

4.16 Historic and Archaeological Resources

4.16.1 Introduction to Resources and Regulatory Requirements

The National Historic Preservation Act of 1966 (NHPA) Section 106 states that any federal or federally assisted project or any project requiring federal licensing or permitting must consider the project's effects on historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP or National Register), in accordance with 36 CFR Part 800. Properties include historic and prehistoric archaeological sites, as well as districts, buildings, structures, objects, and landscapes, in addition to cultural or traditional places or resources that have value to a community, such as an Indian tribal group (NHPA Section 101). To consider the potential concerns of Indian tribes, Sound Transit also reviewed the following:

- American Indian Religious Freedom Act of 1978
- Executive Order (EO) 13007 (access to and/or ceremonial use of sacred sites by Indian religious practitioners)

Also, Section 4(f) of the Department of Transportation Act of 1966 (23 United State Code 138) prohibits the Federal Transit Administration (FTA) from approving a project or program that uses land from a significant public park, recreation area, wildlife or waterfowl refuge, or historic site, with the following exceptions:

- There is no feasible and prudent alternative to the use of the land.
- The project includes all possible planning to minimize harm to the property.

A Section 4(f) evaluation is included in Appendix D of this Draft EIS.

The cities of Seattle, Mercer Island, and Redmond regulate the effects of projects on historic resources. Local regulations that were reviewed during the assessment include the following:

- City of Seattle Landmarks Preservation Ordinance (SMC 25.12) requires that properties eligible for city landmark designation be at least 25 years old and meet at least one of six criteria of significance.
- City of Mercer Island Ordinance No. 05C-09 (amending Ordinance No. 02-16) contains provisions for historic designation of private and

municipal properties 50 years of age or older within the city limits.

- City of Redmond Ordinance No. 2224 contains provisions for historic preservation, including a Redmond Heritage Resource Register, administered by the Landmarks and Heritage Commission. Designation requires that a structure be at least 40 years of age and meet other criteria established by the Commission; archaeological sites also are eligible for designation.

The City of Bellevue has no applicable ordinances regarding historic resources.

4.16.2 Affected Environment

The Federal Transit Administration (FTA), Sound Transit, and Washington State Department of Transportation (WSDOT) consulted with the Washington State Historic Preservation Officer (SHPO) in the Department of Archaeology and Historic Preservation (DAHP), local jurisdictions, and Indian tribes during the investigations concerning historic and archaeological resources. In addition, Sound Transit coordinated with staff at the cities of Seattle, Mercer Island, Bellevue, and Redmond.

Sound Transit and FTA consulted with and received concurrence from the SHPO on the Area of Potential Effects (APE) used for this project. The APE is the area within which the project may cause direct or indirect changes to the character of any historic properties. The APE for archaeological resources is limited to the portion of the project where ground-disturbing activities will be conducted, such as areas for demolition, construction, staging, equipment storage locations, and stormwater management facilities (36 CFR 800.16[d]). For the archaeological resource investigation, the vertical extent of the APE may vary according to construction practice—deeper for excavation areas and shallower for at-grade construction—depending on the geomorphology of the landform where the project feature occurs.

The APE for historical buildings and structures is one block (approximately 200 feet) on each side of the centerline of the project routes (i.e., a total corridor width of approximately 400 feet). The APE extends approximately 200 feet from the outer limits of station locations and maintenance facilities. The APE also includes the area one block from where tunnel alternatives could disturb the ground surface or have the potential for other surface effects, depending on terrain and local land use. Uniquely for bored or mined tunnel construction, the APE for noise, vibration, and settlement effects is 100 feet on each

side of the route centerline (i.e., a total corridor width of approximately 200 feet).

The archaeological sensitive areas and those listed or determined to be eligible historic resources within the study area's APE are shown in Exhibit 4.16-1. Detailed maps are available in the *Historic and Archaeological Resources Technical Report* (Appendix H4).

4.16.2.1 Archaeological Resources

Only one archaeological site has been recorded near the archaeological resource APE. Archaeological site 45KI8 was recorded in 1966 (Greengo, 1966) near the Redmond Way Alternative (E1). The site was described as consisting of scattered artifact finds along the east bank of the river for about one-half mile, including some finds in dredged material. The condition of the site in 1966 was reported as "completely worked over on surface—no midden [organic remains] visible" (Greengo, 1966).

