

# Sound Transit DRLE Alteration Of Geologic Hazard Area Public Hearing

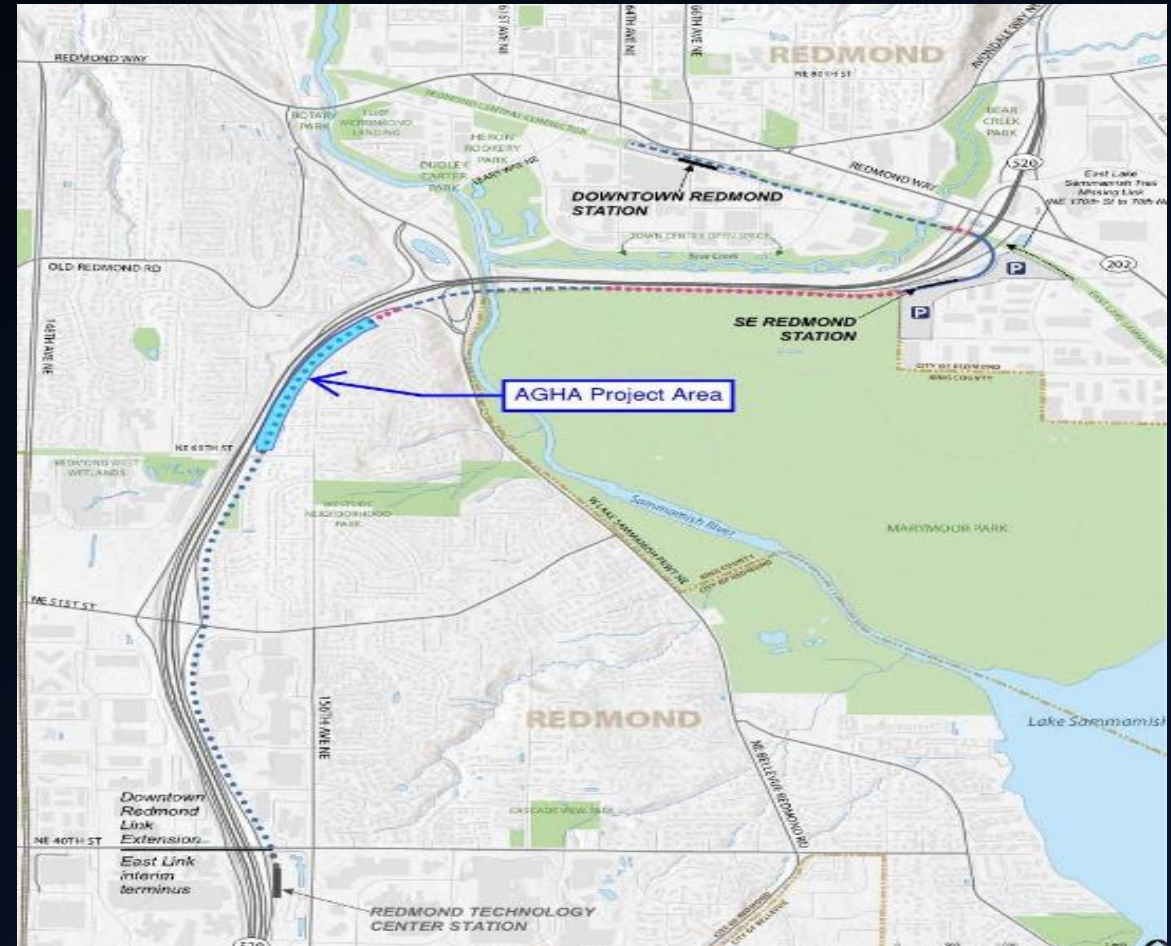
LAND2020-00470  
AUGUST 31, 2020

# Key Dates

- Submittal: April 30, 2020
- Notice of Application/Completeness: May 11, 2020
- SEPA EIS: July 2011 – Sound Transit Issued
- SEPA Addendum: June 2018
- Technical Committee Recommendation: August 5, 2020
- Notice of Hearing: August 10, 2020
- Public Hearing Date: August 31, 2020

