Appendix R

Link Operations and Maintenance Satellite Facility Analysis

APPENDIX R – LINK OPERATIONS AND MAINTENANCE SATELLITE FACILITY ANALYSIS

As described in Chapter 2, Sound Transit plans to construct and operate a Link Operations and Maintenance Satellite Facility (OMSF) to support light rail operations and maintenance needs for the ST2 program of projects across the Sound Transit district. Sound Transit and FTA issued a separate NEPA/SEPA Draft EIS for this facility in May 2014 and are now preparing its Final EIS. The new OMSF would operate in conjunction with Sound Transit's existing Forest Street Operations and Maintenance Facility (OMF) in Seattle to support the 80 additional light rail vehicles required for ST2's expanded system.

The OMSF Draft EIS evaluated one alternative in Lynnwood and three alternatives in Bellevue (see Figure R-1):

Lynnwood Alternative—This alternative is north of I-5, west of the Lynnwood Transit Center, and east of 52nd Avenue West/Cedar Valley Road, with additional light rail storage tracks, operator report facilities, and interior cleaning functions in Bellevue north of NE 12th Street and south of SR 520.

BNSF Alternative—This alternative is located in Bellevue between the Eastside Rail Corridor on the west and 120th Avenue NE on the east, south of SR 520 and north of NE 12th Street.

BNSF Modified Alternative—This alternative would be in the same location as the BNSF Alternative, but it would construct the OMSF on both sides of the Eastside Rail Corridor west of 120th Avenue NE.

SR 520 Alternative—This alternative would be constructed south of SR 520 and north of Northup Way/NE 20th Street, east of 130th Avenue NE and west of 140th Avenue NE.

On July 24, 2014, the Sound Transit Board identified the BNSF Alternative as the Preferred Alternative for evaluation in the final EIS along with other alternatives (Motion M2014-51). A final decision on the OMSF site will be made after publication of the project's Final EIS, expected in summer 2015. Table R-1 summarizes the potential impacts of the OMSF build alternatives.

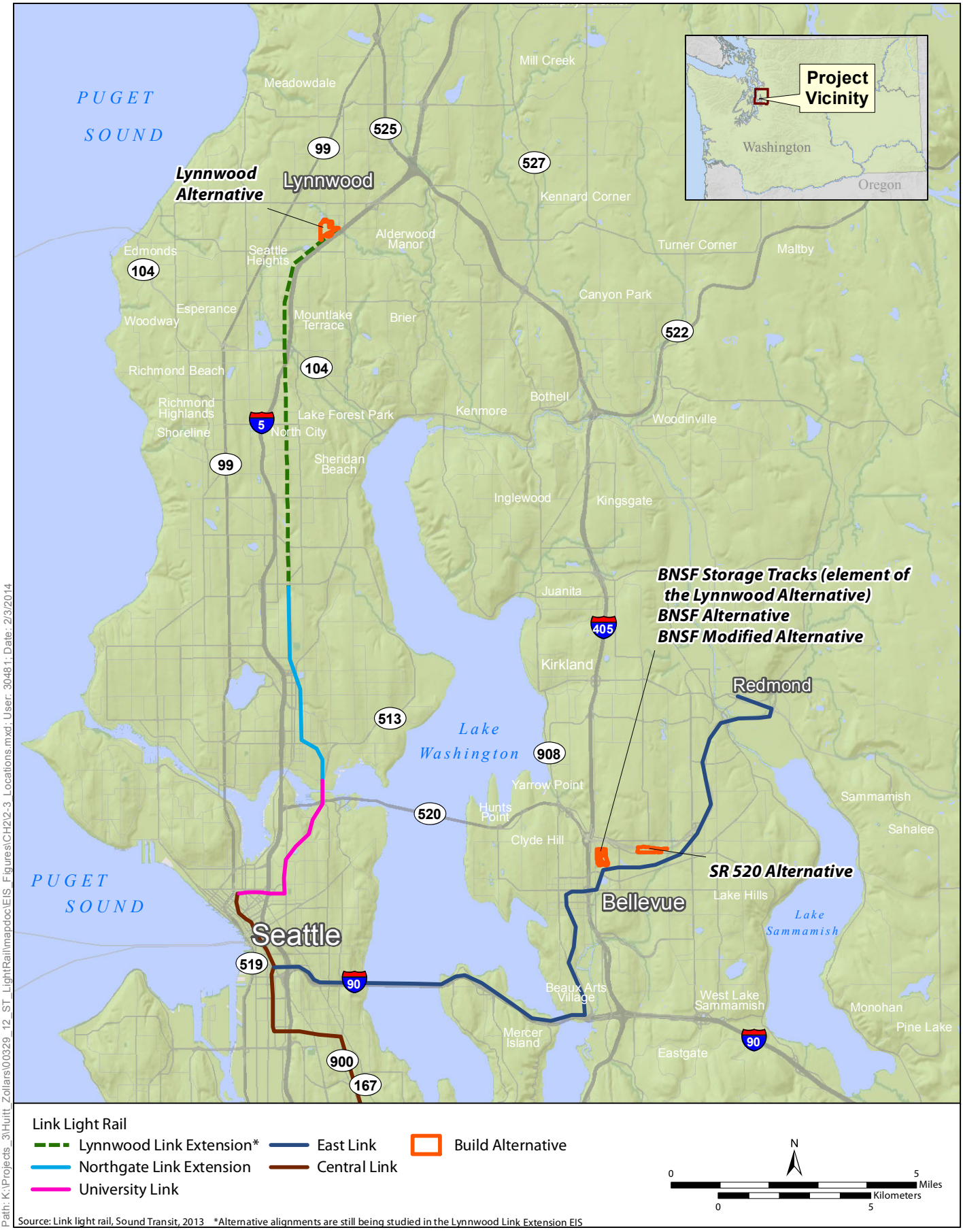

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Figure R-1
Locations of the Build Alternatives
Sound Transit Link Light Rail
OMSF Draft EIS

