMP. IPC may include in the final CWNWMP changes to the mitigation actions based on the Project's final design.	After issuance of the site certificate and prior to construction, IPC will finalize, and submit to ODOE for its approval, a final CWNWMP. IPC may include in the final CWNWMP changes to the mitigation actions based on the Project's final design.

3.6 Determinations and Considerations in Evaluating Individual Removal-Fill Permit Applications

3.6.1 Department Determinations

3.6.1.1 Independent Utility

OAR 141-085-0565(3): The Department will issue a permit if it determines the project described in the application: (a) Has independent utility;

The independent utility of the Project is addressed, as required under OAR 141-085-0565(3)(A), in JPA Section 3.

3.6.1.2 Protection, Conservation, and Best Use

OAR 141-085-0565(3)(b): Is consistent with the protection, conservation and best use of the water resources of this state as specified in ORS 196.600 to 196.905; and

OAR 141-085-0565(3)(B) requires proposed removal-fill activities protect, conserve, and provide for the best use of WOS. Here, the Project will protect, conserve, and provide for the best use of WOS by avoiding, minimizing, and mitigating impacts to WOS, as discussed above in Section 3.4.2.1 and Section 3.4.6.

3.6.1.3 No Unreasonable Interference with Preservation of the Use of the Waters

OAR 141-085-0565(3)(c): Would not unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing and public recreation, when the project is on state-owned lands

OAR 141-085-0565(3)(c) prohibits unreasonable interference with navigation, fishing, and public recreation uses on state-owned land. Here, the Project will not involve any removal-fill activities on state-owned land inside the Site Boundary (see JPA Section 4.b). Therefore, the Project is consistent with OAR 141-085-0565(3)(c).

Regardless, with respect to removal-fill activities on non-state lands, the Project will not result in any loss of navigability on any WOS because the Project will span all streams, rivers, or lakes currently used for navigation.

At this time, the Project does not propose removal or fill inside the bankfull channel on any fish-bearing streams. General requirements listed under OAR 635-412-0035(1) Fish Passage Criteria would still be applicable. All crossings of fish-bearing streams have been designed to

meet Oregon's Fish Passage requirements so they will not restrict the movements of native migratory fish. Further, the Project will neither impede nor reduce the public's opportunity to fish or otherwise recreate on any WOS.

Finally, wetland and non-wetland mitigation proposed for the Project may produce incremental improvement to public opportunities for fishing by improving in-stream and riparian habitat conditions. Both the wetland and non-wetland components of the proposed mitigation will result in increased access to in-stream and off-channel habitat by salmon and steelhead in the Grande Ronde River.

3.6.2 Determination Considerations

3.6.2.1 Public Need and Benefits

OAR 141-085-0565(4): In determining whether to issue a permit, the Department will consider all of the following: (a) The public need for the proposed fill or removal and the social, economic or other public benefits likely to result from the proposed fill or removal. When the applicant for a permit is a public body, the Department may accept and rely upon the public body's findings as to local public need and local public benefit;

Under OAR 141-085-0565(4)(a), DSL considers the public need for, and public benefits of, proposed removal-fill activities. Here, the Project purpose and need is discussed in the JPA, Appendix F, as well as in Exhibits B and N. IPC has identified the Project as a critical component of an overall resource portfolio that best balances cost, risk, and environmental concerns. Both the Idaho and Oregon public utility commissions have approved Integrated Resource Plans with resource portfolios that identify the Project as a key resource, evidencing the need for the Project. The Project will provide important public benefits by providing cost-effective electric service, improving inter-regional access to power markets, maintaining electric service reliability standards, and providing transmission service to wholesale customers.

As described above in Section 3.4.2.1, IPC has made every effort to avoid or minimize removal-fill impacts in WOS. And the remaining unavoidable impacts are essential to construction of the Project. Therefore, public need for, and benefits of, the proposed removal-fill activities should be viewed in terms of the Project as a whole.

3.6.2.2 Economic Cost to the Public If No Fill or Removal

OAR 141-085-0565(4)(b): The economic cost to the public if the proposed fill or removal is not accomplished;

OAR 141-085-0565(4)(b) provides DSL will consider the public economic costs of proposed removal-fill activities. Again, here, each removal-fill activity proposed in the JPA is essential to IPC's completion of the Project, and accordingly, the cost to the public if the proposed removal-fill is not accomplished should be considered at the Project scale.

While it is difficult to quantify the exact economic cost to the public if the Project is not built, it can fairly be concluded that failure to accomplish the Project would result in higher power costs to electric utility customers in the Pacific Northwest. As explained in Exhibit N, if the Project is not completed, IPC will be required either to develop additional generation resources or make higher cost market purchases to serve existing and forecasted native load. For this reason, the Project was selected as an essential component of IPC's Preferred Portfolio in its most recent Integrated Resource Plans. Moreover, IPC has selected the Project as the lowest-cost resource that will enable IPC to meet both North American Electric Reliability Corporation and Western Electricity Coordinating Council reliability requirements and provide transmission service to

wholesale customers in accordance with IPC's Open Access Transmission Tariff. Thus, failure to accomplish the Project would require IPC to turn to a higher cost resource to meet its forecasted load and regulatory obligations. While it is difficult to quantify with precision, this outcome would result in negative economic consequences for ratepayers and the public.

3.6.2.3 Alternatives to the Project

OAR 141-085-0565(4)(c): The availability of alternatives to the project for which the fill or removal is proposed;

OAR 141-085-0565(4)(c) requires DSL consider alternatives to proposed removal-fill activities. In the 2006 IRP process, Idaho Power identified the need for a transmission line to the Pacific Northwest electric market. The transmission line identified in 2006 has evolved into what is currently the Project. The Project has been selected as part of the preferred resource portfolio in IPC's 2009, 2011, 2013, and 2015 IRPs over numerous alternative portfolios. Additional detail discussing the evaluation of alternative portfolios is provided in Exhibit N, Section 3.3.8.

3.6.2.4 Alternative Sites

OAR 141-085-0565(4)(d): The availability of alternative sites for the proposed fill or removal;

Under OAR 141-085-0565(4)(d), DSL considers the availability of alternative sites for proposed removal-fill activities. Table I-1 in Appendix I of the JPA includes information about alternative sites for proposed removal or fill at some impact sites. Entries in the column "Action taken to avoid or reduce impact" describe sites that were identified to allow engineers to relocate project facilities to avoid or reduce impacts. Entries in the column "Explanation if unable to avoid" describes why avoidance and/or minimization is not possible at some impact sites.

3.6.2.5 Conformance with Conservation Policies and Public Health and Safety

OAR 141-085-0565(4)(e): Whether the proposed fill or removal conforms to sound policies of conservation and would not interfere with public health and safety;

OAR 141-085-0565(4)(e) requires DSL consider sound policies of conservation and public health and safety. Here, the proposed fill or removal conforms to sound policies of conservation because of the following actions by IPC:

- Analysis through the desktop study of the potential presence of wetlands and other waters early in the Project planning;
- Thorough field work to identify all areas that may be wetlands or other waters, by use of the Terrestrial Visual Encounter Survey to identify probable wetlands and other waters, followed by wetland delineation of the entire Site Boundary for which IPC has access;
- Avoidance and minimization planning during Project design, to avoid wetlands and other waters when practicable, and minimize unavoidable Removal-Fill impacts;
- Proposals by IPC to provide wetland and non-wetland mitigation to replace impacted functionality of wetlands and other waters; and
- Implementation of best management practices described in the Project's Erosion and Sediment Control Plan (Exhibit I, Attachment I-3) to avoid and minimize incidental impacts to resources adjacent to Removal-Fill sites.

In the aggregate, these actions by IPC meet the requirements of OAR 141-085-0565(4)(e).

3.6.2.6 Conformance with Existing Public Uses and Adjacent Land Use Planning

OAR 141-085-0565(4)(f): Whether the proposed fill or removal is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and land use regulations;

DSL must consider, under OAR 141-085-0565(4)(f), public uses and uses designated for adjacent land in acknowledged comprehensive plans and land use regulations. In this instance, public uses of waters proposed for fill or removal include such activities as withdrawals of surface water, agricultural use, fishing, and boating. No existing public use of affected WOS will be eliminated or degraded, and no WOS will be converted to farmland. Project construction will have, at most, only temporary impacts on such public uses. Hence, the Project conforms to existing public uses of such waters.

In Exhibit K, IPC demonstrates compliance with the local substantive criteria identified by the relevant counties, including relevant provisions of county comprehensive plans and zoning ordinances. To the extent IPC may not comply with all provisions of a local comprehensive plan or zoning ordinance, IPC will either demonstrate that it nonetheless complies with statewide planning goals or request a goal exception.

3.6.2.7 Conformance with Land Use Plans and Regulations

OAR 141-085-0565(4)(g): Whether the proposed fill or removal is compatible with the acknowledged comprehensive plan and land use regulations for the area where the proposed fill or removal is to take place or can be conditioned on a future local approval to meet this criterion;

OAR 141-085-0565(4)(g) provides DSL must consider local land use plans and regulations relevant to the removal-fill sites. As described above, IPC demonstrates compliance with the local comprehensive plans and zoning codes in Exhibit K. To the extent that IPC may not comply with all provisions of a local comprehensive plan, IPC demonstrates that it nonetheless complies with statewide planning goals or request a goal exception.

3.6.2.8 Streambank Protection

OAR 141-085-0565(4)(h): Whether the proposed fill or removal is for streambank protection; and

OAR 141-085-0565(4)(h) requires consideration of whether a proposed removal-fill activity is intended for streambank protection. Here, IPC does not propose removal-fill for streambank protection.

3.6.2.9 Practicable Mitigation

OAR 141-085-0565(4)(i): Whether the applicant has provided all practicable mitigation to reduce the adverse effects of the proposed fill or removal in the manner set forth in ORS 196.800.

DSL considers, under OAR 141-085-0565(4)(i), whether the proposed removal-fill activity will include all practicable mitigation. Regarding the Project, IPC will provide wetland mitigation sufficient to replace the wetland functions and values affected by unavoidable Removal-Fill impacts, and the minimum wetland mitigation acreage requirements in OAR 141-085-0690(4)(c). A draft of the CWNWMP plan is attached as Appendix T of the JPA.

4.0 IPC'S PROPOSED SITE CERTIFICATE CONDITIONS

IPC proposes the following site certificate conditions to ensure compliance with the relevant EFSC standards.

Waters of this State Condition 1: Prior to construction on the parcels that had been surveyed at the time of the ASC, the site certificate holder shall obtain from the Oregon Department of Lands a Removal-Fill Permit based on the Joint Permit Application in ASC Exhibit J, Attachment J-3.

Waters of this State Condition 2: Prior to construction on the parcels that had not been surveyed at the time of the ASC, the site certificate holder shall finalize, and submit to the department for its approval, a final Joint Permit Application.

Waters of this State Condition 3: Prior to construction on the parcels that had not been surveyed at the time of the ASC, the site certificate holder shall obtain from the Oregon Department of Lands a Removal-Fill Permit based on the final Joint Permit Application referenced in Waters of this State Condition 2.

Waters of this State Condition 4: During construction, the site certificate holder shall conduct all work in compliance with a Removal-Fill Permit.

5.0 CONCLUSIONS

Exhibit J, including its attachments, provides all of the application submittal information required under OAR 345-021-0010(1)(j). For the parcels that have been surveyed, this Exhibit shows the Project is in compliance with the law governing Removal-Fill permits, and therefore, a Removal-Fill permit for those parcels should be included in and governed by the site certificate. For the parcels that have not yet been surveyed, IPC's proposed site certificate conditions allowing ODOE to approve a Removal-Fill permit for those parcels after IPC submits a final JPA with the necessary survey information.

6.0 COMPLIANCE CROSS-REFERENCES

Table J-3 identifies the location within the application for site certificate of the information responsive to the site certificate application submittal requirements in OAR 345-021-0010(1)(j), the Removal-Fill Permit application requirements at OAR 345-022-0010, the DSL Removal-Fill permit application determinations and considerations at OAR 141-085-0565(3) and (4), and the relevant Amended Project Order provisions.

Table J-3. Compliance Requirements and Relevant Cross-References

Requirement	Location
OAR 345-021-0010(1)(j)	
Exhibit J. Information based on literature and field study, as appropriate, about waters of the state, including:	
(A) A description of all areas within the site boundary that might be waters of the state and a map showing the location of these features.	Exhibit J, Section 3.4.1, Attachment J-1, and Attachment J-2

Requirement	Location
(B) An analysis of whether construction or operation of the proposed facility would adversely affect any waters of the state, as defined under OAR 141-085-0510.	Exhibit J, Section 3.4.2
(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).	Exhibit J, Section 3.4.3; Further information to be prepared after impact analysis and wetland assessment are complete.
(D) If the proposed facility would not need a removal-fill authorization as described under OAR 141-085-0520, an explanation of why no such authorization is required for the construction and operation of the proposed facility.	Exhibit J, Section 3.4.4; Not applicable, as IPC anticipates that a removal-fill authorization will be required
(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR chapter 141 division 85.	Exhibit J, Section 3.4.5 and Attachment J-3
OAR 141-085-0550	
(1) Written Application Required. A person who is required to have an individual permit to remove material from the bed or banks, or fill any waters of this state, must file a written application with the Department for each individual project. A permit must be issued by the Department before performing any regulated removal-fill activity.	Exhibit J, Section 3.5.1
(2) Complete and Accurate Information Required. Failure to provide complete and accurate information in the application may be grounds for administrative closure of the application file or denial, suspension or revocation of the authorization.	Exhibit J, Section 3.5.2
(3) Fee Required for a Complete Application. For an application to be determined complete, the Department must have received the appropriate fee.	Exhibit J, Section 3.5.3
(4) Level of Detail Required May Vary. The applicant is responsible for providing sufficient detail in the application to enable the Department to render the necessary determinations and decisions. The level of documentation may vary depending on the degree of adverse impacts, the level of public interest and other factors that increase the complexity of the project.	Exhibit J, Section 3.5.4
(5) Required Information: A completed and signed application on current forms provided by the Department, including any maps, necessary photos and drawings, is required. The information must be entered in the appropriate blocks on the application form. The Department may require the applicant to submit any or all application materials electronically. The application must include all of the following:	Exhibit J, Section 3.5.5

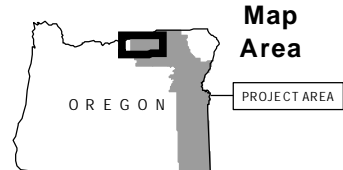
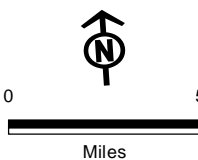
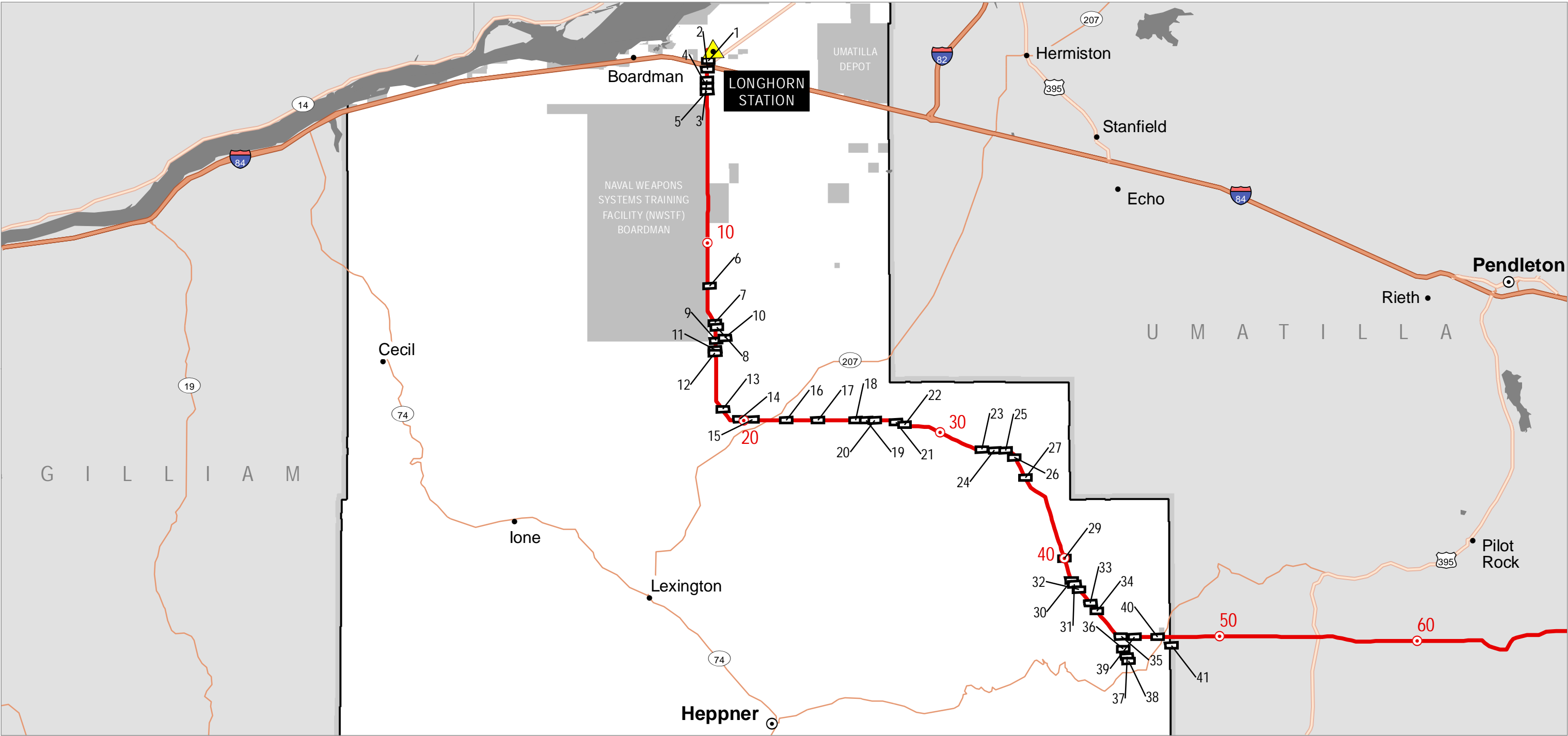
Requirement	Location
(6) Additional Requirements for Estuarine Fill. If the activity is proposed in an estuary for a non-water-dependent use, a complete application must also include a written statement that describes the following: (a) The public use of the proposed project; (b) The public need for the proposed project; and (c) The availability of alternative, non-estuarine sites for the proposed use.	Exhibit J, Section 3.5.6
(7) Additional Information as Requested. The Department may request additional information as necessary to make an informed decision on whether or not to issue the authorization.	Exhibit J, Section 3.5.7
(8) Waiver of Required Information. At its discretion, the Department may waive any of the information requirements listed in Section (5) of this rule for voluntary restoration projects.	Exhibit J, Section 3.5.8
(9) Permit Application Modifications. A modification to a permit application may be submitted at any time prior to the permit decision. If the modification is received after the public review period, the Department may circulate the revised application again for public review. Modifications proposing significantly different or additional adverse impacts will generally be resubmitted for public review. The Department may set an expedited time frame for public review.	Exhibit J, Section 3.5.9
(10) Pre-Application Conference. An applicant may request the Department to hold a pre-application meeting. In considering whether to grant the request, the Department will consider the complexity of the project and the availability of Department staff.	Exhibit J, Section 3.5.10
OAR 141-085-0565	
(3) Department Determinations. The Department will issue a permit if it determines the project described in the application: (a) Has independent utility; (b) Is consistent with the protection, conservation and best use of the water resources of this state as specified in ORS 196.600 to 196.990; and (c) Would not unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing and public recreation, when the project is on state-owned lands.	Exhibit J, Section 3.6.1

Requirement	Location
<p>(4) Department Considerations. In determining whether to issue a permit, the Department will consider all of the following: (a) The public need for the proposed fill or removal and the social, economic or other public benefits likely to result from the proposed fill or removal. When the applicant for a permit is a public body, the Department may accept and rely upon the public body's findings as to local public need and local public benefit; (b) The economic cost to the public if the proposed fill or removal is not accomplished; (c) The availability of alternatives to the project for which the fill or removal is proposed; (d) The availability of alternative sites for the proposed fill or removal; (e) Whether the proposed fill or removal conforms to sound policies of conservation and would not interfere with public health and safety; (f) Whether the proposed fill or removal is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and land use regulations; (g) Whether the proposed fill or removal is compatible with the acknowledged comprehensive plan and land use regulations for the area where the proposed fill or removal is to take place or can be conditioned on a future local approval to meet this criterion; (h) Whether the proposed fill or removal is for stream bank protection; and (i) Whether the applicant has provided all practicable mitigation to reduce the adverse effects of the proposed fill or removal in the manner set forth in ORS 196.800.</p>	Exhibit J, Section 3.6.2
Amended Project Order Provisions	
<p>The application shall include identification of wetlands and waters of the state for all areas the applicant anticipates will be affected by the proposed facility, including access roads and temporary laydown areas. The applicant has proposed a "phased survey" approach for data collection during the site certificate review process. The Department understands that the entirety of the site boundary for the proposed facility may not yet have been surveyed for wetlands and waters. Nevertheless, Exhibit J should include as much information as possible about the results of the field surveys conducted to date and the schedule for future surveys.</p>	Exhibit J, Section 3.3.1, Attachment J-1, and Attachment J-2
<p>The applicant should include in Exhibit J as much of the information required by OAR 345-021-0010(1)(j) as possible, and the proposed path forward to obtain the information necessary for the Council to find that the requirements for a removal-fill permit have been met. Information would include an itemized demonstration of each applicable provision of ORS 196.825 (Criteria for Issuance of a Permit) and OAR 141-085-0550 (Application Requirements for All Authorizations). DSL requires a compensatory wetland, compensatory non-wetland, and temporary impacts mitigation plan be submitted with a removal-fill application.</p>	Exhibit J, Section 4.1 and Section 4.2

7.0 REFERENCES

- Adamus, P., J. Morlan, and K. Verble. 2010. Manual for the Oregon Rapid Wetland Assessment Protocol (ORWAP). Version 2.0.2. Oregon Dept. of State Lands. Salem, Oregon.
Available online at: http://www.oregon.gov/DSL/WETLAND/docs/orwap_manual_v2.pdf
- Cowardin, L.M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.
- DSL (Oregon Department of State Lands). 2011. Delineations for Large Linear Projects. Guidance from DSL.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. NTIS No. AD A176 912
- ESRI Inc. 2012. World Imagery Map Service by ESRI. Provides the best available United States Department of Agriculture Farm Services Agency (USDA FSA) National Agriculture Imagery Program (NAIP) imagery and enhanced versions of United States Geological Survey (USGS) Digital Ortho Quarter Quad (DOQQ) imagery. Available online: <http://www.arcgis.com/home/webmap/viewer.html?webmap=716b600dbbac433faa4bec9220c76b3a>. January 2013.
- OBDP (Oregon Bridge Delivery Partners). 2004. Oregon Department of Transportation Salmon Resources and Sensitive Area Mapping (SRSAM). Partner Central - Environmental. 2004-2011.
<http://www.obdp.org/partner/environmental/authorization/> (accessed December 5, 2011).
- Nadeau, T-L. 2011. Streamflow Duration Assessment Method for Oregon, U.S. Environmental Protection Agency, Region 10, Document No. EPA 910-R-11-002. Oregon Spatial Data Library. 2011. Available at: <http://oregonexplorer.info/wetlands/DataCollections/GeospatialData>. Accessed 2011.
- Topping, Brian J.D., Tracie-Lynn Nadeau, and Michael R. Turaski. 2009. Oregon Streamflow Duration Assessment Method Interim Version. U.S. Environmental Protection Agency, Oregon Operations Office Region 10, and office of Wetlands, Oceans and Watersheds; U.S. Army Corps of Engineers, Portland District. Public Notice release date, 6 March 2009.
- Turaski, Mike and Karen Nelson. 2013. Personal communication at a meeting with Zach Funkhouser (IPC) and John Gordon (TT) at USACE Portland District office, December 11 2013.
- USGS (U.S. Geological Survey). 2012. National Hydrography Dataset [Internet]. Available online at: <http://nhd.usgs.gov/> (Accessed 2011).
- USACE (U.S. Army Corps of Engineers). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.

ATTACHMENT J-1 FIGURES



- Project Features**

 - Proposed Route
 - Alternative
 - Stations
 - Ten Mile Marker
- Map Index**

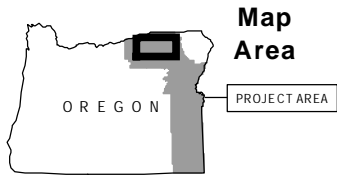
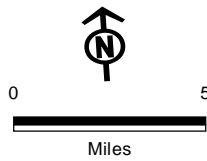
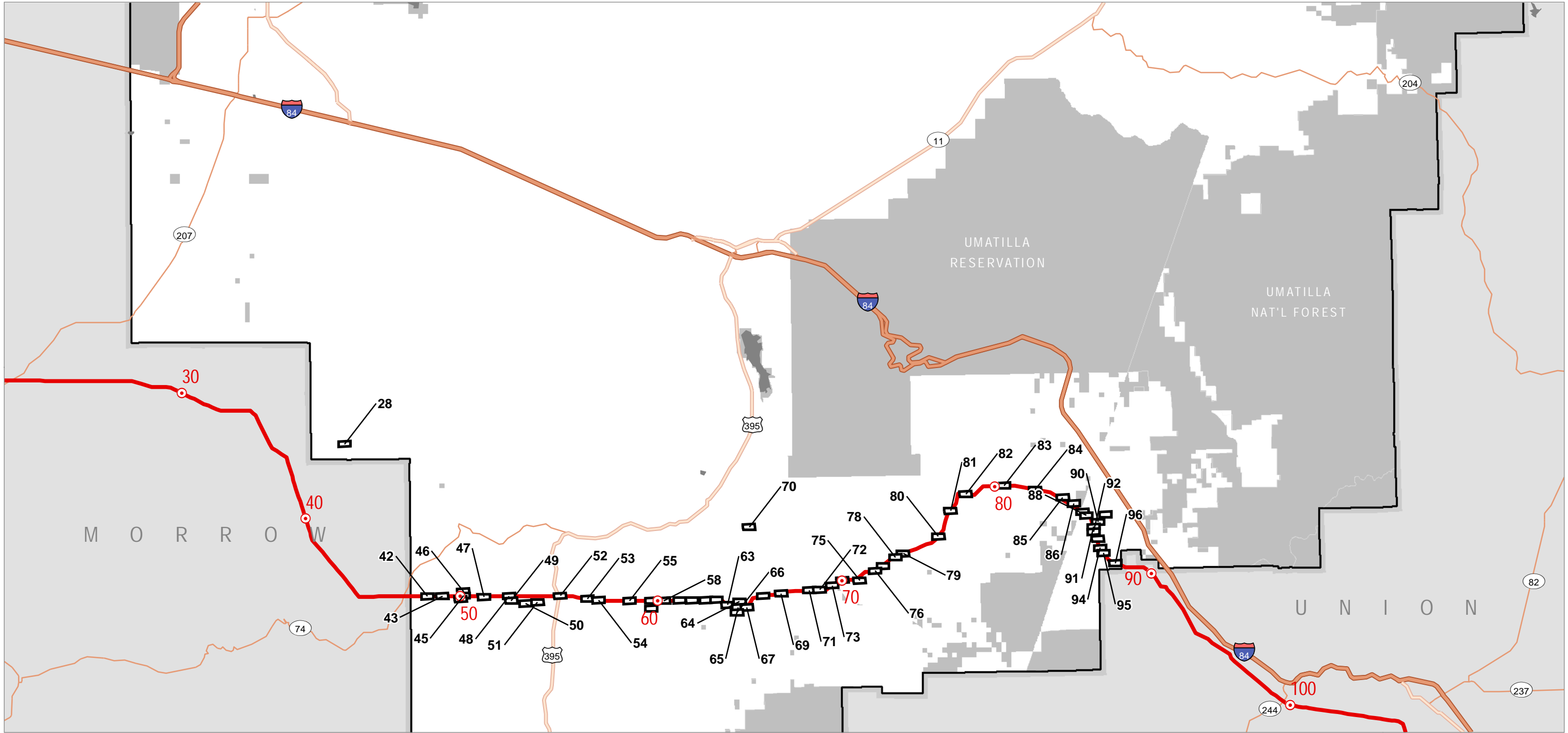
 - Map Tile (Map #)

IDAHO POWER
An IDACORP Company

Boardman to Hemingway
Transmission Line Project

Attachment J1
Proposed Route Location Map
Morrow 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



Project Features

- Proposed Route
- Ten Mile Marker

Map Index

- Map Tile (Map #)



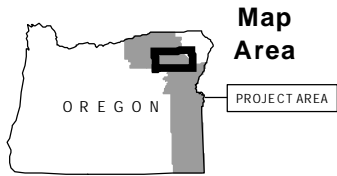
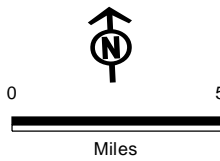
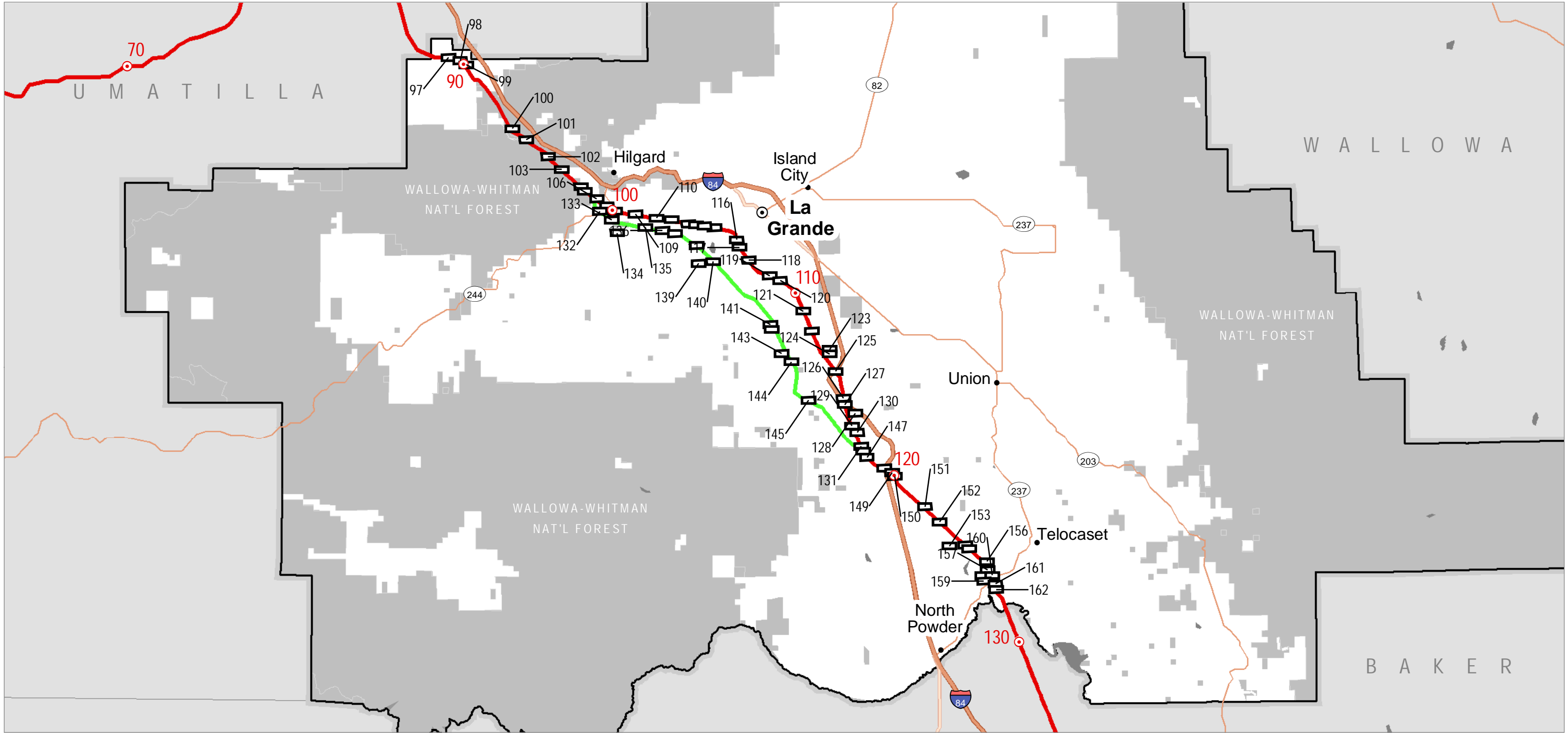
Boardman to Hemingway
Transmission Line Project

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

**Attachment J1
Proposed Route Location Map**

Umatilla County

[Map Index](#)

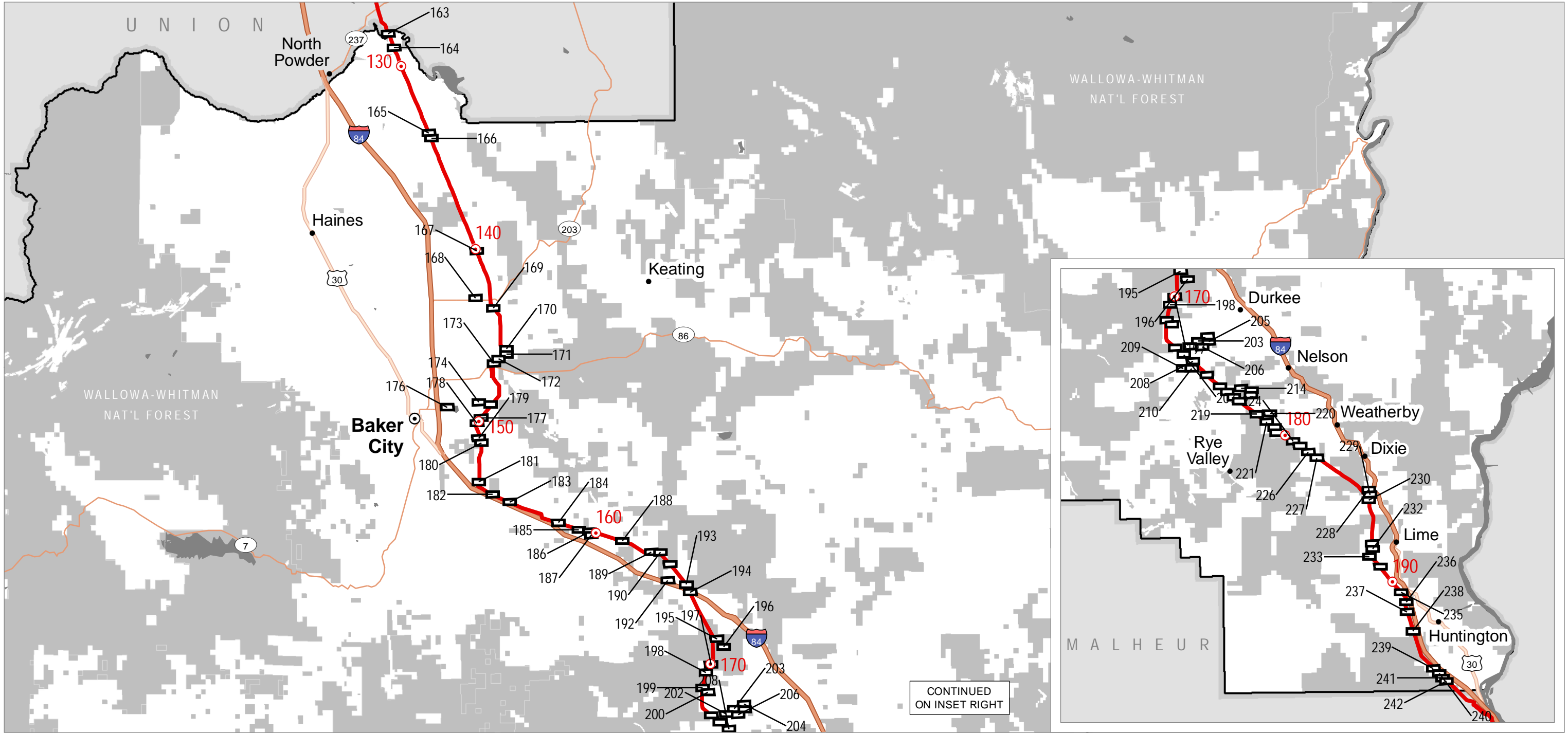


- Project Features**

 - 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

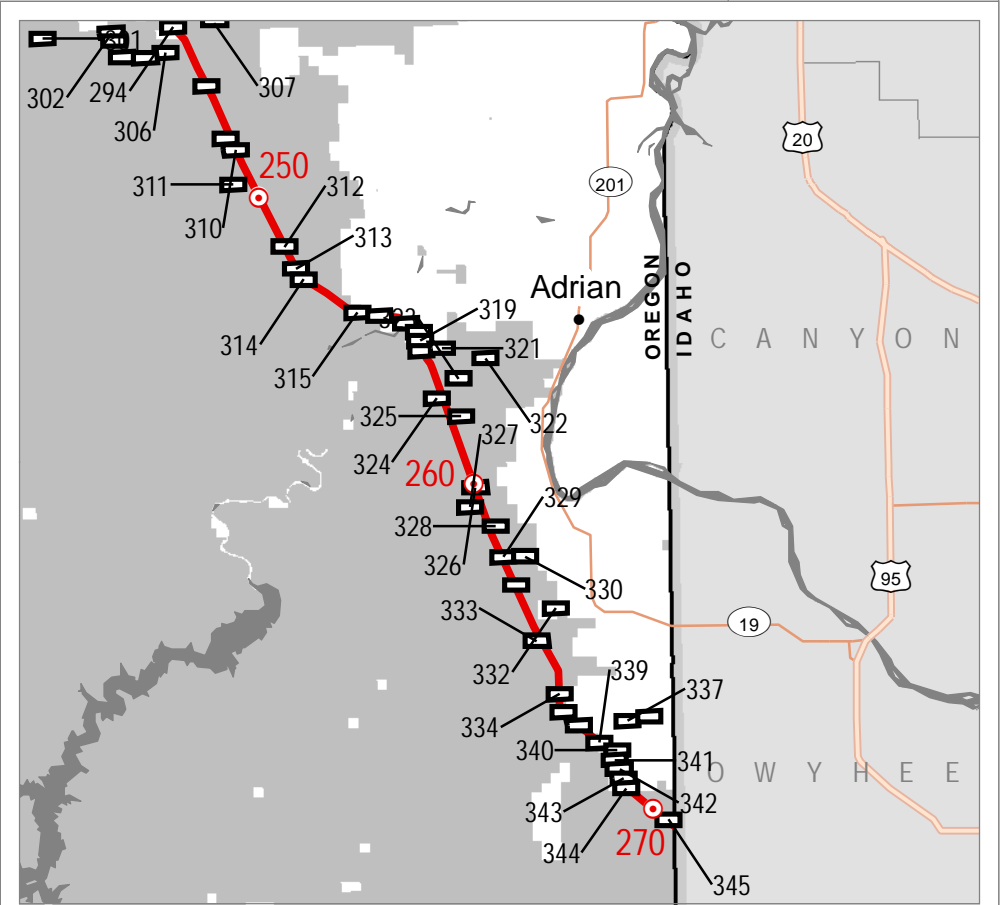
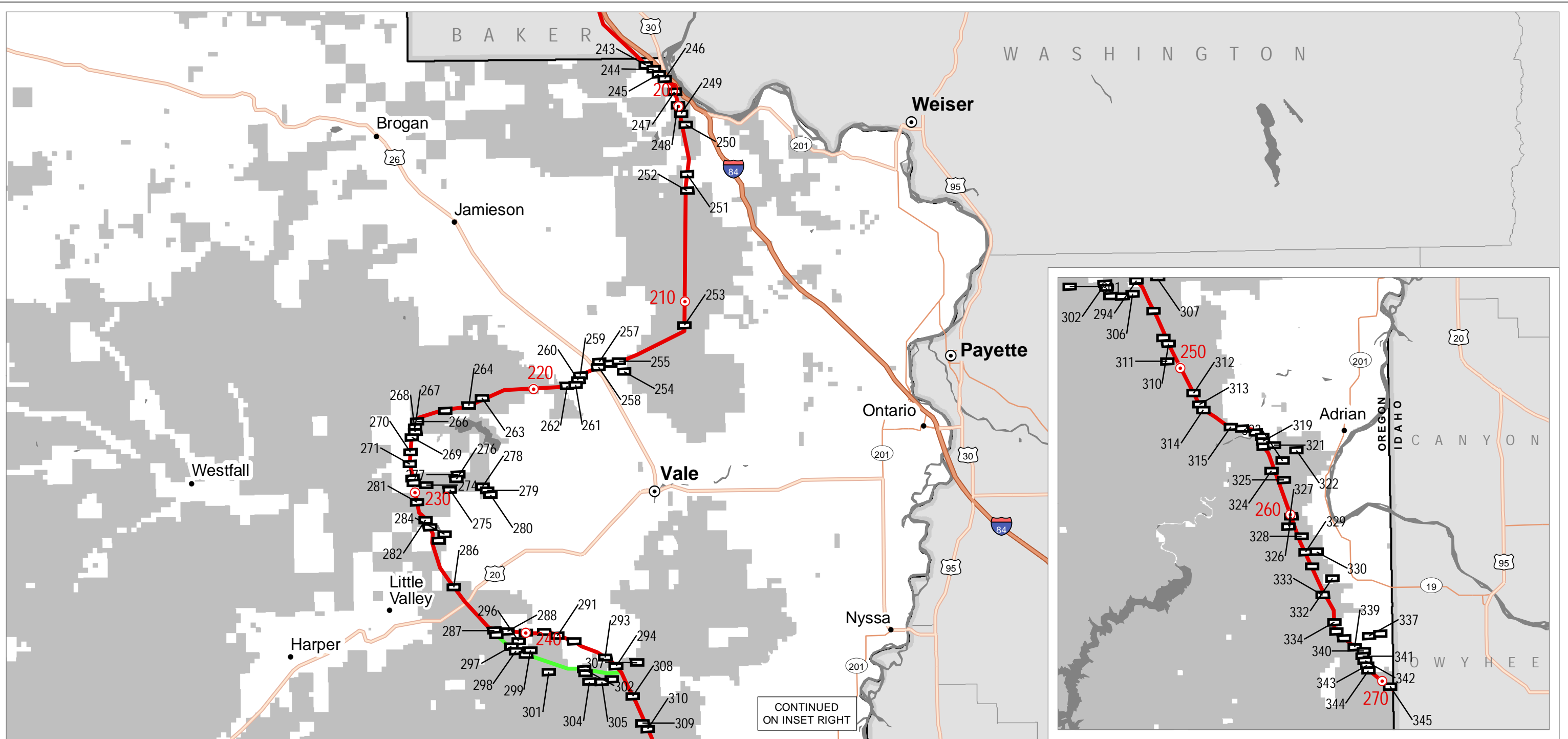


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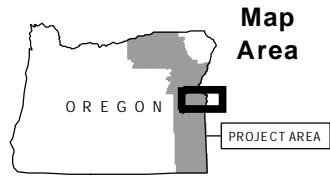
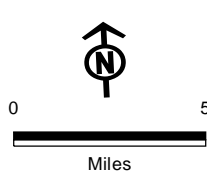
- | Project Features | Map Index |
|------------------|------------------|
| Proposed Route | Map Tile (Map #) |
| Ten Mile Marker | |

 Boardman to Hemingway
Transmission Line Project

Attachment J1
Proposed Route Location Maps
Baker County
[Map Index](#)



CONTINUED
ON INSET RIGHT



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

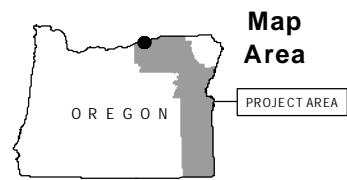
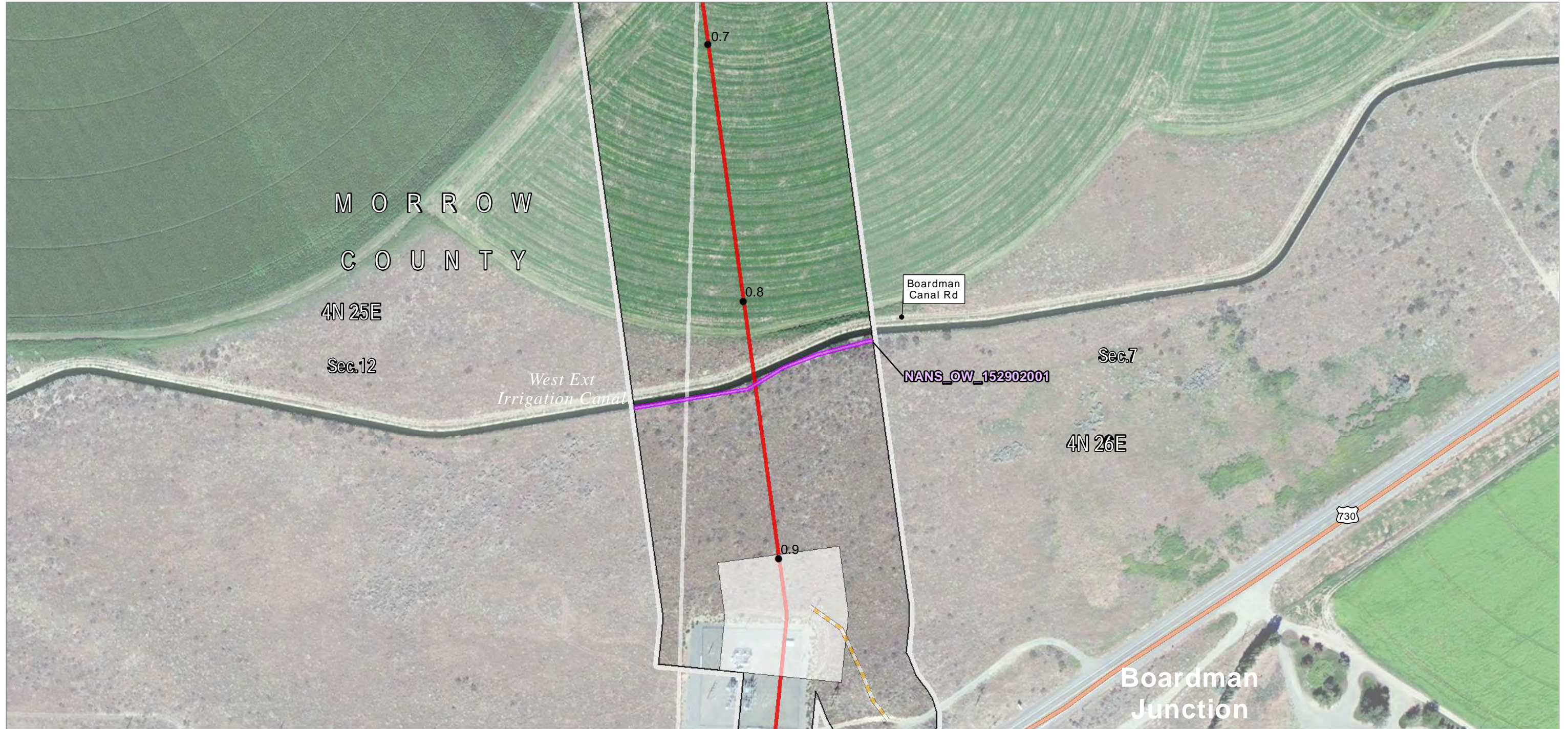


Boardman to Hemingway
Transmission Line Project

**Attachment J1
Proposed Route Location Maps**

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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Transportation

- Interstates or Highways

Other Waters

- NANS Streams (NHD)

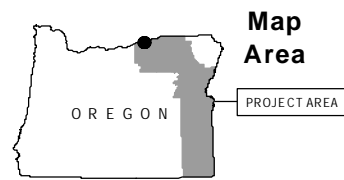
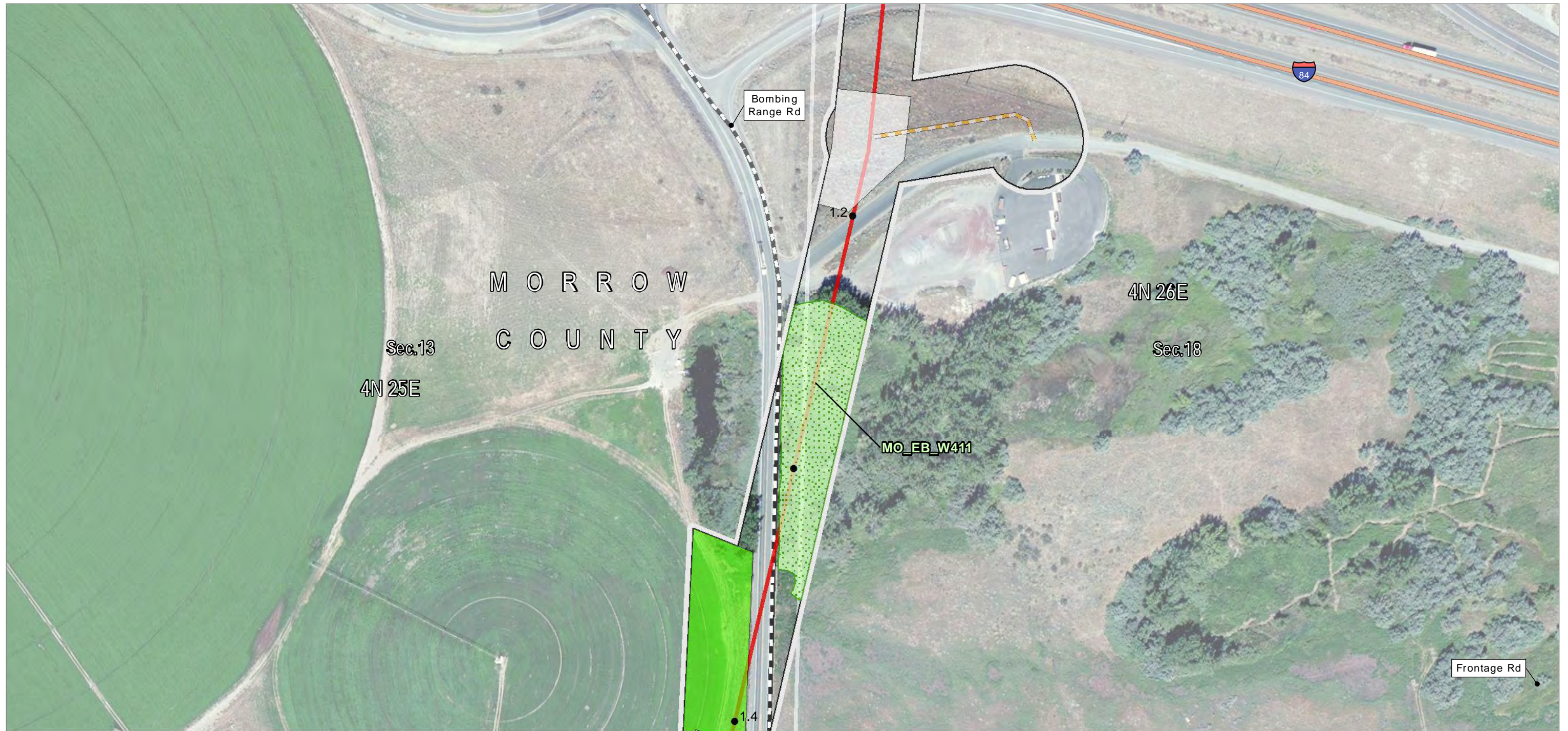


Boardman to Hemingway
Transmission Line Project

Attachment J1-1

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route
- Route Centerline

Proposed Route

Work Areas
 Pulling and Tensioning

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Primitive

Transportation

Interstates or Highways

Other Major Roads

Wetland

Field Survey Wetland

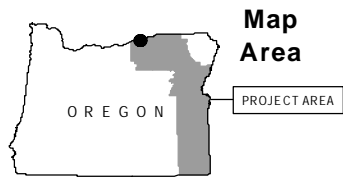


Boardman to Hemingway
Transmission Line Project

Attachment J1-2

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Transportation

- Other Major Roads

Wetland

- NANS Wetland (NWI)

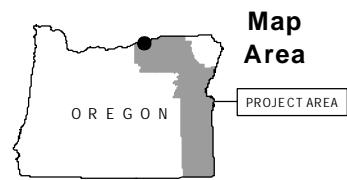
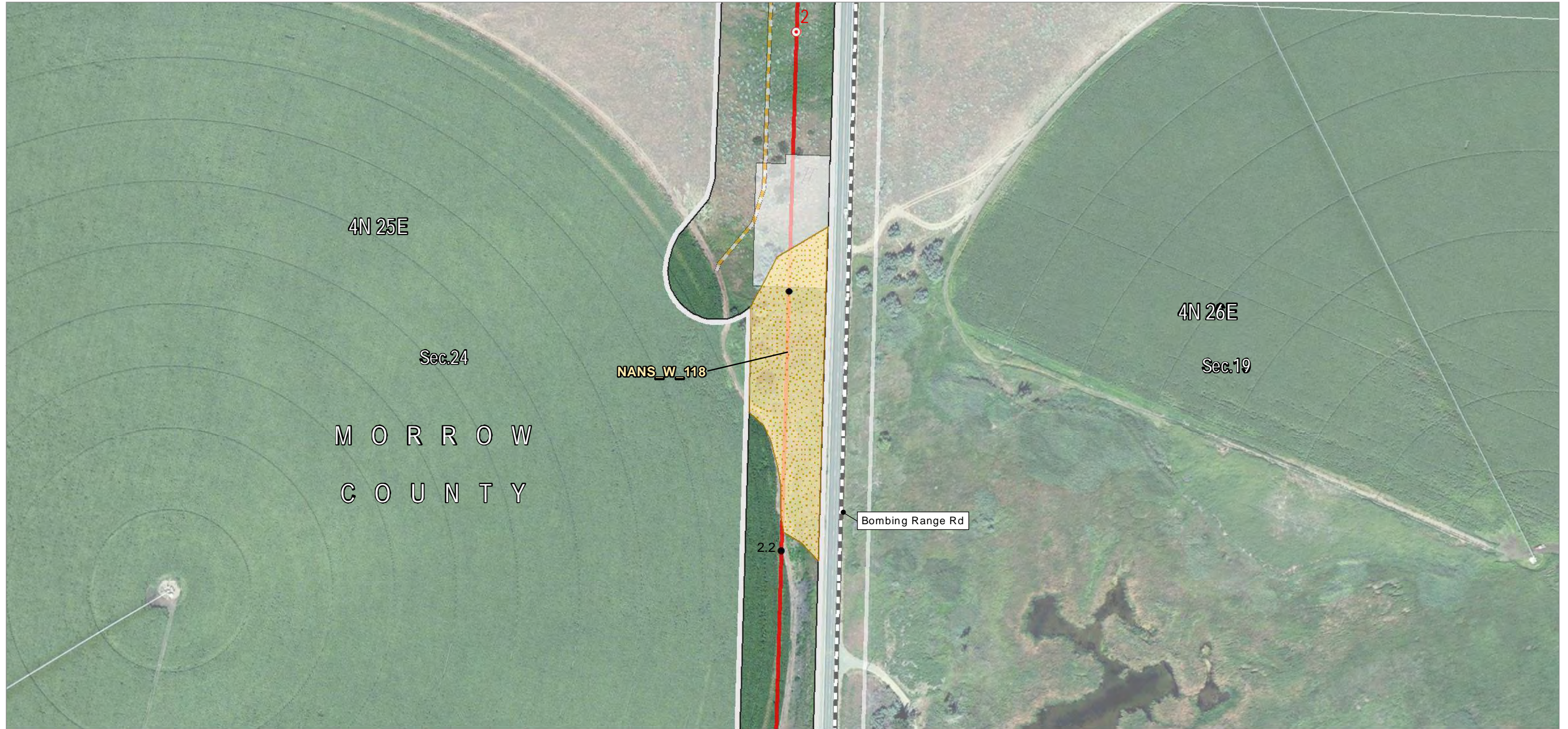


Boardman to Hemingway
Transmission Line Project

Attachment J1-3

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- New Road, Primitive
- Other Major Roads

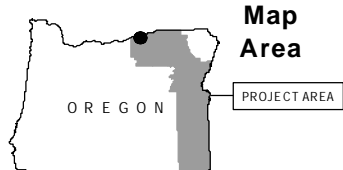
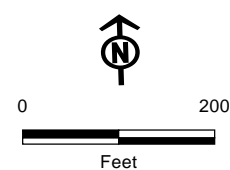
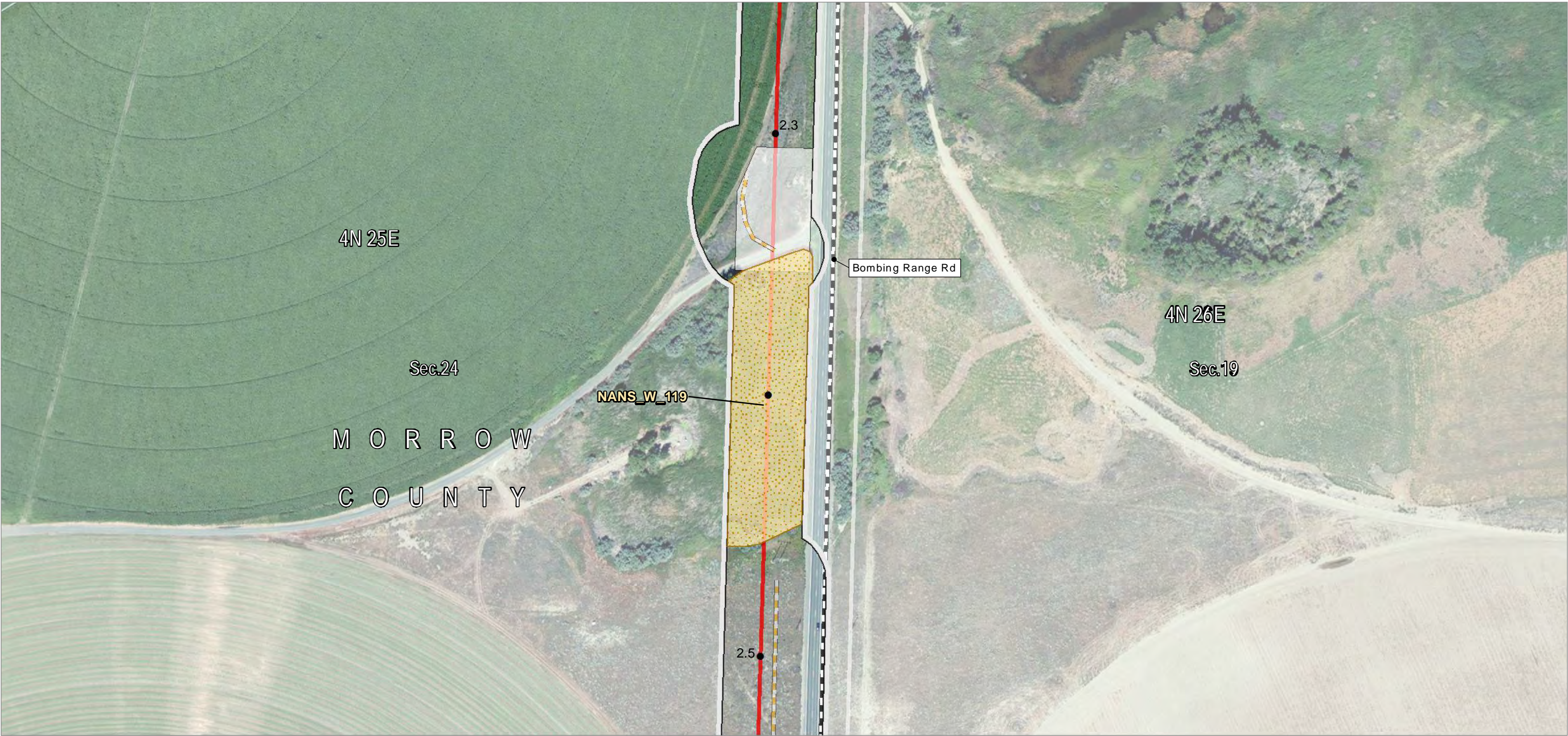
Wetland

- NANS Wetland (NWI)



