BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of the Application for Site Certificate for the West End Solar Project	))))	PROPOSED ORDER ON APPLICATION FOR SITE CERTIFICATE

January 13, 2023

RED underline and ~~strikethrough~~ represent recommended changes from Draft Proposed Order (DPO) to Proposed Order

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ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

AADT	Average Annual Daily Traffic
ACEC	Oregon Trail Area of Critical Environmental Concern
ACDP	Air Contaminant Discharge Permit
ADT	Average daily traffic
Applicant	EE West End Solar, LLC
ASC	Application for Site Certificate
AVA	American Viticulture Area
BGEPA	Bald and Golden Eagle Protection Act
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
BPA	Bonneville Power Administration
CadnaA	Computer Aided Noise Abatement
CFR	Code of Federal Regulations
Cfs	Cubic feet per second
CON	Construction
Council	Oregon Energy Facility Siting Council
CR	Country Road
CSZ	Cascadia Subduction Zone
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CTWS	Confedered Tribes of the Warm Springs Reservation of Oregon
dBA	A-weighted decibel
Department	Oregon Department of Energy
demo	Demolish
DEQ	Oregon Department of Environmental Quality
DC	Direct current
DOGAMI	Oregon Department of Geology and Mineral Industries
DPO	Draft Proposed Order
DSL	Oregon Department of State Lands
EFSC	Oregon Energy Facility Siting Council
EFU	Exclusive Farm Use
EMWMP	Emergency Management and Wildfire Mitigation Plan
EPA	United States Environmental Protection Agency
ESCP	Erosion and Sediment Control Plan
ESEE	Environmental, Socioeconomic and Energy
ESS	Energy storage system
FAA	Federal Aviation Administration
FACP	Fire alarm control panel
FHWA	Federal Highway Administration
FSS	Fire Safety System
GEN	General Conditions
GPS	Global Positioning System
HMA	Habitat Mitigation Area
HMP	Habitat Mitigation Plan
HMBP	Hazardous Materials Business Plan
hp	Horsepower

HPROSMP	Hermiston Parks, Recreation and Open Space Master Plan
I-82	Interstate 82
I-84	Interstate 84
IBC	International Building Code
IDP	Inadvertent Discovery Plan
IOU	Investor owned utility
ISO	International Organization for Standardization
km	kilometers
kV	kilovolts
LCDC	Land Conservation and Development Commission
LLC	Limited liability company
LOS	Level of service
MGD	Million gallons per day
MW	Megawatt(s)
NOI	Notice of Intent
NFPA	National Fire Protection Association
NHD	National Hydrologic Database
NOAA	Northwest Interagency Coordination Center
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	Noise sensitive receptor
NWCC	Northwest Interagency Coordination Center
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
OAH	Oregon Office of Administrative Hearings
ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
ONHT	Oregon National Historic Trail
OPRD	Oregon Parks and Recreation Department
OPS	Operational Conditions
ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statutes
OSSC	Oregon Structural Specialty Code
OWRD	Oregon Water Resources Department
Parent company	Eurus Energy America Corporation
pASC	Preliminary Application for Site Certificate
PRE	Preconstruction Conditions
PRO	Preoperational Conditions
Proposed facility	West End Solar Project
PSA	Predictive service area
RAI	Request for Additional Information
RET	Retirement Conditions
ROW	Rights-of-way

RPS	Renewable Portfolio Standard
RV	Recreational vehicle
SAG	Special Advisory Group
SCADA	Supervisory Control and Data Acquisition system
SC	Sensitive critical
SEIA	Solar Energy Industries Association
SHPO	State Historic Preservation Office
SLIDO-2	Statewide Landslide Information Database for Oregon, Release 2
SMBC	Sumitomo Mitsui Banking Corporation
SPCC	Spill Prevention Control and Countermeasure Plan
T&E	Threatened and Endangered
TSP	Transportation System Plan
UCDC	Umatilla County Development Code
UCFD #1	Umatilla County Fire District #1
UEC	Umatilla Electric Cooperative
US-395	U.S. Route 395
USACE	U.S. Army Corps of Engineers
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
U.S.	United States
V/C	Volume to capacity
VOC	Volatile Organic Compound
WGS	Washington Ground Squirrel
WPCF	Water Pollution Control Facilities
ZVI	Zone of Visual Influence

I. INTRODUCTION

The Oregon Department of Energy (Department) issues this ~~draft~~ proposed order ~~(DPO)~~ in accordance with Oregon Revised Statute (ORS) 469.370(~~4~~1), based on its review of the draft proposed order (DPO) on the Application for Site Certificate (ASC) for the proposed West End Solar Project (proposed facility), comments received on the record of the DPO public hearing, agency consultation on issues raised on the record of the DPO public hearing, and comments and recommendations received during review of the preliminary and complete ASC from state agencies, local governments, and tribal governments. This ~~DPO~~ proposed order includes recommended conditions of approval for inclusion in the site certificate to ensure or maintain compliance with applicable rules and standards during proposed facility construction, operation and retirement. Based upon its review, as presented in recommended findings of fact, conclusions of law and conditions, the Department recommends Council approve the ASC and issue a site certificate for the proposed facility. This proposed facility is processed under the Council's rules for Expedited Review of Small Capacity Facilities because it would be less than 100 MW generating capacity, discussed further in this order.

EE West End Solar, LLC (applicant), a wholly owned subsidiary of Eurus Energy America Corporation, seeks Energy Facility Siting Council (EFSC or Council) approval to construct and operate up to 50 megawatts (MW) of solar photovoltaic energy generation facility components, and related or supporting facilities including: a 70 MW lithium ion energy storage system, collector substation and switchyard substation located within a 15 acre area, a 34.5-kV collector line system, Supervisory Control and Data Acquisition (SCADA) System, driveway and access roads, an Operation and Maintenance (O&M) enclosure located near the substations, and a construction staging area. The entire site boundary would be enclosed in a 6 to 10-foot perimeter fence. The applicant does not propose a transmission line within the ASC, yet proposes to connect to one of three existing transmission line rights-of-way that run through the proposed site boundary or adjacent to the site boundary; the Bonneville Power Administration's McNary to Roundup 230-kilovolt line, PacifiCorp's Pendleton to Hermiston 69-kilovolt line, and a Umatilla Electric Cooperative 115-kilovolt line.

The proposed facility would occupy up to 324 acres on Exclusive Farm Use zoned land, including approximately 261 acres of high-value farmland[1] under ORS 195.300(10)(f) because of the location within the designated Columbia Valley American Viticulture Area (AVA) designation and criteria. The proposed facility site does not include high-value farmland as defined under ORS 195.300(10)(a) (soils) or ORS 195.300(10)(c) (water rights). The proposed facility site would be located entirely in northwestern Umatilla County, approximately one mile east of the city limits of Hermiston, Oregon and one mile north of the city limits of Stanfield, Oregon.

In addition to the conditions recommended in this ~~DPO~~proposed order, the applicant would be subject to the applicable substantive criteria in effect on the date the preliminary ASC (pASC) was submitted, the rules and standards of the Council and state laws in effect on the date the

[1] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22. Table K-2.

site certificate is executed.[2] Under ORS 469.401(2), the site certificate shall require the Council and applicant to abide by state law and the rules of the Council in effect on the date the site certificate is executed, except upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, then Council may require compliance with such later-adopted laws or rules. The Department recognizes that many specific tasks related to the design, construction, operation, and retirement of the proposed facility would be undertaken by the applicant's agents or contractors. Nonetheless, the applicant would be responsible for ensuring compliance with all provisions of the site certificate.

The Council does not have jurisdiction over matters that are not included in and governed by the site certificate, including design-specific construction or operating standards and practices that do not relate to siting, as well as matters relating to employee health and safety, building code compliance, wage and hour or other labor regulations, or local government fees and charges.[3] However, nothing in ORS chapter 469 shall be construed to preempt the jurisdiction of any state agency or local government over matters that are not included in and governed by the site certificate or amended site certificate.[4] Also outside the Council's jurisdiction are matters of land-acquisition, land purchases, land leases and right-of-way easements.

A site certificate is a binding agreement between the State of Oregon and the applicant, authorizing the applicant to design, construct, operate, and retire a facility within an approved site, incorporating all conditions imposed by the Council in the site certificate.[5] A site certificate issued by EFSC binds the state and all counties, cities and political subdivisions of Oregon. Once EFSC issues a site certificate, any affected state agency, county, city or political subdivision with an applicable permit identified in the ASC and to be governed by the site certificate, must, upon submission by the applicant of the proper applications and payment of the proper fees, but without hearing or other proceeding, promptly issue the permits, licenses and certificates addressed in the site certificate.[6] The Council has continued authority over the site for which the site certificate is issued and may inspect, or direct Department staff to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of the site certificate.[7]

II. PROCEDURAL HISTORY

II.A Expedited Review

[2] The pASC and payment under ORS 469.421(3) we received by the Department on November 05, 2021.
[3] 469.401(4).
[4] Id.
[5] ORS 469.300(26).
[6] ORS 469.401(3).
[7] ORS 469.430.

On December 4, 2020, the Department received a Request for Expedited Review for a Small Capacity Facility for the West End Solar Project, a solar photovoltaic energy generation project with a peak generating capacity of approximately 50 megawatts (MW). The Department reviewed the request and on December 17, 2020 notified the applicant (EE West End Solar, LLC) that the request for expedited review of the application for site certificate (ASC) for the West End Solar Project was granted.[8]

Under the expedited review process, an applicant is not required to submit a Notice of Intent. In an expedited review, an applicant submits a preliminary application for a site certificate (pASC) based on the OAR 345-021-0010 informational requirements. The Department issues a Project Order after reviewing the pASC. Procedurally, submission of the ASC and the Department's review of the ASC are the same for expedited review as for non-expedited review of ASCs.

II.B Project Order

Pursuant to ORS 469.370(10), OAR 345-015-0160, and OAR 345-015-0300(3) the Department issued a Project Order on February 10, 2022, which specified the state statutes and administrative rules, and local, state, and tribal laws, regulations, ordinances and other requirements applicable to the siting of the facility and is discussed further in this order. The Project Order outlines the ASC requirements from OAR 345-021-0010 that are relevant to the proposed facility. Under OAR 345-015-0160, the Project Order also establishes analysis areas for the proposed facility which are areas that may contain resources that the proposed facility may affect and that must be evaluated in the ASC.[9] A proposed facility may have different analysis areas for different types of resources. Further, the Department considered the size and type of the proposed facility in determining the analysis areas the applicant must evaluate in the ASC.[10] Finally, under OAR 345-015-0160(3), the Department or Council may amend the Project Order at any time.

II.C Application for Site Certificate

The Department received the preliminary application for site certificate (pASC) and payment under ORS 469.350 and ORS 469.421 on November 5, 2021. The Department distributed the pASC to reviewing agencies and requested pASC review and comment by December 17, 2021. Additionally, the Department posted an announcement on its project website notifying the public that the pASC had been received.

On April 22, 2022, the Council appointed Alison Greene Webster, Senior Administrative Law Judge at the Oregon Office of Administrative Hearings (OAH), as the hearing officer to conduct

[8] OAR 345-015-0300(4).

[9] OAR 345-015-0160(1)(f) and OAR 345-001-0010(2).

[10] OAR 345-015-0160(2).

the public hearing on the draft proposed order (DPO) and to conduct the contested case proceeding.[11]

Pursuant to OAR 345-015-0190(1), following review of the pASC, the Department determined the pASC to be incomplete and issued requests for additional information (RAIs) on January 3, 2022 (RAI1). The applicant responded to the Department's information requests on May 27, 2022, June 1, 2022, June 10, 2022 and June 20, 2022 (including revised pASC exhibits) in response to RAI1 and reviewing agency comments. On June 30, 2022, the Department issued additional RAI's, and on August 3, 2022 the Department notified the applicant of the new rules under OAR 345-022-0115 and OAR 345-021-0010(1)(v) - Wildfire Prevention and Risk Mitigation that are applicable to the pASC/ASC for the proposed facility. The Department received additional responses to the RAIs from the applicant on August 11 and September 7, 2022. After reviewing the applicant's responses and revised pASC exhibits, the Department determined the pASC to be complete on September 19, 2022.[12,13] The applicant submitted an electronic copy of the ASC on September 26, 2022 and filed the complete ASC on September 28, 2022.[14]

Public Notice of the complete ASC was issued via U.S. Mail to property owners within 500-feet of the property on which the proposed facility site boundary would be located, electronically via ClickDimensions to all individuals signed up to receive email notices from the Department regarding the proposed facility or all EFSC facilities, and published in the Hermiston Herald, a newspaper of general circulation in the vicinity of the proposed facility on September 28, 2022.[15,16] The Department held a remote public information meeting on the complete ASC on October 10, 2022. Pursuant to OAR 345-015-0200, the Department distributed electronic copies of the complete ASC to reviewing agencies, along with a request for agency reports on the complete ASC on September 27, 2022. The Department received comments from four agencies, all of which are provided in Attachment B of this order and referenced in Sections *IV.H Fish and Wildlife Habitat*, *IV.J Threatened and Endangered Species* and *IV.R.2. Removal-Fill Law*, respectively, of this order. As indicated in the Notice of the ASC, the Department and applicant held a remote informational meeting on October 10, 2022.[17]

Under OAR 345-015-0190(9), while the Department drafted the DPO, continued to review the ASC, and consulted with reviewing agencies, the Department identified the need for additional information following the determination of completeness. From October 22 to October 25,

[11] WESAPPDoc10 Hearing Officer Appointment 2022-04-22.

[12] Pursuant to OAR 345-015-0190(5), an ASC is complete when the Department finds that the applicant has submitted information adequate for the Council to make findings or impose conditions on all applicable Council standards.

[13] WESAPPDoc-1 ASC Determination of Complete Application_2022-09-19.

[14] WESAPPDoc5 ASC Filing Date Confirmation 2022-09-28.

[15] WESAPPDoc3-6 ASC Exhibit F Property Owners 2022-09-28, Figure F-1. Updated property owner information was obtained by the applicant from Umatilla County on September 21, 2022.

[16] WESAPPDoc2-1 ASC Public Notice-Mailing-Newspaper Proof-Click D 2022-09-28.

[17] WESAPPDoc2 Complete ASC Public Notice 2022-09-28.

2022, the applicant filed revised ASC Exhibits which were posted on the Department's project webpage.[18]

II.D Council Review Process

Draft Proposed Order on ASC

The Department issued the DPO on October 26, 2022, initiating a 22-day comment period. The Council-appointed, third-party hearing officer ~~will~~ conducted a public hearing on the DPO ~~starting at 5:30 P.M.~~ on November 17, 2022 at Oxford Inn and Suites – ~~Walleye~~ Oxford Room in Hermiston, Oregon with opportunities for remote and in-person participation. The public hearing location was selected ~~– representing~~because it represents the geographic area that would be affected by the proposed facility. ~~In addition to accepting written comments during the comment period, the hearing officer will also accept oral testimony at the public hearing.~~

On the record of the DPO public hearing, the Department received comments from two state agencies, 1 tribal government, 2 members of the public, EFSC members and the applicant/landowners on behalf of the applicant. All comments and applicant response to comments were provided to Council in preparation for the November 18 and December 16, 2022 Council meetings.[19]

Prior to the conclusion of the November 17, 2022 public hearing, the applicant requested that the Hearing Officer extend the record to December 2, 2022 to allow the applicant to provide additional responses to issues raised by EFSC members during the November 17, 2022 DPO public hearing.

A summary of DPO comments and the Department's recommendation as incorporated in the proposed order are presented in Table A-1 below. Consistent with OAR 345-015-0230(2), following the Council's review of the DPO, the Department consulted with reviewing agencies including Oregon Department of Water Resources (DWR), Oregon Depart of Agriculture (ODA) and the Special Advisory Group (Umatilla County) to support the evaluation of comments and recommendations presented in the proposed order.

[18] WESAPPDoc3, 3-1, 3-4, 3-13, 3-16, 3-11, 3-22, 3-25 2022-09-28; Exhibits: A, B, D, M, P, K, V, Y

[19] The following record documents are the DPO comments and applicant responses DPO comments: WESAPPDoc3 Reviewing Agency Comment ODFW Somers 2022-11-03; WESAPPDoc3-1 Applicant DPO Comment Curulla 2022-11-14; WESAPPDoc3-2 Reviewing Agency Tribal Gov DPO Comment CTUIR Farrow Ferman 2022-11-16; WESAPPDoc3-3 Public DPO Comment Thompson 2022-11-17; WESAPPDoc3-4 Public DPO Comment Little 2022-11-17; WESAPPDoc3-5 Reviewing Agency Comment ODAV Pike 2022-11-17; WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02.

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Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
State and Tribal Government Agencies				
ODFW	Draft Habitat Mitigation Plan (HMP) (DPO Attachment P-5)	Draft HMP is not consistent with mitigation goals for Category 3, 4 and 5; however, habitat quality of site is lower than Category 3 and 4 due to it limited functionality and connectivity	IV.H Fish and Wildlife Habitat (pp. 106-119)	Section IV.H., Fish and Wildlife Habitat, Recommended Fish and Wildlife Habitat Condition 1: Recommends that F&W Condition 1 include an opportunity for the applicant to update the habitat categorization referenced in the HMP to Category 5; commitments for mitigation area size and enhancement actions should be maintained as sufficient to meet the mitigation goals for Category 5 habitat.
CTUIR	Inadvertent Discovery Plan (IDP) (DPO Attachment S-3) and Noxious Weed Control	Draft IDP should be updated to reflect current contacts for CTUIR, Oregon State Police and CIS; and, requests confirmation of applicant's plan for noxious weed control	IV.K Historic, Cultural and Archeological Resources (pp. 130 – 141); and, IV.H. Land Use (p. 82)	Section IV.K., Historic, Cultural, and Archaeological Resources: Recommended findings for Historic, Cultural, and Archaeological Resources Condition 1 describe that the draft IDP reviewed by Council includes updated contact information identified by CTUIR; condition language modified to require another update of relevant contacts prior to construction. DPO Attachment P-4 includes the applicant's draft Noxious Weed Control Plan; plan identifies pre-construction noxious weed survey and treatment, and

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
				monitoring, treatment and control methods to be implemented during construction and operation. No changes made in response to CTUIR comment.
ODAV	Review of facility structures for potential impacts to navigable airspace	Recommends a condition requiring that applicant obtain FAA and ODAV review of structures	IV.M.6 Public Services, Air Traffic (pp. 168- 170)	No Proposed Order Revision: Recommended Public Services Condition 3 is consistent with ODAV comments.
Public Comments				
G. Thompson	Opposes proposed facility	Concerns related to project impacts to good quality farmland and wildlife	NA	No Proposed Order Revision: Comment did not contain sufficient detail to allow the Department to substantively respond.
C. Little	Supports proposed facility	General support of solar project to support local economies and help meet state reviewable energy policies/laws	NA	No Proposed Order Revision: Comment did not contain sufficient detail to allow the Department to substantively respond.
EFSC Member Comments				
H. Jenkins	Land Use, Goal 3 exception	Expressed concerns about using arable soils for an energy facility rather than preserving for agricultural use and requested additional reasons/evidence to support the proposed Goal 3 exception "reason" that the proposed	IV.E.3 Land Use, Goal 3 Exception (pp. 68-82)	Section II.D. describes the Department's post-DPO evaluation conducted in consultation with Oregon Department of Agriculture and conclusion that the analysis recommended by Council is a significant change in the "test" applied to the evaluation of the adequacy of the "reason" compared to prior goal exceptions taken by

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
		facility would result in a minimum direct impact to agriculture. Requested a regional assessment to support arguments that the subject tracts are not suitable for agriculture.		Council which relied, in part, on the same "minimal impact to agriculture" reason. Therefore, it is recommended that Council consider whether to apply this "test" in a rulemaking or policy to allow applicants/certificate holders an adequate opportunity to understand and complete the evaluation.
K. Howe	Land Use, Goal 3 exception	Information in the record is confusing and refers to adjacent agricultural activity on soils of same quality as site – requests that information submitted at the hearing be applied to ASC Exhibit K analysis to ensure the record is accurate and clear.		Section IV.E1.b. Land Use, Applicable Substantive Criteria and Goal Exception: Updated section based on additional facts and evidence provided by applicant (see below)
C. Condon	Organizational Expertise and concerns over the "Act"	Applicant should clarify how the applicant, an LLC, can rely on the parent company in light of the limitations established in the definition of the "Act" as referenced in ASC Exhibit A Attachment A-3	IV.B Organizational Expertise (pp. 25-31)	Section IV.B Organizational Expertise, Recommended Organizational Expertise Condition 1: Organizational Expertise Condition 3(c)(4) authorizes the Department to review site certificate compliance status to re-evaluate the adequacy of the decommissioning estimate. This will provide the State protection if the applicant went bankrupt or the Council opted to terminate the site

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
				certificate and the applicant was unable to fulfil its facility decommissioning obligation
Applicant Comments (includes comments from underlying landowners on behalf of applicant)				
R. Curulla, EE West End Solar, LLC	Organizational Expertise Condition 5	Requests to revise recommended Organizational Expertise Condition 5 to remove requirement to provide the Department the selected contractor's compliance history	IV.B Organizational Expertise (pp. 25-31)	No Proposed Order Revision: Department recommends that the condition be maintained. The Department disagrees that this request is unreasonably burdensome as the information is readily available from construction contractors and is recommended due to the lack of demonstrated experience of the applicant in Oregon. The Department intends to rely on the results of the selected contractor's compliance history to inform the level of construction compliance oversight/inspections by the Department.
	Land Use Condition 2(d) (parking lot design)	Requests to revise recommended Land Use Condition 2(d) to allow Umatilla County to approve alternative parking lot design requirements, if needed.	IV.E Land Use (pp. 55- 56)	Section IV.E.1.b. Land Use, IV.E.1 Applicable Substantive Criteria, Recommended Land Use Condition 2(d): Department consulted with Umatilla County and recommends that UCDC 152.562(I) (1-7) be removed from the list of applicable substantive criteria in Table 2 and that the condition imposing parking lot standards be removed in proposed order

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
				based on inapplicability of the requirement for non-public use facility.[20]
	Land Use Condition 12 (setback for avoidance of impacts to irrigated agriculture)	Requests to revise recommended Land Use Condition 12 to correct tax lot reference applied to setback.	IV.E Land Use (pp. 82- 83)	Section IV.E.1.b. Land Use, Recommended Land Use Condition 12: Department agrees that the condition contained an erroneous taxlot reference and recommends the condition be amended to reference taxlot 4N2900000300 rather than 4N29000001700 (see DPO Figure 4)
	T&E Species Condition 1	Requests revisions to recommended T&E Species Condition 1 for sub(a) to allow desktop analysis for areas extending outside the site boundary where applicant land access has not been obtained; and (c) to remove explanation of WGS colonies and burrows.	IV.I Threatened and Endangered Species (pp. 122-123)	Section IV.I., Threatened and Endangered Species, Recommended Threatened and Endangered Species Condition 1: Department agrees that the condition should be amended per applicant comment – the revisions are consistent with the methods employed for the ASC evaluation and were discussed/concurred with by ODFW.
	T&E Species Condition 2	Requests revisions to recommended T&E Species Condition 2 to remove the requirement for delineation	IV.E Land Use (pp. 82- 83)	Section IV.I., Threatened and Endangered Species, Recommended Threatened and Endangered Species Condition 2:

[20] WESAPPDoc1-1 Proposed Order Agency Consultation SAG Umatilla County 2022-12-09. Umatilla County confirmed that UCDC 152.562(I) (1-7) consists of parking lot design standards intended to apply to publicly accessible businesses and therefore would not apply to the proposed facility. This criteria has been removed from list of "applicable substantive criteria" in Table 2 of the proposed order and from the land use evaluation in Section IV.E.1 (resulting in removal of recommended Land Use Condition 2(d)).

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
		and avoidance of Category 2 WGS habitat.		Department agrees that the condition should be amended per applicant comment - delineation for avoidance and avoidance requirements do not apply to Category 2 WGS habitat impacts, only Category 1 WGS habitat.
S. & W. Scott	Land Use, Goal 3 exception and farm impacts	Testimony describing that they farmed land in 2013 and 2015; best crop occurred in 2013 resulting in 14 bushels an acre which did not pay for the inputs; in 2015, they produced 11 bushels an acre at $5.50 a bushel. Area is within critical groundwater restricted area and obtaining water for irrigation is virtually impossible. Confirmed that adjacent lands with same soil type are irrigated.	IV.E Land Use (pp. 82- 83)	Section IV.E1.b. Land Use, IV.E.3 Goal Exception: Recommends that the testimony and facts presented be incorporated into findings of fact for Goal 3 exception analysis.
Prior		Testimony describing that he has owned the property since 1990 and has never attempted to farm the parcel because it is outside of irrigation water district		Section IV.E1.b. Land Use, IV.E.3 Goal Exception:

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
		boundaries. He affirmed that his adjacent properties where high value crops are produced are indeed irrigated and that he does not have enough water rights to irrigate the subject properties and that the value of the land is not viable to move water right on to farm.		
Applicant		Provided a copy of the East Improvement District Recorded Landowner Notice, which provides documentation of all of the parcels located in the East Improvement Irrigation District. Pages 92-94 of the PDF are the pertinent sections to Art Prior's land holdings. Page 94 lists the tax lots he owns that are in the East Improvement District – including the two tax lots (Tract 3 and Tract 6) located east of the West End Solar site boundary that have recently been developed for irrigated agricultural use. The tax lot Mr.		Section IV.E1.b. Land Use, IV.E.3 Goal Exception:

Table A-1: Summary of DPO Comments and Department Recommendations (as represented in Proposed Order)

Commenter	Comment Subject	Comment Summary	DPO Applicability (Section Reference)	Recommendations, Responses, and Location in Proposed Order
		Prior owns within the site boundary (4N29C00000500) is not listed in this document.		
		Provided a map from the Oregon Water Resources Department of the Groundwater Restricted Areas in North Umatilla County, Stage Gulch area, where the facility and adjacent properties are located.		Section IV.E1.b. Land Use, IV.E.3 Goal Exception:

Acronyms:
CTUIR = Confederated Tribes of Umatilla Indian Reservation
FAA = Federal Aviation Administration
LCIS = Oregon Legislative Commission on Indian Services
ODAV = Oregon Department of Aviation
ODFW = Oregon Department of Fish and Wildlife

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On December 16, 2022, Council reviewed the DPO, issues raised in comments received on the record of the DPO and applicant response. Council provided comments to the Department regarding Organizational Expertise Condition 1, Retirement and Financial Assurance Condition 3(c)(iv) and the Goal 3 exception request (specifically the evaluation of the "minimal direct impacts to agriculture on the subject tracts" reason provided in support of the "reasons" exception request).[21]

Council comments and recommendations described above are incorporated in Section IV below, as represented in Table A-1.

As described in Table A-1, Council's comments on the Goal 3 exception request expressed concern that one of the four reasons proposed for the "reasons" exception had not been adequately evaluated.

To address the Council's comments, the Department consulted with Oregon Department of Agriculture to determine an approach in evaluating soil capability on a regional basis. To substantively and adequately evaluate the question, the following information would be needed:

- Tract and parcel level data extending approximately 9 miles east, 7 miles north, and 3.5 miles south and west (this would follow developed breaks including City of Hermiston, I-84 and I-207 to I-730 and then to the edge of topographic features at which the land use pattern changes)
    - This resulted in more than 20,000 parcels and over 200,000 acres
- Then, to evaluate the question of comparable soil capability, for the over 20,000 parcels, 1) a complete history of water rights including active, cancelled and transferred rights; NRCS soil classification evaluated based on complete water right history; cultivation and grazing history for more than 15 years; and status of Conservation Recovery Program (CRP) enrollment within the 15 year evaluation period.

CRP enrollment and a complete 15-year land use history (cultivation or grazing status) for more than 20,000 parcels is not information that is readily and publicly available, and necessitates, to some degree, on the ground surveys and landowner consultation. The scope of this assessment is significant and not one that the Department could complete if the full extent were to be completed.

The Department evaluated Council's prior findings and analysis for past exceptions taken for solar facilities where "minimal impacts to agriculture" was a reason determined, in part, to justify the goal exception. Based on prior Council Final Orders[22] approving goal exceptions, none

[21] Final Approved EFSC Meeting Minutes 2022-12-16.

[22] 2018 Final Order on ASC for Boardman Solar Energy Facility (p.94); 2020 Final Order on ASC for Bakeoven Solar Project (pp.109-111); 2018 Final Order on RFA1 for Carty Generating Station (pp.65-73); 2021 Final Order on ACS

relied upon or required an evaluation similar to the scope of the evaluation described above. Therefore, the Department recommends Council maintain consistency with the relevant findings and analysis in this order and of its past orders, as applicable to the "minimal impacts to agriculture" reason, and evaluate whether it wants to recommend that the "minimal impacts to agriculture" reason be evaluated as identified above either through rulemaking or policy directive to the Department. This would allow both the Department and applicants/certificate holders an adequate opportunity to weigh whether it believes it could complete such an evaluation, propose alternate evaluations, and whether the results would be favorable enough to continue supporting the reason.

Proposed Order on ASC

On January 13, 2023, the Department ~~Following the close of the record of the public hearing and Council review of the DPO, the Department will~~ issued a p~~P~~roposed o~~O~~rder, taking into consideration Council comments, evidence and arguments provided by the applicant in responses to issues raised ~~any comments received~~ "on the record of the public hearing" (i.e. oral testimony provided at the public hearing and written comments received by the Department from October 26 through November 17, 2022), and agency consultation.

Concurrent with the issuance of the Proposed Order, the Department ~~will~~ issued a Notice of Proposed Order and Contested Case, establishing a deadline of February 13, 2023 for eligible individuals to submit a petition for party status in the contested case proceeding.[23]

Contested Case Proceeding on the Proposed Order on ASC

Only those persons who commented in person or in writing on the record of the DPO public hearing may request to participate as a party or limited party in the contested case proceeding. ~~Additionally,~~ To raise an issue in a contested case, the issue must be within Council jurisdiction, and the person must have raised the issue on the record of the public hearing with "sufficient specificity to afford the Council, the department, and the applicant an adequate opportunity to respond."[24] At the conclusion of the contested case proceeding, the hearing officer must issue a proposed contested case order stating the hearing officer's findings of fact, conclusions of law and recommended site certificate conditions on the issues in the contested case. The Council may adopt, modify or reject the hearing officer's proposed contested case order. If adopted or modified, the order would then be incorporated into the Proposed Order for Council's review.

Final Order on the ASC

for Madras Solar Energy Facility (pp.102-103); 2019 Final Order on Amendment 4 of Montague Solar Facility (p.97); 2022 Final Order on ASC for Obsidian Solar Center (p,86); 2019 Final Order on Amendment 4 of Wheatridge Wind Energy Facility (pp.63-64).

[23] See ORS 469.370(4) and OAR 345-015-0014.

[24] ORS 469.370(3).

Following the contested case proceeding, the Council will take action to ether modify or approve the Proposed Order as the Final Order and issue a site certificate; or, may reject the Proposed Order, denying the Final Order and issuance of a site certificate, based upon the standards adopted under ORS 469.501, and any additional state statutes, rules, or local government regulations or ordinances determined to be applicable to the proposed facility in the Project Order.[25] The Council's Final Order is subject to judicial review by the Oregon Supreme Court. Only a party to the contested case proceeding may request judicial review and the issues on appeal are limited to those raised by parties or limited parties in the contested case proceeding. A petition for judicial review must be filed with the Supreme Court within 60 days after the date of service of the Council's final order or within 30 days after the date of the petition for rehearing is denied or deemed denied.[26]

III. DESCRIPTION OF THE FACILITY

The information presented in ~~this~~ Table A-2 below and in this section is based upon details provided in ASC, primarily from Exhibits B and C. Section III.A., *Facility Components* describes proposed facility components and Section II.B., *Facility Location* describes the proposed location and site boundary of the facility.

Table A-2 : Facility Component Summary

Component and Design Standard	No.	Unit
Solar Components		
Solar micrositing area	324	acres
PV Solar Modules		
Approx. Total number	180,000	modules
Max Height at full-tilt	16	feet
Posts		
Approx. Total number	33,000	posts
Inverters/Transformer Units		
Approx. Total number	25	
Noise level, per unit	88	dBA
Transformer oil-containing capacity	550	gallons
Related or Supporting Facility Components		
34.5 kV Collection System		
Collector line length, belowground	15	miles
Perimeter Fence		
Length	15,400	Linear feet
Height	10	feet
Roads		
New road (length, width)	3.4; 12-20	Miles, feet

[25] ORS 469.370(7) and (10).

[26] ORS 469.403.

Table A-2 : Facility Component Summary

Component and Design Standard	No.	Unit
Grid-Interconnect		
No. of Structures	2	
Structure type, height	Utility pole, 30	feet
Battery Energy Storage System (Lithium-ion)		
Approx. total batteries	70	MW
Approx. total containers	200	
Approx. container dimensions	8 x 10 x 10	H x W x L, feet
HVAC noise level, per unit	98	dBA at 6 feet
Substations/Switchyard		
Switchyard	1	
No. of substations	1	
No. of main power transformers	2	
Transformer oil-containing capacity	15,000	gallons
Transformer noise level	102	dBA
O&M Enclosure		
Size	20 x 600	Height x width
Buildings	Dry storage shed, workspace, storage area	

III.A Facility Components

The proposed facility would occupy up to 324 acres and includes the energy facility together with related or supporting facilities. Related or supporting facilities means any structure, proposed by the applicant, to be constructed or substantially modified in connection with the construction of an energy facility.[27] As stated in ASC Exhibit B, the proposed facility includes solar photovoltaic power generation components and related or supporting facilities, with a nominal and average generating capacity of approximately 50 MW.

III.A.1 Energy Facility

The proposed solar energy facility would be comprised of approximately 180,000 solar modules that would use either mono- or poly-crystalline cells contained within antireflective glass panels linked together with wire connectors.[28] The crystalline silicon cells are insulated and protected on both sides by sheets of polymers and glass, which is tempered and covered with a protective plastic layer that gives the glass added strength and ensures that if the glass were to crack or break it would stay intact. Furthermore, the modules would be connected in series to form long rows connected via shielded electrical cables, to protect against fires. Strings of these solar modules would be mounted on single-axis tracker systems that rotate the modules to follow

[27] ORS 469.300 (24), OAR 345-001-0010(21) and – (50).

[28] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 2.0.

the path of the sun throughout the day. The modules on posts and trackers would be approximately 16 feet in height when tilted on the single-axis tracking system.[29] The tracker system would be supported by approximately 33,000 steel posts, which could be round hollow posts or pile-type posts (i.e., H-pile, C-pile, S-pile) or helical.[30] The type of post and post depth may vary depending on soil conditions, but the posts would typically be installed 4 to 8 feet below the surface and protrude 4 to 7 feet above grade. Posts at the end of tracker rows are usually installed to greater depth to withstand wind uplift. In some soil conditions, concrete backfill would be required for each post, which would be determined by geotechnical investigations conducted prior to construction of the proposed facility as discussed further in Sections IV.D., *Soil Protection* and IV.C., *Structural Standard*. The solar array and related or supporting facilities would be within a 6 to 10-foot-tall chain link perimeter fence line. A solar "array" refers to the configuration of multiple rows of modules and can vary depending on the type of equipment technology and topography of the site. Related or supporting facilities are discussed in more detail below.

Approximately 25 inverters would serve the function of converting DC electricity generated from the solar modules to AC electricity and then are routed to approximately 25 step-up transformers which increase the output voltage from the inverter to the final substation feed voltage which would depend on which transmission line the facility connects to. Transformers would be co-located with the inverters associated with each tracker row, or centrally located and constructed on concrete or gravel pads. The inverter and transformer specifications would comply with the applicable requirements of the National Electric Code and Institute of Electrical and Electronics Engineers standards and the transformers would have an oil containment system made of prefabricated steel, concrete, or fiberglass for the 550 gallons of oil, depending on permit and code requirements.

Facility Interconnection

The applicant is not proposing a transmission line as a related or supporting facility and explains that there are three existing transmission line rights-of-way that are capable of providing interconnection. The three existing transmission line rights-of-way are illustrated in ASC Exhibit C, Figures C-2 through C-4. Two transmission line rights-of-way transect the proposed site boundary and run southeast to northwest crossing over the site boundary: Bonneville Power Administration's (BPA) McNary to Roundup 230-kilovolt (kV) line and PacifiCorp's Pendleton to Hermiston 69-kV line. The Umatilla Electric Cooperative (UEC) 115-kV line parallels the eastern edge of the proposed site boundary adjacent to South Edwards Road. The applicant anticipates that interconnection would occur with the Umatilla Electric Cooperative 115-kV line, however, the applicant seeks interconnection micrositing flexibility for all or part of the proposed facility to the three existing transmission lines. As described below in Section III.A.2., *Related or Supporting Facilities*, the applicant proposes a facility Switchyard Substation in addition to the

[29] WESAPPDoc3-7 ASC Exhibit G Materials Analysis 2022-09-28, Section 2.1.

[30] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Attachment B-1 provides a figure with drawings of the tracker post designs.

facility Collector Substation. The switchyard would likely be owned and operated by the utility the facility interconnects with (e.g., Umatilla Electric Cooperative, Bonneville Power Administration, or PacifiCorp), and under Recommended Land Use Condition 6, prior to operation, the applicant would be required to provide an executed interconnection agreement with Umatilla Electric Cooperative, Bonneville Power Administration or PacifiCorp demonstrating that the facility has a long-term agreement for interconnection to one of the existing transmission lines.

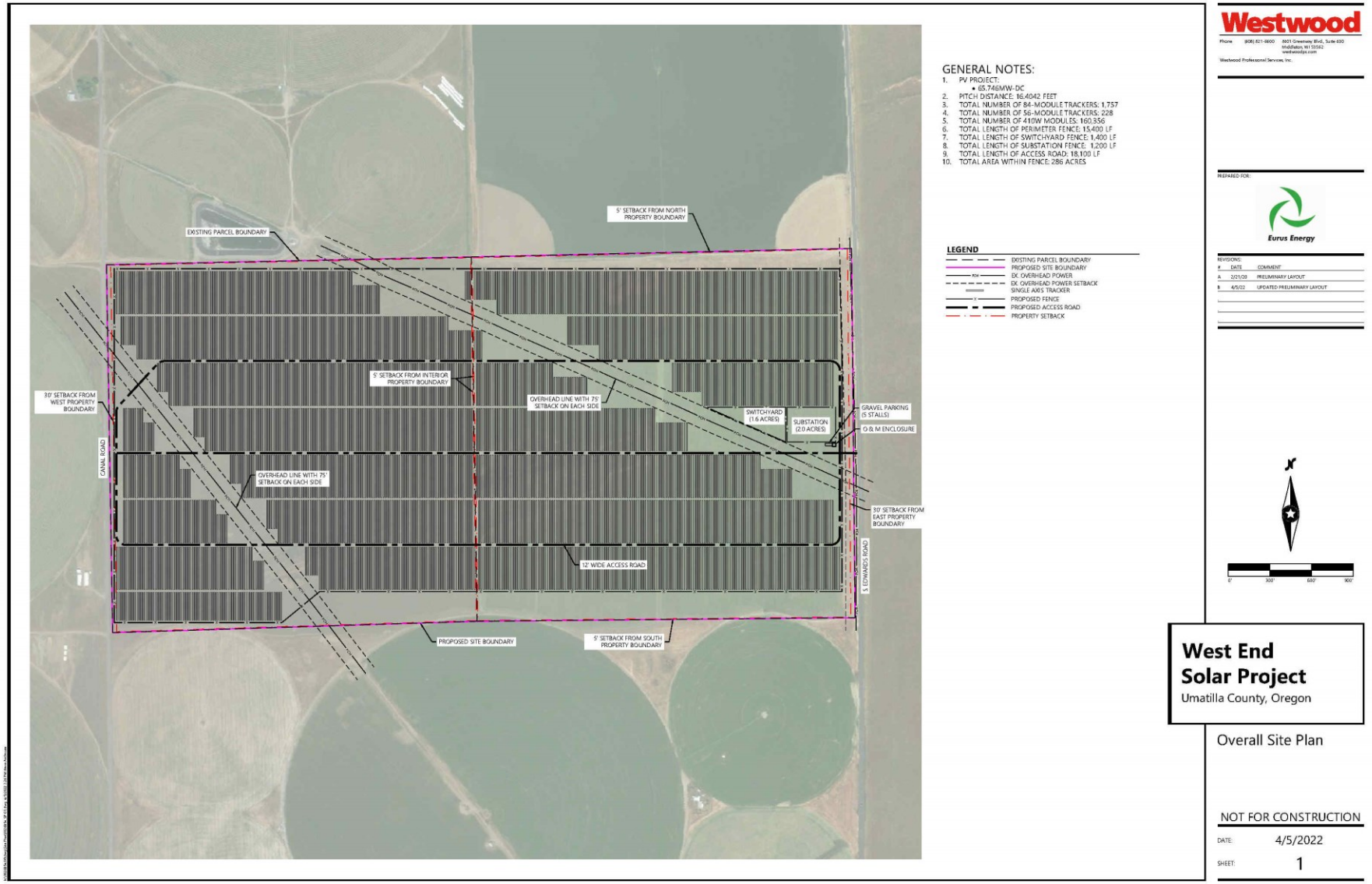
As discussed in Section IV.K., *Historic, Cultural, and Archaeological Resources,* because of the age of the BPA McNary to Roundup 230-kilovolt (kV) transmission line and PacifiCorp's Pendleton to Hermiston 69-kV transmission line, they are considered historic resources. However, as operational transmission lines, it is permissible to interconnect with them. The applicant indicates that the facility would be constructed and operated to avoid the transmission line rights-of-way, as represented in ASC Exhibit C, Figure C-4 (Overall Site Plan), and in Figure 1: *Preliminary Facility Site Plan*, of this order. As indicated in the Preliminary Site Plan, there would be a 75-foot set back of facility components on both sides of the transmission line rights-of-way, however, facility roads would be permissible under the transmission lines.

III.A.2 Related or Supporting Facilities

Proposed related or supporting facilities, as further described below, would include:

- Battery storage system
- 34.5 kV electrical collector lines
- Collector substation
- Switchyard substation with interconnection facilities
- Supervisory Control and Data Acquisition (SCADA) System
- Operations and maintenance (O&M) enclosure
- Security fencing and gates
- Service roads
- Construction staging areas

Figure 1: Preliminary Facility Site Plan



Battery Storage System

The proposed facility may include up to 70 MW of lithium-ion energy storage system (ESS), which would be comprised of up to 200 modular energy storage units or enclosures, each roughly 8 x 10 x 10 feet (w, d, h).[31] Multiple individual units would be linked together to form an energy storage string, which may be distributed throughout the site boundary around the solar array or centrally located at the proposed substation. The ESS enclosures would be located on gravel surface, without vegetation present. The smaller step-up transformers located at the energy storage enclosures would have an oil containment system made of prefabricated steel, concrete, or fiberglass oil collection system depending on permit and code requirements, similar to those at the substation, discussed more below.

- The ESS units would have/be:
    - A thermal management system designed and sized so heat generated could be removed ensuring the batteries operate in an environment that does not exceed the operational temperature range defined by the battery manufacturer.
    - Temperature, current, voltage, and humidity sensors which provide a real time information of the conditions inside the enclosures.
    - Fire Safety System (FSS) which monitors heat, and smoke, and provides dedicated annunciation/alarming in the event a fire condition is detected, automatically returns the system to a standby mode and if necessary automatically deploys an appropriate suppression agent.[32]
    - Designed so that if an internal fire occurs, it can impede flames from moving to adjacent enclosures or the environment.
    - Equipped with proper safety labels and signages for the safety of site personnel. The enclosure will be electrically touch safe and grounded.

On-site personnel, when present, would be able to activate an emergency stop via an emergency stop button on the external wall of the energy storage system enclosures. However, the battery storage units would also be remotely controlled, including shut off abilities.

34.5-kV Collector Line System

The 34.5-kV collector line system links transformers throughout the proposed solar array and carries generated power to the proposed collector substation. The collector line system would be approximately 79,200 feet (approximately 15 miles), buried in a trench likely adjacent to access roads within the solar arrays at a depth of approximately three feet and four feet wide.[33]

[31] ASC Exhibit B, Section 3.0 and G, Section 2.1.

[32] The FSS alarm functions are handled by a common fire alarm control panel (FACP) in the auxiliary control cabinet. The FACP monitors the status of the detectors and initiates an alarm if a fire is detected. The panel is set up with fire detection zones for the detectors in the battery enclosures. The FACP is connected to the local strobe and siren unit for alarm annunciation. Internal batteries in the FACP provide backup power if the main power supply is temporarily lost. WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 2.0

[33] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 3.0.

The collector line system and substation would have redundant surge arrestors to deactivate the facility components during unusual operational events that could start fires.

Collector Substation

The 34.5-kV collector line system carries power generated power to the collector substation which would combine and step up the voltage of energy generated by the solar arrays to the transmission voltage via main power transformer. The substation would include three open-air isolation switches that connect the collector line system to the main 34.5-kV bus, a 34.5-kV main bus open-air isolation switch, the step-up transformer, and a circuit breaker and open-air isolation switch.[34] The substation would also include protective relay and metering equipment, utility and customer revenue metering, and a station service transformer to provide power to the substation and substation control house. The substation would also have redundant surge arrestors to deactivate the operation of the proposed facility during unusual operational events that could start fires.

The main power transformer would use approximately 15,000 gallons of non-polychlorinated biphenyl oil. Additional substation equipment may include circuit-breakers, electrical buses and insulators, disconnect switches, relaying, battery and charger, surge arresters, alternating current and direct current supplies, control enclosure, metering and control equipment, grounding, and associated control wiring. The main power transformer would be ground-mounted, constructed on concrete or gravel pads. As discussed further in Section IV.D., *Soil Protection,* transformers would have secondary spill containment traps to minimize the possibility of accidental leakage. The main power transformer at the collector substation may use a reinforced concrete pit to retain any oil that may be accidentally spilt from the transformer and the transformer areas would have a drainage sump for the collection of liquid within the containment and would allow for oil/water separation. A berm and liner solution may be also considered, for oil containment, if it complies with all relevant codes and has a minimum lifespan of 30 years free of maintenance.

The substation and O&M enclosure would be sited together in a fenced and graveled area on approximately 15 acres, likely on the eastern end of the proposed site boundary. The substation's maximum height would be 30 feet.

Switchyard Substation

A switchyard substation would be constructed in a separately fenced graveled area adjacent the collector substation. The switchyard may be constructed, owned, and operated by the utility that operates the transmission line that the proposed facility interconnects with (e.g.,

[34] Open-air isolation switches allow visual confirmation that electrical disconnects between components have been made and are used during construction, commissioning, and maintenance. WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 3.0.

Umatilla Electric Cooperative, Bonneville Power Administration, or PacifiCorp).[35] The switchyard substation would have similar equipment as the collector substation described above including a control house, however instead of a main power transformer the switchyard would include other small transformers for service power and meters. The Switchyard substation would also have interconnection facilities including two utility poles that would support the electric line that connects the Switchyard to the existing transmission line. The switchyard equipment would have a maximum height of 30 feet.[36]

Supervisory Control and Data Acquisition (SCADA) System

A Supervisory Control and Data Acquisition (SCADA) system would be installed to collect operating and performance data from the solar array and would allow remote operation of the proposed facility. Smoke/fire detectors would be placed around the site that will be tied to the SCADA System and would contact local firefighting services. Fiber optic cables for the SCADA system operation would be installed with the 34.5 kV collector line system.

Operations and Maintenance (O&M) Enclosure

The O&M enclosure would consist of a single, 20-foot-tall, 600-square-foot, dry-storage shed located near the collector substation graveled area. The O&M building would include a workspace and storage area. Restroom facilities for employee sanitation would be provided by portable-toilets and a hand-washing station, while operational required water will be trucked in from offsite sources and bottled water, as discussed further in Section IV.R.3., *Water Rights*.

Small quantities of lubricants, degreasers, herbicides, or other chemicals may be stored in the O&M enclosure according to recommended storage and usage label instructions. During construction, on-site fuel storage (i.e. for backup generators, etc.) may be placed in designated areas within construction staging areas. Secondary containment and refueling procedures for on-site fuel storage will follow the contractor's Spill Prevention, Control, and Countermeasures Plan (SPCC), which is described further in Section IV.D., *Soil Protection*. Any tank, container or drum of oil, diesel or chemical, equal to or greater than 55 gallons would:[37]

- Include secondary containment of at least 110% of the volume of the primary container;
- Include spill response equipment;
- Site security to control access to equipment and property.

Security Fencing and Gates

[35] The applicant includes the Switchyard substation and its interconnection facilities in the ASC to evaluate maximum potential impacts to resources protected under Council standards, therefore, there are recommended site certificate conditions that may apply to the Switchyard substation and its components, if constructed and operated by the applicant.

[36] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 3.0.

[37] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 2.0.

The applicant proposes to fence the entire 324-acre site boundary with approximately 3 miles (15,400 linear feet) of 6 to 10-foot chain-link perimeter fencing. As stated above, the substation, switchyard, and centralized battery enclosures would have additional 6 to 8-foot-high wire mesh fencing. The perimeter fencing would vehicle and pedestrian access gates with locks, with the primary access point likely on the eastern point of the proposed facility off of S. Edwards Road. A noncombustible, defensible space clearance along the fenced perimeter of the site boundary would be maintained to protect from fire hazards.

Site Access and Service Roads

As noted above, the anticipated main access point off of S. Edwards Road near the proposed substation. A new driveway off of S. Edwards Road would be required at the access point, which would meet that applicable design standards designated by Umatilla County Development Code (UCDC) and discussed further in Section IV.E., *Land Use*. Approximately 3.4 miles of newly constructed roads would be graded and graveled to meet load requirements for all equipment, where road cross sections would consist of 6 inches of compacted gravel supported on 6 inches of compacted native dirt. The driveway and access roads would also be sufficiently sized for emergency vehicle access, where access roads located within the solar array site would be approximately 12 feet to 20 feet wide, depending on location, with an internal turning radius of up to 28 feet.[38] These roads would also have less than a 10 percent grade, or a similar profile, depending on exact siting which would maintain safety standards as well as help maintain erosion and sediment control. Vegetation would be cleared and maintained along perimeter roads to provide a vegetation clearance for fire safety.

Construction Staging Areas

During construction, temporary staging areas would be used within the fenced site boundary to support construction and store supplies and equipment. The staging areas would consist of a crushed gravel surface and would be considered a permanent impact.

III.B Description of Construction, Operation, and Retirement Activities

III.B.1 Facility Construction Activities

Construction of the proposed facility is anticipated to take 9-12 months, however, under Recommended General Standard of Review Condition 1, the Department recommends the applicant be allotted three years from site certificate execution to begin construction and then 24 months to complete construction after construction has begun.[39] Construction activities would employ an average of 300 people and a maximum of 500 people during peak summer months. Most of the construction workers would be contracted under the applicant or

[38] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 3.0.

[39] ORS 469.300(6) "Construction" means work performed on a site, excluding surveying, exploration or other activities to define or characterize the site, the cost of which exceeds $250,000.

contractor, however, specialized workers would be required for the installations of the solar components and battery storage facilities.

Construction activities include clearing and grubbing of vegetation in construction staging areas, solar array, and new access roads then the access roads, substation and O&M areas would be graded and the site prepared which includes equipment that would cut, move, and compact the subgrade surface. Soils would be stockpiled for later use and decompaction would be performed as needed prior to final grading for site revegetation, gravel placement or foundation installation.

Heavy-duty trucks would deliver construction equipment such as bulldozers, graders, compactors, forklifts, and would also carrying gravel and other materials required for site grading and to construct the new site access road segments. Heavy-duty trucks would also carry proposed facility components and materials for the solar module blocks, battery and substation. Lighter-duty trucks would deliver water to the site for dust control during construction and other electrical equipment and materials required for solar panel construction and power transmission. All construction vehicles would be limited to 20 miles per hour on all facility access roads

If the proposed facility is constructed in phases, in accordance with ORS 469.300(6), preconstruction conditions, if specified, may be satisfied for the applicable phase, facility component or for the facility, as applicable, based on final design and configuration.

III.B.2 Facility Operational Activities

The estimated life of the proposed facility is 30 years. The proposed facility would be operated remotely except for routine maintenance and facility repair activities where approximately two to five workers would be deployed to the site for maintenance or repairs of facility components. Proposed facility O&M activities would include routine inspections of the battery storage, transformers, and other electrical equipment, vegetation management, solar panel washing, and changing the lithium-ion batteries and solar panels. Operational water may be trucked in and stored in a water tank or trucked in for specific uses.

Inspections of the inverters, transformers, and battery system would be conducted according to the manufacturer's recommendations, which are assumed to be monthly inspections.[40] Vegetation and weed management under the solar arrays and other areas within the site boundary that aren't graveled would be implemented through manual, mechanical or chemical (i.e., herbicide) control measures, but vegetation would be low growing or maintained to not overgrow.[41] The applicant estimates that the solar panels may need to be washed up to twice per year and wash water would be applied via tanker truck without any cleaning solvents added to the water so it may be absorbed into the ground after application. The applicant assumes

[40] WESAPPDoc3-9 ASC Exhibit I Soil Conditions 2022-09-28, Section 5.2.

[41] ASC Exhibit P, Attachment P-5 Draft Weed Management Plan, Sections 2.0 and 2.2.

that the lithium-ion batteries would need to be changed approximately every 10 years or two to three times throughout the life of the proposed facility because they degrade over time, particularly batteries that are more heavily used.[42] The following procedures would be implemented for the battery replacement:

- Proposed facility operator would disconnect and de-energy battery systems prior to removal from the installed racks and package the batteries for transport to a licensed recycling facility.
- At the recycling facility, the qualified contractor would dismantle the battery modules and prepare individual cells for metals recovery.
- Individual cells would be processed in a furnace to recover metals. Recovered metals may include aluminum, calcium, lithium, and a metal alloy comprising cobalt, copper, nickel, and iron.
- Recovered metals would be recycled or separated to recover individual metals where economically viable.

Solar modules and electrical equipment would need to be repaired or replaced over the lifetime of the proposed facility. Solar panels that are nonfunctional or are retired would be recycled to the maximum extent feasible through the Solar Energy Industries Association (SEIA) National PV Recycling Program, as described in Section IV.N., *Waste Minimization*.

III.B.3 Facility Retirement Activities

Proposed facility retirement or decommissioning is described in detail in Section IV.G., *Retirement and Financial Assurance*, but begins with disconnecting all electrical equipment disassembling equipment and components such and the battery storage units, solar panels and transformers. Larger containers and equipment would be removed, trucked off-site and recycled and disposed of. None of these materials are considered hazardous. Solar panels would be disconnected, and piles would be removed including the excavation of any concrete foundations. Gravel and foundations from the inverters and transformers, O&M structure, substations, and switching station would be removed by trenching and excavation a minimum depth of 3 feet below grade. The proposed facility site would then be restored through minimal grading and revegetation with plants or seed mix consistent with the Draft Noxious Weed Plan (Attachment P-4 of this order) or landowner interests.

Any hazardous material would be handled by a qualified contractor and adhere to applicable regulations for transport and disposal, including but not limited to 49 Code of Federal Regulations 173.159. The decommissioning of the energy storage system, if used, would involve disposing of battery components at an off-site facility approved for disposal or recycling of batteries, following the same process as replaced batteries during operations. Solar panels would be recycled to the greatest extent feasible at the time of facility retirement and solar panels not recycled would be disposed of at a certified disposal site or program for solar panels.

[42] WESAPPDoc3-7 ASC Exhibit G Materials Analysis 2022-09-28, Section 2.2.

