

Local Agency Environmental Classification Summary

ederal Aid Project Num STPU10099(062)	Boute 99	Part 1 Proje	Created 1/13/2007	Intent of Submi	ital 🔀 Final 🔲 Re-Evaluate
Agency City of ShoreFine			Federal Prop	ram Title	er
Project Title Aurora Corridor Imp	rovement Project: N	65th Street - N	205th Stree	st	
Begin MP 41.48	End MP 43.48	Miles	2.00	Townships 26N	
VD	KB	-	111	Ranges 4E	
N ²		_ KM		Sections 6 & 7	
County King	Water P 8	lesource inventor Lake Was	ry Area (WRi hington/Ce	A) No. & Name dan/Sammamish	Within Puget Sound Basin? S Yes No
project description, and	Attachment B for the P Part	2 Environme	Statement pe	sification	eet.
	NEPA		TT Call	5 	SEPA
Class I - Environmental Impact Statement (EIS)			Categorically exempt per WAC 197-11-600		
Cas Class II - Categorical	iý Excludeu (CE)		Deter	mination of Non-Signi	ficance (DNS)
CE Type (from 23 CFH	771.117)	-	-		na ann an Ann Ann Ann
Class III - Environmental Assessment (EA)		Envin	Environmental Impact Statement (EIS) Adoption Addendum		
		H			
Programmatic CE MC	DU			Supplemental	
Local Agency App Local Agency App All Multiple Regional Local Pro- Highways and Local Sum	ogramic Engineer / Assis	NEPA Appro	val Signal	tures <u>R 14</u> Date <u>14</u> Date <u>12</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u> <u>14</u>	07 107 107
Federal Highway	Administration	1.27		Date	
Completed By (Print C	official's Name)	Tele	phone (includ	le area code)	Fax (include area code)

Part 3 Permits a	nd Approvals Required			
Yes No Permit or Approval	Yes No Permit or Approval			
 Corps of Engineers Sec. 10 Sec. 404 Nationwide Type Individual Permit No. Coast Guard Permit Coastal Zone Management Certification Critical Area Ordinance (CAO) Permit ESA and EFH Compliance (See Part 5) Flood Plain Development Permit Forest Practice Act Permit Hydraulic Project Approval Local Building or Site Development Permit Local Clearing and Grading Permit Natl. Historic Preservation Act - Section 106 National Pollutant Discharge Elimination System (NPDES) Baseline General for Construction 	 Shoreline Permit State Waste Discharge Permit Section 4(f)/6(f): Wildlife Refuges, Recreation Areas, Historic Properties TESC Plans Completed Water Rights Permit Water Quality Certification - Sec. 401 Issued by Tribal Permit(s), (If any) Other Permits, including GMA (List): 			
Part 4 Environme	ntal Considerations			
Will the project involve work in or affect an	y of the following? Identify proposed mitigation.			
1. Air Quality - Identify any anticipated air quality issues. Is the project included in the Metropolitan Transportation Plan? Yes No If Yes, date Metropolitan Transportation Plan was adopted. 5/22/06 Is the project located in an Air Quality Non-Attainment Area or Maintenance Area (for carbon monoxide, ozone, or PM10)? Yes No Is the project exempt from Air Quality conformity requirements? Yes No (If Yes, identify exemption below.) A project-level CO hot-spot analysis and Mobile Source Air Toxics (MSAT) analysis were conducted. In all cases, the modeled CO concentrations were less than NAAQS limits, and MSAT emissions were projected to decrease over time. See section 1 (Air Quality) of Attachment C (Environmental Summary Report) for more detailed information.				
 2. Critical/Sensitive Areas - Identify any known Critical or Sensitive Areas as designated by local Growth Management Act ordinances. a. Aquifer Recharge Area, Wellhead Protection Area, or Sole Source Aquifer. If located within a sole source aquifer, is project exempt from EPA approval? D Yes X No No aquifer recharge zones are mapped within the project area. b. Geologically Hazardous Area 				
 c. Habitat. List known fish and wildlife species present and describe general habitat. c. Habitat. List known fish and wildlife species present and describe general habitat. The project is located in a commercial area of the City of Shoreline, and no streams or wildlife habitat are found along the project corridor. Echo Lake, located 300 feet from the project, drains to Lake Ballinger and McAleer Creek, which contain ESA-listed Chinook and coho salmon, as well as cutthroat trout. See Attachment D (No Effect Letter) for more detailed information. 				
d. Are wetlands present within the project area? Y Site investigation by field biologist revealed no evide (Wetlands) of Attachment C (Environmental Summar	es No If Yes, estimated area of impact in acre(s): nce of wetland hydrology in the project area. See section 3 ry Report) for more detailed information.			

