

D.7 Segment B/C Least Harm Analysis

D.7.1 Introduction to Least Harm Analysis

As discussed in Section D.6.1.3, as there is no prudent and feasible alternative to avoid the Mercer Slough Nature Park, pursuant to 23 CFR 774.3(c), a Least Harm analysis is provided here. As concluded in Section D.6, since alternatives from Segments B and C are not independent, and selecting an alternative in one of these segments would affect the range of alternatives in the other, these two segments cannot be reviewed separately, as other segments can. Therefore, Segments B and C are treated together and alternatives within these segments are combined for purposes of this least harm analysis. A project “alternative” as defined in his analysis may consist of an individual alternative within either Segment B or Segment C, or a combined Segment B and Segment C alternative such as *Preferred Alternatives C9T-B2M* and *C11A-B2M*.

D.7.2 Range of Segment B and C Alternatives

The range of feasible and prudent alternatives in Segments B and C consists of the complete set of possible combinations of the feasible and prudent Segment C alternatives with the set of feasible and prudent Segment B alternatives. There are a few alternatives that are not analyzed as combinations in the East Link Final EIS because their impacts are covered by other alternative combinations. However, all possible combinations are analyzed here with additional combinations, including those that are based upon the *Preferred Alternatives C11A* and *C9T* alternatives that connect with Alternatives B2A and B2E. This results in 35 B-C combination alternatives that must be considered, as illustrated in Exhibit D-25 and listed in Table D-7.

D.7.3 Outline of Analysis of Least Harm as Required by FTA Regulations

In Segments B and C, there is no prudent and feasible alternative that avoids any use of Section 4(f) resources. Therefore, pursuant to 23 CFR 774.3(c), the FTA may approve only the alternative that causes the “least overall harm” in light of the purposes of Section 4(f). The regulations require that determining which alternative causes the least overall harm be based upon an assessment and balancing of seven factors:

1. The ability of the alternative to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)
2. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection
3. The relative significance of each Section 4(f) property
4. The views of the official(s) with jurisdiction over each Section 4(f) property
5. The degree to which each alternative meets the purpose and need for the project
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)
7. Substantial differences in costs among the alternatives

There are five resources that have a Section 4(f) use and must be considered in this least harm analysis: Mercer Slough Nature Park, Surrey Downs Park, NE 2nd Pocket Parks, McCormick Park, and the Winters House. All five resources are considered under each of the seven balancing factors below.

D.7.4 Factor 1: The Ability of the Alternative to Mitigate Adverse Impacts to Each Section 4(f) Property (including any measures that result in benefits to the property)

This factor requires an analysis of how the effects of each alternative can be mitigated for each of the five Section 4(f) resources. Table D-8 summarizes the impacts that would occur and mitigation measures that have been proposed as a result of consultation with the appropriate resource managers, including the City of Bellevue and Washington State DAHP; the proposed mitigation is further discussed below by resource. Almost all effects on Section 4(f) resources can be mitigated, and some alternatives would result in a net benefit to the resource after mitigation.

In addition to the ability to mitigate effects on Section 4(f) resources, several alternatives along Main Street in Downtown Bellevue could help facilitate the creation of a vegetated open green space that might support the City of Bellevue’s park plan to create a buffer along Main Street for the Surrey Downs Neighborhood (City of Bellevue, 2010). This benefit would result from Alternatives *C11A-B2M*, *C11A-B2A*, *C11A-B2E*, *C11A-B3*, *C11A-B7*, *C9T-B2M*, *C9T-B2A*, *C9T-B2E*, *C9T-B3*, *C9T-B7*, *C2T-B2E*, *C2T-B3*, *C2T-B7*,

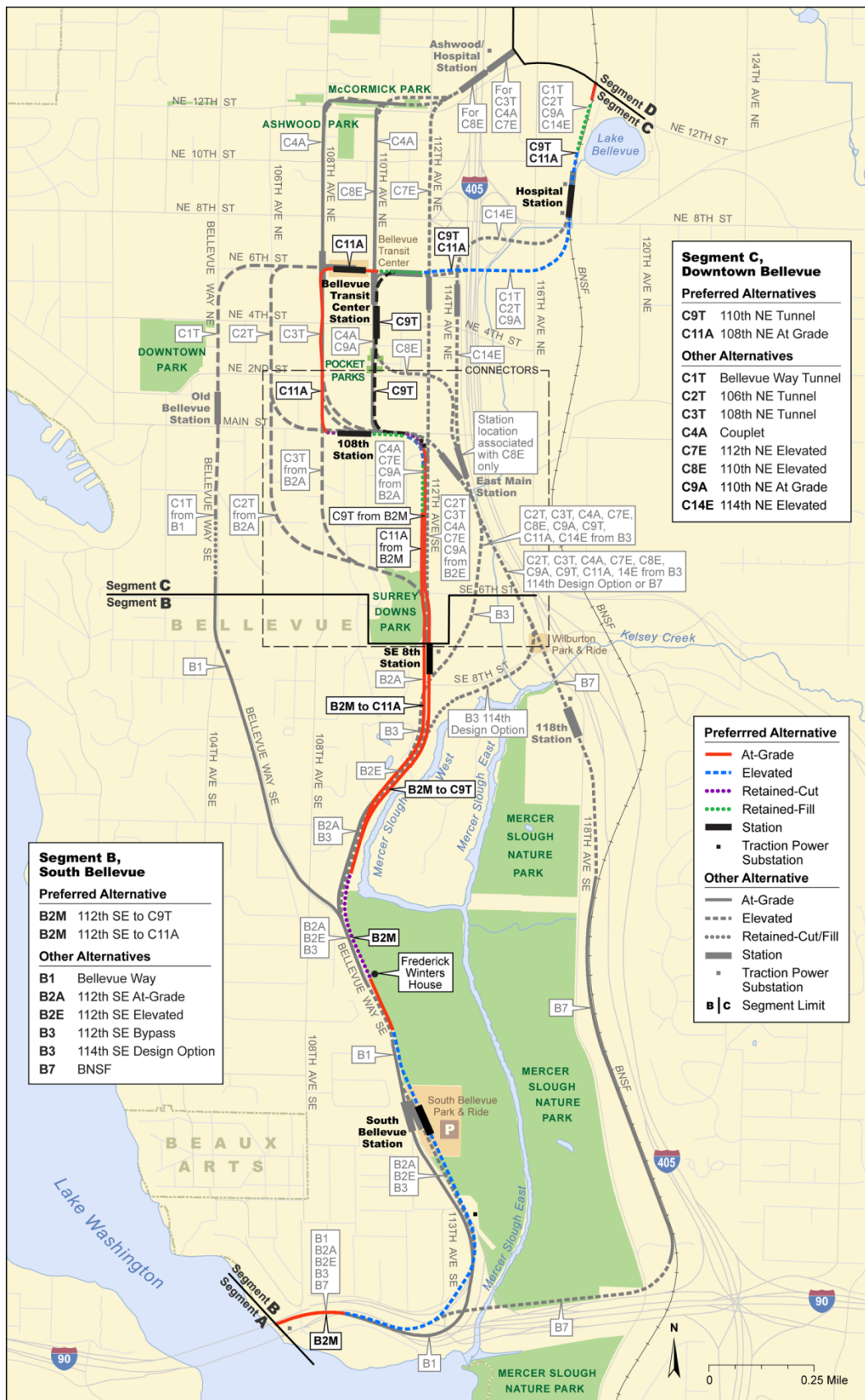


EXHIBIT D-25
Range of Segment B-C Alternatives

TABLE D-7

Range of Alternatives Evaluated under the Least Harm Analysis

No.	Segment C Alternatives	Connection with Segment B Alternatives	Nomenclature for the Least Harm Analysis
1	108th NE At-Grade Alternative (C11A)	112th SE Modified Alternative (B2M) to C11A	C11A-B2M
2		112th SE At-Grade Alternative (B2A)	C11A-B2A
3		112th SE Elevated Alternative (B2E)	C11A-B2E
4		112th SE Bypass Alternative (B3)	C11A-B3
5		BNSF Alternative (B7)	C11A-B7
6	110th NE Tunnel Alternative (C9T)	112th SE Modified Alternative (B2M) to C9T	C9T-B2M
7		112th SE At-Grade Alternative (B2A)	C9T-B2A
8		112th SE Elevated Alternative (B2E)	C9T-B2E
9		112th SE Bypass Alternative (B3)	C9T-B3
10		BNSF Alternative (B7)	C9T-B7
11	Bellevue Way Tunnel Alternative (C1T)	Bellevue Way Alternative (B1)	C1T-B1
12	112th SE At-Grade Alternative (C2T)	112th SE At-Grade Alternative (B2A)	C2T-B2A
13		112th SE Elevated Alternative (B2E)	C2T-B2E
14		112th SE Bypass Alternative (B3)	C2T-B3
15		BNSF Alternative (B7)	C2T-B7
16	108th NE Tunnel Alternative (C3T)	112th SE At-Grade Alternative (B2A)	C3T-B2A
17		112th SE Elevated Alternative (B2E)	C3T-B2E
18		112th SE Bypass Alternative (B3)	C3T-B3
19		BNSF Alternative (B7)	C3T-B7
20	Couplet Alternative (C4A)	112th SE At-Grade Alternative (B2A)	C4A-B2A
21		112th SE Elevated Alternative (B2E)	C4A-B2E
22		112th SE Bypass Alternative (B3)	C4A-B3
23		BNSF Alternative (B7)	C4A-B7
24	112th NE Elevated Alternative (C7E)	112th SE At-Grade Alternative (B2A)	C7E-B2A
25		112th SE Elevated Alternative (B2E)	C7E-B2E
26		112th SE Bypass Alternative (B3)	C7E-B3
27		BNSF Alternative (B7)	C7E-B7
28	110th NE Elevated Alternative (C8E)	112th SE Bypass Alternative (B3)	C8E-B3
29		BNSF Alternative (B7)	C8E-B7
30	110th NE At-Grade Alternative (C9A)	112th SE At-Grade Alternative (B2A)	C9A-B2A
31		112th SE Elevated Alternative (B2E)	C9A-B2E
32		112th SE Bypass Alternative (B3)	C9A-B3
33		BNSF Alternative (B7)	C9A-B7
34	114th NE Elevated Alternative (C14E)	112th SE Bypass Alternative (B3)	C14E-B3
35		BNSF Alternative (B7)	C14E-B7

C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7. The net impact or benefit for each alternative is discussed under Factor 2 and summarized in Table D-8.

D.7.4.1 Mercer Slough Nature Park

All Segment B and C alternatives would impact the Mercer Slough Nature Park. Permanent acquisition of park land varies, but all alternatives remove less than one percent of the park land area before mitigation. Those alternatives that are along Bellevue Way have common effects and mitigation measures. Only Alternatives C11A-B2M and C9T-B2M would temporarily close or redirect park uses along Bellevue Way to different points or different parking locations and consolidated trail heads. To the extent possible, activities at the Winters House would be relocated to mitigate the temporary closure of the Winters House during construction. Other alternatives along Bellevue Way (Alternatives C11A-B2A, C11A-B2E, C11A-B3, C9T-B2A, C9T-B2E, C9T-B3, C1-B1, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C7E-B2A, C7E-B2E, C7E-B3, C8E-B3, C9A-B2A, C9A-B2E, C9A-B3 and C14E-B3) would not result in these impacts.

Land used for the project along the park's west edge provides facilities for active park functions consisting of a retail outlet for the blueberry farm, Winters House (used for events and Eastside Heritage Center and City of Bellevue offices), Sweylocken boat ramp to access Mercer Slough, parking for these uses and for access points to some of the park trails. While located within the park, many of those facilities that would be most affected along the west side of Mercer Slough Nature Park are not core park functions, (such) as a quiet nature park. Any park functions that would have to be modified during construction (trails, park roadway, and parking) would be replaced following construction.

The active uses are not upholding the primary park objectives as discussed later in Factor 3. According to the *Mercer Slough Open Space Master Plan* (City of Bellevue, 1990) one of the top objectives is to "maintain and enhance extensive wetland wildlife habitat." Those alternatives (Alternatives C11A-B2M, C1T-B1, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C7E-B2A, C7E-B2E, C7E-B3, C8E-B3, C9A-B2A, C9A-B2E, C9A-B3, and C14E-B3) along Bellevue Way would permanently remove areas on the west edge of the park, adjacent to Bellevue Way (a busy four-lane arterial lane) where the active uses are

concentrated. These alternatives affect wetland buffer areas but only less than 0.5 acre of actual wetlands within Mercer Slough Nature Park.

Those alternatives that cross over the mouth of Mercer Slough north of, and adjacent to, the Mountains-to-Sound Trail and I-90 (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7) would permanently affect natural wetlands and several wetland mitigation sites. Temporary impacts caused by those alternatives that parallel I-90 (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7) would be minimized through construction techniques such as possibly building a trestle over the parks' key natural features (wetland and stream areas); using a gantry crane, or other measures. Further, vegetation would be replanted to fully mitigate construction impacts on natural areas. During construction and subsequent restoration and mitigation period, wetlands functions would be lost for wetlands affected by alternatives connecting with Alternative B7 as listed above.

Impacts caused by Alternatives C11A-B2M, C1T-B1, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C7E-B2A, C7E-B2E, C7E-B3, C8E-B3, C9A-B2A, C9A-B2E, and C9A-B3 would be mitigated by acquiring replacement lands (up to 3 acres) with a natural wetland character.

These proposed replacement lands would support core park functions better than the existing active areas along the park's western edge and would generally be more consistent with the park objectives than the lands that would be displaced by the project. Because the amount of replacement land for these alternatives varies, the net improvement to the park would vary with the amount of replacement lands needed. Lands used from connections from those alternatives that include alternatives with Alternative B7 (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7 and C14E-B7) would be replaced with similar areas as the impacted land for no net change in type of use.

Alternatives C11A-B2M and C9T-B2M would result in consolidating access points and rebuilding facilities (trails, trail heads, access roads, and parking). Alternatives C11A-B2M and C9T-B2M would require consolidating two vehicle access points. Alternatives C11A-B2M and C9T-B2M would not adversely affect Bellevue's planned T-100 trail head at the 112th Avenue SE and Bellevue Way intersection, but they would require that two trailheads be consolidated at

TABLE D-8
Impacts and Mitigation by Section 4(f) Resource^a

Facility	Impact	Mitigation	Associated Alternative
Parks			
Segment B			
Mercer Slough Nature Park	Permanent: Up to 3.0 acres converted to light rail use (a portion of which is aerial easement) Vehicular access to Sweylocken boat ramp modified right-in/right-out Trails relocated Vehicular access to Winters House and blueberry farm combined Temporary: 3.6 acres disturbed Construction impacts ^a Parking at Winters House and blueberry farm closed Winters House and blueberry farm retail closed Trails and access points closed	Permanent: <ul style="list-style-type: none"> Acquire replacement land pursuant to Washington State RCO and Section 6(f) requirements that would be consistent with the natural character of the park. Have an option to preserve existing vehicle access to Sweylocken boat ramp. Temporary: <ul style="list-style-type: none"> Provide financial compensation for temporary use of land as agreed to with the City. Restore temporarily disturbed areas to existing conditions. Provide temporary parking for users off Bellevue Way and south of the park-and-ride or as agreed to with the City. Relocate blueberry farm retail use during construction. Maintain blueberry farm operations. Relocate Eastside Heritage Center during construction. Maintain access or provide detours for trails, and maintain access to Sweylocken boat ramp. 	C11A-B2M and 9T-B2M
	Permanent: 0.5 to 1.7 acres converted (includes aerial easements) Temporary: 1.6 to 2.6 acres disturbed Construction impacts ^b Certain trail access points closed Access to boat launch revised (Alternative B1 only)	Permanent: <ul style="list-style-type: none"> Acquire replacement land pursuant to Washington State RCO and Section 6(f) requirements or provide financial compensation as agreed with the City. Temporary: <ul style="list-style-type: none"> Provide financial compensation for temporary use of land as agreed to with the City. Restore temporarily disturbed areas to existing conditions. Maintain access or provide detours for trails, and maintain access to Winters House, blueberry farm, and boat launch where affected as agreed to with the City. Provide new signal for full access to boat launch (Alternative B1 only). 	All other Segment B and C alternatives
Segment C			
Surrey Downs Park	Permanent: 0.5 acre acquired North access to park eliminated; south access changed to right-in/right-out only Temporary: 0.6 acre disturbed Access restricted Construction impacts ^b	Permanent: <ul style="list-style-type: none"> Replace impacted acreage with the acquired properties north of the park along 112th Avenue SE and provide landscaping. Design treatments of the retaining wall and fence along 112th Avenue SE in consultation with the City. Design and construct a U-turn on 112th Avenue SE at SE 8th Street. Prepare conceptual layout for two northbound-to-southbound U-turn options – one at SE 6th Street and one at Main Street – to accommodate those coming from the south who would want to turn left into the park; the City and Sound Transit would pick one that Sound Transit would design and construct. Coordinate with the City of Bellevue and community to revise the Surrey Downs Park Master Plan to address the impacted area. Temporary: <ul style="list-style-type: none"> Provide financial compensation for temporary use of land as agreed with the City. Restore the temporarily disturbed area with landscaping in accordance with the <i>Surrey Downs Master Park Plan</i>. Maintain overall access to the park by providing trail and sidewalk connectivity through detours in coordination with the City. Maintain public parking and access for scheduled baseball/soccer fields (spring, late summer, and fall) Provide a barrier or fence adjacent to the main construction area. Improve south driveway to increase traffic flow prior to closure of the north driveway. 	C11A-B2M

TABLE D-8 CONTINUED
Impacts and Mitigation by Section 4(f) Resource^a

Facility	Impact	Mitigation	Associated Alternative
Surrey Downs Park contd.	Permanent: 0.5 acre acquired Temporary: 0.5 acre disturbed Construction impacts ^b	Permanent: <ul style="list-style-type: none"> Replace impacted acreage with the acquired properties north of the park along 112th Avenue SE and provide landscaping. Design treatments of the retaining wall and fence along realigned SE 4th Street in consultation with the City. Coordinate with the City of Bellevue and community to revise the Surrey Downs Park Master Plan to address the impacted area. Temporary: <ul style="list-style-type: none"> Provide financial compensation for temporary use of land as agreed with the City. Restore the temporarily disturbed area with landscaping in accordance with the Surrey Downs Master Park Plan. Maintain overall access to the park by providing trail and sidewalk connectivity through detours in coordination with the City. Maintain public parking and access for scheduled baseball/soccer fields (spring, late summer, and fall) Provide a barrier or fence adjacent to the main construction area. Improve south driveway to increase traffic flow prior to closure of the north driveway. 	C9T-B2M
	Permanent: Less than 0.1 to 0.5 acre acquired Temporary: 5.7 acres disturbed (Alternatives C2T and C3T from Alternative B2A only) 0.1 to 0.4 acre disturbed (Alternatives C4A, C7E, and C9A from Alternative B2A only) Construction impacts ^b	Permanent: <ul style="list-style-type: none"> Provide financial compensation or replacement land as agreed with the City. Temporary (Alternatives C2T and C3T from Alternative B2A): <ul style="list-style-type: none"> Provide financial compensation for use of land as agreed with the City. Restore landscape after construction to existing conditions or as agreed to with the City. Maintain overall access to the park by providing trail and sidewalk connectivity through detours in coordination with the City. Maintain public access and parking for scheduled baseball/soccer fields (spring, late summer, and fall) Provide a barrier or fence adjacent to the main construction area. Temporary (Alternatives C4A, C7E, and C9A from Alternative B2A only): <ul style="list-style-type: none"> Provide financial compensation for the temporary use of land as agreed with the City. Restore temporarily disturbed park area to existing conditions. 	C4A-B2A, C3T-B2A, C2T-B2A, C7E-B2A, and C9A-B2A
NE 2nd Pocket Parks	Permanent: 0.1 acre acquired Temporary: 0.3 acre disturbed, partially closed Construction impacts ^b	Permanent: <ul style="list-style-type: none"> One, or a combination of, the following, as agreed to with the City: <ul style="list-style-type: none"> Provide financial compensation as agreed to with the City. Provide replacement land with an equivalent portion of the project's staging area located on the northeast quadrant of the park. Enhance entire northwest quadrant of the park as a public plaza in conjunction with the station entrance. Temporary <ul style="list-style-type: none"> Provide financial compensation for temporary use of land as agreed to with the City. Restore temporarily disturbed park area to existing conditions. Preserve pedestrian access to southern park quadrants. 	C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7
	Permanent: Less than 0.1 acre acquired Temporary: 0.1 to 0.3 acre disturbed, partial closure Construction impacts ^b	Permanent (Alternatives C4A and C9A from Alternatives B2A, B2E, and B3 only): <ul style="list-style-type: none"> Provide financial compensation or replacement land as agreed to with the City. Permanent (Alternative C8E from Alternatives B3 and B7 only): <ul style="list-style-type: none"> Provide financial compensation or replacement land as agreed to with the City. Add visual and aesthetic design measures, as agreed to with the City. Temporary: <ul style="list-style-type: none"> Provide financial compensation for the temporary use of land as agreed to with the City. Restore temporarily disturbed park area to existing conditions. Preserve pedestrian access to southern park quadrants. 	C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, C8E-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7

TABLE D-8 CONTINUED
Impacts and Mitigation by Section 4(f) Resource^a

Facility	Impact	Mitigation	Associated Alternative
McCormick Park	Permanent: 0.2 to 0.9 acre acquired, net gain of 0.1 to 0.7 acres for Alternatives C3T, C4A, and C8E Temporary: 0.8 to 1.8 acres disturbed Construction impacts ^b	Permanent: <ul style="list-style-type: none"> One or more of the following measures would be implemented: <ul style="list-style-type: none"> Acquire replacement land for permanent use impacts (results in net increase in park land for some alternatives). Provide financial compensation for use during construction. Temporary: <ul style="list-style-type: none"> Restore disturbed area after construction. 	C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7
Historic Properties			
Segment B			
Winters House	Permanent: Use of property between the structure and Bellevue Way SE for lidded retained-cut structure; Potential groundborne noise impact Temporary: Potential for vibration and settlement impacts during construction Winters House activities closed Construction impacts ^b	Permanent: <ul style="list-style-type: none"> Incorporate standard methods of vibration reduction, such as resilient fasteners or ballast mats into the project. A floating slab would be incorporated as necessary to reduce the level of groundborne noise and eliminate the impact. Landscape the area of property between the front (west elevation) of the Winters House and Bellevue Way SE to more closely reflect the landscaping of the historic period, in consultation with the City. Provide new interpretive displays on or near the property. Temporary: <ul style="list-style-type: none"> Photograph and inventory the building to establish existing conditions. Install vibration and settlement monitoring devices and adjusting 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. Apply dust control measures during construction to minimize dust (after construction, Sound Transit will clean the outside of the building and windows in a manner sensitive to the resource). Close the Winters House during construction and temporarily relocating the tenant (Sound Transit will 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. 	C11A-B2M and C9T-B2M

^a The residual impacts after mitigation are discussed in Factor 2.

^b Construction impacts might include impacts such as removed landscape, dust, noise, and/or traffic detours. For historic properties, the setting might be temporarily changed.

FTA Federal Transit Administration

NRHP National Register of Historic Places

RCO Washington State Recreation and Conservation Office

other points along Bellevue Way. Additionally, north of the park and ride, the guideway for Alternatives C11A-B2M and C9T-B2M would be lower than other alternatives that travel along 112th Avenue SE, thus resulting in less visual change. None of the alternatives would displace active uses.

Collectively, the mitigation measures for all alternatives would fully mitigate the changes to the park, be consistent with core park functions and objectives, and all except C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7 alternatives would expand natural areas where replacement lands are needed. There is no

unmitigated harm to park resources for any alternative that affect Mercer Slough Nature Park.

