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EXHIBIT A**APPLICANT INFORMATION**

OAR 345-021-0010(1)(a)

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ATTACHMENTS

A-1 Proof of Ability to Work in Oregon and Articles of Organization

A.1 INTRODUCTION

OAR 345-021-0010(1)(a) *Information about the applicant and participating persons, including:*

A.2 NAME AND ADDRESS OF APPLICANT AND CONTACT PERSON

OAR 345-021-0010(1)(a)(A) *The name and address of the applicant including all co-owners of the proposed facility, the name, mailing address and telephone number of the contact person for the application, and if there is a contact person other than the applicant, the name, title, mailing address and telephone number of that person;*

Response: The name and address of the Applicant filing this Site Certificate Application is as follows:

LotusWorks – Summit Ridge I, LLC
9611 NE 117th Ave, Suite 2840
Vancouver, WA 98662
ATTN: Steven Ostrowski, President
(360) 737-9692

A.3 PARTICIPANT INFORMATION

OAR 345-021-0010(1)(a)(B) *The contact name, address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely in meeting any facility standard adopted by the Council.*

Response: Parent Corporation of the applicant (100% member of the applicant):

Lotus Group USA, Inc.
9611 NE 117th Ave, Suite 2840
Vancouver, WA 98662
Attn: Steven Ostrowski, President
(360) 737-9692

The Applicant will not rely on any third-party permits or approvals to accomplish the project.

A.4 CORPORATE INFORMATION

OAR 345-021-0010(1)(a)(C) *If the applicant is a corporation, it shall give: (i) The full name, official designation, mailing address, and telephone number of the officer responsible for submitting the application; (ii) The date and place of its incorporation; (iii) A copy of its articles of incorporation and its authorization for submitting the application; and (iv) In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

(i) *The full name, official designation, mailing address and telephone number of the officer responsible for submitting the application;*

Response: The applicant is a limited liability company, not a corporation. The proof of ability to do business in Oregon is Attachment A-1. The requested information is as follows:

Steven Ostrowski, President
LotusWorks – Summit Ridge I, LLC
9611 NE 117th Ave, Suite 2840
Vancouver, WA 98662
(360) 737-9692

(ii) *The date and place of its incorporation;*

Response: LotusWorks – Summit Ridge I, LLC was formed in Oregon on August 8, 2008.

A copy of its articles of incorporation and its authorization for submitting the application; and

Response: The authorization for submitting the Application and the articles of organization are included in Attachment A-1.

(iii) *In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

Response: Not applicable; LotusWorks – Summit Ridge I, LLC was formed in Oregon.

A.5 PARENT COMPANY INFORMATION

OAR 345-021-0010(1)(a)(D) *If the applicant is a wholly owned subsidiary of a company, corporation, or other business entity, in addition to the information required by paragraph (C), it shall give the full name and business address of each of the applicant's full or partial owners.*

Response: The full name and address of the Applicant's parent entity and sole owner is as follows:

Lotus Group USA, Inc.
Attn: Steven Ostrowski, President
9611 NE 117th Ave, Suite 2840
Vancouver, WA 98662
(360) 737-9692

A.6 MISCELLANEOUS INFORMATION

OAR 345-021-0010(1)(a)(E) *If the applicant is an association of citizens, a joint venture or a partnership, it shall give: (i) the full name, official designation, mailing address and telephone number of the person responsible for submitting the application; (ii) the name, business address and telephone number of each person participating in the association, joint venture or partnership and the percentage interest held by each; (iii) proof of registration to do business in Oregon; (iv) a copy of its articles of association, joint venture agreement or partnership agreement and a list of its members and their cities of residence; and (v) if there are no articles of association, joint venture agreement or partnership agreement, the applicant shall state that fact over the signature of each member.*

Response: Not applicable.

OAR 345-021-0010(1)(a)(F) *If the applicant is a public or governmental entity, it shall give: (i) the full name, official designation, mailing address and telephone number of the person responsible for submitting the application; and (ii) written authorization from the entity's governing body to submit an application.*

Response: Not applicable.

OAR 345-021-0010(1)(a)(G) *If the applicant is an individual, the individual shall give his or her mailing address and telephone number.*

Response: Not applicable.

ATTACHMENT A-1

**PROOF OF ABILITY TO WORK IN OREGON
ARTICLES OF ORGANIZATION**

EXHIBIT A
TO
WRITTEN CONSENT OF SOLE MEMBER
IN LIEU OF ORGANIZATIONAL MEETING

Form of Articles of Organization



Phone: (503) 986-2200
Fax: (503) 378-4361

Articles of Organization—Limited Liability Company

Secretary of State
Corporation Division
255 Capitol St. NE, Suite 151
Salem, OR 97310-1327
FilingInOregon.com

FILED

AUG 04 2008

REGISTRY NUMBER:

538378-95

For office use only

OREGON
SECRETARY OF STATE

In accordance with Oregon Revised Statute 192.410-192.490, all information on this form is publicly available, including addresses. We must release this information to all parties upon request and it will be posted on our website.

For office use only

Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Necessary.

1) NAME OF LIMITED LIABILITY COMPANY (Must contain the words "Limited Liability Company" or the abbreviations "LLC" or "L.L.C.")

LotusWorks - Summit Ridge I, LLC

2) DURATION (Please check one.)

Latest date upon which the Limited Liability Company is to dissolve is _____

Duration shall be perpetual.

3) NAME OF THE PERSON WHO WILL ACCEPT LEGAL SERVICE FOR THIS BUSINESS (INITIAL REGISTERED AGENT)

Ball Janik Service Company

4) REGISTERED AGENT'S PUBLICLY AVAILABLE ADDRESS (Must be an Oregon Street Address, which is identical to the registered agent's business office.)

101 SW Main Street, Suite 1100

Portland, OR 97204-3219

5) ADDRESS WHERE THE DIVISION MAY MAIL NOTICES

9611 NE 117th Avenue, Suite 2830

Vancouver, WA 98662

6) NAME AND ADDRESS OF EACH PERSON WHO IS FORMING THIS BUSINESS (ORGANIZER)

Jeffrey S. Perry

c/o BALL JANIK LLP

101 SW Main Street, Suite 1100

Portland, OR 97204-3219

7) IF THIS LIMITED LIABILITY COMPANY IS NOT MEMBER MANAGED, CHECK ONE BOX BELOW.

This limited liability company is managed by a single manager.

This limited liability company is managed by multiple manager(s).

8) IF RENDERING A LICENSED PROFESSIONAL SERVICE OR SERVICES, DESCRIBE THE SERVICE(S) BEING RENDERED.

N/A

9) OPTIONAL PROVISIONS (Attach a separate sheet if necessary.)

(OPTIONAL) LIST MEMBERS AND/OR MANAGERS NAMES AND ADDRESSES

10) OWNERS (MEMBERS) (Names and Street address)

11) MANAGERS (MANAGERS) (Names and Street address)

12) EXECUTION/SIGNATURE OF THE PERSON WHO IS FORMING THIS BUSINESS (ORGANIZER) (The title for each signer must be "Organizer.")

By my signature, I declare as an authorized authority, that this filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment or both.

Signature

Printed Name

Jeffrey S. Perry

Title

Organizer

Organizer

Organizer

Organizer

FEES

Required Processing Fee \$50
Confirmation Copy (Optional) \$5

Processing Fees are non-refundable.

Please make check payable to "Corporation Division."

NOTE:
Fees may be paid with VISA or MasterCard. The card number and expiration date should be submitted on a separate sheet for your protection.

13) CONTACT NAME (To resolve questions with this filing.)

Jane K. Gregory - Ball Janik LLP

DAYTIME PHONE NUMBER (include area code.)

(503) 228-2525

WRITTEN CONSENT OF SOLE MEMBER
IN LIEU OF ORGANIZATIONAL MEETING
OF
LOTUSWORKS – SUMMIT RIDGE I, LLC

The undersigned, being the sole member of LOTUSWORKS – SUMMIT RIDGE I, LLC, an Oregon limited liability company (the “Company”), hereby adopts the following resolutions and takes the following actions in lieu of holding an organizational meeting for the Company on or as of August 4, 2008:

Articles of Organization

RESOLVED, that the Articles of Organization of the Company in the form attached hereto as *Exhibit A* are hereby ratified and approved, as duly filed with the Oregon Secretary of State on August 4, 2008. The actions of Jeffrey S. Perry in filing the Articles of Organization as Organizer for the Company are hereby approved, ratified and adopted as the valid and binding acts of the Company and the Company shall indemnify the sole organizer against any and all damages, costs and injury sustained in connection with the formation and organization of the Company.

Operating Agreement

RESOLVED, that the initial Operating Agreement of the Company dated as of August 4, 2008 (the “Operating Agreement”) in the form attached hereto as *Exhibit B* is hereby adopted as the Operating Agreement of the Company.

Principal Place of Business

RESOLVED, that 9611 NE 117th Avenue, Suite 2830, Vancouver, Washington 98662 shall be maintained as the initial principal place of business for the transaction of business of the Company. The members may relocate the principal place of business or establish additional offices from time to time.

Registered Office; Registered Agent

RESOLVED, that the initial registered office of the Company shall be 101 SW Main Street, Suite 1100, Portland, Oregon 97204-3219 and that the initial registered agent at such address shall be Ball Janik Service Company.

Bank Accounts

RESOLVED, that the Company’s sole member is hereby authorized and directed, in the name and on behalf of the Company, to open

checking, deposit and other accounts with banks and other financial institutions, with payments from such accounts to be made upon and according to the order of the Company and with authorized signatories determined by the sole member which reflect appropriate internal controls, and to certify to any such bank or financial institution any form of resolution required by such bank or financial institution that is consistent with this resolution. Any actions by any member, manager, officer or person heretofore to create, operate or maintain such accounts on behalf of the Company are hereby ratified, confirmed and approved in every respect.

Expenses of the Company

RESOLVED, that the Company's sole member is hereby authorized and directed, in the name and on behalf of the Company, to pay the expenses of organization of the Company.

Licenses and Permits

RESOLVED, that the sole member is authorized and directed to obtain in the name of the Company such licenses, registrations and tax permits as may be required for the conduct of the business of the Company in the state of Oregon by any federal, state, county or municipal governmental statute, ordinance or regulation, and to do all things necessary or convenient to qualify the Company to transact its business in compliance with the laws and regulations of any appropriate federal, state or municipal governmental authority.

Fiscal Year

RESOLVED, that the fiscal year of the Company shall be the calendar year ending December 31st subject to change, as appropriate, at the discretion of the members by resolution.

General Authority

RESOLVED, that the Company's sole member is hereby authorized and directed, in the name and on behalf of the Company, to take any and all further actions which it deems necessary or appropriate to effectuate fully the foregoing resolutions.

LOTUS GROUP USA INC.,
a Delaware corporation

By: 
Steven A. Ostrowski, Jr., President

EXHIBIT B
TO
WRITTEN CONSENT OF SOLE MEMBER
IN LIEU OF ORGANIZATIONAL MEETING

Form of Operating Agreement

**OPERATING AGREEMENT OF
LOTUSWORKS – SUMMIT RIDGE I, LLC,
an Oregon Limited Liability Company**

This OPERATING AGREEMENT (this “Agreement”) is made and entered into effective August 4, 2008, by and between LotusWorks – Summit Ridge I, LLC, an Oregon limited liability company (the “Company”), and Lotus Group USA Inc., a Delaware corporation (the “Member”).

SECTION 1 THE LIMITED LIABILITY COMPANY

1.1 Formation. Effective August 4, 2008, the Member formed an Oregon limited liability company under the name LotusWorks – Summit Ridge I, LLC by filing articles of organization with the Oregon Secretary of State. The rights and obligations of the Member are as provided in the Oregon Limited Liability Company Act (the “LLC Act”) except as otherwise expressly provided in this Agreement.

1.2 Name. The business of the Company will be conducted under the name LotusWorks – Summit Ridge I, LLC.

1.3 Purpose. The principal purpose of the Company is to evaluate a wind energy project on property located in Wasco County, Oregon (known as the Summit Ridge Project), and, if such evaluation indicates commercial potential for the site, to develop or cause to be developed such site as a wind turbine energy generation project, and to engage in all activities incidental to that purpose. However, the Company may engage in any other lawful business determined by the Member.

1.4 Offices. The Company maintains its principal business office at 9611 NE 117th Avenue, Suite 2830, Vancouver, Washington 98662-2403.

1.5 Registered Agent. Ball Janik Service Company will be the Company’s initial registered agent in Oregon and the registered office will be at 101 SW Main Street, Suite 1100, Portland, Oregon 97204-3219.

1.6 Term. The term of the Company commenced on August 4, 2008, and will continue until terminated as provided in this Agreement.

1.7 Name and Address of Member. The Member’s name and address are Lotus Group USA Inc., 9611 NE 117th Avenue, Suite 2830, Vancouver, Washington 98662-2403

1.8 Admission of Additional Members. No additional members may be admitted to the Company without the prior approval of the Member.

SECTION 2 CAPITAL CONTRIBUTIONS

2.1 Initial Capital Contribution. The Member has contributed to the Company the assets (subject to the liabilities) described in Appendix A to this Agreement.

2.2 Additional Capital Contributions. Additional Capital Contributions will be made from time to time in such amounts as the Member deems necessary.

SECTION 3 ALLOCATION OF PROFITS AND LOSSES; DISTRIBUTIONS

3.1 Allocations of Income and Loss. All items of income, gain, loss, deduction, and credit will be allocated 100% to the Member. For federal and state income tax purposes, all items of Company income, gain, loss, and deduction will be reported on the Member's individual tax returns.

3.2 Distributions. No distribution may be made to the Member if, after giving effect to the distribution, in the judgment of the Member, either (a) the Company would not be able to pay its debts as they become due in the ordinary course of business or (b) the fair value of the total assets of the Company would not at least equal its total liabilities. Subject to the foregoing limitation, the Company will make distributions to the Member in such amounts and at such times as the Member determines.

SECTION 4 POWERS AND DUTIES OF MEMBER

4.1 Management of Company. The Company is a member-managed limited liability company. The management and control of the Company and its business and affairs will be vested in the Member. The Member will have all the rights and powers that may be possessed by a member in a member-managed limited liability company pursuant to the LLC Act and the rights and powers that are otherwise conferred by law or are necessary, advisable, or convenient to the discharge of the Member's duties under this Agreement and to the management of the business and affairs of the Company. Without limiting the generality of the foregoing, the Member will have the following rights and powers (which the Member may exercise at the cost, expense, and risk of the Company):

(a) To expend the funds of the Company in furtherance of the Company's business.