# General Project Overview

- 3.4 Mile Extension of East Link Light Rail
- Alteration of Geologic Hazard Area
  - NE 60<sup>th</sup> ST to SR520/West Lake Sammamish
- Installation/Construction of Light Rail
  - Utilities
  - Drainage
  - Heavy Civil Systems
  - Clearing/Grading
  - Tree Removal
- Other Critical Areas
  - Low Grade Wetland
  - Unnamed Tributary To Lake Sammamish



# Public Comment

- Three Comments Received
- One Request for More Project Information
- One Comment Regarding Street Improvements
- One Request For More Information On Project Type & Hearing

# Tree Removal

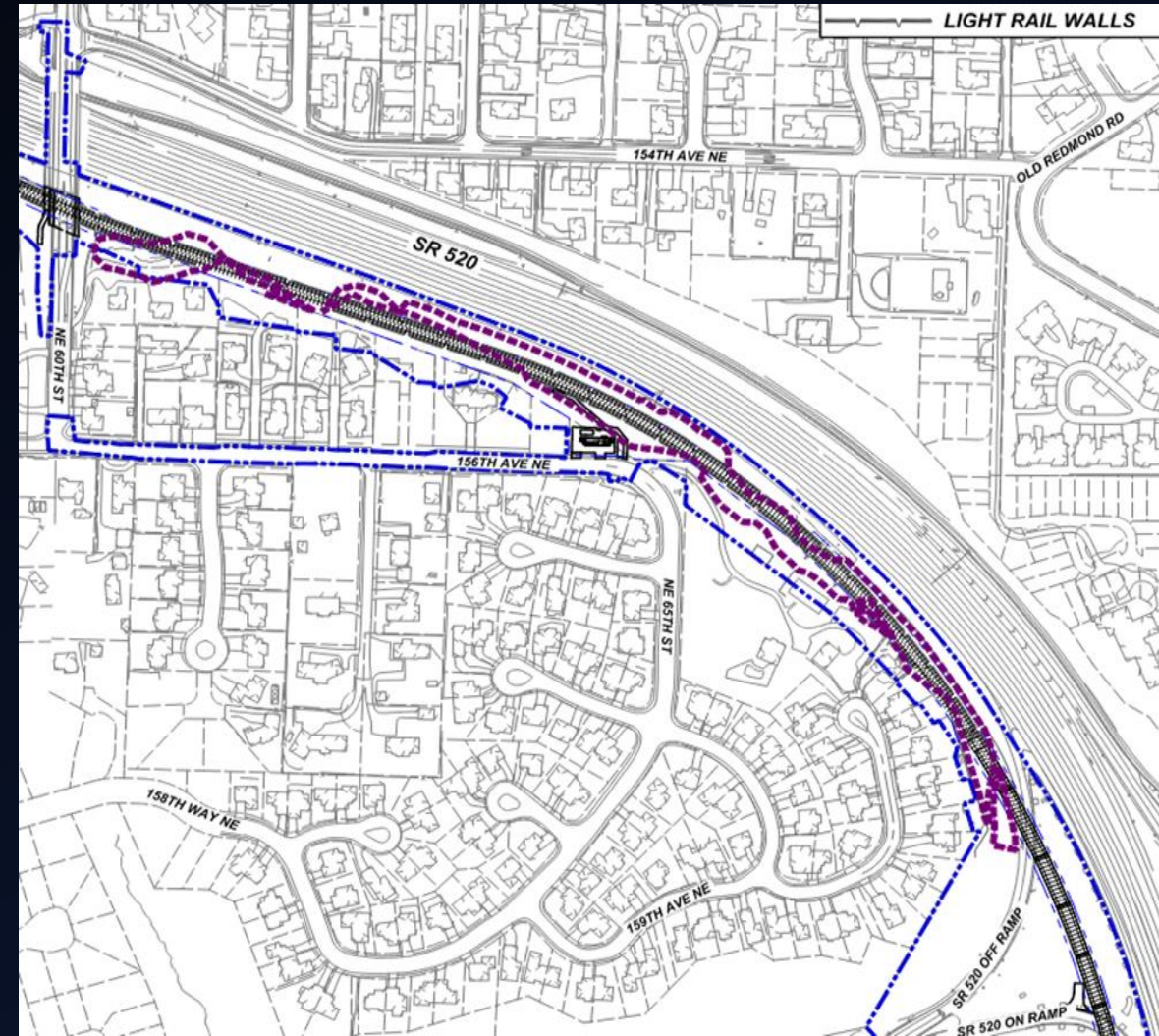
- 178 Significant Trees Identified (City of Redmond)
- 7 Landmark Trees Identified (City of Redmond)
- 40 Significant Trees proposed for removal (1:1)
- 2 Landmark Trees for removal (3:1)
- Development Agreement Covers Removal of Trees Including Landmark Trees

