



**Portland General Electric Company**

121 SW Salmon Street, Portland, Oregon 97204

PortlandGeneral.com

BCWOPSDoc63

May 29, 2007

RCT-06-07

Mr. John White  
Oregon Department of Energy  
625 Marion Street NE, Suite 1  
Salem, OR 97301-3742

Re: Proposed Access Road: Request for Department of Energy  
Determination Pursuant to OAR 345-027-0050(5)

Dear John:

As you know, Portland General Electric Company (PGE) is the holder of the Second Amended Site Certificate for the Biglow Canyon Wind Farm (the "Site Certificate"). Construction of the Biglow Canyon Wind Farm has commenced. PGE is proposing to modify the approved facility as shown on the attached Figure 1. Specifically, PGE proposes to construct a new access road approximately 660 feet long, from Fox Road southwest to the location of Turbine 34 within Turbine String 10. The location of the new access road is shown on the revised facility layout on Figure 1. PGE would eliminate approximately 1,300 feet of permanent access road south of Fox Road, as shown on the "original facility layout" on Figure 1. In addition, approximately 970 feet of permanent access road north of Fox Road within the approved Turbine String 10 Corridor would be removed and approximately 680 feet of that alignment would be used as an extended temporary crane path. (Compare original and revised facility layouts on Figure 1.)

As discussed below, the new access road reduces the overall permanent disturbance area and habitat impacts, without impacting any other protected resources. The new access location is also preferred by the property owner. The cut and fill for the approved road location (shown as "Original Facility Layout" on Figure 1) would create a permanent berm that the property owner could not safely cross with his tractor. The new access road location eliminates that inconvenience for the property owner in his farming activities.

Pursuant to OAR 345-027-0050(5), PGE requests a determination by the Oregon Department of Energy that the changes outlined above do not require an amendment to the Site Certificate. OAR 345-027-0050(5) provides:

A certificate holder may ask the Department to determine whether a proposed change requires a site certificate amendment by submitting a written description of the proposed change, the certificate holder's analysis of the proposed change under sections (1) and (2) and the written evaluation described in section (3). The Department shall respond in writing as promptly as possible. The Department may refer its determination to the Council for concurrence, modification or rejection. At the request of the certificate holder or a Council member, the Department must refer

its determination to the Council for concurrence, modification or rejection.

1. Analysis Under OAR 345-027-0050(1)

PGE requests a determination that the proposed changes do not meet the threshold requirements for an amendment to the Site Certificate under OAR 345-027-0050(1). OAR 345-027-0050(2) is not directly relevant to PGE's request. OAR 345-027-0050(1) provides:

Except as allowed under sections (2) and (6), the certificate holder must submit a request to amend the site certificate to design, construct or operate a facility in a manner different from the description in the site certificate if the proposed change:

- (a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;
- (b) Could impair the certificate holder's ability to comply with a site certificate condition; or
- (c) Could require a new condition or a change to a condition in the site certificate.

A. The proposed change would not result in a significant adverse impact that the Council has not addressed in an earlier order.

The certificate holder has evaluated the potential impacts of the new access road through studies designed to determine whether the new access road would adversely impact any resources protected by Council rules. No adverse impacts were identified. The following summarizes the studies that have been performed and that are attached to this request:

(i) Threatened, Endangered and Sensitive Wildlife Species

Attached as Exhibit 1 is a Technical Memorandum from West, Inc., describing surveys performed in May 2007 for threatened, endangered and sensitive wildlife species. The location of the new access road is "Area F". The surveys found no threatened, endangered or sensitive wildlife species in Area F.

(ii) Habitat Impacts

Attached as Exhibit 2 is a table evaluating changes in permanent disturbance. For the changes associated with this request (Turbine String 10), there would be a net reduction of 1.05 acres of permanent disturbance to Category 6 habitat, and a net reduction of 0.02 acres of permanent disturbance to Category 4 habitat.

(iii) Cultural Resource Impacts

Attached as Exhibit 3 is a Cultural Resource Survey by Archaeological Investigations Northwest, Inc. (AINW). The AINW report addresses two possible changes in the

Biglow Canyon Wind Farm. With respect to the proposed new access road from Fox Road, the survey by AINW found no archaeological or historical resources, and AINW concludes that the area does not have a high probability of prehistoric archaeological resources based on where such resources have been recorded in previous surveys.

(iv) Wetlands and Rare Plant Habitat

Attached as Exhibit 4 is a report from CH2M Hill, Inc. describing the results of surveys for wetlands or other jurisdictional waters of the United States or the State, and for rare plant habitat. As described in the report, the new access road (Study Area F) would cross one intermittent stream, which is non-jurisdictional and exempt from State permit requirements. No federal or state listed plant habitat or species were identified in Study Area F.

B. The proposed change would not impair the certificate holder's ability to comply with any site certificate condition.

The proposed change results in permanent disturbance in any area not previously evaluated. However, as described above, the change does not create any net impacts to habitat, and does not create any adverse impact to other resources protected by Council rules. The Site Certificate already contains adequate conditions to address the potential impacts of the new permanent disturbance associated with the access road from Fox Road and the temporary disturbance associated with the crane path that will replace part of what was approved as a permanent road (for example, Soil Protection conditions 26-35 and Historic, Cultural and Archaeological conditions 69-73). Construction of the new access road, and use of a portion of the previously approved road location as a temporary crane path, would not impair PGE's ability to comply with those conditions.

C. The proposed change would not require a new condition or a change to a condition of the site certificate.

As described above, the Site Certificate already contains adequate conditions to address any impacts (soil impacts, restoration of temporary disturbance areas, and impacts to previously undiscovered archaeological resources) that might arise from the facility changes addressed in this request.

2. Evaluation required by OAR 345-027-0050(3)

OAR 345-027-0050(3) requires that if the certificate holder concludes that a change does not require a site certificate amendment "based on the criteria in section (2), the certificate holder shall, nevertheless, complete an investigation sufficient to demonstrate that the proposed change in the design, construction and operation of the facility would comply with applicable Council standards." The certificate holder's justification for not requiring a site certificate amendment arises under OAR 345-027-0050(1), rather than OAR 345-027-0050(2). However, in order to ensure that the Department and the Council have all relevant information, we are providing the evaluation of compliance with applicable Council standards.

Mr. John White

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For the reasons described above, the certificate holder's proposal to develop a new access road from Fox Road does not alter the Council's prior findings that the Biglow Canyon Wind Project will comply with Council standards for Soil Protection (OAR 345-022-0022), Threatened and Endangered Species (OAR 345-022-0070), Fish and Wildlife Habitat (OAR 345-022-0060), and Historic, Cultural and Archaeological Resources (OAR 345-022-0090). The proposed facility changes would not involve the construction of additional turbines, transmission facilities, or other structures, and would reduce the net area of permanent disturbance associated with the Biglow Canyon Wind Farm. Therefore, the changes do not alter the Council's prior findings of compliance with standards regarding Organizational Expertise (OAR 345-022-0010), Retirement and Financial Assurance (OAR 345-022-0050), Land Use (OAR 345-022-0030), Protected Areas (OAR 345-022-0040), Scenic and Aesthetic Values (OAR 345-022-0080), Recreation (OAR 345-022-0100), Public Health and Safety for Wind Energy Facilities (OAR 345-024-0010), Siting Standards for Wind Energy Facilities (OAR 345-024-0015), Siting Standards for Transmission Lines (OAR 345-024-0090), Structural Standard (OAR 345-022-0020), Public Services (OAR 345-022-0110), Waste Minimization (OAR 345-022-0120), and Noise Control (OAR 340-035-0035).