(b) To perform all acts necessary to manage and operate the business of the Company, including engaging such persons as the Member deems advisable to manage the Company.

(c) To execute, deliver, and perform on behalf of and in the name of the Company any and all agreements and documents deemed necessary or desirable by the Member to carry out the business of the Company, including any lease, deed, easement, bill of sale, mortgage, trust deed, security agreement, contract of sale, or other document conveying, leasing, or granting a security interest in the interest of the Company in any of its assets, or any part thereof, whether held in the Company's name, the name of the Member, or otherwise. No other signature or signatures will be required.

(d) To borrow or raise money on behalf of the Company in the Company's name or in the name of the Member for the benefit of the Company and, from time to time, to draw, make, accept, endorse, execute, and issue promissory notes, drafts, checks, and other

negotiable or nonnegotiable instruments and evidences of indebtedness, and to secure the payment of that indebtedness by mortgage, security agreement, pledge, or conveyance or assignment in trust of the whole or any part of the assets of the Company, including contract rights.

4.2 Limitation on Liability of Member. To the maximum extent permitted under the LLC Act, the Member will not have any liability to the Company for any loss suffered by the Company that arises out of any action or inaction of the Member if the Member, in good faith, determined that the course of conduct was in the best interests of the Company.

4.3 Indemnification of Member. To the maximum extent permitted under the LLC Act, the Member is entitled to be indemnified by the Company against any losses, judgments, liabilities, expenses, and amounts paid in settlement of any claims sustained against the Company or against the Member in connection with the Company. The satisfaction of any indemnification and any saving harmless will be from, and limited to, Company assets, and the Member will not have any personal liability on account of that indemnification.

4.4 Dealing with the Company. The Member, and affiliates of the Member, may deal with the Company by providing or receiving property and services to or from the Company, and may receive from others or from the Company normal profits, compensation, commissions, or other income incident to such dealings.

4.5 Loans. The Member may, but will not be obligated to, make loans to the Company to cover the Company's cash requirements and those loans will bear interest at a rate determined by the Member.

SECTION 5 COMPENSATION AND REIMBURSEMENT OF EXPENSES

5.1 Organization Expenses. The Company will pay all expenses incurred in connection with organization of the Company.

5.2 Other Company Expenses. The Member will charge the Company for the Member's actual out-of-pocket expenses incurred in connection with the Company's business.

5.3 Compensation. The Member will be paid such compensation by the Company as is specifically authorized by the Member.

SECTION 6 BOOKS OF ACCOUNT AND BANKING

6.1 Books of Account. The Company's books and records and this Agreement will be maintained at the principal office of the Company. The Member will keep and maintain books and records of the operations of the Company that are appropriate and adequate for the Company's business and for carrying out this Agreement.

6.2 Banking. All funds of the Company are to be deposited in a separate bank account or in an account or accounts of a savings and loan association as determined by the

Member. Those funds may be withdrawn from such account or accounts on the signature of the person or persons designated by the Member.

SECTION 7 DISSOLUTION AND WINDING UP OF THE COMPANY

7.1 Dissolution. The Company will be dissolved on the occurrence of any of the following events:

- (a) The express determination of the Member to dissolve the Company; or
- (b) By operation of law.

7.2 Winding Up. On the dissolution of the Company, the Member will take full account of the Company's assets and liabilities; the assets will be liquidated as promptly as is consistent with obtaining their fair value; and the proceeds, to the extent sufficient to pay the Company's obligations with respect to such liquidation, will be applied and distributed in the following order:

- (a) To payment and discharge of the expenses of liquidation and of all the Company's debts and liabilities, including debts and liabilities owed to the Member; and
- (b) To the Member.

SECTION 8 GENERAL PROVISIONS

8.1 Amendments. A proposed amendment will be adopted and become effective as an amendment only on the written approval of the Member.

8.2 Governing Law. This Agreement and the rights of the parties under it will be governed by and interpreted in accordance with the laws of the state of Oregon (without regard to principles of conflicts of law).

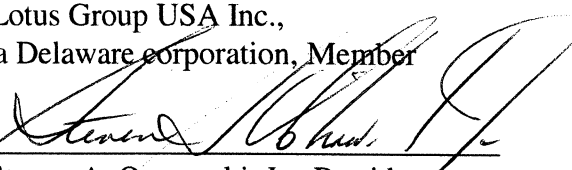
[Separate signature page follows]

The parties enter into this Agreement as of the date first written above.

The Company:

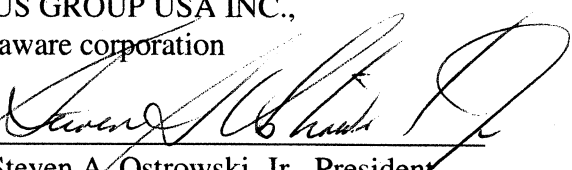
LOTUSWORKS – SUMMIT RIDGE I, LLC,
an Oregon limited liability company

By: Lotus Group USA Inc.,
a Delaware corporation, Member

By: 
Steven A. Ostrowski, Jr., President

Member:

LOTUS GROUP USA INC.,
a Delaware corporation

By: 
Steven A. Ostrowski, Jr., President

Attachment A
to
Articles of Organization
of
LotusWorks – Summit Ridge I, LLC

Article 9 INDEMNIFICATION AND EXCULPATION OF LIABILITY

A. The Company shall indemnify to the fullest extent permitted by law any person who is made or threatened to be made a party to, witness in, or otherwise involved in, any action, suit or proceeding, whether civil, criminal, administrative, investigative, or otherwise (including an action, suit or proceeding by or in the right of the Company) by reason of the fact that the person is or was a manager, director or officer of the Company or a fiduciary within the meaning of the Employee Retirement Income Security Act of 1974 with respect to any employee benefit plan of the Company, or serves or served at the request of the Company as a director, manager, officer, employee or agent or as a fiduciary of an employee benefit plan, of another limited liability company, corporation, partnership, joint venture, trust, or other enterprise. Any indemnification provided pursuant to this Article 9.A will not be exclusive of any rights to which the person indemnified may otherwise be entitled under any provision of these articles of organization, operating agreement, other agreement, statute, policy of insurance, vote of members, directors or managers, or otherwise.

For purposes of this Article 9.A, the term “to the fullest extent permitted by law” includes, without limitation, to the fullest extent permitted by any provision in the Oregon Limited Liability Company Act that authorizes a limited liability company to provide indemnification, by agreement, article, operating agreement or otherwise, in addition to the permissible indemnification specifically authorized and set forth in the Oregon Limited Liability Company Act.

B. To the fullest extent permitted by law, no manager or director of the Company will be personally liable to the Company or its members for monetary damages for conduct as a manager or director. Without limiting the generality of the preceding, if the Oregon Revised Statutes are amended after this Article 9.B becomes effective to authorize action further eliminating or limiting the personal liability of members or managers of the Company, then the liability of the members or managers of the Company will be eliminated or limited to the fullest extent permitted by the Oregon Revised Statutes, as so amended. No amendment or repeal of this Article 9.B, nor the adoption of any provision of these Articles of Organization inconsistent with this Article 9.B, nor a change in the law, will adversely affect any right or protection that is based upon this Article 9.B and pertains to conduct that occurred prior to the time of such amendment, repeal, adoption or change. No change in the law will reduce or eliminate the rights and protections set forth in this Article 9.B unless the change in the law specifically requires such reduction or elimination.

CERTIFICATE

State of Oregon

OFFICE OF THE SECRETARY OF STATE
Corporation Division

I, KATE BROWN, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:

LOTUSWORKS - SUMMIT RIDGE I, LLC

was

organized

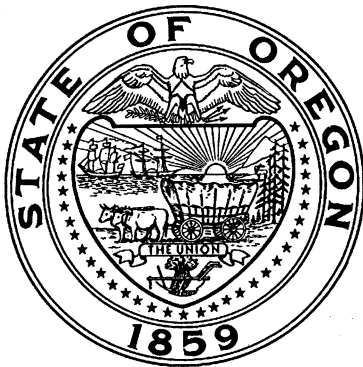
under the Oregon

Limited Liability Company Act

on

August 4, 2008

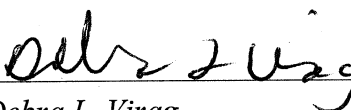
and is active on the records of the Corporation Division as of
the date of this certificate.



In Testimony Whereof, I have hereunto set
my hand and affixed hereto the Seal of the
State of Oregon.

KATE BROWN, Secretary of State

By



Debra L. Virag

April 21, 2009

EXHIBIT B**GENERAL INFORMATION ABOUT THE PROPOSED FACILITY**

OAR 345-021-0010(1)(b)

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B.1 DESCRIPTION OF THE PROPOSED FACILITY

OAR 345-021-0010(1)(b) *Information about the proposed facility, construction schedule, and temporary disturbances of the site, including:*

OAR 345-021-0010(1)(b)(A) *A description of the proposed energy facility, including as applicable:*

- (i) *The nominal electric generating capacity and the average electrical generating capacity, as defined in ORS 469.300.*

Response: The nominal electric generating capacity will be approximately 200.1 megawatts (MW). The average electric generating capacity will be approximately 67 MW.

- (ii) *Major components, structures, and systems, including a description of the size, type, and configuration of equipment used to generate electricity and useful thermal energy.*

The following sections provide detailed information about Facility components, including the wind turbines, the O&M facility, communications equipment, access roads, laydown areas, and the electrical system.

B.1.1 Facility Overview

Response: LotusWorks - Summit Ridge I, LLC (“Applicant” or LWSR) proposes to develop, construct and operate a wind generation facility in Wasco County, Oregon, with a generating capacity of approximately 200.1 MW and up to 87 turbine locations. The Facility will be located on private land, approximately 15 miles southeast of The Dalles, Oregon. Refer to Exhibit C for maps of the site vicinity, the Facility location, and the Facility components.

The Applicant has signed long-term land agreements with landowners representing approximately 25,000 acres of land in Wasco County. A list of the owners of record of property within or adjacent to the proposed Facility site is contained in Exhibit F. The Applicant proposes to begin construction of the Summit Ridge Wind Farm no later than three years after the effective date of the site certificate and to complete construction no later than six years after the effective date of the site certificate.

B.1.2 Power Generation Equipment and Systems

B.1.2.1 Wind Turbines

The Facility will have an aggregate nominal nameplate generating capacity of approximately 200.1 MW, and will consist of up to 87 wind turbine generators of 1.8 to 2.3 MW and with a hub height of approximately 80 meters.

The wind turbine nacelle houses the generator and gearbox, and supports the rotor and blades at the hub. The turbine tower supports and provides access to the nacelle. The turbines are connected by an underground power collection system that collects the electricity to the project substation, which steps up the power from 34.5 kV to 230 kV.

The intent of the project is to construct the collector system underground. It is possible that site conditions, once geotechnical explorations have been conducted, or even during construction, may dictate that overhead collector lines need to be installed. The applicant intends to minimize such overhead installations. The conditions under which overhead collector lines might be needed are discussed in more detail in Section B.8.4.

Wind turbines will be sited in turbine strings within the 1300-foot micro-siting corridors that comprise the site boundary. Final locations of turbines within the corridors will be based on multiple criteria, such as optimization of the wind resource, constraints posed by terrain, efforts to minimize impacts to habitat and cultural resources, to comply with noise standards, and to avoid interference with BPA radio signal corridors.

Some of the turbines will include the minimum aviation warning lights required by the Federal Aviation Administration (FAA). The number of turbines with lights and the lighting pattern of the turbines will be determined in consultation with the FAA.

B.2 SITE PLAN

(iii) *A site plan and general arrangement of buildings, equipment, and structures.*

Response: The Summit Ridge Wind Farm site plan is included in Exhibit C.

B.3 FUEL AND CHEMICAL STORAGE FACILITIES

(iv) *Fuel and chemical storage facilities, including structures and systems for spill containment;*

Response: Limited quantities of lubricants, cleaners and detergents will be stored inside the operation and maintenance (O&M) building, and no fuel will be stored on site. Spill kits will be carried by maintenance trucks.

B.4 FIRE PREVENTION

(v) *Equipment and systems for fire prevention and control.*

Response: The wind turbines will be equipped to shut down automatically before mechanical problems create excess heat or sparks. Each wind turbine generator and pad-mounted transformer will be constructed with a concrete pad around each base, with a minimum of 10 feet of nonflammable groundcover on all sides. The use of underground power collector cables, which will be used except where infeasible, substantially reduces the risk of fire from short circuits caused by wildlife or lightning.

Each maintenance truck will carry a fire extinguisher to respond to any fires that might be sparked.

B.5 SOURCE OF FUELS, FUEL CYCLES, ELECTRICAL LOADS, ENERGY FLOW, AND EXCESS HEAT DISPOSAL

(vi) *For thermal power plants:*

- (I) *A discussion of the source, quantity and availability of all fuels used to generate electricity or useful thermal energy.*
- (II) *Process flow, including power cycle and steam cycle diagrams to describe the energy flows within the system;*
- (III) *Equipment and systems for disposal of waste heat;*
- (IV) *The fuel chargeable to power heat rate;*

Response: Not applicable.

B.6 UNDERGROUND GAS STORAGE

- (vii) *For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors.*

Response: Not applicable.

B.7 LIQUEFIED NATURAL GAS STORAGE

- (viii) *For facilities to store liquefied natural gas, the volume, maximum pressure, and liquefaction and gasification capacity in thousand cubic feet per hour.*

Response: Not applicable.

B.8 DESCRIPTION OF RELATED OR SUPPORTING FACILITIES

OAR 345-021-0010(1)(b)(B) *A description of major components, structures, and systems of each related or supporting facility.*

Response:

B.8.1 Project Roads

Existing unpaved roads within the site boundary will be utilized to the extent practicable to reduce the need for new road construction. Where needed, the existing roads will be improved to the following general configuration: site access roads that will be used for construction equipment, including erector cranes, will be designed to a total width of 40 feet, consisting of a 20-foot wide graveled surfaces and 10-foot compacted shoulders. Erosion control and drainage best management practices will be included in the design of all roads. After the completion of construction, the road shoulders, which are needed during construction to accommodate the cranes, will be removed and restored to pre-existing conditions, whether arable land or natural habitat. The 20-foot width of the graveled surface will be left to facilitate operation of the facility and for the convenience of the landowners. All areas temporarily disturbed during road construction will be restored to their pre-existing condition and contours. There will be no separate ‘crane paths’ constructed to allow the construction crane access from string to string.