# Other Critical Areas On Site

- Unidentified Stream To Sammamish River
  - Intermittent Class IV Stream
  - Non-Fish Bearing
  - 515 sqft of Stream Impacts
  - 4,327 Sqft of Buffer Impacts
  - Compensation Through Keller Farm Mitigation Bank
- Wetland WRE-2
  - Low function wetland / “No special habitat features”
  - 3,207 Square feet of fill
  - Compensation Through Keller Farm Mitigation Bank
- Watershed Approach

# Geologically Hazardous Areas

- Landslide Areas / Erosion Hazard Areas / Steep Slopes
- Majority of Alignment In Landslide/Steep Slope Areas
  - Landslide risk due to combination of bedrock, soil, slope, slope aspect, structures, hydrology
- On-Site & Off-Site Impacts Same



# LANDSLIDE HAZARD AREA IMPACTS/MITIGATION EXAMPLES

Impacts	Mitigation
Temporary slope cuts being too deep and cause local minor slope instability	Project design will minimize alterations or reduce steepness of the natural contour of the slopes to the extent practical
Temporary slope cuts or grading over a large area could cause local minor slope instability or erosion	Clearing of existing vegetation or the geologically hazardous slopes will be minimized to the extent practical
Temporary open cuts/clearing during construction could cause (minor) sloughing and erosion of the slopes, especially during wet weather	Design will provide retaining wall systems to support slopes where abrupt grade changes are unavoidable due to the track alignment. Retaining walls and other structures will be designed to maintain or enhance the overall stability of the slopes, in both static and seismic conditions
Seepage from slope faces during construction could cause local minor sloughing and erosion	Design and construction methods should minimize the length and steepness of slopes with exposed soils as much as practical
Steepened slopes or large cuts could cause slope instability if not supported with earth retention systems in final configuration	Construction sequencing and methods should be selected to improve or not adversely affect overall slope stability during construction
Seismic events could cause slope instability if not supported by earth retention systems after construction.	Permanent erosion protection will be provided by reestablishing vegetation using hydroseeding and/or landscape planting. Until the permanent erosion protection is established, site monitoring will be performed by qualified personnel to evaluate the effectiveness of the erosion control measures



# Erosion Hazard Areas

- Erosion Hazard Areas
  - Classified based on soil type
- Impacts Are To Steep Slopes
- Mitigation Includes:
  - Install siltation control fencing around project work areas to protect all adjacent properties from sediment deposition and runoff
  - All exposed soils will be stabilized with an approved TESC method (e.g. seeding, mulching, plastic covering, crushed rock) within two days during wet weather months or seven days during dry months
  - Where straw mulch is required for temporary erosion control, it will be applied at a minimum 4-inch thickness
  - Provide temporary curb or drainage bypass to direct runoff away from exposed soils and slopes
  - Inspect and maintain erosion and sediment control measures frequently. Repair and/or replacement of dysfunctional erosion control elements should be completed as quickly as possible
  - Decreasing runoff velocities with check dams, straw bales, or wattles.

# Alteration Of Geologic Hazard Area Decision Criteria

- RZC 21.76.070.E.
  1. There must be no reasonable alternative to locating in a Landslide Hazard Area. Alternative locations which would avoid impact to the Landslide Hazard Area must be shown to be economically or functionally infeasible.
  2. A geotechnical evaluation must be conducted to identify the risks of damage from the proposal, both on-site and off-site, and to identify measures to eliminate or reduce risks. The proposal must not increase the risk of occurrence of the potential geologic hazard.
  3. Impacts shall be minimized by limiting the magnitude of the proposed construction to the extent possible, any impacts must be eliminated or mitigated by repairing, rehabilitating, restoring, replacing, or providing substitute resources consistent with the mitigation and performance standards set forth in RZC 21.64.010.L and M.

# Conclusion & Recommendations

- Meets applicable code sections as conditioned
- City of Redmond Recommendation: Approve W/ Conditions