Mapping of landform criteria for archaeological sensitivity identified several portions of the alternatives as having high sensitivity for prehistoric archaeological sites, but did not identify areas with a high sensitivity of important historic-period archaeological sites. The project archaeologist developed maps of areas judged to have high prehistoric archaeological sensitivity for the project alternatives based on historic stream courses, ethnographic land use, and topography of the terrain. Archaeological sensitivity and survey maps are provided in the technical report (Appendix H4). Much of the Segment B and E alternatives have relatively high levels of archaeological sensitivity based on the presence of Mercer Slough in Segment B and the Sammamish River floodplain in Segment E.

Also shown in the *Historic and Archaeological Resources Technical Report* (Appendix H4), are the soil probe locations that were excavated during the archaeological survey. A field crew conducted an archaeological survey the last week of February 2007. The work included 15 survey tracts, with 6 survey tracts located in the archaeologically sensitive portions of Segment B, 5 in Segment D, and 4 in the archaeologically sensitive portions of Segment E. Two survey tracts (in Segment D) were placed in areas considered to have low archaeological sensitivity to control for the bias inherent in focusing surveys on high sensitivity areas. No tracts were placed in Segments A or C because heavy development and other characteristics provided relatively fewer areas of high archaeological sensitivity.

The archaeological survey of the Segment B tracts encountered areas of historical disturbance, heavy

vegetation, water near or at the ground surface, and some modern debris. Survey tracts in Segment D also showed considerable disturbance, while those in Segment E encountered fill covering the native soils up to about 3 feet deep. The project archaeologist identified an additional survey tract to search for recorded archaeological site 45KI8 described above, but encountered no evidence of the site. It is difficult to tell whether the site still exists because the area has been eroded, dredged, rip-rapped and filled.

In summary, the survey located no prehistoric or historic-period archaeological remains, including at the historically recorded prehistoric archaeological site 45KI8. These results are not conclusive because materials and sites could be found buried, particularly along the Segment B and Segment E alternatives. Although past development has likely damaged or destroyed archaeological sites, some important remains could exist.

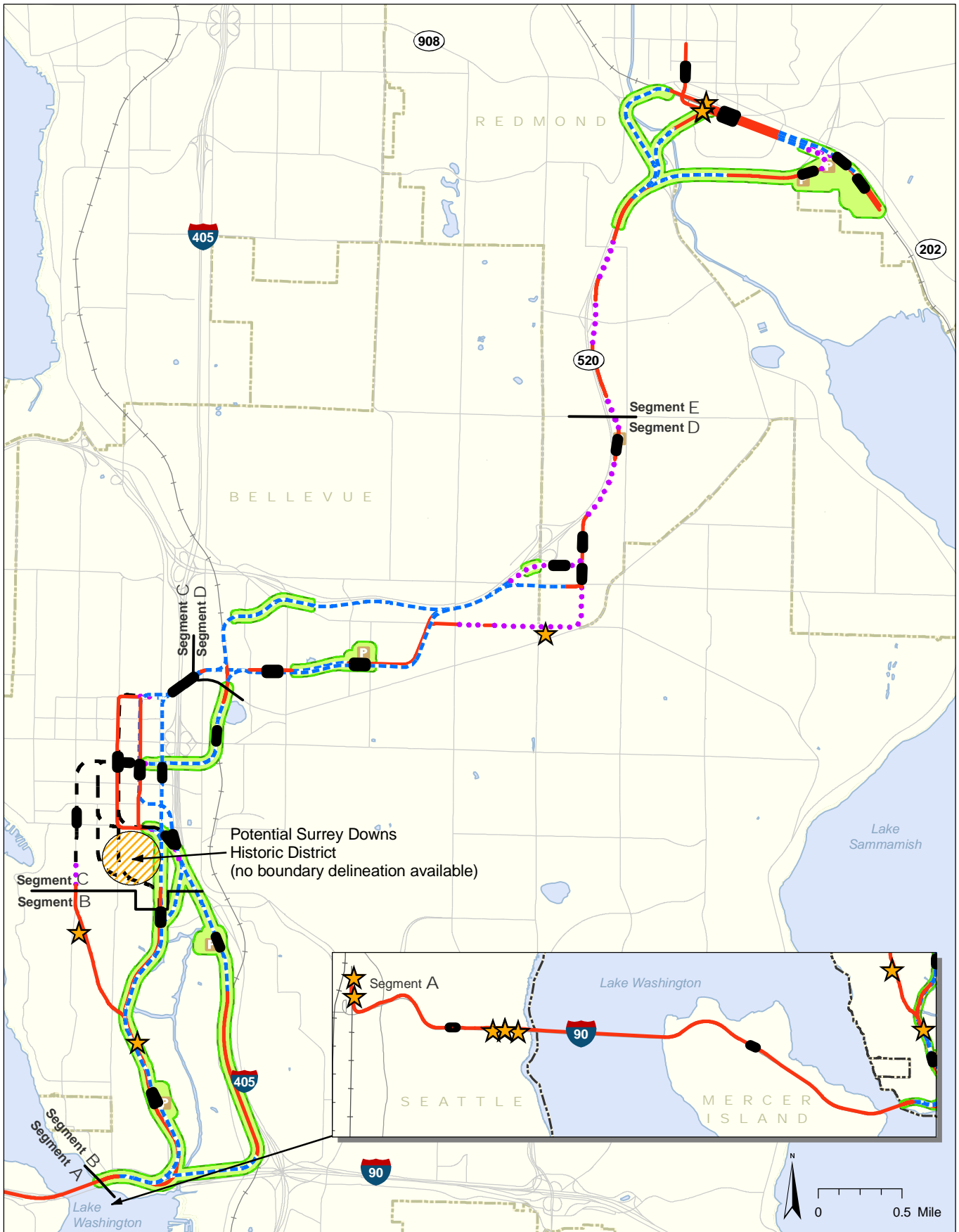
4.16.2.2 Traditional Cultural Properties