In areas where there are no existing roads to access wind turbine strings or proposed facilities, new access roads will be constructed to the dimensions described above. Permanent turnaround areas will be situated at or near the end of each turbine string.

B.8.2 Meteorological Towers

A maximum of three permanent un-guyed meteorological (met) towers will be placed within the site boundary; these will replace the seven existing temporary met towers. The meteorological towers will collect wind resource data. These towers will be the same height as the hub of the turbines, approximately 80 meters (210 feet) tall. Permanent met tower foundations are generally 15-20 feet deep, but in the worst-case scenario, could be as deep as 40 feet depending on height, soil conditions, and geotechnical engineering requirements.

B.8.3 SCADA

A SCADA system will be installed to enable remote operation of the wind turbines, collect operating data from each wind turbine, and archive wind and performance data from various sources. The SCADA system will be buried in the same alignment as the collector system and linked (via fiber optic cables or other means of communication) to a central computer in the O&M facility.

B.8.4 Electrical System

The electrical system will consist of: (1) a power collection system, which will collect energy generated by each wind turbine at approximately 600 to 690 volts, increase voltage through a generator step-up (GSU) transformer either located in the nacelle or adjacent to the turbine (pad-mounted) to approximately 34.5 kV, and deliver it via electric collector cables to (2) the Facility step-up substation, where transformers will further increase the voltage delivered by the power collection system to approximately 230 kV, (3) a high-voltage transmission line that will deliver power from the Facility step-up substation to the (4) Facility interconnect location at the 230 kV Bonneville Power Administration (BPA) Big Eddy to Maupin-Redmond transmission.

For the purpose of this Exhibit, the term “collector cable” refers to the 34.5-kV aboveground and underground power collection system, and the term “transmission line” refers to the 230 kV or higher cables connecting the Facility substation to the interconnect substation and regional transmission grid.

Each wind turbine will generate power ranging from approximately 600 volts to 690 volts (voltage could vary, depending on the turbine model ultimately selected for the Facility). A transformer next to or inside of each turbine will increase the voltage to 34.5 kV. From the transformer, power will be transmitted via electric cables. These cables will be installed in the same trench as the fiber optic cables interconnecting the SCADA system.

This project is specifically intending to install the entire 34.5 kV collector system underground. There are certain site conditions that may require aboveground installation of the collector system as noted in Exhibit B (B.8.4). Until detailed site examinations occur, either prior to or during construction, there is no way to determine at this time what the “maximum length of the aboveground 34.5 kV collector system” might be. Any estimation

of what this maximum length might be at this time would be simply a guess. In some locations, the collector cables might be constructed above ground on wood poles. Examples of specific conditions that will make it environmentally advantageous to run portions of the collection system above ground are as follows:

- Steep terrain where the use of construction equipment would be infeasible or unsafe;
- Stream or wetland crossings where an aboveground line avoids impacts;
- Rare plant communities or archeological/cultural resources to avoid impacts;
- Soil with low thermal conductivity preventing adequate heat dissipation from the conductor; and/or
- Rocky conditions that would significantly increase ground impacts or fail to achieve the required heat dissipation.

Any overhead structures that may be needed to carry the collector system above ground will be wooden poles approximate 55 feet tall. It is estimated that 10% of the collector system may be constructed above ground. However, until the final layout is established, and site-specific geotechnical borings have been studied, the Applicant will not know if any above ground collector cables will be required.

B.8.5 Interconnection and Substation System

The collector cable system will link each turbine to the proposed Facility substation located within the project site. A 230 kV transmission feeder line capable of handling the nameplate capacity of the Facility will connect the project substation to the interconnection location. The 230 kV transmission feeder line is expected to be carried on wooden H-frame poles. The project substation site will be on approximately five acres surrounded by a graveled, fenced area. The transformer, control building with protective relaying, switching equipment and an area to park utility vehicles will also be located at the substation site. Transformers will use non-toxic material, such as mineral oil, rather than polychlorinated biphenyl (PCB).

B.8.6 O&M Facility

The permanent O&M facility will be co-located with the project substation, and will have up to approximately 10,000 square feet of enclosed space, which may include office and workshop areas, control room, kitchen, bathrooms, shower, parking facilities, utility sink, and other facilities typical of this type of facility. Water for the bathrooms and kitchen will be acquired from an onsite well constructed and permitted by a licensed contractor according to local and state requirements. Water use will not exceed 5,000 gallons per day. Domestic wastewater generated at the O&M facility will drain into an onsite septic system, which will be permitted according to local and state requirements. A graveled parking area for employees, visitors, and equipment will be located in the vicinity of the building. The O&M facility area will be secured and will have outside lighting directed downward to limit night glare.

B.8.7 Laydown Areas

Six temporary laydown areas of approximately four acres will be needed for construction for the delivery and staging of wind turbine components and other equipment and materials, as well as the staging of construction trailers for the construction crews. Each temporary laydown area will be covered with gravel, which will be removed following construction when the area is restored. One of these laydown areas will be the site of the five-acre project substation and O&M facility.

B.8.8 Batch Plant

A temporary batch plant will be set up to prepare concrete for the project. It will be on a graveled 2-acre site, located within the site boundary, as shown on Figure C-2

B.9 DIMENSIONS OF MAJOR STRUCTURES AND FEATURES

OAR 345-021-0010(1)(b)(C) *The approximate dimensions of major facility structures and visible features.*

Response: The proposed turbines will have a hub height of up to 80 m and rotor diameter of 101 m. Power from the turbines will be collected by the approximately 49 mile 34.5 kV collection system.

The substation will be located on approximately five acres, and will step up the power from 34.5 kV to 230 kV. The 230 kV transmission line will be approximately eight miles, and convey the power to the Big Eddy to Maupin-Redmond transmission line.

Approximately 25 miles of access roads will be required for the Facility. Of that total, approximately 19 miles of new roads will be constructed. Approximately six miles of existing roads will require improvement to meet the construction and operational requirements of the Facility. Roads will be 20 feet wide with temporary 10-foot shoulders to accommodate construction cranes on either side.

The O&M facility will be co-located with the project substation on approximately five acres, and will include an approximately 300-foot by 300-foot fenced storage area.

B.10 CORRIDOR EVALUATION AND SELECTION

OAR 345-021-0010(1)(b)(D) *If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline, that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the Applicant selected the corridor(s) for analysis in the application. In the assessment, the Applicant shall evaluate the corridor adjustments the Department has described in the Project order, if any. The Applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the Applicant selects a new corridor, then the Applicant must explain why the Applicant did not present the new corridor for comment at an informational meeting under OAR 345-015-0130. In the assessment, the Applicant shall discuss the reasons for selecting the corridor(s), based upon evaluation of the following factors:*

- (i) *Least disturbance to streams, rivers and wetlands during construction;*

- (ii) *Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife;*
- (iii) *Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads, as defined in ORS 368.001, and existing pipeline or transmission line rights-of-way;*
- (iv) *Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions;*
- (v) *Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040;*
- (vi) *Least disturbance to areas where historical, cultural or archaeological resources are likely to exist;*
- (vii) *Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards; and*
- (viii) *Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use;*

Response: The proposed Facility is not, and does not include, a transmission line or pipeline that falls within the definition of ORS 469.300.

B.11 PIPELINE AND TRANSMISSION LINE

OAR 345-021-0010(1)(b)(E) *For any pipeline or transmission line, regardless of size:*

- (i) *The length of the pipeline or transmission line.*

Response: The proposed feeder transmission line will be approximately eight miles long. There will be no pipeline associated with the Facility.

- (ii) *The proposed right-of-way width of the pipeline or transmission line, including to what extent new right-of-way will be required or existing right-of-way will be widened.*

Response: The proposed transmission line right-of-way is 150 feet wide. The transmission line will occupy new right-of-way obtained by Applicant from private property owners, because no parallel or existing right-of-way exists that could accommodate this use.

- (iii) *If the proposed corridor follows or includes public right-of-way, a description of where the facility would be located within the public right-of-way, to the extent known. If the Applicant proposes to locate all or part of a pipeline or transmission line adjacent to but not within the public right-of-way, describe the reasons for locating the facility outside the public right-of-way. The application must include a set of clear and objective criteria and a description of the type of evidence that would support locating the facility outside the public right-of-way, based on those criteria.*

Response: The proposed transmission line will be constructed on private property, and will not be on or adjacent to existing public right-of-way: The disadvantages of locating the transmission line adjacent to existing roads include:

- The winding nature of the local roads, which is dictated by topography, increases the length of the transmission line, increases the number of angles that would be required and increases power losses along the line.
- In order to keep the transmission line’s corridor as narrow as possible to fit inside an existing road right-of-way, the conductors would have to be placed in a vertical configuration and spans would have to be kept to a minimum to minimize blow-out. This increases the height and number of the structures, which increases the cost and visual impact of the transmission line.
- The vertical conductor configuration described above increases the peak ground-level EMF levels, which would be located where the public is concentrated.

The proposed easement for the transmission line is five miles shorter than the closest route available along public right-of-way. This alignment minimizes visual impacts and power losses.

(iv) *For pipelines, the operating pressure and delivery capacity in thousand cubic feet per day and the diameter and location, above or below ground, of each pipeline.*

Response: Not applicable.

(v) *For transmission lines, the rated voltage, load carrying capacity, and type of current and a description of the transmission line structures and their dimensions.*

Response: The 230 kV transmission line will have a load carrying capacity of at least 200.1 MW, but a final determination will be made during final design of the Facility. The type of current will be alternating current (AC).

The proposed overhead feeder transmission line to the BPA Big Eddy to Maupin-Redmond transmission line will be approximately eight miles long. Transmission line towers are proposed to be wood H-frame supports 70 feet high spaced approximately 800 feet apart.

B.12 CONSTRUCTION SCHEDULE

OAR 345-021-0010(1)(b)(F) *A construction schedule including the date by which the Applicant proposes to begin construction and the date by which the Applicant proposes to complete construction. Construction is identified in OAR 345-001-0010. The Applicant shall describe in this exhibit all work on the site that the Applicant intends to begin before the Council issues a site certificate. The Applicant shall include an estimate of the cost of that work. For the purposes of this exhibit, “work on the site” means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor that the Applicant anticipates or has performed as of the time of submitting the application.*

Response: The Applicant proposes to begin construction of the Summit Ridge Wind Farm no later than three years after the effective date of the site certificate and to complete construction no later than six years after the effective date of the site certificate. The only

work the Applicant intends to complete prior to construction is the surveys and explorations needed to characterize the site sufficiently to obtain the site certificate and design the facility.

EXHIBIT C

PROPOSED LOCATION AND MAPS

OAR 345-021-0010(1)(c)

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C.3 LOCATION OF FACILITY COMPONENTS	1

FIGURES (*located after text*)

C.1 INTRODUCTION

OAR 345-021-0010(1)(c) *Information about the location of the proposed facility, including:*

C.2 MAPS

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

Response: Figure C-1 shows the Facility site boundary relative to major roads, towns and water bodies. Figure C-2 (sheets 1-6) shows, at a scale of one inch equals 2000 feet, the location of all related and supporting facilities, and all areas that might be temporarily disturbed during construction of the Facility.

C.3 LOCATION OF FACILITY COMPONENTS

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

Response:

As shown in Figures C-1 and C-2, the Facility is located in rural Wasco County 17 miles southeast of The Dalles and approximately 8 miles east of Dufur, Oregon, and encompasses all or portions of:

Township 1 South, Range 14 East, Sections 14, 15, 20, 21, 22, 23, 24

Township 1 South, Range 15 East, Sections 11, 12, 13, 14, 15, 19, 20, 22, 23, 24, 26, 27, 28, 29, 32, 33, 34, and 35

Township 2 South, Range 14 East, Sections 12 and 13

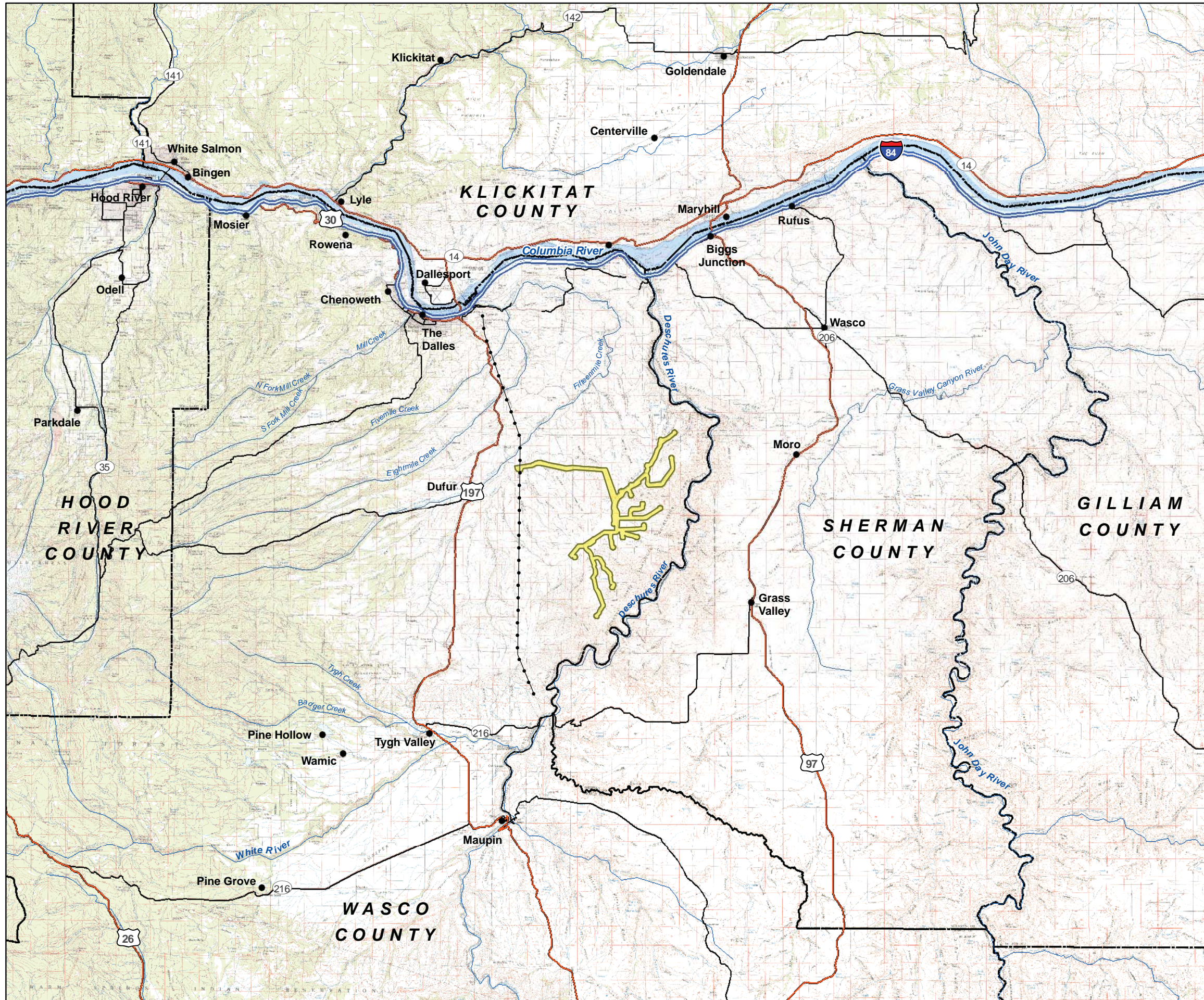
Township 2 South, Range 15 East, Sections 2, 3, 4, 5, 7, 8, 9, 10, 17, 18, 19, 20, 29, 30, 31, and 32