D.7.4.2 Surrey Downs Park

Neither the alternatives connecting from Alternatives B2E, B3, and B7 (Alternatives C11A-B2E, C11A-B3, C11A-B7, C9T-B2E, C9T-B3, C9T-B7, C2T-B2E, -B3, C2T-B7, C3T-B2E, C3T-B3, C3T-B7, C4A-B2E, C4A-B3, C4A-B7, C7E-B2E, C7E-B3, C7E-B7, C8E-B3, C8E-B7, C9A-B3, C9A-B2E, C9A-B7, C14E-B3, C14E-B7) nor Alternative C1T-B1 would affect Surrey Downs Park.

Alternatives C2T-B2A and C3T-B2A would temporarily use the northern half of Surrey Downs

Park (where the King County District Courthouse is located) as a staging area to construct the tunnel portals. Following construction, removing the King County District Courthouse and replacing the site with landscaped park grounds would have a net benefit to Surrey Downs Park—if it is not already removed at the time of East Link construction—and would help facilitate implementing the City of Bellevue's *Surrey Downs Master Plan* (City of Bellevue, 2009) to redevelop the park facility. Disturbed lands would be restored to existing conditions or as agreed to with the City. However, depending on the park development schedule, construction staging at this location might delay implementing the newly funded master plan for Surrey Downs Park.

Alternatives C11A-B2A, C9T-B2A, C4A-B2A, C8E-B2A, and C9A-B2A would acquire small slivers of park property along the eastern edge of Surrey Downs Park for the adjustments to 112th Avenue SE right-of-way in order to preserve operations on this heavily traveled four-lane arterial. This impact would remove only landscaping and no recreational uses. Disturbed lands would be restored, and removed lands would be mitigated with financial compensation or replacement lands of similar function and value. Replacement lands that would mitigate for the impacts of Alternatives C11A-B2M and C9T-B2M would extend the park by continuing it along the west side of 112th Avenue SE from the park north to Main Street.

Alternative C11A-B2M would eliminate the north vehicle access, but the south vehicle access would be modified to right-in and right-out and U-turn capabilities along 112th Avenue SE would preserve park vehicle access needs. For Alternative C9T-B2M, vehicle access at the north end of the park would be closed and a new alignment for SE 4th Street would connect through a corner of the park from SE 6th Street. The access at SE 6th Street would be signalized to provide a safe access into Surrey Downs neighborhood. This option may require up to 0.5 acres of the park. A second option would provide a connection into the Surrey Downs neighborhood at SE 9th Street from the south park entrance. Access to the neighborhood from the south park entrance would permanently close the north entrance reducing park impact, but it would result in changing circulation patterns in the neighborhood. Since none of the alternatives negatively affect active recreational uses in this park, no mitigation is necessary for these park functions.

D.7.4.3 NE 2nd Pocket Parks

Portions of all quadrants of the NE 2nd Pocket Parks may be closed temporarily during construction for

Alternatives C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, C8E-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7 and three might be closed for Alternatives C9T-B2M, C9T-B2A, C9T-B3, and C9T-B7. These impacts would be temporary, and financial compensation would be provided as compensation or for use of the park land as agreed to with the City.

Alternatives C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, and C9T-B7 would use one quadrant of the parks for a permanent entry into the Bellevue Transit Center tunnel station. The station entrance would be incorporated into the northwest quadrant of the park, measuring approximately 0.1 acre. This use would be consistent with the intended use of the parks. Additionally, a portion of the property planned to be used for staging adjacent to the northeast quadrant could be used to create new park area as a replacement. Alternatives C8E-B3 and C8E-B7 would result in a permanent elevated guideway over the parks, creating a visual intrusion. Beyond visual treatments to the columns, no mitigation is needed for this impact because these parks contain no recreational facilities and serve principally as neighborhood open space in an urbanized neighborhood; the parks would likely continue to operate as they do currently. Use of the parks by Alternatives C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7 would be mitigated with replacement park property or financial compensation and Alternatives C8E-B3 and C8E-B7 would be mitigated with visual and aesthetic design measures to integrate the guideway into the park.

Alternatives C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, C8E-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7 would cause no additional impact to the NE 2nd Pocket Parks. No other alternative would affect the pocket parks.

D.7.4.4 McCormick Park

Only Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7 would affect McCormick Park and result in a permanent visual impact or changes in access even after mitigation. Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, and C4A-B7 would result in a net increase in park acreage following construction and after disturbed landscaping and associated amenities are replaced. Alternatives C8E-B3 and C8E-B7 would not enlarge the park, but net useable acreage would remain unchanged. Large conifers, which act as a visual buffer and aesthetic amenity, would be affected by

Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7. Because the removed trees are mature, the impact of removing these trees will take many years to mitigate. These alternatives would result in the permanent presence of portions of at-grade, retained-fill and/or elevated light rail guideway within the park area. These profiles would limit access to portions of the park and would diminish the amount of uninterrupted greenery that serves as a buffer to the urban core.

D.7.4.5 Winters House

Measures to avoid potential construction impacts on the historic structure from Alternatives *C11A-B2M* and *C9T-B2M* are incorporated into the project construction methodology. Among these measures would be construction techniques such as ground improvement, underpinning the building, and shallow supporting walls; directions that contractors shall begin trench construction at the furthest distance from the house; conducting settlement and vibration monitoring; and anticipating and implementing corrective measures to avoid impacts on the structure. These measures would avoid damage to the structure's unique characteristics and features. If damage did occur Sound Transit would make repairs consistent with the U.S. Secretary of the Interior's standards for treating historic properties. In addition, the existing tenant and other uses of the building would be relocated during construction to avoid disturbing their activities. Potential groundborne noise impacts during operation of the light rail would be mitigated with special vibration reducing track-work incorporated into the project.

The Winters House today sits adjacent to a busy urban vehicular thoroughfare. Over time, landscaping that would preserve the context of the structure has gradually been lost or compromised with expansion of Bellevue Way and changes to the landscaping. The proposed mitigation for the Winters House would improve its visual and physical context. Following construction, and in consultation with the DAHP and the City of Bellevue more historically appropriate landscaping would be planted over the lidded retained-cut with a net benefit to the historic home. The Winters House today lacks sufficient or appropriate signage providing information about its history and historic significance. Sound Transit would also provide new interpretive signage at the house in coordination with City of Bellevue staff.

D.7.4.6 Conclusions: Factor 1

Most, but not all impacts to Section 4(f) resources could be effectively mitigated under most alternatives.

The principal impact that could not be mitigated would be the visual impact of the guideway structure on McCormick Park as a result of Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7.

In addition to mitigation, there would be net benefits to Section 4(f) resources from several alternatives. Alternatives *C11A-B2M* and *C9T-B2M* would produce net benefits for the Winters House in the form of enhanced landscaping and new interpretive signage. Alternatives *C11A-B2M*, *C11A-B2A*, *C11A-B2E*, *C11A-B3*, *C9T-B2M*, *C9T-B2A*, *C9T-B2E*, *C9T-B3*, *C1-B1*, *C2T-B2E*, *C2T-B2A*, *C3T-B2E*, *C2T-B3*, *C3T-B2A*, *C3T-B2E*, *C3T-B3*, *C4A-B2A*, *C4A-B2E*, *C4A-B3*, *C7E-B2A*, *C7E-B2E*, *C7E-B3*, *C9A-B2A*, *C9A-B2E*, *C9A-B3*, and *C14E-B3* would produce a net benefit for the Mercer Slough Nature Park because replacement lands would be more consistent with the park's objectives than the areas affected.

D.7.5 Factor 2: The Relative Severity of the Remaining Harm, after Mitigation, to the Protected Activities, Attributes, or Features that Qualify Each Section 4(f) Property for Protection

The purpose of this factor is to assess the remaining effects on Section 4(f) resources after efforts to avoid, minimize, and mitigate project effects as described under Factor 1. The following discussion analyzes the severity of the remaining harm to each Section 4(f) resource. In the weighing that is required for least harm analysis, the severity of any remaining harm to Section 4(f) resources needs to be considered carefully. Where all impacts to a particular Section 4(f) resource can effectively be mitigated, the absence of remaining harm is especially important. Where there are impacts that cannot be mitigated, it is important to consider whether those impacts are significant within the context of the purpose, goals, plans, and other resource management objectives for the particular Section 4(f) resource. All impacts are not treated alike and are evaluated in this analysis within the context of each resource.

D.7.5.1 Mercer Slough Nature Park

All impacts on Mercer Slough Nature Park would be fully mitigated. Alternatives *C11A-B2M*, *C11A-B2A*, *C11A-B2E*, *C11A-B3*, *C9T-B2M*, *C9T-B2A*, *C9T-B2E*, *C9T-B3*, *C1-B1*, *C2T-B2*, *C2T-B2A*, *C3T-B2E*, *C2T-B3*, *C3T-B2A*, *C3T-B3*, *C4A-B2A*, *C4A-B2E*, *C4A-B3*, *C7E-B2A*, *C7E-B2E*, *C7E-B3*, *C9A-B2A*, *C9A-B2E*, *C9A-B3*, and *C14E-B3* would produce a net benefit for this park because they would provide replacement land equivalent to land permanently occupied by the

project (up to 3 acres) to the Mercer Slough Nature Park. The replacement lands would be natural areas, which are more consistent with the park core objectives and role than the active areas that would be affected by these alternatives. The impacts from all other alternatives would be fully mitigated, but there would be no net benefit to the park.

D.7.5.2 Surrey Downs Park

All impacts to this resource would be fully mitigated. As demonstrated under Factor 1, effects on Surrey Downs Park from Alternatives C11A-B2M, C9T-B2M, C11A-B2A, C9T-B2A, C2T-B2A, C3T-B2A, C4A-B2A, C7E-B2A, and C9A-B2A would be mitigated. Replacement lands for impacts caused by Alternatives C11A-B2M and C9T-B2M would extend the existing park along the west side of 112th Avenue SE from the park (approximately SE 6th Street) to Main Street. Depending on final input from City of Bellevue, changes in neighborhood access through the north end of the park for C9T-B2M could be redesigned through the south park entrance to reduce park land impacts while also maintaining overall access to the park from 112th Avenue SE. Alternatives C2T-B2A and C3T-B2A would have a net benefit to Surrey Downs Park if they removed the King County District Courthouse, which is presently sited within the park but does not contribute to the park's core objectives. Small slivers of property needed for Alternatives C4A-B2A, C7E-B2A, and C9A-B2A would be mitigated with financial compensation and landscaping. No other alternatives would directly affect Surrey Downs Park.

D.7.5.3 NE 2nd Pocket Parks

There would be no remaining harm after mitigation to the NE 2nd Pocket Parks. Because this resource serves principally as open space, a small reduction (less than 0.1 acre) in park area for several alternatives and visual effects from C8E-B3, C8E-B7 would not change the parks' use or function.

D.7.5.4 McCormick Park

Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7 would result in lasting visual impacts on McCormick Park even after mitigation. There would be a net benefit to the resource as a result of increase in park acreage from mitigation of Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, and C4A-B7. There would be no net benefit for this resource from Alternatives C8E-B3 and C8E-B7.

D.7.5.5 Winters House

All impacts to this resource from Alternatives C11A-B2M and C9T-B2M would be effectively mitigated through vibration reducing track-work, new

landscaping that would be more consistent with the historic setting of the building, and interpretive signage which are described in more detail in Section 4.16, Historic and Archaeological Resources; and Appendix H4, the *Historic and Archaeological Resources Technical Report*. The landscaping and interpretive signage would also result in a net benefit, which would not be realized from the other alternatives. The potential for temporary construction impacts would be mitigated through construction methods and relocating the tenant during construction. All other alternatives avoid impacts to the Winters House.

D.7.5.6 Conclusions: Factor 2

After mitigation, Alternatives C11A-B2M and C9T-B2M would result in no remaining harm and have a net benefit to Mercer Slough Nature Park and the Winters House. Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C1-B1, C2T-B2E, C2T-B2A, C3T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C7E-B2A, C7E-B2E, C7E-B3, C9A-B2A, C9A-B2E, C9A-B3, and C14E-B3 would result in no remaining harm and create a net benefit to Mercer Slough Nature Park through replacement lands that contribute to park objectives. A net benefit to Winters House would result from Alternatives C11A-B2M and C9T-B2M. There would be no remaining harm from C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7 alternatives, but also no benefits. After mitigation, there would be remaining impacts on McCormick Park from Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7.

D.7.6 Factor 3: The Relative Significance of Each Section 4(f) Property

This factor is intended to evaluate all of the affected Section 4(f) resources on a comparative basis. This factor does not address the impacts on each resource but rather is intended to help assess whether certain resources are of greater significance than others. This analysis is necessarily qualitative and requires an element of judgment since it requires comparing unlike resources and their relative and comparative value to the community.

It is useful for this analysis to understand that the City of Bellevue prides itself on being a city within a park. With a current population of approximately 110,000, parks and open space resources are a highly valued commodity for this community. Each recreational facility that would potentially be affected by the project has a unique function and value to this

community. While the City of Bellevue has formally indicated each affected park is significant (and therefore eligible for protection under Section 4(f)), the relative significance of each resource is not identical. For example, Mercer Slough Nature Park has a broad regional significance, whereas Surrey Downs Park serves primarily as a community recreational function and McCormick Park and the NE 2nd Pocket Parks have a far more localized importance for just the adjacent neighborhoods. The Winters House is significant because it is the only historic resource listed on the NRHP within the City of Bellevue.

D.7.6.1 Mercer Slough Nature Park

The Mercer Slough Nature Park, located between Bellevue Way SE and 118th Avenue SE directly north of I-90, is a 320-acre community park characterized by wetland systems and upland habitat for most of the park and the Environmental Education Center on the park's east side. Mercer Slough Nature Park is surrounded by a highly urbanized environment, with large freeways and developed residential and business districts. With few missing pieces, Mercer Slough Nature Park is a large contiguous open space offering an accessible environment for passive recreation where visitors feel removed from the urban environment and observe wildlife. The size of this relatively natural environment provides a protected ecosystem from urban development. The 320-acre size and topography separates the park from adjacent lands uses and thick vegetation blocks views and offers a feeling of separation from the busy roadways and freeways that surround the park. The Mercer Slough Nature Park is a regional as well as a local resource; it defines the entrance and the context for South Bellevue.

As a regional resource, this park attracts a broad range of users from throughout the east side of the metropolitan area. Its size and ecological role makes the Mercer Slough Nature Park considerably more significant (both absolutely and relative to the other affected resources) than the other potentially affected resources within the project area.

The importance and future plans for the park are recorded in the Bellevue Parks Master Plan (City of Bellevue, 2010). Also, as stated in the *Mercer Slough Open Space Master Plan Environmental Impact Statement* (City of Bellevue, 1990), park objectives consist of the following:

- Maintain and enhance the extensive wetland wildlife habitat.

- Provide environmental education and awareness and maintain and diversify Bellevue's agricultural heritage.
- Participate in regional and national efforts to understand wetland ecosystems through research in restoration enhancement techniques.
- Provide passive recreational opportunities in harmony with natural system preservation.
- Maintain and protect important views and open space values.

It is important to note that these objectives focus on the park's ecological and passive recreation benefits and place relatively less emphasis on active recreation or more intensive uses. Consistent with its role, the park provides wetland habitat, environmental education and awareness, agricultural heritage maintenance, nature observation, and open space with pedestrian trails, a water trail, benches, and interpretive signs. Other activities do take place in the park, including events and meetings at the Winters House, the blueberry farm, agricultural U-pick farm and sales (including fruit and vegetable produce sales, parking for the Winters House, the blueberry farm and trails) the South Bellevue Transit Center park-and-ride, and the Swaylocken boat ramp. These functions, while important, are not as closely aligned with the principal goals and purposes of this resource and are, therefore, not as significant. Most of these active uses and ancillary facilities are located on the west side along Bellevue Way.

D.7.6.2 Surrey Downs Park

Surrey Downs Park contains active park uses such as ballfields, a play structure, internal trails, open space, the King County District Courthouse, and associated parking. Approximately 4.9 acres of the 11.4-acre site are currently used as park, with the remainder occupied by the King County District Courthouse. The courthouse is not consistent with the objectives of this resource and detracts from its significance and value.

In March 2009, the City of Bellevue adopted the *Surrey Downs Park Master Plan* for redeveloping the park. Proposed improvements include new baseball fields, open space, a community garden, parking, and a recreational building. A levy to approve funding to implement the master plan was approved by Bellevue voters in fall 2009.

This park is important as a neighborhood park and as a larger community baseball and soccer recreational resource. Per the City of Bellevue Parks Master Plan, the Surrey Downs Park's focus of its significance is on active, community-based recreation. Other uses are

less important or detract from its value (e.g., the courthouse) as confirmed with the *Surrey Downs Park Master Plan*, which plans to remove the Courthouse.

D.7.6.3 NE 2nd Pocket Parks

The NE 2nd Pocket Parks are located at the four corners of the intersection of NE 2nd Place and 110th Avenue NE. These small, undeveloped areas function primarily as visual green space. There are limited facilities for public use of these parks. Bellevue proposes to expand and develop these parks under Bellevue's *Downtown Implementation Plan* (City of Bellevue, 2004) and the *Bellevue Parks & Open Space System Plan* (City of Bellevue, 2010); however, no property has been purchased or plans developed for this expansion. These parks have grass, with hedgerows that encircle the grass area preventing easy access. A few benches are positioned along the perimeter of the park quadrants, facing the sidewalks. As a result of this landscape pattern, this resource is often used as an informal off-leash pet area.

Notwithstanding the lack of facilities, small parklands in urbanized areas provide visual relief and an element of greenery and repose within the urban environment. While these parks are a Section 4(f) resource, their role is limited to serving a localized population, and they are not significant beyond the immediately adjacent community. Given Bellevue's decision not to develop or implement specific plans for enhancing these parks, it is reasonable to conclude that their relative significance is less than some of the other park resources in the project area to which Bellevue has made a substantial financial commitment.

D.7.6.4 McCormick Park

McCormick Park is located along the north side of NE 12th Street at the north end of the Segment C boundary. The park, which extends from 107th to 112th Avenue NE, is a neighborhood park with trails, art features, and picnic benches that provide a buffer between the established single-family residences to the north (Northtowne neighborhood) and high-density residential and commercial uses to the south in the downtown core. The topography undulates with berms and a meandering path. The vegetation is mature, including tall evergreens that separate the park and the residences to the north. The park does not provide any active recreational activities or facilities. Roads to the neighborhood and a pedestrian crossing separate some of the park segments. This park is used by nearby residents and workers in the area and persons walking or exercising their pets. While this park is a Section 4(f) resource, it is reasonable to conclude that its significance is limited

to a local population and is not significant for the larger community.

D.7.6.5 Winters House

The Winters House is the only structure in the city of Bellevue registered on the NRHP. It has a role in the development and history of Bellevue and is recognized by the community as an important resource. The Eastside Heritage Center has made this its headquarters from which it operates a heritage research center, exhibit space, and archive and library. The Eastside Heritage Center uses the facility for meeting space, tours, and other events (such as weddings or other events). Because of the varied uses to which this center puts this resource, its significance extends beyond its historic attributes. In addition, its unique role as the only NRHP-listed resource in the city means that this resource is significant beyond the immediately adjacent community.

D.7.6.6 Conclusions: Factor 3

This factor provides insights about the relative significance of each Section 4(f) resource. Mercer Slough Nature Park and the Winters House clearly have the greatest significance of all the potentially affected Section 4(f) resources and the NE 2nd Pocket Parks, Surrey Downs Park, and McCormick Park have relatively less significance.

D.7.7 Factor 4: The Views of the Official(s) with Jurisdiction over Each Section 4(f) Property

The purpose of this factor is to help provide a basis for judging the relative importance of each Section 4(f) resource and the relative significance of potential impacts to these resources based on the jurisdiction's point of view. Only two entities have jurisdiction over the Section 4(f) resources that would be potentially affected by the project in Segments B and C: the City of Bellevue and DAHP. The following analysis explains positions that these agencies have taken with regard to the potentially affected resources providing insights on how to integrate the views of these jurisdictions into this Section 4(f) analysis.

D.7.7.1 City of Bellevue

Sound Transit and the City of Bellevue have been working closely to develop the project in a manner that both meets the East Link Project purpose and also respects the City of Bellevue planning goals. Since the City has been deeply involved in evaluating and selecting alternatives, the City's views on the preferred alternative for the East Link project are important because they reflect the City's own balance of competing (and often contradictory) needs and goals.

Bellevue Views on Alternatives

It is important for purposes of this analysis to review the history of the City's involvement in selecting alternatives for Segments B and C and the views that the City has expressed to Sound Transit. A series of letters and correspondence beginning with the release of the Draft EIS is a useful foundation for understanding the City's views on impacts to Section 4(f) resources within the City's jurisdiction.

Following the release of the Draft EIS, the City of Bellevue submitted its preference for an alternative that resembles alternative C2T-B3, including the 114th Design Option, (with modifications referred to as alternative B3S) in a letter dated February 25, 2008. Bellevue's letter stated the following:

"The City's preferred routing decisions are the result of careful study and significant public discussion....over three years in review, planning, outreach and deliberation. This B3S balances three key principles in South Bellevue: provides transit access by facilitating regional and local connections at the South Bellevue Park-and-Ride, protects neighborhoods by placing the line farther away from residences, and minimizes construction impacts by reducing the amount of street reconstruction required along these major transportation corridors. For land use, C2T allows Downtown Bellevue to continue to accommodate regional growth and helps realize local land use potential east of I-405 in Wilburton."

This letter demonstrates the importance that the City places on ensuring that the project serves the South Bellevue Park-and-Ride market, tunneling through Downtown Bellevue, serving the Wilburton area east of I-405, and minimizing neighborhood and traffic impacts, and these continue to inform the City's preferences as they have evolved between 2009 and 2011. These views are important since the City is also the entity with jurisdiction over all potentially affected Section 4(f) park resources.

The City's February 2008 recommendation was based on the following City of Bellevue light rail policy principles:

- Connect "somewhere to somewhere" by conveniently serving the places where people live, work, and play
- Accommodate long-term, multimodal transportation system development
- Optimize ridership
- Consider construction impacts and risks
- Protect environmentally sensitive areas

- Advance the long-term land use vision by serving existing and planned concentrations of employment and population

Bellevue's suggested alternative for Segment B in South Bellevue requires shifting Alternative B3 from the center to the east side of Bellevue Way to reduce construction effects on the arterial and to increase separation from the Enatai neighborhood. The City's suggestion also included routing the alternative to the east at SE 8th Street in order to avoid widening the street to the north where the 112th Avenue SE right-of-way becomes more constrained.

It is important to note that the City letter acknowledges that the proposed alternative might increase impacts to Mercer Slough Nature Park (including wetland impacts) but stated that mitigation opportunities exist within Mercer Slough. The letter also stated, "The Winters House may need to be relocated in order to accommodate this alternative. Based on preliminary assessment, the Council believes this is feasible and the relocation costs could be offset by the cost savings of this modification." These statements indicate the City's concurrence that impacts to these two Section 4(f) resources can be appropriately mitigated and that, with such mitigation, impacts are acceptable.

In Downtown Bellevue (Segment C), the City has recognized that the ST2 Plan does not provide funding for the tunnel alternatives and has stated, "We are committed to being an active partner with Sound Transit to identify potential cost saving measures and additional funding resources to ensure the City's preferred alternatives can be implemented and the system is build to support the regional vision" (City of Bellevue Letter, 2008). The letter also states that another reason that the City prefers alternative C2T with its crossing of I-405 at NE 6th Street is because it avoids the permanent and adverse effects on McCormick Park that would occur with an alternative that exits downtown at NE 12th Street.

On May 12, 2009, the City sent another letter to Sound Transit stating its opposition to the surface Alternative C4A through downtown because of potential traffic impacts. The letter requested further engineering on a tunnel alternative, which also serves the Wilburton neighborhood, and reiterated the City's commitment to continue working with Sound Transit on tunnel funding.