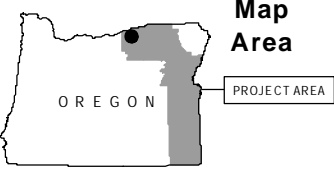
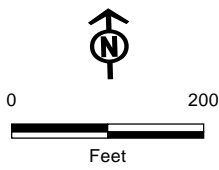
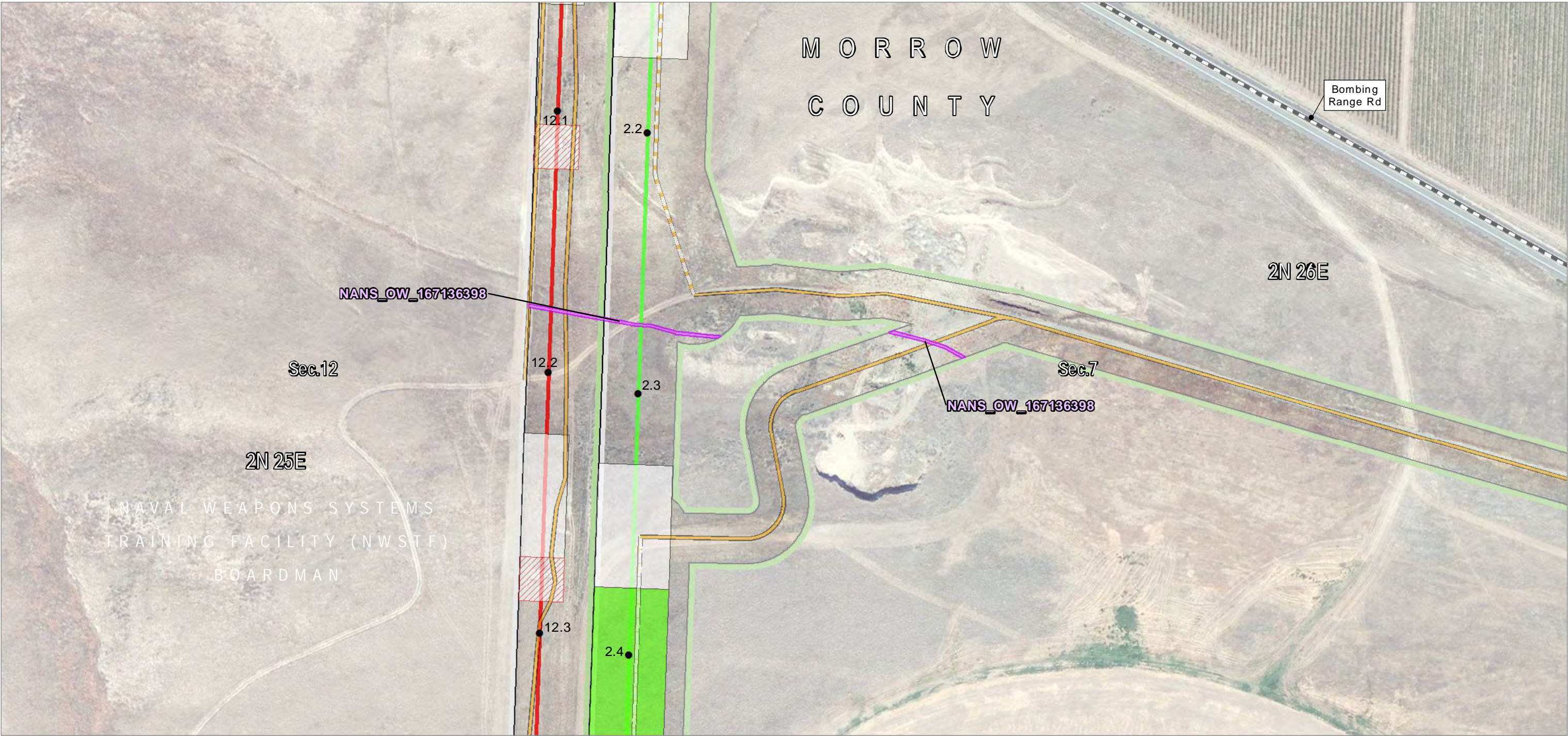
Boardman to Hemingway
Transmission Line Project

Attachment J1-4 Wetland and Other Waters Detail Maps Morrow 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

- | | |
|-------------------------|----------------------------|
| Project Features | Mileposts |
| Site Boundary | ● Tenth-mile |
| Route Centerline | Construction Access |
| □ Proposed Route | ▬ New Road, Primitive |
| ▬ Alternative Route | ▬ Other Major Roads |
| ▬ Proposed Route | Wetland |
| □ Structure Work Area | ▬ NANS Wetland (NWI) |



Project Features

- Site Boundary
- Proposed Route
- Alternative Route
- Route Centerline
- Proposed Route
- Alternative

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

Transportation

- Other Major Roads

Other Waters

- NANS Streams (NHD)



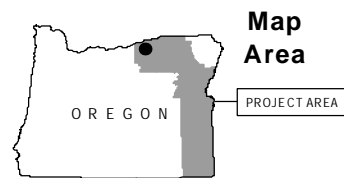
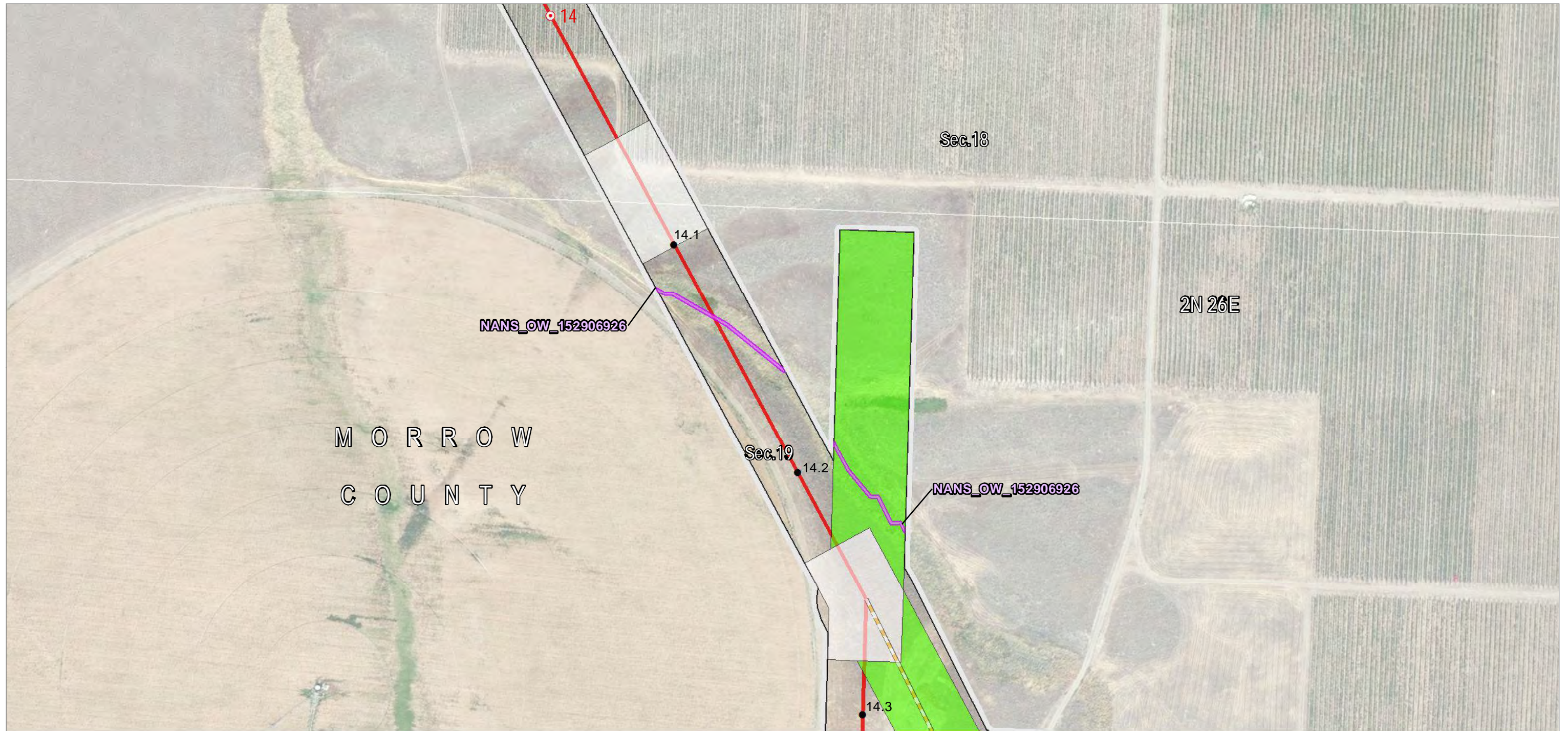
Boardman to Hemingway
Transmission Line Project

Attachment J1-6

**Wetland and Other Waters
Detail Maps**

Morrow 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



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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

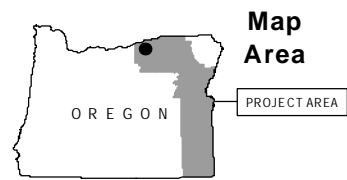


Boardman to Hemingway
Transmission Line Project

Attachment J1-7

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

- Site Boundary
- Proposed Route
- Alternative 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, Primitive

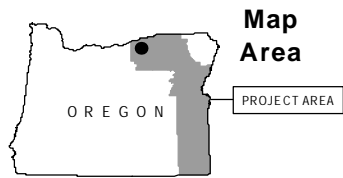
Other Waters

- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-8 Wetland and Other Waters Detail Maps Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

Other Waters

- NANS Streams (NHD)

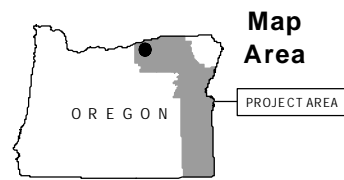


Boardman to Hemingway
Transmission Line Project

Attachment J1-9

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Transportation

Other Major Roads

Other Waters

NANS Streams (NHD)

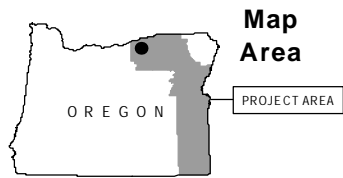
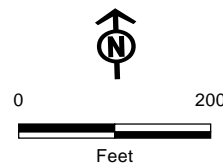
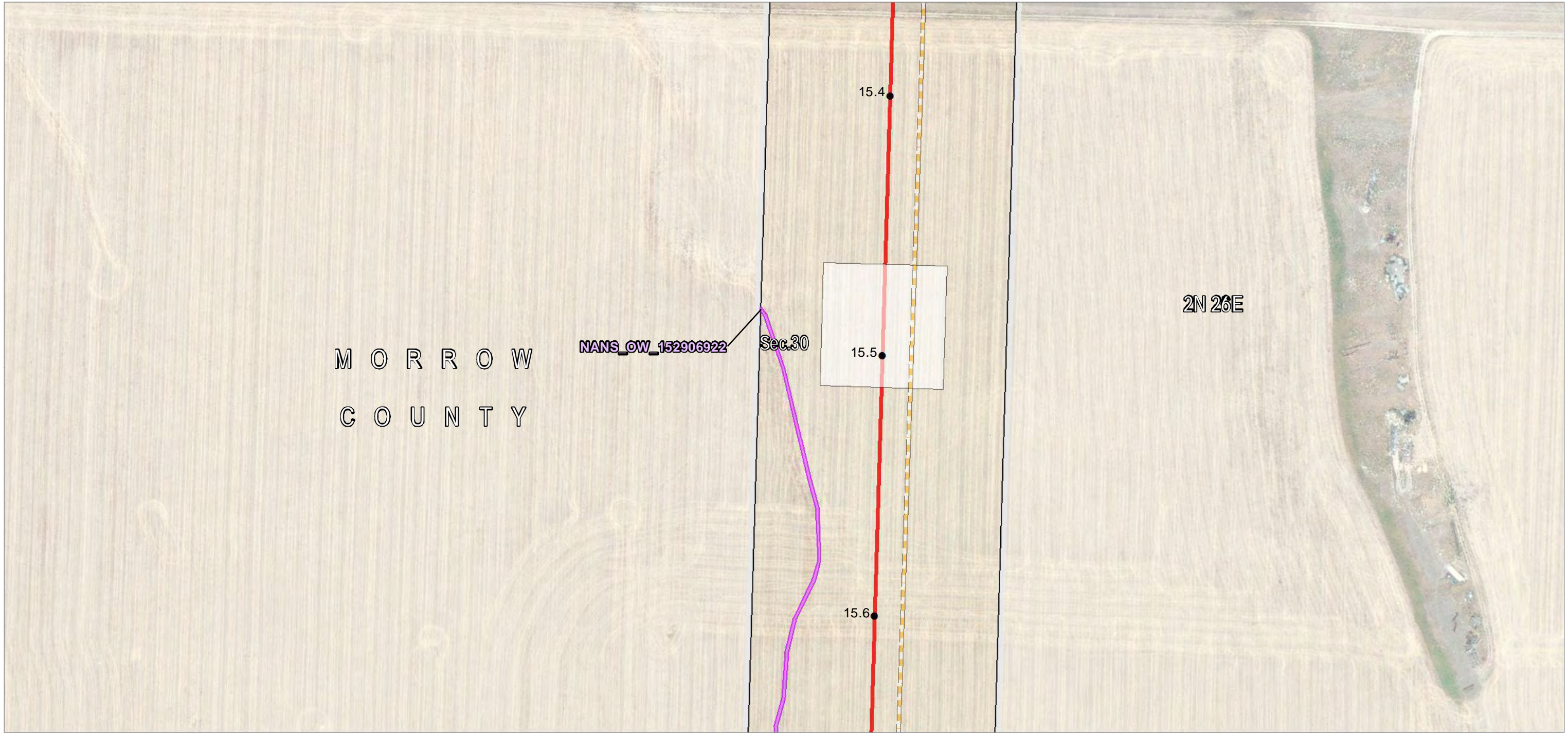


Boardman to Hemingway
Transmission Line Project

Attachment J1-10

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Primitive

Other Waters

NANS Streams (NHD)

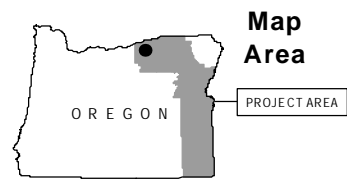
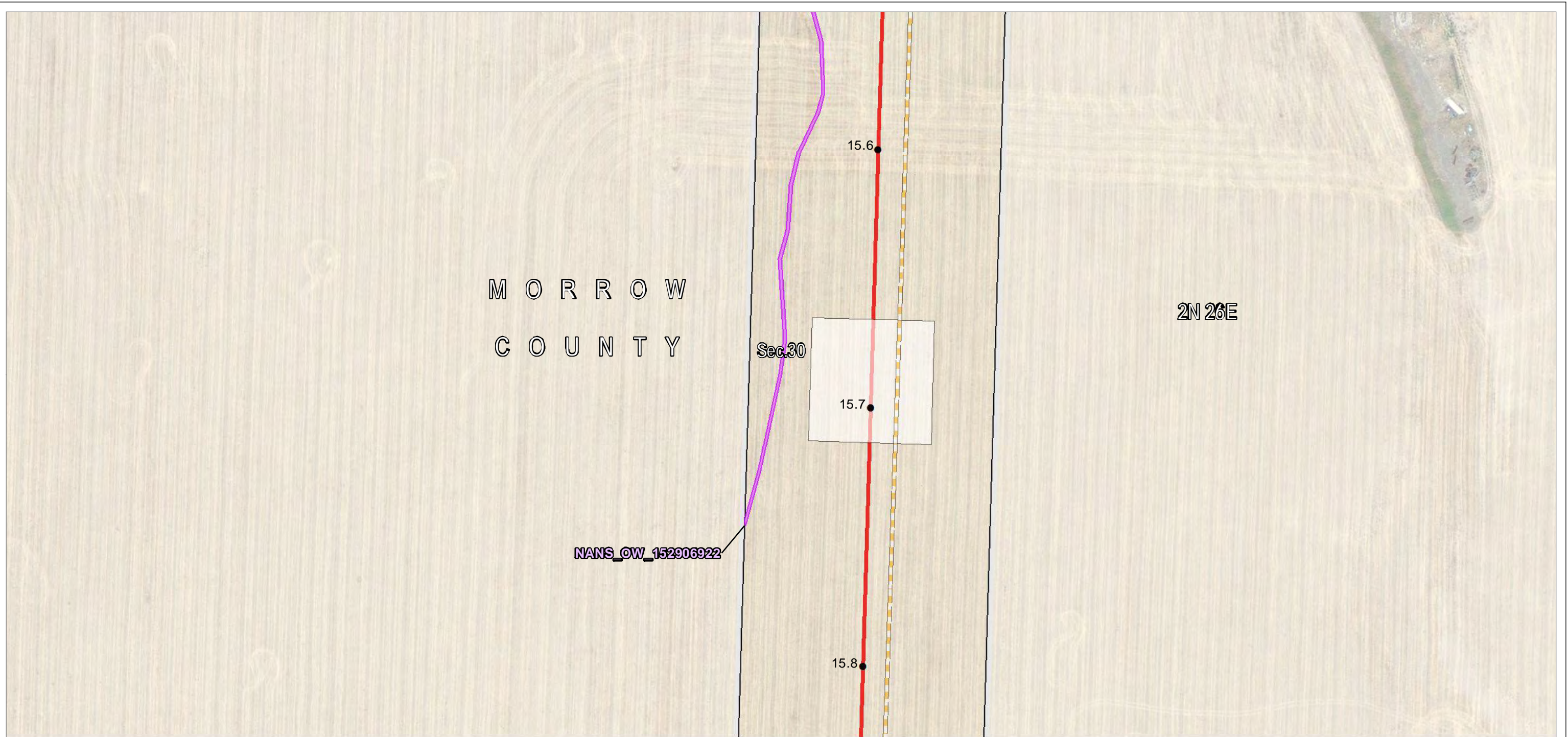


Boardman to Hemingway
Transmission Line Project

Attachment J1-11

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Primitive

Other Waters

NANS Streams (NHD)

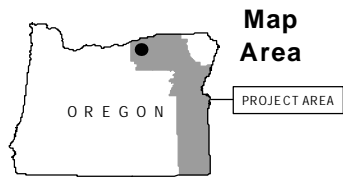
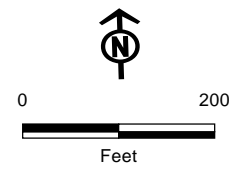
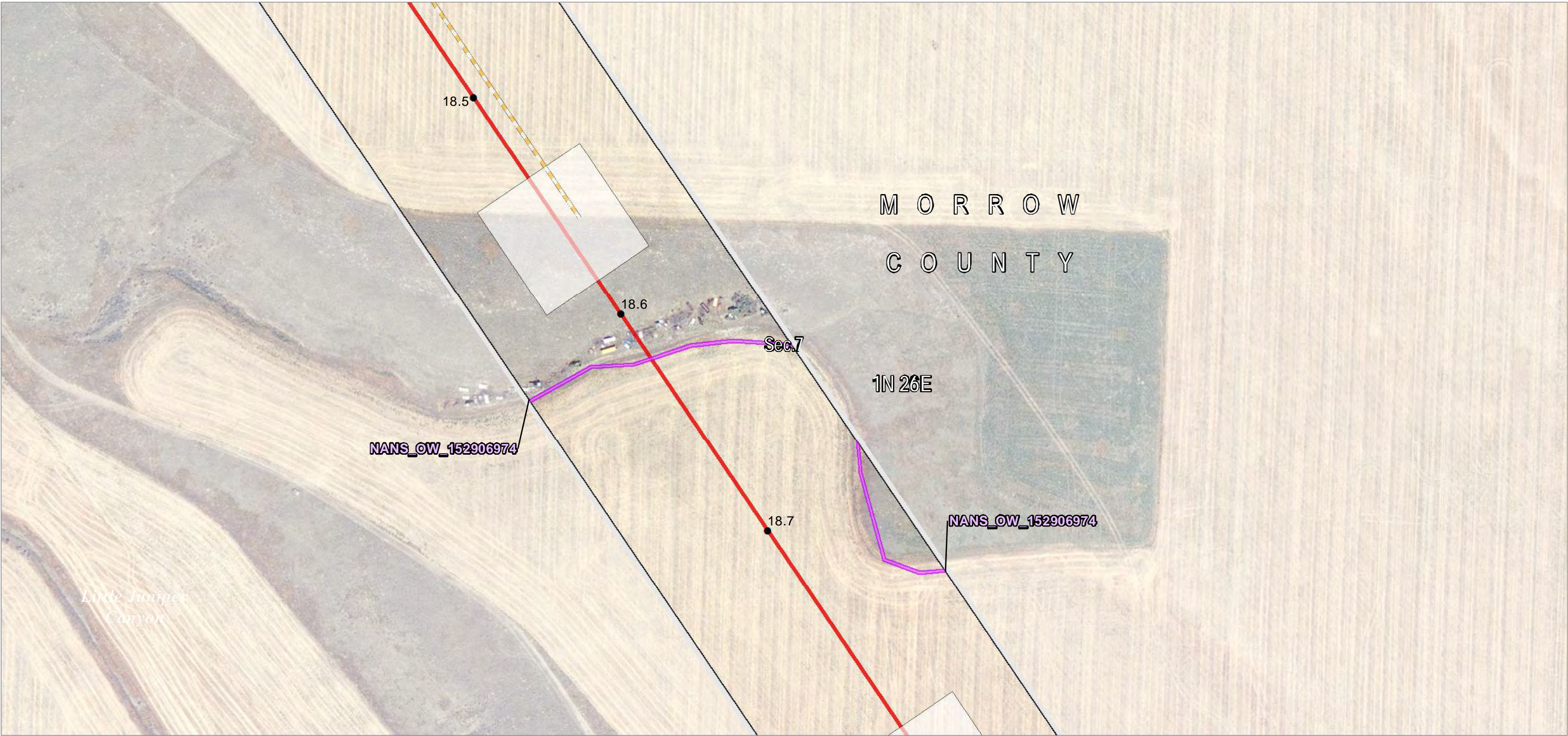


Boardman to Hemingway
Transmission Line Project

Attachment J1-12

**Wetland and Other Waters
Detail Maps**

Morrow County

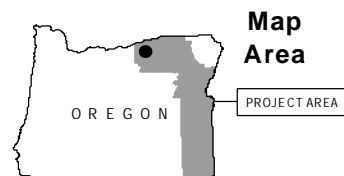
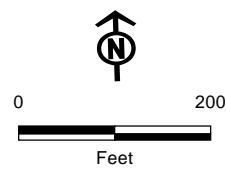
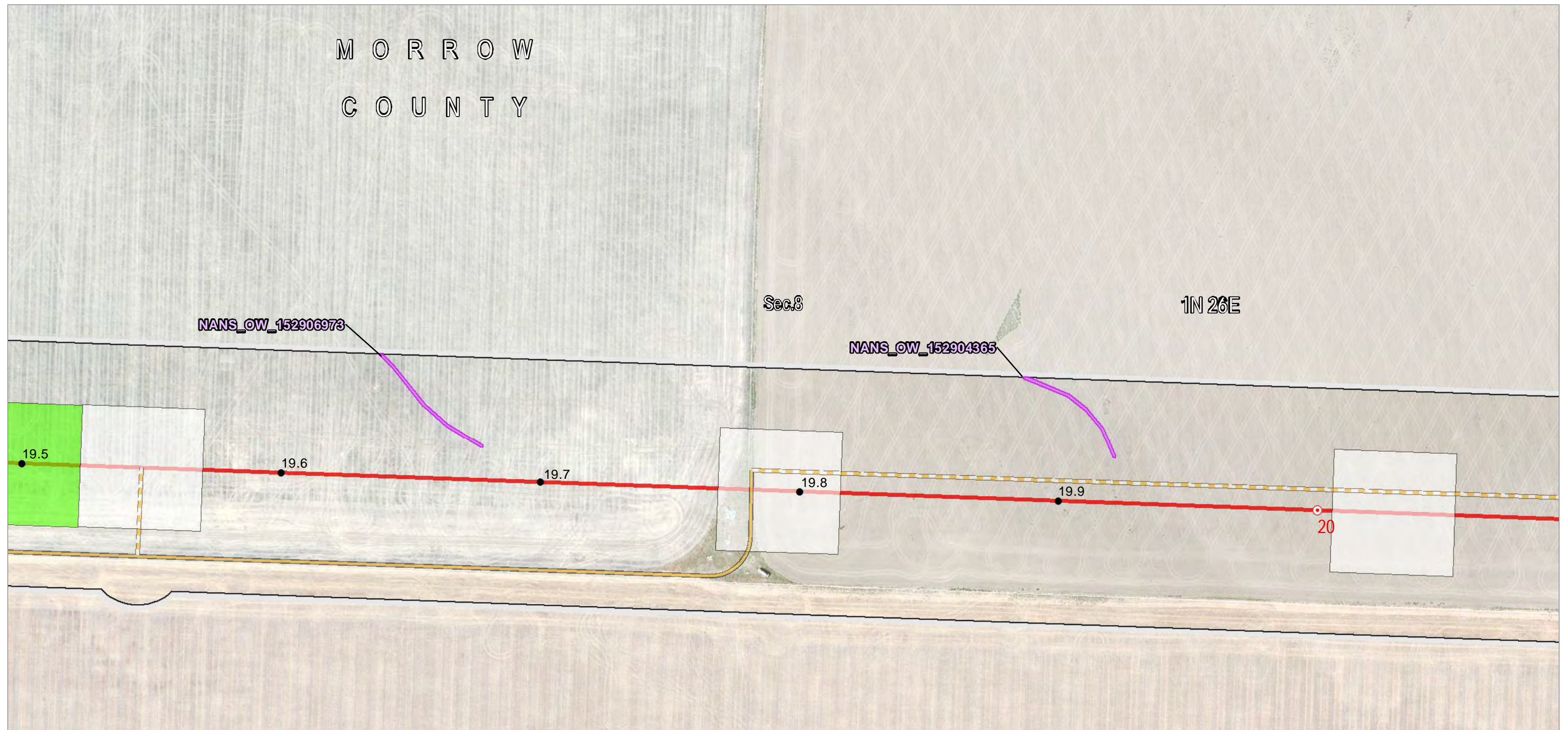


Source(s): BLM, IPC, ODFW, ODOT, NPS, USDA, USFS, USGS, Ventyx, Esri, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- Tenth-mile
- Construction Access**
- New Road, Primitive
- Other Waters**
- NANS Streams (NHD)

MORROW COUNTY



Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Primitive
- Other Waters
- NANS Streams (NHD)

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



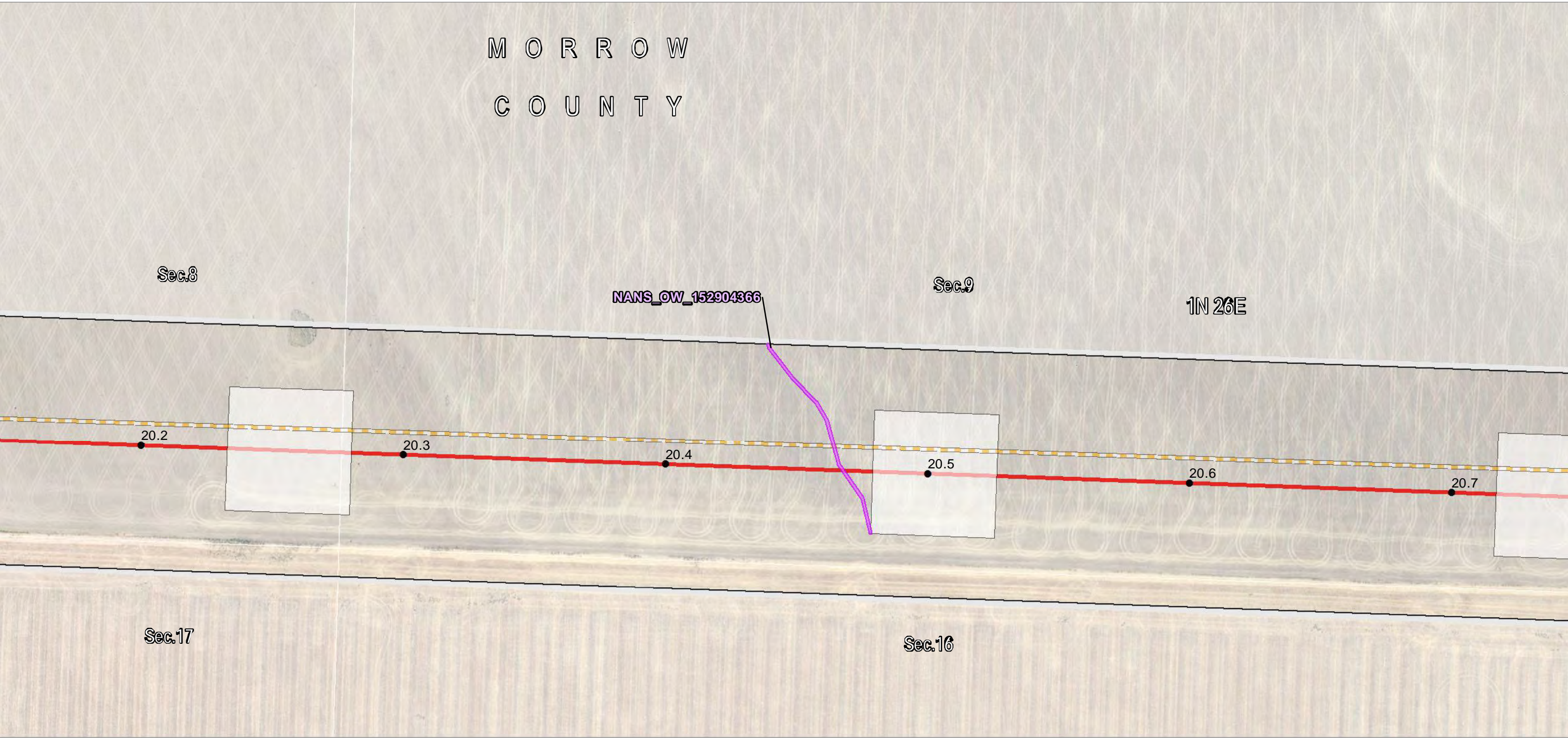
Boardman to Hemingway
Transmission Line Project

Attachment J1-14

**Wetland and Other Waters
Detail Maps**

Morrow County

MORROW
COUNTY



Project Features

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

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

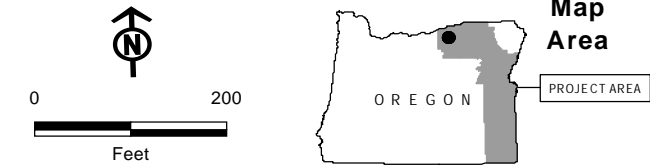
Other Waters

- NANS Streams (NHD)

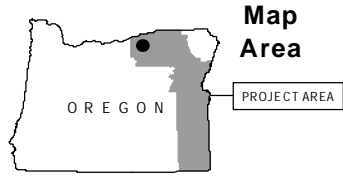
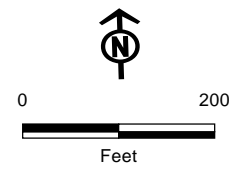
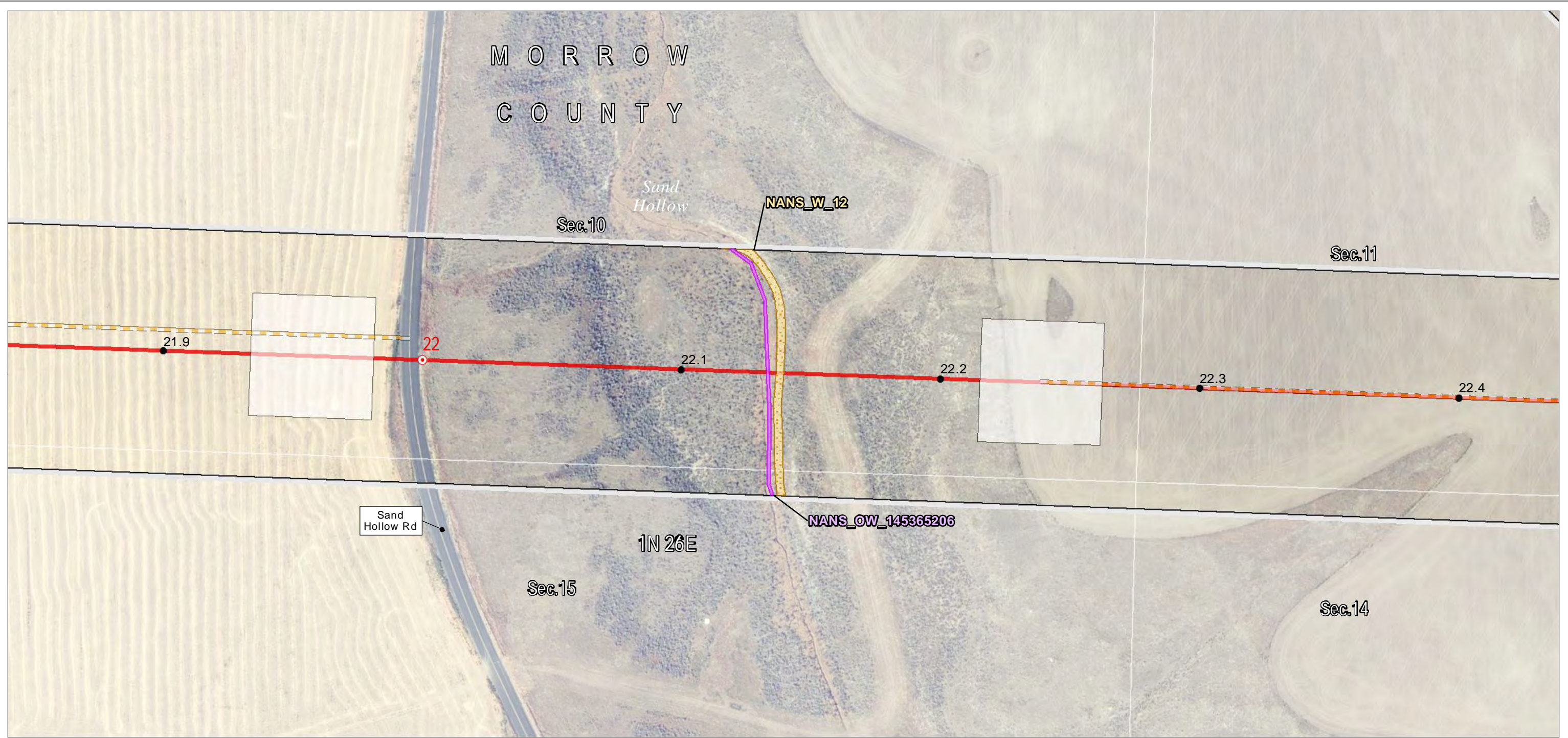


Boardman to Hemingway
Transmission Line Project

Attachment J1-15
Wetland and Other Waters
Detail Maps
Morrow 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



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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- Mile
 - Tenth-mile
- Construction Access**
- New Road, Primitive
- Other Waters**
- NANS Streams (NHD)

- Wetland**
- NANS Wetland (NWI)

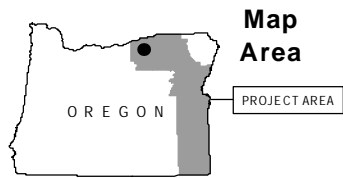
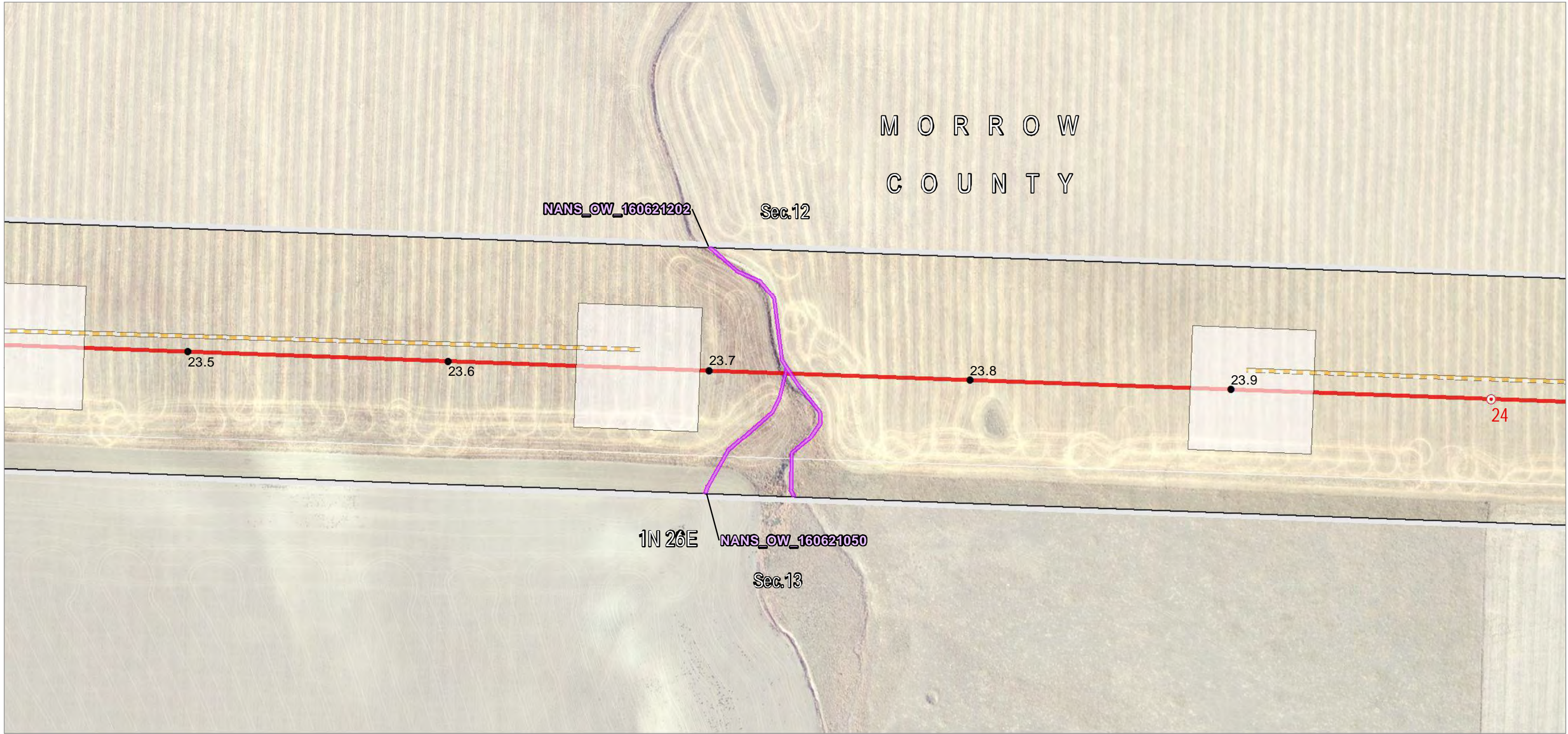


Boardman to Hemingway
Transmission Line Project

Attachment J1-16

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

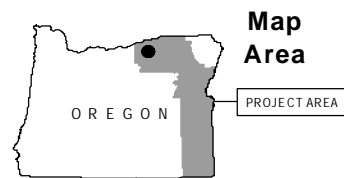
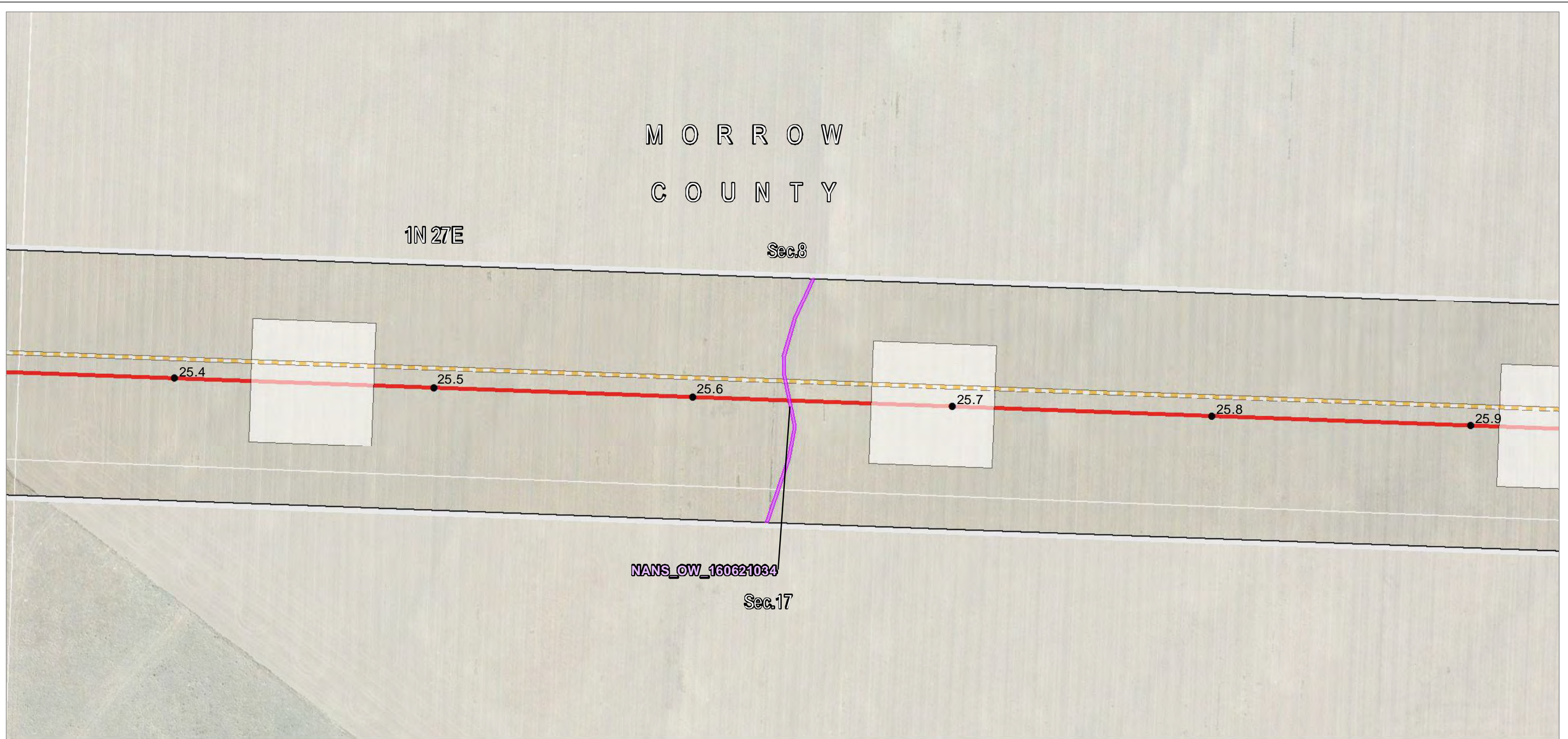


Boardman to Hemingway
Transmission Line Project

Attachment J1-17

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

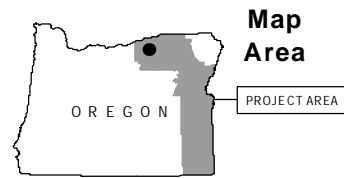
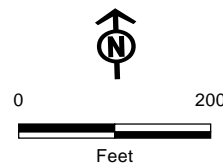
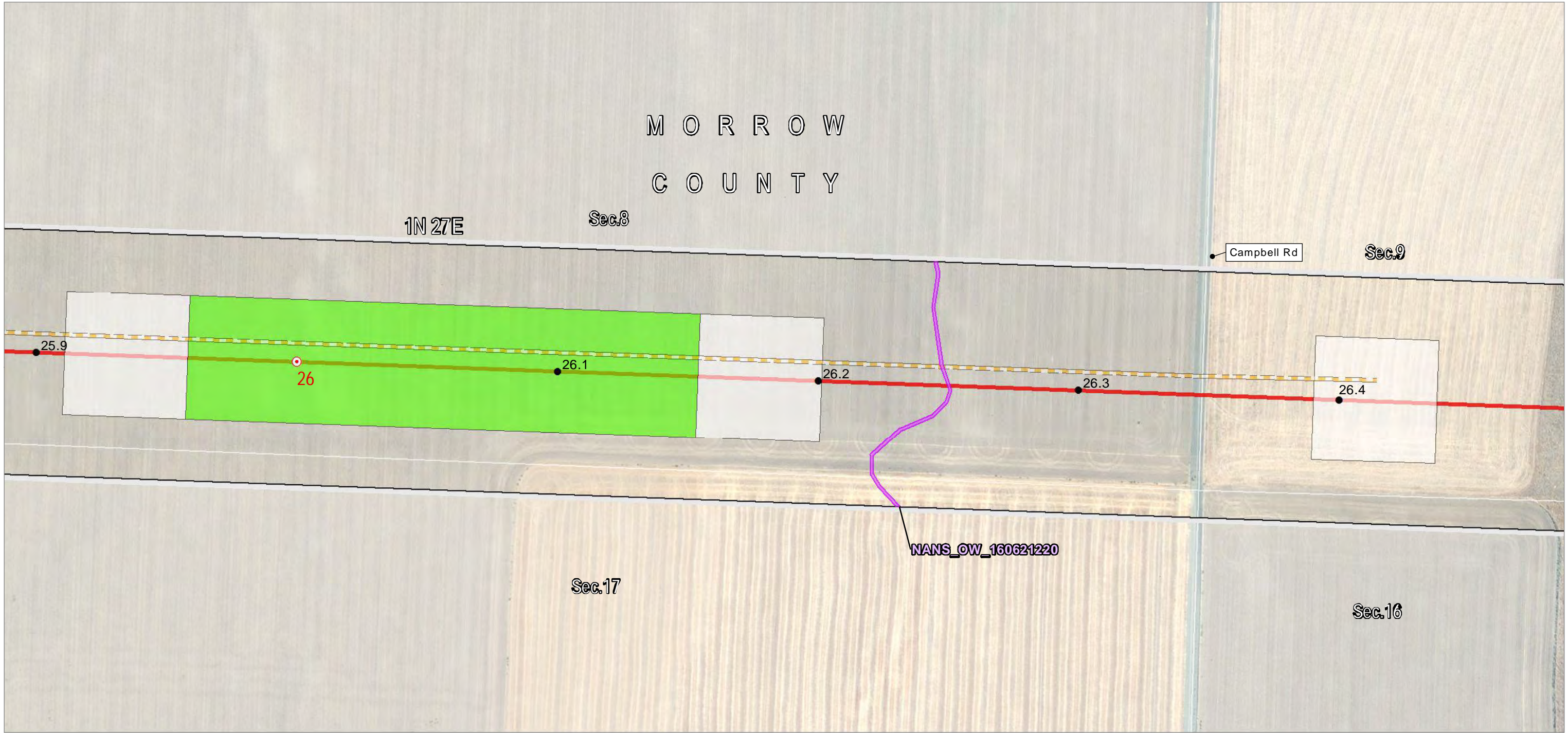


Boardman to Hemingway
Transmission Line Project

Attachment J1-18

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

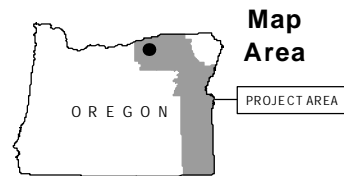
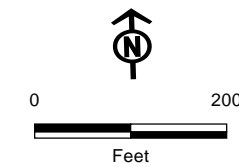
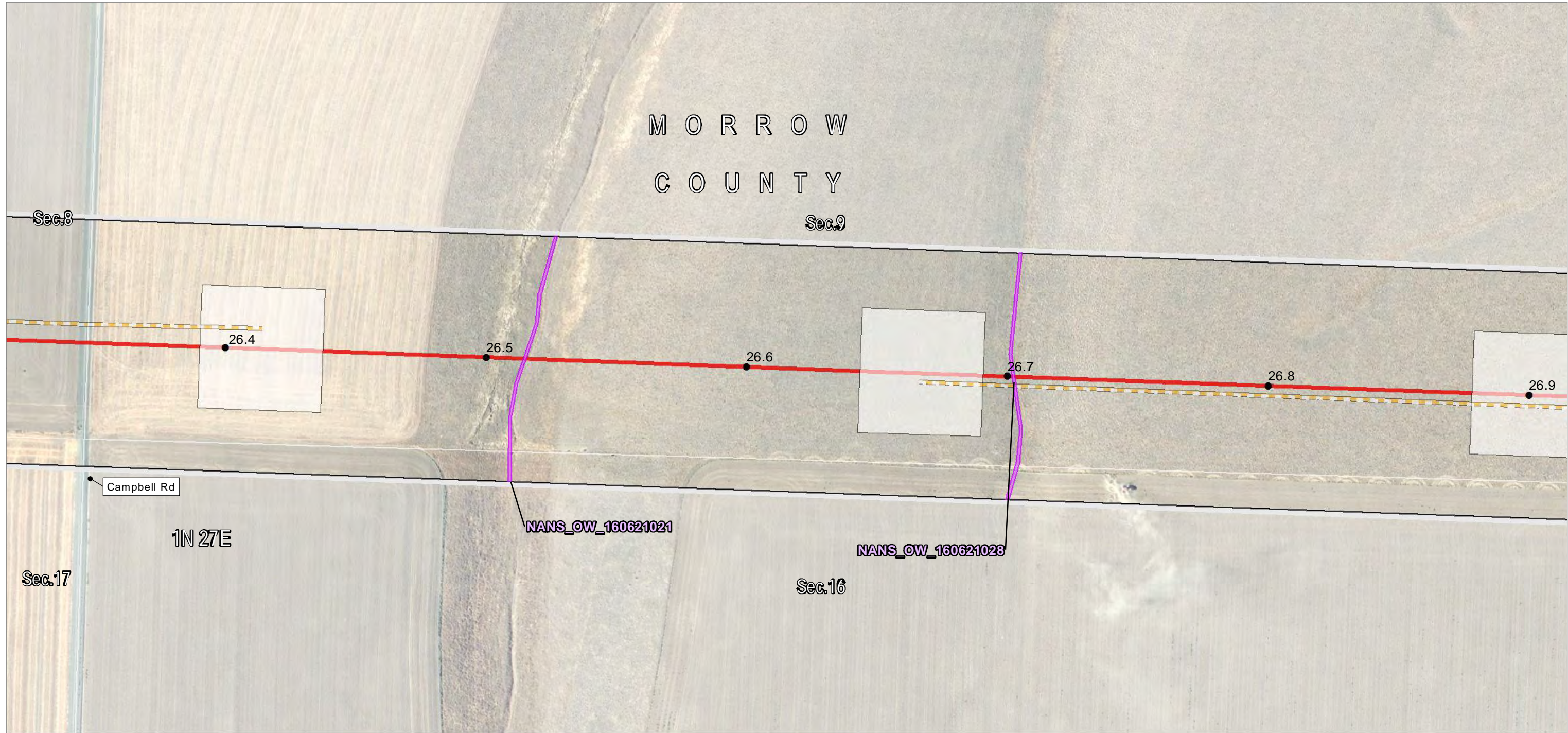


Boardman to Hemingway
Transmission Line Project

Attachment J1-19

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

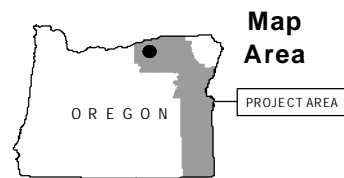
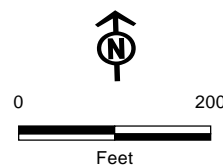
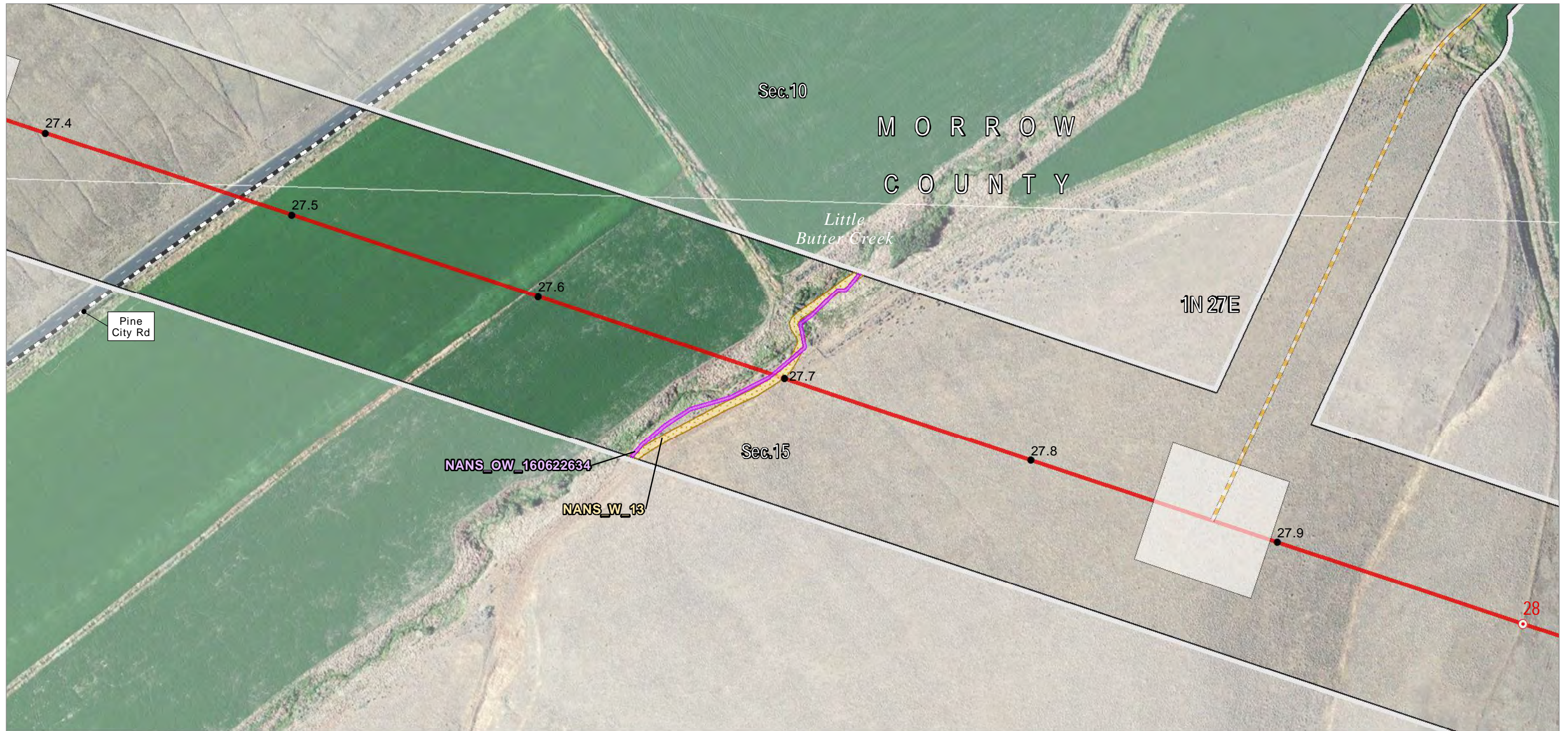


Boardman to Hemingway
Transmission Line Project

Attachment J1-20

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements
 - New Road, Primitive

Transportation

- Other Major Roads
- Other Waters
 - NANS Streams (NHD)
- Wetland
 - NANS Wetland (NWI)

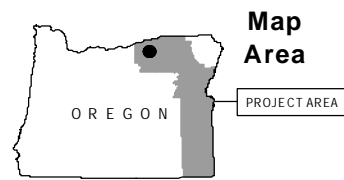
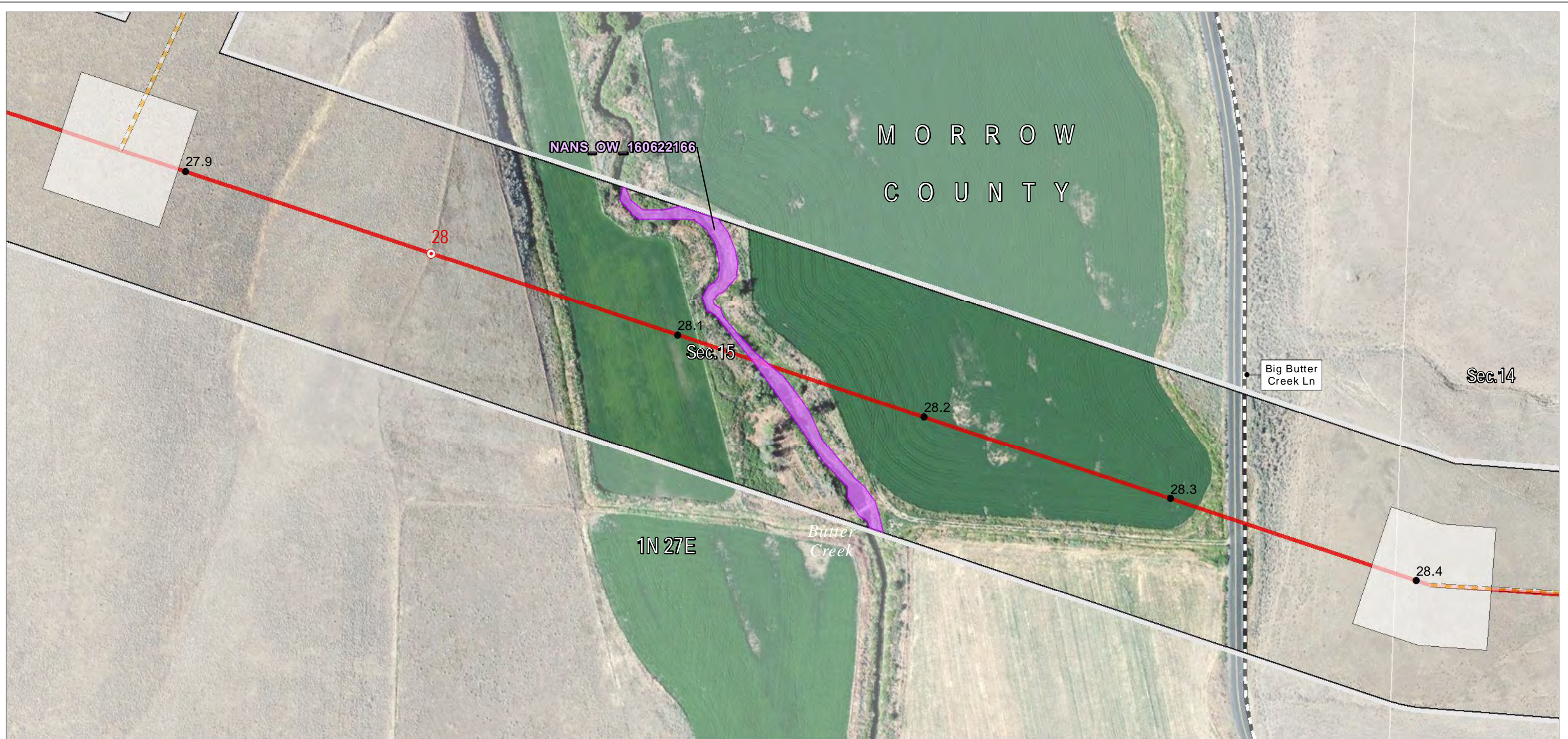


Boardman to Hemingway
Transmission Line Project

Attachment J1-21

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- New Road, Primitive

Transportation

- Other Major Roads

Other Waters

- NANS Streams (NHD)