FTA and Sound Transit are conducting government-to-government consultation with the Muckleshoot Indian Tribe, Snoqualmie Indian Tribe, Suquamish Tribe, Duwamish Tribe, Tulalip Tribes of Washington, and Yakama Nation, initially providing project information by mail. Meetings have been held with Snoqualmie and Muckleshoot tribal representatives to discuss the project and its potential effects on archaeological sites and traditional cultural properties (TCPs). Consultation with the tribes has revealed no traditional cultural properties in the project vicinity.

4.16.2.3 Historic Buildings and Structures

An historical records search was performed that identified several properties listed in the National Register, the Washington Heritage Register (WHR), or local registers. The *Historic and Archaeological Resources Technical Report* (Appendix H4) lists the properties inventoried and shows the properties determined to meet the National Register and local ordinance criteria by 2016, the earliest foreseeable project construction completion date. A field survey by project historians and preparation of inventory forms took place primarily from February through June and during September through October 2007. The field survey inventoried 377 buildings and structures (including one potential historic district) in the APE, with 11 either listed in the National Register (and thus automatically listed in the WHR) or recommended to be eligible.

The SHPO reviews NRHP recommendations for concurrence, and the local jurisdictions review local landmark register recommendations. Letters from the



Source: Data from University of Washington (2006), Historical Research Associates (2007), Sound Transit (2004), King County (2006), and City of Redmond (2005).

- ★ NHRP Listed/Eligible Site
- Sensitivity Zone
- At-Grade Route
- - - Elevated Route
- ⋯ Retained-Cut Route
- - - Tunnel Route
- Proposed Station
- P New and/or Expanded Park-and-Ride Lot

Exhibit 4.16-1
Cultural Resources
Segments A, B, C, D, and E
 East Link Project

SHPO and local jurisdictions concurring on the eligibility of the historic properties can be found in Appendix H4 (*Historic and Archaeological Resources Technical Report*). Table 4.16-1 summarizes the NRHP- or local-listed or eligible properties identified in the APE, and the following subsections discuss these properties.

Segment A

The five historic structures and buildings in Segment A are on the NRHP and have already been recorded at the Washington DAHP. They consist of the Publix Hotel, located within the Seattle Chinatown National Register Historic District and the International Special Review Historic District, the Immigrant Station and Assay Office Building (INS Building), the 12th Avenue South Bridge, the Will H. Thompson House, and the Mount Baker Ridge Tunnels and Eastern Portals.

The architecture of the INS Building features Neo-classical and Mediterranean elements, as shown in Exhibit 4.16-2. The building is important for its role in history, particularly that of Asian immigration. The Mount Baker Tunnels’ architects designed an

impressive gateway to the City of Seattle by combining Art Deco elements and stylized Native American motifs, as shown in Exhibit 4.16-3. Although the tunnels were an engineering feat, the National Register listing focuses on their striking ornamentation. In addition, City of Seattle has determined that the Endresen Residence at 1402 32nd Avenue and the Romaine Electric building at 1101 Airport Way may be eligible for City Landmark status.