III.C Facility Location and Site Boundary

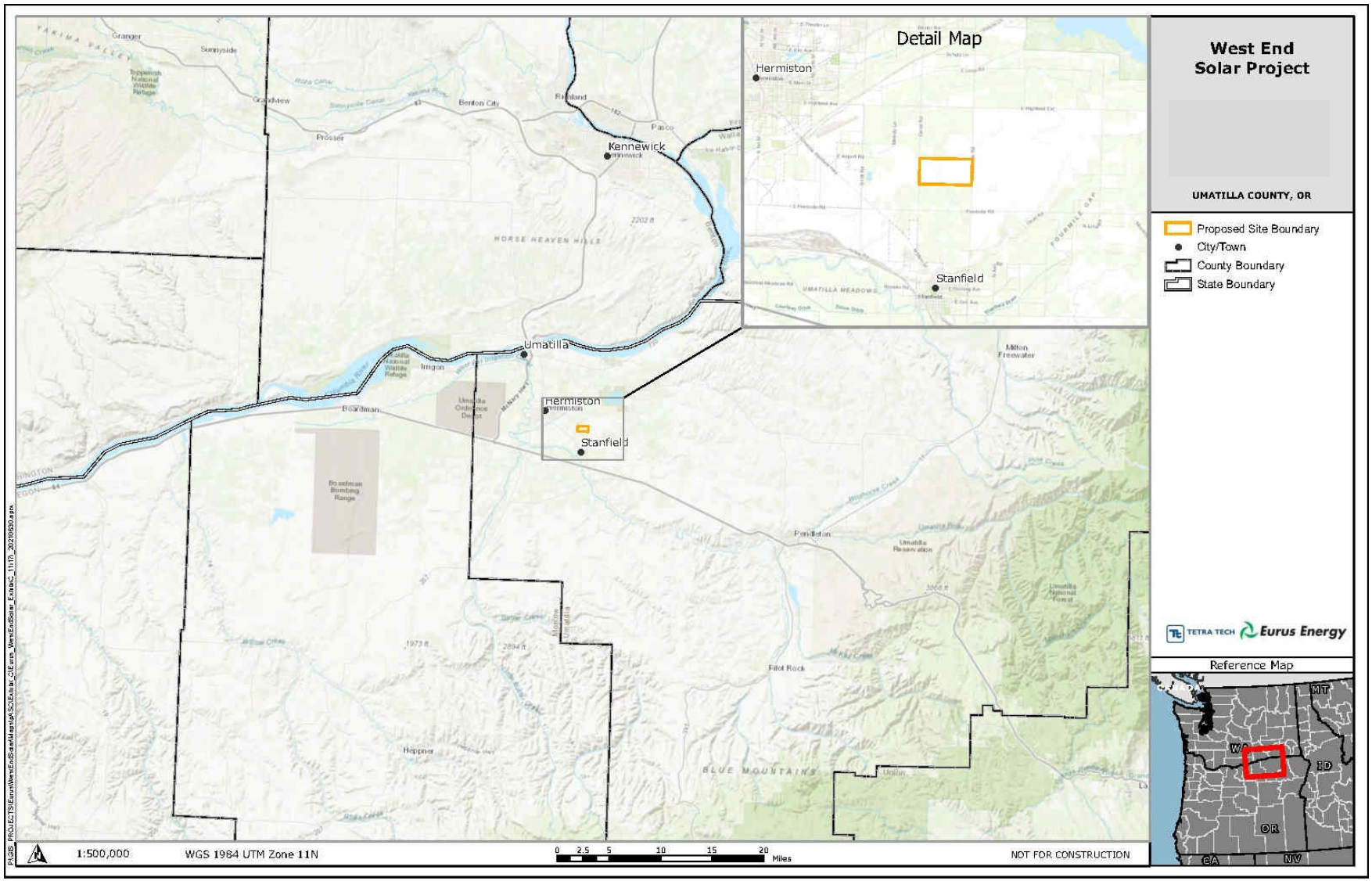
The proposed facility is located within Umatilla County, Oregon, approximately 1 mile east of the city limits of Hermiston, Oregon and 1 mile north of the city limits of Stanfield, Oregon, as presented in Figure 2: *Proposed Facility Regional Location*.

The proposed site boundary includes approximately 324 acres of private land zoned as exclusive farm use (EFU). As defined in OAR 345-001-0010, "site boundary" means the perimeter of the site of a proposed energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant; "site" means all land upon which an energy facility and its related or supporting facilities is located or proposed to be located.[43]

The applicant requests that the site boundary be considered a "micrositing area" to provide maximum flexibility with siting the location of specific facility components based on final design. Further, the applicant requests the site boundary be considered a "micrositing area" because the evaluation in the ASC considers the maximum impact footprint to be the 324 acres, including under the Council's Fish and Wildlife Habitat standard where the applicant represents that the 324 acres would be considered a permanent impact to habitats.[44] A micrositing corridor, by definition, means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions.[45] Micrositing corridors or areas are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. As presented in Section IV., *Evaluation of Council Standards*, based on the applicant's methodology and assessment of impacts under applicable Council standards, the Department recommends Council authorize the site boundary as a micrositing area.

[43] ORS 469.300(25).
[44] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 2.0 and WESAPPDoc3-16 ASC Exhibit P Fish and Wildlife 2022-09-28, Section 6.2.
[45] OAR 345-001-0010(32).

Figure 2: Proposed Facility Regional Location



IV. EVALUATION OF COUNCIL STANDARDS

As discussed above, ORS 469.320 requires a site certificate from the Energy Facility Siting Council (EFSC or Council) before construction of a "facility." ORS 469.300(14) defines "facility" as an "energy facility together with any related or supporting facilities." The proposed facility qualifies as an "energy facility" under the definition in ORS 469.300(11)(a)(D)(i).[46]

To issue a site certificate for a proposed facility, the Council must determine that "the facility complies with the applicable standards adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards that the facility does not meet."[47] The Council must also determine that the proposed facility complies with all other applicable Oregon statutes and administrative rules, as identified in the Project Order, excluding requirements governing design or operational issues that do not relate to siting[48] and excluding compliance with requirements of federally-delegated programs.[49] Nevertheless, the Council may consider these programs in the context of its own standards to ensure public health and safety and protection of the environment.[50]

Under ORS 469.310, the Council is charged with ensuring that the "siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety." ORS 469.401(2) further provides that the Council must include in the site certificate "conditions for the protection of the public health and safety," for the time for completion of construction, and to ensure compliance with the standards, statutes and rules described in ORS 469.501 and ORS 469.503."[51] The Council implements this statutory framework and ensures the protection of public health and safety by adopting findings of fact, conclusions of law, and conditions of approval concerning the proposed facility's compliance with the Council's Standards for Siting Facilities at OAR 345, Divisions 22, 24, 26 and 27.

~~This DPO includes~~This proposed order includes the Department's ~~initial~~ revised analysis of whether the applicant has demonstrated an ability to satisfy each applicable Council Standard (with mitigation and subject to compliance with recommended conditions, as applicable), based on the information in the ASC, issues raised on the record of the DPO public hearing and

[46] ORS 469.300(11)(a)(D)(i) defines an EFSC jurisdictional solar photovoltaic power generation facility as using more than 160 acres located on high-value farmland as defined in ORS 195.300.
[47] ORS 469.503(1).
[48] As stated above, such matters include design-specific construction or operation standards and practices that do not relate to siting, as well as matters relating to employee health and safety, building code compliance, wage and hour or other labor regulations, or local government fees and charges.
[49] ORS 469.401(4); ORS 469.503(3).
[50] The Council does not have jurisdiction over matters that are not included in and governed by the site certificate or amended site certificate. However, the Council may rely on the determinations of compliance and the conditions in the permits issued by these state agencies and local governments in deciding whether the facility meets other standards and requirements under its jurisdiction.
[51] ORS 469.401(2).

supplemental facts and evidence provided by the applicant in response to those issues~~.~~. ~~Following the 30-day comment period on the DPO, public hearing on April 22, 2021, and Council's review of and comments on the DPO, the Department will issue a Proposed Order presenting an evaluation of the Council's comments and issues raised with sufficient specificity on the record of the DPO.~~

Where the following language is included in a condition, "before beginning construction of the facility or a facility component," the certificate holder is authorized to construct in a phased approach. If the facility is to be constructed in separate phases, only conditions, or portions of conditions, related to that phase and related facility components are required to be met to begin construction of that phase.

IV.A General Standard of Review: OAR 345-022-0000

(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:

(a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the facility outweigh the damage to the resources protected by the standards the facility does not meet as described in section (2);

(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

*****

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirement of the Council statutes if other agencies have special expertise, the Department of Energy shall consult such other agencies during the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.

Findings of Fact

OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that a proposed facility would comply with the requirements of EFSC statutes and the siting standards adopted by the Council and that a proposed facility would comply with all other Oregon statutes and administrative rules applicable to the issuance of a site certificate for the facility.

The requirements of OAR 345-022-0000 are discussed in the sections that follow. The Department consulted with other state agencies, and the Umatilla County Board of Commissioners, as the appointed Special Advisory Group (SAG) for the proposed facility, during review of the preliminary Application for Site Certificate (pASC) and ASC to aid in the evaluation of whether the proposed facility would satisfy the requirements of applicable statutes, rules and ordinances otherwise administered by other agencies. Additionally, in many circumstances the Department relies upon these reviewing agencies' special expertise in evaluating compliance with the requirements of Council standards.

OAR 345-022-0000(2) and (3) apply to ASCs where an applicant has shown that the proposed facility cannot meet Council standards, or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of the damage to protected resources; and, for those instances, establish criteria for the Council to evaluate in making a balancing determination. The applicant does not assert that the proposed facility would not meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

Certificate Expiration (OAR 345-027-0013)

ORS 469.370(12) requires the Council to "specify in the site certificate the date by which construction of the facility must begin." ORS 469.401(2) requires that the site certificate contain a condition "for the time for completion of construction." Under OAR 345-025-0006(4), the certificate holder must begin construction on the facility no later than the construction beginning date specified by Council in the site certificate. "Construction" is defined in ORS 469.300(6) and OAR 345-010-0010(12) to mean "work performed on a site, excluding surveying, exploration or other activities to define or characterize the site, the cost of which exceeds $250,000."

In ASC Exhibit B, the applicant represents a tentative construction schedule that would span a nine-month period. Based on the Department's experience with large energy facilities, a number of unforeseen factors can cause delays to a facility's construction commencement and completion timelines, such as financial, economic, or technological changes. Pre-construction requirements that must be satisfied also require 9-12 months to prepare, submit and obtain agency approvals, as applicable. An applicant is obligated to comply with all applicable pre-construction conditions prior to beginning construction activities. Recommended pre-construction conditions include securing an approximately 240-acre habitat mitigation area, if

facility is the full build out, geotechnical investigation and finalization of mitigation plans as included in attachments to this order. Several pre-construction conditions include review and approval by the Department, in coordination with applicable reviewing agencies. Given that the applicant represents a 9-month maximum construction schedule, the Department recommends Council establish a construction commencement deadline that provides sufficient time for planning and unexpected delays of three years after the issuance of the site certificate, and an 24-month completion deadline once construction commences.

Recommended General Standard Condition 1 (GEN): The certificate holder shall begin and complete construction of the facility by the dates specified in the site certificate.

a. Construction of the facility, facility component or phase, shall commence within three years after the date of Council action [DATE TO BE SPECIFIED]. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline by satisfying applicable preconstruction conditions and completing at least $250,000 work at the site.
b. Construction of the facility shall be completed within 18-months after the construction commencement date. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline.

[Mandatory Condition OAR 345-025-0006(4)]

Mandatory and Site-Specific Conditions in Site Certificates [OAR 345-025-0006 and OAR 345-025-0010]

OAR 345-025-0006 lists certain mandatory conditions that the Council must adopt in every site certificate. Mandatory conditions OAR 345-025-0006(7) through (9) and (16) are discussed and applied in Section IV.G *Retirement and Financial Assurance* of this order as they relate to the restoration of the site, Council approval of a retirement plan, and bonding requirements. Mandatory conditions OAR 345-025-0006(12) through (14) are discussed and applied in Section IV.C *Structural Standard*, because they are associated with the design, construction and operation of the proposed facility to avoid dangers of seismic hazards, coordination with and notifications to the Department of Geology and Mineral Industries (DOGAMI). In addition, pursuant to OAR 345-025-0006(10), the Council shall include as conditions in the site certificate all representations in the ASC and supporting record the Council deems to be binding commitments made by the applicant, as necessary to avoid or minimize a potential impact. Mandatory conditions that are not otherwise addressed in the evaluation of compliance with specific standards are discussed below, in the context of the Council's General Standard of Review. These are not presented as "recommended" conditions because they are mandatory conditions in all site certificates.

The following are applicable mandatory conditions required pursuant to OAR 345-025-0006:

General Standard Condition 2 (GEN): The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility or any phase of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility.
[Mandatory Condition OAR 345-025-0006(2)]

OAR 345-025-0006(3) establishes, as a mandatory condition, that the certificate holder design, construct, operate, and retire the facility substantially as described in the site certificate in compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued.

General Standard Condition 3 (GEN): The certificate holder shall design, construct, operate and retire the facility:
a. Ss~~~~ubstantially as described in the site certificate;
b. ~~and i~~In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and
~~**a.**~~**c.** ~~-~~In compliance with all applicable permit requirements of other state agencies.
[Mandatory Condition OAR 345-025-0006(3)]

General Standard Condition 4 (GEN): Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For the transmission line associated with the energy facility if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site.
[Mandatory Condition OAR 345-025-0006(5)]

General Standard Condition 5 (GEN): If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility or any phase of the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.
[Mandatory Condition OAR 345-025-0006(6)]

General Standard Condition 6 (GEN): Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.
[Mandatory Condition OAR 345-025-0006(11)]

General Standard Condition 7 (GEN): Before any transfer of ownership of the facility, any phase of the facility, or ownership of the site certificate holder, the certificate holder shall inform the Department of the proposed new owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate.
[Mandatory Condition OAR 345-025-0006(15)]

Site Specific Conditions [OAR 345-025-0010]

In addition to mandatory conditions imposed on all facilities, the Council rules also include "site specific" conditions at OAR 345-025-0010 that the Council may include in the site certificate to address issues specific to certain facility types or proposed features of facilities.[52] These are not presented as "recommended" conditions because they are designated under OAR 345-025-0010 to apply to the site certificate.

Because the proposed facility includes electrical infrastructure, the Department recommends the Council adopt the following site-specific conditions:

General Standard Condition 8 (GEN): The certificate holder shall:

a. Design, construct and operate electrical infrastructure in accordance with the requirements of the National Electrical Safety Code as approved by the American National Standards Institute; and
b. The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.
c. Design the battery storage system in accordance with the requirements of the National Fire Protection Association's (NFPA) 855: Standard for the Installation of Stationary Energy Storage Systems (NFPA, 2020) or most current version.

[Site Specific Condition OAR 345-025-0010(4)]

[52] Site-Specific Conditions at OAR 345-025-0010(1)-(3), and (6)-(7) do not apply to the proposed facility based on facility energy source/type (solar photovoltaic power generation facility with related or supporting facilities including a proposed 230 kV transmission line).

As noted above, General Standard Condition 8(c) includes a design requirement applicable to the proposed battery storage system. The battery storage system would be designed in accordance with *NFPA 855: Standard for the Installation of Stationary Energy Storage Systems* (NFPA, 2020). These standards include an evaluation of XX (fire suppression system).

Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]

The Council adopted rules at OAR Chapter 345, Division 26 to ensure that construction, operation, and retirement of facilities are accomplished in a manner consistent with the protection of the public health, safety, and welfare and protection of the environment. These rules include requirements for compliance plans, inspections, reporting and notification of incidents. The applicant must construct the facility substantially as described in the site certificate and the applicant must construct, operate, and retire the facility in accordance with all applicable rules adopted by the Council in OAR Chapter 345, Division 26.[53]

The Department recommends that the Council adopt General Standard Condition 9 and 10, as presented below, to support the Department's review of ongoing site certificate compliance, in accordance with OAR Chapter 345, Division 26.

> **General Standard Condition 9 (PRE):** At least 90 days prior to beginning construction, (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a compliance plan documenting and demonstrating actions completed or to be completed to satisfy the requirements of all site certificate terms and conditions and applicable statutes and rules. The plan shall be provided to the Department for review and compliance determination for each requirement. The Department may request additional information or evaluation deemed necessary to demonstrate compliance. [OAR 345-026-0048]
>
> **General Standard Condition 10 (GEN)**: The certificate holder shall:
>
> a. Within six months after beginning construction, and every six months thereafter during construction, submit a semiannual construction progress report to the Department. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall report on the progress of construction and shall address the subjects listed in (b). When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in this rule.
> b. After January 1 but no later than April 30 of each year after beginning operation of the facility, the certificate holder shall submit an annual report to the Department addressing the following for the calendar year preceding the date of the report:
> i. Facility Status: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. The certificate holder shall describe any unusual events, such as

[53] Applicable rule requirements established in OAR Chapter 345, Division 26 include OAR 345-026-0005 to OAR 345-026-0170.

earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility.

ii. Reliability and Efficiency of Power Production: For electric power plants, the plant availability and capacity factors for the reporting year. The certificate holder shall describe any equipment failures or plant breakdowns that had a significant impact on those factors and shall describe any actions taken to prevent the recurrence of such problems.

iii. Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period.

iv. Monitoring Report: A list and description of all significant monitoring and mitigation activities performed during the previous year in accordance with site certificate terms and conditions, a summary of the results of those activities and a discussion of any significant changes to any monitoring or mitigation program, including the reason for any such changes.

v. Compliance Report: A report describing the certificate holder's compliance with all site certificate conditions that are applicable during the reporting period. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate.

vi. Facility Modification Report: A summary of changes to the facility that the certificate holder has made during the reporting period without an amendment of the site certificate in accordance with OAR 345-027-0350.

[OAR 345-026-0080]

Conclusions of Law

Based on the foregoing recommended findings of fact, conclusions of law, and subject to recommended, mandatory and site-specific conditions, the Department recommends Council find that the proposed facility would satisfy the requirements of OAR 345-022-0000.

IV.B Organizational Expertise: OAR 345-022-0010

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, 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.

(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

Findings of Fact

Applicant and Parent Company

The applicant, EE West End Solar LLC, is a limited liability company formed in the State of Delaware on September 12, 2018. The applicant is authorized by the Oregon Secretary of State to conduct work in (Registry Number 172382393) and has a registered agent in Oregon.[54] The applicant has retained a resident attorney-in-fact from Stoel Rives LLP, Ms. Sarah Stauffer Curtiss to support in the preparation and submission of the ASC.

The applicant is a wholly owned subsidiary of Eurus Solar Holdings, LLC. Eurus Solar Holdings LLC is a wholly owned subsidiary of Eurus Energy America, LLC. Eurus Energy America, LLC is a wholly owned subsidiary of Eurus Energy America Corporation (parent company). The applicant and Eurus Solar Holdings LLC have executed a limited liability company agreement, effective September 1, 2021.[55] This agreement establishes, in part, the ownership and management of assets and interests by the applicant and its sole Member, Eurus Solar Holdings LLC.

The applicant's parent company is the North American branch of Eurus Energy Holdings Corporation, an international renewable energy developer owned by Toyota Tsusho

[54] WESAPPDoc3 ASC Exhibit A Applicant Information 2022-09-28. Attachments A-1 and A-2.

[55] WESAPPDoc3 ASC Exhibit A Applicant Information 2022-09-28. Attachment A-3.

Corporation and Tokyo Electric Power Company.[56] The applicant is a project-specific LLC and, as an individual LLC, does not have experience in designing and constructing energy facilities. The applicant relies on the technical experience and financial assurance of its parent LLC and parent company to demonstrate compliance with the standard.

Senior Legal Counsel for Eurus Energy America Corporation and EE West End Solar LLC, Anthony Cresap, provides an August 9, 2021 letter affirming that based upon review of original or certified copies of books and records, limited liability company records, certificate of public officials, and instruments regarding the applicant, the applicant has the legal authority to construct and operate the proposed facility without violating its articles of organization, covenants or similar agreement.

Applicant is covered by comprehensive business, property and liability insurance. Applicant will own the proposed facility, which will have an estimated value of $80 million dollars, and will generate revenue from a power purchase agreement or from selling power into the wholesale market.[57]

~~The applicant and parent company affirm its intent to execute a performance guarantee prior to construction of the facility, using the form provided in Attachment D of this order. This guarantee affirms that the parent company unconditionally guarantees to Council the full and prompt payment and performance of all obligations, accrued and executory, which Eurus Energy Holdings LLC presently or hereafter may have under the site certificate. The guarantee also affirms that the parent company agrees to indemnify Council against any losses sustained and expenses incurred as a result of the enforcement or attempted enforcement by Council of any of its rights and remedies under the site certificate, in the event of a default by the applicant thereunder, and/or as a result of the enforcement or attempted enforcement by the EFSC of any of its rights against applicant hereunder. To ensure that that the guarantee is executed prior to construction of the facility, the Department recommends Council impose the following condition:~~

> ~~**Recommended Organizational Expertise Condition 1 (PRE):** Prior to construction, the certificate holder shall submit to the Department a guarantee signed by its parent company guaranteeing payment and performance of the certificate holder's obligations under the site certificate using the form provided in Final Order on ASC Attachment D.~~

Applicant personnel includes a President and Chief Executive Officer; Vice President of Development; Assistant Vice President of Development Engineering and Senior Counsel. The qualifications of these individuals include:

- President and Chief Executive Officer: a degree in law; 20 years of experience in wind power development; and employed by Euros Energy America for 14 years.

[56] "Who is Eurus Energy America?" https://eurusenergy.com/about/, accessed 6/13/2022

[57] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02. Page 14 of 192.

- Vice President of Development: degrees in History, Psychology, International Affairs/International Economics and Japan Studies; worked in the field of energy development for 23 years; and employed by Euros Energy America for 10 years.
- Assistant Vice President of Development Engineering: degrees in Civil Engineering, Construction Management; 15 years of experience in construction management
- Senior Counsel: degree in law, geography and environmental planning; 15 years of experience as a land use attorney and planner; and employed with Euros for 25 years.

Parent Company Experience in Constructing and Operating Wind and Solar Energy Facilities

Parent company has developed over 700 megawatts (MW) of renewable energy generation in the United States. This experience includes 4 wind projects from 1987 through 2012 ranging in size from 41 to 250 MW; and 2 solar projects ranging in size from 2011-2017 ranging from 27 to 45 MW.

Applicant has not selected engineers, manufacturers or contractors.

Compliance History

An LLC owned by the applicant's parent company received a Notice of Violation (NOV) from the Texas Public Utility Commission in December 2021. The NOV resolution is pending approval by the Texas PUC. The information provided in ASC Exhibit D demonstrates that the applicant and its parent company comply with, or take efforts to resolve, regulatory compliance issues.

Recommended Opinion

Based on compliance with recommended Organizational Expertise Condition 3(c)(4), ~~1~~ (~~pre-construction execution of performance guarantee agreement between applicant and parent company~~ the Department's ability to review site certificate compliance status to determine the adequacy of the decommissioning estimate which would provide the State protection if the applicant went bankrupt or the Council opted to terminate the site certificate and the applicant was unable to fulfil its facility decommissioning obligation) and financial assurance letter provided in ASC Exhibit M (Attachment M-2), the Department recommends Council find that the applicant has the ability to design, construct, operate and retire the proposed facility in compliance with site certificate conditions and has the ability to obtain a bond or letter of credit in a form and amount necessary to restore the site to a useful, nonhazardous condition.

The Department recommends Council impose the following conditions to ensure that the facility is designed, constructed, operated and retired in a manner that protects public health and safety.

General Conditions

Recommended Organizational Expertise Condition 1~~2~~ (GEN): Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate will be issued to the certificate holder. Any civil penalties under the site certificate will be levied on the certificate holder.

Recommended Organizational Expertise Condition 2~~3~~ (GEN): The certificate holder must notify the Department within 72 hours of any occurrence of the following:

a. There is an attempt by anyone to interfere with the facility's safe operation.
b. There is a significant nature event such as a fire, earthquake, flood, tsunami or tornado, or human-caused event such as a fire or explosion.
c. There is any fatal injury at the facility.

[OAR 345-026-0170]

Recommended Organizational Expertise Condition 3~~4~~ (GEN): The certificate holder shall, as soon as reasonably possible:

a. Report incidents or circumstances that may violate the terms or conditions of the site certificate, terms or conditions of any order of the Council, or the terms or conditions of any order issued under OAR 345-027-0230, to the Department. In the report to the Department, the certificate holder shall provide all pertinent facts including an estimate of how long the conditions or circumstances existed, how long they are expected to continue before they can be corrected, and whether the conditions or circumstances were discovered as a result of a regularly scheduled compliance audit;
b. Initiate and complete appropriate action to correct the conditions or circumstances and to minimize the possibility of recurrence;
c. Submit a written report within 30 days of discovery to the Department. The report must refer to the language in (d) of the condition and contain:
    i. A discussion of the cause of the reported conditions or circumstances;
    ii. The date of discovery of the conditions or circumstances by the responsible party;
    iii. A description of immediate actions taken to correct the reported conditions or circumstances;
    iv. A description of actions taken or planned to minimize the possibility of recurrence; and
    v. For conditions or circumstances that may violate the terms or conditions of a site certificate, an assessment of the impact on the resources considered under the standards of OAR Chapter 345 Divisions 22 and 24 as a result of the reported conditions or circumstances.
d. Upon receipt of the written report in sub(c) of this condition, the Department may review the facility record for incidents or circumstances reported or reportable under sub(a) related to public health and safety, the environment, or other resources protected under Council standards. If these incidences are determined by the Department to impact the adequacy of the facility decommissioning cost, the Department or Council may adjust the contingencies identified in Final Order on ASC Table 4 and shall request and receive an updated bond or letter of credit from certificate holder in the adjusted amount.

[OAR 345-029-0010]

Preconstruction Conditions

Recommended Organizational Expertise Condition 5 (PRE): Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall select a construction contractor with a low rate of historic environmental and safety compliance citations. Certificate holder shall provide the following documentation to the Department:

a. Qualifications and contact information of the of the major design, engineering and construction contractor(s) and subcontractors, as applicable.
b. Construction contractor compliance history.
c. Contract excerpt affirming that contractors are required to comply with the terms and conditions of the site certificate, including selecting design layout and construction materials that minimize impacts to resources protected under Council standards.

Recommended Organizational Expertise Condition 6 (PRE): Prior to construction, the certificate holder shall provide to the Department the qualifications and contact information of the certificate holder's construction manager.

Construction Conditions

Recommended Organizational Expertise Condition 7 (CON): During construction, the certificate holder shall:

a. Maintain an onsite construction manager.
b. Require that the construction manager implement and monitor all applicable construction related site certificate conditions.
c. Within six months after beginning construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall report on the progress of construction and shall address the following:
    i. Facility Status: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. The certificate holder shall describe any unusual events, such as earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility.
    ii. Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period.
    iii. Compliance Report: A report describing the certificate holder's compliance with all site certificate conditions that are applicable during the reporting period. For

ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate.

iv. Facility Modification Report: A summary of changes to the facility that the certificate holder has made during the reporting period without an amendment of the site certificate in accordance with OAR 345-027-0050.

[OAR 345-026-0080(1)(a)]

Operational Conditions

Recommended Organizational Expertise Condition 8 (PRO): Prior to operation, the certificate holder shall provide to the Department the qualifications and contact information of the individuals responsible for monitoring facility operations, including individuals or third-party entity responsible for onsite maintenance.

Recommended Organizational Expertise Condition 9 (OPS): During operations, the certificate holder shall maintain records of operations and maintenance activities and shall make available for Department review upon request.

Public Health and Safety

Proposed facility components including solar array, substation transformers, transmission line, and battery storage system could result in health and safety impacts from unanticipated fire- and electrical hazards. ASC Exhibit V and Section IV.N., *Wildlife Prevention and Risk Mitigation,* provide an evaluation of potential fire related risks from proposed facility design, construction and operation. Under Recommended Wildlife Prevention and Risk Mitigation Conditions 1 through 3, the applicant is required to submit and implement an Emergency Management and Wildfire Mitigation Plan, which has design features, inspections, and emergency protocols which would minimize public health and safety risks. The Department also recommends that potential risks from handling and transport of spent or damaged battery and battery waste be minimized by requiring that the applicant secure contracts with third-party operators establishing that applicable federal battery transport requirement be adhered, as presented in the condition below:

Recommended Organizational Expertise Condition 10 (GEN): The certificate holder shall contractually require its third-party contractor used to transport and dispose battery and battery waste to comply with all applicable federal regulations and manufacturer recommendations related to the transport and handling of battery related waste.

Ability to Restore the Site to a Useful, Non-Hazardous Condition

The applicant's ability to restore the site to a useful, non-hazardous condition is evaluated based on the applicant's experience decommissioning facilities, its environmental compliance history, the adequacy of the facility decommissioning cost estimate provided in ASC Exhibit X,

and its ability to obtain a bond or letter of credit in the amount equivalent to the decommissioning estimate.

Applicant and parent company do not have experience in decommissioning energy facilities. Applicant and parent company have not received citations or warning related to spill or other hazardous actions on any of its constructed or operating facilities. A financial institution approved by Council for use in issuing bonds or letter of credits to meet the Retirement and Financial Assurance standard, Sumitomo Mitsui Banking Corporation, provides a letter dated July 7, 2021, that there is a reasonable likelihood of its willingness to provide a letter of credit to the parent company up to $5.8 million.[58, 59]

Third-Party Permits

Resources needed for facility construction that will be secured through permits obtained by a third-permit, include:

- Umatilla County Conditional Use Permit and Zoning Permit(s)
- Oversize Load Movement Permit
- Umatilla County Road Access Permit

The switchyard substation will be owned and operated by a third-party (the utility that owns the transmission line that will provide grid-interconnection for the proposed facility).

The applicant has not selected its contractors, nor confirmed the third-party permits that will be required for facility construction and operation. Therefore, no evidence has been provided demonstrating that the applicant can obtain access to the resources secured by the permits. The Department recommends Council impose the following condition requiring that adequate evidence be provided for third-party permits and resources prior to construction:

Recommended Organizational Expertise Condition 11 (GEN): The certificate holder shall:

a. Provide to the Department a list of federal, state and local permits, including any third-party permits related to facility siting; and a schedule for obtaining identified permits.
b. Once obtained, provide copies of all permits, including third-party permits, required for facility siting to the Department.

In addition, the Department recommends Council require that, prior to construction, the applicant provide evidence of a shared-use agreement between the third-party and applicant for use of the switching station during facility operation, and acknowledgement of the

[58] WESAPPDoc3-13 ASC Exhibit M Financial Capability 2022-10-24, Attachment M-2.

[59] At its January 28, 2022 EFSC Meeting, Council conducted its annual review and approval of financial institutions, where Sumitomo Mitsui Banking Corporation (SMBC, NY Branch) was approved as a financial institution for EFSC projects. WESAPPDoc8 EFSC Meeting-Item-B-Annual-Financial-Assurance-Update-Staff-Report and Mins 2022-01-28

applicant's responsibilities under the site certificate for the switching station, a related or supporting facility to the energy facility (see recommended Land Use Condition 6).

Conclusions of Law

Based on the recommended findings of fact and compliance with recommended conditions, the Department recommends that the Council find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with the Organizational Expertise standard.

IV.C Structural Standard: OAR 345-022-0020

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site;

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

***[60]

[60] OAR 345-022-0020(3) does not apply to this ASC because the proposed facility would not meet the criteria for a special criteria facility as defined in ORS 469.373(1).

Findings of Fact

The analysis area for review of geologic and soil stability, as evaluated under the Council's Structural Standard, is the area within the site boundary. The analysis area for historic seismic and potentially active faults, as defined by the applicant, extends 50-miles from the proposed site boundary.

As required under OAR 345-021-0010(1)(h), the applicant identified geological and soil stability within the analysis area, and evaluated seismic and non-seismic hazards which could, adversely affect or be aggravated by the construction or operation of the facility. Seismic Hazards evaluated for the proposed facility include potential fault rupture, earthquake-induced landslides, liquefaction and lateral spread, settlement, and subsidence. Non-Seismic geologic hazards that the applicant evaluated included landslides, volcanic activity, erosion, flooding, and shrinking and swelling soils.

Council rules at OAR 345-021-0010(1)(h)(B) require applicant consultation with the Oregon Department of Geology and Mineral Industries (DOGAMI) on the appropriate methodology and scope of the seismic hazards, and geology and soil-related hazards assessments, and the appropriate site-specific geotechnical work to be completed to demonstrate compliance with the Council's Structural Standard. The applicant consulted with DOGAMI and the Department on June 10, 2021, and discussed the methodology for the seismic hazard assessment, and the appropriate methods to evaluate seismic hazards at the site. Notes from the June 10, 2021 consultation were provided as Attachment H-1 of ASC Exhibit H, and summarize DOGAMI's recommendations to the applicant for clear references of sources used for data references, and to look at all the appropriate resources and data sources. [61]

As described further below, the applicant represents that prior to design and construction, it would conduct a site-specific geotechnical assessment to confirm the anticipated soil conditions including bearing capacity of the soils, address subsurface exploration plans and testing plans, and provide engineering recommendations for the final design of the proposed facility structures.[62]

Potential Seismic Hazards

OAR 345-022-0020(1)(a) and (b) requires the applicant adequately characterize the seismic hazards of the proposed site, and demonstrate an ability to design, engineer and construct the proposed facility to avoid dangers to human safety and the environment from seismic hazards affecting the site. The applicant identified potential seismic hazards by conducting a literature review that included topographic and geologic maps, aerial photographs, existing geologic reports and data provided by; the Oregon Department of Geology and Mineral Industries

[61] WESAPPDoc3-8 ASC Exhibit H Geological Soil Stability 2022-09-28. Attachment H-1.

[62] OAR 345-021-0010(1)(h) requires that ASC Exhibit H rely on "reasonably available sources" regarding the geological and soil stability within the analysis area.

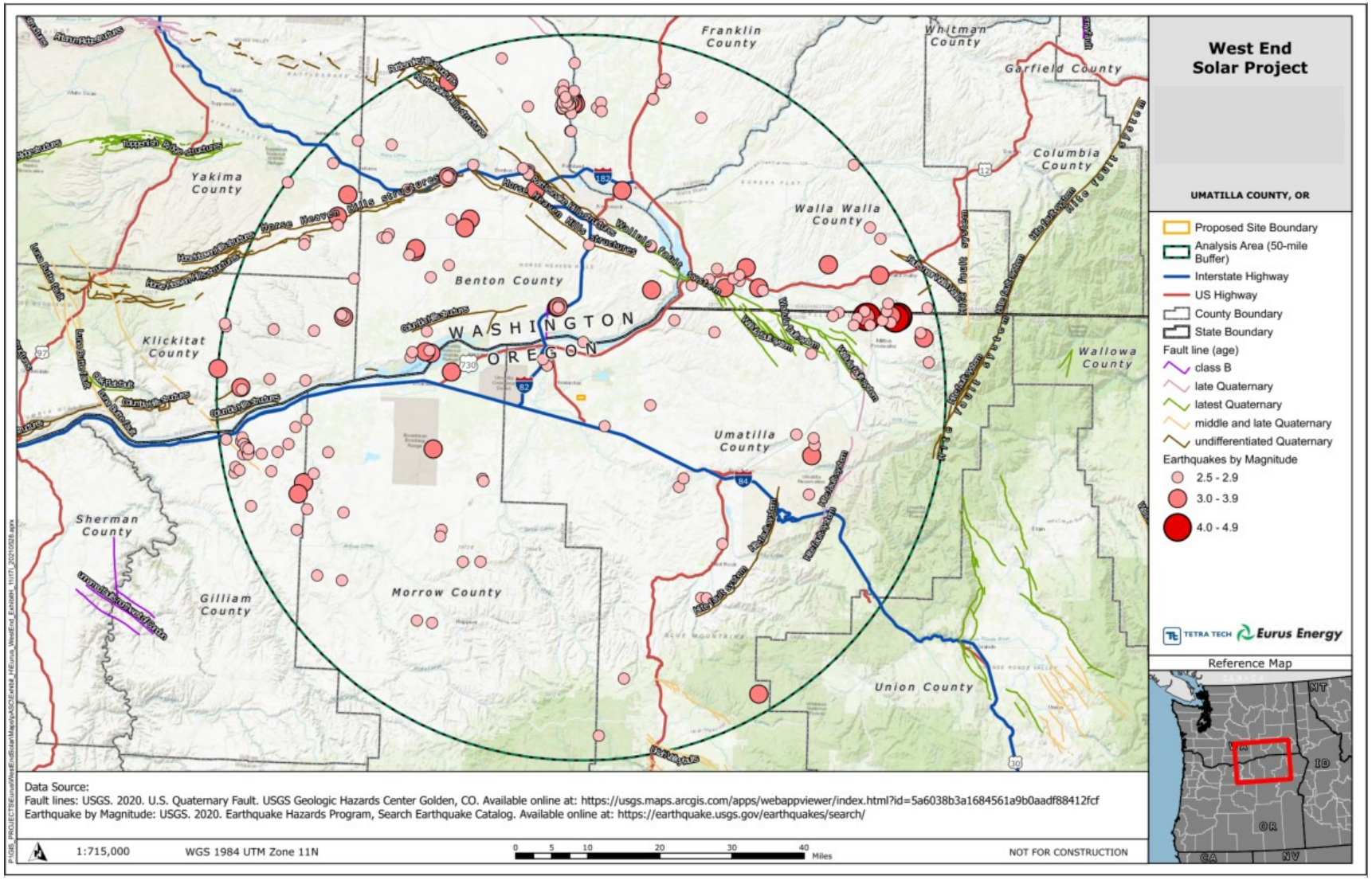
(DOGAMI), the Oregon Water Resources Department (OWRD), U.S. Geological Survey (USGS), and the Natural Resources Conservation Service (NRCS). Impacts evaluated by the applicant included fault displacement, ground shaking, liquefaction, behavior of subsurface materials, and adverse effects from groundwater or surface water.

Based on their literature review, a desktop evaluation, and DOGAMI consultation, the applicant anticipates the risk of seismic hazards at the proposed facility to be low. Data from The National Earthquake Information Center shows no earthquakes within the site boundary. There are no known or active faults mapped within the site boundary. The area is likely not in any landslide hazard zone based on data accessed thus far. DOGAMI agreed there would be no landslides in project area/vicinity and that the area is very flat.

A commitment to conduct a site specific geotechnical exploration prior to final design and construction would to ensure safe design, construction, and operation of the proposed facility. Requirements to include a description of any potentially active faults within the proposed site boundary and their potential risk to the proposed facility, a determination of the final Site Class for the proposed site boundary area to be applied to final design, and any additional mitigation that will be undertaken by the applicant to ensure safe design, construction, and operation of the proposed facility are recommended by the Department for Council to impose as recommended Structural Standard Condition 1 (below). The criteria of the site-specific geotechnical investigation are the applicant's representations made in ASC Exhibit H, to ensure a safe design, construction, and operation of the proposed facility.

Figure 3 provides the locations of historic seismicity and potentially active faults within the 50-mile analysis area, and in relation to the proposed facility site. As shown in the figure, no earthquakes are located within 10 miles of the site and the closest earthquakes were fairly small.

Figure 3: Historic seismicity and potentially active faults in relation to the West End Solar Project



Maximum Considered Earthquake Ground Motion under IBC 2015 was considered by the applicant at the proposed site by using a probabilistic seismic hazard analysis from the USGS Unified Hazard Tool (USGS 2020a). Based on the data from the USGS 2020a hazard tool, at the bedrock surface at the center of the site, at 475 and 2,475-year intervals, earthquakes have peak ground acceleration of 0.198g, where "g" is the acceleration of gravity.

Completion of a site-specific geotechnical analysis prior to construction would be used to evaluate risks of any potentially active faults within the site boundary, determine the soil characteristics and Site Class, and to inform additional mitigation to ensure safe design, construction, and operation of the facility. The Department recommends Council require that the geotechnical investigation include a site-specific probabilistic seismic hazards assessment, unless otherwise approved by the Department in consultation with DOGAMI, to appropriately inform site class design requirements. The Department recommends Council impose the following conditions to ensure compliance with the applicants' commitment to conduct additional Geotechnical analysis:

> **Recommended Structural Standard Condition 1 (PRE):** Before beginning construction, the certificate holder shall submit a site-specific geotechnical investigation report, consistent with the Oregon State Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports, or newer guidelines if available to the Department, for review in consultation with its third-party consultant or DOGAMI. The site specific geotechnical investigation report shall include information on any potentially active faults within the site boundary, soil characteristic and Site Class determination, and include a site-specific probabilistic seismic hazards assessment to inform Site Class design.
>
> **Recommended Structural Standard Condition 2 (GEN):** The certificate holder shall design, engineer and construct facility components based on Site Class (soils-related category) determined through the site-specific geotechnical investigation (Structural Standard Condition 1), as reviewed and approved by the Department in consultation with its third-party consultant or DOGAMI.

Based on review of ASC Exhibit H and consultation with DOGAMI, the Department recommends Council find that potential seismic hazards at the site have been adequately characterized and that the applicant will design, construct and operate the proposed facility in a manner that would minimize public health and safety risks from these hazards. Nonetheless, the Council's Mandatory Conditions at OAR 345-025-0006(12) – (14) provide structural related design requirements, which the Department recommends Council find sufficient to address the applicant's ability to design the proposed facility to minimize risks to public health and safety and the environment from a seismic event, as represented below:

> **Recommended Structural Condition 3 (GEN):** The certificate holder must design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result

from all maximum probable seismic events. As used in this rule "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. For coastal sites, this also includes tsunami hazards and seismically-induced coastal subsidence.
[Mandatory Condition OAR 345-025-0006(12)]

Recommended Structural Condition 4 (GEN): The certificate holder must notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions.
[Mandatory Condition OAR 345-025-0006(13)]

Recommended Structural Condition 5 (GEN): The certificate holder must notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions.
[Mandatory Condition OAR 345-025-0006(14)]

Non-Seismic Geologic Hazards and Design Measures to Avoid Non-Seismic Hazards

OAR 345-022-0020(1)(c) and (d) require that the applicant adequately characterize the nonseismic hazards of the proposed site; and, that the applicant demonstrate an ability to design, engineer and construct the proposed facility to avoid dangers to human safety and the environment from the identified hazards.

To evaluate the presence of non-seismic geologic hazards, the applicant conducted a literature review and field reconnaissance. The literature review evaluated various sources including DOGAMI's Statewide Landslide Information Database for Oregon, Release 2 (SLIDO-2) database, topographic maps, geologic maps and aerial photographs. The field reconnaissance of the facility site was used to evaluate erosion potential and collapsing soils. Based on the sources and field evaluation, the potential non-seismic geologic hazards within the analysis area include landslides/slope instability, erosion, flooding and shrinking and swelling soils.

The preconstruction geotechnical investigation (recommended Structural Standard Condition 1) will identify any onsite slope stability and shrink-swell soil issues. The applicant is required to avoid any identified slope stability issues or implement remedial measures; and, over-excavate

and replace loess soil with structural-fill, wetting and compacting, deep foundations, or avoidance (recommended Structural Standard Condition 2). Wind and water erosion will be mitigated through installation of silt fences, physical controls and other best management practices (as recommended be required during construction and operation under Soil Protection Conditions 1, 2 and 3). Onsite flood risk will be avoided by designing access roads and drainages in a manner that directs stormwater runoff away from structures and into drainage ditches and culverts (recommended Land Use Condition 1).

Based on compliance with the above-recommended conditions, the Department recommends Council find that potential nonseismic hazards at the site have been adequately characterized and that the applicant will design, construct and operate the proposed facility in a manner that would minimize public health and safety risks from these hazards.

Conclusions of Law

Based on the foregoing analysis, and in compliance with OAR 345-022-0020(2), the Department recommends that the Council find that with the inclusion of the conditions listed above, the proposed facility can be constructed and operated in compliance with the requirements of the Structural Standard.

IV.D Soil Protection: OAR 345-022-0022

> *To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.*

Findings of Fact

The analysis area for the Soil Protection standard is the area within the site boundary, as established in the Expedited Review Project Order.

Existing Soil Conditions and Land Use

The Natural Resources Conservation Service Soil Data (NRCS) identifies the soil types within the analysis area as Adkins fine sandy loam (which constitutes approximately 73 percent of the 324 acre analysis area), and Quincy fine sand (approximately 27 percent of the analysis area). Both soil types are at least seven feet thick, have slopes ranging from zero to five percent, and have low to moderately low runoff. The erosion factor that indicates the susceptibility of a soil to erosion by water, or “K factor” of both soil types, ranges from approximately 0.1 to 0.32, which could be considered slight to moderate erodibility. Wind erosion is moderate for the Adkins fine sandy loam and is severe for the Quincy fine sand. The land within the analysis area is zoned as

Exclusive Farm Use by Umatilla County, and uses of the land include fallow agriculture.[63] Adkins fine sandy loam is considered prime farmland if irrigated, whereas the Quincy fine sand is not considered prime farmland.

Soil characteristics including the NRCS capability class and farmland rating of the two soil types in the analysis area are presented in Table 1: *Soil Characteristics within and Adjacent to the Proposed Site Boundary* below.

Table 1: Soil Characteristics within and Adjacent to the Proposed Site Boundary

NRCS Soil Unit	NRCS Soil Capability Class (irrigated; nonirrigated)	NRCS Farmland Rating	Water Erosion (K-factor)	Wind Erosion	Permeability
1B -- Adkins fine sandy loam	Class 2; Class 4	Prime if irrigated	0.32 (Moderate)	Moderate	High
74B -- Quincy fine sand	Class 4; Class 7	Not prime	0.1 (Slight)	Severe	Very High

Potential Adverse Impacts to Soil

To evaluate potential adverse impacts to soils, the applicant considers the entire area within the site boundary (324 acres) subject to temporary or permanent disturbance.

Construction

Proposed facility construction could result in adverse impacts to soils from construction activities such as site preparation, grading, equipment use, and on-site traffic which can cause erosion, compaction, loss of vegetation, and soil contamination from spills and leaks.

The Oregon Department of Environmental Quality's (ODEQ) National Pollutant Discharge Elimination System stormwater discharge permit (NPDES-1200C permit) would not be required for this facility because there are no surface waters, wetlands, ditches, or conveyance systems within or adjacent to the proposed site boundary, therefore, there is no possibility of stormwater (rainfall or snowmelt) running off the site into surface waters of the state or into a conveyance systems leading to surface waters of the state. The applicant describes best management practices (BMPs) to reduce and mitigate soil impacts in ASC Exhibit I, Attachment I-1: Erosion Sediment Control Measures, also attached to this order. As recommended below in Soil Protection Condition 1, the Erosion Sediment Control Measures would be finalized prior to construction of the facility. Attachment I-1 also includes additional measures the applicant

[63] The NRCS web soil survey defines fallow as "Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue." (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx)

discusses in Exhibits P (Fish and Wildlife Habitat), K (Land Use), and U (Public Services). The erosion and sediment control measures and best management practices (BMP's) include the following:

- Minimizing to the maximum extent practicable, grading at the site and unnecessary disturbance, while preserving existing vegetation where practical. A scheduled/phased grading approach would minimize soil exposure and prevent exposed inactive areas from becoming a source of erosion, and minimize fugitive dust.
- Sediment basins and traps will be located at low points below disturbed areas. Earth dikes or swales will be implemented as needed to route drainage from disturbed areas into the basins. Sediment barriers and sediment fences will be placed below small, disturbed areas on gentle to moderate slopes.
- Vegetate and mulch disturbed areas. Temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses. Seed and mulch exposed soil as soon as practicable after grading is completed.
- Implement fugitive dust abatement measures that include the application of water, soil-binding agents, or other dust control techniques to avoid wind-blown soil. If soil-binding agents are used, they will be applied in a way to not travel beyond the site. Fugitive dust from truck traffic would be minimized by applying water to access roads and by keeping paved public rights-of-way (ROW) clean or wet down. Stabilized construction exits will be used to assist with cleaning of truck tires as the vehicles leave unpaved areas. Airborne dust wet suppression system and water spray mist would be required for soil loading, hauling, and backfilling.
- Areas where soils are stockpiled, a combination of the following measures may be implemented: water spray/mist, soil-binding agents, and/or other dust suppression systems such as covering stockpiles particularly if sustained wind greater than 20 miles per hour are expected.

In addition to the potential construction related erosion impacts, proposed facility construction may cause localized soil compaction. Haul trucks and heavy equipment would induce soil stress, may compact the native soils on the site. To minimize and mitigate soil compaction, the applicant proposes to scarify and reseed affected areas after construction. The Department recommends Council impose Recommended Soil Protection Condition 1, which would require the certificate holder finalize the Erosion Sediment Control Measures with the Department (in consultation with ODEQ) for review and approval, prior to construction. The Erosion Sediment Control Measures shall be based upon the draft plan provided in Attachment I-1 of Exhibit I.

Recommended Soil Protection Condition 1 (PRE): Prior to construction, the certificate holder shall submit for review and approval to the Department, in consultation with ODEQ, the Erosion Sediment Control Measures to be implemented during construction, consistent with the measures included in Attachment I-1 of the Final Order on the ASC. Components of

the plan to be finalized shall take into consideration site specific information obtained during the preconstruction geotechnical investigation, and the final facility design.

Recommended Soil Protection 2 (CON): During construction, the certificate holder shall conduct all work in compliance with the final Erosion Sediment Control Measures approved in Soil Protection Condition 1, as modified by the Department, as necessary.

Recommended Soil Protection 3 (OPS): During operation, the certificate holder shall conduct all work in compliance with the final Erosion Sediment Control Measures approved in Soil Protection Condition 1, as applicable, and as modified by the Department, as necessary.

Facility construction activities could result in soil contamination hazards including leakage and spillage of fuels or lubricants associated with construction equipment, or the from other industrial materials including oils, lubricants, and solvents. During construction, on-site fuel storage (i.e., for back-up generators, etc.) may be placed in designated areas within temporary staging areas. Secondary containment and refueling procedures for on-site fuel storage will follow the contractor's Spill Prevention, Control, and Countermeasures Plan, discussed further below. For the Construction SPCC, the Construction Project Manager or its designee, will assure that for any tank, container or drum of oil, diesel or chemical, equal to or greater than 55 gallons, the following prevention and control measures will be provided at all times:

1. Secondary containment of at least 110 percent of the volume of the primary container.
2. Routine inspection of fluid levels and containment conditions.
3. Spill Response equipment and personnel available and prepared to deploy.
4. Site Security to control access to equipment and property.

Spill Prevention, Control, and Countermeasures (SPCC) Plan outline is provided in ASC Attachment B-2. Prior to construction, the applicant will retain a contractor to prepare a SPCC Plan that would comply with 40 CFR 112 (Oil Pollution Prevention), including the safe cleanup of hazardous materials. The SPCC plan will include the following steps that will be followed in the event of a spill:

1. Eliminate potential ignition sources;
2. Identify and shut down source of the discharge to stop the flow;
3. Contain the discharge with sorbents, berms, fences, trenches, sandbags, etc.;
4. Contact the Facility Manager or his/her alternate;
5. Contact regulatory authorities and the response organization; and
6. Collect and dispose of recovered products according to regulation.

The Department recommends Council require that the applicant develop, maintain, and conduct all work in compliance with an SPCC Plan, by imposing the following Conditions:

Recommended Soil Protection Condition 4 (PRE): Prior to construction, the certificate holder shall prepare and submit to the Department a construction Spill Prevention Control and Countermeasure Plan (SPCC), based on the draft SPCC Plan outline included in Attachment B-2 of the Final Order on the ASC.

Recommended Soil Protection 5 (CON): During construction, the certificate holder shall conduct all work in compliance with the final construction SPCC Plan. Certificate holder shall report spill and cleanup activities to the Department within 72 hours and shall make inspection records available to the Department upon request.

Operation

Operation activities that could result in negative impacts to soils including erosion, compaction and contamination, would occur from solar panel washing, routine service maintenance of the facility components, and inadvertent spills from facility components.

Solar panels may be washed twice a year. Washwater from panel washing could negatively impact soils through contamination, if soaps and detergents are used or if paints and finishes are degraded with pressure washing; and, impacts to bioorganisms if overly heated water is used. To minimize these potential impacts, the Department recommends Council impose the following condition prohibiting use of chemicals, soaps, and detergents, unless Chemical Safety Data Sheets for low volatile organic compound/biodegradable cleaning chemicals and solvents are submitted to the Department for review and approval. The Department also recommends that the condition prohibit use of heated water and authorize pressure washing, so long as it does not remove paint or other finishes.

Recommended Soil Protection Condition 6 (OPR): During facility operation, if solar panel washing is planned to occur, the use of chemicals, soaps, detergents and heated water is prohibited, unless Chemical Safety Data Sheets for low volatile organic compound/biodegradable cleaning chemicals and solvents are submitted to the Department for review and approval. Pressure washing is allowed, so long as it does not remove paint or other finishes.

The transformers associated with the solar panels would contain approximately 550 gallons of transformer oil. The main power transformer at the collector substation would contain approximately 14,000 gallons of transformer oil and may use a reinforced concrete pit to retain any oil that may be accidentally spilt from the transformer per applicable code and local requirements. Each transformer area would have a drainage sump for the collection of liquid within the containment. The design would allow for oil/water separation and a berm and liner solution may be considered, for oil containment, if it complies with all relevant codes and has a minimum lifespan of 30 years free of maintenance.

Hazardous materials used at the site during operation may include fuels, paint, spent oils, solvents, and pesticides will be stored in an operations and maintenance enclosure. Spill kits

containing items such as absorbent pads would be located on equipment and in on site temporary storage facilities to respond to accidental spills.

The ESS would either include an air or liquid coolant associated with a fire suppression system. Liquid cooled lithium-ion batteries use coolant similar to automotive antifreeze. The coolant, if used, is then recirculated through a closed system to cool the batteries. The battery storage units would also be contained and located upon concrete or gravel pads which would prevent seepage into soils.

Given the oil-containment capacity of the transformers, secondary containment and an SPCC are required. The Department recommends Council impose conditions to ensure that an operational SPCC is developed and implemented to address potential spill-related incidents during operations.

> **Recommended Soil Protection Condition 7 (PRO):** Prior to operation, the certificate holder shall submit to the Department a final copy of an Operational Spill Prevention Control and Countermeasures Plan (SPCC Plan).
>
> **Recommended Soil Protection Condition 8 (OPR):** During operations, the certificate holder shall submit any updates of the SPCC Plan in the annual report to the Department. Operational activities shall adhere to the requirements of the SPCC Plan. Certificate holder shall report spill and cleanup activities to the Department within 72 hours and shall make inspection records available to the Department upon request.

Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with the recommended site certificate conditions, the Department recommends that the Council find that the proposed facility would comply with the Soil Protection standard.

IV.E Land Use: OAR 345-022-0030

> *(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.*
>
> *(2) The Council shall find that a proposed facility complies with section (1) if:*
>
> > *(a) The certificate holder elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or*

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

*****

Findings of Fact

The analysis area for potential land use impacts, as defined in the Project Order, is the area within and extending 0.5-mile from the site boundary.

The applicant elects for Council to make a determination of compliance with applicable substantive criteria from Umatilla County Development ~~Ordinance or~~ Code (UCDC) pursuant to ORS 469.504(1)(b)(B). The Land Use standard therefore requires the Council to find that the proposed facility complies with local applicable substantive criteria and statewide planning goals adopted by the Land Conservation and Development Commission (LCDC) or take an exception to an applicable goal.[64] Compliance with applicable substantive criteria must be demonstrated for proposed facility components based on the appropriate land use category and zone. The proposed facility includes the following land use category and zone:

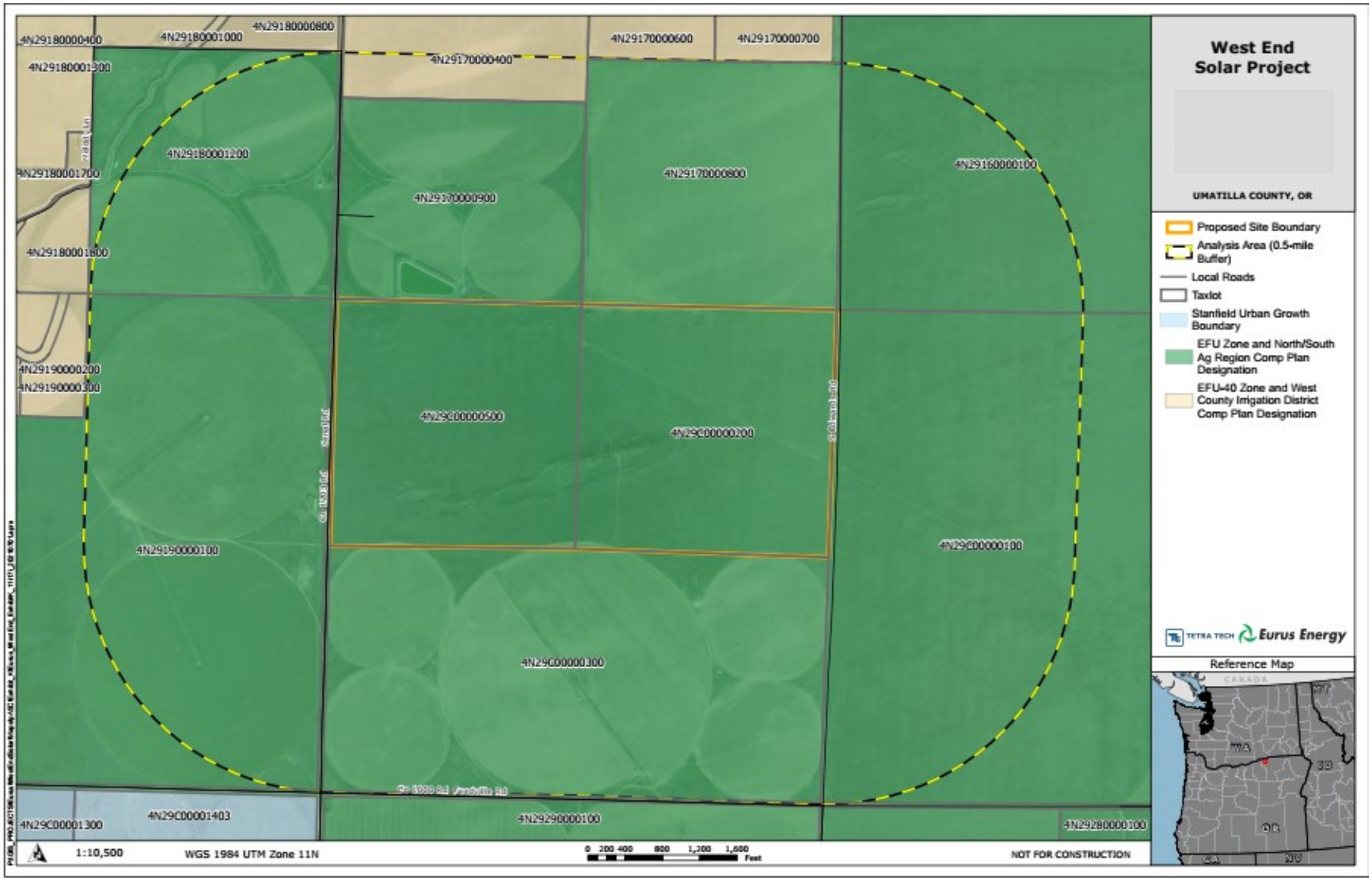
- Commercial solar power generation facility, Exclusive Farm Use (EFU) zone[65]
    - Up to 324 acres of solar PV energy generation components

Figure 4 below presents the 0.5-mile land use analysis area, the proposed site boundary, the underlying land use zone, comprehensive plan designation and map, and tax lot number.