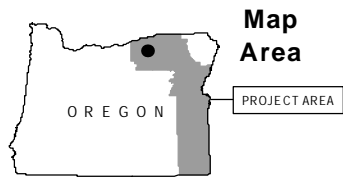
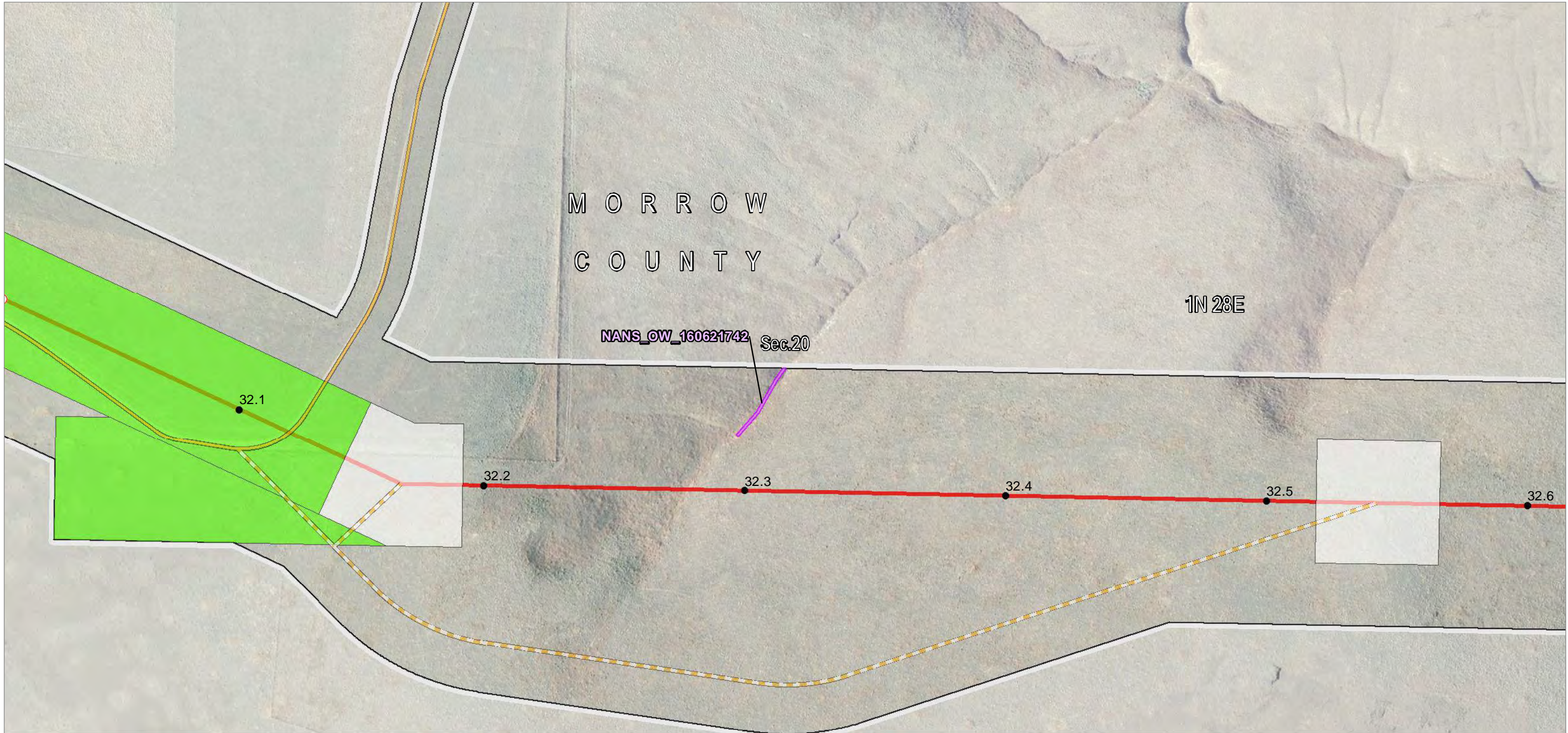


Boardman to Hemingway
Transmission Line Project

Attachment J1-22

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Primitive
- Other Waters
- NANS Streams (NHD)

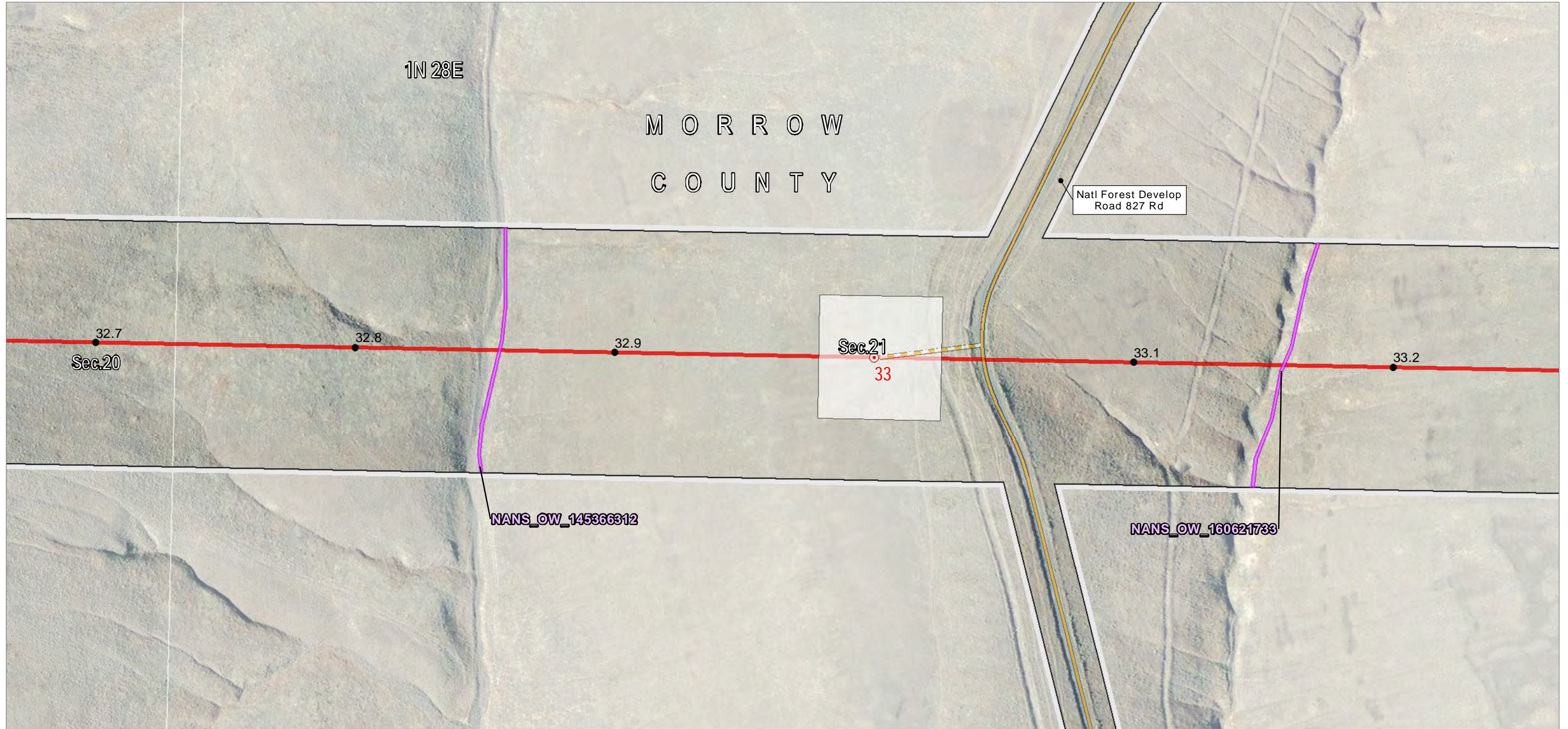


Boardman to Hemingway
Transmission Line Project

Attachment J1-23

**Wetland and Other Waters
Detail Maps**

Morrow County



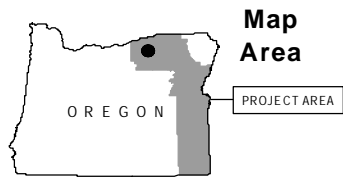
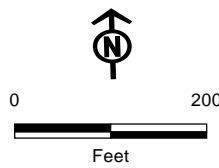
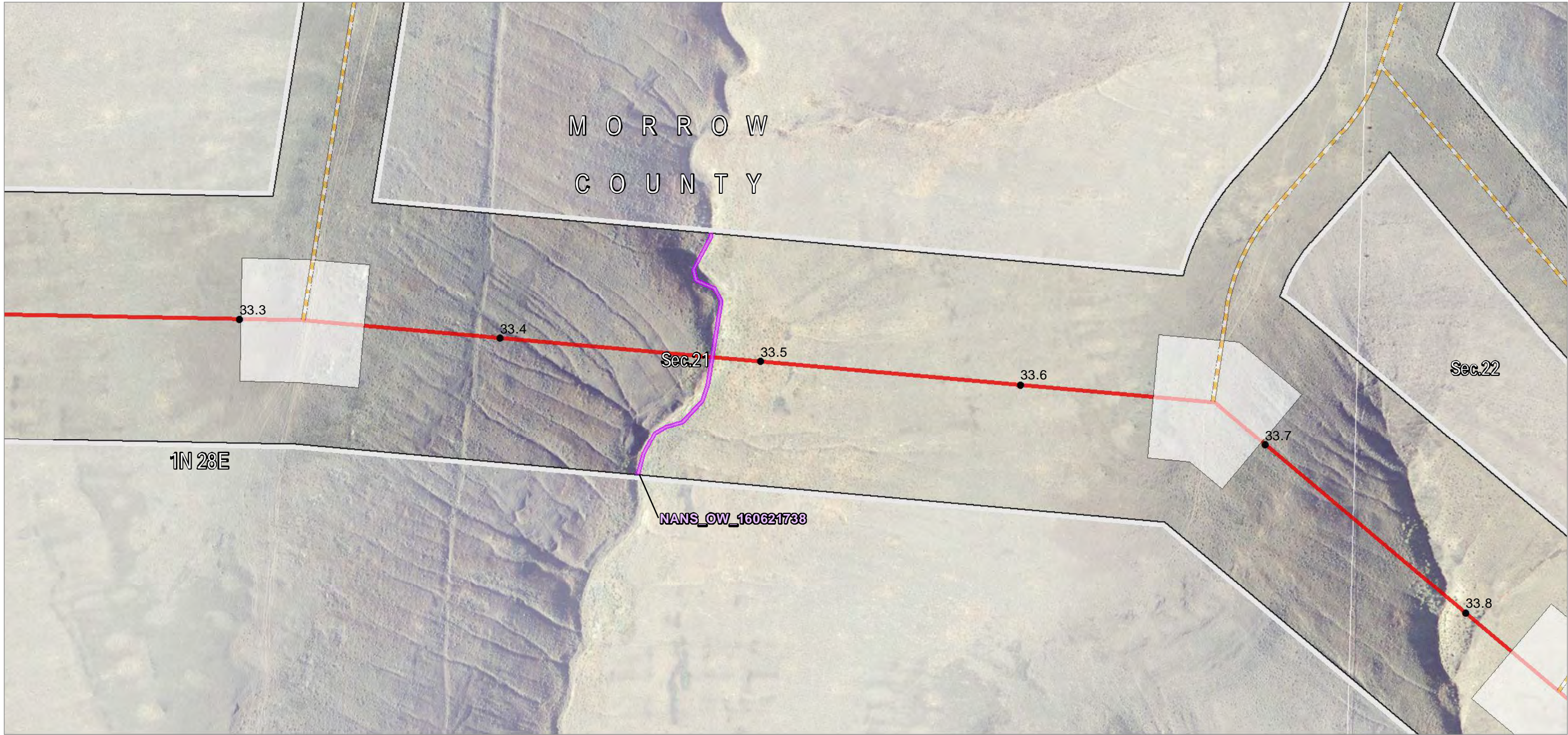
Map Area

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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- ⊙ Mile
 - Tenth-mile
- Construction Access**
- Existing Road, Substantial Modification, 21-70% Improvements
 - New Road, Primitive

- Other Waters**
- NANS Streams (NHD)



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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

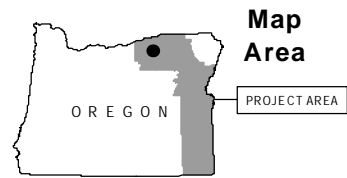
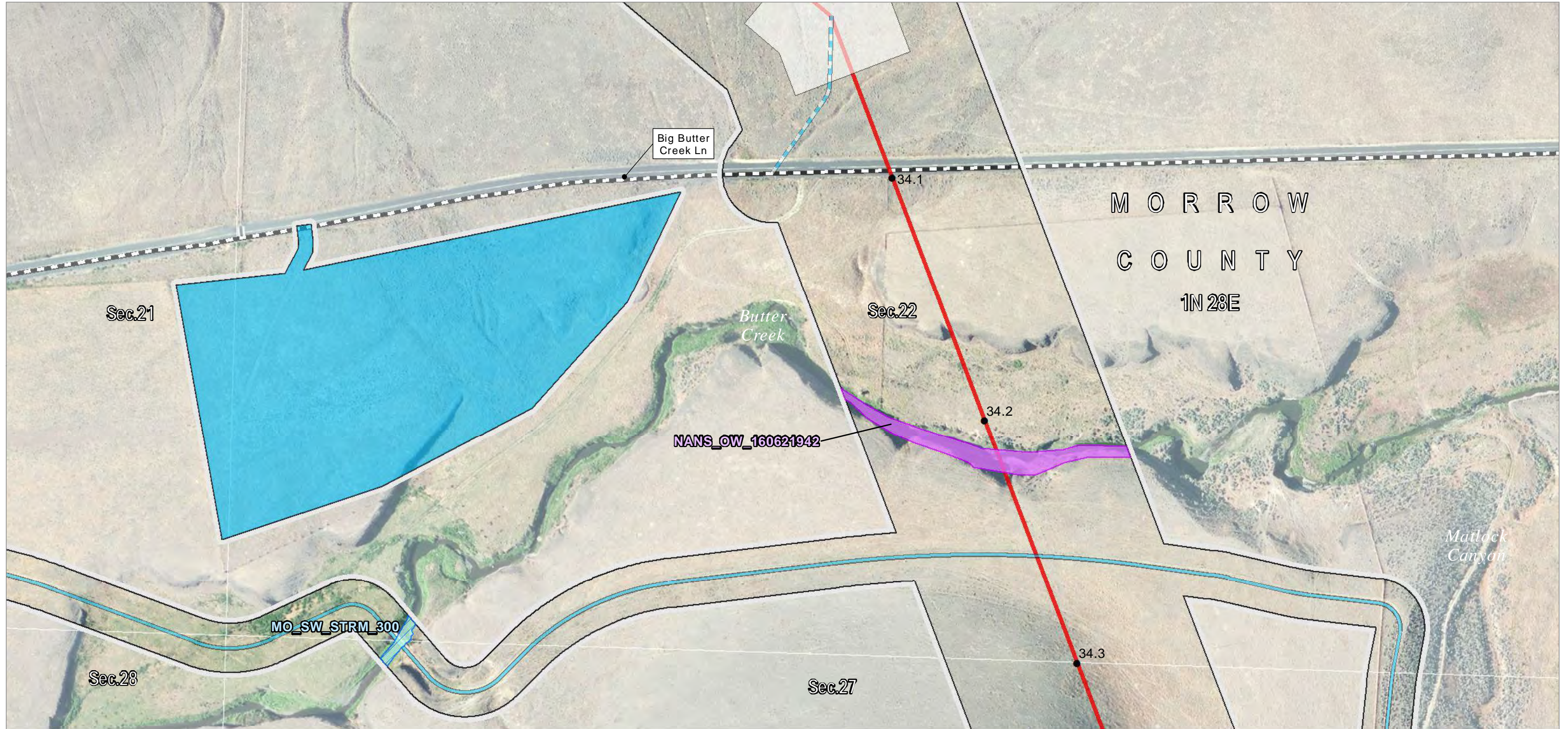


Boardman to Hemingway
Transmission Line Project

Attachment J1-25

**Wetland and Other Waters
Detail Maps**



Morrow 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

Project Features


Site Boundary


-  Proposed Route
-  Alternative Route

Route Centerline

-  Proposed Route

Work Areas


-  Multi-Use Area

-  Structure Work Area

Mileposts


-  Tenth-mile

Construction Access



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

-  New Road, Bladed

Transportation

-  Other Major Roads

Other Waters

-  Field Survey Streams
-  NANS Streams (NHD)

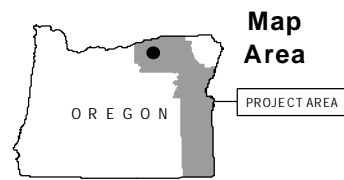
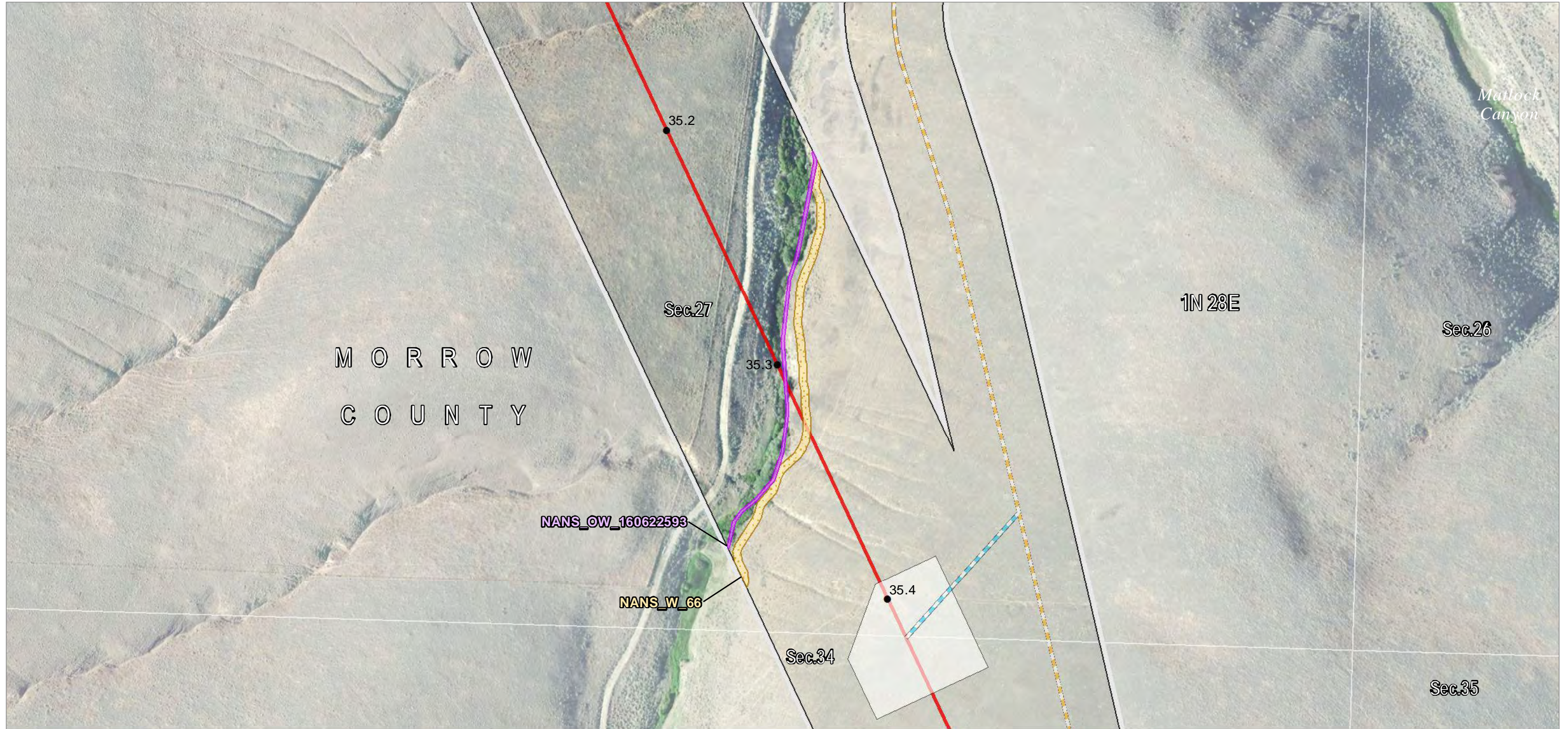


Boardman to Hemingway
Transmission Line Project

Attachment J1-26

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Construction Access

New Road, Bladed

New Road, Primitive

Other Waters

NANS Streams (NHD)

Wetland

NANS Wetland (NWI)

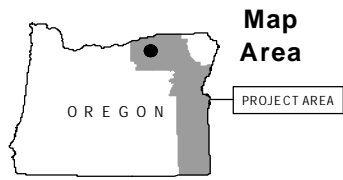
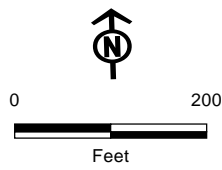


Boardman to Hemingway
Transmission Line Project

Attachment J1-27

Wetland and Other Waters
Detail Maps

Morrow 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

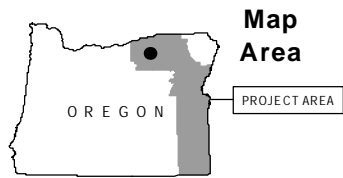
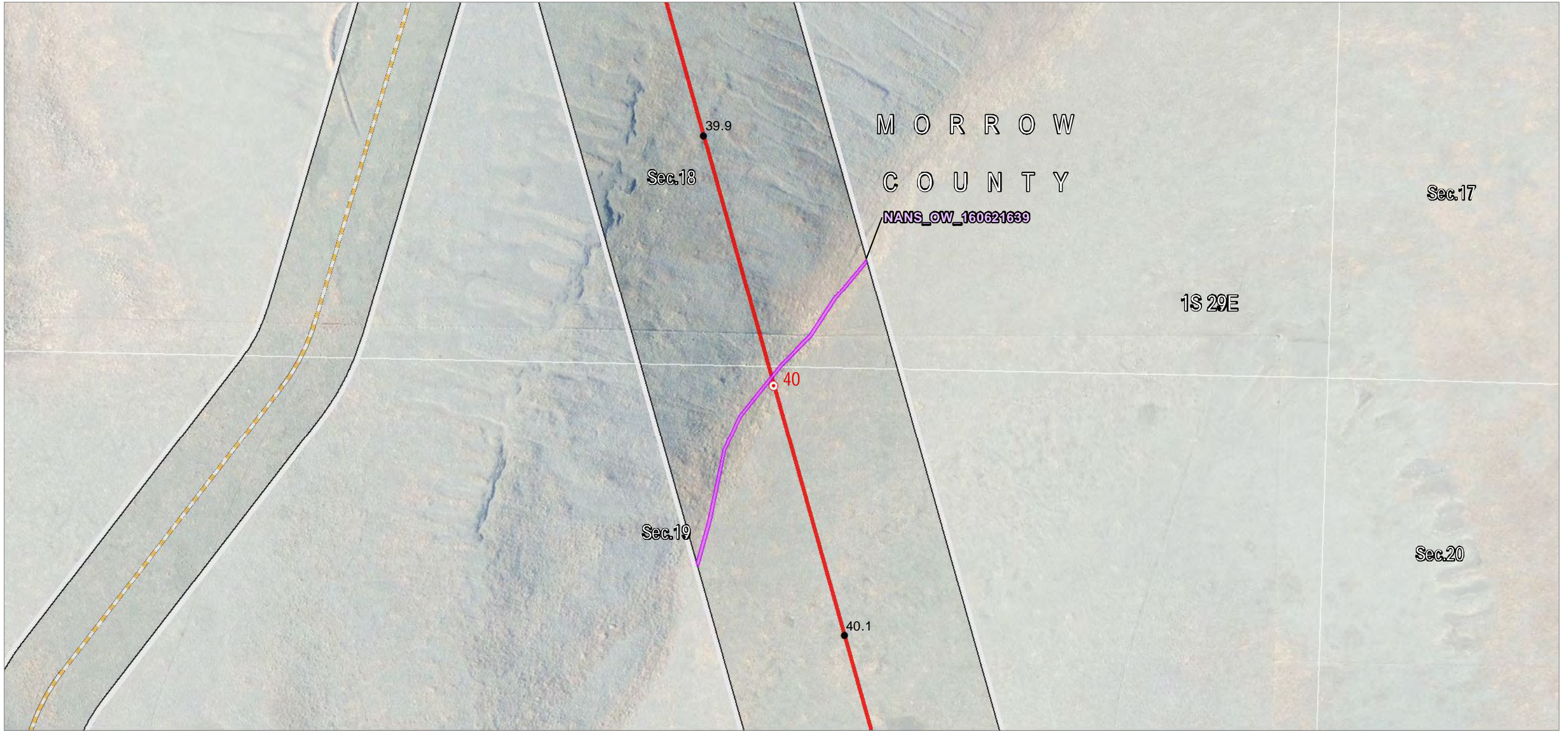
- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Work Areas
 - Multi-Use Area
 - Transportation
 - Other Major Roads

- Other Waters**
- Field Survey Streams



Boardman to Hemingway
Transmission Line Project

Attachment J1-28
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route
- Route Centerline

- Proposed Route

Mileposts

- Mile

Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

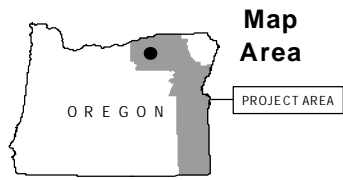
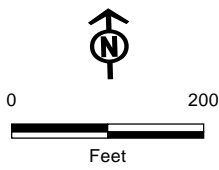
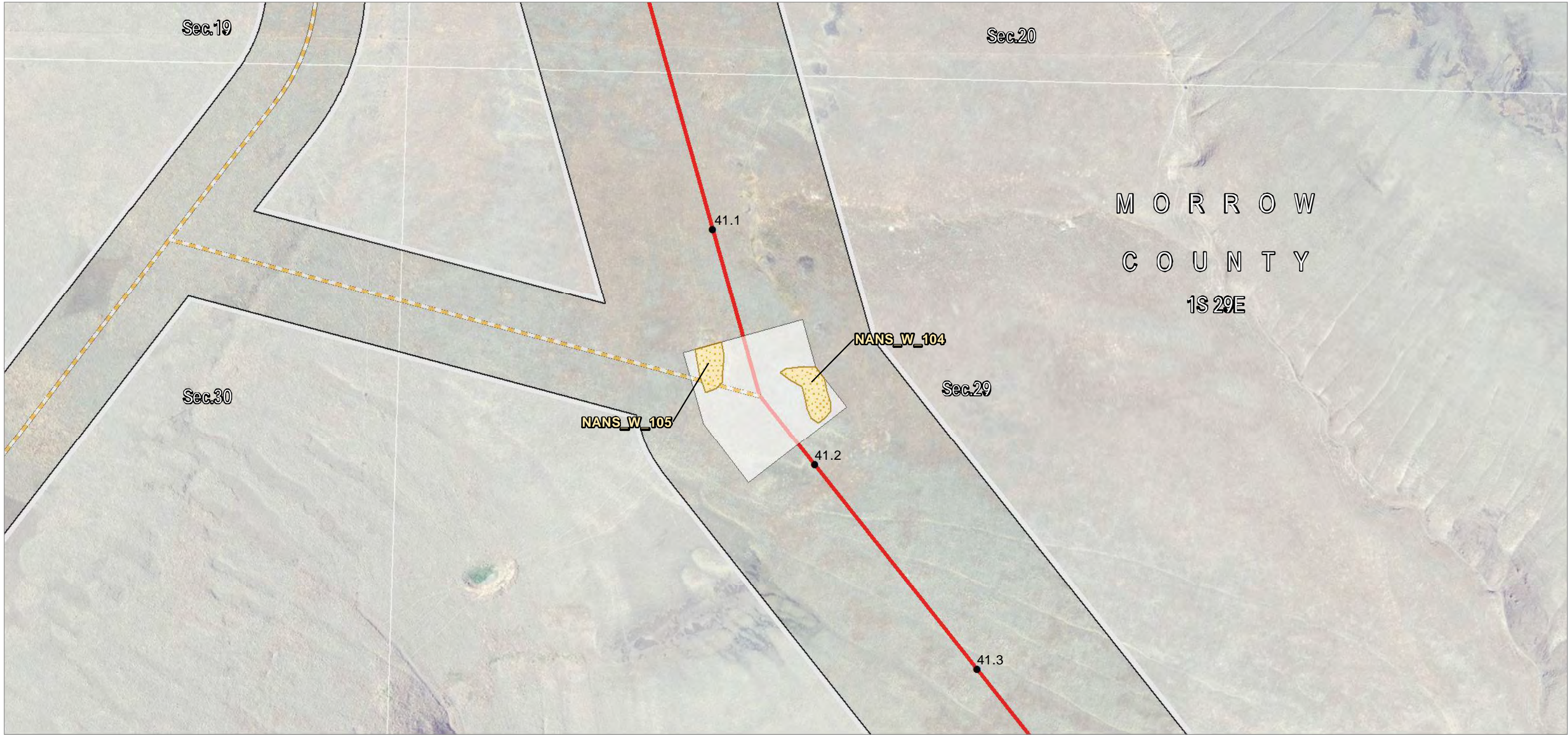


Boardman to Hemingway
Transmission Line Project

Attachment J1-29

Wetland and Other Waters
Detail Maps

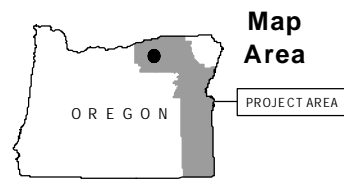
Morrow County



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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- Tenth-mile
- Construction Access**
- New Road, Primitive
- Wetland**
- NANS Wetland (NWI)



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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

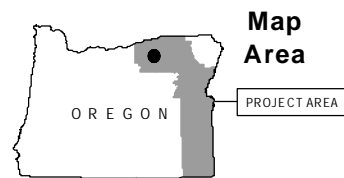


Boardman to Hemingway
Transmission Line Project

Attachment J1-31

**Wetland and Other Waters
Detail Maps**

Morrow County



Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed

Other Waters

- NANS Streams (NHD)

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

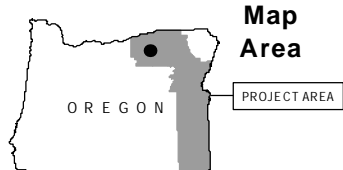
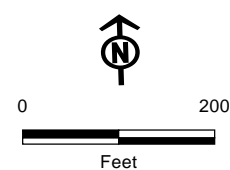
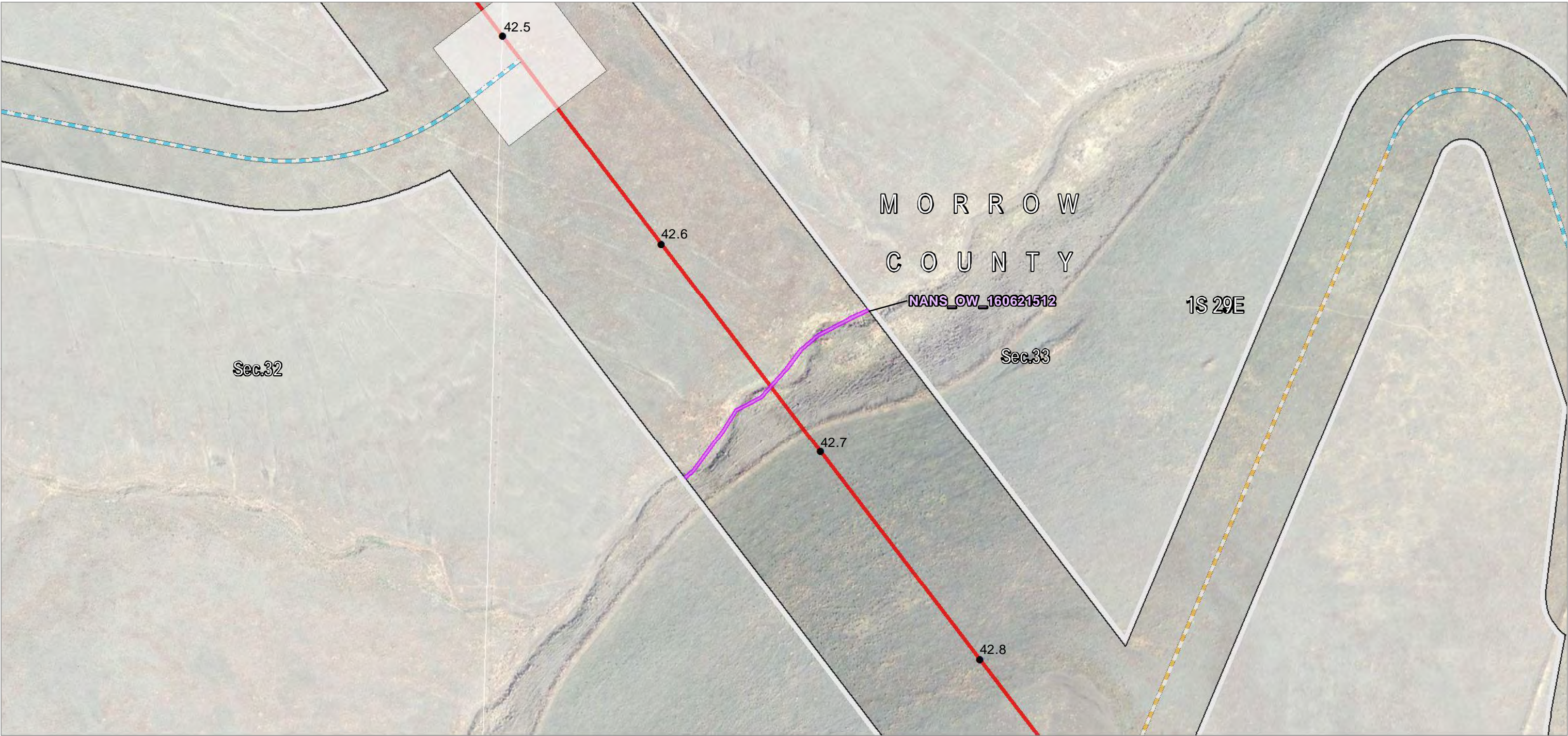


Boardman to Hemingway
Transmission Line Project

Attachment J1-32

**Wetland and Other Waters
Detail Maps**

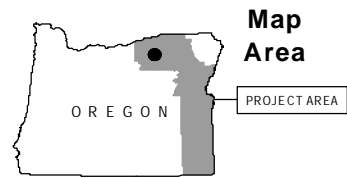
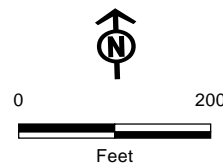
Morrow County



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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- Tenth-mile
- Construction Access**
- New Road, Bladed
 - New Road, Primitive
- Other Waters**
- NANS Streams (NHD)



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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

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

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

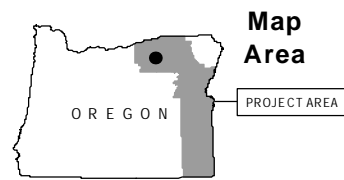
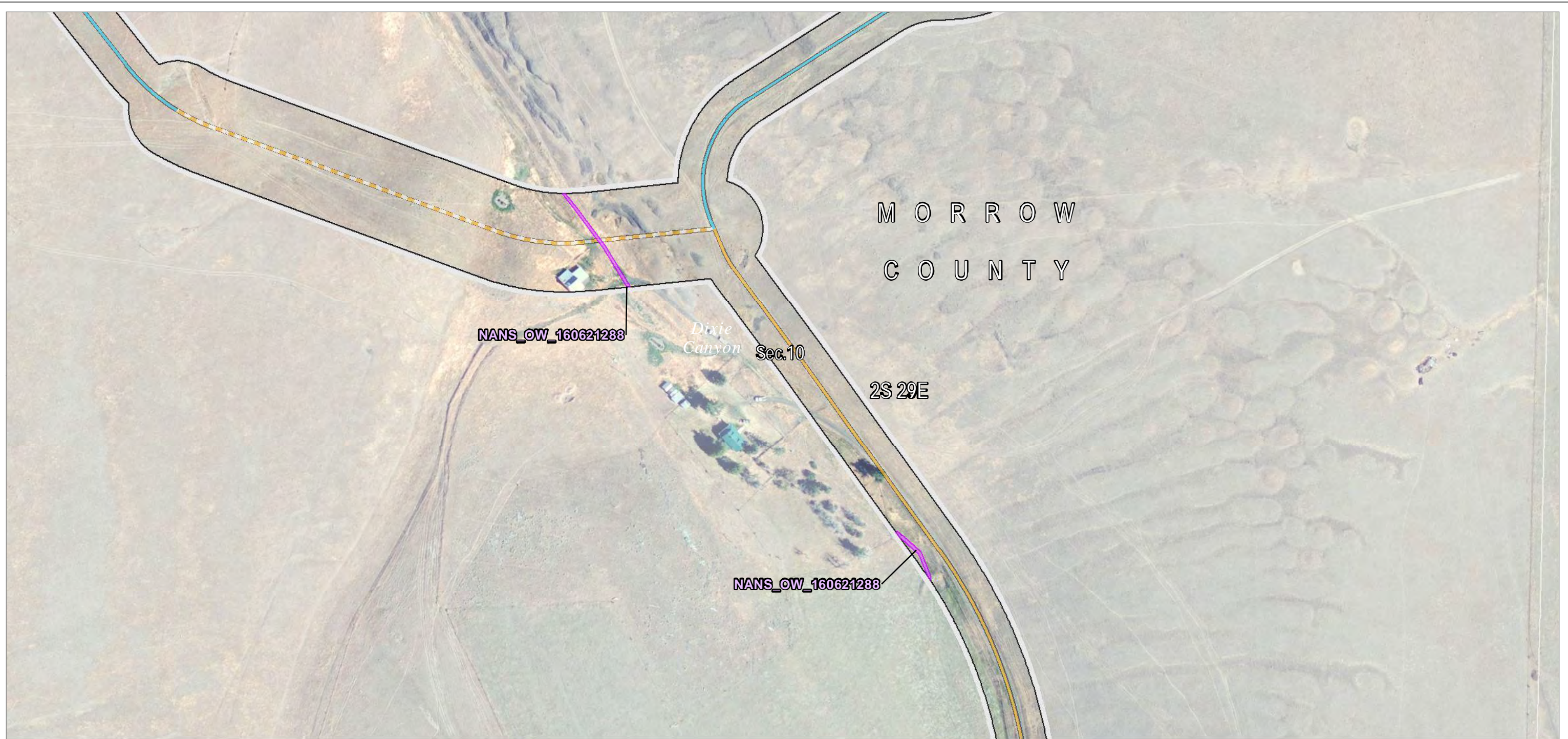


Boardman to Hemingway
Transmission Line Project

Attachment J1-34

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Construction Access

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

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

Other Waters

- NANS Streams (NHD)

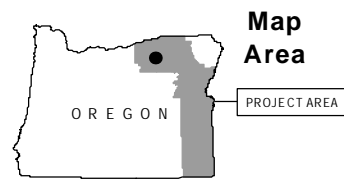


Boardman to Hemingway
Transmission Line Project

Attachment J1-36

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial
Modification, 21-70%
Improvements

Other Waters

NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-37

**Wetland and Other Waters
Detail Maps**

Morrow County

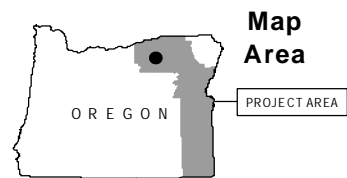
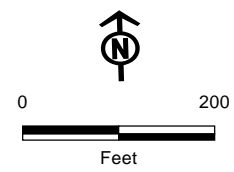
MORROW COUNTY

Dixie
Canyon

2S 29E

Sec.14

NANS_OW_160621238



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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial
Modification, 21-70%
Improvements

Other Waters

NANS Streams (NHD)

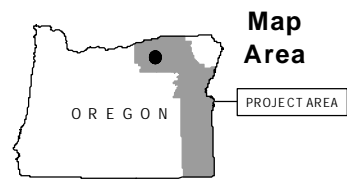
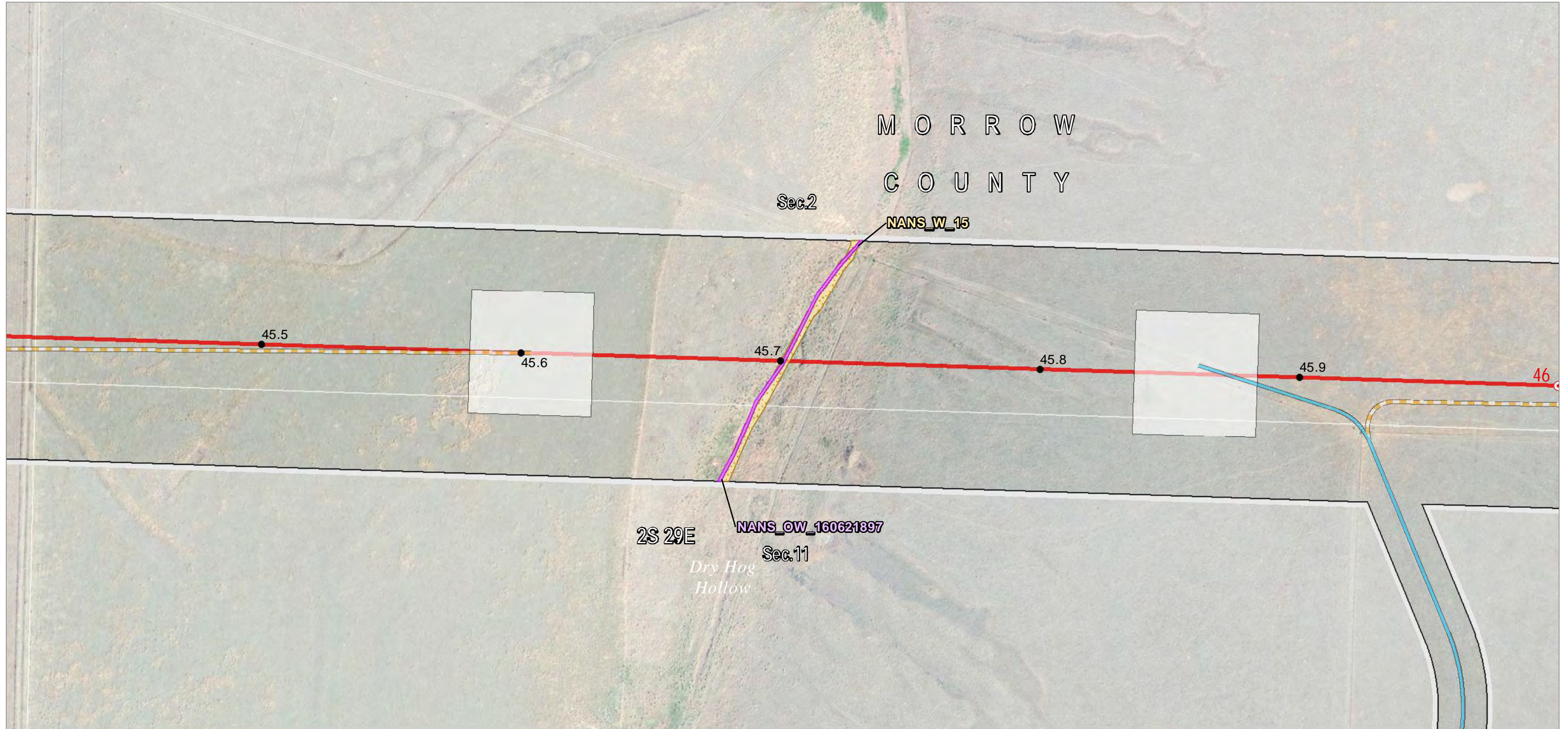


Boardman to Hemingway
Transmission Line Project

Attachment J1-38

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

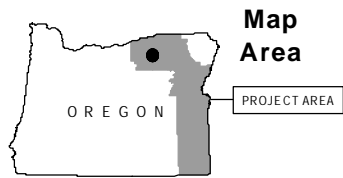
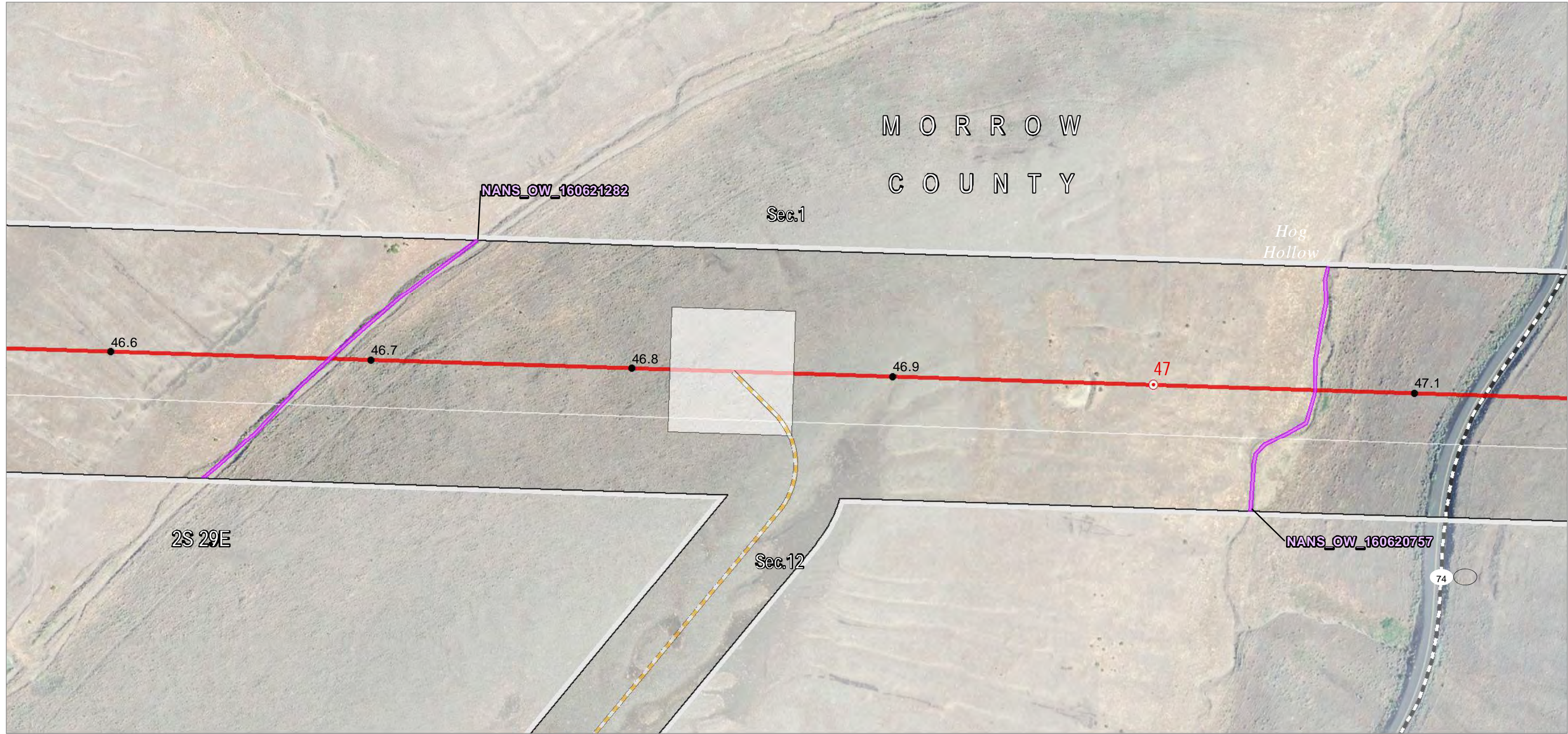


Boardman to Hemingway
Transmission Line Project

Attachment J1-39

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- New Road, Primitive

Transportation

- Other Major Roads

Other Waters

- NANS Streams (NHD)

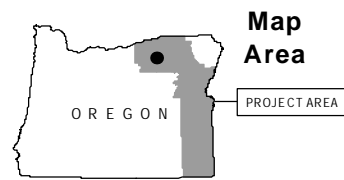


Boardman to Hemingway
Transmission Line Project

Attachment J1-40

**Wetland and Other Waters
Detail Maps**

Morrow 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

County Boundary

Other Waters

NANS Streams (NHD)

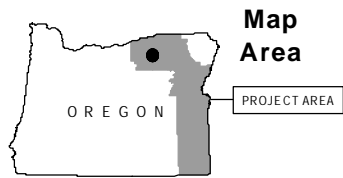
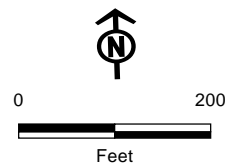
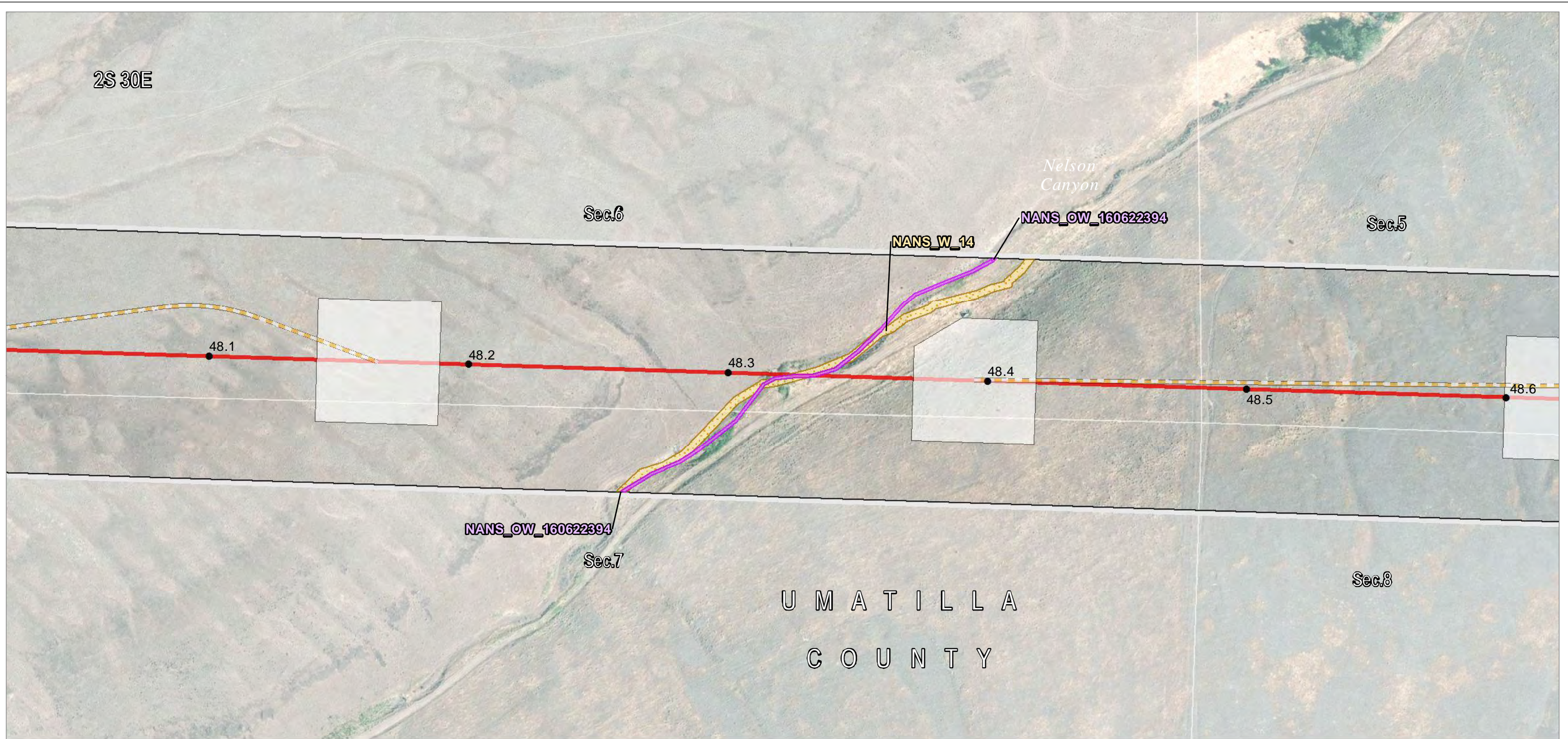


Boardman to Hemingway
Transmission Line Project

Attachment J1-41

Wetland and Other Waters Detail Maps

Morrow 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route
- Route Centerline

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

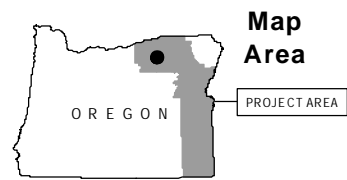
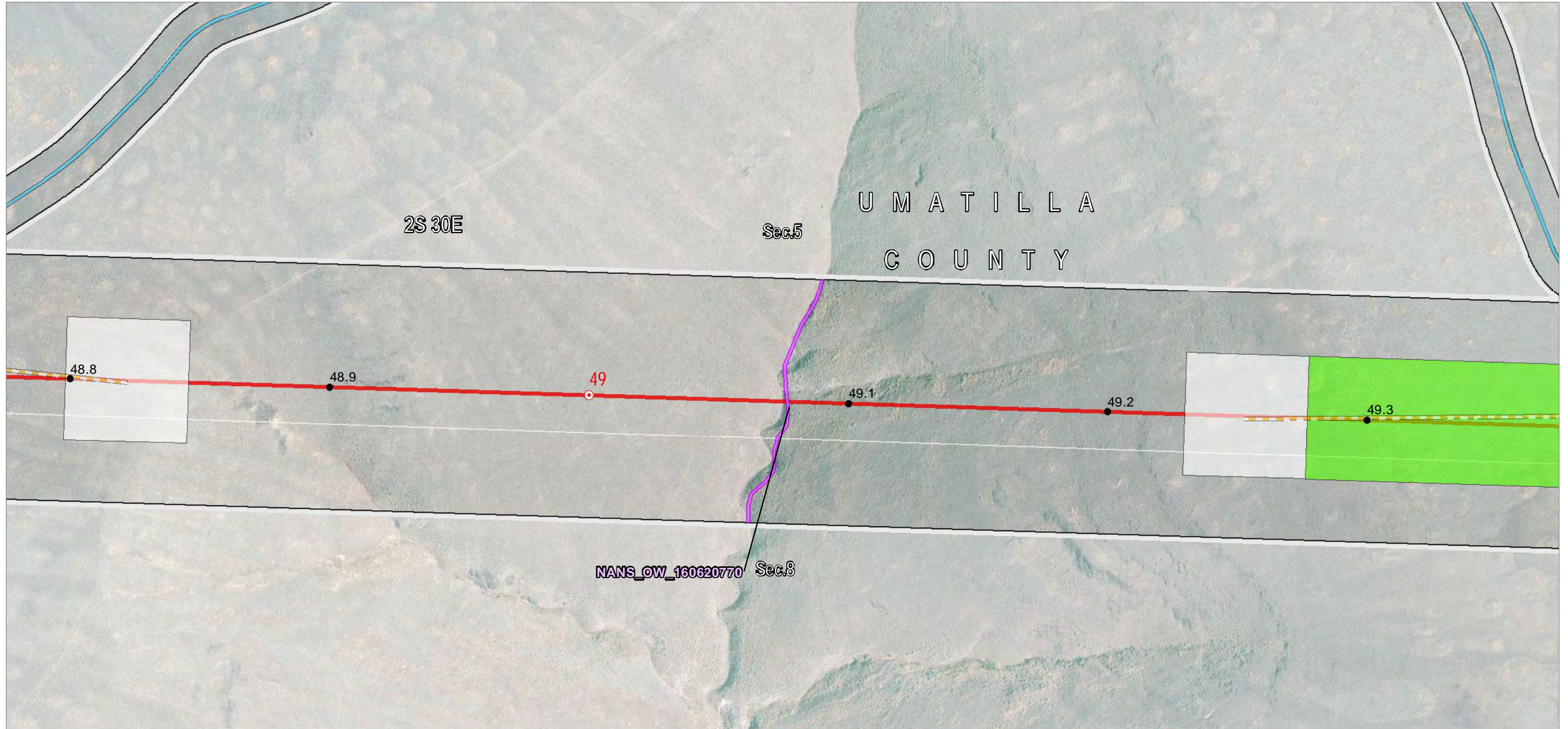


Boardman to Hemingway
Transmission Line Project

Attachment J1-42

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements

- New Road, Primitive
- Other Waters
- NANS Streams (NHD)

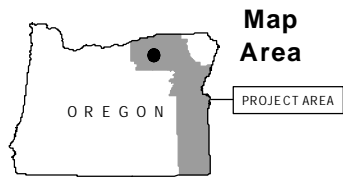
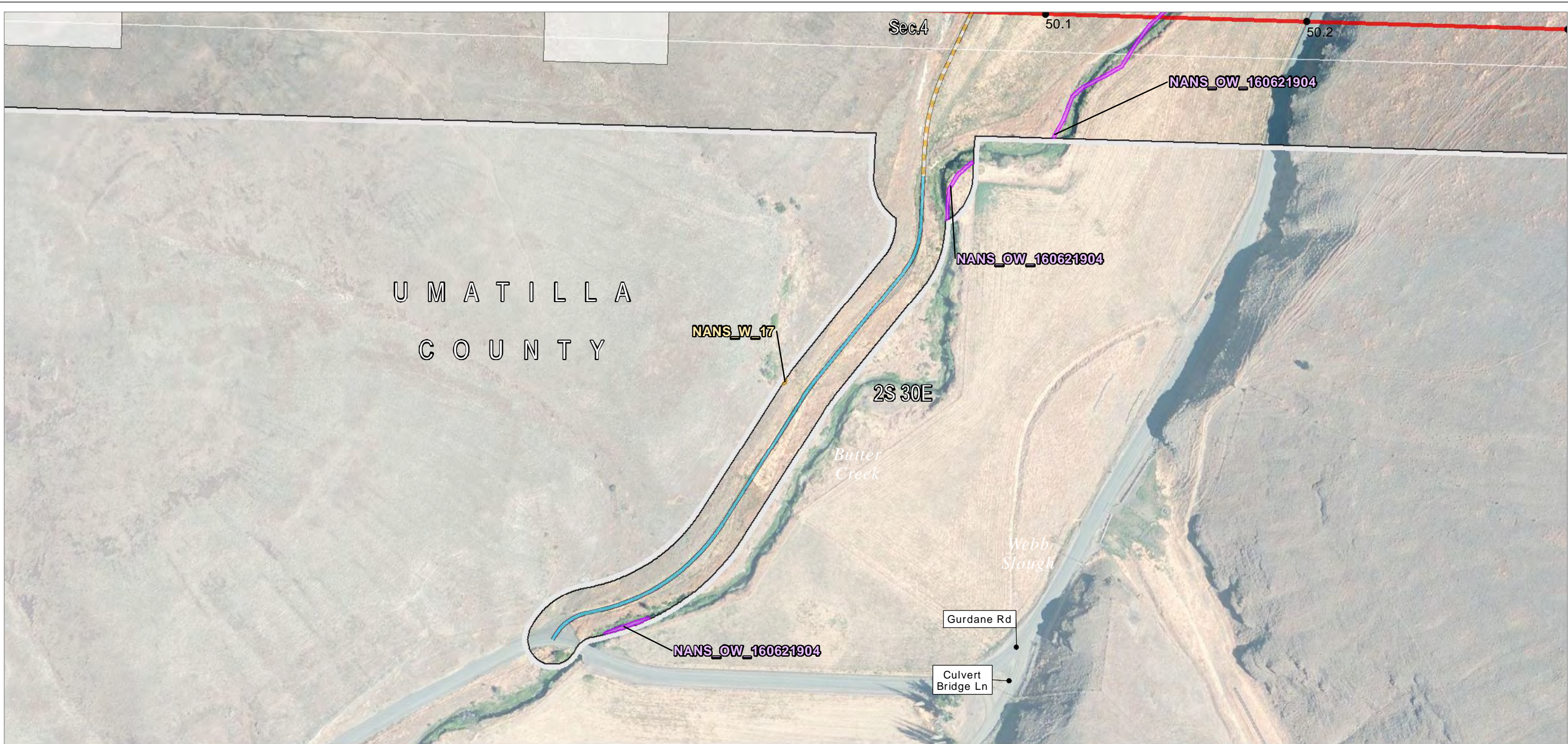


Boardman to Hemingway
Transmission Line Project

Attachment J1-43

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Primitive

Other Waters

- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)