Based upon the City's continued strong interest in a downtown tunnel alternative and a willingness to consider both cost-savings measures and additional funding, Sound Transit conducted a peer review of the

tunnel options to seek the lowest-cost tunnel options. The peer review led to the development of *Preferred Alternative C9T*, which would be significantly less expensive than previous tunnel alternatives and also addresses the City's preference for service to the Wilburton neighborhood. Sound Transit also conducted a value analysis review of the entire East Link corridor, which recommended that a 112th Avenue NE alternative be used into Downtown Bellevue as a means to further reduce project costs.

On February 10, 2010, the City Council and Sound Transit Board held a joint workshop to review the tunnel alternative (*Preferred Alternative C9T*), two new at-grade options through downtown (Alternative C9A and Preferred Alternative C11A), and an elevated option (Alternative C14E) proposed by the City. All of these new alternatives address the City goal of serving the Wilburton redevelopment area east of downtown. The workshop also reviewed the potential cost savings and changes in impacts associated with following 112th Avenue NE into Downtown Bellevue.

Following the workshop, the City issued a letter on March 24th, 2010, changing its preference from Alternative C2T to the newly created *Preferred Alternative C9T* and requesting that Sound Transit explore further design modifications. On April 19, 2010, the City Council took another step in support of *Preferred Alternative C9T* by authorizing the City Manager to execute a term sheet with Sound Transit for including the tunnel as a preferred alternative in the East Link Project Final EIS. The term sheet outlined a funding strategy for *Preferred Alternative C9T* in which the City would contribute up to \$150 million in additional funding, Sound Transit would identify in \$75 million in scope reductions, and Sound Transit would identify \$95 million in additional funding (all in 2007 dollars).

While work progressed on developing and funding *Preferred Alternative C9T*, the City reexamined its preferred alternative in South Bellevue (Segment B). On January 26, 2010, the City sent a letter asking for evaluation of a modified Alternative B7 that would "...expand the South Bellevue Park-and-Ride lot to the south ... then cross the Mercer Slough Nature Park, before heading north on the BNSF..." The U.S. Department of Interior subsequently expressed significant concern about this proposed alternative in correspondence with the City. On March 9, 2010, the City withdrew its January 26 request and stated that its new preferred alternative is the original Alternative B7.

After the term sheet on the tunnel alternative was executed, Sound Transit updated its preferred

alternative to include the *Preferred Alternative C9T* alternative and also the 112th Avenue SE alternative rather than the Alternative B7, consistent with the term sheet commitment to identify scope reduction. On May 6, 2010, the City sent Sound Transit a letter reiterating the City's preference for Alternative C9T-B7 and committing to working with Sound Transit to achieve the principles outlined in the term sheet. This was a clear change in direction on the part of the City from previous discussions about facilitating a tunnel in Downtown Bellevue through saving costs in Segment B.

After Sound Transit had identified the 112th Avenue SE alternative as its preferred alternative, the City collaborated with Sound Transit on an extensive design and outreach process. Throughout this process, Sound Transit and City staff made it clear to the public that while 112th Avenue SE is not the City's preferred alternative, it might ultimately be selected by Sound Transit as the preferred alternative. In July 2010, the Sound Transit Board refined the preferred alternative on 112th Avenue SE (*Preferred Alternative B2M*) to incorporate a westside alternative recommended by residential and business owners along the portion of the 112th Avenue SE right-of-way that is most constrained.

On July 20, 2010, the City sent another letter to Sound Transit. This letter stated the City's opposition to *Preferred Alternative B2M*. The concerns raised include displacements, noise impacts, construction impacts, impacts to historic properties, and traffic impacts. The letter also raised concerns about the potential for negative impacts on the historic character and use of the Winters House.

The July 2010 letter restated the City's support for Alternative C9T-B7 but proposed a series of design modifications. The letter acknowledged that a principal objection to Alternative B7 is the lack of service to the South Bellevue Park-and-Ride. The City, therefore, requested review of an option developed by the City to relocate the park-and-ride south to the I-90/Bellevue Way interchange. Reports prepared by City consultants and attached to the July 2010 letter indicated that relocation of the park-and-ride would add costs to Alternative C9T-B7 alternative and would have greater impacts on the Enatai neighborhood than alternatives that retain the park-and-ride in its current location.

After Sound Transit declined further study of the City's proposed Alternative C9T-B7 design modifications based on cost, risk, and impacts, the City hired its own consultant to review some of its proposed modifications to the alternative that it now

refers to as Alternative B7R. In its January 2011 comment letter on the Supplemental Draft EIS, the City stated that its goals are to “minimize negative impacts, reduce costs, and ensure high ridership as compared to [alternative] B2M.” Initial analysis, however, indicates that the City’s Alternative B7R is likely to have different but not fewer impacts, similar ridership, and significantly greater cost. As with Alternative C9T-B7, the City’s Alternative B7R would impact both Mercer Slough Nature Park and the NE 2nd Pocket Parks.

Conclusions from City’s Input

For purposes of the current analysis, several relevant conclusions can be drawn from the lengthy history of the City’s involvement in evaluating alternatives through Segment B and C.

First, based on the October 21, 2008 letter, the only Section 4(f) resource that the City has found to be permanently and adversely affected is McCormick Park, which would be affected by most of the alternatives exiting Downtown Bellevue along NE 12th Street (Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7).

Second, the City clearly views Mercer Slough Nature Park as an important regional park resource. Nevertheless, the City appears to indicate that mitigation is appropriate for all of the potential impacts and that none of the potential impacts is so severe as to interfere with the fundamental goals and objectives for each Section 4(f) resource. The City has recommended four alternatives in South Bellevue (Segment B), all of which would adversely affect the park; one alternative passes along the west edge of the park adjacent to Bellevue Way (Alternative B3S), one passes along the south edge of the park by I-90 (Alternatives B7 [as well as their B7R proposal]), and one actually transects the middle of the park from the South Bellevue park-and-ride to the former BNSF Railway corridor. In February 2009, the City specifically asserted that mitigation opportunities are appropriate within Mercer Slough Nature Park for the impacts created by an alternative along the east side of Bellevue Way and adjacent to the park.

Third, the City presents a varied view about affecting the Winters House. While their February 2009 letter provides that avoiding the Winters House property is not essential so long as impacts to this resource are fully mitigated and the City even suggested moving the Winters House if necessary to mitigate impacts of the alternative it proposed, the City’s July 20, 2010 letter raises concerns about impacts to the Winters House (and other impacts)

Fourth, the City’s comments on Surrey Downs Park and the NE 2nd Pocket Parks have been limited to technical comments from staff regarding mitigation. While the 112th Avenue SE alternative that the City currently opposes would adversely affect Surrey Downs Park, the reasons cited by the Bellevue City Council for opposition to 112th Avenue SE have focused primarily on neighborhood noise, traffic, and construction impacts and not on impacts to these parks.

In summary, from the record of City correspondence and meetings with Sound Transit staff, there do not appear to be any impacts on Section 4(f) resources in either Segment B or Segment C that the City does not believe can be potentially mitigated. The City views that impacts on Section 4(f) resources from all Segment B and C alternatives can be potentially mitigated. While the City has expressed support for the role played by each potentially affected Section 4(f) resource, the City has also indicated that other considerations, independent of impacts on Section 4(f) resources, are at least as, and generally more important to the City than avoiding impacts to these resources. While the City has shown a recent preference for alternatives based upon Alternative B7, it is important to observe that the City’s preference is based upon its own criteria and not based upon an assessment of impacts weighted towards resources protected under Section 4(f).

D.7.7.2 Department of Archaeological and Historic Preservation

Sound Transit and FTA have consulted with DAHP regarding the Winters House throughout the environmental review process, starting with initiating the Section 106 process in August 2006. The Winters House is listed on the NRHP, and DAHP believes it is appropriate to preserve its existing setting and maintain the current integrity and features that support its listing on the NRHP. FTA has determined, in consultation with DAHP, that the project has an Adverse Effect resulting from potential impacts on the Winters House (*Preferred Alternative B2M*), the potential Surrey Downs Historic District (*Preferred Alternative C11A* and Alternatives C4A, C2T, and C3T), and the Justice White House (Alternative E4). Accordingly, a Memorandum of Agreement (MOA) will be prepared stipulating the appropriate mitigation measures. The MOA would also describe benefits to the resource because of measures Sound Transit has committed to implement. This net benefit would not be realized by any other alternative, although the other alternatives would also have no impacts on historic resources. Because its jurisdiction

is limited to historic resources, DAHP has not expressed any view on impacts to other non-historic Section 4(f) resources.

D.7.7.3 Conclusions: Factor 4

While the City's preferred alternative has changed several times over the last few years, it is evident that impacts to Section 4(f) resources (and avoiding such impacts) have not been a primary determinant in the City's position. Instead, the City has prioritized serving the South Bellevue Park-and-Ride market (either at the existing location or relocated south), tunneling through Downtown Bellevue, serving the Wilburton area east of Downtown Bellevue, and minimizing traffic and neighborhood impacts as the more important criterion in selecting alternatives than protecting Section 4(f) resources. The only Section 4(f) resource for which the City has found a permanent adverse effect is McCormick Park. Regarding the other Section 4(f) resources, the City has placed a priority on mitigating, rather than necessarily avoiding, impacts. The City effort to balance broader planning objectives and impact concerns with mitigation to Section 4(f) resources in this respect is similar to the objectives of this least harm analysis. In the past, the City has supported Alternatives C9T-B7 and C2T-B3 with modifications.

City of Bellevue has recommended a modified alignment for the BNSF Alternative (B7) that incorporates a station near the Bellevue Way SE and I-90 ramps rather than the 118th Station. Bellevue's proposed alignment then connects to *Preferred 110th NE Tunnel Alternative (C9T)* with a tunnel along NE 2nd Street (rather than along Main Street as the current C9T Alternative). These collective revisions to Alternative B7 and *Preferred Alternative C9T* are referred to as the B7R. The City has stated that this is its current proposal for the alignment through Segments B and C for East Link. The B7R variation has not been evaluated in this least harm analysis because there is not complete information on this variation. The alternatives consistent with the term sheet the City signed with Sound Transit are Alternatives C9T-B2M, C9T-B2A, and C9T-B2E. All of these alternatives affect Section 4(f) resources, but as explained in earlier sections of this analysis, the impacts to these resources can all be mitigated.

DAHP views the Winters House as an important resource for historic preservation. An MOA will be developed to describe measures to avoid potential impacts to the Winters House and benefits to this resource.

D.7.8 Factor 5: Degree to Which Each Alternative Meets the Project Purpose and Need

The overarching purpose and need of the East Link Project is to expand the Sound Transit Link light rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. This purpose and need is supported by five Sound Transit goals and supporting objectives described in Chapter 1, Purpose and Need, of the Final EIS, as follows:

1. Transportation goal: Improve transit mobility in the East Link Corridor.
 - a. Improve the quality of transit service.
 - b. Increase transit accessibility.
 - c. Maximize East Link ridership.
2. Environmental goal: Preserve environmental quality in the corridor.
 - a. Minimize potential adverse operating impacts on the natural and built environment.
 - b. Minimize potential adverse construction impacts on the natural and built environment.
3. Land use goal: Support regional and local land use goals and objectives.
 - a. Support adopted land use and transportation plans.
4. Implementation goal: Minimize risk in the corridor.
 - a. Enhance stakeholder and community support.
 - b. Design system to reduce construction risk.
5. Financial goal: Provide a financially feasible solution.
 - a. Build a system within project budget.
 - b. Build a system that can be operated and maintained within available revenue.
 - c. Build a system that is cost-effective.

Since these five goals are far more specific than the more general purpose and need statement, and since the Sound Transit goals are entirely consistent with, and amplify upon, the purpose and need, these Sound Transit goals are used in this analysis for a more refined analysis than would be possible if the analysis were to rely solely on the purpose and need statement. The analysis under this factor will specifically address Goals 1, 3, and 4. Sound Transit's Goal 2 is addressed under Factors 1, 2, and 6 in this analysis and Goal 5 is addressed under Factor 7 in this analysis.

D.7.8.1 Sound Transit's Transportation Goal

Sound Transit's transportation goal—to improve transit mobility in the East Link Corridor—is supported by all alternatives evaluated in the Final EIS. The alternatives vary, however, in the degree to which the transportation objectives are fulfilled. Each alternative would fulfill the objective of improving the quality of transit service and each would provide reliable transit service that would not be hindered by congestion through a dedicated right-of-way with stations that provide convenient connections between transit services. In contrast, while all alternatives would generally fulfill the objective of increasing transit accessibility by providing more efficient high capacity linkages, not all alternatives satisfy this objective equally.

Many of the Segment B and C alternatives have similar ridership since they generally connect the same destination with similar travel modes. There are, however, a few alternatives that are significantly less desirable because they carry fewer people and offer less accessibility. The level of accessibility generally corresponds to the ridership for each alternative and both objectives are discussed together. Exhibit D-26 provides a comparative review of ridership generated by each alternative within South Bellevue and Downtown Bellevue.

In South Bellevue, the less desirable alternatives from the transit accessibility and ridership perspective are those that include Alternative B7 (Alternatives C9T-B7, C11A-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7). All of these alternatives require construction of an isolated station at 118th Avenue SE with poor walking, bus, and park-and-ride access. The walking access is poor because of the barriers created by I-405, SE 8th Street, and the Mercer Slough Nature Park. A station at this location would not offer many bus transfer opportunities because it is on a minor arterial with little existing bus service. Diverting routes from Bellevue Way to the station would increase delays for bus passengers and increase operating costs. The park-and-ride is also less convenient since commuters arriving from the east and south on I-90 and I-405 would have to drive further than if using the existing South Bellevue Park-and-Ride.

In Downtown Bellevue, the poorest accessibility and lowest ridership would occur with alternatives that include Alternative C14E (Alternatives C14E-B3 and C14E-B7). The single Downtown Bellevue Station associated with Alternative C14E is located directly adjacent to I-405, and this station is a substantial distance from most Downtown Bellevue destinations.

Also, because of its location adjacent to I-405, this alternative is inconvenient for bus transfers because of the long distance from the Bellevue Transit Center. Similarly, the Bellevue Transit Station for Alternatives C7E-B2A, C7E-B2E, C7E-B3, and C7E-B7 is about 800 feet away from the Bellevue Transit Center bus terminal and the concentration of high density Downtown destinations.

Alternatives C1T-B1, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C7E-B2E, C8E-B3, and C9A-B2E best meet the project ridership goals. The highest ridership in downtown Bellevue generally occurs with tunnel alternatives that combine grade-separated travel and accessible stations located near the center of downtown and near or directly below the Bellevue Transit Center. The downtown at-grade alternatives, would provide high visibility and direct access to the Bellevue Transit Center, but the slower travel times would result in slightly reduced trips between Seattle and Redmond.

Examining the combined boardings in Segment B-C, the average ridership generated is 12,000 boardings per day. Every alternative combination that includes Alternative B7 generates lower than average ridership (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7) due to the poor accessibility discussed above. Average or better ridership is achieved for all of the other alternatives that are at-grade or tunneled in downtown Bellevue and also serve the South Bellevue Park-and-Ride (Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C1T-B1, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C9A-B2A, C9A-B2E, and C9A-B3). Two elevated alternatives in downtown Bellevue achieve higher ridership (Alternatives C7E-B2E, C8E-B3) while five have lower than average ridership (Alternatives C7E-B2A, C7E-B7, C8E-B7, C14E-B3, C14E-B7).

D.7.8.2 Sound Transit's Land Use Goal

The project's land use goal is to implement the project in a manner that supports regional and local land use and transportation plans. As stated in Chapter 1, the Puget Sound Regional Council's (PSRC's) VISION 2040, the regional land use plan, focuses growth in urbanized areas. VISION 2040 rededicates the region's commitment, as stated in VISION 2020, to enable residents to live near jobs and other urban activities, to help strengthen existing communities, and to promote bicycling, walking, and transit use. These focus areas are identified as "urban centers."

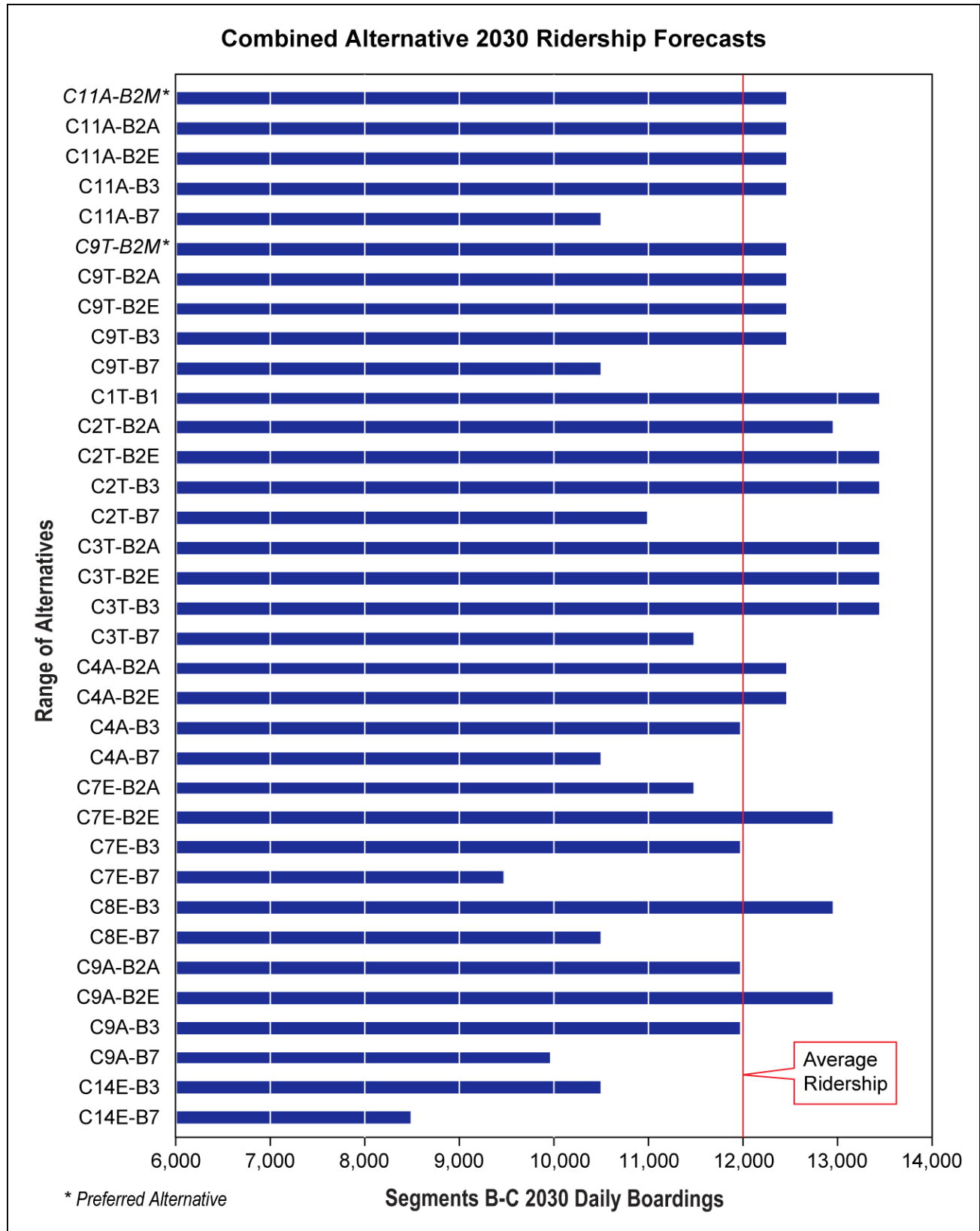


EXHIBIT D-26
Ridership by B-C Alternatives

In response to the state Growth Management Act, PSRC's metropolitan transportation plan, Destination 2030, established policies that prioritize new transportation services in areas that accept an increased share of growth. Because of limited funding, the Regional Transportation Improvement Program strategically focuses funding on developing regional growth centers and the corridors between them. The goal of this prioritization is to concentrate growth in existing urbanized areas and is considered the most efficient way to serve a greater share of the region's population. Out of this vision, the East Link Project was prioritized to provide direct linkages to the transit markets in the urban centers, most specifically the Bellevue Transit Center, the densest portion of downtown Bellevue.

Evaluating the alternatives against this background, the elevated alternatives on the edge of Downtown Bellevue (Alternatives C7E-B2A, C7E-B2E, C7E-B3, C7E-B7, C14E-B3, and C14E-B7), would be less supportive of the project's land use goals than other alternatives. Among those alternatives, Alternatives C14E-B3 and C14E-B7 would be the worst at fulfilling the project's land use goals. Alternative C14E is the most problematic from a land use perspective since it would provide only a single station in Downtown Bellevue, and this station is located on the eastern edge of downtown next to I-405. As a result, many commuters would find the station beyond a typical five to ten minute walking distance. This poor service could constrain the growth of Downtown Bellevue, which is a PSRC-designated Regional Growth Center. Alternatives that rely on Alternative C7E would provide a station one block closer to the Bellevue Transit Center, but still a longer walk to both bus transfers and downtown destinations than other alternatives. It would also provide a second downtown station with the Main Street Station, but its location would be on the very southeast edge of downtown.

The remaining alternatives (Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C11A-B7, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7, C1-B1, C2T-B2A, C2T-B2E, C2T-B3, C2T-B7, C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B2A, C8E-B2E, C8E-B3, C8E-B7, C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7) are better at satisfying the project's land use goal. All of these alternatives provide a station directly adjacent to the Bellevue Transit Center, nearest the downtown core and most densely developed area of Downtown Bellevue.

D.7.8.3 Sound Transit's Implementation Goal

The project's implementation goal is to minimize risk in the corridor. Sound Transit developed plans to measure and address the two objectives under this goal by pursuing an ongoing community outreach and involvement plan to enhance stakeholder and community support and designing the East Link Project in a manner that reduces construction risk. The intent of the community support objective is to involve the community in the project development and design process such that the selected alternatives would reduce, or ideally avoid, controversy. The East Link Project has received considerable controversy from the communities in proximity to, and stakeholders with interests in, Segments B and C. None of the alternative combinations have achieved consensus. East Link Project development has continued Sound Transit's commitment to involving the community at every step of the project's 5-year process.

Through NEPA and the State Environmental Policy Act (SEPA) process, Sound Transit has received 1,586 comment letters, which have all been reviewed and responded to in the Final EIS. While the Draft EIS initially reviewed 19 combined alternatives for Segments B and C, as a result of comments and multiple workshops, the number of alternatives has grown to the 35 alternatives reviewed in this analysis. The additional alternatives have also been publicly vetted through an SDEIS. From the comment letters, public meetings, and stakeholder briefings, it is clear that many residents remain concerned about alternatives that are adjacent to their neighborhood. Beginning in September 2006, outreach activities have included hosting public open houses and workshops, offering information at local public meetings, making door-to-door visits, and conducting ongoing agency coordination. In addition, Sound Transit's outreach staff has attended community events, posted regular project updates on the Sound Transit website, and mailed fact sheets and project announcements throughout the project corridor.

To design the project in a manner that reduces construction risk, Sound Transit solicited the involvement of qualified experts to rate the comparative risk factors for the various alternatives. Risks factors include complexity, safety, stakeholder concerns and several other factors. These factors have been consolidated in the project cost estimates presented in Factor 7.

D.7.8.4 Conclusions: Factor 5

Factor 5 only addresses the degree to which the alternatives meet the transportation, land use and risk goals of the project's purpose and need because the

environmental impact and cost goals of the purpose and need are reflected in other factors. The transportation goal is addressed through accessibility and ridership, whereas the land use goal assesses how well the project supports land use and transportation plans to serve population and employment centers. Risk has been managed equally for all alternatives, since extensive outreach has addressed and continues to address stakeholder concerns, and construction risk is considered in project cost estimates, which is evaluated in Factor 7. From a combined transportation and land use perspective, the alternatives that include a station directly adjacent to the Bellevue Transit Center and serve the South Bellevue Park-and-Ride, best serve the project purpose and need. Except when connecting from Alternative B7, these are the tunnel and at-grade alternatives as well as Alternative C8E-B3. Although the station is further from the Bellevue Transit Center Alternative C7E-B2E is also included due to its high ridership.