[64] The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504.

[65] As presented in ASC Exhibits B and C, the proposed facility omits an interconnection transmission line because of the interconnection opportunities with 2 existing transmission lines intersecting the site boundary, and an existing transmission line paralleling the eastern site of the site boundary along S. Edwards Road. Therefore, because the facility does not need an interconnection transmission line and the proposed substation/switching station can interconnect to an existing line, on site or in direct proximity to the site, the requirements for a "utility necessary for public service" under UCDC 152.059(C) and 152.617(II)(7) are not applicable to the land use evaluation. WESAPPDoc7-2 Reviewing Agency Comment SAG Umatilla County_Waldher 2022-10-26.

1 **Figure 4: Land Use Analysis Area, Proposed Facility Site Boundary and Zoning/Comprehensive Plan Designations**



IV.E.1 Applicable Substantive Criteria

"Applicable substantive criteria" are criteria from the affected local government's (Umatilla County) acknowledged comprehensive plan and land use ordinance, which then must satisfy two requirements. The criteria within the acknowledged comprehensive plan and land use regulations must 1) be required by the statewide planning goals applicable to the proposed facility based on facility type or facility component and land use zone, and 2) be in effect on the date the applicant submits the preliminary application for site certificate (pASC), which in this instance occurred on November 5, 2021.[66]

For this ASC, the applicant requests a Council determination under ORS 469.504(1)(b)(B), which requires:

> *(B) For an energy facility or a related or supporting facility that must be evaluated against the applicable substantive criteria pursuant to subsection (5) of this section, that the proposed facility does not comply with one or more of the applicable substantive criteria but does otherwise comply with the applicable statewide planning goals, or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.*

ORS 469.504(1)(b)(B), as presented above, allows for Council to find that an applicant has satisfied the requirements of the Land Use standard, even if the proposed facility cannot comply with one or more "applicable substantive criteria" if the proposed facility otherwise complies with applicable statewide planning goals or demonstrates that an exception to the applicable statewide planning goal is justified. Strict compliance with "applicable substantive criteria" is therefore not required if compliance with statewide planning goals is demonstrated or Council finds that an exception is justified.

The affected local governments include the governing bodies of the jurisdictions for which proposed facility components would be located, which in this instance includes the governing bodies of Umatilla County – Umatilla Board of County Commissioners, appointed as a special advisory group (SAG) on November 24, 2021.[67]

Table 2 below provides the applicable substantive criteria recommended by the SAG.[68]

Table 2: Umatilla County Development Code (UCDC)[1]

Code Section	Title
Exclusive Farm Use (EFU) Zone Requirements	
§152.025	Zoning Permit
§152.060	Conditional uses permitted
§152.061	Standards for all conditional uses

[66] OAR 345-022-0030(3); ORS 469.504(1)(b)(A).

[67] WESAPPDoc3 West End Solar SAG Appointment Order Umatilla County 2021-11-19

[68] WESAPPDoc6-2 pASC Reviewing Agency Comment SAG Umatilla County Murdock 2021-12-15.

Table 2: Umatilla County Development Code (UCDC)[1]

§152.063	Development standards
§152.010	Access to Buildings, Private Driveways and Easements
§152.011	Vision Clearance
§152.015	Fences
~~§152.562~~	~~Off-Street Parking and Loading Requirements~~
§152.615	Additional Conditional Use Permit Restrictions
Umatilla County Comprehensive Plan (UCCP)~~1~~2	
Chapter 6: Agriculture Policies 1, 8 and 17	
Chapter 8: Open Space, Scenic and Historic Areas, and Natural Areas Policies 1(a), 5(a & b), 6(a), 8(a), 9(a), 10(c, d & e), 20 (a), 20(b)(1-8), 22, 23(a), 24(a), 26, 37 & 38(a-c), 39(a) and 42(a)	
Chapter 9: Air, Land, and Water Quality Policies 1, 7 and 8	
Chapter 10: Natural Hazards Policies 1 and 4	
Chapter 11: Recreational Needs Policy 1	
Chapter 12: Economy of the County Policies 1, 4 and 8(a-f)	
Chapter 14: Public Facilities and Services Policies 1(a-d), 2, 9 and 19	
Chapter 15: Transportation Policies 18 and 20	
Chapter 16: Energy Conservation Policy 1	
Notes: 1. Umatilla County confirmed that UCDC 152.562(I) (1-7) consists of parking lot design standards intended to apply to publicly accessible businesses. Because the proposed facility is not a public-use facility the parking lot design standards do not apply to the proposed facility. Th~~is~~ese criteria has~~v~~e been removed from list of "applicable substantive criteria" in Table 2 of the proposed order and from the land use evaluation in Section IV.E.1 (resulting in removal of recommended Land Use Condition 2(d)). [69] ~~1.~~2. Rather than recommend findings on the broad policies and goals articulated in the Comprehensive plan that are not specific to locations, activity or use, the Department recommends Council makes findings on compliance with the land use ordinance provisions that implement the relevant sections of the Comprehensive Plan. See ORS 197.175(2) and 197.015(11).	

Applicable Umatilla County Development Code Provisions

UCDC §152.025 Zoning Permit

(A) Prior to the construction, reconstruction, addition to or change of use of a structure, or the change of use of a lot, or the installation or replacement of a mobile home on a lot, a zoning permit shall be obtained from the County Planning Department. An amended zoning permit must be obtained when changes to an approved zoning permit occur. Changes include, but are not limited to, the size of the proposed structure, relocation of a structure or changes in the model year of a proposed manufactured home, etc.

[69] WESAPPDoc1-1 Proposed Order Agency Consultation SAG Umatilla County 2022-12-09.

As presented in the subsections below, the conditional use criteria for the proposed solar facility components require that conditional use and zoning permits, per tax lot, be obtained from Umatilla County.

To ensure that zoning permits are obtained prior to construction of all applicable structures the Department recommends Council impose the following condition:

> **Recommended Land Use Condition 1 (PRE):** Prior to construction of facility structures, as applicable, subject to the Council's jurisdiction and authority pursuant to ORS 469.504(1), the certificate holder shall obtain conditional use permits and zoning permits issued by the Planning Director, per affected tax lot, from Umatilla County Planning Department; copies of permits shall be provided to the Department.

Based on compliance with the above-recommended condition, the Department recommends Council find that the applicant will comply with UCDC §152.025 requirements.

UCDC §152.060 Conditional Uses Permitted

> *In an EFU zone the following uses may be permitted conditionally via administrative review (§ 152.769), subject to the requirements of this section, the applicable criteria in § 152.061, §§ 152.610 through 152.615, 152.617 and §§ 152.545 through 152.562. A zoning permit is required following the approval of a conditional use pursuant to §152.025. Existing uses classified as conditional uses and listed in this section may be expanded subject to administrative review and subject to the requirements listed in OAR 660, Division 033.*
> *****
> *(FF) Photovoltaic solar power generation facility as provided in OAR 660-033-0130(38).*

UCDC §152.060 establishes conditional use requirements for permissible land used within EFU-zoned land, including land uses meeting the definition of a "photovoltaic solar power generation facility." This proposed land use is subject to the requirements of UCDC §152.060, UCDC §152.061 and §152.615. A conditional use permit and zoning permits, per taxlot, are also required – local permits are addressed above and will be required per recommended Land Use Condition 1.

Under UCDC §152.060(FF), a solar PV facility may be permitted conditionally in the EFU zone as provided in OAR 660-033-0130(38). The evaluation of compliance with OAR 660-033-0130(38) is presented in Section IV.E.2 *Directly Applicable State Laws and Statutes*.

UCDC §152.061 Conditional Uses Permitted

> *The following limitations shall apply to all conditional uses in an EFU zone. Uses may be approved only where such uses:*

(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

There are no forest lands within the 0.5-mile land use analysis area, as shown in Figure 4, *Land Use Analysis Area, Proposed Facility Site Boundary and Zoning/Comprehensive Plan Designations*. Surrounding lands on the north, west and southern perimeters of the proposed site boundary are used for irrigated agriculture. In the area of the proposed facility, farmed crops include wheat, corn, potatoes and other row crops and the harvest season can extend 5 months.[70]

There are four property owners within the analysis area. ~~-~~Accepted farm practices on these properties are summarized below.

Windblown Ranch - owns the tax lots immediately west, east, and northeast of the site boundary.

- Windblown Ranch leases its land to Castle Rock Farming LLC. The tax lot west of the site boundary has been used for cultivation of wheat, grass seed, alfalfa, and most recently for potatoes.
- The tax lots east and northeast of the site boundary ~~has~~ have historically had no irrigation and ~~was~~ were uncultivated. However, recently these tax lots were added into the East Improvement Irrigation District boundary and have been planted with peas, corn, and potatoes.[71]

Walchli Farms - owns the tax lots immediately north of the eastern half of the site boundary.

- Walchli Farms rotates their crops as most farmers in this area and are known to cultivate wheat, potatoes, corn, and watermelons on ~~their various properties in this area~~irrigated parcels in the analysis area.[72]

Stanfield Hutterian Brethren - owns the tax lots immediately north and northwest of the western half of the site boundary.

[70] WESAPPDoc6-7 pASC Reviewing Agency Comment SAG Umatilla County Shafer 2022-02-09, p.1.
[71] In 2018, water rights were secured for Mr. Prior's lands (4N29160000100 and 4N29C00000100) from a newly formed East Improvement District (EID). Mr. Prior's Tract 1 was excluded from the EID boundary because it is site constrained by the existing Bonneville Power Administration and PacifiCorp transmission lines and located farther from the existing EID irrigation infrastructure than his other parcels.
[72] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Attachment K-9.

- Stanfield Hutterian Brethren rotates their crops as most farmers in this area and are known to cultivate wheat, potatoes, and corn on irrigated parcels in the analysis area.[73]

Windy River - owns the tax lot immediately south of the site boundary

- Windy River leases its land to Castle Rock Farming LLC. They are known to cultivate potatoes, wheat, corn, and grass seed on this irrigated tax lot.

Potential impacts from proposed facility construction to the above-referenced farm practices on surrounding lands include: construction related traffic congestion; local road damage due to heavy construction-related vehicular traffic; noxious weed infestation; wildfire risk; and, offsite erosion and dust. Potential impacts from proposed facility operations to the above-referenced farm practices on surrounding lands include: noxious weed infestation; and, offsite erosion and dust.

The Department recommends Council impose numerous conditions to address these potential impacts:

- Soil Protection Conditions 1, 2 and 3 (development and implementation of an erosion and sediment control plan)
- Land Use Conditions 7 and 8 (phased grading plan and onsite erosion materials)
- ~~Land Use Condition 5 (recording of "covenant not to sue")~~
- Land Use Condition 7 (landowner consultation on construction schedule and harvest season, and demonstration of adjustment of heavy traffic congestion during peak harvest season)
- Land Use Conditions 9, 10 and 11 (pre, during and post-construction noxious weed control plan)
- Public Services Condition 1 and 2 (finalization and implementation of a Traffic Management Plan, and secured road use agreement with county)
- Wildfire Prevention and Risk Mitigation Condition 1 and 2 (finalization and implementation of Wildfire Mitigation Plans during construction and operation)

Based on compliance with the above-recommended conditions, the Department recommends Council find that the proposed facility would comply with the requirements of UCDC 152.061(A) and (B) and would not significantly impact accepted farm practices, or the cost thereof, on surrounding properties used for agricultural purposes.

UCDC §152.063 Development Standards

In the EFU zone, the following dimensional and development standards shall apply:

[73] Id.

(A) Minimum parcel frontage. A parcel shall have a minimum street or road frontage of 30 feet

(B) Front yard setbacks. All buildings shall be set back from front property lines and side or rear property lines adjoining county roads, public roads, state highways, or public or private access easements as follows:

(1) At least 30 feet from the property line or easement boundary; or

(2) At least 60 feet from the center line of the road, highway, or easement, whichever is greater.

(C) Side and rear yard setbacks. Except as provided in division (B) above, the following standards shall apply for side and rear yard setbacks:

(1) The minimum yard setback for farm or non-farm dwellings shall be 20 feet.

(2) The minimum yard setback for accessory buildings or structures, for both farm and non-farm uses, shall be five feet, except as otherwise provided in applicable conditions of approval, or as constrained by division (D) below.

(3) Special minimum yard setbacks may be established for an approved conditional use to protect the public health, safety and welfare and to mitigate possible adverse impacts to adjacent land uses

(D) Distance maintained from aggregate mining operations. A dwelling shall not be located within 500 feet of an existing aggregate mining operation unless the owner of the property of the proposed dwelling:

******

(E) Stream setback. To permit better light, air, vision, stream pollution control, to protect fish and wildlife areas, and to preserve the natural scenic amenities and vistas along the streams, lakes, and wetlands, and to prevent construction in flood prone areas along streams not mapped as part of the National Flood Insurance Program, the following setbacks shall apply:

(1) All sewage disposal installations such as septic tanks and drainfields shall be set back from the mean water line or mark along all streams, lakes or wetlands a minimum of 100 feet, measured at right angles to the high water line or mark. In those cases, where practical difficulties preclude the location of the facilities at a distance of 100 feet, and the DEQ sanitarian finds that a chosen location will not endanger health, the Planning Director may permit the location of these facilities closer to the stream, lake, or wetland, but in no case closer than 50 feet.

(2) All structures, buildings or similar permanent fixtures shall be set back from the high water line along all streams, lakes or wetlands a minimum of 100 feet measured at right angles to the high water line or mark, except that this setback can be reduced to 20 feet if all of the following criteria are met:

******

(F) Other development standards. All development shall be subject to the regulations contained in §§ 152.010 through 152.017, §§ 152.545 through 152.562, and to the exceptions standards of §§ 152.570 through 152.577, including but not limited to: vision clearance, signs, off street parking, access, fences, wetland drainage, and maintenance, removal and replacement of riparian vegetation. (Ord. 2005-02, passed 1-5-05)

Two county roads adjacent to the proposed facility site, S. Edwards Road and Canal Road, are considered "front yards". Therefore, facility structures, not including the perimeter fence,[74] shall be setback 60 feet from the centerline of the road or 30 feet to the property line, whichever is greater in order comply with UCDC §152.063(B) front yard setbacks.

Facility structures shall be setback a minimum of 5-feet from property boundaries on the northern and southern sides of the site boundary in order comply with UCDC §152.063(C) side and rear yard setbacks.

The applicant has not proposed any aggregate mining and has demonstrated that there are no streams or wetlands within the site boundary.[75] Therefore, the development standards under UCDC §152.063(D) and (E) do not apply. The applicable development standards referenced in UCDC §152.063(F) are evaluated separately in this section.

To ensure that the final facility layout and design complies with the applicable UCDC §152.063 Development Standards, the Department recommends Council impose the following conditions:

> **Recommended Land Use Condition 2 (PRE)**: Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall submit to the Department and Umatilla County a site plan that adheres to the following development standards:
>
> a. For the property line parallel to S. Edwards Road and Canal Road, facility structures shall be set back 60 feet from the centerline of the road or 30 feet to the property line, whichever is greater. This setback does not apply to the perimeter fence.
> b. On the north and south sides of the site boundary, facility structures shall be setback a minimum of 5 feet from the property line. This setback does not apply to underground collector lines or internal access roads.
> c. On the interior boundary between the two adjacent properties within the site boundary, facility structures shall be set back a minimum of 5 feet from the property line. This setback does not apply to underground collector lines or internal access roads.

Based on compliance with the above-recommended condition, the Department recommends Council find that the applicant will comply with the applicable UCDC §152.063 Development Standards.

[74] On March 13, 2022, through email correspondence to the applicant's consultant (Tetra Tech, Leslie McLain), Umatilla County planner, Carol Johnson confirmed that fencing is not required to meet a property line or boundary setback.

[75] WESAPPDoc3-10 ASC Exhibit J Wetlands 2022-09-28. Section 4.0 states, "There are no WOS within the site boundary..," and from an Oregon Department of State Lands (DSL) response letter for an Offsite Determination, DSL concurs that, "Based on available offsite information and additional information provided by the applicant, it is unlikely that jurisdictional wetlands or waterways are present on the property." WESAPPDoc6-10 pASC Reviewing Agency Comment Offsite Determination No Wetlands_DSL_Ryan 2022-07-28.

UCDC §152.010 Access to Buildings; Private Driveways and Easements

(A) Every building hereafter erected or moved shall be on a lot that abuts a public street or a recorded easement. All structures shall be so located on lots as to provide safe and convenient access for servicing, fire protection, and required off-street parking. In commercial and industrial zones, access points shall be minimized. To accomplish this, access shall be limited to one every 200 feet and shall be reviewed during the design review stage or the conditional use hearing. If necessary to accomplish this, driveways may be shared between two lots.

(B) Private driveways and easements that enter onto a public or county road or state or federal highway shall be constructed of at least similar if not the same material as the public or county road or state or federal highway to protect the edge of the road from rapid deterioration. The improvements shall extend at least 25 feet back from the edge of the existing travel lane surface. (Ord. 83-4, passed 5-9-83)

The proposed facility includes a driveway that would provide access to the site from S. Edwards Road. UCDC §152.010(B) requires that the driveway be constructed with the same, or similar, material as S. Edwards Road and that the driveway extend at least 25 feet back from the edge of the existing travel lane surface.

Recommended Land Use Condition 3 (PRE): Prior to submission of a zoning permit application to Umatilla County for the driveway off of S. Edwards Road, the certificate holder shall submit to Umatilla County, and the Department, the final design of the driveway in compliance with the following:

a. Construction materials shall be similar, or the same, as S. Edwards Road.
b. Driveway shall extend at least 25 feet back from the edge of the existing travel lane surface of S. Edwards Road.
c. Driveway shall include a minimum 10 foot vision clearance area (triangular area on the lot at the intersection of driveway and S. Edwards Road).

Based on compliance with the above-recommended condition ((a) and (b)), the Department recommends Council find that the applicant will comply with the applicable UCDC §152.010(D) private driveway requirements. See also recommended Public Services Condition 1 for additional requirements related to the certificate holder's obligation to obtain directly or through a third-party applicable road and access permits from ODOT and Umatilla County Public Works Department.

UCDC §152.011 Vision Clearance

Vision clearance areas shall be provided with the following distance establishing the size of the vision clearance area:

(A) In an Agricultural or Residential Zone, the minimum distance shall be 30 feet or, at intersections including an alley, 10 feet;

(B) In all other zones the minimum distance shall be 15 feet or, at intersections including an alley, 10 feet, except when the angle of intersection between streets is less than 30º the distance shall be 25 feet;

(C) The vision clearance area shall not contain any planting, wall, structure, or obstruction of any kind exceeding two and one-half feet in height measured from the grade of the street centerline. (Ord. 83-4, passed 5-9-83)

UCDC §152.011(A) establishes minimum vision clearance distances of 10 feet, applicable to the triangular area on the lot of the proposed facility driveway and S. Edwards Road. The Department recommends Council impose Land Use Condition 3(c) to ensure the final facility design adheres to the vision clearance requirements. Based on compliance with recommended Land Use Condition 3(c), the Department recommends Council find that the applicant will comply with the applicable UCDC §152.011(A) vision clearance requirements.

UCDC §152.015 Fences

Fences are allowed in any zone and do not require a zoning permit for construction unless located in a Special Flood Hazard Area. Fences located in a Special Flood Hazard Area require an approved Floodplain Development Permit and Zoning Permit. Fences must meet vision clearance requirements and zoning height limitation for structures. Fences shall meet all Oregon Uniform Building Code requirements. (Ord. 83-4, passed 5-9-83; Ord. 2010-05, passed 8-3-10; Ord. 2019-03, passed 4-3-2019)

UCDC §152.015 establishes that fencing, when not located in Special Flood Hazard Area, must meet vision clearance requirements, zoning height limitations and Oregon Uniform Building Code requirements. The proposed facility will include approximately 3 miles (15,400 linear feet) of 6 to 10-foot chain-link perimeter fencing. There are no structure or height restrictions established in UCDC within EFU zoned land. Therefore, the applicable requirements include vision clearance and Oregon Uniform Building Code. The Department recommends Council impose the following condition to comply with UCDC §152.015.

Recommended Land Use Condition 4 (PRE): Prior to submission of a zoning permit application for the facility, facility component or phase, the certificate holder shall submit to Umatilla County, and the Department, the final site plan of the facility demonstrating that:

a. Perimeter fence will include a minimum 10 foot vision clearance area (triangular area on the lot to any offsite roadway intersections).
b. Perimeter fence complies with Oregon Uniform Building Code requirements.

Based on compliance with recommended Land Use Condition 4, the Department recommends Council find that the applicant will comply with the applicable UCDC §152.015 fencing requirements.

~~UCDC §152.562 Off-Street Parking and Loading Requirements~~

~~(A) Should the owner or occupant of a lot or building change the use to which the lot or building is put, thereby increasing off-street parking or loading requirements, it shall be a violation of this chapter to begin such altered use until the required increase in off-street parking or loading is provided;~~

~~(B) Requirements for types of buildings and uses not specifically listed herein shall be determined by the Planning Commission or Hearings Officer, based upon the requirements of comparable uses listed;~~

~~(C) In the event several uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately;~~

~~(D) Owner of two or more uses, structures or parcels of land may agree to utilize jointly the same parking and loading spaces when the hours of operation do not overlap, provided that satisfactory legal evidence is presented to the Planning Director in the form of deeds, leases, or contracts to establish the joint use;~~

~~(E) Off-street parking spaces for dwellings shall be located on the same lot with the dwelling. Other required parking spaces shall be located no farther than 500 feet from the building or use they are required to serve, measured in a straight line from the building;~~

~~(F) Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees only, and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business or use;~~

~~(G) Unless otherwise provided, required parking and loading spaces shall not be located in a required yard;~~

~~(H) Plans shall be submitted as provided in § 152.767 of this chapter;~~

~~(I) Design requirements for parking lots:~~

~~(1) Areas used for standing and maneuvering of vehicles shall have paved surfaces maintained adequately for all weather use and so drained as to avoid flow of water across public sidewalks;~~

~~(2) Except for parking to serve residential use, parking and loading areas adjacent to residential use shall be designed to minimize disturbance of residents by the erection between the uses of a sight obscuring fence of not less than five feet in height except where vision clearance is required;~~

~~(3) Parking spaces along the outer boundaries of a parking lot shall be contained by a curb at least four inches high and set back a minimum of four and one-half feet from the property line, or by a bumper rail;~~

~~(4) Artificial lighting which may be provided shall not create or reflect glare in a residential zone or on any adjacent dwelling;~~

~~(5) Service drives to off-street parking areas of four or more spaces shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives;~~

~~*(6) Service drives shall have a minimum vision clearance area bounded by the driveway centerline, the street right-of-way line, and a straight line joining said lines 20 feet from their intersection.*~~

~~*(7) Except for parking to serve a single-family residential use, parking and loading areas must meet State Building Code Accessible Parking requirements. (Ord. 83-4, passed 5-9-83; Ord. 2016-02, passed 3-16-16;)*~~

~~The proposed O&M enclosure will include parking spaces, accessed via the new access road proposed off of S. Edwards Road. In recommended Land Use Condition 2, the certificate holder will be required to demonstrate that the site plan complies with UCDC setback requirements. The Department recommends Land Use Condition 2 also require that the certificate holder demonstrate that the final facility site plan complies with applicable parking lot design ((I)(1), (3)) requirements referenced above, as follows:~~

~~**Recommended Land Use Condition 2 (PRE)**: Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall submit to the Department and Umatilla County a site plan that adheres to the following development standards:~~

~~...~~

~~d. Parking design at the O&M enclosure shall include paved surfaces, minimum of four inch curb height; and drainage infrastructure.~~

~~Based on compliance with recommended Land Use Condition 2(d), the Department recommends Council find that the applicant will comply with the applicable UCDC §152.562 parking requirements.~~

UCDC §152.615 Additional Conditional Use Permit Restrictions

In addition to the requirements and criteria listed in this subchapter, the Hearings Officer, Planning Director or the appropriate planning authority may impose the following conditions upon a finding that circumstances warrant such additional restrictions: [list of conditions omitted for brevity]

The Council has the authority to impose additional conditions under UCDC 152.615. The County, however, has not recommended any additional conditions under this provision, and the Department does not recommend the Council impose any additional conditions under this provision.

IV.E.2 Directly Applicable State Laws and Statutes

The proposed facility must demonstrate compliance with the requirements under LCDC OAR 660-033-0130(38).

The proposed site is located within land classified as high-value farmland per ORS 195.300(10)(f) because the property is located within the Columbia Valley American Viticulture Area

designation and criteria. The proposed facility would use, occupy, or cover 261 acres of high-value farmland.[76] The proposed facility would not be located on any high value farmland soils as defined under OAR 660-033-0020(8)(b)-(e).

OAR 660-033-0130 – Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses

(38) A proposal to site a photovoltaic solar power generation facility shall be subject to the following definitions and provisions:

*****[77]

(g) For high-value farmland described at ORS 195.300(10), a photovoltaic solar power generation facility shall not use, occupy, or cover more than 12 acres unless:

(A) The provisions of paragraph (h)(H) are satisfied; or

(B) A county adopts, and an applicant satisfies, land use provisions authorizing projects subject to a dual-use development plan. Land use provisions adopted by a county pursuant to this paragraph may not allow a project in excess of 20 acres. Land use provisions adopted by the county must require sufficient assurances that the farm use element of the dual-use development plan is established and maintained so long as the photovoltaic solar power generation facility is operational or components of the facility remain on site. The provisions of this subsection are repealed on January 1, 2022.

OAR 660-033-0130(38)(g) restricts a photovoltaic solar power generation facility from using, occupying, or covering more than 12 acres of high value farmland unless the provisions of OAR 660-033-0130(38)(h)(H) are satisfied or the County adopts (and the applicant satisfies) land use provisions authorizing projects subject to a dual-use development plan.[78] The applicant acknowledges, and the Department agrees, that the proposed solar facility components would not meet either one of these exemptions. As provided under OAR 660-033-0130(38)(k), a solar PV facility that exceeds the threshold established by OAR 660-033-0130(38)(g) requires a goal exception.

OAR 660-033-0130(38)(h)(A) – (D) requires a demonstration that the proposed facility components would not create unnecessary negative impacts to agricultural operations, soil erosion or loss, soil compaction, or the unabated introduction or spread of noxious weeds.

(A) The proposed photovoltaic solar power generation facility will not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property not occupied by project components. Negative

[76] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22. Table K-2.

[77] OAR 660-033-0130(38)(a)-(e) contain definitions. The provisions begin at (g).

[78] Land use provisions adopted by a county pursuant to this paragraph may not allow a project in excess of 20 acres. OAR 660-033-0130(38)(g)(B).

impacts could include, but are not limited to, the unnecessary construction of roads dividing a field or multiple fields in such a way that creates small or isolated pieces of property that are more difficult to farm, and placing photovoltaic solar power generation facility project components on lands in a manner that could disrupt common and accepted farming practices;

The proposed facility site is located on lands that are not currently, nor in the last 50 years, been used for agricultural operations. Therefore, the Department recommends Council find that construction and operation of the proposed facility will not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property and therefore would satisfy the requirements under OAR 660-033-0130(38)(h)(A).

(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied. The approved plan shall be attached to the decision as a condition of approval;

This provision is consistent with Council's Soil Protection standard, where the Department recommends Council impose a condition requiring that, during facility construction, the applicant be required to adhere to the requirements of a Department approved Erosion and Sediment Control Plan ~~during construction~~ (see recommended Soil Protection Conditions 1 and 2) and implementation of a Noxious Weed Plan, prior to and during construction and operation (see recommended Land Use Conditions 9, 10 and 11). This plan includes best management practices to be implemented during construction and operation designed to reduce and minimize unnecessary soil erosion or loss that could limit agricultural productivity within the proposed facility site and on adjacent EFU zoned land.

Based upon compliance with the recommended conditions, the Department recommends Council conclude that the proposed facility will satisfy the requirements under OAR 660-033-0130(38)(h)(B).

(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval;

This provision is consistent with Council's Soil Protection standard, where the Department recommends Council impose a condition requiring that the applicant minimize compaction

through scarification and ~~revegetation~~ reseeding following site disturbance (see recommended Soil Protection Conditions 1, 2 and 3 and associated Attachment I-1 of this order).

Based upon compliance with the recommended conditions, the Department recommends Council conclude that the proposed facility will satisfy the requirements under OAR 660-033-0130(38)(h)(C).

> *(D) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weed species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval;*

Noxious weed control is required to ensure the impacts to adjacent agricultural lands are minimized and that revegetation and site stabilization within areas of disturbance are achieved.

Recommended Land Use Conditions 9, 10 and 11 requires that the applicant implement a Noxious Weed Plan, which includes requirements for noxious weed control, prior to and during construction and operation. Elements of the noxious weed control requirements include preconstruction identification and treatment of infestation locations; flagging, avoiding and monitoring of infestation areas during construction; and long-term monitoring and treatment during operations. All of these requirements would be reported to the Department and Umatilla County Weed Department and allow for the Department to require additional treatment and monitoring given reported results. Based upon compliance with the condition, the Department recommends Council conclude that the proposed facility would not result in unabated introduction or spread of noxious weeds and other undesirable weed species and would satisfy the requirements under OAR 660-033-0130(38)(h)(D).

> *(E) Except for electrical cable collection systems connecting the photovoltaic solar generation facility to a transmission line, the project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(a);*

As defined in OAR 660-033-0020(8)(a), high value farmland means land in a tract composed predominately of soils that are either irrigated and classified prime, unique, Class I or II soils; or, not irrigated and classified prime, unique, Class I or Class II soils.

As shown in ASC Exhibit K, Figure K-8, the proposed site boundary is predominately not located on Class I or II soils and is not located within an irrigation district. ~~-~~There are approximately 4 acres of Class II soils within the site boundary that will be required to be avoided under Recommended Land Use Condition 12. Because the subject tracts are not irrigated and are not located within an irrigation district, it is not considered irrigated farmland and is therefore not prime farmland.

The Department recommends the Council find that the proposed facility will not be located on high-value farmland soils listed in OAR 660-033-0020(8)(a), consistent with OAR 660-033-0130(38)(h)(E).

> *(F) The project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:*
> *(i) Non high-value farmland soils are not available on the subject tract;*
> *(ii) Siting the project on non high-value farmland soils present on the subject tract would significantly reduce the project's ability to operate successfully; or*
> *(iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of non high value farmland soils; and*

The proposed site boundary would not be located on high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e), which include certain high-value farmland tracts[79] outside the Willamette Valley growing specified perennials, and certain soils located in other areas that are far from the site boundary (specifically, within the Willamette Valley, west of the Coast Range, and west of U.S. Highway 101). The proposed site boundary would, however, be located on arable soils (Class IV), so the applicant must demonstrate that the proposed facility can meet one of the factors listed in (i) through (iii).

Siting the proposed facility on non-arable soils (Class VII) to avoid arable soils would significantly reduce the acreage available to develop the project, resulting in less than ~~70~~ 88 available acres that are laid-out in a long narrow pattern within the subject tracts.[80] Because the subject tracts are limited to the site boundary and do not extend or offer more area than is under review, the Department recommends Council find that the proposed facility site satisfies OAR 660-033-0130(38)(f)(ii).

> *(G) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:*
> *(i) If fewer than 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, no further action is necessary.*
> *(ii) When at least 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities within the study area, the local government or its designate must find that the photovoltaic solar power generation facility will not materially alter the stability of the overall land use*

[79] As defined in OAR 660-033-0020, "tract" means one or more contiguous lots or parcels under the same ownership. The Department highlights that because OAR 660-033-0130(38)(g)(A) requires an evaluation of soil conditions on the "subject tract," that such an evaluation may require the review of areas outside of the proposed site boundary area.

[80] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22, Table K-1 and Section 7.1.2.

pattern of the area. The stability of the land use pattern will be materially altered if the overall effect of existing and potential photovoltaic solar power generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland, acquire water rights, or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area.

OAR 660-033-0130(38)(h)(G) requires an evaluation of photovoltaic solar power generation facility development within 1-mile of the proposed site boundary. The applicant asserts that no photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the 1-mile study area.[81] ASC Exhibit C Figure C-3 shows operating solar facilities within 10 miles of the site boundary, all of which are farther than 1 mile away. Based on a review of aerial imagery, the Department confirms that there are fewer than 48 acres of other solar PV facilities within 1-mile of the proposed facility. The Department therefore recommends that the Council find that no further action is necessary, consistent with OAR 660-033-0130(38)(h)(G)(i).

(H) A photovoltaic solar power generation facility may be sited on more than 12 acres of high-value farmland described in ORS 195.300 (Definitions for ORS 195.300 to 195.336)(10)(f)(C) without taking an exception pursuant to ORS 197.732 (Goal exceptions) and OAR chapter 660, division 4, provided the land:

(i) Is not located within the boundaries of an irrigation district;

(ii) Is not at the time of the facility's establishment, and was not at any time during the 20 years immediately preceding the facility's establishment, the place of use of a water right permit, certificate, decree, transfer order or ground water registration authorizing the use of water for the purpose of irrigation;

(iii) Is located within the service area of an electric utility described in ORS 469A.052 (Large utility renewable portfolio standard)(2);

(iv) Does not exceed the acreage the electric utility reasonably anticipates to be necessary to achieve the applicable renewable portfolio standard described in ORS 469A.052 (Large utility renewable portfolio standard)(3); and

(v) Does not qualify as high-value farmland under any other provision of law; or

The proposed facility does not satisfy OAR 660-033-0130(38)(h)(H)(iii) and (iv) and therefore does not qualify for the acreage exception.

(i) For arable lands, a photovoltaic solar power generation facility shall not use, occupy, or cover more than 20 acres. The governing body or its designate must find that the

[81] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-28, p.35.

following criteria are satisfied in order to approve a photovoltaic solar power generation facility on arable land.

(A) Except for electrical cable collection systems connecting the photovoltaic solar generation facility to a transmission line, the project is not located on those high-value farmland soils listed in OAR 660-033-0020 (Definitions)(8)(a);

As defined in OAR 660-033-0020(8)(a), high value farmland means land in a tract composed predominately of soils that are either irrigated and classified prime, unique, Class I or II soils; or, not irrigated and classified prime, unique, Class I or Class II soils.

As shown in ASC Exhibit K Figure K-8, the proposed site boundary is predominately not located on Class I or II soils and is not located within an irrigation district. There are approximately 4 acres of Class II soils within the site boundary that will be required to be avoided, under recommended Land Use Condition 12. Because the subject tracts are not irrigated and are not located within an irrigation district, it is not considered irrigated farmland and is therefore not prime farmland.

The Department recommends the Council find that the proposed facility will not be located on high-value farmland soils listed in OAR 660-033-0020(8)(a), consistent with OAR 660-033-0130(38)(i)(A).

(B) The project is not located on those high-value farmland soils listed in OAR 660-033-0020 (Definitions)(8)(b)-(e) or arable soils unless it can be demonstrated that:

(i) Nonarable soils are not available on the subject tract;
(ii) Siting the project on nonarable soils present on the subject tract would significantly reduce the project's ability to operate successfully; or
(iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of nonarable soils;

The proposed site boundary would not be located on high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e), which include certain high-value farmland tracts[82] outside the Willamette Valley growing specified perennials, and certain soils located in other areas that are far from the site boundary (specifically, within the Willamette Valley, west of the Coast Range, and west of U.S. Highway 101). The proposed site boundary would, however, be located on arable soils (Class IV), so the applicant must demonstrate that the proposed facility can meet one of the factors listed in (i) through (iii).

[82] As defined in OAR 660-033-0020, "tract" means one or more contiguous lots or parcels under the same ownership. The Department highlights that because OAR 660-033-0130(38)(g)(A) requires an evaluation of soil conditions on the "subject tract," that such an evaluation may require the review of areas outside of the proposed site boundary area.

Siting the proposed facility on non-arable soils (Class VII) to avoid arable soils would significantly reduce the acreage available to develop the project, resulting in less than 88~~70~~ available acres that are laid-out in a long narrow pattern within the subject tracts.[83] Because the subject tracts are limited to the site boundary and do not extend or offer more area than is under review, the Department recommends Council find that the proposed facility site satisfies OAR 660-033-0130(38)(i)(B)(ii).

> *(C) No more than 12 acres of the project will be sited on high-value farmland soils described at ORS 195.300 (Definitions for ORS 195.300 to 195.336)(10));*

The proposed facility will be sited on more than 12 acres of high-value farmland as defined in ORS 195.300(10)(f) because the property is located within the located within the Columbia Valley American Viticulture Area designation and criteria. Therefore, the proposed facility requires an exception to Statewide Planning Goal 3, as evaluated in Section IV.E.3 *Goal Exception* of this order.

> *(D) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:*
> *(i) If fewer than 80 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, no further action is necessary.*
> *(ii) When at least 80 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities within the study area, the local government or its designate must find that the photovoltaic solar power generation facility will not materially alter the stability of the overall land use pattern of the area. The stability of the land use pattern will be materially altered if the overall effect of existing and potential photovoltaic solar power generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland, acquire water rights, or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area; and*

OAR 660-033-0130(38)(i)(D) requires an evaluation of photovoltaic solar power generation facility development within 1-mile of the proposed site boundary. The applicant asserts that no photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the 1-mile study area.[84] ASC Exhibit C Figure C-3 shows operating solar facilities within 10 miles of the site boundary, all of which are farther than 1 mile away. Based on a review of aerial imagery, the Department confirms that there are fewer than 48 acres of other solar PV facilities within 1-mile of the proposed facility. The

[83] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22, Table K-1 and Section 7.1.2.
[84] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-28, p.35.

Department therefore recommends that the Council find that no further action is necessary, consistent with OAR 660-033-0130(38)(h)(i)(D).

(E) The requirements of OAR 660-033-0130 (Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses)(38)(h)(A), (B), (C) and (D) are satisfied

As presented in the subsections above, the Department recommends Council find that the proposed facility would comply with OAR 660-033-0130(38)(h)(A), (B) and (D). OAR 660-033-0130(38)(h)(C) requires that proposed solar facility component use or occupy no more than 12 acres of high-value farmland described at ORS 195.300(10). Because the proposed facility would be sited on more than 12 acres of high-value farmland described at ORS 195.300(10), the applicant requests an exception to Statewide Planning Goal 3. The Department's analysis of the exception request is provided in Section IV.E.3. *Goal 3 Exception* of this order.

(j) For nonarable lands, a photovoltaic solar power generation facility shall not use, occupy, or cover more than 320 acres. The governing body or its designate must find that the following criteria are satisfied in order to approve a photovoltaic solar power generation facility on nonarable land:

The proposed facility would use, occupy, or cover approximately 68 acres of nonarable lands, far less than the 320-acre threshold established by OAR 660-033-0130(38)(j). The Department recommends that the Council find that the proposed facility would comply with the 320 acreage threshold for nonarable lands pursuant to OAR 660-033-0130(38)(j).

(A) Except for electrical cable collection systems connecting the photovoltaic solar generation facility to a transmission line, the project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(a);

As defined in OAR 660-033-0020(8)(a), high value farmland means land in a tract composed predominately of soils that are either irrigated and classified prime, unique, Class I or II soils; or, not irrigated and classified prime, unique, Class I or Class II soils.

As shown in ASC Exhibit K Figure K-8, the proposed site boundary is predominately not located on Class I or II soils and is not located within an irrigation district. There are approximately 4 acres of Class II soils within the site boundary that will be required to be avoided (see recommended Land Use Condition 12). Because the subject tracts are not irrigated and are not located within an irrigation district, it is not considered irrigated farmland and is therefore not prime farmland.

The Department recommends the Council find that the proposed facility will not be located on high-value farmland soils listed in OAR 660-033-0020(8)(a), consistent with OAR 660-033-0130(38)(j)(A).

(B) The project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:

(i) Siting the project on nonarable soils present on the subject tract would significantly reduce the project's ability to operate successfully; or

(ii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract as compared to other possible sites also located on the subject tract, including sites that are comprised of nonarable soils;

The proposed site boundary would not be located on high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e), which include certain high-value farmland tracts[85] outside the Willamette Valley growing specified perennials, and certain soils located in other areas that are far from the site boundary (specifically, within the Willamette Valley, west of the Coast Range, and west of U.S. Highway 101). The proposed site boundary would, however, be located on arable soils (Class IV), so the applicant must demonstrate that the proposed facility can meet one of the factors listed in (i) or (ii)

Siting the proposed facility on non-arable soils (Class VII) to avoid arable soils would significantly reduce the acreage available to develop the project, resulting in less than 88~~70~~ available acres that are laid-out in a long narrow pattern within the subject tracts.[86] Because the subject tracts are limited to the site boundary and do not extend or offer more area than is under review, the Department recommends Council find that the proposed facility site satisfies OAR 660-033-0130(38)(j)(B)(i).

(C) No more than 12 acres of the project will be sited on high-value farmland soils described at ORS 195.300(10);

The proposed facility will be sited on more than 12 acres of high-value farmland as defined in ORS 195.300(10)(f) because the property is located within the located within the Columbia Valley American Viticulture Area designation and criteria. Therefore, the proposed facility requires an exception to Statewide Planning Goal 3, as evaluated in Section IV.E.3 *Goal Exception* of this order.

(D) No more than 20 acres of the project will be sited on arable soils;

[85] As defined in OAR 660-033-0020, "tract" means one or more contiguous lots or parcels under the same ownership. The Department highlights that because OAR 660-033-0130(38)(g)(A) requires an evaluation of soil conditions on the "subject tract," that such an evaluation may require the review of areas outside of the proposed site boundary area.

[86] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22, Table K-1 and Section 7.1.2.

The proposed facility will be sited on more than 20 acres of arable soils as defined in OAR 660-033-0130(38)(b). Therefore, the proposed facility requires an exception to Statewide Planning Goal 3, as evaluated in Section IV.E.3 *Goal Exception* of this order.

(E) The requirements of OAR 660-033-0130(38)(h)(D) are satisfied;

As presented in the subsections above, the Department recommends Council find that the proposed facility would comply with OAR 660-033-0130(38)(h)(D) (noxious weed control).

(F) If a photovoltaic solar power generation facility is proposed to be developed on lands that contain a Goal 5 resource protected under the county's comprehensive plan, and the plan does not address conflicts between energy facility development and the resource, the applicant and the county, together with any state or federal agency responsible for protecting the resource or habitat supporting the resource, will cooperatively develop a specific resource management plan to mitigate potential development conflicts. If there is no program present to protect the listed Goal 5 resource(s) present in the local comprehensive plan or implementing ordinances and the applicant and the appropriate resource management agency(ies) cannot successfully agree on a cooperative resource management plan, the county is responsible for determining appropriate mitigation measures; and

Neither the applicant nor Umatilla County have identified Goal 5 resources within the site boundary. Therefore, the Department recommends Council find that the proposed facility will satisfy the requirements under OAR 660-033-0130(38)(j)(F)

(G) If a proposed photovoltaic solar power generation facility is located on lands where, after site specific consultation with an Oregon Department of Fish and Wildlife biologist, it is determined that the potential exists for adverse effects to state or federal special status species (threatened, endangered, candidate, or sensitive) or habitat or to big game winter range or migration corridors, golden eagle or prairie falcon nest sites or pigeon springs, the applicant shall conduct a site-specific assessment of the subject property in consultation with all appropriate state, federal, and tribal wildlife management agencies. A professional biologist shall conduct the site-specific assessment by using methodologies accepted by the appropriate wildlife management agency and shall determine whether adverse effects to special status species or wildlife habitats are anticipated. Based on the results of the biologist's report, the site shall be designed to avoid adverse effects to state or federal special status species or to wildlife habitats as described above. If the applicant's site-specific assessment shows that adverse effects cannot be avoided, the applicant and the appropriate wildlife management agency will cooperatively develop an agreement for project-specific mitigation to offset the potential adverse effects of the facility. Where the applicant and the resource management agency

cannot agree on what mitigation will be carried out, the county is responsible for determining appropriate mitigation, if any, required for the facility.

ASC Exhibits P and Q and Sections IV.H., *Fish and Wildlife Habitat* and IV.I, *Threatened and Endangered Species* of this order provide information relevant to this criterion. The applicant consulted with ODFW's district biologist and ODOE on the appropriate field survey protocols and performed a site-specific assessment of potential adverse impacts to special status species and fish and wildlife habitat. As presented in Section IV.H., *Fish and Wildlife Habitat* and IV.I, *Threatened and Endangered Species* of this order, the Department recommends Council find that based on the evidence provided in ASC Exhibits P and Q, and compliance with recommended conditions, that the site would be designed to mitigate adverse impacts to special status wildlife species and associated wildlife habitat, consistent with OAR 660-033-0130(38)(j)(G).

(k) An exception to the acreage and soil thresholds in subsections (g), (h), (i), and (j) of this section may be taken pursuant to ORS 197.732 and OAR chapter 660, division 4.

As previously discussed, the proposed facility would exceed the 12-acre threshold established at OAR 660-033-0130(38)(g) for high-value farmland described at ORS 195.300(10) because it would use, occupy, or cover 252 acres of high-value farmland. In addition, the proposed facility would exceed the 20-acre threshold established by OAR 660-033-0130(38)(i) for arable lands, because the facility would use, occupy, and cover 235.3 acres of arable lands.

The proposed facility therefore triggers the need for a goal exception through both the OAR 660-033-0130(38)(g) threshold exceedance and the OAR 660-033-0130(38)(i) threshold exceedance.

The Department's evaluation of the applicant's Goal 3 exception request is provided below, in Section IV.E.3. *Goal 3 Exception* of this order, and recommends the Council find that an exception to Goal 3 is justified.

(l) The county governing body or its designate shall require as a condition of approval for a photovoltaic solar power generation facility, that the project owner sign and record in the deed records for the county a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).

Subject to compliance with the recommended condition, the Department recommends that the Council find that the proposed facility would comply with OAR 660-033-0130(38)(l).

Recommended Land Use Condition 5 (PRO): Prior to operations, the certificate holder, and underlying landowners on whose property the solar facility components are located, shall record in the real property records of Umatilla County a Covenant Not to

Sue with regard to generally accepted farming practices on adjacent farmland. Copies of the recorded covenants shall be provided to the Department.

(m) Nothing in this section shall prevent a county from requiring a bond or other security from a developer or otherwise imposing on a developer the responsibility for retiring the photovoltaic solar power generation facility.

OAR 660-033-0130(38)(m) allows for the governing body to require a bond or letter of credit for the amount necessary to retire the facility during decommissioning. Recommended Retirement and Financial Assurance Condition 4 would require that, prior to construction, the applicant obtain and provide to the Department a bond or letter of credit in the specified amount recommended by considered by Council as satisfactory for facility decommissioning. Based upon compliance with this condition, the Department recommends Council conclude that the requirements under OAR 660-033-0130(38)(m) would be satisfied.

IV.E.3 Goal 3 Exception

The proposed facility would use, occupy or cover approximately 261 acres of high-value farmland/arable soils,[87] approximately 235 acres of arable (NRCS Class IV) soil; and ~~55~~ 88 acres of nonarable (NRCS Class VII) soils as illustrated below in Figure 6: *High-Value Farmland within 0.5-Mile Land Use Analysis Area/Subject Tracts within Site Boundary*.[88] Therefore, the proposed solar facility components would not comply with OAR 660-033-0130(38)(g) and (i), which prohibit a photovoltaic solar power generation facility from using, occupying or covering more than 12 acres of high-value farmland or 20 acres of arable land, respectively. Pursuant to ORS 469.504(2), if a proposed facility does not comply with an applicable substantive criterion, the proposed facility must otherwise comply with the applicable statewide planning goal (here, Goal 3 Agricultural Lands) or seek an exception to the statewide planning goal. Pursuant to ORS 469.504(1)(b)(B), non-compliance with a statewide planning goal requires a determination by the Council that an exception to the goal is warranted under ORS 469.504(2). The intent of Goal 3, *Agricultural Lands*, is "To preserve and maintain agricultural lands. Agricultural lands shall be preserved and maintained for farm use, consistent with existing and future needs for agricultural products.." Taking a goal exception for an energy facility does not re-zone the land, yet allows for a specific use for an energy facility for the duration of the life of the facility, after which the facility would be retired and land would be restored to a useful nonhazardous condition.

The Council's Land Use standard at OAR 345-022-0030(4), repeats the language of ORS 469.504(2), stating:

(4) The Council may find goal compliance for a facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal.

[87] High-value farmland per ORS 195.300(10)(f).

[88] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22, Table K-1.

Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process goal, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the facility; and

(C) The facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

The applicant seeks an exception under OAR 345-022-0030(4)(c) based on the following five reasons:

1. Consistency with Local and State Energy Policies
2. Locational Dependency (interconnection opportunities, minimal impacts to agriculture, minimal impacts to other sensitive resources, existing site access)
3. Lack of Agricultural Use and Value
4. Minimal Impact to Agriculture
5. Local Economic Benefit

To allow for Council to consider the merits of each reason as separate and distinct reasons, and use the same "reason" description used for prior Council decisions, for "reasons" that have been reviewed in prior Council Orders, the Department recommends that the reasons be described and organized based on the following:

1. Consistency with Local and State Energy Policies
2. Locational Dependency (interconnection opportunities, ~~minimal impacts to agriculture, minimal impacts to other sensitive resources,~~ existing site access)
3. ~~Lack of Agricultural Use and Value~~ Minimal Direct Impacts to Agriculture within Subject Tracts
4. ~~Minimal Impact to Agriculture~~ Minimal Indirect Impacts to Agricultural within Surrounding Area
5. Minimal Impacts to Resources Protected by Council standards
6. Local Economic Benefit

Based on the evaluation presented below, the Department recommends that Council find that a goal exception under OAR 345-022-0030(4)(c) is appropriate.

Consistent with Implementing Local and State Energy Policies

The applicant requests that Council consider the proposed facility's consistency with local and state energy policies as a reason that justifies taking an exception to the statewide policy embodied in Goal 3, *Agricultural Lands.*

The referenced local and state energy policies include: LCDC's Statewide Planning Goal embodied in Goal 13, Energy Conservation (utilize renewable energy sources), which is reflected in UCCP Chapter 16; and Oregon House Bill 2021 (large investor-owned utilities and electricity service suppliers must reduce greenhouse gas emissions by 100 percent by 2040). Council has repeatedly rejected this proposed reason.[89]

Neither Goal 13 nor House Bill 2021 require renewable energy to be procured from Oregon-based resources, nor do they address where renewable energy facilities should be located, let alone suggest such facilities may be placed on agricultural lands as an exception to Goal 3. To the contrary, the Oregon Court of Appeals has expressly held that Goal 13 does not provide a basis for a reasons exception to Goal 3.[90] Further, the applicant has not provided a power purchase agreement or similar assurance to document that the proposed facility would provide power related to an investor-owned utility (IOU) in Oregon order to achieve goals under Oregon House Bill 2021.

Based on the analysis presented above, the Department recommends Council reject the applicant's reason that the proposed facility would be "consistent with local and state energy policies" as justifying taking an exception to Goal 3.

Locationally Dependent

The applicant requests that Council consider that the proposed facility site is "locationally dependent" and that the site's locational dependency is a reason that justifies taking an

[89] BSPAPP Final Order Application for Site Certificate on Bakeoven Solar Project. 2020-04-24. p.113.

[90] "We agree with LUBA's conclusion that Goal 13 does not require counties to develop or facilitate the development of energy facilities. . . . Neither the text of the goal nor its guidelines 'require' the county to develop or facilitate the development of any particular land use, much less large solar power generation facilities. [footnote omitted]. Instead, Goal 13 requires that *all* development on land be 'managed and controlled' to conserve energy. The text of the goal and its guidelines do not directly or indirectly require the development of energy facilities. . . . Or Solar's exception request was to the requirement in Goal 3 that authorizes counties to approve 'farm uses and those nonfarm farm uses defined by [LCDC] rule' and to the requirement in OAR 660-033-0130(38) that the facility be not more than 12 acres in size when located on high-value farmland. Thus, the exception was to justify an energy facility of a particular size, and Goal 13 has no bearing on that justification.
1000 Friends of Oregon v. Jackson Cnty., 292 Or. App. 173, 192-193, 423 P.3d 793, 804-805 (2018) (emphasis in original).

exception to the statewide policy embodied in Goal 3, *Agricultural Lands.* "Locationally dependent" factors include that the site would not require new transmission lines; it would not impact active agricultural operations[91] or sensitive species, habitat or wetlands; and is located directly off of a primary road, S. Edwards Road which feeds directly from US-395. As noted above, the information related to minimal impacts to agriculture and sensitive species, habitat and wetlands is evaluated under the reason, "minimal impacts to agriculture – tract-level analysis" and "minimal impacts to resources protected by Council standards" and is not duplicated here.

Site Provides Existing Opportunities for Grid Interconnection – Omits New Transmission Lines

There are three existing transmission lines with interconnection capability for the proposed facility within or adjacent to the proposed site, as presented in Figure 5 below: two existing transmission line rights-of-way, including BPA's McNary to Roundup 230-kV Transmission and PacifiCorp's Pendleton to Hermiston 69-kV line; and, UEC 115-kV transmission line (parallel to eastern edge of site boundary). The proposed facility does not include a grid interconnection transmission line because of the existing transmission lines within and adjacent to the site boundary; the applicant anticipates interconnecting and utilizing the existing UEC 115-kV transmission line for grid interconnection.[92]

The Department agrees that three existing transmission lines, with interconnection potential by the proposed facility, which cross or parallel the site boundary offers a substantial benefit for the use of this specific site for use by an industrial facility. To ensure that this representation is realized, the Department recommends Council impose a condition (sub(a)) below) requiring that, prior to construction of the facility, the applicant provide an executed interconnection agreement between applicant and one of the three existing utilities operating the identified lines.

Recommended Land Use Condition 6 (PRO): Prior to operation, the certificate holder shall provide to the Department:

a. An executed interconnection agreement with Umatilla Electric Cooperative, Bonneville Power Administration or PacifiCorp demonstrating that the facility has an interconnection agreement for the life of the facility, to one of the existing transmission lines, as presented in the Site Certificate, Figure 1.

[91] In ASC Exhibit K4, the applicant identifies 4 acres of irrigated agricultural (pivot circles along southern edge of site boundary) within the site boundary. Soils on irrigated lands are considered high-value farmland under ORS 195.300(10)(a), which has not been evaluated or represented directly in ASC Exhibit K. Applicant affirms that the facility will be designed to avoid these 4 acres. The representation is imposed in recommended Land Use Condition 12 with a 10-foot setback on the southern fence line. The land use evaluation is based on avoidance of ORS 195.300(10)(a) high-value farmland.

[92] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-09-28, p.2.

b. An executed shared use agreement with Umatilla Electric Cooperative, Bonneville Power Administration or PacifiCorp (third-party) for shared use of the switchyard substation.
    i. If the third-party proposes to substantially modify the shared switchyard substation, certificate holder shall submit an amendment determination request to obtain a determination from the Department on whether a site certificate amendment is required or request for site certificate amendment to account for any significant change in the decommissioning amount required under Retirement and Financial Assurance Condition 4.

Figure 5: Existing Transmission Lines within Proposed Site Boundary

Site Provides Existing Access – Omits New External Access Roads

The proposed facility site omits the need for new external access roads or major local road improvements. A local road, South Edwards Road, parallels the east side of the site boundary, as presented in Figure 5, *Existing Transmission Lines within Proposed Site Boundary* above and offers direct access to the site, only requiring that a driveway be constructed for site access. South Edwards Road has an existing level of service (LOS) A-rating, with volume to capacity ratio of 0.10 to 0.25.[93] Based on the level of anticipated construction traffic at 534 one-way trips per day, South Edwards Road has sufficient carrying capacity to support construction traffic while maintaining an A-rating LOS.

Based on the above-described facts, the Department recommends Council find that the significant advantages of the site support the reason that the site is "locationally dependent" and is one of four reasons that cumulatively justify taking an exception to Goal 3.

