EAST LINK EXTENSION

2013 SEPA Addendum


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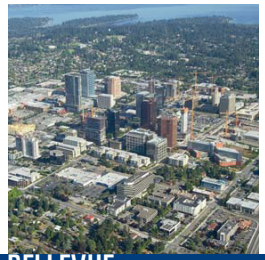
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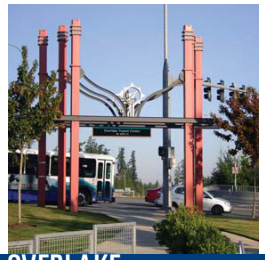
OVERLAKE


REDMOND

SOUNDTRANSIT

Washington State Department of Transportation

MARCH 2013

SOUNDTRANSIT

March 26, 2013

Dear Recipient:

The Central Puget Sound Regional Transit Authority (Sound Transit) has prepared this SEPA (State Environmental Policy Act) addendum to the Sound Transit East Link Light Rail Project Final Environmental Impact Statement (July 2011) to address potential refinements to the East Link Extension and provide new project related environmental information. The Washington State Department of Transportation (WSDOT) is a co-lead agency for the addendum.

The potential refinements are located in the following areas of the project corridor: Bellevue Way SE; 112th Avenue SE; and downtown Bellevue. Within the same area as the potential refinements along Bellevue Way SE, the City of Bellevue is considering a southbound high occupancy vehicle (HOV) lane which is also addressed in the addendum. The potential refinements include:

- Shift Bellevue Way with or without a City of Bellevue HOV lane
- 112th Road Over Rail with access options to the adjacent neighborhood
- Optimized downtown Bellevue station or move the station along NE 6th Street

In addition, this addendum also addresses new information regarding tunnel construction in downtown Bellevue, information regarding further design of pedestrian and bicycle bridges over State Route (SR) 520 at the Overlake Village Station and at the Overlake Transit Center Station, as well as a revised noise analysis along SR 520 in Redmond.

Based on the evaluation in this addendum, Sound Transit has determined that the potential refinements to the project would not substantially change the analysis of significant impacts and alternatives in the existing environmental documents, and no new probable significant environmental impacts would result.

Additional copies of this addendum are available upon request by contacting Elma Borbe, Environmental Planner, at 206-398-5445 or elma.borbe@soundtransit.org. The addendum is available as a CD, which is free of charge or a hard copy, which is $15.00.

Sincerely,

James Irish
Deputy Director
Office of Environmental Affairs and Sustainability

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2013 State Environmental Policy Act Addendum
to the
East Link Extension
Final Environmental Impact Statement (July 2011)

Prepared pursuant to the Washington State Environmental Policy Act
Chapter 43.21C RCW and WAC 197-11-625

March 2013

SOUNDTRANSIT
(Central Puget Sound Regional Transit Authority)

Washington State Department of Transportation

Executive Summary

ES.1 Introduction

The Central Puget Sound Regional Transit Authority (Sound Transit), in collaboration with the City of Bellevue (City), has developed potential design refinements for a portion of the East Link Light Rail Transit Extension (East Link Extension[1]). In July 2011, Sound Transit published the *East Link Light Rail Transit Project Final Environmental Impact Statement* (Final EIS; Sound Transit et al., 2011). The Sound Transit Board selected the project to be built, which included a tunnel in downtown Bellevue. The selected project to be built is hereafter referred to as the Selected Alternative. The Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) issued their Records of Decision (ROD) for the East Link Light Rail Project in November 2011.

On November 15, 2011, the City of Bellevue and Sound Transit executed a Memorandum of Understanding (MOU) (City of Bellevue and Sound Transit, 2011) for funding and construction of the downtown Bellevue tunnel with the commitment to review City-recommended modifications. The MOU establishes a collaborative framework for Sound Transit and the City to share the cost of a tunnel in downtown Bellevue beyond the funding planned in the Sound Transit 2 Plan (ST2). The MOU also establishes the City's funding commitment of $160 million (2010 dollars) for the tunnel, comprising an initial contribution of $100 million and a City-contingent contribution of $60 million. Within this framework, the City and Sound Transit analyzed cost-savings concepts and value-engineering ideas that could result in material project cost savings of at least $60 million, while supporting the light rail system's performance consistent with stated project and City objectives. These cost-savings concepts and value-engineering ideas are the potential refinements that are studied in this Addendum.

As part of the MOU, the City also requested design modifications be studied for potential inclusion in the project, including a) an elevated crossing of 112th Avenue SE from east to west side at approximately SE 15th Street; b) an undercrossing of SE 4th Street via a retained cut alignment; c) between Surrey Downs Park and Main Street, provide additional landscaping between the light rail alignment and the sidewalk on 112th Avenue SE; and d) closing the access to Surrey Downs Park from 112th Avenue SE and providing alternate access from SE 4th Street in order to enhance the park's neighborhood character. The MOU also committed the City to adopt a package of Land Use Code (LUC) and other technical code amendments that would provide certainty and predictability and establish comprehensive and consolidated permit processes for the project. In response, the City of Bellevue adopted, on February 25, 2013, the Light Rail Overlay District, which, among other things, allows light rail transit facilities as a permitted land use and requires landscape setbacks and separation between light rail and residences. The 60-foot separation between the light rail and existing primary residential buildings requires Sound Transit to offer to acquire properties where the residence is within 60 feet of the edge of the trackway. In addition, a 30-foot landscaped setback is required from the trackway and station perimeter where light rail is adjacent to residential properties (City of Bellevue, 2013). Changes to the project as a result of this overlay are incorporated into this addendum.

Sound Transit and the City of Bellevue collaborated to provide information about the potential design refinements and opportunities for public comment. Two reports were published for public review; the first was issued on June 28, 2012, and the second was issued on September 27, 2012, and both are available on the East Link website (www.soundtransit.org/eastlink). Between April and June, both agencies cohosted 2 open houses and 15 stakeholder briefings to inform the public of the cost-savings concepts and engage stakeholders in the decision-making process. In September and October, the agencies cohosted 3 drop-in sessions and 10 stakeholder briefings to share the *Cost Savings Work Plan Findings* (Work Plan Findings; Sound Transit, 2012), inform the public of how the cost-savings ideas advanced, and educate stakeholders about the decision-making process.

[1] "East Link Extension" is the new name for this project; in the East Link Final EIS (Sound Transit et al., 2011) and other past environmental documents, the project was called "East Link Project."

Public comments were accepted in person at the open houses, stakeholder briefings, and drop-in sessions and via postal mail and email. Summaries of public involvement are available at the East Link website.

In addition, new information concerning project elements is incorporated into this Addendum—one of which is further design of pedestrian-bicycle bridges at Overlake Village Station and the Overlake Transit Station. Sound Transit, the City of Redmond, and Microsoft are working together to develop a plan to design, construct, and operate the pedestrian-bicycle bridges. Other changes include a recent development agreement between the City, Sound Transit, and a developer that has changed a planned construction staging area for the downtown tunnel. Finally, the City of Bellevue is proposing to develop a southbound HOV lane on Bellevue Way from the 112th Avenue SE intersection to the South Bellevue Transit Center.

ES.2 Potential Refinements

The potential refinements to the Selected Alternative have been developed to reduce project costs within the City of Bellevue, while supporting light rail system performance and City objectives. The Selected Alternative and potential refinements are described in Table ES-1 and generally shown in Exhibit ES-1.

TABLE ES-1
Definition of Areas Evaluated

Geographic area	Selected Alternative	Potential Refinements
Bellevue Way SE	Rail in Trench in Front of Winters House	Shift Bellevue Way (without HOV lane or with HOV lane)
112th Ave SE	Rail At-Grade on 112th Ave	112th Road over rail • SE 4th Emergency Access Suboption (without or with Bellefield Access Variation) • SE 4th Open • Rail Under SE 4th
Downtown Bellevue	110th Downtown Tunnel	Optimized Selected Alternative Station NE 6th Station

This executive summary describes the project refinements, which are discussed in detail in Section 3 of this SEPA Addendum. Each potential refinement is depicted with exhibits illustrating the Selected Alternative and potential refinements in Section 3 (Exhibits 3-1 to 3-3). The SEPA Addendum analyzes the potential effects of the potential refinements and compares them with the Selected Alternative and with the range of alternatives evaluated in the Final EIS. This Executive Summary compares the information in the SEPA Addendum in text and tabular form below. Graphics showing images of the project, visual simulations, affected parcels and noise impacts for the Selected Alternative, Potential Refinements, and FEIS Alternatives are provided in Attachments A to F.

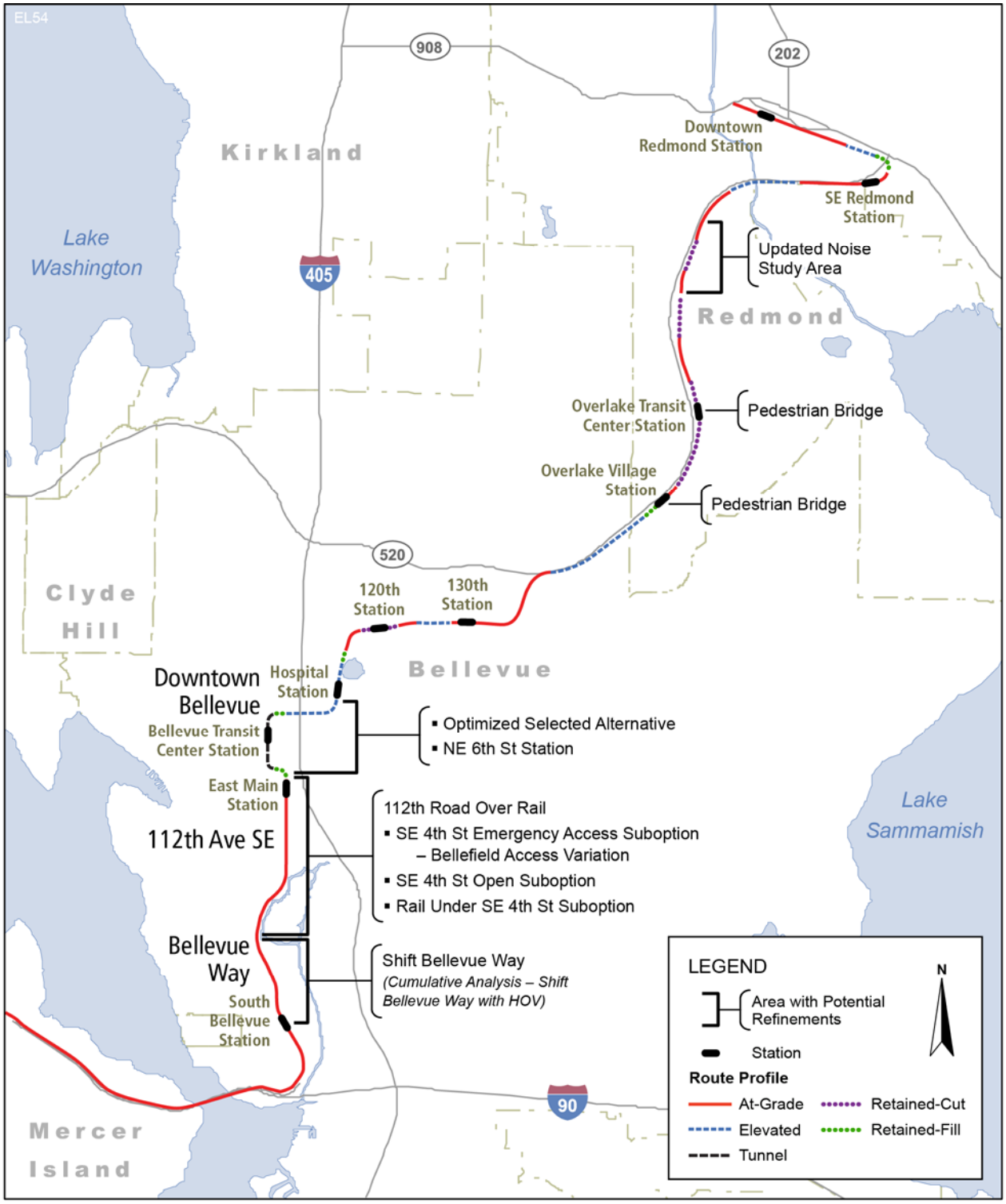

Exhibit ES-1
Selected Alternative with Potential Refinements
SEPA Addendum
East Link Extension

ES.3 Project-wide Comparison of Impacts

Table ES-2 compares impacts for the Selected Alternative, potential refinements, and Final EIS Alternatives for the full length project from Seattle to Redmond. As shown in the table, the impacts of the Selected Alternative as well as with the potential refinements are within the range of impacts for all alternatives evaluated in the Final EIS.

TABLE ES-2
Project-Wide Comparison of Selected Alternative, Potential Refinements, and Final EIS Alternatives

Environmental Resource	Impact Category	Selected Alternative	Potential Refinements[1]	Impact Range from All Alternatives in the Final EIS	
				Low Range	High Range
Transportation	Intersections not meeting local standards (after mitigation)	13 (0)	13 (0)	9 (0)	20 (0)
Property Acquisition	Business displacements	59	61-90	54	156
	Residential displacements	49	57-65	2	229
	Full/partial property acquisitions	37/115	48-57/132-143	14/84	78/236
Visual	Decrease in visual quality	No	Yes	No	Yes
Noise	Receptors: Light rail before (after mitigation)	401 (0)	391-397(0)	203 (0)	943 (0)
	Receptors: traffic before (after mitigation)	0 (0)	26 (0)	0 (0)	154 (0)
Vibration	Buildings: before (after mitigation)	6 (2)	4-14 (1)	3 (0)	11 (3)
Groundborne noise	Buildings: before (after mitigation)	27 (0)	27-28 (0)	25 (0)	36 (0)
Ecosystems (acres)	Wetland: permanent/temporary	0.8/1.1	1.0/1.0	0.3/0.6	2.6/3.6
	Wetland buffer: permanent/temporary	4.8/6.3	4.7/4.5	0.8/1.0	5.6/7.5
	High-value habitat: permanent/temporary	3.0/4.6	3.1/4.2	1.7/1.1	6.0/8.7
Parks (acres)	Permanent/temporary	5.8/7.4	5.2/8.8	1.3/2.0	6.5/13.6
Historic	Historic properties impacted	1	0	0	3

[1] Range reflects the options for the Downtown Bellevue stations and the suboptions for the 112th Road Over Rail Option and a range of potential full acquisitions that could occur with the City's Light Rail Overlay LUC amendments.

ES.4 Shift Bellevue Way Option

Table ES-3 compares the Selected Alternative and Final EIS Alternatives with the Shift Bellevue Way Option. The Shift Bellevue Way Option would have more property acquisitions, displacements, noise, habitat, and visual impacts than the Selected Alternative, but these impacts with mitigation are within the range of impacts evaluated in the Final EIS for other alternatives along Bellevue Way SE. The combined permanent and temporary impacts on Mercer Slough Park would be less compared to the Selected Alternative because the potential refinements move the project farther out of the park. Temporary impacts on wetlands and wetland buffer are less for the Shift Bellevue Way Option. Increased property and noise impacts would result from shifting Bellevue Way SE to the west compared with the Selected Alternative, but these impacts can be mitigated. The retaining walls and potential noise walls along the west side of Bellevue Way SE and removal of vegetation would potentially lower the visual quality with the Shift Bellevue Way Option. This impact is similar to other Final EIS alternatives and can be mitigated with design treatments of the wall and replanting. By shifting Bellevue Way SE west and placing the light rail in front of the Winters House, it avoids the Selected Alternative's potential for adverse impacts on the Winters House during construction, as well as the potential for groundborne noise impact during operations.

This Addendum also evaluates the cumulative effects that the City of Bellevue's proposed high-occupancy vehicle (HOV) lane would have in combination with the Shift Bellevue Way Option. The proposed HOV lane would result in slightly more property acquired from properties already affected by the Shift Bellevue Way Option, slightly greater impacts on high value habitat, and two more noise impacts, which can be mitigated. Visual impacts would be similar for the Shift Bellevue Way Option with or without the HOV lane, with both showing decreased visual quality. Traffic flow in the southbound direction would be improved but, otherwise, adding the HOV lane would result in no differences in impacts from the Shift Bellevue Way Option after mitigation.

TABLE ES-3
Comparison of Shift Bellevue Way Option Impacts

Environmental Resource	Impact Category	Selected Alternative	Potential Refinements		Impact Range from All Alternatives in the Final EIS[1]	
			Shift Bellevue Way Option	Shift Bellevue Way Option with HOV Lane[2]	Low	High
Transportation	Intersections not meeting local standards (after mitigation)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
Property Acquisition	Residential displacements	1	4	4	1	4
	Full/partial property acquisitions	1/4	3/29	3/29	1/4	4/28
Visual	Decreased Visual Quality	No	Yes	Yes	No	Yes
Noise	Receptors: Light rail before (after mitigation)	13 (0)	14 (0)	14 (0)	13 (0)	31 (0)
	Receptors: traffic before[3] (after mitigation)	0 (0)	26 (0)	28 (0)	0 (0)	31 (0)
Groundborne noise	Buildings: before (after mitigation)	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)
Ecosystems (acres)	Wetland: permanent/temporary	0.2/0.4	0.1/0.2	0.1/0.2	<0.1/0.5	0.2/0.9
	Wetland buffer: permanent/temporary	2.3/1.1	1.8/0.8	1.8/0.8	1.2/0.7	2.3/1.8
	High-value habitat: permanent/temporary	0.4/0.8	1.2/0.8	1.6/0.8	0.4/0.8	1.5/1.6
Parks (acres)	Permanent/temporary	2.3/2.8	1.3/3.4	1.3/3.4	0.3/0.4	2.2/2.7
Historic	Historic properties impacted	1	0	0	0	1

[1] Range does not include Alternative B7.

[2] This column represents the cumulative impact total of the proposed refinements with the City of Bellevue's proposed HOV lane project.

[3] Existing noise levels on Bellevue Way SE in the study area for the Shift Bellevue Way Option already affect the same 28 residences.

ES.5 112th Road Over Rail Option

Table ES-4 compares the Selected Alternative and Final EIS Alternatives with the 112th Road Over Rail Option and its three suboptions along 112th Avenue SE. All the suboptions of the 112th Road Over Rail Option would have slightly more property acquisitions, wetland, wetland buffer, and park impacts than the Selected Alternative, but these impacts are not significant and can be mitigated. The impacts of the suboptions only vary by one additional residential displacement with the Bellefield Access Variation of the SE 4th Emergency Access Suboption. Wetland and wetland buffer impacts would increase over the Selected Alternative due to the realigned SE 15th Street. Also, all suboptions equally increase property acquisition from Surrey Downs Park when compared with the Selected Alternative. Park access and parking areas within the park would be redesigned to accommodate remaining or planned uses. Consistent with the City's requests outlined in the MOU, the 112th Road Over Rail Option would "close the access to Surrey Downs Park from 112th Avenue SE and provide alternate access . . . to enhance the Park's neighborhood character." The Selected Alternative would only remove the north entrance off of 112th Avenue SE. All 112th Road Over Rail Option suboptions include possibly providing access from 111th Avenue SE north of the park and from the same roadway, 111th Avenue SE, located south of the park, or potentially from SE 4th Street. None of these impacts would be significant. While the 112th Road Over Rail Option would change the visual character, with the proposed planting and design elements it would not lower visual quality in this area.

Suboptions primarily differ in whether access from 112th Avenue SE to SE 4th Street is limited to emergency access only, right-in/right-out with an at-grade rail crossing, or open access with the light rail in retained cut under SE 4th Street. Additionally, for the Bellefield Residential Park, left turns from/to 112th Avenue SE would be allowed at the southern entrance except for with the Bellefield Access Variation of the SE 4th Emergency Access Suboption. The SE 4th Emergency Access Suboption includes a variation of the new access to the Surrey Downs neighborhood from SE 15th Street by constructing a new roadway between Bellefield Park Lane (in Bellefield Residential Park) and 111th Place SE. For all suboptions, noise impacts would be slightly less than with the Selected Alternative, primarily due to reduced impacts at the Bellefield Residential Park, where the raised 112th Avenue SE roadway would block the light rail noise. The Rail Under SE 4th Suboption would have the least noise impacts and would preserve access to SE 4th Street. The SE 4th Open Suboption would include pedestrian audible warning devices at the at-grade crossing at SE 4th Street, which would result in additional noise impacts over the other suboptions being considered. The existing vehicle level of service (LOS) along 112th Avenue SE would be maintained with each suboption.

The impacts for the 112th Road Over Rail Option would be similar in magnitude to those of the Selected Alternative, and the impacts can be mitigated. The potential impacts are within the range of impacts of the alternatives analyzed in the Final EIS.

The new City of Bellevue Light Rail Overlay District resulted in changes to the city's LUC that requires Sound Transit to offer to fully acquire up to eight additional residences along 112th Avenue SE, which are located within 60 feet of the edge of the trackway. If these residences are acquired, there is a range in potential full and partial property acquisitions in this area. In addition, a 30 foot residential landscaped setback is required from the trackway and station perimeter. The number of vibration impacts would be reduced by eight, and the eight severe noise impacts would be eliminated, but seven moderate and one severe noise impacts would result on the remaining residences behind the acquired residences.

TABLE ES-4
Comparison of 112th Road Over Rail Option Impacts

Environmental Resource	Impact Category	Selected Alternative	Potential Refinements			Impact Range from All Alternatives in the Final EIS	
			4th Emergency Access Only	4th Open Suboption	Rail Under SE 4th Suboption	Low	High
Transportation	Intersections not meeting local standards (after mitigation)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
Property Acquisition	Business displacements	6	6	6	6	0	37
	Residential displacements[1]	46	51-59	51-59	51-59	0	99
	Full/partial property acquisitions[1]	12/22	17-26/ 4-13	17-25/ 5-13	17-25/ 5-13	0/6	22/58
Visual	Decreased Visual Quality	No	No	No	No	No	Yes
Noise	Receptors: Light rail before (after mitigation)[2]	44 (0)	35-36 (0)	39 (0)	33 (0)	28 (0)	140 (0)
Vibration	Buildings: before (after mitigation)[1]	2 (0)	2-10 (0)	2-10 (0)	2-10 (0)	0 (0)	8 (0)
Ecosystems (acres)	Wetland: permanent/temporary	<0.1/0.1	0.3/0.2	0.3/0.2	0.3/0.2	0/0	0.6/0.8
	Wetland buffer: permanent[3]/temporary	1.9/1.4	1.1/2.3	1.1/2.3	1.1/2.3	<0.1/0.1	2.1/2.2
	High-value habitat: permanent/temporary	0.3/0.2	<0.1/<0.1	<0.1/<0.1	<0.1/<0.1	0/0.9	1.5/1.4
Parks (acres)	Permanent/temporary	0.5/0.5	1.0/1.0	1.0/1.0	1.0/1.0	0/0	0.6/5.9

[1] Range reflects a range of potential full acquisitions that could occur with the City's Light Rail Overlay LUC amendments.

[2] With the Bellefield Access Variation, there would be one additional property acquisition that lowers the noise impacts by one.

[3] The permanent impact includes a credit for removing impervious surface associated with the SE 15th Street modification within the wetland buffer of 0.7 acre.

ES.6 Bellevue Transit Center Station Options

Table ES-5 compares the Selected Alternative and Final EIS Alternatives to two potential refinements: an Optimized Selected Alternative, which moves the north tunnel station entrance west of 110th Avenue NE closer to the Bellevue Transit Center, and the NE 6th Street Station Option, which moves the station from underground to at-grade with station entrances east of 110th Avenue NE and west of 112th Avenue NE, and which slightly reduces access to downtown. The light rail alignment is also shifted to the south of NE 6th Street east of the station. Table ES-5 shows that the NE 6th Street Station Option would have more business displacements but reduced noise and vibration impacts compared with Selected Alternative. With mitigation, the impacts of these changes are not significant. The Optimized Selected Alternative Station Option would not result in changes in impacts from the Selected Alternative, except that it would remove a left-hand turn pocket, which may alter one local bus route.

The NE 6th Station Option would avoid vibration impacts on the Coast Bellevue Hotel, and it would result in the 36 moderate noise impacts at the Coast Hotel; the Optimized Selected Alternative Station Option would result in a vibration impact and 36 severe noise impacts at the Coast Hotel. Both options would also have additional groundborne noise impacts at two multifamily residential buildings, which would occur due to the shallower tunnel. The NE 6th Station Option would eliminate the groundborne noise impact at Meydenbauer Center associated with the Selected Alternative and the Optimized Selected Alternative Station Option. These changes in impacts are within the range of impacts of other alternatives evaluated in the Final EIS, and these impacts can be mitigated, with the exception of the groundborne noise impact at Meydenbauer Center. For the NE 6th Station Option, the realignment across I-405 would acquire a similar number of properties but would displace 29 additional businesses located in two buildings, one of which holds 28 of the businesses. These 28 businesses are located in the Lincoln Center just east of I-405, which is owned by the City of Bellevue.

In addition to the Bellevue Transit Center Station Options, revisions are proposed to the tunnel construction methods and staging areas along 110th Avenue NE for all alternatives. One tunnel staging area has been revised to avoid a new hotel development resulting in acquisition of two smaller adjacent properties (displacing two businesses) and an increase in the use of the Pocket Parks during construction. Construction may close 110th Avenue NE between NE 2nd and NE 6th Streets except for local access, which was also considered under the Selected Alternative. The sequential excavation method (SEM) for tunneling is also being considered for the NE 6th Street Station Option and would reduce construction impacts on the surface by mining the tunnel from portal(s) rather than excavating from the street.