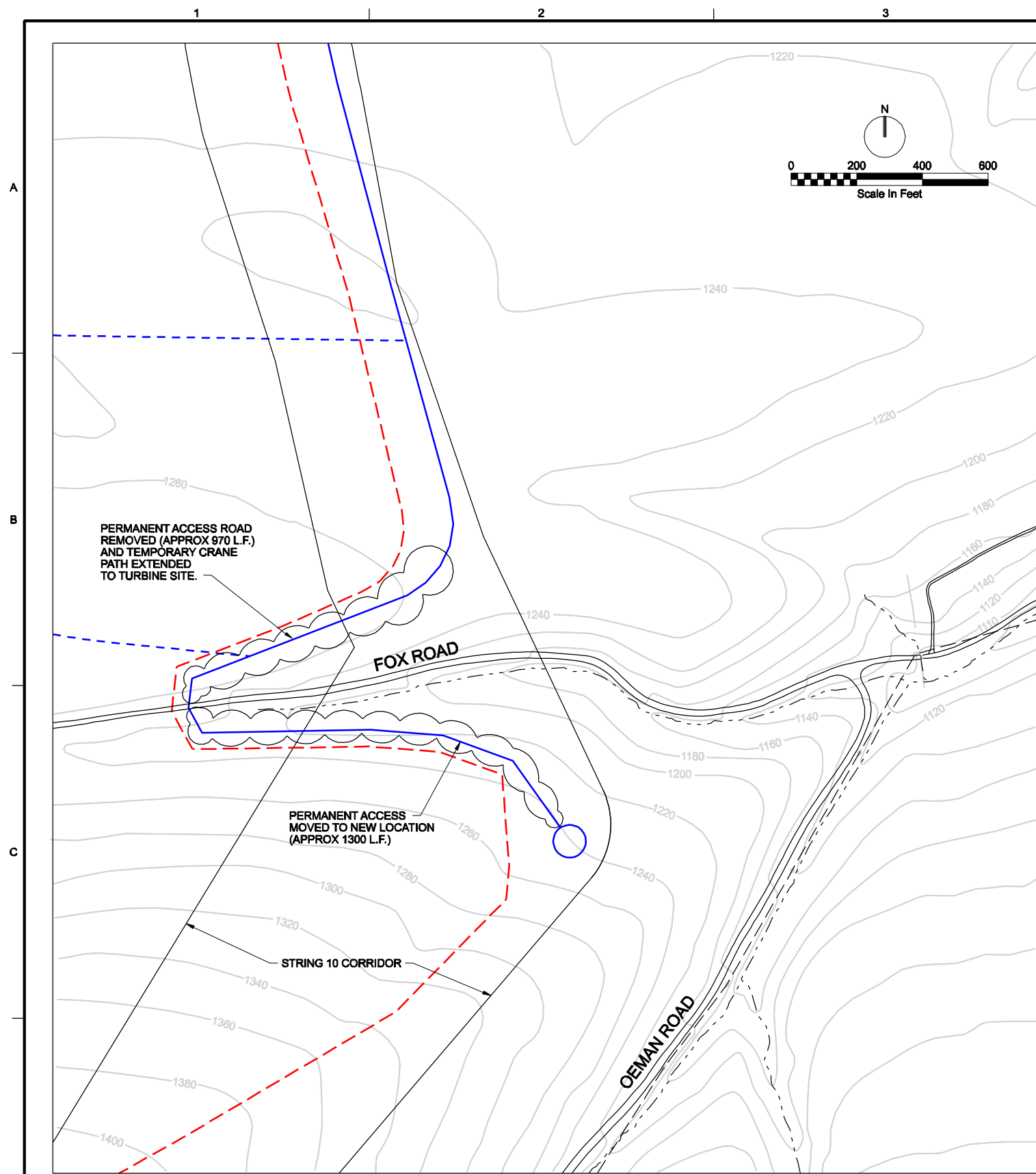
For the reasons set forth in this letter, we request the Department's determination that the proposed changes to access roads in and around Turbine String 10 do not require an amendment to the Site Certificate. Please let me know if you have any questions.

Sincerely,

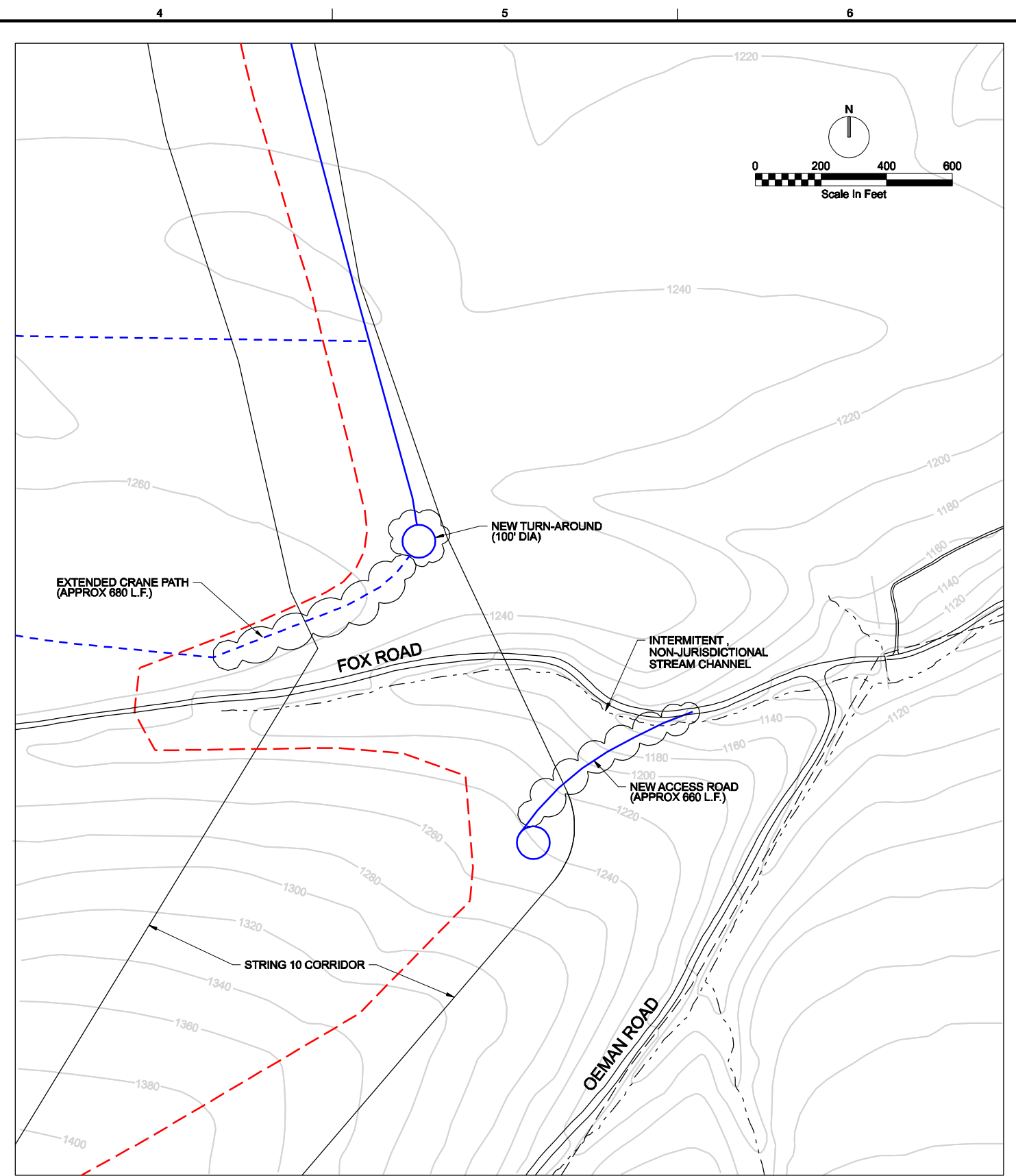
Rick Tetzloff

Attachments

cc: Richard Allan (via email)  
Kelley Marold (via email)



**ORIGINAL FACILITY LAYOUT**



**REVISED FACILITY LAYOUT**

**LEGEND:**

- PROPOSED PERMANENT ACCESS ROAD
- - - TEMPORARY PATH FOR CRANE TRAVEL OR MET ACCESS
- - - PROPOSED ELECTRICAL COLLECTION LINE

**FIGURE 1**  
**FACILITY MODIFICATIONS**  
 BIGLOW CANYON WIND FARM  
 MAY 2007

Biglow Wind Project

24-May-07

Permanent Disturbance changes due to access road changes between T34 and T33 at Helm Ln/Fox Rd:

|                               | Cat 6 agriculture-nonvalue | Cat 6 agriculture-highvalue | Cat 4 Shrubsteppe | Total        |
|-------------------------------|----------------------------|-----------------------------|-------------------|--------------|
| Remove from project           | 11                         | 26457                       | 802               |              |
|                               | 34334                      | 325                         | 1327              |              |
|                               | 172                        | 547                         | 2122              |              |
|                               | 789                        |                             |                   |              |
|                               | 661                        |                             |                   |              |
|                               | 1489                       |                             |                   |              |
| <b>Total Removal: (s.f.)</b>  | <b>37456</b>               | <b>27329</b>                | <b>4251</b>       | <b>69036</b> |
| <b>Total Removal: (acres)</b> | <b>0.86</b>                | <b>0.63</b>                 | <b>0.10</b>       | <b>1.58</b>  |