	Part 4 Environmental Considerations - Continued
3.	Cultural Resources/Historic Structures - Identify any historic, archaeological, or cultural resources present with the project's area of potential effects.
	Does the project fit into any of the exempt types of projects listed in Sect. 24.82(a) of the LAG Manual? Yes X No If Yes, note exemption below.
4.	If No: Date of DAHP consultation 10/20/06 Date of Tribal consultation(s) (if applicable) 10/5/06 Adverse affects on cultural/historic resources? ☐ Yes ⊠ No If Yes, date of approved Section 106 MOA No significant unavoidable adverse impacts are anticipated. See section 4 (Cultural Resources) of Attachment C (Environmental Summary Report) for more detailed information. Flood Plains or Ways Is the project located in a 100-year flood plain? ☐ Yes ⊠ No If yes, is the project located in a 100-year flood way? ☐ Yes ☐ No
	Will the project impact a 100-year flood plain? The project corridor is located in Zone X on FIRM 53033C0040F.
5.	 Hazardous and Problem Waste - Identify potential sources and type. Is the project likely to involve site clean-up? Yes No Several potentially contaminated sites were identified within the project area, and Phase II Environmental Site Assessments are recommended to assess the extent of soil and groundwater contamination. See section 5 (Hazardous Materials) of Attachment C (Environmental Summary Report) for more detailed information.
	Will the project create any hazardous waste? Yes X No (If Yes, describe waste handling and disposal.) Any buildings demolished as part of the project will be surveyed for asbestos and lead-based paint by the City, and abatement will be conducted according to federal and state regulations prior to demolition.
6.	Noise - Identify potential sensitive receptors or previous mitigation commitments. Briefly describe your impacts to the sensitive receptor, if present.
	Potential sensitive receptors were identified within 500 feet of the project and consist of houses, apartments/condominiums, and commercial establishments with outdoor seating. 5 receptor sites are projected to exceed NAC limits, but the none of the locations meet WSDOT's "reasonable and feasible" criteria for noise wall as migitation. See section 6 (Noise) of Attachment C (Environmental Summary Report) for more detailed information.
7.	Parks, Recreation Areas, Wildlife Refuges, Historic Properties, or Scenic Rivers/Byways, 4(f)/6(f) Lands - Identify any properties within the project limits and, if any are present, describe impacts to properties present. The project would not adversely impact any parks, recreation areas, wildlife refuges, or 4(f)/6(f) lands. No significant unavoidable adverse impacts are anticipated to historic properties. No Scenic Rivers/Byways are present within the
	project area. See Attachment E (4(1) memorandum) for more defailed morthation.

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-	Part 4 Environmental Considerations - Continued
8.	Resource Lands - Identify any of the following resource lands within 300 feet of the project limits and those otherwise impacted by the project. Describe any impacts to any resource lands identified.
	a. Agricultural Lands
	No agricultural land is located within 300 feet of the project corridor.
	If present, is resource considered to be prime and unique farmland? Yes No If Yes, date of approval from Natural Resources Conservation Service (NRCS) b. Forest/Timber No forest/timber land is located within 300 feet of the project corridor.
	c. Mineral No known mineral deposits are located within 300 feet of the project corridor
	-
9.	Rivers, Streams (Continuous, Intermittent), or Tidal Waters a. Identify all waterbodies within 300 feet of the project limits or that will otherwise be impacted. Fisheries WA Stream No. Ecology 303d Report No. List ID 12156 Reason for 303d listing Fecal coliform
	Date of Report <u>11/2/05</u> No natural stream channels occur within the project area. The nearest surface water body is Echo Lake, which is within 300 feet of the project area. Echo Lake is 303d listed as impaired due to fecal coliform bacteria. See section 7 (Surface Water) of Attachment C (Environmental Summary Report) for more detailed information.
	 b. Identify stream crossing structures by type. No stream crossing structures have been identified within the project area.
10.	Tribal Lands - Identify whether the project will impact any Tribal lands.
	No tribal lands are known to exist in the project corridor.
11.	Visual Quality Will the project impact roadside classification or visual aspects? \Box Yes X No (If Yes, identify the impacts.) Use of context-sensitive design in construction of the project will result in an improvement over the existing visual quality of the area; no adverse effects are anticipated from completion of the project. Temporary degradation of visual quality may result from construction activities. See section 8 (Visual Quality) of Attachment C (Environmental Summary Report) for more detailed information.