D.7.9 Factor 6: After Reasonable Mitigation, the Magnitude of Any Adverse Impacts to Resources Not Protected by Section 4(f)

D.7.9.1 Analysis of Factor 6

This factor emphasizes unavoidable environmental impacts to resources not protected by Section 4(f) after implementing mitigation measures. The context of this light rail project is that Sound Transit has designed alternatives that follow existing transportation corridors to the extent possible, through extensively developed urban centers with the objective of serving the highest-density transit markets. Given the intensity of adjacent uses, therefore, most of the project impacts can be fully mitigated. There are only relatively minor differences among the quantifiable impacts of the Segment B and C alternatives. The primary unavoidable impacts that cannot be completely mitigated are visual quality, minor vibration impacts, and construction impacts to businesses.

All alternatives along Bellevue Way, except Alternatives C11A-B2M and C9T-B2M, would lower the visual quality because of widening the Bellevue Way right-of-way to the west and removing mature vegetation. Additionally, Alternative C9A-B2A would lower the visual quality at 112th Avenue SE and Main Street as a result of the permanent straddle bents (the double-column piers that support a beam straddled over the roadway on which sits the guideway) as it turns onto Main Street. Alternatives C8E-B3 and C8E-B7 would result in visual impacts along 110th Avenue

NE, to residents and pedestrians. Mitigation measures would reduce the visual impacts for each alternative.

A few vibration impacts might not be avoidable with standard mitigation measures. Alternatives C9A-B2A, C9A-B2E, C9A-B3, and C9A-B7 each would have three locations where project vibration is predicted to exceed FTA criteria. Alternatives C4E-B2A, C4E-B2E, C4E-B3, C4E-B7, C8E-B3, and C8E-B7 each would have two areas, and finally, Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C11A-B7, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7, C14E-B3, and C14E-B7 each would have one site where there are potential vibration impacts above the FTA criteria. The affected properties in all instances are hotels and the ability to mitigate these impacts would be reviewed again in final design. During construction, businesses might be adversely affected in Downtown Bellevue along the alignment of all alternatives being considered. Mitigation can reduce the effects, but it would not alleviate disruptions caused by reduced accessibility, noise and visibility.

D.7.9.2 Conclusions: Factor 6

All project alternatives have some unavoidable impacts related to visual quality, minor vibration, and temporary construction on businesses. These impacts would be minimized with project mitigation, and these impacts are not major discriminators that would eliminate any one alternative from consideration.

D.7.10 Factor 7: Substantial Differences in Costs among the Alternatives

D.7.10.1 Analysis of Factor 7

The East Link Project includes the goal of providing a financially feasible solution to transit in the region. This includes the objective of building a system within a project budget that can be operated and maintained within available revenue. This goal is also intended to balance cost with performance as measured by cost effectiveness. Exhibit D-27 compares the cost for each alternative. This bar chart also defines what is fundable under the ST2 Plan revenues with and without the Sound Transit and City of Bellevue term sheet. The ST2 Plan, approved by the voters in November 2008, would fund the construction of the East Link Project. ST2 provides sufficient funding for an at-grade or elevated alternative through Downtown Bellevue (Segment C). However, if the Sound Transit Board selects the most expensive alternative in Segment B (Alternative B7), the only alternatives within the ST2 Plan budget assumptions would be the elevated alternatives on the edge of downtown Bellevue (Alternatives C7E and C14E).

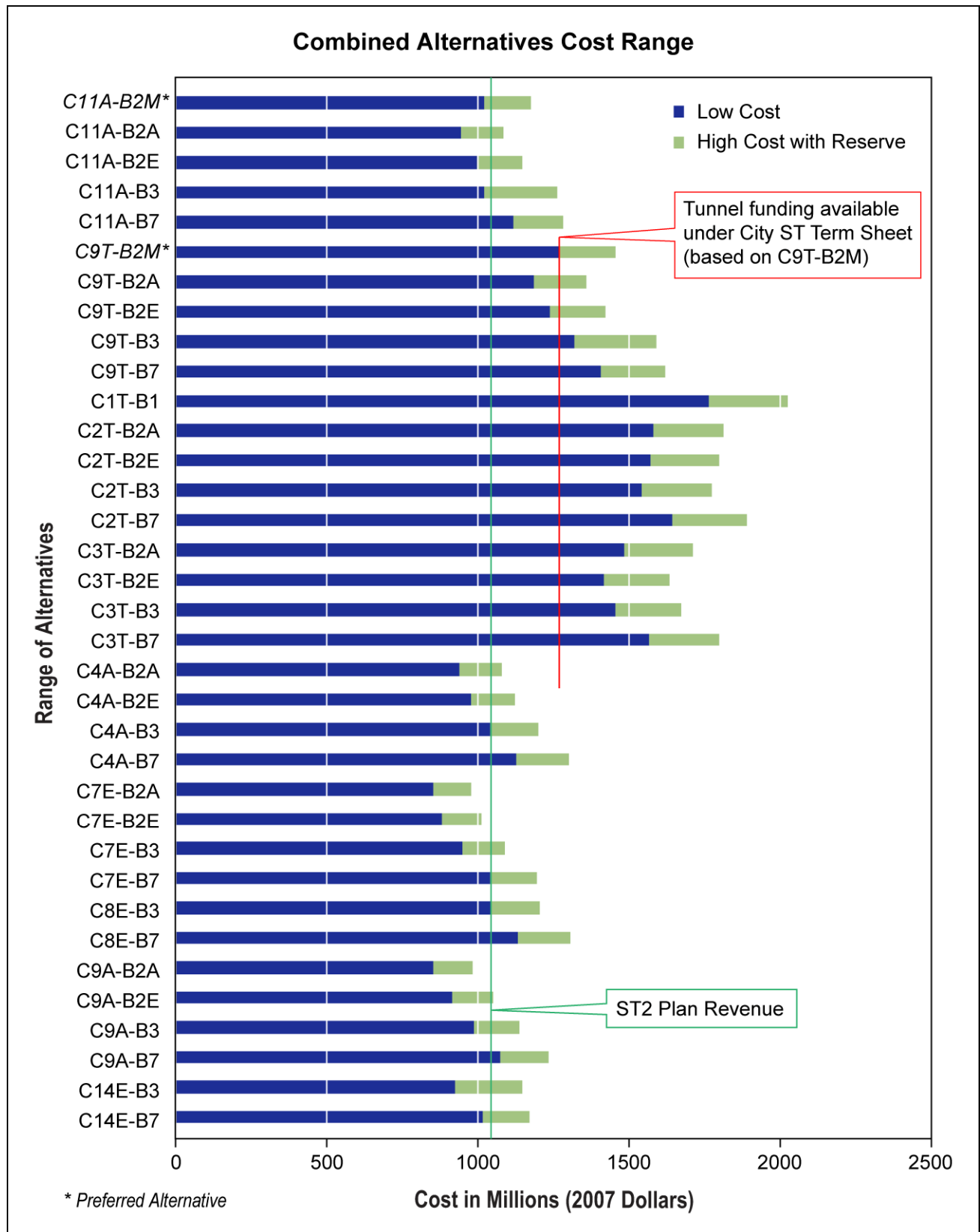


EXHIBIT D-27
Low and High Cost Comparison for Each Alternative

If the Sound Transit Board selects a tunnel alternative in this segment, additional funding sources would be required. The tunnel alternatives (Alternatives C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C9T-B7, C1T-B1, C2T-B2A, C2T-B2E, C2T-B3, C2T-B7, C3T-B2A, C3T-B2E, C3T-B3, and C3T-B7) are not fundable through the existing ST2 funding program. These alternatives are generally estimated to cost an additional \$300 to \$800 million above the cost of alternatives that rely upon an at-grade or elevated alternative. Three of the tunnel alternatives could, however, be made affordable. *Preferred Alternative C9T*, combined with a 112th Avenue approach into downtown Bellevue (Alternatives C9T-B2M, C9T-B2A, and C9T-B2E), is the lowest cost of the tunnel alternatives and potentially affordable under the term sheet between the City of Bellevue and Sound Transit, if the city provides \$150 million in additional funding and accepts the alternative into downtown along 112th Avenue SE.

Another metric that helps to understand the cost difference among alternatives is cost-effectiveness. Cost-effectiveness is measured as the project's annualized cost divided by the projected number of riders that would be attracted each year, for a cost-per-rider estimate. Annualized costs are the project's construction costs averaged over the years of operation. Exhibit D-28 compares the cost effectiveness of each alternative. A lower dollar (\$) cost per rider is a more efficient system, carrying more riders for less overall cost.

A cost-effectiveness analysis shows that those alternatives that include Alternative B7 (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7), reduce the cost-effectiveness for the Segment C alternative they connect with in Downtown Bellevue. This is because the costs are higher and the ridership lower than with other Segment B alternatives (e.g., Alternative C11A-B7 has poor cost-effectiveness as compared with Alternatives C11A-B2M, C11A-B2A, C11A-B2E, and C11A-B3). Those alternatives that include a tunnel alternative in Downtown Bellevue generally have higher costs per rider than at-grade or elevated alternatives. Tunnels are inherently costlier, and therefore, unless they provide substantially higher ridership, they would have a high cost per rider (ranging between \$8.70 to 11.90 per rider).

Preferred Alternative C9T is the lowest cost tunnel alternative when combined with the alternatives that travel along 112th Avenue SE with only slightly lower ridership than the other tunnel alternatives. Alternatives C9T-B2M, C9T-B2A, and C9T-B2E, therefore, are the most cost-effective of the tunnel

alternatives. The elevated alternatives have a cost-effectiveness similar to the at-grade alternatives. Similarly, those alternatives with an alternative at-grade in Downtown Bellevue that connect with alternatives from 112th Avenue SE (Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C4A-B2A, C4A-B2E, C9A-B2A, C9A-B2E, and C9A-B3) have similar to or slightly lower ridership than the tunnel alternatives but at a lower construction cost and, therefore, have a low cost per rider. The elevated alternatives generally have both lower ridership and lower cost and, therefore, similar cost-effectiveness to the at-grade alternatives.

D.7.10.2 Conclusions: Factor 7

Conclusions for Factor 7 rely primarily on differences in project cost, but conclusions are also generally supported with the cost-effectiveness metric. The alternatives that rely upon a tunnel alternative would have a higher cost than at-grade or elevated alternatives through Downtown Bellevue. Of the tunnel alternatives, only *Preferred Alternative C9T* combined with a 112th Avenue SE approach into Downtown Bellevue (Alternatives C9T-B2M, C9T-B2E, and C9T-B2A) would be potentially affordable under the Sound Transit financial criteria with the City of Bellevue term sheet. Alternative B7 through South Bellevue would reduce the cost-effectiveness (Alternatives C11A-B7, C9T-B7, C2T-B7, C3T-B7, C4A-B7, C7E-B7, C8E-B7, C9A-B7, and C14E-B7) for the alternatives that connect within Segment C.

D.7.11 Least Harm Analysis: Conclusions

As required by FTA regulations, this least harm analysis is required to balance and compare seven factors in evaluating which alternative, or alternatives, would have the least harm. As can be seen from the prior discussion, this evaluation and balancing is complex and qualitative in this instance because it requires comparing unlike criteria and weighing the relative importance of each factor and the relative strength or weakness of each *alternative* under each factor. It is, furthermore, important to note that the seven factors are not limited to evaluation of effects on Section 4(f) resources; FTA regulations specifically contemplate that this least harm analysis would balance protection of Section 4(f) resources against other considerations in project planning, including factors such as cost and impacts to nonprotected resources that have little relevance to the protection of Section 4(f) resources.

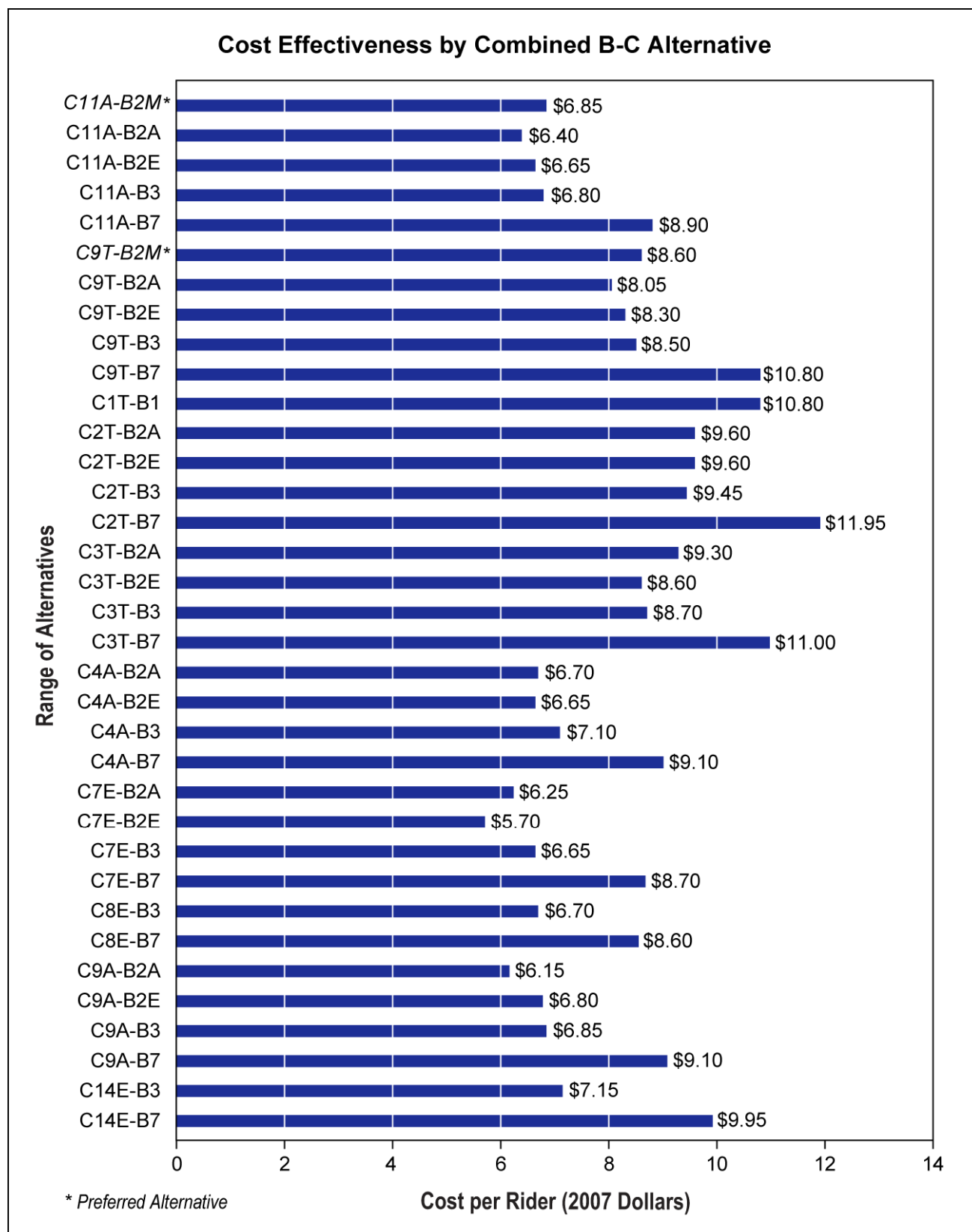


EXHIBIT D-28
Cost Effectiveness for Each Alternative

As a qualitative evaluation, the least harm analysis necessarily requires an element of judgment and evaluation. The previous discussion of each factor was designed to provide the technical and analytical bases for this evaluation. The following discussion summarizes the relative weighing of the 35 alternatives under each of the seven required factors.

D.7.11.1 Factors 1 and 2: The Ability of the Alternative to Mitigate Adverse Impacts to Each Section 4(f) Property (including any measures that result in benefits to the property) and The Relative Severity of the Remaining Harm, after Mitigation, to the Protected Activities, Attributes, or Features that Qualify Each Section 4(f) Property for Protection

With mitigation the following alternatives would result in net impacts on McCormick Park: Alternatives C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B2A, C4A-B2E, C4A-B3, C4A-B7, C8E-B3, and C8E-B7. The visual impact created as a result of the presence of the guideway structure cannot be fully mitigated for McCormick Park. However, there would be a potential for net benefit on Mercer Slough Nature Park from Alternatives C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9T-B3, C2T-B2A, C2T-B2E, C2T-B3, C3T-B2A, C3T-B2E, C3T-B3, C4A-B2A, C4A-B2E, C4A-B3, C7E-B2A, C7E-B2E, C7E-B3, C9A-B2A, C9A-B2E, C9A-B3, and C14E-B3. The Winters House would be potentially impacted but with mitigation would have no net adverse impacts and, in fact, would receive net benefits from Alternatives C11A-B2M and C9T-B2M.

D.7.11.2 Factor 3: The Relative Significance of Each Section 4(f) Property

All parks have been determined to be significant by the City of Bellevue; therefore, it is difficult to solely use the judgment of the City of Bellevue (as the resource manager for all of the Section 4(f) resources) as the basis upon which to distinguish the relative significance of the affected Section 4(f) resources. Mercer Slough Nature Park is a major regional resource, in contrast to Surrey Downs Park and McCormick Park, which are community resources and the NE 2nd Pocket Parks, which are an even more local park resource. This suggests that Mercer Slough Nature Park, as a regional park, is relatively more significant than other park resources. With respect to the Winters House, it is the only historic resource in the City of Bellevue on the NRHP; that makes this resource significant in comparison with the other affected resources.

All alternatives affect Mercer Slough Nature Park, the most significant of the park resources. Some

alternatives affect the other, less significant, parks. Only Alternatives C11A-B2M and C9T-B2M would potentially impact the Winter House, but these are also the only alternatives that offer a benefit to this resource. Other differences between alternatives are minor for this factor.

D.7.11.3 Factor 4: The Views of the Official(s) with Jurisdiction over Each Section 4(f) Property

The City of Bellevue's current preferred alternative is the proposed modifications to C9T-B7 referred to as B7R. In the past, the City has supported alternatives C9T-B7 and C2T-B3 with modifications. The alternatives consistent with the term sheet the City signed with Sound Transit are Alternatives C9T-B2M, C9T-B2A, and C9T-B2E. While the City's preferred alternative has changed several times over the last few years, it is clear from the City's extensive input and correspondence that impacts to Section 4(f) resources, while a consideration, have not been the primary determinant in the City's choice of preferred alternative. Instead, the City has prioritized other factors more highly, including the importance of serving the South Bellevue Park-and-Ride market (either at the existing location or relocated south), developing a tunnel alternative through Downtown Bellevue, serving the Wilburton area east of I-405, and minimizing traffic and neighborhood impacts, regardless of the selected alternative. The only Section 4(f) resource that the City has found that would be permanently adversely affected is McCormick Park. As to other Section 4(f) resources, the City has focused on ensuring adequate mitigation rather than necessarily on avoiding impacts. The City has evidently engaged in its own balancing of its broader planning objectives with impact concerns and mitigation to Section 4(f) resources. In this respect, the City's approach appears to be similar to the analytical approach used in this least harm analysis.

DAHP views the Winters House as an important resource for historic preservation. For those alternatives affecting the Winters House (Alternatives C9T-B2M and C11A-B2M), Sound Transit has incorporated protective measures during construction and mitigation measures that result in net benefits to the Winters House.

D.7.11.4 Factor 5: Degree to Which Each Alternative Meets the Project Purpose and Need

Factor 5 only addresses the degree to which the alternatives meet the transportation, land use and risk goals of the project's purpose and need because the environmental impact and cost goals of the purpose and need are reflected in other factors. The

transportation goal is represented by ridership, whereas the land use goal assesses how well the project supports land use and transportation plans to serve population and employment centers. The analysis found that the risk goals did not inform the least harm analysis because construction risk is reflected in the cost estimates and enhancing community support does not differentiate alternatives. Those alternatives with higher ridership and that provide support for land use were generally found to have the least harm for this factor. From a ridership perspective, Alternatives connecting to B7 and to C14E perform poorly compared with the other alternatives. From a combined transportation and land use perspective, the alternatives that include a station directly adjacent to the Bellevue Transit Center and serve the South Bellevue Park-and-Ride best serve the project purpose and need. Except when combined with Alternative B7, these alternatives are the tunnel and at-grade alternatives in Segment C. Although the station is further from the Bellevue Transit Center for Alternative C7E-B2E, this alternative is also included due to its high ridership.

D.7.11.5 Factor 6: After Reasonable Mitigation, the Magnitude of Any Adverse Impacts to Resources Not Protected by Section 4(f)

All project alternatives have some unavoidable impacts related to visual quality, vibration impacts, or construction impacts on nearby businesses. These impacts would be minimized with project mitigation and are not major discriminators in the comparative alternatives evaluation.

D.7.11.6 Factor 7: Substantial Differences in Costs among the Alternatives

Alternatives that can be fully funded are considered to have least harm under Factor 7. Cost-effectiveness (annualized cost per rider) is discussed under Factor 7 to provide additional information about the cost of an alternative.

Most tunnel alternatives (Alternatives C1T-B1, C9T-B3, C9T-B7, C2T-B2A, C2T-B2E, C2T-B3, C2T-B7, C3T-B2A, C3T-B2E, C3T-B3, and C3T-B7) are not affordable under Sound Transit criteria. And Alternative B7 is only affordable in Alternative C14E-B7 or C7E-B7.

Preferred Alternative C9T combined with a 112th Avenue SE alternative into Downtown Bellevue (Alternatives C9T-B2M, C9T-B2E, and C9T-B2A) is potentially affordable to Sound Transit pursuant to the terms of a tentative agreement between Sound Transit and the City of Bellevue. Alternatives C11A-B7, C9T-B3, C9T-B7, C1T-B1, C2T-B2A, C2T-B2E, C2T-B3, C2T-B7, C3T-B2A, C3T-B2E, C3T-B3, C3T-B7, C4A-B7, C7E-

B7, C8E-B7, C9A-B7, and C14E-B7 have poor cost-effectiveness.

D.7.12 Conclusions

In making the least harm conclusion all seven factors have been considered and weighed, as required by Section 4(f) regulations. This weighing was complex for two reasons. First, there is not a universally accepted best practice for balancing and weighing the factors. Second, the factors are fundamentally unlike: there is no quantitative way, for example, to compare the views of officials with responsibility for 4(f) resources (Factor 4) with the magnitude of impacts on non-4(f) resources (Factor 6).

All seven factors were weighed. In the unique circumstance of the analysis for this project, however, several of the factors were relatively easier to weigh than others and therefore did not require subtle analysis. Almost all the alternatives were identical under Factors 4 and 6 and relatively similar under Factor 3. Therefore, these three factors do not substantially differentiate between the 35 alternatives and do not influence the result of this least harm analysis. It was also relatively simple to compare alternatives under Factor 7 since quantitative data is available on cost effectiveness and on difference in cost. The alternatives can effectively be ranked under Factor 7.

Factors 1 and 2 are largely qualitative and require more subtle and nuanced balancing. In the unique circumstance of this analysis, Factor 1 effectively divides the alternatives into two categories – those whose impacts can be mitigated and those that cannot. Impacts to all Section 4(f) resources can be effectively mitigated except for the impacts to McCormick Park. Therefore, any alternatives that would adversely affect McCormick Park would rank lower on Factor 1 and necessarily lower in the overall least harm analysis. Similarly, Factor 2 also divides the alternatives into those with remaining harm to McCormick Park and those that do not have remaining harm to any of the Section 4(f) resources. Those with remaining harm rank lower in the least harm analysis.