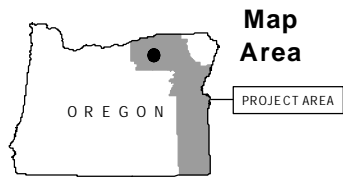
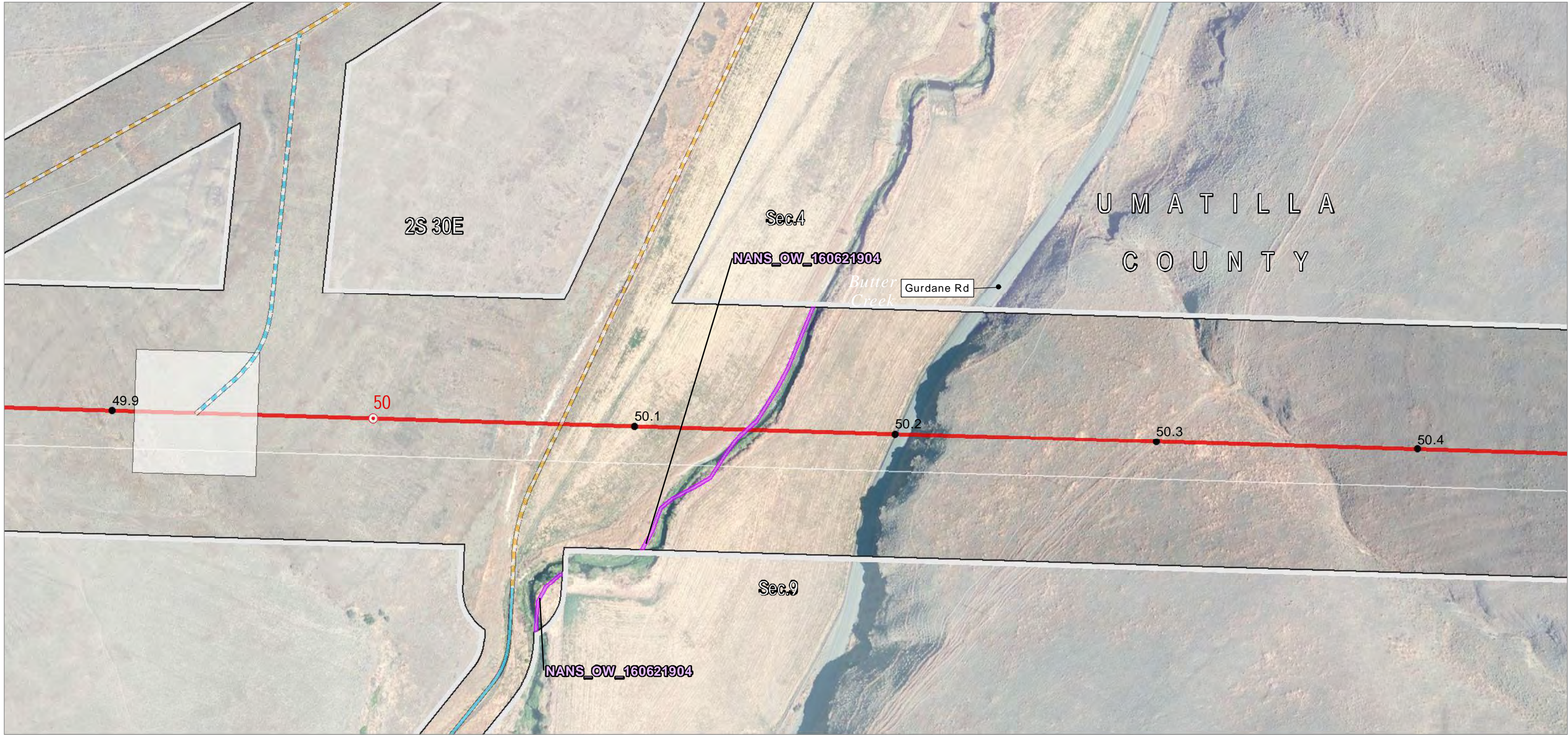


Boardman to Hemingway
Transmission Line Project

Attachment J1-44

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

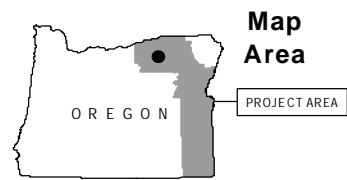
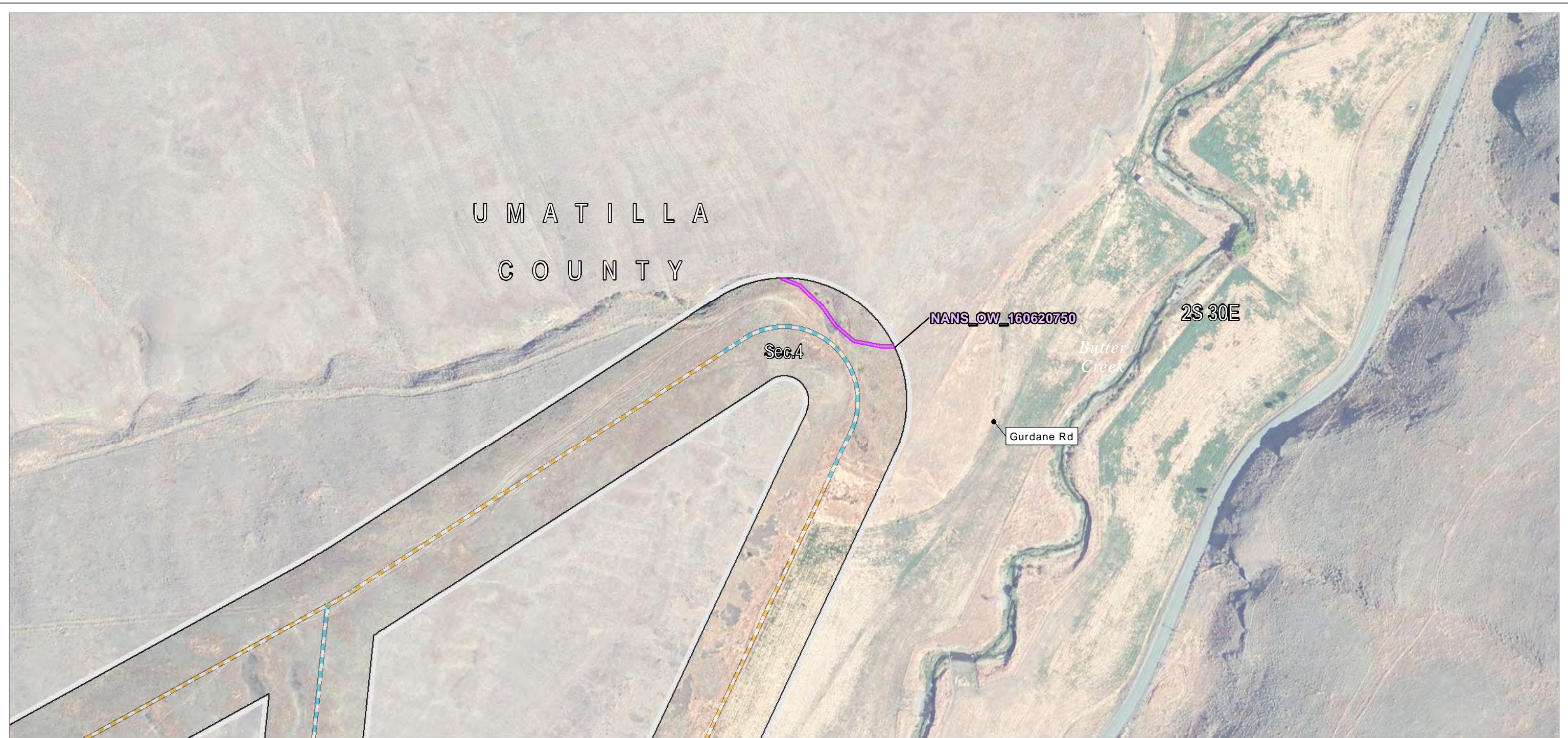


Boardman to Hemingway
Transmission Line Project

Attachment J1-45

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

- Site Boundary
- Proposed Route
- Alternative Route
- Construction Access
- New Road, Bladed
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

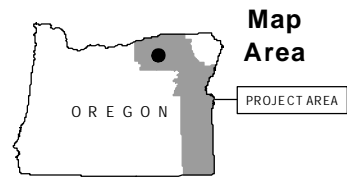
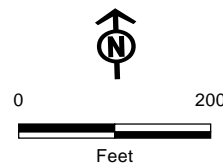
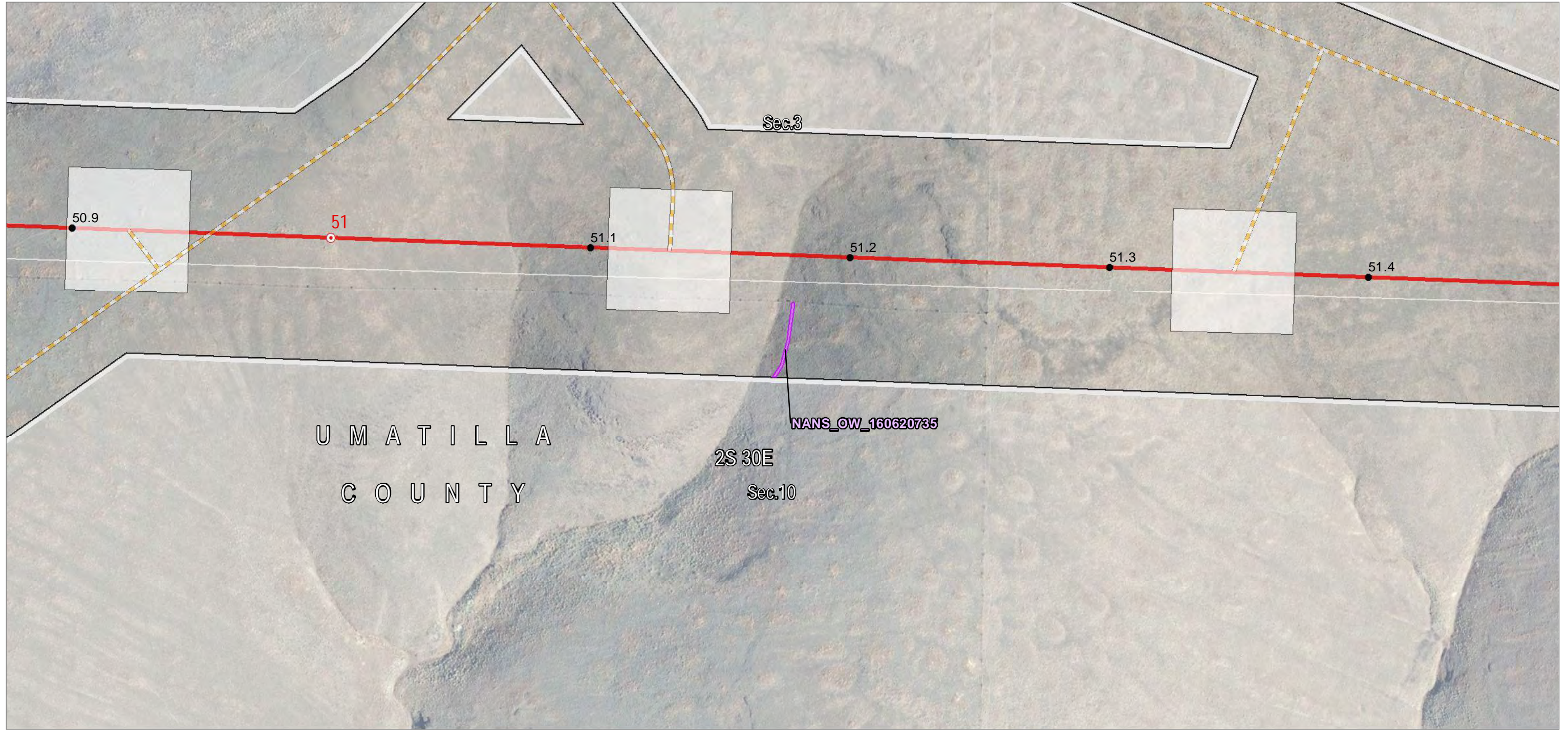


Boardman to Hemingway
Transmission Line Project

Attachment J1-46

Wetland and Other Waters
Detail Maps

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

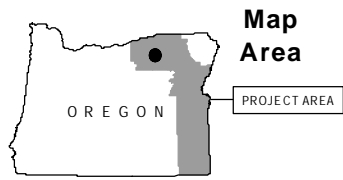
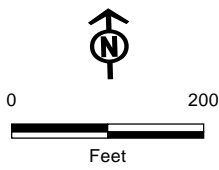
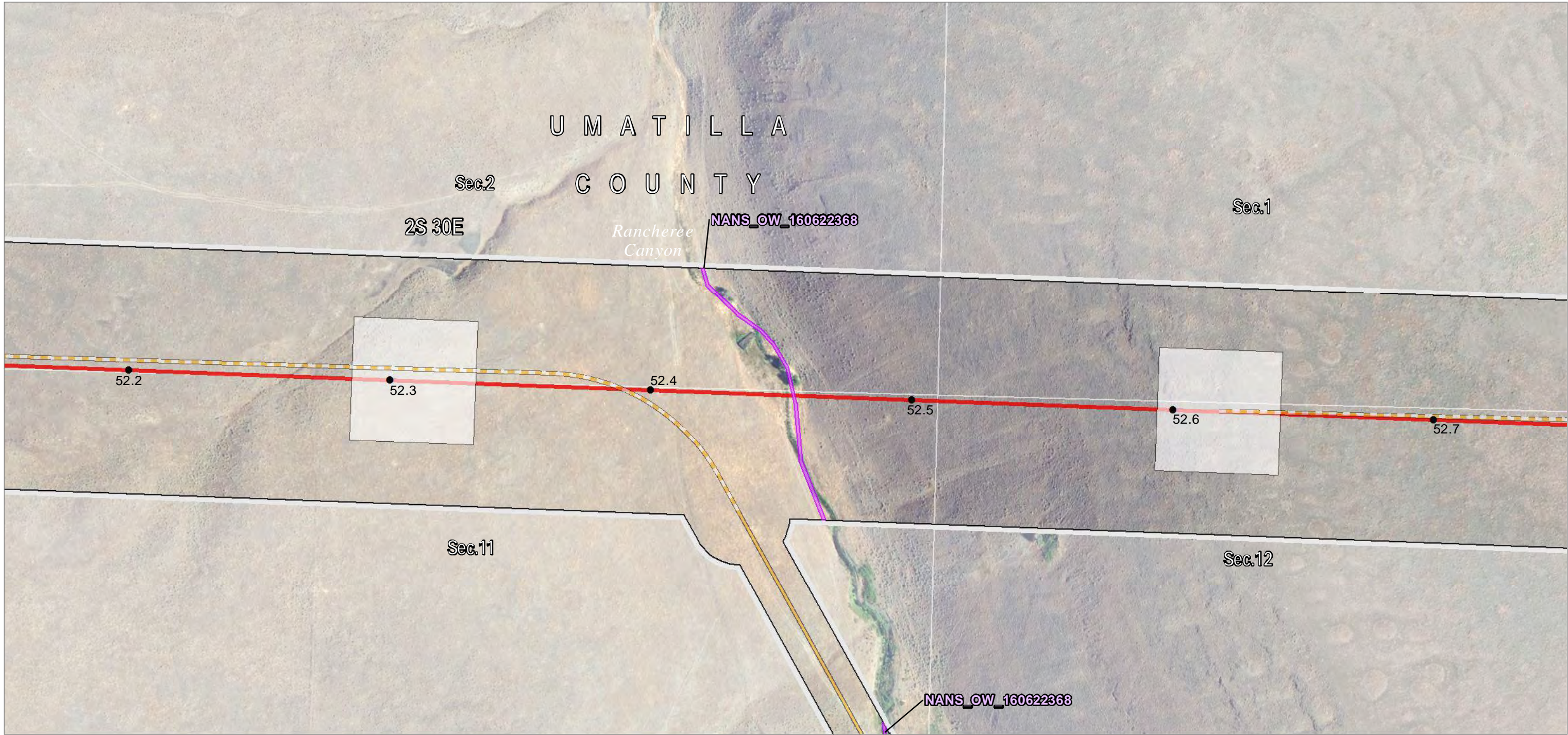


Boardman to Hemingway
Transmission Line Project

Attachment J1-47

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

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

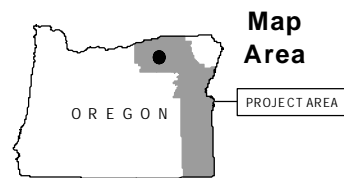
Other Waters

- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-48
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Other Waters

NANS Streams (NHD)



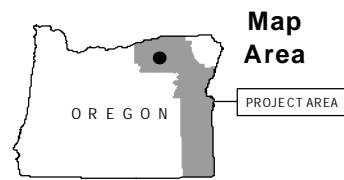
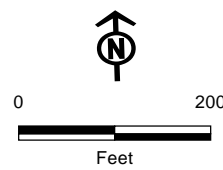
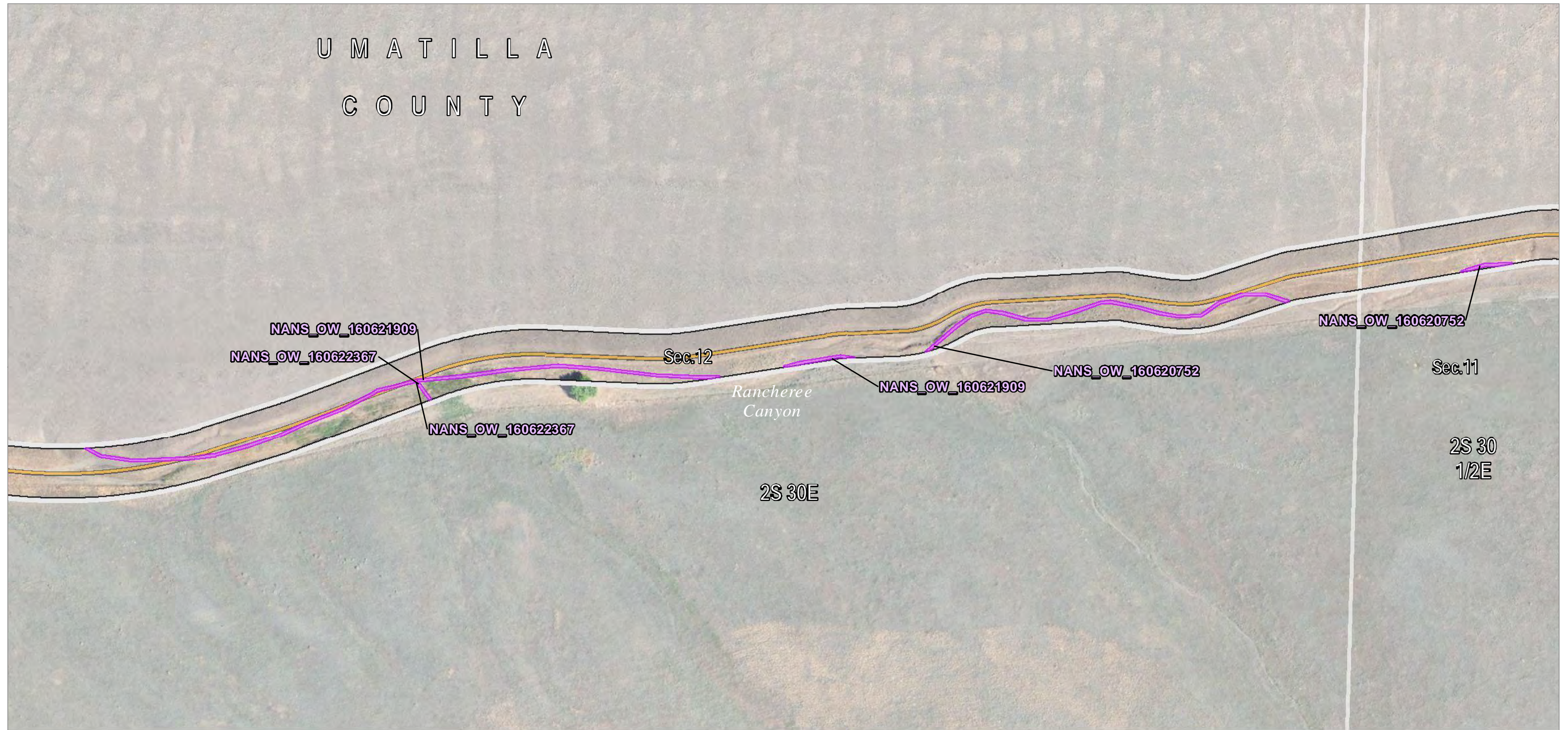
Boardman to Hemingway
Transmission Line Project

Attachment J1-49

**Wetland and Other Waters
Detail Maps**

Umatilla County

U M A T I L L A 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial
Modification, 21-70%
Improvements

Other Waters

NANS Streams (NHD)

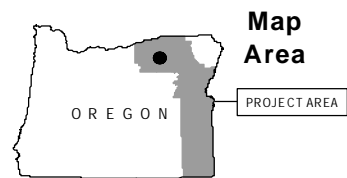


Boardman to Hemingway
Transmission Line Project

Attachment J1-50

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Other Waters

NANS Streams (NHD)

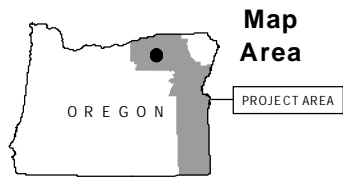
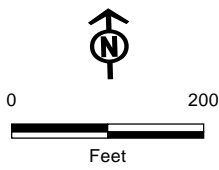
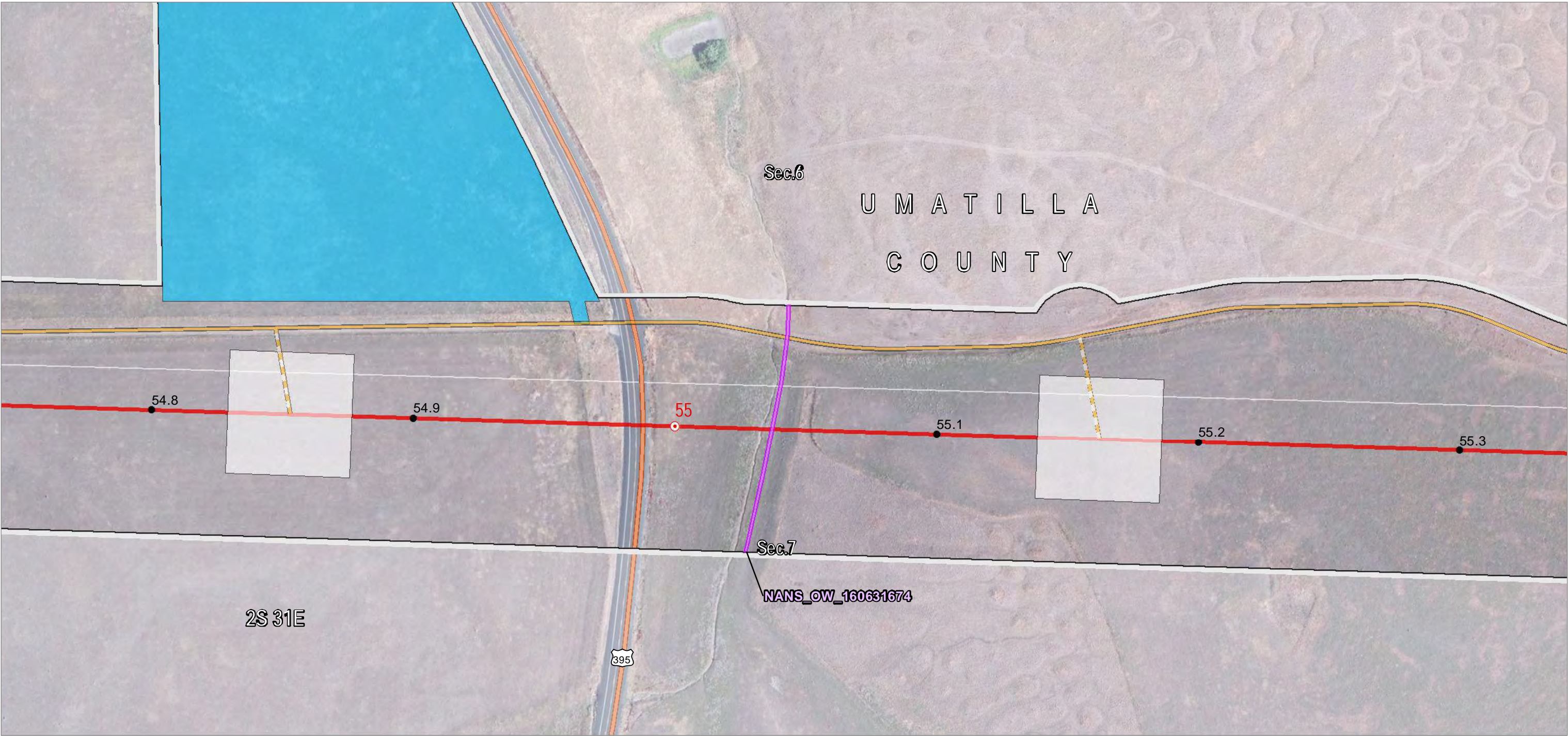


Boardman to Hemingway
Transmission Line Project

Attachment J1-51

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Multi-Use Area

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

- New Road, Primitive

Transportation

- Interstates or Highways

Other Waters

- NANS Streams (NHD)

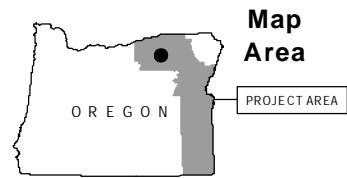
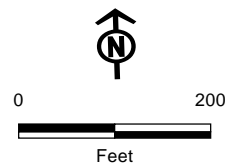
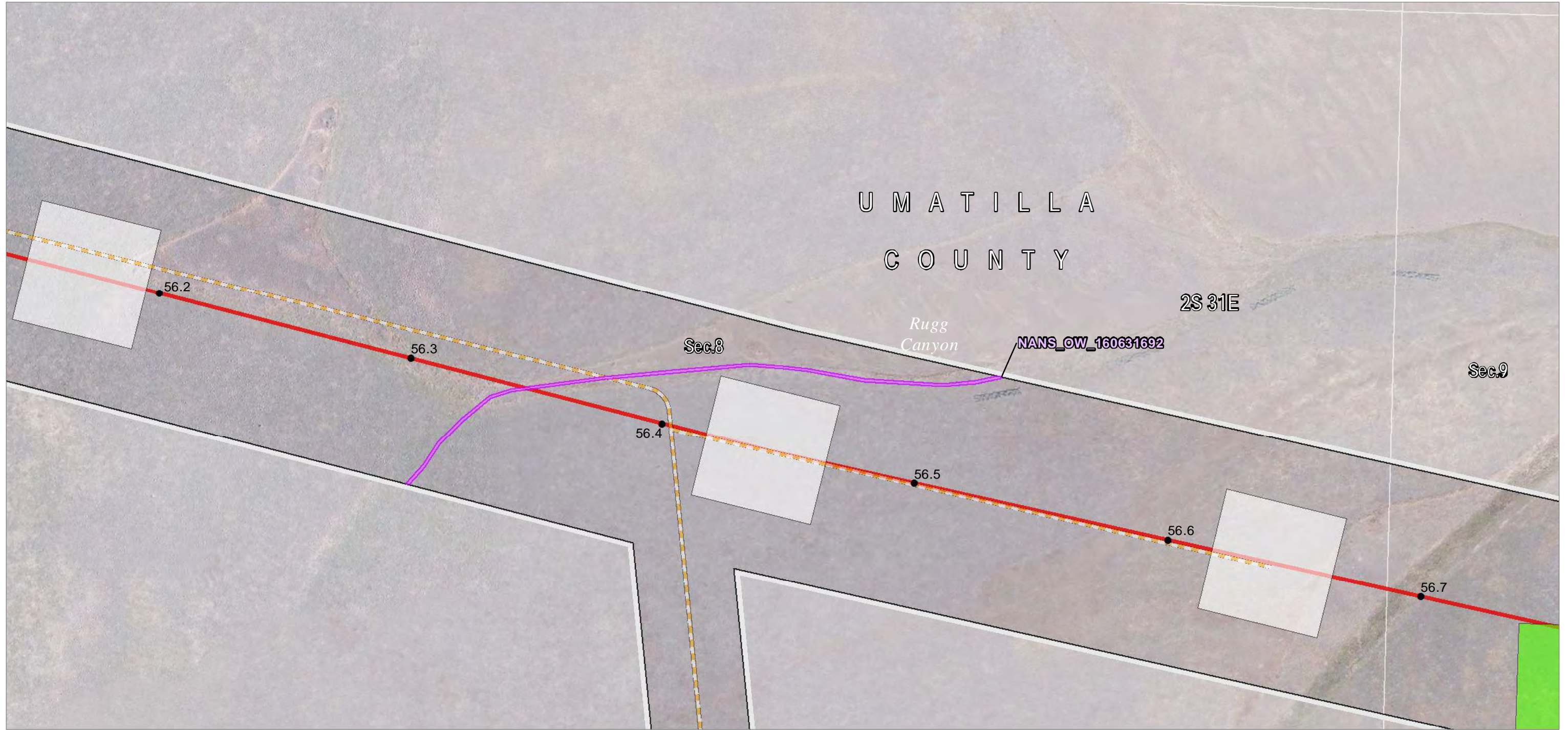


Boardman to Hemingway
Transmission Line Project

Attachment J1-52

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

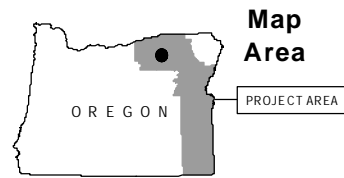
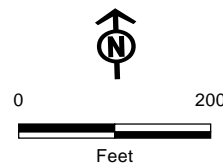
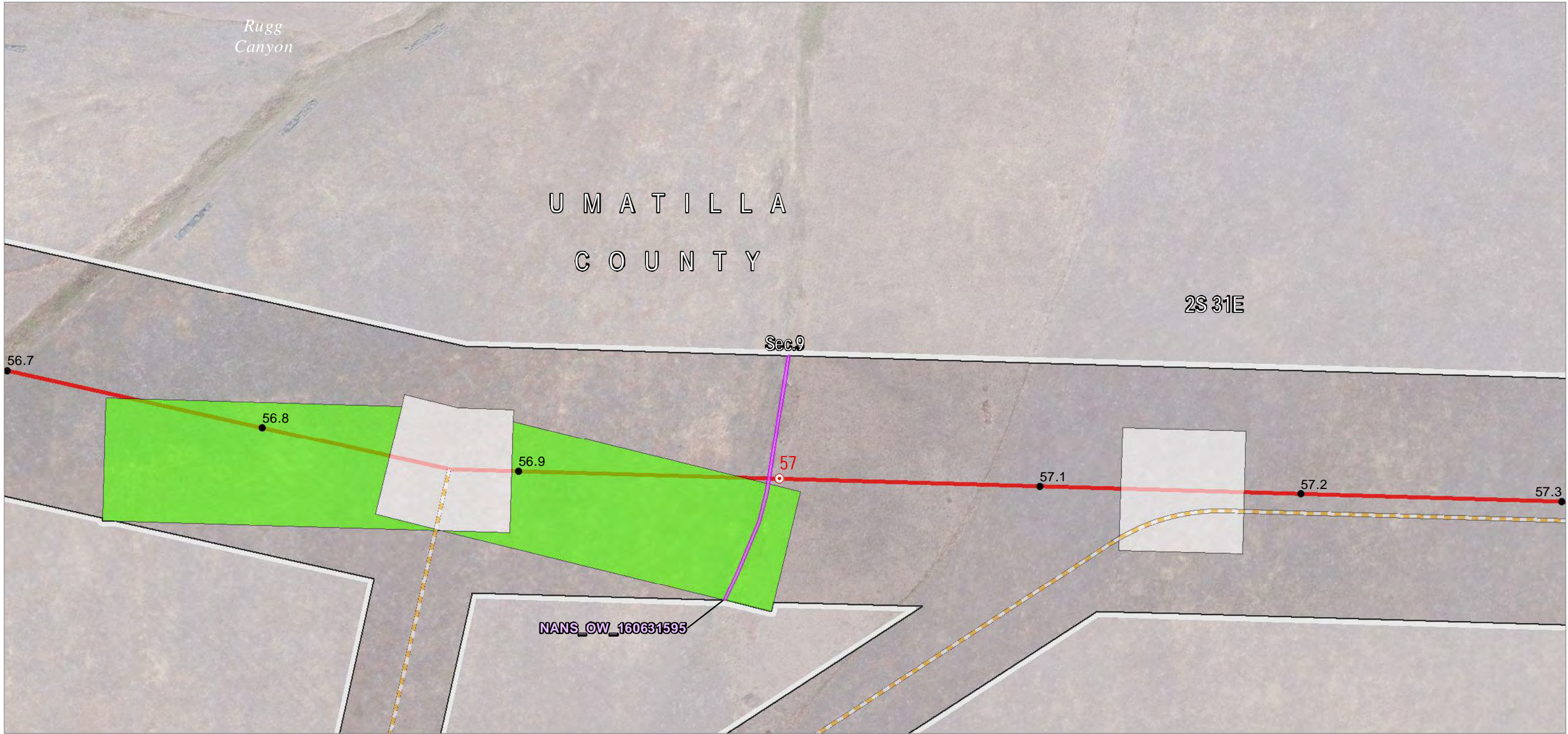


Boardman to Hemingway
Transmission Line Project

Attachment J1-53

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

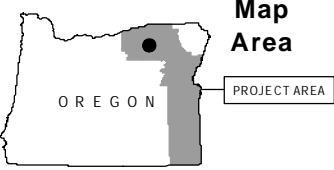
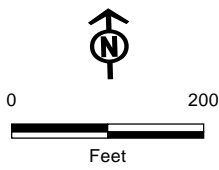
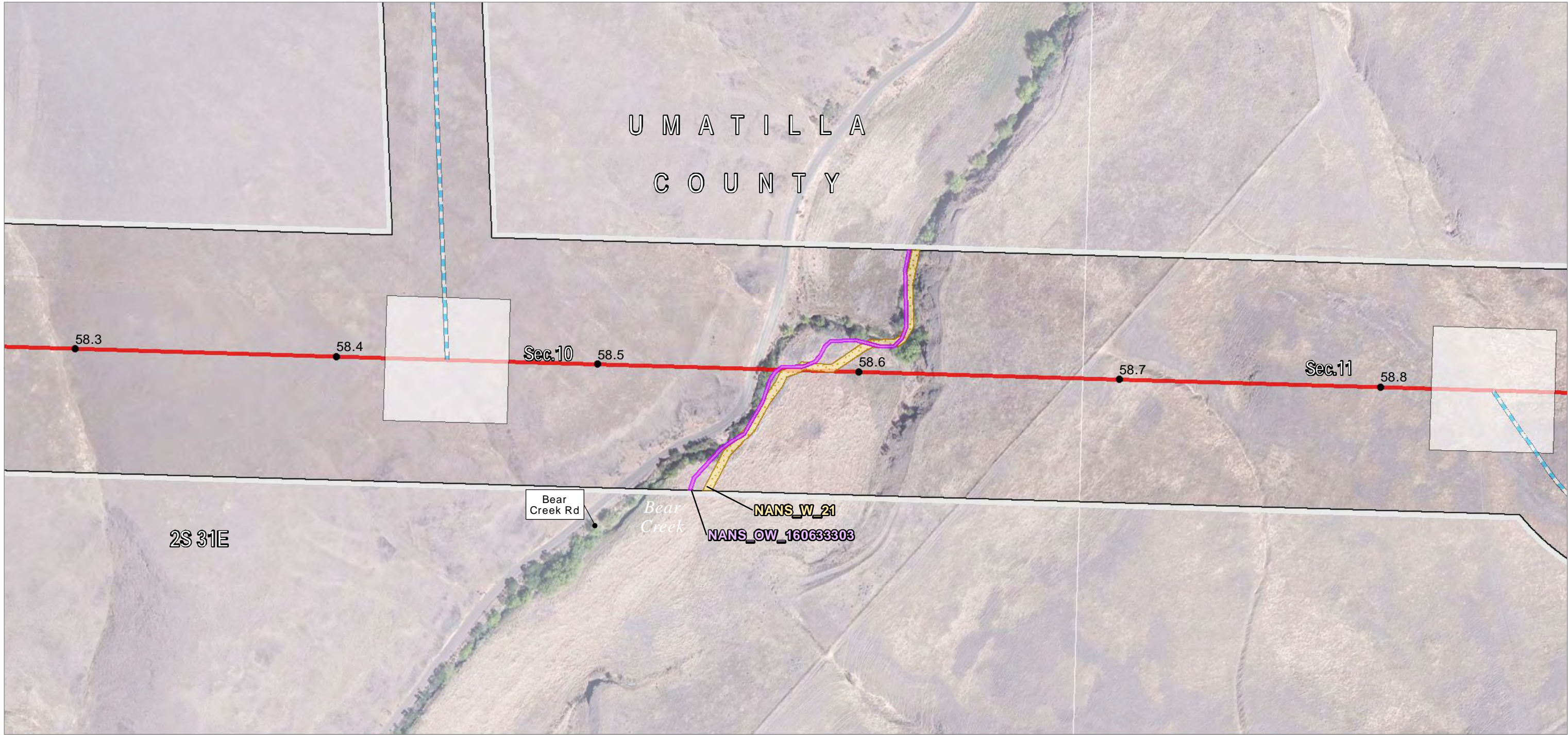


Boardman to Hemingway
Transmission Line Project

Attachment J1-54

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- New Road, Bladed

Other Waters

- NANS Streams (NHD)

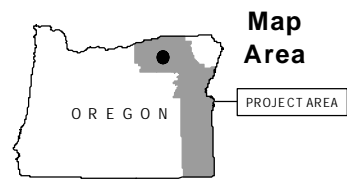
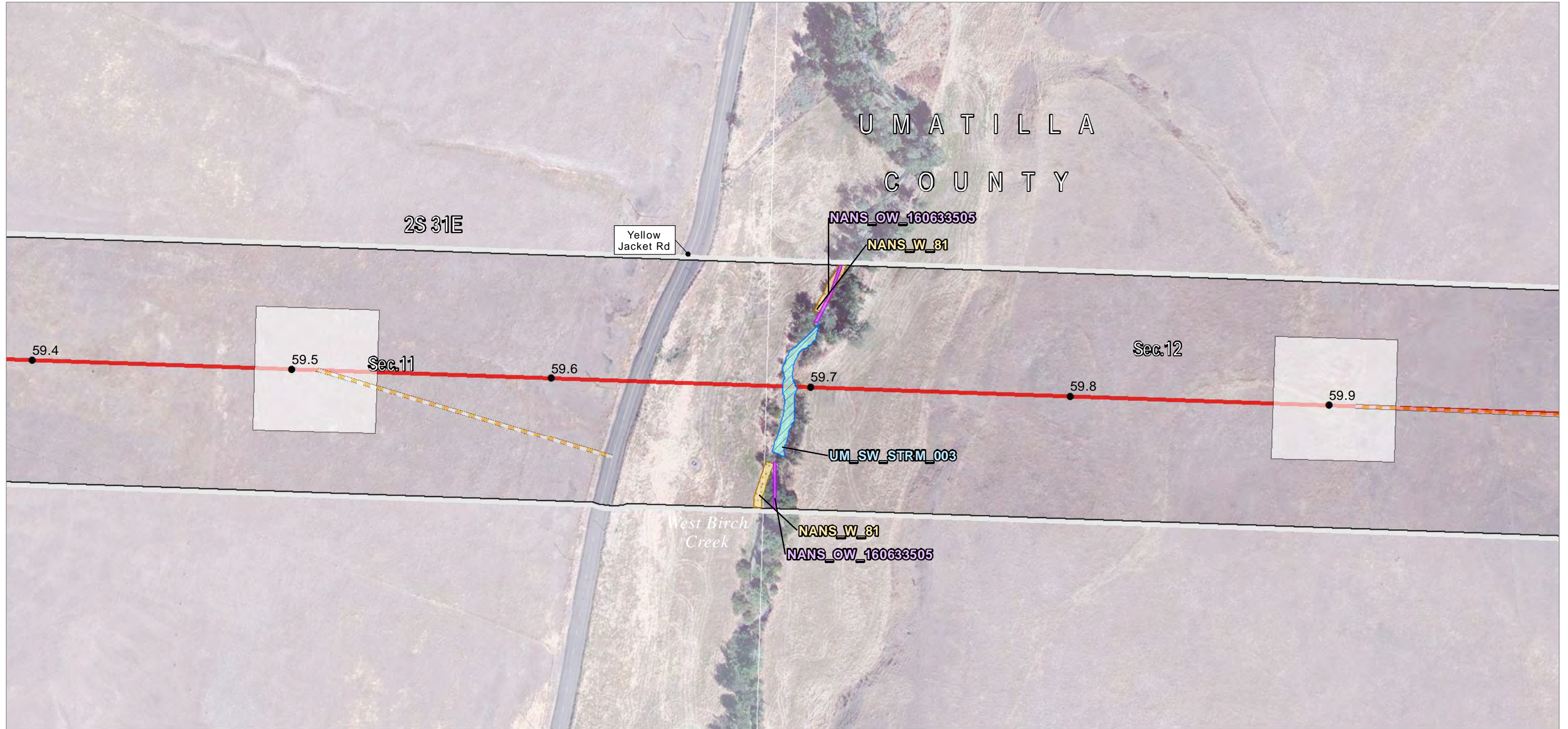
Wetland

- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-55
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- New Road, Primitive

Other Waters

- Field Survey Streams
- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

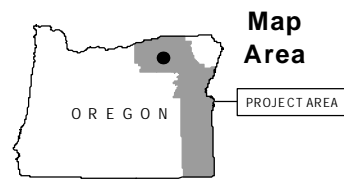
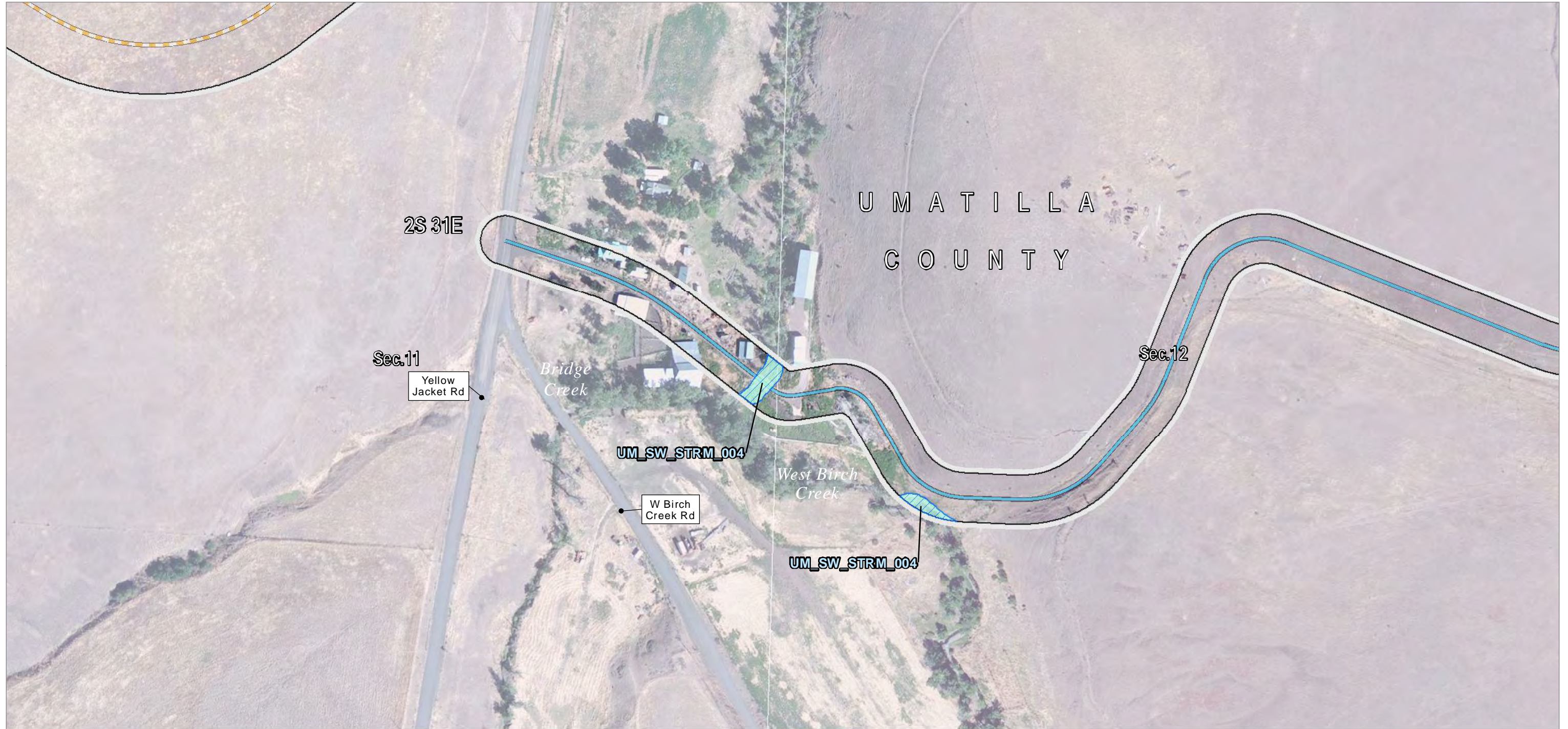


Boardman to Hemingway
Transmission Line Project

Attachment J1-56

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 71-100% Improvements

New Road, Primitive

Other Waters

Field Survey Streams

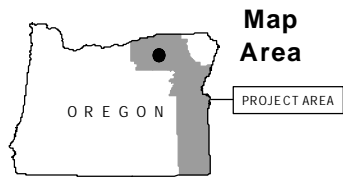
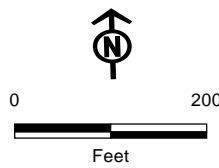
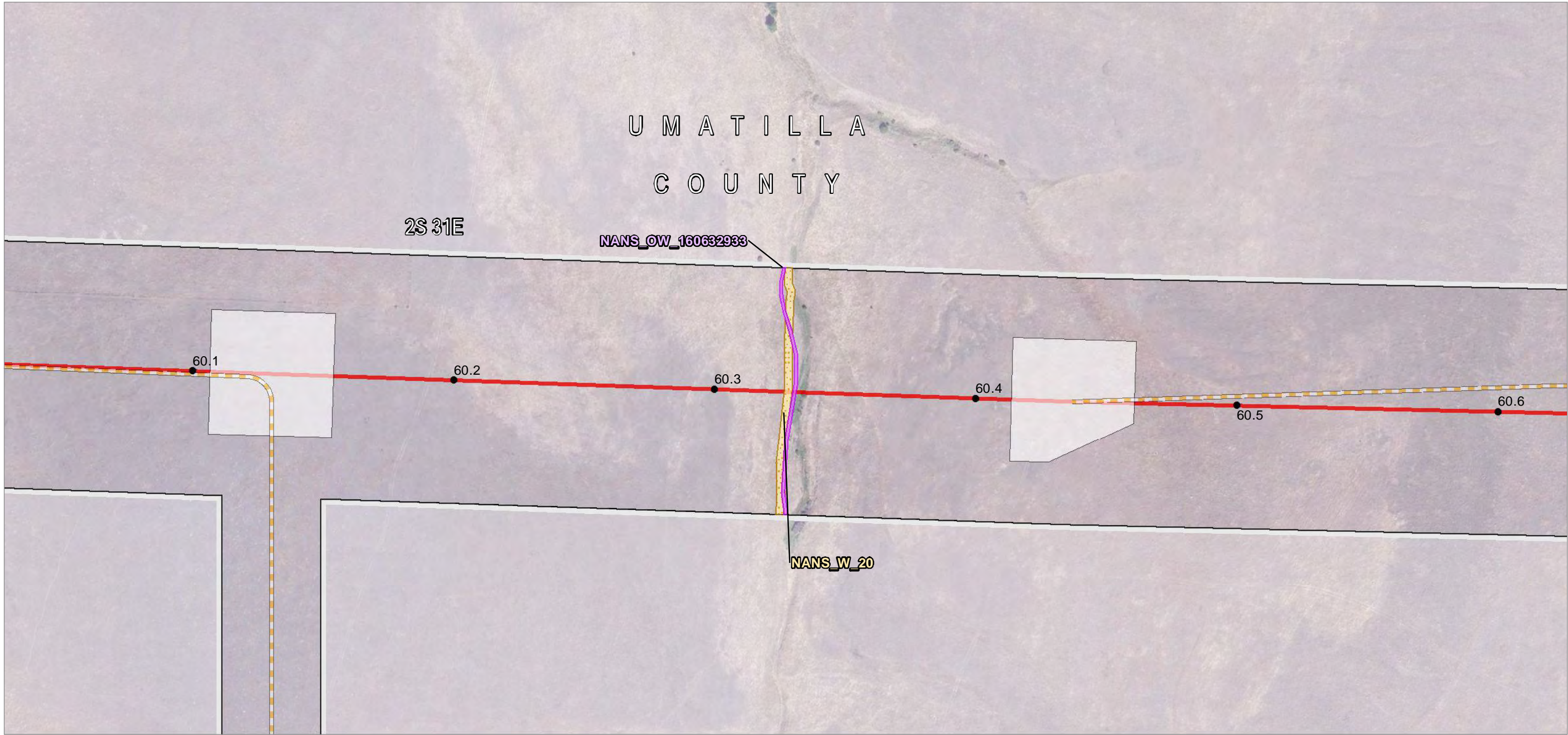


Boardman to Hemingway
Transmission Line Project

Attachment J1-57

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

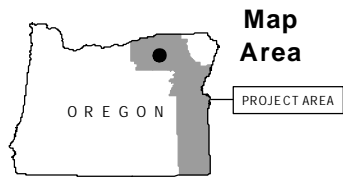
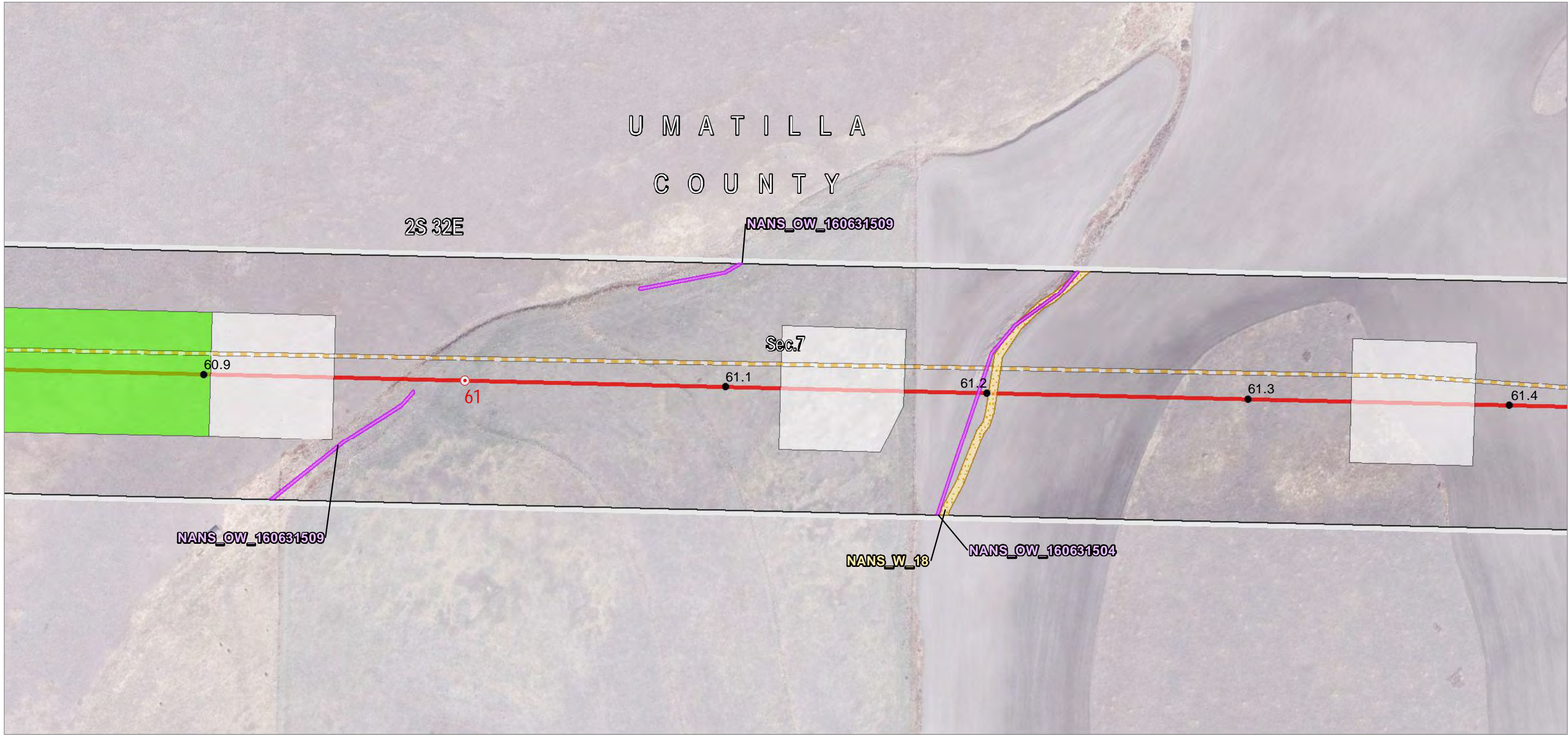
Wetland

- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-58
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

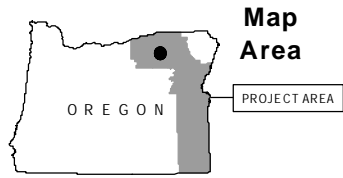
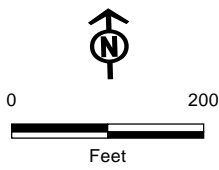
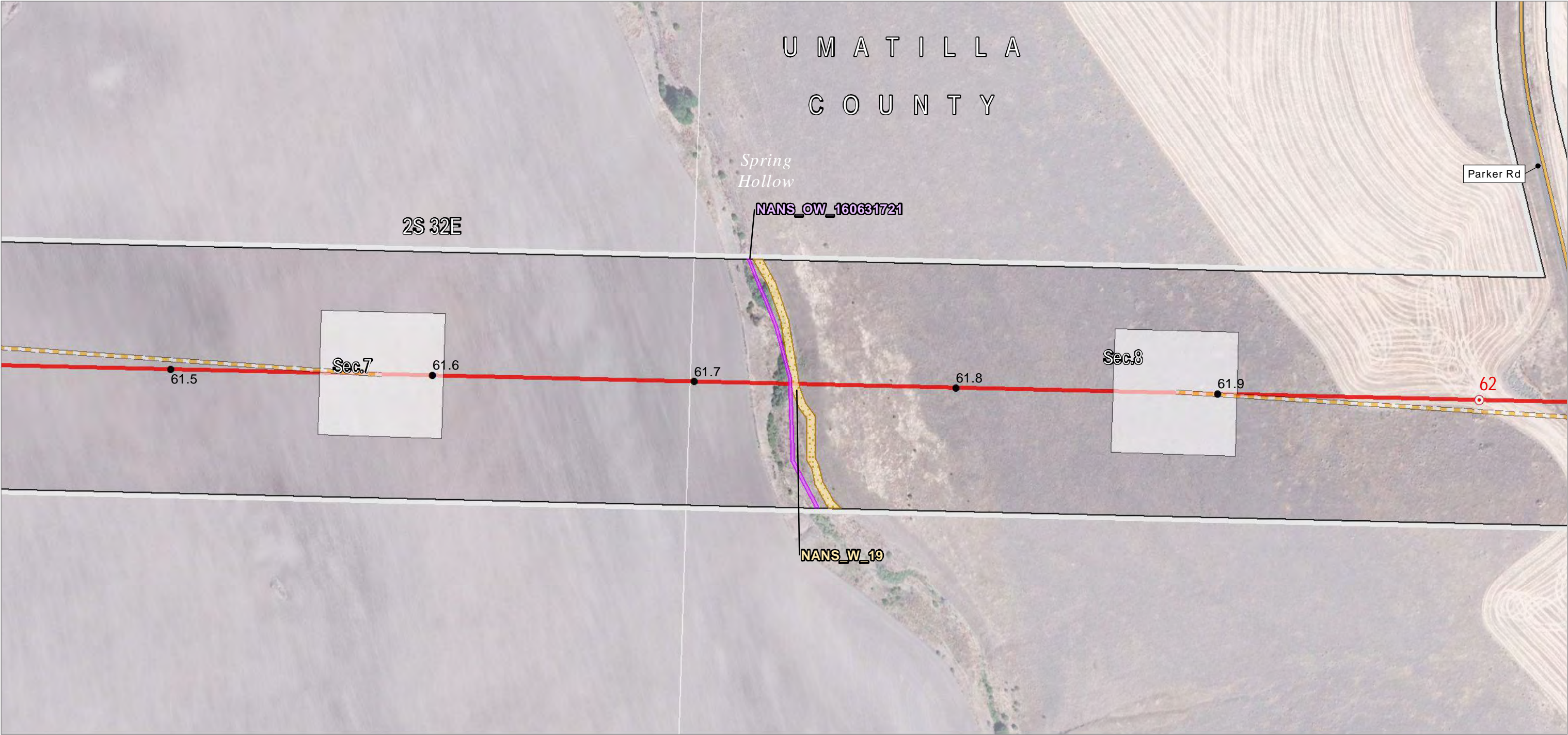


Boardman to Hemingway
Transmission Line Project

Attachment J1-59

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
 - Mile
- Tenth-mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements
 - New Road, Primitive

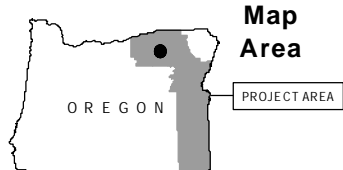
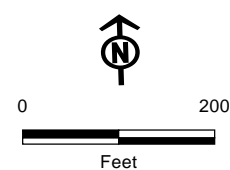
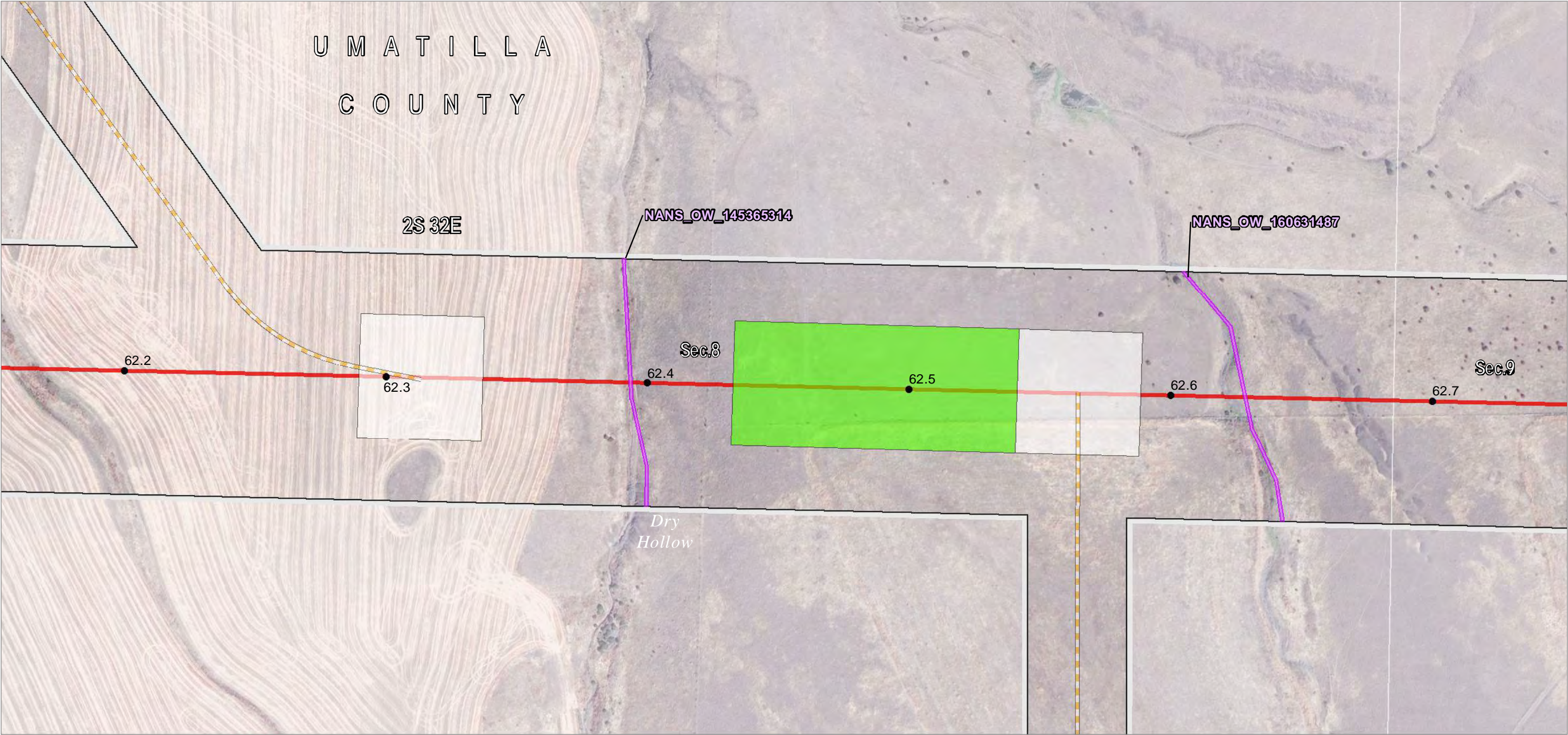
Other Waters

- NANS Streams (NHD)
- Wetland
 - NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-60
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