Minimal Direct Impacts to Agriculture within Subject Tracts

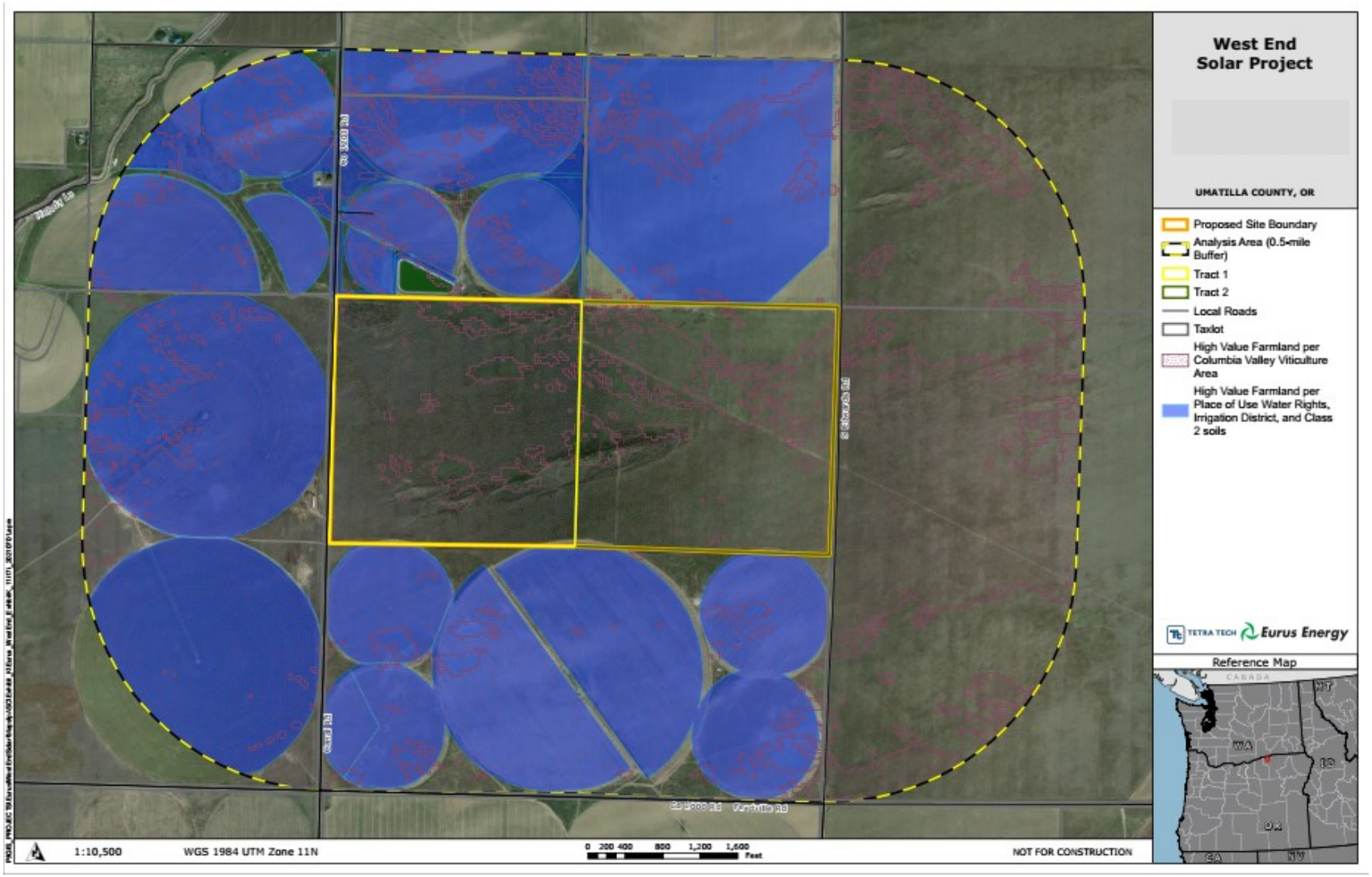
The applicant requests that Council find that a reason justifying taking an exception to the statewide policy embodied in Goal 3, *Agricultural Lands*, is that the site lacks agricultural use and value.

The proposed site boundary includes approximately 261 acres of high-value farmland as defined under ORS 195.300(10)(f) within two adjacent tracts, as presented in Figure 6~~5~~ below.[94] Figure 7 illustrates the irrigation status (inclusion in a water district and/or ground water rights) of the adjacent tracts as well as the agricultural uses on adjacent lands and subject tracts.

[93] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28. Table U-8, p.23.

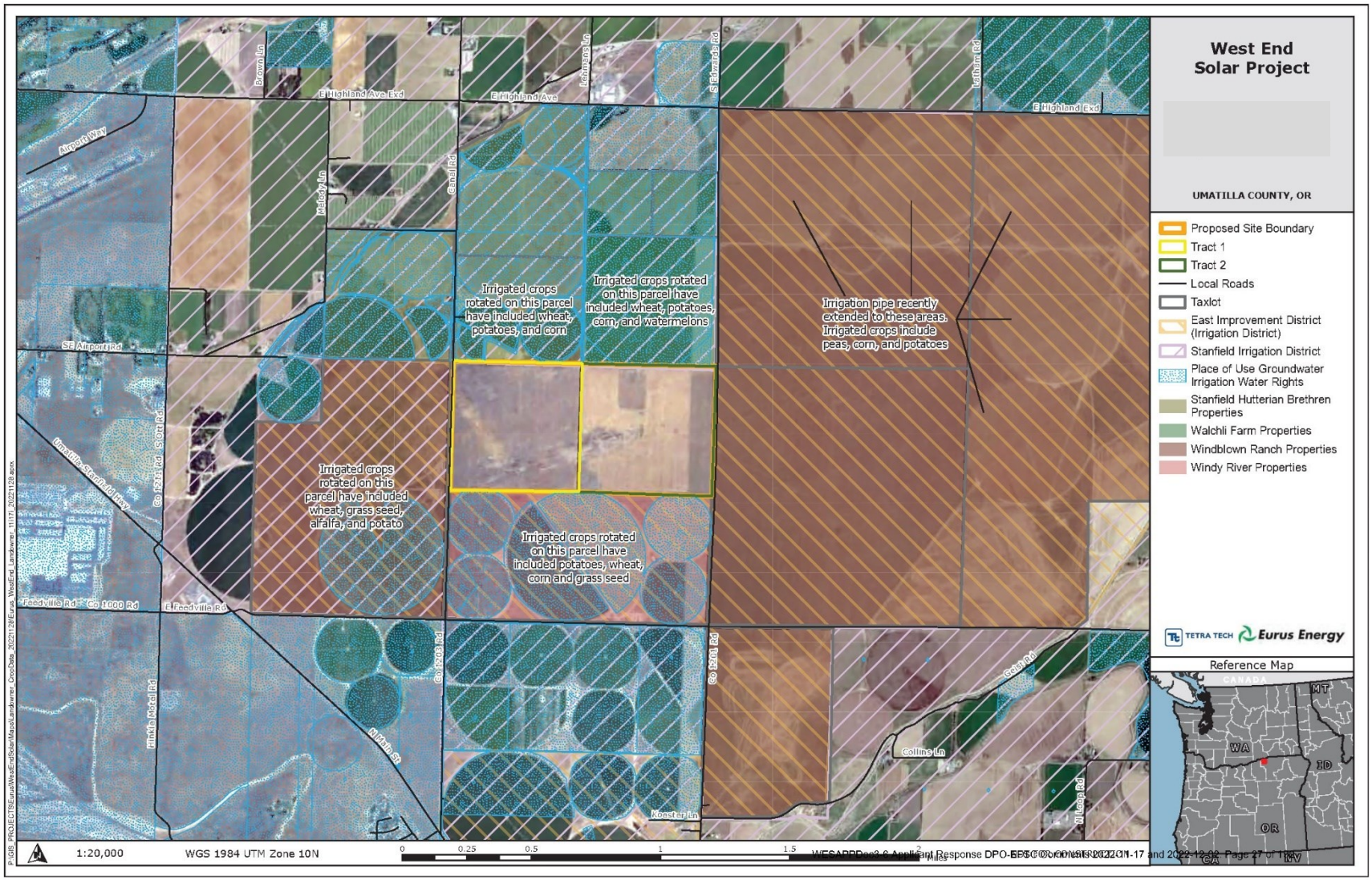
[94] OAR 660-033-0020(14) defines "tract" as "one or more contiguous lots or parcels under the same ownership."

1 **Figure 6: High-Value Farmland within 0.5-Mile Land Use Analysis Area/Subject Tracts within Site Boundary**



2

Figure 7: Subject Tract Proximity to Adjacent Agricultural Uses and Irrigation Status



The tracts are owned by two landowners, Arthur Prior of Windblown Solar (Tract 1) and Steve and Wanda Scott (Tract 2). While the soils are considered high-value farmland under ORS 195.300(10)(f) due to the site's location within the Columbia Valley viticulture area and location above mean sea leave, slope and aspect, the site is not currently used for viticulture or other form of agriculture. The subject tracts are primarily composed of 1B Adkins fine sandy loam soils (Tract 1: 102 acres, 63 percent of parcel; Tract 2: 133 acres, 82 percent of parcel) and are soils classified by the Natural Resources Conservation Service (NRCS) as Class 4 - the lowest of the arable soil classifications.[95] The soil classification for the remaining 88 acres of both tracts is Class 7 (Quincy fine sand) which has very high permeability and is not prime farmland.

~~Signed letters from both landowners are provided in ASC Exhibit K Attachments K-1 and K-2; the letters describe the history of use and lack of agricultural viability at the site; relevant landowner statements are incorporated below.~~

~~Based on U.S. Geological Survey historic and aerial photography, the subject tracts were used for agricultural purposes in the 1950s and 1970s.~~ Both tracts are currently fallow. Neither tract has a water right. A water right transfer to Tracts 1 and 2 does not appear likely due to limited water availability in Umatilla County, exclusion from boundaries of irrigation districts and technological and financial implications of operating pivot irrigation equipment with the existing BPA and PacifiCorp transmission line rights-of-way traversing across each tract.[96]

In a signed letter dated June 14, 2021, underlying landowner Arthur Prior of Windblown Solar LLC states,

> "We have not used the proposed facility site for any type of agricultural enterprise or farming operation. The facility has never had water rights or been irrigated." "Because of the lack of irrigation the land is not useful to use for agricultural purposes."[97]

Testimonial declaration of property owner Arthur Prior confirms that he owns Tract 1 of the subject properties. He also confirms that he is the owner of Windblown Ranch Inc. and owns and farms several irrigated parcels located west and east of Tract 1.[98] See Figure 7: *Subject Tract Proximity to Adjacent Agricultural Uses and Irrigation Status*. Testimonial declaration of property owner Arthur Prior confirms that his property (Tract 1) is not viable for farm use without a water right, as represented below:

[95] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Page 9 of 192.

[96] WESPAPPDoc3-11 ASC Exhibit K Land Use 2022-09-28. p. 45. In ASC Exhibit K, the applicant states that "Windblown Ranch made the decision to not allocate some of its limited water rights to Tract 1 because the parcel is obstructed by the existing Bonneville Power Administration transmission line and the PacifiCorp transmission line. These obstructions would limit a center pivot to a partial circle thus increasing the per-acre cost to irrigate the parcel. This is because the infrastructure costs are the same for a center pivot irrigation system regardless if the pivot covers a full 360-degree circle or a partial circle."

[97] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-2. Attachment K-1

[98] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Attachment 2.

- Mr. Prior acquired Tract 1 in 1990 and has not used the land for cultivation because of the lack of available water, marginal production capacity, and because he focuses his farm use on productive lands.[99]
- Dry-land wheat farming is not economically feasible on Tract 1 given the limited acreage of arable soils (102 acres), lack of existing or ability to obtain a water right, the low potential for dryland crop yield, and the high costs of wheat cultivation (i.e., fertilizer, fuel, herbicides).
- Adkins fine sandy loam soils (102 acres 63% of parcel) is extremely limiting for dryland cultivation and can actually be detrimental due to risk of wind erosion.
- Tract 1 has no irrigation water or water rights:
    - Tract 1 is located within the Stage Gulch Critical Groundwater Area; therefore, acquisition of new groundwater irrigation water rights is not allowed.
    - Tract 1 is not located within the Stanfield Irrigation District or the Hermiston Irrigation District and inclusion into either one of these districts is highly unlikely due to the unavailability of water and the need to go through a federal boundary adjustment processes.

In a signed letter dated July 5, 2021, underlying landowners Steve and Wanda Scott of S&W Scott Properties LLC state,

> "..land..has not been suitable for farming." "We do not have water rights for irrigation and we do not get enough rain to raise any type of a viable crop. The soil is very sandy and without irrigation is not good for farming."[100]

Testimonial declaration of property owner Steve Scott which concludes that his property (Tract 2) is not viable for farm use without a water right, is included below[101]:

- Mr. Scott attempted to cultivate dryland wheat twice on Tract 2 – once in 2013 and once in 2015;[102]
- Dryland wheat production in 2013 produced about 14 bushels per acre. In 2015, they averaged 11 bushels per acre;[103]
- Costs of farming land exceeded the value in crops and is not economically feasible for the landowner;
    - For instance, -Mr. Scott attempted dryland wheat farming in 2013 and in 2015. In 2015, Mr. Scott received $5.55/bushel for total of $8,097 revenue. However,

[99] WESAPPDoc4-1 DPO Hearing Recording 2022-11-17, at approx.. 1:33:15, 1:37:00, and 1:42:00
[100] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-2. Attachment K-2.
[101] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Attachment 1.
[102] ORS 215.203(2)(b)(B).
[103] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Page 181 of 192. Attachment 5: USDA Economic Research Service. Wheat Production Costs and Returns Per Planted Acre, Excluding Government Payments. Updated: October 03, 2022.

costs of producing the 2015 crop was approximately $16,370, which is a loss of approximately $8,273 (not including losses from fixed costs.)[104]

- Landowner has left land fallow because lack of profitability.
- Landowner has not been able to secure water rights:
  - The land is located within the Stage Gulch Critical Groundwater Area, acquisition of new groundwater irrigation water rights is not allowed, and landowner has not been able to get water rights to irrigate the parcel. This is evidenced by an Oregon Water Resources Department (DWR) map of the Stage Gulch Critical Groundwater Area and in a copy of the *Final Order Before the Water Resources Department of Oregon In the Matter of the Determination of a Critical Groundwater Area in the Stage Gulch Area*. On page 5 of this final order is a map of the Stage Gulch Critical Groundwater Area (CGWA) with the approximate location of the Project site boundary outlined in red and located in subarea A. On page 16 of the Final Order it states "It is FURTHER ORDERED that no new application for a permit to appropriate water from either the upper or the deep basalt groundwater reservoirs within the Stage Gulch Critical Groundwater Area be accepted for filing."[105]
  - The legal recording of the Landowner's Notice of East Improvement District, adopted December 4, 2018, lists all of the parcels included in the East Improvement Irrigation District. The two tax parcels that make up the facility site boundary (4N29C0000500 and 4N29C0000200) are not included in the East Improvement District.

Oregon Water Resources Department (DWR) confirms the location of the facility site within the Stage Gulch Critical Groundwater Area and that no new water rights can be issued within the designated area, and this is unlikely to change in the future due to ongoing substantial declines in groundwater availability. Further, DWR indicated water rights in the East Improvement Irrigation District can be re-located but the lands within that boundary do not necessarily receive and/or have access to this water as it is limited by membership and physical limitations such as necessary infrastructure to deliver water to all lands covered, such as the facility site, which lacks infrastructure.[106]

Regional Wheat Price and Cost Assessment

The EFU-zoned land proposed for use by the proposed facility includes high-value farmland; and arable and non-arable soils. The intent of Goal 3 is to preserve and maintain agricultural lands for farm use. ORS 215.203(2)(a) defines "farm use" as the current employment of land for

[104] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Page 18 of 192. Attachment 1. Testimonial declaration of property owner Steve Scott.
[105] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Page 179 of 192. Attachment 4, Final Order Before the Water Resources Department of Oregon In the Matter of the Determination of a Critical Groundwater Area in the Stage Gulch Area, Umatilla County.
[106] WESAPPDoc1 Proposed Order Agency Consultation ODWR Kowitz 2022-12-10.

the primary purpose of obtaining a profit in money by raising, harvesting and selling crops.[107] The only arable soils located within the site boundary are the 1B Adkins fine sandy loam soils, which have the lowest capability class (Class 4) of the arable soils definition. Adkins fine sandy loam soils, similar soils as adjacent lands, do well for certain irrigated crops as the sandy loam drains well, reducing risk of disease or rot and making it easy to dig/harvest root crops. But for dryland cultivation, this soil type is extremely limiting and cultivation of these soils can actually be detrimental due to risk of wind erosion. According to NRCS, the Adkins series are suitable for "dryland wheat, irrigation cropland, and range." Tract 1 and Tract 2 have no irrigation water rights, the only suitable agricultural use for the limited Class 4 arable soils located in the site boundary would likely be dryland wheat or range/grazing.[108]

Landowner testimony on the limited profitability of their cultivation efforts is supported by United States Department of Agriculture (USDA) data provided by the applicant, as summarized below[109]:

Oregon's historic average yield for dryland winter wheat includes:[110]

- 2013: 62 bushels per acre
- 2015: 47 bushels per acre
- 2021: 45 bushels per acre

The ten-year average production costs include:[111]

- Wheat seed = $19.39 per acre
- Fertilizer = $54.55 per acre
- Chemicals/herbicide = $24.29 per acre
- Fuel/lube/electricity = $14.92 per acre.

Using these average costs per acre and applying them to the site boundary acreage of 323 acres, would equal an average cost of $113.15 per acre, or a total of $36,545.84 per crop. Assuming the site boundary were to yield 13 bushels per acre (the NRCS average assigned to the Adkins Soil Series) for a total harvest of 4,199 bushels, and assuming the ten-year average

[107] See also OAR 660-033-0020(7)(a) .ORS 215.203(2)(b)(B) "current employment" of land for farm use includes: Land lying fallow for one year as a normal and regular requirement of good agricultural husbandry…
[108] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02. Page 9 of 192.
[109] WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Attachment 5. Additional information supporting demonstration why the site boundary is not viable for dry land agricultural production.
[110] USDA National Agricultural Statistics Service. Small Grains Summary for 2013, 2015, and 2021. Available at https://downloads.usda.library.cornell.edu/usda-esmis/files/5t34sj573/zs25xc125/1r66j372m/SmalGraiSu-09-30-2013.pdf and https://downloads.usda.library.cornell.edu/usdaesmis/files/5t34sj573/s7526f71r/x346d670c/SmalGraiSu-09-30-2016.pdf and https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=OREGON
[111] October 2022 USDA Economic Research Service cost and return estimates for major production regions of the US, including the "Basin and Range" production region (which includes the Columbia Basin and Umatilla County) and WESAPPDoc3-6 Applicant Response DPO-EFSC Comments 2022-11-17 and 2022-12-02, Attachment 5.

price wheat at $5.61 per bushel, we can estimate a gross return of $23,556.39. Using these ten-year averages of both costs and returns would equal a net loss of $12,989.45 per crop. Using the ten-year average price of wheat per bushel and the ten-year average of the costs illustrated above, the land within the site boundary would need to produce a minimum of 21 bushels per acres to come close to breaking even. The low production yield associated with the Atkins Soil Series severely limits the economic viability of cultivating dry-land wheat within the site boundary, analysis area, and within lands in the region that may have similar soils.

Based on the above recommended facts, reasoning and analysis, the Department recommends Council find that "minimal direct impacts to agriculture within the subject tracts" is one of four reasons that cumulatively justify taking an exception to Goal 3.

Minimal Indirect Impacts to Agriculture within Surrounding Area

The applicant requests that Council find that a reason justifying taking an exception to the statewide policy embodied in Goal 3, *Agricultural Lands* is that there would be minimal impacts to agriculture within the surrounding area.

The proposed facility will not require relocating access roads or farm infrastructure on neighboring properties. The proposed facility will not displace any jobs or impact any ancillary businesses related to agriculture goods and services because the site is not currently nor in the last 50 years has it been used for or in support of agricultural activity.

Based on the statements provided by the underlying landowners affirming current and historic use and benefit of the land, the Department recommends Council find that the indirect impact to agricultural goods and services within the county would be minimal or none. Therefore, the Department recommends Council find that "minimal direct impacts to agriculture within the surrounding area" is one of four reasons that cumulatively justify taking an exception to Goal 3.

Minimal Impacts to Resources Protected by Council Standards

The applicant requests that Council find that a reason justifying taking an exception to the statewide policy embodied in Goal 3, *Agricultural Lands* is that there would be minimal impacts to other resources protected by Council standards.[112]

As evaluated in Section IV.F. *Protected Areas* of this order, construction and operation of the proposed facility will not impact any protected areas. As evaluated in Section IV.J. *Scenic Resources* of this order, construction and operation of the proposed facility will not impact any important or significant scenic resources. As evaluated in Section IV.K. *Historic, Cultural and Archeological Resources* of this order, construction and operation of the proposed facility will

[112] In ASC Exhibit K, this reason is embedded within the evaluation of "locational dependency"; the Department recommends Council evaluate minimal impacts to resources protected by Council standards as a separate and distinct reason.

not impact any NRHP-eligible historic, cultural or archeological resources. As evaluated in Section IV.L. *Recreation* of this order, construction and operation of the proposed facility will not impact any important recreational opportunities. As evaluated in Section IV.R.2 *Removal-Fill Law* of this order, construction and operation of the proposed facility will not impact any wetlands or waters of the state.

Because the site is not used for agricultural purposes, and is largely comprised of eastside grasslands and shrub-steppe, the lands are considered fish and wildlife habitat under the Council's Fish and Wildlife Habitat standard (OAR 345-022-0060). The habitat is suitable for Washington Ground Squirrel (WGS) and Laurence's milkvetch, state-listed threatened and endangered species and plants, however, surveys conducted in 2020 and 2021 at the site identified no presence of these species. Based on consultation with ODA on October 21, 2022, the 2021-22 surveys for Laurence's milkvetch may be relied upon to determine a low likelihood of any changes to the potential of the species to occur onsite.

Preconstruction surveys, required under recommended Threatened and Endangered Species Condition 1, would require that the certificate holder re-evaluate suitable habitat within and extending 1,000-feet from the site boundary to determine whether any changes have occurred in presence of WGS colonies or burrows. If any WGS colonies or borrows are identified during the preconstruction surveys, Threatened and Endangered Species Condition 2 would then require avoidance of the identified WGS habitat.

A site that is large enough to construct and operate a utility scale energy facility, while having minimal impacts to resources protected by Council standards offers a substantive advantage. Therefore, the Department recommends Council find that "minimal impacts to resources protected by Council standards" is one of four reasons that cumulatively justify taking an exception to Goal 3.

Local Economic Benefit

The applicant requests that Council consider that the "local economic benefit" realized from construction and operation of the proposed facility be a reason that justifies taking an exception to the statewide policy embodied in Goal 3, *Agricultural Lands.*

The 324 acres proposed for use by the facility currently provide no economic benefit to the underlying property owners because no agricultural activity occurs or has occurred there due to the poor quality soils. ASC Exhibit K Attachments K-1 and K-2 include letters from the two underlying landowners. In a signed letter dated June 14, 2021, underlying landowner Arthur Prior of Windblown Solar LLC states,

> "We have not used the proposed facility site for any type of agricultural enterprise or farming operation. The facility has never had water rights or been irrigated." "Because of the lack of irrigation the land is not useful to use for agricultural purposes."[113]

In a signed letter dated July 5, 2021, underlying landowners Steve and Wanda Scott of S&W Scott Properties LLC state,

> "..land..has not been suitable for farming." "We do not have water rights for irrigation and we do not get enough rain to raise any type of a viable crop. The soil is very sandy and without irrigation is not good for farming."[114]

Applicant states that the proposed facility will provide local economic benefits through full-time jobs, construction jobs, compensation to landowners via lease agreements, improvements to local road networks, and community service fees.

The Department recommends Council reject the applicant's "local economic benefit" as a reason justifying taking an exception to Goal 3 based on the following analysis.

- The applicant has not selected a contractor and therefore has not provided any evidence that full-time[115] or construction jobs will be filled with local workers or that hired workers will use goods and services within Umatilla County.
- Any improvements to local roads would be required under the road use agreement with the county, to ensure that public service providers are not impacted (see recommended Public Services Conditions 1 and 2), and therefore it is not a unique result of the proposed facility.
- The Council has previously expressed disagreement that lease agreements with landowners is a supportive reason for justifying local economic benefit as a reason.[116]
- The applicant simply refers to "community service fees" but does not explain or offer any evidence of coordination with Umatilla County – therefore the Department does not have the ability to evaluate whether this would provide a local economic benefit or whether it is even an available option.

Summary of Reasons Department Recommends Justify the Exception Request

<u>Summary of Reasons Recommended as Justifiable</u>

[113] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-28. Attachment K-1

[114] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-09-28. Attachment K-2.

[115] WESAPPDoc3-21 ASC Exhibit U Public Services. 2022-09-28, Section 3.2.1.2 states, "Since the Project can be operated remotely, is it anticipated that only two to five workers would be deployed to the site when necessary for maintenance. It's anticipated that the operation and maintenance (O&M) staff will be hired locally (within 3-hour radius of the Project site); however, positions that require previous experience working at solar facilities may be hired from non-local areas (outside a 3-hour radius of the Project site)."

[116] WRWAMD4. Final Order on Request for Amendment 4 of the Wheatridge Wind Energy Facility Site Certificate. 2019-11-22. p. 64.

The Department recommends Council find that 1) locational dependency, 2) minimal direct impacts to agriculture within subject tracts, 3) minimal indirect impacts to agricultural within surrounding area; and 4) minimal impacts to other resources protected by Council standards as ~~the~~ four reasons ~~justified for~~that justify taking an exception to the statewide policy embodied in Goal 3.

Environmental, Socioeconomic and Energy Consequences (ESEE Analysis)

Under OAR 345-022-0030(4)(c)(B) and ORS 469.504(2)(c)(B), in order for the Council to determine whether to grant an exception to a statewide planning goal, the applicant must show that "the significant environmental, economic, social and energy consequences" of the proposed solar facility have been identified and mitigated in accordance with Council standards.

Environmental Consequences

The proposed facility must satisfy the requirements of all applicable EFSC standards, rules and statutes. Applicable environmental EFSC standards include: General Standard of Review; Soil Protection standard; Protected Areas standard; Recreation Standard; Scenic Resources standard; Fish and Wildlife Habitat standard; and the Threatened and Endangered Species standard, as evaluated in this order. Based on the recommended findings of fact, conclusions of law, and conditions of approval presented in this order related to environmental EFSC standards, the Department recommends Council find that the proposed facility, including mitigation, would not cause significant adverse environmental consequences or impacts.

Economic Consequences

The proposed facility would create a level of tax revenue in Oregon from construction- jobs; it would result in lease payments for the two underlying landowners; and, would result in property taxes to Umatilla County. The proposed facility is not anticipated to create negative economic impacts to public services, based on letters from Umatilla County Sheriff's Office and Umatilla County Fire District #1 provided in in ASC Exhibit U Attachments U-5 and U-6.

Based on these facts, the Department recommends Council find that the proposed facility, including mitigation, would have a beneficial economic impact.

Social Consequences

Social consequences are evaluated within the context of impacts on a community from a proposed facility, such as impacts from facility visibility, noise, traffic, or demand on providers of public services. As presented in this order, the proposed facility components would not be expected to result in significant adverse visual or noise impacts on any scenic resource, protected areas, or important recreational opportunity within the analysis areas; NRHP-eligible historic, cultural and archeological resources or to public services.

Based on the recommended findings of fact and conclusions of law, and conditions of compliance as presented in this order under the Council's Scenic Resources standard; Historic, Cultural and Archeological standard; Public Services standard; and Recreation standard, the Department recommends Council find that the proposed facility would not cause significant adverse social consequences.

Energy Consequences

The proposed facility would produce up to 50 MW of renewable, emissions-free energy. Therefore, the Department recommends that the Council concludes that the proposed facility would not cause significant adverse energy consequences and would provide a positive energy consequence by producing clean, renewable electricity.

Compatibility with Adjacent Land Use

Under OAR 345-022-0030(4)(c)(C) (and ORS 469.504(2)(c)(C)), in order for the Council to determine whether to grant an exception to a statewide planning goal, the applicant must show that the proposed facility is compatible with other adjacent land uses or will be made compatible through mitigation measures.

The proposed site boundary is surrounded by EFU-zoned land. Adjacent land uses directly north, west and south of the site farming have a water right and are used for irrigated agriculture. Potential impacts from proposed facility construction to adjacent agricultural activities include: traffic congestion on local roads, wind and water-related erosion, offsite dust and noxious weed infestations.

To minimize these impacts, the applicant represents that it will:

- Coordinate with adjacent landowners on construction and harvest schedules to minimize construction-related traffic impacts
- Apply water or other dust control measures
- Implement a weed control plan

The minimization measures addressing construction-related traffic, erosion and dust control, and noxious weeds are represented in recommended Public Services Condition 1 and 2, recommended Soil Protection Conditions 1 and 2 and recommended Land Use Conditions 7, 8, 9, 10 and 11.

Because adjacent farm practices on the north, west and southern end of the site boundary are active, irrigated agricultural operations, the Department recommends Council require that, in addition to the measures represented above, that the applicant be required to prepare a site preparation and grading plan in consideration of harvest schedules and the availability of onsite dust and erosion control measures. The intent of the grading plan is to minimize unnecessary

disturbance, preserve existing vegetation and ensure that grading only occurs there is adequate dust control at the site. Adequate dust control shall be informed based on DEQ's Fugitive Dust Control Regulation.[117]

Recommended Land Use Condition 7 (PRE): Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall:

a. Provide evidence to the Department of coordination with landowners of active agricultural operations on property adjacent to the site boundary on construction schedule, including site preparation and grading activities, road construction and heavy equipment and worker traffic periods.
b. Provide to the Department a site preparation and grading plan, based on final facility design, that includes phased levels of disturbance as necessary based on landowner consultation and availability of dust and erosion control measures.

Recommended Land Use Condition 8 (CON): During construction of the facility, facility component or phase, as applicable, the certificate holder shall:

a. Adhere to the site preparation and grading plan and any necessary phased levels of disturbance to minimize dust and erosion impacts to adjacent farm practices.
b. Ensure adequate dust and erosion control measures are onsite prior to and during any grading and other ground disturbing activities.
c. Adhere to the requirements of the Traffic Management Plan under Public Services Condition 1.

The Department recommends Council impose conditions requiring that, prior to and during construction, and during facility operation, the applicant implement a Noxious Weed Plan, as follows:

[117] OAR 340-208-0210(1) No person may cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but not be limited to the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
(b) Application of water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
(c) Full or partial enclosure of materials stockpiles in cases where application of water or other suitable chemicals are not sufficient to prevent particulate matter from becoming airborne;
(d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
(e) Adequate containment during sandblasting or other similar operations;
(f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
(g) The prompt removal from paved streets of earth or other material that does or may become airborne.

Recommended Land Use Condition 9 (PRE): Prior to construction, the certificate holder shall complete all applicable preconstruction requirements established in the Noxious Weed Plan (Attachment P-4 of the Final Order on the ASC).

Recommended Land Use Condition 10 (CON): During construction, the certificate holder shall implement and adhere to the requirements of the Noxious Weed Plan (Attachment P-4 of the Final Order on the ASC or as approved to be amended by the Department).

Recommended Land Use Condition 11 (OPR): During operation, the certificate holder shall implement and adhere to the applicable requirements of the Noxious Weed Plan (Attachment P-4 of the Final Order on the ASC or as approved to be amended by the Department).

On figures and calculations presented in the ASC, approximately 4 acres of high-value Class I and II NRCS soils are mapped within the site boundary. The applicant commits to avoiding these soils entirely. To ensure that the irrigated agriculture (pivot circle) on the northern perimeter of the site boundary is avoided, the Department recommends Council impose the following condition:

Recommended Land Use Condition 12 (PRE): Prior to construction, the certificate holder shall provide to the Department final facility design/layout maps that include at least a 10-foot setback of the southern perimeter fenceline to the pivot irrigation operation on taxlot ~~4N290000017004~~N29000000300.

Based upon the zone and type of adjacent land uses, and compliance with the above-referenced conditions, the Department recommends Council find that the proposed facility would be compatible with adjacent land uses.

The Department, therefore, recommends the Council find an exception to Goal 3 is justified under OAR 345-022-0030(4)(c) and ORS 469.504(2)(c).

Conclusions of Law

Based on the foregoing recommended findings and the evidence in the record, and subject to compliance with the recommended site certificate conditions, the Department recommends the Council find an exception to Goal 3 is justified under OAR 345-022-0030(4)(c) and ORS 469.504(2)(c)~~.; and that therefore the Department recommends the Council find that the proposed facility would comply with the applicable statewide planning goal (Goal 3).~~ As such, subject to the recommended conditions, the Department recommends Council find that the proposed facility would comply with the Council's Land Use standard.

IV.F Protected Areas: OAR 345-022-0040

(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:

(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;

(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;

(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;

(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;

(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;

(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;

(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;

(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;

(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;

(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;

(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;

(l) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;

(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to: Coastal Oregon Marine Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension Center, Hood River Agriculture Research and Extension Center, Hermiston Columbia Basin Agriculture Research Center, Pendleton Columbia Basin Agriculture Research Center, Moro North Willamette Research and Extension Center, Aurora East Oregon Agriculture Research Center, Union Malheur Experiment Station, Ontario Eastern Oregon Agriculture Research Center, Burns Eastern Oregon Agriculture Research Center, Squaw Butte Central Oregon Experiment Station, Madras Central Oregon Experiment Station, Powell Butte Central Oregon Experiment Station, Redmond Central Station, Corvallis Coastal Oregon Marine Experiment Station, Newport Southern Oregon Experiment Station, Medford Klamath Experiment Station, Klamath Falls;

(n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;

(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;

(p) State wildlife areas and management areas identified in OAR chapter 635, Division 8.

*****

(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Findings of Fact

The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a proposed facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040.

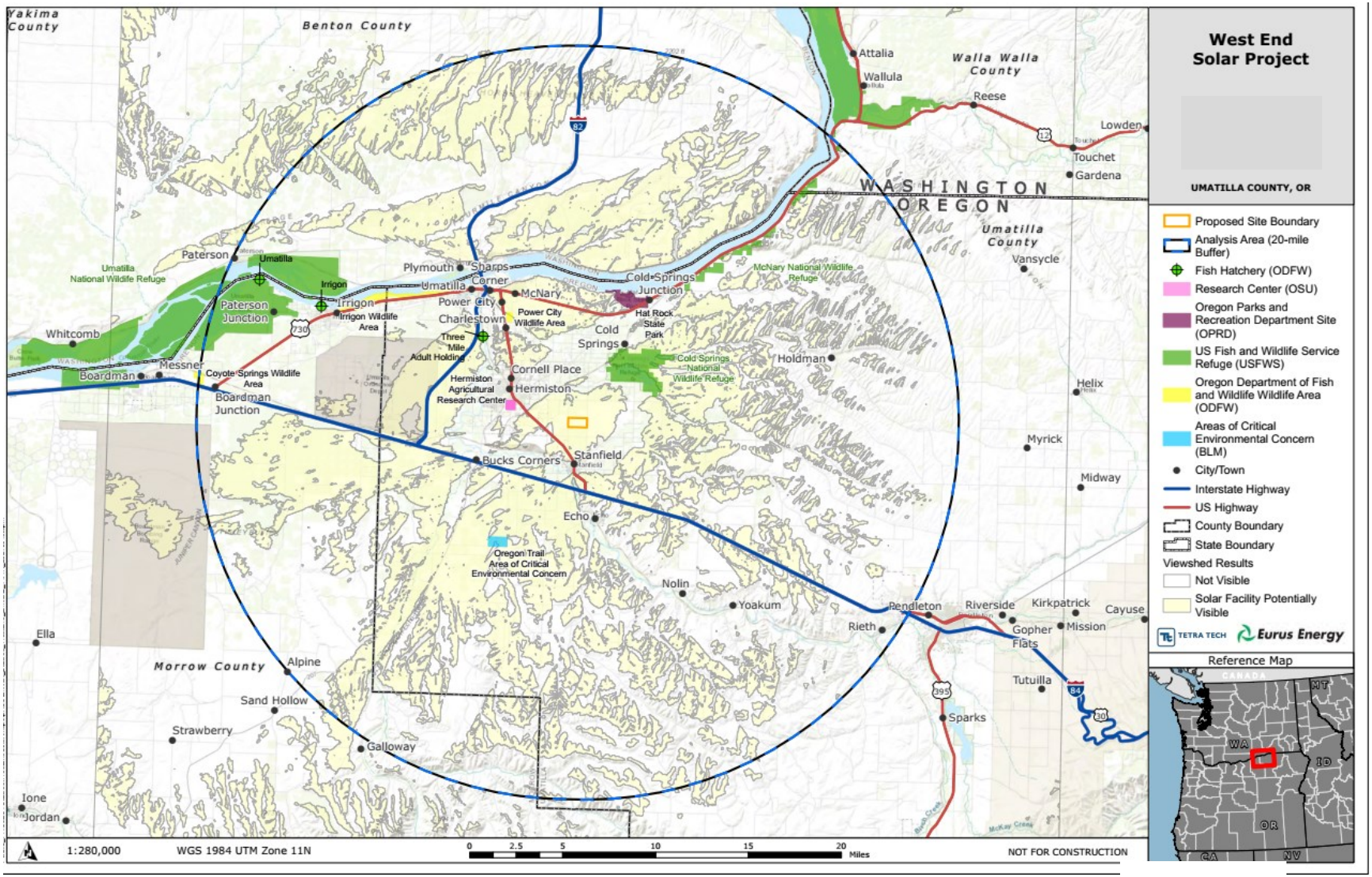
As required under OAR 345-021-0010(1)(L), the applicant identified the protected areas within the analysis area and evaluated potential impacts to those protected areas during construction and operation of the proposed facility in Exhibit L of the Application for Site Certificate. Impacts evaluated by the applicant included visual impacts as well as impacts from noise, increased traffic, water use, and wastewater disposal.

As shown in Table 3: *Protected Areas within 20-mile Analysis Area*, there are twelve protected areas within 20-miles of the proposed facility site boundary. The protected area located nearest to the proposed facility site boundary is the Cold Spring National Wildlife Refuge, which is located approximately 2.4 miles northeast of the proposed facility site. The next closest protected area is the Hermiston Agricultural Research and Extension Center which is located approximately 3.2 miles west of the proposed facility site. The remaining protected areas are located six or more miles from the proposed facility site. Figure 8 shows the location of the protected areas in relation to the proposed facility site and includes the results of the applicant's visibility analysis for protected areas within the analysis area.

Table 3: Protected Areas within 20-mile Analysis Area

Protected Area	Approx. Distance from Proposed Site Boundary (miles)	Direction from Proposed Site Boundary	Basis for Protection OAR 345-022-0040(1)
Cold Spring National Wildlife Refuge	2.4	NE	(d)
Hermiston Agricultural Research and Extension Center	3.2	W	(m)
Power City Wildlife Area	6.0	NW	(p)
Three Mile Adult Holding Facility	6.3	NW	(f)
Hat Rock State Park	6.3	N	(h)
Echo Meadows Site, Oregon Trail Area of Critical Environmental Concern	6.8	SW	(o)
McNary National Wildlife Refuge	7.9	NE	(d)
Irrigon Wildlife Area	9.1	NW	(p)
Umatilla National Wildlife Refuge	13.8	NW	(d)
Irrigon Fish Hatchery	14.6	NW	(f)
Umatilla Fish Hatchery	18.2	NW	(f)
Coyote Springs Wildlife Area	19.7	W	(p)

Figure 8: Protected Areas within 20-miles of the West End Solar Project



Potential Visual Impacts of Proposed Facility Structures

The applicant conducted a zone of visual influence (ZVI) analysis to determine whether the proposed facility would potentially be visible from the protected areas in the analysis area. The ZVI analysis assumed that the facility would include solar arrays with a maximum height of 16 feet and a substation with associated equipment, including two interconnection utility poles, with a maximum height of 30 feet.[118] The impacts of these modeled components were expected to be representative of impacts from other facility components. The analysis used a "bare-earth" modeling approach, meaning that it only considers the effects of topography and does not account for the effects of distance, lighting, weather, atmospheric attenuation factors, vegetation, or buildings. The Department recommends that the ZVI analysis used sufficient assumptions to adequately predict potential visibility of facility components within the potentially affected viewshed.

The results of the ZVI analysis are shown about in Figure 8: *Protected Areas within 20-miles of the West End Solar Project*. Based on the ZVI analysis, the proposed facility would be potentially visible or partially visible from five of the protected areas identified in the analysis area, including: the Cold Springs National Wildlife Refuge, the Power City Wildlife Area, Hat Rock State Park, the Echo Meadows Site of the Oregon Trail ACEC, and the McNary National Wildlife Refuge. The ZVI analysis indicates that the proposed facility would not be visible from the remaining seven protected areas in the analysis area. Because the proposed facility is not likely to be visible from these areas, the Department recommends that no visual impacts to these areas are expected.

Cold Springs National Wildlife Refuge

The Cold Springs National Wildlife Refuge is a 3,117-acre wildlife refuge overlaying the Bureau of Reclamation Cold Springs Reservoir. The Bureau of Reclamation manages the reservoir to provide water for irrigation in the surrounding areas, and the U.S. Fish and Wildlife Service manages refuge lands to provide habitat and nesting areas for native birds, migratory waterfowl, and other species. According to the U.S. Fish and Wildlife Service recreational use of the refuge is low, and most users are local residents engaged in hunting and fishing activities, with birdwatching, horseback riding and day-use (e.g., picnicking, social gathering) accounting for additional visitor use days.[119]

The refuge is located approximately 2.4 miles to the northeast of the proposed facility site. From the refuge, the facility will be viewed at a middleground distance (0.5 to 5 miles). Applicant explains that at a middleground distance, viewers would potentially be able to

~~[118] The ZVI analysis does not account for potential visual impacts from two new 50-75 foot utilities poles that will support transmission lines connecting the switchyard substation to existing transmission lines. Because these poles would be of similar height and immediately adjacent to existing transmission infrastructure, the Department recommends that the poles would have a minimal contribution to visual impacts.~~

[119] US Fish and Wildlife Service. "Cold Springs National Wildlife Refuge." Accessed June 27, 2022 at: https://www.fws.gov/refuge/cold-springs

distinguish individual forms within the facility and that the texture and color of facility components would be identifiable but would be muted and would lack detail.[120] Applicant further explains that in portions of the refuge, views of the facility will be screened by vegetation and structures. In the portions of the refuge where the proposed facility would be visible, it would be viewed in context with existing urban and industrial development and would not be a prominent feature in the viewshed.[121]

The proposed facility may be visible from portions of the Cold Springs National Wildlife Refuge but impacts to views from the refuge would be mitigated by distance and screening by vegetation and existing structures. Where visible, the proposed facility would be viewed in context with existing urban and industrial development and would not be visually dominant within the landscape. Further, the National Wildlife Refuge (NWR), is managed for preserving and breeding gourds foe native birds, which would be precluded by the construction and operation of the facility. Based on the limited visibility, viewing distance, and low visual contrast, and the management directive for the NWR, the Department recommends the Council find that visual impacts of the facility on Cold Springs National Wildlife Refuge would be less than significant.

Power City Wildlife Area

The Power City Wildlife Area is a 100-acre state wildlife area situated immediately adjacent to Highway 395 between Hermiston and Power City.[122] The Power City Wildlife Area is located approximately 6-miles from the proposed facility.

Applicant explains that at a background distance (greater than 5 miles), the shape and size of solar arrays may be visible but will create limited contrast and will lack texture and distinguishable color. Applicant further explains that existing views from the Power City Wildlife Area include existing industrial and urban development, highways, and transmission lines.[123]

The proposed facility may be visible from portions of the Power City Wildlife Area but impacts to views from the refuge would be mitigated by distance and screening by vegetation and existing structures. Where visible, the proposed facility would be viewed in context with existing urban and industrial development and would not be visually dominant within the landscape. Based on the limited visibility, viewing distance, and low visual contrast, the Department recommends the Council find that visual impacts of the facility on the Power City Wildlife Area would be less than significant.

Hat Rock State Park

[120] Exhibit L, Section 4.4.1
[121] Exhibit L, Section 4.4.2.1
[122] ODFW. Columbia Basin Wildlife Areas Management Plan. December 2021. pg. 7
[123] Exhibit L, Section 3.0, Table L-1.

Hat Rock State Park is located nine miles east of the city of Umatilla off U.S. Highway 730. The park lies on the south shore of Lake Wallula behind McNary Dam on the Columbia River.[124] The park is named for a distinctive 70-foot tall basalt formation located in the northern portion of the park. A trail provides park users with access to the base of Hat Rock but access to the formation itself is restricted. Hat Rock, along with two other Basalt formations within the park and the wetlands and islands to the north of the Park boundary are designated as primary protection areas in part for their scenic values.[125]

Hat Rock State Park is located 6.3 miles to the north of the proposed facility site. Applicant explains that at a background distance (greater than 5 miles), the shape and size of solar arrays may be visible but will create limited contrast and will lack texture and distinguishable color.[126] Applicant explains that the proposed facility may only be visible from higher elevation areas within the park and would not be visible from developed use areas. Applicant further explains that existing views from Hat Rock State Park in the direction of the proposed facility include existing industrial and urban development, highways, and transmission lines.[127]

Visibility of the proposed facility from Hat Rock State Park would be limited, and where visible, impacts would be mitigated by distance and screening by vegetation and existing structures. Where visible, the proposed facility would be viewed in context with existing urban and industrial development and would not be visually dominant within the landscape. Based on the limited visibility, viewing distance, and low visual contrast, the Department recommends the Council find that visual impacts of the facility on Hat Rock State Park would be less than significant.

Echo Meadows Site of the Oregon Trail ACEC

The Echo Meadows Site is a 320-acre site managed by the Bureau of Land Management. The site is located off of State Highway 320 west of the City of Echo. The site includes an interpretive site and a path to a one-mile long stretch of wagon swales created by emigrants on the Oregon Trail.

The Echo Meadows Site is located approximately 6.8 miles to the southwest of the proposed facility. Applicant explains that at a background distance (greater than 5 miles), the shape and size of solar arrays may be visible but will create limited contrast and will lack texture and distinguishable color.[128] Applicant further explains that existing views from the Echo Meadows Site in the direction of the proposed facility include existing agricultural structures, transmission

[124] Oregon Parks and Recreation Department. "Hat Rock State Park." Accessed 6/30/2022 at: https://stateparks.oregon.gov/index.cfm?do=park.profile&parkId=12
[125] Oregon Parks and Recreation Department. Hat Rock State Park Master Plan. 1983. Accessed 6/30/2022 from: https://www.oregon.gov/oprd/PRP/Documents/PLA-Adopted-Hatrock-1983.pdf
[126] Exhibit L, Section 4.4.1
[127] Exhibit L, Section 3.0, Table L-1.
[128] Exhibit L, Section 4.4.1

lines, and highways.[129] Applicant states that the primary orientation of visitors away from the proposed facility site will further mitigate visual impacts; however, the Department does not find this argument to be compelling given the northwesterly orientation of the access path from the interpretive site to the Oregon Trail segments.

Visibility of the proposed facility from the Echo Meadows Site would be limited, and where visible, impacts would be mitigated by distance and screening by topography, vegetation, and existing structures. Where visible, the proposed facility would be viewed in context with existing agricultural development and other infrastructure, and would not be visually dominant within the landscape. Based on the limited visibility, viewing distance, and low visual contrast, the Department recommends the Council find that visual impacts of the facility on the Echo Meadows Site would be less than significant.

McNary National Wildlife Refuge

The McNary National Wildlife Refuge consists of approximately 15,666 acres of refuge lands administered by the US Fish and Wildlife Service. The majority of refuge lands are located in Washington State and are outside of the 20-mile analysis area for Protected Areas. The Juniper Canyon and Stateline Units of the refuge, which are located within the analysis area, consist of approximately 1692 acres of isolated parcels extending along the southern bank of the Columbia River in both Oregon and Washington.

The Applicant's ZVI analysis indicates that the proposed facility would only be potentially visible from limited areas within the McNary Wildlife Refuge and this visibility would likely be further reduced by vegetation and existing development.

The proposed facility would only be visible from isolated parcels within the McNary National Wildlife Refuge, and where visible, impacts from the proposed facility would be mitigated by distance and screening by vegetation and existing structures. Based on the limited visibility, the Department recommends the Council find that visual impacts of the facility on the McNary National Wildlife Refuge would be less than significant.

Potential Visual Impacts of Emissions

Operation of the proposed facility is not expected to result in significant emissions. Construction of the proposed facility could result in some dust emissions during road construction, foundation installation, final cleanup, reclamation, and restoration. Applicant proposes to implement dust control measures consistent with the best management practices identified in Attachment I-1: Erosion Sediment Control Measures, attached to this order and discussed further in Section IV.D., Soil Protection.

Potential Noise Impacts (Construction and Operation)

[129] Exhibit L, Section 3.0, Table L-1.

Potential noise impacts from construction and operation of the proposed facility are discussed in Section IV.Q.1 of this Order. Noise from construction and operation of the proposed facility will not be distinguishable from background noise levels at a distance of 2 miles from the proposed facility site. Because all protected areas are located more than 2 miles from the proposed site, the Department recommends the Council find that the construction and operation of the proposed facility are not likely to result in significant noise impacts to any protected areas.

Traffic Impacts (Construction and Operation)

The primary transportation routes for workers and deliveries to the proposed facility site include Interstate 82 (I-82) and Interstate 84 (I-84). U.S. Route 395 (US-395) and sections of US-730, County Road 1000, and S. Edwards Road, which provides access to the site, could also be affected by increased traffic during construction of the proposed facility.

As discussed in Section IV.M., *Public Services*, of this order, the applicant estimates that there will be approximately 45 round trips to the site for truck deliveries and 240 round trips to the site by worker vehicles per day on average, with worker traffic increasing to 400 round trips per day during peak construction periods. This volume of traffic is not expected to significantly affect travel times on the primary transportation routes. Traffic during operation of the proposed facility is expected to be minimal.

Most protected areas in the analysis area are located to the north of the proposed site and are primarily accessed by I-84, I-82, US-730 and Oregon Route 207. Travel to these areas is not expected to be significantly impacted by traffic associated with construction of the proposed facility. The two exceptions are the Power City Wildlife Area and the Oregon State University Agriculture Research and Extension Center at Hermiston, which are both located along US-395. Increased traffic could result in some short-term delays due to increased traffic on US-395, but that these delays would be intermittent and temporary in nature.

Applicant also argues that traffic impacts to these protected areas would be less than significant because there may be alternate routes to access the site but does not explain how or when travelers would be informed that alternate routes are advised. As a result, the Department does not recommend that the Council rely on the availability of alternate routes as a mitigating factor.

The applicant is required to enter into a Road Use Agreements with Umatilla County, and as described in Recommended Public Services Condition 1 and 2, would be required to implement best management practices to minimize traffic impacts due to construction, traffic congestion, flagging needs, road closures, and large equipment and deliveries. The BMPs are further described in the draft Traffic Management Plan provided as ASC Attachment U-1. The Road Use Agreement would also provide for the mitigation of any damage to roads that occurs during construction.

Traffic associated with construction of the proposed facility could result in intermittent, short-term delays for visitors to the Power City Wildlife Area and the Oregon State University Agriculture Research and Extension Center at Hermiston. These impacts will be minimized through the implementation of a Traffic Management Plan, as required by Recommended Public Services Condition 1 and 2. Based on the intermittent and temporary nature of the impacts and taking the proposed mitigation into account, the Department recommends that the construction and operation of the proposed facility is not likely to result in significant traffic impacts to any Protected Areas.

Water Use and Wastewater Disposal (Construction and Operation)

As discussed further in Section IV.Q.3., *Water Rights*, the applicant estimates that approximately 12.8 million gallons of water will be required for the construction of the proposed facility, and that the proposed facility will use an additional 1.65 million gallons of water per year for sanitation and washing solar modules.

Some protected areas within the analysis area, including the Cold Springs National Wildlife Refuge, are protected for wildlife habitat that is dependent on surface water availability and could be impacted by additional withdrawals or diversions. The applicant has represented that this would be obtained from the City of Hermiston, which has existing water rights that are sufficient to meet this demand, and that no additional ground or surface water withdrawals will be needed for water use at the site.

As described in Section IV.D., *Soil Protection*, construction of roads, foundations, and other related supporting facilities would be Applicant proposes to implement dust control measures consistent with the best management practices identified in Attachment I-1: Erosion Sediment Control Measures, attached to this order. In addition, the proposed facility is not expected to discharge into waters of the state that would directly or indirectly connect to a protected waterway.

The applicant does not propose to construct or operate a septic system or other water disposal system for industrial water or sewage at the site. Sanitation wastewater will be contained in portable toilets and disposed of by a licensed contractor. Because no industrial or sanitation wastewater will be disposed at the site no water quality impacts from these types of wastewater are expected.

Because no additional ground or surface water withdrawals are required for the construction and operation of the proposed facility, stormwater discharges would be minimized by best management practices, and no other wastewater discharges are expected, the Department recommends that the construction and operation of the proposed facility is not likely to result in significant adverse impacts to water availability or water quality at any protected areas.

Conclusions of Law

Based on the foregoing recommended findings, the Department recommends the Council conclude that the design, construction and operation of the proposed facility would not be likely to result in significant adverse impacts to any protected areas, in compliance with the Council's Protected Area standard.

IV.G Retirement and Financial Assurance: OAR 345-022-0050

> *To issue a site certificate, the Council must find that:*
>
> *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.*
>
> *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.*

Findings of Fact

The Retirement and Financial Assurance standard requires a finding that the proposed facility site can be restored to a useful, non-hazardous condition at the end of the facility's useful life, should either the applicant (certificate holder) stop construction or should the facility cease to operate. In addition, it requires a demonstration that the applicant can obtain a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.

Restoration of the Site Following Cessation of Construction or Operation

OAR 345-022-0050(1) requires the Council to find that the facility site can be restored to a useful non-hazardous condition at the end of the facility's useful life, or if construction of the facility were to be halted prior to completion. In ASC Exhibit X, the applicant estimates the proposed facility's useful life as 30 years.[130]

The applicant is obligated to retire the proposed facility upon permanent cessation of construction or operation (or upon retirement). Below, the Department provides a description of the decommissioning activities associated with retiring the proposed facility and each

[130] WESAPPDoc3-24 ASC Exhibit X Retirement 2022-09-28, Section 2.0. The applicant indicates the proposed facility could be repowered with more efficient equipment over time so operation of the proposed facility could be longer than 30 years. Any major repowering may be subject to an amendment determination and the EFSC amendment process under OAR Chapter 345, Division 027.

proposed facility component that the applicant would deploy to restore the site to a useful, non-hazardous condition:[131]

Mobilization and demobilization of equipment and facilities: Includes mobilization (prior to decommissioning) and demobilization (upon completion) of on-site construction management/storage facilities and equipment used for decommissioning. Also includes site set up and cleanup of facilities prior to and after decommissioning.

Mobilization and demobilization of management: Site support including medical and office supplies, on-site field management including superintendent and engineers.

Operations and Maintenance Enclosure: Demolish (demo) structure, load materials and truck dispose/recycle metal. Remove foundation/gravel to subgrade or deeper by excavation, load concrete/gravel into trucks and transport/dispose of materials.[132]

Substation: Disconnect transformers then separate, remove, transport and dispose of oil. Dismantle and cut transformers then load truck and dispose. Remove/demo control building, truck and dispose. Remove underground utilities. Excavate and remove foundations to subgrade or deeper then load, truck/transport and dispose concrete from foundations. Remove fence.

Switchyard: (same as Substation) Disconnect transformers then separate, remove, transport and dispose of oil. Dismantle and cut transformers then load truck and dispose. Remove/demo control building, truck and dispose. Remove underground utilities. Excavate and remove foundations to subgrade or deeper then load, truck/transport and dispose concrete from foundations. Remove fence.

Interconnection facility: Cut and lower poles and transmission towers (structure removal), remove overhead cables, load trucks and dispose. Remove foundations to subgrade or deeper with excavation, then load truck, transport and dispose concrete from foundations.

Battery facilities: Disconnect, remove, transport and dispose/recycle batteries. Demo and remove structures for disposal or recycling.

Solar Facility: Disconnect electrical from panels and inverters and transformers. Dismantle and remove racking system, remove piers including pier foundations to depth with excavation, concrete loaded and transported for disposal. Panels transported for disposal or recycling.

[131] Tasks and descriptions were derived from Department evaluation of ASC Exhibit X, Attachment X-1. Project Retirement and Restoration Cost Estimate line items and subtasks. WESAPPDoc3-24 ASC Exhibit X Retirement 2022-09-28.