Township 3 South, Range 15 East, Sections 5 and 6

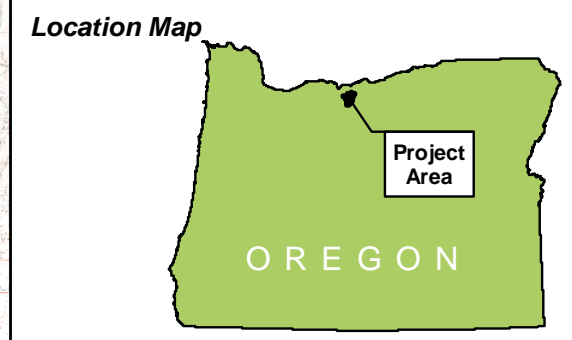
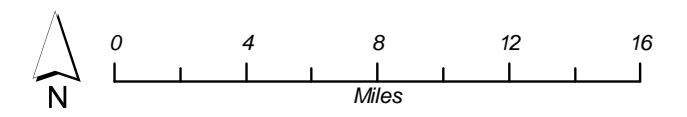
Almost the entire project site is in agricultural production, primarily dryland winter wheat production. Other areas serve as pasture for cattle. Temporary construction impacts would occur on approximately 100 acres and long-term impacts would occur on approximately 82 acres.

FIGURES

Figure C-1
Project Location



- Legend**
- Site Boundary
 - County Line
 - Interstate Highway
 - Other Highway
 - Major Road
 - Bonneville 230 KV Line






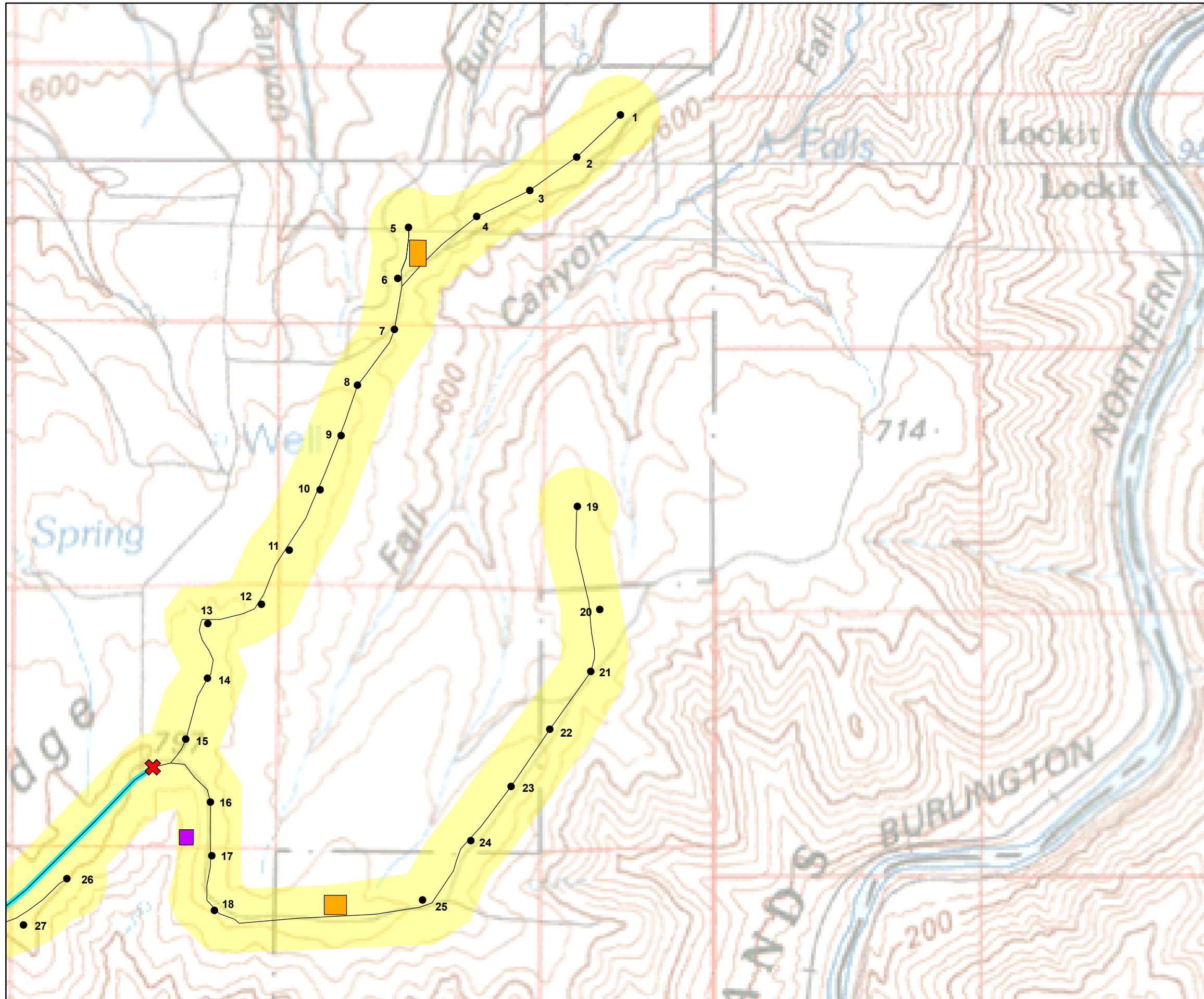
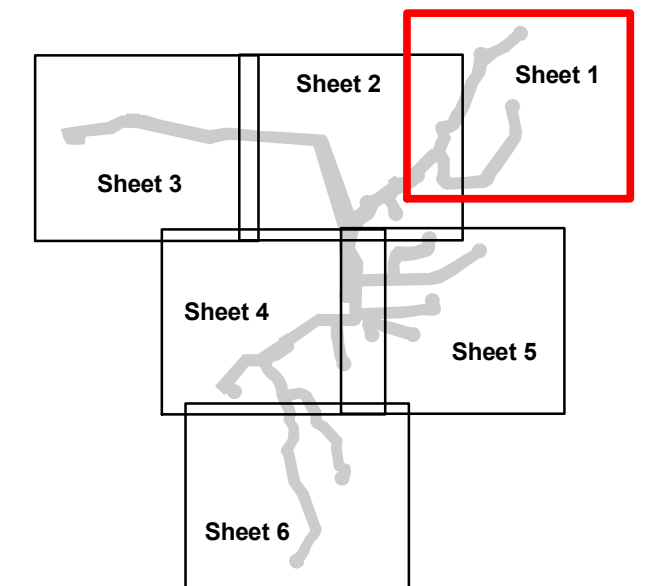
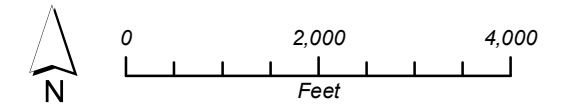
Data Sources:
LotusWorks, 2009
USGS 30x60 Ortho Quadrangles: (Oregon) Condon, Goldendale, Hood River, and Mt. Hood



Figure C-2 Project Layout Sheet 1

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations







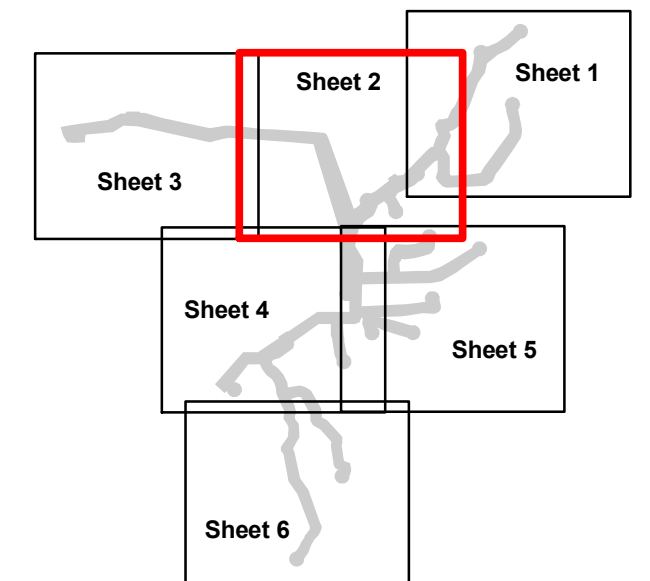
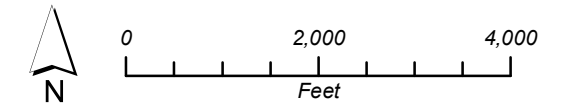
Data Sources:
LotusWorks, 2009
Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood



Figure C-2
Project Layout
Sheet 2

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations



Proposed Substation,
Laydown Area, and O&M Building



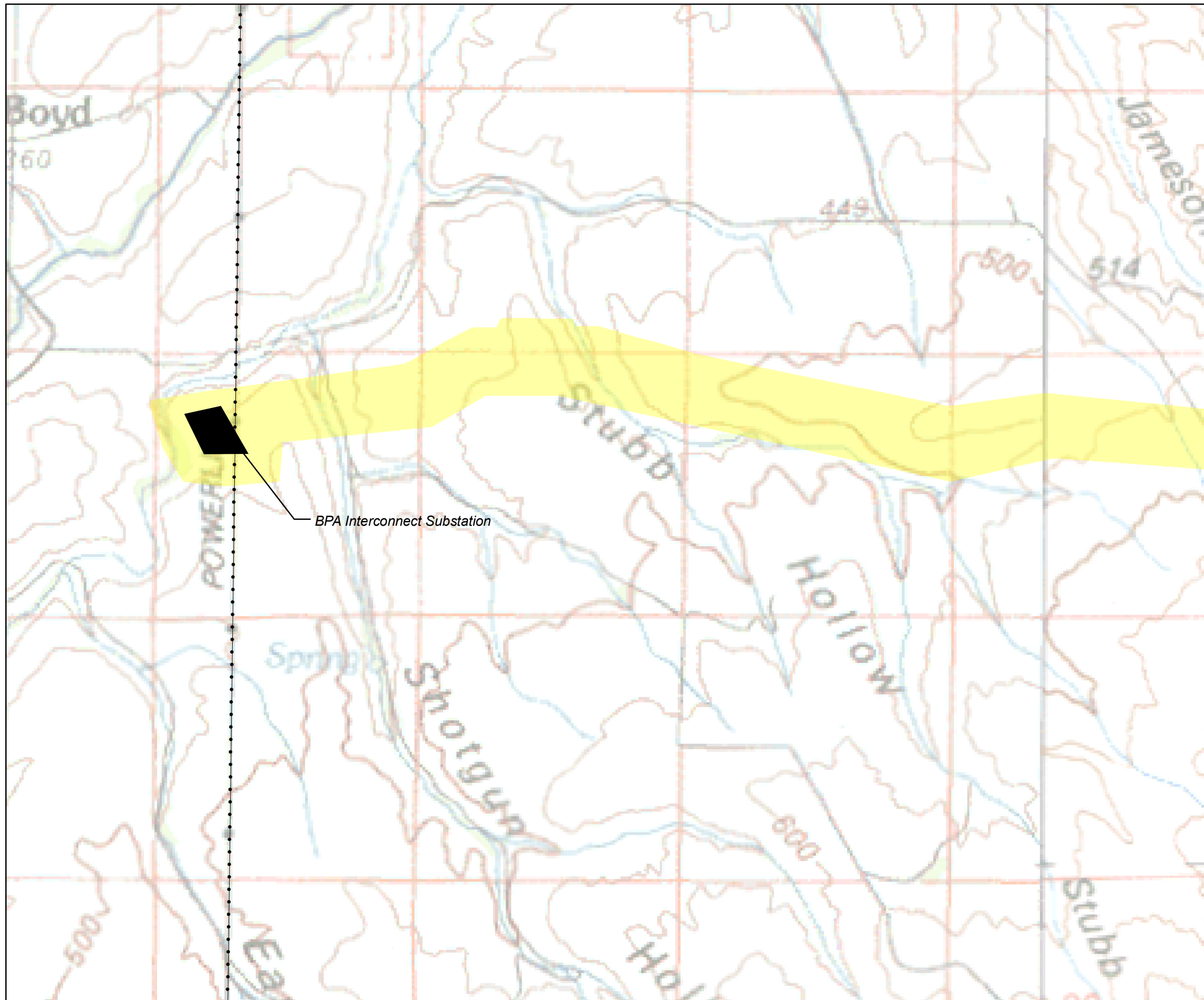
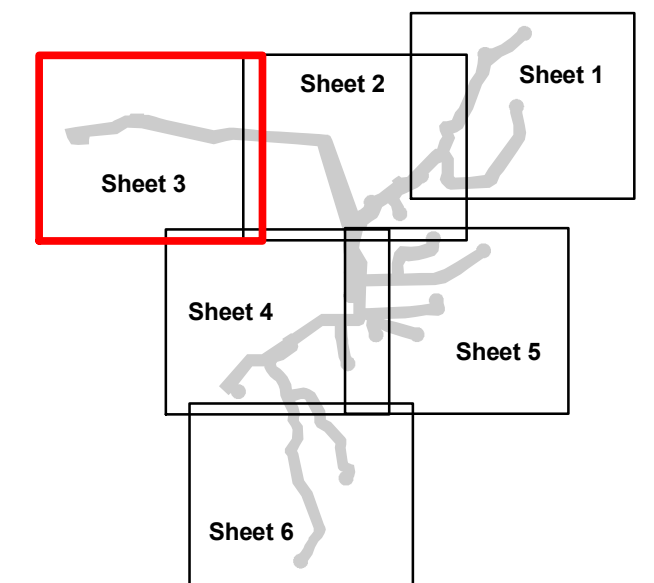
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Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood



Figure C-2
Project Layout
Sheet 3

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations



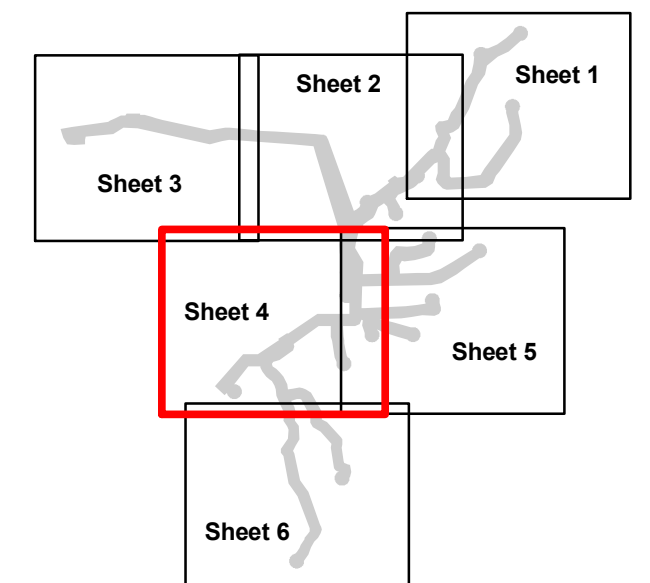
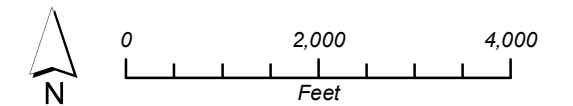
Data Sources:
LotusWorks, 2009
Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood



Figure C-2 Project Layout Sheet 4

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations



Data Sources:
LotusWorks, 2009
Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood

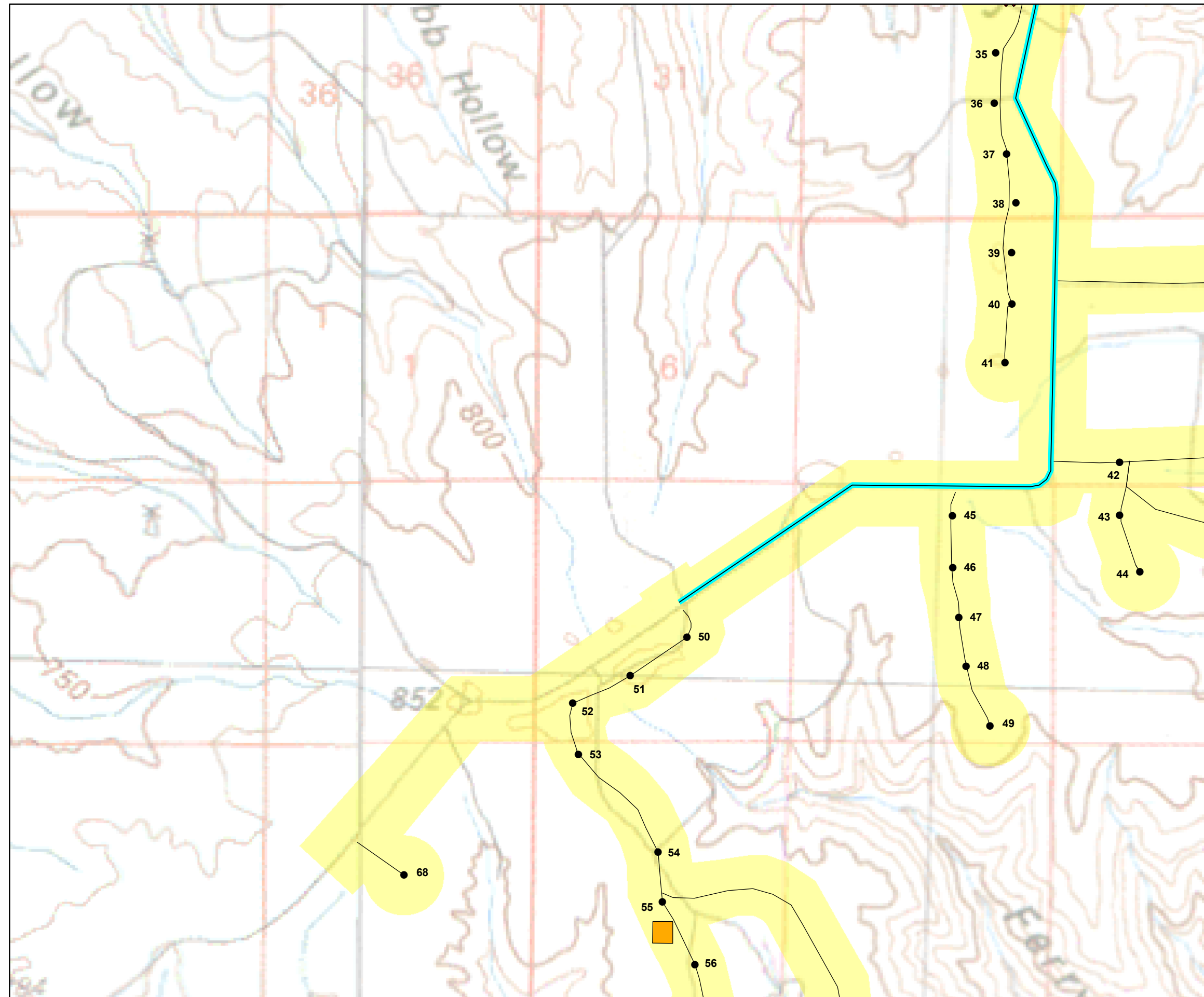





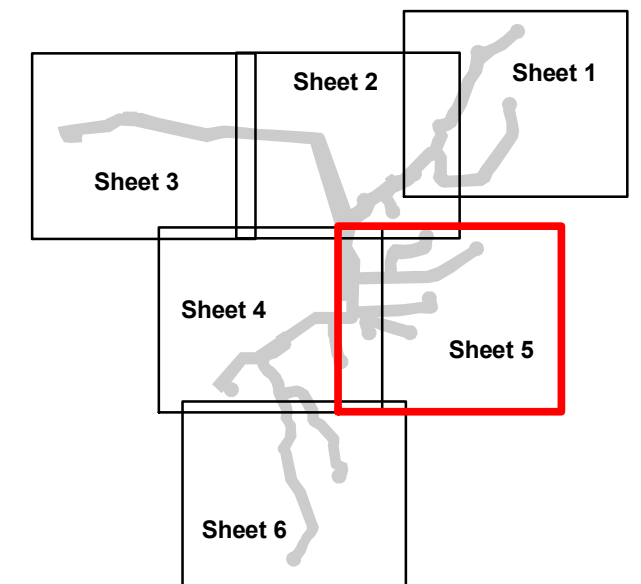
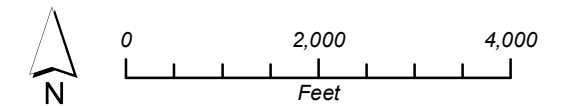


Figure C-2 Project Layout Sheet 5

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations



Data Sources:
LotusWorks, 2009
Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood

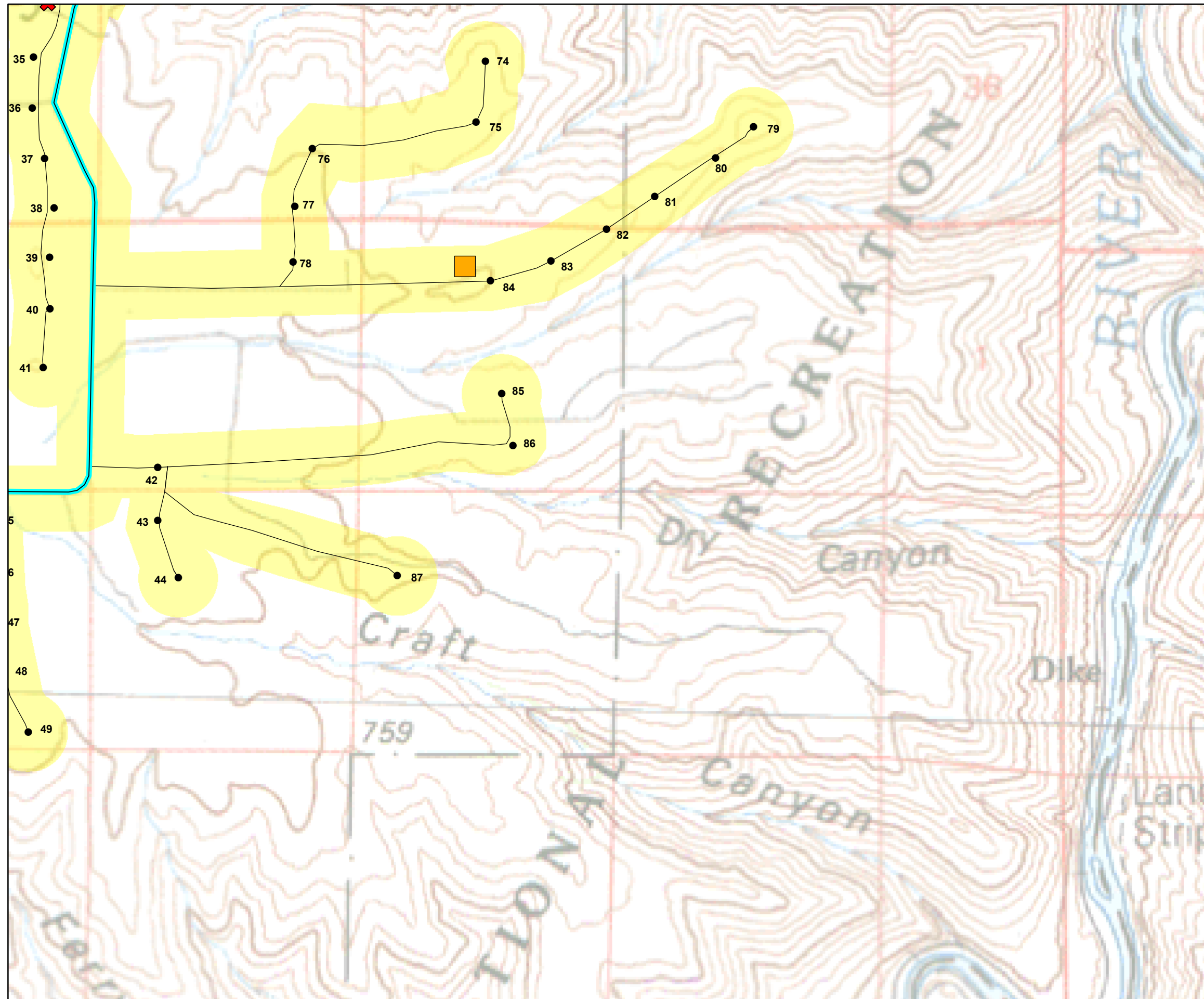
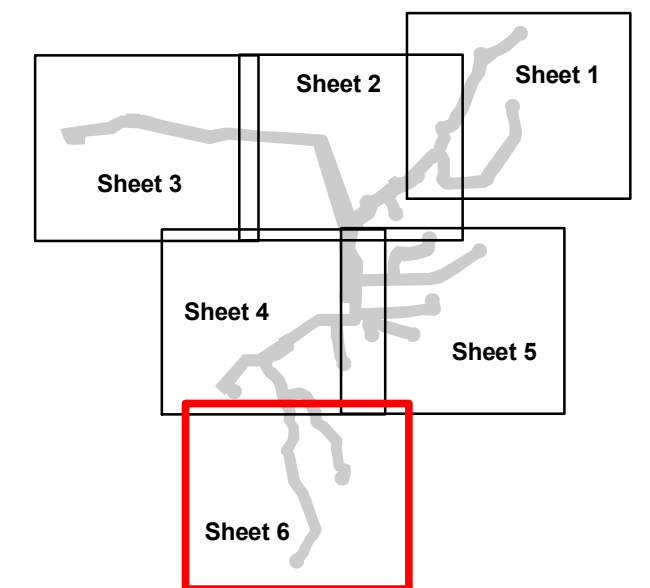
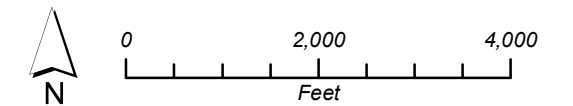


Figure C-2
Project Layout
Sheet 6

Legend

-  Site Boundary
-  Existing Roads to be Improved
-  Proposed Access Roads
-  Bonneville 230 KV Line
-  Proposed Substation
-  Proposed Batch Plant Location
-  Proposed Laydown Areas
-  Proposed Met Tower Locations
-  Proposed Turbine Locations



Data Sources:
LotusWorks, 2009
Pioneer Surveying and Engineering, Inc., 2009
USGS 30x60 Quadrangles: (Oregon) Condon,
Goldendale, Hood River, and Mt. Hood