TABLE ES-5
Comparison of Bellevue Transit Center Option Impacts

Environmental Resource	Impact Category	Selected Alternative	Potential Refinements		Impact Range from All Alternatives in the Final EIS	
			Optimized Selected Alternative Option	NE 6th Station Options	Low	High
Transportation	Intersections not meeting local standards (after mitigation)	1 (0)	1 (0)	0 (0)	0 (0)	4 (0)
Property Acquisition	Business displacements	8	8	37	5	25
	Full/partial property acquisitions	6/14	4/14	7/11	2/9	15/27
Noise	Receptors: Light rail before (after mitigation)	84 (0)	84 (0)	84 (0)	26(0)	469 (0)
Vibration	Buildings: before (after mitigation)	1 (1)	1 (1)	0 (0)	0 (0)	6 (1)
Groundborne noise	Buildings: before (after mitigation)	1 (0)	3 (0)	2 (0)	0 (0)	1 (0)
Parks (acres)	Permanent/temporary	0.1/0.6	0.1/0.6	< 0.1/0.6	0/0	0.9/1.8

ES.7 New Information

ES.7.1 Pedestrian-Bicycle Bridges

Proposed pedestrian-bicycle bridges over State Route (SR) 520 are addressed in the Final EIS and would be constructed in partnership with the City of Redmond and Microsoft. Additional design information now shows that the pedestrian-bicycle bridges at the Overlake Village Station and the Overlake Transit Center Station would result in a total of five new partial acquisitions. A temporary detour or closure of the SR 520 multiuse pathway would be necessary during construction to lower the trail by 5 feet under the proposed pedestrian-bicycle bridges.

ES.7.2 Revised Noise Analysis

The revised noise analysis addresses new residential construction and the need to remove and replace existing traffic noise walls. The analysis identified 34 to 41 additional noise impacts adjacent to SR 520 north of the Overlake Transit Center for all alternatives in this portion of the project. These impacts would be in addition to impacts already identified for Final EIS Segment E alternatives, which range from 33 to 167 moderate impacts and 32 to 150 severe impacts. These additional impacts added to the project-wide Selected Alternative would not exceed the total range of project-wide noise impacts reported in the Final EIS; all of these noise impacts could be mitigated. The noise analysis is located in Segment E, the construction of which is not currently funded within ST2; however, the Sound Transit Board did select the alternative to be built for this project area, which is Alternative E2 in the Final EIS.

ES.8 Conclusions

Changes in impacts from the potential changes and design refinements are of similar magnitude to the impacts identified for the Selected Alternative and other alternatives evaluated in the Final EIS and would not result in different conclusion with regard to the significance of the impacts. Impacts from the potential refinements would be within the range of impacts evaluated in the Final EIS and can be mitigated. The potential refinements do not substantially change the analysis of significant impacts evaluated in the Final EIS and no new probable significant environmental impacts would arise.

After considering this addendum, the Sound Transit Board is expected to decide in spring of 2013 whether to revise the project to include any of the potential design refinements in the Selected Alternative design.

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Acronyms and Abbreviations

CFR	Code of Federal Regulations
City	City of Bellevue
dBA	A-weighted noise measurement scale
East Link Extension	East Link Light Rail Transit Extension
FHWA	Federal Highway Administration
Final EIS	East Link Light Rail Transit Project Final Environmental Impact Statement
FTA	Federal Transit Administration
HOV	high-occupancy vehicle
I-90	Interstate 90
Leq	continuous noise level
Lmax	maximum sound level
LOS	level of service
LUC	land use code
MOU	Memorandum of Understanding
NRHP	National Register of Historic Places
RCO	Recreation and Conservation Office
ROD	Record of Decision
SEM	sequential excavation method
SEPA	State Environmental Policy Act
SHPO	Washington State Historic Preservation Office
Sound Transit	Central Puget Sound Regional Transit Authority
SR	State Route
ST2	Sound Transit 2 Plan
TPSS	traction power substation
Work Plan Findings	Cost Savings Work Plan Findings

SECTION 1

Purpose of this Addendum

The Central Puget Sound Regional Transit Authority (Sound Transit), in collaboration with the City of Bellevue (City), has developed design refinements for a portion of the East Link Light Rail Transit Extension (East Link Extension[2]), which is extending light rail from downtown Seattle to Redmond. The potential refinements have been developed to improve the project and reduce project costs within the City of Bellevue. The potential refinements were determined through a formal collaborative design process with the City of Bellevue. Developing refinements are a normal part of final design and engineering, and these refinements are consistent with that process. The refinements are located in the following areas of the project corridor: Bellevue Way SE; 112th Avenue SE; and downtown Bellevue. Within the same area as the potential refinements along Bellevue Way SE, the City of Bellevue is also considering a southbound high-occupancy vehicle (HOV) lane. The City's proposal is evaluated as a new foreseeable future project in the update to the cumulative impacts assessment. This addendum also addresses new information regarding construction in downtown Bellevue.

Additional information has also been included regarding further design of pedestrian-bicycle bridges over State Route (SR) 520 at the Overlake Village Station and at the Overlake Transit Center Station, as well as a revised noise analysis along SR 520 in Redmond.

This Washington State Environmental Policy Act (SEPA) Addendum to the *East Link Light Rail Transit Project Final Environmental Impact Statement* (Final EIS; Sound Transit et al., 2011) addresses potential refinements to the project and provides new project-related environmental information. Sound Transit has prepared this addendum in order to provide an updated description of the potential refinements to the Selected Alternative in the course of final design and to evaluate how these potential refinements affect the impact analyses contained in the Final EIS.

1.1 Findings

Changes in impacts from design refinements are of similar magnitude to the impacts identified for the Selected Alternative and are within the range of impacts of other alternatives evaluated in the Final EIS and can be mitigated; none result in different conclusions with regard to the significance of the impacts. The potential refinements and new information would not substantially change the analysis of significant impacts presented in the Final EIS.

1.2 Next Steps

After considering this addendum, the Sound Transit Board is expected to decide in spring of 2013 whether to revise the project to include any of the potential design refinements in the Selected Alternative design.

[2] "East Link Extension" is the new name for this project; in the East Link Final EIS (Sound Transit et al, 2011) and other past environmental documents, the project was called "East Link Project."

SECTION 2

Project Background

The East Link Extension is Sound Transit's voter-approved project of approximately 18 miles of light rail that will extend Sound Transit's current light rail transit system from Seattle, across Lake Washington via Interstate 90 (I-90), to serve Mercer Island, Bellevue, and downtown Redmond. The East Link Extension will connect the Eastside's biggest population and employment centers, serving 50,000 daily riders by 2030.

After a 5-year environmental review process, Sound Transit published the Final EIS in July 2011. Subsequently, the Sound Transit Board selected the project to be built, which included a tunnel in downtown Bellevue. The project to be built is hereafter referred to as the "Selected Alternative." The Sound Transit 2 Plan (ST2) was a voter-approved ballot measure that includes funds for designing, constructing, and operating the segment from Seattle to the Overlake Transit Center in Redmond. For the portion from the Overlake Transit Center to downtown Redmond, ST2 includes environmental review but not construction.

In November 2011, the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) issued their respective RODs, which allowed the project to move forward into final design. Also, on November 15, 2011, the City of Bellevue and Sound Transit executed a Memorandum of Understanding (MOU) (City of Bellevue and Sound Transit, 2011) for funding and construction of the downtown Bellevue tunnel with the commitment to review City-recommended modifications to the 112th Avenue SE corridor. The MOU establishes a collaborative framework for Sound Transit and the City to share the cost of a tunnel in downtown Bellevue beyond the funding planned in ST2. The MOU also establishes the City's funding commitment of $160 million (2010 dollars) for the tunnel comprising an initial contribution of $100 million and a City-contingent contribution of $60 million. The MOU specifies that project cost reductions from value engineering, design advancement, and scope modifications, as well as from any other changes within the City of Bellevue count towards reducing the City-contingent contribution (provided that such reductions do not result in deferral of stations or park-and-ride lots or deferral or complete elimination of other project elements that have a direct negative project impact on ridership or operations and maintenance).

As part of the MOU, the City also requested design modifications be studied for inclusion in the project, including a) an elevated crossing of 112th Avenue SE from the east to west side at approximately SE 15th Street; b) an undercrossing of SE 4th Street via a retained cut; c) between Surrey Downs Park and Main Street, provide additional landscaping between the light rail alignment and the sidewalk on 112th Avenue SE; and d) closing the access to Surrey Downs Park from 112th Avenue SE and providing alternate access from SE 4th Street in order to enhance the park's neighborhood character. The MOU also committed the City to adopt a package of Land Use Code (LUC) and other technical code amendments that would provide certainty and predictability and establish comprehensive and consolidated permit processes for the project. In response, the City of Bellevue adopted, on February 25, 2013, the Light Rail Overlay District, which, among other things, allows light rail transit facilities as a permitted land use and requires landscape setbacks and separation between light rail and residences. The 60-foot separation between the light rail and residential buildings requires Sound Transit to offer to acquire properties where the residence is within the 60 feet of the edge of the trackway. In addition, a 30-foot landscaped setback is required from the trackway and station perimeter where light rail is adjacent to residential properties (City of Bellevue, 2013). Changes to the project as a result of this overlay are incorporated into this addendum.

Within this framework, the City and Sound Transit analyzed cost-savings concepts and value-engineering ideas that could result in material project cost savings of at least $60 million, while supporting the light rail system's performance consistent with stated project and City objectives. These cost-savings concepts and value-engineering ideas are the potential refinements that are studied in this addendum.

Sound Transit and the City of Bellevue collaborated to provide information about the cost-savings options and opportunities for public comment. Two reports were published for public review; the first was issued on June 28, 2012, and the second was issued on September 27, 2012, and both are available on the East Link website (www.soundtransit.org/eastlink). Between April and June, both agencies cohosted 2 open houses and

15 stakeholder briefings to inform the public of the cost-savings concepts and engage stakeholders in the decision-making process. In September and October, the agencies cohosted 3 drop-in sessions and 10 stakeholder briefings to share the *Cost Savings Work Plan Findings* (Work Plan Findings; Sound Transit, 2012), inform the public of how the cost savings ideas advanced, and educate stakeholders about the decision-making process. Public comments were accepted in-person at the open houses, stakeholder briefings, and drop-in sessions and via postal mail and email. Summaries of public involvement are available at the East Link website.

In addition, new information concerning project elements is incorporated in this addendum—one of which is further design of pedestrian-bicycle bridges at Overlake Village Station and the Overlake Transit Station. Sound Transit, City of Redmond, and Microsoft are working together to develop a plan to design, construct, and operate the pedestrian-bicycle bridges. Other changes include a current development proposal that has changed a planned staging area for the Bellevue Transit Center Station and proposed changes in construction methods. Also, since publication of the Final EIS, an additional noise study was conducted for Segment E near SR 520 in order to address potential impacts related to the following: 1) construction would require the removal and replacement of some or all of the sound walls on the east side of SR 520 between NE 51st Street and NE 65th Street; 2) on the west side of SR 520, upper floors of homes behind sound walls are visible and could be affected by noise; and 3) new residences were constructed on the west side of SR 520 along 156th Place NE and on the east side of SR 520 along 156th Avenue NE, which could be affected. Finally, the City of Bellevue is proposing to develop a southbound high-occupancy vehicle (HOV) lane on Bellevue Way from the 112th Avenue SE intersection to the South Bellevue Transit Center.

SECTION 3

Description of Potential Refinements and New Information

Since the 2011 Final EIS and RODs were issued, potential refinements have been developed to the Selected Alternative alignment, profile, and station locations in Bellevue. The purpose of the potential refinements is to reduce overall project costs within the City of Bellevue, while supporting the light rail system's performance with respect to project and city objectives, as studied in the Work Plan Findings (Sound Transit, 2012a) and as initially reviewed in the Draft Cost Savings Report (Sound Transit, 2012b).

Conceptual maps comparing the Selected Alternative with the potential refinements are shown in Exhibits 3-1 through 3-3. Graphic depictions of the potential refinements are provided in Attachment A. Conceptual design drawings for the potential refinements are provided in Attachment B for Bellevue Way SE, 112th Avenue SE, and Downtown Bellevue and lists of potentially affected properties are provided in Attachment C and visual simulations of the potential refinements are provided in Attachment D. In addition, changes in the existing conditions related to the NE 2nd Place staging area in downtown Bellevue are discussed. New design information available is also provided for pedestrian-bicycle bridges near the Overlake Village Station and the Overlake Transit Center and an updated noise assessment along SR 520 in Redmond.

3.1 Selected Alternative within the City of Bellevue

The Selected Alternative, as adopted by the Sound Transit Board and described in the FTA and FHWA RODs, is the 112th SE Modified (B2M) and 110th NE Tunnel (C9T) alternatives in the Final EIS and illustrated in Attachment A, Exhibits A-1 through A-3. The Selected Alternative begins elevated in the I-90 center roadway, crosses over westbound I-90, and continues elevated on the east side of Bellevue Way SE to the South Bellevue Station and South Bellevue Park-and-Ride. After leaving the station, the route transitions to a retained cut on the east side of Bellevue Way within Mercer Slough Nature Park to the intersection of Bellevue Way SE and 112th Avenue SE. In front of the Winters House, the route is in a lidded retained cut approximately 170 feet long. Vehicle and pedestrian access point for the blueberry farm would be permanently relocated to the north at a joint access with the Winters House. During construction, Blueberry Farm retail use would be relocated and operations would be maintained.

The Selected Alternative transitions from retained cut to at-grade on the east side of 112th Avenue SE until SE 6th Street, then crosses at-grade to the west side of 112th Avenue SE before turning west at Main Street to enter the tunnel portal on Main Street. The at-grade light rail requires realigning SE 4th Street through Surrey Downs Park to connect to 112th Avenue SE farther south, forming a four-way intersection at SE 6th Street. The East Main Station is an at-grade station just south of the intersection of 112th Avenue SE and Main Street on the west side of 112th Avenue SE. Crossing gates and audible warning devices are located at the SE 6th Street, SE 8th Street, SE 15th Street, and East Main Station at-grade crossings.

From the tunnel portal on Main Street, the Selected Alternative continues on the south side of Main Street before turning north under 110th Avenue NE. The Selected Alternative includes the underground Bellevue Transit Center Station at NE 4th Street, with a north entrance on the east side of 110th Avenue NE in the Bellevue City Hall Plaza and the south entrance on the west side of 110th Avenue NE next to the northwest corner of the NE 2nd Pocket Park. This station has a design option to locate the northern entrance on the southwest corner of 110th Avenue NE and NE 6th Street, in the City Center building plaza. From this station, the Selected Alternative continues north to NE 6th Street, where it turns east and transitions to an elevated profile in the center of NE 6th Street and then swings to the north side of NE 6th Street to cross 112th Avenue NE, I-405, and 116th Avenue NE. The Selected Alternative then turns north along the former BNSF Railway corridor to cross NE 8th Street and reach the elevated Hospital Station; it then connects with Segment D from the former BNSF Railway corridor. There are two traction power substation (TPSS) for the Selected Alternative between I-90 and Main Street—one located south of

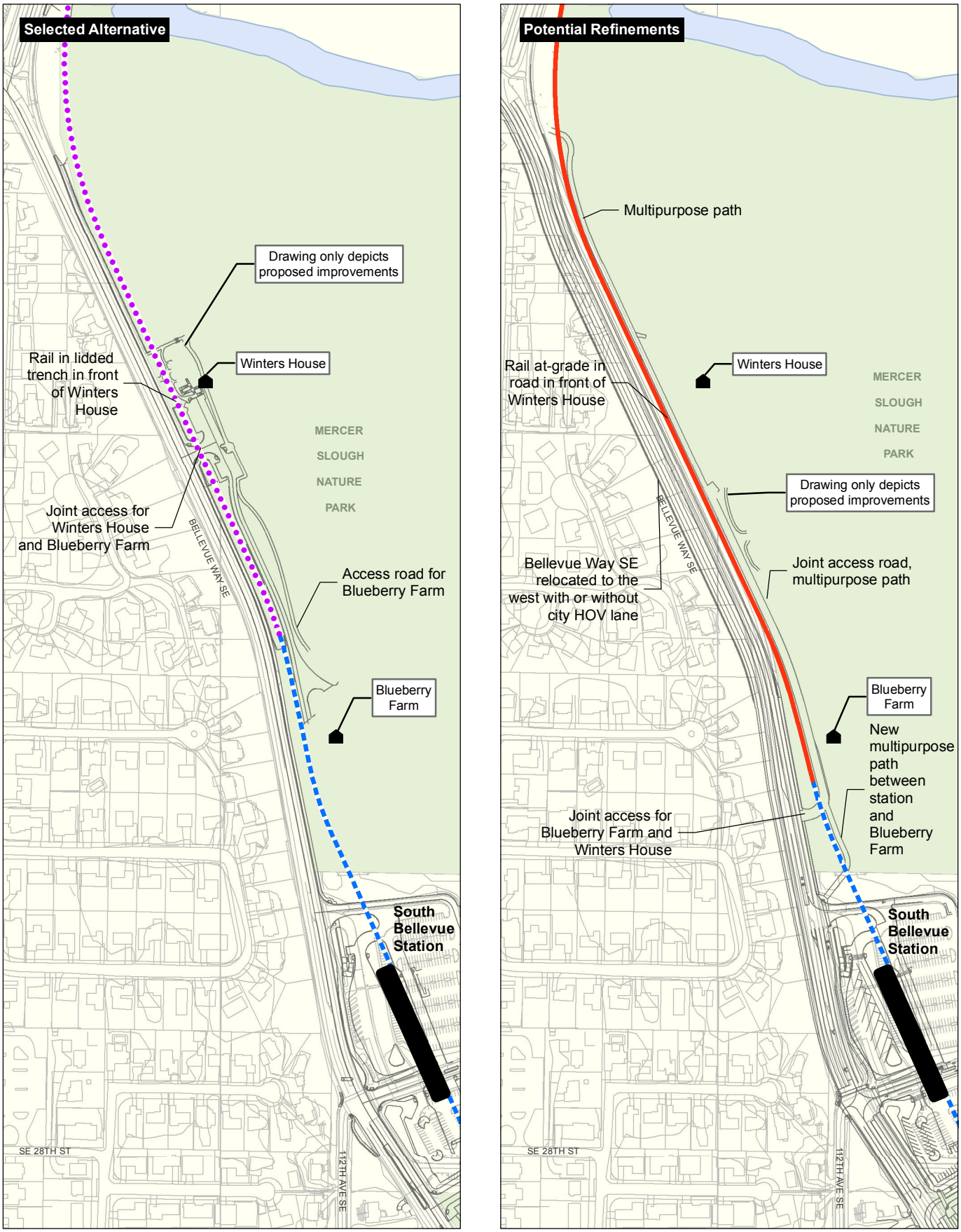


Exhibit 3-1
Selected Alternative and Shift Bellevue Way Option
SEPA Addendum
East Link Extension

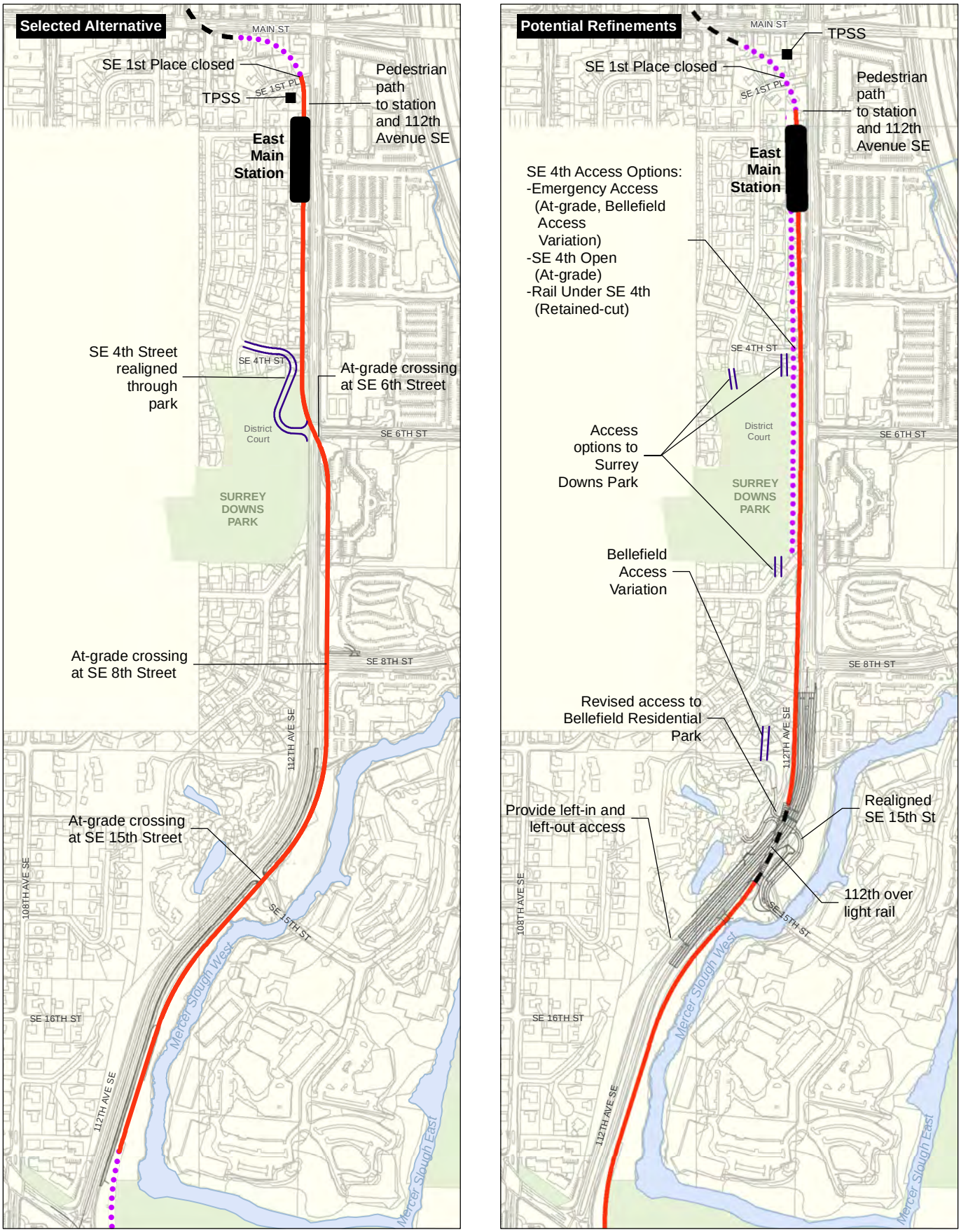
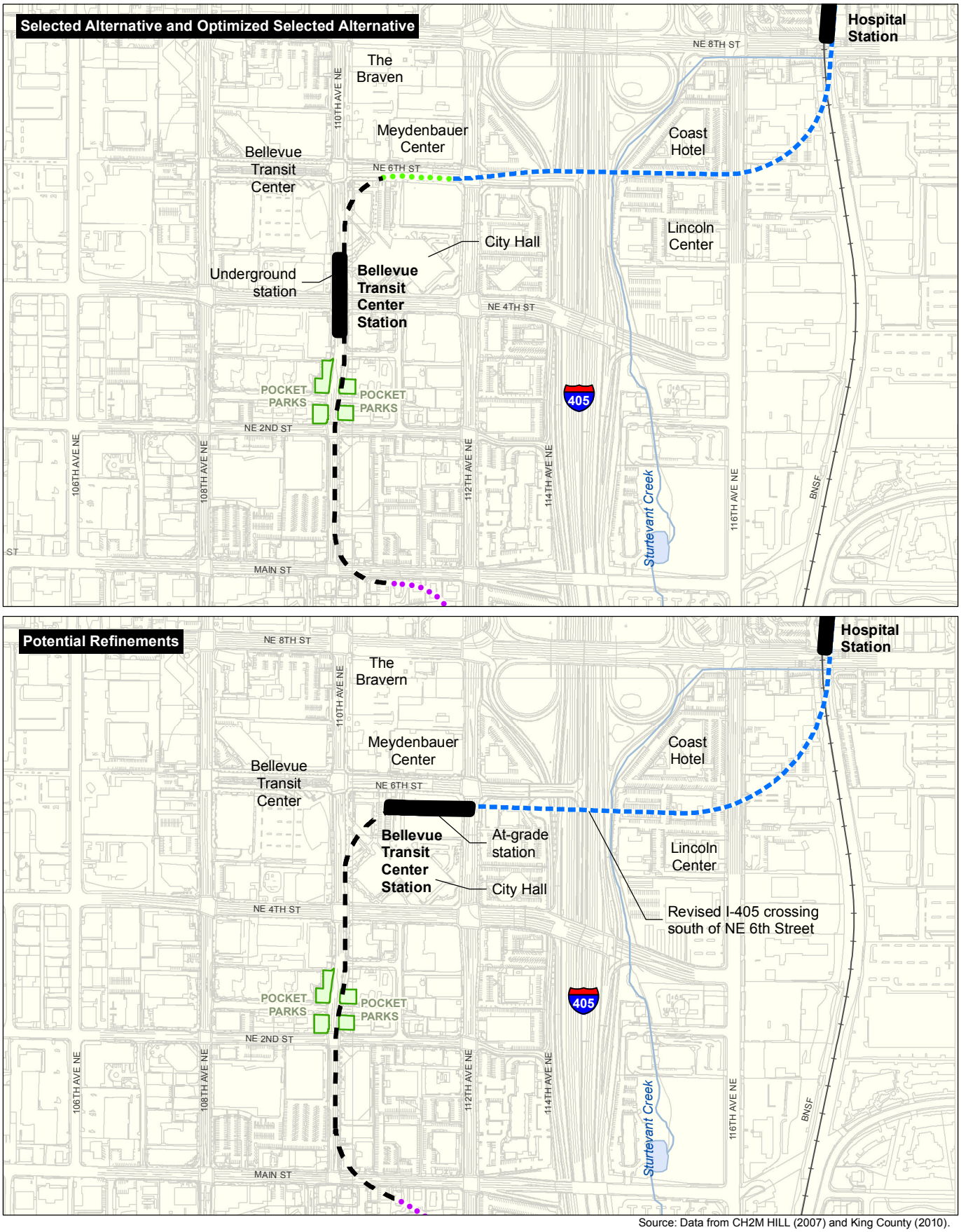


Exhibit 3-2
Selected Alternative and 112th Road Over Rail Options
SEPA Addendum
East Link Extension



Source: Data from CH2M HILL (2007) and King County (2010).

At-Grade Route
Elevated Route
Retained-Cut Route
Retained-Fill Route
Tunnel Route
Station

N

0 0.125 Mile

Exhibit 3-3
Selected Alternative and Bellevue Transit Center Station Options
SEPA Addendum
East Link Extension

the South Bellevue Station and the other located near the intersection of Main Street and 112th Avenue SE on the east side of the proposed guideway. Because the East Main Station is located at-grade, it requires crossing gates, visual signals, and an audible warning device, such as a bell, for pedestrians crossing the rail.