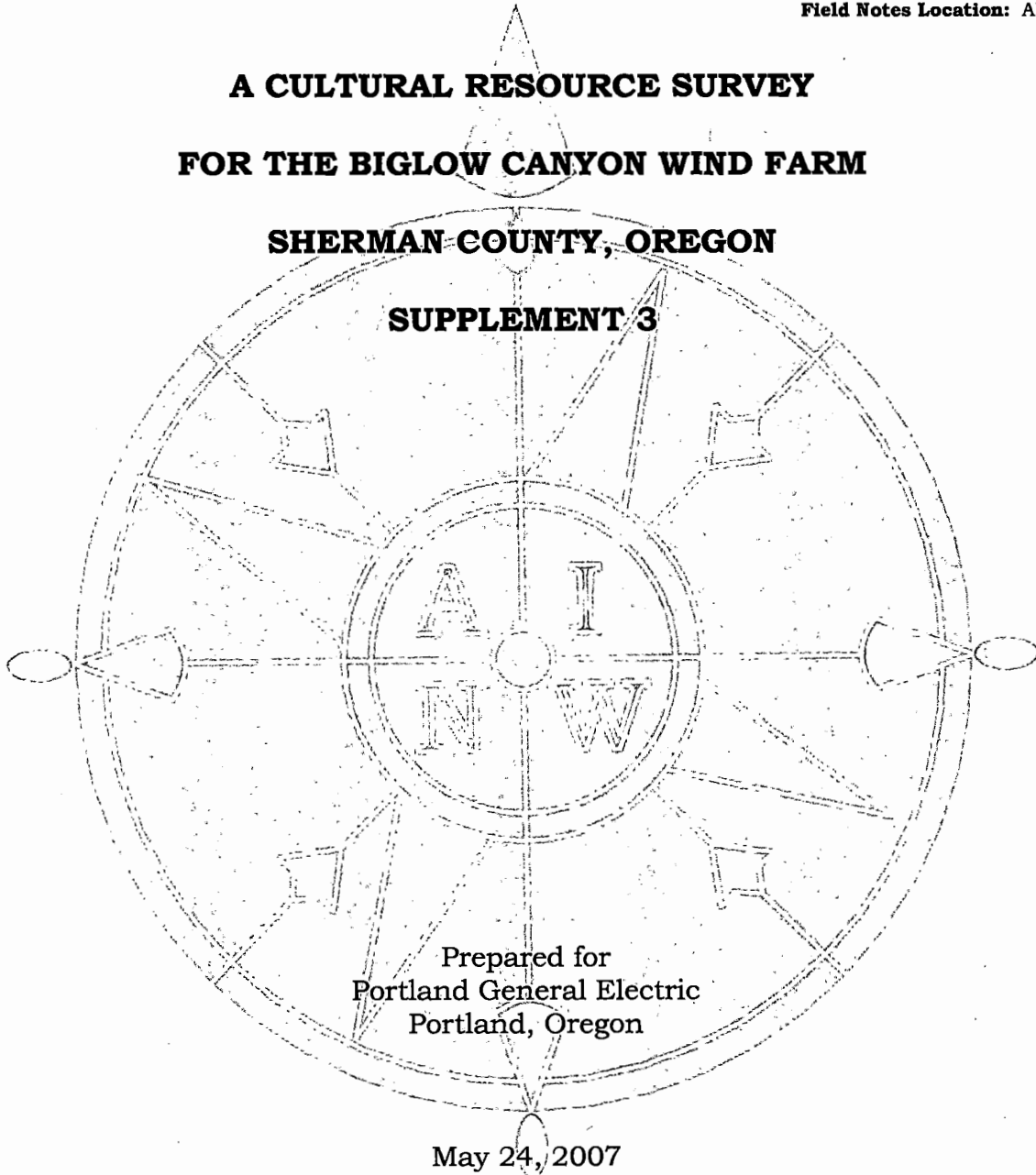
|                                |              |             |             |              |
|--------------------------------|--------------|-------------|-------------|--------------|
| Add to Project                 | 304          | 4636        | 3512        |              |
|                                | 13651        | 657         |             |              |
| <b>Total Addition: (s.f.)</b>  | <b>13955</b> | <b>5293</b> | <b>3512</b> | <b>22760</b> |
| <b>Total Addition: (acres)</b> | <b>0.32</b>  | <b>0.12</b> | <b>0.08</b> | <b>0.52</b>  |

|                            |               |               |               |               |
|----------------------------|---------------|---------------|---------------|---------------|
| <b>Net Change: (acres)</b> | <b>(0.54)</b> | <b>(0.51)</b> | <b>(0.02)</b> | <b>(1.06)</b> |
|----------------------------|---------------|---------------|---------------|---------------|

CONFIDENTIAL

**Findings:** (-)  
**County:** Sherman  
**Township, Range, Section:** T1N, R18E, Section 6;  
T3N, R18E, Section 31;  
T3N, R17E, Section 36  
**USGS Quad:** *Quinton, Oreg.-Wash., 7.5', 1971*  
**Total Project Acres:** 10  
**Total Acres Surveyed:** 10  
**Project Type:** Survey  
**Field Notes Location:** AINW

**A CULTURAL RESOURCE SURVEY  
FOR THE BIGLOW CANYON WIND FARM  
SHERMAN COUNTY, OREGON  
SUPPLEMENT 3**



Prepared for  
Portland General Electric  
Portland, Oregon

May 24, 2007

REPORT NO. 1926

**Archaeological Investigations Northwest, Inc.**

2632 SE 162<sup>nd</sup> Ave. • Portland, OR • 97236

Phone 503 761-6605 • Fax 503 761-6620



Western EcoSystems Technology, Inc. P.O. Box 2095, Walla Walla, WA 99362  
 Phone & Fax: 509.529.7523. WWW.west-inc.com

## TECHNICAL MEMORANDUM

**Date:** May 24, 2007

**To:** Rick Tetzloff, PGE

**From:** Jay Jeffrey, WEST, Inc.

**Subject:** Biglow Canyon Wind Farm  
 TES Wildlife Spring 2007 – Additional Areas Survey

We have completed surveys for threatened, endangered, or sensitive (TES) wildlife species that could potentially occur in those areas identified as not being previously surveyed in the permitted Biglow Canyon Wind Farm (Figure 1 and 2). This memorandum reports results of spring 2007 surveys. No state or federally protected or sensitive-classified species were observed. Details of the surveys are as follows. The areas identified were each surveyed twice in May 2007 following the same methods identified in the 2005 *Oregon EFSC Site Certificate Application for the Biglow Canyon Wind Farm, Sherman County, Oregon*. These methods were previously discussed and approved by the Oregon Department of Fish and Wildlife (ODFW). Results of the surveys are as follows.

Table 1. Biglow Canyon Additional Areas Survey – TES Wildlife, May 2007.

| Area | Dates Surveyed           | General Habitat   | TES Presence |
|------|--------------------------|---|--------------|
| A    | PREVIOUSLY SURVEYED 2006 | --  | --           |
| B    | May 7 and 15, 2007       | Narrow draw surrounded by ag fields; degraded with non-native veg                   | NO TES       |
| C    | May 7, 2007 <sup>a</sup> | 100% Wheat  | NO TES       |
| D    | May 8 and 15, 2007       | Native veg in patches and small draws within ag field; degraded with non-native veg | NO TES       |
| E    | PREVIOUSLY SURVEYED 2005 | --  | --           |
| F    | May 15 and 17, 2007      | Limited native habitat at Fox road and east in Fox Canyon drainage; degraded        | NO TES       |

<sup>a</sup>No second survey conducted due to lack of habitat.



Results of the surveys do not raise additional concerns for the project. No raptor nests, burrowing owls, or shrub-steppe obligate species were located that may have required construction delays, avoidance, or mitigation. This letter is intended to report completion of the sensitive wildlife species surveys for all areas of the final layout of the Biglow Canyon Wind Farm. Please address any questions regarding this report to myself:

Jay D. Jeffrey  
WEST, Inc  
Office: 509.529.7523  
Cell: 509.386.0450  
Email: [jjeffrey@west-inc.com](mailto:jjeffrey@west-inc.com)

Sincerely,



Jay Jeffrey  
Research Coordinator/Ecologist

cc: Wally Erickson, WEST

Figure 1. Additional 2007 TES Wildlife survey areas A-E.