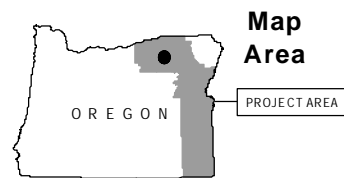
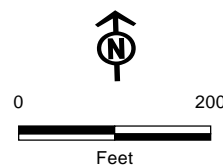
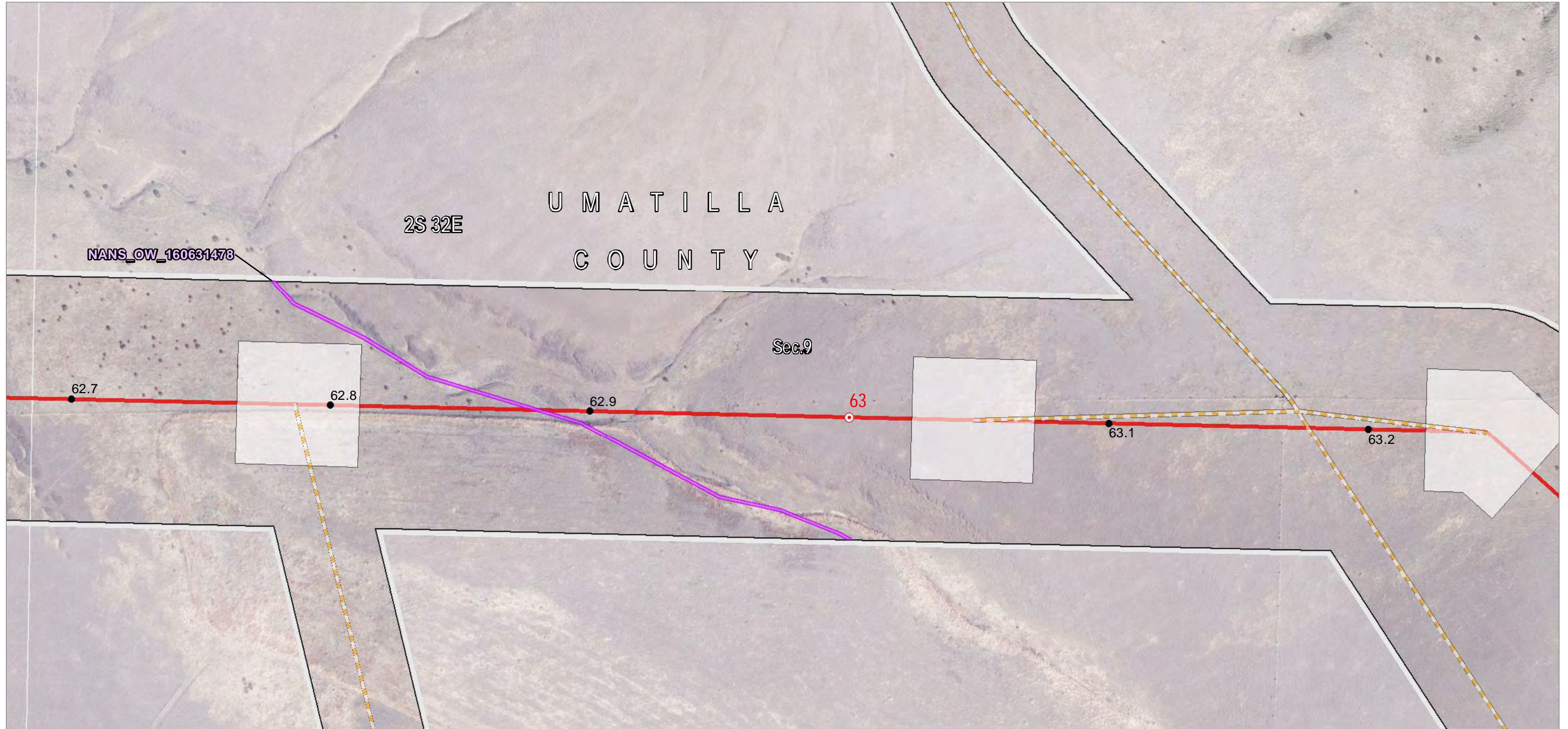


Boardman to Hemingway
Transmission Line Project

Attachment J1-61

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

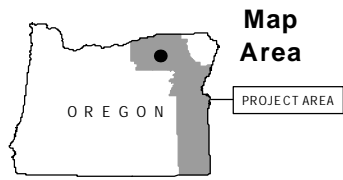
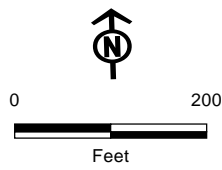
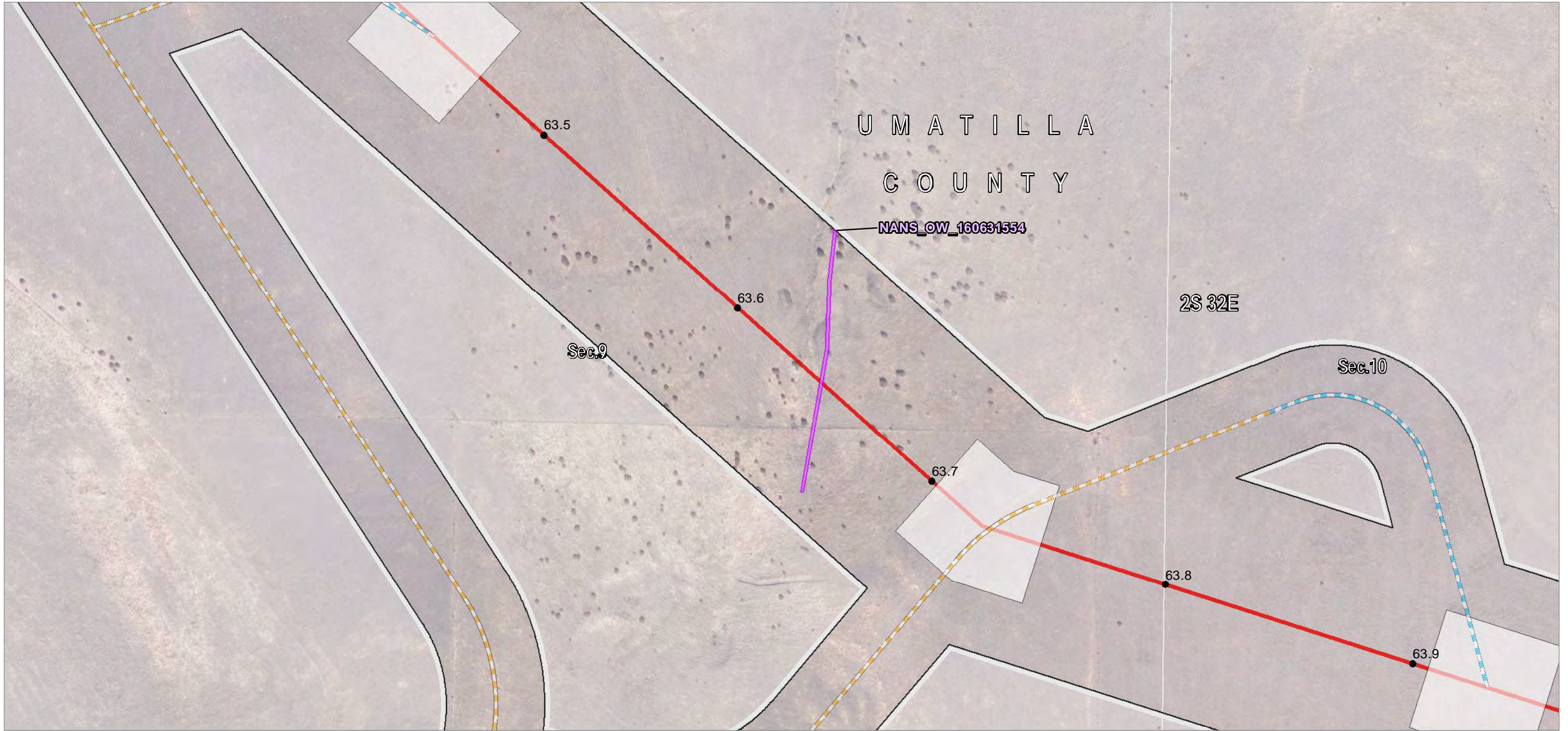


Boardman to Hemingway
Transmission Line Project

Attachment J1-62

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- New Road, Bladed
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

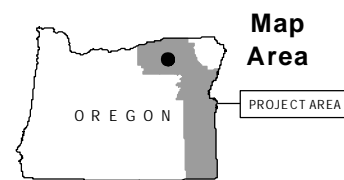
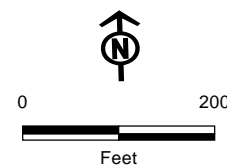


Boardman to Hemingway
Transmission Line Project

Attachment J1-63

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Other Waters

Field Survey Streams

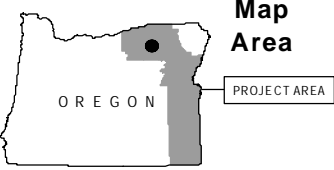
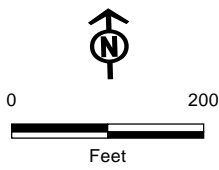
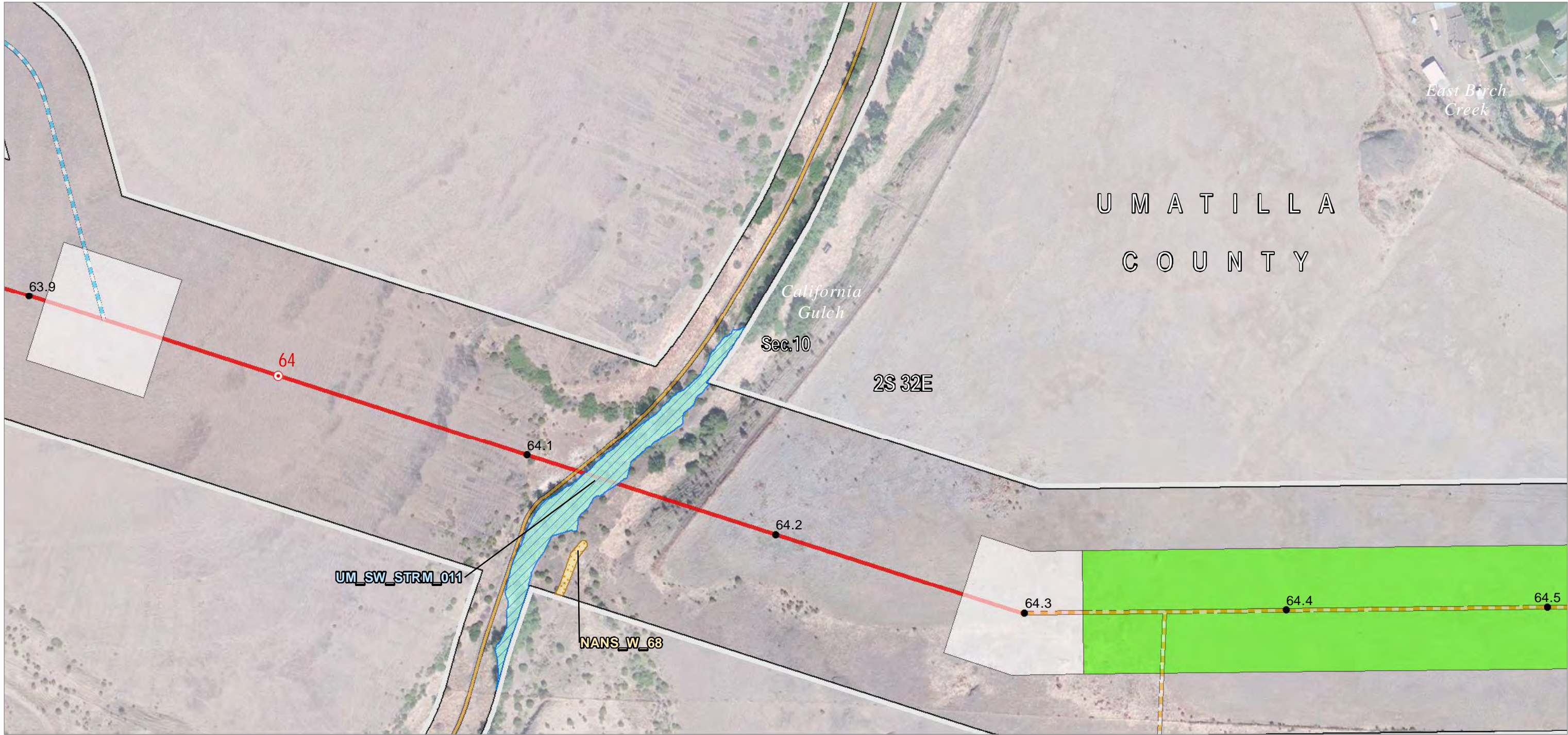


Boardman to Hemingway
Transmission Line Project

Attachment J1-64

**Wetland and Other Waters
Detail Maps**

Umatilla County



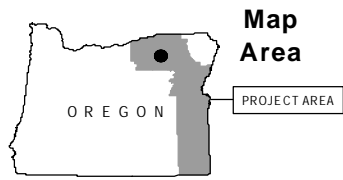
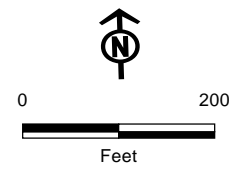
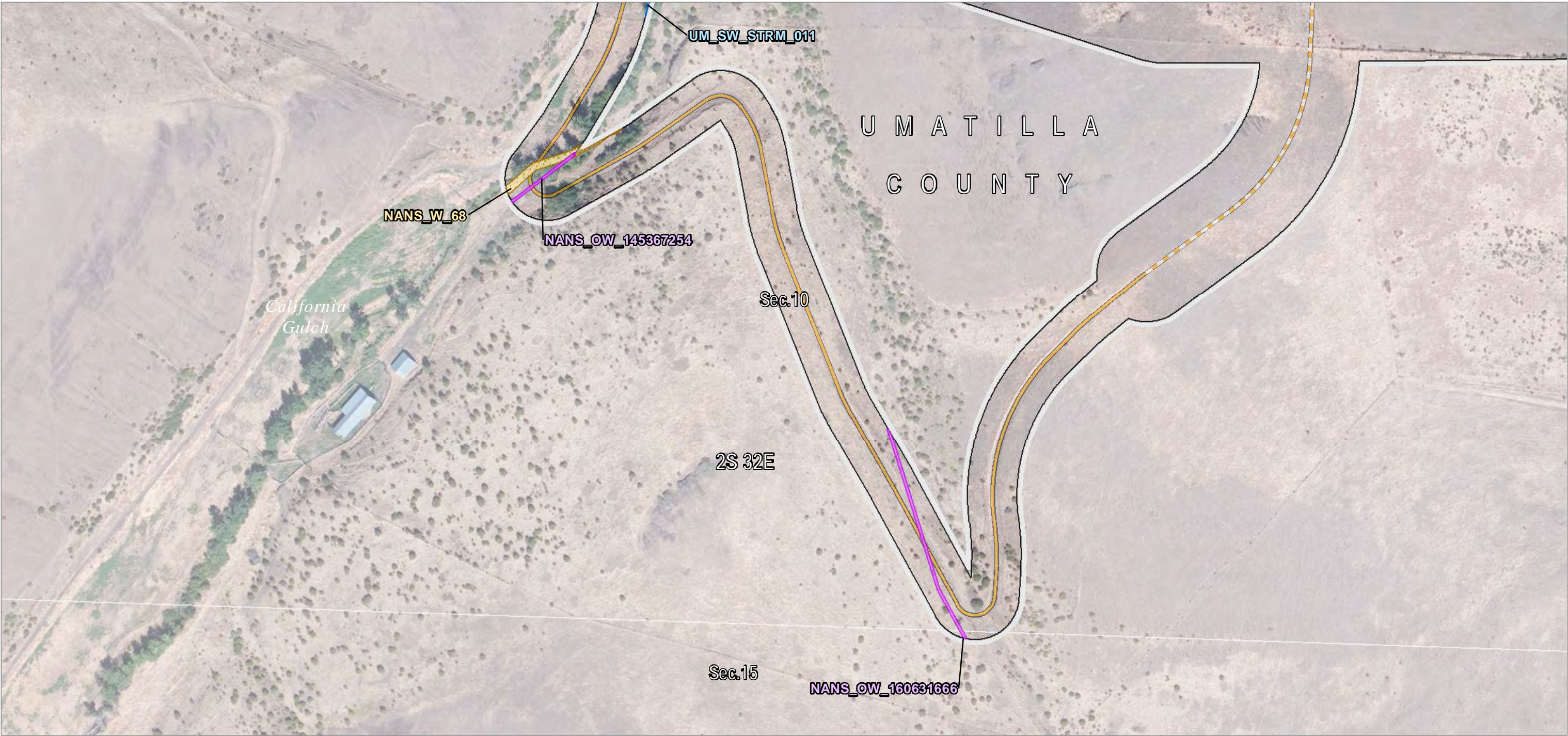
Source(s): BLM, IPC, ODFW, ODOT, NPS, USDA, USFS, USGS, Ventyx, Esri, DigitalGlobe, GeoEys, Earthstar Geographics, CNES/Airbus DS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo

Project Features

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

- Structure Work Area
- Mileposts
 - Mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- New Road, Primitive
- Other Waters
 - Field Survey Streams
- Wetland
 - NANS Wetland (NWI)



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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

New Road, Primitive

Other Waters

Field Survey Streams

NANS Streams (NHD)

Wetland

NANS Wetland (NWI)

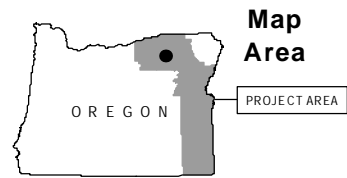
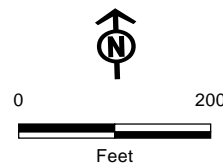
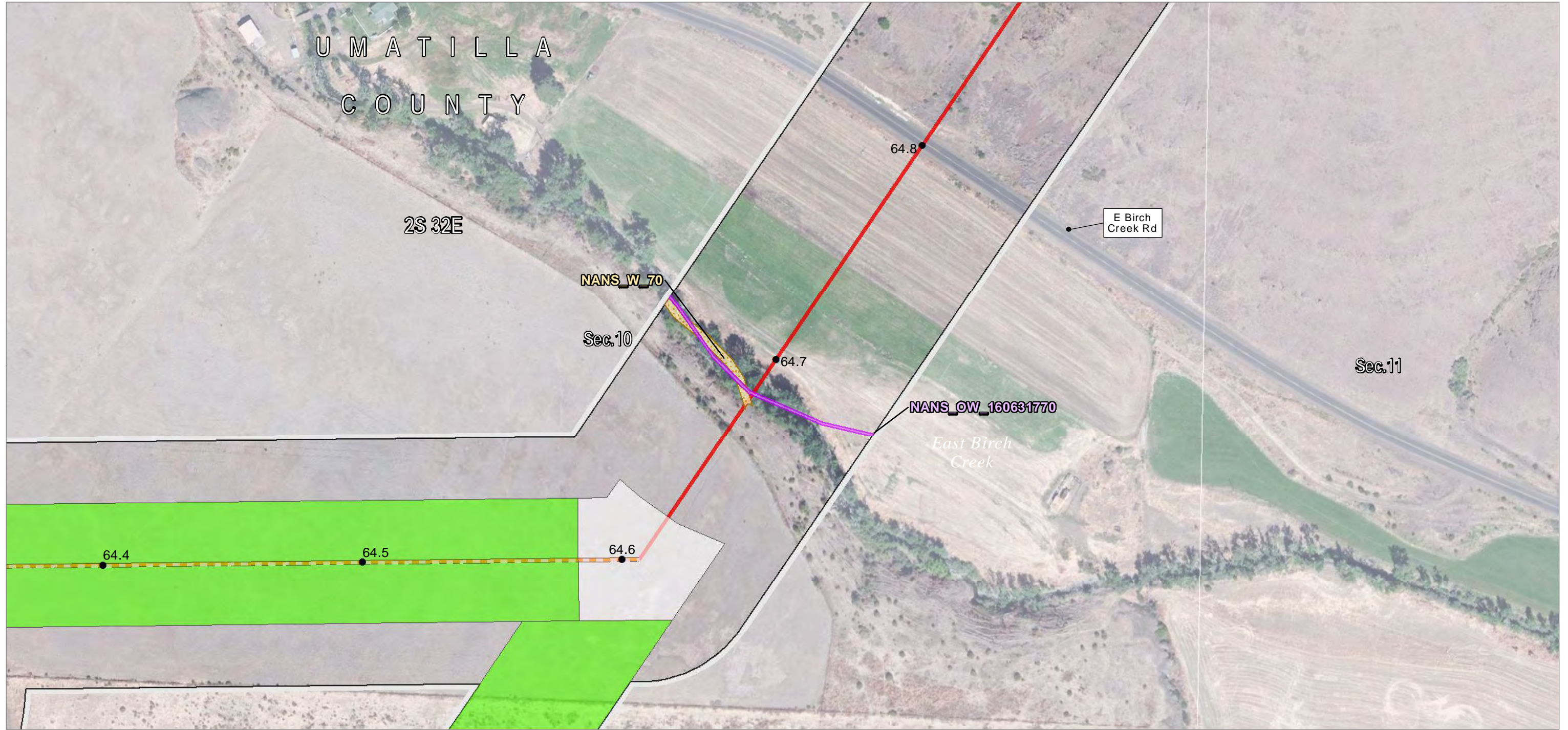


Boardman to Hemingway
Transmission Line Project

Attachment J1-66

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-67

**Wetland and Other Waters
Detail Maps**

Umatilla County

U M A T I L L A C O U N T Y

2S 32E

NANS_OW_160631397

Sec.1

66.9

66.8

66.7

66.6

66.5

67

Sec.12

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Work Areas

Pulling and Tensioning

Structure Work Area

Mileposts

Mile

Tenth-mile

Construction Access

New Road, Primitive

Other Waters

NANS Streams (NHD)

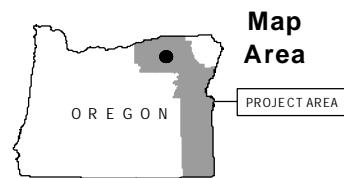
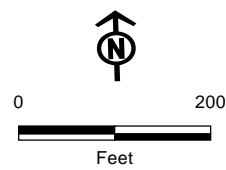


Boardman to Hemingway
Transmission Line Project

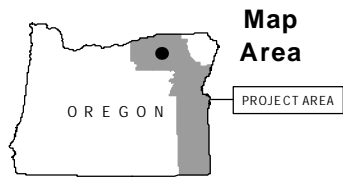
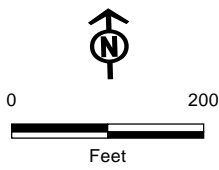
Attachment J1-69

Wetland and Other Waters
Detail Maps

Umatilla 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



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

Project Features

- Site Boundary
- Proposed Route
- Alternative Route
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements

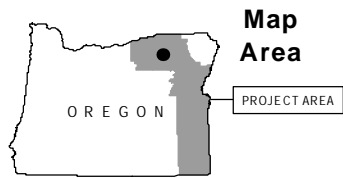
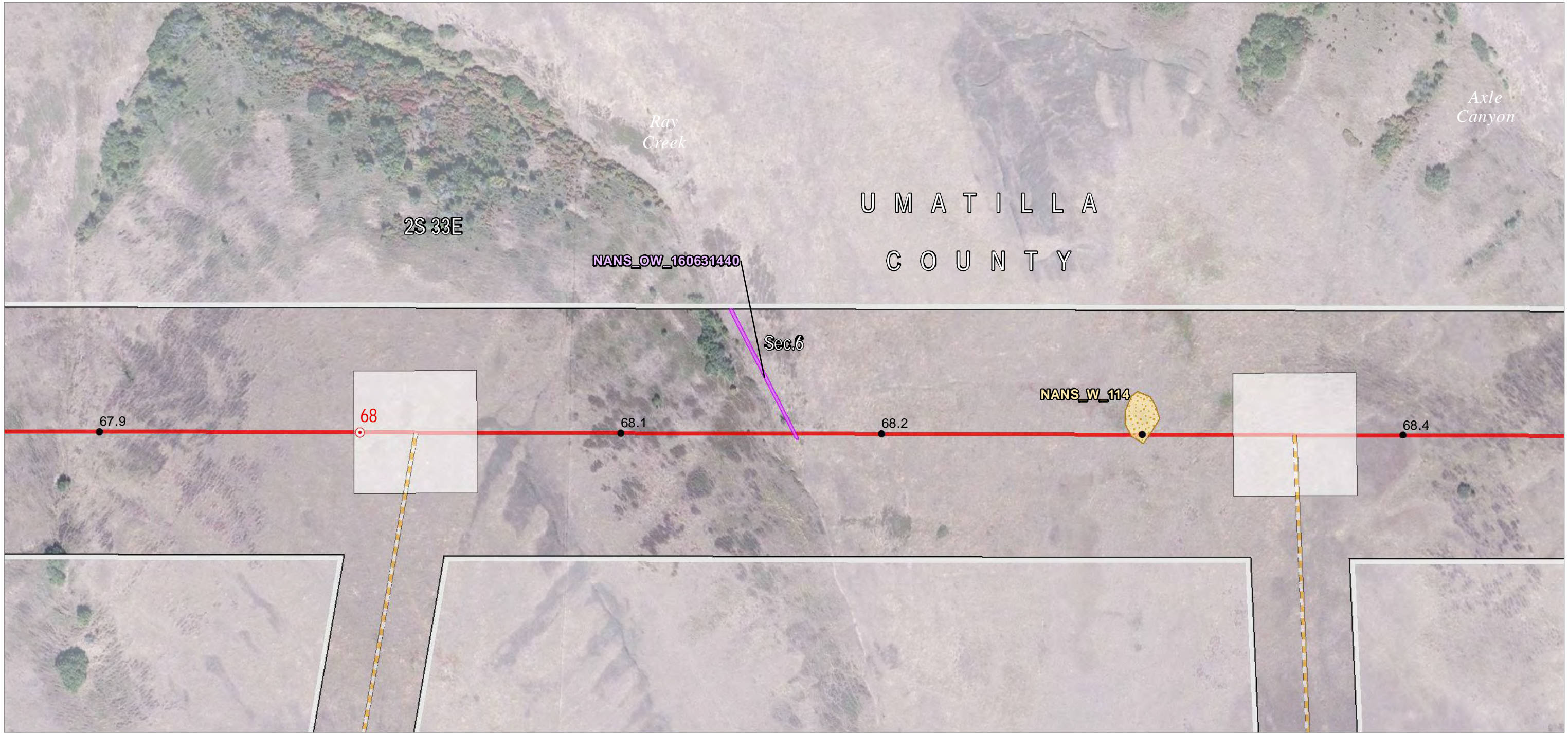
Other Waters

- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-70
Wetland and Other Waters
Detail Maps
Umatilla 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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

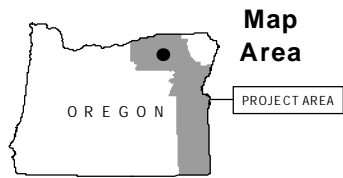
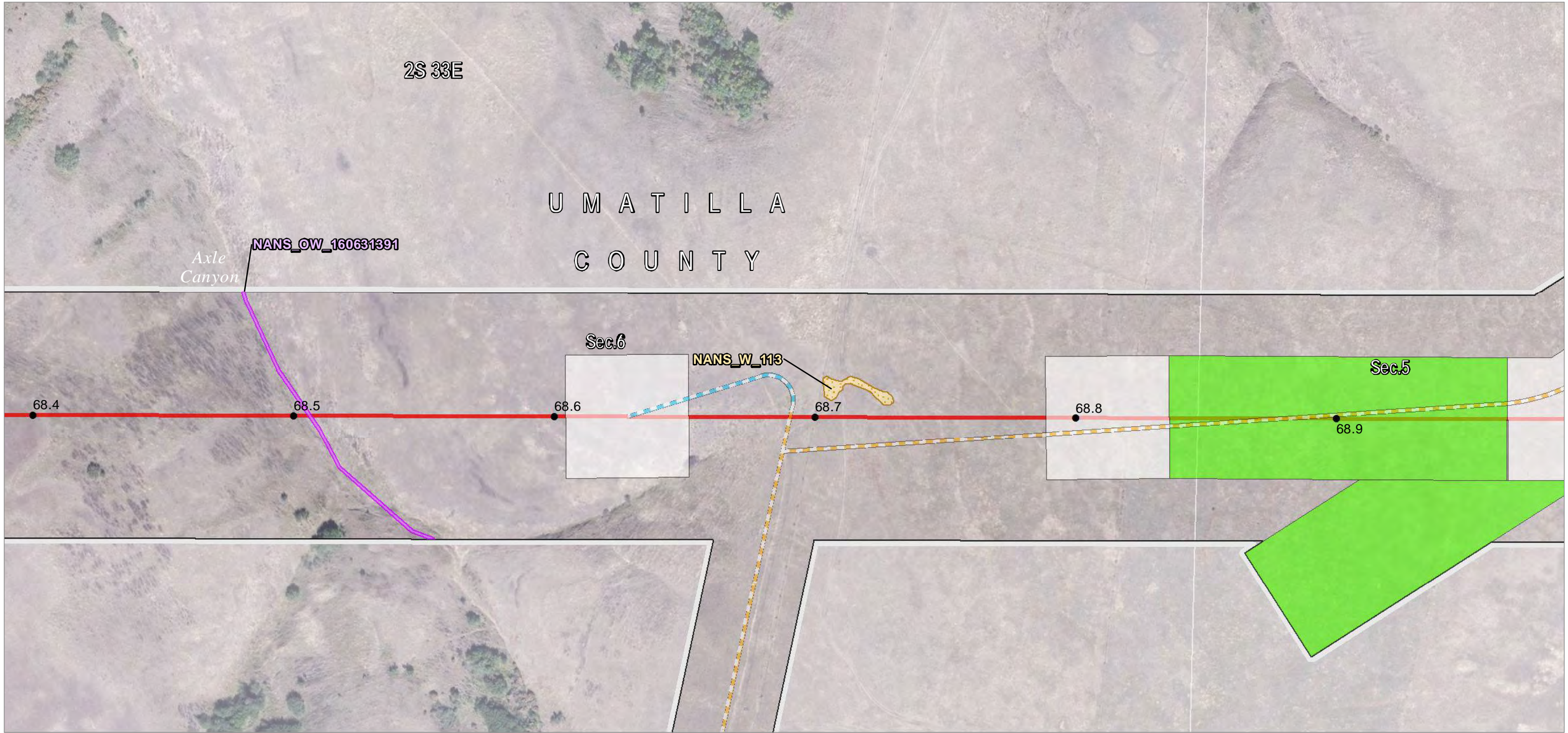
- Mileposts**
- Mile
 - Tenth-mile
- Construction Access**
- New Road, Primitive
- Other Waters**
- NANS Streams (NHD)

- Wetland**
- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-71
Wetland and Other Waters
Detail Maps
Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Bladed
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

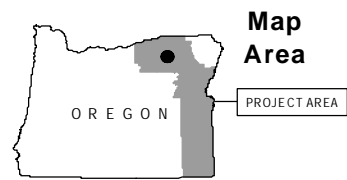


Boardman to Hemingway
Transmission Line Project

Attachment J1-72

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)

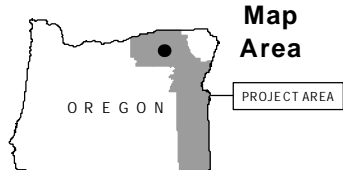
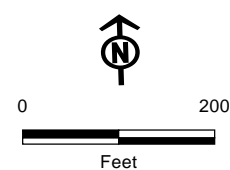
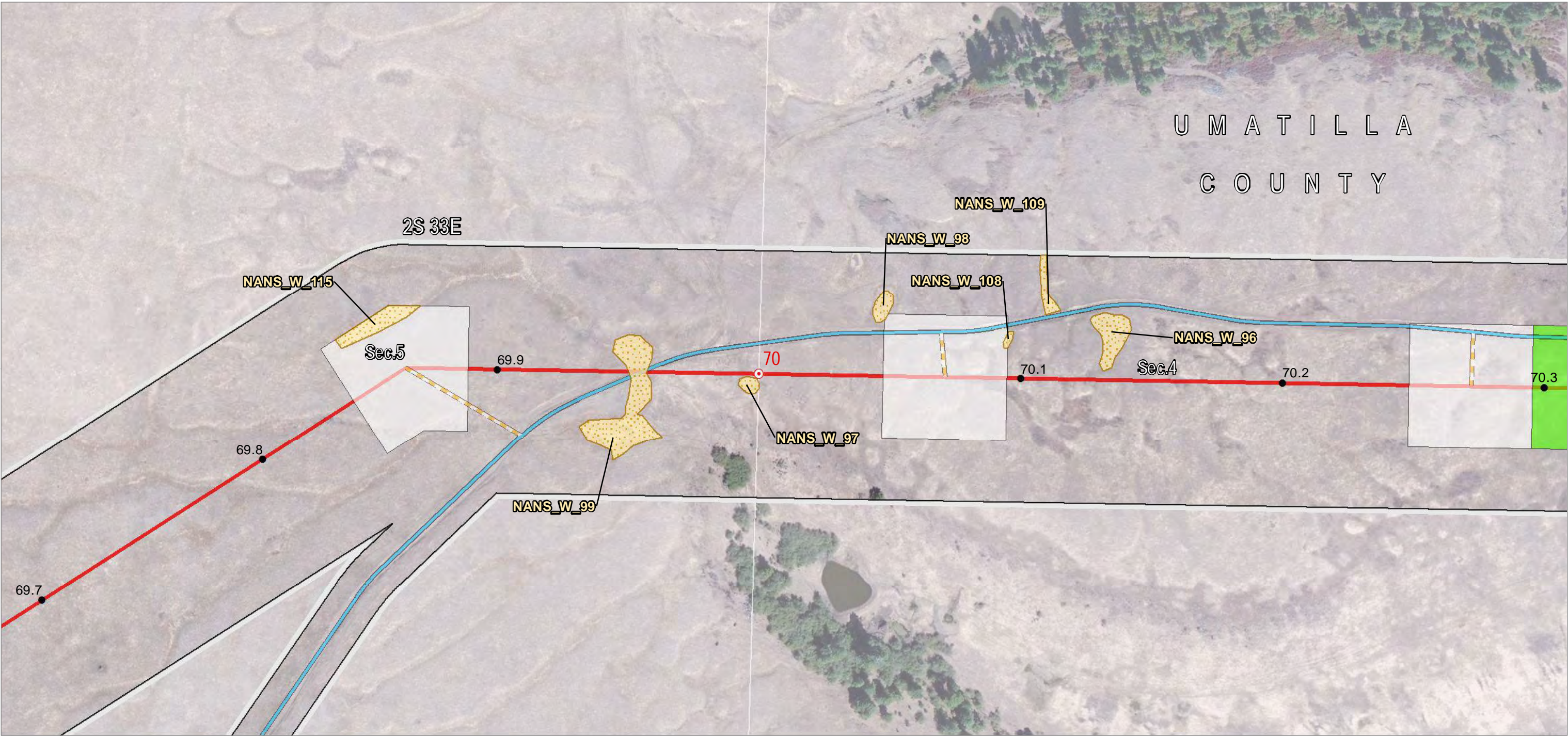


Boardman to Hemingway
Transmission Line Project

Attachment J1-73

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements

- New Road, Primitive
- Wetland
- NANS Wetland (NWI)

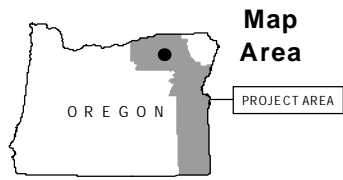
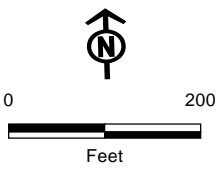
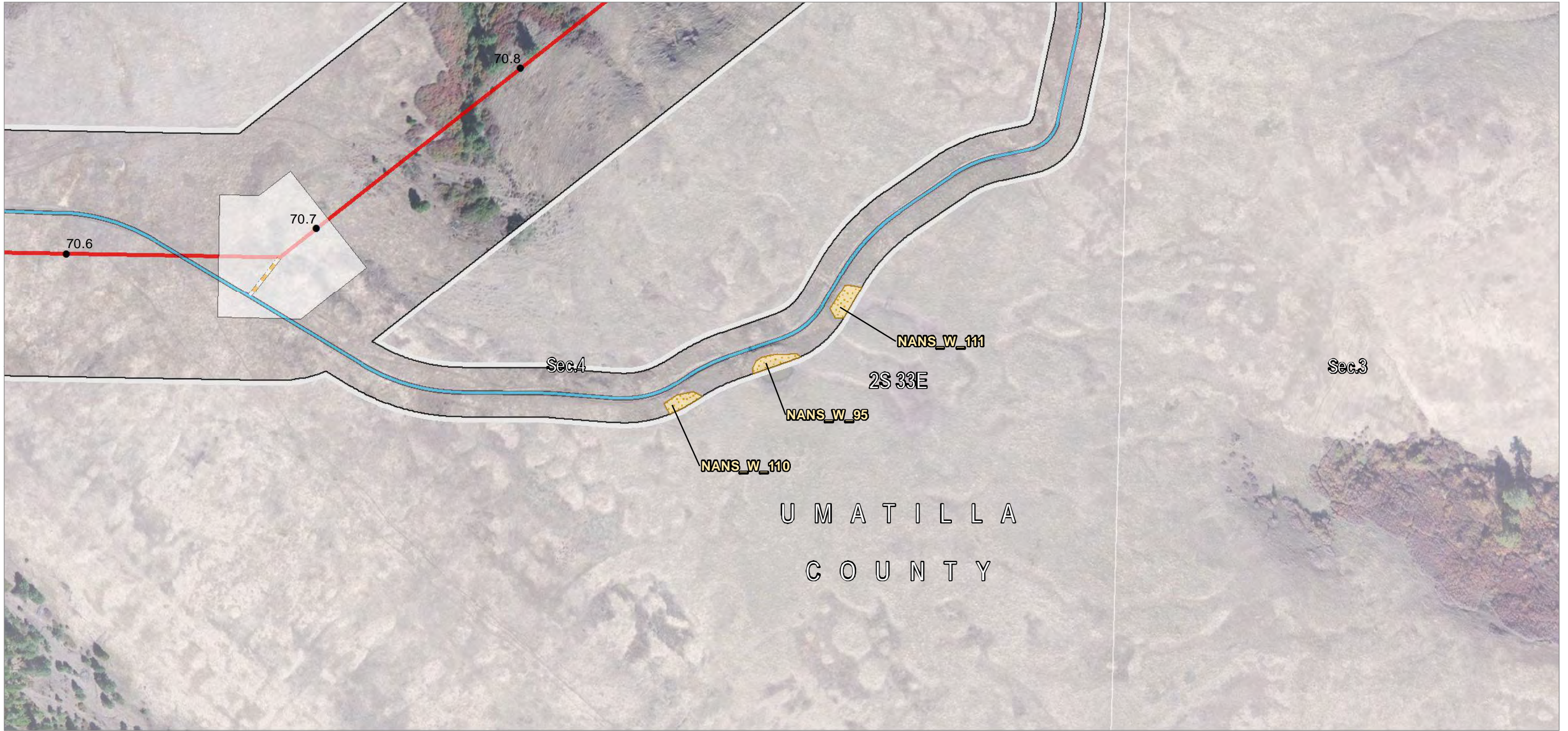


Boardman to Hemingway
Transmission Line Project

Attachment J1-74

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Primitive

Wetland

- NANS Wetland (NWI)

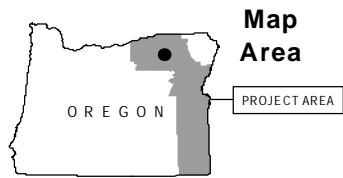
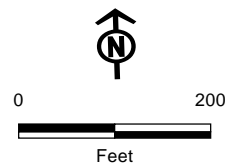
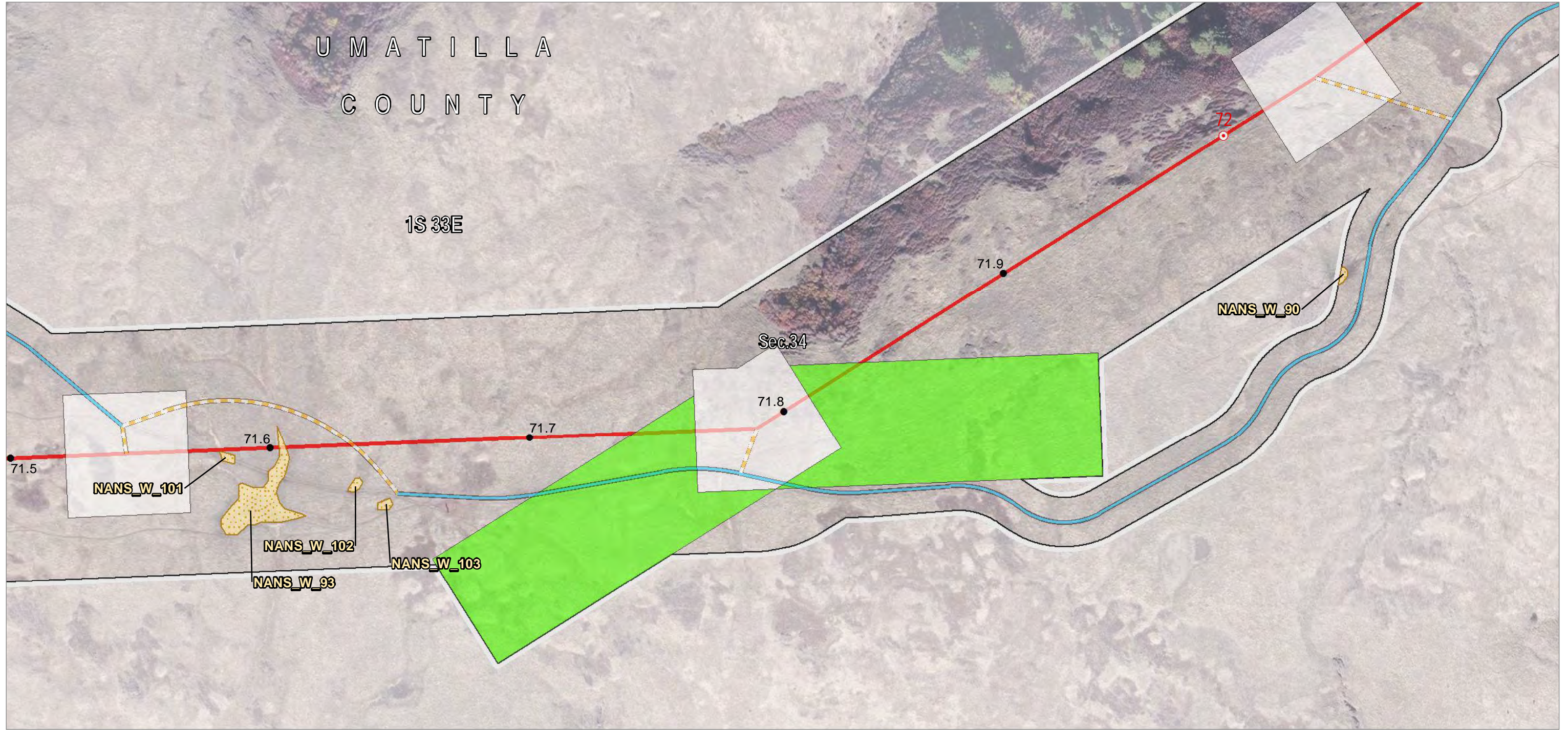


Boardman to Hemingway
Transmission Line Project

Attachment J1-75

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements

- New Road, Primitive
- Wetland
- NANS Wetland (NWI)

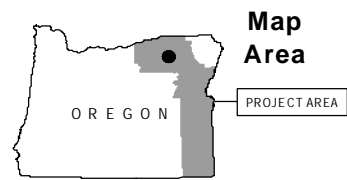
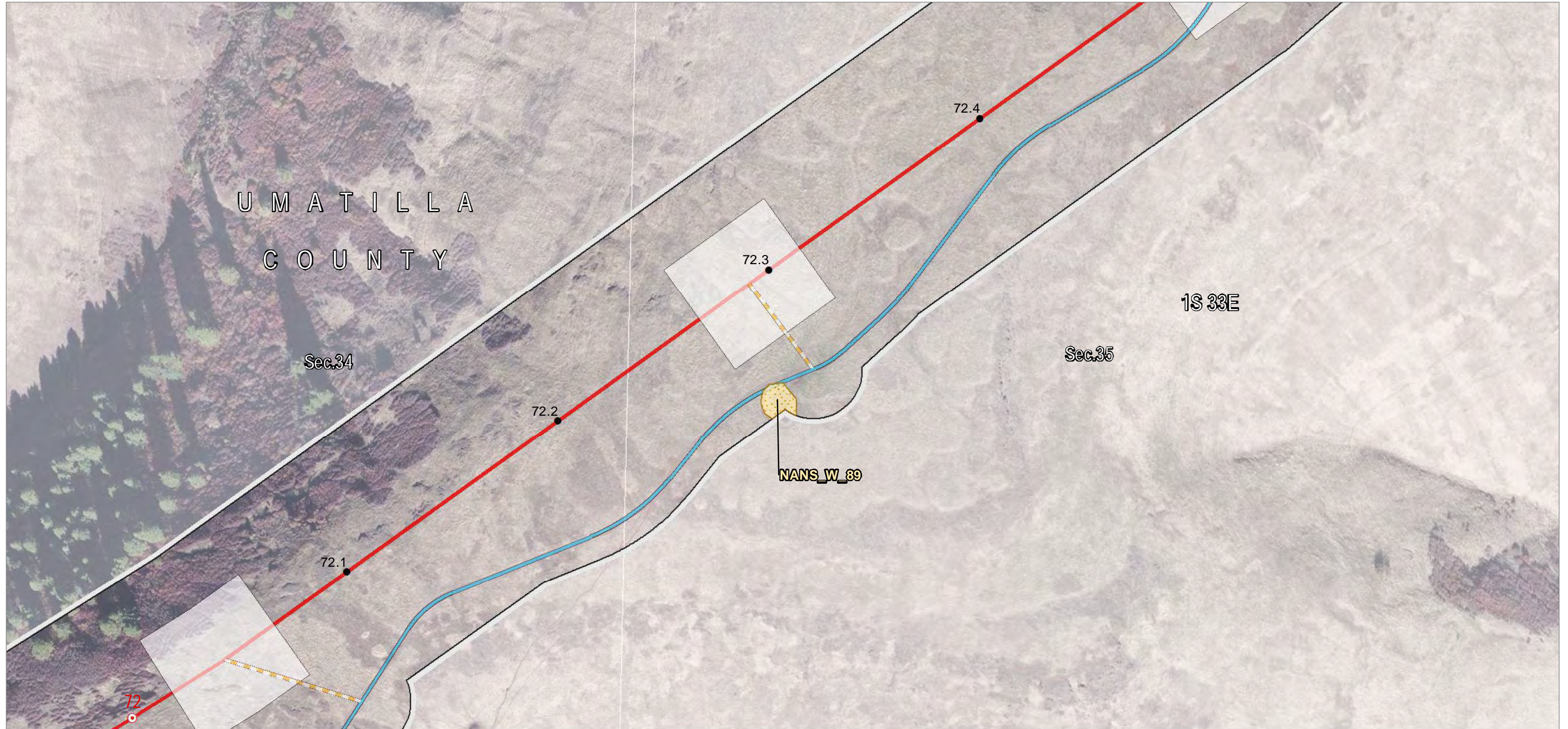


Boardman to Hemingway
Transmission Line Project

Attachment J1-76

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
- Tenth-mile

Construction Access

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

Wetland

- NANS Wetland (NWI)

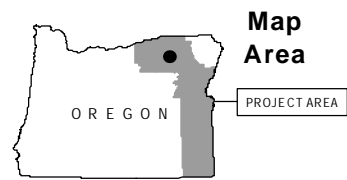
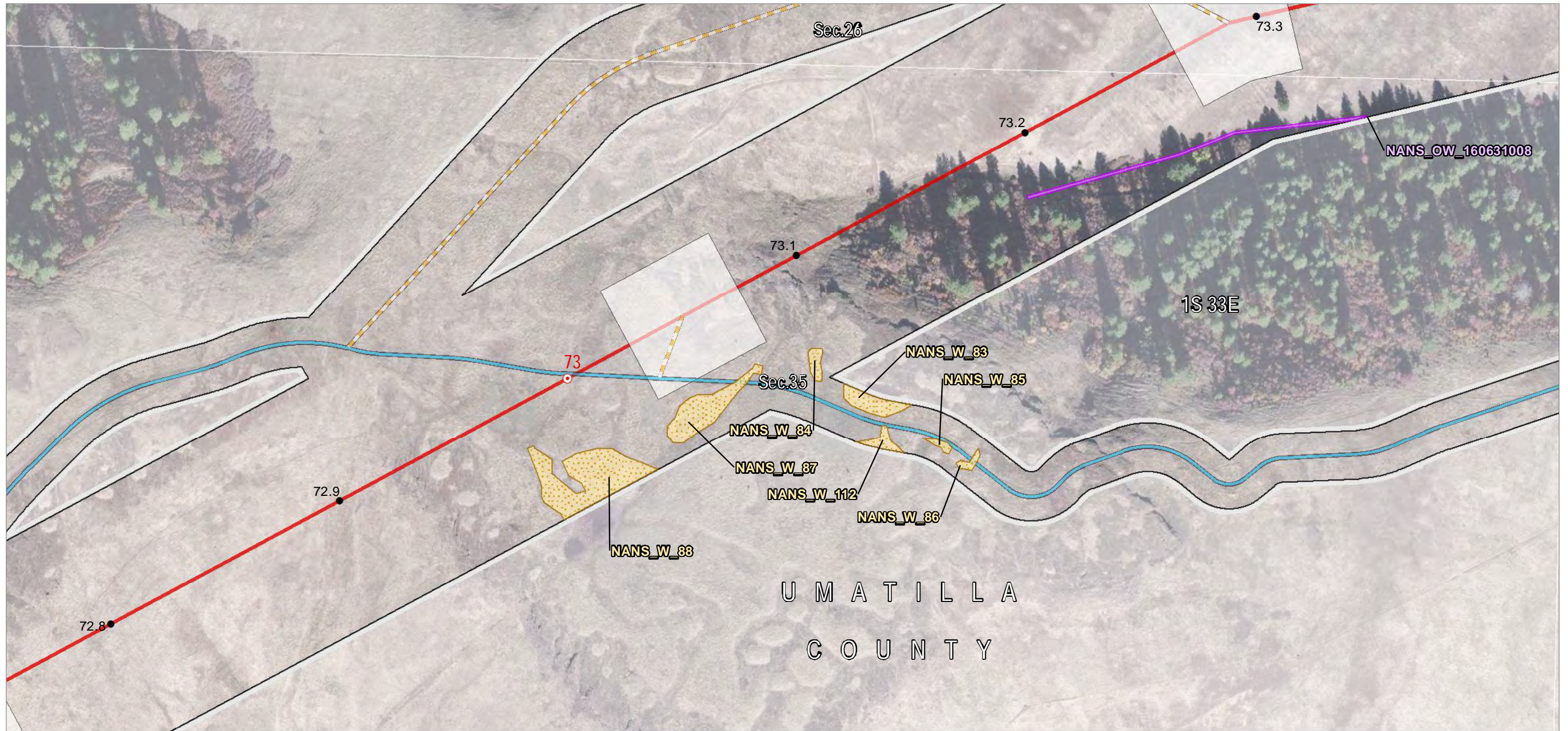


Boardman to Hemingway
Transmission Line Project

Attachment J1-77

**Wetland and Other Waters
Detail Maps**

Umatilla County



Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Primitive

Other Waters

- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)

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

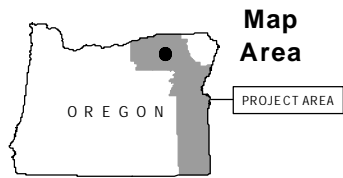
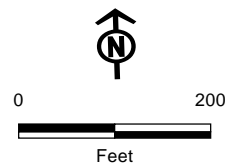
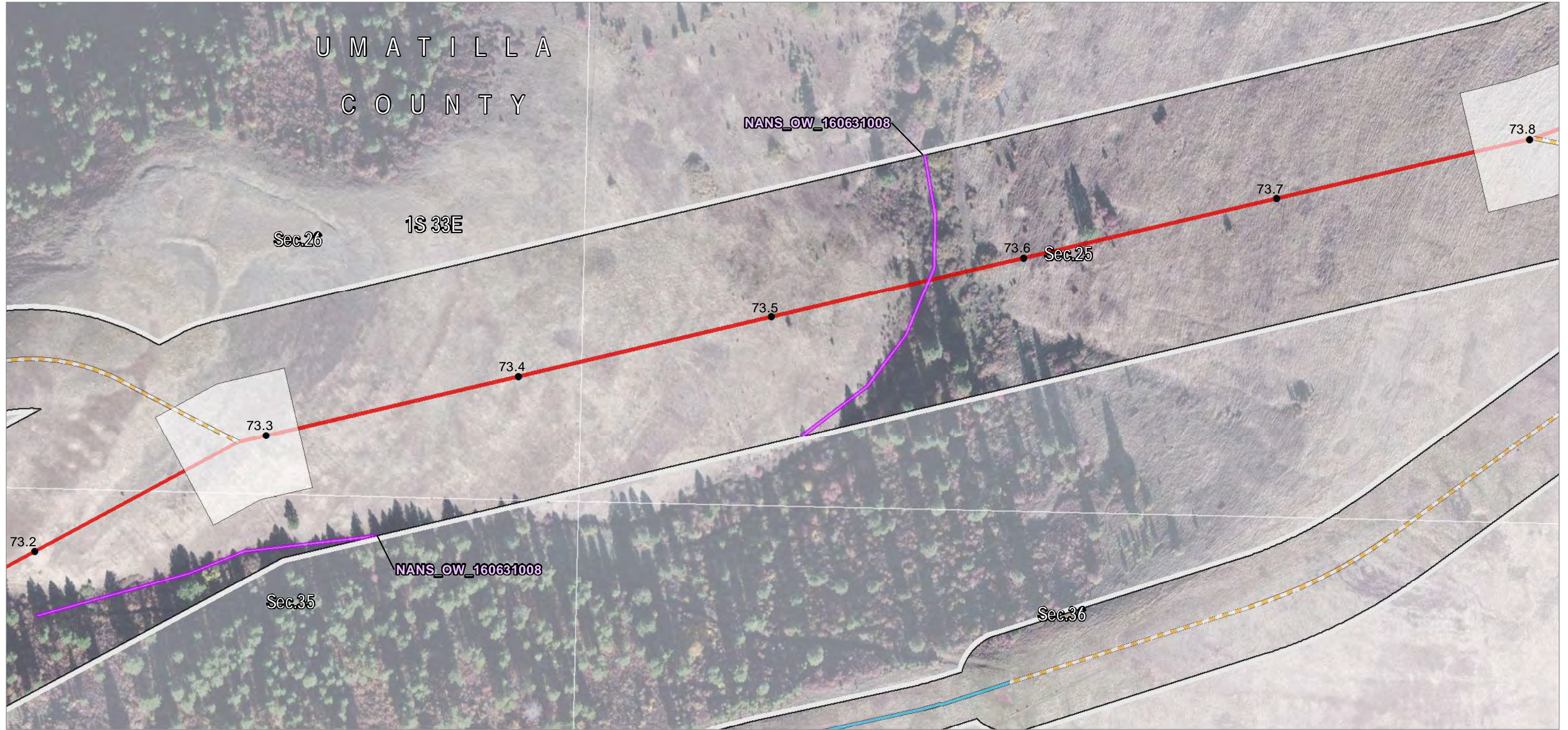


Boardman to Hemingway
Transmission Line Project

Attachment J1-78

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)

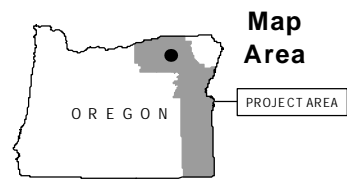
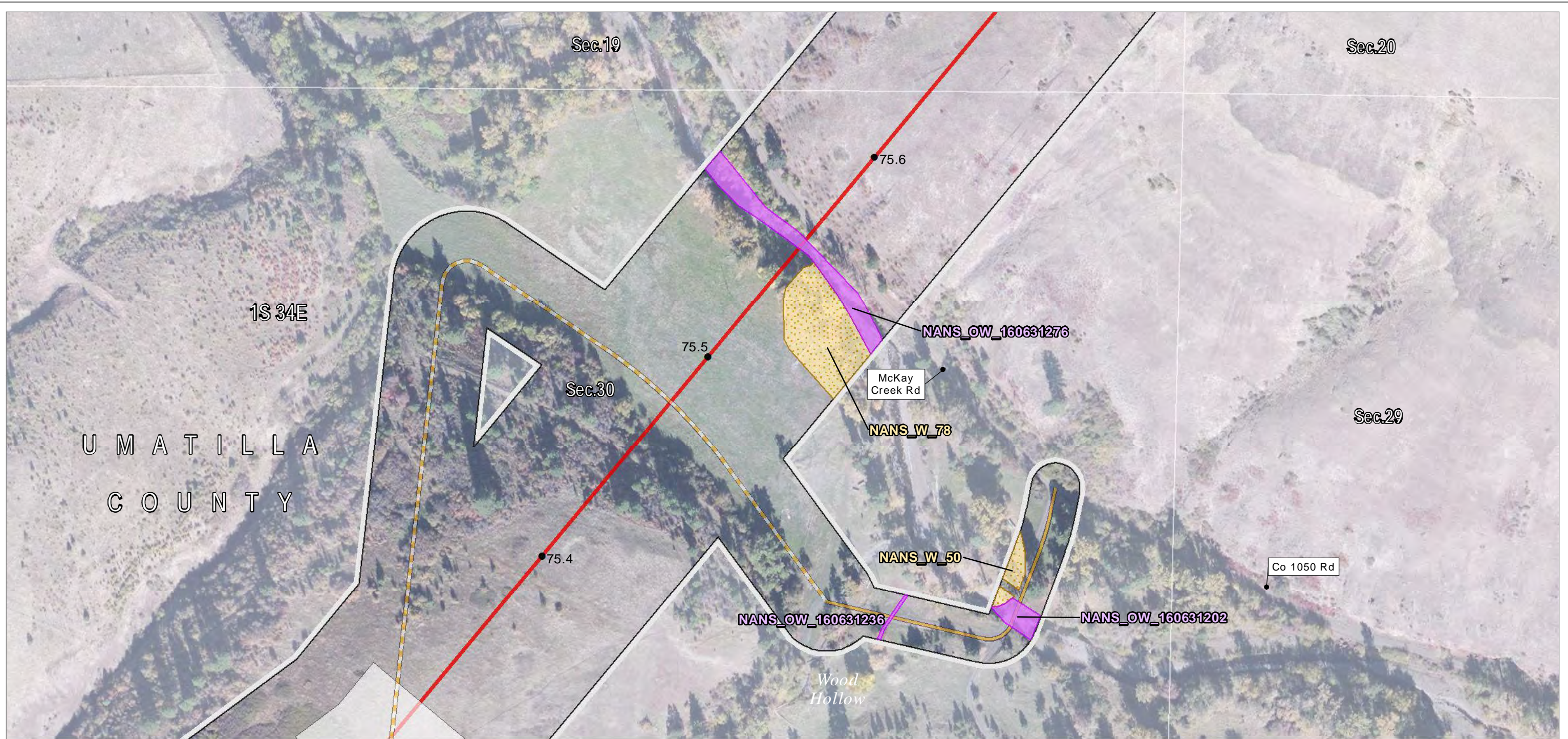


Boardman to Hemingway
Transmission Line Project

Attachment J1-79

**Wetland and Other Waters
Detail Maps**

Umatilla County



Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)