3.2 Potential Refinements within the City of Bellevue

3.2.1 Shift Bellevue Way Option

Along Bellevue Way SE, the potential refinement brings the light rail to at-grade on the east side of Bellevue Way SE and shifts Bellevue Way SE to the west; therefore, it is referred to as the Shift Bellevue Way Option.

The shift west begins north of the elevated South Bellevue Station (location unchanged from Final EIS) and continues to 112th Avenue SE. Graphic depictions of this potential refinement can be found in Attachment A, Exhibits A-4 through A-7. Retaining walls would be required along the west side of Bellevue Way SE where the road would be shifted west. In front of the Winters House, the alignment is at-grade within the existing road right-of-way, eliminating the lidded retained cut in the Selected Alternative. The project would still combine vehicular access to the Winters House, the Blueberry Farm, and Mercer Slough Nature Park into one access road, except the access road for these uses would be located south of the current Blueberry Farm driveway. A multipurpose path is also included.

The City of Bellevue is also considering a southbound HOV lane on Bellevue Way SE between 112th Avenue SE and the main entrance of the South Bellevue Park-and-Ride, as depicted in Exhibit A-6 of Attachment A. This lane would be located in the middle of the road between the existing southbound and northbound lanes and could be constructed at the same time as the East Link Extension if the Shift Bellevue Way Option were selected. The City's HOV project has independent utility and is undergoing its own environmental review under SEPA; however, this project is included in the cumulative impact analysis of this addendum because it is a future project currently under consideration by the City that could be constructed at the same time as East Link. A decision whether to construct the HOV project has not yet been made by the City and is expected in spring 2013. Potential impacts associated with the Shift Bellevue Way Option together with the HOV project are documented in Section 4 of the Addendum.

3.2.2 112th Road Over Rail Option

The 112th Road Over Rail Option transitions from the east side of 112th Avenue SE to the west near SE 15th Street, with the 112th Avenue SE roadway raised over the light rail tracks. This refinement replaces the recommendation made by the City of Bellevue in the MOU, which was considered and is not carried forward for further consideration.

Graphic depictions of this potential refinement are shown in Attachment A, Exhibits A-8 to A-10. SE 15th Street access to Bellefield Office Park and Bellefield Residential Park would be realigned to move north and changed to right-in/right-out only. The 112th Road Over Rail Option keeps the light rail alignment on the west side of the road to the East Main Station, located south of Main Street. Because the East Main Station is located at-grade for all access suboptions, it requires pedestrian crossings at the rail and associated safety features such as crossing gates and visual and audible warning devices.

Following are the three 112th Road Over Rail suboptions:

1. **SE 4th Emergency Access Suboption:** The light rail crosses SE 4th Street at-grade. The street would be closed, except for emergency vehicle access. This access suboption also has a design variation—the Bellefield Access Variation—to build a new access to the Surrey Downs neighborhood from SE 15th Street by constructing a new roadway between Bellefield Park Lane (in Bellefield Residential Park) and 111th Place SE. Also, left turns from and/or to 112th Avenue SE would be allowed at the southern entrance of the Bellefield Residential Park, except with the Bellefield Access Variation.
2. **SE 4th Open Suboption:** This suboption allows access at the at-grade light rail crossing of SE 4th Street, and this intersection includes crossing gates, flashing light signals, and pedestrian audible warning devices. Left

turns would be prohibited to and from SE 4th Street at 112th Ave SE. A U-turn in the vicinity of Main Street and 112th Avenue would be provided for vehicles approaching from the south to facilitate entry into the Surrey Downs neighborhood. SE 4th would become right-in, right-out only. Left turns at the southern entrance to Bellefield Residential Park would be included.

3. **Rail Under SE 4th Suboption:** This suboption follows the same alignment along the west side of 112th Avenue SE but lowers the light rail guideway into a retained cut beginning at Surrey Downs Park and crossing under SE 4th Street. The intersection with 112th Avenue SE would allow all traffic movement as it does today. The profile rises to at-grade near the East Main Station. Left turns at the southern entrance to Bellefield Residential Park would be included.

All suboptions along 112th Avenue SE include a modified vehicular access to Surrey Downs Park. Park access and parking areas within the park would be redesigned to accommodate remaining or planned uses. Consistent with the City's requests outlined in the MOU, the 112th Road Over Rail Option would "close the access to Surrey Downs Park from 112th Avenue SE and provide alternate access . . . to enhance the Park's neighborhood character." All 112th Road Over Rail Option suboptions include possibly providing access from 111th Avenue SE north of the park and from the same roadway, 111th Avenue SE, located south of the park, or potentially from SE 4th Street for the SE 4th Emergency Access Only Suboption.

A pedestrian crossing from the station platform over 112th Avenue SE would be provided at the East Main Station to connect with a proposed kiss-and-ride located on the east side of the street. The pedestrian crossing would include a pedestrian-activated signal. After the East Main Station, the alignment turns west on the south side of Main Street and enters a tunnel under 110th Avenue NE, matching the Selected Alternative. The TPSS located north of East Main Station and west of the tracks is proposed to be relocated on the east side of the tracks.

3.2.2.1 Light Rail Overlay District

The Light Rail Overlay District adopted by the City of Bellevue on February 25, 2013, incorporates light rail transit into the City of Bellevue's LUC and requires landscape setbacks and separation between light rail and residences. The 60-foot separation between the light rail and existing primary residential buildings requires Sound Transit to offer to acquire properties where the residence is within 60 feet of the edge of the trackway. In addition, a 30-foot landscaped setback is required from the trackway and station perimeter where the light rail is adjacent to residential properties (City of Bellevue, 2013). Changes to the project as a result of this overlay predominantly affect the area along 112th Avenue SE; as a result, the LUC changes are incorporated into the evaluation of the Selected Alternative and the 112th Road Over Rail Option.

3.2.3 Bellevue Transit Center Station Options

Following are the two options for revisions to the Bellevue Transit Center Station:

- **Optimized Selected Alternative Station Option:** This option for the Bellevue Transit Center Station includes optimizing the Selected Alternative's station design below grade and raising the elevation of the tunnel. The only above-grade change shifts the northern entrance of the station from the City Center property on the southwest corner of 110th Avenue NE and NE 6th Street to the far west lane of the 110th Avenue NE. The roadway would be reconfigured to remove the northbound left-hand turn lane into the transit center and would maintain two through lanes in each direction. A graphic depiction image of this potential refinement can be found in Attachment A, Exhibit A-12.
- **NE 6th Station Option:** This option for the Bellevue Transit Center Station moves the station from within the tunnel under 110th Avenue NE to an at-grade station on the south side of NE 6th Street, between 110th and 112th Avenues NE and raises the tunnel. The station has entrances on the east side of 110th Avenue NE and a second station entrance on the west side of 112th Avenue NE. After exiting the Bellevue Transit Center Station, the alignment crosses I-405 on the south side of NE 6th Street (the Selected Alternative crosses I-405 on the north side) and connects with the Selected Alternative alignment at the Hospital Station. Graphic depictions of this potential refinement are shown in Attachment A, Exhibits A-13 and A-14.

3.2.3.1 Downtown Bellevue Construction

A proposed hotel at the northeast corner of 110th Avenue NE and NE 2nd Place will occupy a construction staging area that was identified in the Final EIS for the Selected Alternative and is therefore no longer available. A revised staging area has been developed that would include all four Pocket Parks at the intersection of 110th Avenue NE and NE 2nd Place, as well as two parcels east of the southeast Pocket Park (between 110th and 111th Avenues NE). In cooperation with the City of Bellevue, the revised staging area would also involve closing NE 2nd Place between 110th and 111th Avenues NE and the portion of 110th Avenue NE between NE 2nd and NE 3rd Streets.

In addition to the revised staging area, proposed construction phasing for any option could be modified to include closing 110th Avenue NE between Main and NE 6th Streets to through traffic. Cross streets would remain open to allow traffic to cross 110th Avenue NE. This construction staging area applies to both the Selected Alternative as well as the proposed station refinement options for the Downtown Bellevue Transit Station.

Construction approach for downtown Bellevue tunnel: Construction of the tunnel along 110th Avenue for the Selected Alternative and the two options is proposed as the "cut and cover" technique which excavates from the surface down. Sound Transit is considering an alternative to the cut and cover technique for tunneling for the NE 6th Station Option in downtown Bellevue called "sequential excavation method" (SEM). This approach was considered in the Final EIS analysis but not for the Selected Alternative tunnel on 110th Avenue, which would use cut and cover construction.

SEM is an approach where most of the tunnel would be mined rather than excavated from the surface down. With SEM construction, tunnel spoils would be removed from portal(s). Compared to the cut and cover technique, the SEM approach reduces impacts to the surface, access restrictions and the quantity of materials excavated. Potential portal locations for tunnel mining include SE Main Street and the 110th / NE 2nd Place staging area. While work could extend over a 24-hour period, disruption on the surface streets would be greatly reduced. As the tunneling enters the City Hall parking garage, and potentially at the NE 2nd staging area, construction would still require the use of cut and cover on 110th Avenue NE.

Civil construction of the tunnel is estimated to take approximately 4 years for the Selected Alternative and Optimized Selected Alternative including work on the surface along 110th Avenue between Main Street and NE 6th Street. The NE 6th Station Option involves less excavation with the above ground station and would take approximately 3 ½ years to construct including surface work on 110th Avenue between Main Street and NE 6th Street. With the SEM approach the civil tunnel construction duration would be reduced to about 3 years. The SEM approach would reduce surface impacts to limited areas on 110th Avenue including near the tunnel portals and at the staging area between NE 2nd and NE 3rd Streets. There would be additional time for contractor mobilization before and after the actual construction of the tunnel. Systems construction (power, signals, communication) and pre-revenue testing would occur after civil construction is complete.

3.3 SR 520

3.3.1 Pedestrian-Bicycle Bridges

Additional design information has been developed for pedestrian-bicycle bridges from the Overlake Village and the Overlake Transit Center Stations to the other side of SR 520. These bridges would be constructed in partnership with the City of Redmond (for Overlake Village) and with Microsoft and City of Redmond (for Overlake Transit Center). The pedestrian-bicycle bridge design information would only affect nonmotorized transportation facilities (discussed in Section 4.2.4) and acquisitions (discussed in Section 4.3).

3.3.2 Revised Noise Analysis

In addition, a revised noise analysis was completed along SR 520 following publication of the Final EIS for homes where an existing noise wall might be relocated. The revised noise analysis updates the analysis for all alternatives for this portion of the study area. The noise analysis was conducted for Segment E, the construction of which is not currently planned to be funded within the voter-approved ST2. The noise analysis is only discussed under Section 4.7, Noise and Vibration.

SECTION 4

Change in Environmental Effects and Mitigation

4.1 Changes in Environmental Effects and Mitigation

The potential refinements would not change the primary characteristics of the light rail project along the route evaluated in Final EIS. The potential refinements modify areas of the project; however, the changes in these areas, when added to the Selected Alternative project-wide, are within the range of impacts evaluated for the alternatives in the Final EIS. Table 4-1 summarizes impacts for many elements of the environment discussed in the Final EIS.

TABLE 4-1
Summary of Changes in Effects to the Final EIS

Element of the Environment	Changes in Effects
Transportation	Project refinements would have similar impacts during operation but more construction impacts when compared with the Selected Alternative; however, both alternatives are within the range of impacts of the alternatives evaluated in the Final EIS. With the proposed refinements, the project-wide impacts would be on 13 intersections and the 604 off-street parking spaces lost, (all intersection impacts can be mitigated).
Acquisitions	Potential refinements would result in 48 to 57 full and 132 to 143 partial acquisitions project-wide, which is greater than the Selected Alternative but within the range (14 to78 full and 84 to 236 partial acquisitions) evaluated in the Final EIS. Potential refinements would result in 57 to 65 residential displacements and 61 to 90 business displacements, which is within the range (2 to 229 residential displacements and 54 to 156 business displacements) evaluated in the Final EIS.
Land Use and Economics	The area of land converted to transportation uses with the potential refinements would be less than the Selected Alternative, while there would be more property acquisitions and displacements. All impacts would be within the range of impacts evaluated in the Final EIS. Adding the potential refinements to the project would result in 61 to 90 business displacements, which is within the range of 54 to 156 business displacements evaluated in the Final EIS.
Social, Community, and Neighborhood	The potential refinements would have similar impacts on neighborhoods as several Final EIS alternatives but more than the Selected Alternative. Access to the Surrey Downs neighborhood would change with some suboptions along 112th Avenue SE, but they would not affect neighborhood quality or cohesion.
Environmental Justice	There would be no new changes in effect to minority and low-income populations.
Visual Resources and Aesthetics	Components of potential refinements that differ visually from the Selected Alternative include a retaining wall and potential noise walls along Bellevue Way SE, the 112th Road Over Rail including retaining walls along Surrey Downs Park and views blocked of the Cascade Mountains from the NE 6th Station Option. The only visual change that would lower visual quality would be the retaining wall and potential noise walls along Bellevue Way SE. This impact would be greater than the Selected Alternative but within the range of potential visual impacts evaluated in the Final EIS.
Air Quality	There would be no new changes in effect.
Noise and Vibration	Potential refinements would result in 391 to 397 light rail noise impacts project-wide, which is within the range of project-wide alternative impacts from light rail noise (203 to 943) evaluated in the Final EIS. Potential refinements would result in 26 to 28 traffic noise impacts along Bellevue Way SE, which is within the range (0 to 154 traffic noise impacts) evaluated in the Final EIS.

TABLE 4-1
Summary of Changes in Effects to the Final EIS

Element of the Environment	Changes in Effects
	Potential refinements would result in 4 to 14 vibration impacts and 27 to 28 groundborne noise impacts, which is slightly above the range (3 to 11 vibration impacts and 25 to 36 groundborne noise impacts) evaluated in the Final EIS. All potential refinement impacts except for one vibration impact could be fully mitigated, which is the same as the Selected Alternative in the areas of change. Groundborne noise impacts at the Winters House would not occur.
Ecosystems	Potential refinements would result in 1.0 acre of wetland impacts, 4.7 acres of wetland buffer, and 3.1 acres of high-value habitat, which is within the range of impacts (0.3 acre to 2.6 acres of wetlands, 0.8 to 5.6 acres of wetland buffer, and 1.7 to 6 acres of high-value habitat) evaluated in the Final EIS for project-wide alternatives.
Water Resources	The potential refinements would have similar impacts on stormwater and groundwater resources as those with the Selected Alternative, and they would be within the range of impacts evaluated in the Final EIS.
Energy	There would be no new changes in effect.
Geology and Soils	The potential refinements would have similar impacts on geology and soils as those with other Final EIS alternatives, but they would have less construction in less stable soils on the east side of Bellevue Way SE and 112th Avenue SE than the Selected Alternative. The NE 6th Station Option would result in less excavation than the Selected Alternative because the station would be above ground. Implementing SEM construction techniques at the NE 6th Station would further reduce the amount of excavated material when compared with the cut and cover technique.
Hazardous Materials	There would be no new changes in effect.
Electromagnetic Fields	There would be no new changes in effect.
Public Services	The potential refinements would have similar impacts on public services when compared with those of the Selected Alternative and would not exceed the ranges of impacts evaluated in the Final EIS. Additional police parking at Bellevue City Hall would be removed but would be mitigated prior to construction.
Utilities	The potential refinements would have similar impacts on utilities as the Selected Alternative and would not exceed the ranges of impacts evaluated in the Final EIS.
Historic and Archaeological	The potential refinements would mitigate impacts on the Winters House. Impacts on historic resources would be less than those with the Selected Alternative and similar to other alternatives in the Final EIS.
Parklands and Recreation	The potential refinements would result in a lower permanent park acreage impacts but slightly more temporary park acreage impacts than the Selected Alternative but would not exceed the range of impacts evaluated in the Final EIS (2.0 to 13.6 acres). Access and parking at Mercer Slough Nature Park and Surrey Downs Park would be redesigned in collaboration with the City of Bellevue to support present and planned park uses.
Cumulative Effects	New cumulative effects not previously analyzed would result from the City of Bellevue's proposal to add a southbound HOV lane along Bellevue Way. This would slightly increase total area of property acquisition from the same properties, increase effects on visual resources, increase permanent high-value habitat impacts by 0.4 acre, and result in two additional traffic noise impacts. Traffic would operate slightly better than with the potential refinements only.

The following areas do not require additional detailed discussion in this addendum because there would be no changes in effect:

- Environmental Justice
- Air Quality
- Energy
- Hazardous Materials
- Electromagnetic Fields

Additional information about potential impacts and mitigation measures associated with the potential refinements are provided for the following elements of the environment:

- Transportation
- Acquisitions, Displacements, and Relocations
- Land Use and Economics
- Social, Community, and Neighborhoods
- Visual and Aesthetic Resources
- Noise and Vibrations
- Ecosystem Resources
- Water Resources
- Geology and Soils
- Public Services
- Utilities
- Historic and Archaeological Resources
- Parklands and Open Space

Changes in cumulative impacts would occur only along Bellevue Way SE when compared with the Final EIS; therefore, this is the only area where cumulative impacts are discussed. The City of Bellevue's proposed southbound HOV lane on Bellevue Way SE is a new project subsequent to the Final EIS. The proposed HOV lane could be constructed at the same time as the Shift Bellevue Way Option. The City's HOV project would affect transportation, property acquisition, visual, and noise cumulative assessments; thus cumulative effects are only discussed for these resources.

For construction of the City of Bellevue's HOV lane project, there are two scenarios: either the project is constructed at the same time as the Shift Bellevue Way Option or it is constructed at a later date separate from the East Link Extension Project. If constructed separately, the City's HOV project would result in a longer overall construction period resulting from a separate mobilization period, rework on the roadway, and two sets of lane closures, resulting in a longer period of construction noise and more delay and traffic impacts. If constructed together, the projects would have a longer construction period than just the Shift Bellevue Way option but would be more efficient and take less time than constructing them separately.

4.2 Transportation

Overall, impacts from the potential refinements would be within the range of impacts evaluated among the Final EIS alternatives. Operating the potential refinements would not affect regional travel, highway operations and safety, freight mobility and access, or navigable waterways. Therefore, these impacts are not discussed below. Also, no on-street parking would be removed with the potential refinements. There are no proposed changes to the mitigation measures during construction and operations. Impacts on transit, arterials, local streets, nonmotorized facilities, and parking are provided below. For more detailed information on transportation impacts from the potential refinements, please see Attachment G, Transportation Technical Memorandum.

4.2.1 Bellevue Way

4.2.1.1 Transit

Ridership with the Shift Bellevue Way Option would be the same as that discussed for the Selected Alternative in the Final EIS. Construction impacts on transit would be similar to those discussed in the Final EIS.

4.2.1.2 Arterials and Local Streets

The potential refinements would not change operational impacts for Bellevue Way SE from those discussed in the Final EIS. Construction impacts on Bellevue Way SE would be similar to other Final EIS alternatives on Bellevue Way SE, but more than with the Selected Alternative because the Selected Alternative runs next to Bellevue Way SE and the roadway would not need to be shifted. Construction on Bellevue Way SE would likely require multiple lane closures, but at least one lane in each direction would be maintained.

4.2.1.3 Nonmotorized Facilities

Along Bellevue Way SE, the sidewalk north of the South Bellevue Station would be replaced with a widened multiuse path that would connect the South Bellevue Station to Bellevue Way SE and 112th Avenue SE to the north. This path would provide nonmotorized users with an off-street pathway that is wider than existing sidewalk along Bellevue Way SE. Impacts would be within the range of impacts evaluated for the Final EIS alternatives.

4.2.1.4 Cumulative Impacts

The City of Bellevue's proposed HOV lane project would provide a cumulative benefit of improved traffic flow conditions along Bellevue Way SE in the southbound direction. The East Link Extension, with or without the proposed HOV lane, would result in a net benefit of improving accessibility and mobility, but adding vehicular capacity would improve traffic flow along Bellevue Way. For construction, if the Shift Bellevue Way Option and the HOV project are constructed at the same time, the construction duration would be slightly longer than if only the East Link Extension were built. However, if the projects were constructed at different times, creating two separate construction periods, the total construction period would result in a longer total period of traffic delays. If the City's HOV project were constructed separately, it would have a longer overall construction period resulting from separate mobilization period and more roadway work, and it would result in longer lane closures, causing more impacts from traffic delays.

4.2.2 112th Avenue SE

4.2.2.1 Transit

Ridership with the 112th Road Over Rail Option and Suboptions would be the same as discussed for the Selected Alternative in the Final EIS. Construction impacts on transit would be similar to those discussed in the Final EIS.

4.2.2.2 Arterials and Local Streets

With the 112th Road Over Rail Option, SE 15th Street access would become right-in/right-out only on both sides of 112th Avenue SE, and left turns would be prohibited where they are currently allowed, except for emergency vehicles. Left turns to and from the Bellefield Residential Park would be allowed at the southern entrance to the complex, with the exception of the Bellefield Access Variation with the SE 4th Emergency Access Suboption. With this variation, these turns would likely either divert to 108th Avenue SE, Bellevue Way SE, or back to 112th Avenue SE via U-turns at Bellevue Way SE or Main Street. Left turns from the Bellefield Office Park would use SE 8th Street; the office park's other access location. The access changes with the 112th Road Over Rail Options would not cause any new intersections to fail or operate substantially worse than the Selected Alternative.

Traffic into the Surrey Downs neighborhood would be diverted to 108th Avenue SE with the SE 4th Emergency Access Suboption. With the Bellefield Access Variation, access into the Surrey Downs neighborhood would be right-in/right-out only at 112th Avenue SE. With the SE 4th Open Suboption, SE 4th Street access would be right-in/right-out movements only. For northbound traffic on 112th, left turns would be accommodated with a U-turn near Main Street that would allow northbound traffic to enter Surrey Downs. The Rail Under SE 4th Suboption would maintain all existing turning movements. Impacts from the potential refinements would be within the range of impacts evaluated for the Final EIS alternatives. One intersection (108th Avenue and Main Street) would

operate slightly worse than the Selected Alternative with the SE 4th Emergency Access and SE 4th Open suboptions (from level of service [LOS C] to LOS D) but would still meet City of Bellevue standards.

Construction of the raised 112th Avenue SE would require multiple lane closures, and at least one lane in each direction would be maintained for the majority of the construction period. The road would be closed to through traffic as needed, except for local access, for short periods of time, as needed. Construction impacts on 112th Avenue SE would limit access to the Bellefield Residential Park to its southern access while construction of the realigned Bellefield Park Drive is constructed. Access to the Bellefield Office Park would be limited to SE 8th while the realigned SE 15th Street is constructed.

All potential refinements would eliminate at-grade vehicle crossings of the light rail tracks, removing the potential for conflicts, except in the case of the SE 4th Open Suboption, which would have the one allowed crossing at SE 4th Street. With the SE 4th Open Suboption, there would still be two fewer at-grade vehicle crossings than the Selected Alternative. The reduction in vehicle crossings would correspond with a reduction in necessary safety features, such as gates and visual and audible warning devices.

4.2.2.3 Nonmotorized Facilities

The Selected Alternative evaluated an option to close the east approach at SE 15th Street to the Bellefield Office Park, which would recirculate nonmotorized traffic entering or exiting the office park to the intersection of 114th Avenue SE and SE 8th Street. With the 112th Road Over Rail Option, SE 15th Street would remain open, maintaining nonmotorized access to the Bellefield Office Park (see Attachment B). The Road Over Rail option would replace the sidewalk on the east side of 112th Ave SE with a portion of the planned multiuse path that connects from Bellevue Way SE to SE 8th. It would provide nonmotorized users with an off-street pathway that is wider than the existing sidewalk. Because the 112th Road Over Rail Option is located primarily on the west side of 112th Avenue SE, pedestrian access between the Surrey Downs neighborhood and 112th Avenue SE would be limited to two locations: one near the East Main Station south of SE 1st Street and one at SE 4th Street, except with the SE 4th Emergency Access Suboption where pedestrian access would be removed at SE 4th Street (see Attachment B). Nonmotorized access would be closed at the stairway located south of the Surrey Downs Park and the two park entrances. In addition, a signalized pedestrian crossing across 112th Avenue SE between SE 4th Street and Main Street would be provided to allow pedestrians to access the station from the kiss-and-ride area and the commercial area on the east side of 112th Avenue SE.

The pedestrian and bicycle access to Lincoln Plaza would be maintained, whereas with the Selected Alternative, the pedestrian and bicycle access to Lincoln Plaza on the east side of 112th Avenue SE would be closed to avoid a conflict with the proposed at-grade light rail crossing. This impact was minimized with an access available within 300 feet of the existing driveway on SE 8th Street.

Compared to the Selected Alternative, all potential refinements would reduce at-grade crossings of the light rail tracks, reducing the potential for conflicts. At-grade crossing would be present at the East Main Station for all suboptions, and the SE 4th Open Suboption would have an at-grade crossing at SE 4th Street. Construction impacts on nonmotorized facilities would be similar to those in the Final EIS. Overall, impacts from the potential refinements would be within the range of impacts evaluated in the Final EIS alternatives.

4.2.3 Downtown Bellevue

4.2.3.1 Transit

With the NE 6th Station Option, access to downtown would be slightly farther away from the downtown core when compared with the Selected Alternative or Optimized Selected Alternative Station, but the differences are too small to model the impact on ridership. Access to the Optimized Selected Alternative Station Option would be closer to the Bellevue Transit Center than with the NE 6th Station Option. The northbound left-turn pocket into the Bellevue Transit Center at the intersection of NE 6th Street and 110th Avenue NE would be removed with the Optimized Selected Alternative Station Option, and a left-turn only for buses may be considered. However, this lane is currently restricted to transit use and only one bus route (King County Metro Route No. 241) currently uses it for rider service. Buses that use this lane would either be rerouted or there would be an option to allow transit-only turn movement to occur in the existing through lane.

Construction impacts on transit for the Optimized Selected Alternative Station Option would be similar to those discussed in the Final EIS. Constructing the NE 6th Station Option would likely have less impact on operations at the Bellevue Transit Center than the Selected Alternative because most construction would occur south of NE 6th Street and would have less impact on the intersection of 110th Avenue NE and NE 6th Street. No changes in mitigation during construction or operations are proposed.

