Shift road to avoid steep ditch along road. Reduces cut/full for access road.

Proposed road at edge of approved corridor. New area added as contingency to adapt to field condition during construction.

Area added around turbine workspace. Turbine pad within approved corridor.

Primary Turbine - Vestas V150-4.3, 150RD, 105HH

Data Sources:
- Avangrid-Project Infrastructure
- USDA-Aerial Imagery
- ESRI-Roads

NOT FOR CONSTRUCTION
Stream crossing avoided by using proposed route.

UG collector using approved corridor is 2.9 miles long, crossing property lines, and one stream. Proposed route 1.3 miles, no stream crossing.

Route uses existing farm access across low laying areas.

Contingency temporary work space for O&M, not likely to be used because building was shifted east to property line.

Area added to match road, fix to misaligned data from approved corridor.
Area added to match road, fix misaligned data from approved corridor.

Proposed route using portion of approved corridor and follows edge of field.

Approved corridor with no road/collector connection.

2.5 mile UG collector route using approved corridor. Would add new UG circuit lines to these two turbines.

Shifted road to follow property line.

Figure 2.4 Golden Hills Facility Map
Detail Map

Data Sources
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Primary Turbine - GE 2.5-116, 116RD, 80HH
Primary Turbine - Vestas V150-4.2, 150RD, 105HH

Earthwork Pad Extent Temporary
Access Road
Temporary Turn Radius
Temporary Turn Radius
Crane Path (Temporary)
Underground 34.5-kV Collector Line
Secondary Highway
Local Road
Secondary Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Corridor to be Removed
Road or Collector Line
Realignment to Minimize Road, Intersection and Turning Radius Safety Improvements
Limits of Disturbance
Road Edge
Laydown Yard
Storage Area (Temporary)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)
Area added for temporary workspace for turbine construction.

Area added for temporary workspace for turbine construction.

Added to connect corridors, Alternative route using approved corridors is 5 miles.

Area added for temporary workspace of UG collector installation. Permanent facilities within approved corridor.

Corridor shifted to align with turbine.

Reference Map

SHERMAN COUNTY, OREGON

Golden Hills Wind Project

Figure 2.5
Golden Hills Facility Map
Detail Map

Data Sources
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Primary Turbine - Vestas V150-4.3, 150RD, 105HH
Earthwork Pad Extent Temporary
Access Road
Temporary Turn Radius
Crane Path (Temporary)
Underground 34.5-kV Collector Line
Local Road
Secondary Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Road or Collector Line Realignment to Minimize
Turbine Temporary Laydown Areas
Road, Intersection and Turning Radius Safety Improvements
Limits of Disturbance
Road Edge
Storage Area (Temporary)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)
Added corridor to avoid low area and steep slopes.

Crane walk, added area for ability to drive crane.

Add area to align UG circuits in one area.

Added area around substation for HDD workspace.

Added area to widen corridor for multiple circuits.

Corridor shifted to align with turbine.

2017 18 23 21 22 19 20

T39a
T38a
T37a
T36a
T42a
T41a
T25a
T24a
T23a
T22a
T21a
T20a

Figure 2.6
Golden Hills Facility Map
Detail Map

SHERMAN COUNTY, OREGON

Primary Turbine - GE 2.5-116, 116RD, 80HH
Primary Turbine - Vestas V150-4.3, 150RD, 105HH
Power Pole - High Voltage
Earthwork Pad Extent Temporary
Access Road
Temporary Turn Radius
Construction Road (Temporary)
Crane Path (Temporary)
Overhead 230-kV Gen-Tie/Transmission Line
Underground 34.5-kV Collector Line
Secondary Highway
Local Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Corridor to be Removed
Road or Collector Line
Realignment to Minimize
Turbine Temporary Laydown Areas
Limits of Disturbance
Road Edge
Substation
Laydown Yard
Storage Area (Temporary)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)

Data Sources
Avangrid-Project Infrastructure;
USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Primary Turbine - Vestas V150-4.3, 150RD, 105HH

T20a
T19a
T18a
T17a
T16a
T15a
T14a
T13a
T12a
T11a
T10a
T9a
T8a
T7a
T6a
T5a

Golden Hills Wind Project

Avangrid Project Infrastructure
USA-Ag 73

Reference Map

Avangrid Renewables
Golden Hills Facility Map
Detail Map

SHERMAN COUNTY, OREGON

Primary Turbine - GE 2.5-116, 116RD, 80HH
Primary Turbine - Vestas V150-4.3, 150RD, 105HH

Power Pole - High Voltage
Earthwork Pad Extent Temporary
Access Road
Temporary Turn Radius
Construction Road (Temporary)
Crane Path (Temporary)
Overhead 230-kV Gen-Tie/Transmission Line
Underground 34.5-kV Collector Line
Secondary Highway
Local Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Corridor to be Removed
Road or Collector Line
Realignment to Minimize
Turbine Temporary Laydown Areas
Limits of Disturbance
Road Edge
Substation
Laydown Yard
Storage Area (Temporary)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)
Added area to widen corridor for multiple circuits. T-line proposed at edge of approved corridor. Added temporary work space to build line. Actual work space much less than added corridor.

Shifted UG collector to better stream crossing location - less steep slopes compared to approved crossing.

Approved route crosses a side slope - requires more cut/fill to install UG line.

No access to T-line from Nish Rd due to steep slope. Temporary access route for T-line.
Temporary access route for T-line.