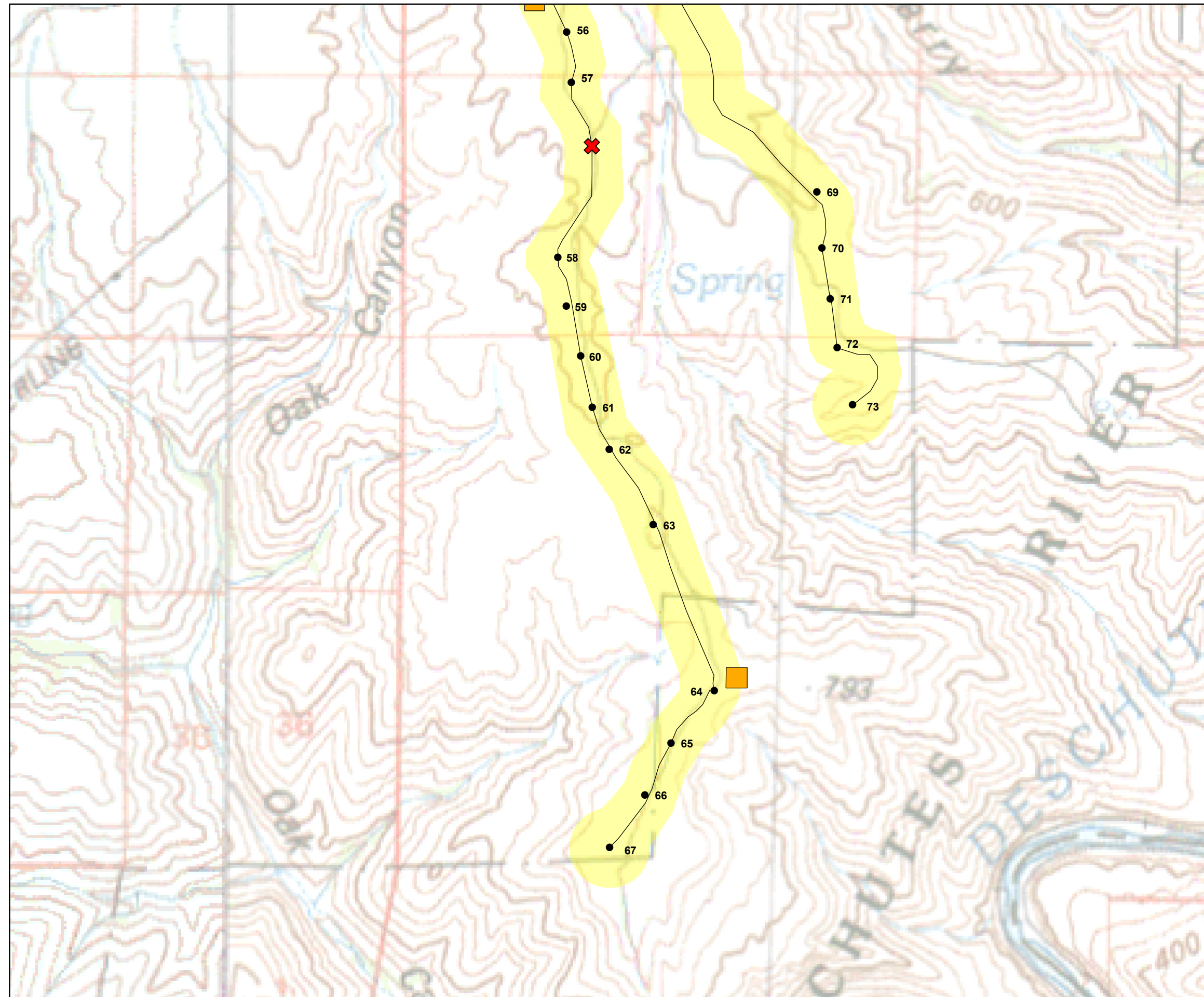
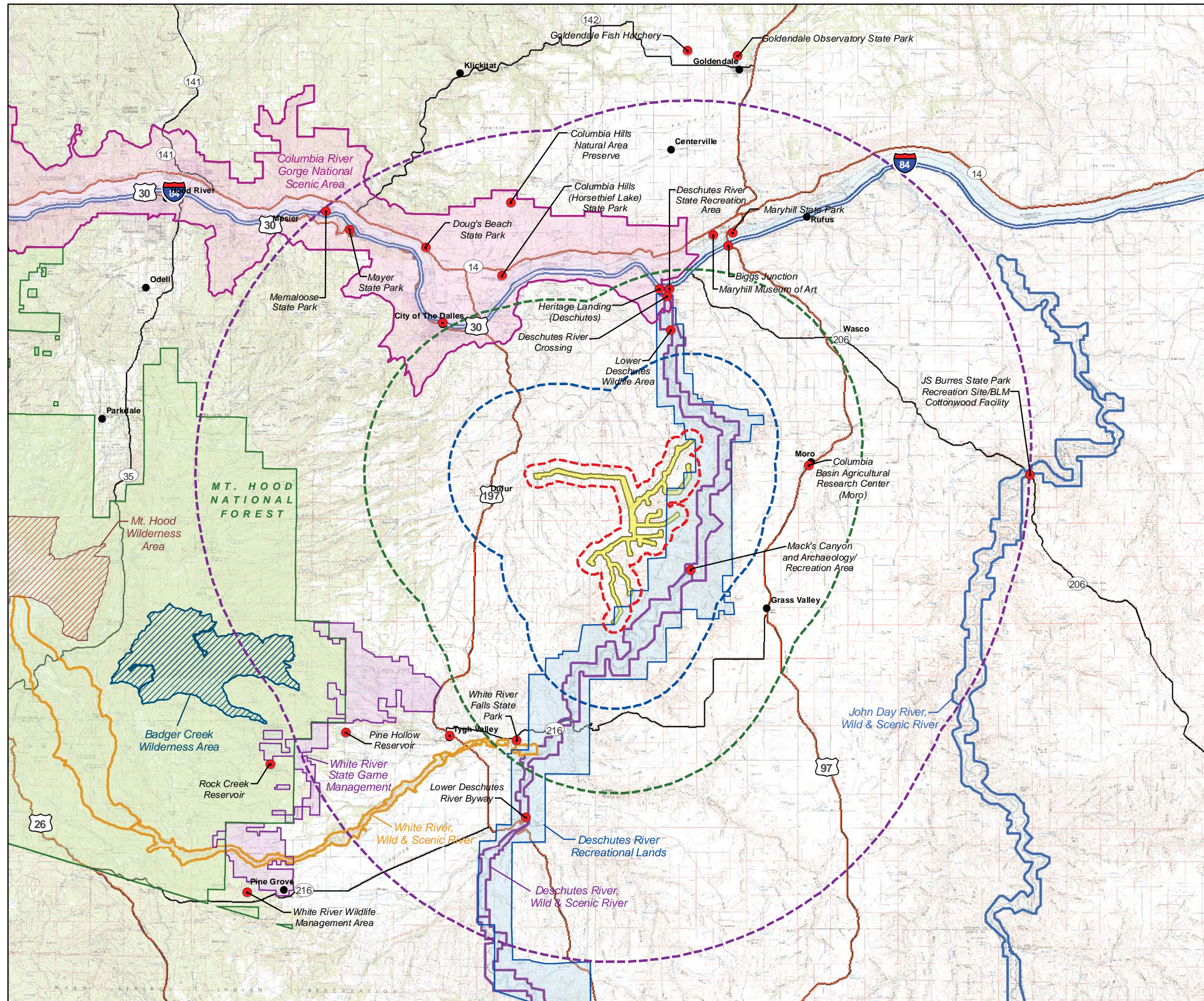


Figure C-3
Study Areas



Legend

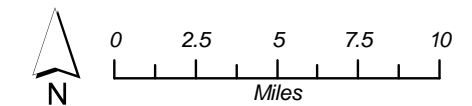
- Site Boundary
- Interstate Highway
- Other Highway
- Major Road

Study Areas

- Wildlife Habitat (0.5 Mi)
- Recreation/Threatened & Endangered Species (5 Mi)
- Scenic Resources and Public Services (10 Mi)
- Protected Areas (20 Mi)

Protected Areas

- John Day River, Wild & Scenic River
- Deschutes River, Wild & Scenic River
- White River, Wild & Scenic River
- Badger Creek Wilderness
- Mt. Hood Wilderness
- Columbia River Gorge National Scenic Area
- Mt. Hood National Forest
- Deschutes River Recreational Lands
- White River State Game Management



Data Sources:

LotusWorks, 2009
USGS 30x60 Ortho Quadrangles: (Oregon) Condon, Goldendale, Hood River, and Mt. Hood



EXHIBIT D**ORGANIZATIONAL, MANAGERIAL, AND TECHNICAL EXPERTISE**

OAR 345-021-0010(1)(d)

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D.1 INTRODUCTION

OAR 345-021-0010(1)(d) *Information about the organizational expertise of the applicant to construct and operate the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0010, including:*

D.2 APPLICANT'S PREVIOUS EXPERIENCE

OAR 345-021-0010(1)(d)(A) *The applicant's previous experience, if any, in constructing and operating similar facilities;*

Response: LotusWorks has in the last two and a half years provided project support to several wind projects in this region:

White Creek Wind I Project – Roosevelt Washington

LotusWorks was project manager and provided staff for a 205 MW wind project in Roosevelt, Washington. Their responsibilities included pre-construction management, construction management, budgets, cash flow, bookkeeping, training, and closeout. The LotusWorks project manager had full scope, cost and schedule responsibilities for this project. LotusWorks also provided site inspectors and support staff to this project.

Wild Horse Wind Project – Ellensburg Washington

LotusWorks was project manager and provided staff for a 250 MW wind project. Construction Management, closeout and owner interface were provided. The site team was successful and was asked by the customer to provide the same services for their next project in the region. LotusWorks also provided site inspectors and support staff to this project.

Elkhorn Wind Project – La Grande Oregon

Project and Site Management for a 100 MW wind project. This group provided by LotusWorks directly managed all contractors and were responsible for construction of the BOP, including electrical, roads, foundations, etc. They were also responsible for erection of the wind turbines, and all other contractors associated with the wind turbine installation. The site group was responsible for scope, costs and schedule for this project. LotusWorks also provided site inspectors and support staff to this project.

Summit Power Group Inc. at the White Creek Wind I Project

Wind Farm O&M – LotusWorks is providing local asset management services to oversee an 89-unit wind project. This includes many duties that support the ownership group in the operation and maintenance of this project.

Project manager and staff for the 205 MW Harvest Wind Project, included pre-construction management, construction management, budgets, cash flow, bookkeeping, training, and closeout. The LotusWorks project manager had full scope, cost and schedule responsibilities for this project. LotusWorks also provided site inspectors and support staff to this project.

D.3 QUALIFICATIONS OF APPLICANT'S PERSONNEL

OAR 345-021-0010(1)(d)(B) *The qualifications of the applicant's personnel who will be responsible for constructing and operating the facility, to the extent that the identities of such personnel are known when the application is submitted;*

Response: **Steven Ostrowski** is President of LotusCM, the construction management division of LotusWorks. Mr. Ostrowski has spent has 35 plus years in the construction and engineering business with a significant majority of those years spent in the construction of energy and power producing facilities. Included in Mr. Ostrowski's experience as responsible manager are contracts for the construction of gas, oil and renewable projects worth more than \$3 billion.

Mr. Ostrowski's renewable energy experience includes both wind and geo-thermal applications and he is currently directly involved in the development of more than 400 MW of renewable power. Mr. Ostrowski's previous experience also includes service as vice president of JH Kelly, President of Kelly Electric and as Western and Mid-Western Regional General Manager of Johnson Yokogawa, a joint venture between Johnson Controls and Yokogawa of America. Mr. Ostrowski holds a BS degree in Business Management and is a licensed Electrical General Administrator in the State of Washington.

Bob Young is an experienced power engineer. He is the VP of Operations for LotusCM, and has completed construction management for projects up to \$360 million dollars. He has been plant manager and general manager of power plants in the US and has completed power plant start-up activities for several plants.

Mr. Young has been responsible for leading and directing the Construction Management and Performance Improvement Services division within LotusCM and has established internal controls and project controls, enhancing divisional and project specific financial and reporting structures for the organization. He has also completed a four-unit gas turbine construction project as site manager and owners' representative. He is currently construction manager/director for a \$260 million coal-fired project. He is also providing the asset management oversight to a 205 MW wind farm. He is responsible to the owner for the operation and maintenance success of this wind farm.

Over the last four years, Mr. Young has provided construction management expertise for over 600 MW of new wind power construction in the Pacific Northwest. Included in this experience is his role as the overall project manager for White Creek 1, a 205 MW wind farm near Roosevelt, Washington.

D.4 QUALIFICATIONS OF KNOWN CONTRACTORS

OAR 345-021-0010(1)(d)(C) *The qualifications of any architect, engineer, major component vendor, or prime contractor upon whom the applicant will rely in constructing and operating the facility, to the extent that the identities of such persons are known when the application is submitted;*

Response: LotusWorks has not yet selected its prime contractors or turbine suppliers for the Facility, but will work with experienced professionals in the engineering, construction, and wind turbine manufacturing industries to complete the Facility.

LotusWorks intends to conduct a competitive bid to award the contract for engineering services and Facility construction. The Request for Proposal (RFP) would be released following the granting of the site certificate. Likewise, LotusWorks will consider competitive offers for the supply of the Facility's wind turbine generators (WTGs). Final decisions on both engineering procurement contractors and the sourcing of WTGs will be made based on competitive criteria such as the price, proven experience in constructing wind energy projects, financial capability, managerial resources, and environmental track record.

The Applicant has used Siemens, a qualified engineering and turbine manufacturing firm in the past and will use similarly experienced and qualified firms for this Facility:

The Siemens Energy Sector is the world's leading supplier of a complete spectrum of products, services and solutions for the generation, transmission and distribution of power and for the extraction, conversion and transport of oil and gas.

Wind turbines are an important component of the Siemens environmental portfolio, which earned the company revenues of nearly EUR19 billion in fiscal 2008, roughly a quarter of the company's total revenues. Today, Siemens is the world's leading supplier of environmentally friendly technology.

The large-scale wind farms developed in recent years require significant project management know-how in order to be completed successfully. Siemens has extensive experience in this field and has, by the timely completion of hundreds of wind farms, including the challenging offshore wind farms, proven itself as a competent supplier of large, complicated projects. The most important resource of Siemens Wind Power is undoubtedly the more than 5,000 employees - their experience, technical know-how and enthusiasm. An experienced management team vouches for continuity and confidence. Siemens offer a unique mix of experience and innovation, wisdom and vision.

Table D-1. Wind turbines in Siemens Portfolio

SWT-3.6-107:	98 turbines
SWT-2.3-101:	1 turbine
SWT-2.3-93:	1,374 turbines
SWT-2.3-82:	633 turbines
SWT-1.3-62:	1,520 turbines
Total power:	8,813 MW*
Total # of turbines:	7,793 turbines*

*Including SWT-2.0-76 turbines and turbines of 1 MW or smaller.