Segment B

The Frederick Winters House was listed in the NRHP in 1992 based on its Spanish Eclectic architecture, as shown in Exhibit 4.16-4, and its association with developments in the bulb-growing and floriculture industry in King County and Washington State. The Pilgrim Lutheran Church (Exhibit 4.16-5), completed in 1965, is an outstanding example of Neo-Expressionist architectural style. The firm that designed the building, Grant Copeland, Chervenak and Associates, won awards for several of their local projects.

TABLE 4.16-1
List of Historic Properties

	Field Inventory Number	Property Name/ Type	Address	Register Status
Segment A, Interstate 90	376	Publix Hotel (Seattle Chinatown NRHP/ International Special Review Historic District)	504 Fifth Avenue South	Contributing element to NRHP and Seattle Special Review historic districts
	132	Immigrant Station and Assay Office	815 Airport Way South	NRHP, WHR, eSL
	303	Jose Rizal 12th Avenue South Bridge (12th Avenue South Bridge)	12th Avenue South crossing of South Dearborn Street	NRHP, WHR, eSL
	166	Will H. Thompson House	3119 South Day Street	NRHP, WHR, SL
	304	Mount Baker Ridge Tunnel and Eastern Portals	East end of I-90 tunnel	NRHP, WHR, SL
	156	Endresen Residence	1402 32nd Avenue S	eSL
	133	Romaine Electric	1101 Airport Way S	eSL
Segment B, South Bellevue	16	Frederick Winters House	2102 Bellevue Way SE	NRHP, WHR
	63	Pilgrim Lutheran Church	10420 SE 11th Street	eNRHP, eWHR
Segment C, Downtown Bellevue	Various (see Exhibit 4.16-6 under Segment C discussion)	Surrey Downs Potential historic district	Between 108th and 112th avenues SE, south of Main Street	eNRHP
Segment D, Bel-Red/Overlake	104	Former Bellevue Fire Station	14822 NE Bel-Red Road	eNRHP, eWHR
Segment E, Downtown Redmond	112	Justice William White House	Leary Way NE and NE 76th Street	eNRHP, eWHR, RHL
	114	Bill Brown Saloon Building	7824 Leary Way NE	eNRHP, eWHR, RHL
	118	Dudley Carter/Haida House	Sammamish Slough Park	RHL

NRHP = National Register of Historic Places
 WHR = Washington Heritage Register
 SL = Seattle Landmark
 RHL = Redmond Historic Landmark
 e = Determined or recommended eligible

Segment C

A portion of the Surrey Downs Residential Subdivision is potentially eligible for the NRHP as a historic district (see Exhibit 4.16-6). A district is a concentration of buildings or other properties that may or may not be individually eligible for the National Register, but are linked by one or more features that define their character. To be considered eligible as part of the potential Surrey Downs historic district, the houses needed to be a consistent architectural style and not have been outwardly modified since their construction. The district is unique because the subdivision featured home designs that are of the post-World-War II called "Northwest Modern" Style of design, which were created by Mithun & Nesland, a Seattle architectural firm. The Washington State Department of Archaeology and Historic Preservation (DAHP) determined 35 houses would be contributing elements to the potential historic district within the project APE. The historians did not establish boundaries for the district because it extends beyond the project APE.

The house in Exhibit 4.16-7 is representative of the Northwest Modern style of design (15 houses in the potential historic district), which included one-story houses with carports and two-story houses with garages located beneath the living space. Other contributing houses include split-level (10 houses) and ranch (8 houses) styles. Exhibit 4.16-6 illustrates the location of each of the contributing homes within the APE and the properties are listed in Appendix H4 (*Historical and Archaeological Resources Technical Report*).

Segment D

One potentially NRHP-eligible structure was identified in Segment D. The Former Bellevue Fire Station on Bel-Red Road, constructed in 1960, is a good example of Populuxe architecture, a style reminiscent of 1950s aerodynamic design.