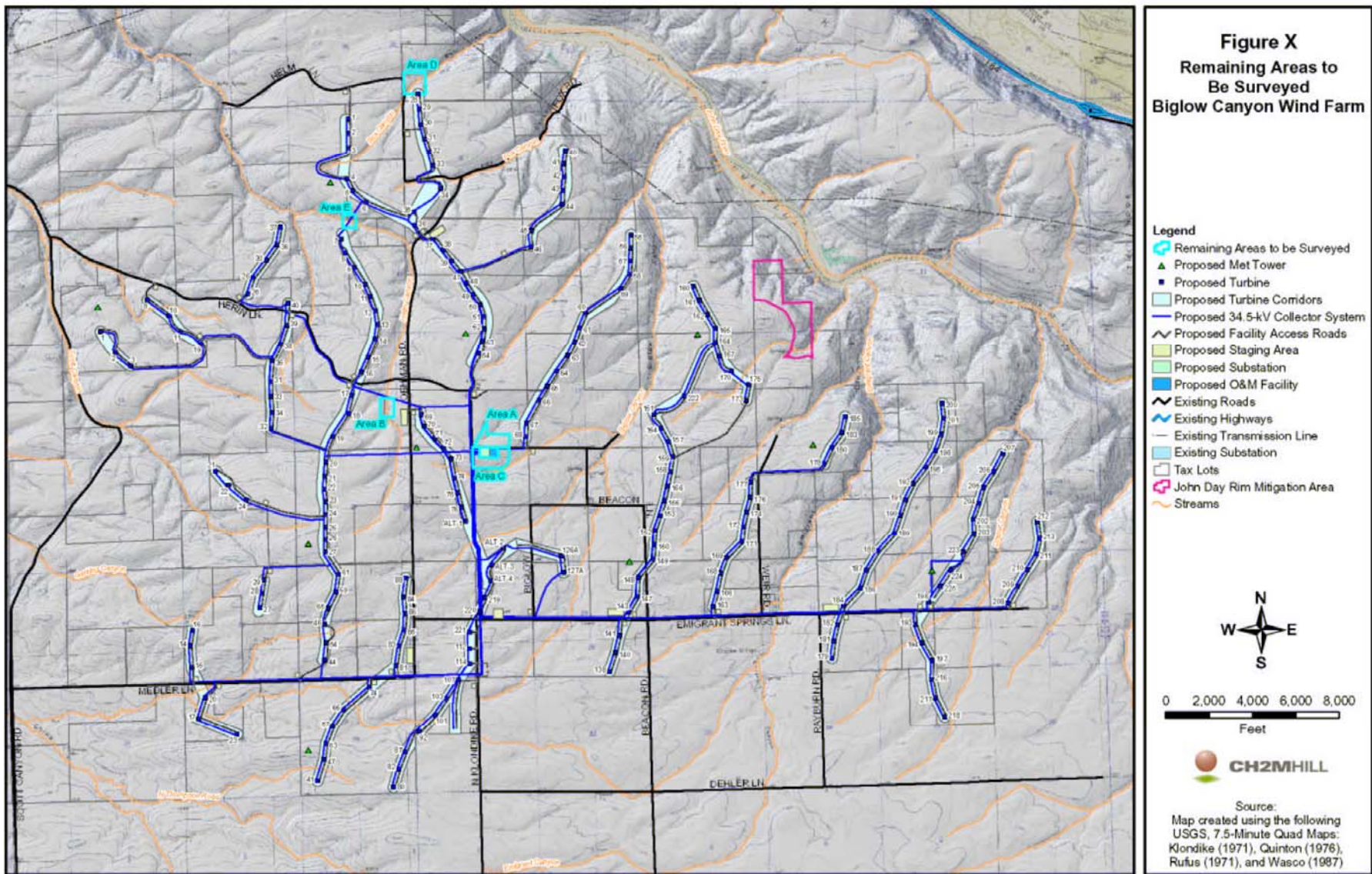
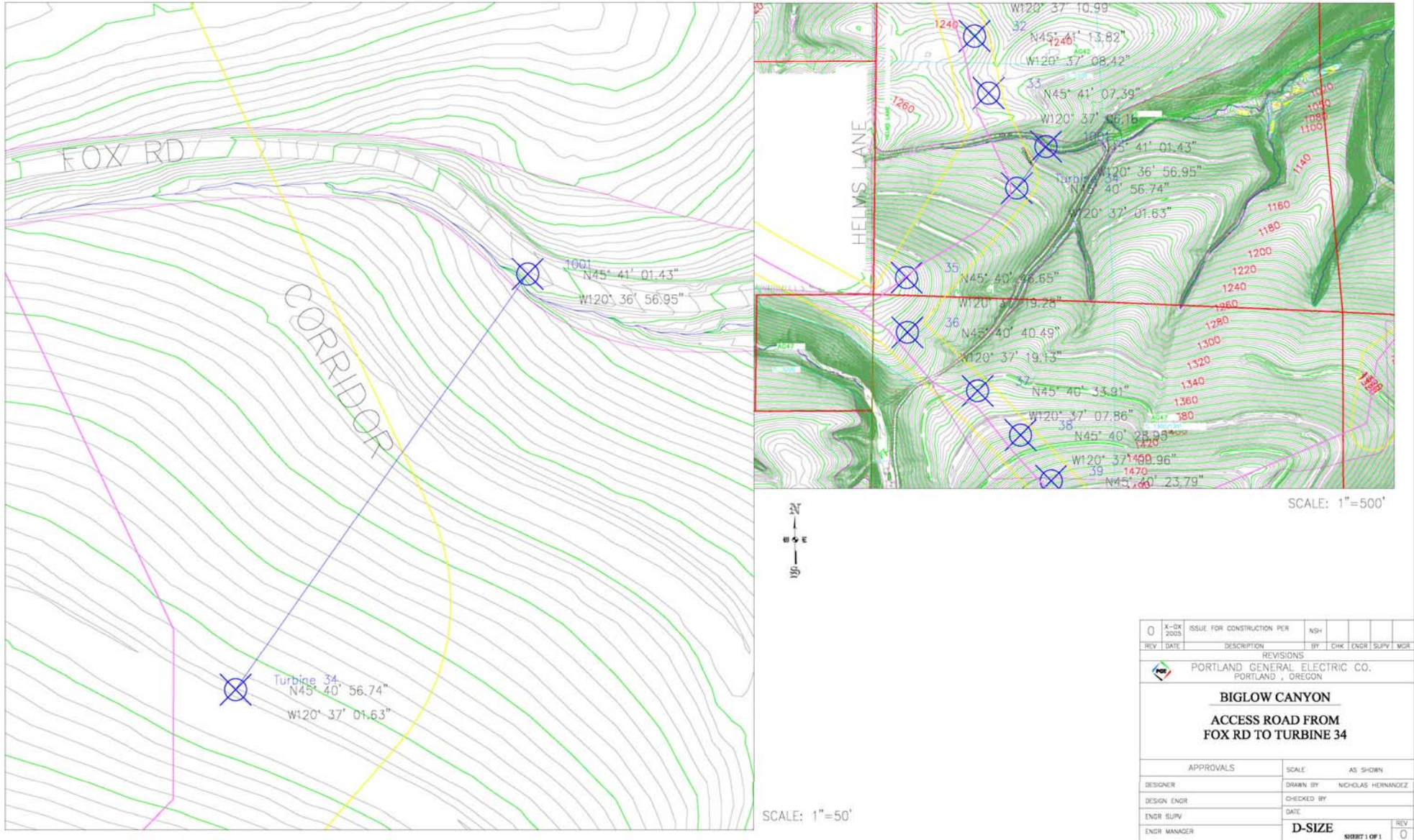




Figure 2. Additional 2007 TES Wildlife survey area F (Turbine 34 to Fox Road; left below).



|   |              |                            |     |                 |                    |              |     |
|---|--------------|----------------------------|-----|-----------------|--------------------|--------------|-----|
| 0   | X-OK<br>2005 | ISSUE FOR CONSTRUCTION PER | NSH |                 |                    |              |     |
| REV   | DATE         | DESCRIPTION                | BY  | CHK             | ENGR               | SUPV         | MGR |
| REVISIONS   |              |                            |     |                 |                    |              |     |
|  PORTLAND GENERAL ELECTRIC CO.<br>PORTLAND, OREGON |              |                            |     |                 |                    |              |     |
| <b>BIGLOW CANYON</b><br><b>ACCESS ROAD FROM</b><br><b>FOX RD TO TURBINE 34</b>  |              |                            |     |                 |                    |              |     |
| APPROVALS   |              |                            |     | SCALE: AS SHOWN |                    |              |     |
| DESIGNER  |              |                            |     | DRAWN BY        | NICHOLAS HERNANDEZ |              |     |
| DESIGN ENGR   |              |                            |     | CHECKED BY      |                    |              |     |
| ENGR SUPV   |              |                            |     | DATE            |                    |              |     |
| ENGR MANAGER  |              |                            |     | <b>D-SIZE</b>   | REV                |              |     |
|   |              |                            |     |                 |                    | SHORT 1 OF 1 | 0   |

# Biglow Canyon Wind Farm - Supplemental Wetlands and Waters Determination and Rare Plant Habitat Survey

PREPARED FOR: Rick Tetzloff/PGE  
PREPARED BY: Nichole Coulter, Peggy O'Neill and Joel Shaich/CH2M HILL  
COPIES: Mike Pappalardo/CH2M HILL  
DATE: May 24, 2007

## Summary

CH2M HILL conducted a wetland and waters determination for the proposed Biglow Canyon Wind Farm in the summer of 2005. Supplemental determinations were performed in both the summer and winter of 2006 based on the addition of a collector line in the project area. Results of previous field work efforts can be found in the original wetland and rare plant tech memo (July 2006), the EFSC Application (February 2006), and the collection line and access roads tech memo (December 2006). This memo serves as an amendment to the three existing reports discussed above.

The purpose of this determination was to investigate additional changes to the December 2006 facilities layout (Site Certificate Amendment 2) and to satisfy the site certificate Condition 55 criteria of performing a spring survey for rare plant species. CH2M HILL conducted site visits on May 7 and May 22, 2007 to determine the presence and extent of wetlands and/or jurisdictional waters, as defined under Section 404 of the Clean Water Act and the Oregon Removal-Fill Law. Suitable habitat for and presence of federal and state listed plant species were also investigated. Study Areas A, B, C, D, E and F (Figure 1) were investigated for the potential presence of federal and/or state listed plant species. Study Areas C, D and F were also investigated for the presence of potentially jurisdictional wetlands and/or waters (Figure 1).

No jurisdictional wetlands were identified within the study areas. One potentially jurisdictional water was identified at Study Area D. Study Area D includes one intermittent stream (Drainage D), which is a tributary of the John Day River. Impacts to the potentially jurisdictional water identified at Drainage D will be avoided as no fill or removal will occur at this drainage. Study Area F includes one intermittent stream (Drainage F), which is a tributary of the John Day River. However, the Department of State Lands previously determined (Appendix B) that this drainage is non-jurisdictional and exempt from state permit requirements.

No federal or state listed plant habitat or species were identified within any of the study areas (A-F).