4.2.3.2 Arterials and Local Streets

With the Optimized Selected Alternative Station Option, either left turns would be allowed northbound into the Bellevue Transit Center for buses only or left turns would be prohibited for all vehicles. Therefore there would be no change for general traffic movements related to the Optimized Selected Alternative Station Option at the Bellevue Transit Center. The NE 6th Station Option would eliminate the Selected Alternative's impact at NE 4th Street and 110th Avenue NE because there would be no station entrance in this area for the Bellevue Transit Center Station.

In downtown Bellevue, potential refinements in construction phasing along 110th Avenue NE would close all traffic lanes between Main and NE 6th Streets, which was also considered for construction phasing as part of the evaluation for the Selected Alternative in the Final EIS. Access to properties that have access only from 110th Avenue NE would be maintained, with the exception of Abella business garage access (residential garage access would remain open). Abella business garage closure would require mitigation by providing parking elsewhere. With the exception of NE 2nd Place, streets crossing 110th Avenue NE would remain open, so traffic on Main, NE 2nd, NE 3rd, and NE 4th Streets could cross 110th Avenue NE. Emergency and service access would also be maintained to all properties around the construction areas. The closure would divert vehicles to parallel streets in downtown Bellevue, such as 106th, 108th, and 112th Avenues NE. This would create similar traffic impacts on the Selected Alternative and cause up to two additional intersections on these parallel streets between Main and NE 8th Streets to operate at LOS F, compared with the no-build condition. This is one fewer intersection compared with the Selected Alternative. With the NE 6th Station Option there would be fewer truck trips resulting from the reduced amount of excavation. Compared to the cut and cover technique, the SEM approach would reduce restrictions on pedestrian and vehicle access to buildings, would have about 60 percent less excavated material, and about 60 percent fewer truck trips for hauling. Stockpiling excavated material at the portal(s) and at the staging area at 110th Avenue NE/NE 2nd Place would allow for material hauling during non-peak traffic hours.

Overall, intersection results are similar even with the closure of 110th Avenue NE to through traffic because high-volume driveways along 110th Avenue NE would continue to remain open. The reduction of one LOS F intersection with the construction of the potential refinements would be a result of traffic pattern changes. The intersection of 112th Avenue NE and NE 2nd Street is expected to operate at LOS F with the Selected Alternative construction condition; this is because northbound vehicles that travel on 110th Avenue SE between Main Street and NE 2nd Street are limited to a right-turn at NE 2nd Street that directs them to 112th Avenue NE.

Constructing the Selected Alternative along NE 6th Street would partially close the street between 110th Avenue NE and I-405, whereas with the location of the Bellevue Transit Center Station in the NE 6th Station Option, there would likely be less impact on NE 6th Street because the station and alignment would be constructed south of the street.

4.2.3.3 Parking

The NE 6th Station Option would have additional parking impacts at Bellevue City Hall when compared with the Selected Alternative. Approximately 188 spaces would be removed at Bellevue City Hall. This impact would be mitigated as agreed to in the MOU (Sound Transit and City of Bellevue, 2011). This parking solution would be implemented prior to construction.

4.2.3.4 Nonmotorized Facilities

The Optimized Selected Alternative Station Option improves the pedestrian connection to the Bellevue Transit Center compared with the Selected Alternative because the station entrance west of 110th Avenue is closer to the Bellevue Transit Center. With the NE 6th Station, the crosswalk at NE 6th Street would not need to be lengthened because the tunnel portal would be on the south side of the road. The project may affect Bellevue's

future nonmotorized crossing of NE 6th extension to accommodate light rail transit column placement. Impacts for both Bellevue Transit Center Options would be within the range of impacts for the Final EIS alternatives. Construction impacts on nonmotorized facilities would be similar to those in the Final EIS.

4.2.4 SR 520: Nonmotorized Facilities

Like the Selected Alternative, the Overlake Village and Overlake Transit Center stations' pedestrian-bicycle bridges would provide a direct connection to the SR 520 multiuse trail and general nonmotorized access to and from the north and west sides of SR 520. Along SR 520, a detour and possible temporary closure of the SR 520 Trail would be required during construction of the pedestrian-bicycle bridges to lower the trail by 5 feet. This impact would be mitigated similar to other trail closures by providing a detour route and, therefore, would be within the range of impacts evaluated in the Final EIS.

4.3 Acquisitions, Displacements, and Relocations

The potential refinements would collectively affect 85 to 87 properties, primarily along the west side of Bellevue Way SE and 112th Avenue SE. Of these, 50 to 61 would be partial acquisitions and 26 to 35 would be full acquisitions. These acquisitions would result in 55 to 63 residential displacements and 14 to 43 business displacements. With the potential refinements, the Selected Alternative would be within the range of impacts from the various alternatives studied in the Final EIS and no changes in mitigation are proposed from those in the Final EIS. Table 4-2 compares the acquisitions and displacements from the potential refinements with those from the Selected Alternative. Exhibit 4-1 to 4-5 include information on affected properties, and Attachment C includes a list of the affected parcels.

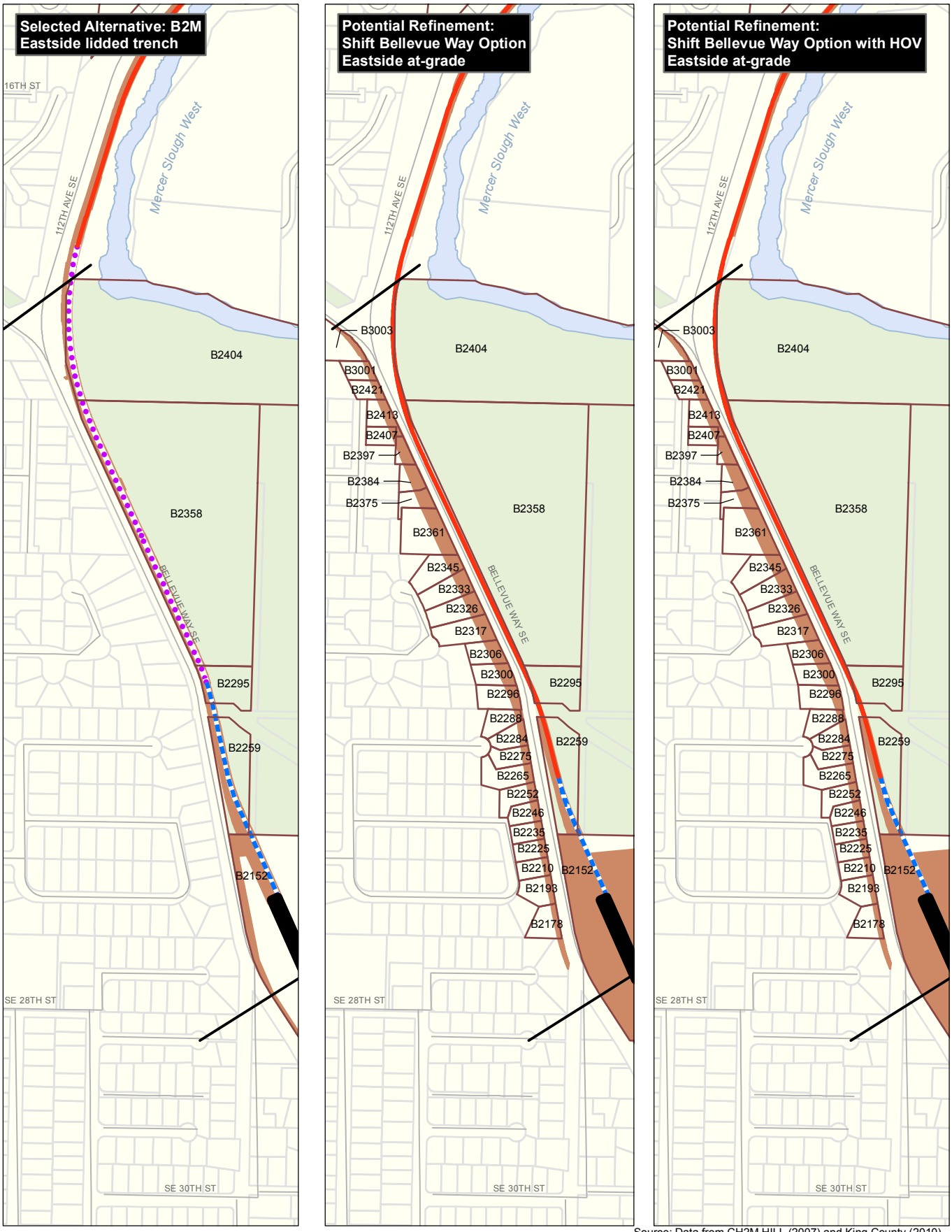
TABLE 4-2
Comparison of Acquisition and Displacement Impacts

Area of Change	Acquisitions (Full/Partial)	Displacements (Businesses/Residential)
Bellevue Way SE		
Selected Alternative (Rail in trench in front of Winters House)	0/4	0/1
Shift Bellevue Way[1, 2]	3/29	0/4
112th Avenue SE		
Selected Alternative (Rail at grade on 112th Ave)	12/23	6/46
112th Road Over Rail [2]		
• SE 4th Emergency Access Suboption, SE 4th Open Suboption, Rail Under SE 4th Suboption	17-25/6-14	6/51-59
• SE 4th Emergency Access Suboption with Bellefield Access Variation	18-26/5-13	6/52-59
Downtown Bellevue [2]		
Selected Alternative (110th downtown tunnel)	6/13	8/0
Optimized Selected Alternative Station Option	6/13	8/0
NE 6th Station Option	7/10	37/0
SR 520		
SR 520 Pedestrian-Bicycle Bridges	0/5	0

[1] HOV lane cumulative impacts—no changes in the number of full and partial acquisitions. There would only be an increase in the area of partial property acquisition.

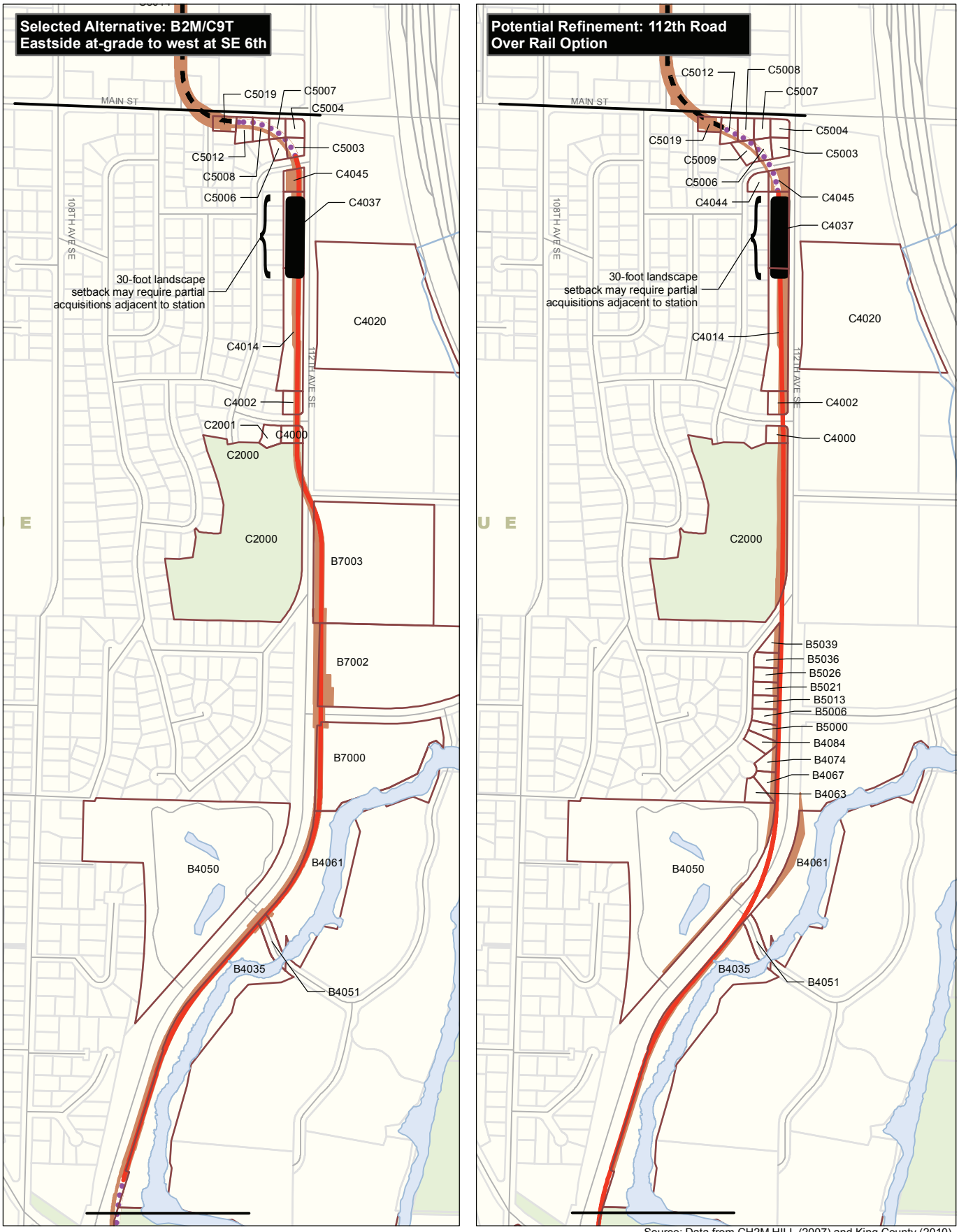
[2] Includes potential acquisitions from cited 60-foot separation requirement

All acquisition and displacement impacts would be permanent, and therefore, construction period impacts are not mentioned in the sections below. Mitigation for property acquisition is detailed in the Final EIS.



Source: Data from CH2M HILL (2007) and King County (2010).

Exhibit 4-1
Affected Parcel Impacts - Bellevue Way SE
SEPA Addendum
East Link Extension



Source: Data from CH2M HILL (2007) and King County (2010).

1119 Map ID & Affected Parcel Boundary

Conceptual Right-of-Way and Areas to be Acquired

Proposed Station

At-Grade Route

Elevated Route

Retained-Cut Route

Retained-Fill Route

Tunnel Route

Limits of Study

N

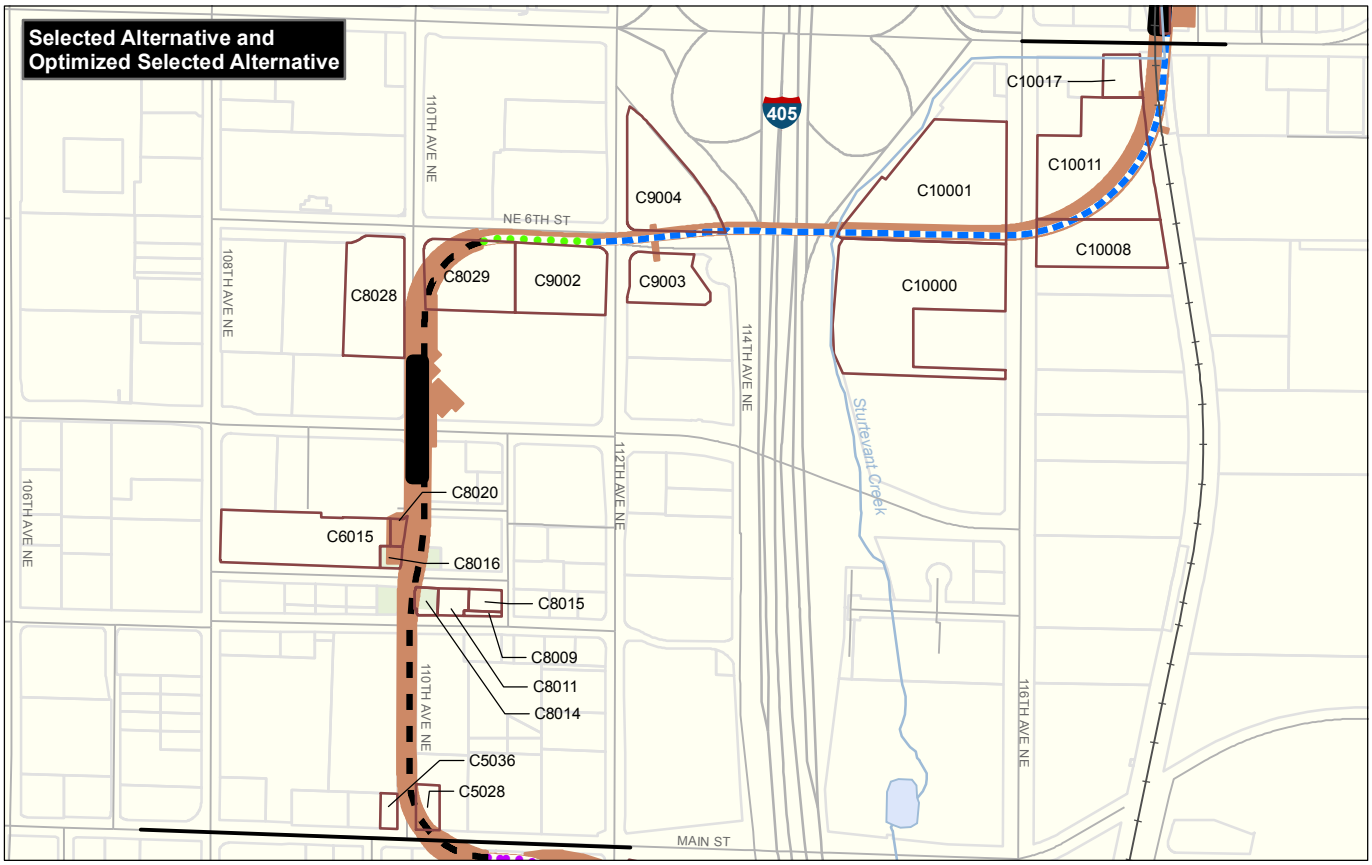
0 0.125 Mile

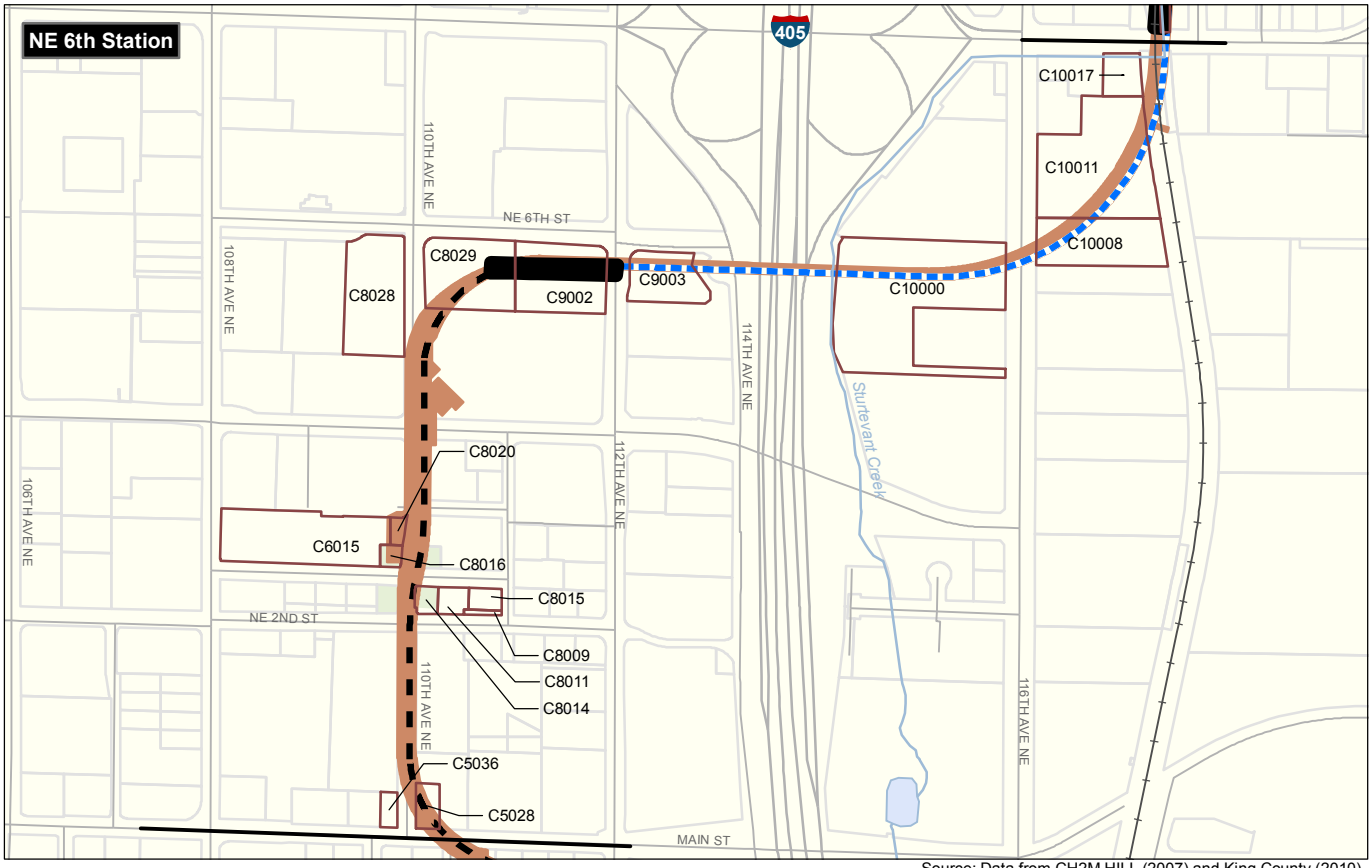
Exhibit 4-2

Affected Parcel Impacts - 112th Avenue SE

SEPA Addendum

East Link Extension





Source: Data from CH2M HILL (2007) and King County (2010).

1119 Map ID & Affected Parcel Boundary

Conceptual Right-of-Way and Areas to be Acquired

Proposed Station

At-Grade Route

Elevated Route

Retained-Cut Route

Retained-Fill Route

Tunnel Route

Limits of Study

N

0 300 Feet

Exhibit 4-3

Affected Parcel Impacts - Downtown Bellevue

SEPA Addendum

East Link Extension

4.3.1 Bellevue Way SE

Compared with the Selected Alternative, the Shift Bellevue Way Option would have 28 additional property acquisitions, including an additional 3 full and 25 partial acquisitions primarily along the west side of Bellevue Way SE. There would be three additional residential displacements due to the widening of Bellevue Way SE.

4.3.1.1 Cumulative Impacts

The City of Bellevue's proposed HOV project would require acquisition of additional area from properties already affected by the Shift Bellevue Way Option. However, these impacts would be limited to additional land from the same partial acquisitions that would be affected without the HOV lane and would not result in additional full property acquisitions or residential relocations.

4.3.2 112th Avenue SE

The new City of Bellevue Light Rail Overlay District resulted in changes to the city's LUC that require Sound Transit to offer to fully acquire up to eight additional residences along 112th Avenue SE between the Bellfield Residential Park condominiums and Surrey Downs Park. The LUC also requires Sound Transit to provide a 30-foot landscaped setback between residences and the light rail. For the landscape setback, homeowners could choose to have Sound Transit pay for a perpetual easement on their property or choose to allow Sound Transit to acquire this property through fee title. As a result of these requirements, there is a range in potential full and partial property acquisitions in this area of the 112th Road Over Rail Option.

Compared with the Selected Alternative, the 112th Road Over Rail Option would have four fewer property acquisitions between Bellevue Way SE and Main Street on the east side of 112th Avenue SE. However, the 112th Road Over Rail Option would have between 5 and 13 more full acquisitions, 8 to 16 fewer partial acquisitions, and 5 to 13 more residential displacements due to the shift to the west side of the road south of SE 6th Street. The Bellefield Access Variation of the SE 4th Emergency Access Suboption would require one partial acquisition to become a full acquisition for the access road between Bellefield Park Lane and 111th Place NE, resulting in one additional displacement.

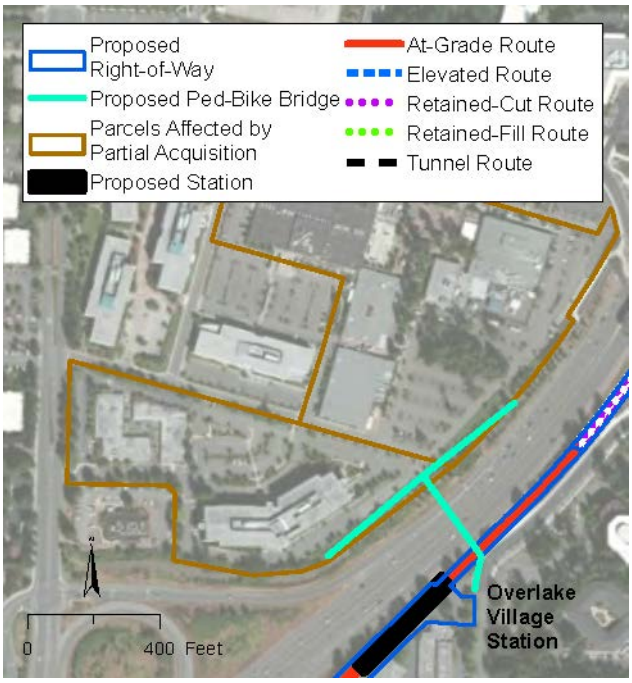


EXHIBIT 4-4
Affected Parcel Impacts of 520 Pedestrian-Bicycle Bridge Overlake Village Station

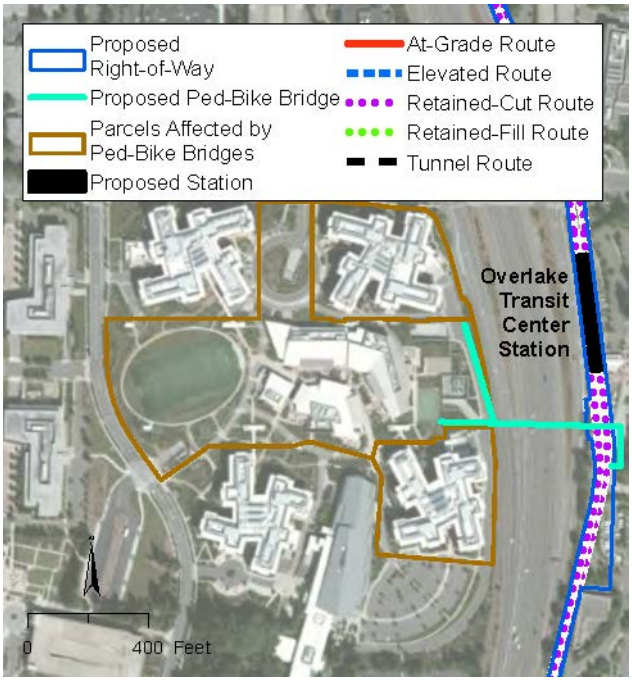


EXHIBIT 4-5
Affected Parcel Impacts of 520 Pedestrian-Bicycle Bridge Overlake Transit Center Station

4.3.3 Downtown Bellevue

For the Selected Alternative and both station options, an additional three parcels would be acquired and an additional two businesses would be displaced due to the revised construction staging area around NE 2nd Place. The City of Bellevue would purchase these for use by Sound Transit during construction and then would retain

them for other uses or resell them after construction. One property that was previously a full acquisition would no longer be needed.