EXHIBIT 4.16-2
United States Immigration Station and Assay Office Building



EXHIBIT 4.16-3
Mount Baker Ridge Tunnel



EXHIBIT 4.16-4
Frederick Winters House



EXHIBIT 4.16-5
Pilgrim Lutheran Church

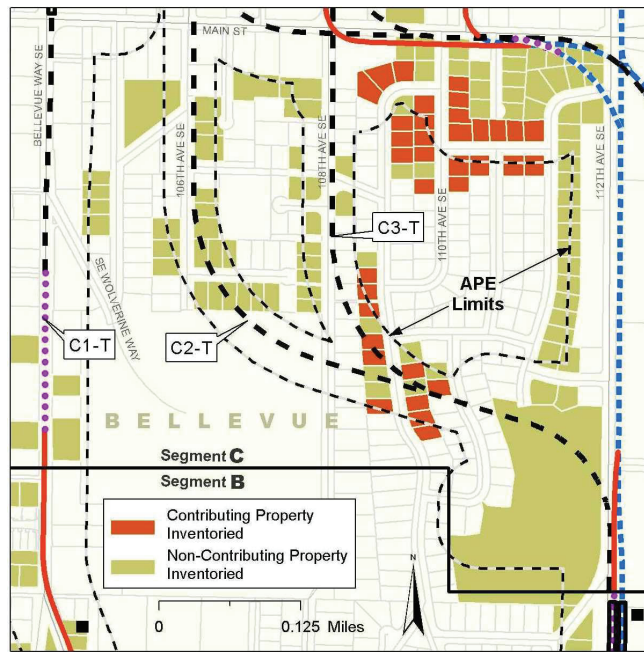


EXHIBIT 4.16-6
Contributing Properties for the Potential Surrey Downs Historic District



EXHIBIT 4.16-7
West side of 109th Avenue SE Showing Representative Mithun & Nesland
Designs in the Potential Surrey Downs Historic District

Segment E

The Justice William White House (see Exhibit 4.16-8) and the Bill Brown Saloon Building are designated as Redmond Heritage Landmarks (see Exhibit 4.16-9) and also recommended as eligible for listing in the NRHP (and therefore also for the WHR).

The Justice William White House is important because its owners, William and Emma McRedmond White, both played important roles in the history of Redmond and western Washington. They set aside a part of the house, which was built in 1900, as a hotel because it was conveniently located close to the railroad line and the passenger depot, giving guests easy access.

The Bill Brown Saloon Building is important because of its association with the man who was mayor of Redmond from 1919 to 1948. Beginning about 1915, the building's second floor served as an unofficial Redmond City Hall (Hardy, 2001).

The Dudley Carter/Haida House is a City of Redmond Heritage Landmark, and the City considers it to be eligible for listing in the National Register. It was constructed by nationally known, Canadian-born artist Dudley Carter following methods of the Haida First Nation. Review conducted by the SHPO, however, determined that because the building is less than 50 years old and not of exceptional significance, it does not qualify for the National Register.

- Demolition or alteration of the property
- Alteration of the property's setting
- Introduction of visual, audible, or atmospheric elements that are out of character with the setting of the historic property
- Physical encroachment upon an archaeological site.

4.16.3.2 No Build Alternative

The No Build Alternative would not affect any historic properties.



EXHIBIT 4.16-8
Justice William White House in Redmond

4.16.3 Environmental Impacts

4.16.3.1 Impact Evaluation Methods

The Advisory Council on Historic Preservation's regulations implementing NHPA Section 106 create a process by which federally assisted projects are reviewed for their effects on properties listed in, or eligible for listing in, the NRHP.

After the resource is identified and evaluated, the next step is applying the Criteria of Adverse Effect. These criteria are used to determine whether the undertaking could in any way change the characteristics that qualify the property for NRHP inclusion. If the undertaking could diminish the integrity of such characteristics, then it is considered to have an adverse impact. Adverse effects include, but are not limited to, the following:



EXHIBIT 4.16-9
Bill Brown Saloon Building

4.16.3.3 Impacts During Operation

Although some potentially archaeological sensitive areas are identified, studies to date have identified no prehistoric or historic-period archaeological sites in the project APE. If one or more archaeological sites were identified in future studies, treatment would be completed before project operation, resulting in no impacts during operation. In addition, there are no identified TCPs and, therefore, no effects on them.

The following subsections discuss the potential effects of project operation and construction on historic buildings and structures.

Segment A

Operation of the light rail system on the I-90 Alternative (A1) is not anticipated to affect the seven historic properties identified in Table 4.16-1 because of the position of A1 in the center of I-90.