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

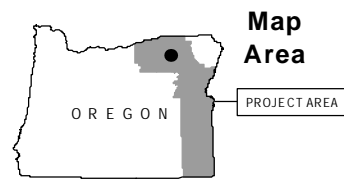
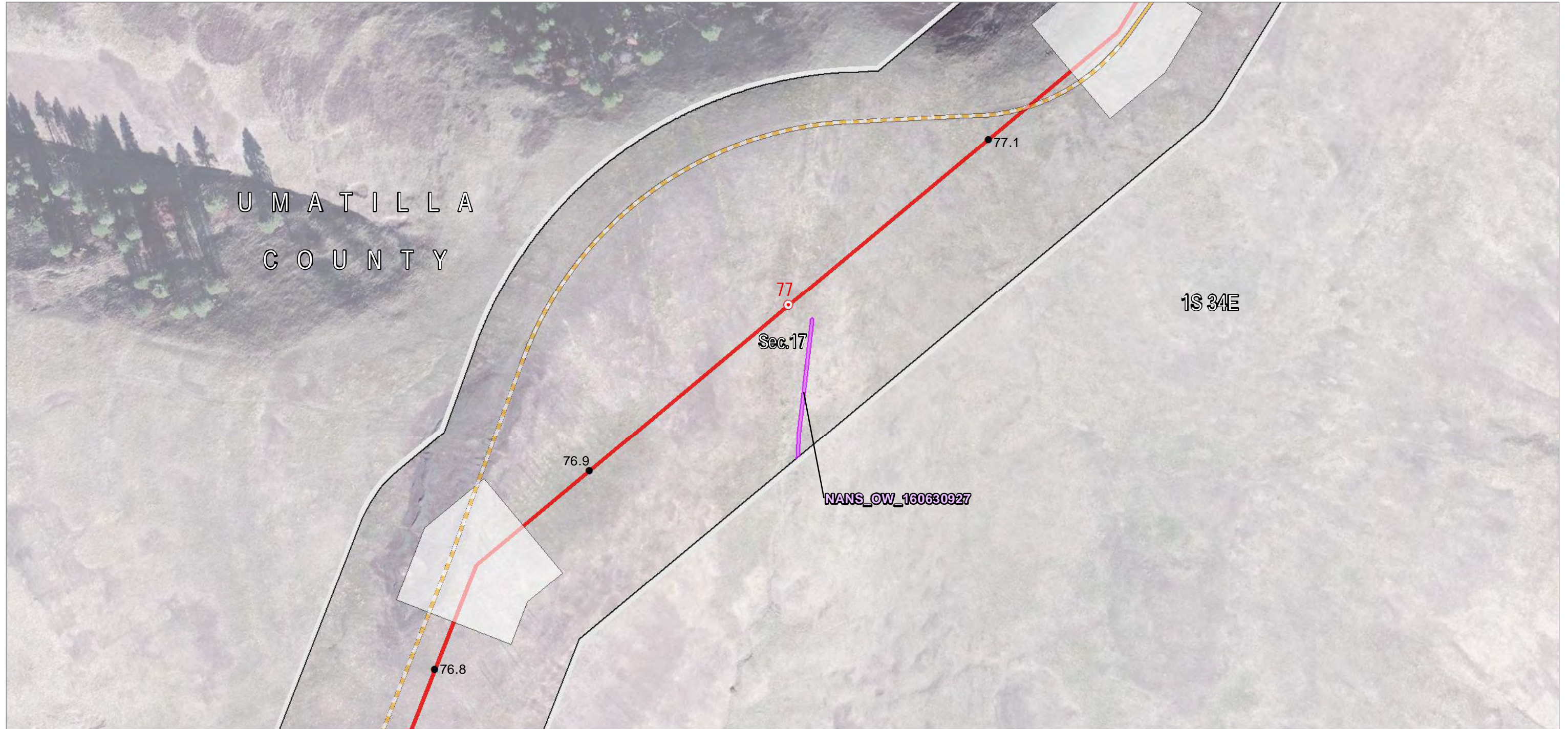


Boardman to Hemingway
Transmission Line Project

Attachment J1-80

**Wetland and Other Waters
Detail Maps**

Umatilla County



Project Features

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

Mileposts

- Mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements
 - New Road, Primitive

Other Waters

- NANS Streams (NHD)

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

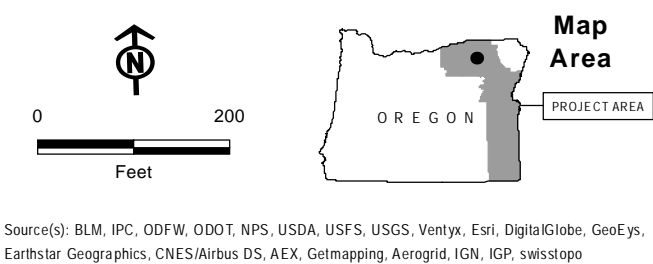
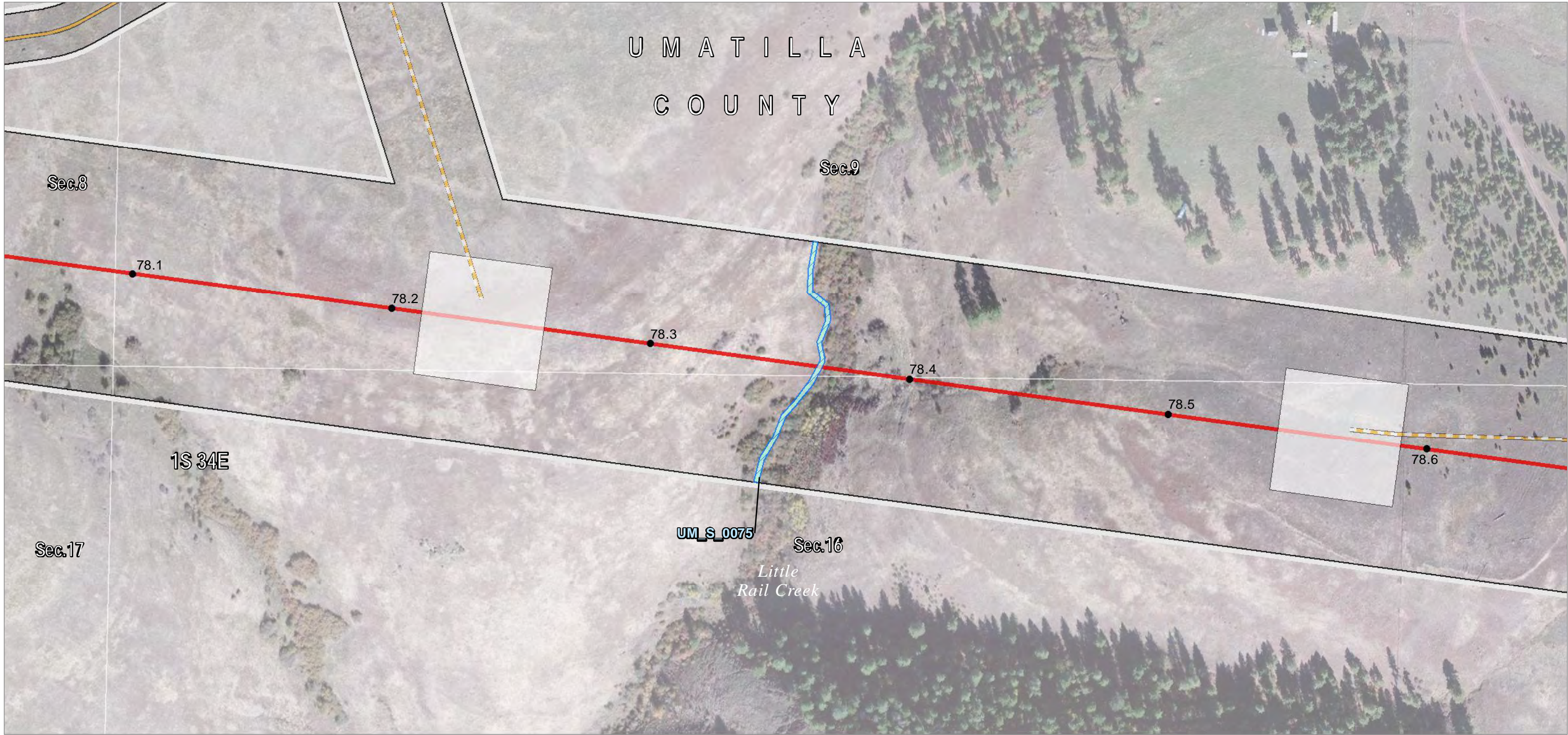


Boardman to Hemingway
Transmission Line Project

Attachment J1-81

**Wetland and Other Waters
Detail Maps**

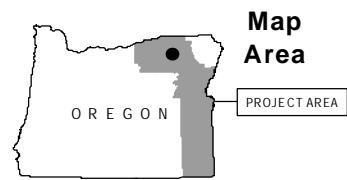
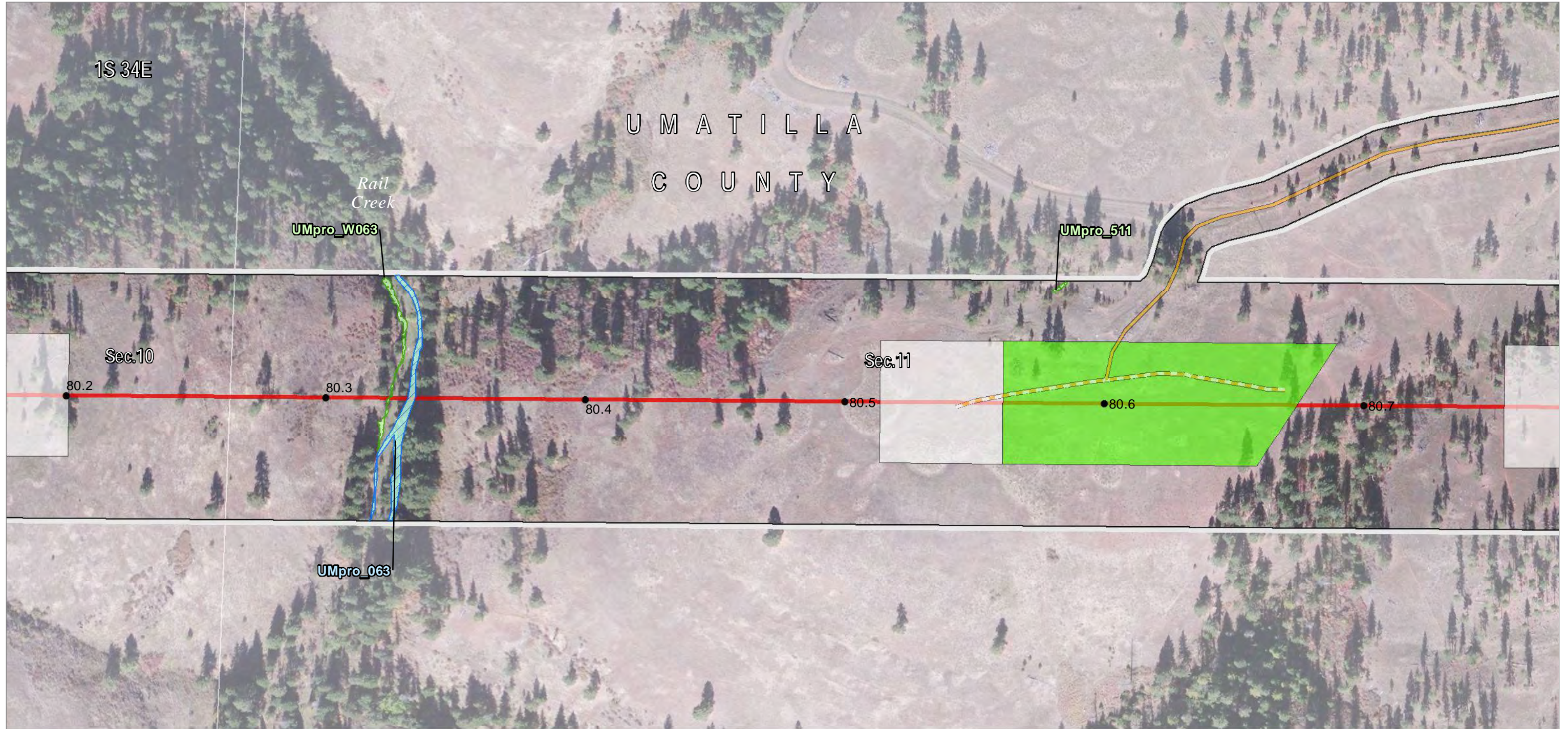
Umatilla County



- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

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

- Other Waters**
- Field Survey Streams



Project Features

- Site Boundary
- Proposed Route
- Alternative 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, Primitive

Other Waters

- Field Survey Streams
- Wetland
- Field Survey Wetland

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

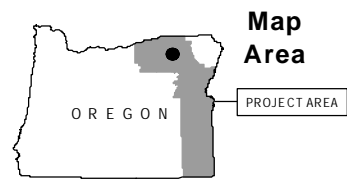
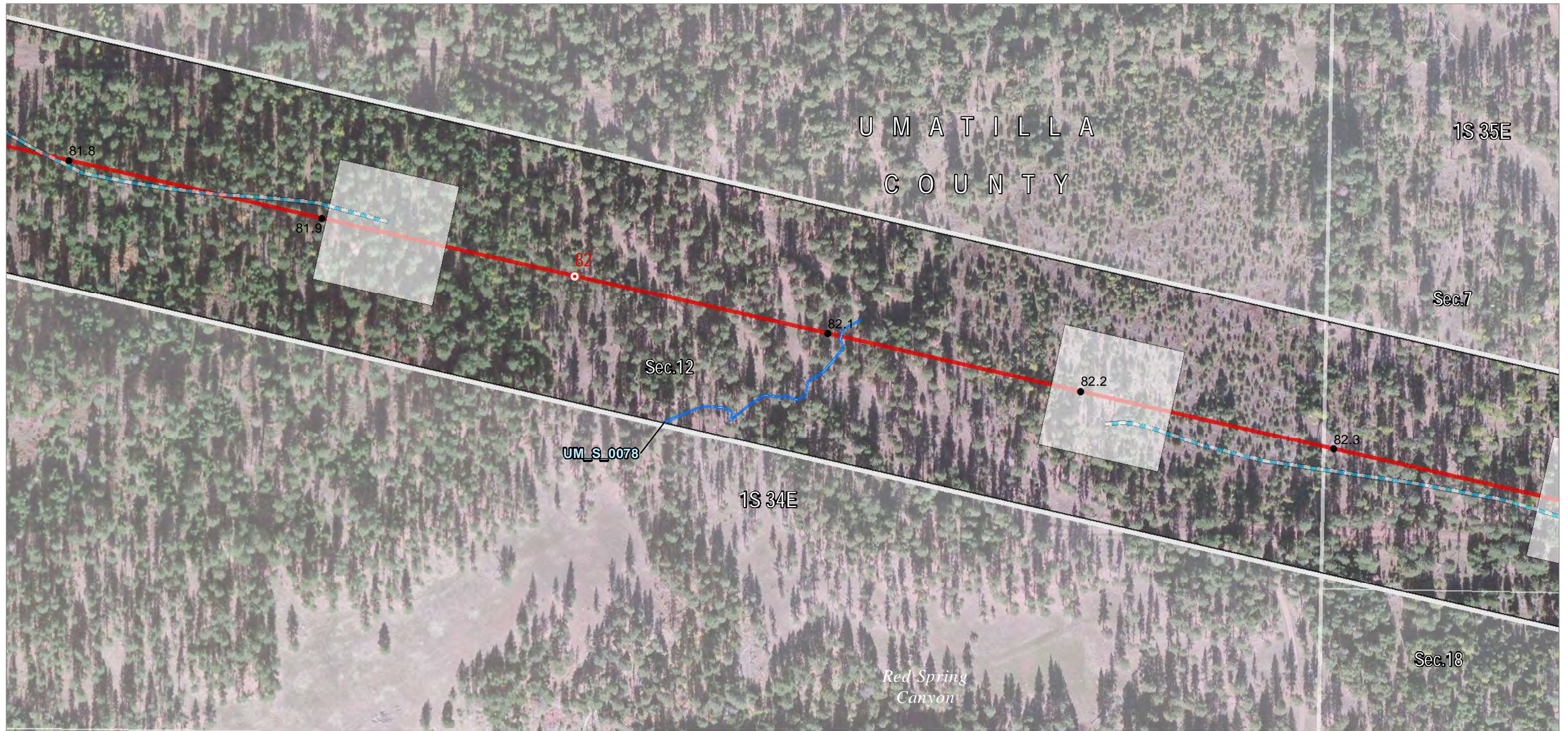


Boardman to Hemingway
Transmission Line Project

Attachment J1-83

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Bladed

Other Waters

- Field Survey Streams

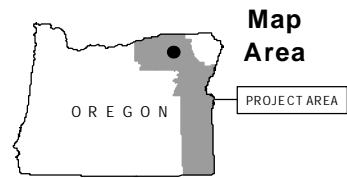


Boardman to Hemingway
Transmission Line Project

Attachment J1-84

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

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

Other Waters

- Field Survey Streams
- Wetland
- Field Survey Wetland

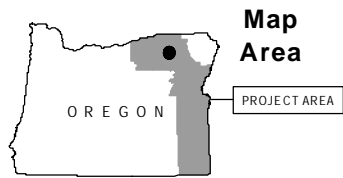


Boardman to Hemingway
Transmission Line Project

Attachment J1-85

Wetland and Other Waters Detail Maps

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- NANS Streams (NHD)

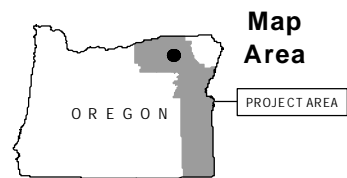
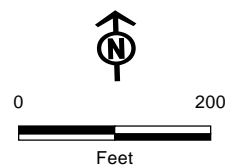


Boardman to Hemingway
Transmission Line Project

Attachment J1-86

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- Field Survey Streams
- NANS Streams (NHD)

Wetland

- Field Survey Wetland

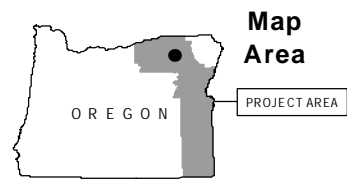
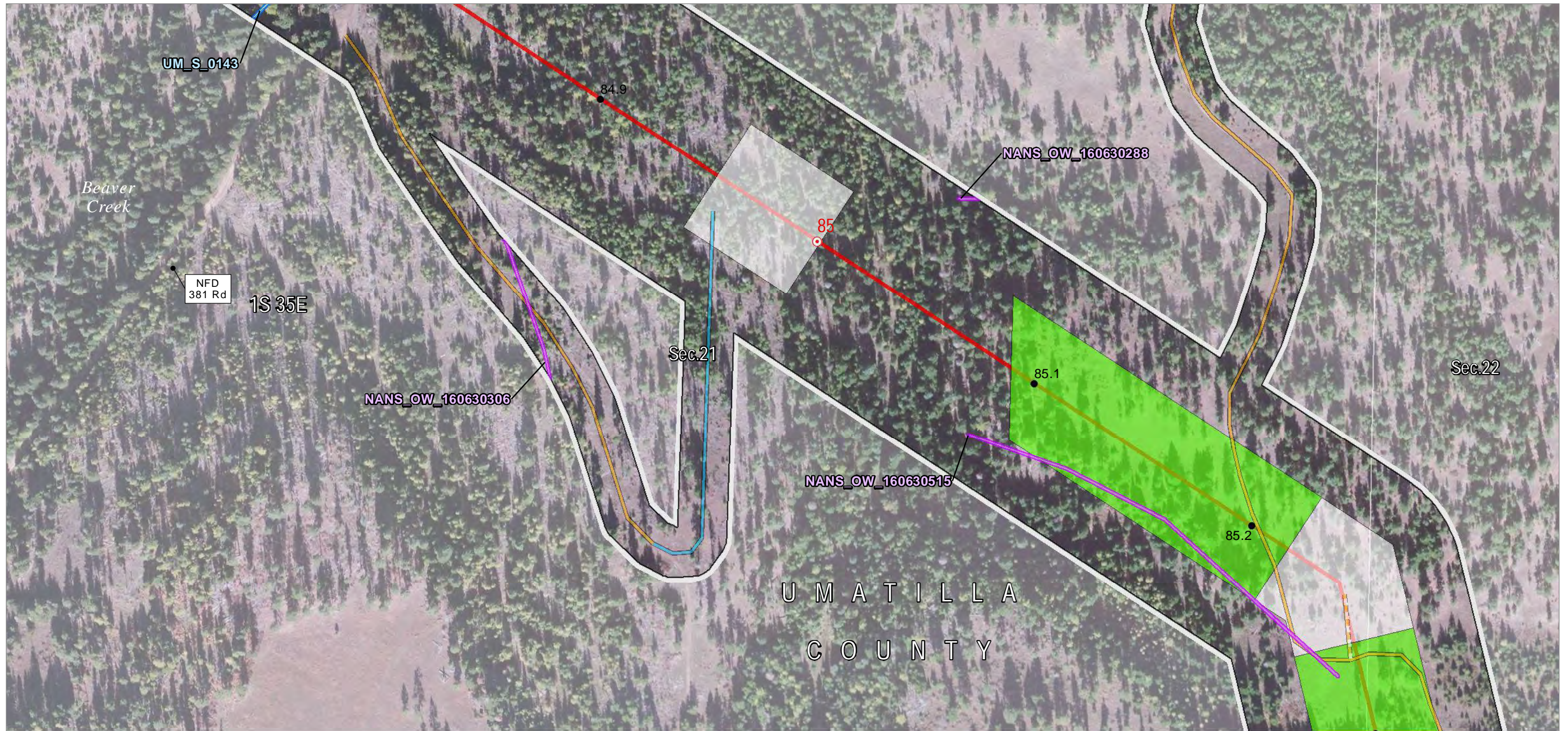


Boardman to Hemingway
Transmission Line Project

Attachment J1-87

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- Field Survey Streams
- NANS Streams (NHD)

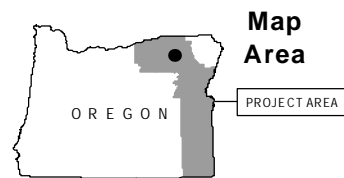
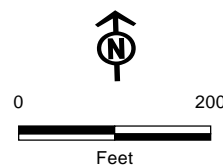


Boardman to Hemingway
Transmission Line Project

Attachment J1-88

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Construction Access

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

- Railroads

Other Waters

- NANS Streams (NHD)

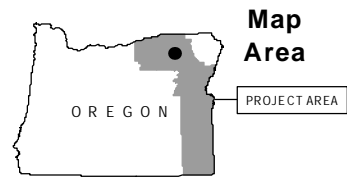
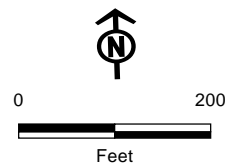


Boardman to Hemingway
Transmission Line Project

Attachment J1-89

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Tenth-mile

Construction Access

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

Other Waters

- NANS Streams (NHD)

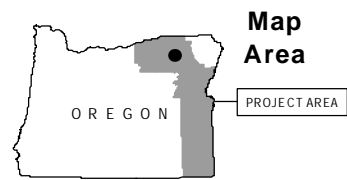
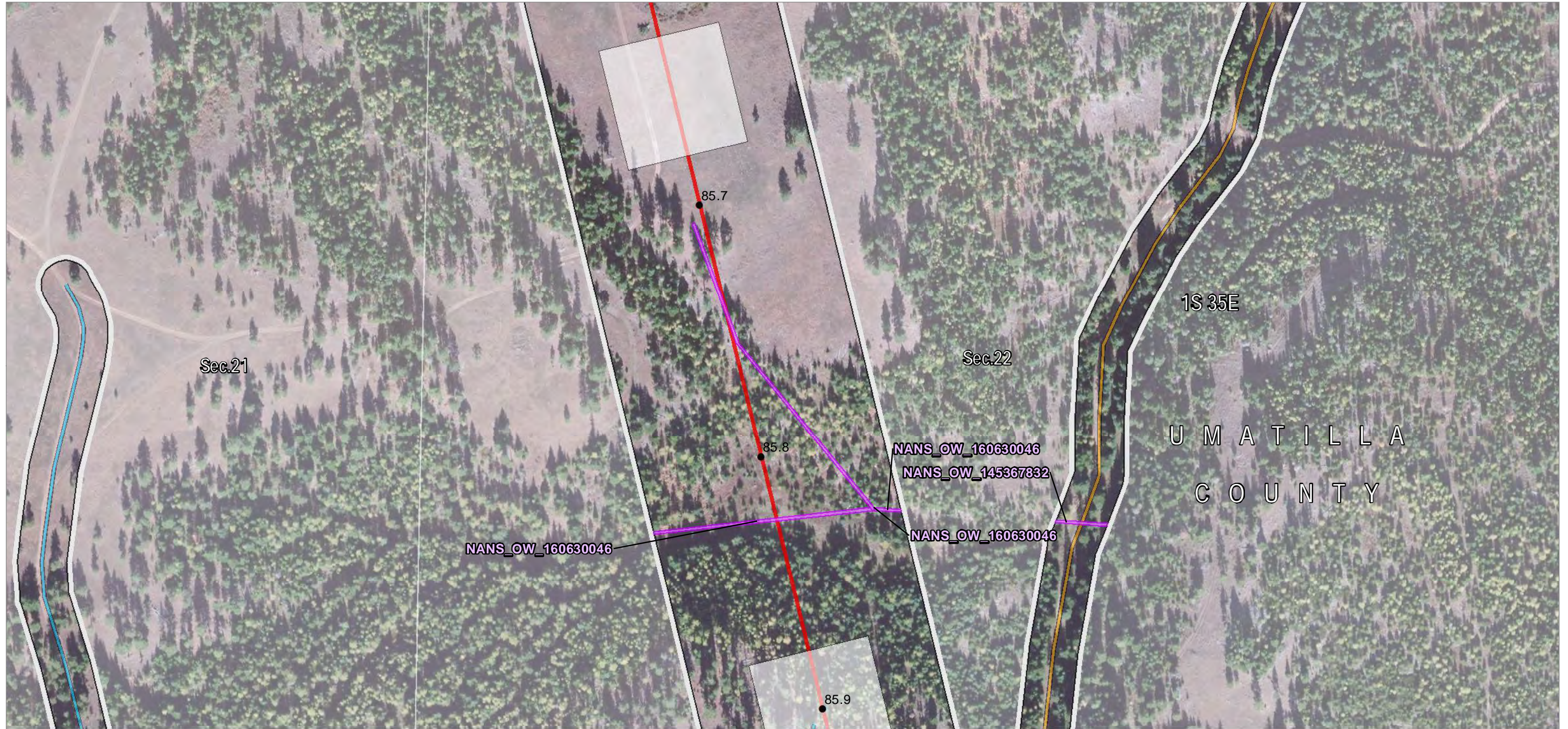


Boardman to Hemingway
Transmission Line Project

Attachment J1-90

**Wetland and Other Waters
Detail Maps**

Umatilla County



Project Features

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

Mileposts

- Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements
 - Existing Road, Substantial Modification, 71-100% Improvements

- New Road, Bladed
- Other Waters
 - NANS Streams (NHD)

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

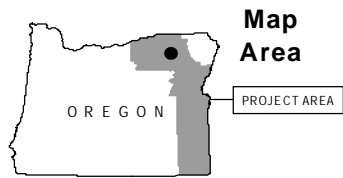
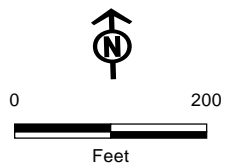
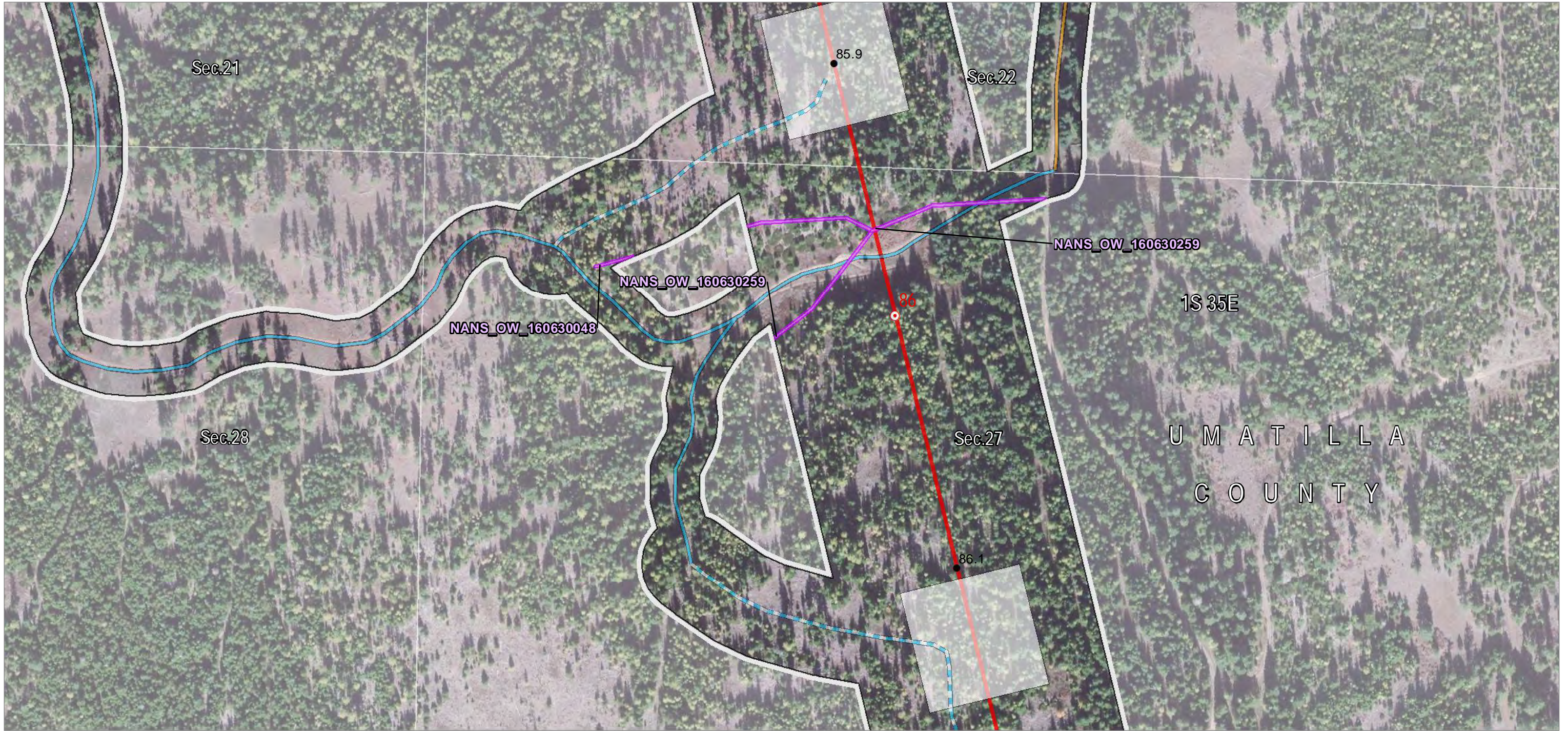


Boardman to Hemingway
Transmission Line Project

Attachment J1-91

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

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

Other Waters

- NANS Streams (NHD)

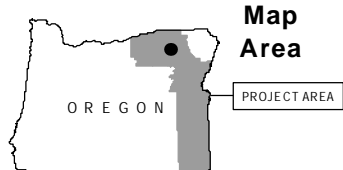
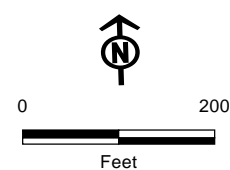


Boardman to Hemingway Transmission Line Project

Attachment J1-92

Wetland and Other Waters Detail Maps

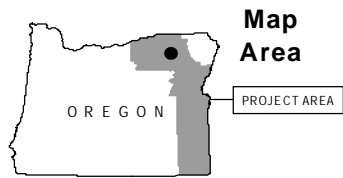
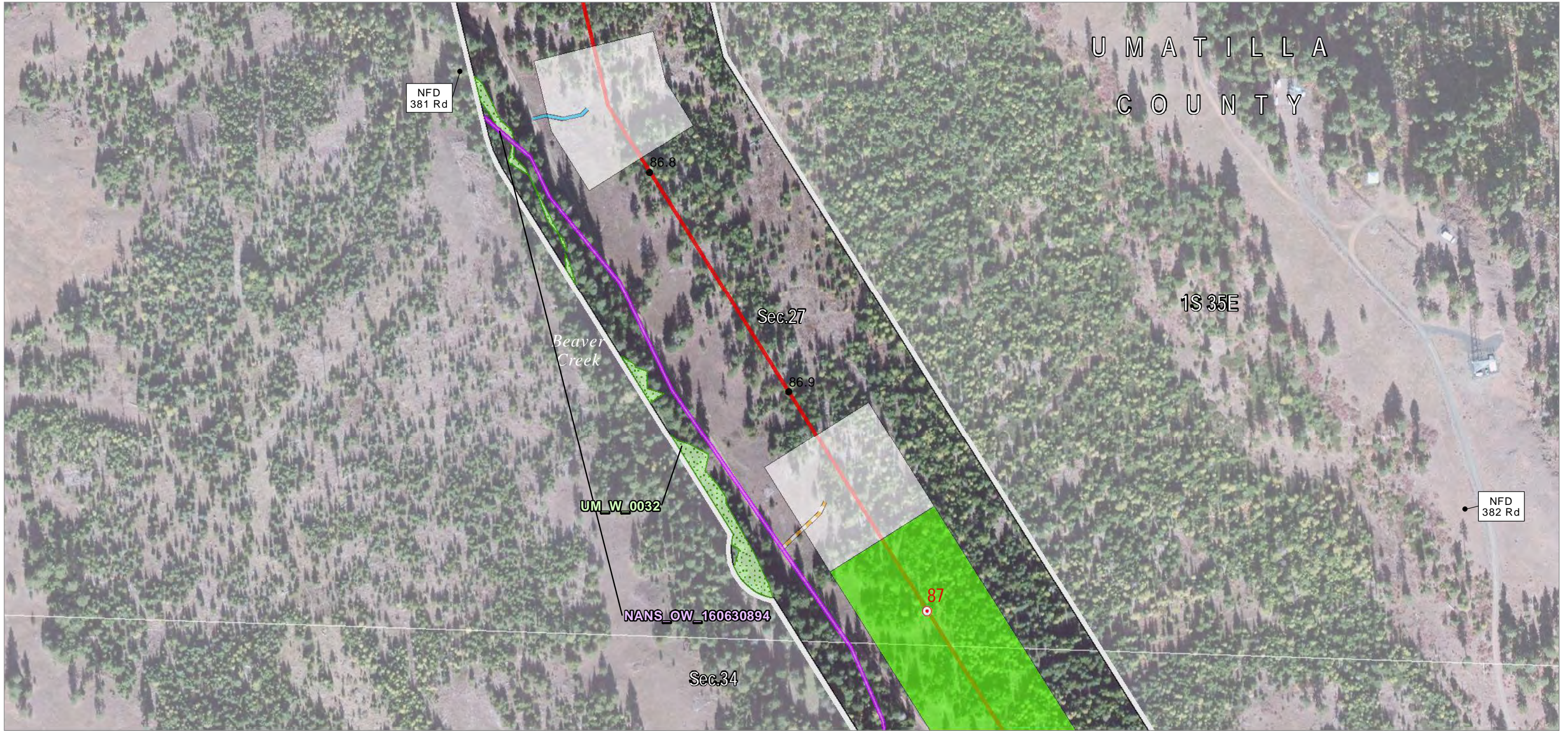
Umatilla County



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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Proposed Route
 - Work Areas
 - Structure Work Area

- Mileposts**
- Tenth-mile
- Construction Access**
- New Road, Bladed
- Other Waters**
- NANS Streams (NHD)



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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 71-100% Improvements

- New Road, Primitive
- Other Waters
- NANS Streams (NHD)
- Wetland
- Field Survey Wetland

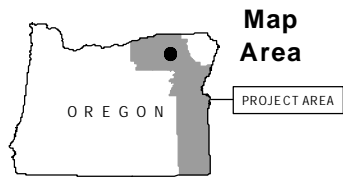
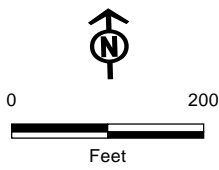
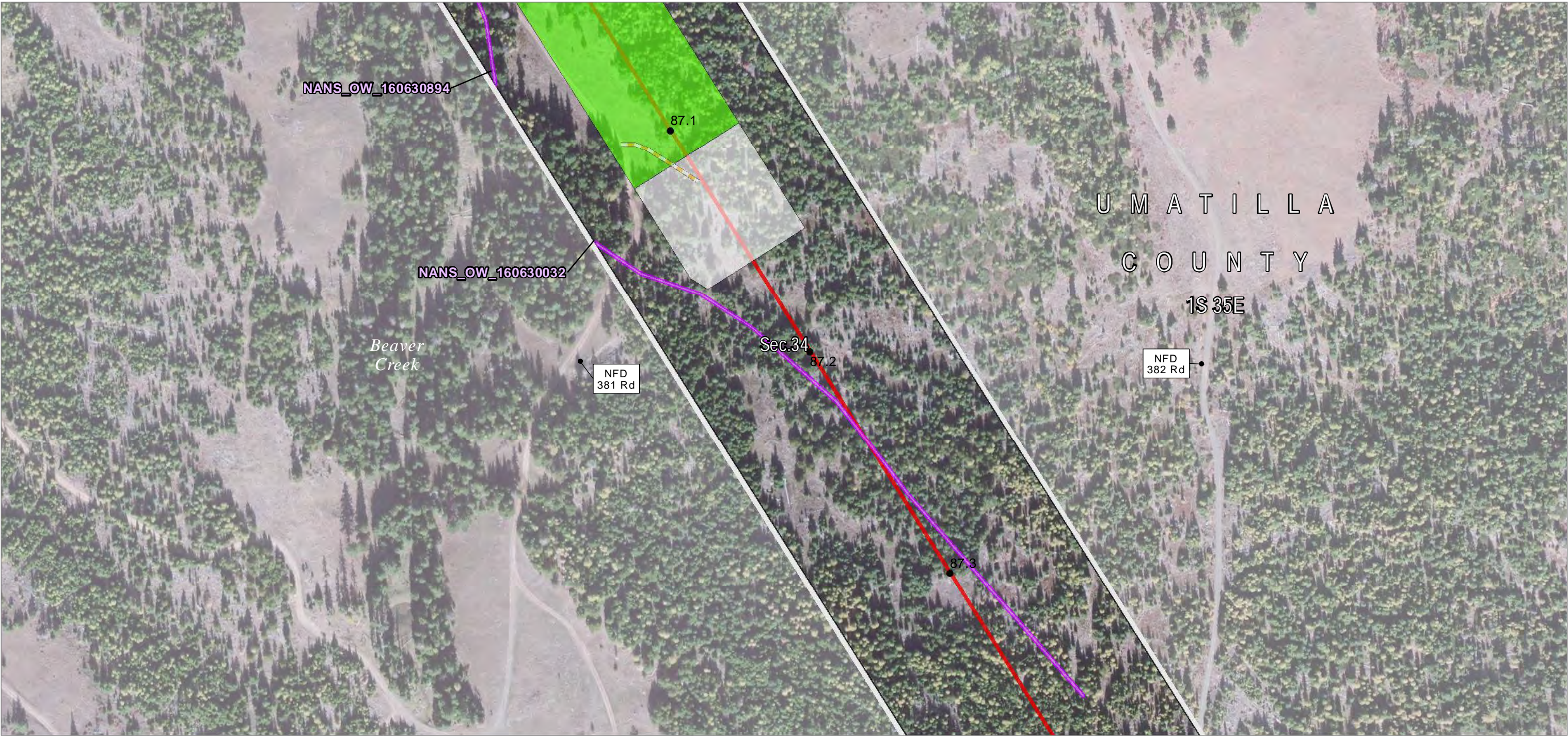


Boardman to Hemingway
Transmission Line Project

Attachment J1-94

**Wetland and Other Waters
Detail Maps**

Umatilla 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

Project Features

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

- Structure Work Area
- Mileposts
- Tenth-mile
- Construction Access
- New Road, Primitive

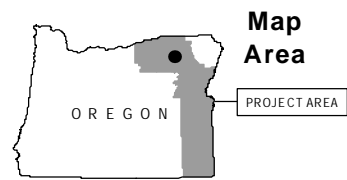
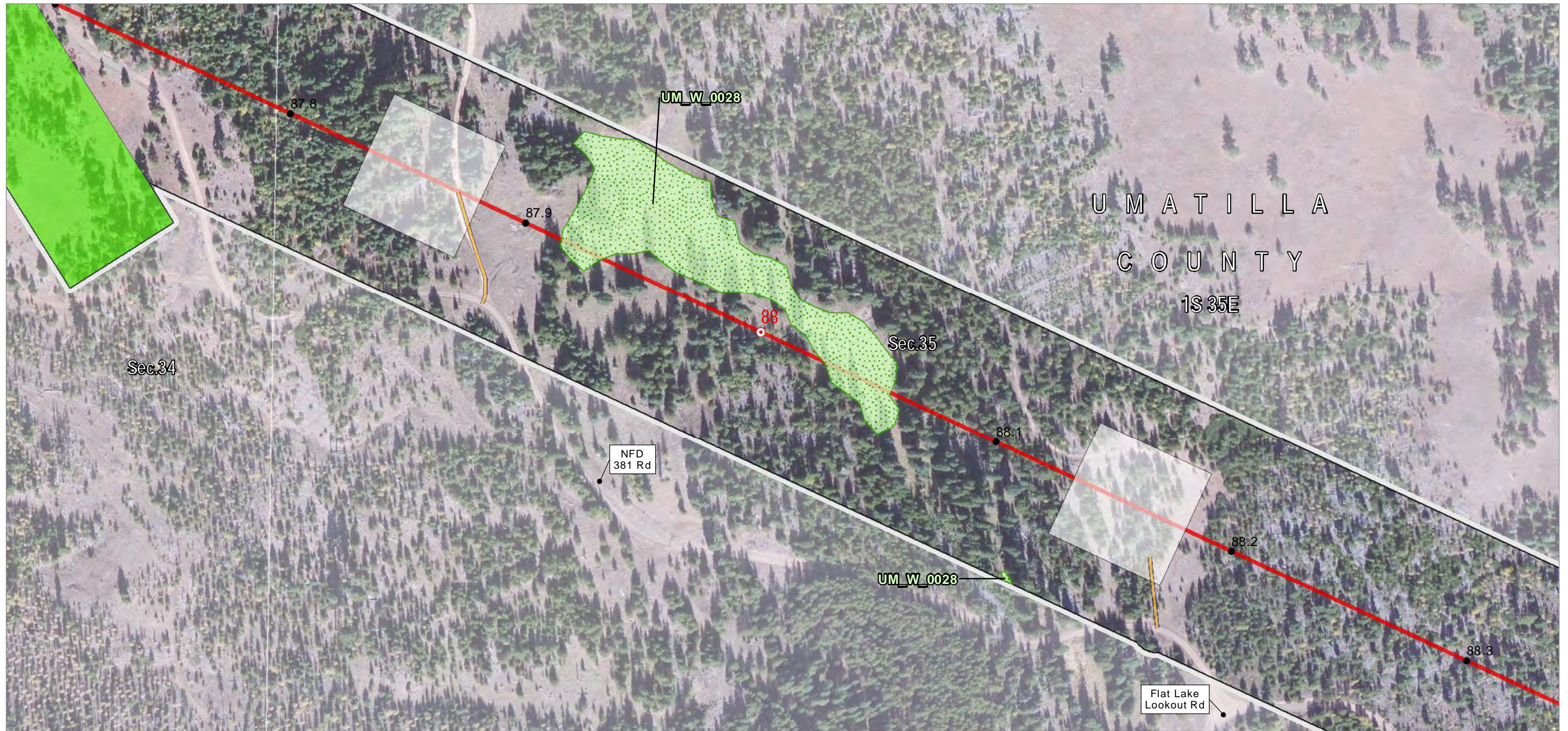
Other Waters

- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-95
Wetland and Other Waters
Detail Maps
Umatilla County



Project Features

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

- Structure Work Area
 -
- Mileposts
 - Mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements

- County Boundary
 -
- Wetland
 - Field Survey Wetland

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

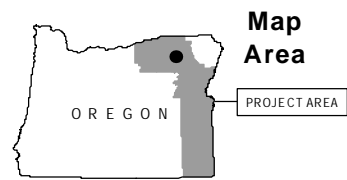
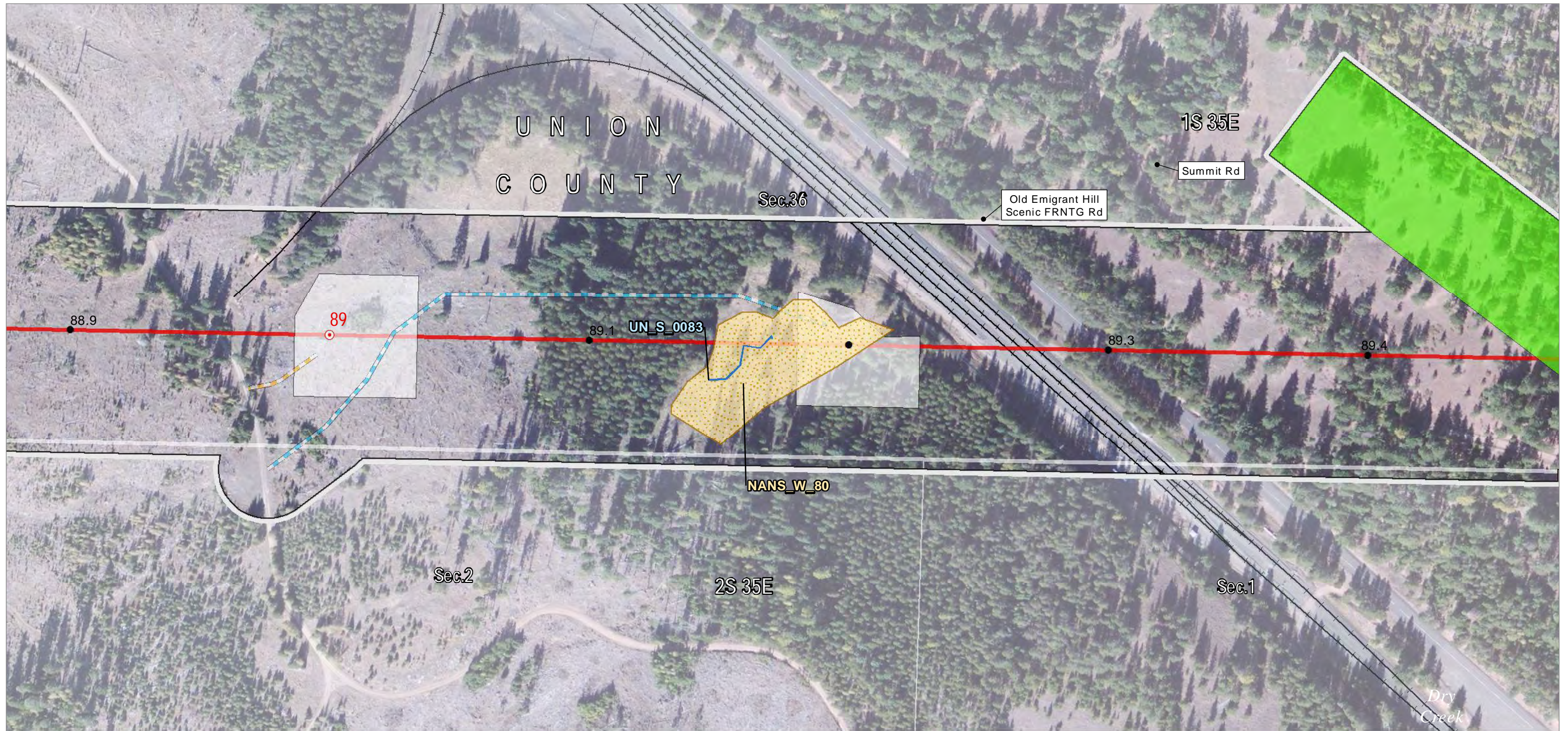


Boardman to Hemingway
Transmission Line Project

Attachment J1-96

**Wetland and Other Waters
Detail Maps**



Umatilla 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

Project Features


Site Boundary


-  Proposed Route
-  Alternative Route

Route Centerline



-  Proposed Route

Work Areas




-  Pulling and Tensioning

-  Structure Work Area


Mileposts

-  Mile
-  Tenth-mile


Construction Access

-  New Road, Bladed
-  New Road, Primitive
-  Railroads

Other Waters

-  Field Survey Streams

Wetland

-  NANS Wetland (NWI)

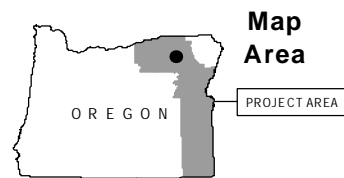
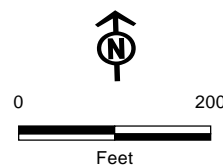
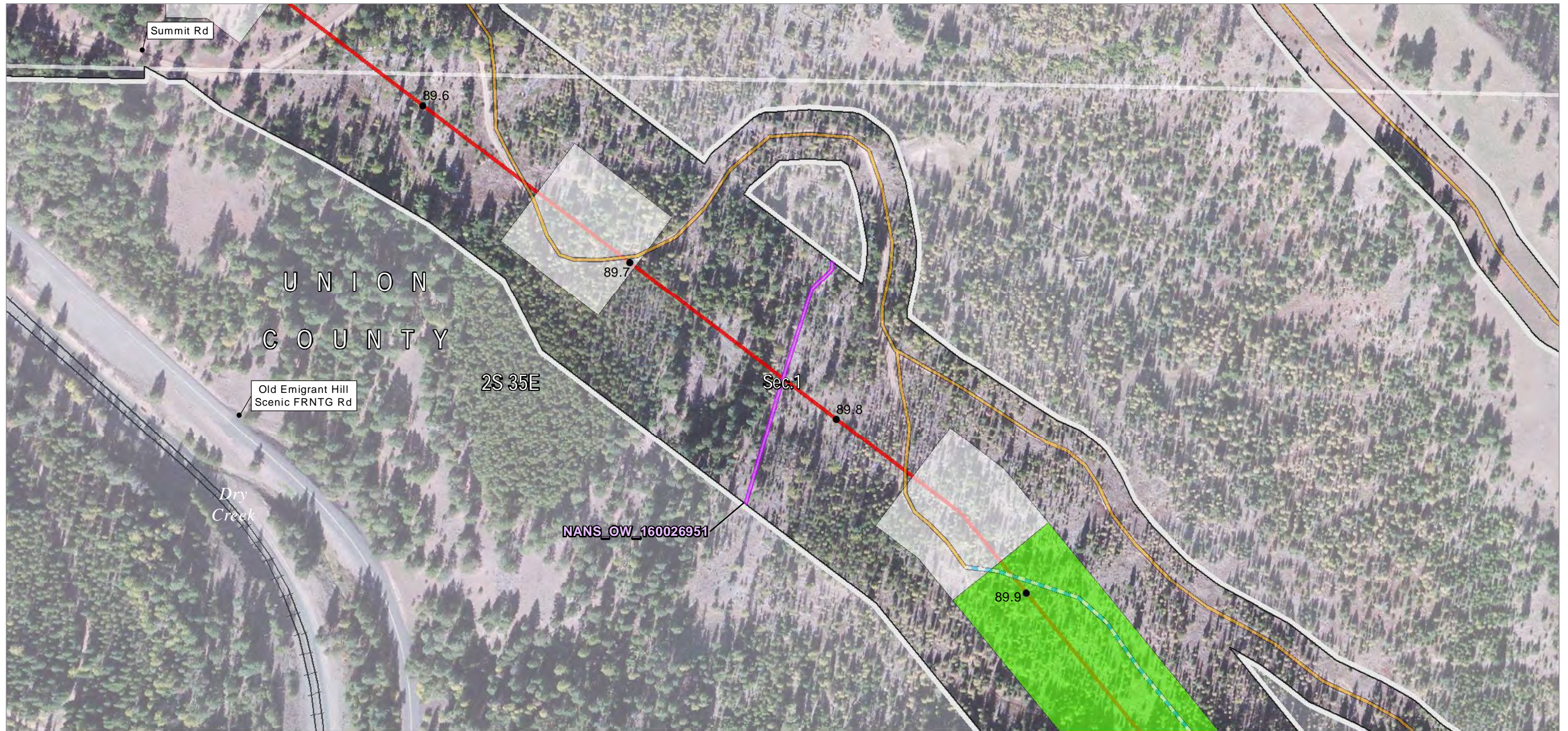


Boardman to Hemingway
Transmission Line Project

Attachment J1-97

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

- Site Boundary
- Proposed Route
- Alternative 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

- Railroads
- Other Waters
- NANS Streams (NHD)

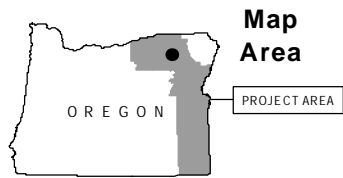
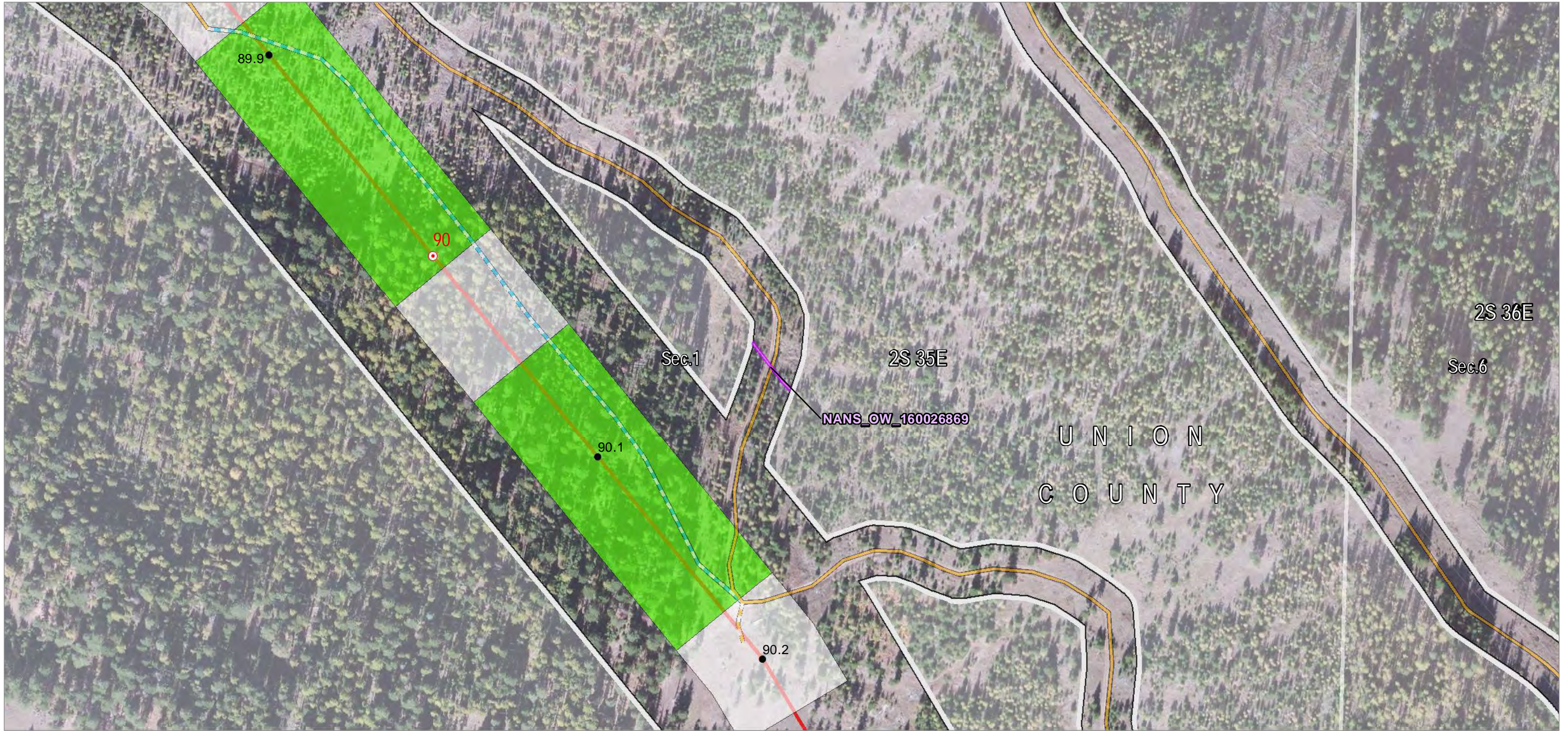


Boardman to Hemingway
Transmission Line Project

Attachment J1-98

**Wetland and Other Waters
Detail Maps**

Union County



Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- New Road, Primitive
- Other Waters
- NANS Streams (NHD)



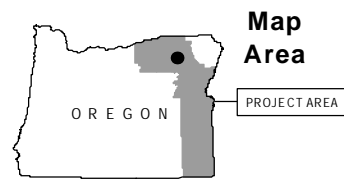
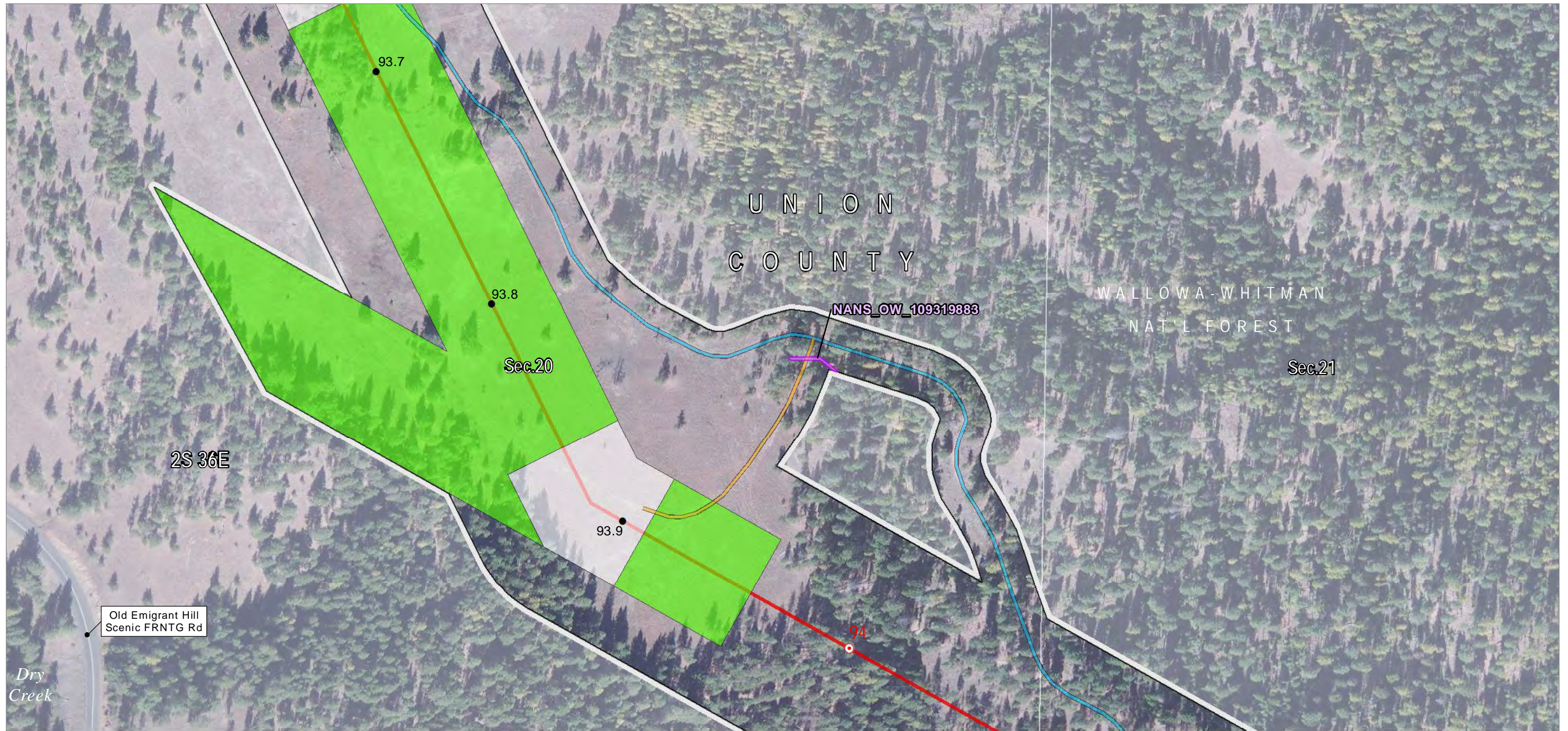
Boardman to Hemingway
Transmission Line Project

Attachment J1-99

**Wetland and Other Waters
Detail Maps**

Union 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



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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- NANS Streams (NHD)