For the NE 6th Station Option, the realignment across I-405 would displace 29 additional businesses, including 2 new buildings, one with 28 business displacements. Of the 29 displacements, 1 is a restaurant on SE corner of 112th and NE 6th Street and the other 28 are in Lincoln Center on east side of I-5. The City of Bellevue purchased this property as a voluntary sale in 2009 for two purposes: to provide a site for a new correctional facility (in partnership with 22 other cities) and to allow for the city's NE 6th Street Extension Project. The correctional facility is no longer a project, but the City of Bellevue is continuing with the NE 6th Street Extension Project. About 75 percent of the total available building space is occupied. Businesses are generally small and independent offices. The majority of the leases are short term (about 2 years), with a few extending into 5 years. One partial acquisition on the west side of I-405 would be replaced with a full acquisition, and one partial acquisition on the east side of I-405 would no longer occur due to the realigned crossing of I-405.

4.3.4 SR 520 Pedestrian-Bicycle Bridges

As shown in Exhibits 4-4 and 4-5, constructing the pedestrian-bicycle bridges across SR 520 at the Overlake Village Station and the Overlake Transit Center Station would require a total of five partial property acquisition or easements to accommodate the bridge landings on the north side of SR 520, with additional design work for the pedestrian-bicycle bridges. These partial acquisitions would occur as part of the Selected Alternative or the potential refinements.

4.4 Land Use and Economics

The potential refinements would displace between 14 and 43 businesses and acquire property from 85 to 87 total parcels, which are more business and property impacts than the Selected Alternative. However, the property impacts and tax impacts from the potential refinements would be within the range of impacts evaluated for the Final EIS alternatives. The NE 6th Station Option would displace 29 additional businesses due to the revised crossing of I-405 when compared with the Selected Alternative.

The areas that would be converted to transportation uses are generally the same as with the Selected Alternative. Effect on businesses for the Shift Bellevue Way Option would be limited to the Blueberry Farm. As part of the 112th Road Over Rail Options, SE 15th Street would be relocated, and access to Bellefield Office Park would become right-in/right-out only. This right-in/right-out access at the Bellefield Office Park would not substantially affect the business park activities because unrestricted access at SE 8th Street and 114th Avenue SE would remain. Permanent access to any other businesses would not change. The City of Bellevue's new Light Rail Overlay District could result in fully acquiring up to eight additional properties along 112th Avenue SE between the Bellefield Residential Park condominiums and Surrey Downs Park. The landscape buffer requirement may also result in additional easements on homeowner properties.

The primary differences associated with properties in downtown Bellevue are due to a change in the construction staging area and business displacements in downtown Bellevue. Staging along 110th Avenue NE would now include all of the Pocket Parks as well as three parcels adjacent to the southeast park instead of the previous staging area of vacant properties. The land use of these parcels would be converted from park and commercial land uses temporarily. Following construction, park areas would be returned to park use. The City of Bellevue would own the three adjacent commercial parcels and may convert them to a different land use following construction. For the NE 6th Station Option, the realignment across I-405 would displace 29 additional businesses located in 2 buildings, including Lincoln Center on the east side of I-405, which has 28 businesses. Changes in construction impacts on businesses caused by the potential refinements include a new staging area in downtown Bellevue that would require full closure of 110th Avenue NE between NE 2nd and NE 3rd streets, which would affect access to businesses with access from 110th Ave NE in this area. Furthermore, proposed construction phasing could be modified so that 110th Avenue NE is fully closed between Main and NE 6th Streets. The proposed construction phasing could apply to the potential refinements or to the Selected Alternative in this area. This full closure on 110th Avenue NE would be of longer duration than with the Final EIS alternatives, including the Selected Alternative, for which a short-term full closure only was analyzed in the Final EIS. The Selected

Alternative and potential refinements would use a cut and cover tunneling technique, affecting businesses along 110th Avenue NE between Main and NE 6th streets; however, traffic access would be maintained to the extent practicable.

Full closures along 110th Avenue NE would maintain traffic access for local access. However, if possible, buildings access may be directed to use existing access from another street. Short-term access disruption is unavoidable while decking is put in place. Cross streets would remain open to allow for access across 110th Avenue NE. For the Abella retail access, parking would need to be replaced elsewhere. With the accommodation of access to buildings along 110th Avenue NE where necessary and replacement parking at Abella, these impacts would not be significant. If SEM were implemented for the NE 6th Station Option, there would be reduced access restrictions to buildings on 110th Avenue NE, resulting in fewer impacts on businesses and adjacent land uses.

No changes in operational period mitigation are proposed. To address potential construction impacts on surrounding uses, Sound Transit would develop detailed construction mitigation plans in coordination with the City during the permitting phase of the project.

4.5 Social Impacts, Community Facilities, and Neighborhoods

Overall impacts on neighborhoods would generally be within the range of impacts evaluated in the Final EIS (also refer to the discussion in Section 4.4, Land Use and Economics).

4.5.1 Bellevue Way SE

The Shift Bellevue Way Option would encroach on the eastern edge of the Enatai neighborhood by displacing three residences and removing a portion of several properties that border Bellevue Way SE, remove vegetation, change access to some properties, result in noise impacts that can be mitigated, and construct new retaining walls. Access to these residences, however, is available from other roadways. These impacts are similar to the impact of the Final EIS alternatives along Bellevue Way SE. Most of the Final EIS alternatives would travel on major arterials or transportation rights-of-way adjacent to neighborhoods, and some would require widening Bellevue Way SE to the west. The Selected Alternative is located east of Bellevue Way SE, farther away from the Enatai neighborhood than other Final EIS alternatives that travel along Bellevue Way SE, therefore not resulting in property acquisition, retaining walls on the west side of Bellevue Way SE and fewer noise impacts. The change would be on the edge of the neighborhood and not affect neighborhood connectivity or quality.

Construction on Bellevue Way SE with the Shift Bellevue Way Option would have more visual and noise impacts on sensitive properties in the Enatai neighborhood on the west side of Bellevue Way SE than the Selected Alternative. Shifting Bellevue Way would require multiple lane closures during construction, which would not be necessary with the Selected Alternative. Construction period impacts from the Shift Bellevue Way Option on the Enatai neighborhood and on Bellevue Way SE traffic would be similar to the other Final EIS alternatives that travel along Bellevue Way SE.

4.5.2 112th Avenue SE

With the 112th Road Over Rail Option, impacts along the west side of the roadway would include additional full and partial property acquisition; vegetation removal; a 30-foot landscape buffer and 60-foot separation; noise impacts that can be mitigated; new walls; roadway modifications; and light rail guideway construction. Noise impacts on this area would be reduced, because the raised roadway would provide a screen between the neighborhood and the light rail. Overall Surrey Downs neighborhood impacts from the 112th Road Over Rail Option would be similar to the Final EIS alternatives that traveled along 112th Avenue SE, including the Selected Alternative. Project changes would be on the edge of the neighborhood and would not affect neighborhood character or quality.

Access to the Bellefield Residential Park would be more limited with the potential refinements, although the suboptions would not change the overall neighborhood quality or cohesion. 112th Road Over Rail suboptions include adding left turns from/to 112th Ave SE at the southern entrance of the Bellefield Residential Park, except with the Bellefield Park Access Variation of the SE 4th Emergency Access Suboption. The SE 4th Emergency Access

Suboption would remove access from 112th Avenue SE to the Surrey Downs neighborhood, unless the Bellefield Park Access Variation is chosen. This variation would connect Surrey Downs with the Bellefield Residential Park via 111th Place SE. Other impacts from the SE 4th Emergency Access Suboption would be similar to the Final EIS alternatives and it would not affect community quality or cohesion. No changes in mitigation are proposed.

The potential refinements would result in more impacts related to construction activities near more residences along 112th Avenue SE than the Selected Alternative. Construction impacts on the Surrey Downs neighborhood and the Bellefield Residential Park would be closer to residences between SE 15th and SE 6th Streets than with the Final EIS alternatives that travel along 112th Avenue SE, but impacts would be similar in other areas of those alternatives. Impacts would still occur on the edge of these neighborhoods, which is similar to other Final EIS alternatives, and would not affect community cohesion. The potential refinements would use the same staging area along 112th Avenue SE and Main Street as the Selected Alternative.

Construction for the 112th Road Over Rail Option would alter traffic patterns into and out of the Surrey Downs neighborhoods, and these neighborhoods would experience construction noise and disruption. Multiple lane closures would be needed, although at least one lane would be maintained in each direction. Short-term full closures would be necessary and would close all lanes except for local access. Construction activity would occur closer to homes on the west side of 112th Avenue SE between SE 15th and SE 4th Streets.

4.5.3 Downtown Bellevue

The Optimized Selected Alternative Station and NE 6th Station Options would have minimal impacts because they would be underground or located away from low-density residential neighborhoods. Overall, impacts on downtown Bellevue would be similar for the proposed revisions as the Selected Alternative.

The closure on 110th Avenue NE could be a long term full closure for any option. Traffic on cross streets would be maintained, but access to buildings on this roadway would be limited during construction. Local access would be provided as possible; however, there would be short term disruption while decking is put in place. Staging along 110th Avenue NE would require a longer full term closure than other Final EIS alternatives, including the Selected Alternative but overall impacts on downtown would be similar. Compared to the cut and cover technique, the SEM approach would reduce disruption on the surface along 110th Avenue NE, reduces restrictions on pedestrian/vehicle access to buildings along 110th Avenue NE and have less excavation and fewer truck trips for hauling of excavated material. Temporarily stockpiling excavated material at the portal(s) and at the staging area at 110th Avenue NE/NE 2nd Place allows for hauling of this material during non-peak traffic hours, and would avoid most conflicts with utilities.

The 24-hour construction could affect residents near the tunnel portals. Focused construction at the portals would create noise, light, and general construction impacts similar to those described in the Final EIS for other alternatives. Noise mitigation would be provided to address these effects on adjacent properties as evaluated for similar alternatives in the Final EIS. A construction mitigation plan, with input from the community, would be prepared to address these short-term impacts.

4.6 Visual and Aesthetic Resources

Visual impacts from the potential refinements would be within the range of impacts for the Final EIS alternatives. The Final EIS included some alternatives that did not lower the visual quality along Bellevue Way SE and 112th Avenue SE and in downtown Bellevue, while others lowered the visual quality along Bellevue Way SE and downtown near the Bellevue Transit Center Station. While several Final EIS alternatives would result in changes in views for some residents along 112th Avenue SE, none would lower visual quality along this roadway. Attachment D provides visual simulations that show the viewers' perspective of the potential refinements. Attachment A provides graphic depictions of the potential refinements to provide enhanced understanding of visual impacts. There would be no change to construction period visual impacts from those described in the Final EIS and no changes to proposed construction period mitigation measures.

4.6.1 Bellevue Way SE

The Shift Bellevue Way Option would shift Bellevue Way SE west and construct a retaining wall and potential noise walls visible from Bellevue Way SE and some areas of the Mercer Slough Nature Park and would lower visual quality due to the walls and removed natural slope and mature vegetation on the west side of the road (see Attachment D, Exhibit D-2C). The Selected Alternative would result in changes along Bellevue Way SE, including vegetation removal, new retained fill walls, and some sound walls; however, these changes would mostly occur near the existing South Bellevue Park-and-Ride. The Selected Alternative would be in a retained cut along the edge of a large portion of the Mercer Slough Nature Park. Changes along Bellevue Way SE from the Selected Alternative would be consistent with the transportation-oriented character of the existing park-and-ride lot and nearby I-90 structures and would not lower the existing visual quality category along Bellevue Way SE. Other alternatives along Bellevue Way SE would result in a retaining wall along the west side of Bellevue Way SE, lowering visual quality from high to medium in this area. However, the retaining structure would be similar in character of the adjacent major arterials and freeways from the perspective of the views of travelers and park users. Mitigation measures for the Shift Bellevue Way Option would be the same as those proposed in the Final EIS for alternatives affecting the west slope along Bellevue Way SE. The retaining wall would receive design treatments such as texture, patterns, color, possibly setbacks in the wall and possibly plantings. Vegetative screening would be provided by Sound Transit for residences where it would be practical and effective in screening views of the light rail.

4.6.1.1 Cumulative Impacts

Adding the HOV lane to the Shift Bellevue Way Option would widen the roadway and construct higher retaining walls (by about 5 feet) along Bellevue Way SE than the Shift Bellevue Way Option and the other Final EIS alternatives that resulted in retaining walls along Bellevue Way SE. The higher retaining walls may decrease the visual character slightly more in comparison. Adding the HOV lane would not, however, further decrease the visual quality rating noted earlier for the Shift Bellevue Way Option.

4.6.2 112th Avenue SE

The raised road for 112th Road Over Rail Option would change the view from the roadway and from adjacent Surrey Downs residences when compared with the Selected Alternative. The Selected Alternative would remain on the eastside of 112th until SE 6th Street, where it would cross over to the west side, affecting Surrey Downs Park. It would remove vegetation from the eastern edge of Surrey Downs Park and construct a retaining wall for realignment of SE 4th Street through Surrey Downs Park, which would change the appearance; however, the visual quality of this area would not be lowered from medium to low after construction and replanting.

The 112th Road Over Rail Option would cross to the west side of 112th Avenue SE at SE 15th Street. It would alter the view from the north east corner of Bellefield Residential Park. Current views of a heavily vegetated area towards 112th Avenue SE would change to a landscaped slope with a raised 112th roadway above the slope (see Attachment A, Exhibit A-8). This change may include views of passing vehicles, but the view would be primarily landscaped areas and the light rail would be below the roadway and therefore not visible.

For the area south of Surrey Downs Park, consistent with a recent City of Bellevue Light Rail Overlay District, there could be up to eight additional full acquisitions along 112th Avenue SE. A 30-foot landscaped setback would also be provided between the light rail alignment and single-family residences along 112th Avenue SE, which would enhance visual quality. Views from 111th Place South would be altered where residences would be removed for the 112th Road Over Rail Option. While some residents may chose to remain, the removed residences would open views; the 112th Road Over Rail Option would not be prominent from this perspective, because the light rail and the roadway would be lower than the views from the residences and the landscape setback would act as a screen. Views from this neighborhood would be either vegetative slope leading up to the raised roadway, substantially unchanged, or enhanced views of vegetation, and/or noise walls if deemed necessary for mitigation. Portions of retained fill and retaining walls along 112th Avenue SE from the Mercer Slough Water Trail would affect some viewers for a short distance, but are consistent with the adjacent Bellefield Business Park. While the

potential refinements are different than the Selected Alternative along 112th Avenue SE, the visual quality is not lowered for either the Selected Alternative or for the potential refinements.

Continuing north along 112th Avenue SE, all the suboptions would result in a visual change due to a retaining wall along the entire east side of the Surrey Downs Park, north of which would be similar to the Selected Alternative. As part of these refinements, street trees, landscaping and aesthetic design of the retaining wall would provide screening and reduce visual impacts for the viewers along the roadway. So while the views along 112th would be different, the corridor would be designed to uphold medium visual quality. Exhibit D-3B in Attachment D illustrates the southbound view from the east side of 112th Avenue SE just north of the SE 8th Intersection for the SE 4th Emergency Access Suboption, and Exhibit D-3C demonstrates the visual simulation from the same viewpoint but for the Rail Under SE 4th Suboption. This change, which includes landscaping and screening for pedestrians along 112th Avenue SE, would not lower the visual quality from medium visual quality. The Bellefield Access Variation of the SE 4th Emergency Access Suboption would not lower visual quality for sensitive viewers.

North of Surrey Downs Park would remain similar as the Selected Alternative. Areas not used for light rail right-of-way or the East Main Station would be landscaped and a 30-foot landscape setback provided. These features would be visual changes, but they would create a new visual unity consistent with the arterial corridor serving mixed business and residential land uses. Other details, such as the proposed re-location of the TPSS on the street side of the tunnel portal would be less visible to Surrey Downs houses than the Selected Alternative. Also, once screened with compatible vegetation, visual impacts of the TPSS and the tunnel portal would be reduced.

4.6.3 Downtown Bellevue

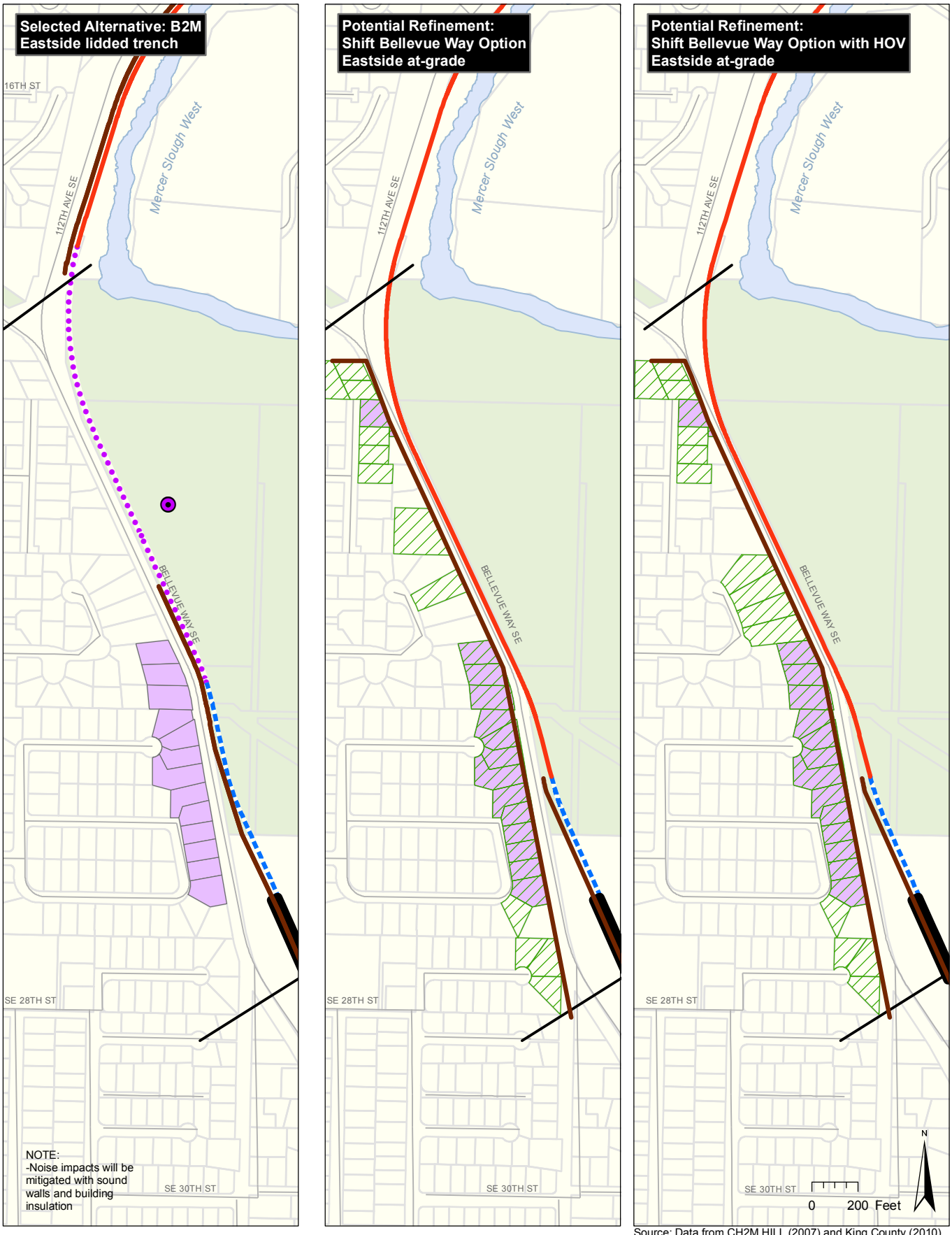
The Optimized Selected Alternative Station Option would mirror the Selected Alternative except for the relocation of the proposed station entrance with no effect on the visual quality. The entry to the Bellevue Transit Center for the NE 6th Station Option includes overhead canopies or roof structure. These features may block views in downtown Bellevue of the Cascade Mountains which is discouraged in the *Bellevue Comprehensive Plan*. View blockage of the Cascade Mountains occurred with other Final EIS alternatives evaluated but not as part of the Selected Alternative. The NE 6th Station Option would not result in lowering the visual quality.

Potential effects from SEM for the NE 6th Station Option may result in nighttime light and glare during construction at the Main Street and NE 2nd Place staging areas, similar to the construction effects considered for tunnels evaluated in the Final EIS. Construction lights would be shielded and pointed downward to minimize glare, mitigating this effect and other visual effects from construction would be the same as those proposed in the Final EIS.

4.7 Noise and Vibration

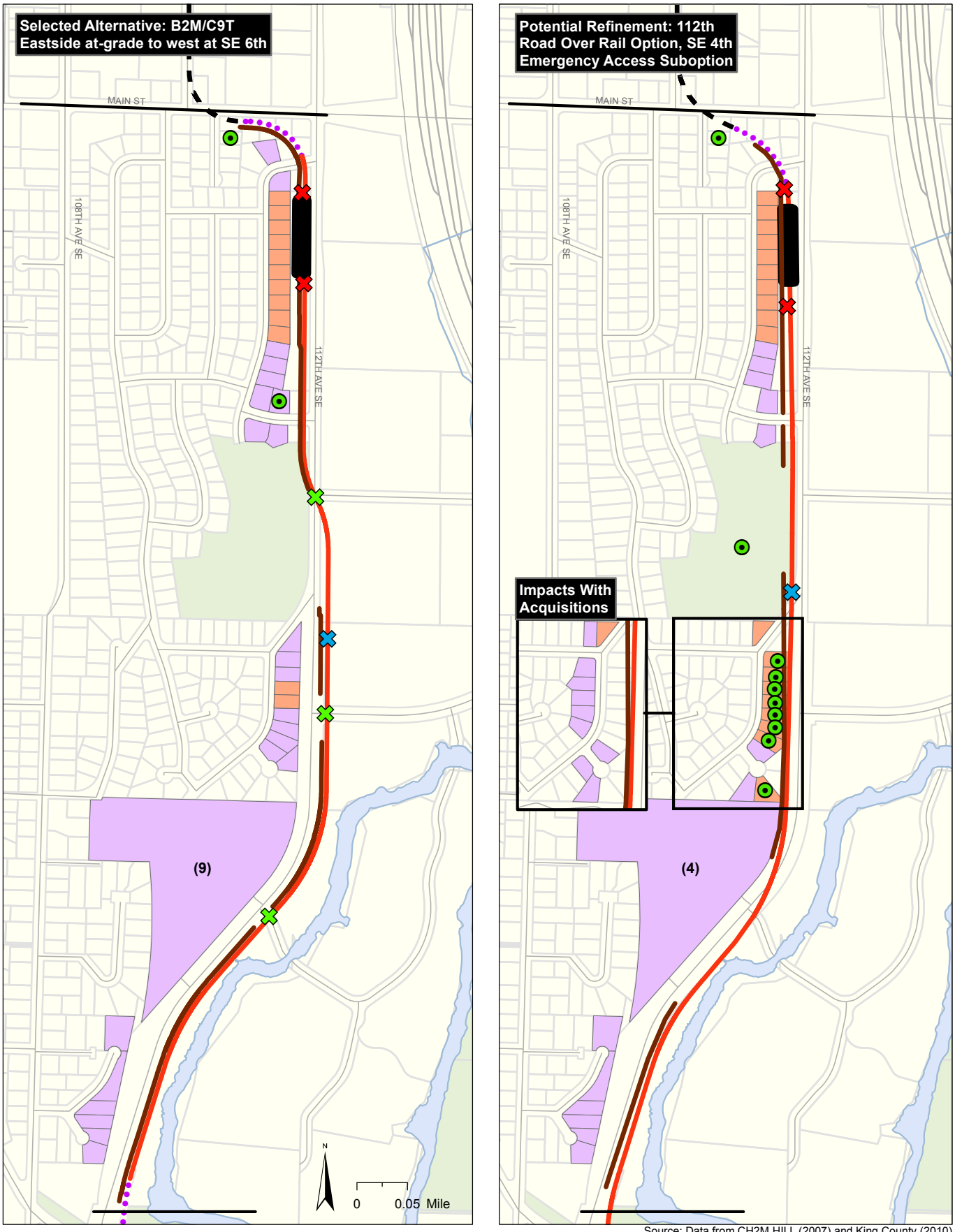
The potential refinements would have between 77 to 123 moderate impacts and between 11 and 57 severe impacts related to light rail noise. Overall, the potential refinements would be within the range of impacts identified in the Final EIS. Compared with the Selected Alternative, the potential refinements could have greater or fewer noise impacts, depending on the options selected and the number of full acquisitions that could occur due to a recent City of Bellevue Light Rail Overlay. The refinements would have 16 fewer to 30 more moderate noise impacts and 37 fewer to 9 more severe impacts than the Selected Alternative (see Table 4-3). The potential refinements would result in a total of five to six new vibration impacts on single-family residences and one new impact at the King County District Courthouse (see Table 4-4). These impacts are associated with the 112th Road Over Rail and Bellevue Transit Center Station Options. Noise impacts in the area of the potential refinements are shown in Exhibits 4-6 through 4-9.