By definition, since all alternatives are considered to be feasible and prudent, they all satisfy the purpose and need for the project. In this case, then, Factor 5, calls for some judgment about the relative degree to which an alternative meets the purpose and need and the relative complexities that an alternative will present. Factor 5 only addresses the degree to which the alternatives meet the transportation, land use and risk goals of the project's purpose and need because

the environmental impact and cost goals of the purpose and need are reflected in other factors. The transportation goal is represented by ridership, a quantitative measure, whereas the land use goal is a qualitative assessment of how well the project supports land use and transportation plans to serve population and employment centers. The analysis found that the risk goals did not inform the least harm analysis because construction risk is reflected in the cost estimates and enhancing community support does not differentiate alternatives. Those alternatives with higher ridership and that provide support for land use were found to have the least harm for this factor.

The conclusion from this qualitative and comparative analysis of the least harm Factors is that Alternatives *C11A-B2M*, *C11A-B2A*, *C11A-B2E*, *C11A-B3*, *C9T-B2M*, *C9T-B2A*, *C9T-B2E*, *C9A-B2A*, *C9A-B2E*, *C9A-B3* and *C7E-B2E* are equally the alternatives with the least harm. Table D-9 summarizes the results of the analysis. Those alternatives that have the least harm for a particular factor are shaded in green and those alternatives with the least harm overall are shaded in yellow.

TABLE D-9
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C11A-B2M	3	Mercer Slough Nature Park, Surrey Downs Park, Winters House	Impacts fully mitigable	Benefits to Winters House and Mercer Slough Nature Park in expanding natural areas	Mercer Slough Nature Park , Winters House most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Higher than average ridership, supports land use,	Environmental effects o not differentiate among the alternatives	Within ST2 Plan budget
C11A-B2A	2	Mercer Slough Nature Park, Surrey Downs Park	Impacts fully mitigable	Benefit Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Within ST2 Plan budget
C11A-B2E	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use support,		Within ST2 Plan budget
C11A-B3	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Within ST2 Plan budget
C11A-B7	1	Mercer Slough Nature Park	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Lower than average ridership, supports land use		Not within ST2 Plan budget
C9T-B2M	4	Mercer Slough Nature Park, Surrey Downs Park, NE 2nd Pocket Parks, Winters House	Impacts fully mitigable	Benefits to Winters House and Mercer Slough Nature Park in expanding natural areas	Mercer Slough Nature Park , Winters House most significant		Higher than average ridership, supports land use		Within ST2 Plan budget with funding under Bellevue term sheet

TABLE D-9 CONTINUED
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C9T-B2A	3	Mercer Slough Nature Park, Surrey Downs Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Higher than average ridership, supports land use	Environmental effects do not differentiate among the alternatives	Within ST2 Plan budget with funding under Bellevue term sheet
C9T-B2E	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Within ST2 Plan budget with funding under Bellevue term sheet
C9T-B3	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Not within ST2 Plan budget
C9T-B7	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Lower than average ridership, supports land use		Not within ST2 Plan budget
C1T-B1	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget
C2T-B2A	2	Mercer Slough Nature Park, Surrey Downs Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget

TABLE D-9 CONTINUED
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C2T-B2E	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Much higher than average ridership, supports land use	Environmental effects do not differentiate among the alternatives	Not within ST2 Plan budget
C2T-B3	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget
C2T-B7	1	Mercer Slough Nature Park	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Lower than average ridership, supports land use		Not within ST2 Plan budget
C3T-B2A	3	Mercer Slough Nature Park, Surrey Downs Park	Not McCormick Park	Visual impact in McCormick Park Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget
C3T-B2E	2	Mercer Slough Nature Park, McCormick Park	Not McCormick Park	Visual impact in McCormick Park Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget
C3T-B3	2	Mercer Slough Nature Park, McCormick Park	Not McCormick Park	Visual impact in McCormick Park Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Not within ST2 Plan budget

TABLE D-9 CONTINUED
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C3T-B7	2	Mercer Slough Nature Park, McCormick Park	Not McCormick Park	Visual impact in McCormick Park	Mercer Slough Nature Park most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Lower than average ridership, supports land use	Environmental effects do not differentiate among the alternatives	Not within ST2 Plan budget
C4A-B2A	4	Mercer Slough Nature Park, Surrey Downs Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact in McCormick Park, Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Within ST2 Plan budget
C4A-B2E	3	Mercer Slough Nature Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact on McCormick Park, Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant		Higher than average ridership, supports land use		Within ST2 Plan budget
C4A-B3	3	Mercer Slough Nature Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact on McCormick Park Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Average ridership, supports land use		Within ST2 Plan budget
C4A-B7	3	Mercer Slough Nature Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact on McCormick Park	Mercer Slough Nature Park most significant		Lower than average ridership, supports land use		Not within ST2 Plan budget
C7E-B2A	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Lower than average ridership, poor support of land use		Within ST2 Plan budget

TABLE D-9 CONTINUED
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C7E-B2E	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas.	Mercer Slough Nature Park most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Much higher than average ridership, poor support of land use	Environmental effects do not differentiate among the alternatives	Within ST2 Plan budget
C7E-B3	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Average ridership, poor support of land use		Within ST2 Plan budget
C7E-B7	1	Mercer Slough Nature Park	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Much lower than average ridership, poor support of land use		Within ST2 Plan budget
C8E-B3	3	Mercer Slough Nature Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact on McCormick Park Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Within ST2 Plan budget
C8E-B7	3	Mercer Slough Nature Park, NE 2nd Pocket Parks, McCormick Park	Not McCormick Park	Visual impact on McCormick Park	Mercer Slough Nature Park most significant		Lower than average ridership, supports land use		Not within ST2 Plan budget
C9A-B2A	2	Mercer Slough Nature Park, Surrey Downs Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Average ridership, supports land use		Within ST2 Plan budget
C9A-B2E	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Much higher than average ridership, supports land use		Within ST2 Plan budget

TABLE D-9 CONTINUED
Summary of Least Harm Factors

Alternative	Number of Section 4(f) Resources Potentially Affected	Section 4(f) Resource Affected	Factor 1: Ability to Mitigate	Factor 2: Severity of Remaining Harm on Section 4(f) Resources	Factor 3: Relative Significance of Section 4(f) Lands	Factor 4: Views of Officials ^a	Factor 5: Ability to Meet Purpose and Need ^b	Factor 6: Magnitude of Impacts on non-Section 4(f) Resources	Factor 7: Substantial Difference in Cost
C9A-B3	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant	Views of City of Bellevue and DAHP regarding 4(f) resources do not differentiate among the alternatives	Average ridership, supports land use	Environmental effects do not differentiate among the alternatives	Within ST2 Plan budget
C9A-B7	2	Mercer Slough Nature Park, NE 2nd Pocket Parks	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Much Lower than average ridership, supports land use		Not within ST2 Plan budget
C14E-B3	1	Mercer Slough Nature Park	Impacts fully mitigable	Benefits Mercer Slough Nature Park objectives in expanding natural areas	Mercer Slough Nature Park most significant		Lower than average ridership, poor support of land use		Within ST2 Plan budget
C14E-B7	1	Mercer Slough Nature Park	Impacts fully mitigable	None	Mercer Slough Nature Park most significant		Much Lower than average ridership, poor support of land use		Within ST2 Plan budget

Notes: Alternatives that have the least harm for a particular factor are shaded in green, and alternatives with the least harm overall are shaded in yellow.

^a Whether the City of Bellevue supports an alternative or not does not necessarily reflect their views of Section 4(f) significance.

^b The transportation, land use and risk elements of the project's purpose and need are reflected in Factor 5, whereas the environmental element is addressed separately under Factors 1,2, and 6 and the cost element is addressed separately under Factor 7.

D.8 Section 6(f) and Washington State Recreation and Conservation Office Resources and Impacts

Section 6(f) lands are those that have been funded for acquisition or improvement through the LWCF grants. The conversion of any portion of these lands follows Title 36 CFR 59.3 of the Land and Water Conservation Fund Program, which instructs the following:

- (1) All practical alternatives to the proposed conversion have been evaluated.
- (2) The fair market value of the property to be converted has been established and the property proposed for substitution is of at least equal fair market value as established by an approved appraisal (prepared in accordance with uniform Federal appraisal standards) excluding the value of structures or facilities that will not serve a recreation purpose.
- (3) The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted. Dependent upon the situation and at the discretion of the Regional Director, the replacement property need not provide identical recreation experiences or be located at the same site, provided it is in a reasonably equivalent location.

The Washington State Recreation and Conservation Office (RCO) administers Section 6(f) of the LWCF Act. The RCO website (<http://www.rco.wa.gov/>) was

accessed on February 13, 2007, and RCO staff was contacted in September and October 2009 to identify Section 6(f) resources in the East Link study area. Project staff also met with NPS and RCO staff on April 12, 2010. Mercer Slough Nature Park has benefited from LWCF monies, which contributed to acquiring multiple parcels to establish the park in 1974 and 1978. Exhibit D-5 shows the area, approximately 130 acres, purchased with these funds. In addition, RCO funds have been used to further acquire portions of the park. King County also received RCO funds for to develop portions of Marymoor Park, but no LWCF grants. Properties funded by RCO are subject to similar requirements for conversion as Section 6(f) without requiring approval from the NPS.

A conversion of recreational use must be approved by RCO and the NPS (for Section 6(f) property) according to the prerequisites listed above. A portion of both the Section 6(f) LWCF- and RCO-funded properties in Mercer Slough Nature Park is jointly owned by Washington State Parks. Table D-10 shows the acreage impacts to Section 6(f), RCO, and Washington State Parks property in Mercer Slough Nature Park for each Segment B alternative.

D.8.1 Section 6(f) Impacts

The LWCF Act requires that before Section 6(f) properties are converted, the agency proposing the conversion must ensure that “all practical alternatives” to converting Section 6(f) properties have been evaluated. As described above, the No Build Alternative would avoid uses of all Section 6(f) resources, however, it does not meet the purpose and need of the East Link Project.

TABLE D-10
Segment B Impacts on Section 6(f) LWCF and RCO Parks and Open Spaces in Mercer Slough Nature Park

Impact (acres)	Alternative				
	<i>Preferred Alternative C11A-B2M</i> (acres)	<i>Preferred Alternative C9T-B2M</i> (acres)	Alternative C9T-B2A, C11A-B2A, or C9A-B2A (acres)	Alternative C9T-B2E, C11A-B2E, or C9A-B2E (acres)	Alternative C11A-B3 (high range is due to B3 - 114th Extension Design Option) (acres)
Section 6(f) LWCF-Funded					
Impacted area (permanent/construction)	0.3/0.4	0.3/0.4	0.1/0.2	0/0	0.1/0.2 to 0.3
Section 6(f) total a	0.8	0.8	0.3	0/0	0.3 to 0.4
Washington RCO-Funded					
Impacted area (permanent/construction)	0.7/1.0	0.7/1.0	0.6/0.4	0.2/0.3	0.6/0.4
RCO total ^a	1.7	1.7	1.0	0.4	1.0

^a Includes operational and construction impacts and might not equal the sum of operation and construction impacts shown due to rounding.

^b Washington State Parks has ownership interest in portions of the Section 6(f) LWCF-funded property and RCO-funded property.

Portions of the park acquired and or developed through LWCF monies do not operate independent of the larger Mercer Slough Nature Park. Therefore, while the specific impact on Section 6(f) alternatives varies by alternative, all Segment B alternatives affect Mercer Slough Nature Park. The avoidance alternative analysis as conducted under the Section 4(f) analysis is applied to these lands as well. Please refer to Section D.6.2 of this document for an avoidance alternatives discussion, which leads to the Least Harm Analysis in Section D.7.

As discussed under the Section 4(f) analysis, the avoidance alternatives in Segment B cannot be separated from Segment C alternatives impacts. Section D.6.1 reviews the range of avoidance alternatives for Mercer Slough Nature Park. This analysis concluded that completely avoiding the park would not be prudent since new routes would result in more extensive impacts on the larger community and adjacent neighborhood relative to the minor impacts that can be fully mitigated to Mercer Slough Nature Park.

Since no prudent and feasible avoidance alternative exists to avoid Mercer Slough Nature Park, a least harm analysis was developed in Section D.7. The least harm analysis results in C11A-B2M, C11A-B2A, C11A-B2E, C11A-B3, C9T-B2M, C9T-B2A, C9T-B2E, C9A-B2A, C9A-B3, C9A-B2E and C7E-B2E Alternatives. The LWCF area that would be converted depends uniquely on which alternative is selected.

Impacts are analyzed in light of park objectives for which the LWCF were used. As stated in the *Mercer Slough Open Space Master Plan Environmental Impact Statement* (City of Bellevue, 1990), park objectives` consist of the following:

- Maintain and enhance the extensive wetland wildlife habitat.
- Provide environmental education and awareness and maintain and diversify Bellevue's agricultural heritage.
- Participate in regional and national efforts to understand wetland ecosystems through research in restoration enhancement techniques.
- Provide passive recreational opportunities in harmony with natural system preservation.
- Maintain and protect important views and open space values.

The alternatives that affect the Section 6(f) resources have permanent impacts ranging from 0.0 to 0.3 acre and temporary impacts ranging from 0.0 to 0.4 acre. However, because the LWCF Act considers using the

property for longer than 6 months, which is not considered a temporary use but a full conversion of use, the total impact includes permanent and temporary acquisition. Table D-10 shows the Section 6(f) impacts for the Least Harm alternatives. While only a small portion of the Section 6(f) property would be converted, indirect impacts on the unconverted area must be evaluated along with the direct impacts on the converted area.

The portion of the LWCF Section 6(f) area that would be converted due to direct acquisition is along the roadway intersection of Bellevue Way SE and 112th Avenue SE as illustrated in Exhibit D-4. This area has a steep grade and is difficult to access, with no trails, except for the Mercer Slough Nature Park Periphery Trail+. There is a planned trail in the Section 6(f) property that would remain possible with current East Link designs. The permanent acquisition area would not include wetlands, although a small area of wetland (less than 0.1 acre) would be within the temporary construction area. This wetland area would be considered part of the total conversion area because construction would last longer than 6 months.

The portion of Mercer Slough Nature Park acquired with LWCF serves many of the park objectives, with the exception of the objective regarding Bellevue's agricultural heritage. Along the edge of the area that would be acquired, park users include walkers and joggers. Most of this use occurs on the east side of the Mercer Slough channel, but some use does occur on the west side of the park, although not within the Section 6(f) property affected by East Link alternatives. Wildlife viewing is an activity in the internal areas of the park. Also, as part of a large nature park that provides open space in an urban area, this Section 6(f) property protects views and open space values. Views from existing trails and planned trails proposed in the City of Bellevue's 2009 *Pedestrian and Bicycle Transportation Plan* (City of Bellevue, 2009) for the Section 6(f) property are largely sheltered due to topography and existing vegetation.

A series of photographs are provided in Attachment D2 that shows views of and from the Section 6(f) property towards the proposed East Link Project to determine whether any viewpoint from the Section 6(f) property would be affected. Attachment D2 also provides a key map of photograph locations. Due to topography and the height of vegetation, the only potential impact would be from planned trails, but this is inconclusive since access could not be achieved under current conditions. Also, funding is not currently available for the planned trail, and therefore, the effect might not occur. The LWCF Section 6(f) area

is just south of and borders a portion of the water trail running west to east. Views from this trail toward the project might be possible to varying amounts depending on the alternative constructed, but it is adjacent to the Bellevue Office Park and, therefore, does not represent the Mercer Slough Nature Park objectives.

Much of the 6(f) property provides wetland wildlife habitat and opportunities for research in restoring and enhancing the habitat. Established trails, including the water trail, provide opportunities for education and passive recreation (access beyond trails requires escort by parks staff and is not considered a regular park use). Night use also occurs in the park as part of scheduled programming through City of Bellevue Parks or requires permission from the City.

D.8.1.1 Preferred Alternatives

Preferred Alternative (B2M) portion of the *C11A-B2M* and the *C9T-B2M Preferred Alternatives* would acquire 0.8 acre of Section 6(f) property located east of Bellevue Way and adjacent to the Bellevue Way SE and 112th Avenue NE intersection or less than 1 percent of the total Section 6(f) property. Of this acreage, 0.3 acre would be permanently acquired for the *C11A-B2M* and the *C9T-B2M Preferred Alternatives*, with the remainder used as a temporary construction easement to be restored after project construction. The *C11A-B2M* and the *C9T-B2M Preferred Alternatives* may result in relocating the planned trail's access to Bellevue Way SE in the northwest corner of the park.

People using the water trail along the northern boundary of the Section 6(f) property may have upward views of the catenaries and east face of the retaining wall until the vegetation matures. The vegetation would likely screen parts of the retaining wall and catenaries once mature. In addition, the wall and catenaries would not be out of character with the built elements of the parking and buildings in Bellefield Office Park located north of the Section 6(f) property.

Because the *C11A-B2M* and the *C9T-B2M Preferred Alternatives* would travel in retained cut in the northern half of Bellevue Way SE and portions of 112th Avenue SE, it is unlikely that the train would be seen from any portion of the Section 6(f) property. Similarly, light from the light rail trains is not expected to be visible from the Section 6(f) portions of the park at night due to the guideway's elevation and north-south orientation. The lights might be visible from the water trail where there is a visual opening toward the elevated portion of the alternative and the elevated

I-90 ramps, but this view is already affected by vehicle traffic.

As described in Section 4.7, Noise and Vibration, existing noise levels in Mercer Slough Nature Park is bordered on two sides by two interstate highways, I-90 and I-405 and on a third by the major arterial South Bellevue Way, a park-and-ride, and a commercial office park, where "quiet" is not an essential element as outlined in FTA criteria for park noise analysis. The active park uses along the west perimeter include the boat launch, blueberry farm, and Winters House and are not considered noise sensitive. The central portions of Mercer Slough Nature Park contain uses that do meet the criteria as noise-sensitive – such as nature watching and protected trails.

Sound Transit conducted a noise impact analysis for park users in Mercer Slough Nature Park. The typical noise levels at the edge of the park are between 61 decibels (dBA) and 67 dBA, and the internal noise level measured from the middle of the park is 58 dBA. Therefore, for this analysis, the FTA Category 3 land use, which includes certain parks and recreational areas, was used to determine compliance with noise impact FTA criteria. Light rail noise levels from operation of the Preferred Alternatives *C11A-B2M* and *C9T-B2M* are predicted to be lower than the existing noise levels by 3 dBA Leq or more at active and noise sensitive locations within the park. Also the project noise levels are well under the FTA noise impact criteria.

Because there would be no substantial impacts that diminish the value or function of the Section 6(f) areas of the park not directly impacted, the conversion area would be limited to the directly converted area consisting of permanent and temporary acquisition.

D.8.1.2 Other Segment B-C Alternatives Affecting Section 6(f) Property

Alternatives *C11A-B2A*, *C11A-B2E*, *C11A-B3*, *C9T-B2A*, *C9T-B2E*, *C9A-B2A*, and *C9A-B2E* would all result in similar impacts on the Section 6(f) property as the *C11A-B2M* and the *C9T-B2M Preferred Alternatives* regarding visibility from Section 6(f) property, noise effects, and light. Most of these alternatives would acquire property (refer to Table D-10) as part of widening the intersection at Bellevue Way and 112th Avenue SE to accommodate the light rail guideway. The difference is that the light rail would be in the roadway, and the trees closest to the roadway would be removed, as opposed to leaving trees along the roadway and placing the guideway below the roadway grade in the park. Because the alternatives would not cause indirect impacts that would diminish the value or function of the Section 6(f) areas of the

park, the conversion area would be limited to the lands permanently and temporarily affected. Mitigation for any of the least harm alternatives is limited to the property replacement. For Section 6(f) purposes, a replacement property acquired for mitigation must constitute a viable recreational unit. Therefore, if the replacement property is not adjacent to an existing recreational resource, it may need to be developed for recreational use.

D.8.2 Section 6(f) Conversion

Sound Transit has conducted a preliminary review of property adjacent to and having similar market value and function as the Section 6(f) lands. Sound Transit has determined that a number of properties exists that are of equivalent usefulness and location as the lands being converted. These potential properties meet the park objectives to maintain and enhance the extensive wetland wildlife habitat, are located adjacent to Mercer Slough Nature Park, and contain wetland areas.

The NPS prerequisites for conversion approval state that all necessary coordination with other federal agencies must be satisfactorily accomplished. In addition, in cases where the proposed conversion arises from another federal action, final review of the proposal will not occur until the NPS Regional Office is assured that all environmental review requirements related to the project action have been met. This process is under way, in conjunction with FTA through the Final EIS process.

Due to the timing of the project environmental evaluation and the need to demonstrate completion of all other environmental review requirements, Sound Transit will provide the additional environmental evaluation regarding potential replacement property for Section 6(f) conversion consistent with NPS NEPA requirements after the Final EIS is published. FTA can issue its NEPA determination and Record of Decision before the NPS determination. Once the Record of Decision confirms which alternative will be constructed, Sound Transit will coordinate with NPS to complete the 6(f) Section process. NPS evaluation will meet the remaining prerequisites for conversion approval, including establishing the fair market value of the property to be converted and the property proposed for substitution, which will be of at least equal fair market value as established by an approved appraisal. In addition, environmental evaluation of the conversion will analyze the impacts of converting the replacement property. Replacement property will be of similar function and recreation value. Sound Transit will coordinate with the City of Bellevue so that the proposed conversion and substitution are in accord

with the State Comprehensive Outdoor Recreation Plan (SCORP).

D.8.3 RCO-Funded Property

Converting properties acquired with RCO funds follows a similar conversion analysis as the Section 6(f) lands, although the RCO oversees this process rather than the NPS. In addition, Washington State Parks has an ownership interest in a portion of the RCO property impacted by the project, requiring consultation with that agency.

D.8.3.1 Preferred 112th SE Modified Alternative (B2M)

The C11A-B2M and the C9T-B2M Preferred Alternatives would acquire 1.7 acres of RCO property along Bellevue Way SE north of the existing South Bellevue Park-and-Ride. Of this total acreage, 0.7 acre would be permanently acquired, with the remainder used as a temporary construction easement to be restored after project construction. While only a small portion of the RCO property would be converted, indirect impacts on the unconverted area must be evaluated in addition to the direct impacts on the converted area.

Buildings, parking, and access associated with the blueberry farm occupy a portion of the RCO area that would be converted due to direct acquisition along Bellevue Way SE. The Heritage Trail crosses the property, running northward parallel to Bellevue Way SE, to connect to the Winters House and to the southeast toward Mercer Slough East; the Mercer Slough Nature Park Periphery Trail, which consists of the sidewalk along Bellevue Way SE, also crosses the edge of the property. A small area of wetland at the south end of the property, just north of the park-and-ride, would be acquired for the project, and the remaining permanent and temporary impact area is wetland buffer.

The portion of the RCO-funded Mercer Slough Nature Park that would be acquired by the project serves the park objective regarding Bellevue's agricultural heritage because this is the access to the blueberry farm. As described above in the Section 4(f) evaluation, this edge of the park is characterized by active use and access to the blueberry farm and the park's interior trails. The blueberry farm's driveway would be relocated and combined with the Winters House driveway. A small area of trail at the north end of the affected property would be relocated slightly to connect with the trail segment to the north that would also be relocated due to the light rail guideway (Exhibit D-4).

The Winters House and the retail activities of the blueberry farm would be closed during construction.

The Eastside Heritage Center would be relocated and the rental use of the Winters House would not occur during construction. Farming operations at the blueberry farm would be maintained during construction, but public access and u-pick would not be permitted. The blueberry farm retail activities would be relocated to enable the business to continue operating during construction. Relocating a small segment of the trail would not substantially affect access to the property or the park, and detours would be provided during construction for temporary closures. Finally, as discussed in Section D.7.1, light rail project operation and construction would not affect the uses in the park's interior because the project would have no noise impacts due to the current ambient noise levels from adjacent roadways and because the at-grade alignment would not have a visual impact.

Converting the RCO area that would be directly impacted by the light rail guideway would not result in indirect impacts on the remainder of the RCO property or the park; therefore, the conversion area would be only that area acquired for project operation and construction. Similar to the Section 6(f) conversion process described above, Sound Transit will provide additional environmental evaluation regarding potential replacement property for RCO conversion as required.

