Chapter 3 Determination and Findings

This chapter summarizes important conclusions that the Federal Highway Administration (FHWA) has made on regulatory requirements pertaining to the proposed project. For each subject, a brief summary is provided to explain how FHWA has reached these conclusions. Natural features that do not occur in the project area and therefore are not discussed in this chapter include floodplains, farmlands, and wetlands.

1 What is the National Environmental Policy Act Finding?

FHWA served as the lead agency for the project under the National Environmental Policy Act (NEPA). As the co-lead agency, Washington State Department of Transportation (WSDOT) prepared an EA in compliance with NEPA, 42 United States Code (USC) Section 4321 et seq.; and FHWA regulations, 23 Code of Federal Regulations (CFR) Part 771. The EA discussed the potential impacts of the project so that FHWA can determine whether significant adverse impacts are probable. If such a determination were made, an EIS would need to be prepared.

WSDOT has incorporated environmental considerations into its study of the project and has conducted evaluations of the project’s potential environmental effects. FHWA and WSDOT reviewed the EA prior to issuing the document in June 2008. The EA found that the project’s construction and operation will not cause any significant adverse environmental effects that
will not be mitigated. This finding applies to all applicable environmental elements.

After carefully considering the EA, its supporting documents, and the public comments and responses, FHWA finds under 23 CFR 771.121 that the proposed project, with the mitigation to which WSDOT has committed, will not have any significant adverse effect on the environment. The record provides sufficient evidence and analysis for determination that an EIS is not required.

**Air Quality Conformity Statement**
The study area for the project includes maintenance areas for carbon monoxide (CO) and particulate matter less than 10 micrometers in size (PM$_{10}$). Projects located in maintenance areas must comply with the project-level and regional conformity criteria described in the U.S. Environmental Protection Agency (EPA) Conformity Rule (40 CFR 93) and with Washington Administrative Code (WAC) Chapter 173-420. Because this project will not cause or increase any exceedance of the National Ambient Air Quality Standards (NAAQS), it meets project-level conformity requirements per 40 CFR 93.123.

The project is not yet included in the Metropolitan Transportation Plan (MTP) or the Transportation Improvement Program (TIP). The project must be included in the MTP and TIP to show that it conforms to the Puget Sound region’s Air Quality Maintenance Plans and will not cause or contribute to exceedances of the NAAQS at the regional level. Once it is included in the MTP and TIP, the project will meet all requirements of 40 CFR 93 and WAC 173-420 and will demonstrate regional conformity.

**Surface Water and Water Quality Finding**
The project will manage stormwater generated from the project in one of two ways: (1) by treating it prior to discharge using water quality Best Management Practices (BMPs) for basic treatment, as defined in the 2006 WSDOT *Highway Runoff Manual*, or (2) by detaining it with detention BMPs, as defined and required in the 2000 Seattle Stormwater, Grading and
Drainage Control Code (Seattle Municipal Code Chapter 22.800). Although the final water quality BMPs have not been designed, the types of water quality BMPs being considered for these areas include wet vaults, storm filters, or other BMPs that meet basic treatment standards. The pollutant loading to receiving waters in the project area will be substantially reduced relative to the existing conditions (No Build). The project will reduce pollutant loading and improve the quality of runoff from the project area that will be discharged to surface water. Based on the pollutant loading analysis, the project will reduce total suspended solids, zinc, and copper loading to Elliott Bay and the Duwamish River.

**Endangered Species Act Finding**

WSDOT served as lead on behalf of FHWA for the Endangered Species Act (ESA) Section 7 consultation pursuant to 50 CFR 402.07. The National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), the agencies responsible for administering ESA, were contacted early in the project.

**Species Determination**

Section 7 concurrence from NMFS and USFWS was received on June 13, 2008. The determination reached is that the project “may affect, [but is] not likely to adversely affect” the following species:

- Southern resident killer whale (*Orcinus orca*, endangered)
- Steller sea lion (*Eumetopias jubatus*, threatened)
- Chinook salmon (*Oncorhynchus tshawytscha*, threatened)
- Steelhead (*Oncorhynchus mykiss*, threatened)
- Bull trout (*Salvelinus confluentus*, threatened)

WSDOT had also requested concurrence with the determination of “may affect, not likely to adversely affect” for marbled murrelets (*Brachyramphus marmoratus*). With regard to this species, NMFS and USFWS stated that the “marbled murrelets are not expected to use the project area of Elliott Bay or the mouth of the Duwamish River,” so the effects of the project on this species would be “discountable.”
Critical Habitat Determination
Designated critical habitat for Chinook salmon and the southern resident killer whale occurs within the action area. The lower Duwamish River and the Seattle waterfront are considered a migration corridor and rearing area for juvenile Chinook salmon. Killer whales are occasionally seen near the action area, such as near Alki Point and West Point. NMFS and USFWS determined that the project “may affect, [but is] not likely to adversely affect” critical habitat for these species.