All impacts would be mitigated with noise walls, building insulation, or special trackwork. For a more detailed description of changes in noise and vibration impacts, see Attachments E1, E2, and E3. The construction impacts would generally be similar to those for other Final EIS alternatives, including the Selected Alternative. The only places where there are changes are along 112th Avenue SE and SR 520, as discussed below. There are no proposed changes in mitigation for construction period impacts.



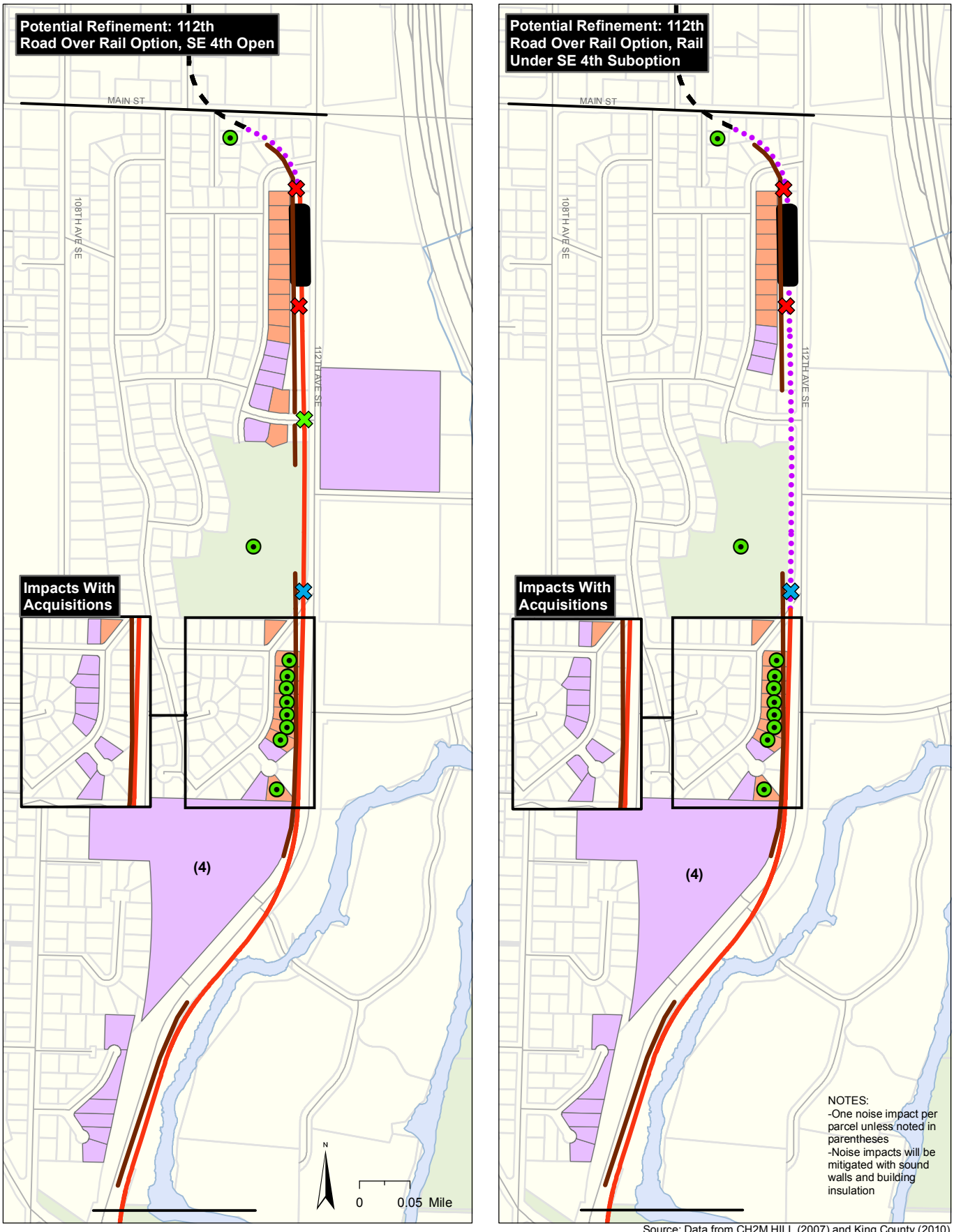
Source: Data from CH2M HILL (2007) and King County (2010).

Exhibit 4-6
Noise and Vibration Impacts - Bellevue Way SE
SEPA Addendum-East Link Extension



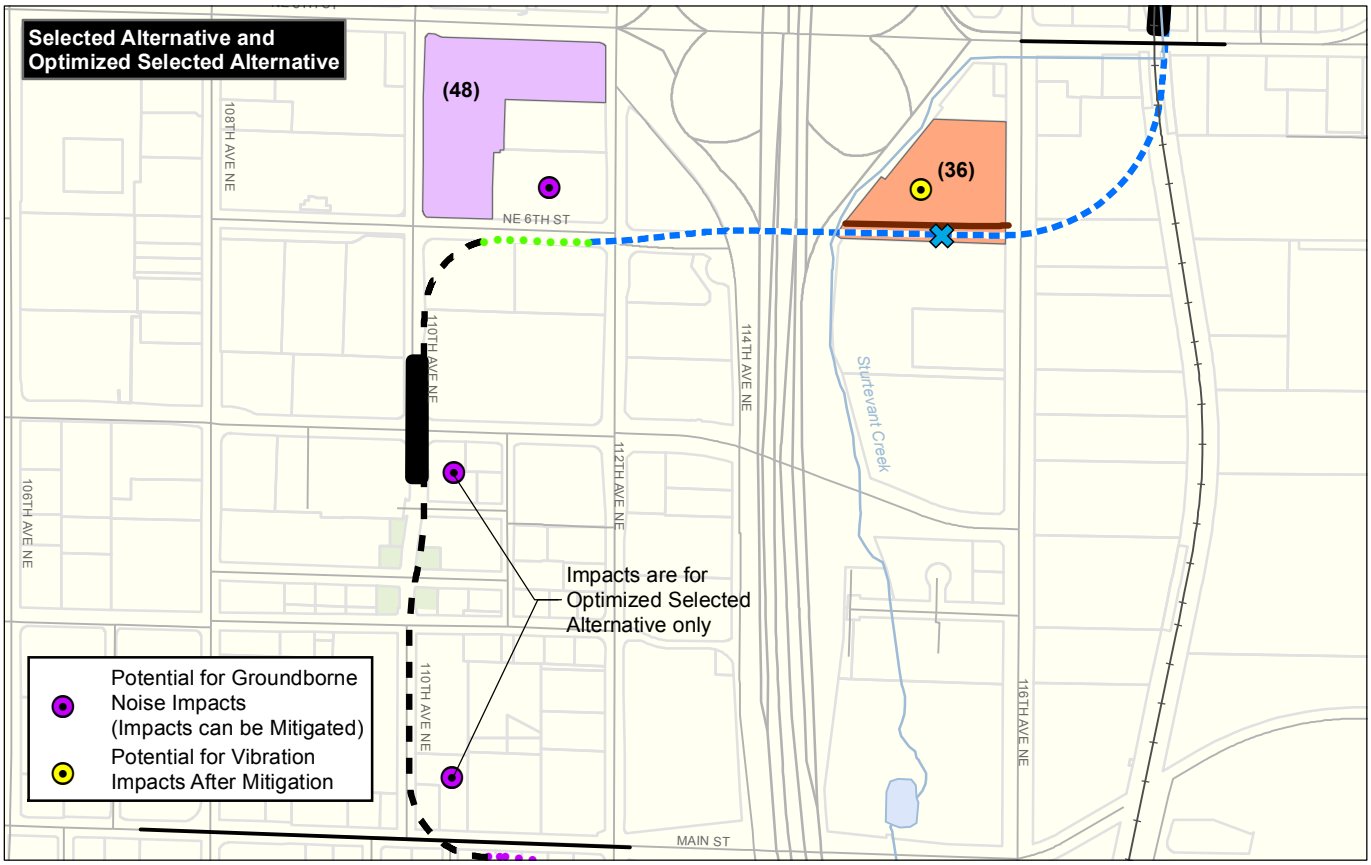
Source: Data from CH2M HILL (2007) and King County (2010).

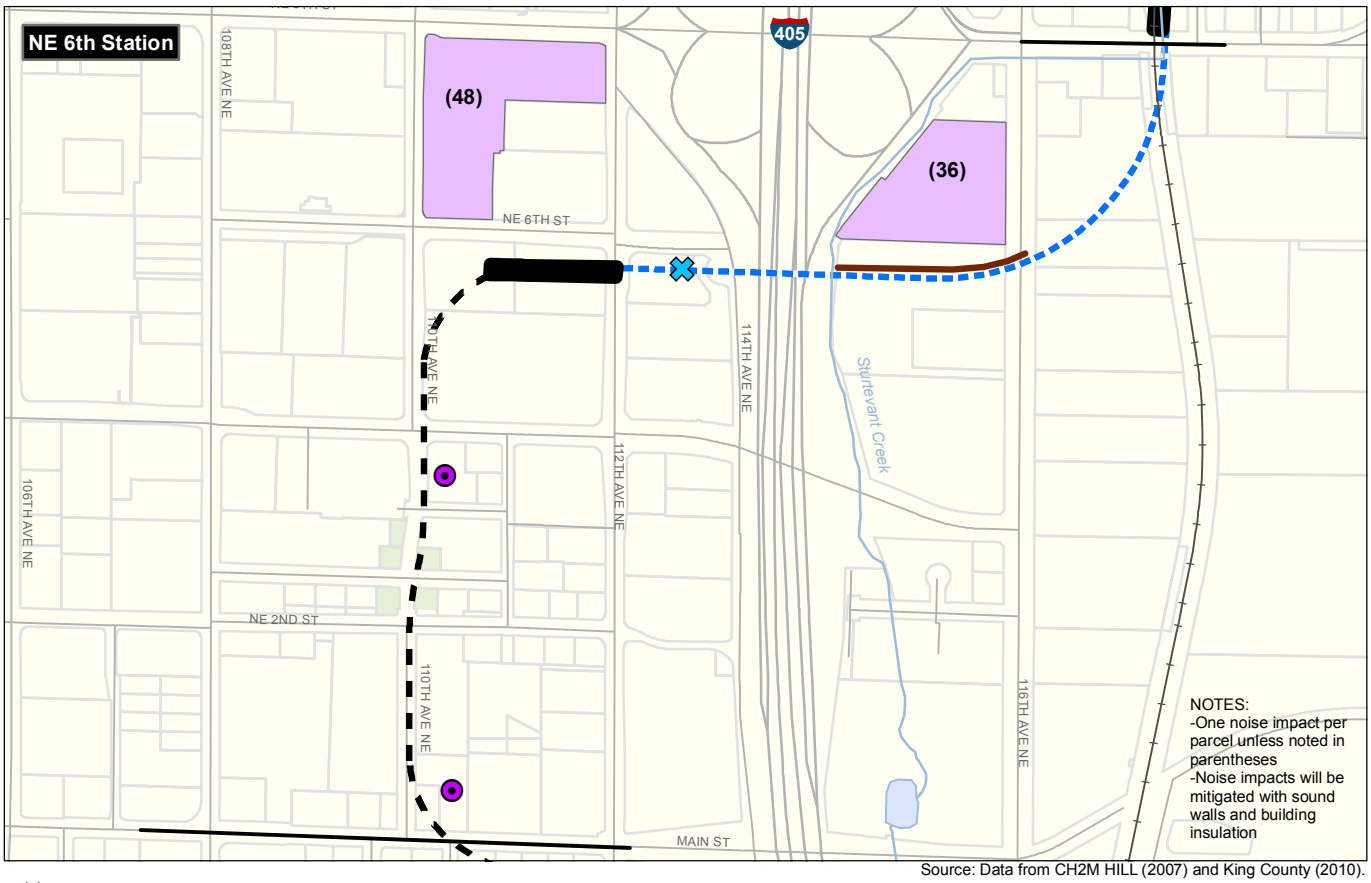
Exhibit 4-7
Noise and Vibration Impacts - 112th Avenue SE
SEPA Addendum-East Link Extension



Source: Data from CH2M HILL (2007) and King County (2010).

Exhibit 4-8
Noise and Vibration Impacts - 112th Avenue SE
SEPA Addendum-East Link Extension





Source: Data from CH2M HILL (2007) and King County (2010).

Crossover Location
Gated Crossing
Shared Crossing
Moderate
Severe
At-Grade Route
Elevated Route
Retained-Cut Route
Retained-Fill Route
Tunnel Route
Limits of Study
Proposed Noise Wall
Proposed Station

0 300 Feet

N

Exhibit 4-9
Noise and Vibration Impacts - Downtown Bellevue
SEPA Addendum-East Link Extension

TABLE 4-3
Comparison of Noise Impacts

Area of Change	Moderate Light Rail Noise Impacts (Before/After Mitigation)	Severe Light Rail Noise Impacts (Before/After Mitigation)	Traffic-Related Noise Impacts (Before/After Mitigation)
Bellevue Way SE			
Selected Alternative (Rail in trench in front of Winters House)	13/0	0/0	0/0
Shift Bellevue Way	14/0	0/0	26/0
Shift Bellevue Way Option with HOV Lane (Cumulative Impacts)	14/0	0/0	28/0
112th Avenue SE[1]			
Selected Alternative (Rail at grade on 112th Ave)	32/0	12/0	0/0
SE 4th Emergency Access Suboption	17-24/0	12-19/0	0/0
• Bellefield Access Variation	17-24/0	11-18/0	0/0
SE 4th Open Suboption	18-25/0	14-21/0	0/0
Rail Under SE 4th Suboption	15-22/0	11-18/0	0/0
Downtown Bellevue			
Selected Alternative (110th downtown tunnel)	48/0	36/0	0/0
Optimized Selected Alternative Station Option	48/0	36/0	0/0
NE 6th Station	84/0	0/0	0/0

[1] Range reflects a range of impacts related to potential full acquisitions that could occur with the City's Light Rail Overlay LUC amendments.

TABLE 4-4
Comparison of Vibration and Groundborne Noise Impacts

Area of Change	Vibration Impacts (Before/After Mitigation)	Groundborne Noise Impacts (Before/After Mitigation)
Bellevue Way SE		
Selected Alternative (Rail in trench in front of Winters House)	0/0	1/0
Shift Bellevue Way	0/0	0/0
112th Avenue SE		
Selected Alternative (Rail at grade on 112th Ave)	3/0	0/0
SE 4th Emergency Access Suboption	10/0	0/0
• Bellefield Access Variation	9/0	0/0
SE 4th Open Suboption	10/0	0/0
Rail Under SE 4th Suboption	10/0	0/0
Downtown Bellevue		
Selected Alternative (110th downtown tunnel)	1/1	1/0
Optimized Selected Alternative Station Option	1/1	3/0
NE 6th Station Option	0/0	2/0

4.7.1 Bellevue Way SE

Noise impacts would occur at single-family residences on the west side of Bellevue Way SE. The Shift Bellevue Way Option would have 14 moderate light rail impacts compared to 13 moderate impacts with the Selected Alternative. By shifting Bellevue Way SE closer to residences, this option would also have 26 traffic noise impacts. Most of the residences on the west side of Bellevue Way SE currently experience traffic noise levels that exceed the federal noise criteria. However, under existing conditions there are 28 existing traffic noise impacts at residences along Bellevue Way that exceed FHWA traffic noise criteria.

The Winters House was not considered a noise-sensitive receiver in the Final EIS noise analysis based on the understanding of the building uses and activities at that time. To consider updated information and provide a conservative analysis, an updated noise analysis was completed for the house as an institutional use (Category 3), and no noise impact was identified for light rail or roadway traffic. As discussed in Attachment E1, Noise Technical Memorandum– Proposed Refinements, reflective noise was analyzed and no noise increase was found at the Winters House; therefore, there would also be no increase in noise in the noise-sensitive interior of Mercer Slough Nature Park. Furthermore, no noise impacts on the interior of Mercer Slough Nature Park were identified in the Final EIS for the Selected Alternative, and the Shift Bellevue Way Option is even farther away from the park. Therefore, no noise impacts on the noise-sensitive interior of Mercer Slough Nature Park would occur. As discussed in the Final EIS, the loop trail system within the park is adjacent to a busy aerial and is not considered noise sensitive. There would be also be no groundborne noise or vibration impacts from the Shift Bellevue Way Option, including at the Winters House, because the alignment would be farther away and no longer in a lidded trench. See Attachment E3, Vibration Technical Memorandum, for more information. Construction noise and vibration would be less than the Selected Alternative.

The Shift Bellevue Way Option would have both traffic noise and light rail noise impacts and the most effective mitigation for this area addressing both types of impacts would be constructing sound walls along the elevated guideway north of the South Bellevue Station and above the retaining wall on the west side of Bellevue Way SE. Noise walls along the retaining wall could range from 4 to 18 feet high on top of the retaining wall. The wall would be approximately 3,000 feet long, starting at the 112th Avenue SE intersection by the South Bellevue Park-and-Ride and continuing north to the 112th Avenue SE "Y" intersection with Bellevue Way SE. Also, because of potential aesthetic issues of placing a noise wall above the retaining wall a shorter wall and or residential sound insulation could also be considered. With a lower noise wall, there would be some residences where sound insulation would be required and the number of residences requiring insulation would depend on the height and length of the proposed wall. With the noise wall mitigation on the west side of the road, noise levels at residences would be lower compared to existing conditions.

4.7.1.1 Cumulative Impacts

Adding the HOV lane to the Shift Bellevue Way Option would increase traffic-related noise impacts by 2 compared with the Shift Bellevue Way Option, for a total of 28 impacts. All impacts would be mitigated similar to the Shift Bellevue Way Option without the HOV lane, and no change in mitigation is proposed. Constructing the HOV lane with the East Link Extension would result in minimal differences in construction noise, but separating the projects would increase the length of construction noise effects on adjacent residents.

4.7.2 112th Avenue SE

Impacts on 112th Avenue SE would be less than the Selected Alternative that traveled on the east side of the road south of Surrey Downs Park. The 112th Road Over Rail Option would have 15 to 24 moderate impacts and 11 to 21 severe impacts. As shown in Table 4-5, a range of impacts would occur due to the eight potential displacements associated with the new Light Rail Overlay. The SE 4th Emergency Access Suboption would have 17 moderate and 19 severe impacts. The Bellefield Access Variation would displace one impacted residence and result in one less severe impact. The SE 4th Open Suboption would have 18 moderate and 21 severe impacts, which is 2 more severe impacts than the SE 4th Emergency Access and 3 more than the Rail Under SE 4th suboptions. The additional impacts occur around SE 4th Street due to the train bells and pedestrian audible warning devices at the at-grade crossing. The Rail Under SE 4th Suboption would have 15 moderate and 18 severe impacts. The reduced number of impacts for this suboption would occur because of the below-grade crossing of SE 4th Street and lower profile north of SE 4th Street. Severe impacts for all suboptions would occur around the East Main Station as a result of wayside and pedestrian audible warning devices.

Compared with the Selected Alternative, moderate impacts at the Bellefield Residential Park would be reduced from nine to four, due to the barrier between the light rail and the residences created by the road over rail. South of Surrey Downs Park, two homes west of 112th Avenue SE that previously had moderate impacts would be displaced and would no longer be affected, but three homes in this area would have new moderate impacts due to the light rail moving closer and the removal of some homes. Most impacts in this area would now be severe due to the proximity of the light rail and the speed of the train rather than the bells at the gated crossing at SE 8th Street.

Under the recently passed City of Bellevue Light Rail Overlay, up to eight residences on 111th Place SE could choose to be voluntarily acquired. These residences would be severe impacts for all suboptions on 112th Avenue SE, and if acquired, would result in impacts on the next row of homes to the west. For all suboptions, this would result in removal of eight severe impacts and impacts on eight new residences, seven of which would be moderate and one of which would be severe. As an example, the SE 4th Emergency Access Suboption without the property displacements would have 17 moderate and 19 severe noise impacts, but with the residents removed, there would be 24 moderate and 12 severe noise impacts. Residences with impacts would have future light rail noise levels from 60 to 68 dBA Ldn.

All options along 112th Avenue SE from Bellevue Way SE to Surrey Downs Park would be mitigated with sound walls and special trackwork. The noise mitigation would consist of three sound walls and some potential building insulation. The first sound wall would be approximately 6 to 8 feet tall and begin just north of the 112th Avenue

SE "Y" intersection at Bellevue Way SE and continue for approximately 1,300 feet until 112th Avenue SE transitions to cross over the light rail, which would be an effective noise barrier for residences in the Bellefield Residential Park. The second barrier, also approximately 6 to 8 feet tall, would begin on the west side of the light rail alignment along the Bellefield Residential Park, continuing for approximately 1,500 to 1,600 feet and increasing to 8 feet or more, depending on the base height of any retaining wall. There is the potential that sound insulation may be needed for residences located above the trackway near Surrey Downs Park due to the elevation change just south of the park.

The third sound wall would start near SE 4th Street, depending on the suboption. The wall would be located along the west side of the light rail alignment on top of the retaining wall or along property lot lines, beginning 200 feet south of SE 4th Street and continuing to the East Main Station, for a total length of approximately 1,600 feet The walls height would start at approximately 6 feet and would likely continue to be between 6 to 12 feet tall depending on the height of the retaining wall. Sound walls could be located on top of the retaining wall or along property lot lines. The sound wall, along with sound insulation as needed would provide noise mitigation for all noise impacts in this segment. For the at-grade access variation with gates, the opening at SE 4th Street would reduce the effectiveness of the wall, and three homes along SE 4th Street may be considered for building sound insulation. Additional sound insulation may be needed at two residences north of the station to allow for pedestrian access to the station.

For the Rail under SE 4th Option, the sound wall would still be needed but only along the tracks north of SE 4th Street to the East Main Station. The length of this wall was estimated at 1,200 feet and the heights would also start at approximately 6 feet tall, increasing to an 8 to 12 foot range, depending in the height of the retaining walls. Sound insulation may also be required at residences near the pedestrian access to the station.

Reducing the noise from wayside pedestrian warning devices would also help to potentially reduce the number and level of noise impacts. The specific type of audible warning device will be determine during final design and could include using directional sound, bell shrouds, and/or a sound that automatically adjusts based on the existing background noise level at that time.

The 112th Road Over Rail Option would have a total of two to ten vibration impacts, including eight single-family residences, if they are not purchased by Sound Transit in accordance with the recent City of Bellevue Light Rail Overlay, and the King County District Courthouse building in Surrey Downs Park, if it is not relocated by others prior to the project. The Bellefield Access Variation would eliminate one vibration impact because an impacted residence would be displaced. Seven to eight residences on the west side of 112th Avenue SE south of Surrey Downs Park would have new impacts because the alignment would be closer. Impacts north of Surrey Downs Park would be reduced from two to one. All impacts could be mitigated with ballast mats or resilient fasteners.

Compared with the Selected Alternative, the 112th Road Over Rail Option would move construction closer to homes along the west side of 112th Avenue SE. However, pile-driving would not occur within 25 feet of any buildings, and no vibration impacts are anticipated. For a more detailed description of changes in vibration impacts, see Attachment E3.

4.7.3 Downtown Bellevue

There would be no change in impacts at the Bravern building with either Bellevue Transit Center Station option. The Optimized Selected Alternative Station Option would have the same impacts as the Selected Alternative. For the NE 6th Station Option, the 36 severe impacts at the Coast Bellevue Hotel would be reduced to moderate impacts because the alignment would move farther away compared with other Final EIS alternatives that cross here. The NE 6th Station Option would, therefore, have 84 moderate transit noise impacts. While noise impacts at the Bravern would be mitigated with building insulation as necessary, the Coast Hotel impact would be mitigated with a sound barrier installed on the light rail guideway. In addition, wheel squeal from the curve from 110th Avenue NE to the NE 6th Street Station may be noticeable outside the tunnel, and therefore that curve would be designed for lubrication.

The groundborne noise impact at the Meydenbauer Center and the vibration impact at the Coast Bellevue Hotel would be eliminated with the NE 6th Station Option because the alignment would be located farther from the

buildings; however, the impacts would remain with the Optimized Selected Alternative Station Option. No change in mitigation is proposed. All impacts could be mitigated except at the Coast Hotel under the Optimized Selected Alternative Station Option, with options for mitigation including ballast mats, resilient fasteners, or special trackwork.

Construction noise and vibration impact mitigation would be the same as those described in the Final EIS for all alternatives. If the SEM approach were implemented, properties along 110th Avenue NE would be less affected by construction noise and vibration; however, the potential for 24-hour excavation activities could affect adjacent residents and other uses around the Main Street portal and NE 2nd Place staging areas.

4.7.4 New Information: SR 520

Additional information about the pedestrian-bicycle bridges along SR 520 would not result in additional operational period noise or vibration impacts.

Updated project information in the area north and east of the Overlake Transit Center includes new residential development and accounting for freeway sound walls in the analysis. This resulted in the identification of between 34 and 41 new impacts along SR 520 that were not identified in the Final EIS—27 to 34 moderate and 7 severe. These new noise impacts would be in addition to impacts would pertain to all Segment E alternatives, which range from 33 to 167 moderate impacts and 32 to 150 severe impacts. All of the noise impacts would be mitigated with sounds walls or a combination of sound walls and building sound insulation. Sound walls would also mitigate the traffic noise from SR 520, as in some places they would be replacing existing sounds walls that would be removed during construction. A wall on the east side of SR 520 would be approximately 2,050 feet long between NE 51st Street and NE 60th Street, with the height determined by modeling the traffic noise on SR 520. The minimum wall height would be around 6 feet, with maximum heights estimated at 12 to 18 feet. North of NE 60th Street, a second wall could be installed to mitigate the impacts in this area. The wall length would vary depending on alternative, and would likely be integrated with the sound wall on the elevated guideway described in the Final EIS. The wall heights would be determined during final design, but heights of 4 to 8 feet are expected, as the light rail noise comes from the wheel rail interface, which near ground level.

For new residences on the west side of SR 520, mitigation would consist of sound walls along the west side of the tracks, a sound wall near the residences, or building sound insulation are all options to consider in this area. Sound insulation may be needed for upper floors of some residences.