D.8.3.2 Other Segment B Alternatives

All Segment B alternatives, with the exception of Alternative B7, would acquire portions of the RCO-funded property in Mercer Slough Nature Park, but these alternatives would require less acreage than *Preferred Alternative B2M*. Of these alternatives, Alternatives B2A, B3, and B3 - 114th Design Option would acquire the most acreage at 0.9 acre, and Alternatives B1 and B2E would acquire the least at 0.4 acre. Impacts would be similar to those discussed for *Preferred Alternative B2M*. However, Alternatives B2A, B2E, B3, and B3 - 114th Design Option are elevated for much of their length along Bellevue Way SE and would be more visible from the park.

D.8.3.3 Preferred Marymoor Alternative (E2)

Marymoor Park was developed with RCO funding (non-Land and Water Conservation Fund monies). *Preferred Alternative E2* would acquire approximately 2.0 acres for project operation and 3.0 acres for construction. Sound Transit would provide replacement land per requirements. The project would not impair RCO-protected park activities, features, or attributes. Similar to the Section 6(f) conversion process described above, FTA and Sound Transit will provide additional environmental evaluation

regarding potential replacement property for RCO conversion.

Preferred Alternative E2 would require lowering the profile of the Bear Creek Trail up to 30 feet in length. This trail has received RCO funding. It has also received LWCF grants on segments of the trail which are not impacted by the project. Similarly, East Lake Sammamish Trail has received LWCF grants, but in segments not affected by *Preferred Alternative E2*.

D.8.3.4 Other Segment E Alternatives

The other Segment E alternatives would be elevated over Bear Creek Trail. For the East Lake Sammamish Trail, both alternatives would relocate a portion of the trail. Similar to Bear Creek Trail, this trail has received RCO funding. It has also received 6(f) funding for certain segments of the trail, which are not anticipated to be impacted by the project.

D.9 Record of Coordination

Sound Transit assessed existing conditions at each Section 4(f) property by visiting the sites, consulting with agencies or municipalities with jurisdiction over the 4(f) properties, and reviewing available planning documents and files maintained by relevant municipalities and agencies. Consultation efforts for Section 4(f), Section 6(f), and RCO resources are recorded in Table D-11. Sound Transit and FTA solicited written correspondence from the local officials with jurisdiction in terms of the significance of the resource, the nature and magnitude of the potential impact, and the acceptability of proposed mitigation (copies of these letters where the local agencies of jurisdiction concurred with *de minimis* are provided as Attachment D1). In addition, a series of meetings have been held with the officials with jurisdiction regarding the parks and trails affected by the East Link alternatives. Sound Transit also consulted with NPS and RCO regarding impacts to Section 6(f) and RCO property and acceptable procedures and criteria for converting Section 6(f) and RCO funded park land. Based on the analysis presented, and in cooperation with the local agencies with jurisdiction, FTA has made a determination of *de minimis* for the 4(f) resources under the jurisdiction of the Cities of Seattle, Mercer Island, and Redmond and King County. Sound Transit coordinated with the SHPO to identify properties listed or eligible for listing in the NRHP and consulted with the SHPO regarding potential adverse effects. Section 4.17 of the Final EIS and the *Final EIS Appendix H4 Historic and Archaeological Resources Technical Report* provide additional detail. Letters related to Section 106 referenced in Table D-11 below can be found in *Appendix H4*.

TABLE D-11
Section 4(f) and 6(f) Consultation Summary

Date	Form	Participants	General Topic(s)
August 24, 2006	Letter	FTA/Sound Transit to Tulalip, Duwamish, Muckleshoot, Yakama, Snoqualmie, and Suquamish Tribes; SHPO; ACHP	Opening consultation with tribes
November 8, 2006	Meeting at DAHP	DAHP, Sound Transit, FTA, WSDOT, HRA	Draft EIS cultural resource methods
November 13, 2006	Meeting at Snoqualmie Tribe	Snoqualmie Tribe, Sound Transit, FTA, WSDOT	Cultural resources and ecosystem resources studies, tribe's concerns
December 12, 2006	DAHP field trip	DAHP, Sound Transit, FTA, WSDOT	Archaeological sensitivity and potential studies along project alternatives
December 13, 2006	Meeting at Muckleshoot Tribe	Muckleshoot Tribe, Sound Transit, WSDOT, HRA	Cultural resources studies and tribe's concerns
December 20, 2006	Submittal of cultural resources methods statement to DAHP for review	Sound Transit and DAHP	Cultural resources methods statement sent to DAHP for review
January 2, 2007	Letter	From Matthew Sterner, DAHP, to James Irish, Sound Transit	Review comments on proposed cultural resources methods statement
January 25, 2007	Meeting	City of Bellevue Parks and Recreation and Transportation Department staff, Sound Transit	Review of project elements and potential impacts on park and recreational facilities
January 18, 2007	DAHP field trip	DAHP, Sound Transit, FTA, WSDOT	Historic resources along project alternatives
February 16, 2007	Meeting	King County Parks and Recreation Department, Sound Transit	Review of project elements and potential impacts on park and recreational facilities
March 1, 2007	Meeting	Mercer Island Parks and Recreation Department staff, Sound Transit	Review of project elements and potential impacts on park and recreational facilities
March 19, 2007	Meeting	City of Seattle Parks and Recreation staff, Sound Transit	Review of project elements and potential impacts on park and recreational facilities
April 17, 2007	Meeting at DAHP	DAHP, Sound Transit, FTA	Discussion of potential historic resources, project impacts, and treatment
June 28, 2007	Meeting	City of Bellevue Parks and Recreation Department staff, Sound Transit	Discussion of potential impacts on park and recreation facilities and possible mitigation associated with impacts
July 3, 2007	Letter	FTA to DAHP	Request for concurrence on area of potential effects (APE) for historic properties and archaeological APE
July 5, 2007	Meeting	City of Redmond Parks and Recreation Department staff, Sound Transit	Discussion of potential impacts on park and recreation facilities and possible mitigation associated with impacts
July 13, 2007	Letter	DAHP to FTA	Concurring in APE for historic properties
July 18, 2007	Letter	FTA to DAHP	Requesting concurrence in determinations of NRHP eligibility for historical resources
July 24, 2007	Meeting	King County Parks and Recreation Department staff, Sound Transit	Discussion of potential impacts on park and recreation facilities and possible mitigation associated with impacts
November 16, 2007	Letter	DAHP to FTA	Determination of historic properties in East Link APE eligible for NRHP
January 9, 2008	Letter	FTA to DAHP	Requesting concurrence on additional NRHP eligibility determinations

TABLE D-11 CONTINUED
Section 4(f) and 6(f) Consultation Summary

January 22, 2008	Letter	City of Mercer Island to Sound Transit	Concurrence received on determination of historic properties
February 20, 2008	Letter	DAHP to FTA	Concurrence on additional historic properties within the APE
May 27, 2008	Letter	City of Seattle	Determination that historic properties were eligible for City ordinance within the APE
April 17, 2008	Meeting	City of Bellevue	Review draft 4(f) preliminary findings of potential impacts on park and recreation facilities and possible mitigation
May 15, 2008	Meeting	City of Mercer Island,	Review draft 4(f) preliminary findings of potential impacts on park and recreation facilities and possible mitigation
May 16, 2008	Meeting	City of Redmond and King County	Review draft 4(f) preliminary findings of potential impacts on park and recreation facilities and possible mitigation
June 24, 2008	Meeting	King County,	Follow-up review draft 4(f) preliminary findings of potential impacts on park and recreation facilities and possible mitigation
July 10, 2008	Meeting	City of Bellevue,	Follow-up review draft 4(f) preliminary findings of potential impacts on park and recreation facilities and possible mitigation
June 13, 2008	Letter	City of Seattle,	Preliminary review of proposed mitigation and <i>de minimis</i> on 4(f) resources
June 13, 2008	Letter	City of Mercer Island	Preliminary review of proposed mitigation and <i>de minimis</i> on 4(f) resources
September 23, 2008	Letter	City of Redmond,	Preliminary review of proposed mitigation and <i>de minimis</i> on 4(f) resources
September 19, 2008	Letter	King County	Preliminary review of proposed mitigation and <i>de minimis</i> on 4(f) resources
October 9, 2008	Meeting	City of Bellevue	Review of permanent impacts to Surrey Downs Park and proposed park Master Plan
October 21, 2008	Letter	City of Bellevue	Preliminary review of proposed mitigation and <i>de minimis</i> on 4(f) resources.
June 1, 2009	Meeting with DAHP	DAHP, FTA, Sound Transit	Preliminary discussion of effect of moving or relocating Winters House and Justice William White House. Discussion of eligibility of other resources within corridor
July 16, 2009	Meeting	DAHP, FTA, City of Bellevue Parks and Recreation Department and Transportation Department staff, Sound Transit	Discussion of effects to Winters House with potential revised alternatives. Review of construction impacts to contributing structures in NRHP-eligible Surrey Downs district. Tour of side-running alignment in Central Link
October 8, 2009	Meeting	City of Bellevue City Manager, Parks and Recreation Department staff, and Transportation Department staff; Eastside Heritage Center; Sound Transit	Alternative B3S and associated impacts to the Winters House
October 27, 2009	Meeting	City of Bellevue Parks and Recreation and Transportation Department staff	Discussion of potential impacts on park and recreation facilities, <i>de minimis</i> , and possible mitigation associated with impacts

TABLE D-11 CONTINUED
Section 4(f) and 6(f) Consultation Summary

March 11, 2010	Meeting	City of Bellevue Parks and Recreation Department staff, Eastside Heritage Center, and Sound Transit	Impacts to Winters House
April 12, 2010	Meeting	NPS, Washington RCO, FTA, City of Bellevue, and Sound Transit	Conversion of Section 6(f) and RCO funded properties in Mercer Slough Nature Park, potential impacts, and environmental process for a conversion request
June 8, 2010	Letter	FTA to DAHP	Requesting concurrence in determinations of NRHP-eligibility for historical resources
July 22, 2010	Meeting	City of Bellevue Parks and Recreation Department staff, Eastside Heritage Center, and Sound Transit	Impacts to Winters House
September 2, 2010	Meeting	DAHP, FTA, Sound Transit, and City of Bellevue	Discussing potential determinations of no adverse effect for preferred alternative
January 11, 2011	Meeting	City of Bellevue Parks and Recreation, Transportation, and Legal staff	City of Bellevue staff kick-off meeting
January 18, 2011	Meeting	City of Bellevue staff	Review mitigation measures, focusing on Surrey Downs and NE 2nd Pocket Parks
January 27, 2011	Meeting	City of Bellevue staff	Review mitigation measures, focusing on Mercer Slough Nature Park
February 10, 2011	Meeting	King County Parks staff	Review mitigation measures, focusing on Marymoor Park
February 17, 2011	Meeting	City of Redmond staff	Review mitigation measures, focusing on recreational resources in Redmond
April 11, 2011	Meeting	King County staff	Review mitigation measures, focusing on Marymoor Park
April 1, 2011	Letter	King County comment letter	Preliminary review on proposed mitigation and <i>de minimis</i> on 4(f) resources
February 14, 2011	Letter	City of Seattle	Concurrency letter on proposed mitigation and <i>de minimis</i> on 4(f) resources
February 17, 2011	Letter	City of Mercer Island	Concurrency letter on proposed mitigation and <i>de minimis</i> on 4(f) resources
March 9, 2011	Letter	City of Redmond	Concurrency letter on proposed mitigation and <i>de minimis</i> on 4(f) resources
May 16, 2011	Letter	City of Redmond	Update to the concurrency letter on proposed mitigation and <i>de minimis</i> on 4(f) resources
May 23, 2011	Letter	City of Bellevue to FTA	Providing comments on potential historic impacts as a consulting party under Section 106
June 9, 2011	Letter	WSDOT to FTA	Concurring with determinations of Adverse Effect on Section 106 resources
April 21, 2011	Letter	FTA to DAHP	Requesting concurrence determinations of National Register eligibility for historic properties and determinations of effect
June 15, 2011	Letter	DAHP to FTA	Providing concurrence determinations of National Register eligibility for historic properties and determinations of effect

D.10 References

- City of Bellevue. 2010. *Bellevue Parks & Open Space System Plan*. <http://www.bellevuewa.gov/park-plan.htm>. City of Bellevue, Parks & Community Services. May 3.
- City of Bellevue. 2009. *Surrey Down Master Plan*. City Council Presentation. http://www.ci.bellevue.wa.us/surrey_downs_master_plan.htm. City of Bellevue, Parks & Community Services. March 9.
- City of Bellevue. 1990. *Mercer Slough Open Space Master Plan Environmental Impact Statement*.
- City of Bellevue. 2004. *Downtown Implementation Plan*.
- City of Bellevue. 2008 – 2010. February 25, 2008, May 12, 2009, January 26, February 10, March 9 and 24, May 6, July 20 of 2010 Letters to Sound Transit expressing preferences for East Link Alternatives.
- City of Bellevue. 2010. Term Sheet April 19, 2010.
- Sound Transit. 2008. ST2 Plan.

Attachment D1

Agency Correspondence



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION X
Alaska, Idaho, Oregon,
Washington

915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002
206-220-7954
206-220-7959 (fax)

February 14, 2011

Christopher Williams, Acting Superintendent
City of Seattle, Seattle Parks and Recreation
100 Dexter Avenue
Seattle, WA 98109

Dear Mr. Williams:

As part of the East Link Light Rail Project Final Environmental Impact Statement (EIS) documentation process, the Federal Transit Administration (FTA), as the lead federal agency, is finalizing the Section 4(f) evaluation of the potential impacts of the project on public parks and recreational facilities.

The Section 4(f) evaluation is a requirement of the U.S. Department of Transportation Act of 1966. Under the Act, FTA cannot approve a transportation project (such as East Link) that requires the use of any publicly owned land from a significant public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site, unless a determination is made that:

- There is no feasible and prudent alternative to using the property; and
- The project includes all possible planning to minimize harm to the property resulting from the use; or
- The use will have no more than a *de minimis* impact on the resource. A *de minimis* impact means a project will have no adverse effect to the activities, features, and attributes of the resource after consideration of any impact avoidance, minimization, and mitigation or enhancement measures.

If the federal lead agency determines that a transportation use of Section 4(f) property, results in a *de minimis* impact on that property, an evaluation of prudent and feasible avoidance alternatives is not required and the Section 4(f) process is complete.

Federal guidance encourages early coordination with officials with jurisdiction over the Section 4(f) resource to ascertain the position of the officials to obtain their views. The City signed a letter in June 2008 indicating its preliminary concurrence on a *de minimis* determination for city park facilities potentially affected by the project (East Link Draft EIS 2008). Federal regulations stipulate that "officials with jurisdiction over the Section 4(f) resource must concur in writing with a *de minimis* finding (23 CFR 774.5 (2)). The regulations also require that an opportunity for public review and comment concerning the effects of the project on the Section 4(f) resource be provided prior to such written concurrence. As per 23 CFR 774.5, the public comment

requirement has been met with the distribution of the East Link Draft EIS (2008) and Supplemental Draft EIS (2010) for review and comment by the public, agencies, and groups.

With the comment period on these documents completed, and based on the city's 2008 letter, FTA intends to make a *de minimis* finding on the listed resources that are owned by the City of Seattle and we are requesting the city's final concurrence on this finding. Your letter of concurrence will be included in the Final EIS for East Link. Following the City's written concurrence, FTA will make a final Section 4(f) determination, which will also be included in the Final EIS.

The table below lists Benvenuto Viewpoint as a City of Seattle park facility that the East Link Light Rail Project would impact. Based on Sound Transit's review and your June letter, this park resource is considered significant for purposes of Section 4(f). Given the potential project impacts and the proposed potential mitigation, FTA believes that a *de minimis* finding can be made for Benvenuto Viewpoint. A *de minimis* determination means that after incorporation of mitigation measures, the East Link project will not adversely affect the activities, features, and attributes of the significant park facilities.

City of Seattle Park Facility and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Benvenuto Viewpoint	Significant	Permanent use of up to 0.06 acre (4%) for a station entrance at 23 rd Ave S. This area is a landscaped strip that fronts 23 rd Ave S	Station entrance designed to be compatible with the City's park design	<i>de minimis</i>

We ask that you provide your signature on this letter, or in its place your own letter, to confirm your concurrence on the significance of the Seattle park facility and final agreement with the Section 4(f) *de minimis* determination, and the potential mitigation.

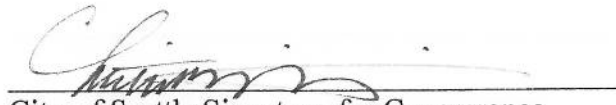
As the project is further refined during final design, Sound Transit will coordinate with the City of Seattle's Department of Parks and Recreation to review and finalize the Rainier Station's entrance design and construction activities. To follow up on this letter, Elma Borbe, Sound Transit Environmental Planner will contact you to provide any information you may need and also to offer a meeting to review this letter.

If you have any questions, please call either John Witmer, Community Planner at (206) 220-7964 or Elma Borbe, Environmental Planner at (206) 398-5445.

Sincerely,



R. F. Krochalis
Federal Transit Administration



City of Seattle Signature for Concurrence

Cc: John Witmer, FTA
James Irish, Sound Transit
Elma Borbe, Sound Transit



CITY OF MERCER ISLAND, WASHINGTON

9611 SE 36th Street • Mercer Island, WA 98040-3732

(206) 275-7600 • (206) 275-7663 fax

www.mercergov.org

February 17, 2011

R. F. Krichalis
Federal Transit Administration
915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002

Dear Mr. Krichalis:

Per your request I am returning your letter regarding East Link Light Rail Section 4(f) Determination with my Signature for Concurrence.

If you have any questions or would like me to provide any further assistance, please call me at (206) 275-7706.

Sincerely,

A handwritten signature in black ink, appearing to be "Tim Stewart", written over a horizontal line.

Tim Stewart, Director
Development Services Group

JW
envy log
Scan to
James Irish

FEB 22 2011 AM 10:34



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION X
Alaska, Idaho, Oregon,
Washington

915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002
206-220-7954
206-220-7959 (fax)

February 14, 2011

Timothy Steward, Planning Director
Mercer Island
9611 SE 36th Street
Mercer Island, WA 98040

Re: East Link Light Rail Section 4(f) Determination

Dear Mr. ^{Tim}Steward:

As part of the East Link Light Rail Project Final Environmental Impact Statement (EIS) process, the Federal Transit Administration (FTA), as the lead federal agency, is finalizing the Section 4(f) evaluation of the potential impacts of the project on public parks and recreational facilities.

The Section 4(f) evaluation is a requirement of the U.S. Department of Transportation Act of 1966. Under the Act, FTA cannot approve a transportation project (such as East Link) that requires the use of any publicly-owned land from a significant public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site, unless a determination is made that:

- There is no feasible and prudent alternative to using the property; and
- The project includes all possible planning to minimize harm to the property resulting from the use; or
- The use will have no more than a *de minimis* impact on the resource. A *de minimis* impact means a project will have no adverse effect to the activities, features, and attributes of the resource after consideration of any impact avoidance, minimization, and mitigation or enhancement measures.

If the federal lead agency determines that a transportation use of Section 4(f) property, results in a *de minimis* impact on that property, an evaluation of prudent and feasible avoidance alternatives is not required and the Section 4(f) process is complete.

Federal guidance encourages early coordination with officials with jurisdiction over the Section 4(f) resource to ascertain the position of the officials to obtain their views. The City signed a letter in June 2008 indicating its preliminary concurrence on a *de minimis* determination for city park facilities potentially affected by the project (enclosed). Federal regulations stipulate that "officials with jurisdiction over the Section 4(f) resource must concur in writing with a *de minimis* finding

(23 CFR 774.5 (2)). The regulations also require that an opportunity for public review and comment concerning the effects of the project on the Section 4(f) resource be provided prior to such written concurrence. As per 23 CFR 774.5, the public comment requirement has been met with the distribution of the East Link Draft EIS (2008) and Supplemental Draft EIS (2010) for review and comment by the public, agencies, and groups.

With the comment period on these documents completed, and based on the city's 2008 letter, FTA intends to make a *de minimis* finding on the listed resources that are owned by the City of Mercer Island and we are requesting the city's final concurrence on this finding. Your letter of concurrence will be included in the Final EIS for East Link. Following the City's written concurrence, FTA will make a final Section 4(f) determination, which will also be included in the Final EIS.

The table below lists the Outdoor Sculpture Gallery as a City of Mercer Island park facility that the East Link Light Rail Project would only impact if Sound Transit included the optional pedestrian bridge over I-90 from Town Center to the Mercer Island Station. Based on Sound Transit's review and your June letter, this park resource is considered significant for purposes of Section 4(f). Given the potential project impacts and the proposed potential mitigation, FTA believes that a *de minimis* finding can be made for the Outdoor Sculpture Gallery. A *de minimis* determination means that after incorporation of mitigation measures, the East Link project will not adversely affect the activities, features, and attributes of the significant park facilities.

City of Mercer Island Park Facility and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Outdoor Sculpture Gallery	Significant	Permanent use of up to 0.2 acres that currently includes a pedestrian path and landscaping. This impact is associated with the pedestrian bridge option only.	Station entrance designed to be compatible with the surrounding design of the park	<i>de minimis</i>

We ask that you provide your signature on this letter, or in its place your own letter, to confirm your concurrence on the significance of the Mercer Island park facility and final agreement with the Section 4(f) *de minimis* determination, and the potential mitigation.

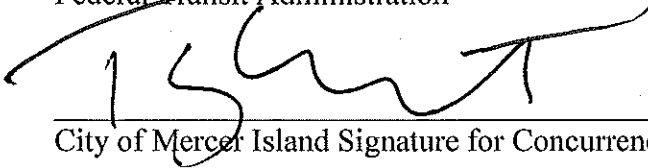
As the project is further refined during final design, Sound Transit will coordinate with the City of Mercer Island's Parks and Recreation Department to review and finalize the Mercer Island Station's entrance design and construction activities. To follow up on this letter, Elma Borbe, Sound Transit Environmental Planner will contact you to provide any information you may need and also to offer a meeting to review this letter.

If you have any questions, please call either John Witmer, Community Planner at (206) 220-7964 or Elma Borbe, Environmental Planner at (206) 398-5445.

Sincerely,



R. F. Krochalis
Federal Transit Administration


City of Mercer Island Signature for Concurrence

Cc: John Witmer, FTA
James Irish, Sound Transit
Elma Borbe, Sound Transit



JW
TU
✓ scanned
✓ Env log 220

March 9, 2011

U.S. Department of Transportation
R.F. Krochalis
Federal Transit Administration
915 Second Avenue
Federal Building, Suite 3142
Seattle, WA. 98174-1022

Re: East Link Light Rail Section 4(f) De Minimis Determination
Significance of Park Facility and Final Agreement

Dear Mr. Krochalis:

Please find enclosed the original of the Concurrence of Significance of the City of Redmond Park Facility and Final Agreement signed by Craig Larsen.

Please let me know if I may be of further assistance to you.

Sincerely,

Sharon Sato
Administrative Office Coordinator
Parks Administration and Planning
City of Redmond Parks and Recreation
425-556-2311

Enclosed: East Link Light Rail Section 4(f) De Minimis Determination signed original

MAR 10 2011 AM 10:27



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION X
Alaska, Idaho, Oregon,
Washington

915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002
206-220-7954
206-220-7959 (fax)

March 3, 2011

Craig Larsen, Director
City of Redmond Parks and Recreation
P.O. Box 97010
Redmond, WA 98073

RECEIVED

MAR 07 2011

CITY OF REDMOND
PARKS PLANNING

Re: East Link Light Rail Section 4(f) De Minimis Determination

Dear Mr. Larsen:

As part of the East Link Light Rail Project Final Environmental Impact Statement (EIS) documentation process, the Federal Transit Administration (FTA), as the lead federal agency, is finalizing the Section 4(f) evaluation of the potential impacts of the project on public parks and recreational facilities.