## Methods

### Office Review

Prior to conducting the site investigation, the following documents were reviewed:

- U.S. Geological Survey (USGS) Topographic Map, Klondike, Oregon quadrangle (USGS, 1971); Quinton, Oregon quadrangle (USGS, 1976); Rufus, Oregon quadrangle (USGS, 1971); Wasco, Oregon quadrangle (USGS, 1987)
- National Wetland Inventory (NWI) Map, Klondike, Oregon quadrangle (USFWS, 1991); Quinton, Oregon quadrangle (USFWS, 1983); Rufus, Oregon quadrangle (USFWS, 1983); Wasco, Oregon quadrangle (USFWS, 1988)
- Natural Resource Conservation Service (NRCS) Soil Survey of Sherman County, Oregon (NRCS, 1992)
- Hydric Soils List: Sherman County, Oregon (NRCS, 2000)
- Oregon Natural Heritage Information Center (ORNHIC) Species List (April 2007)
- US Fish and Wildlife Service (USFWS) County Species List (March 2007)
- A facilities map provided by PGE Energy (March 2, 2007), indicating the location and extent of the five survey areas (Figure 1).

### Site investigation

The site investigation was performed to complete the following:

- Conduct a preliminary estimate of the area of potentially jurisdictional wetlands and/or waters within Study Areas C, D and F that may be affected by construction.
- Document occurrence of and/or potential habitat for sensitive plant species within the vicinity of Study Areas A-F.

Qualified CH2M HILL biologists conducted the site investigations for Study Areas A-E on May 7, 2007 and for Study Area F on May 22, 2007.

## Results

### Office Review

#### USGS Topographic Map

The site is located in the Klondike, Quinton, Rufus, and Wasco, Oregon 7.5-minute quadrangle of the USGS topographic maps. Potentially jurisdictional waters were identified

on the USGS map as occurring within Study Area D and F. No jurisdictional wetlands or waters were identified on the USGS map within Study Area C.

### Sherman County Soil Survey

A review of the soil types mapped within Study Areas D and F determined that none are listed as hydric (Table 1).

TABLE 1

Mapped Soils Study Areas D and F (Sherman County, OR)

| Soil ID | Soil Name   | Hydric | Hydric Inclusions |
|---------|---|--------|-------------------|
| 3D      | Anderly silt loam, 15 to 35 percent south slopes          | No     | No                |
| 16D     | Lickskillet very stony loam, 7 to 40 percent south slopes | No     | No                |
| 31C     | Walla Walla silt loam, 7 to 15 percent                    | No     | No                |
| 32D     | Walla Walla silt loam, 15 to 35 percent north slopes      | No     | No                |
| 33D     | Walla Walla silt loam, 15 to 35 percent south slopes      | No     | No                |
| 36D     | Wato very fine sandy loam, 15 to 35 percent south slopes  | No     | No                |

### PGE Facilities Map (March 2007)

The map provided by PGE indicated potentially jurisdictional waters within the boundary at Study Area D and F (Figure 1).

### Site investigation

The site investigation was conducted on May 7, 2007 at Study Areas A-E. Weather during the site investigation was warm (~65 F) and sunny, with no precipitation. Study Area F was investigated on May 22, 2007. Weather was warm (~70 F) and sunny. Representative site photos are presented in Appendix A.

### Wetlands and Waters Survey

No vegetated wetlands were identified within Study Areas C, D or F. Other waters were present in Study Areas D and F.

### Drainage D

The potentially jurisdictional channel identified on the USGS map at Study Area D was verified to be potentially jurisdictional in the field. This channel is identified as Drainage D to correlate to the study area in which it is located.

Drainage D is an intermittent stream located within Box Canyon in Study Area D and is a tributary of the John Day River. This drainage is located east of Helm Lane at the northernmost portion of the project site (Figure 2). Vegetation within the channel included

species such as cheat grass (*Bromus tectorum*, NI), bulbous bluegrass (*Poa bulbosa*, NI), and Russian thistle (*Salsola kali*, UPL). There was no flow in the channel during the site visit. Indicators of hydrology including evidence of flow, bed and banks, eroded soil and exposed rock were observed at the time of the site investigation. A large box culvert is located at this drainage, indicating that the channel may receive high flows during the wet months. (Appendix A, Photos 4 and 5).

Potential temporary impacts to the jurisdictional water identified at Drainage D may occur during construction of the adjacent turbines (turbines 28-33). Impacts to this potentially jurisdictional water could be avoided by implementing best management practices (BMPs) such as silt fencing and other erosion control measures to ensure no fill entered the channel. If impacts are unavoidable, mitigation for temporary impacts to this resource would be required by the regulatory agencies.

### **Drainage F**

The potentially jurisdictional channel identified on the USGS map at Study Area F was verified to be potentially jurisdictional in the field. This channel is identified as Drainage F to correlate to the study area in which it is located.

Drainage F is an intermittent stream located within Fox Canyon within Study Area F and is a tributary of the John Day River. This drainage is located south of Helm Lane at the northern portion of the project site (Figure 3). Vegetation along the channel banks was primarily cheat grass (*Bromus tectorum*, NI). There was no flow in the channel during the site visit. Indicators of regular flow included a scoured unvegetated bed, sediment deposits on the bed, and eroded banks (Appendix A, Photos 8 and 9).

### **Rare Plant Habitat Survey**

Existing literature and scientific data were reviewed to determine species distribution and potential for occurrence within Study Areas A-F. The ORNHIC database and USFWS were consulted for documented and potential occurrences of candidate, proposed, and listed species.

ORNHIC and USFWS database searches revealed four listed or candidate plant species that might occur within the study area: Northern wormwood (*Artemisia campestris* var. *wormskioldii*), , Laurence's milk-vetch (*Astragalus collinus* var. *laurentii*), Henderson's ricegrass (*Achnatherum hendersonii*), disappearing monkeyflower (*Mimulus evanescens*) (Table 2).

TABLE 2

Federal and State Listed or Candidate Plant Species Potentially Occurring Within the Study Areas (based on April 2007 ONHIC data)

| Common Name               | Scientific Name   | Federal Status <sup>1</sup> | State Status <sup>1</sup> | Notes on Habitat Occurrence |
|---------------------------|---|-----------------------------|---------------------------|-----------------------------|
| Northern wormwood         | <i>Artemisia campestris</i><br>var. <i>wormskioldii</i> | C                           | LE                        | No suitable habitat         |
| Laurence's milk-vetch     | <i>Astragalus collinus</i><br>var. <i>laurentii</i>     | SOC                         | LT                        | No suitable habitat         |
| Henderson's ricegrass     | <i>Achnatherum</i><br><i>hendersonii</i>                | SOC                         | C                         | No suitable habitat         |
| Disappearing monkeyflower | <i>Mimulus evanescens</i>                               | SOC                         | C                         | No suitable habitat         |

### <sup>1</sup> State and Federal Status Definitions

**LE**—Listed Endangered. Taxa listed by the USFWS or National Marine Fisheries Service (NMFS) as Endangered under the Endangered Species Act (ESA), or by the Departments of Agriculture (ODA) and Fish and Wildlife (ODFW) of the state of Oregon under the Oregon Endangered Species Act of 1987 (OESA). Endangered taxa are those which are in danger of becoming extinct within the foreseeable future throughout all or a significant portion of their range.

**LT**—Listed Threatened. Taxa listed by the above agencies as Threatened; defined as those taxa likely to become endangered within the foreseeable future.

**C**—Candidate. Candidate taxa for which NMFS or USFWS have sufficient information to support a proposal to list under the ESA, or which is a candidate for listing by the ODA under the OESA.

**SoC**—Species of Concern. Former Category 2 candidates for which additional information is needed in order to propose as threatened or endangered under the ESA; these species are under review for consideration as Candidates for listing under the ESA.

### Study Area A

This study area is located within Conservation Reserve Program (CRP) land north of Herin Lane. Vegetation includes species such as cheat grass, cultivated wheat, bluegrass, big sagebrush (*Artemisia tridentate*), Russian thistle, common yarrow (*Achillea millefolium*), whitlow grass (*Draba verna*), crested wheatgrass (*Agropyron cristatum*), rabbitbrush (*Chrysothamnus nauseosus*), and blue wildrye (*Elymus glaucus*) (Appendix A, Photo 1). Suitable habitat was not identified within the study areas for any of the listed plant species.

### Study Area B

This study area is located west of Oehman Road and south of Herin Lane. Vegetation includes species such as cheat grass, cultivated wheat, bluegrass, Russian thistle, common yarrow, crested wheatgrass, blue wildrye, common groundsel (*Senecio vulgaris*), and biscuitroot (*Lomatium triternatum*) (Appendix A, Photo 2). Suitable habitat was not identified within the study areas for any of the listed plant species.



### **Study Area C**

This study area is located south of Herin Lane and south of the on-going construction for the substation and O&M facility in a cultivated wheat field. Suitable habitat was not identified within the study areas for any of the listed plant species (Appendix A, Photo 3).

### **Study Area D**

This study area is located east of Helm Lane at the northernmost portion of the project site. Vegetation includes species such as cheat grass, bulbous bluegrass, and Russian thistle (Appendix A, Photos 4 and 5). Suitable habitat was not identified within the study areas for any of the listed plant species.