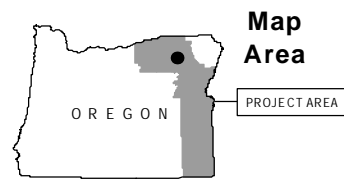
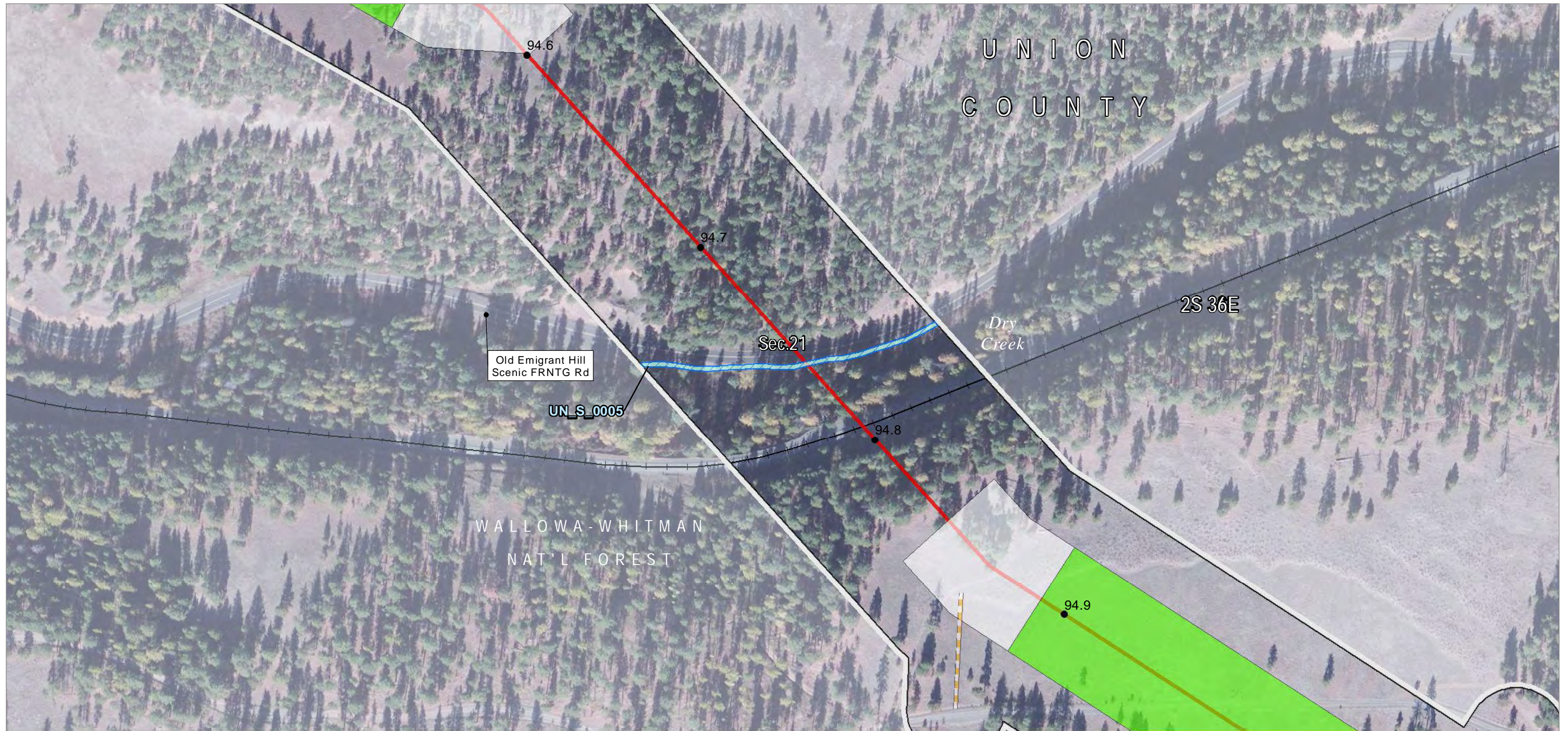


Boardman to Hemingway
Transmission Line Project

Attachment J1-100

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route
- Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive
- Railroads

Other Waters

- Field Survey Streams

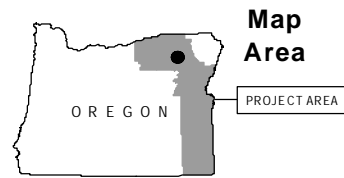
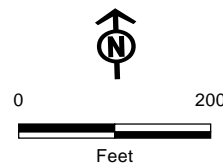


Boardman to Hemingway
Transmission Line Project

Attachment J1-101

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Primitive
- Other Waters
- NANS Streams (NHD)

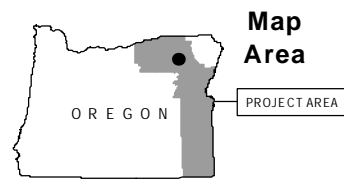
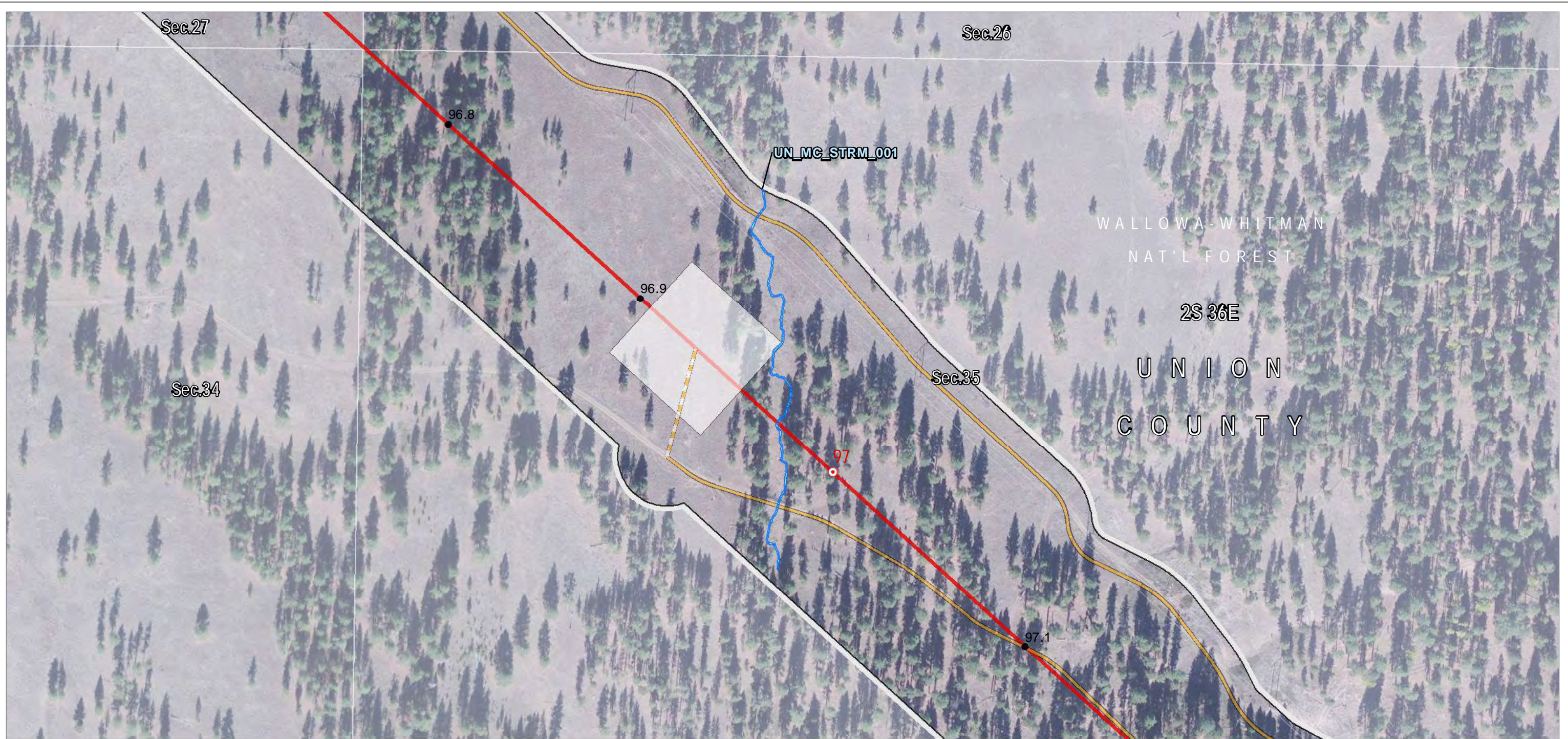


Boardman to Hemingway
Transmission Line Project

Attachment J1-102

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

- Mile
- Tenth-mile

Construction Access

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

Other Waters

- Field Survey Streams

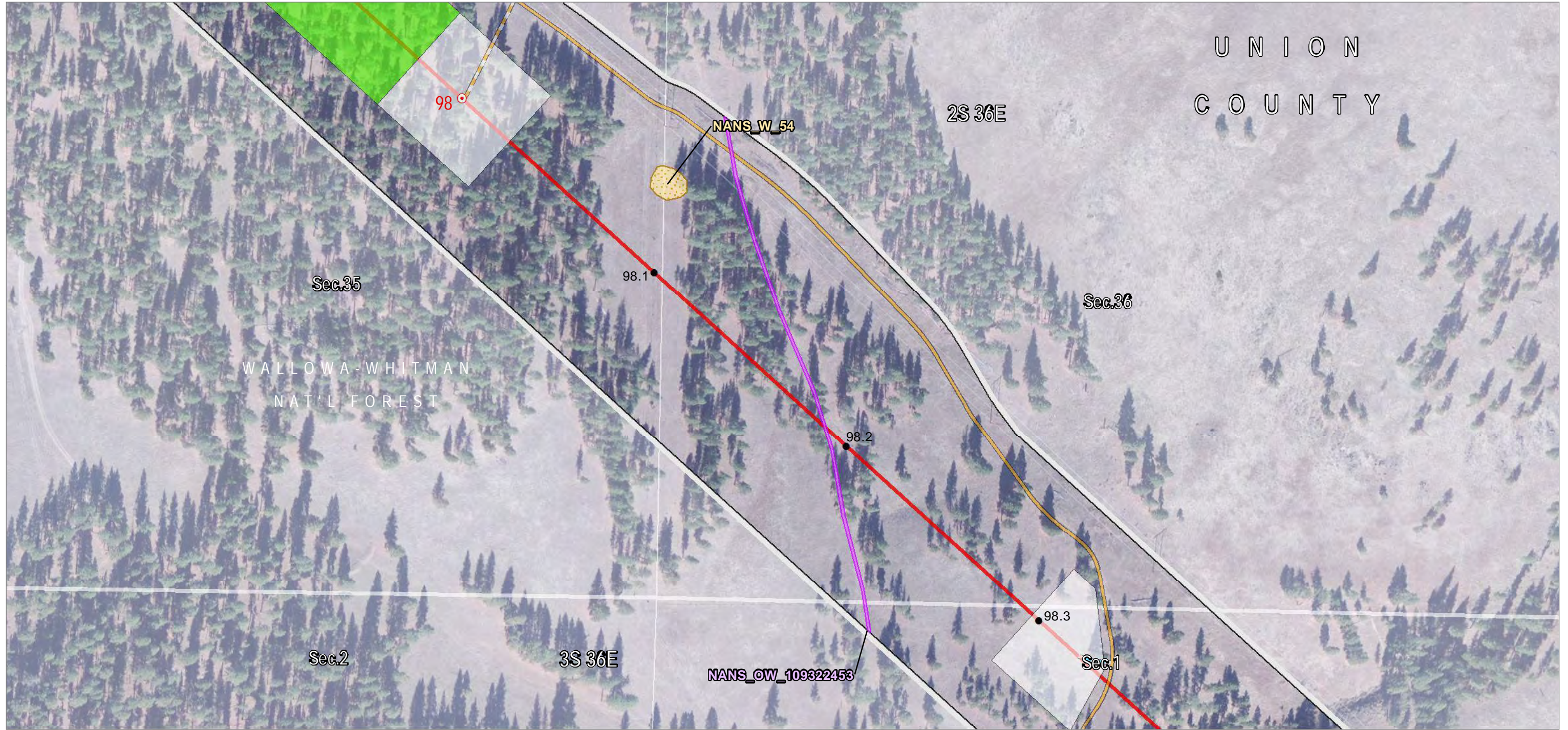


Boardman to Hemingway
Transmission Line Project

Attachment J1-103

**Wetland and Other Waters
Detail Maps**

Union County



U N I O N
C O U N T Y

2S 36E

Sec.35

WALLOWA-WHITMAN
NAT'L FOREST

Sec.36

Sec.2

3S 36E

NANS_OW_109322453

Sec.1

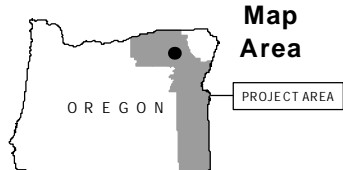
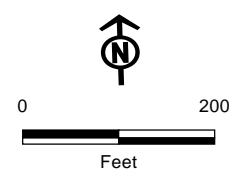
98.1

98.2

98.3

NANS_W_54

98



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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- New Road, Primitive
- Other Waters
- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)

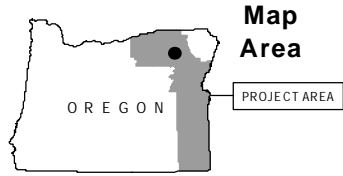
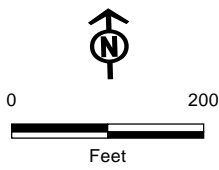
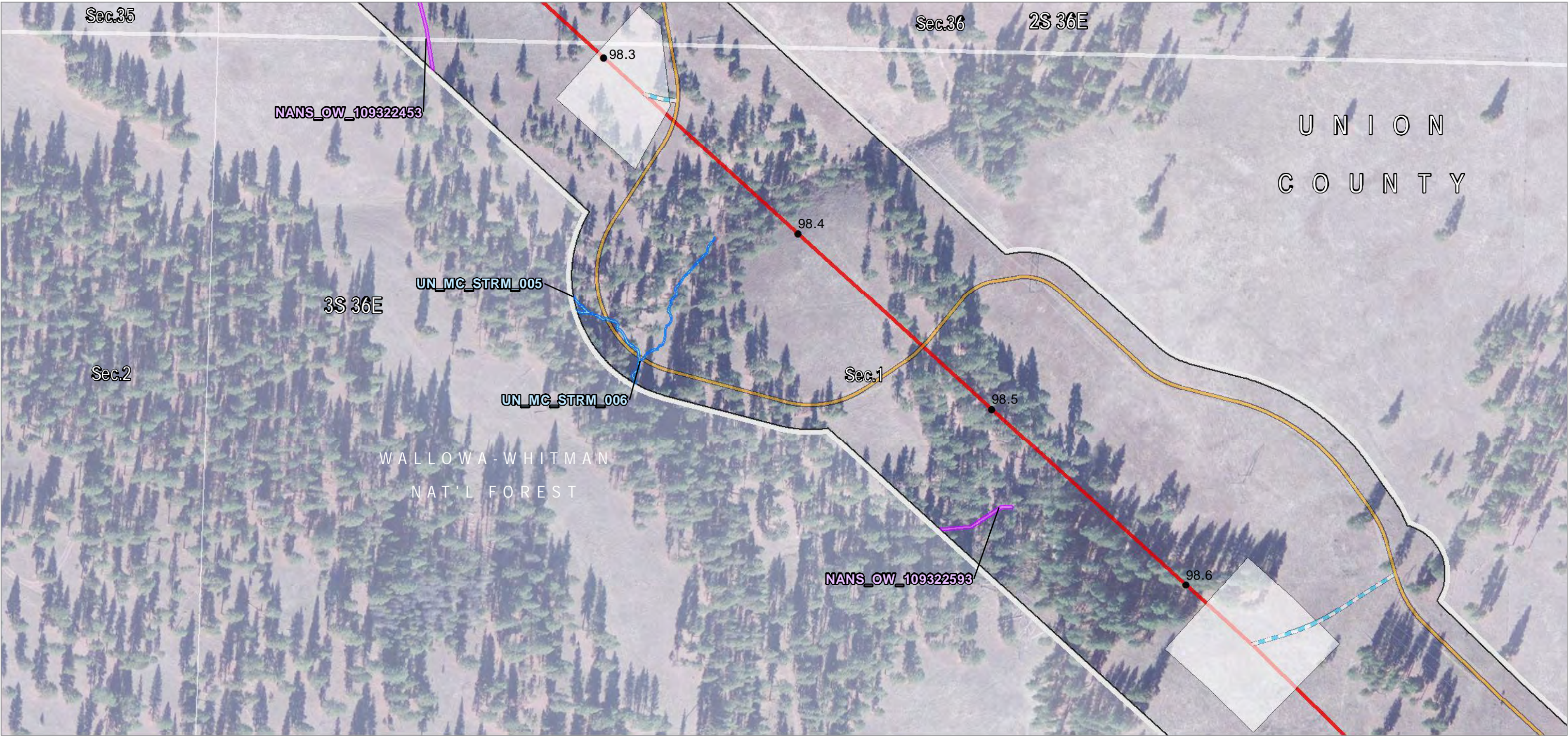


Boardman to Hemingway
Transmission Line Project

Attachment J1-104

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

- Site Boundary
- Proposed Route
- Alternative 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

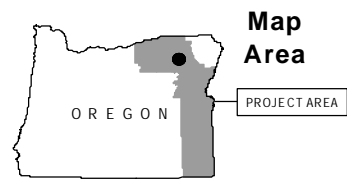
Other Waters

- Field Survey Streams
- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-105
Wetland and Other Waters
Detail Maps
Union 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

Project Features

- Site Boundary
- Proposed Route
- Alternative Route
- Route Centerline
- Proposed Route
- Alternative

Work Areas

- Pulling and Tensioning
- Structure Work Area
- Mileposts
- Mile
- Tenth-mile

Construction Access

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

Other Waters

- NANS Streams (NHD)

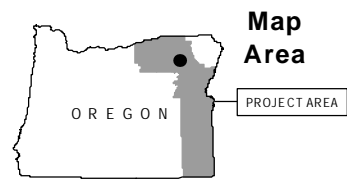
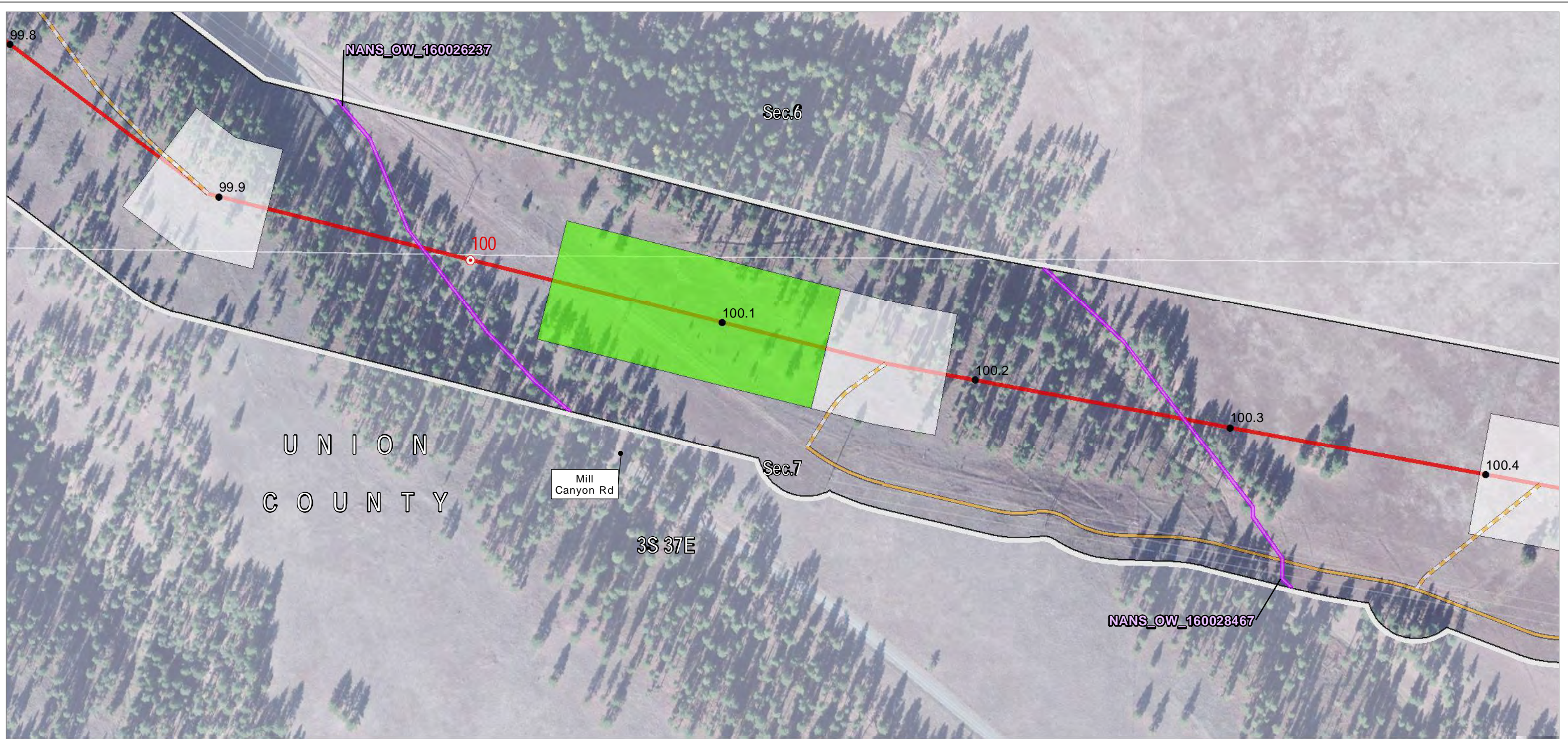


Boardman to Hemingway
Transmission Line Project

Attachment J1-106

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

New Road, Primitive

Other Waters

- NANS Streams (NHD)

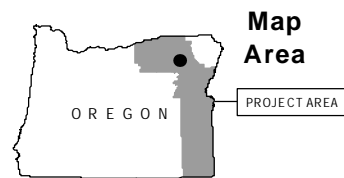
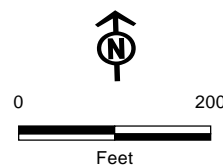
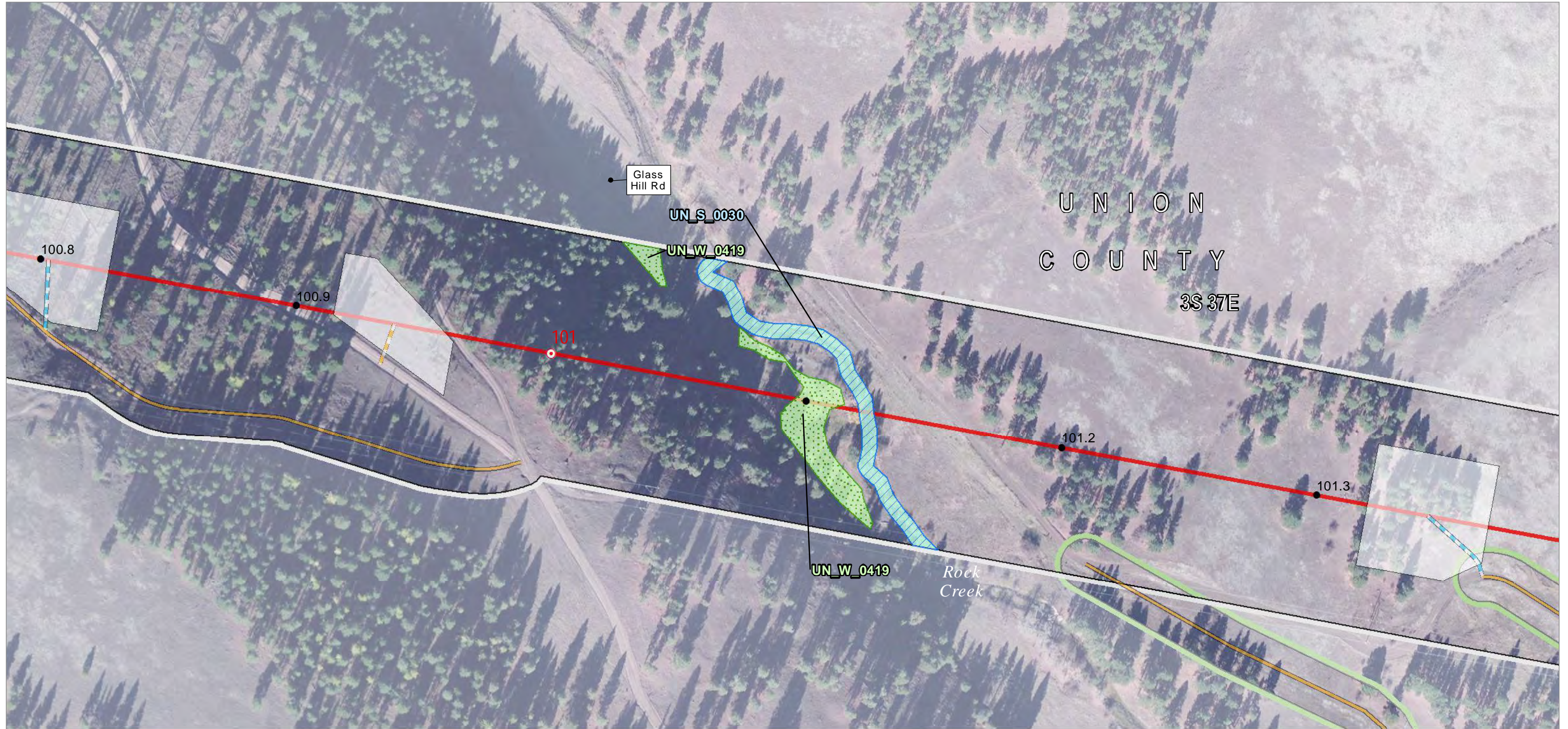


Boardman to Hemingway
Transmission Line Project

Attachment J1-108

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

New Road, Primitive

Other Waters

- Field Survey Streams

Wetland

- Field Survey Wetland

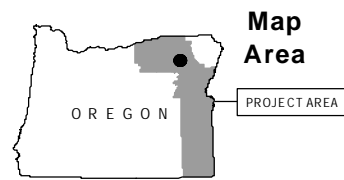
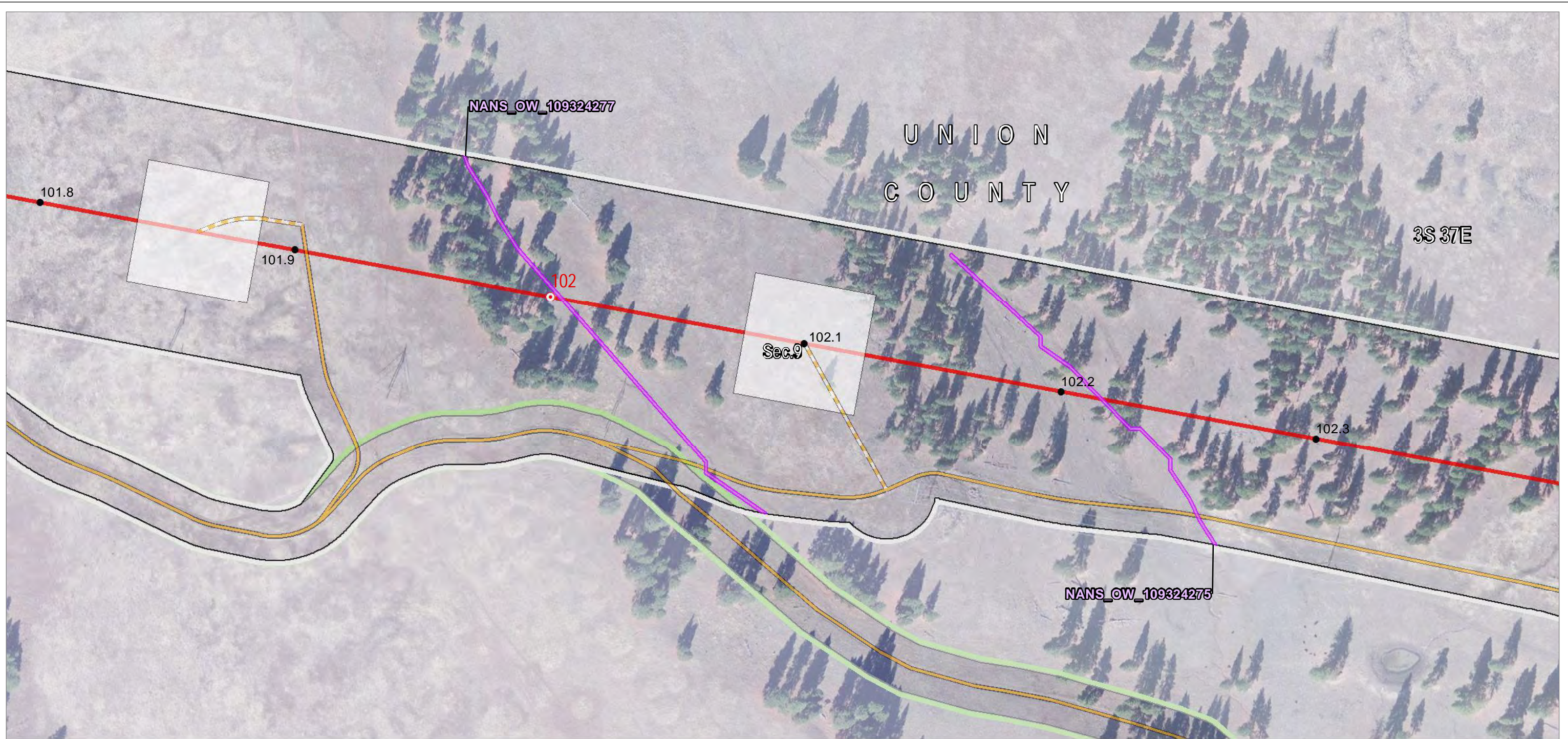


Boardman to Hemingway
Transmission Line Project

Attachment J1-109

**Wetland and Other Waters
Detail Maps**

Union County



Project Features

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

Mileposts

- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

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

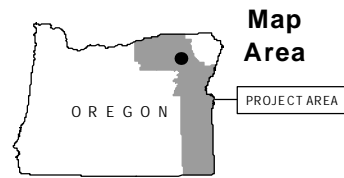
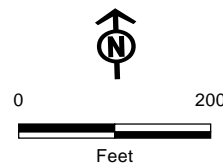
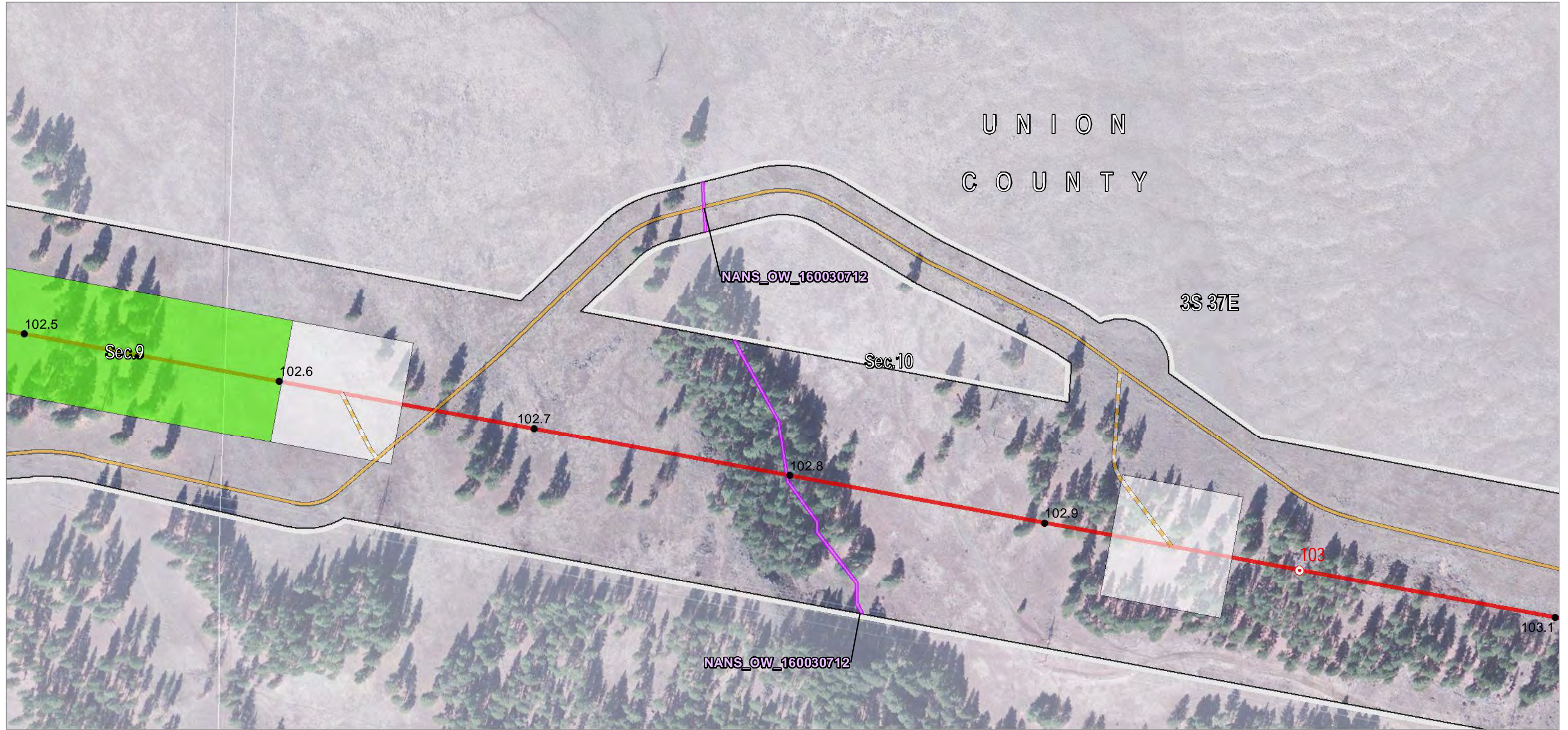


Boardman to Hemingway
Transmission Line Project

Attachment J1-110

**Wetland and Other Waters
Detail Maps**

Union County



Project Features

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

- Structure Work Area

- Mileposts
- Mile
- Tenth-mile

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

- New Road, Primitive

Other Waters

- NANS Streams (NHD)



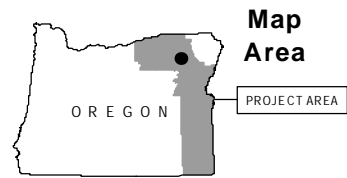
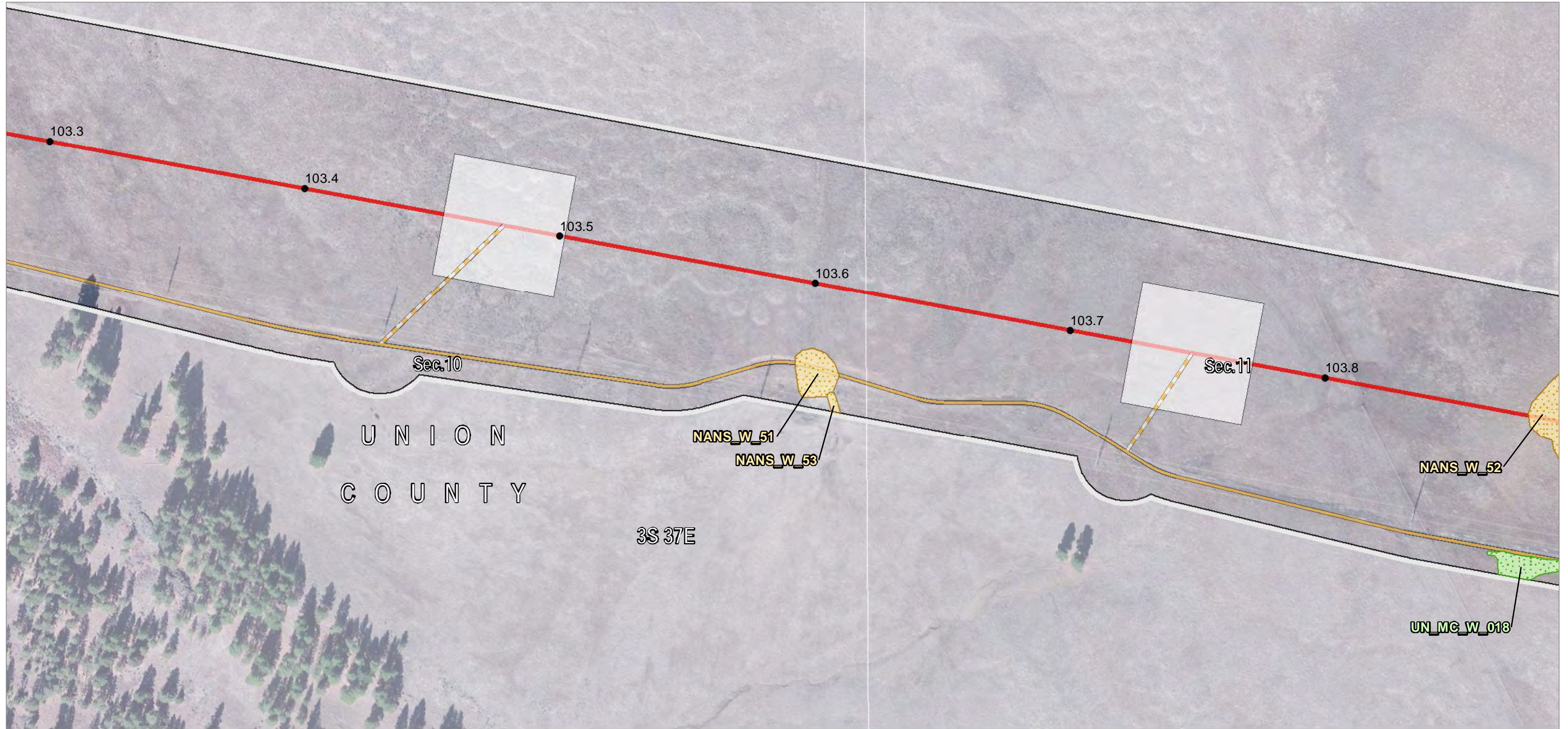
Boardman to Hemingway
Transmission Line Project

Attachment J1-111

Wetland and Other Waters
Detail Maps

Union 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



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

Project Features

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

Mileposts

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

Wetland

- Field Survey Wetland
- NANS Wetland (NWI)

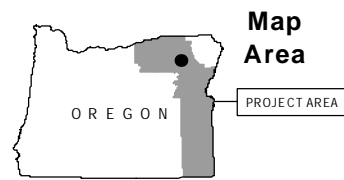
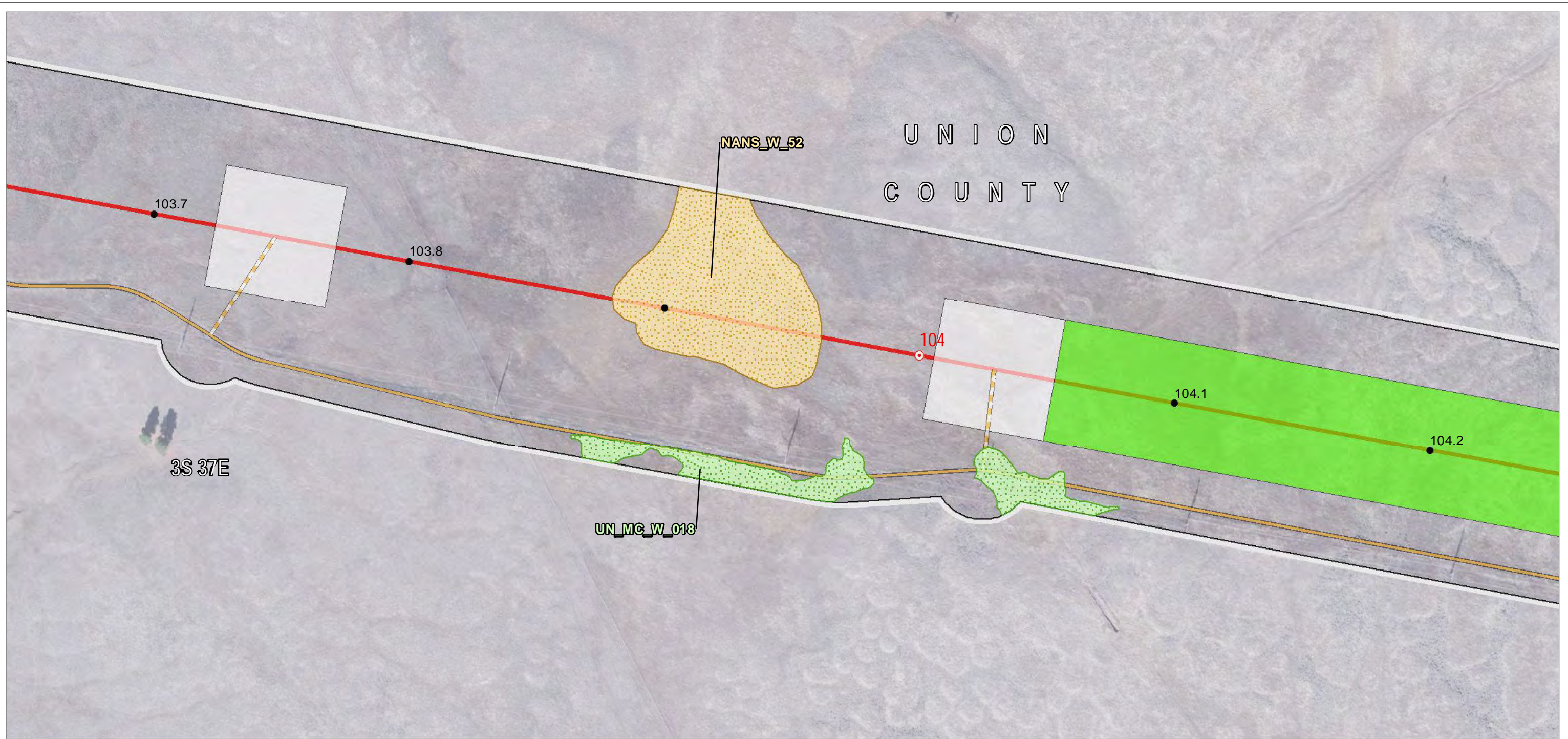


Boardman to Hemingway
Transmission Line Project

Attachment J1-112

Wetland and Other Waters Detail Maps

Union County



Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

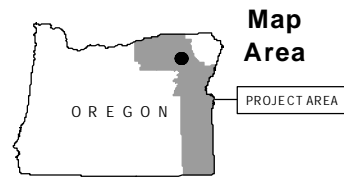
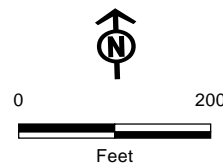
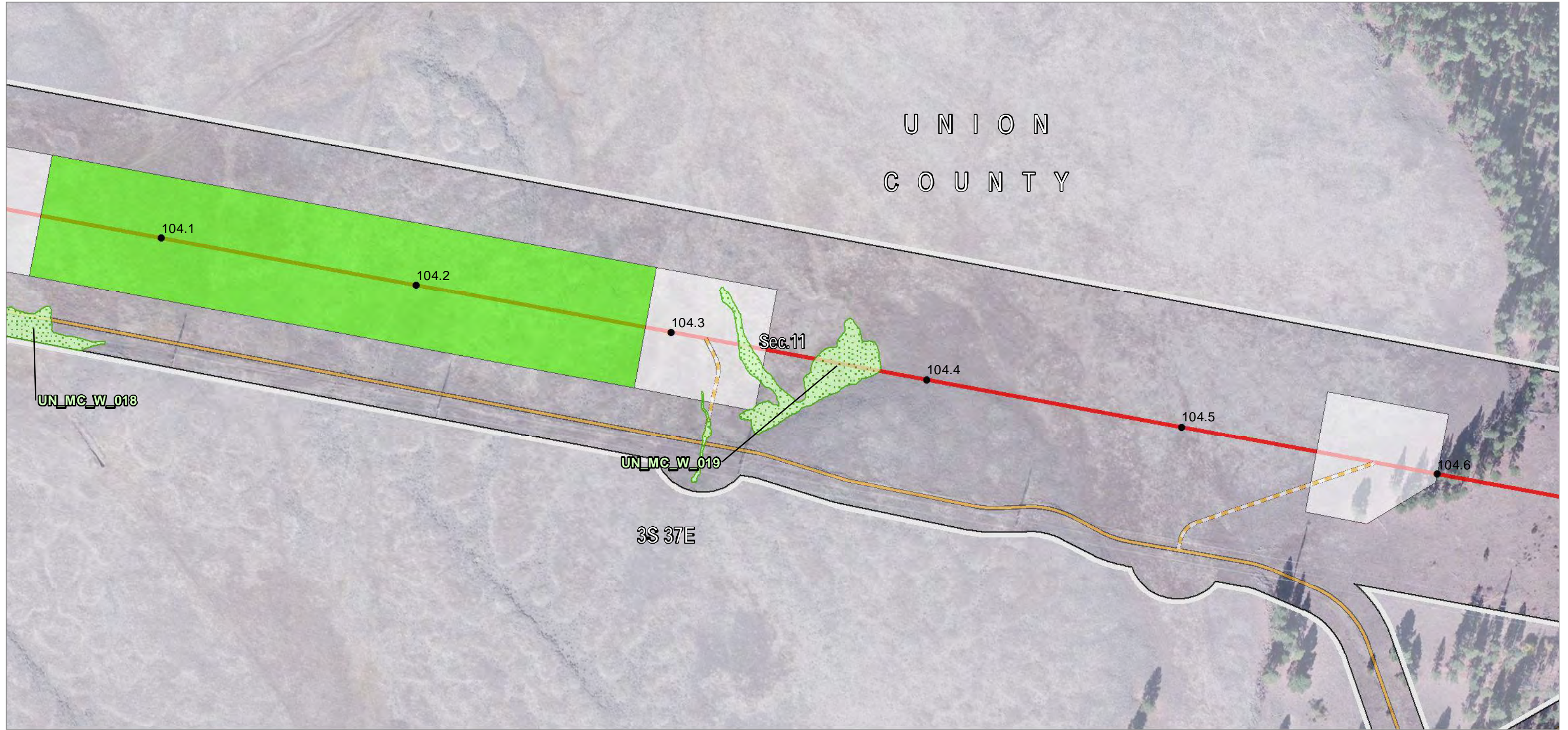
- New Road, Primitive
- Wetland
- Field Survey Wetland
- NANS Wetland (NWI)

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

Attachment J1-113
Wetland and Other Waters
Detail Maps
Union 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

Project Features

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

- Structure Work Area
- Mileposts
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements
- New Road, Primitive

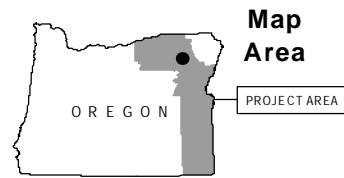
Wetland

- Field Survey Wetland



Boardman to Hemingway
Transmission Line Project

Attachment J1-114
Wetland and Other Waters
Detail Maps
Union County



Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)



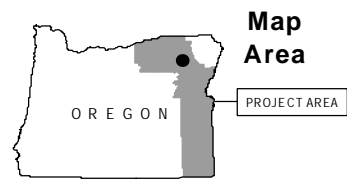
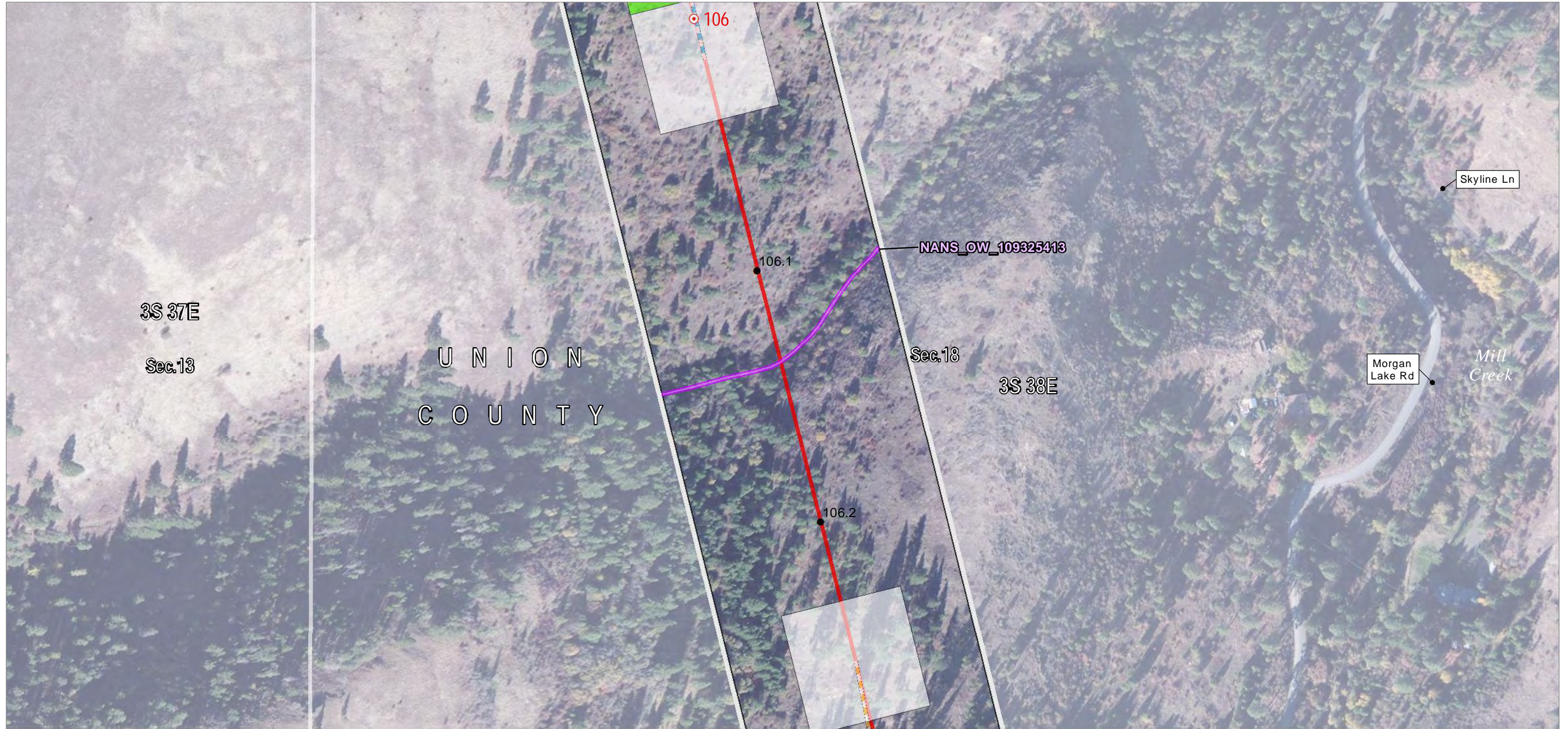
Boardman to Hemingway
Transmission Line Project

Attachment J1-115

**Wetland and Other Waters
Detail Maps**

Union 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



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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Bladed
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

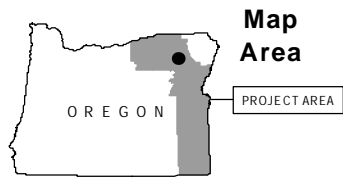
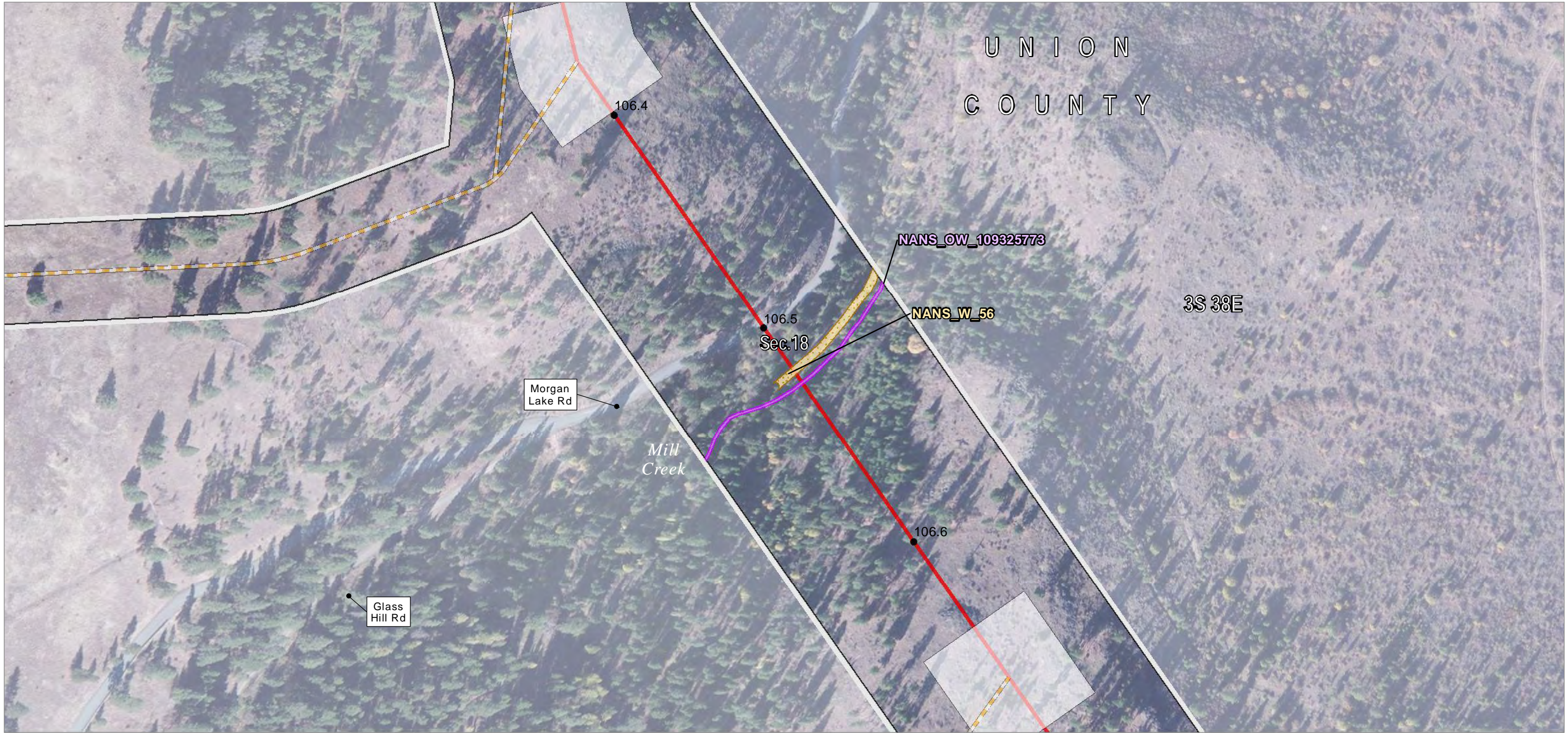


Boardman to Hemingway
Transmission Line Project

Attachment J1-116

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

- Tenth-mile

Construction Access

- New Road, Primitive

Other Waters

- NANS Streams (NHD)

Wetland

- NANS Wetland (NWI)

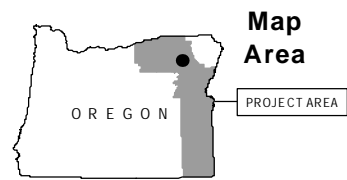
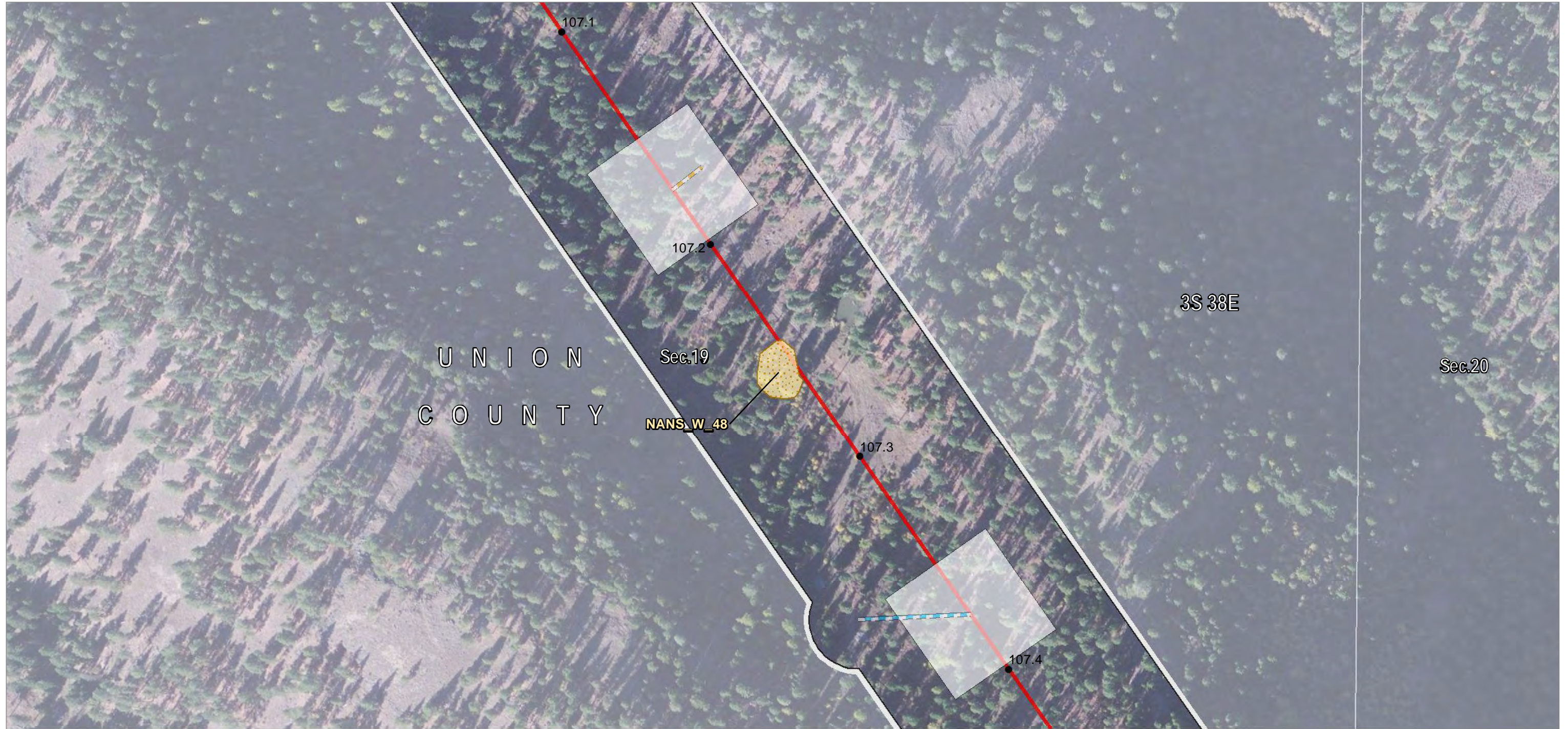


Boardman to Hemingway
Transmission Line Project

Attachment J1-117

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

- Tenth-mile

Construction Access

- New Road, Bladed
- New Road, Primitive

Wetland

- NANS Wetland (NWI)