The Section 4(f) evaluation is a requirement of the U.S. Department of Transportation Act of 1966. Under the Act, FTA cannot approve a transportation project (such as East Link) that requires the use of any publicly owned land from a significant public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site, unless a determination is made that:

- There is no feasible and prudent alternative to using the property; and
- The project includes all possible planning to minimize harm to the property resulting from the use; or
- The use will have no more than a *de minimus* impact on the resource. A *de minimus* impact means a project will have no adverse effect to the activities, features, and attributes of the resource after consideration of any impact avoidance, minimization, and mitigation or enhancement measures.

If the federal lead agency determines that a transportation use of Section 4(f) property, results in a *de minimus* impact on that property, an evaluation of prudent and feasible avoidance alternatives is not required and the Section 4(f) process is complete.

Federal guidance encourages early coordination with officials with jurisdiction over the Section 4(f) resource to ascertain the position of the officials to obtain their views. The City signed a letter in September 2008 indicating its preliminary views on a proposed *de*

minimis determination for certain city park facilities potentially affected by the project and is included the East Link 2008 Draft EIS. Federal regulations stipulate that “officials with jurisdiction” over the Section 4(f) resource must concur in writing with a *de minimus* finding (23 CFR 774.5 (2)). The regulations also require that an opportunity for public review and comment concerning the effects of the project on the Section 4(f) resource be provided prior to such written concurrence. As per 23 CFR 774.5, the public comment requirement has been met with the distribution of the East Link Draft EIS (2008) and Supplemental Draft EIS (2010) for review and comment by the public, agencies, and groups.

With the comment period on these documents completed, and based on the city’s 2008 letter, FTA intends to make a *de minimus* finding on the listed resources that are owned by the City of Redmond and we are requesting the city’s final concurrence on this finding. Your letter of concurrence will be included in the Final EIS for East Link. Following the City’s written concurrence, FTA will make a final Section 4(f) determination, which will also be included in the Final EIS.

The table below lists Luke McRedmond Park, Bear Creek Trail, and the Redmond Central Connector as City of Redmond park facilities that the East Link Light Rail Project would affect. Alternative E1 would only affect Luke McRedmond Park and all Segment E alternatives would affect the Bear Creek Trail and the Redmond Central Connector. Given the potential project affects and the proposed potential mitigation, FTA believes that a *de minimus impact* finding can be made for Luke McRedmond, Bear Creek Trail and the Redmond Central Connector. A *de minimus* determination means that after incorporation of mitigation measures, the East Link project will not adversely affect the activities, features, and attributes of the significant park facilities.

City of Redmond Park Facility and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Luke McRedmond (E1)	Significant	Permanent use of up to 0.1 acre under elevated structure.	One or more of the following measures would be implemented: Financial compensation for permanent aerial easement, or improvements to the park as agreed to with the City. Replacement of trees removed per City tree ordinance.	<i>de minimus</i>
		<i>Temporary use of land during construction</i>	<i>Financial compensation for the lease of land during construction, as agreed to with the City.</i> <i>Maintain access to the park</i>	

City of Redmond Park Facility and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
			<p>during construction.</p> <p>Restore temporarily disturbed area to existing conditions.</p>	
Bear Creek Trail (Preferred Alternative E2 and alternatives E1, E4)	Significant	<p>Permanent tunneling of trail for up to 30 feet (E2).</p> <p>Permanent shading from elevated structures (E1, E4)</p>	<p>The following measures would be implemented for the impacts described:</p> <p>Rerouting of trail, restoration of vegetation, and replacement of trees (E2);</p> <p>Financial compensation for permanent aerial easement, or improvements to the trail as agreed with the City (E1, E4).</p>	<i>de minimus</i>
		<p>Temporary loss of use of trail during construction</p>	<p>Financial compensation for the lease of land during construction, as agreed with the City.</p> <p>Maintain access or provide detours for trail during construction.</p> <p>Restore temporarily disturbed area to existing conditions.</p>	
Redmond Central Connector (Trail/Park Corridor) (Preferred Alternative E2 , and alternatives E1, E4)	Significant	<p>Possible reduction of planned trail width, removal of planned park amenities and associated vegetation (E2, E1, E4)</p>	<p>The following measures would be implemented for the impacts described:</p> <p>Possible rerouting of trail, replacement of affected park amenities, and associated vegetation as agreed to with the City.</p>	<i>de minimus</i>
		<p>Temporary loss of use of planned trail and park facilities during construction</p>	<p>Financial compensation for the lease of land during construction as agreed to with the City.</p> <p>Maintain access or provide detours for trail during construction.</p> <p>Restore temporarily disturbed area to existing conditions.</p>	

In addition, the impact to the Redmond Central Connector is assumed *de minimus*, because Sound Transit will be contributing toward the purchase of the Woodinville Subdivision (former BNSF Rail Corridor) to obtain real property and easements for the right to operate a light rail on the remainder of the corridor from the Port of Seattle and

the City of Redmond to operate light rail. This contribution toward the purchase of the corridor, and subsequent easements, will guarantee Sound Transit access to the downtown Redmond segment of the former BNSF corridor without having to replace the land at the time of project implementation as part of 4(f) requirements.

We ask that you provide your signature on this letter, or in its place your own letter, to confirm your concurrence on the significance of the City of Redmond park facility and final agreement with the Section 4(f) *de minimus* determination, and the potential mitigation. We are requesting a response within 30-days of the date of this letter.

As the project is further refined during final design, Sound Transit will coordinate with the City of Redmond's Parks and Recreation Department to review and finalize the City of Redmond design and construction activities. To follow up on this letter, Elma Borbe, Sound Transit Environmental Planner will contact you to provide any information you may need and also to offer a meeting to review this letter. If you have any questions, please call either John Witmer, Community Planner at (206) 220-7964 or Elma Borbe, Environmental Planner at (206) 398-5445.

Sincerely,



R. F. Krochalis
Federal Transit Administration



City of Redmond Signature for Concurrence

Cc: John Witmer, FTA
James Irish, Sound Transit
Elma Borbe, Sound Transit



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION X
Alaska, Idaho, Oregon,
Washington

915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002
206-220-7954
206-220-7959 (fax)

April 20, 2011

Kevin Brown, Division Director
Parks and Recreation Division
Department of Natural Resources and Parks
King Street Center, KSC-NR-0700
201 South Jackson Street
Seattle, WA 98104-3855

Dear Mr. Brown:

As part of the **East Link Light Rail Project Final Environmental Impact Statement (EIS)** documentation process, the Federal Transit Administration (FTA), as the lead federal agency, is finalizing the Section 4(f) evaluation of the potential impacts of the project on public parks and recreational facilities. On behalf of FTA, Sound Transit has been coordinating with King County to review and reach an agreement for a *de minimis* finding regarding **potential impacts and mitigation measures to the Sammamish River Trail ("River Trail"), East Lake Sammamish Trail ("Lake Trail"), and Marymoor Park ("the Park")** that are located along the alternatives in Segment E of the project. For each of these park resources, the results of this consultation and agreements are described in this letter.

BACKGROUND

The Section 4(f) evaluation is a requirement of the U.S. Department of Transportation Act of 1966. Under the Act, FTA cannot approve a transportation project (such as East Link) that requires the use of any publicly owned land from a significant public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site, unless a determination is made that:

- There is no feasible and prudent alternative to using the property; and
- The project includes all possible planning to minimize harm to the property resulting from the use; or
- The use will have no more than a *de minimis* impact on the resource. A *de minimis* impact means a project will have no adverse effect to the activities, features, and attributes of the resource after consideration of any impact avoidance, minimization, and mitigation or enhancement measures.

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If the federal lead agency determines that a transportation use of Section 4(f) property, results in a *de minimis* impact on that property, an evaluation of prudent and feasible avoidance alternatives is not required and the Section 4(f) process is complete.

Federal guidance encourages early coordination with officials with jurisdiction over the Section 4(f) resource to ascertain the position of the officials to obtain their views. The County signed a letter in September 2008 indicating its preliminary concurrence on a *de minimis* determination for county park facilities potentially affected by the project. Federal regulations stipulate that officials with jurisdiction over the Section 4(f) resource must concur in writing with a *de minimis* finding (23 CFR 774.5 (2)). The regulations also require that an opportunity for public review and comment concerning the effects of the project on the Section 4(f) resource be provided prior to such written concurrence. As per 23 CFR 774.5, the public comment requirement has been met with the distribution of the East Link Draft EIS (2008) and Supplemental Draft EIS (2010) for review by the public, agencies, and groups.

The following table lists the King County park facilities that the East Link Light Rail Project would impact, the alternatives affecting the resource, the potential impacts, mitigation measures and Section 4(f) finding after mitigation. Additional information for each of the park facilities is also discussed below.

King County Park Facilities and Summary of Section 4(f) Use

Name of Resource and Alternatives	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Sammamish River Trail	Significant	Permanent shading of about 20 to 30 feet of trail	Acquire replacement recreation land equal in value to offset the light rail use within the trail right of way per RCO requirements	<i>de minimis</i>
Alternatives E1, E2 and E4		Possible impacts to trail use if guide way columns are located within trail right-of-way	Locate guideway columns outside trail clear zone as practical.	
		Possible temporary use of land outside of the	Financial compensation for temporary use of land outside of the light rail right-of-way for	

King County Park Facilities and Summary of Section 4(f) Use

Name of Resource and Alternatives	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
		<i>light rail right-of-way for construction</i>	<i>construction</i>	
		<i>Possible detour of trail during construction</i>	<i>Rerouting and restoration of trail to King County standards and specifications during and after construction.</i>	
East Lake Sammamish Trail	Significant	Permanent relocation of about 900 feet of trail	Financial compensation for the light rail use of the trail right-of-way	<i>de minimis</i>
Alternatives E1, E2 & E4		<i>Possible temporary use of land outside of the light rail right-of-way for construction</i>	<i>Financial compensation for temporary use of land outside of the light rail right-of-way for construction</i>	
		<i>Detour of trail during construction</i>	<i>Rerouting and restoration of trail to King County standards and specifications during and after construction.</i>	

Marymoor Park Alternative E2	Significant	Permanent use of about 2.0 acres	Acquire replacement recreation land equal in value and function to offset the light rail use within the Park property.	<i>de minimis</i>
		<i>Temporary use of about 3.2 acres during construction</i>	<i>Financial compensation for the temporary use of land outside the light rail right-of-way for construction.</i>	
		<i>Temporary impacts to park use during construction</i>	<i>Park land restoration following construction</i>	

Sammamish River Trail

There is no direct trail use by the project associated with the Sammamish River Trail and all Segment E alternatives would span the trail resulting in an additional 20 feet of trail shading. Through continued coordination with the County, two issues were raised regarding the project's potential impacts to the River Trail. The County requested that, to the extent practical, locating project columns should be avoided in the "clear zone" (up to 8 feet) on either side of the trail. However, if locating the project columns or improvements within the clear zone is unavoidable, the County requested that Sound Transit hold harmless and indemnify King County from any property damage or personal injury related to guideway columns. Sound Transit and County staff discussed this subject and agree that Sound Transit would locate the guideway columns outside of the trail clear zone to the extent practical. In addition, as part of a future property agreement between the agencies, issues regarding indemnification would be addressed, if needed.

East Lake Sammamish Trail

The East Lake Sammamish Trail would require realignment and relocation to accommodate the light rail project. There is adequate width within the former BNSF Railway corridor to accommodate both facilities. Access to the trail and connections to the Bear Creek Trail would not be impacted by the project.

Through continued coordination with the County, it was requested that Sound Transit acknowledge that East Lake Sammamish Trail is a "rail bank corridor." Rail banking, as defined by the National Trails System Act, 16 USC 1247(d) is a voluntary agreement between railroad company and a trail agency to use out of service rail corridors for trail purposes until such time as a bonafide railroad use requires the corridor again for rail service. Sound Transit and County staff discussed this subject and agree that as part of future work, the appropriate covenants would be put in place to comply with the federal rail banking regulations.

Marymoor Park

For Marymoor Park the light rail would require permanent and temporary use of the park on the northern edge and no recreation facilities would be directly affected by operation; however, an unofficial equestrian route would be affected. In addition, a wetland mitigation site is located along the north edge of the park. In 2010, a "deed restriction" document on the site was prepared by King County. At such time as the design of the East Link Project is advanced in the future, Sound Transit would coordinate with the appropriate agencies to address and mitigate impacts, in compliance with provisions established in the deed restriction.

Through continued coordination with Sound Transit, the County raised issues associated with potential light rail noise impacts on park uses. From west to east, the portion of the park closest to SR 520 currently includes the following facilities: three baseball diamonds, four tennis courts, two multisport fields, a reflexology path, three soccer fields, a wetland area, a cricket pitch, a recreation and event area, a bicycling velodrome, and a climbing rock. Sound Transit and County staff further discussed these issues and agree that when the light rail design is advanced during Preliminary Engineering, Sound Transit would, in coordination with the County, evaluate noise impacts to park uses in place at that time consistent with FTA noise analysis methods and criteria.

CONCLUSION

Given the potential project impacts, proposed mitigation, and continued consultation with King County, FTA believes that a *de minimis* finding can be made for the Sammamish River Trail, the East Link Sammamish Trail and Marymoor Park. A *de minimis* determination means that after incorporation of mitigation measures, the East Link project will not adversely affect the activities, features, and attributes of the significant park facilities.

FTA and Sound Transit acknowledge that this Section 4(f) concurrency letter is based on current environmental analysis and project information. Given that the design for Segment E is at the conceptual engineering phase (about 5 percent), Sound Transit will continue coordinating with King County when the project design is advanced during preliminary engineering and final design.

We ask that you provide your signature on this letter, or in its place your own letter, to confirm your concurrence on the significance of the King County park facilities and final agreement with

the Section 4(f) *de minimis* determination, and the potential mitigation. Following the County's written concurrence, FTA will make a final Section 4(f) determination, which will also be included in the Final EIS.

If you have any questions, please call either John Witmer, FTA Community Planner at (206) 220-7964 or Elma Borbe, Sound Transit Environmental Planner at (206) 398-5445.

Sincerely,

Linda M. Schenk

for
R. F. Krochalis
Federal Transit Administration

Ken R. [Signature]

King County Signature for Concurrence

Cc: John Witmer, FTA
James Irish, Sound Transit
Elma Borbe, Sound Transit
Sharon Claussen, King County
Robert Nunnenkamp, King County



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION X
Alaska, Idaho, Oregon,
Washington

915 Second Avenue
Federal Bldg. Suite 3142
Seattle, WA 98174-1002
206-220-7954
206-220-7959 (fax)

May 16, 2011

Re: East Link Light Rail Project Section 4(f) Determination

Craig Larsen, Director
City of Redmond Parks and Recreation
15670 NE 85th Street
Redmond, WA 98052-3580

Dear Mr. Larsen:

Thank you for your letter dated March 9, 2011 with regards to concurring with the Federal Transit Administration's (FTA) intent to make a finding of *de minimis* pursuant to 23 CFR 774.5 (2) for Luke McRedmond Park, Bear Creek Trail, and the Redmond Central Connector that are located within the City of Redmond.

Please accept this letter as an addendum to the March 9 letter. Another Redmond park facility for which FTA intends to make a *de minimis* finding is for the Edge Skate Park. FTA requests the City's final concurrence on this finding. With your signature below, this addendum letter of concurrence will be included in the East Link Final Environmental Impact Statement (EIS). Following the City's written concurrence, FTA will make a final Section 4(f) determination, which will also be included in the Final EIS.

The table below lists Edge Skate park facility that the East Link Light Rail Project would impact. Alternative E2 Transit Center Design Option is the only alternative that would potentially impact this park. Given the potential project impacts and the proposed potential mitigation, FTA believes that a *de minimis* finding can be made for Edge Skate Park. A *de minimis* determination means that after incorporation of mitigation measures, the East Link project will not adversely affect the activities, features, and attributes of the significant park facilities.

MAY 27 2011

City of Redmond Park Facility and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Edge Skate Park (E2 Transit Center Design Option)	Significant	Permanent use of less than 0.1 acre. <i>Temporary use of land during construction</i> <i>Temporary indirect impacts include noise and visual effects.</i>	Financial compensation as agreed with the City; or <i>Financial compensation for the use of land as agreed with the City during construction</i> <i>Restore temporarily disturbed area to existing conditions</i> <i>Maintain access to skatepark.</i>	<i>de minimis</i>

We ask that you provide your signature on this letter or, in its place, your own letter to confirm your concurrence on the significance of the City of Redmond park facility, the final agreement with the Section 4(f) *de minimis* determination, and the potential mitigation. As the project is further refined during final design, Sound Transit will coordinate with the City of Redmond's Parks and Recreation Division to review and finalize the design and construction activities. If you have any questions, please call either John Witmer, Community Planner at (206) 220-7964 or Elma Borbe, Environmental Planner at (206) 398-5445.

Sincerely,

for R. F. Krochalis
Regional Administrator

City of Redmond Signature for Concurrence

Cc: John Witmer, FTA
James Irish, Sound Transit
Elma Borbe, Sound Transit



King County

Parks and Recreation Division

Department of Natural Resources and Parks

King Street Center, KSC-NR-0700

201 South Jackson Street

Seattle, WA 98104-3855

206.296.8687 Fax 206.296.8686

TTY Relay: 711

April 1, 2011

Elma Borbe, Environmental Planner
East Link Light Rail
Sound Transit
402 S. Jackson Street
Seattle, WA 98104-2826

Dear Ms. Borbe:

As you know, the Federal Transit Administration (FTA) is the lead federal agency on the Final Environmental Impact Statement (EIS) for Sound Transit's East Link Light Rail Project ("the Project") and is finalizing the Section 4(f) evaluation of the project's potential impacts on public parks and recreational facilities, as required by the U.S. Department of Transportation Act of 1966.

The King County Parks and Recreation Division ("Division") owns and operates several park and recreation facilities along the proposed route of the East Link project, including the Sammamish River Trail ("River Trail"), East Lake Sammamish Trail ("Lake Trail"), and Marymoor Park ("the Park"). We understand that the FTA intends to make a *de minimis* finding regarding East Link's impacts on those park and recreation facilities. The FTA asked the Division to concur in that finding on behalf of King County. The Division understood Sound Transit to make this request as part of the coordination and consultation process required under Section 4(f) of the Department of Transportation Act of 1966 (as amended), and its implementing regulations, codified at Title 23 of the Code of Federal Regulations (CFR) Part 774 (together, "the Act").

We thank you for your prior correspondence and documentation regarding this matter. As anticipated in the Divisions' 2008 letter concurring in Sound Transit's preliminary *de minimis* conclusion, and consistent with 23 CFR 774.5(b)(2)(i)-(ii), King County has now separately evaluated whether to concur in Sound Transit's conclusion that the Project will have *de minimis* impacts on King County park resources. I regret that King County cannot completely concur in the FTA's determination at this point in time.

To be clear, we **conditionally concur in FTA's *de minimis* finding regarding East Link's impacts on the River Trail**, so long as the proposed mitigation is properly and fully implemented, and so long as Sound Transit avoids placing Project-related improvements in the "clear space" around the River Trail; or, alternatively, Sound Transit covenants to hold harmless and indemnify King County from any property damage or personal injury arising out of, caused by, or related to guideway columns permanently located in that "clear space." Also, we **conditionally concur in FTA's *de minimis* finding regarding East Link's impacts on the Lake Trail**, so long as Sound Transit provides replacement property for any Lake Trail corridor property occupied by the East Link Project, and so long as Sound Transit covenants to comply with all applicable "railbanking" requirements, including but not limited to those set forth in 16 U.S.C. §1247(d) and 49 C.F.R. §1152.29. However, at the present **time King County does not concur in FTA's *de minimis* finding regarding East Link's noise and vibration impacts to the Park**. As explained below, we believe that additional review and analysis is required to properly assess and mitigate these impacts.

BACKGROUND

Under Section 4(f) of the U.S. Department of Transportation Act of 1966, FTA cannot approve a transportation project (such as East Link) that requires the use of any publicly owned land from a significant public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site, unless a determination is made that (underlining, bolding added):

- There is no feasible and prudent alternative to using the property; and
- The project includes all possible planning to minimize harm to the property resulting from the use; or
- The use will have no more than a *de minimis* impact on the resource. A *de minimis* impact means a project will have **no adverse effect to the activities, features, and attributes of the resource after consideration of any impact avoidance, minimization, and mitigation or enhancement measures**.

If the federal lead agency determines that a transportation use of Section 4(f) property results in a *de minimis* impact on that property, an evaluation of prudent and feasible avoidance alternatives is not required and the Section 4(f) process is complete. However, federal regulations stipulate that "officials with jurisdiction over the Section 4(f) resource **must concur** in writing with a *de minimis* finding (23 CFR 774.5 (2)) (underlining, bolding added).

It is our understanding that the FTA analyzed the potential project impacts and the proposed potential mitigation described above, and concluded that a 4(f) *de minimis* finding could be made for the River Trail, the Lake Trail, and the Park. As recited above, a *de minimis* determination would mean that after incorporation of mitigation measures, the Project will not adversely affect the activities, features, and attributes of these significant park and recreation

assets. For the reasons set forth below, King County conditionally concurs in FTA's *de minimis* findings regarding the River Trail and the Lake Trail; but King County rejects FTA's *de minimis* finding regarding the Project's noise and vibration impacts to the Marymoor Park.

DISCUSSION OF IMPACTS

The FTA identified the River Trail, the Lake Trail, and the Park as King County park facilities that would be impacted by the East Link Light Rail Project ("the Project"). We address each of them in turn.

SAMMAMISH RIVER TRAIL

In a draft letter sent earlier this year, the FTA summarized the Project's impacts to the River Trail as follows:

King County Park Facilities and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Sammamish River Trail/E1 & E2	Significant	Permanent shading of about 20 to 30 feet of trail Possible impacts to trail use if guide way columns are located within trail right-of-way <i>Possible detour of trail during construction</i>	Acquire replacement recreation land equal in value to offset the light rail use within the trail right of way per RCO requirements <i>Financial compensation for temporary use of land outside of the light rail right-of-way needed for construction</i> <i>Rerouting and restoration of trail and disturbed areas to King County standards and specifications during and after construction.</i>	<i>de minimis</i>

Elma Borbe
April 1, 2011
Page 4

The FTA's letter also stated that "[t]here is no direct trail use by the [P]roject associated with the . . . River Trail and all Segment E alternatives would span the trail resulting in an additional 20 feet of trail shading."

We agree that the River Trail is a significant resource. We agree that the Project will result in additional shading of 20 to 30 feet of the Trail. And we agree that the Project's shading and temporary displacement/detour impacts on the River Trail can be mitigated by detouring the trail during construction, compensating King County for temporary use of County property, and restoring the River Trail and disturbed areas to County standards and specification after construction.

We appreciate that the FTA and Sound Transit recognize the need to compensate King County for Project use of the River Trail right of way, particularly for guide way supports that may be located there. And we agree that those impacts must be mitigated through the acquisition of replacement property. However, we think the FTA's letter overlooked some additional, critical impacts and potential mitigation regarding those guide way supports.

Nationally-recognized standards and guidelines govern the design of multipurpose trails like the River Trail. These standards and guidelines include, but are not limited to the Washington State Department of Transportation Manual M 22-01 Ch. 1515 ("WSDOT Manual"), and the Guide for Development of New Bicycle Facilities, published by the American Association of State Highway and Transportation Officials ("AASHTO Guide"). The AASHTO Guide is the standard for the construction and design of federally-funded bicycle routes, 23 C.F.R. 652.13(a) (2006). Under the AASHTO Guide, the WSDOT Manual, and other standards, a multipurpose trail like the River Trail should have a clear zone of 2 to 5 feet (and up to 8 feet) on either side of the paved trail surface. The purpose of this clear zone is to ensure that cyclists, rollerbladers, or runners do not accidentally clip or run into a trailside obstacle or obstruction, and to provide a modicum of runoff room if a trail user needs to make an emergency maneuver to avoid a collision, or to get out of the way.

