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# **Sammamish-Juanita 115 kV Transmission Line**

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# Project Description



New approximately 5 mile 115 kV transmission line between Sammamish Substation in the City of Redmond and Juanita Substation in the City of Kirkland. The transmission line will loop through the Totem Substation in the City of Kirkland.

# Project Purpose

Increase capacity and reliability for over 60,000 customers in eastern King County in the service area around the cities of Redmond and Kirkland and portions of unincorporated King County.



# Community Outreach

- PSE initiated a community outreach process in Sept. 2011, including the formation of a Stakeholder Advisory Group (SAG) made up of representatives from government, non-profits, businesses and residential neighborhoods.
- The SAG provided input on community values and siting constraints to create route alternatives during 11 meetings from Sept. 2011 to Oct. 2012 that were open to the public.



# Community Outreach

- PSE held multiple community workshops within the communities of Redmond and Kirkland during the SAG process to receive broader community input.
- PSE also presented to several neighborhood groups and community organizations during this outreach period.
- Preferred route announced to community in October 2012.
- Since 2012, PSE has maintained a project website, provided project updates to the community, and continued presentations and meetings with community groups and the cities.

# Project Scope: City of Redmond

- Project includes work within the existing substation yard to accommodate the new transmission line.
- Existing poles will be replaced south of the substation and within existing transmission line corridors in the City of Redmond after crossing into the City of Kirkland.
- The remaining project work will include the installation of new transmission poles and conductor east of Willows Road NE and widening of the existing rail ballast to create an access road.



# Project Scope: City of Redmond

## Sammamish Substation Site:

- Reconfigure 115 kV bays and add equipment within substation yard to accommodate the new transmission line.
- Install 2 new transmission poles and replace one existing pole within the substation fence.
- Replace 6 existing poles south of substation fence and add one new pole to accommodate bay reconfiguration.
- Location of wetland and buffer mitigation for project impacts are also in the City of Redmond.



# Project Scope: City of Redmond

## **New transmission line from Sammamish Substation to northern City limits:**

- Install 25 new transmission poles and associated conductors (23 poles east of Willows Road NE).
- Widen existing rail ballast east of Willows Road NE to create a gravel construction access and maintenance road.
  - Replace 3 existing undersized culverts with fish passage culverts along regulated streams under rail ballast to accommodate widening.
  - Replace 3 existing stormwater culverts under rail ballast to accommodate widening and stormwater conveyance.
  - Install stormwater infiltration improvements along access road.



# Project Scope: City of Redmond

## South of NE 124<sup>th</sup> Street west of Willows Road NE:

- Replace two 2-pole H-frames within the existing Bothell-Sammamish transmission line corridor to accommodate transmission line crossing on north side of street.
- Replace one pole and install one new pole within existing transmission line corridor connecting to Totem Substation in the City of Kirkland.



# Project Scope: Redmond

## Summary:

New poles:	30
Replacement poles:	10
New transmission line:	1.68 miles
Replacement transmission line:	0.08 miles
Access road length:	1.36 miles
Fish culvert replacement:	3 culverts
Storm culvert replacement:	3 culverts

# Project Scope: Redmond

**Critical Areas identified within or near Redmond study area:**

8 wetlands and 5 streams

**Critical Area Impacts:**

Permanent wetland impact: 160 square feet (2 wetlands)

Permanent buffer impact: 1,955 square feet (1,910 sf access road, 45 sf poles)

Retaining walls were incorporated into the access road design to minimize impacts to critical areas.

**Mitigation:** 4,435 square feet of wetland enhancement within Wetland C south of Sammamish Substation.



# Project Compliance

- Project will be located within the Business Industrial (BP)/Manufacturing Park (MP), and Urban Recreation (UR) zoning districts.
- Sammamish Substation has been located on current site since the 1960s and is located within the BP and MP zones surrounded by business park and industrial uses. The transmission line is permitted outright in these zoning districts. The nearest residential uses are approximately 1,000 feet from the substation improvements and 1,500 feet from the transmission line.
- On the east side of Willows Road NE, the adjacent uses include business park, a mega church, a golf course, and an undeveloped park.
- The proposed transmission line is compatible within the zoning classifications and will not impact existing or future uses. The golf course and park are within Transfer of Development Right (TDR) easements in perpetuity ensuring long-term compatibility.
- PSE's code compliance narrative can be found in Attachment 11 to the staff report.

# Concurrence with Recommendation

PSE has read the staff analysis and recommendation and concurs with the conditions of approval.