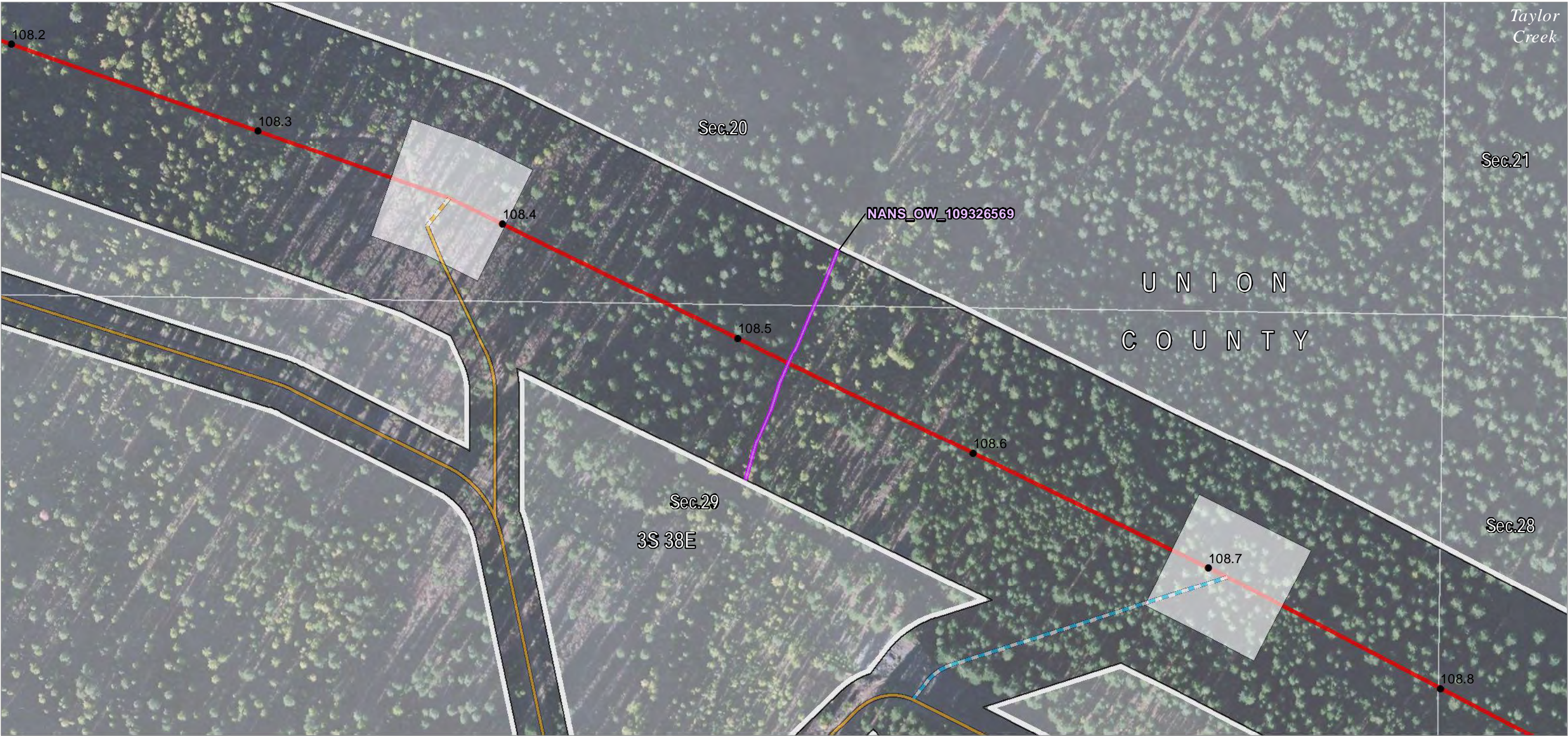


Boardman to Hemingway
Transmission Line Project

Attachment J1-118

**Wetland and Other Waters
Detail Maps**

Union County



Taylor
Creek

Sec.21

Sec.28

Sec.20

Sec.29

3S 38E

U N I O N
C O U N T Y

NANS_OW_109326569

108.2

108.3

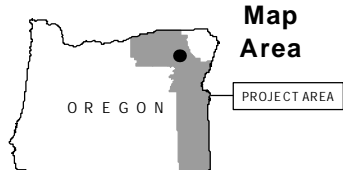
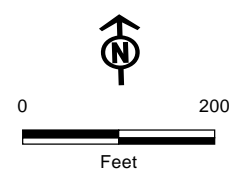
108.4

108.5

108.6

108.7

108.8



Map
Area

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

Project Features

- Site Boundary
 - Proposed Route
 - Alternative 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

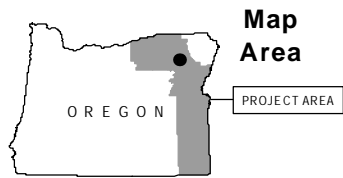
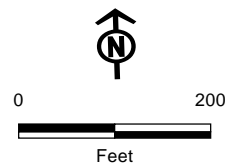
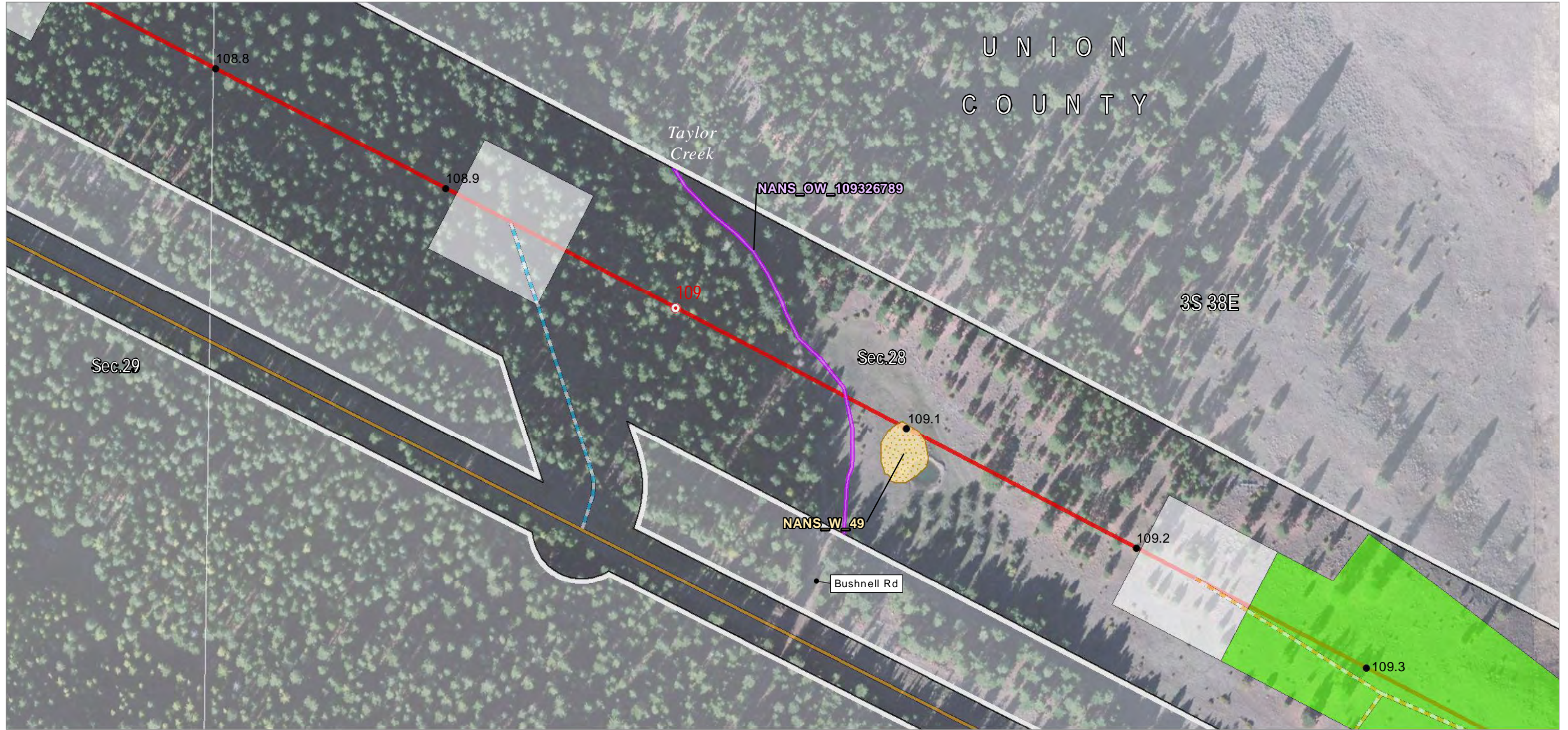
Other Waters

- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-119
Wetland and Other Waters
Detail Maps
Union 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

Project Features

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

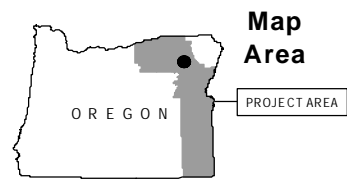
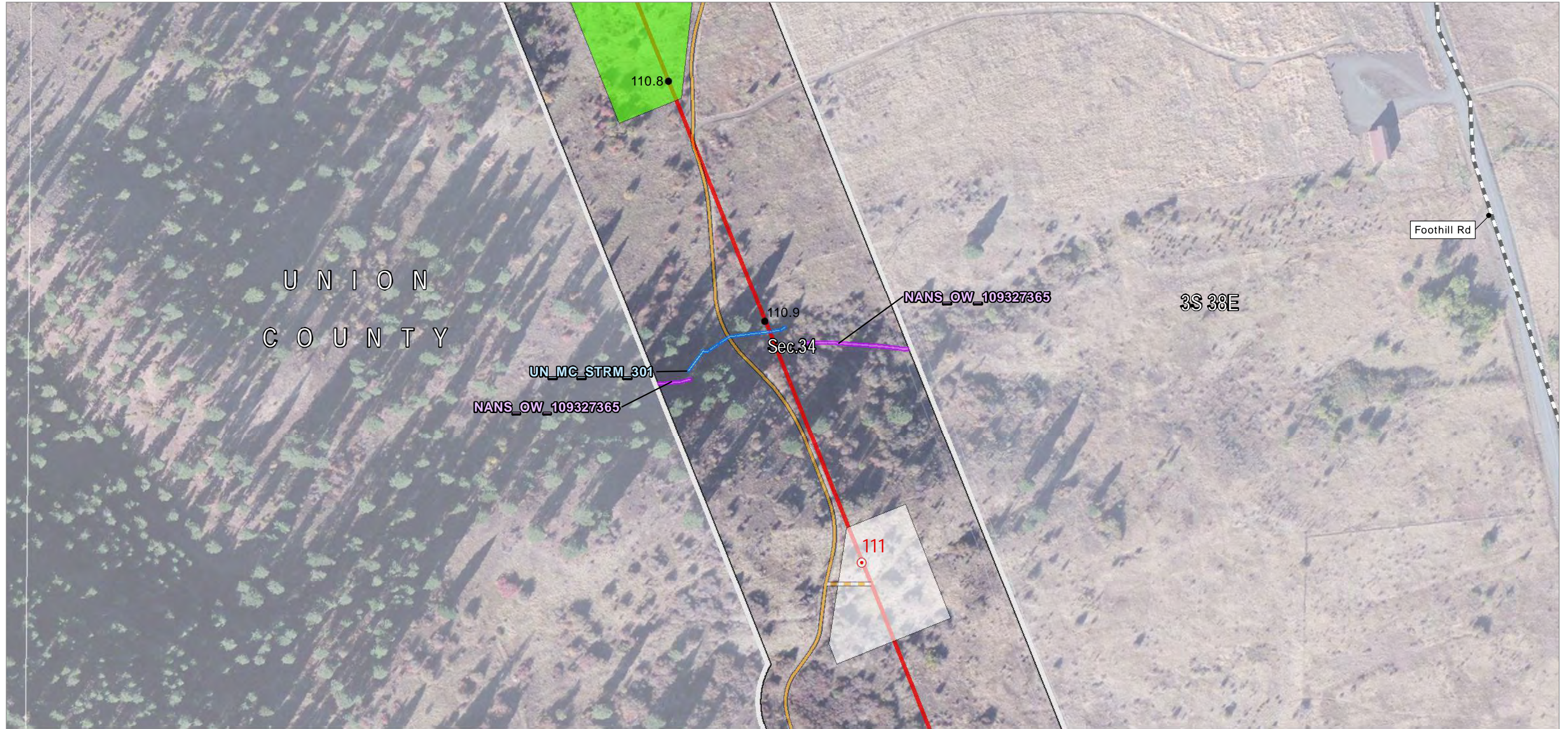
- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- New Road, Primitive
- Other Waters
- NANS Streams (NHD)
- Wetland
- NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-120
Wetland and Other Waters
Detail Maps
Union 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Primitive
- Other Major Roads
- Other Waters
- Field Survey Streams
- NANS Streams (NHD)

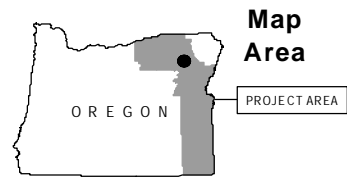
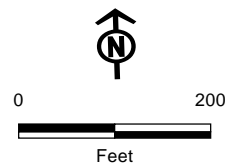
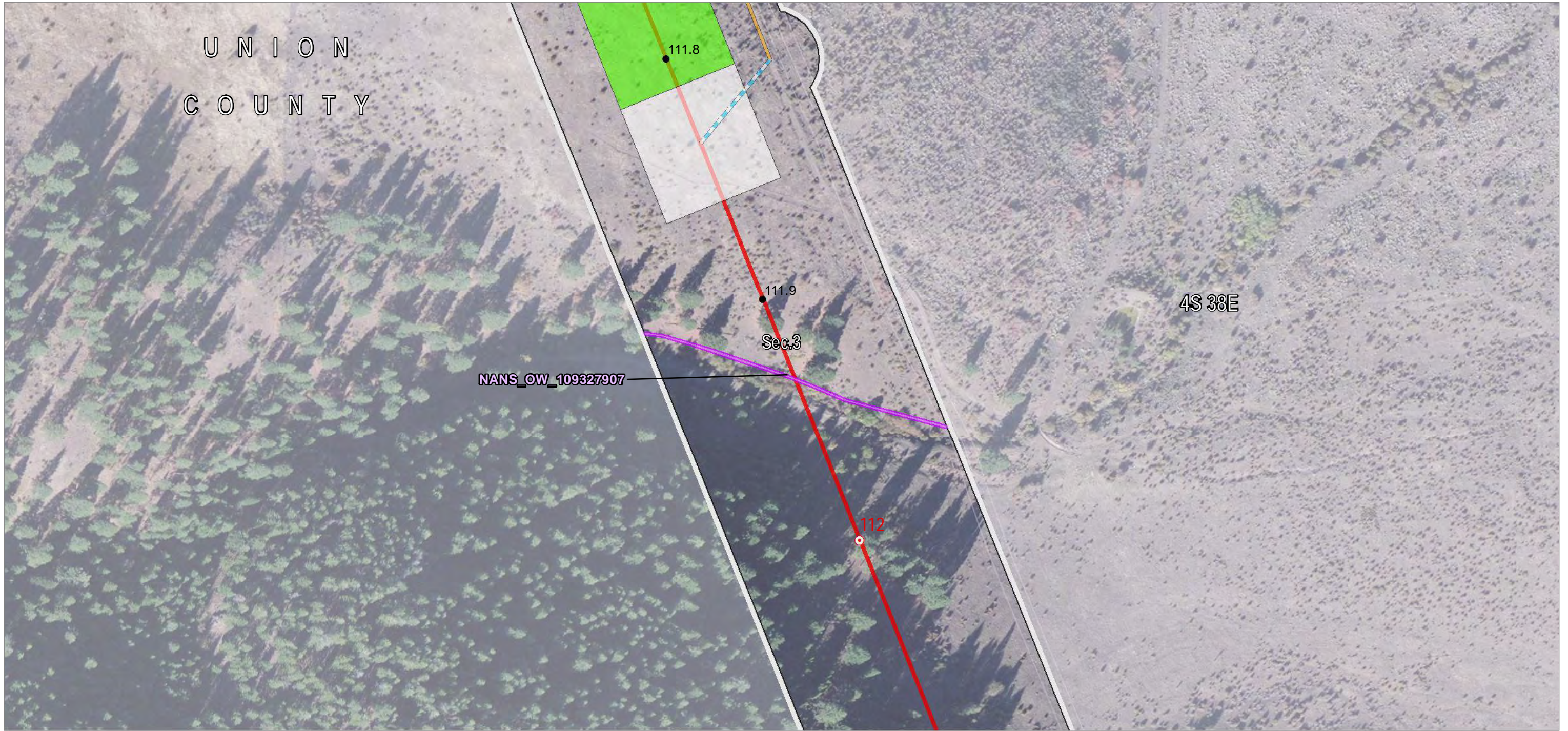


Boardman to Hemingway
Transmission Line Project

Attachment J1-121

Wetland and Other Waters Detail Maps

Union 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

Project Features

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

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- Other Waters
- NANS Streams (NHD)

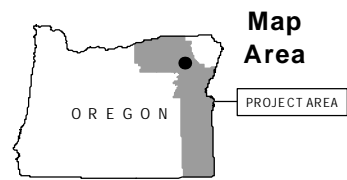


Boardman to Hemingway
Transmission Line Project

Attachment J1-122

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial
Modification, 21-70%
Improvements

Wetland

NANS Wetland (NWI)

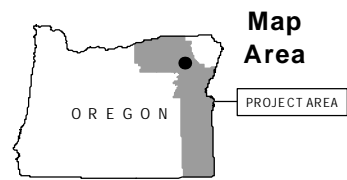


Boardman to Hemingway
Transmission Line Project

Attachment J1-123

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

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

Wetland

- NANS Wetland (NWI)

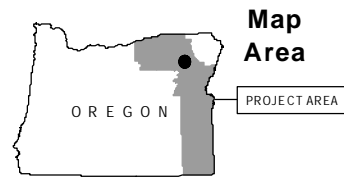
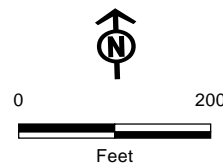


Boardman to Hemingway
Transmission Line Project

Attachment J1-124

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Mileposts

Mile

Tenth-mile

Transportation

Interstates or Highways

Other Waters

NANS Streams (NHD)

Wetland

NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-125

**Wetland and Other Waters
Detail Maps**

Union County



U N I O N
C O U N T Y

4S 38E

Sec.23

UN_MC_STRM_011

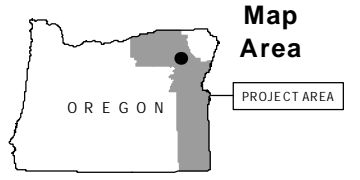
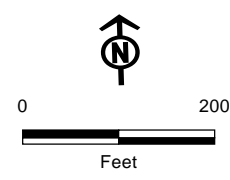
Sec.24

NANS_OW_109329911
UN_MC_STRM_011

115.4

115.5

84



Project Features

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

Mileposts

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

Transportation

- Interstates or Highways

Other Waters

- Field Survey Streams
- NANS Streams (NHD)



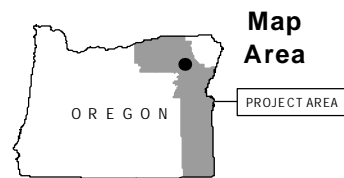
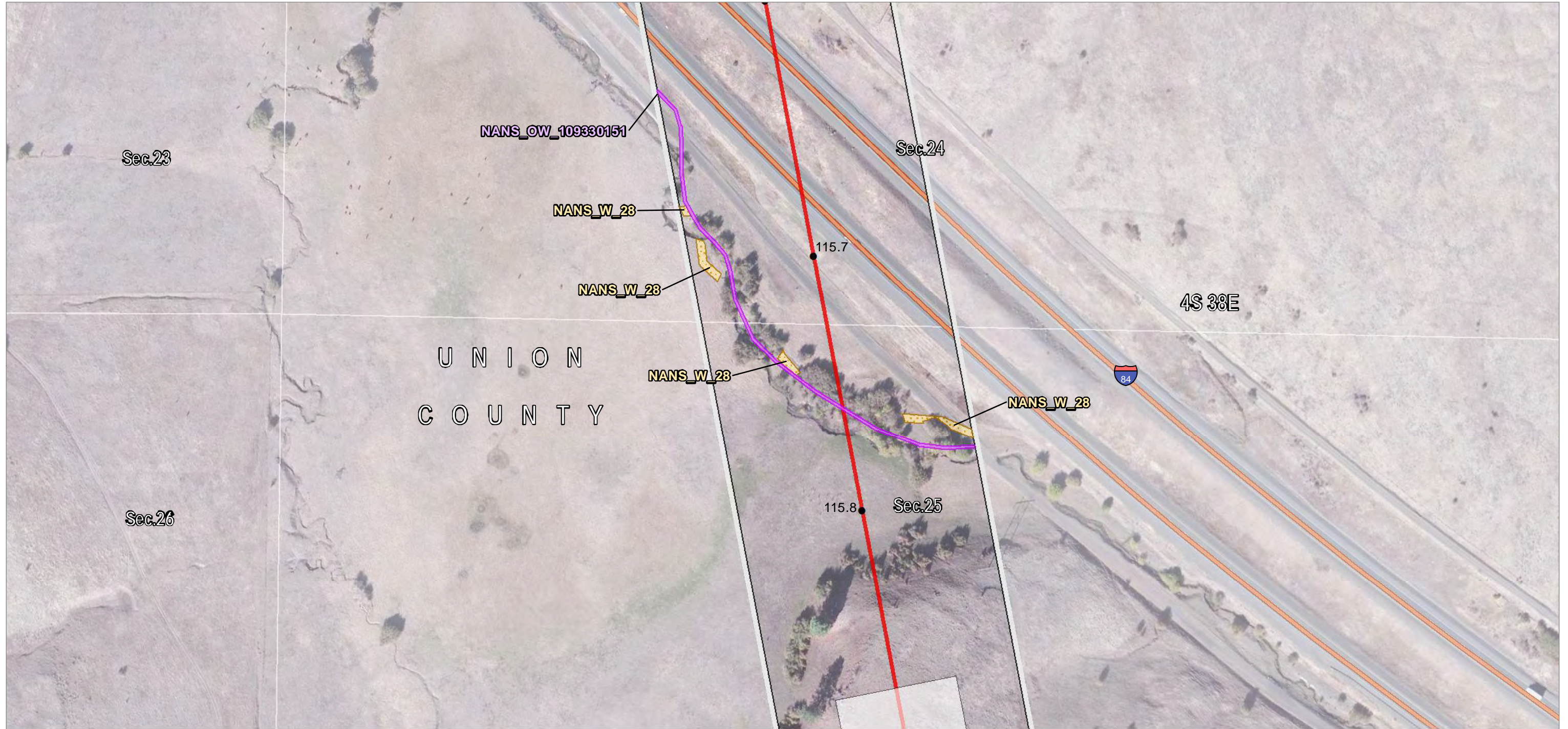
Boardman to Hemingway
Transmission Line Project

Attachment J1-126

**Wetland and Other Waters
Detail Maps**

Union 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



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

Project Features

Site Boundary

Proposed Route

Alternative Route

Route Centerline

Proposed Route

Work Areas

Structure Work Area

Mileposts

Tenth-mile

Transportation

Interstates or Highways

Other Waters

NANS Streams (NHD)

Wetland

NANS Wetland (NWI)

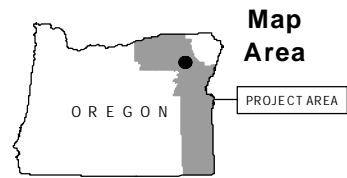


Boardman to Hemingway
Transmission Line Project

Attachment J1-127

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Construction Access

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

Transportation

- Interstates or Highways

Other Waters

- Field Survey Streams

Wetland

- Field Survey Wetland

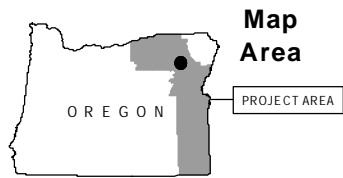
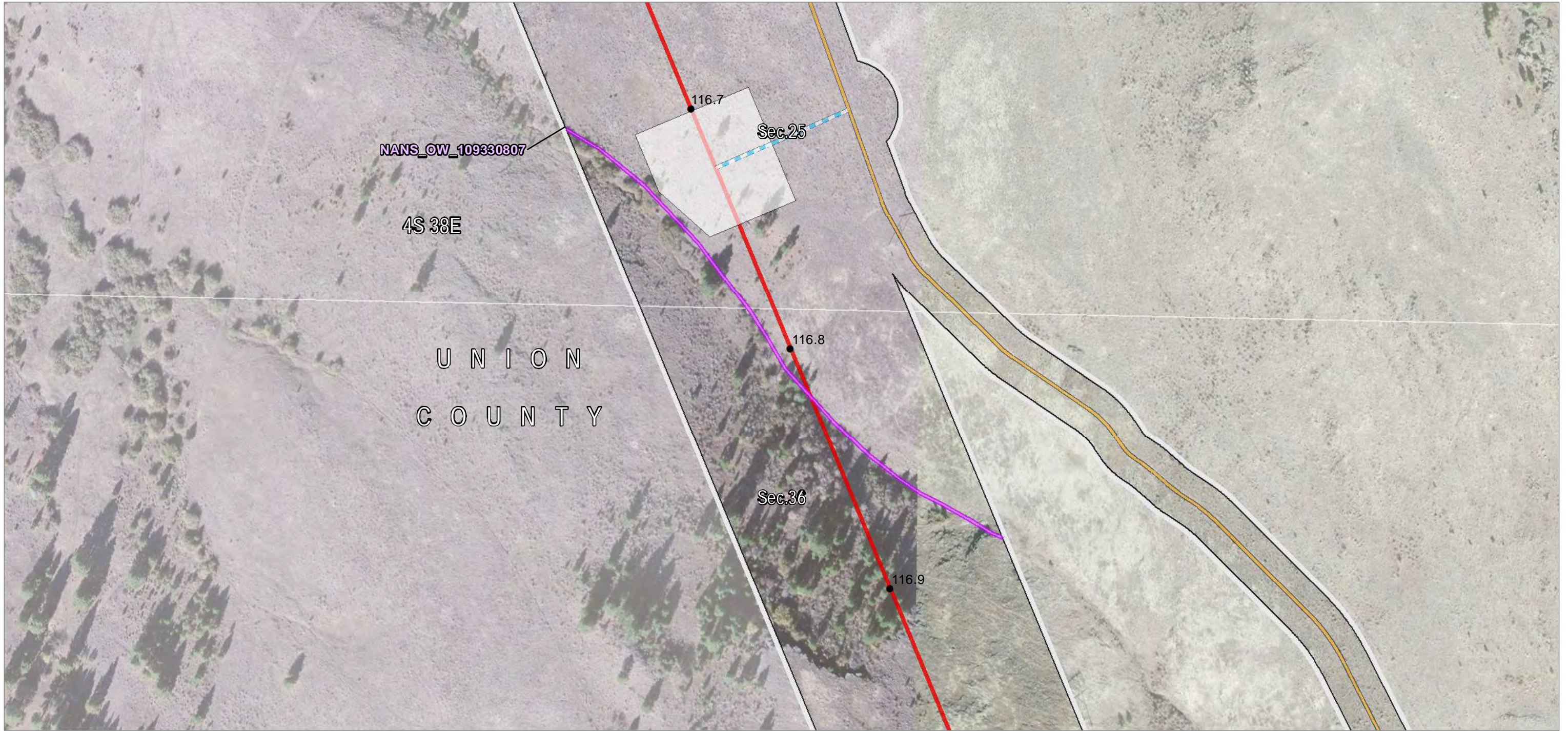


Boardman to Hemingway
Transmission Line Project

Attachment J1-128

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)

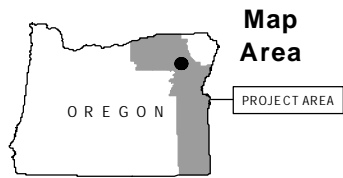
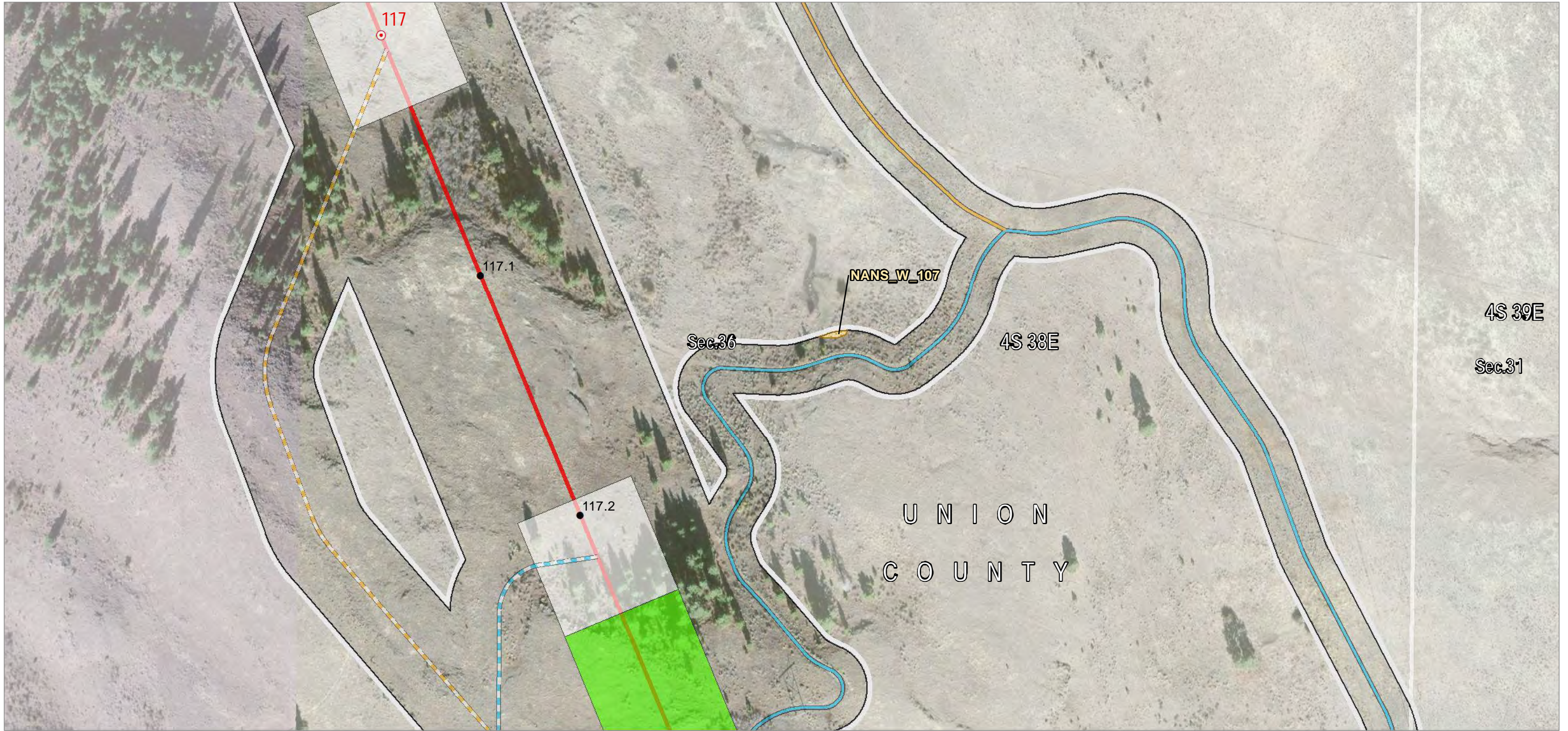


Boardman to Hemingway
Transmission Line Project

Attachment J1-129

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Proposed Route

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Wetland

- NANS Wetland (NW1)

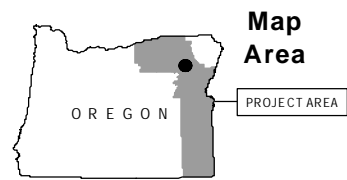
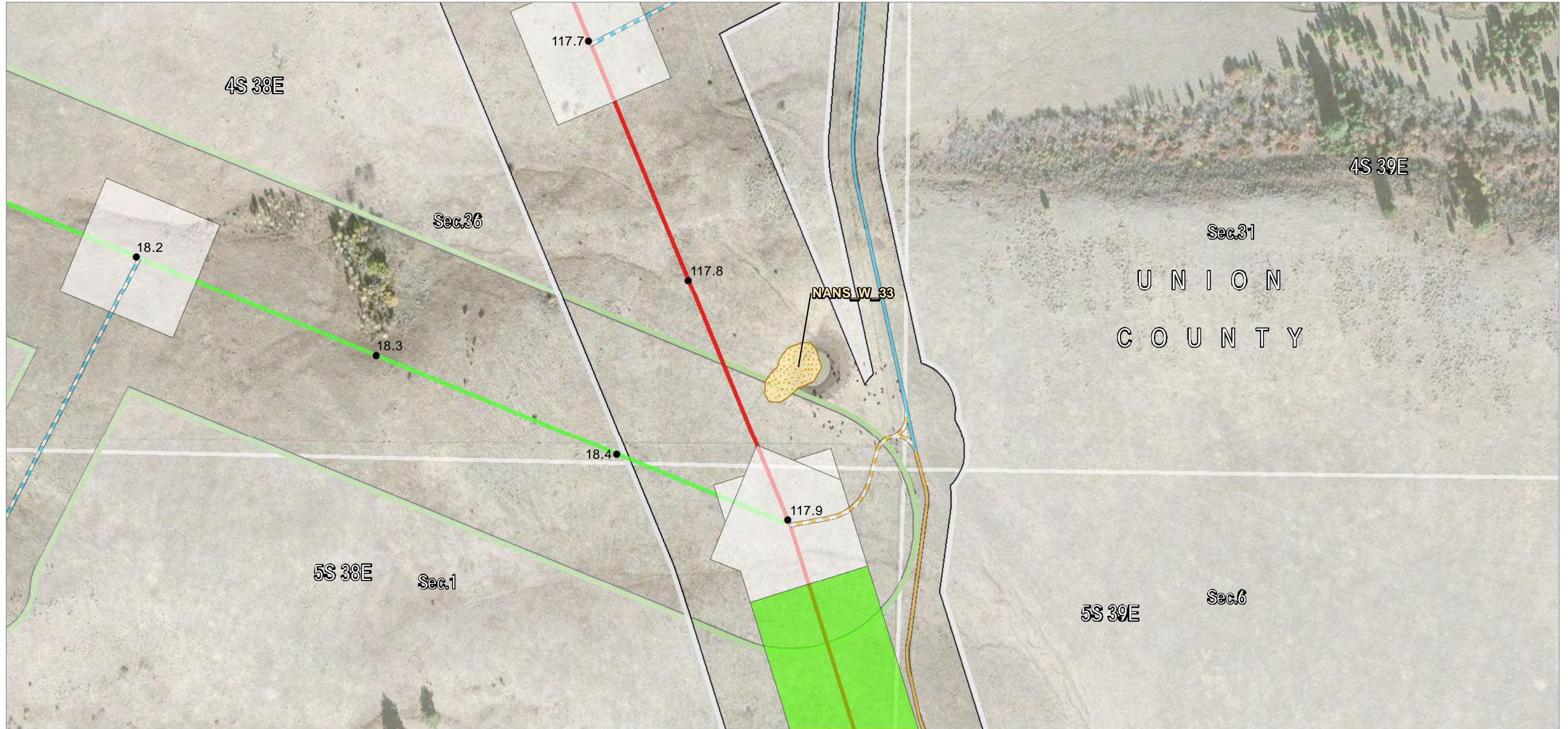


Boardman to Hemingway
Transmission Line Project

Attachment J1-130

Wetland and Other Waters Detail Maps

Union 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

Project Features

- Site Boundary
- Proposed Route
- Alternative Route
- Route Centerline
- Proposed Route
- Alternative

Work Areas

- Pulling and Tensioning
- Structure Work Area

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

Wetland

- NANS Wetland (NWI)

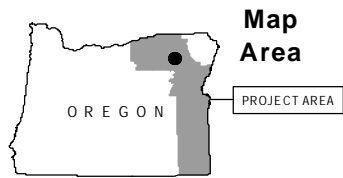


Boardman to Hemingway
Transmission Line Project

Attachment J1-131

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Alternative

Work Areas

- Pulling and Tensioning

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

- New Road, Bladed

Transportation

- Other Major Roads

Other Waters

- Field Survey Streams

Wetland

- Field Survey Wetland

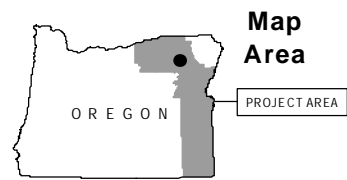
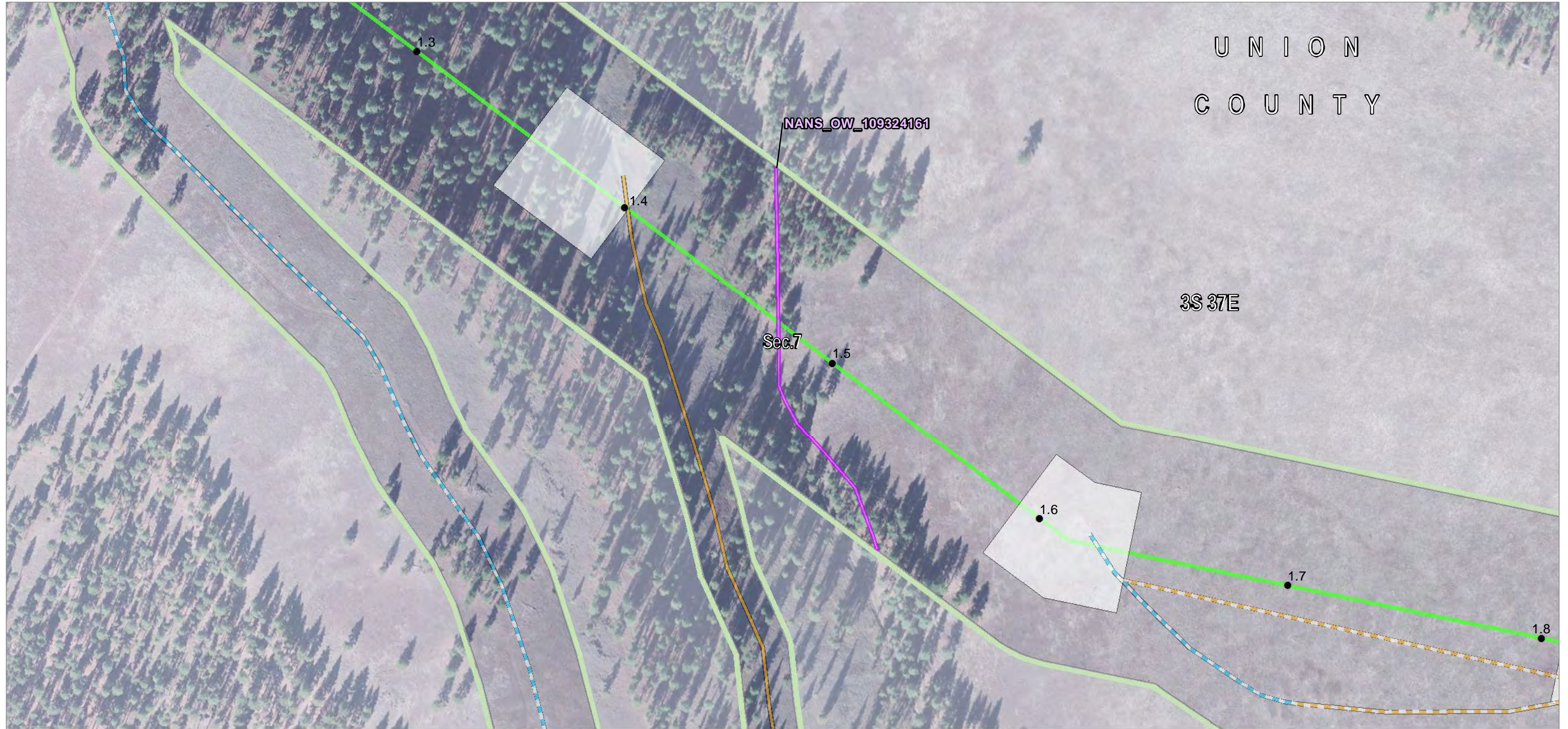


Boardman to Hemingway
Transmission Line Project

Attachment J1-132

**Wetland and Other Waters
Detail Maps**

Union County



Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)

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

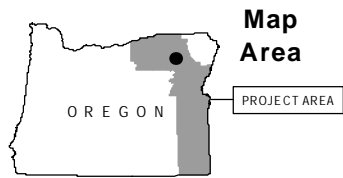
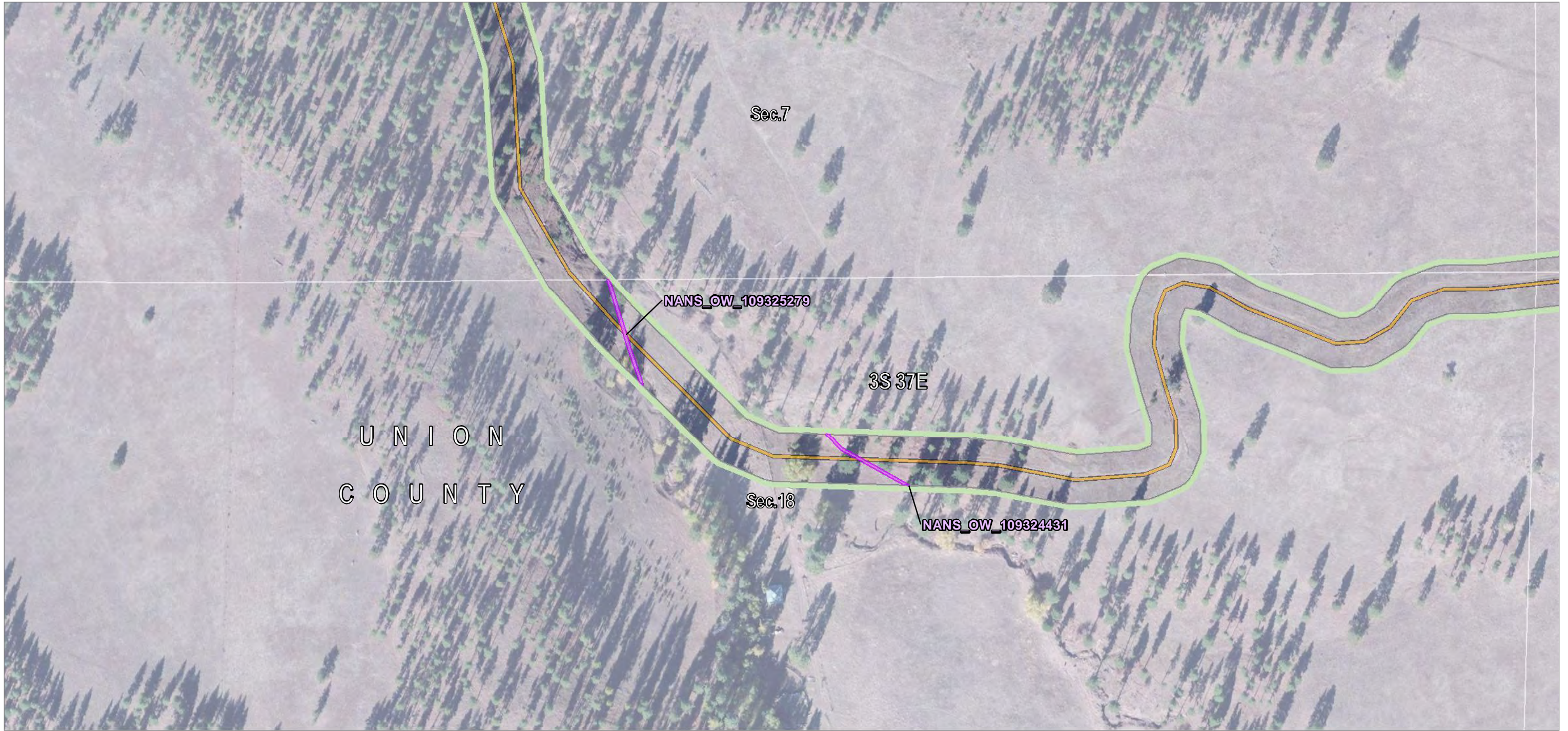


Boardman to Hemingway
Transmission Line Project

Attachment J1-133

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

Existing Road, Substantial Modification, 21-70% Improvements

Other Waters

NANS Streams (NHD)

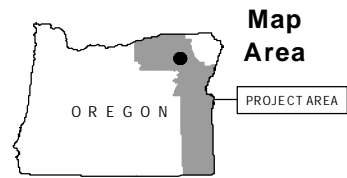
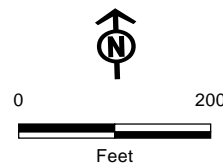


Boardman to Hemingway
Transmission Line Project

Attachment J1-134

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

- Route Centerline
- Alternative

Work Areas

- Structure Work Area

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- Field Survey Streams

Wetland

- Field Survey Wetland

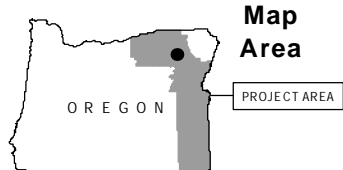
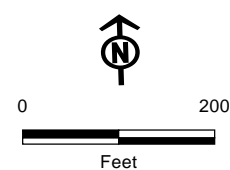
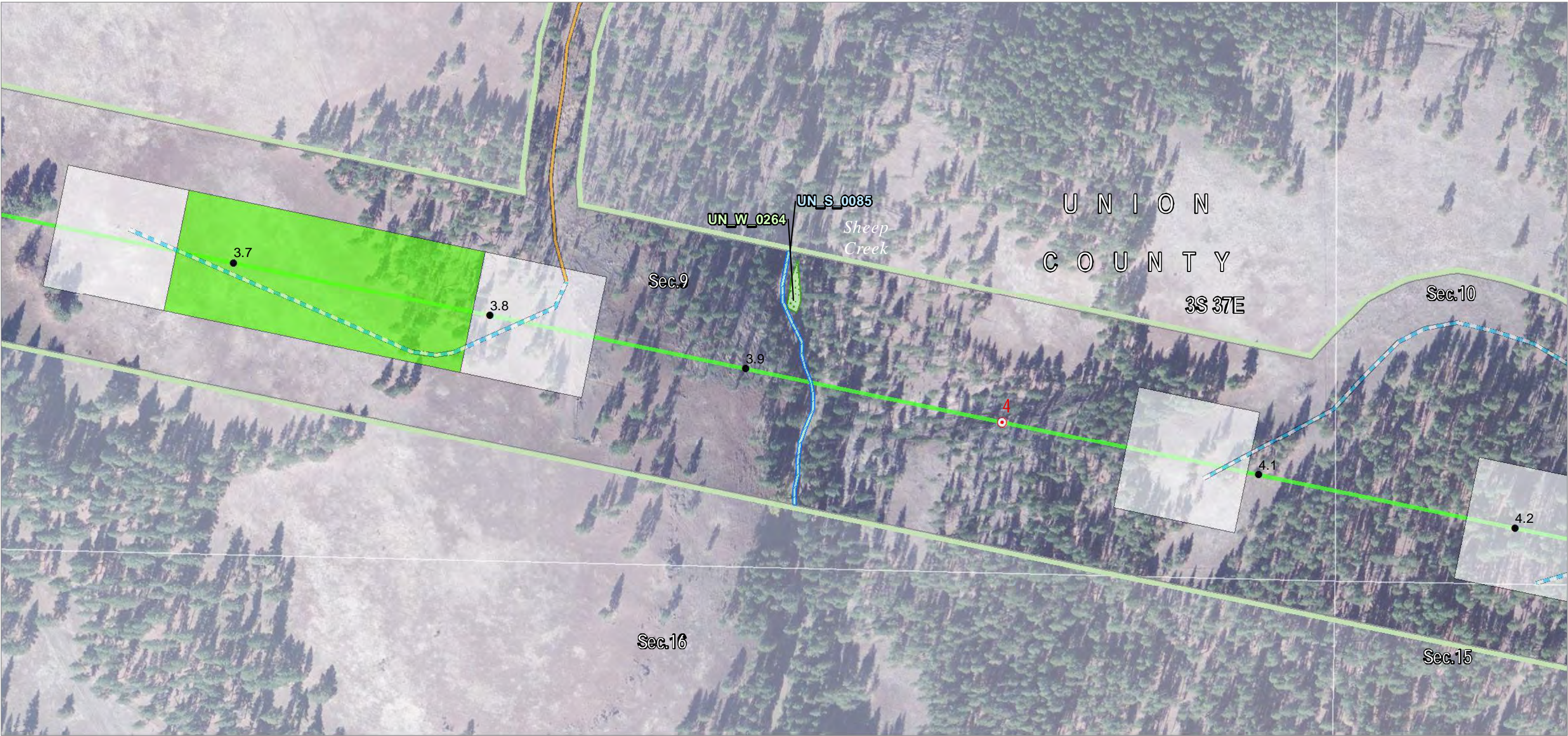


Boardman to Hemingway
Transmission Line Project

Attachment J1-135

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

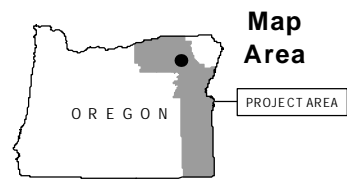
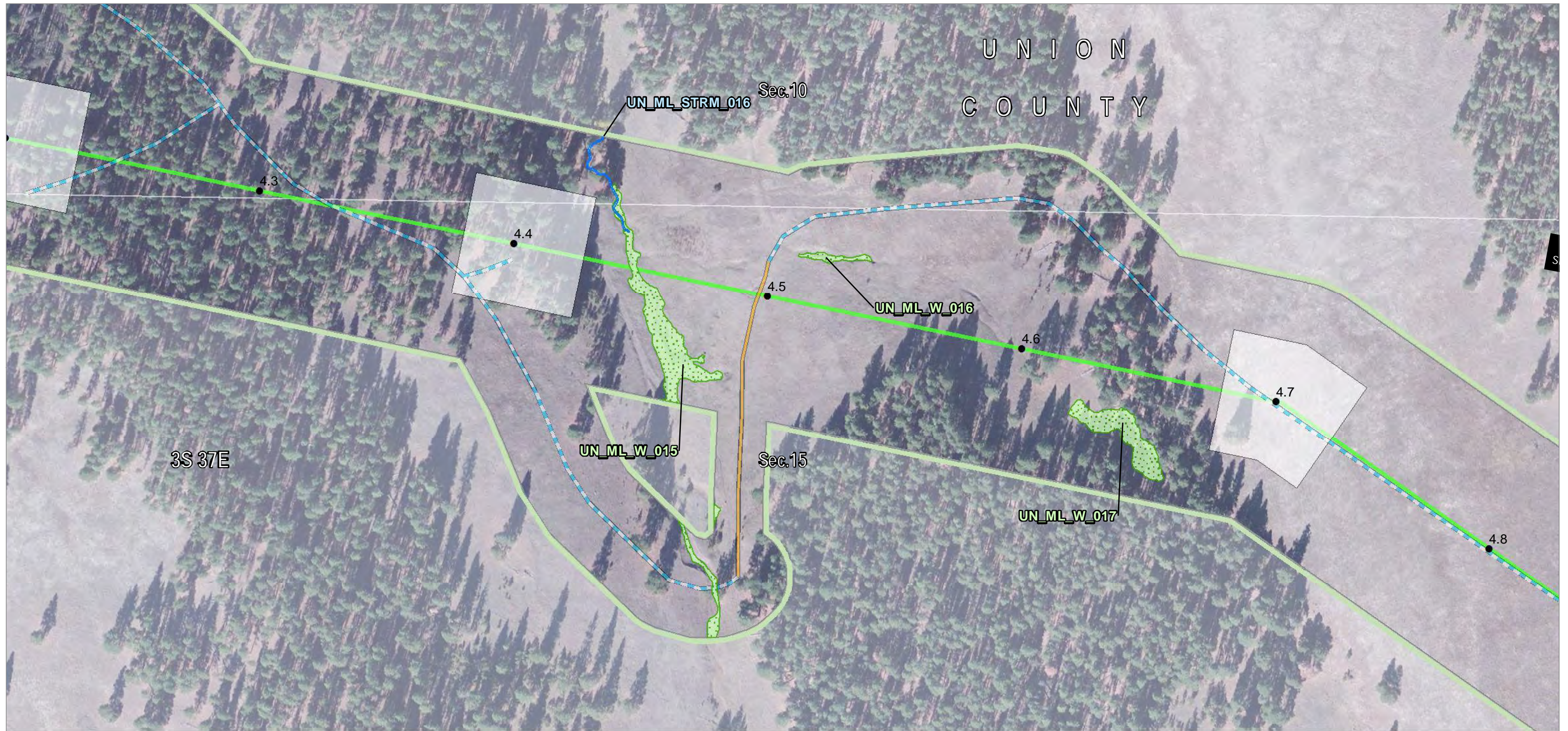
- Structure Work Area
- Mileposts
 - Mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- Other Waters
 - Field Survey Streams
- Wetland
 - Field Survey Wetland



Boardman to Hemingway Transmission Line Project

Attachment J1-136
Wetland and Other Waters
Detail Maps
Union 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

Project Features

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

Mileposts

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

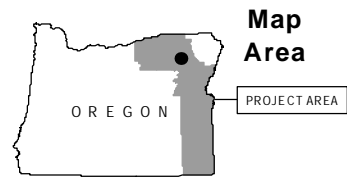
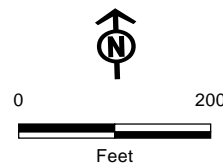
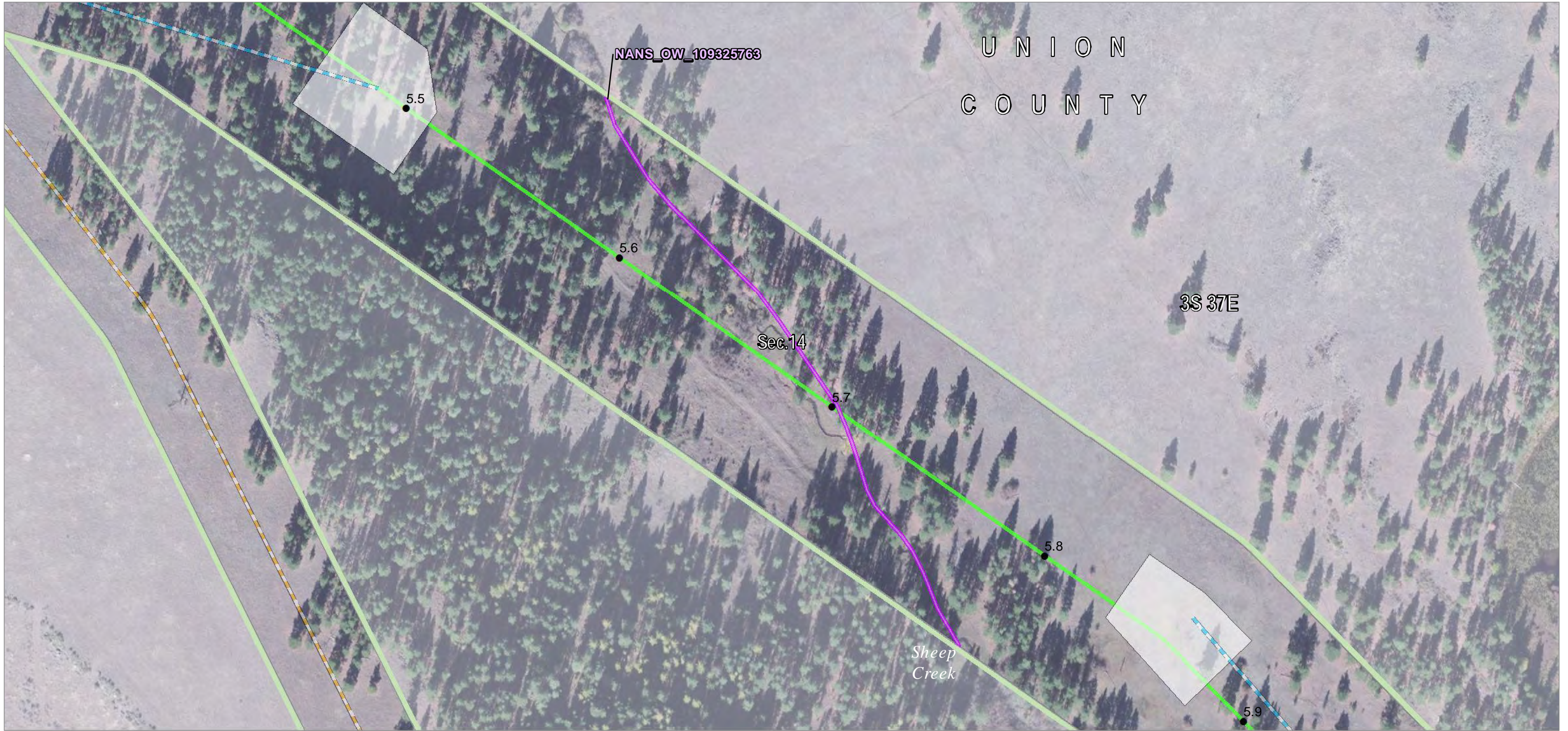
Other Waters

- Field Survey Streams
- Wetland
- Field Survey Wetland



Boardman to Hemingway
Transmission Line Project

Attachment J1-137
Wetland and Other Waters
Detail Maps
Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

- Alternative

Work Areas

- Structure Work Area

Mileposts

- Tenth-mile

Construction Access

- New Road, Bladed
- New Road, Primitive

Other Waters

- NANS Streams (NHD)

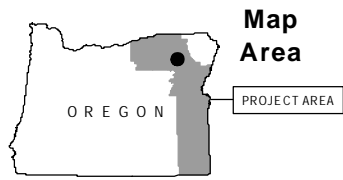
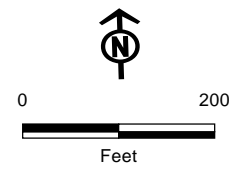


Boardman to Hemingway
Transmission Line Project

Attachment J1-138

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

Site Boundary

Proposed Route

Alternative Route

Construction Access

New Road, Primitive

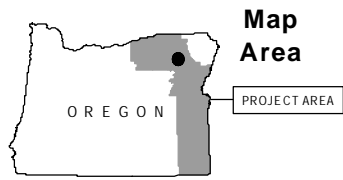
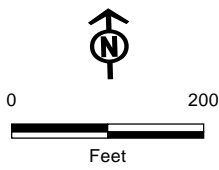
Wetland

Field Survey Wetland



Boardman to Hemingway
Transmission Line Project

Attachment J1-139
Wetland and Other Waters
Detail Maps
Union 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

Project Features

Site Boundary

- Proposed Route
- Alternative Route

Route Centerline

Alternative

Work Areas

- Communication Station

Pulling and Tensioning

Structure Work Area

Mileposts

- Tenth-mile

Construction Access

New Road, Bladed

New Road, Primitive

Other Waters

- NANS Streams (NHD)

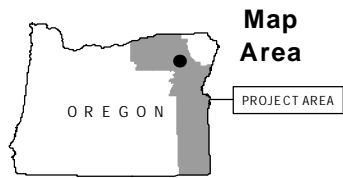


Boardman to Hemingway
Transmission Line Project

Attachment J1-140

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

- Mile
- Tenth-mile

Construction Access

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

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

Other Waters

- NANS Streams (NHD)

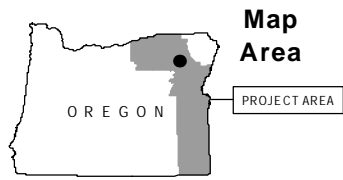
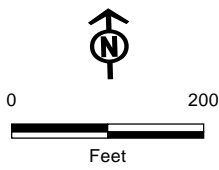


Boardman to Hemingway
Transmission Line Project

Attachment J1-141

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

Mileposts

- Mile
 - Mile
- Tenth-mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements

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

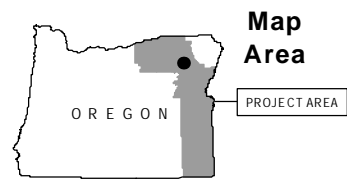
Other Waters

- NANS Streams (NHD)
- Wetland
 - NANS Wetland (NWI)



Boardman to Hemingway
Transmission Line Project

Attachment J1-142
Wetland and Other Waters
Detail Maps
Union County



Project Features

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

Mileposts

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

Other Waters

- NANS Streams (NHD)

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

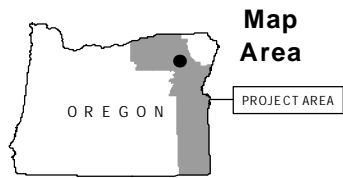


Boardman to Hemingway
Transmission Line Project

Attachment J1-143

**Wetland and Other Waters
Detail Maps**

Union 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

Project Features

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

- Structure Work Area
- Mileposts
 - Mile
 - Tenth-mile
- Construction Access
 - Existing Road, Substantial Modification, 21-70% Improvements

- New Road, Bladed
- New Road, Primitive
- Other Waters
 - Field Survey Streams

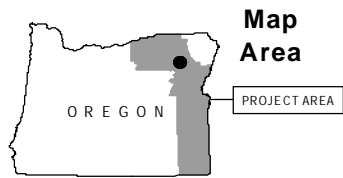
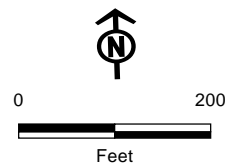


Boardman to Hemingway
Transmission Line Project

Attachment J1-144

**Wetland and Other Waters
Detail Maps**

Union 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

- Project Features**
- Site Boundary
 - Proposed Route
 - Alternative Route
 - Route Centerline
 - Alternative
 - Work Areas
 - Pulling and Tensioning

- Structure Work Area
- Mileposts
- Mile
- Tenth-mile
- Construction Access
- New Road, Bladed
- New Road, Primitive

- Other Waters**
- NANS Streams (NHD)



Boardman to Hemingway
Transmission Line Project

Attachment J1-145
Wetland and Other Waters
Detail Maps
Union County