D.5 APPLICANT’S PAST PERFORMANCE

OAR 345-021-0010(1)(d)(D) *The past performance of the applicant, including but not limited to the number and severity of any regulatory citations in constructing or operating a facility, type of equipment, or process similar to the proposed facility;*

Response: The applicant has received no regulatory citations in constructing or operating any similar facility.

D.6 APPLICANT WITH NO PREVIOUS EXPERIENCE

OAR 345-021-0010(1)(d)(E) *If the applicant has no previous experience in constructing or operating similar facilities and has not identified a prime contractor for construction or operation of the proposed facility, other evidence that the applicant can successfully construct and operate the proposed facility. The applicant may include, as evidence, a warranty that it will, through contracts, secure the necessary expertise; and*

Response: Not applicable.

D.7 ISO CERTIFIED PROGRAM

OAR 345-021-0010(1)(d)(F) *If the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program, a description of the program;*

Response: Not applicable.

D.8 MITIGATION

OAR 345-021-0010(1)(d)(G) *If the applicant relies on mitigation to demonstrate compliance with any standards of Division 22 or 24 of this chapter, evidence that the applicant can successfully complete such proposed mitigation, including past experience with other projects and the qualifications and experience of personnel upon whom the applicant will rely, to the extent that the identities of such persons are known at the date of submittal.*

Response: LotusWorks’ past experience demonstrates their ability to successfully meet mitigation compliance requirements. Previous experience includes mitigation measures implemented for the Harvest Wind Project in Washington State, in which they provided the following mitigation measures: native plant revegetation and reseeded of riparian and upland habitats; and installation of protective fencing in revegetation areas to minimize cattle intrusion, decrease vehicle traffic, and increase plant survival. Furthermore, throughout the various projects that LotusWorks has developed both domestically and internationally, LotusWorks has not encountered any issues complying with mitigation standards and requirements.

EXHIBIT E

PERMITS NEEDED FOR CONSTRUCTION AND OPERATION

OAR 345-021-0010(1)(e)

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E.1 INTRODUCTION

OAR 345-021-0010(1)(e) *Information about permits needed for construction and operation of the facility, including:*

E.2 IDENTIFICATION OF NECESSARY PERMITS

OAR 345-021-0010(1)(e)(A) *Identification of all federal, state and local government permits needed before construction and operation of the proposed facility, legal citation of the statute, rule or ordinance governing each permit, and the name, address and telephone number of the agency or office responsible for each permit.*

Response:

E.2.1 Federal Permits

E.2.1.1 Bonneville Power Administration

42 USC 4332; 40 CFR pt 1500

Permit: Record of Decision (ROD)/NEPA Compliance for connecting to BPA transmission line.

Agency: Gene Lynard
Bonneville Power Administration
905 NE 11th Avenue
Portland, OR 97208
(503) 230-5361

E.2.1.2 U.S. Army Corps of Engineers

33 USC 1344; 33 CFR parts 320, 323, 325-28, and 330.

Permit: Clean Water Act, Section 404, if fill occurs in waters of the U.S.

Agency: Debra Henry, Permit Evaluator
U.S. Army Corps of Engineers, Portland District
333 SW First Avenue
Portland, OR 97204
(503) 808-4391

E.2.1.3 U.S. Fish and Wildlife Service

16 USC 1536; 50 CFR part 402

Permit: Potential Endangered Species Act incidental take statement if the Facility impacts fish and wildlife species listed as threatened or endangered under the federal Endangered Species Act.

Agency: Nancy Gilbert, Field Supervisor
U.S. Fish and Wildlife Service
Pacific Region Bend Field Office
20310 Empire Avenue, Suite A-100
Bend, OR 97701
(541) 383-7146

E.2.1.4 Federal Aviation Administration

49 USC 44718; 14 CFR 77.13, 77.15, 77.17

Permit: Notice of Proposed Construction (Form 7460.1).

Agency: Don Larsen
Northwest Mountain Regional Office
Air Traffic Division, ANM-520
1601 Lind Avenue, SW
Renton, WA 98055-4056
(425) 227-2520

E.2.2 State Permits: Not Federally Delegated

E.2.2.1 Energy Facility Siting Council

ORS 469.300 *et seq.*; OAR Chapter 345, Divisions 1, 21-24.

Permit: Energy Facility Site Certificate.

Agency: Tom Stoops
Oregon Department of Energy
625 Marion St., NE
Salem, OR 97301
(503) 378-3194

E.2.2.2 Oregon Plant Conservation Biology Program

ORS 564; OAR Chapter 603, Division 73

Permit: None required.

Agency: Bob Meinke, Program Leader
Oregon Department of Agriculture – Plant Division
635 Capitol St., NE
Salem, OR 97301
(541) 737-2317

E.2.2.3 Oregon Department of State Lands

ORS 196; OAR Chapter 141, Division 85

Permit: Removal-Fill, if removal or filling occurs in waters of the state.

Agency: Jess Jordan, Permit Coordinator
Oregon Department of State Lands
1645 NE Forbes Rd., Suite 112
Bend, OR 97701
(541) 388-6060

E.2.2.4 Oregon Water Resources Department

ORS 537 and 540; OAR Chapter 690

Permit: None required. Water for the Facility will be supplied by an onsite well that pumps <5,000 gallons per day.

Agency: Oregon Water Resources Department – Water Rights Division
725 Summer St., NE, Suite A
Salem, OR 97301-1271
(503) 986-0900

E.2.2.5 Oregon State Historic Preservation Office

ORS 97, 358, and 390; OAR Chapter 736, Division 51

Permit: Archaeological permit.

Agency: Dr. Dennis Griffin, Lead Archaeologist
Oregon Department of Parks and Recreation, SHPO
725 Summer St., NE, Suite C
Salem, OR 97301
(503) 986-0674

E.2.2.6 Oregon Department of Fish and Wildlife

ORS 496, 506, and 509; OAR Chapter 635, Divisions 100, 415, and 425

Permit: None required, but state habitat mitigation guidelines must be met.

Agency: Rose Owens, Habitat Special Projects Coordinator
Oregon Department of Fish and Wildlife – Wildlife Division
3406 Cherry Avenue, NE
Salem, OR 97303
(503) 947-6085

E.2.2.7 Oregon Department of Geology and Mineral Industries

ORAR 345-021-0010(1)(h).

Permit: None required. The Applicant will consult with DOGAMI to ensure compliance with applicable Council standards.

Agency: Yumei Wang, Geotechnical Engineer, Geohazards Team Leader
Oregon Department of Geology and Mineral Industries
800 NE Oregon St., Suite 965
Portland, OR 97232
(503) 731-4100

E.2.2.8 Oregon Department of Environmental Quality

ORS 468B.050; OAR 340-45-0005-0075

Permit: Water Pollution Control Facility

Agency: Jayne West
Oregon Department of Environmental Quality
475 NE Bellevue, Suite 110
Bend, OR 97701
(541) 633-2028

E.2.2.9 Oregon Department of Environmental Quality

ORS 467; OAR Chapter 340, Division 35

Permit: None required, but the Facility must meet state noise standards.

Agency: Tom Stoops
Oregon Office of Energy
625 Marion St., NE
Salem, OR 97301
(503) 378-3194

E.2.3 State Permits: Federally Delegated

E.2.3.1 Oregon Department of Environmental Quality

Water Quality

ORS 468 and 468B; OAR Chapter 340, Divisions 14, 41, 45, 52, and 55

Permit: NPDES Construction Storm Water Permit 1200-C.

Agency: Oregon Department of Environmental Quality, Eastern Region
475 NE Bellevue, Suite 110
Bend, OR 97701
(541) 388-6146

Water Quality

Permit: NPDES wastewater permit not required. No discharge to surface waters is proposed.

Water Quality

ORS 468 and 468B; OAR Chapter 340, Division 48

Permit: Water Quality Certification. Required if permit is required under Clean Water Act, Section 404.

Agency: Alex Cyril
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
(503) 229-5046

Air Quality

ORS 468A.040 through 468A.060; OAR 340-216-0010 through 0094

Permit: Air Contaminant Discharge Permit

Agency: Oregon Department of Environmental Quality
475 NE Bellevue, Suite 110
Bend, OR 97701

E.2.4 Local Permits

E.2.4.1 Wasco County Zoning Code

Chapter 19: Standards for Energy Facilities and Commercial Energy Facilities

Permit: Conditional Use Permit. The Applicant is seeking all land use approvals through EFSC.

Agency: Todd Cornett, Planning Director
Wasco County Planning Department
2705 East 2nd Street
The Dalles, Oregon 97058
Phone: 541-506-2560

E.2.4.2 Wasco Sherman Public Health Department

OAR 340-071-0100 regarding requirements for the construction, alteration, repair, operation, and maintenance of onsite wastewater treatment systems for disposal of domestic waste.

Permit: Onsite wastewater disposal permit.

Agency: Wasco-Sherman Public Health Dept
419 East 7th Street
The Dalles, OR 97058-2607
Phone: (541) 506-2600

E.3 DESCRIPTION OF NECESSARY PERMITS

OAR 345-021-0010(1)(e)(B) *A description of each permit and the reasons the permit is needed for construction or operation of the facility.*

E.3.1 Federal Permits

E.3.1.1 Record of Decision (ROD)/NEPA Compliance

42 USCA 4332; 40 CFR pt 1500.

Permit: None required. BPA's actions with respect to the Facility (i.e., BPA's decision to interconnect Facility), will be subject to review under the National Environmental Policy Act (NEPA) as part of BPA's decision-making process – in this case a tiered Record of Decision (ROD). The NEPA review will include review under the Endangered Species Act, the National Historic Preservation Act, and related cultural resources protection statutes. Any other federal permitting actions referenced below also would be subject to NEPA review.

E.3.1.2 Clean Water Act, Section 404

33 USCA 1344; 33 CFR parts 320, 323, 325-28, and 330

Permit: A Clean Water Act Section 404 permit will not be required, because no fill will be placed in the waters of the US including wetlands.

E.3.1.3 Notice of Proposed Construction or Alteration; Actual Construction

14 CFR 77.13, 77.15, 77.17

Permit: None required; however, the FAA requires notice of any and all proposed construction of more than 200 feet in height above the ground level (FAA Form 7460-1 and 2).

E.3.2 State Permits: Not Federally Delegated

E.3.2.1 Energy Facility Site Certificate

ORS 469.300 et seq.; OAR Chapter 345, Divisions 1, 21-24.

Permit: Energy Facility Site Certificate required for construction and operation of the Facility.

E.3.2.2 Removal/Fill Permit

ORS 196; OAR Chapter 141, Division 85.

Permit: A removal-fill permit will not be required because no removal or fill will occur within jurisdictional wetlands or other waterways, which are regulated waters of the state.

E.3.2.3 Water Right Permit or Water Use Authorization

ORS 537 and 540; OAR Chapter 690.

Permit: The new O&M facility will be served by a new well. No permit is required. Commercial uses of up to 5,000 gallons per day from groundwater wells are exempt from permitting requirements. During construction, water will be obtained from a municipality such as The Dalles.

E.3.2.4 Archaeological Permit

ORS 97, 358, and 390; OAR Chapter 736, Division 51.

Permit: Archaeological permit. An Archaeological permit is required for ground disturbing archaeological surveys on private lands.

E.3.2.5 Water Pollution Control Facility

ORS 454; OAR Chapter 340, Division 071-073

Permit: Water Pollution Control Facility Onsite Sewage Treatment System Permit: Required for the construction, alteration, repair, operation, and maintenance of onsite wastewater treatment systems.

E.3.3 State Permits: Federally Delegated

E.3.3.1 Construction Stormwater Permit 1200-C

ORS 468 and 468B; OAR Chapter 340, Divisions 14, 41, 45, 52, and 55.

Permit: Construction storm water permit 1200-C is required for ground disturbing activities of more than one acre. The Applicant is required to prepare and implement an Erosion and Sediment Control Plan (ESCP) and incorporate Best Management Practices (BMPs) into construction activities.

E.3.3.2 Water Quality Certification

33 USC 1341, Section 401; OAR Chapter 340, Division 48.

Permit: Water Quality Certification will not be required, because no federal license or permit, including Clean Water Act Section 404 permit will be required to build the facility.

E.3.3.3 Air Contaminant Discharge Permit

ORS 468A.040 through 468A.060; OAR 340-216-0010 through 0094

Permit: Air Contaminant Discharge Permit will be required to authorize operation of sources of air contaminants, such as those from the proposed batch plant.

E.3.4 Local Permits

E.3.4.1 Land Use Approval

Wasco County Zoning Code Chapter 19

Permit: All land use approvals are being pursued through the EFSC process.

E.3.4.2 Wasco Sherman Public Health Department

OAR 340-071-0100 regarding requirements for the construction, alteration, repair, operation, and maintenance of onsite wastewater treatment systems for disposal of domestic waste.

Permit: Onsite wastewater disposal permit

E.4 NON-FEDERALLY DELEGATED PERMIT APPLICATION

OAR 345-021-0010(1)(e)(C) *For any state or local government agency permits, licenses or certificates that are subject to the Council's siting decision, evidence to support findings by the Council that construction*

and operation of the proposed facility will comply with the statutes, rules and standards applicable to the permit. The Applicant may show this evidence:

- (i) *In Exhibit J for permits related to wetlands;*

Response: See Exhibit J. No jurisdictional wetlands or waters will be altered to construct or operate the facility.

OAR 345-021-0010(1)(e)(D) *For federally delegated permit applications, evidence that the responsible agency has received a permit application and the estimated date when the responsible agency will complete its review and issue a permit decision.*

Response: No new water rights are required for this Facility. Water for construction will be purchased from an existing private water right holder(s) using a Temporary Water Right Transfer, or obtained from a municipality such as The Dalles.

Water for operations will be supplied by an exempt well (<5,000 gallons per day).

E.5 THIRD-PARTY PERMITS

OAR 345-021-0010(1)(e)(E) *If the Applicant relies on a state or local government permit or approval issued to a third party, identification of any such third-party permit and for each:*

- (i) *Evidence that the Applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit;*
- (ii) *Evidence that the third party has, or has a reasonable likelihood of obtaining, the necessary permit; and*
- (iii) *An assessment of the impact of the proposed facility on any permits that a third party has obtained and on which the Applicant relies to comply with any applicable Council standard.*

Response: The Applicant will not rely on any third-party state or local third-party permit approval.