Assuming that a "guide way support" is something like a concrete column or abutment, or a steel girder, these structures do not belong in the paved trail surface or the clear zone. To do so would be contrary to nationally-recognized guidelines, safety practices, and common sense. Therefore, **the FTA should impose an additional mitigation measure requiring that to the maximum extent practicable, Sound Transit should design the Project to avoid placing guide way supports in the clear zone on either side of the River Trail.**

If it proves impossible for Sound Transit to engineer the Project to avoid placing improvements in the River Trail clear zone, then the **FTA should impose an additional mitigation measure requiring Sound Transit to execute a covenant to hold harmless, indemnify, and defend King County from any and all claims or litigation regarding property damage, personal injury, or death that may be caused by, arise out of, or relate to Project improvements located in the clear zone.** King County hereby notifies the FTA and Sound Transit that King County will require Sound Transit to execute such a covenant in connection with any

agreement to allow Project-related improvements in the River Trail right of way. King County will also require Sound Transit to sign or mark any Project improvements in the clear zone in order to visibly identify them as hazards.

Subject to these additional conditions and mitigation measures, as well as those previously identified by the FTA, and so long as the proposed mitigation is properly and fully implemented, King County conditionally concurs in FTA's *de minimis* finding regarding the Project's impacts on the River Trail.

EAST LAKE SAMMAMISH TRAIL

In its draft letter sent earlier this year, the FTA summarized the Project's impacts to the Lake Trail as follows:

King County Park Facilities and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
East Lake Sammamish Trail/E1, E2, & E4	Significant	Permanent relocation of about 900 feet of trail	Financial compensation for the light rail use of the trail right-of-way	<i>de minimis</i>
		<i>Detour of trail during construction</i>	<i>Financial compensation for temporary use of land outside of the light rail right-of-way needed for construction</i>	
			<i>Rerouting and restoration of trail and disturbed areas to King County standards and specifications during and after construction.</i>	

FTA's draft letter further stated that "The [Lake Trail] would require realignment and relocation, but there is adequate width within the former BNSF Railway corridor to accommodate both facilities and access to the trail and connections to the Bear Creek Trail would not be impacted by [P]roject operation . . . [T]his park resource is considered significant for purposes of Section 4(f)."

We agree that the Lake Trail is a significant resource. We agree that the Project will displace a segment of the Lake Trail. And we agree that the Project's temporary and permanent displacement of the Lake Trail can be mitigated by detouring the trail during construction, compensating King County for temporary and permanent use of County property, and relocating and restoring the Lake Trail and disturbed areas to County standards and specification after construction. We appreciate that the FTA and Sound Transit recognize the need to compensate King County for Project use of the Lake Trail right of way. However, we think the FTA's letter overlooked some additional, critical impacts and potential mitigation regarding Project impacts to the Lake Trail.

The Lake Trail occupies a former freight rail corridor that is "railbanked" or preserved for the future restoration of freight service under the National Trails System Act 16 U.S.C. 1247(d).¹ Such corridors may be used for trail purposes on an interim basis. However, trail use is subject always to the possibility that the corridor could be reclaimed for freight rail service. Federal regulations are quite specific that "interim trail use is . . . subject to possible future reconstruction and reactivation of the right-of-way for rail service." 49 C.F.R. §1152.29(a)(3).

King County is the "interim trail user" ("Trail User") responsible to maintain and protect the railbanked corridor in which the Lake Trail is located, 49 C.F.R. §1152.29(a). As the Trail User, King County is legally obligated to ensure that sufficient real property interest remains in a railbanked corridor to allow the restoration of freight rail service. See *Central Kansas Railway, LLC -- Abandonment Exemption -- In Marion and McPherson Counties, KS*, Docket No. AB-406 (Sub-docket No. 6X) (Service Date December 18, 1998) (1998 WL 884726) at *4. One example of a corridor use likely inconsistent with restoration of freight service would be a full-width disposition of all property interests that permanently "severs" the railbanked corridor from tracks that remain in use for interstate freight, and forever "strands" the railbanked corridor away from interstate commerce. See *Burlington Northern Railroad Co. -- Abandonment Exemption -- In Klickitat County, WA*, Docket No. AB-6 (Sub-No. 346X) (June 8, 2005) (2005 WL 1350596) (litigation challenging "railbanked" status of a corridor where railroad allegedly conveyed a full-width section of the corridor that would sever railbanked track from interstate commerce).

¹ The FTA's draft 2011 letter acknowledged the Lake Trail's status as a railbanked corridor. It stated that:

[r]ailbanking . . . is a voluntary agreement between a railroad company and a trail agency to use an out-of-service rail corridor as a trail until some railroad might need the corridor again for rail service. Because a railbanked corridor is not considered abandoned, it can be sold, leased or donated to a trail manager without reverting to adjacent landowners.

However, the FTA's draft letter failed to acknowledge that as the Interim Trail User, King County has affirmative duties under the Railbanking Legislation—duties that could be potentially jeopardized by the Project. The FTA's draft letter also failed to acknowledge the need to avoid "severing" the corridor or "stranding" any portion of it; or the need to preserve the corridor for potential restoration of freight service.

As the Trail User, King County cannot and will not authorize or allow any Project use of the Lake Trail corridor that would jeopardize the "railbanked" status of the corridor or permanently foreclose the potential to freight rail service in the future. However, King County believes that it may be possible to allow Project use of the Lake Trail corridor so long as such use is properly conditioned to preserve the corridor's "railbanked" status and protect the potential to restore freight service in the future. King County is willing to work with the FTA and Sound Transit to further refine the Project concept to meet these requirements. In exchange, and in connection with any grant of rights allowing Sound Transit to use the Lake Trail corridor for Project-related purposes, King County will require Sound Transit to execute the following covenants:

- A. Sound Transit acknowledges that to protect the Lake Trail corridor as a rail transportation corridor, to preserve it for future reactivation of freight rail service, and to encourage energy efficient transportation uses, the Lake Trail corridor has been "rail banked" in accordance with 49 C.F.R. 1152.29 and Section 8(d) of the National Trails System Act (also known as the "Rails-to-Trails Act"), 16 U.S.C. 1247(d) (collectively, and as any of the foregoing may hereafter be amended or interpreted by binding judicial or administrative authority, the "Railbanking Legislation"). Sound Transit acknowledges that the Surface Transportation Board ("STB") approved King County as an Interim Trail User for the Lake Trail corridor for purposes of "railbanking" the corridor. Sound Transit acknowledges that under the Railbanking Legislation, King County, as the Interim Trail User, is subject to certain legal obligations related to the Property which are referred to herein as the "Railbanking Obligations".
- B. Sound Transit covenants that it will comply with the Railbanking Obligations and that its use of the Lake Trail corridor will conform to the requirements of the Railbanking Legislation. Sound Transit covenants to cooperate with King County in good faith to fulfill the Railbanking Obligations in connection with Project use of the Lake Trail corridor.
- C. Sound Transit covenants that if the STB receives a request for approval to use all or any portion of the Lake Trail corridor for reactivated freight rail service, including but not limited to such portion as Sound Transit may use in connection with the Project, then Sound Transit will cooperate with King County in order to cause the party making such request (including Sound Transit or King County): (i) to bear all costs to restore or improve the Lake Trail corridor for reactivated freight rail service; (ii) to bear all responsibility to take all steps necessary before the STB and any other regulatory agency, governmental or quasi-governmental body having jurisdiction over such work, to cause the relevant Notice of Interim Trail Use to be vacated, in whole or in part, as necessary; and (iii) to compensate King County and Sound Transit for the fair market value of any and all of their respective rights or interests in the Lake Trail corridor or improvements thereon (including, but not limited to, any Project-related improvements then located on or in the Lake Trail corridor)

that may be destroyed, lost, compromised or otherwise reduced in value or function when the Lake Trail corridor or any portion of it is put to use for reactivated freight rail service.

Subject to these additional conditions and mitigation measures, as well as those previously identified by the FTA, and so long as the proposed mitigation is properly and fully implemented, King County conditionally concurs in FTA's *de minimis* finding regarding the Project's impacts on the Lake Trail.

MARYMOOR PARK

In its draft letter sent earlier this year, FTA summarized the Project's impacts to the Park as follows:

King County Park Facilities and Summary of Section 4(f) Use

Name of Resource	Significance Determination	Impact on Resource	Potential Mitigation	4(f) Findings after Mitigation
Marymoor Park/E2	Significant	Permanent use of about 2.0 acres	Acquire replacement recreation land equal in value and function to offset the light rail use within the Park property.	<i>de minimis</i>
		<i>Temporary use of about 3.2 acres during construction</i>	<i>Financial compensation for the temporary use of land outside the light rail right-of-way for construction.</i>	
		<i>Temporary impacts to park use during construction</i>	<i>Park land restoration following construction</i>	

FTA's draft letter also stated that

Sound Transit will work with the appropriate agencies to address proposed changes to the Marymoor Park's wetland mitigation site. The Preferred Alternative E2 runs along the north end of a wetland mitigation site. This wetland was originally created to

compensate for impacts on a natural wetland that occurred in the early 1990s during the widening of the SR 520. In 2000, as part of King County's project to develop the multi-use grass and soccer fields along the north end of the park, the wetland area was also impacted. In 2010, a "deed restriction document" for the site was prepared by King County.

The FTA's draft letter further stated that "the permanent and temporary use would occur on the northern edge [of the Park] and **no recreation facilities would be directly affected by operation**; however, an unofficial equestrian route would be affected." (Bracketed material, underlining, bolding added.)

In a separate 2011 memo prepared for Sound Transit by Michael Minor and Associates ("MMA"), MMA asserted that Sound Transit's light rail vehicles produce noise levels of 82 dBA L_{max} when traveling at 50 miles an hour (and measured 50 feet from the train). MMA asserted that this noise level was similar to that of heavy trucks and buses (84 to 86 dBA), and that when atmospheric dispersion is taken into account "[o]verall, maximum noise levels are not predicted to change with the installation of the . . . Project." MMA also concluded that at a predicted interval of 18 train trips per hour (peak hours), reduced to 8 train trips per hour (late evening and early morning), "vehicle traffic noise from SR 520 will continue to be the dominant noise source at the [P]ark." Finally, MMA concluded that the Project will not result in a measurable difference in the overall noise levels at the active areas of the Park, including the baseball fields, soccer fields, entertainment pad and velodrome.

For the reasons set forth below, **King County does not concur in the FTA's *de minimis* finding regarding the Project's impacts to Marymoor Park.** More specifically, King County rejects the FTA's assertion that Sound Transit's train operations will not affect the Park through noise and vibration. We believe that the FTA's analysis and MMA's memo suffer from certain critical shortcomings, and that those shortcomings gloss over potential noise and vibration impacts to the Park, as well as mitigation opportunities to address them.

ANALYTICAL FLAWS REGARDING NOISE AND VIBRATION IMPACTS TO THE PARK

We believe that there are at least two analytical flaws in the FTA's *de minimis* conclusion regarding noise and vibration impacts to the Park. First, the FTA and MMA did not properly consider the variety, pitch, and periodicity of noise impacts that may be generated by Sound Transit train operations; and second, the FTA did not properly consider the noise sensitivity of the Park. We address each of these in turn.

THE FTA DID NOT CONSIDER THE VARIETY, PITCH, AND PERIODICITY OF NOISE IMPACTS THAT MAY BE GENERATED BY SOUND TRANSIT OPERATIONS

The MMA memo does not distinguish between the various types of noise that Sound Transit light rail vehicles may generate. For example, a train may generate engine noise, air noise (the sound of the vehicle displacing air), brake noise, wheel noise (bearings and brakes), track noise (joints, curves, crossovers, etc.), and bell, horn, or other warning signal noise.

Some of these noises may be much louder than the 82 dBA L_{\max} level identified by MMA. For example, based on its experience with Central Link, Sound Transit has specified that the maximum sound level for train wheels passing over the rail gaps in a standard track crossover is 90 dBA L_{\max} (measured at 50 feet from train). The 90 dBA L_{\max} is substantially louder than 82 dBA L_{\max} . Since the decibel scale is logarithmic, an 8 dBA increase represents a doubling or near-doubling of loudness. The MMA memo does not discuss the location of crossover tracks, or whether these twice-as-loud track noises might affect Park users. Nor does the FTA or MMA propose any mitigation to address such noises, which might include special track to eliminate the wheel impacts responsible for the loud noises; or wheel skirts.

Intermittent noises such as wheel squeal on track curves can also be substantially louder and more disruptive than straight-line train operation. The MMA memo does not discuss the radius of any track curves near the Park, or whether any such curves might produce loud, intermittent wheel squeal that could affect Park users. Nor does the FTA or MMA propose any mitigation to address such noises, which might include designing the Project to include gentler curves; or, if a gentle curve is not feasible, automated track lubricators or a program of track grinding and wheel truing.

Similarly, some of these noises, such as bell, horn, or other warning signal noise, are specifically designed to stand out against background noise, and to capture people's attention—that is their function. The intermittent or unpredictable nature of these sounds, together with their tonal, high frequency character, mean that these noises are likely to be more irritating than a constant, broader-frequency sound, even if the overall sound level is the same. MMA's memo acknowledges that there will be a Sound Transit station just east of the Park, but does not discuss the noise impacts of slowing trains (wheel bearings, braking, crossovers) or warning signals (bells, horns, etc.) that necessarily accompany train arrivals and departures at a station.

Finally, we are also concerned that other the FTA/Sound Transit noise studies have averaged short-term noise sources (bells, etc.) over a 24-hour period. While this may be in keeping with the FTA methodology, it does not fully reveal the noise level the community experiences. Averaging the sound of a short-duration noise over a 24-hour period will tend to obscure the "impact" that each such event may have. Also, there is no evidence that the FTA or Sound Transit have attempted to evaluate sound reflected off of barriers (noise walls, retaining walls,

jersey barriers, etc. We believe that the FTA's noise analysis regarding the Park should include reflected sound impacts. Likewise there should be a full discussion of construction-related impacts, which may not occur in perpetuity but could be substantial and significant during the period of construction.

FTA DID NOT PROPERLY CONSIDER THE NOISE SENSITIVITY OF THE PARK

The MMA memo states that EPA typically considers residential land use to be a more sensitive land use type than parks. However, the FTA has its own criteria for noise sensitivity. The FTA guidelines state that (bolding added):

Parks are a special case. Whether a park is noise-sensitive depends on how it is used. Most parks used primarily for active recreation would not be considered noise-sensitive. However, some parks—even some in dense urban areas—are used for passive recreation like reading, conversation, meditation, etc. These places are valued as havens from the noise and rapid pace of everyday city life and they should be treated as noise-sensitive. **The noise sensitivity of parks should be determined on a case-by-case basis after carefully considering how each facility is used. The state or local agency with jurisdiction over the park should be consulted on questions about how the park is used and how much use it gets.**

Under the FTA's own criteria, there is ample evidence that additional consideration should be given to the noise sensitivity of the Park. Even if noise impacts are limited to that portion of the Park located closest to the SR-520 corridor, those impacts are or may be significant. From west to east, the portion of Marymoor Park closest to SR-522 consists of facilities dedicated to the following uses: three baseball diamonds; four tennis courts; two multisport fields; a reflexology path; three artificial turf soccer fields; a wetlands area; a cricket pitch; a recreation and event area; a velodrome; and a climbing rock.

Each of these facilities serves a noise-sensitive use that could be impacted by periodic loud noises from Sound Transit train operations. Tennis, cricket, and rockclimbing are classic examples of sports that require tremendous concentration and freedom from distractions in order to properly execute the skills needed to perform them: We are all familiar with television images of a tennis umpire scolding a noisy fan in the bleachers for merely clapping while a player is preparing to serve. Periodic horn blasts, unexpected brake squeal, or 90-decibel wheel impacts would be far more intrusive. Similarly, soccer and baseball referees must be able to reliably communicate with and control players over distances by voice and whistle alone—sounds that could be easily drowned out by the sounds of a train on a crossover. Track cycling is a high-speed, close-quarters competition where even a moment's inattention can lead to a severe crash with traumatic injuries. What will happen if a warning bell sounds unexpectedly as two sprinters are racing for the line, elbow-to-elbow with their wheels just centimeters apart at

35 mph? And what of the reflexology path user, attempting to improve circulation and reduce overall stress through the ancient, meditative practice of mindful breathing while walking barefoot over protruding stones? Habitat and wildlife viewing associated with the wetlands adjacent to the Event Pad may also be affected.

Finally, King County rents the Event Pad to a variety of users, including dog shows, camping groups, black-tie fundraising galas, and, of course, the Cirque du Soleil. Each of these are noise-sensitive uses in their own right; they cannot be conducted in an environment subject to periodic, exceptionally loud bangs, squeals, bells or whistles. Together, they produce substantial revenue to the County, all of which is plowed back in the park and recreation system. **If noise or vibration from Sound Transit's train system impacts the County's ability to rent the Event Pad, it could jeopardize the County's strategy to fund regional parks and recreation over the long term.** This strategy is mandatory for the Division. See King County Ordinance 14509 §1.A.1, -.6 (finding that the County must find new ways of generating revenue, and finding that it is appropriate for the Division to "develop . . . entrepreneurial ways of doing business").

NEED FOR FURTHER REVIEW AND MITIGATION REGARDING THE PARK

Many other activities and uses in the Park are noise sensitive in varying ways and degrees. To begin, the FTA must acknowledge that one of the primary functions of a park is to allow people to escape the hustle and bustle of their everyday urban existence for the peace and quiet of a park. How is it possible that Meydenbauer Center in Bellevue—a large, concrete-and-steel reinforced structure used for indoor purposes—is deemed a sensitive noise receptor structure, while the many open-air recreation facilities located in the northern tier of Marymoor Park are not?

As discussed earlier, it is not just a question of noise volume, or noise frequency, but also noise quality. For example, the noise from Highway 520 is more of a constant hum that can be relegated to background noise, while a train coming by intermittently is startling as each train passes by. Intermittent noise will have a far greater impact than the background noise of roads. Quiet or contemplative uses will be impacted as will conversation between walkers or picnickers. Similarly, scheduled Park uses such as weddings, parties, and concerts could also be affected.

A potential secondary noise issue or indirect effect of the Project is that loudspeaker systems for events held at the velodrome or sports fields may need to operate at higher volume due to train-related noise, which would thus further impacting other park users and the neighbors who are already sensitive to the existing volume levels.

CONCLUSION

Section §4(f) of the 1966 Highway Act requires that the FTA consider any impact avoidance, minimization, and mitigation or enhancement measures before making a finding of *de minimis* impacts. For all of the reasons discussed above, the Division declines to endorse a *de minimis* finding without more structured analysis of the noise and vibration impacts that Sound Transit's operations could have on the many uses of the Park along SR-522.

Sound can be mitigated at the source, along the path between source and receiver, or at the receiver. It is preferable to treat the noise at the source whenever possible. Without a full discussion of noise sources and possible mitigation methods to control East Link train noise at the source, the Division cannot completely concur in the FTA's *de minimis* finding determination at this point in time.

As a result, **we conditionally concur in FTA's *de minimis* finding regarding Project's impacts on the River Trail**, so long as the proposed mitigation is properly and fully implemented as described in this letter. Also, **we conditionally concur in the FTA's *de minimis* finding regarding East Link's impacts on the Lake Trail**, so long as the proposed mitigation is properly and fully implemented, and so long as Sound Transit covenants to comply with all applicable "railbanking" requirements, all as discussed in this letter. However, at the present time **King County does not concur in the FTA's *de minimis* finding regarding the Project's impacts to the Park**. We request that the FTA and Sound Transit perform the additional review, analysis, and mitigation planning discussed above.

Our review of the Project's potential impacts and mitigation measures is based on current analyses and the information about the Project. In the event that new or additional information becomes available as the Project is refined, King County will gladly reconsider its rejection of the FTA's *de minimis* conclusions regarding the Project's impacts on Marymoor Park. The Division looks forward to coordinating with Sound Transit to further review design and construction elements of the Project as it progresses.

Sincerely,



Kevin Brown
Division Director

cc: James Irish, Sound Transit
Sharon Claussen, Project Manager, Parks and Recreation Division, Department of
Natural Resources and Parks (DNRP)
Robert Nunnenkamp, Property Agent, Parks and Recreation Division, DNRP



**Washington State
Department of Transportation**

Paula Hammond
Secretary of Transportation

ESO Mega Projects
999 Third Avenue, Suite 2424
Seattle, WA 98104
206-521-5628/ fax 206-805-2899
TTY: 1-800-833-6388
www.wsdot.wa.gov

June 9, 2011

R.F. Krochalis
Federal Transit Administration, Region X
915 Second Avenue, Suite 3142
Seattle, WA 98174-1002

Subject: East Link Light Rail Project

Dear Mr. Krochalis,

Thank you for the opportunity to review and comment on your Determination of Adverse Effect on Section 106 resources for the East Link Light Rail Project and the invitation to participate as a consulting party under the Section 106 process for this project.

We have no comments on the Determination of Adverse Effect and we accept your invitation to participate as a consulting party.

You may continue to use me as a point of contact during the Section 106 process. If you have any questions, please call me at (206) 805-2892 or email me at paul.krueger@wsdot.wa.gov.

Sincerely,

Paul Krueger
Project Environmental Manager

cc: James Irish, Sound Transit
Elma Borbe, Sound Transit
Scott Williams, WSDOT
Kevin Bartoy, WSDOT

JUN 9 2011 PM 12:20

Attachment D2

Section 6(f) Photographs



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

- ↔2 Photo Location and Direction
- - - Recreational Water Trail
- - - Other Trail
- Section 6(f) Boundary
- Park



0 0.25 Mile

Attachment 2.
Section 6(f) Area
Photo Locations
East Link Project



Photo 1



Photo 2



Photo 3. At ground level at water trail.



Photo 4. Sitting on dock to simulate view from canoe trail.



Photo 5. Sitting on dock to simulate view from canoe trail.



Photo 6. Sitting on dock to simulate view from canoe trail.



Photo 7

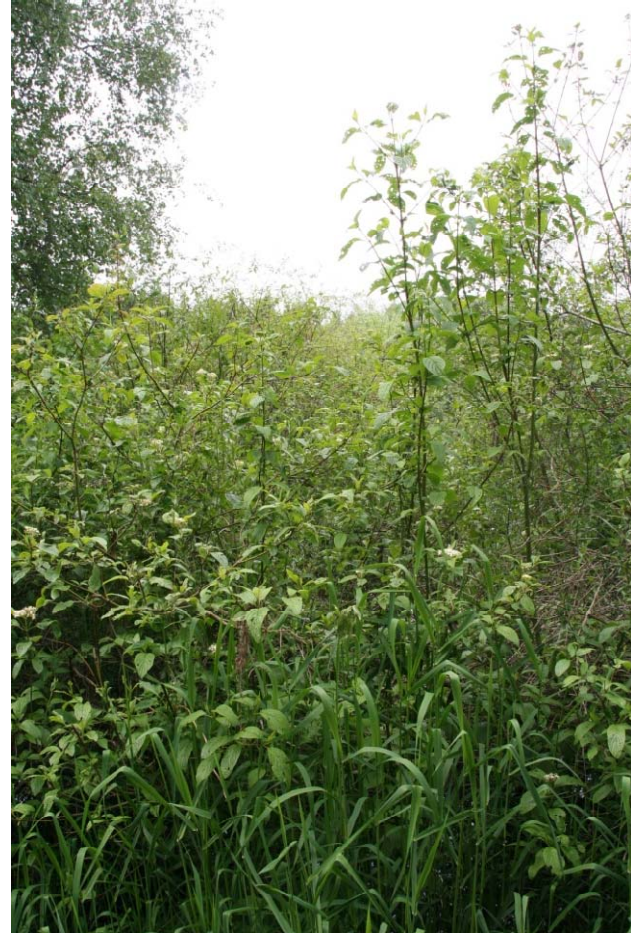


Photo 8



Photo 9



Photo 10. Standing on bench.



Photo 11. Sitting at water level.



Photo 12. Canoe trail near intersection of Bellevue Way SE and 112th Avenue SE.