[132] To allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes, all subsurface features including underground collector lines and concrete foundations associated with the O&M, Substation, Solar, Battery, and Switchyard may need to be removed to a minimum of 3 feet below ground surface or as agreed with the landowner.

Remove external fence line. Underground electrical collector lines would remain buried for sections at 3 feet or deeper.

Roads: Facility roads would be used to allow the decommissioning contractor to separate the solar modules from the pole, and directly load the modules into a truck or roll-off container for off-site disposal or recycling. After facility components are removed, gravel would be removed from facility roads and then roads would be decompacted, backfilled as necessary, and restored. Decompaction includes discing and regrading.

Re-seeding and Site Restoration: Roads, locations of facility components, and areas disturbed by construction would be spot graded and re-seed with native vegetation as per revegetation plan and retirement plan.

The Department reviewed the above-summarized tasks and actions with the more-detailed line-item breakdown presented in ASC Exhibit X-1 and compared those details against the information presented in ASC Exhibit B (Project Description), C (Project Location – Disturbance) and G (Materials Inventory). Based on review of these materials, the Department affirms that the information is consistent across relevant exhibits. For this reason, the Department recommends Council find that the tasks and actions accurately represent facility decommissioning and site restoration.

As provided in ASC Exhibit B and I, and reflected in recommended Soil Protection Condition 4, 5, 7 and 8 in Section IV.D., *Soil Protection*, the applicant commits to developing and implementing a Spill, Prevention, Control and Countermeasure Plan (SPCC), which would comply with 40 CFR 112 (Oil Pollution Prevention), including the safe cleanup of hazardous materials.[133] This applicant proposed plan, recommended by the Department as site certificate conditions, would also minimize impacts to the site and support the applicant's ability to restore the site to a useful, nonhazardous condition.

The Council's rules include several mandatory site certificate conditions, which are addressed below, relating to the obligation of a certificate holder to prevent the development of conditions on the site that would preclude restoration of the site and requiring the certificate holder to obtain Council approval of a retirement plan in the event that the facility ceases construction or operation:

> **Retirement and Financial Assurance Condition 1 (RET):** The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.
> [Mandatory Condition OAR 345-025-0006(7)]

[133] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 2.0.

Retirement and Financial Assurance Condition 2 (RET): The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, nonhazardous condition at the time of retirement, notwithstanding the Council's approval in the site certificate of an estimated amount required to restore the site.
[Mandatory Condition OAR 345-025-0006(9)]

Retirement and Financial Assurance Condition 3 (RET): If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-025-0006(8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
[Mandatory Condition OAR 345-025-0006(16)]

In Section IV.B., *Organizational Expertise* of this order, the Department recommends that the Council find that the applicant has the organizational expertise to construct, operate, and retire the facility, in compliance with the standard. In addition, the Department recommends Council find that the applicant would satisfy the requirements of the Soil Protection, Fish and Wildlife Habitat, and Waste Minimization standards (Sections IV.D., IV.H., and IV.N. of this order, respectively). Each of those sections describe conditions designed to minimize adverse impacts on the surrounding land from construction and operation of the proposed facility.

Based on compliance with the above-referenced mandatory conditions and recommended conditions as presented in Section IV.D. *Soil Protection*, and the applicant's assessment of decommissioning tasks and actions, the Department recommends the Council find that the site of the proposed facility could be restored adequately to a useful, non- hazardous condition following permanent cessation of construction or operation.

Methods and Assumptions for Decommissioning Cost Estimate

OAR 345-022-0050(2) requires the Council to find that the applicant has demonstrated a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the site of the proposed facility to a useful non-hazardous condition. A bond or letter of credit in a form and amount satisfactory to Council provides a site restoration remedy to protect the State of Oregon and its citizens if the applicant (certificate holder) fails to perform its obligation to restore the site. The bond or letter of credit must remain in force until the applicant (certificate holder) has fully restored the site. OAR 345-025-0006(8) establishes a mandatory condition, which ensures compliance with this requirement (see Retirement and Financial Assurance Condition 4 below).

ASC Exhibit X, Attachment X-1, details the applicant's cost estimate to restore the site to a useful, nonhazardous condition. The decommissioning cost estimate was generated by Mr. Gary Murdock an Engineer and Cost Estimator at Tetra Tech with 15 years' experience in generating cost estimates for commercial energy facilities, including approved EFSC wind and solar facilities.[134] The methods and assumptions that the applicant relied on to generate the decommissioning estimate are:

Labor, Equipment, and Unit Cost Rate Methods and Assumptions:

- Labor costs developed by reviewing U.S. Department of Labor wage determinations prevalent to the geographic area of the proposed facility and rates published by RS Means data.[135] An average rate includes base wage, fringe, and payroll tax liability. The final rate used in the estimate is an average of 40 hours of standard time and 10 hours of overtime per week, assuming a 50-hour work week during construction activities.
- Production rates established using applied professional experience and published standards including RS Means data.[136]
- Equipment rates developed by reviewing rates published by RS Means and historical vendor quotes associated with the location of the proposed facility. Rates include fuel, maintenance, and wear and tear of ground-engaging components. Rates utilized assume the use of rental equipment, which is generally more expensive than contractor-owned equipment.
- Unit costs developed by establishing the labor, equipment, and production rate required for each individual task using RS Means and the estimator's experience.[137]

[134] WESAPPDoc12 Applicant Responses to RAIs Exhb E, I, W and X_Combined 2022-06-01; Exhibit X_RAI X-11_Murdock Gary Resume.

[135] RS Means provides cost estimating software for the construction industry where construction costs are comprised of material, labor and/or equipment prices with more than 92,000-line items and cost engineers spend more than 30,000 hours researching and validating the costs every year. https://www.rsmeans.com/info/contact/about-us Accessed 06-10-2022.

[136] Production rates in estimating refer to time to perform a task. For example, the production rate for Solar Panel Removal is assumed to be 20 panels per laborer per hour. WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 4.2.

[137] The applicant provided different unit rates for the removal of the solar racking posts – one where posts have concrete backfill and one where there is no concrete backfill in Attachment W-1. To generate a more conservative estimate, the applicant applied the higher unit rate (where concrete must be removed at each post) was applied to all racking posts but one.

Decommissioning Task Methods and Assumptions:

- Mobilization and demobilization costs reflect the anticipated cost to mobilize equipment, facilities and workers to the facility site, assuming the work would performed by local contractors. This amount does not include the frontloading of costs from other tasks.
- Project Site Support incudes costs for field management during construction/decommissioning activities which includes a Superintendent, a Health and Safety Representative, and two Field Engineers. Costs for temporary facilities includes one office trailer and two Conex storage units, along with portable toilets, first aid supplies, and utilities.
- The contractor's Home Office, Project Management, Overhead, and Fee costs developed based on an average and applied to the estimate, added as 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fee.
- Roads would be restored consistent with the approved retirement plan so that they become a part of the natural surroundings and are no longer recognizable or usable as a road. On private lands, roads would be restored or left in place at the request of the current landowner. The cost for restoration of roads assumes that all roads would be decompacted and reseeded.
- Restoration is estimated on a unit cost basis, priced by task, and follows the progression of work from start to finish. Several other miscellaneous costs have been approximated, including permits, engineering, signage, fencing, traffic control, utility disconnects, etc.

Estimated Cost of Site Restoration

As presented in Table 4: *Facility Decommissioning Tasks and Cost Estimate*, the decommissioning cost estimate totals $4,734,498 million (Q3 2022 dollars), prior to application of the Department's recommended contingencies, as further described below.

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($)[1]	Unit	Estimate ($)
Mobilization / Demobilization *[1.1]*				
Equipment Mob	1	61,200.00	Lump Sum[4]	$61,200.00
Site Facilities	1	2,200.00	Lump Sum[4]	$2,200.00
Crew Mob & Site Setup	3	12,065.72	Day	$36,197.16
Crew Demob & Site Cleanup	2	12,065.72	Day	$24,131.44
			Subtotal =	***$123,728.60***
Project Site Support [1.2] Site Facilities *[1.2.1]*	3	1,305.00	Month	***$3,915.00***
Field Management *[1.2.2]*	3	53,947.28	Week	***$161,841.84***
O&M Building Removal *[1.3]*				
Structure Demo	1	867.41	Lump Sum[4]	$867.41
Remove Foundations To Subgrade[3]	11	27.02	Cubic Yd.	$297.22
Trucking	1	1,375.00	Each	$1,375.00
Waste Material Disposal	4	45	Ton	$180.00
			Subtotal =	***$2,719.63***
Substation & Switchyard Removal and Disposal *[1.4.1 & 1.4.2]*				
Fence Removal	2	1,202.19	Day	$2,404.38
Transformer Removal	2	119,639.33	Each	$239,278.66
Remove Control Building	2	2,432.59	Each	$4,865.18
UG Utility & Ground Removal	4	1,202.19	Day	$4,808.76
Remove Foundations to Subgrade[3]	1000	27.02	Cubic Yd.	$27,020.00
Misc. Material Disposal	2	1,825.00	Lump Sum[4]	$3,650.00
Restore Yard (Incl. backfill, topsoil, reveg)	2	31,301.73	Each	$62,603.46
			Subtotal =	***$344,630.44***
Interconnection Facility *[1.5]*				
Structure Removal	2	4,255.53	Each	$8,511.06
Remove Foundations To Subgrade[3]	2	2,321.28	Each	$4,642.56
			Subtotal =	***$13,153.62***

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($)[1]	Unit	Estimate ($)
DC Storage System Removal *[1.6]*				
Battery Removal & Disposal	70	2,497.10	MW	$174,797.00
Structure & Components Removal	70	951.7	MW	$66,619.00
			Subtotal =	***$241,416.00***
Solar Array Removal *[1.7]*				
Fence Removal	15,400.00	1.19	Linear Feet	$18,326.00
Inverter / Transformer Removal	25	5,089.67	Each	$127,241.75
Remove Foundations To Subgrade[3]	25	2,594.35	Each	$64,858.75
Solar Panel Removal & Disposal	180,000.00	6.00	Each	$1,080,000.00
Solar Rack (Trackers) & Post Removal w/ Concrete	1	1,142,547.10	Lump Sum[4]	$1,142,547.10
			Subtotal =	***$2,432,973.60***
Road Removal and Site Restoration/Revegetation [1.8]				
Decompact & Remove Gravel From Roads	18,100.00	2.29	Linear Feet	$41,449.00
Import Backfill/Topsoil	2,500.00	20.00	Cubic Yd.	$50,000.00
Spot Grade Disturbed Areas	324	268.20	Acre	$86,896.80
Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	324	500.00	Acre	$162,000.00
			Subtotal =	***$340,345.80***
			West End Solar Project Max Potential Decommissioning Cost **(Cost)** *Subtotal =*	***$3,664,724.53***
			Decommissioning Subtotal for Wind and Solar (94% of Total Cost)	***$3,423,308.53***
			Decommissioning Total for Battery (6% of Total Cost)	***$241,416.00***
Applicant Applied Contingencies *[1.9]*				
Home Office, Project Management (5% Of Cost)	5		Percent	$183,236.23
Contractor OH & Fee (13% Of Cost)	13		Percent	$476,414.19
			Applicant **Contingency** *Subtotal =*	***$659,650.42***

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($)[1]	Unit	Estimate ($)
Breakdown of Applicant Contingencies by Component				
Total Applicant Contingencies for Solar (94% of total contingencies)				***$620,071.39***
Total Applicant Contingencies for Battery (ESS) (6% of total contingencies)				***$39,579.02***
Subtotal of Cost and Applicant Contingencies (Q2 2021 Dollars) - *Rounded to nearest $1*				**$4,324,374.95**
Subtotal of Cost and Applicant Contingencies for Solar (94% of total contingencies)				**$4,043,379.92**
Subtotal of Cost and Applicant Contingencies for Battery (ESS) (6% of total contingencies)				**$280,995.02**
Subtotal of Cost and Applicant Contingencies (Adjusted - Q3 2022 Dollars)[2]				**$4,687,622.44**
Performance Bond	1		Percent	**$46,876.22**
			Adjusted Gross Cost	**$4,734,498.67**
Department Applied Contingencies				
Department Administration and Project Management	10		Percent	$473,449.87
Future Development Contingency	10		Percent	$445,042.87
	20 (ESS)		Percent	$56,813.98
	subtotal			$501,856.86
			ODOE **Contingency** *Subtotal* =	***$975,306.73***
Total Site Restoration Cost with Department Adjusted Contingencies (Q3~~1~~ 2022 Dollars) *Rounded to nearest $1*				**$5,709,805**

Notes:
1. All unit costs are in Q2 2021 Dollars.
2. Adjustment factor from Q2 2021 Dollars to Q3 2022 Dollars is 1.084.
Source: WESAPPDoc3-24 ASC Exhibit X Retirement 2022-09-28. Attachment Y-1 for detailed breakdown of tasks, actions and unit costs for the sum total costs presented in this table.
3. To allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes, all subsurface features including underground collector lines and concrete foundations associated with the O&M, Substation, Solar, Battery, and Switchyard may need to be removed to a minimum of 3 feet below ground surface or as agreed with the landowner.

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($)[1]	Unit	Estimate ($)
4. Tasks associated with a Lump Sum unit cost may be calculated using a fraction (in decimal form) of the actual quantities constructed or by using the more detailed break down of unit costs associated with the Lump Sum task identified in the cost estimating worksheet in ASC Exhibit X, Attachment X-1.				

1

As presented in Table 4: *Facility Decommissioning Tasks and Cost Estimate*, the Department recommends Council add a 10 percent contingency cost for both the administrative and project management expenses, and a future development contingency (less the decommissioning estimate of the ESS/DC Storage System, which the Department recommends have a 20 percent contingency be applied). A performance bond of 1 percent is also recommended to be applied. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work would be completed as agreed, if the proposed facility needed to be retired absent the applicant.

The 10 percent contingency for administrative and management expenses is recommended to cover the anticipated direct costs borne by the State in the course of managing site restoration and would include the preparation and approval of a final retirement plan, obtaining legal permission to proceed with demolition of the facility, legal expenses for protecting the State's interest, preparing specification bid documents and contracts for demolition work, managing the bidding process, negotiations of contracts, and other tasks. Consistent with recommended Organizational Condition 3, the Department and Council reserve the right to adjust the contingencies, as appropriate and necessary to ensure that costs to restore the site are adequate to maintain health and safety of the public and environment, consistent with Council standards.

The 10 percent future development contingency the Department recommends Council apply to all tasks, actions and applicant contingencies, with the exception of the cost of the ESS conclude that a 20 percent future development contingent is necessary to be applied to account for uncertainty in the decommissioning estimate of the ESS/DC Storage System because, if site restoration becomes necessary, it might be many years in the future where there is uncertainty of continued adequacy of the retirement cost estimate. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work will be completed as agreed.

Therefore, the Department recommends that Council find that $5,709,805 million (Q3 2022 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition.

Ability of the Applicant to Obtain a Bond or Letter of Credit

OAR 345-022-0050(2) requires the Council to find that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to Council to restore the proposed facility site to a useful non-hazardous condition. A bond or letter of credit provides a site restoration remedy to protect the state of Oregon and its citizens if the applicant

(certificate holder) fails to perform its obligation to restore the site. The bond or letter of credit must remain in force until the applicant (certificate holder) has fully restored the site.

As discussed in Section IV.B., *Organizational Expertise*, the applicant, EE West End Solar LLC, is a wholly owned subsidiary of Eurus Solar Holdings, LLC. Eurus Solar Holdings LLC is a wholly owned subsidiary of Eurus Energy America, LLC. Eurus Energy America, LLC is a wholly owned subsidiary of Eurus Energy America Corporation (EEAC- parent company). ASC Exhibit M, Attachment M-2 is a letter from Sumitomo Mitsui Banking Corporation (SMBC), which indicates that EEAC is a valued client of SMBC.[138] The letter continues to acknowledge the organizational structure of Eurus Solar Holdings and that EE West End Solar LLC is the applicant for the proposed facility and that the applicant may request a letter of credit up to $5.8 million. SMBC indicates that, because of its ongoing relationship with EEAC, there is a reasonable likelihood that the financial institution would provide the letter of credit for the facility.

ASC Exhibit M, Attachment M-1 includes a letter from Senior Legal Counsel for EEAC, indicates that he reviewed the original or certified copies of books, records, LLC records, and certificates of public officials to support his professional opinion that the applicant has the legal authority to construct and operate the proposed facility, without violating its articles of incorporation covenants, or similar agreements.

The Department reviewed the legal opinion and SMBC financial assurance letter which are provided in the ASC under the informational requirements under OAR 345-021-0010(1). These documents, combined with the performance guarantee agreement to be executed by the applicant and its parent company prior to construction (Organizational Expertise Condition 1) supporting evidence under the Council's Retirement and Financial Assurance standard and Organizational Expertise standard and are largely consistent with similar letters historically reviewed and approved by Council under these rules.

Based upon the Department's review of the SMBC letter and applicant's legal counsel opinion, the Department recommends that Council find that the applicant has demonstrated a reasonable ability to obtain a bond or letter of credit in a form and amount recommended be considered satisfactory by Council.

OAR 345-025-0006(8) establishes a mandatory condition that must be imposed in all site certificates.[139] This condition is imposed, based on the decommissioning amount recommended by the Department to be considered satisfactory by Council, per below:

> **Recommended Retirement and Financial Assurance Condition 4 (PRE):** Before beginning construction of the facility or a facility component, the certificate holder shall

[138] At its January 28, 2022, Council added and approved SMBC as an EFSC-approved financial institution. WESAPPDoc8 EFSC Meeting-Item-B-Annual-Financial-Assurance-Update-Staff-Report and Mins 2022-01-28

[139] OAR 345-025-0006(8) Before beginning construction of the facility, the certificate holder must submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to

submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The total bond or letter of credit amount for the facility is $5.7 million dollars (Q3 2022 dollars), to be adjusted to the effective date, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition:

a. The certificate holder may adjust the amount of the bond or letter of credit based on the design configuration of the facility, or any phase of the facility, by applying the unit costs presented in Table 4 of the Final Order on the ASC, and the contingencies illustrated in Table 4 of the Final Order on the ASC and may further make adjustments based on unit costs for task and actions presented in ASC Exhibit X Attachment X-1. Any revision to the restoration costs should be adjusted to the effective date as described in (b). Any modification to the unit costs presented in Table 4 of the Final Order on the ASC are subject to review and approval by the Council. The Department and Council reserve the right to adjust the contingencies, as appropriate and necessary to ensure that costs to restore the site are adequate to maintain health and safety of the public and environment.
b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
    i. Adjust the amount of the bond or letter of credit (expressed in Q3 2022 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the third quarter 2022 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust third quarter 2022 dollars to present value.
    ii. Round the result total to the nearest $1,000 to determine the financial assurance amount.
c. The financial institution issuing of the bond or letter of credit must be on the Council's pre-approved financial institution list. The bond or letter of credit form approved by the Council is included as Attachment X-1 to the Final Order on ASC,. [Mandatory Condition OAR 345-025-0006(8)]

Conclusions of Law

Based on the foregoing recommended findings of fact, and subject to compliance with the recommended conditions, the Department recommends that the Council find that the proposed facility would comply with the Council's Retirement and Financial Assurance standard.

restore the site to a useful, non-hazardous condition. The certificate holder must maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.

IV.H Fish and Wildlife Habitat: OAR 345-022-0060

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:

*(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017****

Findings of Fact

The analysis area for potential impacts to fish and wildlife habitat, as defined in the Project Order, is the area within and extending ½-mile from the site boundary.

IV.H.1 Department Evaluation of Applicant's Desktop and Field Surveys

Literature review and field studies were conducted in 2019-2020, based on consultation with ODFW, and review of state (ODFW, ORBIC), federal (USFWS) and regional wildlife databases.

Surveys were conducted in 2019 and 2020, including protocol-level Washington Ground Squirrel (WGS) surveys,[140] raptor nest surveys, habitat categorization, botanical and wetland surveys.

WGS and raptor nest surveys were conducted from April 22-23 and May 21-22, 2019; and, March 22 and May 9-10, 2020. The area for evaluation of potentially suitable WGS habitat extends 1,000 feet from potential ground disturbance, including areas outside of the site boundary, totaling approximately 388 acres. The area for evaluation of potentially active nest substrates included the area within an extending 0.5-mile from the site boundary. Based on the extent of existing active agriculture and permanent infrastructure (paved roads), there are approximately 120 acres of potentially suitable WGS habitat within the survey area; 81 acres were field surveyed and 39 acres were desktop surveyed due to landowner permission restrictions on areas outside the site boundary. There were no observations of active WGS burrows or colonies or any active or inactive raptor nests during the 2019-2020 surveys.[141]

Habitat categorization surveys included desktop review of USFWS, 2018 National Wetlands Inventory data, 2001 National Hydrography Dataset, National Land Cover Database, 2016 Oregon Conservation Strategy, State Land and Water Resources Plans, 2018 Oregon Biodiversity Information Center data, soil and land use data from Umatilla County. Based on the results of the literature review, a field reconnaissance-level site visit was conducted on October

[140] Protocol-survey methods generally followed Morgan, R.L., and M. Nugent. 1999. Status and Habitat Use of the Washington Ground Squirrel (Spermophilus washingtoni) on State of Oregon Lands, South Boeing, Oregon in 1999. Report to the Oregon Department of Fish and Wildlife. WESAPPDoc3-16 ASC Exhibit P Fish and Wildlife 2022-09-28. Attachment P-3, p.2.

[141] WESAPPDoc3-16 ASC Exhibit P Fish and Wildlife 2022-09-28. Attachment P-3. Section 4.0, p.5; and Section 5.2, p.14.

31, 2018. Surveys for habitat mapping and raptor nests were then conducted concurrently with the WGS surveys described above; biologists delineated areas of relatively homogenous vegetation and characterized the composition and structure of habitat, with a minimum mapping unit of 1-acre. Each delineated vegetation polygon was assigned a habitat type, subtype and habitat category.

Botanical and wetland surveys were conducted within the 324-acre sit boundary on July 3, 2019, June 22, 2022, and May 19, 2022. The results of these surveys are described below as they were used to inform that habitat categories within the analysis area.

The Department recommends Council find that the above-described databases, references and field surveys were conducted in accordance with ODFW and other available guidance ~~and~~ are appropriate for informing habitat ~~cauterization~~ categorization at the site and potential impacts to state sensitive wildlife species.

Habitat Categories within the Analysis Area

This standard creates requirements for mitigating impacts to fish and wildlife habitat, based on the functional quantity and quality of the habitat impacted as well as the nature, extent, and duration of the impact. Functional quality is presented using a habitat classification system based on the function and value of the habitat it would provide to a species or group of species likely to use it. ODFW policy identifies six habitat categories, with Category 1 being the most valuable, and Category 6 the least valuable.

As described above, the analysis area includes the area within and extending ½-mile from the site boundary. When an analysis area extends beyond the area that could be directly impacted, as is the case under the Fish and Wildlife Habitat standard, the purpose is to identify whether there are adjacent sensitive habitat areas, such as WGS Category 1 habitat, that would inform habitat categorization within the area of potential impact. Other than the potential for WGS habitat outside of the site boundary, there is not sensitive habitat outside the site boundary that should be considered in the evaluation of habitat categorization.

Habitat categorization, based on habitat type, within the analysis area includes the following:

- Category 3 habitat:
  - Shrub-steppe (mature, big basin sagebrush; rubber rabbitbrush; green rabbitbrush)

- Category 4 habitat:
  - Eastside grasslands (green rabbitbrush, rubber rabbitbrush, non-native cereal rye, cheatgrass and bulbous bluegrass)

- Category 5 habitat:

- Eastside grasslands (green rabbitbrush, rubber rabbitbrush, cheatgrass, non-native cereal rye, Russian thistle yellow starthistle, salsify, and stork's bill)

- Category 6 habitat:
  - Active agriculture
  - Developed areas

In a January 2022 comment letter, ODFW agreeds with the applicant's habitat categorization presented above and in Table 5 below.[142] However, in a comment submitted on the draft proposed order, ODFW indicated that, due to adjacent development, agriculture and fragmented habitat, the proposed Category 3 and 4 habitat would not serve as functional "important" habitat, and would be more appropriately categorized as Category 5 habitat. Based on the appropriate desktop and field surveys and resulting data, and ODFW recommendations, the Department recommends Council find that the habitat categorization may be relied upon to establish the applicable mitigation goals under the standard, to be updated prior to construction as per Fish and Wildlife Habitat Condition 1 below.[143] Figure 97: *Habitat Categories within the Analysis Area* and Figure 108: *Habitat Subtypes within the Analysis Area* below present habitat mapping within the analysis area.

[142] WESAPPDoc6-5 pASC Reviewing Agency Comment_ODFW_Rosenberg 2022-01-26. Comment 5.
[143] WESAPPDoc3_Reviewing Agency Comment ODFW Somers 2022-11-03.

Figure 9: Habitat Categories within the Analysis Area

Figure 10: Habitat Subtypes within the Analysis Area

IV.H.2 Habitat Impacts and Mitigation

Habitat impacts can be temporary, temporal or permanent depending on whether the impact can be restored within 3-5 years, 5-10 years or is not recoverable and therefore considered permanent due to siting of facility structures. For this proposed facility, all habitat impacts will occur within an approximately 3-mile perimeter fenceline and are considered permanent habitat impacts. Because all onsite impacts are considered permanent habitat impacts, and there are no temporary habitat impacts, there is not a revegetation plan or revegetation requirements for restoration of temporary habitat impacts. However, the applicant will be required to monitor all areas of disturbance prior to and during construction, and during operations, within the fenceline for site stability and noxious weeds under the requirements of the Noxious Weed Plan (see recommended Land Use Conditions 9, 10 and 11) and ESCP (see recommended Soil Protection Conditions 1, 2 and 3).

Permanent habitat disturbance impacts to Categories 3, 4 and 5 are preliminarily estimated at 320 acres. Impacts to Category 6 habitat do not require mitigation under the standard and therefore are omitted from the habitat impact calculation. As presented in Table 5: *Summary of Habitat Impacts, by Category/Acres*, permanent impacts to habitat include 20 acres on Category 3, 139 acres on Category 4 and 161 acres on Category 5 habitat.

Table 5: Summary of Habitat Impacts, by Category/Acres

Habitat Category	Habitat Subtype	Permanent Impact (Acres)
3	Shrub-steppe	20
4	Eastside Grasslands	139
5		161
6	Other Row Crops	4
Total Permanent Impacts for Categories 1-5 =		**320**

> *"Habitat Category 3" is essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.*

The mitigation goal for Category 3 habitat is no net loss of either habitat quantity or quality. The Council interprets this to mean that both habitat quantity and quality must be preserved. The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts through reliable "in-kind, in-proximity" habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality.

> *"Habitat Category 4" is important habitat for fish and wildlife species.*

Like Category 3, the mitigation goal for Category 4 habitat is no net loss in either existing habitat quantity or quality. The Council interprets this to mean that both existing habitat quantity and quality must be preserved. The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts. In contrast to Category 3, mitigation options are less constrained and may involve reliable "in-kind or out-of-kind, in-proximity or off-proximity" habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality.

> *"Habitat Category 5" is habitat for fish and wildlife having high potential to become either essential or important habitat*.

If impacts are unavoidable, the mitigation goal for Category 5 habitat is to provide a net benefit in habitat quantity or quality. The Council has previously interpreted this to mean that there must be some improvement in either habitat quality or quantity. To clarify the "net benefit" goal, ODFW has advised: "The improvement in habitat quantity or quality achieved need not rise to the level of improvement required to meet a goal of 'no net loss' (i.e. the level required or recommended in the Mitigation Policy for Habitat Categories 2, 3, and 4)." The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts through "actions that contribute to essential or important habitat."

> *"Habitat Category 6" is habitat that has low potential to become essential or important habitat for fish and wildlife.*

Impacts to Category 6 habitat does not require mitigation under the standard.

To achieve the habitat mitigation goals for permanent impacts to Category 3, 4 and 5 habitat, the applicant proposes to implement a Habitat Mitigation Plan (HMP). In the draft HMP (See Attachment P-5 of this order), the applicant proposes to demonstrate consistency with ODFW's mitigation goals for each applicable habitat category based on obtaining a habitat mitigation area (HMA) of sufficient size and quality to provide a no net loss in habitat quantity for the approximately 320 acres permanently impacted; and to implement a suite of enhancement actions sufficient to achieve a no net loss in quality for Category 3 and 4 habitat and a net benefit in quality for Category 5 habitat. Applicant identifies a potential HMA as the 2100-acre Olex Ranch owned by Karen Kronner and Bob Gritski, located in Gilliam County. The quality of the habitat at the potential Olex HMA ranges from Category 2 to 5 based primarily on its vegetative characteristics and the HMA is also located within ODFW-designated mule deer winter range (Category 2 habitat). To demonstrate this commitment, applicant includes a recorded Memorandum of Option for Conservation Agreement is included in the draft HMP.

The applicant proposes mitigation acreage ratios (acres impacted to acres protected in HMA) per habitat category, as presented in Table 6 below. The maximum size of the HMA is approximately 239 acres.

Table 6 : Habitat Mitigation to Achieve No Net Loss in Habitat Quantity

Habitat Category	Habitat Subtype	Permanent Impact (Acres)	Goal	Mitigation Acreage Ratio	Total Mitigation Acres	Does Mitigation Acreage Ratio Meet the Quantity Goal?
3	Shrub-steppe	20	No net loss	1:1	20	Yes
4	Eastside Grasslands	139		1:1	139	Yes
5		161	Net benefit	0.5:1	80.4	Yes
6	Other row crops	4	NA			
Total Permanent Impacts for Categories 1-5 =		**320**	**-**	**-**	**239**	**-**

In the draft HMP, the enhancement actions proposed to achieve a no net loss in habitat quality for Categories 3 and 4, and a net benefit in quality for Category 5 habitat impacts, include: shrub planting within 20 acres of existing shrub-steppe; weed control; seeding on a minimum of 5-acres; fire control; and restricted grazing, as presented in Table 7 below.

Table 7: Habitat Mitigation to Achieve No Net Loss in Habitat Quality

Habitat Category	Habitat Subtype	Permanent Impact (Acres)	Goal	Mitigation Enhancement	Total Mitigation Acres (Minimum)	Does Mitigation Enhancement Meet Quality Goal?
3	Shrub-steppe	20	No net loss	Shrub-planting; weed control	Within 20 acres; as needed	Yes
4	Eastside Grasslands	139		Seeding; weed control	5 acres; as needed	Yes
5		161	Net benefit	weed control	As needed	Yes
Total Permanent Impacts for Categories 1-5 =		**320**				

Based on consultation with ODFW and the minimum mitigation acres available for enhancement within the HMA, the Department recommends Council find that the proposed enhancement actions demonstrate the ability to achieve a no net loss in habitat quality for

Category 3 and 4 impacts, and a net benefit for Category 5 impacts. The Department further recommends that, prior to construction, the applicant be provided an opportunity to re-evaluate habitat categorization in consultation with ODFW, that would then be used in the finalization of the final HMP as outlined below.

The Department recommends Council impose a condition requiring that, prior to construction, the applicant may re-evaluate the habitat categorization at the site in consultation with ODFW, and then finalize the draft Habitat Mitigation Plan, including selection of an HMA, substantially similar to or with similar habitat enhancement potential as that currently under review, based on a preconstruction habitat assessment, and execution of a legally binding agreement to conserve, enhance and maintain the HMA for the life of the proposed facility:

Recommended Fish and Wildlife Condition 1 (PRE): Prior to construction, the certificate holder shall:

a. Indicate to the Department and ODFW if certificate holder intends to re-evaluate habitat categorization at the site, and if so, consult with ODFW and Department in final categorization.

~~a.~~b. Calculate the size of the habitat mitigation area (HMA) for permanent habitat impacts, based on final habitat mitigation obligations and facility design. The calculation must be based on the ratios and methods presented in the Final Order on the ASC and provided to the Department for review and approval.

~~b.~~c. Provide evidence to the Department demonstrating that an agreement of outright purchase, conservation easement or similar conveyance has been executed for the enhancement and protection of the HMA under the requirements of the Habitat Mitigation Plan, to extend for the life of the facility.

~~c.~~d. Submit a final Habitat Mitigation Plan to the Department for review and approval, substantially similar to the draft plan provided in Attachment P-5 of the Final Order on the ASC.

Recommended Fish and Wildlife Condition 2 (OPR): During operation, the certificate holder shall implement and adhere to the requirements of the Habitat Mitigation Plan, as approved per Fish and Wildlife Condition 1.

The draft HMP includes a Memorandum of Option of Conservation Easement executed on April 13, 2022 for one or more easements for land conservation purposes over approximately 240 acres; and two maps demonstrating the location of the proposed HMA, the underlying habitat type and enhancement areas. Based on this evidence and the evaluation of habitat, habitat categorization and applicable mitigation goals, and compliance with the above-proposed conditions, the Department recommends Council find that the applicant has demonstrated that permanent impacts to wildlife habitat will be mitigated in a manner consistent with ODFW's fish and wildlife habitat mitigation policy.

IV.H.3 Wildlife Impacts and Mitigation

The proposed site boundary contains suitable habitat for 9 state sensitive birds and two eagle species, as presented in Table 8: *State Sensitive Species with the Potential to Occur within the Analysis Area* below.[144]

[144] The two eagle species identified are not state sensitive species, "bald eagles (Haliaeetus leucocephalus) and golden eagles (Aquila chrysaetos) are … species of concern protected under the Bald and Golden Eagle Protection Act (BGEPA).

1

Table 8: State Sensitive Species with the Potential to Occur within the Analysis Area

Common Name *(Scientific Name)*	ODFW Status in Columbia Plateau[1]	Expected Habitat	Observed (including Quantity) or Expected Occurrence within Analysis Area	Potential Use of Habitat within Analysis Area
Birds				
bald eagle (*Haliaeetus leucocephalus)*	N/A	Nests in forested areas adjacent to large bodies of water. Nests in trees, rarely on cliff faces and ground nests in treeless areas. Known to scavenge opportunistically on carcasses in otherwise unsuitable habitat particularly during migration.	Not observed during surveys.	Potential scavenging and foraging habitat.
golden eagle (*Aquila chrysaetos)*	N/A	Usually nests on cliffs but also can nest in trees. Breeds in open and semi open habitats at a variety of elevations, in tundra, shrublands, grasslands, woodland-brushlands, and coniferous forests, farmland and riparian areas. Typically forages in open habitats like grasslands, areas with steppe-like vegetation.	Not observed during surveys.	Potential foraging habitat.
Brewer's sparrow (*Spizella breweri)*	S	Abundant east of the Cascades in sagebrush communities.	Not observed during surveys.	Limited sagebrush habitat available.
Burrowing owl (*Athene cunicularia hypugaea)*	SC	Nests in earthen burrows in open shrub-steppe regions and grasslands.	Not observed during surveys.	Limited nesting and foraging habitat available.

Table 8: State Sensitive Species with the Potential to Occur within the Analysis Area

Common Name *(Scientific Name)*	**ODFW Status in Columbia Plateau[1]**	**Expected Habitat**	**Observed (including Quantity) or Expected Occurrence within Analysis Area**	**Potential Use of Habitat within Analysis Area**
Common nighthawk (*Chordeiles minor)*	S	Nests in open landscapes with little ground cover and is most abundant in sagebrush and rock scablands of eastern Oregon.	Not observed during surveys.	Limited nesting and foraging habitat available.
Ferruginous hawk (*Buteo regalis)*	SC	Occurs in the open landscapes east of the Cascades, most common in the foothills of the Blue Mountains. Nests on the ground or in lone or peripheral trees.	Not observed during surveys.	Foraging habitat available.
Grasshopper sparrow (*Ammodramus savannarum)*	S	Prefers open grasslands, found in scattered colonies along unforested northern slopes of the Blue Mountains.	Three individuals observed in Eastside grassland.	Breeding and foraging habitat available.
Loggerhead shrike (*Lanius ludovicianus)*	S	Breeds in open habitats east of the Cascades.	Not observed during surveys.	Limited potential habitat.
long-billed curlew (*Numenius americanus)*	SC	Locally common breeder in open grassland areas east of the Cascades. It is most abundant in the Columbia River basin.	Three individuals observed during surveys in eastside grassland habitat.	Breeding habitat available.
Sagebrush sparrow (*Artemisiospiza nevadensis)*	SC	Widespread throughout the extensive shrub-steppe of eastern Oregon. Usually associated with big sagebrush.	Not observed during surveys.	Limited sagebrush habitat available.

Table 8: State Sensitive Species with the Potential to Occur within the Analysis Area

Common Name *(Scientific Name)*	**ODFW Status in Columbia Plateau[1]**	**Expected Habitat**	**Observed (including Quantity) or Expected Occurrence within Analysis Area**	**Potential Use of Habitat within Analysis Area**
Swainson's hawk (*Buteo swainsoni)*	S	Prefers bunchgrass prairies of eastern Oregon and common in the foothills of the Blue Mountains. Nests typically in solitary tree, bush, or small grove.	Six individuals observed foraging in eastside grassland and Shrub-steppe habitat during surveys.	Foraging habitat available.
Notes**:** ODFW Status: S = Sensitive Species, SC = Critical Sensitive Species				

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Potential impacts to state-sensitive species from proposed facility construction include injury to or loss (fatality) due to collision with or crushing from construction equipment vehicles; and, general disturbance (noise and visual), which can interrupt wildlife behavior. In addition, there are risks to wildlife species during proposed facility operations from structure collision, vehicle collisions, disturbance related to artificial lighting and introduction or spread of noxious weeds. To minimize impacts to wildlife species, the applicant proposes to implement numerous design measures, construction restrictions and a long-term wildlife monitoring plan.

All of the applicant's proposed measures are presented in ASC Exhibit P Section 7.1.1 and 7.1.2, which have been converted into measures that can be verified by the Department and included in a Wildlife Monitoring and Adaptive Management Plan provided as Attachment P-3 of this order. To ensure that the applicant adheres to its representations and to allow the Department the ability to monitor and evaluate implementation of the design and construction-related avoidance measures, the Department recommends Council impose the following conditions:

> **Recommended Fish and Wildlife Condition 3 (PRE)**: Prior to construction, the certificate holder shall provide evidence to the Department that the design measures included in the Wildlife Monitoring and Adaptive Management Plan (Attachment P-3 of the Final Order on the ASC) have been included in the final facility design and construction contractor contracts, as applicable.
>
> **Recommended Fish and Wildlife Condition 4 (CON)**: During construction, the certificate holder shall adhere to the requirements of the Wildlife Monitoring and Adaptive Management Plan (Attachment P-3 of the Final Order on the ASC). Monitoring records shall be maintained throughout construction and included in the semi-annual report submitted to the Department pursuant to OAR 345-026-0080.
>
> **Recommended Fish and Wildlife Condition 5 (OPS)**: During operation, the certificate holder shall adhere to the requirements of the Wildlife Monitoring and Adaptive Management Plan (Attachment P-3 of the Final Order on the ASC). Monitoring records shall be maintained throughout operation and included in the annual report submitted to the Department pursuant to OAR 345-026-0080.

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions, and subject to compliance with the recommended site certificate conditions, the Department recommends the Council find that the design, construction and operation of the facility, with mitigation, would satisfy the requirements of the Council's Fish and Wildlife Habitat standard.

IV.I Threatened and Endangered Species: OAR 345-022-0070

> *To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:*

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

Findings of Fact

For the purposes of this standard, threatened and endangered species are those identified as such by either the Oregon Department of Agriculture or the Oregon Fish and Wildlife Commission.[145]

The analysis area for threatened or endangered plant and wildlife species, as defined in the Project Order, is the area within and extending 5-miles from the proposed site boundary.

Desktop Review

In order to identify threatened and endangered species that might occur within the analysis area, the applicant conducted a desktop review using information provided by the Oregon Biodiversity Information Center (ORBIC) and the Oregon Department of Fish and Wildlife (ODFW) and additional sources of information regarding threatened and endangered species published by ORBIC, ODFW, U.S. Fish and Wildlife Service, the Burke Museum of Natural History and Culture Herbarium, the Oregon Flora Project, and the Washington Department of Natural Resources.[146]

The applicant's literature review indicated that one endangered animal species, Washington ground squirrel (*Urocitellus washingtoni*), had the potential to occur within the analysis area. The desktop review identified two historic occurrence records for Washington ground squirrel

[145] Although the Council's standard does not address federally-listed threatened or endangered species, applicants must comply with all applicable federal laws, including laws protecting those species, independent of the site certificate.

[146] WESAPPDoc3-17 ASC Exhibit Q TE Species 2022-09-28~~WESAPP ASC, Exhibit Q~~, Section 2.1.

(WGS) within the analysis area, with the most recent of the two recorded in 1979.[147] Wolverine (*Gulo gulo),* a state threatened species was also considered in the desktop review but was not specifically surveyed for due to lack of suitable habitat.

The literature review identified one threatened plant species, Lawrence's milkvetch (*Astragalus collinus* var. *laurentii*), with the potential to occur within the analysis area. The desktop review identified one occurrence record for Lawrence's milkvetch at a location southeast of Echo, approximately 3 miles south of the site boundary.[148]

Field Surveys

Washington Ground Squirrel Surveys

Surveys for Washington ground squirrel (WAGS/WGS) were conducted on April 22 and 23, May 21 and 22, 2019, and March 22, May 9 and 10, 2020. Surveyors walked linear transects spaced 165 to 230 feet apart in suitable habitat, including non-agricultural habitats and non-developed lands, within the site boundary and within an area extending 1000 feet from the site boundary unless separated by a road, ~~or~~ other habitat barrier, or if access from landowners was not granted. ~~The Applicant explained that s~~Surveys generally followed methodology developed in the Status and Habitat Use of the WAGS on State of Oregon Lands (Morgan and Nugent 1999). Details on the survey methods are provided in ASC Exhibit P, Attachment P-3. No active Washington ground squirrel colonies were observed within the survey area during surveys.[149]

Botanical Surveys

The applicant conducted botanical surveys on July 3, 2019, and June 22, 2020. The survey schedule was chosen to cover the identification period for Lawrence's milkvetch (Astragalus collinus var. laurentii) and dwarf evening-primrose (Eremothera [Camissonia] pygmaea). The surveys were conducted outside of the recommended identification period for sessile mousetail, but this species' vernal pool habitat was considered unlikely to occur in the analysis area.[150] Botanical field surveys were conducted using the Intuitive Controlled Survey Method. No occurrences of Lawrence's milkvetch, dwarf evening-primrose, or sessile mousetail were observed during the surveys.

Mitigation of Potential Impacts to Threatened and Endangered Species

As described above, one endangered animal species and one threatened plant species have the potential to occur in the analysis area. No occurrences of either species were observed during surveys conducted in support of the application.

[147] WESAPPDoc3-17 ASC Exhibit Q TE Species 2022-09-28~~ASC, Exhibit Q~~, Section 3.1.
[148] WESAPPDoc3-17 ASC Exhibit Q TE Species 2022-09-28~~ASC, Exhibit Q~~, Section 3.2.1.
[149] WESAPPDoc3-17 ASC Exhibit Q TE Species 2022-09-28~~ASC, Exhibit Q~~, Section 3.1.
[150] WESAPPDoc3-17 ASC Exhibit Q TE Species 2022-09-28, Section 2.2.2.

The analysis area includes potentially suitable habitat for WGS, the endangered animal species with the potential to occur in the analysis area. While no active WGS colonies were observed during initial surveys, survey results are only considered valid for three years based on the species' dispersal and burrowing patterns. While the 2019 and 2020 survey data may be relied upon for this evaluation, additional preconstruction surveys of potentially suitable habitat within 1,000 feet of ground disturbing activities, where access is permitted, are necessary to ensure avoidance and minimize of impacts to the survivability of the species. The Department recommends Council impose the following conditions to ensure that WGS and their habitat are avoided:

Recommended Threatened and Endangered Species Condition 1 (PRE): Prior to construction of the facility, facility component or phase, as applicable, that would occur within suitable Washington Ground Squirrel (WGS) habitat:

a. The certificate holder must conduct protocol-level WGS surveys within 1000 feet of any ground disturbing activity, where accessible. Where suitable WGS habitat is not accessible (e.g., on adjacent properties where access is not granted) an assessment must be conducted from accessible areas and based on desktop sources using methods similar to those used during the pre-application assessment, which was conducted consistent with ODFW recommendations.
b. Suitable WGS habitat can be defined as any terrestrial habitat that has not been developed e.g. active agricultural lands, paved roads), particularly shrub-steppe and grassland habitats. Protocol-level surveys include two sets of surveys at least two weeks apart, in the active squirrel season (March 1 to May 31), in suitable habitat that is contiguous with areas of ground disturbing activity (e.g., excluding areas across a paved road from ground disturbance). Protocol-level surveys are valid for three (3) years. If construction does not commence the year following the protocol-level survey, any active burrows or colonies shall be checked prior to the year of construction to evaluate any changes that may occur in the location and delineation of Category 1 and 2 habitat.
c. The certificate holder shall submit the WGS Survey Report to the Department and ODFW. The certificate holder shall clearly identify whether WGS were observed or colonies and burrows were identified, and include a facility layout map demonstrating how temporary and permanent impacts to WGS and WGS habitat will be avoided (i.e., Category 1 habitat associated with WGS colonies and burrows) will be avoided.

Recommended Threatened and Endangered Species Condition 2 (CON): If the WGS surveys required under Threatened and Endangered Species Condition 1 identify Category 1 WGS habitat (buffer extending 785-feet around each active burrow, excluding areas not suitable for WGS foraging or burrow establishment) or Category 2 WGS habitat (buffer extending 4,136-feet from the delineated Category 1 habitat, excluding areas of habitat types not suitable for WGS foraging or burrow establishment), during construction of the facility, facility component or phase, the certificate holder shall:

a. Map, flag and avoid delineated Category 1 ~~and 2~~ WGS habitat.

b. Check the location of active burrow or colonies in subsequent years of construction to evaluate any changes that may occur in the location and delineation of Category 1 ~~and 2~~ habitat.

Based on compliance with the above-recommended conditions, the Department recommends Council find that the design, construction and operation of the proposed facility would not be likely to significantly reduce the likelihood of survivability or recovery of Washington Ground Squirrel.

The applicant conducted surveys for Laurence's milkvetch, the threatened plant species with the potential to occur in the analysis area, and for other candidate species with potentially suitable habitat in the analysis area. The applicant did not observe occurrences of Lawrence's milkvetch during the surveys. ODA agrees with the applicant's survey results, and considers the likelihood of future Laurence's milkvetch occurrences within the surveyed areas to be low.[151] Based on the low likelihood Laurence's milkvetch occurrences, ODA clarified that preconstruction surveys are unnecessary given the expected construction commencement to occur within 3 years, if the site certificate is approved. Because these species were not observed during initial surveys and are not known to occur in the analysis area, the Department recommends the Council find that the design, construction and operation of the proposed facility would not be likely to cause a significant reduction in the likelihood of survival or recovery of the species. To ensure the avoidance of any potential impacts to the survivability or recovery of the Lawrence's milkvetch, the Department recommends Council impose the following condition:

Recommended Threatened and Endangered Species Condition 3 (PRE): Prior to and during construction of the facility, facility component or phase, as applicable, the certificate holder shall avoid via mapping and flagging, based on a 100 foot buffer (unless otherwise reviewed and approved by the Department and ODA), any incidentally identified occurrence(s) of Lawrence's milkvetch.

Based on compliance with the above-recommended condition, the Department recommends Council find that the design, construction and operation of the proposed facility would not be likely to significantly reduce the likelihood of survivability or recovery of the Lawrence's milkvetch.

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions, and subject to compliance with the recommended site certificate conditions, the Department recommends that the Council find that the proposed facility would comply with the Council's Threatened and Endangered Species standard.

[151] WESAPPDoc7-1 Reviewing Agency Comment ODA NPCS_Brown 2022-10-21.

IV.J Scenic Resources: OAR 345-022-0080

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.
****[152]*

Findings of Fact

The Scenic Resources Standard requires the Council to find that visibility of proposed facility structures, plumes, vegetation loss and landscape alterations would not cause a significant adverse impact to identified scenic resources and values. To be considered under the standard, scenic resources and values must be identified as significant or important in a local land use plan, tribal land management plan, state land management plan or federal land management plan.

The analysis area for the Scenic Resources standard is the area within and extending 10-miles from the proposed site boundary.

Applicable Land Use and Management Plans

The analysis area for scenic resources includes parts of two Oregon counties, one Washington county, four Oregon municipalities, and land administered by the Oregon Department of Fish and Wildlife (ODFW), the U.S. Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Army Corps of Engineers (USACE). No Tribal lands are located within the Analysis Area. Land use and management plans applicable to lands within and extending 10-miles of the proposed site boundary are presented in Table 9 below.

[152] The proposed facility is not a special criteria facility under OAR 345-015-0310; therefore OAR 345-022-0080(2) is not applicable.

Table 9: Identification of Applicable Local, State, Tribal, and Federal Land Use and Management Plans for Lands within 10-Mile Scenic Resources Analysis Area

Governmental Agency	Plan
Local (County)	
Morrow County	Morrow County Comprehensive Plan (2013)
Umatilla County	Umatilla County Comprehensive Plan (1984, 2018)
Benton County (WA)	Benton County Comprehensive Plan (2020)
Local (City)[1]	
City of Umatilla	City of Umatilla Comprehensive Land Use Plan (2019)
City of Hermiston	City of Hermiston Comprehensive Plan and Development Code (2021)
City of Stanfield	City of Stanfield Comprehensive Plan (2001) and Development Code (2017)
City of Echo	City of Echo Comprehensive Plan (2005) and Zoning Administrative Regulations (2015)
State	
Oregon Department of Fish and Wildlife	Columbia Basin Wildlife Areas Management Plan (2008)
Oregon Parks and Recreation Department	Hat Rock State Park Master Plan (1983)*
Federal	
BLM, Vale District	Baker Resource Management Plan (BLM 1989)
USFWS	McNary and Umatilla National Wildlife Refuges Comprehensive Conservation Plan and Environmental Assessment (USFWS 2007)
US Army Corps of Engineers	Lake Umatilla and Lake Wallula Recreation Management Areas – John Day Lock and Dam Master Plan (1976) and McNary Shoreline Management Plan (2012)
*This plan was not identified in ASC Exhibit R.	

Both the applicant and the Department reviewed the listed plans for identification of scenic resources or values as significant or important.

The Morrow County Comprehensive Plan does not identify any significant or important scenic resources.[153]

The 1983 Umatilla County Comprehensive Plan, as amended June 1, 2022, identifies Wallula Gap as a significant or important scenic resource.[154] Wallula Gap, which is a large water gap in

[153] WESAPPDoc3-18 ASC Exhibit R Scenic Resources 2022-09-28, Section 3.1., citing Morrow County Comprehensive Plan – Natural Resources Element (2013), page 11. Accessed 6/28/2022 at: https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/991/6_of_19_-_mc_comp_plan_-_goals_5_6.pdf

[154] Umatilla County Comprehensive Plan, Page 8-12.

the Columbia River, is located more than 20 miles from the proposed facility site, and is not within the Analysis Area for Scenic Resources. The Umatilla County Comprehensive plan further states that "[i]t is the position of Umatilla County that Comprehensive Plan designations and zoning ordinances mitigate other scenic and aesthetic conflicts through ordinance criteria."[155] The proposed facility's compliance with applicable substantive criteria from the Umatilla County Development Ordinance is discussed in Section IV.E of this Order.

The Benton County (Washington) Comprehensive Plan establishes a goal to ""Conserve visually prominent naturally vegetated steep slopes and elevated ridges that define the Columbia Basin landscape and are uniquely a product of the ice age floods." The plan specifically discusses the protection of the Rattlesnake uplift formation, specifically Rattlesnake, Red, Candy, and Badger mountains, and the Horse Heaven Hills. Applicant states that this could be interpreted to identify the formation as a significant or important scenic resource; however, there are no features located within the analysis area.[156]

The City of Umatilla Comprehensive Land Use Plan (2019) does not identify any significant or important scenic resources.[157]

The City of Hermiston Comprehensive Plan (2020) explains that designated Open Space areas within the Urban Growth Boundary of the City, including areas within the 100- year floodplain of the Umatilla River, the wetlands area in the northeast portion of Hermiston and the OSU Agricultural Experimentation Station provide visual relief and passive recreational activities. Policy 16 of the plan then explains that the City will acquire and develop additional parks and recreational facilities which possess scenic qualities.[158] Because no specific scenic sites or views are identified, the applicant concluded that the plan does not identify significant or important scenic resources.[159]

The designated Open Space areas within the 100-year floodplain of the Umatilla River appear to have been designated as Open Space as an interim floodplain ordinance.160 Because these areas appear to be designated to address a natural hazard rather than to protect a scenic resource or to provide visual relief, the Department concurs that these areas are likely not intended to be considered important scenic resources. The Department does not agree with the applicant's reasoning with regards to the remaining areas zoned as Open Space; however, as discussed further below the Applicant's ZVI analysis indicates that the proposed facility

[155] Umatilla County Comprehensive Plan, Page 8-10.
[156] WESAPPDoc3-18 ASC Exhibit R Scenic Resources 2022-09-28~~Exhibit R~~, Section 3.1.3.
[157] City of Umatilla Comprehensive Land Use Plan (2019), pg. 3
[158] City of Hermiston Comprehensive Pan (2020), page III-17
[159] WESAPPDoc3-18 ASC Exhibit R Scenic Resources 2022-09-28~~Exhibit R~~, Section 3.2.2.
[160] City of Hermiston Comprehensive Plan, page III-10.

would not be visible from either wetlands area in the northeast portion of Hermiston or the Oregon State University Agriculture Research and Extension Center.

The City of Stanfield Comprehensive Plan (2003) does not identify specific scenic resources as significant or important.[161]

The City of Echo Comprehensive Plan (2005) does not identify specific scenic resources as significant or important.[162]

The Oregon Department of Fish and Wildlife's Management Plan for the Columbia Basin Wildlife Areas (2008) does not discuss scenic resources and does not identify specific scenic resources as significant or important.[163]

The Hat Rock State Park Master Plan (1983) identifies views of Hat Rock, Boat Rock, and the Columbia River as providing important scenic qualities and elements of scenic interest.

The Baker Resource Management Plan, which provides management direction for lands administered by the Bureau of Land Management in Morrow, Umatilla, Union, and Baker County, identifies 151,711 acres of land identified as areas of high-scenic quality. None of these areas are located within the analysis area. The plan also states that the Oregon Trail Area of Critical Environmental Concern (ACEC) will be managed to preserve the areas "unique historic resource and visual qualities." As a result of this management direction, the Applicant concludes that the Oregon Trail ACEC is a significant scenic resource. The Department concurs.

The Comprehensive Conservation Plan and Environmental Assessment for the McNary and Umatilla National Wildlife Refuges (2007) does not identify specific scenic resources as significant or important.

The John Day Lock and Dam Master Plan (USACE 1976), and McNary Shoreline Management Plan (USACE 2012) do not identify specific scenic resources as significant or important.

Visual Impacts

Based on the analysis of Land Use Management Plans applicable to lands within the analysis area, significant or important scenic resources that could potentially be affected by the construction and operation of the proposed facility include: -wetlands area in the northeast portion of Hermiston which are designated as Open Space, the Oregon State University

[161] City of Stanfield Comprehensive Plan (2003), page 6.
[162] City of Echo Comprehensive Plan (2005), page 3.
[163] ODFW. 2008. Columbia Basin Wildlife Areas Management Plan.

Agriculture Research and Extension Center, views of Hat Rock, Boat Rock, and the Columbia River within Hat Rock State Park, and the Echo Meadows parcel of the Oregon Trail Area of Critical Environmental Concern (ACEC).

The applicant conducted a zone of visual influence (ZVI) analysis to determine whether the proposed facility would potentially be visible from the protected areas in the analysis area. The ZVI analysis assumed that the facility would include solar arrays with a maximum height of 16 feet. and a substation, and equipment with a maximum height of 30 feet. The impacts of these modeled components were expected to be representative of impacts from other facility components. The analysis used a "bare-earth" modeling approach, meaning that it only considers the effects of topography and does not account for the effects of distance, lighting, weather, atmospheric attenuation factors, vegetation, or buildings.

The applicant ZVI analysis indicates that the proposed facility would not be visible from either the wetlands area in the northeast portion of Hermiston or the Oregon State University Agriculture Research and Extension Center, which are both designated as Open Space in the City of Hermiston Comprehensive Plan. As a result, the Department recommends that the proposed facility would not impact these resources. Discussion of potential impacts to resources within Hat Rock State Park and the Echo Meadows parcel of the Oregon Trail ACEC are discussed further below.