Segment B

Sound Transit situated the Bellevue Way (B1), 112th SE At-Grade (B2A), and 112th SE Bypass (B3) alternatives to avoid adverse effects on the Frederick Winters House for the operation of the project. While these alternatives encroach on the larger parcel wherein the Winters House is located, no impact within the delineated historic boundary of the house would occur. Bellevue Way Alternative (B1) and 112th SE At-Grade Alternative (B2A) are located at-grade in the center of the roadway and therefore no visual, noise, or vibration impacts are anticipated. The 112th SE Elevated (B2E) alternative is elevated to the far side of Bellevue Way, away from the Frederick Winters House and placed up against the adjacent ridge, also avoiding adverse effects on the property. For all alternatives, expansion of Bellevue Way was limited to the existing right-of-way line at the Frederick Winters House so that there would be no adverse effect on this historic property.

Operation of Alternative B1 of the at-grade project in the center of South Bellevue Way is not anticipated to adversely affect the Pilgrim Lutheran Church, which is located just west of the street, although South Bellevue Way would be realigned up to 10 feet into the property for a distance of roughly 250 feet. The location already experiences the visual and noise effects of heavy street traffic and no additional impacts are expected to occur from operation of the project. Access from SE 11th Street to the church would not be disrupted. In addition, an underground stormwater detention vault would be constructed at the northeast corner of the property in the parking area, but operation of this facility would not adversely affect the Pilgrim Lutheran Church. Vibration effects would not be expected to reach the church.

The BNSF Alternative (B7) has no historic properties in the APE.

Segment C

Bellevue Way Tunnel Alternative (C1T). This alternative has no historic properties in the APE.

106th NE Tunnel Alternative (C2T), 108th NE Tunnel Alternative (C3T), Couplet Alternative (C4A), 112th NE Elevated Alternative (C7E), and 110th NE Elevated Alternative (C8E). Operation of alternatives C2T and C3T would have no visual effects on properties that contribute to the potential Surrey Downs historic district within the APE. Vibration and noise effects also are not anticipated during operation.

Operation of C4A along 112th Avenue SE would avoid adverse effects on properties that contribute to the potential Surrey Downs historic district. Almost all of the contributing properties would be screened by existing vegetation, fences, and other houses. Also, the elevated 112th and 110th alternatives (C7E and C8E, respectively) are not anticipated to affect properties that contribute to the potential Surrey Downs historic district within the APE because the alternatives are distant enough (at least 200 feet) to avoid visual, noise, and vibration effects.

Segment D

NE 16th At-Grade Alternative (D2A), NE 16th Elevated Alternative (D2E), and SR 520 Alternative (D5). These alternatives have no historic properties within the APE.

NE 20th Alternative (D3). Operation of this alternative in a retained cut near the former Bellevue Fire Station would not result in acquisition of the property or visual, noise, vibration, or other effects on the property. Although the building's parcel is situated inside the APE, the building itself is outside the APE.

Segment E

Redmond Way Alternative (E1) and Marymoor Alternative (E2). These alternatives result in no impacts on historic properties. The closest historic property, Bill Brown Saloon Building, lies at the northern edge of the APE, sufficiently distant that it would not be affected by either alternative.

Leary Way Alternative (E4). This alternative would pass close enough to the Justice White House to cause an adverse effect on the historic context or potentially damaging the building. Sound Transit has consulted with the City of Redmond and SHPO about moving the building to a nearby location that preserves its setting, feeling, and association with the BNSF Railway, thus avoiding an adverse impact from project operation. FTA and Sound Transit would consult with

the City, SHPO, and other interested parties to determine a suitable relocation site and draft a Memorandum of Agreement (MOA) on how to avoid adverse effects on the building during transport and reestablishment.

4.16.3.4 Impacts During Construction

It is unlikely that project alternatives would affect important NRHP-eligible archaeological sites because many portions of the project are located within areas not considered sensitive for the occurrence of archaeological sites or are located in high-sensitivity areas that have experienced previous disturbance. The archaeological investigation encountered no archaeological sites, including historically recorded site 45KI8. Past disturbance and fill could cover site 45KI8 or could have destroyed or damaged it. Although much of the APE has seen ground disturbance, fill, and development, it is possible that one or more archaeological sites may still exist beneath the ground surface in areas where project excavation would take place. The Segment B and Segment E alternatives have a greater likelihood of containing archaeological sites than the other segments because they are near water bodies that contain resources sought by prehistoric and historic people and therefore the water's edge may likely contain archaeological artifacts. The 112th SE At-Grade (B2A), 112th SE Elevated (B2E), 112th SE Bypass (B3), and BNSF (B7) alternatives are near Mercer Slough and its adjacent terraces, while alternatives the Redmond Way (E1), Marymoor (E2), and Leary Way (E4) alternatives are near the Sammamish River valley and its adjacent terraces.