Table R-1. Differentiating Characteristics and Impacts of the OMSF Build Alternatives

Differentiating Characteristic	Lynnwood Alternative	BNSF Alternative	BNSF Modified Alternative	SR 520 Alternative
Operations				
Requires off-site storage tracks	Yes	No	No	No
Acquisitions, Displacements, and Relocations				
Number of parcels acquired	14–15	6	14	13
Number of existing land uses displaced	11–14	14	25	101
Land Use				
Consistent with zoning/comprehensive plan designations	No; would require comp. plan and zoning change and a conditional use permit.	No; would require a conditional use permit.	No; would require a conditional use permit.	No; would require a conditional use permit.
Surplus land available for redevelopment	9–13 acres	4 acres	8 acres	0 acres
Economics				
Loss of annual property tax revenue (2012)	$413,100–$450,400	$464,200	$572,400	$630,500
Noise and Vibration				
Affected sensitive receptors and adjacent land uses (number after mitigation)	2 homes (None)	None	None	None
Ecosystems and Water Resources				
Aquatic impacts	≤ 0.1 acre of stream buffer	0 acres of stream buffer	0 acres of stream buffer	Piping approx. 700 feet of Goff Creek and 0.64 acre of stream buffer
Vegetation and wildlife impacts (vegetation removal)	11–12 acres	3 acres	6 acres	2 acres
Wetland impacts (direct)	1.98–2.18 acres	0.07 acre	0.6 acre	0.39 acre
Wetland buffer impacts	1.79 acres	0.25 acre	1.33 acres	0.29 acre
Groundwater and stream baseflow impacts	No	No	No	Yes
Public Services				
Number of direct impacts on essential public facilities	1	0	1	0
Parkland and Open Space				
Number of temporary impacts on park resources	1	0	0	0

Link Light Rail Operations and Maintenance Satellite Facility Draft Environmental Impact Statement, May 2014

This Lynnwood Link Extension EIS analysis assumes the OMSF along with other ST2 projects as part of the No Build and all build alternatives. Even if the Lynnwood Link Extension does not go forward, Sound Transit will construct the OMSF to accommodate other elements of the ST2 Plan.

Sound Transit does not require the OMSF in order to build and operate the Lynnwood Link Extension, although the OMSF is needed to operate Lynnwood Link at the level of light rail service assumed for the ST2 program. If the OMSF is delayed or not constructed, Link operation and maintenance would occur exclusively at the Forest Street OMF. Therefore, Lynnwood Link Extension and the Link OMSF are related but have independent utility under NEPA and SEPA.

However, Lynnwood Link Extension service levels without the OMSF would be substantially lower than if the OMSF were constructed. During peak periods, the OMSF will enable four-car trains at 4-minute headways between the Lynnwood Transit Center and International District Station in Seattle. Without the OMSF, the Lynnwood Link Extension would run three-car trains and have longer peak-hour headways, reducing passenger capacity by more than 40 percent. Table R-2 compares potential effects of the Lynnwood Link Extension project with the service levels assumed in No Build and light rail alternatives as analyzed in the Lynnwood Link Extension EIS with potential impacts at reduced service levels without the OMSF.

Table R-2. Comparison of Potential Effects of Lynnwood Link Extension Without OMSF

Effect		Comparative Impacts with Reduced Capacity/No OMSF
Ridership		Reduced ridership due to reduced capacity and overcrowding.
Transportation	Number of intersections requiring mitigation	Same or fewer due to reduced ridership.
	I-5 congestion	Increased congestion.
	I-5 bridges rebuilt	Similar, project facilities would be unchanged.
	I-5 ramps relocated	Similar, project facilities would be unchanged.
	Realigned streets	Similar, project facilities would be unchanged.
	Number of parking spaces removed	Similar, project facilities would be unchanged.
Acquisitions, Displacements and Relocations		Similar, project facilities would be unchanged.
Land Use		Similar, project facilities would be unchanged.
Economics		Similar, project facilities would be unchanged.
Social Impacts, Community Facilities, and Neighborhoods		Similar, project facilities would be unchanged.
Visual and Aesthetic Resources		Similar, project facilities would be unchanged.

Table R-2. Comparison of Potential Effects of Lynnwood Link Extension Without OMSF

Effect	Comparative Impacts with Reduced Capacity/No OMSF
Air Quality and Greenhouse Gases	Predicted reduction in VMT would be less, resulting in less air quality benefit. Construction impact would be the same as project facilities would be unchanged.
Noise and Vibration	Slightly reduced due to fewer and shorter train pass-bys.
Ecosystem Resources	Similar, project facilities would be unchanged.
Water Resources	Similar, project facilities would be unchanged.
Energy	Reduction in energy consumption for travel would be less due to a smaller reduction in VMT.
Geology and Soils	Similar, project facilities would be unchanged.
Hazardous Materials	Similar, project facilities would be unchanged.
Electromagnetic Fields	Negligible reduction due to fewer train pass-bys.
Public Services, Safety and Security	Similar because project facilities would be unchanged. Fewer passengers could reduce potential for accidents.
Utilities	Similar, project facilities would be unchanged. Electricity demand to power the system would be reduced.
Cultural Resources	Similar, project facilities would be unchanged.
Parks and Recreational Resources	Similar, project facilities would be unchanged.