Temporary access to T-line follows fence line.

Too steep to drive up corridor.

Pulling/tension areas for conductor installation plus 50 ft buffer.

Existing Hay Canyon 230kV line.

Klondike Rd
Hay Canyon Rd
Sandon Rd

Figure 2.8
Golden Hills Facility Map
Detail Map
SHERMAN COUNTY, OREGON

Golden Hills Wind Project

Data Sources
Avangrid-Project Infrastructure;
USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Power Pole - High Voltage
Access Road
Construction Road (Temporary)
Overhead 230-kV Gen-Tie/Transmission Line
Local Road
Secondary Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Corridor to be Removed
230-kilovolt (kV) Transmission
Line - Temporary Disturbance
Road or Collector Line
Realignment to Minimize
Limits of Disturbance
Road Edge

1:10,400  NAD 1983 2011 StatePlane Oregon North FIPS 3601 Ft Intl

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Area added for temporary workspace for turbine construction.

Area added for temporary workspace of UG collector installation. Permanent facilities within approved corridor.

Van Gilder Rd  Erskine Rd  Fulton Peters Rd  Gordon Ridge Rd

T62a  T63a  T64a

PMM1

Golden Hills Wind Project
Figure 2.9
Golden Hills Facility Map
Detail Map
SHERMAN COUNTY, OREGON

Data Sources
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Primary Turbine - Vestas V150-4.3, 105HH
Earthwork Pad Extent Temporary
Access Road
Crane Pad (Temporary)
Crane Build (Temporary)
Crane Path (Temporary)
Underground 34.5-kV Collector Line
Local Road
Secondary Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Road or Collector Line Realignment to Minimize Limits of Disturbance
Proposed Permanent Met Tower
Road Edge
Storage Area (Temporary)
Met Pad (Permanent)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)

# *  Proposed Permanent Met Tower

#  Road Edge

*  Storage Area (Temporary)

#  Met Pad (Permanent)

#  Gravel Apron (Temporary)

#  Crane Pad (Temporary)

#  Crane Build (Temporary)
Shift road outside approved corridor to align with direction of planting rows. West to East portions follows BPA 115 kV Line.

Contingency area added for turbine construction.

Turbine pad within approved corridor.

Corridor no longer needed.

Alternative access road routes requested by landowner. East corridor not used.

Road shifted outside corridor to keep on ridge line.

Shifted to perpendicular crossing of existing BPA line.

Van Gilder Rd

Sawtooth Rd

Demoss Spring Rd

Gordon Ridge Rd

I4

I1

T33a

T62a

T34a

T32a

T35a

T61a

PMM1

Reference Map

SHERMAN COUNTY, OREGON

Golden Hills Wind Project

Figure 2.10
Golden Hills Facility Map
Detail Map

Data Sources
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads

NOT FOR CONSTRUCTION

Primary Turbine - Vestas V150-4.3, 150RD, 103HP
Alternate Turbine - Vestas V150-4.3, 150RD, 103HP
Earthwork Pad Extent Temporary
Access Road
Temporary Turn Radius
Crane Path (Temporary)
Underground 34.5-kV Collector Line
Local Road
Secondary Road
Site Boundary
Original Micrositing Corridor
Additions to Micrositing Corridor
Road or Collector Line Realignment to Minimize
Turbine Temporary Laydown Areas
Limits of Disturbance
Proposal Permanent Met Tower
Road Edge
Storage Area (Temporary)
Met Pad (Permanent)
Gravel Apron (Temporary)
Crane Pad (Temporary)
Crane Build (Temporary)
Limits of Disturbance for Alternate Facilities

Golden Hills EFS Corridors ADR Mapbook 11x17.mxd

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GAL 1983 2011 StatePlane Oregon North FIPS 3601 Ft Intl
1:10,400
Alternative access road routes requested by landowner. East corridor not used. Road shifted outside corridor to keep on ridge line. Shifted to perpendicular crossing of existing BPA line. Shifted UG collector route off steep slope. Proposed route follow existing farm access road. Shifted road to follow property line. Corridor for alternative turbine only. Shifted to narrower wetland crossing. Wetland crossing avoided by using proposed route.
Proposed UG collector route with new alignment is 1.1 mile. Route using approved corridor is 2.2 miles (north) or 4.4 miles (south).

Area added along existing roads: Not likely to be developed.

Shifted road to follow property line.

Turbine pad within approved corridor. Grading limits extend outside corridor.
Shift UG collection south to avoid steep slopes and habitat impacts of approved route.

Shifted road to follow property line.

Turbine pad within approved corridor, Grading limits extend outside corridor.

Area added for temporary workspace for turbine construction.

Area added to keep road straight through field.

Primary Turbine - Vestas V150-4.3, 150RD, 105HH

Alternate Turbine - Vestas V150-4.3, 150RD, 105HH

Earthwork Pad Extent Temporary

Access Road

Temporary Turn Radius

Crane Path (Temporary)

Underground 34.5-kV Collector Line

Local Road

Secondary Road

Site Boundary

Original Micrositing Corridor

Additions to Micrositing Corridor

Corridor to be Removed

Road or Collector Line Redaligment to Minimize

Turbine Temporary Laydown Areas

Limits of Disturbance

Road Edge

Storage Area (Temporary)

Gravel Apron (Temporary)

Crane Pad (Temporary)

Crane Build (Temporary)

Limits of Disturbance for Alternate Facilities