Construction impacts on historic buildings and structures can include temporary loss of access, along with visual effects, noise, vibration, and the dust and debris of construction activities. Sound Transit implements avoidance measures to minimize these effects; however, some dust and noise is inevitable. These effects are temporary and would not adversely affect the properties in Segments B, D, or E. Construction impacts in Segment C mostly involve connectors to Segment B alternatives in the vicinity of the potential Surrey Downs historic district. These issues are outlined below.

The 106th NE Tunnel (C2T) and 108th NE Tunnel (C3T) alternatives involve connectors B2A to C2T and C3T that would bore a tunnel beneath the potential Surrey Downs historic district from a staging area in Surrey Downs Park. Construction activities and noise may be noticeable to residents nearest the staging area but would not affect the buildings. The geotechnical analysis shows that the soils in this area are generally

resistant to settlement from tunneling and no damage to buildings is expected. If any building damage did occur it would be repaired. However, engineering and construction methods and a monitoring program would be used to address the potential for settlement as described in Section 4.11 Geology and Soils. The connectors from B2E to C3T and B3 and B7 to both C2T and C3T would bore a tunnel and have staging areas along the south side of Main Street, just north of the potential historic district, also avoiding impacts to the buildings in the potential district.

The connector from B2E to C2T would involve cut-and-cover construction and staging along Main Street adjacent to the potential Surrey Downs historic district. This method would alter access at times during construction, and would produce visual, noise, and vibration effects. The effects would be temporary and not affect historic structures. Soil settlement precautions would also apply to cut-and-cover construction.

For connectors from B2A and B2E to the Couplet Alternative (C4A), construction staging areas would remove properties just north of (but not affecting) properties that form part of the potential Surrey Downs historic district. For connectors from B3 and B7 to the C4A alternative construction staging would involve a smaller area but would still back onto portions of the potential Surrey Downs historic district. There would be no effect on the potential Surrey Downs historic district for connectors from B3 and B7 to the 110th Elevated (C7E) and 112th Elevated (C8E) alternatives.

None of the connectors to Segment C alternatives or construction staging areas would involve removal of properties that contribute to the potential historic district, and the removal of the other buildings would not damage the potential district's setting, feeling, and association. Access to properties in the potential Surrey Downs historic district would be limited at times during construction, and would produce visual, noise, and possibly vibration effects. The effects would be temporary and would not affect historic structures.

4.16.3.5 Maintenance Facilities

None of the maintenance facilities have historic properties located in their APE; therefore, no historic properties would be affected by operation or construction of these facilities.

4.16.4 Potential Mitigation Measures

4.16.4.1 Archaeological Sites

The archaeological investigation encountered no archaeological sites, including historically recorded

site 45KI8. Although much of the APE has seen ground disturbance, fill, and development, it is possible that one or more archaeological sites may exist beneath the ground surface in areas where project excavation would take place. Sound Transit would either conduct subsurface testing before construction and/or monitor ground-disturbing activities in archaeologically sensitive areas during construction. An archaeological resources monitoring and treatment plan would be prepared to provide additional information that would guide archaeological monitoring during East Link construction. FTA and Sound Transit would consult with SHPO, the Muckleshoot and Snoqualmie tribes, and other interested parties as appropriate, to review the plan. If prehistoric or historic-period archaeological sites are encountered, FTA and Sound Transit would consult with SHPO, interested Indian tribes, and other interested parties as appropriate about eligibility for listing in the NRHP, project impacts, necessary mitigation and/or other treatment measures.

4.16.4.2 Historic Buildings and Structures

If Sound Transit selects the Leary Way Alternative (E4), the agency would move the Justice William White House to avoid adverse impacts on it. FTA and Sound Transit would consult with SHPO, the City of Redmond, and other interested parties to develop a MOA during preparation of the Final EIS to determine a suitable relocation site that preserves its setting, feeling, and association with the railroad, as well as measures to avoid adverse physical impacts to the building during transport and reestablishment. The house would receive documentation to Historic American Building Survey standards before it was moved.