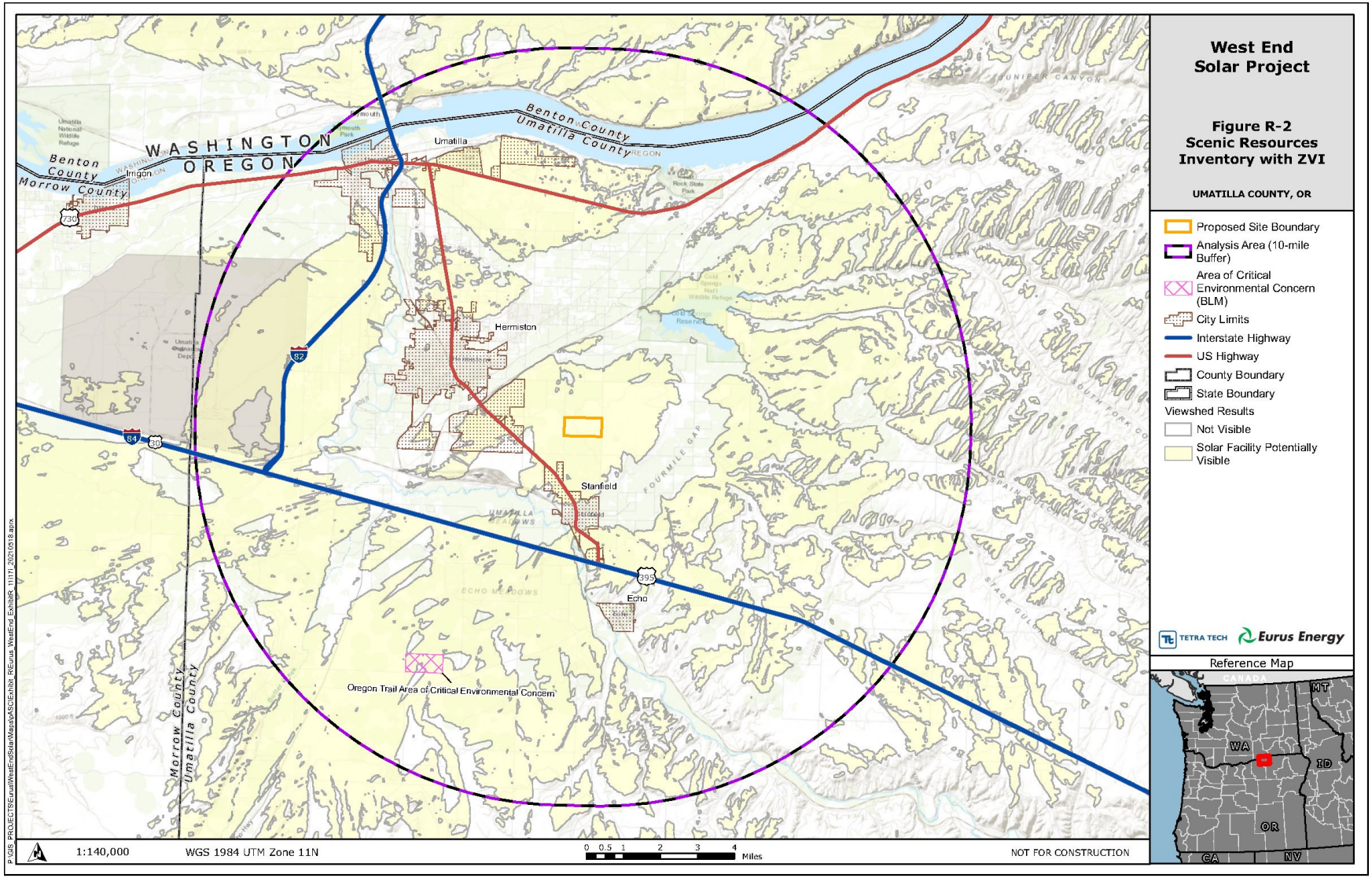
Hat Rock State Park

The applicant's viewshed analysis indicates that the proposed facility is potentially visible from some higher elevation areas of Hat Rock State Park at a background distance (more than 5 miles) but would not be visible from developed use areas. In addition, due to the orientation of the proposed facility from the park, views of important scenic resources, including Hat Rock, Boat Rock, and the Columbia River are not likely to be affected by the construction or operation of the proposed facility. Based on the limited visibility, viewing distance, and low visual contrast, the Department recommends the Council find that visual impacts of the facility on Hat Rock State Park would be less than significant.

Oregon Trail ACEC

The applicant's viewshed analysis indicates that the proposed facility would be visible from much the Echo Meadows Parcel of the Oregon Trail ACEC at a background distance (greater than 5 miles.) Visitors to the ACEC viewing Oregon Trail ruts and interpretive signage would likely be oriented to the North, but some viewers may be oriented to the Northwest in the direction of the proposed facility. Existing views in the direction of the proposed facility would include wind turbines, transmission lines, agricultural structures, center-pivot agricultural irrigation systems and urban development in the City of Stanfield which would limit the visual contrast introduced by the proposed facility, and in some cases, would screen views of facility components or structures. Due to the viewing distance, low visual contrast, and high level of existing development within the affected viewshed, the Department recommends that Council find that the visual impacts of the facility on the Echo Meadows Parcel of the Oregon Trail ACEC would be less than significant.

Figure 11: Applicant's ZVI Analysis for Scenic Resources within 10-Mile Analysis Area



Recommended monitoring and mitigation conditions

While no potential significant adverse impacts to scenic resources to significant were identified, the applicant proposed to incorporate the following mitigation features into its design.

- Use solar modules with antireflective coating to minimize the potential for glare.
- Limit the length, if any, of overhead collector lines.
- Use permanent lighting fixtures with down shielding to limit off-site lighting.
- Limit signage to those needed for manufacturer's or installer's identification, appropriate warning signs, or owner identification.

While the Department believes these proposals should be viewed as binding commitments by the applicant, the Department does not recommend that additional conditions are required. Based on the applicant's proposals to use antireflective coating and underground most collector lines in Exhibit B of the ASC, and requirements for down shielding on lighting and limitations on signage imposed under Recommended Land Use Conditions 3, 4 and 5.

Conclusion of Law

Based on the foregoing findings of fact, the Department recommends the Council conclude that the design, construction, and operation of the proposed facility would not be likely to result in significant adverse impacts to any scenic resource identified as significant or important in a local, tribal, or federal land or resource management plan, in compliance with Council's Scenic Resources standard.

IV.K Historic, Cultural, and Archaeological Resources: OAR 345-022-0090

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

** * **

Findings of Fact

Information about Historic, Cultural and Archaeological Resources is located in ASC Exhibit S, where information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.345(11)[164].

The analysis area for Historic, Cultural and Archaeological Resources as identified in the Project Order is the area within the site boundary, and for aboveground resources, including Built Environment, Traditional Cultural Properties or Historic Properties of Religious and Cultural Significance to Indian Tribes, the analysis area is the area within and extending 1-mile from the site boundary.[165] The entire 324-acre site boundary was field surveyed for archaeological and historic resources. The expanded field survey area for historic built environment resources was based upon the findings of the archival research for the one mile beyond the site boundary.

Description of Discovery Measures

Discovery measures included desktop analysis consisting of a review of State Historic Preservation Office (SHPO) records (Oregon Archaeological Records Remote Access and Oregon Historic Sites Database) for previous surveys and known recorded archaeological or historic/built-environment resources within the site boundary and the analysis area, as well as historic maps, aerial photographs, and records on file with the Umatilla County Tax Assessor's Office. For historic-era resources, archival sources such as historic maps and historic newspapers were reviewed online to develop a chain of title for the property and identify whether the properties are associated with an important individual or event in local, state, or national history. In addition, local libraries were visited.

Discovery measures also included applicant and Department coordination with affected Tribal Governments; the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and Confederated Tribes of Warm Springs (CTWS). The applicant coordinated directly with the CTUIR November 11, 2020 and May 12, 2021, where the Tribe was provided a copy confidential survey report (Exhibit S, Attachment S-1) for comments. The Department requested comments from CTUIR and CTWS on the facility on November 18, 2021, and on September 27, 2022. The applicant indicated that the CTWS did not express interest in the project, and the Tribe did not respond to Department comment requests.

In April 2020, the applicant's qualified archaeologists conducted a Phase I pedestrian survey of the entire 324-acre site boundary. Results of the desktop studies of prior surveys in the analysis area indicated a very low density of previously recorded archaeological resources in the analysis area supported the low probability of subsurface resources and as such, no subsurface probing during the survey was warranted. The pedestrian surveys were conducted following the Oregon SHPO guidelines which included archaeologist crews walking taking observations spread out in

[164] The site boundary does not encompass public lands; therefore, OAR 345-022-0090(1)(c) is not applicable.
[165] WESAPPDoc8 Expedited Review Project Order 2022-02-10. Table 3.

line at 20-meter intervals (i.e., transects) and spatial control was maintained through the use of 1:24,000 scale maps and Global Positioning System (GPS) units with sub-meter accuracy. Ground surface visibility varied between fair (greater than 30 percent) and excellent (greater than 75 percent) throughout the analysis area.[166]

Additional historic built-environment field surveys were conducted, based on SHPO comments, for a total of eight tax parcels that archival research identified as containing historic buildings. Historic resources/built environment field surveys were conducted in April 2022 based on the results of the archival research showing parcels with historic-era structures. A comprehensive study of each property was completed to evaluate the significance of each building for listing on the NRHP, which is discussed further in this section.

Survey Results and Impacts Assessment

Tribal Resources

In response to Department comment requests, the CTUIR provided comments on the application indicating that they had reviewed the archaeological report the applicant provided them, and that location of the proposed facility does not appear to have any archaeological concerns.[167] The letter concludes that the CTUIR does not have cultural resource concerns at the time the letter was submitted.

A plan outlining the procedures for inadvertent discoveries (Draft Inadvertent Discovery Plan or IDP) during construction has been drafted and was reviewed by CTUIR as part of their review of ASC Exhibit S Attachment S-1. A draft IDP, as amended based on updated contact information provided by CTUIR[168], is provided as ~~It is included in confidential Attachment S-1 as Appendix B as well as in~~ Attachment S-3~~, included in this~~ of this order. The IDP includes minimum avoidance buffers/markers around cultural resources and procedures to follow in the unlikely event of a discovery of an archaeological resource during construction. In its letter to the Department the CTUIR acknowledges the IPD's inclusion in ASC Exhibit S and indicate that they appreciate the inclusion of the Inadvertent Discovery Plan (IDP) in the ASC.[169]

~~The applicant indicates that CTUIR may still be reviewing the IDP and, at a minimum, the contact information would be finalized prior to construction, Thus,~~ The Department recommends Historic, Cultural, and Archaeological Resources Condition 1 requiring that, prior to construction, the applicant submit to the Department the ~~to ensure that the~~ final IPD ~~is submitted to the Department~~with the most current agency and tribal government contacts at the time. ~~, the~~The Department recommends Historic, Cultural, and Archaeological Resources

[166] WESAPPDoc3-19 ASC Exhibit S Cultural 2022-0-9-28, Section 3.1.2.

[167] WESAPPDoc6 pASC Reviewing Agency Comment_CTUIR_Steinmetz 2021-11-30.

[168] WESAPPDoc3-2 Reviewing Agency Tribal Gov DPO Comment CTUIR Farrow Ferman 2022-11-16. In comments on the DPO, CTUIR's Cultural Resources Protection Program Manager Teara Farrow Ferman provided current contact information for CTUIR, CIS and Oregon State Police to be reflected in the draft IDP.

[169] WESAPPDoc6 pASC Reviewing Agency Comment_CTUIR_Steinmetz 2021-11-30.

Condition 1. Further, to ensure that the ~~IPD~~ IDP is implemented during construction and during any ground disturbing operational activities, the Department also recommends Historic, Cultural, and Archaeological Resources Condition 2.

Recommended Historic, Cultural, and Archaeological Resources Condition 1 (PRE): Prior to construction of the facility, facility component or phase, submit to the Department ~~a final~~an Inadvertent Discovery Plan (based on Attachment S-3 of Final Order on ASC), finalized with current contact information for the coordination protocol (3).

Recommended Historic, Cultural, and Archaeological Resources Condition 2 (GEN): During construction and ground disturbing operational activities, implement the final Inadvertent Discovery Plan.

Because of the low probability of precontact archaeological resources on site and the CTUIR's acknowledgement that there are not resources within the analysis area they are aware of that would be impacted, and the implementation of the IPD during construction and ground disturbing activities during operations, the Department recommends that any significant adverse impacts from the construction and operation of the facility to tribal resources would be minimized.

Field and Desktop Survey Results

Previously Recorded Resources

The databases with existing archaeological and historical property information revealed that nine cultural resource surveys had been previously performed within site boundary and the 1-mile analysis area. The archival research identified two previously documented resources as presented below.

Table 10: Previously Recorded/Identified Cultural Resources within Analysis Area

Resource ID	Resource Description	Resource Type	NRHP-Eligibility	Nearest Distance to Site Boundary
HPP-H-2	Historic Refuse Scatter	Archaeological Site	Unevaluated	0.5-mile south of southwest corner
35UM 00399	Historic Irrigation Ditch ("Furnish Ditch")	Historic Site*	Unevaluated (possibly eligible under NRHP Criteria A-C)	0.5-mile northwest of the northwest corner
* Although the historic Furnish Ditch is listed in Oregon Archaeological Records Remote Access and has been assigned a State trinomial number for an archaeological site, it is a functioning irrigation ditch. SHPO considers functioning historic irrigation ditches to be historic sites, not archaeological sites (SHPO 2016: Appendix C). As such, the applicant presents it in ASC Exhibit S, Table S-2 as a historic site.				

The potentially eligible (or unevaluated) archaeological site, HPP-H-2, is identified as an historic refuse scatter is located approximately 0.5-mile south of southwest corner of the site boundary. Because this resource is outside of the site boundary, there would not be impacts to the archaeological site. Similarly, the historic site 35UM 00399, which is a functioning Historic Irrigation Ditch ("Furnish Ditch"), is located outside of the site boundary and would not be impacted by the proposed facility.

Archaeological Site EWE-BB-01

The Phase I pedestrian survey resulted in the identification of archaeological site EWE-BB-01 which consists of a historic refuse scatter including two abandoned vehicles and two artifact concentrations. The vehicles are both early twentieth century disarticulated vehicles without diagnostic markings or tags, and the two artifact concentrations are comprised nearly entirely of domestic and automotive cans. The site represents household and auto-related artifacts typical of debris scatters from regional farming communities discarded during the early to late twentieth century. The applicant submitted information about site EWE-BB-01 to SHPO and in a February 7, 2022 Archaeological Site Form Approval, SHPO confirmed that a Smithsonian number of 35UM00596 has been assigned to the resource and the submission was given a SHPO national register eligibility status of Not Eligible.[170] The Department recommends that Council find that because of the Not Eligible SHPO determination, archaeological site EWE-BB-01 is not protected under OAR 345-022-0090(1)(a).

OAR 345-022-0090(1)(b) requires the Council to find that, taking into account mitigation, the facility is not likely to result in significant adverse impacts to archaeological sites, as defined in 358.905(1)(c) located on private land.[171] Because the site contains archaeological objects (old vehicles and refuse) and it is possible the archaeological objects (vehicles) could have with a contextual associations with each other, this resource could qualify for an evaluation under OAR 345-022-0090(1)(b).

The applicant indicates that based on the current facility design, solar arrays are planned for the area of the EWE-BB-01 resource, therefore the resource would be directly impacted. According to the Oregon SHPO, mitigation may include documenting historic properties before they are demolished.[172] The resource cataloging encompassed with the SHPO NRHP designation can be considered mitigation for impacts to the Not Eligible resource, because it preserves the data for the resource, even though the resource is considered Not Eligible. Therefore, the Department recommends Council find that impacts to EWE-BB-01 have been mitigated

[170] WESAPPDoc9 SHPO Not Eligible Confirmation Site EWE-BB-01 2022-02-07.

[171] ORS 358.905(1)(c) (A) "Archaeological site" means a geographic locality in Oregon, including but not limited to submerged and submersible lands and the bed of the sea within the state's jurisdiction, that contains archaeological objects and the contextual associations of the archaeological objects with:
(i) Each other; or
(ii) Biotic or geological remains or deposits…

[172] Oregon SHPO Mitigation for Adverse Effects: Examples Fall 2019

appropriately, therefore EWE-BB-01 may be impacted by the construction and operation of the facility.

Historic Resources

Historic Transmission Structures

As discussed in this order, the applicant proposes to connect to the grid with one of three transmission lines that run across or adjacent to the site. Two transmission line rights-of-way transect the proposed site boundary and run southeast to northwest crossing over the site boundary: Bonneville Power Administration's (BPA) McNary to Roundup 230-kilovolt (kV) line which was constructed in 1952 and PacifiCorp's Pendleton to Hermiston 69-kV line, which was constructed in 1941. Both lines were included in the preliminary records search as a known historic utility corridors observed on historic cartographic references. During the field surveys, no artifacts were observed to be associated with either transmission line corridor. Both lines are still operational and were recommended as eligible for listing in the NRHP under Criterion A for their significant association with early rural electrification in eastern Oregon. Neither line was recommended for listing in the NRHP under criteria B through D.

The applicant explains that right-of-way corridor avoidance (except for access roads) is recommended if the transmission lines are not selected for interconnection. As discussed in Section III.A.1*., Energy Facility,* the facility would be constructed and operated to avoid the transmission line rights-of-way, as represented in ASC Exhibit C, Figure C-4 (Overall Site Plan), and in Figure 1: *Preliminary Facility Site Plan*, of this order. As indicated in the Preliminary Site Plan, there would be a 75-foot set back of facility components on both sides of the transmission line rights-of-way, however, facility roads would be permissible under the transmission lines. Under General Standard Condition 3, the applicant is required to design, construct, operate and retire the facility substantially as described in the site certificate.

The applicant states that if either of the lines are selected for interconnection, the impact of the interconnection would be assessed separately and in consultation with the owning company (BPA or PacifiCorp). However, for both lines, an interconnect is not expected to result in a significant impact because the transmission lines remain operational. According to BPA Pacific Northwest Transmission System, Register of Historic Places Multiple Property Documentation Form connection to BPA's Pacific Northwest Transmission System multiple property resource is expressly allowed. Note that development under the lines and around their associated utility pole structures will not cause significant impacts to the resources. The sites will be flagged for avoidance during construction to ensure significant impacts are avoided. If avoidance is infeasible, the applicant would enter consultations with SHPO and the owning company (BPA and/or PacifiCorp) to determine appropriate mitigation for significant impacts.

The Department recommends that Council find that because the BPA McNary to Roundup 230-kilovolt (kV) transmission line and PacifiCorp's Pendleton to Hermiston 69-kV transmission line are operational facilities where it's permissible to interconnect (impact) with them, and taking

into account the right-of-way facility avoidance areas for impacts to the operational transmission lines, the construction and operation of the facility, is not likely to result in significant adverse impacts to these historic resources.

Historic Properties

The analysis area for aboveground resources, including Built Environment resources, the analysis area is the area within and extending 1-mile from the site boundary. Therefore, the applicant provides in ASC Exhibit S, Attachment S-2, a Historic Properties Inventory Report.[173] Historic sites are defined by the NHPA as resources consisting of standing structures 50 years of age or older.[174]

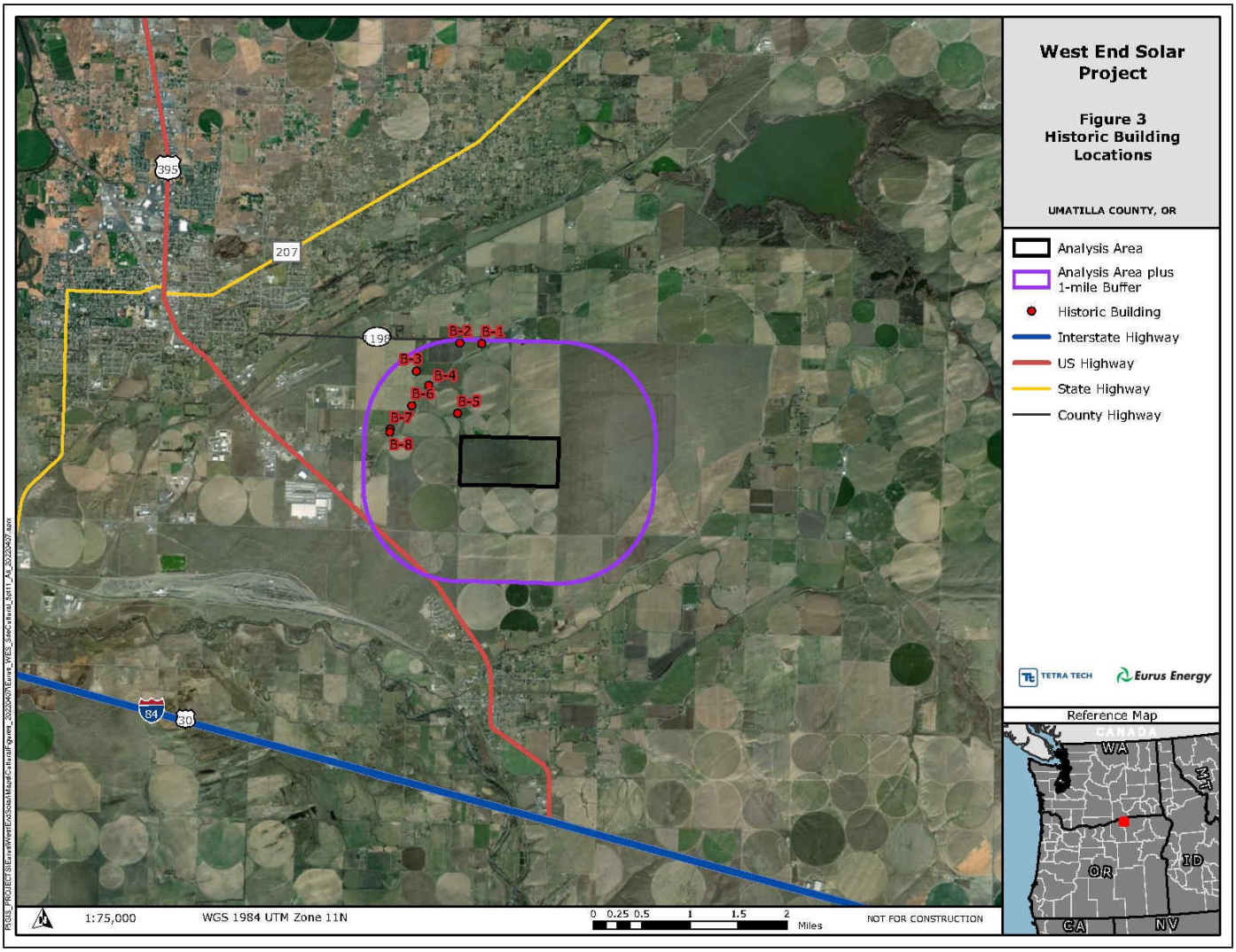
The applicant's archaeological consultants conducted a desktop survey identifying buildings on aerial photographs of the historic properties, reviewed the SHPO Historic Sites database, and assessed the information on the Umatilla County Assessors site to determine the age of the buildings. Historic maps were also reviewed to identify previous and current ownership of each parcel, which in included General Land Office cadastral maps, the 1914 Ogle map, and the 1934 Metsker map. A total of eight tax lots were identified as containing historic buildings. Field assessments of these eight properties were conducted from the public right-of-way, where resources were photographed and recorded on photograph logs. Documentation also included photographic documentation of at least one elevation, a physical description, and a concise statement of significance relative to the building's eligibility for listing on the NRHP (36 CFR Part 60.4).

Figure 12: *Historic Building/Property Locations*, identifies the location and proximity to the facility site boundary for the historic properties that are evaluated in the Historic Properties Inventory Report and correspond to Table 11: *Historic Property Inventory and NRHP Significance Summary*.

[173] Attachment S-2 was provided by the applicant in response to SHPO's January 2022 comment letter which indicated that to adequately evaluate potential indirect impacts to the setting (e.g. visual/audial) of historic, built environment resources from the proposed facility, SHPO requests that the applicant evaluate aerial photographs/cartographic maps (1970) within 1-mile of the site boundary to determine if there are any historic properties within 1-mile of the site boundary and that if there are historic built environment resources that could be impacted by the facility, additional field work is likely recommended to further evaluate likelihood of NRHP eligibility and potential impact. WESAPPDoc6-6 pASC Reviewing Agency Comment_SHPO Case No 21-1537_ Gabriel 2022-01-31.

[174] ORS 358.905(1)(a) and ORS 358.905(1)(c) require archaeological resources to be at least 75 years old, however the Code of Federal Regulations (CFR) Title 36 Chapter II § 261.2 defines a Historical Resource as any structural, architectural, archaeological, artifactual or other material remains of past human life or activities which are of historical interest and are at least 50 years of age, and the physical site, location, or context in which they are found. Therefore, because the applicant is applying federal NRHP criteria to the resources, the applicant evaluated resources that are 50 years or older. https://www.ecfr.gov/current/title-36/chapter-II/part-261 Accessed 10-25-2022.

Figure 12: Historic Building/Property Locations



Because OAR 345-021-0010(1)(s)(A) requires an evaluation of historic and cultural resources within the analysis area that have been listed, or would likely be eligible for listing, on the NRHP, the Department and SHPO recommend and the applicant provides an evaluation of the four NRHP Eligibility Criteria.[175] In addition to the four criteria of eligibility under CFR Part 60.4, architectural resources must meet some, if not all, of the seven aspects of integrity as defined

[175] The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
B. that are associated with the lives of persons significant in the past; or
C. that embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possess high artistic value, or that represent a significant or distinguishable entity whose components may lack individual distinction; or
D. that have yielded, or are likely to yield, information important in prehistory or history….

by the National Park Service (NPS) which include location, design, setting, materials, workmanship, feeling, and association.

The results of the applicant's desktop and field studies for historic properties and buildings is provided below in Table 11: *Historic Property Inventory and NRHP Significance Summary*.

1

Table 11: Historic Property Inventory and NRHP Significance Summary

GIS Point	Tax Id	Building Construction Years	Location	Description	Significance Evaluation[1]
B-1	4N29170000500	1953, 1991, 2021, 2022	32654 E Highland Ext., Stanfield, OR	Agricultural Area abutting a canal. Equipment storage garage (2022), a residence (2021) a small utility shed (1953), and a garage (1991)	No buildings or structures remain from this early period in the property's history. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-2	4N29180000100	1970, 1979, 1979	32548 E Highland Ext, Stanfield, OR	Agricultural Area with canal at the south. Residence (1979), garage (1979), and a pole barn used for potato storage (1970)	Potato storage building is clearly related to the history of potato farming in Oregon and is part of a local agricultural legacy. No exterior characteristics that suggest the building's use as potato storage. Property is one of several that are associated with the Amstad family. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-3	4N29180000700	1959, c. 2000	79113 Melody Lane, Stanfield, OR	Agricultural Area with transmission line views. Residence built in 1959 and substantially modified around 2000, large pole barn used for machinery storage constructed around the same time.	Residence has been significantly altered since its construction. Property retains no buildings or structures from its ownership by the irrigation companies. property also does not relate to any historically significant individuals or group. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-4	4N29180000800	1940, 2005	79023 Melody Lane, Stanfield, OR	Agricultural Area with canal through middle. Residence (1940, remodeled 2005) and a machinery storage shed (2005 with a 2015 addition).	Original residence was significantly altered in 2005, obscuring almost all of its exterior features. The building no longer maintains integrity of design, workmanship, or materials. No evidence to suggest that the property could provide additional historical

Table 11: Historic Property Inventory and NRHP Significance Summary

GIS Point	Tax Id	Building Construction Years	Location	Description	Significance Evaluation[1]
					information. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-5	4N29180001200	1938, 1980	78910 Canal Rd., Stanfield, OR	Agricultural Area with canal. Residence (1938) and a detached two car garage (1980). A hay cover (1970) built at the west end of the property was demolished in 2021.	Property is not clearly associated with any significant themes in national or local history. Residence has been significantly altered, forfeiting integrity of materials, design, and workmanship. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-6	4N29180001700	1948, c. 1948, 1979, 1979, c. 2015	78926 Melody Lane, Stanfield, OR	Agricultural Area with canal at the south. Residence (1948, remodeled 1979), detached garage (1979) (Photograph 7), Pump house (1979), prefabricated storage shed (recent), and a saltbox roof shed (Assessor Eff Year built 1960).	Residence has an identifiable architectural style but has been significantly modified through a non-historic addition and alterations to the siding and other exterior features. It does not have integrity of design, materials, and workmanship. No evidence to suggest that the property could provide additional historical information. Neither the property nor the individual historical building is eligible for inclusion on the NRHP.
B-7	4N29180001900	1950 (non-extant)	2505 E Airport Rd (A), Stanfield, OR	Umatilla County Tax Assessor, 4N29180001900 had a lean-to (1950) and 4N29180002000 had a machine shed (1950)	Via satellite imagery, it is evident that the two buildings visible in 1970 were removed from the property between 2009-2011. Therefore, there are no longer any historic buildings on the properties.
B-8	4N29180002000	1950 (non-extant)	2505 E Airport Rd (B), Stanfield, OR	Umatilla County Tax Assessor,	Via satellite imagery, it is evident that the two buildings visible in 1970 were removed from the property between 2009-2011.

Table 11: Historic Property Inventory and NRHP Significance Summary

GIS Point	Tax Id	Building Construction Years	Location	Description	Significance Evaluation[1]
				4N29180001900 had a lean-to (1950) and 4N29180002000 had a machine shed (1950)	Therefore, there are no longer any historic buildings on the properties.
1 See ASC Exhibit S, Attachment S-2. Historic Properties Inventory Report, for a full evaluation relative to the building's or properties' eligibility for listing on the NRHP (36 CFR Part 60.4) including photographic documentation included photographic from least one elevation, a physical description, and a concise statement of eligibility for listing on the NRHP.					

The applicant and the Department provided Attachment S-2, the Historic Properties Inventory Report to SHPO for their review and comment. On August 19, 2022, SHPO provided a letter to the Department and applicant indicating they reviewed the revised data and indicated that all the necessary data was present for them to complete their review. In the letter SHPO concurred that the eight potentially historic properties documented within the evaluation/analysis area are not eligible for listing in the National Register of Historic Places (Umatilla Tax IDs: 4N29170000500, 4N29180000100, 4N29180000700, 4N29180000800, 4N29180001200, 4N29180001700, 4N29180001900, and 4N29180002000), and that based on the information provided, SHPO concurs that there will be no effect to historic properties for this undertaking.[176]

[176] WESAPPDoc6-11 pASC Reviewing Agency Comment SHPO Case No. 21-1537_Gabriel_2022-08-19.

Conclusions of Law

Based on the foregoing recommended findings of fact, conclusions of law, based upon the recommended conditions, the Department recommends Council find that the proposed facility would comply with the Council's Historic, Cultural, and Archeological Resources standard.

IV.L Recreation: OAR 345-022-0100

> *(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:*
>
> *(a) Any special designation or management of the location;*
>
> *(b) The degree of demand;*
>
> *(c) Outstanding or unusual qualities;*
>
> *(d) Availability or rareness;*
>
> *(e) Irreplaceability or irretrievability of the opportunity.*
>
> *****[177]

Findings of Fact

The Recreation standard requires the Council to find that the design, construction, and operation of a facility would not likely result in significant adverse impacts to "important" recreational opportunities within the analysis area. Therefore, the Council's Recreation standard applies only to those recreation areas that the Council finds to be "important," utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e); special designations or management of the location; degree of demand; outstanding or unusual qualities; availability or rareness; irreplaceability or irretrievability of the opportunity. After "important" recreational opportunities are identified, the Council must then evaluate whether the design, construction or operation of the facility could adversely impact the identified important recreational opportunity. If the facility could impact the resource, then the Council must consider the significance of the potential impact, by evaluating potential impacts using the factors listed in the OAR 345-022-0100(1)(a)-(e).

Impacts to important recreational opportunities from construction and operation of the proposed facility that are evaluated in this section are: direct or indirect loss of a recreational opportunity, excessive noise, increased traffic, and visual impacts of facility structures or

[177] The proposed facility is not a special criteria facility under OAR 345-0015-0310; therefore, OAR 345-022-0100(2) is not applicable.

plumes. ASC Exhibit T provides information about recreational opportunities. The analysis area for the Recreation standard is the area within and extending five miles from the site boundary.

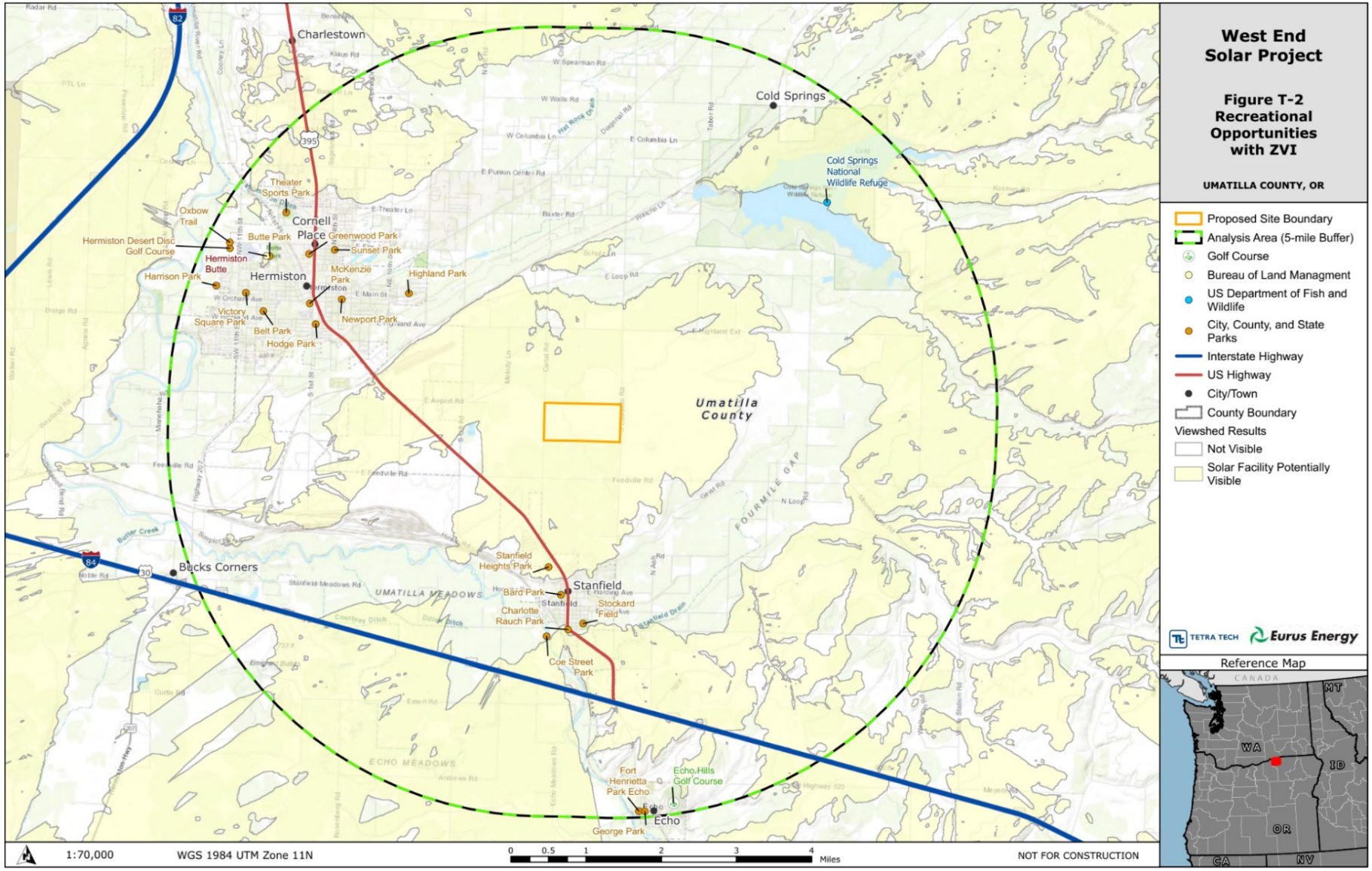
Recreational Opportunities within the Analysis Area

In accordance with OAR 345-001-0010(59)(d), and consistent with the study area boundary, the analysis area for recreational opportunities is the area within and extending 5 miles from the proposed site boundary. As presented in ASC Exhibit T, the applicant conducted a review of published and unpublished resources including maps, GIS files, comprehensive plans, park and recreation plans, park master plans, and internet sites to identify existing recreational opportunities within the analysis area.

The location of identified recreational opportunities within the analysis area is presented in ASC Exhibit T Attachment T-1 and presented below in Figure 13: *Recreational Opportunities within the Analysis Area*.

1

Figure 13: Recreational Opportunities within Analysis Area



There are 23 recreational opportunities identified within the 5-mile analysis area from 1.7 to 4.9 miles from the site boundary. These are identified below in Table 12: *Recreational Opportunities, Distance from Site Boundary, and Importance Designation*, along with the distance from the site boundary as well as each resources' "importance" designation under the standard as provided by applicant and recommended by the Department discussed in this section.

Table 12: Recreational Opportunities, Distance from Site Boundary, and Importance Designation

Recreational Opportunity	Management or Jurisdiction	Distance from Site Boundary (miles)	Special Designation	Determination of Importance (Yes/No)
Stanfield Heights Park	City of Stanfield	1.7	Municipal Park	No
Nathan Bard Memorial Community Park	City of Stanfield	2.0	Municipal Park	No
Highland Park	City of Hermiston	2.3	Municipal Park	No
Stockard Field	City of Stanfield	2.4	Municipal Park	No
Cold Springs National Wildlife Refuge	Federal State (ODFW for hunting access)	2.4	National Wildlife Refuge	**Yes**
Rauch Park	City of Stanfield	2.5	Municipal Park	No
Coe Park	City of Stanfield	2.6	Municipal Park	No
Newport Park	City of Hermiston	3.0	Municipal Park	No
Hodge Park	City of Hermiston	3.2	Municipal Park	No
McKenzie Park	City of Hermiston	3.4	Municipal Park	No
Sunset Park	City of Hermiston	3.5	Municipal Park	No
Greenwood Park	City of Hermiston	3.7	Municipal Park	No
Belt Park	City of Hermiston	3.9	Municipal Park	No
Butte Park	City of Hermiston	4.1	Municipal Park	**Yes**
Hermiston Butte	Federal	4.2	BLM Recreation Area	**Yes**
Victory Square Park	City of Hermiston	4.2	Municipal Park	No
Theater Sports Park	City of Hermiston	4.3	Municipal Park	No
Harrison Park	City of Hermiston	4.6	Municipal Park	No
Hermiston Desert Disc Golf Course	City of Hermiston	4.7	Municipal Park	No
Oxbow Trail	City of Hermiston	4.7	Municipal Hiking Trail	No
Echo Hills Golf Course	City of Echo	4.9	Municipal Golf Course	No
F.T. George Park	City of Echo	4.9	Municipal Park	No
Fort Henrietta Park and Campground	City of Echo	4.9	Municipal Park	**Yes**

The applicant proposes and the Department recommends that twelve municipal parks in the same three cities "as common and replaceable" because they contain many of the same features as each other, as well as other parks in these cities outside of the analysis area, such as community and sports attractions designed for urbanized communities. These include: Stanfield Heights Park, Stockard Field, Rauch Park, Coe Park, Echo Hills Golf Course, F.T. George Park, Highland Park, Newport Park, Hodge Park, Sunset Park, Greenwood Park, Victory Square Park, Harrison Park. Further, based on an internet search, the Department determined that there are at least two other golf courses in Umatilla County, all of which are open to the public. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and recommends Council find that all thirteen recreation resources in this category are common, replaceable and do not constitute "important" recreational resources utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

The applicant proposes, and the Department concurs that six recreational opportunities would be considered uncommon, but replaceable under the Council's Rules. Because these recreation resources are uncommon, each one is evaluated in more detail below, however, the Department recommends Council find that these recreational opportunities also would not be considered important under the Council's Recreation standard.

Nathan Bard Memorial Community Park – The applicant states that the one unusual quality of this park is that it is used to host the Stanfield 4th of July Celebration every year. However, outside of that one unique quality, the park includes similar features as other parks in the City of Stanfield and other municipal parks in the analysis area. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that Nathan Bard Memorial Community Park does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

McKenzie Park – The applicant states that the park's uncommon characteristics include the sole skatepark in the community and it contains an interpretive panel site. However, outside of these two unique qualities, the park includes similar features as other parks in the City of Hermiston and other municipal parks in the analysis area. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that McKenzie Park does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Belt Park – The applicant states that the uncommon characteristic of this park is an arboretum. However, outside of this unique quality, the park includes similar features as other parks in the City of Hermiston and other municipal parks in the analysis area. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that Belt Park does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Theater Sports Park – The applicant states that the uncommon characteristics include that it is used to host youth sports and is also home to the Hermiston City Softball League. However,

outside of these unique qualities, the park includes similar features as other parks in the City of Hermiston and other municipal parks in the analysis area. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that Theater Sports Park does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Hermiston Desert Disc Golf Course – This is the sole disc golf course within the analysis area which makes it unique. However, both the City of Boardman, 26 miles from Hermiston and the City of Pendleton, 32 miles from Hermiston both have disc golf courses as well which makes the Hermiston Desert Disc Golf Course replaceable. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that Hermiston Desert Disc Golf Course does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Oxbow Trail – The applicant states that this 5-mile trail's unusual qualities include that it interconnects with several other recreation resources in Hermiston and includes interpretive panels and a gazebo. However, according to the City of Hermiston's Parks and Recreation webpage, which is referenced in Exhibit T, several of the city's parks include paved walking paths which makes the Oxbow Trail replaceable. Based on a review of the submitted materials in Exhibit T, the Department agrees with the applicant and concludes that Oxbow Trail does not constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Important Recreational Opportunities

For the below reasons and assessment, the applicant proposes, and the Department concurs that there would be four important recreational opportunities within the analysis area: Cold Springs National Wildlife Refuge, Hermiston Butte, Butte Park, Fort Henrietta Park and Campground. The importance evaluation is followed with an assessment of direct or indirect loss of a recreational opportunity as a result of the facility, noise resulting from facility construction or operation; increased traffic resulting from facility construction or operation; and visual impacts of facility structures.

Cold Springs National Wildlife Refuge **–** According the United States Fish and Wildlife Service (USFSW) webpage for the Cold Springs National Wildlife Refuge (NWR), referenced in Exhibit T, it "was one of the first refuges established in the West, created by President Theodore Roosevelt on February 25, 1909. Cold Springs NWR was established primarily to benefit waterfowl and other native birds. However, the 3,102-acre refuge, while small, provides a surprising variety of habitats and abundance of many other wildlife species. The open water on the reservoir attracts large numbers of Canada geese and ducks. Dense riparian areas provide cover for migrating and nesting songbirds. Shrub-steppe areas support coyotes, badgers, ring-

necked pheasants, several hawk species and trophy elk and deer, along with dozens of other mammal, reptile and amphibian species."

While the refuge was first established by Executive Order in 1909, it was subsequently expanded three times through later executive orders. The refuge's purposes are derived from Executive Orders and the Migratory Birds Convention Act as follows:

- "as preserves and breeding grounds for native birds"
- "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds."

According to the applicant's research, "it is the only NWR and ODFW Access and Hunting Site within the Analysis Area (ODFW 2018), providing protection for outstanding wildlife habitat. The NWR also boasts hiking, biking, and horseback riding opportunities, wildlife viewing and photography, and fishing (USFWS 2015). Based on the ecological interest and the mix of individual opportunities, the NWR is considered an uncommon resource; the recreational opportunities are relatively common in the region, but may not offer the same quality of sights and habitat as provided by this NWR. The level of demand is assumed to be low to moderate, because the local population is small, the NWR capacity is large, and the NWR is not located on a high-volume travel route nor near larger population centers. No surveys have ever been completed to determine the level of usage, but the USFWS states that the use is low and the NWR is typically used by residents of local communities (USFWS 2015). The resources and characteristics of the NWR are irreplaceable due to it being a geographic/static recreational resource, and unique to the community. Therefore, though the NWR has low to moderate demand, because of its uncommon nature and irreplaceability the Cold Springs NWR is considered to meet the criteria for an important recreation resource."

Based on a review of the submitted materials in Exhibit T and the USFWS webpage for the NWR, the Department agrees with the applicant and concludes that Cold Springs National Wildlife Refuge does constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Hermiston Butte – According to the "Hermiston Parks, Recreation and Open Space Master Plan – August 2020"[178] (HPROSMP) the Bureau of Land Management (BLM) owns seven acres at the summit of Hermiston Butte. The applicant did not provide, and the Department could not find, a BLM management plan for these 7 acres. However, the following passage is from the HPROSMP[179]

> "According needs assessment findings, Butte Park is the most popular facility in the PROS system, it includes the most recognizable landmark in the City, Hermiston Butte, and it is

[178] https://www.hermiston.or.us/sites/default/files/fileattachments/parks_and_recreation/page/9031/hpros_plan_spread_format_-_compressed.pdf.

[179] IBID – Page 54

the site of the City's major outdoor recreation facility, the Hermiston Family Aquatic Center."

According to the applicant's research, "BLM Hermiston Butte is a small, publicly accessible recreation area that primarily serves the local population of Hermiston (AllTrails 2021, BLM 2021). The Butte is unusual in that it is the sole butte/raised geographic attraction providing elevated views in the community of Hermiston, as well as the Analysis Area. It provides 0.8 miles of hiking trails and an automobile access route to its summit (AllTrails 2021, Google Earth 2021). Based on the geographic interest and the mix of individual opportunities, the Butte is considered an uncommon resource. The level of demand is assumed to be low to moderate, because the local population is small, the Butte capacity is large, and the Butte is not located on a high-volume travel route nor near larger population centers. The resources and characteristics of the Butte are irreplaceable due to it being a geographic/static recreational resource, and unique to the community. Therefore, though the Butte has low to moderate demand, because of its uncommon nature and irreplaceability Hermiston Butte is considered to meet the criteria for an important recreation resource. "

The Department does not agree with the applicant's assumption that the level of usage is low to moderate because the population is small due to the reference in the HPROSMP that this is Hermiston's most popular park. However, based on a review of the submitted materials in Exhibit T and the USFWS webpage for the NWR, the Department agrees with the applicant and concludes that Hermiston Butte does constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Butte Park – As previously cited in the Hermiston Butte overview above, Butte Park is the most popular facility in the City of Hermiston's park, recreation and open space system. According to the applicant's research, it is a large facility that "does have some characteristics that are notable but not outstanding, including general park, pet, and sports amenities such as a football field, four-lit soccer fields. However, the park does have some unusual qualities, including that it is the sole dog park and spray park in the community; home to the Funland Playground, one of the largest playground in the Northwest (opening Spring 2021); has interpretive panels; and has direct access to BLM's Hermiston Butte. Based on the educational and locational interest and the mix of individual opportunities, the park is considered an uncommon resource. The level of demand is assumed to be low to moderate, because the local population is small, the site is large, and the park is not located on a high-volume travel route, although use of the reservable picnic shelter may raise the demand level to moderate. The resources and characteristics of the park are generally replaceable, except for the unique attractions and location adjacent to Hermiston Butte. Though the park has low to moderate demand and is partially replaceable, because of its uncommon features and access to Hermiston Butte, Butte Park is considered to meet the criteria for an important recreation resource."

The Department does not agree with the applicant's assumption that the level of usage is low to moderate because the population is small due to the reference in the HPROSMP that this is Hermiston's most popular park. However, based on a review of the submitted materials in

Exhibit T and the USFWS webpage for the NWR, the Department agrees with the applicant and concludes that Hermiston Park does constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

Fort Henrietta Park and Campground – The applicant did not provide, and the Department could not find, a management plan for this facility. According to the applicant's research, "Fort Henrietta Park is a small facility located within a developed community, and it is typical in many respects of other small, municipal parks that serve a local population. However, the park does have some unusual qualities, including its location on and access to the Umatilla River, location at a noted Oregon National Historic Trail (ONHT) campsite and river crossing, a replica of a frontier-era blockhouse, and the inclusion of camping within the park (City of Echo 2020). Based on the historic interest and the mix of individual opportunities, specifically including the river access, the park is considered an uncommon resource. The level of demand is assumed to be low, because the local population is small, the facility capacity is small, and the park is not located on a high-volume travel route. The resources and characteristics of the park are generally replaceable, except for the historical link to the ONHT crossing (i.e., its function as a campsite and river crossing for Oregon Trail emigrants). Though the park has low demand and is partially replaceable, because of its uncommon access to the Umatilla River and irreplaceable historical connection to the ONHT, Fort Henrietta Park is considered to meet the criteria for an important recreation resource.

While the Department cannot confirm the applicant's assumption that the demand is low because the population is small, based on a review of the submitted materials in Exhibit T and the USFWS webpage for the NWR, the Department agrees with the applicant and concludes that Fort Henrietta Park and Campground does constitute an "important" recreation resource utilizing the factors listed in the OAR 345-022-0100(1)(a)-(e).

The proposed facility must now be evaluated to ensure its design, construction and operation, taking into account mitigation, are not likely to result in a significant adverse impact to these four important recreational opportunities.

Potential Direct or Indirect Loss of Recreational Opportunity

Direct Loss

A direct loss to an important recreational opportunity would occur when construction or operation of the proposed facility would impact a recreational opportunity by directly altering the resource so that it no longer exists in its current state. At its closest, the proposed facility is 2.4 miles from the Cold Springs National Wildlife Refuge; 4.2 miles from Hermiston Butte; 4.1 miles from Hermiston Park; and 4.9 miles from Fort Henrietta Park and Campground respectively. Based on the location of the proposed facility in relation to the four important recreational opportunities, the proposed facility would not physically disturb, or result in ground disturbance, to any of them. The proposed facility would also not require any temporary or permanent closure or removal of the important recreation opportunities to public

use. Therefore, based upon review of the location and proximity of important recreational opportunities to the proposed facility site, the Department recommends the Council find that the proposed facility would not be expected to result in ~~in~~direct impacts to the important recreational opportunities.

Indirect Loss

Similar to the assessment of direct loss, indirect loss would result if construction or operation of the proposed facility would impact a recreational opportunity by indirectly altering the resource or some component of it. To evaluate indirect loss associated resulting from the construction and operation of the proposed facility, the Department considers potential noise, traffic and visual impacts to the above mentioned important recreational opportunities.

Potential Noise Impacts

The significance of potential noise impacts to identified recreational opportunities is based on the magnitude and likelihood of the impact on the affected human population or natural resources that uses the important recreational opportunity.

Construction and Operation

As provided in ASC Exhibit X and discussed in Section IV.R.1., *Oregon Department of Environmental Quality (DEQ) Noise Control Regulations for Industry and Commerce* proposed facility construction activities phases that would generate noise include demolition, site preparation and grading, trenching and road construction, equipment installation and commissioning. Table 17: *Construction Equipment Maximum Noise Levels at 50 and 1200 Feet,* identifies construction equipment noise levels based on 40 percent to 50 percent usage factor for each type of equipment at a distance of 50 feet and 1200 feet from the site boundary. As illustrated in this table, noise attenuate, lessens or dissipates the further from the noise source it travels. As such, the loudest construction equipment would be the pneumatic pile drives used to install the solar facility posts, the noise generated at 50 feed in dBA would be approximately 95 dBA and at 1200 feet (or 0.23 miles) is with other construction equipment would lessen to approximately 63 dBA. For context, 60 dBA is the sound of a large store air-conditioning unit (at 20 feet) and 65 dBA is the sound from a passenger car at 65 mph (at 25 feet).[180]

The nearest important recreational opportunity is Cold Springs National Wildlife Refuge is 2.4 miles from the site boundary. This would be 2.17 miles further than the 1200 feet which would experience the loudest construction noise of 63 dBA. It is highly unlikely that any noise from construction of the facility would be experienced at the Cold Springs National Wildlife Refuge 2.4 miles from the site boundary or any other the other important recreational opportunities which are all further away that the Cold Springs NWR.

[180] WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Table Y-2. Ado[pated from EPA (U.S. Environmental Protection Agency). 1971. Community Noise. NTID300.3 (N-96-01 IIA-231).

Operational noise is also evaluated in Section IV.R.1 of this order. Maximum operational noise id modeled based on the maximum noise generating equipment on site. As discussed in that section, the maximum noise that would be experienced at the residence closest to the facility (approximately .25 miles) during the quietest times of the day and night would be 51 dBA.

Therefore, similar to the noise generated from construction, at the closest important recreational opportunity, and all the other recreational opportunities further away, it is not anticipated that operational noise would be perceivable at these recreational areas. Therefore, the Department recommends Council find that noise generated from construction and operation of the facility would not impact important recreational opportunities.

Traffic Impacts

As discussed in Section IV.M., *Public Services*, the primary transportation routes used during construction of the facility would be:

1. Northern Primary Route -
    -I-82 to US 730 near Sharps Corner
    -US 730 to US-395, also near Sharps Corner
    -US 395 through the City of Hermiston to Feedville Road, north of Stanfield
    -Feedville Road to S. Edwards Road, northeast of Stanfield
    -S. Edwards Road to project site

2. Southern Primary Route -
    -I-84 to US 395 via exit 188, southeast of Stanfield
    -US 395 to S. Edwards Road, running east of Stanfield to project site

Construction & Operation

Cold Springs National Wildlife Refuge – This NWR is located approximately 2.4 Miles of the project but is not located along either of the two primary transportation routes described above. While this NWR can be accessed from the project site via multiple County roads, none of these routes would be convenient for either deliveries or workers accessing the site during operation or construction because it is not directly accessible to any major road. Based on this evaluation, the Department recommends Council conclude that both construction and operational activities will not result in any significant potential adverse traffic impacts to this important recreation resource opportunity.

Hermiston Butte & Butte Park – Because both of these important recreation resource opportunities have the same transportation entrances, they are being evaluated together. The entrance to both is located approximately .5 miles west of US-395, a major part of the Northern Primary Route, as it goes through the City of Hermiston. Based on this evaluation in the Public Services section of this order, the Department recommends Council conclude that both

construction and operational activities will not result in any significant potential adverse traffic impacts to these important recreation resource opportunities.

Fort Henrietta Park and Campground – The City of Echo is located approximately 1.25 miles south of I-84 exit 188 where the Southern Primary Route goes north to the project site. It is therefore not likely that any deliveries would occur through the City of Echo or in proximity to Fort Henrietta Park and Campground. While it is possible that construction workers could stay in Echo, according to ASC Exhibit U – Public Services, page 15, there is adequate temporary housing available in the broader geographic area. So even if there were some construction workers that found temporary housing in the City of Echo, it would not be enough to impact the transportation patterns that would negatively affect the park and campground. Only three operational staff are anticipated once the project is constructed which is also not enough to generate any impacts to traffic. Based on this evaluation, the Department recommends Council conclude that both construction and operational activities will not result in any significant potential adverse traffic impacts to these important recreation resource opportunities.

Potential Visual Impacts

The project description in ASC Exhibit B includes the following facility components with the following maximum heights:

- Solar Modules on Posts – 16' high
- Perimeter Fence – 10' high
- Battery storage module units – 10' high
- Operation and & Maintenance Facility – 30' high
- Substation and equipment– 30' high

The applicant conducted a zone of visual influence (ZVI) analysis to determine if the proposed facility components could be seen from the four important recreational opportunities within the analysis area. The facility will not generate emissions plumes, so the analysis was conducted based on the proposed physically constructed elements of the ~~project~~ facility listed above.

Cold Springs National Wildlife Refuge – The applicant states in ASC Exhibit T – Page 14, "a majority of the NWR will not have views of the Project, which at the base is approximately 100 feet lower than the Project." Based on a review of the topographical base layer in the Oregon Renewable Site Assessment online mapping tool[181], the NWR site ranges from 510 to 740 feet in elevation with the edge of the reservoir itself at 610 feet in elevation, whereas the site boundary ranges from 680 to 735 feet in elevation. The constructed facility components would add between 10 and 30 feet in height which would make taller ones more visible from the NWR. However, given the 2.4 miles distance, the Department agrees with the applicant's conclusion that the majority of the NWR will not have views of the project.

[181] https://tools.oregonexplorer.info/OE_HtmlViewer/Index.html?viewer=renewable

As previously indicated the listed purposes of this NWR are:

- "as preserves and breeding grounds for native birds"
- "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds."

So, even though some of the constructed facility components will be visible from the NWR, the purposes of it are not to maintain views but to maintain an area for native and migratory birds. Based on this analysis, the Department recommends the Council conclude that the proposal will not result in any significant potential adverse visual impacts to this important recreation resource opportunity.

Hermiston Butte – The applicant states in ASC Exhibit T – Page 15, "a majority of the Butte will not have views of the Project, which at the base is approximately 200 feet lower than the Project. However, at the summit, there will be an approximate 70-foot difference in elevation between the Butte and the facility, which, based on the viewshed analyses, could generate limited views of the solar arrays (Figure T-2 and Exhibit R)." Based on a review of the topographical base layer in the Oregon Renewable Site Assessment online mapping tool[182] the butte ranges from 500 feet elevation at its base to 597 feet elevation at its top whereas the site boundary ranges from 680 to 735 feet in elevation. As previously indicated, the constructed facility components would add between 10 and 30 feet in height which would make taller ones more visible from the Hermiston Butte. As previously stated, while the top 7 acres of Hermiston Butte are owned by the BLM, the applicant did not provide, and the Department could not find, a BLM management plan. Therefore, there is no information to show Hermiston Butte is managed to preserve views of the surrounding landscape.