Magnuson-Stevens Fishery Conservation and Management Finding
The conservation measures that FHWA included as part of the proposed action to address ESA concerns are also adequate to avoid, minimize, or otherwise offset potential adverse effects to the essential fish habitat of the relevant fish species occurring in Puget Sound. Therefore, conservation recommendations pursuant to Magnuson-Stevens Fishery Conservation and Management Act Section 305(b)(4)(A) are not necessary.

Section 106 Finding
The project will demolish the southern portion of the Alaskan Way Viaduct, which has been determined to be eligible for listing in the National Register of Historic Places. The existing on- and off-ramps at First Avenue S. near Railroad Way S. will remain, with the same effects and benefits as they have today.

A Memorandum of Agreement (see Attachment 6) has been developed to ensure that adverse effects to historic resources, as defined by Section 106 of the National Historic Preservation Act, are avoided, minimized, or mitigated. The viaduct has been documented with photos and a narrative history that describes its role in Seattle’s history, in accordance with Level 2 Historic American Engineering Record (HAER) standards.

Soil excavation, pile driving, and soil improvement activities may affect unknown, important pre-contact and historic-era archaeological deposits potentially located on the former tideflats of Elliott Bay and in historic-era fill layers. There is a moderate to high probability that construction could affect
historic-era archaeological resources associated with industrial, commercial, and residential development of the Elliott Bay tideflats from the 1890s through early twentieth-century development. Because the project could have an adverse effect on significant, eligible sites, mitigation measures have been developed and are described in a Memorandum of Agreement among WSDOT, FHWA, the Washington State Department of Archaeology and Historic Preservation (DAHP), interested and affected tribes, and the City of Seattle.

The single indirect adverse effect from construction activities on a historic resource would be to the Bemis Building, whose tenants would experience noise and dust during construction, with interruptions or modifications to building access at times during the construction period. Construction will prevent use of their primary loading dock during some periods. Because preventing use of the loading dock could potentially affect the economic viability of the building, it is considered an adverse effect. This effect is mitigated by improvements to an alternative loading dock facing the south parking lot, which will allow business operations to continue. Construction would also reduce on-street short-term parking near the Bemis Building.

Based on the historic and cultural resources analysis, coordination with interested and affected tribes and DAHP, and through the implementation of the Memorandum of Agreement, FHWA finds that the project will have no adverse impact on any identified cultural or historic resources.

Section 4(f) Finding
The only historic resource determined to be protected under the provisions of Section 4(f) of the Department of Transportation Act and subject to use by the proposed project is the existing Alaskan Way Viaduct, which will be demolished within the project area. No other resources, such as publicly owned parks, historic or archaeological resources, or waterfowl or wildlife refuges, will be subject to use by the proposed project. Given the existing viaduct’s inherent structural limitations and high risk of failure during a seismic event, there are no reasonable
and prudent avoidance or design alternatives that would avoid its replacement or complete reconstruction. To mitigate for removal of the viaduct, documentation was completed on the viaduct structure in accordance with Level 2 HAER standards.

Based upon the above considerations, there is no feasible and prudent alternative to the use of the Section 4(f) resource, and the project includes all possible planning to minimize harm to the Section 4(f) resource resulting from such use. Please see the final Section 4(f) evaluation, which follows Chapter 3 of this FONSI.

**Environmental Justice Finding**

Less than 800 people reside in the project area. The population is slightly more racially diverse than the rest of Seattle, though few households have limited English proficiency. Most residents are adults, and almost half live alone. Household income in this area is substantially below the city’s median, and almost half of the population lives at or below the poverty level. Annual surveys also document a substantial homeless population in the downtown Seattle area. One social service provider, St. Martin de Porres Shelter, is located in the project area. Several other social service providers operate shelters and support outlets near the project area.

Project effects include permanent loss of long-term parking used for car camping by homeless persons. Other long-term parking is available throughout the Duwamish industrial area. Efforts will be made to inform social service providers and people who live out of vehicles of proposed changes to parking. Once construction is completed, most effects to low-income and minority populations are likely to be short-term as people and service providers adjust to the changes in the transportation infrastructure. To help with this transition, WSDOT will conduct community outreach and communication activities prior to the opening of the new facilities to educate and prepare people for changes in their community. During construction, WSDOT will secure construction areas to protect homeless persons seeking shelter and work with local service providers.
providers to circulate information on detours and current construction activities.

FHWA finds that with this mitigation, construction and operation of the proposed project will not have disproportionately high or adverse effects on the minority or low-income populations.

Noise Finding
Noise levels in the project area are typical of urban and major downtown metropolitan areas. Typical urban and city noise levels range from 65 to 80 A-weighted decibels (dBA). Without the project, the peak traffic noise levels in 2030 are expected to increase by 1 to 2 dBA. With the project, noise levels are expected to remain the same or decrease by 1 to 2 dBA. These minor changes in noise levels would barely be perceptible to most people. Traffic noise in the area is primarily generated by the high traffic volumes on surface streets. Because the high traffic volumes will generate noise regardless of any project effects, mitigation is not feasible.