### **Study Area E**

This study area is located west of Oehman Road and south of Helm Lane. Vegetation includes species such as cheat grass, common yarrow, bluegrass, lupine (*Lupinus* sp.), crested wheatgrass, yellow salsify (*Tragopogon dubius*), arrowleaf balsamroot (*Balsamorhiza sagittata*), rabbitbrush, fleabane (*Erigeron* sp.), fiddleneck (*Amsinckia spectabilis*), and phlox (*Phlox* sp.) (Appendix A, Photos 6 and 7). Suitable habitat was not identified within the study areas for any of the listed plant species.

### **Study Area F**

This study area is located south of Helm Lane at the northern portion of the project site. Most of the study area is an active wheat field. Drainage F flows between the wheat field and the road embankment of Helm Lane. Vegetation along the drainage banks and on the road embankment was primarily cheatgrass (*Bromus tectorum*) (Appendix A, Photo 8). No rare plant species or suitable habitat were observed.

## **Conclusion**

An office review of USGS data, NWI and soils maps, and the PGE facilities map identified two potentially jurisdictional waters within the Study Areas. A field visit performed on May 7, 2007 confirmed Drainage D as a potentially jurisdictional water of the U.S. and the State of Oregon (see Figure 2-Drainage D). A field visit performed on May 22, 2007 confirmed Drainage F as a potentially jurisdictional water of the U.S. and the State of Oregon (see Figure 3-Drainage F).

Impacts to the potentially jurisdictional water identified at Drainage D will be avoided as no fill or removal will occur at this drainage. Avoiding impact at this drainage obviates the need for subsequent wetland delineation reports, modifications to the existing permit authorizations, and the submittal of a mitigation and restoration plan to the resource agencies. Since there are no impacts at Drainage D, there is no need to revise the existing state and federal permits.

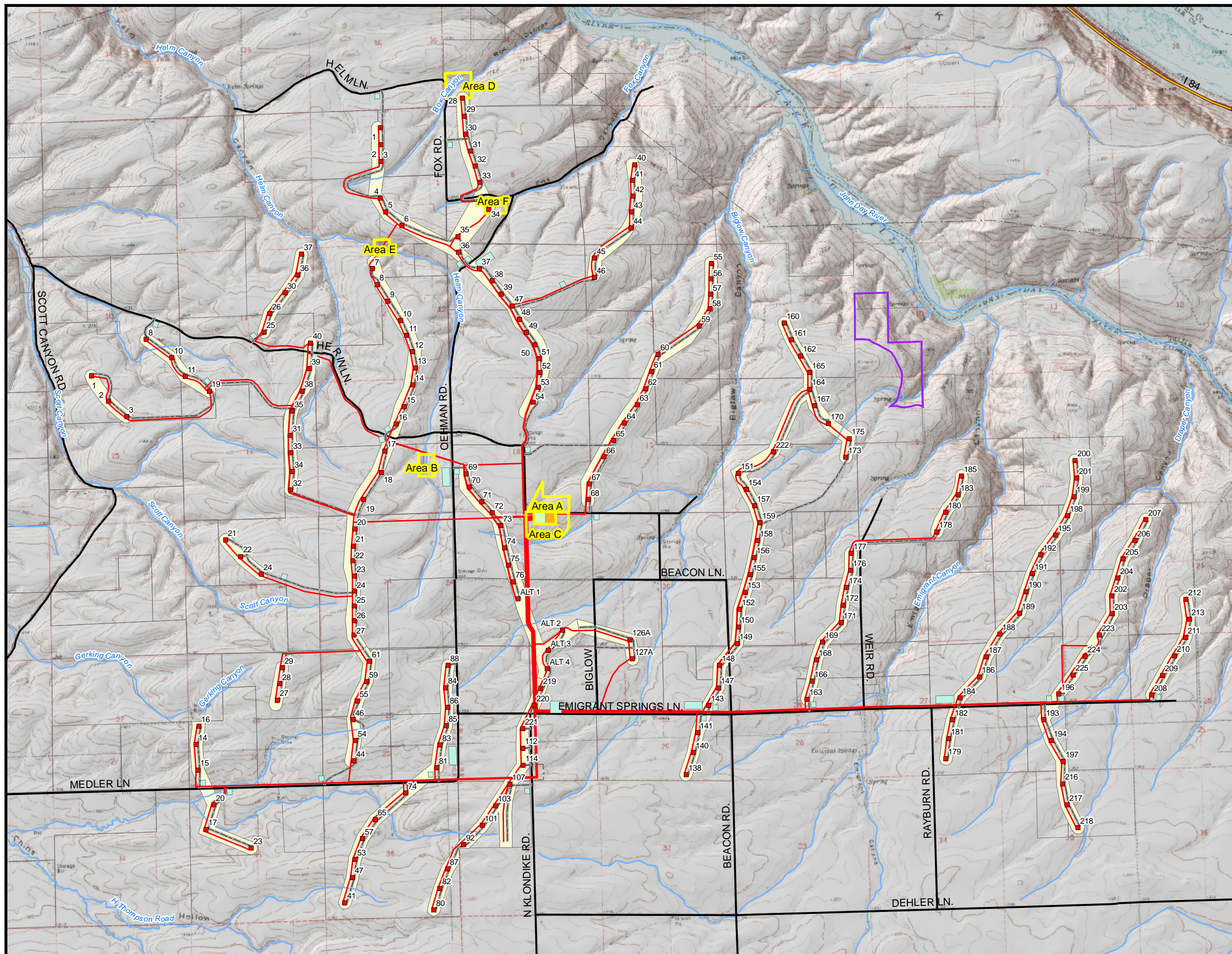
Impacts to the potentially jurisdictional water identified at Drainage F may include installation of a culvert and fill material for an access road. The Corps of Engineers previously authorized activities associated with drainage crossings for the Biglow Canyon Wind Farm Project. A Regional General Permit- Category E was issued on September 26,

2006 (Corps No: 200500689). Modifications to the existing Corps of Engineers permit is not necessary as the activities associated with placing a culvert at this drainage F are covered under the existing RGP and the threshold of 0.5 acres of impacts to waters of the U.S. will not be exceeded. The Department of State Lands has previously determined (Appendix B) that this drainage is non-jurisdictional and exempt from state permit requirements.

No jurisdictional wetlands were identified within the study areas. No rare plants or rare plant habitat were identified within the study areas.

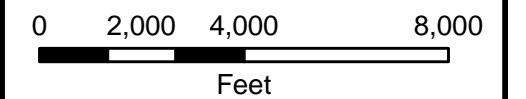
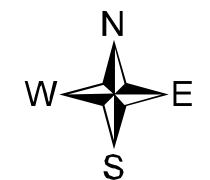


**Figure 1**  
**Study Areas**  
 May 7th & 22nd, 2007 Survey  
 Biglow Canyon Wind Project



**Legend**

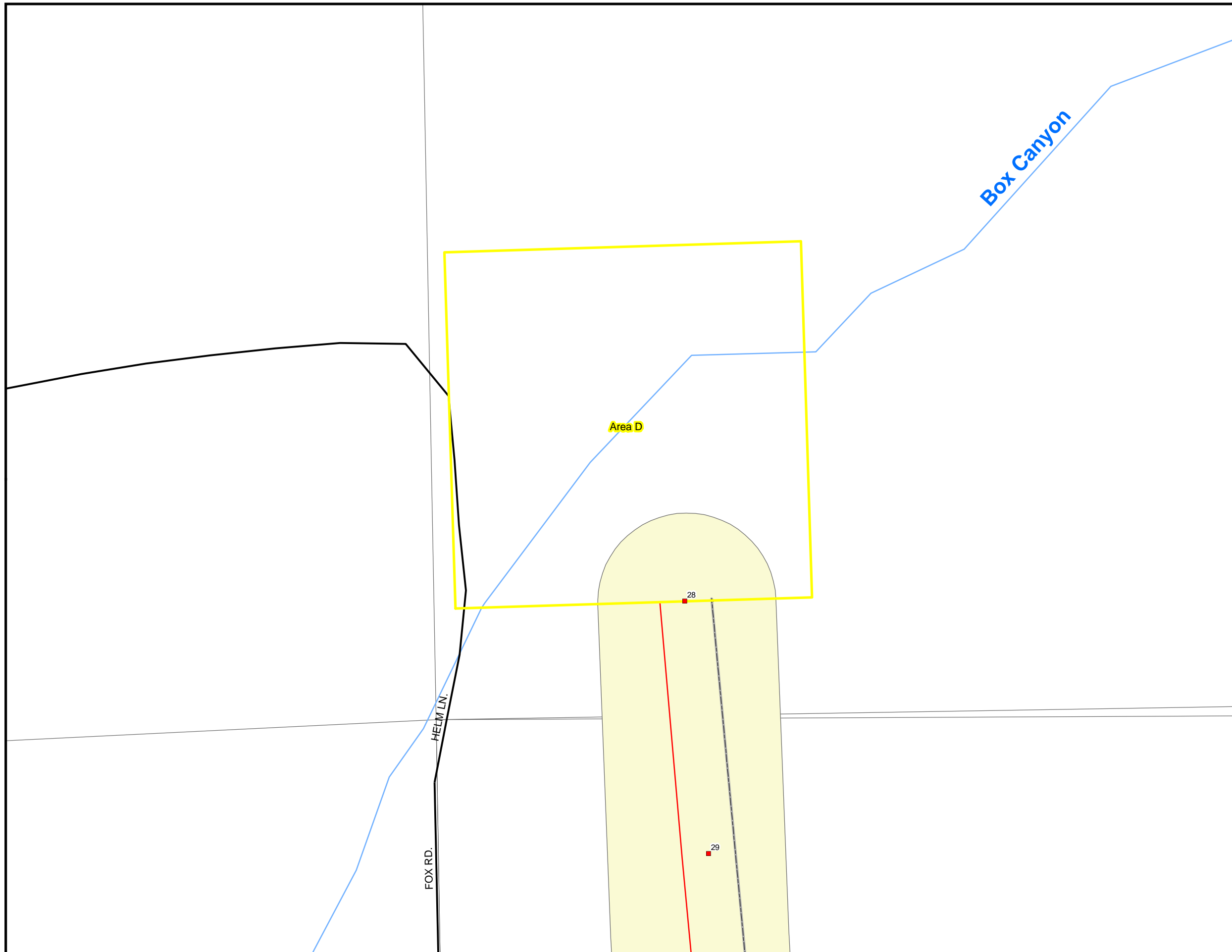
- Proposed Turbine
- Study Areas
- Proposed Turbine Corridors
- Proposed 34.5-kV Collector System
- Proposed Facility Access Roads
- Proposed Staging Area
- Proposed Substation
- Proposed O&M Facility
- Existing Roads
- Existing Highways
- Existing Transmission Line
- Existing Substation
- Tax Lots
- John Day Rim Mitigation Area
- ~ Drainage


