Constructing the Selected Alternative along the shoulder of SR 520 from NE 40th Street to West Lake Sammamish Parkway NE would require relocating existing sound walls along the single-family residential area along 156th Avenue NE. During that time, construction noise and traffic would increase for the residential area north of NE 51st Street to maximum noise levels exceeding 80 decibels on an A-weighted scale (dBA) maximum sound level (Lmax), assuming 100 to 125 feet from the construction activity. For further detail, please see Attachment E2, Noise Technical Memorandum–SR 520.

This area of the noise analysis is located in Segment E, the construction of which is not currently planned to be funded within the ST2 program; however the Sound Transit Board did identify the Selected Alternative for this area of the project.

4.8 Ecosystems Resources

The potential refinements would result in permanent impacts on high-value habitat, wetlands, and wetland buffers that are within the range of impacts from the various alternatives studied in the Final EIS. Mitigation would not change from what was in the Final EIS.

Changes in downtown Bellevue and on SR 520 would not affect wetlands or high-value habitat areas. There would also be no changes to aquatic habitat impacts from any of the potential refinements. As a result, these areas are not discussed further. Operational impacts are listed in Tables 4-5 and shown in Exhibit F2a in Attachment F, Ecosystems, for high-value habitat. Table 4-6 lists impacts on wetland and wetland buffers, which are also shown in Attachment F, Exhibits F1a through F1c.

Wetland mitigation sites under consideration include enhancement of existing Mercer Slough wetlands, enhancement of the Mercer Slough buffer along 112th Avenue SE, and wetland creation and stream enhancement work along the West Tributary of Kelsey Creek.

TABLE 4-5
Comparison of High-Value Habitat Impacts

Area of Change	High-Value Habitat Impacts (Permanent/Temporary Acres)
Bellevue Way SE	
Selected Alternative (Rail in trench in front of Winters House)	0.4/0.8
Shift Bellevue Way	1.2/0.8
Shift Bellevue Way with HOV lane	1.6/0.8
112th Avenue SE	
Selected Alternative (Rail at grade on 112th Ave)	0.3/0.2
112th Road Over Rail	Less than 0.1/Less than 0.1

TABLE 4-6
Comparison of Wetland and Wetland Buffer Impacts

Area of Change	Wetland Impacts (Permanent/Temporary Acres)	Wetland Buffer Impacts (Permanent/Temporary Acres)
Bellevue Way SE		
Selected Alternative (Rail in trench in front of Winters)	0.2/0.4	2.3/1.1
Shift Bellevue Way	0.1/0.2	1.8/0.8
112th Avenue SE		
Selected Alternative (Rail at grade on 112th Ave)	Less than 0.1/0.1	1.9/1.4
112th Road Over Rail	0.3/0.2	2.3/1.1

4.8.1 Bellevue Way SE

The Shift Bellevue Way Option would permanently affect approximately 1.2 acres of high-value habitat. These impacts would be higher than the Selected Alternative (0.4 acre) because the Shift Bellevue Way Option would affect the vegetated slope on the west side of Bellevue Way SE to accommodate the shift in the roadway. The Shift Bellevue Way Option also would permanently affect approximately 0.1 acre of wetlands and 1.8 acres of wetland buffer including impacts from the access road and trail improvements. The Selected Alternative would result 0.2 acre of wetland and 2.3 acres of wetland buffer impacts, including the access road and trail improvements. Including all project improvements, the permanent wetland and wetland buffer impacts of the Shift Bellevue Way Option would be less than the Selected Alternative. These impacts would be less with the Shift Bellevue Way Option because this option would shift the alignment away from the wetlands in Mercer Slough Nature Park (see Exhibit F1a and F1b in Attachment F, Ecosystems).

During construction, the Shift Bellevue Way Option would temporarily impact approximately 0.2 acre of wetlands and 0.8 acre of wetland buffer. The Selected Alternative would temporarily affect approximately 0.4 acre of Category 2 wetland that is located next to Bellevue Way SE and 1.1 acres of wetland buffer, which is more than the potential refinement. See Attachment F for maps of impacts on wetlands and wetland buffers. The proposed retaining walls on the east side of Bellevue Way SE would not intercept groundwater flows, which would occur with the Selected Alternative.

4.8.1.1 Cumulative

Adding the HOV lane proposed by the City of Bellevue to the Shift Bellevue Way Option would increase permanent impacts on high-value habitat by 0.4 acre, for a total impact of 1.6 acres. The area of temporary construction impacts would be the same as without the HOV lane, which is 0.8 acre. The impacts on wetlands and wetland buffer would be the same as without the HOV lane, as well, because there would be no change in the project footprint on the east side of Bellevue Way SE, where the wetlands occur.

4.8.2 112th Avenue SE

During the development of the potential refinements, an area along Mercer Slough that was previously identified as wetland buffer has been reclassified as wetland near the SE 15th Street entrance to the Bellefield Office Park. The impact numbers for the Selected Alternative now include less than 0.1 acre of wetland impact and approximately 0.1 acre of reduced wetland buffer impact in this area than what was included in the Final EIS. The Selected Alternative would be located along the east side of 112th Avenue SE, where Mercer Slough is located, and it would affect less than 0.1 acre of wetlands and approximately 1.8 acres of wetland buffer.

The 112th Road Over Rail Option would permanently affect 0.3 acre of wetland and would permanently affect approximately 2.3 acres of wetland buffer. Design refinements include using retaining walls with fill to support the alignment in wetland areas, which would minimize the fill slope when compared with typical at-grade construction and would therefore minimize wetland impacts. Wetland and wetland buffer impacts would be greater than they would be for the Selected Alternative because the relocated SE 15th Street would require building an embankment fill into the wetland and wetland buffer. The wetland buffer would be restored after construction with vegetation that would provide enhanced wetland buffer function. However, the modification does include a 0.07 acre credit of removing some portion of impervious surface and returning it back to wetland buffer function. Impacts on stream buffers from the 112th Road Over Rail Option would be the same in this area.

4.9 Water Resources

The potential refinements would result in impacts on groundwater and stormwater that are within the range impacts for the alternatives studied in the Final EIS. The only area where there would be a difference in water resource impacts from the Selected Alternative is along Bellevue Way SE and potentially in downtown Bellevue. Mitigation would be the same as proposed in the Final EIS.

The potential refinements would have impacts on stormwater that are within the range of Final EIS impacts and less than impacts from the Selected Alternative. The Final EIS alternatives would add between 4.4 and 13.5 acres of new impervious surface. The Selected Alternative would add about 13.3 acres of new impervious area, while the potential refinements would add 7.6 acres of new impervious surface.

The Shift Bellevue Way Option would have impacts on groundwater that are within the range of Final EIS impacts and less than impacts from the Selected Alternative. Portions of the Selected Alternative would be constructed in retained cuts along Bellevue Way SE, which would be designed to allow groundwater to flow to downgradient wetlands and surface water features. The proposed profile for the Shift Bellevue Way Option would be above-grade along Bellevue Way SE, thereby avoiding impacts from the Selected Alternative's retained cut. Retaining walls on the west side of Bellevue Way SE would be designed to direct groundwater flow under Bellevue Way SE to Mercer Slough.

4.10 Geology and Soils

Overall impacts related to geology and soils for the potential refinements would generally be less than many of the Final EIS alternatives, including the Selected Alternative. The potential refinements would have slightly greater impacts than the Selected Alternative in the areas of Bellevue Way SE and 112th Avenue SE, but they would require less excavation for the tunnel station in downtown Bellevue. There would be no change to proposed best management measures during construction.

4.10.1 Bellevue Way SE

The potential refinements would require less construction on the east side of Bellevue Way SE and 112th Avenue SE adjacent to Mercer Slough, but they would disturb soils on the west side of both roadways when constructing retaining walls. Ground improvements might be needed on the east side of Bellevue Way SE related to access road construction between the Blueberry Farm and the Winters House. Ground improvement would also likely be required along the access to the relocated SE 15th Street as well as beneath the fill for the proposed 112th Avenue SE overcrossing of the at-grade light rail tracks. The Shift Bellevue Way Option would require taller retaining walls on the west side of Bellevue Way SE than the Final EIS alternatives for a similar length of Bellevue Way SE. Heights of the walls to accommodate the roadway widening associated with the Shift Bellevue Way Option would be between 40 and 45 feet tall. Comparatively, the Selected Alternative would require retaining walls up to 20 feet high to support the cuts along much of the length of the Selected Alternative on the east side of Bellevue Way SE. Retaining walls on the east side of Bellevue Way SE would be shorter than with the Selected Alternative. With the Shift Bellevue Way Option, the light rail profile would be at-grade on the east side of Bellevue Way SE, and retaining walls on the east side of the roadway would still be needed to support the trackway as well as the access road between the Blueberry Farm and the Winters House.

4.10.2 112th Avenue SE

Heights of the retaining walls to accommodate the raised roadway for the 112th Road Over Rail Option would be less than 20 feet above grade. The need for measures to address slope stability, settlement, and localized liquefaction issues on the east side of 112th Avenue SE would be reduced when compared with the Selected Alternative because the 112th Road Over Rail Option would cross to the west side of 112th Avenue SE earlier. However, fills would be needed on the east side of 112th Avenue SE with the 112th Road Over Rail Option for the raised 112th Avenue SE roadway and realigned SE 15th Street. Soft peats and clays on the east side of the alignment would likely require ground improvement to mitigate the potential for excessive settlement as well as the potential for slope movement from new earth fills and seismic ground shaking.

Retaining walls would be used on the west side of 112th Avenue SE, where soils are expected to be stronger and more stable than on the east side. No requirements for ground improvement are expected along the west side of 112th Avenue SE due to the stronger soils. Retaining walls on 112th Avenue SE south of Surrey Downs Park would not be necessary for any of the Final EIS alternatives.

4.10.3 Downtown Bellevue

The Optimized Selected Alternative Station Option would require less excavation than the other Final EIS tunnel alternatives, including the Selected Alternative, because the tunnel and station would be shallower. The NE 6th Station Option would have the least excavation because it would eliminate the underground station and have a shallower tunnel than the Final EIS tunnel alternatives. SEM construction has about 60 percent less excavated material than cut and cover construction.

4.11 Public Services

Just as with most alternatives studied in the Final EIS, the potential refinements are not expected to change emergency response times; however, some rerouting might be necessary for some of the potential refinements. The police level of service would be impacted more with the NE 6th Station Option because this option would remove more police parking spaces. Potential parking impacts on Bellevue Police during project construction and

operation would be addressed in consultation with the City. Potential impacts on police parking and response times could increase, but would be mitigated using the same mitigation measures as the Selected Alternative.

4.11.1 Bellevue Way SE

The Shift Bellevue Way Option would not change emergency response times from the Final EIS. While most Final EIS alternatives would not affect emergency response times, some would cause minor delays.

4.11.2 112th Avenue SE

For the 112th Road Over Rail Option, changing access at SE 15th Street for the Bellefield Office Park and Bellefield Residential Park would not affect response times to these areas because approaching emergency vehicles would be allowed to make left turns. Response times within the Surrey Downs neighborhood are not expected to change with the SE 4th Emergency Access Suboption because emergency access would be maintained. Although there would be an at-grade crossing at SE 4th Street for the SE 4th Emergency Access and Open suboptions, the suboptions that maintain access at SE 4th Street would operate similarly to the Selected Alternative. Construction period impacts would also remain similar to those discussed for the Selected Alternative in the Final EIS.

4.11.3 Downtown Bellevue

The NE 6th Station Option could result in altering police level of service compared with the Final EIS alternatives, including the Selected Alternative. Sound Transit would work with the City to minimize this potential impact. The NE 6th Station Option would be at-grade, with the entrance at the Bellevue City Hall Plaza on 110th Avenue NE and NE 6th Street. The station would cross the existing police access to the Bellevue City Hall parking garage on NE 6th Street, but grade-separated access would be created for police vehicles. This option would remove almost 188 parking spaces from the City Hall garage, including secure parking used by police. According to the City of Bellevue, the reduction in parking is anticipated decrease operational efficiency because of farther travel distances between officers' vehicles and their equipment. The Selected Alternative would also remove 105 parking stalls at the Bellevue City Hall parking garage, where police vehicles are parked. However, this parking impact would not likely have a negative effect on local police services. Sound Transit would work with the City to minimize this potential impact consistent with the MOU with the City. The MOU stipulates that the parking solution would be implemented prior to construction and therefore there would be no construction impacts.

Construction impacts would be the same as those discussed in the Final EIS for Downtown Bellevue except that the closure of 110th Avenue NE may be longer in duration. If SEM were implemented, there would be less closure to 110th Avenue NE, thereby minimizing access obstacles for emergency response to the areas affected during construction.

4.12 Utilities

Impacts on utilities would occur when utilities need to be moved during construction. Potential utility relocations with the potential refinements might be slightly more than with the Selected Alternative due to the Shift Bellevue Way Option; however, the impacts would be similar to Final EIS alternatives, which would disturb Bellevue Way SE. All Final EIS alternatives would require utility relocations. No change in mitigation is proposed.

4.12.1 Bellevue Way SE

Because the potential refinements would shift Bellevue Way SE, utility relocations in this area would be more than with the Selected Alternative.

4.12.2 112th Avenue SE

Utility relocations along 112th Avenue SE would be increased due to the raised profile of the roadway, resulting in changes to the profile of some utilities in order to continue to make the utilities accessible. However, impacts at SE 6th Street and SE 8th Street associated with the Selected Alternative would be avoided.

4.12.3 Downtown Bellevue

For the Bellevue Transit Center Station options, utility relocation impacts would be similar or less than with the Selected Alternative. With the NE 6th Station Option, there might be slightly fewer utility relocations in downtown

Bellevue when compared with the Selected Alternative because there would not be an underground station. If SEM were implemented, many utility relocations may be avoided along 110th Avenue NE.

4.13 Historic and Archaeological Resources

Changes to impacts discussed in the Final EIS would only occur at Bellevue Way SE near the Winters House from the Shift Bellevue Way Option. The potential refinements on 112th Avenue SE would not result in new effects on the Surrey Downs potential historic district. The additional properties that would be acquired along 112th Avenue SE are non-contributing to the potential Surrey Downs Historic District.

Similar to the Final EIS alternatives that travel along Bellevue Way SE, the Shift Bellevue Way Option runs in front of the Winters House property. The Winters House was listed in the National Register of Historic Places (NRHP) in 1992 under Criteria A and C, based on its Spanish Eclectic architecture and its association with developments in the bulb-growing and floriculture industry in King County and Washington state. These criteria are as follows:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, or association; and:

> *A. That are associated with events that have made a significant contribution to the broad patterns of our history.*
>
> *C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.*

The NRHP Registration form provides a boundary description that includes 50 feet of landscaping around the house, including a portion of the parcel along Bellevue Way SE. The Winters House is unusual both for its style as well as its farmland setting, though the NRHP Registration form is careful to note that the landscape of the setting no longer has integrity to convey its significance. The relationship of the residence with and its orientation to Bellevue Way SE no longer has integrity, given the dramatic changes that have occurred to the once narrow country road that now is a major arterial leading to Downtown Bellevue.

The project refinements would have a more visible change in front of the Winters House than the Selected Alternative, but they would not affect the historic characteristics of the house.

The Selected Alternative (see Exhibit 4-10) evaluated in the Final EIS listed the following anticipated permanent impacts on the Winters House:

- Use of property between the Winters House and Bellevue Way SE for lidded retained-cut structure
- Modifications to the landscaping over the lid to be more consistent with historic landscaping
- Potential groundborne noise and vibration, which would be mitigated with special track design

The Final EIS concluded that all measures to minimize potential operational impacts on the Winters House have been incorporated in the selected project design, and with these measures, the project design would not impact the character-defining features of the property that qualify it for listing in the NRHP.

As opposed to the Selected Alternative's permanent easement within the historic property's 50-foot boundary, the Shift Bellevue Way Option places the light rail just beyond the sidewalk curb in front of the Winters House and outside of the historic property's 50-foot boundary. The roadway lanes are shifted west of the light rail (see Exhibit 4-11).

EXHIBIT 4-10
Bellevue Way SE with Selected Alternative – looking south at Winters House

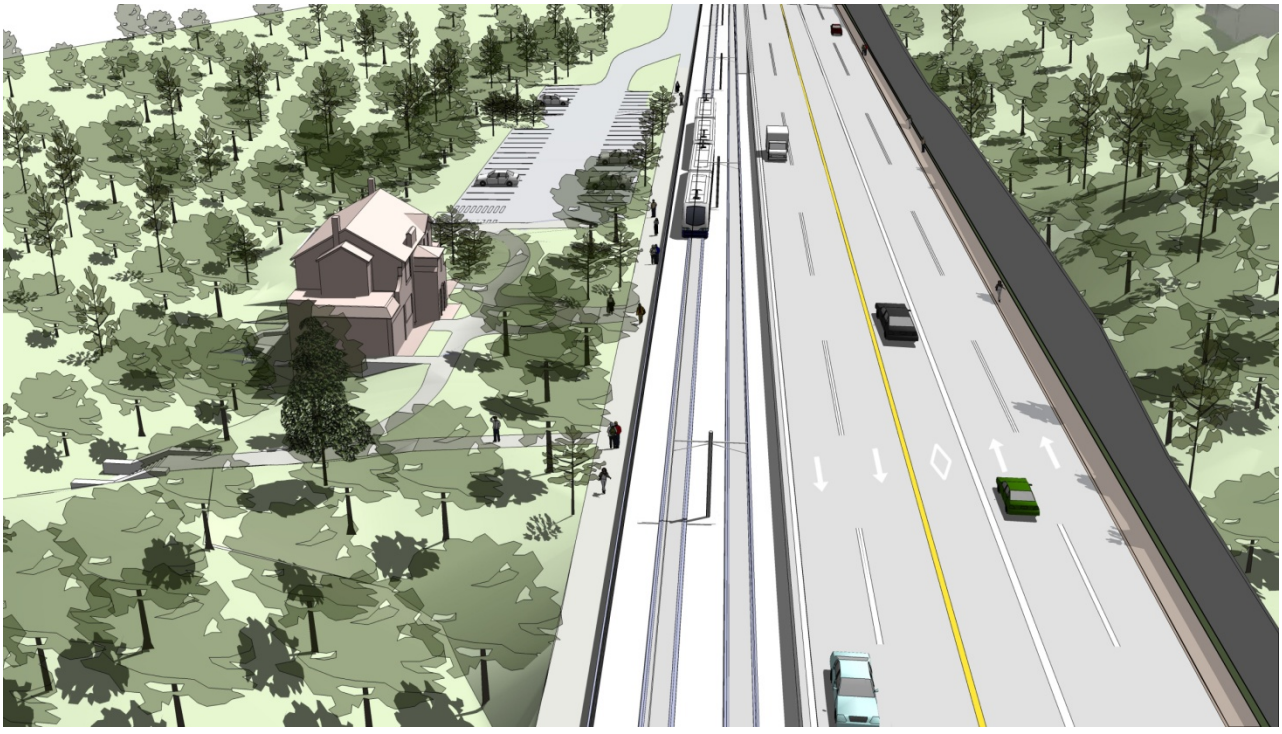


EXHIBIT 4-11
Bellevue Way SE with Shift Bellevue Way Option with HOV and retaining/noise walls– looking south at Winters House

Compared with the Selected Alternative, which proposed to modify the Winters House parking lot, the Shift Bellevue Way Option would relocate the vehicular access approximately 1,000 feet south of the existing driveway. A change in vehicular access to the Winters House parking lot would not result in a change of setting for the Winters House because the existing parking lot is not a historic feature, and it would be maintained and used for the Winters House visitors. The option would provide clear signage identifying the new driveway location. This change would not affect the characteristics that qualify the Winters House for the NRHP (significant architecture and association with horticultural history), nor would it affect the current use of the property.

The Winters House is currently screened from the road to a large degree by existing trees and shrubs. The existing landscaping is not original, does not contribute to its historic character, and does not reflect the landscaping from the historic period. While it was not originally evaluated as part of the Selected Alternative, the City of Bellevue has plans to widen the existing 8-foot-wide sidewalk to a 14-foot-wide multiuse trail consistent with their transportation and park plans. This would affect about 6 feet of the existing landscaping adjacent to the existing sidewalk, consisting primarily of shrubs, to accommodate the wider trail. Because there is an existing sidewalk adjacent to the property, widening the sidewalk would not affect the setting of the Winters House. This represents less change to the landscaping than the Selected Alternative, which would have replaced all landscaping in the front yard adjacent to Bellevue Way SE.

Unlike the Selected Alternative, which was proposed to be in a lidded trench in front of the Winters House, there would be a change in views to the west from the Winters House to the at-grade light rail and safety barriers and across Bellevue Way SE to the retaining wall. The light rail would also change views from the road toward the house due to the addition of safety barriers, overhead catenary wires and poles, the expanded multiuse path, and subsequent reduced front landscaping. Power lines are undergrounded for both the Selected Alternative and Shift Bellevue Way Option. However, because the house is largely screened from the road by the current landscaping, the change in visibility would not result in an impact. Combined, these changes would not alter, in any material way, the historic setting of the Winters House in light of the existing major arterial character of Bellevue Way SE and the absence of historical landscaping. The changes to the setting from the light rail would not be adverse and would not affect the characteristics that qualify the Winters House for the NRHP.

The Final EIS stated that the Winters House is not a noise-sensitive receiver per the FTA guidance (FTA, 2006). Based on updated information on the building uses and to provide a conservative analysis, the house was analyzed as a Category 3 use for both noise and vibration effects. A Category 3 use is the category for institutional uses with primarily daytime and evening use (i.e., schools, museums, quiet offices). The Shift Bellevue Way Option would avoid groundborne noise (noise that is emitted from ground vibration) that the Selected Alternative was projected to cause from the underground light rail in proximity of the Winters House. There would also be no vibration impact for the Shift Bellevue Way Option. Vibration levels are projected to be 70 VdB at the Winters House, and this is below the impact criterion of 75 VdB for Category 3 uses (Sound Transit, 2013a).

The noise analysis for the Shift Bellevue Way Option indicates an existing estimated hourly noise level at the Winters House of 64 dBA equivalent continuous noise level (Leq) during peak hour, which is below the FTA moderate impact of 66 dBA and 71 dBA for a severe impact. The projected noise level of 63 dBA Leq is below the criteria, no noise impact was identified (Sound Transit, 2013b), and light rail noise would not prevent the building from continuing to be used in its current capacity. The noise and vibration associated with the light rail would not affect the characteristics that qualify the Winters House for the NRHP. The analysis of traffic noise also considered noise impacts under FHWA criteria and found that there would not be an impact at the Winters House (see Attachment E1, Noise Technical Memorandum–Proposed Refinements).

The house currently has two types of users: 1) scheduled events and research where users are intentionally going to the house for a specific purpose and 2) drop-in users during the hours when the house is open to the public. The visibility of the house and location of the vehicle access to the parking lot would not affect the first type of users so long as the driveway access is well marked and appropriate signage indicates the location of the house. Drop-in users would see the house either from the road or are people already using the park and trails around the house, and they drop in out of curiosity or interest—they do not intentionally come to visit the house. The visibility of the house from the road does not change substantially as described above. Park users would see the

house from the adjacent trails or parking area, and the light rail would not interfere with these views nor affect this type of use. Neither the visual change nor change in access would prevent the house from continuing its current uses. Additionally, the noise and vibration levels would remain below the FTA impact criteria for Category 3 properties, so would not affect the continued use of the Winters House.

During construction, the Selected Alternative evaluated in the Final EIS listed the following anticipated temporary impacts on the Winters House:

- Potential vibration and settlement impacts during construction that could potentially damage the house, which was determined to be an adverse effect under Section 106
- Temporary closure of the Winters House and relocated activities
- Construction effects (dust and noise)

The Shift Bellevue Way Option resolves the potential to damage the house during construction by moving the light rail above ground and further away from Winters House. The Winters House would likely be closed during construction because of restrictions to accessing the house and the activities conducted at the house by the City of Bellevue and Eastside Heritage Center would be relocated and reinstated following construction. The construction would involve shifting and rebuilding Bellevue Way SE, building the retaining wall and noise walls west of Bellevue Way SE, and constructing the light rail guideway and new path in front of the Winters House property. The major sources of construction vibration include impact pile-driving, augured piling, and vibratory rollers. The primary project activity with a potential to cause building damage is impact pile-driving at locations within 25 feet of structures. Since impact pile-driving is not needed near the Winters House, and other equipment needed for at-grade track construction such as vibratory rollers would be approximately 50 feet from the Winters House, there would be no vibration impact from construction at the Winters House. Construction could result in dust and standard mitigation would be implemented.

Measures addressing the potential for settlement are no longer necessary and a safety fence along the construction limits would replace a barrier.

FTA, in consultation with Washington State Historic Preservation Office (SHPO), has made a determination of Adverse Effect for the Selected Alternative, and a Memorandum of Agreement (MOA; FTA et al., 2011) was prepared pursuant to Code of Federal Regulations (CFR), Title 36, Chapter 800.6[c]. Adverse impacts will be resolved through this MOA. The MOA contains stipulations specifying avoidance, minimization, and mitigation measures to be implemented to resolve the potential impacts. Mitigation measures for effects of the Selected Alternative would include the following:

- Photograph and inventory the building to establish existing conditions.
- Install vibration and settlement monitoring devices and adjust excavation methods based on monitoring results.
- Use specific vibration- and settlement-reducing construction methods (to be determined during final design and construction).
- Potentially build a construction barrier around Winters House to prevent damage and minimize dust.
- Close the Winters House during construction and temporarily relocate the tenant (Sound Transit would provide information to the public regarding how to access the Eastside Heritage Center during construction).
- If damage does occur, make the needed repairs consistent with the U.S. Secretary of the Interior's standards for treating historic properties.

Mitigation for the potential refinements would include providing signage at the relocated driveway near the Blueberry Farm following construction. During construction, mitigation measures would include the following:

- Construct fence along construction limits.

- Relocate Eastside Heritage Center.
- Provide construction mitigation measures such as dust control.
- Install vibration-monitoring devices during construction.
- Use vibration-reducing construction methods, if needed.
- Re-landscape disturbed areas.
- Install a directional sign for the at the driveway entrance.