	Part 4 Environmental Considerations - Continued
12.	Water Quality/Storm Water
	Has NPDES municipal general permit been issued for this WRIA? Xes INO
	Amount of existing impervious surface within project limits: 5.8 acres
	Net new impervious surface to be created as a result of project: <u>none</u> Will this project's proposed stormwater treatment facility be consistent with the guidelines provided by either WSDOT's HRM, DOE's western or eastern Washington stormwater manuals, or a local agency equivalent manual? Xes INo
	If no, explain proposed water quality/quantity treatment for new and any existing impervious surface associated with proposed project.
	Project will result in a net decrease in impervious surface area. Stormwater facilities will be constructed as part of the Project, and will include both conventional and Low Impact Development elements. See section 7 (Water Quality) of Attachment C (Environmental Summary Report) for more detailed information on water quality/quantity treatment ifor this Project.
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13.	Previous Environmental Commitments
	Describe commitments. If commitments are a result of permit conditions, identify issuing agency, permit number and date, and how commitments will be met.
14.	Long-Term Maintenance Commitments Are long-term maintenance commitments necessary for this project? Yes No Identify.
	No new long-term maintenance commitments are necessary for this project. The City of Shoreline currently maintains Aurora Avenue N within the project area, and will continue to do so in the future.
15.	Environmental Justice
	Does the project meet any of the exemptions, as noted in Section 24.101? Yes X No (If Yes, Please note exemption and appropriate justification in the space below.)
	If no, are minority and/or low income communities located within the limits of the project's potential impacts?
	🔀 Yes 🔲 No 🛛 (If no, attach appropriate data to support finding.)
	If yes, describe impacts and attach appropriate supporting documentation.
	No adverse disproportional effects are identified for Environmental Justice populations. See section 9 (Environmental Justice) of Attachment C (Environmental Summary Report) for more detailed information.
DOT	Form 140-100 FF Page 5 of 7