Based on the elevation differences, the distance of 4.2 miles between Hermiston Butte and the site boundary, the intervening urban and agricultural uses the Department recommends the Council conclude that the proposal will not result in any significant potential adverse visual impacts to this important recreation resource opportunity.

Butte Park – Based on a review of the topographical base layer in the Oregon Renewable Site Assessment online mapping tool[183] Butte Park ranges from 480 to 500 feet elevation whereas the site boundary ranges from 680 to 735 feet in elevation. Even with the constructed facility components reaching an additional 30 feet in height, given that the park is surrounded by urban development, is approximately 200 feet lower in elevation than the site boundary, which is 4.1 miles away, the Department agrees with the applicant's conclusion in Exhibit T – Page 14 that the project will not be visible from this important recreational opportunity due to distance and terrain.

[182] IBID

[183] IBID

Fort Henrietta Park and Campground (4.9 Miles) – Based on a review of the topographical base layer in the Oregon Renewable Site Assessment online mapping tool[184] Fort Henrietta Park and Campground is at 603 feet elevation whereas the site boundary ranges from 680 to 735 feet in elevation. Even with the constructed facility components reaching an additional 30 feet high, given that the park and campground is surrounded by urban development, is approximately 100 feet lower in elevation than the site boundary, which is 4.9 miles away, the Department agrees with the applicant's conclusion in Exhibit T – Page 14 that the project will not be visible from this important recreational opportunity due to distance and terrain.

Conclusions of Law

Based on the foregoing recommended findings of fact, the Department recommends that the Council find that the design, construction and operation of the proposed facility would not be likely to result in a significant adverse impact to any important recreational opportunities in the analysis area and therefore the proposed facility would comply with the Council's Recreation standard.

IV.M Public Services: OAR 345-022-0110

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.*
>
> *(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*
> ****[185]*

Findings of Fact

The Council's Public Services standard requires the Council to find that the proposed facility is not likely to result in significant adverse impacts on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools. Pursuant to OAR 345-022-0110(2), the Council may issue a site certificate for a facility that would produce power from solar energy without making findings regarding the Public Services

[184] IBID

[185] OAR 345-022-0110(3) does not apply to this ASC because the proposed facility would not meet the criteria for a special criteria facility as defined in ORS 469.373(1).

standard; however, the Council may impose site certificate conditions based upon the requirements of the standard.

The analysis area for potential impacts to public services from construction and operation of the proposed facility is the area within and extending 10-miles from the site boundary. Based on the analysis area, the following evaluation assesses potential impacts to public and private providers within Umatilla County and the cities of Hermiston, Stanfield, Echo, and Umatilla.

Important Assumptions used in Applicant's Impact Assessment

Assumptions relied upon by the applicant to evaluate potential impacts from proposed facility construction and operation to private and public service providers are summarized below:

Construction Assumptions[186]

- Construction anticipated to take 9-12 months, with an average of 24 working days per month.[187]
- Average number of construction workers would be 300 people, while the maximum number of workers during peak construction months would not be more than 500 people.
- 15 percent of workers would be hired locally by contractors or subcontractors.[188]
- 60 percent of workers would commute from up to 70 miles away from the proposed facility.[189]
- 25 percent of workers would require temporary housing in the analysis area.[190]
- Estimated maximum haul and delivery trip rate would 90 one-way trips per day and maximum worker daily trip rate would be 800 one-way trips.

Operation Assumptions[191]

- Operated remotely, aside from periodic site visits from operational maintenance and repair personnel.
- Two to five workers would be deployed to the site when necessary for maintenance.

[186] Applicant details assumptions about the labor force that includes its assessment under the Public Services standard. The Department notes that these assumptions do not guarantee the assumptions are correct.
[187] Under Recommended General Standard of Review Condition 1, the Department recommends the applicant be allotted two years to complete construction after construction has begun, so construction of the proposed facility could last up to 24 months. WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.2.4.
[188] 15 percent of average workforce hired locally would be 45 people and maximum workers would be 75.
[189] 60 perfect of average workforce commuting would be 180 workers and maximum commuters would be 300.
[190] 25 percent of average workforce needing temporary housing would be 75 workers and the maximum would be 125 workers.
[191] Applicant details assumptions about the labor force that includes its assessment under the Public Services standard. The Department notes that these assumptions do not guarantee the assumptions are correct.

- Operations staff , positions that require previous experience working at solar facilities, may be hired from non-local areas.

IV.M.1 Sewers and Sewage Treatment

Construction and operation of the proposed facility would generate sanitary waste. As discussed in ASC Exhibit U, there would be no permanent restroom facilities and associated underground septic systems onsite at the O&M building. All sanitation waste would be managed via portable toilets which would be managed by a licensed subcontractor, who would be responsible for servicing the toilets at regular intervals, transporting, and disposing of wastewater in accordance with local and jurisdictional regulations.[192] The proposed facility would not rely on or require use of existing public or private sewer system or connection to a sewage treatment facility, other than to have the licensed contractor dispose of sanitation waste, therefore, the Department recommends that the Council find that the proposed facility would not be likely to result in significant adverse impacts to public and private supplies of sewers and sewage treatment.

IV.M.2 Water Service

Proposed facility construction would use approximately 12.8 million gallons of water for dust suppression, road construction and site preparation, installation of collector lines, mixing concrete for foundations, and fire risk mitigation.[193] During construction one of the primary drivers for water use is to control dust. Dust is generated from the construction equipment that would cut, move, and compact the subgrade surface; as well as decompaction and final grading for site revegetation. The applicant explains that water trucks would be used to control dust generation in all disturbed areas during road construction, foundation installation, final cleanup, reclamation, and restoration by patrolling the site to control dust up to as one pass per hour, wetting down disturbed and exposed soils. During construction, water may also be used for fire prevention, which would involve stationing a water truck at the job site to keep the ground and vegetation moist to be prepared for extreme fire conditions.

As discussed in Section IV.R.3., *Water Rights*, the applicant or the applicant's third-party construction contractor would obtain construction water from the City of Hermiston under an existing municipal water right. The applicant provides correspondence from the City's Water Superintendent as ASC Exhibit O, Attachment O-1. In correspondence from the City indicates that, under normal conditions, the City would be able to provide water for the proposed facility construction and operation.

The applicant estimates that the solar modules (panels) would need to be washed twice a year which would use approximately 1.65 Mgal per year during operations.[194] Operational water

[192] WESAPPDoc3-23 ASC Exhibit W Waste 2022-09-28, Section 2.2.1
[193] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.2.2.
[194] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.4.2.2.

would be trucked in and retained from the City of Hermiston. Employee drinking water would be supplied by bottled water and portable toilets would be used for sanitation during operations, therefore, these water uses would not impact public or provide service providers of water.

Based upon review of the correspondence from the City affirming its ability to meet proposed facility construction and operational water demand under its existing water permits, the Department recommends that the Council find that the construction and operation of the proposed facility are not likely to result in significant adverse impacts to the ability of public or private providers to provide water service.

IV.M.3 Stormwater Drainage

Construction and operation of the proposed facility could potentially impact rural stormwater management systems. Stormwater management systems include pervious surfaces that allow rainfall and snowmelt to percolate into soils to refill aquifers, streams, or rivers. Stormwater management systems also include infrastructure to direct and store stormwater such as culverts, catch basins, storm sewers and piping, as well as holding ponds and drainage ditches. The proposed facility would not require use of or interconnection to a publicly or privately managed stormwater system.[195]

New roads constructed would be designed to maintain existing drainage patterns and stormwater generated is anticipated to infiltrate into the soil. As further discussed in Section IV.D., *Soil Protection*, a typical DEQ-issued 1200-C Construction Stormwater Discharge General Permit is not necessary for the construction of this facility because of the lack of waters of the state on-site, however, the applicant proposes and the Department recommends under Recommended Soil Protection Condition 1, an erosion and sediment control best management practices (BMPs) which are included in Attachment I-1, Erosion Sediment Control Measures. These would help reduce any stormwater runoff and include:

- Grading will be minimized to the maximum extent practicable and existing vegetation preserved where practical.
- BMPs for erosion, including perimeter controls (e.g., silt fence), soil stabilization (e.g., mulching or tackifiers).
- Fugitive dust from truck traffic will be minimized by applying water to access roads and by keeping paved public rights-of-way (ROW) clean or wet down.

Operational activities associated with maintaining the facility are not anticipated to cause stormwater runoff because permanent roads would be used for vehicle access and the site is anticipated to maintain existing drainage patterns.

[195] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.3.3.

Because the proposed facility would not interconnect to or require use of existing public or private stormwater drainage systems and the applicant proposes BMP's to mitigate potential impacts to existing stormwater drainage and erosion, the Department recommends Council find that construction and operation of the proposed facility would not be likely to result in significant adverse impacts to the ability of stormwater drainage service providers to provide service.

IV.M.4 Solid Waste Management

Proposed facility construction and operation would result in the generation of solid waste. Construction-related solid waste would include approximately one 40-cubic yard roll-off per week, comprised of scrap steel, packaging materials and erosion control materials (e.g., silt fencing and straw wattles), waste concrete, and excavated soil.[196] Construction material and office recycling programs would be implemented to the extent practical to reduce the volume of material that would be disposed of as solid waste, which is discussed further in Section IV.N., *Waste Minimization*. Any non-recyclable waste would be disposed of offsite, hauled by a licensed sanitary service provider and disposed of in a landfill, discussed below.

During operations, the primary waste generated would be solid waste from maintenance and ongoing operational activities. The applicant estimates approximately two yards of solid waste would be generated per month.[197] Waste such as universal waste (for example, lightbulbs and batteries) would be recycled according to applicable regulations. The solar panels would be replaced on an ongoing and as-needed basis depending on any operational issues incurred. The lithium-ion batteries would need to be changed approximately every 10 years, where the self-contained battery components would be removed and disposed of or recycled by a qualified vendor or contractor.

The closest regional landfill to the facility is the Finley Buttes Regional Landfill, located approximately 12 miles south of Boardman, Oregon. The landfill is owned and operated by Waste Connections, Inc. and was opened in 1990 with a planned closure date of 2242. According to Clark County Washington data, the Finley Buttes Landfill has a capacity of 131,895,000 tons of municipal solid waste and receives approximately 500,000 tons of municipal soil waste a year.[198] The other regional waste handing facility is the Columbia Ridge Landfill, which is located near the town of Arlington in Gilliam County, Oregon, located approximately 60 miles from the facility.

ASC Exhibit U, Attachment U-1 provides correspondence with the Columbia Ridge Landfill, in which representatives from the landfill indicate that the landfill has adequate capacity to receive the waste generated from construction and operation of the facility. Finley Buttes Regional Landfill is closer to the facility site and would likely be used for frequent disposal of waste, and as the second largest landfill in Oregon, receiving 500,000 tons of waste per year,

[196] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 2.1.1.
[197] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 2.1.2.
[198] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 3.3.4.

the Department recommends Council find that the ability of this waste service provider would not be impacted by construction and operation of the facility.[199]

The Department recommends Council impose Waste Minimization Conditions 1 and 2 under the Waste Minimization standard (see Section IV.N., *Waste Minimization*, of this order), which would require the applicant to implement plans that would reduce waste and that would encourage the reuse and recycling of waste generated during construction and operation of the facility. These conditions would lessen the waste that would be disposed of at the regional landfills. Therefore, based on the quantity and type of solid waste generated by the proposed facility, existing and long-term capacity of the Columbia Ridge and Finley Buttes Regional Landfills, and compliance with the recommended waste minimization conditions, the Department recommends Council find that construction and operation of the facility would not be likely to result in significant adverse impacts to the ability of solid waste disposal providers to dispose generated waste.

IV.M.5 Traffic Safety

Construction of the proposed facility would result in traffic impacts from the increased traffic and congestion resulting from delivery trucks, equipment, and workers travelling to and from the facility site. Public providers related to transportation would be the Oregon Department of Transportation (ODOT) for state highways, local and state police Departments for traffic safety, and the Umatilla County Public Works/Road Department because they manage road conditions, maintenance, and improvements.

Applicant assumes and estimates that 15 percent of workers would be hired locally. The remaining 85 percent of the workforce would be anticipated to be from other parts of the state or from out-of-state and would either commute daily from communities outside the analysis area or would temporarily relocate to the vicinity of the proposed facility. Peak construction periods would result in approximately 500 workers onsite. Most workers would drive alone; vehicle trips per day are based on an assumed 1.25 occupancy rate. Estimated maximum worker daily trip rate would be 400 round trips and 800 one-way trips. Estimated maximum haul and delivery trip rate would be 45 round trips and 90 one-way trips per day.[200] Total maximum daily construction-related traffic would be approximately 890 one-way trips and 445 round trips.

Throughout construction the 90 one-way truck trip and deliveries would include the following activities:

- Delivery of civil construction and materials (sand, aggregate, and cement) for new roads, laydown areas, and equipment pads/foundations for substation and inverters.

[199] https://chptap.ornl.gov/profile/78/FinleyButtesLandfill-Project_Profile.pdf. Accessed 10-18-2022.

[200] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.2.4. Worker vehicles trips would occur in the early morning and evenings, whereas equipment and haul truck traffic would occur throughout the day, therefore the applicant does not anticipate worker and truck traffic to overlap significantly.

- Heavy duty trucks to deliver solar modules and related equipment delivery, including racking system structure, electrical wiring/cabling and equipment, steel posts, inverters, and transformers;
- Substation component delivery, including the main power transformer, circuit-breakers, electrical buses and insulators, disconnect switches, control enclosure, metering and control equipment, grounding, and associated control wiring, and all related equipment based on the final design;
- Energy Storage System (ESS) delivery, including containers, battery modules, and related equipment;
- Delivery of on-site construction equipment such as cranes, dozers, graders, compactors, forklifts, etc.; and
- Light-duty delivery trucks would deliver water and would be used to apply water for dust suppression as well as delivering electrical equipment and materials required for solar panel construction and power transmission.
- Heavy-duty trucks carry gravel and other materials required for site grading and to construct the new site access road segments.

The primary transportation highway corridors that would be used are I-82, I-84, and US-395. For deliveries and workers arriving from the northern transportation route via I-82, the route would use a short section of US-730 to access US-395 and from there would take Country Road (CR) 1000 east (Feedville Road) from US-395, to S. Edwards Road north. For deliveries and workers arriving from the southern transportation route via I-84 (east or west), access would be anticipated to be from I-84 exit 188 to US-395, and then to S. Edwards Road. The main access point to the facility site is anticipated to be located off of S. Edwards Road near the proposed substation. A new driveway off of S. Edwards Road would be required at the access point and would be constructed to Umatilla County standards, which is discussed further in Section IV.E., *Land Use*.

According to ODOT, interstate highways, US-395, and US-730 are designated as freight routes by the Amended Oregon Freight Plan, which have specific standards for roadway section widths, median barriers, and intersection design and there are no weight restricted bridges along the two primary transportation routes.[201] Feedville Road and South Edwards Road are both paved County roads; however, current pavement condition of these roads is unknown. Umatilla County requires a Road Use Agreement for certain proposed uses to ensure that any impacts to County roads caused by construction activities are mitigated/repaired by the developer, which is discussed further below.

The Umatilla County Transportation System Plan (Umatilla County TSP) estimates that the average daily traffic (ADT) volumes for local roads is 500 ADT, county roads which include rural county roads is below 1,000 ADT, and heavier use county/collector roads, such as Feedville Road, is between 1,200 and 10,000 ADT. The Umatilla County TSP explains that some county roads serve only local uses, yet other county roads serve rural needs such as providing

[201] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.3.6.

connections to higher functioning facilities such as a state highway or interstate freeway, accessing large businesses in rural areas, and accessing rural communities and farms, and these types of roads are considered to be of higher importance to Umatilla County.[202]

Table 13: *Facility Construction Traffic Impacts to Area Highways* and Table 14: *Facility Construction Traffic Impacts to County Roads* summarize the applicant's analysis of impacts on surrounding roads from construction traffic. The analysis for both types of highways and roads uses the Average Annual Daily Traffic (AADT) as designated by ODOT and by the Umatilla County TSP as an acceptable traffic range for designated roads. The applicant incorporates the Level of Service (LOS) and the volume to capacity (V/C) ratio for facility access roads to determine the magnitude, if any, of impacts to roads. The Umatilla County TSP defines LOS by a letter grade from A to F, with each grade representing a range of V/C ratios. A V/C ratio is the peak hour traffic volume on a highway divided by the maximum volume that the highway can handle, where a V/C ratio of 0.0 indicates free-flowing traffic (LOS A) while a V/C of 1.0 indicates a breakdown in vehicular flow (LOS F).[203] For instance, according to the Umatilla County TSP a LOS "A" rating would have an equivalent V/C ratio of 0.00 to 0.48, which is associated with traffic flow conditions where motorists are able to drive at their desired speed and passing demand is well below passing capacity, and almost no platoons of three or more vehicles are observed.

The assumptions integrated into the applicant's traffic impact assessment are provided in the footnotes in the Tables and include the assumption that some roads will only carry 40 or 60 percent of the maximum construction-related traffic (890 one-way trips) because workers and delivers would originate from different areas outside the analysis area and thus, travel to the site using different routes. Highways used to support construction-related traffic would remain at or near their existing V/C ratio and would not experience a lower level of service due to construction traffic. County roads nearest to the facility site would experience an increase in V/C ratios from an existing range of 0.10 to 0.25 to an anticipated range of 0.14 to 0.30, however, the LOS is not anticipated to diminish and would remain at an A grading. The Department highlights that according to the Umatilla County TSP, the ADT for these important country roads is 1,001 to 2,500 and construction traffic increase is anticipated to be 1,535 to 3,034 AADT, which is within and above the existing range. However, because the V/C ratio is still below 0.48, which is associated with a traffic flow LOS rating of "A", and the applicant would deploy the best management practices to avoid, minimize and mitigate impacts from construction traffic discussed below, the Department recommends that construction-related traffic would not impact the ability of public and private providers of traffic safety services.

[202] Umatilla County 2002 Transportation System Plan, Table 4-3: Important County Roads. https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_TSP_June_02.pdf Accessed on 03-01-2022.

[203] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.3.6.1.

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Table 13: Facility Construction Traffic Impacts to Area Highways

Location	Existing AADT (2019[1])	Estimated Current LOS[2]	Estimated Existing V/C[3,4]	Facility Construction Traffic (Peak Trips Per Day, One-Way)[6]			AADT with Facility Traffic	Projected V/C with Peak Construction Traffic[5,4]	Projected LOS with Peak Construction Traffic
				Total Peak Trips	Worker Traffic	Truck Traffic			
I-82 – Umatilla Bridge ATR Station 30-025	21,600	A	0.17	356[7]	320	36	21,956	0.17	A (no change)
I-84 - 2.56 miles east of US 395 interchange	17,300	B	0.51	534[8]	480	54	17,834	0.52	B (no change)
US-395 – 0.02 miles north of Gladys Ave/OR-207 (located within UGB)	19,300	C/D	0.72	356[7]	320	36	19,656	0.73	C/D (no change)
US-395 – Stanfield ATR Station 30-019 (0.12 miles north of Feedville Rd)	8,200	A	0.30	356[7]	320	36	8,556	0.32	A (no change)
US-395 – 0.5 miles north of I-84 interchange	8,600	A	0.32	534[8]	480	54	9,134	0.34	A (no change)
US-730 - 0.5 miles east of I-82 interchange	12,400	A	0.46	356[7]	320	36	12,756	0.47	A (no change)

1. Data from ODOT (2019).
2. Based on estimated volume to capacity (V/C) and equivalent level of service (LOS) as presented in Table U-5.
3. Estimated by dividing existing annual average daily traffic (AADT) by the maximum ADT of the federal functional class for the applicable highway segment (from Table U-6).
4. Segments below maximum ODOT V/C ratios in Table U-4.

Table 13: Facility Construction Traffic Impacts to Area Highways

Location	Existing AADT (2019[1])	Estimated Current LOS[2]	Estimated Existing V/C[3,4]	Facility Construction Traffic (Peak Trips Per Day, One-Way)[6]			AADT with Facility Traffic	Projected V/C with Peak Construction Traffic[5,4]	Projected LOS with Peak Construction Traffic
				Total Peak Trips	Worker Traffic	Truck Traffic			
5. Estimated by dividing projected annual average daily traffic (AADT) by the maximum ADT of the federal functional class for the applicable highway segment (from Table U-6). 6. One-way trips are counted to tally both the inbound and outbound trips for Project traffic (i.e., round-trip count would be half of total one-way trips). 7. Assumes 40 percent of construction traffic will use road. 8. Assumes 60 percent of construction traffic will use road. Source: ASC Exhibit WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Table U-7.									

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Table 14: Facility Construction Traffic Impacts to County Roads

Location	Existing AADT Range (2021[1])	Estimated Current LOS[2]	Estimated Existing V/C[3]	Facility Construction Traffic[5]			AADT with Facility Traffic	Projected V/C with Peak Construction Traffic[4]	Projected LOS with Peak Construction Traffic
				Total Peak Trips per day, one-way	Worker Traffic, peak trips per day, one-way	Truck Traffic, peak trips per day, one-way			
Feedville Road	1,001 to 2,500	A	0.10 to 0.25	356[6]	320	36	1,357 to 2,856	0.14 to 0.29	A (no change)
S. Edwards Road	1,001 to 2,500	A	0.10 to 0.25	534[7]	480	54	1,535 to 3,034	0.15 to 0.30	A (no change)
1. Data from ODOT (2021). 2. Based on estimated volume to capacity (V/C) and equivalent level of service (LOS) as presented in Table U-5. 3. Estimated by dividing existing annual average daily traffic (AADT) by the maximum vehicles per day for major and minor collector roads per TSP (Umatilla County 2002). 4. Estimated by dividing projected annual average daily traffic (AADT) by the maximum vehicles per day for major and minor collector roads per TSP (Umatilla County 2002). 5. One-way trips are counted to tally both the inbound and outbound trips for Project traffic (i.e., round-trip count would be half of total one-way trips). 6. Assumes 40 percent of construction traffic will use road. 7. Assumes 60 percent of construction traffic will use road.									

Table 14: Facility Construction Traffic Impacts to County Roads

Location	Existing AADT Range (2021[1])	Estimated Current LOS[2]	Estimated Existing V/C[3]	Facility Construction Traffic[5]			AADT with Facility Traffic	Projected V/C with Peak Construction Traffic[4]	Projected LOS with Peak Construction Traffic
				Total Peak Trips per day, one-way	Worker Traffic, peak trips per day, one-way	Truck Traffic, peak trips per day, one-way			
Source: ASC Exhibit WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Table U-8.									

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The Umatilla County TSP designates road design standards for county roads including arterial, major and minor collector, and local roads, which include surface width, speed limits, pavement or gravel standards, and shoulder width. The applicant represents that at the design stage for the proposed facility, a careful inspection of county roads used for construction and operation of the proposed facility would be required to determine where and what improvements would be needed to be made so that roads would be serviceable for construction traffic. To ensure that road improvements are done consistent with current Umatilla County codes and standards, the applicant represents that it would cooperate with the Umatilla County Public Works Department to obtain permits to improve the roads and also to make repairs to roads that might be damaged from construction traffic. In addition, the applicant would enter into road use agreements with Umatilla County, to ensure that public roads impacted by construction would be left in as "good or better" condition than that which existed prior to the start of construction.

Based on other road use agreements reviewed by EFSC and the Department, the Department understands that provisions typical of road use agreements between an applicant and a County or its Public Works Department includes, but is not limited to:

- Applicant responsibility to identify final transportation routes based on final design;
- Conduct pre-construction road inventory that identifies the condition of all roads used during construction;
- Applicant responsibility to pay for road improvements necessary for construction as well as any necessary road repairs caused from construction of the proposed facility;
- Applicant shall maintain roads to County standards which include the ability for the public and emergency services to access and use roads; and
- Conduct post-construction inventory to compare with pre-construction to negotiate all necessary improvements that must be made to roads.

The applicant states that a component of road use agreements would be a traffic management plan which would be employed by its construction contractor and would provide best management practices (BMP's) to minimize traffic impacts due to construction traffic congestion, flagging needs, road closures, and large equipment and deliveries. All BMPs are listed in their entirety in Attachment U-1, a draft Traffic Management Plan, some of which include:

- Encouraged construction worker carpooling.
- Construction manager will provide construction schedules to adjacent landowners prior to start of construction and will work with adjacent landowners on mitigating any traffic impacts to harvest time activities.
- Posting signs on county- and state-maintained roads, where appropriate, to alert motorists of construction and warn them of slow, merging, or oversize traffic.
- Using traffic control measures such as traffic control flaggers, warning signs, lights, and barriers during construction to ensure safety and to minimize localized traffic

congestion. These measures will be required at locations and during times when trucks will be entering or exiting highways frequently.

- Restoring residential areas as soon as possible, and fencing construction areas near residences at the end of the construction day.

The Department compiled all applicant-representations for avoiding, minimizing and mitigating impacts related to construction traffic for the proposed facility into a draft Traffic Management Plan (Plan) which is attached to this order as Attachment U-1. To ensure that construction and operation of the proposed facility is not likely to result in significant adverse impacts on the ability of public and private service providers for traffic safety including impacts to roads and traffic flow, the Department recommends Public Services Conditions 1 and 2, which require the finalization of the Plan, submission of final road use agreements, and adherence to the final Traffic Management Plan during construction. The Department understands that it is likely that the applicant or its construction contractor may have its own Traffic Management Plan, which may be provided if it, at a minimum, includes the provisions in the draft Traffic Management Plan, Attachment U-1.

Recommended Public Services Condition 1 (PRE): Prior to construction of the facility, or facility component, as applicable, the certificate holder shall:

a. Based on final design, finalize, identify, and provide maps of all public roads used for construction, road names, locations, and road conditions and include in Final Traffic Management Plan identified in (b) and (c).
b. Submit executed road use agreements between Umatilla County and the certificate holder or its contractor. Any Final Traffic Management Plan that is part of the road use agreements shall include, at a minimum, the provisions designated in Section II of Attachment U-1 of the Final Order on ASC.
c. If a Final Traffic Management Plan designated in sub (a) is not included in road use agreements executed with Umatilla County, then submit a Final Traffic Management Plan. A copy of the Final Traffic Management Plan shall be provided to the Department and Umatilla County Public Works Department. The Construction Traffic Management Plan shall, at a minimum, include the provisions in Section II of Attachment U-1 of the Final Order on ASC.
d. Submit to the Department, any ODOT permits obtained by the certificate holder, its third-party contractors or subcontractors including but not limited to Oversize Load Movement Permit/Load Registration, Permit to Occupy or Perform Operations Upon a State Highway, and/or an Access Management Permit.
e. Submit to the Department, any county permits obtained by the certificate holder, its third-party contractors or subcontractors including but not limited to utility crossing permit and road approach permit.

Recommended Public Services Condition 2 (CON): During construction of the facility, or facility component, the certificate holder shall ensure that construction contractors adhere to the requirements of the Final Traffic Management Plan.

Proposed facility operation is anticipated to require two to five employees would be periodically onsite for operation and maintenance activities. These employees would use the same roads that would be used by the construction workforce. Occasionally during operations, specialty contractors would travel from farther areas to handle major repairs, however, the Department recommends that operational traffic generation would be minimal and is not anticipated to impact traffic operations or roadways.

IV.M.6 Air Traffic

Proposed facility construction and operation could result in impacts to navigable airspace from taller structures located in proximity to public and private airports, potential solar panel glare, and outdoor light illumination. The tallest facility structures would be the collector substation and switchyard substation which both would be approximately 30 feet high and the interconnection poles at the switchyard substation which would be the approximate height of the existing transmission line/poles that the proposed facility would interconnect with. The O&M building would be approximately 20 feet high and the solar arrays, at maximum tilt would be 16 feet tall. The nearest public airport is the Hermiston Municipal Airport, located 1.5 miles northwest of the proposed facility.[204]

To assess the potential for impacts to navigable air space, ASC Exhibit U includes determination letters obtained from the Oregon Department of Aviation (ODA) indicating that ODA conducted an aeronautical study of the proposed facility buildings and solar array configurations. ODA evaluates standards in CFR: *Title 14. Aeronautics and Space: PART 77—Safe, Efficient Use, and Preservation of the Navigable Space*, similar to the Federal Aviation Administration (FAA). ODA determined that notice to the FAA Form (7460-1) is required, because the structures exceed FAR Part 77.9 (a, b or c) and Obstruction Standards of OAR 738-70-0100, which would be from the proximity to a municipal airport. The determination also concluded that ODA does not object to the construction described in this proposal, but that the determination does not constitute ODA approval or disapproval of the physical development involved in the proposal. It is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground.[205] The determinations from ODA expire 18 months after the effective date, April 06, 2022.[206] To ensure that potential impacts to the public air traffic providers is avoided, Recommended Public Services Condition 3 below, the Department recommends the applicant re-submit the facility data to ODA prior to construction if the ODA determination has expired.

As noted by ODA and as provided in ASC Exhibit U the applicant incudes FAA Determinations of No Hazard to Air Navigation (Form 7460-1) obtained by the applicant, which confirms that FAA conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and

[204] The proposed facility would be located approximately 1.5 miles southeast of Hermiston Municipal Airport.
[205] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Attachment U-4_2022-ODA-S-227-230-OE Determination Letter - Solar Arrays.
[206] ODA determination would expire on or around October 6, 2023.

applicable Title 14 of the Code of Federal Regulations (CFR), part 77, and finds that proposed facility structures would not exceed obstruction standards and would not be a hazard to air navigation. There are four determinations for solar panel configurations, the O&M building, and the substation. The FAA determinations expire November 3, 2023. The FAA's Determinations of No Hazard to Air Navigation, also require the submission of a Supplemental Notice of Actual Construction or Alteration form (Form 7460-2) to FAA is required within 5 days after construction reaches its greatest height as specified in the No Hazard/Determination. The applicant indicates that if the final design of the proposed facility requires additional submittals of form 7460-1 to the FAA and the ODA to account for a revised layout/locations of infrastructure or revised heights, the applicant would provide a record of all correspondence with FAA and ODA to the Department no less than 30 days prior to construction.[207] The applicant indicates it corresponded with Community Planning & Liaison Officer with the Navy who indicated that "the proposed project appears to be located several miles outside of military training and operating areas."[208]

To ensure that, based on final design, proposed facility construction and operation would not be likely to impact private and public air traffic (airport) providers from impacts to navigable airspace, as well as to reflect the applicant-representations for FAA and ODA coordination, and to ensure that valid ODA and FAA determinations are obtained prior to construction, the Department recommends Council impose the following condition:

Recommended Public Services Condition 3 (PRE): If prior to construction, the Oregon Department of Aviation's (ODA) Determinations for the facility expire, the certificate holder shall:

a. First, submit to and receive responses from the ODA of 7460-1 Notice of Proposed Construction or Alteration Forms for all aboveground facility components. The certificate holder shall provide copies of ODA's responses, which must be consistent with ORS 836.535(2), to the Department. Certificate holder shall respond to ODA recommendations, if applicable.
b. Second, once ODA responses on the 7460-1 forms are received and if the FAA determinations have expired, submit to and receive determinations from the Federal Aviation Administration (FAA) for all aboveground facility components. The certificate holder shall provide copies of FAA determinations to the Department.
c. Within 5-days of construction, certificate holder shall submit 7460-2 forms to FAA and ODA and shall report both timing of submission and any results to the Department.

[207] OAR 738-070-0060 outline procedures for submitting notice to ODA of construction or alteration of structures with height and distance to airport limits. ORS 836.535 restricts hazards to air navigation, however, ORS 836.535(2) exempts entities who receive approval from the FAA or EFSC from the statute. Nevertheless, under OAR 345-001-0010(51)(i), ODA is a reviewing agency for EFSC and requests consultation with them prior to submission data to FAA to incorporate any feedback ODA may provide on a facility.

[208] WES Email from Navy with comment 2021-12-10. The Department of Defense, including the U.S. Navy, are not designated as reviewing agencies under OAR 345-001-0010(51) and military airports and airways are not designated under the scope of the Public Services standard, however, the Department encourages applicants to coordinate early in project development with military entities who may be impacted by a proposed facility.

Measures the applicant would employ to minimize potential glare and lighting from the operation of the solar facility would be to use solar modules coated with antireflective to minimize the potential for glare which is a typical design feature for solar panels and permanent lighting fixtures would be directed down, shielding light to limit off-site lighting.

Based on compliance with the above recommended condition, the Department recommends Council find that the proposed facility would not be likely to result in significant adverse impacts on the ability of air traffic service providers to provide service.

Police and Fire Protection

IV.M.7 Police Protection

Facility construction could result in impacts to police protection providers due to the increased possibility of theft at the proposed site, safety issues associated with the increased population from temporary workers, and increased traffic on roads around the proposed facility. The average number of construction workers on site would be 300 people, while the maximum number of workers during peak construction months would not be more than 500 people, with approximately 75-125 workers estimated to temporarily relocate to the area and 180-300 workers estimated to commute to the facility site from outside the analysis area.

The Umatilla County Sheriff is the law enforcement provider that would serve the facility site with an office in Hermiston, Oregon, approximately 2.6 miles from the proposed facility. ASC Exhibit U, Attachment U-4, provides applicant correspondence with the Umatilla County Sheriff which indicates that the facility site is in an area that has low to medium crime. The letter also indicates that, due to the size of Umatilla County, their response times to incidents on the site may be impacted, however, they would respond as necessary if issues arise on site.

As discussed further under the evaluation for impacts to fire service providers and in Section IV.N., *Wildfire Prevention and Risk Mitigation* and in Section III.A., *Facility Components*, access roads would be sized for emergency vehicle access which would allow emergency vehicles to navigate onsite. Under Recommended Wildfire Prevention and Risk Mitigation Conditions 1-3, the applicant would submit and implement an Emergency Management and Wildfire Mitigation Plan – EMWMP, during construction and operation. The EMWMP includes emergency contact information, pre-emergency plaining and training, and emergency response procedures that address fire hazards, equipment safety, and site access.

The construction staging area, collector substation, switchyard, solar array, and energy storage system would be within a 6 to 10-foot-tall fence line with gated access which would prevent outside persons from accessing the facility site during construction and operation which would minimize theft and potential impacts to law enforcement. Further, as discussed under the traffic safety section under this standard, and as recommended under Public Services Condition 2, the applicant proposes, and Department recommends the implementation of a Construction

Traffic Management Plan (Attachment U-1 to this order) which would include measures to reduce safety issues associated with construction traffic such as timing deliveries and using flagging and pilot vehicles.

Proposed facility operations would not be likely to impact police protection providers, because approximately two to five workers would be deployed on an as-needed basis for operations, maintenance (O&M) and repairs. Furthermore, these workers are expected to be hired locally (within 3 hours of the facility), with the exception of positions that may require previous solar generation facility experience. In addition to the O&M workers, specialized third party contractors may be required for equipment repairs, the intermittent frequency of these trips would not be anticipated to impact police protection providers.

Based on the above reasoning analysis, the Department recommends Council find that the construction and operation of the proposed facility would not be likely to impact law enforcement providers from providing service within the analysis area.

IV.M.8 Fire Protection

Construction and operation of the facility could result in impacts to fire protection providers within the analysis area due to increased fire risk from and to the proposed facility. Construction-related activities would increase the risk of fires igniting on site. Proposed facility components including the solar array, substation electrical equipment and transformers, and the battery storage system could result in fire hazards. Findings of compliance of how the applicant characterized wildfire risk within the analysis area and how the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan (Included in an Emergency Management and Wildfire Mitigation Plan – EMWMP) are discussed further in Section IV.N., *Wildfire Prevention and Risk Mitigation*, of this order. The EMWMP describe the procedures and standards that the applicant will use to inspect facility components and manage vegetation as well as identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire.

The Umatilla County Fire District #1 (UCFD #1) provides fire protection services for proposed facility site and the nearest fire station is Station 24 located in Stanfield, approximately 2.4 miles away.[209]

Construction-related fire hazards could result from workers smoking and vehicle and equipment refueling, and operating equipment off roadways in areas of tall dry grass that could ignite upon contact with hot vehicle parts, particularly in dry seasons. ASC Exhibit U as well as ASC Exhibit V (Wildfire Risk), Attachment V-1 (EMWMP) (recommended under Wildfire Prevention and Risk Mitigation Condition 1) provides a summary of the best management practices (BMPs) that would be implemented during construction to reduce the potential for construction-related fires, which include:

[209] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.3.8.2.

- Keeping water trucks on-site to keep the ground and vegetation moist during extreme fire conditions.
- Plan and manage the work and the movement of vehicles. No off-road driving would be done while working alone.
- Smoking would only be allowed in designated smoking areas in the site boundary.
- Each vehicle used on-site would have a shovel and fire extinguisher of sufficient type and capacity to suppress small fires around vehicles.
- Prior to start of construction work activities, contact local fire department(s) and advise them of work type, location, and probable duration.

The risks of fires igniting during operation of the proposed facility would vary depending on the type of operating facility component and depending on climatic conditions. There could be the potential for electrical fires from electrical equipment associated with solar modules, substation components, and the lithium-ion batteries associated with the Energy Storage System (ESS). Electrical equipment associated with the solar panels and cabling, substations, and the ESS could short-circuit and generate sparking, which could cause fires. Electrical equipment associated with the sub and switchyard stations such as the connection lines and transformers could spark, especially if there is contact with foreign objects such as an animal. The chemicals used in lithium-ion batteries are generally nontoxic but do present a flammability hazard because these batteries are susceptible to overheating and typically require cooling systems dedicated to each ESS enclosure, especially at the utility scale such as the proposed facility.

The applicant provides measures to avoid, minimize and mitigate the potential for fires and other safety risks during proposed facility operation are discussed in ASC Exhibits B, U, and V.

As discussed in Section III.A.2., *Related or Supporting Facilities* and in Section IV.N., *Wildfire Prevention and Risk Mitigation,* approximately 3.4 miles new permanent access roads would be constructed to access the solar array, BESS, substations, and O&M building within the site boundary fence line. Access roads located within the solar array site would be approximately 12 feet to 20 feet wide, depending on location, with an internal turning radius of likely up to 28 feet in accordance with 2019 Oregon Fire Code requirements, including Section 503 and Appendix D - Fire Apparatus Access Roads. [210] All newly constructed roads would be graded and graveled with cross sections that consist of 6 inches of compacted gravel supported on 6 inches of compacted native dirt. Further, vegetation would be cleared and maintained along perimeter roads to provide a vegetation clearance for fire safety.

The Supervisory Control and Data Acquisition (SCADA) system consists of fiber optic and copper communication lines that would be installed with the collector line system and connects the facility components to allow for remote operations of the proposed facility, including notification of malfunctions and the ability to shut off power.

[210] WESAPPDoc3-1 ASC Exhibit B Project Description 2022-10-22, Section 3.0.

Solar panels and BESS:

- Proper installation and maintenance of electrical equipment would prevent short-circuits and consequent sparking.
- Vegetation management and low growing to reduce the chance of fire.
- The solar array would have shielded electrical cabling, as required by applicable code, to prevent electrical fire.
- Vegetation near and under solar panels may be mowed periodically, and weeds would be managed in accordance with the weed management procedures described in the Weed Management Plan (discussed further in Section IV.H., *Fish and Wildlife Habitat*)
- Electrical equipment would meet NESC standards reducing significant fire risk.
- The areas immediately around the O&M Building, substations, and BESS would be graveled, with no vegetation present.
- The batteries would be contained in completely leak-proof modules and stored upon a concrete pad.
- Transportation of lithium-ion batteries is subject to 49 CFR 173.185 – Department of Transportation Pipeline and Hazardous Material Administration. This regulation contains requirements for prevention of a dangerous evolution of heat; prevention of short circuits; prevention of damage to the terminals; and prevention of batteries coming into contact with other batteries or conductive materials.
- Adherence to the requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams will minimize any public hazard related to transport, use, or disposal of batteries.

ASC Exhibit U, Attachment U-6 includes a letter from the UDFD #1 which confirms that the proposed facility site is within the boundaries of the Fire District who provides services for fire, hazardous materials, and emergency medical services. In its letter, the UCFD #1 requests training on the solar arrays and safely operating around them and any proposed battery storage as this is the first significant installation within their fire district.[211] Facility design measures that reduce the risk of fire to and from the facility, such as road width and surfaces materials, are further represented in the applicant's Emergency Management and Wildfire Mitigation Plan – EMWMP, recommended under Wildfire Risk Mitigation Conditions 1 through 3. Under these conditions, the applicant would provide UDFD #1 copies of the construction EMWMP and operational EMWMP.

To minimize the impacts to fire protection service providers that would serve the proposed facility site and to address the UDFD #1 request, the Department recommends the applicant

[211] Umatilla County Fire District #1 letter also states that Section 1204 of the 2019 Oregon Fire Code (OFC) would provide adequate safety provisions if required maintenance in those sections is carried out. The Department highlights that 2019 OFC provisions from 1204.1 – 1204.4.1 focus on fire and safety measures such as vegetation clearances and ground cover, however based on 1201.1 of the 2019 OFC, fire codes do not apply to utility-scale energy facilities which are under the control of a lawfully designated agency, in this case the Energy Facility Siting Council. Applicant's may elect to apply these codes and there may be other OFC applicable to the construction and operation of the facility.

and fire department training be included be imposed under the following Recommended Public Services Conditions: 4 and 5.

> **Recommended Public Services Condition 4 (PRO):** Prior to operation the certificate holder shall contact the Umatilla County Fire District #1 (UDFD #1) to schedule an on-site orientation to review facility layout and safety procedures. In its annual report required under General Standard of Review Condition 10, the certificate holder shall indicate the date that the training will occur or occurred.
>
> **Recommended Public Services Condition 5 (OPR):** Once annually during operation the certificate holder shall contact the Umatilla County Fire District #1 (UDFD #1) to offer an on-site training to review facility layout and safety procedures. In its annual report required under General Standard of Review Condition 10, the certificate holder shall indicate the dates that they contacted UDFD #1 and offered training, and any trainings scheduled or already conducted.

Based on the findings of fact and analysis provided above and compliance with the above-recommended Public Services Conditions, the Department recommends Council find that the construction and operation of the proposed facility is not likely to result in significant adverse impacts to the ability of fire protection service providers to provide fire protection services.

IV.M.9 Housing

Potential impacts to public and private housing providers could result if there were an inadequate supply of housing in relation to the demand from the new temporary and permanent residents (workers) associated with the construction and operation of the proposed facility. Examples of public housing providers would be government provided housing, and potentially subsidized housing for low-income people and through a variety of government loans and other incentives. It is not anticipated that temporary or permanent workers associated with proposed facility would use public housing. Examples of private housing options are motels, hotels, trailer or RV parking areas or campgrounds, or house, room or apartment rentals.

Applicant estimates that during the peak construction period a maximum of 500 works may be needed on-site and that and estimated 60 percent of workers would commute from up to 70 miles away from the facility, which leaves and estimated 25 percent of workers requiring temporary housing in the analysis area which means on average there may be 75 construction workers looking for temporary housing and during peak construction 125 workers looking for housing.[212] The applicant assumes that the commutable distance for temporary works would be 70 miles around the project site, so evaluated housing options available in that range, and includes the communities of Hermiston, Stanfield, Boardman, and Pendleton.

[212] WESAPPDoc3-21 ASC Exhibit U Public Services 2022-09-28, Section 3.4.5.1.

Temporary construction workers are expected to utilize housing options that include hotels, campgrounds, recreational vehicle (RV) parks, and to a lesser extent, rental houses. ASC Exhibit U details that there are approximately 63 hotels or motels with approximately 3,939 hotel/motel rooms, and 19 RV parks with a minimum of 1,000 RV spaces that are available in the analysis area.[213] According to 2021 Oregon Tourism Commission data, the lodging vacancy rate for eastern Oregon was approximately 47.1 percent, where hotel and RV site vacancy, occupancy of RV sites is anticipated to be higher during the summer months than during the rest of the year. The Department estimates that even with a 70 percent occupancy rate of hotel rooms and RV sites during the summer months, there would still be approximately 1,492 hotel rooms and RV spaces available. The Department recommends that Council find that this availability of temporary housing would be able to accommodate the estimated maximum of 125 temporary works in the analysis area during construction, and that construction of the facility would not adversely impact their ability to provide temporary housing.

Given that operational personnel that would visit the site as needed would be two to five workers, it is not anticipated that the operational personnel requiring housing, if needed, would impact housing in the analysis area. Therefore, the Department recommends that Council find that the construction and operation of the facility would not be likely to cause significant adverse impact on the ability of housing providers to provide housing.

IV.M.10 Schools and Healthcare

Proposed facility construction and operation could result in increased demand of health care providers. Good Shepherd Health Care Services provides hospital and healthcare services to the analysis area, with an office approximately 4.7 miles from the facility site. The Umatilla County Fire District #1 (UCFD#1), located in Hermiston and discussed above, would provide first responder services to the site. The nearest Level III trauma center is the Good Shepard Medical Center and the nearest Level I trauma centers are located in the city of Portland: Oregon Health & Science University Hospital and Legacy Emmanuel Medical Center.

Impacts to health care providers could occur if facility construction activities result in an unexpected increase in emergency services to such a degree that it overwhelms local providers. Potential impacts could include accidents on-site during construction or traffic-related incidents from the increased traffic. As discussed in Section IV.N., *Wildfire Prevention and Risk Mitigation,* and as recommended Wildfire Prevention and Risk Mitigation Conditions 1-3, the applicant would submit and implement an Emergency Management and Wildfire Mitigation Plan – EMWMP, during construction and operation. The EMWMP includes training, emergency preparation and response procedures which would reduce emergency incidents related to

[213] ASC Exhibit U also provides the vacancy/availability of apartments and short-term rental houses, where the estimated number of vacant rental units is calculated as a percentage of total vacant housing units; that percentage is based on the ratio of renter-occupied dwellings to owner-occupied dwellings. Using this method, the applicant estimates that 1,231 housing units would be available for rent in Umatilla County, and 1,499 housing units would be available for rent in Benton County. However, the Department does not anticipate that temporary workers within the area for the approximate 12 months construction period would secure this type of housing.

construction and operation of the facility. These measures would help avoid impacts to health care providers and responders. Based on the relatively small number of new temporary residents during construction and new permanent residents during operation, and the implementation of the EMWMP, the Department recommends that the Council find that the proposed facility is not likely to cause significant adverse impact on the ability of communities to provide health care.

Proposed facility construction would not be expected to increase demand of school providers due to the temporary nature of the activity and low likelihood that families would relocate permanently. The applicant estimates that during operations, up to two new permanent households, with a maximum of four new schoolchildren could move to the analysis area. Due to the relatively small number of new temporary residents and new permanent residents, significant new demands are not expected from schools that serve the area. Therefore, the Department recommends that Council find that the construction and operation of the proposed facility are not likely to result in significant adverse impacts to the ability of school providers to provide schools.

Conclusions of Law

Based on the foregoing analysis, finding of facts, and recommended site certificate conditions, the Department recommends that the Council find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area to provide their services.

IV.N Wildfire Prevention and Risk Mitigation: OAR 345-022-0115

(1) To issue a site certificate, the Council must find that:

(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:

(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;
(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;
(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;
(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and

(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.

(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:

(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;
(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;
(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;
(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and
(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

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Findings of Fact

The Wildfire Prevention and Risk Mitigation standard requires the Council to find the applicant has adequately characterized wildfire risk associated with a proposed facility; and that the proposed facility would be operated in compliance with a Council-approved wildfire mitigation plan. Because the effective date of OAR 345-022-0115 was July 29, 2022, and the application for site certificate was deemed complete on September 9, 2022, this standard applies to the proposed facility. The analysis area to evaluate potential wildfire risks is the site boundary and one-half mile from the site boundary.[214]

Characterization of Wildfire Risk within Analysis Area

To adequately characterize the wildfire risk within the analysis area as required under OAR 345-022-0115(1)(a), the applicant used data from the Northwest Interagency Coordination Center (NWCC) Predictive Services group which provides fire weather advisories, and the Oregon Wildfire Risk Explorer which is an online planning tool maintained in partnership with the Oregon Department of Forestry, Oregon State University Institute for Natural Resources, and

[214] OAR 345-001-0010(34)(c).

the U.S. Forest Service.[215] The applicant also evaluated climate and weather data from the National Oceanic and Atmospheric Administration (NOAA).

Based upon the applicant and Department evaluation of baseline and seasonal fire risk, areas subject to heightened fire risk, and high-fire consequence areas using current and reputable data sources and methods, the Department recommends Council find that the area within the site boundary is characterized as having moderate wildfire risk and the area within the analysis area as having moderate or low wildfire risk.

Baseline Fire Risk [OAR 345-022-0115(1)(a)(A)]

The applicant evaluated baseline wildfire risk within the analysis area, based on factors that are expected to remain fixed for multiple years, including topography of the site, vegetation, existing infrastructure and fire hazards to potential infrastructure, the history of fires, status of active fires, burn probability, and the regional climate.

Topography

The site boundary and surrounding analysis area are located in north-central Oregon, an area of rolling hills covered in grasslands and desert vegetation. The topography of the facility site includes slopes ranging from approximately zero to 15 percent, with an average slope of less than 2 percent, and elevation ranges from approximately 665 feet to 732 feet above mean sea level.[216] Because the average slope is 2 percent within the facility site, the topography is considered to be relatively flat, and thus less of a risk for wildfire to spread quicker on steeper slopes.

Vegetation

According to the Oregon Wildfire Risk Explorer, the Vegetation Type within the site boundary is mapped as shrubland with patches of non-native grass and grassland, while the vegetative cover to the north, south, and west of the site boundary are mapped as agricultural and areas east of the site boundary are mapped similar to the site (shrubland with patches of non-native grass, grassland, and conifer).[217] ASC Exhibit V, Figure V-3 illustrates the distribution and

[215] As of October 6, 2022, the Oregon Wildfire Risk Explore website states, "The Senate Bill 762 statewide wildfire risk map and homeowner risk reports are unavailable while the map is being updated. The maps presented here are from the 2018 Quantitative Wildfire Risk Assessment and the rest of this site is still ready for you to explore." https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=wildfire Accessed 10-04-2022. Applicant indicates that, prior to the removal of the statewide wildfire risk map, it was able to evaluate the site boundary and analysis area and the area within the site boundary was mapped as having moderate wildfire risk and the area within the analysis area as having moderate or low wildfire risk.

[216] WESAPPDoc3-8 ASC Exhibit H Geological Soil Stability 2022-09-28, Section 2.1.

[217] Vegetation Type is a data layer derived from the LANDFIRE (2010) dataset, where existing vegetation is mapped using predictive landscape models based on extensive field reference data, satellite imagery, biophysical gradient layers, and classification and regression methods. The data represents the current distribution of terrestrial ecological systems, a group of plant community types that tend to co-occur within landscapes with similar

coverage of vegetation within the analysis area, where most vegetation is shrubland and grasslands. This is reiterated in ASC Exhibit P and in Section IV.H., *Fish and Wildlife Habitat*, where the majority of the site boundary is Category 4 and 5 habitat, mapped as Upland Grassland, Shrub-steppe and Shrubland and Category. Generally speaking, lower vegetation such as grass and shrublands have less of a fire risk because fires tend to burn quickly and diffuse decreasing fire intensity and damage.

Fire Hazards to Infrastructure

Most of the area within the site boundary and analysis area are mapped as having very low to low hazard to potential structures with some discrete areas showing moderate to high hazard to potential structures (see Figure V-1).[218] The only infrastructure within the site boundary are the existing BPA and PacifiCorp transmission lines and towers.[219] The existing transmission towers are considered low-density infrastructure because of their spacing and lack of direct contact with other infrastructure and vegetation. However, if a wildfire were ignited onsite, the areas around the poles and the poles themselves would be subject to heighted risk and may be considered areas of high fire consequence as there is the potential for high fire hazard for these structures. The analysis area contains one house off Canal Road and several agricultural structures north, west, and south of the site boundary as well as irrigation infrastructure. These agricultural structures and irrigation infrastructure areas may be considered areas of high-fire consequence; however, the Hazard to Potential Structures layer identifies these areas as having low to moderate hazard to potential structures as they are located within or adjacent to irrigated agricultural fields which have a reduced fire hazard compared to the shrub/grassland vegetation within and east of the site boundary.[220]

The surrounding agricultural areas have agricultural infrastructure such as watering systems and S. Edwards Road is directly to the east of the facility. Neither of these types of infrastructure are anticipated to increase or be significantly damaged from a wildfire; S. Edwards Road would act as a fire break from fire spreading east to and from the facility site.

Under OAR 345-022-0115(1)(a)(C), the Council must find that the applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources by identifying areas subject to a heightened risk of wildfire, based on the information provided in support of the baseline and seasonal wildfire risk evaluation under OAR 345-022-0115(1)(a)(A) and (B). Because, under this factor (Fire Hazards to Infrastructure), the applicant describes the areas of heightened fire risk within the analysis area, the Department recommends this description meets OAR 345-022-0115(1)(a)(C).

ecological processes, substrates, and/or environmental gradients. This type of data provides the basis for fuel models used in wildfire risk assessment and other wildfire modeling.

[218] The Oregon Wildfire Risk Explorer, Hazard to Potential Structures data layer shows impact levels to structures within 150 meters of a burnable fuel type, as if structures were present, and if a wildfire occurs. This data is based on modeled vegetation and not on building construction materials

[219] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.

[220] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.

Additionally, under OAR 345-022-0115(1)(a)(D), the Council must find that the applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources by identifying high-fire consequence areas, which include but are not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat. Under this factor (Fire Hazards to Infrastructure), the applicant describes the existing transmission lines as potential areas of heightened fire risk within the analysis area, therefore, the Department recommends this evaluation also meets OAR 345-022-0115(1)(a)(D) as well.

Fire History, Active Fires, and Burn Probability

The Oregon Wildfire Risk Explorer provides several layers based on a dataset including fire locations from 1992 to 2019, fire perimeters from 2000 to 2020 and current fire points and perimeters. According to this source, and as of October 2022, no historic or active fire locations or perimeters occurred within the site boundary or analysis area.[221]

Burn Probability shows the likelihood of a wildfire greater than 250 acres burning a given location, based on wildfire simulation modeling. This is an annual burn probability, adjusted to be consistent with the historical annual area burned. Viewing local small fires in conjunction with this layer can give a more comprehensive view of local fire history and potential. The majority of the site boundary is mapped as having a moderate or low burn probability with discreet areas of very low burn probability along S. Edwards Road (see Figure V-2). Most of the areas in the greater analysis area north, south, and west (agricultural areas) of the site boundary are unmapped in this layer. However, areas east of the site boundary are mapped as either very low burn probability (along S. Edwards Road), low burn probability, and moderate burn probability.

Regional Climate

The applicant explains that the site boundary has a moderate wildfire risk mainly due to the existing vegetation and the relatively dry climate in this region. The facility site boundary and analysis area are within the southern portion of the Columbia Plateau, which consists of a large plateau formed by a series of historical basalt flows.[222] The Columbia Plateau ecoregion made up of lowlands, with an arid climate, cool winters, and hot summers.[223] Where arid regions receive little precipitation, less than 10 inches of rain per year, and semi-arid regions receive 10 to 20 inches of rain per year.[224] The area around Hermiston, Oregon receives between

[221] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.
[222] WESAPPDoc3-8 ASC Exhibit H Geological Soil Stability 2022-09-28, Section 2.2.
[223] https://oregonconservationstrategy.org/ecoregion/columbia-plateau/. Accessed 10-20-2022.
[224] https://www.nps.gov/subjects/geology/arid-landforms.htm. Accessed 10-20-2022.

approximately 8.00 to 10.5 inches pf rain annually, with a mean annual precipitation rate of 8.61 inches, which would be considered an arid climate.[225]

Seasonal Wildfire Risk [OAR 345-022-0115(1)(a)(B)]

The applicant evaluated seasonal wildfire risk within the analysis area and site boundary using factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including cumulative annual and monthly precipitation, weather advisories which include fuel moisture content data, and an evaluation of Average Flame Length which is the average length of flames expected during a fire, given local fuel and weather conditions.

Precipitation

ASC Exhibit V provides monthly climate data from 1991 to 2020 measured at the weather station at Hermiston Municipal Airport (Station USW00004113, located 1.7 miles northwest of the facility site boundary). Table 15: Summary of Monthly Normal Temperature and Precipitation at Hermiston Municipal Airport (1991-2020), provides a summary of the weather data. The analysis area receives most of its precipitation from November to February with a mean annual precipitation of 8.61 inches, and the summer months of July through September are typically the driest with the highest temperatures.

Table 15: Summary of Monthly Normal Temperature and Precipitation at Hermiston Municipal Airport (1991-2020)

Month	Max Temp (°F)	Ave Temp (°F)	Precip (Inch)
January	43.3	36	1.14
February	49.4	39.3	0.86
March	59.1	46.4	0.77
April	66.6	52.8	0.78
May	76.2	61.2	0.83
June	82.2	67.6	0.64
July	92.7	75.6	0.12
August	91	73.9	0.17
September	81.2	64.6	0.33
October	66.5	52.7	0.8
November	50.7	41.5	1.05
December	42.1	35.2	1.12
Source: WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Table V-1. NOAA, National Centers for Environmental Information. Station: Hermiston Muni Ap, OR			

Fuel Moisture Content and Flame Length

[225] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0, WESAPPDoc3-9 ASC Exhibit I Soil Conditions 2022-09-28, Section 3.0, and https://www.usclimatedata.com/climate/hermiston/oregon/united-states/usor0159. Accessed on 10-20-2022.