E.6 FEDERALLY DELEGATED PERMIT ISSUED TO A THIRD PARTY

OAR 345-021-0010(1)(e)(F) *If the Applicant relies on a federally delegated permit issued to a third party, identification of any such third-party permit for each:*

- (i) *Evidence that the Applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit;*
- (ii) *Evidence that the responsible agency has received a permit application; and*
- (iii) *The estimated date when the responsible agency will complete its review and issue a permit decision.*

Response: The Applicant will not rely on any third-party federal permit approval.

E.7 MONITORING PROGRAM

OAR 345-021-0010(1)(e)(G) *The Applicant's proposed monitoring program, if any, for compliance with permit conditions.*

Response: The applicant will conduct monitoring as required in conditions of the 1200-C permit, the Site Certificate, and any other state, local, or federal permits needed for the Facility.

EXHIBIT F

PROPERTY OWNERSHIP

OAR 345-021-0010(1)(f)

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F.1 INTRODUCTION

OAR 345-021-0010(1)(f) *A list of the names and mailing addresses of all owners of record, as shown on the most recent property tax assessment roll, of property located within or adjacent to the site boundary as defined in OAR 345-001-0010. The Applicant shall submit an updated list of property owners as requested by the Department before the Department issues notice of any public hearing on the application for a site certificate as described in OAR 345-015-0220. In addition to incorporating the list in the application for a site certificate, the Applicant shall submit the list to the Department in electronic format acceptable to the Department for the production of mailing labels. Property adjacent to the site boundary means property that is:*

OAR 345-021-0010(1)(f)(A) *Within 100 feet of the site boundary within an urban growth boundary;*

OAR 345-021-0010(1)(f)(B) *Within 250 feet of the site boundary where the site, corridor or micrositing corridor is outside an urban growth boundary and not within a farm or forest zone; and*

OAR 345-021-0010(1)(f)(C) *Within 500 feet of the site boundary where the site, corridor or micrositing corridor is within a farm or forest zone.*

Response:

The proposed Facility permit corridors are located outside of the urban growth boundary within zoned farmland. Therefore, a list of property owners within 500 feet of the Facility is included below.

PARTICIPATING LANDOWNERS	
OWNER	ADDRESS
Sharon Lee Craft, ET AL	63883 Center Ridge Road Dufur, OR 97021
Kortge Brothers LLC	5663 Mill Creek Road The Dalles, OR 97058
Iva J Kortge, ET AL	8604 Buckboard Drive Alexandria, VA 22308
William E Hammel, ET AL	7075 Fifteen Mile Road The Dalles, OR 97058
Robert K & Nancy J Hammel	62250 Tygh Ridge Road Dufur, OR 97021
Frances L Limmeroth Trust C/O Ruth Alexander, Trustee	63439 Dufur Gap Road Dufur, OR 97021-3226
R N Ranches, LLC C/O Karolyn K Christy	7517 Southeast 35th Avenue Portland, OR 97202
Carleton L & Pamela R Clausen	85681 Adkisson Road Dufur, OR 97021
John F Clausen, ET AL	83417 Dufur Valley Road Dufur, OR 97021
KC & Carolyn S Kortge	1820 Liberty Way The Dalles, OR 97058

PARTICIPATING LANDOWNERS	
OWNER	ADDRESS
Kortge Brothers LLC	5663 Mill Creek Road The Dalles, OR 97058
Merrill M & Thema J Adkisson	2221 SW 1st Avenue, No. 2224 Portland, OR 97201

ADJACENT LANDOWNERS WITHIN 500 FEET OF PROJECT (Who are NOT also Participating Landowners)	
OWNER	ADDRESS
Bureau of Land Management	3050 Northeast 3rd Street Prineville, OR 97754
Mike Kortge/Gary Van Orman	6857 Roberts Market Road The Dalles, OR 97058-9631
Kelly Kieran & Rita LLC	2857 NE Hamblet Portland, OR 97212
Martin A & Beverly L Underhill	PO Box 266 Dufur, OR 97021
John W & Marlene McManigal	63470 Center Ridge Road Dufur, OR 97021

ADJACENT LANDOWNERS WITHIN 500 FEET OF PROJECT (Who ARE also Participating Landowners)	
OWNER	ADDRESS
John & Patricia R Clausen	83417 Dufur Valley Road Dufur, OR 97021
Frances L Limmeroth Trust C/O Ruth Alexander, Trustee	63439 Dufur Gap Road Dufur, OR 97021
Paul & Velma Limmeroth	2525 Ward Road The Dalles, OR 97058

EXHIBIT G

MATERIALS ANALYSIS

OAR 345-021-0010(1)(g)

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G.1 INTRODUCTION

OAR 345-021-0010(1)(g) *A materials analysis, including:*

Exhibit G provides evidence required by OAR 345-021-0010(1)(g). The following evidence provides an inventory of industrial materials of substantial quantity flowing into and out of the proposed Summit Ridge Wind Farm and a description of how the Applicant plans to manage hazardous substances and non-hazardous waste materials during construction and operation. This exhibit is organized in accordance with the application requirements contained in OAR 345-021-0010(1)(g).

G.2 INVENTORY OF INDUSTRIAL MATERIALS

OAR 345-021-0010(1)(g)(A) *An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;*

Response: The inventory of materials expected at the Facility is shown in Table G-1, following page 2 of this document.

Construction-related Materials

The two major categories of materials required for the construction of this Facility are road construction materials and turbine and nacelle materials. Road construction materials primarily consist of gravel, concrete and water. The primary material required for turbine and nacelle construction is steel.

For the proposed new roads and existing road improvements, the Facility will require 107,750 cubic yards of gravel for turbine pad and road construction. Gravel will be obtained from a local commercial gravel source in Wasco and Sherman County (see Exhibit K). As described in Exhibit O, approximately 12 to 15 million gallons of water will be used for concrete mixing and dust control. Concrete will be used to construct approximately 87 transformer pads and turbine foundations.

The proposed 87 turbines will require approximately 3,800 tons of steel. Each turbine has a nacelle which is composed of various materials. The nacelle houses the auxiliary equipment, the gearbox, and the generator. Adjacent to each turbine base will be a transformer with sealed non-polychlorinated biphenyl (non-PCB) mineral oil. Turbines will be connected to substations by approximately 49 miles of underground collector cable.

Operation-related Materials

During operation of the Facility, very little industrial material will be used or stored on-site. Table G-1 shows the materials required for operation of the Facility. On occasion, replacement materials will be required to repair or replace worn equipment; however, old equipment will be retired and removed from the project site and therefore will not require additional industrial materials. Materials such as general cleaners, lubricants, and weed-control substances will be stored in the O&M building.

G.3 MANAGEMENT OF HAZARDOUS SUBSTANCES

OAR 345-021-0010(1)(g)(B) *The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and*

Response: All hazardous materials required for the construction and operation of the Facility will be used and stored per an internal hazardous materials program that contains guidelines in accordance with EPA and OSHA regulations, all hazardous materials stored and used on-site will be catalogued and materials safety data sheets (MSDS) for each material will be filed and available. In addition, all employees will be trained and will receive guidelines on the handling of hazardous materials and how to properly store, transport, and dispose of hazardous materials.

The applicant has developed a rigorous hazardous materials spill prevention program that works to ensure structural integrity of operating equipment, transport systems, and site facilities.

To prevent hazardous material exposure to the elements, all hazardous materials will be stored inside. In the event of a hazardous material spill, hazardous material containment and cleanup kits will be available on site to minimize the impact resulting from a spill. These hazardous material containment and cleanup kits will be maintained by the applicant or its designated contractor at all times.

G.4 MANAGEMENT OF NON-HAZARDOUS WASTE MATERIALS

OAR 345-021-0010(1)(g)(C) *The applicant's plans to manage non-hazardous waste materials during construction and operation;*

Response: Solid waste will be primarily generated during construction. Steel scraps and wood from concrete forms will be recycled wherever practical. Concrete and excavated soil will be used as fill at the project site or transported off-site for disposal or recycling.

Materials disposed of as on-site fill will be disposed of in accordance with OAR 340-093-0080 and other applicable regulations. Per OAR 340-093-0080, inert wastes or clean fill as are exempt from permit disposal requirements. Inert construction debris will be separated from other non-inert debris in order to meet the clean fill definition described in OAR 340-093-0080(2). Waste concrete generated may be disposed of on-site as it meets the clean fill definition. With landowner approval, the construction contractor may bury waste on-site such as excess concrete from the construction site or batches of concrete that do not meet specifications. Upon burying waste on-site, the contractor would excavate a hole, cover the waste concrete with at least three feet of soil, and regrade the area to match existing contours.

Materials other than fill will be separated and disposed of or recycled. Materials such as paper, food waste, and packing materials will be collected and transported to be disposed of by a local waste hauler. During construction, portable toilets will be provided for on-site sewage management and will be maintained by the local toilet contractor.

Table G-1. Inventory of Materials Expected at the Facility.

Material	Quantity/Units 2.3 MW	Quantity/Units 1.8 MW	Ultimate Disposition
CONSTRUCTION			
Rock/gravel for road construction	248,000 CY crushed rock / gravel for new access road construction – 20 foot wide road with 10 foot shoulders on each side. 31,680 CY crushed rock to reinforce 6 miles of existing county roads. Total rock / gravel used for road construction: 279,680 CY	248,000 CY crushed rock / gravel for new access road construction – 20 foot wide road with 10 foot shoulders on each side. 31,680 CY crushed rock to reinforce 6 miles of existing county roads. Total rock / gravel used for road construction: 279,680 CY	Permanent installation of 124,000 CY in 20 foot wide new access roads until useful life of project has expired. 124,000 CY of gravel in 10 foot shoulders to be removed upon wind turbine erection completion. Permanent installation of 31,680 CY in 20 foot wide county roads.
Rock/gravel for concrete	8,300 CY of rock / gravel for (87) turbine foundations, (87) transformer pads, (3) met tower foundations	8,050 CY of rock / gravel for (87) turbine foundations, (note V100 transformers are in nacelles), (3) met tower foundations	Permanent installation until useful life of project has expired.
Water for dust control and road compaction	5,000,000 gallons	5,000,000 gallons	Evaporation and/or seepage into ground
Water for concrete mixing	1,263,000 gallons	1,225,000 gallons	Chemically bound into concrete mixture during curing, some slight evaporation. Permanent installation until useful life of project has expired.
Concrete	31,575 CY of concrete for (87) turbine foundations, (87) transformer pads, (3) met tower foundations	30,615 CY of concrete for (87) turbine foundations, (note V100 transformers are in nacelles), (3) met tower foundations	Permanent installation until useful life of project has expired.
Concrete reinforcing steel	4,000 tons of reinforcing steel for (87) turbine foundations, (87) transformer pads, (3) met tower foundations	3,850 tons of reinforcing steel for (87) turbine foundations, (note V100 transformers are in nacelles), (3) met tower foundations	Permanent installation until useful life of project has expired.
Nacelles (include generator, rotor, blades, hub, and gearbox)	(87) nacelles	(87) nacelles	Permanent installation until useful life of project has expired.
Electrical GSW transformers	(87) – (1) at each wind turbine	(87) – (1) each located in the nacelle of each wind turbine	Permanent installation until useful life of project has expired.
34.5 kV Electrical cable	45 miles of cable trench with (3) cables in ea. trench = 712,800 LF cable	45 miles of cable trench with (3) cables in ea. trench = 712,800 LF cable	Permanent installation until useful life of project has expired.
Main Step up transformer, switchgear, breakers	(2) sets of each	(2) sets of each	Permanent installation until useful life of project has expired.

Table G-1. Inventory of Materials Expected at the Facility.

Material	Quantity/Units 2.3 MW	Quantity/Units 1.8 MW	Ultimate Disposition
Transmission poles/structures	54 (8 miles of transmission line @ 6.6 poles / mile)	54 (8 miles of transmission line @ 6.6 poles / mile)	Permanent installation until useful life of project has expired.
OPERATIONS and MAINTENANCE			
Mineral oils (turbine lubricant and transformer coolant)	183 gal. / WTG @ (87) WTGs = 15,900 gal. + 550 gal. storage = 16,450 gal.	N/A (Dry-type transformer, and turbine lubricants are synthetic oils)	All lubricants to be recycled.
Synthetic oils (turbine lubricant, gear oil)	152 gal. / WTG @ (87) WTGs = 13,224 gal. + 550 gal. storage = 13,774 gal.	110 gal. / WTG @ (87) WTGs = 9,570 gal. + 550 gal storage = 10,120 gal.	All lubricants to be recycled.
Simple Green (general cleaner)	165 gal.	165 gal.	Unused cleaners to be recycled
WD-40; grease (general lubricant)	44 lb grease / WTG @ (87) WTGs = 3,828 lb grease + 100 lb storage = 3,928 lb grease 165 gal. storage of WD-40 / general lubricant	16.9 lb grease / WTG @ (87) WTGs = 1,470.3 lb grease + 50 lb storage = 1,520.3 lb grease 165 gal. storage of WD-40 / general lubricant	All lubricants to be recycled.
Ethylene Glycol (anti-freeze)	7.5 gal. / WTG @ (87) WTGs = 653 gal. + 55 gal storage = 708 gal.	9.25 gal. / WTG @ (87) WTGs = 805 gal. + 55 ga. storage = 860 gal.	Ethylene glycol to be recycled.
Round-up and 2,4-D (weed control)	55 gal.	55 gal.	Unused herbicides to be recycled
Hydraulic Fluid	59.4 gal. / WTG @ (87) WTGs = 5,168 gal. + 165 gal storage = 5,333 gal.	83.2 gal. / WTG @ (87) WTGs = 7,240 gal. + 165 gal. storage = 7,405 gal.	Hydraulic fluid to be recycled.
Batteries (pitch drive motor backup power)	(16) lead chloride maintenance-free batteries / WTG @ (87) WTGs = 1,392 batteries	(16) Valve-Regulated Lead Acid (VRLA) batteries / WTG @ (87) WTGs = 1,392 batteries	Depleted batteries to be recycled.
Paints/solvents	55 gal. paints / 55 gal. solvents	55 gal. paints / 55 gal. solvents	Unused paints and used & unused solvents to be recycled.