The Shift Bellevue Way Option would not change the features of the Winters House that make it eligible for the NRHP, and operating the light rail would not result in vibration or noise effects beyond the FTA thresholds for this use. The Shift Bellevue Way Option would resolve the potential effects of the lidded trench that contributed to the adverse effect finding for the Selected Alternative and, except as noted, additional mitigation would not be needed.

4.14 Parklands and Open Space

Park impacts from the potential refinements would be within the range of impacts for the Final EIS alternatives. Permanent park impacts from the Final EIS alternatives would range from 0.5 to 3.0 acres of impacts on Mercer Slough Nature Park, 0 to 0.5 acre on Surrey Downs Park, and 0 to 0.1 acre on the Pocket Parks. Total permanent park impacts ranged from 0.5 to 3.6 acres for Final EIS alternatives for the area covered by the potential refinements. Table 4-7 compares the park impacts for the potential refinements as they occur in the Bellevue Way SE, 112th Avenue SE, and Downtown Bellevue areas.

Overall, construction impacts would be in the lower range of total construction impacts when compared with the impacts of the Final EIS alternatives. Minor changes to parks and mitigation are proposed for permanent and construction impacts, as agreed to with the City. These changes would widen the Periphery Trail, relocate the vehicle and pedestrian access points for the Winters House and Blueberry Farm, change access and parking spaces at Surrey Downs Park, and restore the Pocket Parks.

TABLE 4-7
Comparison of Park Impacts

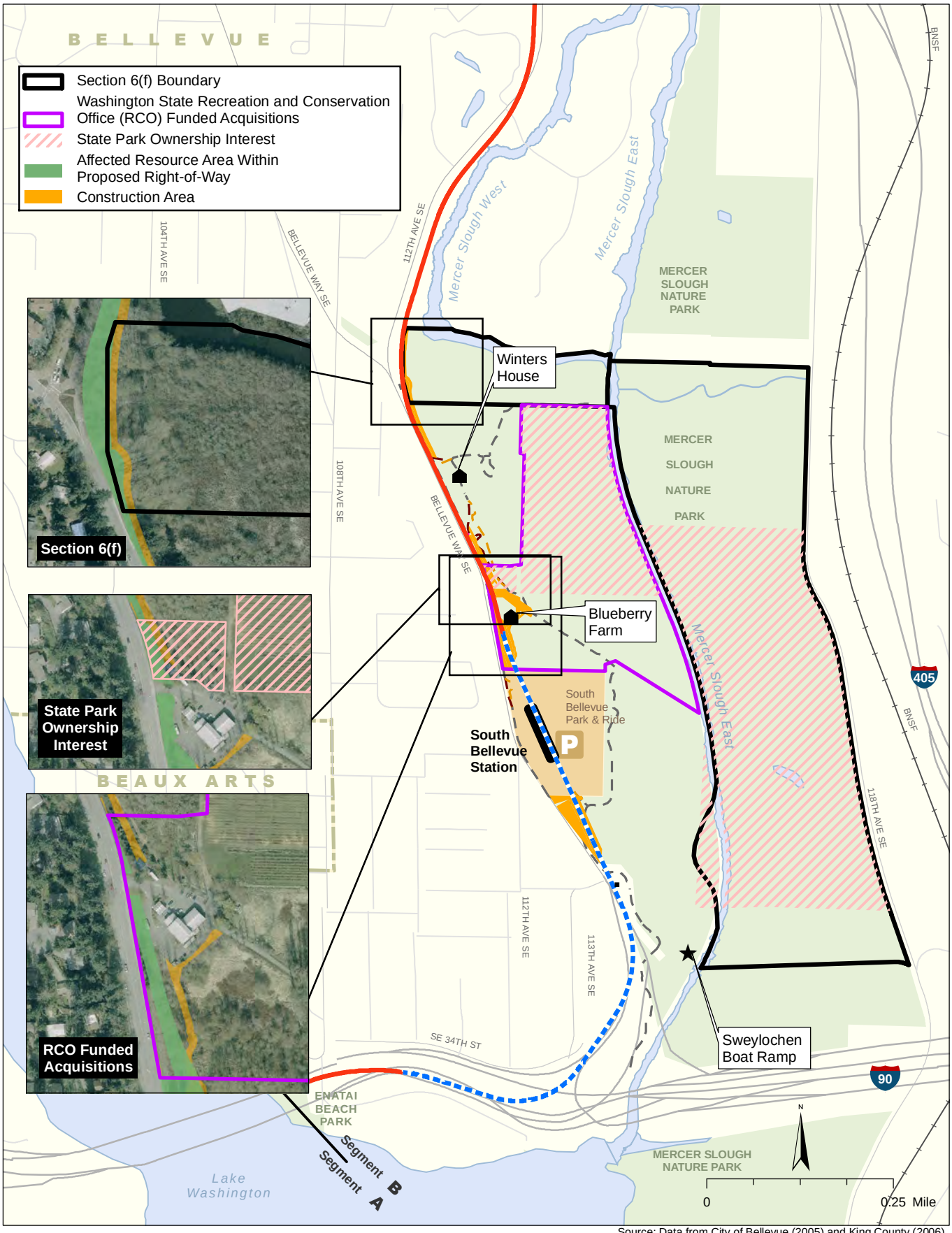
Area of Change	Park Impacts (Permanent/Temporary Acres)	
	Selected Alternative	**Potential refinements**
Bellevue Way (Mercer Slough Nature Park)	2.3/2.8	1.3/3.4
112th Avenue (Surrey Downs Park)	0.5/0.5	1.0/1.0[1]
Downtown Bellevue (Pocket Park)	0.1/0.6	Less than 0.1 to 0.1/0.6[2]

[1] Same impact on Surrey Downs Park for all 112th Road Over Rail Suboptions.

[2] Same impact on Pocket Parks for both Bellevue Transit Center Station Options.

4.14.1 Bellevue Way SE

The Shift Bellevue Way Option would permanently acquire 1.3 acres of the Mercer Slough Nature Park, which is less than the Selected Alternative (permanent impacts on 2.3 acres of Mercer Slough Nature Park in this area). These areas of impacts are shown in Exhibit 4-12, where the areas affected are divided by ownership or park funding sources, noted as Section 6(f) (acquired with Land and Water Conservation Funds), state park ownership and Recreation Conservation Office funded (state funding sources). As with the Selected Alternative, the Shift Bellevue Way Option would modify trails. The proposed refinements include building a relocated, joint access to the Blueberry Farm and the NRHP-listed Winters House. The mitigation for the Selected Alternative included relocating vehicle and pedestrian access points for the Blueberry Farm, which under agreement with the City of Bellevue also included relocating the Blueberry Farm retail facility to the Winters House parking lot.



Source: Data from City of Bellevue (2005) and King County (2006).

At-Grade Route
Elevated Route
Retained-Cut Route
Retained-Fill Route
Tunnel Route
Station
New and/or Expanded Park-and-Ride Lot

Exhibit 4-12
Mercer Slough Nature Park Impact from Potential Refinements
East Link Extension

The relocation of the Blueberry Farm retail is part of the potential refinements. Similar to the Selected Alternative, the potential refinements would not affect wildlife viewing areas because the changes would occur in active use areas including the Winters House, Blueberry Farm buildings, and parking lots. The refinements would not change access to the Sweylocken Boat Ramp from the Selected Alternative.

As with the Selected Alternative, the Shift Bellevue Way Option would consolidate the existing Winters House and Blueberry Farm vehicle and pedestrian access; however access with the Shift Bellevue Way Option would be located south of the current Blueberry Farm driveway. Trailheads from Bellevue Way SE would be relocated from in front of the Winters House and Blueberry Farm to the new access road. The Shift Bellevue Way Option would affect another existing pedestrian connection from Bellevue Way SE to the park, which would be reinstalled following construction. Only minor adjustments would be needed to maintain the existing Heritage Loop Trail. Additionally, this option would modify the existing Periphery Trail in accordance with the City of Bellevue's and *Pedestrian and Bicycle Transportation Plan* (City of Bellevue, 2009). To the south, the existing sidewalk (which is part of the Periphery Trail) would be replaced with a combined multiuse access road and trail. Continuing north, the trail modification would widen the existing sidewalk for park and recreational use, which would enhance accessibility to the Winters House and other recreational uses. Replacement land would meet the park objectives of preserving and enhancing contiguous wetlands, whereas the affected areas consist of groomed landscaped areas near the roadway. The replacement land would be of similar or higher value and function compared to affected lands. Similar to the Selected Alternative, the visual change associated with removing trees would be most noticed from the north portion of the park and from the Periphery Trail, closest to Bellevue Way SE.

The areas affected are adjacent to areas with uses that already affect the area's visual quality. Changes near the Periphery Trail would be near Bellevue Way SE, a busy arterial roadway. Like the Selected Alternative, the potential refinements would not permanently affect the park's use, features, function, and attributes, nor would they diminish the park's value, the priority of which is "to preserve and enhance extensive wildlife habitat" per the *Mercer Slough Open Space Master Plan* (City of Bellevue, 1990).

The Shift Bellevue Way Option would result in more temporary park use for construction than the Selected Alternative. Although the light rail guideway has shifted farther west outside the park, construction of the longer access road to the Blueberry Farm and the Winters House and reconstruction of the Blueberry Farm parking disturbs a larger area, but less of it would be converted to permanent right-of-way. However, the types of effects and areas affected during construction would be the same as those of the Selected Alternative. After construction, disturbed areas would be restored with appropriate landscaping. Construction under both the Selected Alternative and the Shift Bellevue Way Option would occur in the western edge of Mercer Slough Nature Park and would result in the same impacts, including increased noise, dust, and temporary access restrictions to western areas of the park, but neither would inhibit normal use of most of the park's resources.

Just as with the Selected Alternative, the Shift Bellevue Way Option would maintain and/or relocate (as necessary for safety purposes) the Periphery Loop Trail sidewalk on the eastern side of Bellevue Way SE. Options could include providing a protected sidewalk on the eastern side of Bellevue Way SE or constructing a new sidewalk on the western side of Bellevue Way SE. Pedestrian access to Sweylocken Boat Ramp, the I-90 Trail, or other Mercer Slough Nature Park trails would generally be maintained during construction.

As with the Selected Alternative, the Shift Bellevue Way Option would relocate the Eastside Heritage Center activities and the retail component of the Blueberry Farm to enable the businesses to continue operation during construction. Farming operations at the Blueberry Farm would be maintained during construction, but there would be no public access. Closing parking at the Winters House and the Blueberry Farm would reduce available parking in the western side of the park, but temporary parking for park users would be provided as agreed to with the City of Bellevue. Also, Blueberry Farm retail and the Winters House parking and activities would be would be restored following construction. Construction of the Shift Bellevue Way Option would have similar affects as the Selected Alternative to park use along the park's boundary with Bellevue Way SE. Construction would not inhibit normal park access and use on the park's east side.

Exhibit 4-12 also demonstrates how these impacts affect lands improved with Land and Water Conservation Funds, known as Section 6(f) lands, lands purchased by State of Washington funds and those managed by Recreation and Conservation Office (RCO) of the State of Washington. The permanent impacts on the 6(f) lands are eliminated by a slight change in the alignment of the Shift Bellevue Way Option, but construction would temporarily affect a slightly larger area compared against the Selected Alternative to reflect the design of a multi-use path in this area. Temporary impacts on 6(f) lands are mitigated as if they were permanent, due to the length of the construction period. Therefore, as mitigation, all 6(f) lands that are either permanently or temporarily affected would have to be replaced. The permanent and temporary impacts of the Shift Bellevue Way Option would be larger on the RCO land because both the proposed new access roadway between the Blueberry Farm and the Winters House and refinements to the Blueberry Farm parking area occur within the RCO lands. A small realignment to the Heritage Trail also occurs on RCO property, which would not alter the function of these features. All other changes would be similar to the Selected Alternative during construction. Despite the increase in the number of affected acres with the Shift Bellevue Way Option, the conclusion of the analysis in the Final EIS remains valid.

4.14.2 112th Avenue SE

The 112th Road Over Rail Option would affect the Mercer Slough Water Trail and Surrey Downs Park, as discussed below.

4.14.2.1 Mercer Slough Water Trail

Just north of the Mercer Slough Nature Park, the 112th Road Over Rail option follows the same basic alignment as the Selected Alternative and would be visible from the Mercer Slough Water Trail in this area. The 112th Road Over Rail option would have the same permanent and temporary impacts on the Mercer Slough Water Trail as the Selected Alternative.

4.14.2.2 Surrey Downs Park

The 112th Road Over Rail Option would permanently acquire 1.0 acre of Surrey Downs Park along its northeast boundary along 112th Avenue SE, which is more than the 0.5 acre of impact that would result from the Selected Alternative. Although the impact is greater, the area affected does not contain active recreational facilities and displaces the landscape strip and some parking used for the park and District Court.

Similar to the Selected Alternative, the 112th Road Over Rail Option would construct a retaining wall on the west side of 112th Avenue SE and reconfigure the parking area. The retaining wall for the 112th Road Over Rail Option would extend the entire length of the east side of the park, whereas the Selected Alternative would have a wall along the northern portion of the east side of the park along 112th Avenue SE. The Selected Alternative and all suboptions would require updating the *Surrey Downs Master Plan* (City of Bellevue, 2008) for the easternmost portions of the park.

Park access and parking areas within the park would be redesigned to accommodate remaining or planned uses. Consistent with the City of Bellevue's requests outlined in the MOU, the 112th Road Over Rail Option would "close the access to Surrey Downs Park from 112th Avenue SE and provide alternate access . . . to enhance the Park's neighborhood character." The Selected Alternative would remove the north entrance off of 112th Avenue SE, whereas all Road Over Rail suboptions would close the north and south entrances. All 112th Road Over Rail suboptions include possibly providing access from 111th Avenue SE north of the park and from the same roadway, 111th Avenue SE, located south of the park, or potentially from SE 4th Street. The three suboptions mostly only differ with respect to access into the park, as described below:

- **SE 4th Emergency Access Suboption:** Closing SE 4th Street except for emergency vehicle access would make access to the park less direct and through the neighborhood from 108th Avenue SE or Main Street to either the north or south side of the park. As described, enhancing the park's neighborhood character would likely reduce the number of vehicles driving to the park when compared with current conditions. With the Bellefield Access Variation, an additional route to the park would be available but still less direct than currently exists (Exhibit 4-13).

- **SE 4th Open Suboption:** This suboption would allow general access directly from 112th Avenue SE via SE 4th Street, thereby avoiding the less direct access in the SE 4th Emergency Access Suboption (see Exhibit 4-13).
- **Rail under 4th Suboption:** The guideway profile would be below the street level along all park land that fronts 112th Avenue SE for this suboption. The retained cut would result in visual changes as viewed from 112th Avenue SE, but not for park users. This suboption also allows general access directly from 112th Avenue SE via SE 4th Street, thereby avoiding the less direct access in the SE 4th Emergency Access Suboption (Exhibit 4-14).

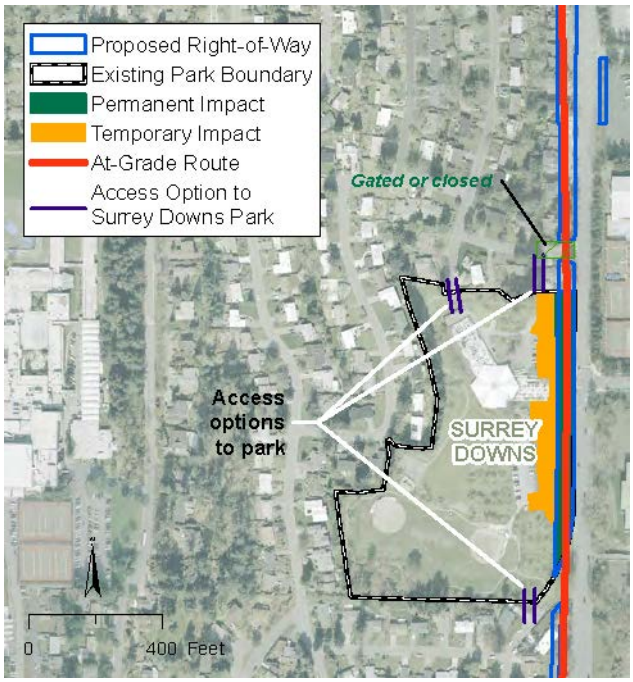


EXHIBIT 4-13
Surrey Downs Park Impacts from SE 4th Emergency Access and SE 4th Open Suboptions

Consistent with the Selected Alternative, each project refinement would acquire properties on the west side of 112th Avenue SE between Surrey Downs Park and Main Street. Once the project is built and operational, about 3.4 acres of the acquired area would be developed into a linear landscaped park area that would replace and fully mitigate the linear landscaped areas of Surrey Downs Park that would be affected. Furthermore, the landscape setback between the residents and the light rail guideway would continue this landscaped area south and into the Bellefield Residential Park, creating even a longer park-like setting. Like the Selected Alternative, the potential refinements would not substantially affect the park's use, features, function, and attributes, and the landscaped area would be extended along the west side of 112th Avenue SE to Main Street.

Regardless of which project refinement is selected, construction would temporarily close the portions of the park's north and eastern edges and close all access from 112th Avenue SE. Pedestrian and vehicular access and parking would be developed during construction as agreed to by the City and Sound Transit. All other construction impacts would be the same as those for the Selected Alternative. Construction impacts such as noise, dust, visual change, and reduced parking would be noticed by park users but would not inhibit park use. The park's active use areas are located in the south and west portions of the park away from construction activities.

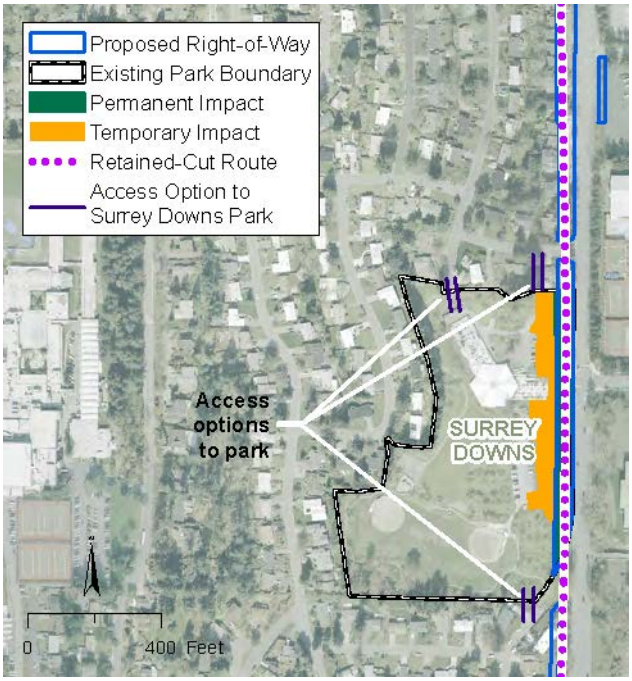


EXHIBIT 4-14
Surrey Downs Park Impacts from Rail Under 4th Suboption

4.14.3 Downtown Bellevue

The area of permanent impact on the Pocket Parks for both the Optimized Selected Alternative Station and NE 6th Station Options is similar to the Selected Alternative; albeit, the NE 6th Station Option would impact less than 0.1 acre for installing the ventilation and station emergency access stairway (Exhibit 4-15). The remainder would be landscaped comparably to existing conditions.

The Optimized Selected Alternative Station Option would convert approximately 0.1 acre of the northwest quadrant of the Pocket Park to a station entrance as noted for the Selected Alternative and convert the remainder

into an outdoor public plaza. Similar to the Selected Alternative, this option would acquire an easement under the Pocket Park's northeast and southeast quadrants.

A proposed hotel development has altered the available staging area for tunnel construction in downtown Bellevue. Construction activities associated with the tunnel for the potential refinements or the current Selected Alternative would use up to all four quadrants of the NE 2nd Pocket Parks for a construction easement, totaling approximately 0.6 acre. Using all four quadrants would be more than the area originally declared for the Selected Alternative in the Final EIS. Once construction is completed, the park quadrants would be restored to comparable preconstruction conditions. If SEM were implemented, there still would be temporary impacts on Pocket Parks because they would be used as construction staging areas. This impact would be the same as that under the Selected Alternative. This park consists of separate, small, and undeveloped parcels that provide visual green space and an informal dog park. With this park closed during construction, nearby areas and parks such as Downtown Park, City Hall Park, Goddard Park, and the Bellevue Library lawn would be available for park users.

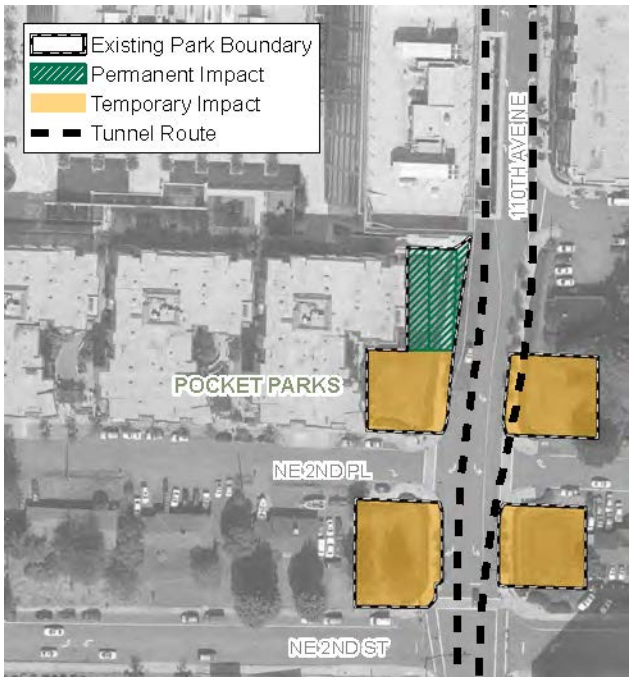


EXHIBIT 4-15
Pocket Park Impacts from Bellevue Transit Center Station Options

SECTION 5

Conclusion

Changes in impacts resulting from the potential design refinements have been identified and compared with those impacts identified in the Final EIS. In general, the impacts of the potential refinements are within the range of impacts identified in the Final EIS, and none of the refinements would result in substantially different conclusions with regard to the significance of the impacts. Impacts related to air quality, energy, electromagnetic fields, environmental justice, and hazardous materials would not change. Impacts related to transportation, property acquisition, noise, vibration, visual, ecosystems, historic properties, and parks are different from the Selected Alternative but would be within the range of impacts analyzed in the Final EIS and could be mitigated. All other impacts related to land use and economics; social, community, and neighborhood; water resources; geology and soils; public services; and utilities would have impacts that would be similar to the Selected Alternative and, therefore, are also within the range of alternatives in the Final EIS. Finally, cumulative effects would be similar, except that the City of Bellevue's proposed HOV lane would result in improved southbound traffic movements, more property from those parcels already partially affected, slightly higher traffic noise impacts, and slightly higher retaining walls that would result in a visual change. These impacts are not cumulatively significant. The potential refinements would not substantially change the analysis of significant impacts evaluated in the Final EIS, and no new probable significant adverse environmental impacts would be likely.

SECTION 6

References

City of Bellevue. 1990. *Final Environmental Impact Statement, Mercer Slough Open Space Master Plan.* City of Bellevue Parks and Community Services, Bellevue, Washington.

City of Bellevue. 2008. *Surrey Downs Master Plan*. City of Bellevue Parks and Community Services, Bellevue, Washington.

City of Bellevue. 2009. *Pedestrian and Bicycle Transportation Plan Report.* City of Bellevue Parks and Community Services, Bellevue, Washington. February.

City of Bellevue. 2010. *Bellevue Parks and Open Space System Plan 2010.* City of Bellevue Parks and Community Services, Bellevue, Washington. May.

City of Bellevue. 2013. "City Council Study Session Item: Final action on draft ordinance No. 6101 creating a Light Rail Overlay with the Bellevue Land Use Code and draft ordinance No. 6102 including conformance amendments with the LUC for consistency with the Overlay." Available at: http://www.bellevuewa.gov/pdf/City%20Council/PacketExtendedStudySession2-25-133b.pdf. Last Accessed March 4, 2013.

FTA. 2006. *Transit Noise and Vibration Impact Assessment.* Report FTA-VA-90-1003-06. U.S. Department of Transportation Federal Transit Administration. May.

FTA. 2011. *Record of Decision for Sound Transit's East Link Light Rail Transit Project, King County, Washington.* U.S. Department of Transportation Federal Transit Administration. November 11.

FTA, SHPO, and Sound Transit. 2011. *Memorandum of Agreement among Federal Transit Administration, Washington State Historic Preservation Officer, and the Central Puget Sound Regional Transit Authority Implementing Section 106 of the National Historic Preservation Action for the East Link Light Rail Transit Project in the Station of Washington*. U.S. Department of Transportation Federal Transit Administration, Washington State Historic Preservation Officer, and the Central Puget Sound Regional Transit Authority.

Harris Miller Miller and Hanson. 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. Prepared for the U.S. Department of Transportation Federal Transit Administration. May.

Sound Transit, FTA, and WSDOT. 2011. *East Link Light Rail Transit Project Final Environmental Impact Statement*. Central Puget Sound Regional Transit Authority, U.S. Department of Transportation Federal Transit Administration, and the Washington State Department of Transportation. July.

Sound Transit and City of Bellevue. 2011. *Umbrella Memorandum of Understanding for the East Link Project.* Central Puget Sound Regional Transit Authority and the City of Bellevue, Washington. November.

Sound Transit. 2012a. *East Link Extension Cost-Savings Work Plan Findings (Within the City of Bellevue-Advancement of Options)*. Central Puget Sound Regional Transit Authority, Seattle, Washington. September 27

Sound Transit. 2012b. *East Link Extension Draft Cost-Savings Work Plan Report (Within the City of Bellevue)*. Central Puget Sound Regional Transit Authority, Seattle, Washington. June 5.

Sound Transit. 2013a*. Vibration Impact Assessment of Cost-Savings Options 1a, 2b, and 3c for the Sound Transit Light Rail Transit East Link Extension*. December.

Sound Transit. 2013b. *Supplemental Noise Analysis for Cost-Savings Proposal Technical Memorandum*. Central Puget Sound Regional Transit Authority, December.