Source:  
 Map created using the following  
 USGS, 7.5-Minute Quad Maps:  
 Klondike (1971), Quinton (1976),  
 Rufus (1971), and Wasco (1987)

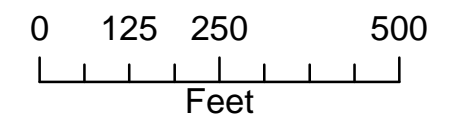


**Figure 2**  
**Study Area D**  
**Biglow Canyon Wind Project**



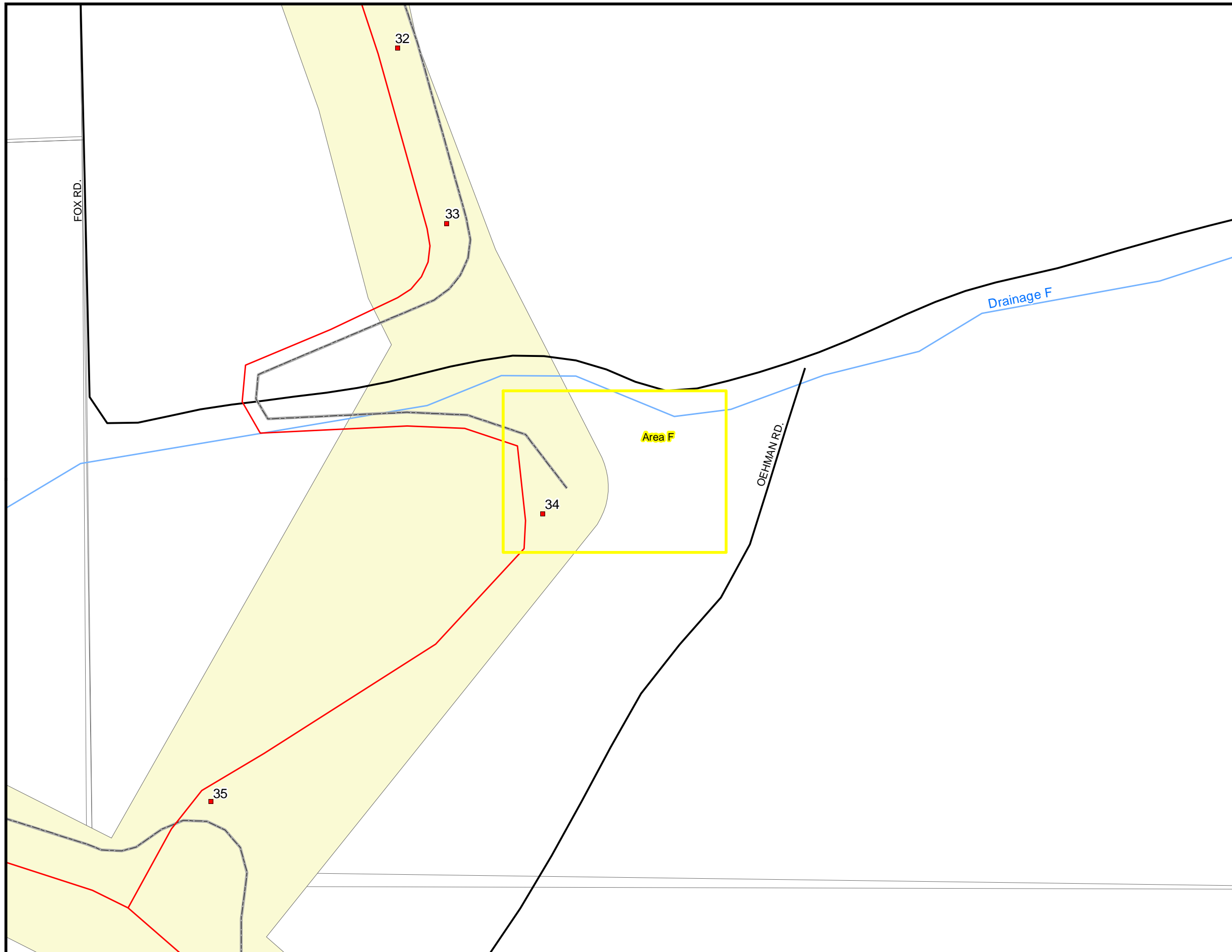
**Legend**

-  Study Area
-  Proposed Turbine
-  Proposed Turbine Corridors
-  Proposed 34.5-kV Collector System
-  Proposed Facility Access Roads
-  Proposed Staging Area
-  Proposed Substation
-  Proposed O&M Facility
-  Existing Roads
-  Existing Highways
-  Existing Transmission Line
-  Existing Substation
-  Tax Lots
-  John Day Rim Mitigation Area
-  Drainage



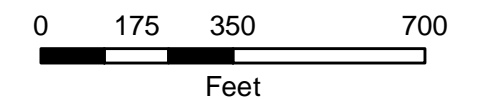
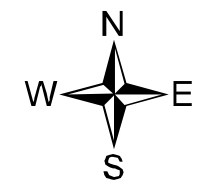
Source:  
 Map created using the following  
 USGS, 7.5-Minute Quad Maps:  
 Klondike (1971), Quinton (1976),  
 Rufus (1971), and Wasco (1987)

**Figure 3**  
**Study Area F**  
**Biglow Canyon Wind Project**



**Legend**

- Proposed Turbine
- ☒ Study Areas
- Proposed Turbine Corridors
- Proposed 34.5-kV Collector System
- - - Proposed Facility Access Roads
- Proposed Staging Area
- Proposed Substation
- Proposed O&M Facility
- Existing Roads
- == Existing Highways
- - - Existing Transmission Line
- Existing Substation
- Tax Lots
- ☒ John Day Rim Mitigation Area
- ~ Drainage



Source:  
 Map created using the following  
 USGS, 7.5-Minute Quad Maps:  
 Klondike (1971), Quinton (1976),  
 Rufus (1971), and Wasco (1987)

## **Appendix A- Site Photos**

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*Photo Plate 1: Study Area A, looking east*



*Photo Plate 2: Study Area B, looking north*





*Photo Plate 3: Study Area C, looking southwest*



*Photo Plate 4: Drainage D- Box Culvert*





*Photo Plate 5: Drainage D-Channel*



*Photo Plate 6: Study Area E, looking east*





*Photo Plate 7: Study Area E, looking west*



*Photo Plate 8: Study Area F, looking east*



*Photo Plate 9: Drainage F*

## **Appendix B**

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# Oregon

Theodore R. Kulongoski, Governor

## Department of State Lands

1645 NE Forbes Rd., Suite 112

Bend, OR 97701

(541) 388-6112

FAX (541) 388-6480

www.oregonstatelands.us.

February 3, 2006

Orion Sherman County Wind Farm LLC.

Attn: Carlos V. Pineda

1611 Telegraph Ave, Suite 1515

Oakland, CA 94612

### State Land Board

Theodore R. Kulongoski  
Governor

Bill Bradbury  
Secretary of State

Randall Edwards  
State Treasurer

Re: State Application Number 35498-NSP  
Biglow Canyon Wind Farm, Multiple intermittent drainages located in  
T. 2N, R. 18E, section 6 (crossings 1 & 2), and section 16 (crossing 3); and  
T. 2N, R. 17E, section 35 (crossings 4 and 5); section 36 (crossing 6),  
section 9 (crossing 7); and section 12 (crossing 8).