Fuel moisture content varies depending on changes in weather (both seasonally and during short periods) and determination of exact fuel-moisture values at any time is complicated by both the nature of the fuels and their responses to the environment. Therefore, fuel moisture content is dynamic throughout the year.[226] Living plants and dead fuels respond differently to weather changes and the nature of the drying and wetting processes of dead fuels is such that the moisture content of these fuels is strongly affected by weather changes. These moisture contents are influenced by precipitation, air moisture, air and surface temperatures, wind, and cloudiness, as well as by fuel factors such as surface to volume ratio, compactness, and arrangement.[227] Therefore, current conditions such as precipitation to-date, current fuel moisture data, and local weather may increase or decrease seasonal fire risk.

The Northwest Interagency Coordination Center (NWCC) Predictive Services group provides fire weather advisories (such as Red Flag Warnings) and fuel and fire behavior advisories (including fuel status reports and fuel moisture content predictions) for each predictive service area (PSA) in the northwest. The site boundary is located within PSA NW10.[228] During construction and operation fire danger forecasts for the analysis area would be monitored, and facility activities and mitigation measures would be adjusted based on their annual variations under the methods and measures identified in the Emergency Management and Fire Mitigation Plan, discussed further below.

According to the 2018 Oregon Wildfire Risk Explorer, Average Flame Length shows the average length of flames expected, given local fuel and weather conditions. Flame lengths have potential to exceed the mapped values shown, even under normal weather conditions. Flame length is commonly used as a direct visual indication of fire intensity and is a primary factor to consider for firefighter safety and for gauging potential impacts to resources and assets. It can also guide mitigation work to reduce the potential for catastrophic fires by showing where work can be done to reduce higher potential flame lengths/fire intensities to lower flame lengths/fire intensities. As illustrated in ASC Exhibit V, Figure V-4, most of the site boundary area is mapped as having an average flame length of 4 to 8 feet or less than 4 feet.[229] Fires with a flame length of 4 to 8 feet can be expected to have moderate intensity under normal weather conditions and fires with a flame length of below four feet are expected to be low intensity under normal weather conditions.

Wildfire Mitigation Plan

Under OAR 345-022-0115(1)(b), the Council must find that the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by

[226] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.
[227] https://www.nwcg.gov/publications/pms425-1/weather-and-fuel-moisture Chapter 11. Accessed on 10-20-2022.
[228] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.
[229] WESAPPDoc3-22 ASC Exhibit V Wildfire Risk Management 2022-09-28, Section 2.0.

the Council. The applicant includes its Emergency Management and Wildfire Mitigation Plan (EMWMP) as Attachment V-1 of ASC Exhibit V. In addition to general emergency response protocols and information, the Emergency Management and Wildfire Mitigation Plan also addresses the criteria under OAR 345-022-0115(1)(b)(A) through (E), as summarized below.

EMWMP Section 4.2.1.2 provides preventative actions and programs that the applicant would carry out to minimize the risk of facility components and personnel causing wildfire during construction. Some of these construction-related avoidance, reduction, and mitigation measures include:

- No smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre task planning to assess fire risks, relevant fire awareness, lockout-tagout requirement, hazardous materials documentation and management.
- Water truck would be on-site to keep the ground and vegetation moist during extreme fire conditions.
- Each vehicle used on-site will have a shovel and a fire extinguisher of sufficient type and capacity to suppress small fires around vehicles. Vehicle occupants shall be familiar with the location of these fire extinguishers.
- Facility will be deenergized for most of the construction period, only during the final commissioning stage it's expected to be connected to grid.

Section 1.2.1, discusses multiple design features of the facility that would facilitate safe operations of the facility as well as help reduce the risk of wildfire from and to the facility. These measures are also discussed under Section III.A., *Facility Components*. The project design features that are preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire are:

- Project roads would be 12 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles.
- Maintain a five-foot noncombustible, defensible space clearance along the fenced perimeter of the site boundary.
- The collector system and substation/switchyard will have redundant surge arrestors to deactivate the Project during unusual operational events that could start fires.
- The areas immediately around the substation, BESS, and switchyard would be graveled, with no vegetation present. The collector substation, switchyard, and battery storage will have also sufficient spacing between equipment to prevent the spread of fire.

Section 1.3.3 of the EMWMP discusses the areas within the site boundary and analysis area that are subject to a heightened risk of wildfire which includes the existing transmission infrastructure, such as the power poles.

Section 1.2.3.1 of the EMWMP outlines and describes the procedures, standards, and time frames that the applicant will use to inspect facility components such as the battery storage units, substation, and solar panels.

- The facility will be monitored and operated remotely using the Supervisory Control and Data Acquisition (SCADA) System which will be installed to collect operating and performance data from the solar arrays.
- The BESS will have an integrated fire safety system that monitors heat, and smoke, and provides dedicated annunciation/alarming in the event a fire condition is detected, automatically returns the system to a standby mode and if necessary, automatically deploys an appropriate suppression agent. The fire alarm functions are handled by a common fire alarm control panel (FACP) in the auxiliary control cabinet, which monitors the status of the detectors and initiates an alarm if a fire is detected.
- Onsite inspections of facility equipment will occur quarterly. Onsite inspections will include check lists provided by the Original Equipment Manufacturer and the use of utility industry best practices.

EMWMP Section 4.2.2 describes the procedures, standards, and time frames that the applicant will use to manage vegetation in the areas of heightened fire risk as well as a vegetation management program for all vegetation within the site boundary. Some provisions of the vegetation management procedures include:

- Vegetation within the fence line and below the solar arrays will be maintained to a height of 18- inches and provide a minimum of 24-inch clear distance to any exposed electrical cables.
- Vegetation will be removed within 10-foot perimeter of the inverter, transformer, and battery unit pads. Gravel or similar noncombustible base will be located within the 10-foot perimeter of these pads.
- BMPs for vegetation removal may include physical vegetation control such as mowing or introduction of a non-invasive species that is low growing.
- A physical vegetation survey assessment of the fenced area will be completed at least once annually to monitor for vegetation clearances, maintenance of fire breaks, and monitor for wildfire hazards. The vegetation survey assessment will occur in May or June, prior to the start of the dry season. Results of the survey will be used to assess the frequency of the periodic vegetation maintenance.

During operations and during periods of heightened wildfire risk, the design features that allow for remote monitoring and control of the facility during operations well as the vegetative maintenance procedures to manage vegetation would act as preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire. Additionally, Section 4.4.3 of the EMWMP states that fire danger forecasts for the analysis area for PSA NW10 will be monitored by the Site Operations Manager or designee, and operational activities and mitigation measures will be adjusted as needed to address fire risks.

Section 1.1.1 identifies the overall purpose of the of the Emergency Management and Wildfire Mitigation Plan, which outlines and describes procedures to minimize risks to public health and safety and the health and safety of responders. The EMWMP will be shared with the Umatilla County Fire District #1 (UCFD #1) which would serve the facility in the event of an emergency,

including fires. This is a provision recommended below in the Wildfire Prevention and Risk Mitigation Conditions. Further, under recommended Public Services Conditions 4 and 5, the applicant would provide the fire department with on-site trainings. The measures outlined in the EMWMP would also protect against damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source. However, the Department notes that there are not significant resources protected under other Council standards such as Fish and Wildlife Habitat, wetlands and cultural and archaeological resources. The applicant notes, however, that the existing transmission lines could be considered an above-ground historic resource because of the age of the operating infrastructure. The Department recommends Council find that the provisions identified in the EMWMP would identity fire risk to this infrastructure and would adequately provide protections and mitigation measures to protect them, to the extent practicable, from wildfire.

Finally, Section 1.1.1 and Section 1.3.4 of the EMWMP describes the process and timeframes the applicant describes to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk. The applicant explains that it will conduct a review and update of the EMWMP every five years during operation, which will include an evaluation of wildfire risks consistent with the requirements of OAR 345-022-0115(1). Based upon this review of wildfire risk, the applicant would update the applicable section of the EMWMP. Best practices and emerging technologies that could be updated could relate to vegetation management, equipment updates, or updates in remote monitoring devices. If the EMWMP is updated after each five-year review, a copy of the updated plan will be provided to the Department with the annual compliance report required under OAR 345-026-008(2) and imposed under General Standard of Review Condition 10. If after the 5-year review of the EMWMP, a determination is made that no updates are required, an explanation of this determination will be provided in the annual compliance report. Further, the applicant will incorporate a summary of the results of the quarterly facility inspections and the annual vegetation survey assessment into each of the annual compliance reports required under OAR 345-026-008(2). A summary of the vegetation management conducted within the fence line will also be included in the annual report. As required under OAR 345-022-0115(1)(b), and to reflect the applicant representations to evaluate and reduce the risk of wildfire during construction and operation of the facility in the EMWMP, the Department recommends the following conditions:

Recommended Wildfire Prevention and Risk Mitigation Condition 1 (PRE): Prior to construction of the facility, facility components or phase, as applicable, the certificate holder shall submit to the Department and the Umatilla County Fire District #1 (UCFD #1), a Final Construction Emergency Management and Wildfire Mitigation Plan (EMWMP) which includes the applicable measures provided in the Draft Emergency Management and Wildfire Mitigation Plan (EMWMP) (Attachment V-1 of the Final Order on ASC).

Recommended Wildfire Prevention and Risk Mitigation Condition 2 (PRO): Prior to operation of the facility and based upon final design, the certificate holder shall submit to the Department and the Umatilla County Fire District #1 (UCFD #1), an Operational

Emergency Management and Wildfire Mitigation Plan (EMWMP) which includes the applicable measures provided in the Draft Emergency Management and Wildfire Mitigation Plan (EMWMP) (Attachment V-1 of the Final Order on ASC).

Recommended Wildfire Prevention and Risk Mitigation Condition 3 (OPR): During operation of the facility the certificate holder shall:

a. Implement the Operational Emergency Management and Wildfire Mitigation Plan (EMWMP) submitted under Wildfire Prevention and Risk Mitigation Condition 2.
b. Every 5 years after the first operational year, review and update the evaluation of wildfire risk under OAR 345-022-0115(1)(b) and submit the results in the annual report required under General Standard of Review Condition 10 for that year.
c. Submit an updated EMWMP to the Department and the Umatilla County Fire District #1 (UCFD #1) if substantive changes are made to the EMWMP as a result of the review under sub (b) of this condition, or at any other time substantiative revisions are made to the EMWMP.

Based upon the applicant and Department evaluation of baseline and seasonal fire risk, areas subject to heightened fire risk, and high-fire consequence areas using current and reputable data sources and methods, the Department recommends Council find that the area within the site boundary is characterized as having moderate wildfire risk and the area within the analysis area as having moderate or low wildfire risk. Further, the Department recommends that Council find that proposed facility will be designed, constructed, and operated in compliance with the Emergency Management and Wildfire Mitigation Plan and approved the Plan.

Conclusions of Law

Based on the foregoing findings of fact and recommended site certificate conditions, the Department recommends that the Council find that the applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources and that That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan under OAR 345-022-0115(1).

IV.O Waste Minimization: OAR 345-022-0120

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:

(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

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Findings of Fact

Solid Waste

Proposed facility construction, operation and decommissioning would result in solid waste generation. The applicant estimates the volume of construction waste would be one 40-cubic-yard roll-off per week during active construction.[230] The solid waste generated includes general construction debris, such as scrap metal, wood, glass, plastics, cardboard, waste concrete, and excavated soils. Solid waste would be generated from the packaging materials from the solar photovoltaic modules and associated equipment, which would consist of cardboard, wood pallets, and plastic materials. Erosion control materials, such as straw and silt fencing, would also be generated during construction. The waste generated from construction may also include small amounts of hazardous waste, such as paint, spent lubrication oils, pesticides, and solvents. The hazardous materials required for construction would be stored in accordance with U.S. Environmental Protection Agency and U.S. Occupational Safety and Health Administration regulations as they apply, and any spills of these materials would be cleaned up according to the construction Spill Prevention, Control and Countermeasure (SPCC).

The applicant describes that waste generated during construction would be minimized by implementing efficient construction practices and ensuring that detailed amounts of materials are delivered on site. Waste that can be recycled includes metals, glass, paper, and yard debris. Recyclable waste will be sorted, stored in dumpsters or other suitable containers, and then transported to Columbia Ridge Landfill near Arlington or Finley Buttes Landfill near Boardman, Oregon. Additional discussion of waste disposal and recycling facility capacity within the analysis area, see Section IV.M., *Public Services*.

During operations, the primary waste generated would be solid waste from maintenance and ongoing operational activities. The applicant estimates approximately two yards of solid waste would be generated per month.[231] During operations, the primary waste generated would be solid waste from maintenance and ongoing operational activities. Waste such as universal waste (lightbulbs and batteries) would be minimized and recycled according to applicable

[230] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 2.1.1.

[231] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 2.1.2.

regulations. Solar panels that are nonfunctional, exchanged during operations or are retired would be recycled to the maximum extent feasible through the Solar Energy Industries Association (SEIA) National PV Recycling Program.[232] Solid waste would also be generated during operations when the lithium-ion batteries are replaced because batteries lose their effectiveness through repeated charge/discharge cycles. The frequency of battery replacement would depend on final technologies selected, however may occur every 10 years. The following procedures would be implemented for lithium-ion battery replacement during operations and retirement:[233]

- The facility operator would disconnect and de-energize battery system prior to removal from the installed racks and package the batteries for transport to a licensed facility.
- At the recycling facility, the qualified contractor would dismantle battery modules and prepare individual cells for metals recovery.
- Individual cells would be processed in a furnace to recover metals. Recovered metals may include aluminum, calcium, lithium, and a metal alloy comprising cobalt, copper, nickel, and iron.
- Recovered metals would be recycled or separated to recover individual metals where economically viable.

The applicant explains in ASC Exhibit G that during operation small amounts of hazardous materials may be generated including oils, lubricants, and solvents on site, which would be stored similar to the materials on-site during construction. Soil Protection Conditions 5 and 6 require an operational Spill Prevention Control and Countermeasure Plan (SPCC), which would provide procedures for any spills during operations including from non-hazardous and small amounts of hazardous. Further discussed in Section IV.D., *Soil Protection*, are the secondary containment design features, such as siting the batteries and transformers on concrete or gravel pads, to avoid impacts associated with spills.

At the time of facility retirement and decommissioning, as discussed further in Section IV.G., *Retirement and Financial Assurance*, aboveground equipment would be removed, sold for scrap, reused or recycled, or disposed of at a local landfill. Electrical cables would be rendered inert; aboveground cables would be removed, and underground cables would be left in place if below three feet below ground. The applicant maintains that similar procedures for minimizing, recycling, and disposing of solid waste during construction will be employed during retirement of the proposed facility. The retirement of the battery storage system, if constructed and

[232] WESAPPDoc3-23 ASC West End Solar Exhibit W Waste 2022-09-28, Section 3.1. The purpose of the SEIA is to combine services offered by recycling partners in order to provide cost-effective and environmentally responsible end-of-life management solutions for solar facility components.
[233] Id.

operated, would involve disposing of battery components at an offsite facility approved for disposal or recycling of batteries, similar as the procedures during operations.

To require that the applicant develop and implement plans that, to the greatest extent practicable, reduce~~s~~, minimize~~s~~ and recycle~~s~~ solid waste and wastewater during the construction and operation of the facility, the Department recommends the following condition:

> **Recommended Waste Minimization Condition 1 (GEN):** The certificate holder shall develop and implement plans that are likely to minimize the generation of solid waste and wastewater during construction and operation of the facility, and which would result in reuse and recycling solid waste and wastewater.

Further, to ensure that adverse impacts to surrounding and adjacent areas are minimized and that the applicant maintains plans to manage the accumulation, storage, disposal and transportation of waste generated by operation of the facility, the Department recommends the following condition:

> **Recommended Waste Minimization Condition 2 (OPR):** In the annual report required under General Standard of Review Condition 10, the certificate holder shall include results of its waste management and recycling plans, including but not limited to:
>
> a. Quantities of solar panels and lithium-ion batteries recycled or disposed of.
> b. Identification of the availability of programs or licensed facilities that recycle solar panels and lithium-ion batteries and their capacity to accept materials. Identification of final recycling destination facility or program for recycled solar panels and lithium-ion batteries.
> c. If recycling programs or facilities are not available, the identification of final disposal destination facility or program for disposed solar panels and lithium-ion batteries and their capacity to accept waste.

Wastewater

Wastewater generated during construction would result from construction personnel using portable toilets, which would be serviced by a local contractor for offsite disposal in accordance with state law. The construction contractor will provide an adequate number of portable toilets to accommodate construction staff on site. These would be serviced a minimum of once per week, and wastewater generated during construction would be transported via trucks by a local licensed subcontractor to a treatment facility. Portable handwashing stations would also be used during construction would be hauled off site as well.

Other than washwater periodically generated from washing panels, industrial wastewater would not be generated during facility operation. Solar panel washing and wastewater disposal is discussed further in Section IV.D., *Soil Protection*, and the wastewater would not include cleaning solvents, and would be discharged by evaporation and seepage into the ground. Based

on the limited sources of wastewater, the Department recommends Council find that it would be unlikely for the surrounding area to be impacted by proposed facility wastewater generation.

Conclusions of Law

Based on the foregoing findings of fact and recommended site certificate conditions, the Department recommends that the Council find that the applicant's plans will likely minimize solid waste and waste water generated, that solid waste and wastewater would be recycled and reused, and that the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas, under the Council's Waste Minimization Standard.

IV.P Division 23 Standards

The Division 23 standards apply only to "nongenerating facilities" as defined in ORS 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The proposed facility would not be a nongenerating facility as defined in statute and therefore Division 23 is not applicable.

IV.Q Division 24 Standards

The Council's Division 24 standards include specific standards for the siting of energy facilities, including wind projects, underground gas storage reservoirs, transmission lines, and facilities that emit carbon dioxide.

IV.Q.1 Siting Standards for Transmission Lines: OAR 345-024-0090

To issue a site certificate for a facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:

(1) Can design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public;
(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.

Findings of Fact

The Siting Standards for Transmission Lines address issues associated with alternating current electric fields and induced currents generated by high-voltage transmission lines. ASC Exhibit

AA provides the applicant's analysis to support Council's review of the proposed facility's compliance with the standard.

The applicant is not proposing a transmission line in the ASC as a related or supporting facility and states that it would connect to one of three existing transmission lines within or adjacent to the site boundary, therefore, OAR 345-024-0090 does not apply to this proposed facility.

IV.R Other Applicable Regulatory Requirements Under Council Jurisdiction

Under ORS 469.503(3) and under the Council's General Standard of Review (OAR 345-022-0000), the Council must determine whether the proposed facility complies with "all other Oregon statutes and administrative rules…as applicable to the issuance of a site certificate for the proposed facility." This section addresses the applicable Oregon statutes and administrative rules that are not otherwise addressed in Council standards, including noise control regulations, regulations for removal or fill of material affecting waters of the state, and regulations for water rights.

IV.R.1 Oregon Department of Environmental Quality (DEQ) Noise Control Regulations for Industry and Commerce: OAR 340-035-0035

(1) Standards and Regulations:

*****

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites: No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source

including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

*****

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

A. 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

B. That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);…

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

*****

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

*****

(g) Sounds that originate on construction sites.

*****

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

*****

The Oregon Department of Environmental Quality's (DEQ) Noise Control Regulations for Industry and Commerce apply to operational noise from proposed energy facilities, as industrial noise sources. In 1991, DEQ's Noise Control Program was terminated; however, the rules remain in effect.[234] Regulated sources of noise are legally responsible for complying with the applicable provisions and standards of the regulations. As described above, because ORS 469.503(3) and the Council's General Standard of Review (OAR 345-022-0000) require Council

[234] OAR 340-035-0110.

to find that a proposed facility complies with all other applicable requirements, which includes DEQ's noise control regulations, and because DEQ no longer implements, enforces or monitors the regulations, Council assumes the authority as the decision maker to interpret and implement the DEQ noise rules.

Findings of Fact

OAR 340-035-0035 establishes noise limits for new industrial or commercial noise sources based upon whether those sources would be developed on a previously used or previously unused site.[235, 236] Section IV.E, *Land Use*, and ASC Exhibit K explain that the land within the site boundary is private property in EFU zone, made up of two tracts owned by different property owners. Landowner representations of the underlying land uses are that Tract 1 has not been used for agricultural enterprise or farming and has never had water rights or been irrigated and that Tract 2 has no water rights and farming was attempted however the land has been left fallow.[237] The Department recommends this as evidence that the proposed facility site has not been in industrial or commercial use at any time during the last 20 years. Therefore, the proposed facility is considered an industrial noise source and the site is considered a previously unused site and evaluated per the requirements of OAR 340-035-0035(1)(b)(B). The analysis area for evaluating compliance with the DEQ noise regulation includes the area within and extending one-mile from the proposed site boundary as designated under OAR 345-021-0010 and the project order.

This section includes an evaluation of noise generated from construction activities to inform the analysis under other applicable Council standards, however, under OAR 340-035-0035(5)(g) construction-related noise is specifically exempt from the DEQ noise rules.

Operational noise generated by the proposed facility is assessed under OAR 340-035-0035(1)(b)(B), which specifies that noise generated by a new industrial or commercial source located on a previously unused site must comply with two standards: the "maximum allowable noise standard," and the "ambient noise degradation standard." Both of these standards represent allowable noise levels at "real properties normally used for sleeping," otherwise referred to as a noise sensitive receptor or NSR, or "noise sensitive property."[238] The applicant used ariel imagery to preliminarily identify 12 NSRs within one mile of the proposed site boundary and then verified the NSRs during field visits in July 2021, the Department also used

[235] OAR 340-035-0015(47) defines a "previously unused industrial or commercial site" as "property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property."

[236] OAR 340-035-0015(24) defines "industrial and commercial noise sources" as "noise generated by a combination of equipment, facilities, operations or activities employed in the production, storage, handling, sale, purchase, exchange, or maintenance of a...service."

[237] WESAPPDoc3-11 ASC Exhibit K Land Use 2022-10-22, Section 4.3.2.

[238] OAR 340-035-0015(38) "Noise Sensitive Property" means real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner.

ariel imagery to confirm these NSRs. The applicant states that all NSRs were identified as single-family residential structures or potential residence.[239]

- Under the maximum allowable noise standard at OAR 340-035-0035(1)(b)(B)(i), new industrial or commercial noise sources may not exceed the noise levels specified in Table 8 of DEQ noise rules, which are represented below in Table 16: *Statistical Noise Limits for Industrial and Commercial Noise Sources* below.

Table 16: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor[1]	Maximum Permissible Hourly Statistical Noise Levels (dBA)	
	Daytime (7:00 AM - 10:00 PM)	Nighttime (10:00 PM - 7:00 AM)
L50	55	50
L10	60	55
L1	75	60

Notes:
1. The hourly L50, L10 and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively.

Source: OAR 340-035-0035, Table 8

- Under the ambient noise degradation standard, facility-generated noise must not increase the ambient hourly L10 or L50 noise levels at any noise sensitive property by more than 10 dBA in any one hour, with ambient noise levels established based on noise measurements taken at an appropriate noise measurement location (point on the noise sensitive property line nearest to the noise source).

Noise Generated from Construction Activities

OAR 340-035-0035(5)(g) specifically exempts noise caused by construction activities; however, an evaluation of construction-related noise is presented in accordance with OAR Chapter 345 Division 21 information requirements and to inform the construction-related noise analysis required under the Council's Protected Areas and Recreation standards, found in Sections IV.F., *Protected Areas*, and IV.L., *Recreation*, of this order.

Proposed facility construction activities that would generate noise include the delivery of construction equipment and materials, site preparation activities including brush clearing, internal road and access road construction, excavation and site preparation including grading, foundation pouring, erection and installation of components, interconnection to existing transmission lines, and finishing work required to prepare the facility for operation. Table 17: *Construction Equipment Maximum Noise Levels at 50 and 1200 Feet* shows typical sound levels

[239] WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 8.0.

associated with common construction equipment and noise levels per phase at 50 feet from the site boundary and at the closest noise sensitive receptor (NSR). Predicted construction noise levels range from 23 to 63 dBA at 1,200 feet from the nearest NSR and from 55 to 95 dBA at 50 feet.[240] The loudest equipment would be the pneumatic pile drive which is used for installing the solar panel posts.

Table 17: Construction Equipment Maximum Noise Levels at 50 and 1200 Feet

Construction Phase	Construction Equipment	Usage Factor %	Max. Equipment Noise Level at 50 feet dBA	Composite Max. Equipment Noise Level at Nearest NSR 1200 feet dBA
Demolition	Excavators (168 horsepower [hp]) Tractors/Loaders/Backhoes (108 hp) Rough Terrain Forklifts (93 hp) Dump Truck	40 40 40 40	85 80 85 85	59
Site Preparation and Grading	Graders (174 hp) Rubber Tired Loaders (164 hp) Scrapers (313 hp) Water Trucks (189 hp) Generator Sets	40 40 40 40 50	85 85 85 88 82	61
Trenching and Road Construction	Excavators (168 hp) Graders (174 hp) Water Trucks (189 hp) Trencher (63 hp) Rubber Tired Loaders (164 hp) Generator Sets	40 40 40 40 40 50	85 85 88 85 80 82	61
Equipment Installation	Crane (399 hp) Forklifts (145 hp) Pile drivers Pickup Trucks/ATVs Water Trucks (189 hp) Generator Sets	16 40 20 40 40 50	85 85 95 55 88 82	63
Commissioning	Pickup Trucks/ATVs	40	55	23
Source: 2008 Federal Highway Administration (FHWA) Roadway Construction Noise Model, WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Table Y-4				

[240] For reference applicable to construction and operational noise, approximate sound levels for common sounds are 30 dBA for a soft whisper, 40 dBA for bird calls, 70 dBA for a vacuum cleaner, and 90 dBA for heavy truck or motorcycle traffic. ASC Exhibit Y, Table Y-2, adapted from EPA (U.S. Environmental Protection Agency). 1971. Community Noise. NTID300.3 (N-96-01 IIA-231).

Construction activities would occur sequentially for groupings of solar arrays, with the potential for overlap of sections of solar arrays. The inverters and distribution transformers would likely be completed while respective solar arrays are being constructed, other facility components, such as operations and maintenance building, may occur independently from the solar array installation. As discussed in Section III.B.1., *Facility Construction Activities*, construction of the proposed facility is anticipated to take 9-12 months, however, under Recommended General Standard of Review Condition 1, the Department recommends the applicant be allotted 24-months to complete construction after construction has begun. Construction activities would be intermittent with variable noise levels depending on the type of construction equipment operating and is generally considered to be a temporary impact.

Operational Noise

The methods for the operational noise assessment including baseline noise measurements and inputs into the noise model, compliance with OAR 340-035-0035(1)(b)(B) (maximum allowable noise standard, and the ambient noise degradation standard) and recommended conditions of approval, are provided below.

Noise-Generating Equipment

Noise-generating equipment associated with operation of the proposed facility would include substation transformers, inverters and transformers for the solar arrays, and the cooling systems necessary for the battery storage systems. Sound power level data was used as inputs to the acoustic modeling analysis, where the applicant assumed the maximum number of noise-generating equipment as:

- 25 inverters, 88 dBA per inverter
- 25 inverter step-up transformers, 77 dBA per transformer
- 2 main power transformers, 102 dBA per transformer
- 200 battery storage HVAC units, 98 dBA per unit

ASC Exhibit Y includes a noise assessment which assumes a maximum number of noise-generating equipment in two different design or build-out scenarios:

1. Distributed Battery Storage (Figure Y-1): Eight (8) battery energy storage units collocated with each of the 25 inverter skids (200 battery energy storage units total); and

2. Centralized Battery Storage (Figure Y-2): Two hundred (200) battery storage units would be located in one consolidated area in proximity to the collector substation.

Methods and Results for Baseline Ambient Noise Levels

To evaluate the maximum potential noise generated from a proposed facility, the noise assessment must begin with a baseline, ambient, or existing noise level analysis because

existing noise levels at any site may vary depending on nearby roads, agricultural operations, residences, weather, and wildlife, etc. The applicant conducted measurements of the existing sound levels for both the daytime and nighttime periods because the proposed facility would be operational during the day and nighttime hours.[241]

Ambient sound measurements were collected on July 23 – 24, 2021, when the weather was fair, with no precipitation and wind speeds ranged from 0 to 12 mph.[242] Three sound measurement locations were selected within the analysis area at publicly accessible land in as close proximity to NSRs as possible because access to the properties was not granted by landowners.[243] The measurement locations were selected to represent the nearest NSRs to the site boundary and to facility components. OAR 340-035-0035(3)(b) establishes acceptable procedures based on the DEQ Sound Measurement Procedure Manual (NPCS-1) adopted by the DEQ's Environmental Quality Commission, or as otherwise approved by the Department. Pursuant to OAR 340-035-0035(1)(b)(B)(i) and -0035(3), noise standards must be evaluated at an appropriate measurement point at noise sensitive properties. Unless otherwise specified, the measurement point must be a point on the noise sensitive property either 25 feet toward the noise source from that point on the noise sensitive building nearest the noise source, or a point on the noise sensitive property line nearest the noise source, whichever is further.[244] ASC Exhibit Y, Figures Y-1 and Y-2 illustrate the Ambient Sound Monitoring Locations relative to the representative NSRs that are closest to the proposed facility site boundary. In response to Department information requests the applicant provided pictures of the monitoring positions relative to the residences, which illustrate the close proximity to the NSR. Because of access restrictions, the applicant placed the baseline measurement equipment at publicly accessible land located near to each representative NSR location, this location would be closer to the proposed noise source and further way from the NSR property which means anticipated noise generated from the proposed facility experienced at each NSR may be less then represented in the applicant's modeling. The Department recommends Council find that the three locations (ST-1, ST-2, ST-3) where the applicant evaluated baseline noise are appropriate because the three locations are near NSRs that are closest to the site boundary which would be the NSR'S most impacted by the worst-case noise scenario. The Department also recommends Council find that the three baseline measurement points located on publicly accessible land closest to the corresponding NSR are appropriate because the three locations are near NSRs that are closest to the site boundary, and these locations are closer to the noise source and further from the NSR residence, therefore a conservative location to gather baseline noise data.

[241] OAR 340-035-0035(1)(b)(A) defines daytime (7:00 AM – 10:00 PM) and nighttime (10:00 PM – 7:00 AM).

[242] WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 3.1.

[243] WESAPPDoc11-6 Applicant Responses to RAIs Exhibit D_F_G_M_O_W_X_V and ODFW Combined 2022-09-01 and 2022-09-07; Exhibit X-West End Solar Project_RAI NC-8_08-31-22.

[244] The Sound Measurement Procedure Manual was developed in 1974 and last modified in 1983 and includes methodology based on hand tallies. As previously described, because DEQ does not fund, administer, or enforce the noise control requirements established in OAR 345-035-0035, yet they are applicable OARs to the proposed facility, the Council assumes authority to review, interpret, and apply the rules. Therefore, the Council has authority to review and approve sound measurement procedures that differ from the Sound Measurement Procedures Manual (NPCS-1) or the DEQ Noise Rules, when specified in the rules.

All baseline measurements were taken with a Larson Davis 831 real-time sound level analyzer, equipped with a PCB model 377B02 ½-inch precision condenser microphone which meets or exceeds all requirements set forth in the American National Standards Institute standards for Type 1 sound level meters for quality and accuracy. During monitoring, the applicant made site-specific field observations where typical sound sources were related to traffic, wildlife (birds) and barking dogs. Noise from homes in the evaluation area was minimal most of the time, with items such as air conditioners or heat pumps producing noticeable sound within their immediate vicinity.[245] Other sound sources that could reasonably be expected, though not observed during the survey, would be farm equipment during planting and harvest time, and impact sprinklers in the agricultural fields. Because the existing transmission lines are operational, sound from the transmission lines was included in the ambient baseline sound levels. Ambient sound monitoring location ML-1 is approximately 300 feet from the existing PacifiCorp transmission line and 1,000 feet from the existing Bonneville Power Administration transmission line. The existing Bonneville Power Administration transmission is approximately 0.4 miles northeast of ML-2 and the existing PacifiCorp transmission line is approximately southwest of ML-3.[246] Since corona noise from transmission lines occurs most frequently during foul weather (light rain) and fair-weather conditions were observed during the sound monitoring surveys, sound contribution of the existing transmission lines was minimal.

Table 18: *Summary of Ambient Sound Survey Results* presents results at each monitoring location, which demonstrates that existing noise levels during the day and at night are generally low/quiet.

Table 18: Summary of Ambient Sound Survey Results

Baseline Monitoring Location ID	Distance to Nearest Facility Fence Line (feet/meters)	Time Period	Baseline Sound Level Metric			
			L_{eq}	L_{10}	L_{50}	L_{90}
ST-1	1,172/357	Day	38	39	38	36
		Night	37	40	35	34
ST-2	3,897/1,188	Day	40	42	39	39
		Night	42	46	40	39
ST-3	5,247/1,599	Day	44	49	40	38
		Night	41	45	40	38

Leq = equivalent sound level; L10 = intrusive sound level; L50 = median sound level; L90 = residual sound level; UTM = Universal Transverse Mercator.
Source: WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Table Y-3.

Methods and Results from Noise Assessment with Proposed Facility

[245] WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 3.2.
[246] WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 3.2.

The Cadna-A computer noise prediction model was used to calculate sound levels from the operation of the proposed facility based on the maximum of noise-generating equipment and two design scenarios bulleted above, 200 battery storage units with distributed and centralized locations. Cadna-A is used to describe noise emission and propagation modeling from facilities that consist of various equipment and technologies and has been used for noise modeling for other EFSC-approved facilities.[247, 248] Inputs and assumptions included in the Cadna-A computer noise prediction model and outdoor noise propagation modeling are:

- All noise-generating equipment is operating concurrently during the daytime and nighttime periods at the representative manufacturer-rated sound levels.
- Sound attenuation was calculated under weather conditions that are favorable for sound propagation, such as for downwind propagation or atmospheric inversion, conditions which are typically considered worst-case.
- Sound propagation from source to NSR locations incorporate physical effects including geometric divergence, reflection from surfaces, atmospheric absorption, screening from topography and obstacles, ground effects, source sound power, directivity, and cumulative effects.
- It was assumed that all equipment would operate consistently during both daytime and nighttime periods.
- For the acoustic modeling analysis, a semi-reflective value of G = 0.5 was used to represent the analysis area, while a value of G = 0 was used to represent the facility site boundary.[249]

The results of the noise modeling are provided below in Table 19 and Table 20. Table 19 provides the results of the noise modeling for the centralized battery storage layout and Table X provides the results of the noise modeling for the distributed battery storage layout. As demonstrated in Table 19, under the centralized battery scenario, the maximum allowable noise standard of 50 dBA at L_{50} under OAR 340-035-0035(1)(b)(B), would not be exceeded and the ambient statistical noise levels would increase by 6 dBA which is less than 11 dBA therefore both the maximum allowable noise standard and the ambient noise degradation standard are met.

[247] MSEFAPPDoc4-1 Final Order on ASC for Madras Solar Energy Facility 2021-08-02; BSPAPPDoc2 Final Order on ASC for Bakeoven Solar Project 2020-04-24.

[248] The outdoor noise propagation model is based on the 1996 International Organization for Standardization (ISO) 9613, Part 2: "Attenuation of Sound during Propagation Outdoors".

[249] Ground absorption rates are described by a numerical coefficient. For pavement and water bodies, the absorption coefficient is defined as G = 0 to account for reduced sound attenuation and higher reflectivity. In contrast, ground covered in vegetation, including suburban lawns, are acoustically absorptive and aid in sound attenuation (i.e., G = 1.0). WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 4.3.

Table 19: Acoustic Modeling Results, Layout with Centralized Battery Storage

NSR ID	Time Period	Background Noise (dBA, L_{50})	Solar Project Noise (dBA)	Combined Noise (Background/Solar Project) (dBA)	Change in Noise (dBA)	Compliant with OAR 340-035-0035?
1	Day	38	39	42	4	Yes
	Night	35	39	41	6	Yes
2	Day	38	34	39	1	Yes
	Night	35	34	37	2	Yes
3	Day	40	33	41	1	Yes
	Night	40	33	41	1	Yes
4	Day	40	33	41	1	Yes
	Night	40	33	41	1	Yes
5	Day	40	34	41	1	Yes
	Night	40	34	41	1	Yes
6	Day	40	30	40	0	Yes
	Night	40	30	40	0	Yes
7	Day	38	31	39	1	Yes
	Night	35	31	37	2	Yes
8	Day	38	33	39	1	Yes
	Night	35	33	37	2	Yes
9	Day	39	34	40	1	Yes
	Night	40	34	41	1	Yes
10	Day	39	35	40	1	Yes
	Night	40	35	41	1	Yes
11	Day	39	33	40	1	Yes
	Night	40	33	41	1	Yes
12	Day	39	32	40	1	Yes
	Night	40	32	41	1	Yes

As demonstrated in Table 20 below, under the distributed battery scenario, the maximum allowable noise standard of 50 dBA at L_{50} under OAR 340-035-0035(1)(b)(B), would be exceeded at NSR 1 with a L_{50} nighttime noise level of 51 dBA. Additionally, at NSR 1 with the distributed battery layout, the ambient statistical noise levels would increase by 13 dBA during the day and 16 dBA at nighttime, therefore, the ambient noise degradation standard is also not met. Thus, under the distributed battery layout, at one NSR, the applicant does not meet the maximum noise or the ambient noise degradation standards under OAR 340-035-0035, which is addressed under recommended conditions below.

Table 20: Acoustic Modeling Results, Layout with Distributed Battery Storage

NSR ID	Time Period	Background Noise (dBA, L_{50})	Solar Project Noise (dBA)	Combined Noise (Background/Solar Project) (dBA)	Change in Noise (dBA)	Compliant with OAR 340-035-0035?
1	Day	38	51	51	13	**No**
	Night	35	51	51	16	**No**
2	Day	38	39	41	3	Yes
	Night	35	39	40	5	Yes
3	Day	40	36	41	1	Yes
	Night	40	36	41	1	Yes
4	Day	40	37	42	2	Yes
	Night	40	37	42	2	Yes
5	Day	40	39	42	2	Yes
	Night	40	39	42	2	Yes
6	Day	40	36	41	1	Yes
	Night	40	36	41	1	Yes
7	Day	38	38	41	3	Yes
	Night	35	38	40	5	Yes
8	Day	38	40	42	4	Yes
	Night	35	40	41	6	Yes
9	Day	39	44	45	6	Yes
	Night	40	44	45	5	Yes
10	Day	39	43	44	5	Yes
	Night	40	43	45	5	Yes
11	Day	39	41	43	4	Yes
	Night	40	41	43	3	Yes
12	Day	39	39	42	3	Yes
	Night	40	39	43	3	Yes

The applicant's noise modeling with a maximum operational capacity with maximum amount of noise-generating equipment under the distributed battery scenario results in the exceedance of the maximum allowable noise standard and the ambient noise degradation standard. Measures applicant may employ to ensure compliance with DEQ noise rules include detailed design of a distributed battery storage layout by siting the inverter skids/battery storage equipment an adequate distance away from NSR ID 1 to reduce the operational sound to a level compliant with the Oregon noise standard, specifying quieter equipment (when available), and/or installing improved acoustical enclosures or barriers. Final equipment specifications and noise warranty data and final locations of the inverter skids/battery storage units will be reviewed by an acoustician to ensure compliance with OAR 340-035-0035.

The applicant has not requested that Council consider an exception or variance under the regulation; therefore, the facility is precluded from the maximum scenario presented with distributed battery storage.[250] The Department recommends impose the following condition to ensure that final facility design and layout comply the maximum allowable noise standard and ambient noise degradation standard.

Recommended Noise Control Condition 1 (PRE): Prior to construction, the certificate holder shall provide to the Department:

a. Final facility layout; and number, type, and noise level (dBA) of all noise generating equipment. Identify differences in equipment noise level (dBA), based on manufacturer specifications, compared to noise levels presented in ASC Exhibit Y. If there are differences in equipment noise level (dBA), certificate holder shall provide updated acoustic modeling results, if determined necessary by the Department. The certificate holder may rely on ambient noise measurements included in ASC Exhibit Y or may obtain updated ambient noise measurements, if measurement locations and protocol are approved by the Department.
b. If the final design of the facility includes distributed battery storage, provide an acoustic modeling analysis using manufacturer based noise levels (dBA) that demonstrate compliance with the ambient degradation standard and maximum allowable noise standards. The certificate holder may rely on ambient noise measurements included in ASC Exhibit Y or may obtain updated ambient noise measurements, if measurement locations and protocol are approved by the Department.

Pursuant to the DEQ noise standards under OAR 340-035-0035(4)(a), the Council has authority to require the owner of an operating noise source to monitor and record the statistical noise levels upon written notification. In the event of a complaint regarding noise levels during proposed facility operation, the Council has the authority to act in the place of DEQ to enforce this provision to verify that the certificate holder is operating the facility in compliance with the noise control regulations. Therefore, the Department recommends the Council adopt the following conditions:

Recommended Noise Control Condition 2 (PRO): Prior to operation, the certificate holder shall:

a. Identify a facility contact that will receive, track and respond to noise complaints during facility operations.
b. Send to Noise Sensitive Receptors (NSRs) identified in ASC Exhibit Y Table Y-9, information about the facility, facility operational noise levels and the process for

[250] Applicant indicates the noise assessment, based on final design, will demonstrate that the facility meets the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties, or that the applicant has obtained the legally effective easement or real covenant for expected exceedances of the ambient noise degradation test. The Department highlights that under OAR 340-035-0035 in place at the time of this order, does not contemplate "noise waivers" for solar facilities. WESAPPDoc3-25 ASC Exhibit Y Noise 2022-10-22, Section 5.0.

filing a noise complaint to facility operational personnel, as identified in (a) of the condition.

Recommended Noise Control Condition 3 (OPR): During operations, the certificate holder shall track and respond to any noise complaints received. Certificate holder shall notify the Department within three working days of receiving a noise complaint related to the facility and shall identify the date the certificate holder received the complaint, the nature of the complaint, the complainant's contact information, the location of the affected property, and any actions taken, or planned to be taken, by the certificate holder to address the complaint.

Conclusions of Law

Based on the recommended findings of fact and compliance with the recommended condition requiring the applicant to design the facility in a manner that does not exceed the DEQ noise standards, the Department recommends the Council find that the proposed facility would comply with the Noise Control Regulations in OAR 340-035-0035(1)(b)(B).

IV.R.2 Removal-Fill Law

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state."[251] The Council, in consultation with DSL, must determine whether a removal-fill permit is needed and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other waters of the state is the area within the site boundary. If a removal-fill permit is needed for the facility, it is Council that makes a determination whether or not DSL should issue such a permit.

Findings of Fact

ASC Exhibit J provides the applicant's analysis of the presence or absence of wetlands and other nonwetland waters of the state within the analysis area, which encompasses the 324 acre proposed facility site boundary. To inform the analysis, the applicant conducted literature and desktop reviews as well as field studies. The literature review included an evaluation of the following sources:

The applicant's consultant, Tetra Tech, and the Department reviewed the National Wetlands Inventory (NWI) database for the presence of mapped wetland and waterways, the National Hydrologic Database (NHD) which provides data about known hydrology, hydric soils data from the Natural Resources Conservation Service, and aerial imagery from 2019 and 2020 Google Earth 2019, 2020 to identify potential wetlands and other waters occurring within the analysis

[251] ORS 196.800(15) defines "Waters of this state." The term includes wetlands and certain other waterbodies.

area. The review of NWI and NHD data and aerial imagery did not identify any wetlands or stream features mapped within the site boundary. Data from the NRCS indicated that approximately 73 percent of the site soils are Adkins fine sandy loam soils with zero to 5 percent slopes which is considered non-hydric, whereas 27 percent of the mapped soils are Quincy fine sand which may meet the criteria for hydric soils, especially in areas where there are depressions in the topography.[252]

To confirm the absence of wetland and water features, Tetra tech conducted field surveys for wetlands and WOS following the methods in the 1987 *Wetlands Delineation Manual, Technical Report Y-87-1* and *the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West*, which are the industry and DSL standard manuals directing on-site delineation surveys as designated in OAR 141-090-0030.[253] As recommended in these manuals, three field indicators of wetlands (hydrophytic vegetation, hydric soils, and wetland hydrology) must be present to make a positive wetland determination. Field surveys focused on documenting the presence/absence of each of these indicators in order to conclude if wetlands or other waters of the state were present in the analysis area. Figure 14 below illustrates the locations where plants, soils, and hydrology were assessed within the site boundary.

[252] ASC Exhibit J Section 3.3 and Attachment J-1, Section 3.1.2.

[253] OAR 141-090-0030 (1) Wetland determinations and delineations shall be conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual ("the manual"), including regional supplements and applicable guidance, and any supporting technical or guidance documents issued by the Department.

Figure 14: Site Boundary Wetland Assessment Sample Plot Locations

The Department submitted Attachment J-1, the Botanical and Wetland Survey Report which to DSL on June 13, 2022, with an Off-site Determination Request for signed by the applicant. On July 21, 2022, DSL provided its preliminary jurisdictional determination which indicated that; "Based on available offsite information and additional information provided by the applicant, it is unlikely that jurisdictional wetlands or waterways are present on the property."[254] The Department also evaluates the presentation of data for hydrophytic vegetation, hydric soils, and wetland hydrology below, and recommends Council find that it is not likely that wetlands or other WOS are present within the site boundary and therefore, no removal-fill permit is necessary for the construction and operation of the proposed facility.

Hydrophytic vegetation

As discussed above, desktop studies, literature review and consultation was conducted to evaluate the presence of plant species associated with wetlands within the site boundary. Further, the applicant's consultant, Tetra Tech, conducted field surveys for botanical resources and wetland/non-wetland waters on July 3, 2019, June 22, 2020, and May 19, 2022. Botanical field surveys were conducted using the Intuitive Controlled survey method, standard and accepted survey protocols used by the USFS and BLM which incorporates meandering transects that traverse the site boundary, and that target the full array of major vegetation types, aspects, topographical features, habitats, and substrate types.[255] Attachment 2 of the Botanical and Wetland Survey Report lists the vascular plans observed within the site boundary which includes a column indicating each plants' wetland indicator status from the Army Corps of Engineer's 2020 National Wetland Plant List for the Arid West Region, which indicates there were not any Obligate or Facultative Wet plants observed in the site boundary.[256] Attachment 4 of the 2019-2022 Botanical and Wetland Survey Report includes Wetland Determination Data Forms used by wetland specialists and DSL to record features associated with soils, plants and hydrology. The Dominance Test and Prevalence Index worksheets in the data forms indicate that the majority of the species identified in the survey were predominantly Facultative Upland species and that the Facultative species documented were intermixed with Upland (non-wetland) plant species and for that reason, no area within the proposed site boundary meets the criteria for hydrophytic vegetation.[257]

[254] DSL also indicated that the offsite wetland and waters determination process is best reserved for property owners, real estate agents and appraisers, etc. interested in smaller properties. Determinations for larger study areas (such as this one) are best addressed by submitting a complete wetland delineation report to DSL for review and approval. WESAPPDoc6-10 pASC Reviewing Agency Comment Offsite Determination No Wetlands_DSL_Ryan 2022-07-28.

[255] ASC Exhibit J, Attachment J-1, Section 3.2.1.

[256] Obligate = OBL plants that always occur in standing water or in saturated soils; FACW = Facultative Wet plants that nearly always occur in areas of prolonged flooding, standing water, or saturated soils; FAC= Facultative plants occur in a variety of habitats, including wetland and non-wetland habitats and commonly occur in standing water or saturated soils; FACU = Facultative Upland plants typically occur in non-wetland habitats but may frequently occur in standing water or saturated soils; and UPL = Upland plants almost never occur in water or saturated soils. USACE National Wetland Plan List Fact Sheet. In Attachment 2 applicant also includes NI = No Indicator.

[257] ASC Exhibit J, Attachment J-1 2019-2022 Botanical and Wetland Survey Report, Section 4.3.

Hydric soils

As noted above and discussed in Section IV.D., *Soil Protection*, the data reviewed for the analysis area shows that soils are comprised primarily (235.8 acres or 73 percent) of Adkins fine sandy loam with zero to 5 percent slopes, and the remaining portions (88 acres or 27 percent) are composed of Quincy fine sand with zero to 5 percent slopes.[258] The Adkins fine sandy loam, zero to 5 percent slopes soil type, is considered non-hydric, well-drained, with no frequency of ponding or flooding.[259] The NRCS describes hydric soil categories on a spectrum from hydric to nonhydric, where "predominantly nonhydric" soils are soils where no major component listed for a given map unit is rated as hydric, and at least one contrasting minor component is rated hydric. Quincy fine sand soil does not contain a major component that is rated as hydric, therefore it is considered "predominantly nonhydric" by NRCS's State Soil Data Access Hydric Soils Rating by Map Unit.[260] Even so, because the Quincy fine sand located in depressions may meet the criteria for hydric soils the consultant targeted these on-site depressional areas for the field assessment conducted on May 19, 2022.[261] Attachment 4 of the 2019-2022 Botanical and Wetland Survey Report includes Wetland Determination Data Forms which identify the sample plots where soils were sampled in the areas of topographical depressions to a depth of 20 inches and there were not any hydric soil indicators listed from the soil sampling.

Wetland hydrology

As noted already, the applicant's desktop review of NWI and NHD data did not identify any wetlands or stream features mapped by the NWI or NHD within the analysis area. The sample plots for the on-site surveys focused in the topographical depressions where it would be most likely for there to be hydrological features present, these features can be seen in Figure 14: Site *Boundary Wetland Assessment Sample Plot Locations*, above. The applicant indicates that none of these areas would appear to hold water for a sustained period of time. Other hydrologic indicators of wetlands such as sediment deposits, water marks, or drainage patters were also not present and not documented in Attachment 4 of the 2019-2022 Botanical and Wetland Survey Report Wetland Determination Data Forms. Visual comparison with the select site photographs included as Attachment 3 also affirms the absence of hydrologic features.

The Department and DSL reviewed that applicant's desktop data and results from the field assessments, including subsurface investigations, conducted at the 3 locations most likely to have wetland features and concur that they do not identify any hydrophytic vegetation, hydric

[258] Exhibit J, Attachment J-1, Figure 3. See also References section in ASC Exhibit J.
[259] ASC Exhibit J, Attachment J-1, Section 3.4.2 and NRCS Soil Map Unit Descriptions for the site boundary, accessed by Department 07-29-2022. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.
[260] ASC Exhibit J Section 3.4.2 and State Soil Data Access (SDA) Hydric Soils Rating by Map Unit, accessed by Department 07-29-2022. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1389479.html#reportref.
[261] ASC Exhibit J, Attachment J-1, Botanical and Wetland Survey Report Figure 5, illustrates the locations within the depressional areas where sample plots and photographs were taken, which are provided in ASC Exhibit J, Attachment 3.

soils, or wetland hydrology. Based upon the Department's review of the applicant's wetland survey data, independent confirmation of references, and cross-referencing information in ASC Exhibit J, and the preliminary determination from DSL that it is unlikely that jurisdictional wetlands or waterways are present on the property, the Department recommends Council find that it is not likely that wetlands or other waters of the state are present within the site boundary, and therefore, no removal-fill permit is necessary.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, the Department recommends that the Council find that a removal-fill permit is not needed for the proposed facility because there are no wetlands or WOS present based on the lack of hydrophilic plants, hydric soils, and on-site hydrology.

IV.R.3 Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the proposed facility would comply with these statutes and administrative rules. OAR 345-021-0010(1)(o)(F) requires that if a proposed facility needs a groundwater permit, surface water permit, or water right transfer, that a decision on authorizing such a permit rests with the Council.

Findings of Fact

As described in ASC Exhibit O and in Section IV.M., *Public Services* of this order, construction-related water use would include civil and site preparation for road compaction and dust suppression, as well as water used for concrete mixing for foundations, and fire protection. Water trucks would be used to control dust generation in all disturbed areas during road construction, foundation installation, final cleanup, reclamation, and restoration.

The applicant estimates that approximately 10.5 to 12.8 million gallons (Mgal) of water would be used during a 12-month construction period for the uses described above, or about 1 Mgal of water use per month. During proposed facility operation, water would be used for solar module washing, approximately twice a year amounting to approximately 1.65 Mgal each year. The applicant is not proposing the installation and operation of on-site wells.

The applicant maintains that no groundwater permit, surface water permit, or water right transfer is needed for the construction and operation of the proposed facility because water for facility construction and operation would be obtained under existing water rights held by the City of Hermiston under an existing municipal water right. The applicant provided correspondence from the City which confirms, that under normal circumstances, the City can

provide up to 18.3 Mgal of water for construction and operation of the facility.[262] Under OWRD rules, examples of municipal water use include but are not limited to domestic water use, irrigation of lawns and gardens, commercial water use, industrial water use, fire protection, irrigation, and other water uses.[263] Previously, OWRD has affirmed and Council has found that water use for the construction and operation for the proposed facility qualifies under 690-300-0010(25) as "industrial water use", which includes the use of water associated with the processing or manufacture of a product, such as the construction, operation, and maintenance of an industrial site like a solar facility. The Department recommends Council find that the proposed solar facility, as an industrial or commercial use, qualifies as a municipal use under OWRD rules.

To affirm the facility's water use during construction, and the ability of the City of Hermiston or any other municipality, to provide water for facility construction, the Department recommends the following condition.

Recommended Water Rights Condition 1 (PRE): Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall:

a. Identify all water-related needs and estimate daily and annual water demand for each construction phase, as applicable.
b. Provide excerpts of agreements or other similar conveyance from the water-providing entity to the Department demonstrating that construction activities will be adequately and legally served by service providers or third-party permits.

Recommended Water Rights Condition 2 (CON): During construction of the facility, facility component or phase, as applicable, if a water right, limited water use license or water rights transfer is needed and would not be obtained by a third-party, submit and obtain approval of the applicable water permit through the site certificate amendment process.

Conclusions of Law

Based on the foregoing findings of fact and recommended site certificate conditions, the Department recommends that the Council conclude that the proposed facility does not need a groundwater permit, surface water permit, or water right transfer.

[262] WESAPPDoc3-15 ASC Exhibit O Attachment O-1. Record of Correspondence with the City of Hermiston
[263] OAR 690-300-0010(29).

V. PROPOSED CONCLUSIONS AND ORDER

EE West End Solar LLC submitted an application for site certificate (ASC) to construct and operate approximately 50-99 MWs of solar photovoltaic power generation equipment and related or supporting facilities to be located in Umatilla County. Subject to the representations in the ASC, compliance with the recommended site certificate conditions and based on the preponderance of evidence on the record, the Department recommends Council find that:

1. The proposed West End Solar Project complies with the requirements of the Oregon Energy Facility Siting Statutes, ORS 469.300 to 469.520.

2. The proposed West End Solar Project complies with the standards adopted by the Council pursuant to ORS 469.501.

3. The proposed West End Solar Project complies with all other Oregon statutes and administrative rules identified in the Project Order as applicable to the issuance of a site certificate for the proposed facility.

Based on the recommended findings of fact, reasoning, recommended conditions and conclusions of law in this proposed order, the Department recommends that Council conclude that the applicant has satisfied the requirements for issuance of a site certificate for the proposed West End Solar Project. The Department further recommends that, pursuant to ORS 469.401, the Chairperson execute the site certificate authorizing the applicant to construct, operate and retire the facility subject to the conditions set forth in the site certificate.

Issued this 13th day of January 2023

The OREGON DEPARTMENT OF ENERGY

By: Todd Cornett
Todd Cornett (Jan 13, 2023 13:04 PST)

Todd Cornett, Assistant Director of Siting

Attachments:

Attachment A: Recommended Site Certificate Conditions
(To be replaced in final order with Site Certificate)
Attachment B: Reviewing Agency Comments and Documents Relied upon in DPO and Proposed Order
Attachment C: Draft Proposed Order Index/Comments and Applicant Responses~~/Index~~
~~Attachment D: Performance Guarantee Agreement~~
Attachment B-2: Draft SPCC Plan
Attachment I-1: Draft Erosion and Sediment Control Plan and Best Management Practices
Attachment P-3: Wildlife Monitoring and Adaptive Management Plan
Attachment P-4: Draft Noxious Weed Control Plan
Attachment P-5: Draft Habitat Mitigation Plan
Attachment S-3: Inadvertent Discovery Plan
Attachment U-1: Draft Traffic Management Plan
Attachment V-1: Draft Emergency Management and Wildfire Mitigation Plan
Attachment X-1: EFSC-Approved Bond and Letter of Credit Templates

Notice of the Right to Appeal

[Text to be added to Final Order]