Dear Mr. Pineda:

We have received your application to construct road and electrical crossings associated with the Biglow Canyon Wind Farm in multiple intermittent drainages, in the locations identified above. The Department of State Lands requires a permit if you plan to remove, fill or alter 50 cubic yards or more of material within the banks of most waters of the state or designated wetlands. State-designated Essential Salmon Habitat streams and State Scenic Waterways are exceptions in that any amount of removal, fill or alteration typically requires a permit.

OAR 141-085-0015(2) states; to be subject to the requirements of the removal-fill law, the removal or fill must be within "waters of the state." The types of waters of the state and the physical limits of removal-fill jurisdiction are as follows: (c) Rivers, intermittent and perennial streams, lakes, ponds and all other bodies of water (except wetlands) subject to these rules, to the ordinary high water line, or absent readily identifiable field indicators, the bankfull stage. OAR 141-085-0010 (111) states that "Intermittent Stream" means any stream that flows during a portion of every year and which provides spawning, rearing or food-producing areas for food and game fish.

Based on an a field inspection on January 18, 2006 by Kevin Herkamp, of my staff, all of the crossings, except for crossing 7, are proposed at locations where the drainages do not meet the definition of an "Intermittent stream" as defined in OAR 141-085-0005(111). Crossing 7 does meet the definition, however based on the information provided, impacts will avoided at this location. The drainages at the locations of proposed impacts do not qualify as "waters of the state" as defined in OAR 141-085-0015(2(c)). Therefore a state removal-fill permit is not required.

You must also receive authorization, when required, from the U.S. Army Corps of Engineers and local planning department before beginning construction.

If you have any questions, please call Kevin Herkamp at (541) 388-6345.

Sincerely,

Eric D. Metz

Eastern Region Operations Manager

Wetlands and Waterways Conservation Division

Oregon Department of State Lands

cc: Rod French, Oregon Dept. of Fish and Wildlife  
Karla Ellis, Corps of Engineers, Portland District  
Sherman County Planning Dept.  
Cathy Van Horn, Department of Energy  
Carrie Konkol, CH2M HILL, Inc. (agent)



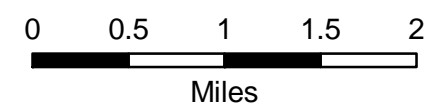
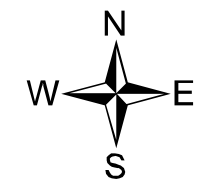
**Figure J-1**  
**Jurisdictional Wetlands & Waters**

Biglow Canyon Wind Farm

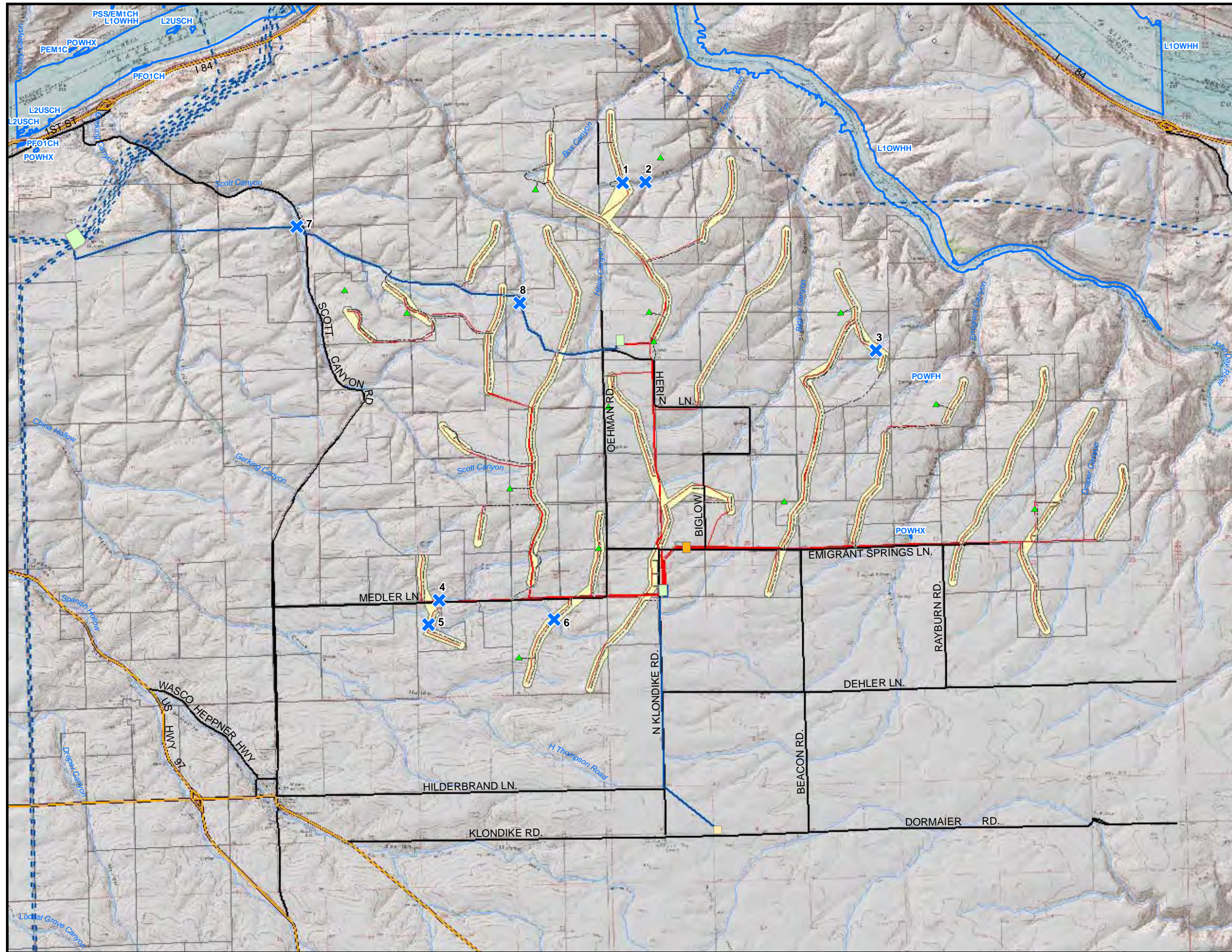


**Legend**

- Potential Jurisdictional Waters
- (POWHX) NWI Wetlands
- Proposed Met Tower
- Proposed Facility Access Roads
- Existing Dirt Roads
- Existing Roads
- Existing Highways
- Proposed 34.5-kV Collector System
- Proposed Transmission Line
- Existing Transmission Line
- Proposed Turbine Corridors
- Existing Substation
- Proposed Substation / Proposed O&M Facility
- Proposed O&M Facility
- Streams



Source:  
 U.S. Fish & Wildlife Service,  
 National Wetlands Inventory  
 USGS, 7.5-Minute Quad Maps:  
 Klondike (1971), Quinton (1976),  
 Rufus (1971), and Wasco (1987)







# Oregon

Theodore R. Kulongoski, Governor

BCWOPSDoc 64



**OREGON DEPARTMENT  
OF ENERGY**

625 Marion St. NE

Salem, OR 97301-3737

Phone: (503) 378-4040

Toll Free: 1-800-221-8035

FAX: (503) 373-7806

[www.oregon.gov/energy](http://www.oregon.gov/energy)

June 4, 2007

Mr. Rick Tetzloff  
Portland General Electric  
121 SW Salmon Street  
Portland OR 97204

Re: Biglow Canyon Wind Farm Amendment  
Proposed Access Road

Dear Rick:

We have reviewed your request, dated May 29, for a Department determination under OAR 345-027-0050(5) that a proposed access road modification and crane path extension do not require an amendment of the site certificate.

As modified, a proposed 660-foot access road would run southwest from Fox Road to the location of Turbine 34. A portion of this road lies outside the previously-approved site boundary. Construction of the modified access road would eliminate the need for approximately 1,300 feet of previously-approved access road running southeast from Fox Road to the turbine location, as shown on Figure 1 that was included in your request.

In addition, you request the use of approximately 680 feet of the previously-approved access road alignment north of Fox Road to extend a crane path (no access road would be built). This change would not affect any additional area outside the previously-approved site boundary.

We appreciate the thoroughness of your request, which included an assessment of the "threshold requirements" under OAR 345-027-0050(1), an assessment of compliance of the proposed modification with the Council standards, and attachments (Spring wildlife survey report, table of comparative habitat impacts, cultural resource survey report and jurisdictional waters and rare plants survey report). This documentation provides clarifying support for your request in the record, and that is very helpful.

June 4, 2007

Page 2

The Department agrees with your conclusion that the access road modification and crane path extension are consistent with Council standards. The current site certificate conditions adequately address the impacts of these changes. The modified access road would actually improve compatibility of the facility with underlying farm use and would reduce the area of the facility's footprint impact. We have determined, therefore, that a site certificate amendment proceeding is unnecessary and that you may proceed with these proposed changes. Please include a description of the changes and our determination in the next semi-annual construction progress report and in the next annual report required under OAR 345-026-0080.

Sincerely,

A handwritten signature in cursive script, appearing to read "John G. White".

John G. White  
Senior Analyst