Part 5 Bio	logical Assessment and EFH	Evaluations
 Are there any listed or proposed species a project's action area? Yes X No necessary.) 	nd/or designated or proposed critical ha (If no, attach species listings and no fu	abitat located within the proposed rther documentation or responses are
Are any of the following environmental per or local clearing and grading, shorelines, o	mits, as indicated in Part 2, required: F r permits related to critical or sensitive	HPA, 404 wetlands, areas ordinances?
	3. Will any construction work occur within 0.5 miles of any of the following:	 Does the project involve blasting, pile driving, concrete sawing, rock drilling, or rock scaling activities within 1 mile of any of the following?
Bald eagle nesting territories, winter concentration areas, or bald eagle communal roosts?	🗌 Yes 🛛 No 📄 Don't Know	🗌 Yes 🛛 No 📋 Don't Know
Spotted owl management circles or designated critical habitat?	🗋 Yes 🕱 No 📄 Don't Know	🗌 Yes 🛛 No 📄 Don't Know
Marbled murrelet nest or occupied stand, or designated critical habitat?	🗌 Yes 🕱 No 🔲 Don't Know	🗌 Yes 🛛 No 🔲 Don't Know
Western snowy plover designated critical habitat?	🗌 Yes 🕱 No 🔲 Don't Know	🗋 Yes 🕱 No 🔲 Don't Know
Federal threatened, endangered, proposed, or candidate plant species locations or documented habitat?	🗌 Yes 🕱 No 🔲 Don't Know	🗌 Yes 🛛 No 🔲 Don't Know
Canada lynx habitat?	🗌 Yes 🔀 No 🔲 Don't Know	🗌 Yes 🛛 No 📄 Don't Know
Gray wolf habitat?	🗌 Yes 🛛 No 🔲 Don't Know	🗌 Yes 🛛 No 📄 Don't Know
Grizzly bear habitat?	🗌 Yes 🔀 No 📋 Don't Know	🗌 Yes 🛛 No 🗌 Don't Know
Brown pelican night roosts?	🗌 Yes 🛛 No 🗌 Don't Know	🗌 Yes 🛛 No 🔲 Don't Know
Woodland caribou habitat?	🗌 Yes 🛛 No 🗋 Don't Know	🗌 Yes 🔀 No 📋 Don't Know
A mature coniferous or mixed fixed forest stand?	🗌 Yes 🛛 No 📄 Don't Know	🗋 Yes 🛛 No 🔲 Don't Know
5. Will any construction work occur within a or the Pacific Ocean?	300 feet of Puget Sound, Strait of Juan	de Fuca, 🗌 Yes 🛛 No
6. Will any construction work occur within waterbody, which supports or drains	300 feet of any permanent or intermitte into a listed fish supporting waterboo	ent 🛛 🗙 Yes 🗌 No 🔲 Don't Know dy?
7. Will any construction work occur within connected to any permanent or intermit	300 feet of any wetland, pond, or lake t tent waterbody?	that is 🛛 🗙 Yes 🛄 No 📋 Don't Know
8. Does the action have the potential to dia habitat for salmonids (including adjacer	rectly or indirectly impact designated cr t riparian zones)?	itical 🗌 Yes 🔀 No 🗍 Don't Know
9. Will this project's proposed stormwater guidelines provided by either WSDOT's stormwater manuals, or a local agency	treatment facility be consistent with the HRM, DOE's western or eastern Wash equivalent manual?	e 🛛 🗙 Yes 🗔 No nington
10. Will any construction waste materials (e construction-related chemicals, fill mate disposed of at a location other than a pe	.g., asphalt or concrete grindings or by rials, or excavated materials) from the ermitted disposal site?	products, 🔲 Yes 🔀 No 🗌 Don't Know project be
11. Will the project involve any in-water wor	k?	🗌 Yes 🛛 No 📄 Don't Know
12 Will the project effect the water regime supports or drains into a listed fish supp	of, or utilize any water from a waterbod orting waterbody; or any wetland, ponc	ly, which 🛛 Yes 🔀 No 🗍 Don't Know
13. Will construction work occur outside the	existing pavement? If Yes, go to 12a.	Yes 🔲 No
13a. Will construction activities occurring ou grading, filling, or modifications of vege	tside the existing pavement involve cleatation or tree cutting?	aring, 🛛 🗙 Yes 🗋 No

Determination			
If each of the questions in the preceding section so "dont't know", but adequate justification can be pro- this checklist cannot be used for Section 7 complia determination is anticipated), a separate biologica	resulted in a "no" respo ovided to support a "no ance (i.e., adequate ju l assessment docume	onse or if any of the que effect" determination, f stification cannot be pro nt is required.	estions were checked "yes" or hen check "No effect" below. If wided or a "may affect"
	NOAA Fisheries	USEWS	
No Effect			
NLTAA Date of Concurrence			
LTAA Date BO Issued			
Date of First 6 Mo. Update			
Essential Fish Habitat Determination:			
	0		
	e		
No Effect Letter pending.			
Ра	rt 6 FHWA Comm	nents	

Use Supplement Sheet if additional space is required to complete this section.

Attachments to Environmental Classification Summary

Aurora Corridor Improvement Project: N 165th Street – N 205th Street 🗖 City of Shoreline 🗖 November 2007

Attachments to Environmental Classification Summary Aurora Corridor Improvement Project: N 165th Street – N 205th Street

Prepared for:

City of Shoreline 17544 Midvale Avenue N. Shoreline, WA 98133 Contact: Kris Overleese, P.E. 206/546-0791

Prepared by:



11820 Northup Way, Suite E300 Bellevue, WA 98005 Contact: Jennifer Barnes 425/822-1077

November 2007

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Listing of Environmental Technical Reports

The City of Shoreline (City) proposes to improve a 2-mile long segment of State Route (SR) 99, named Aurora Avenue N within the City. This project, described in the following section, must be developed in compliance with the National Environmental Policy Act (NEPA). This document provides a summary of the environmental investigation completed for this project.

The following technical reports have been prepared to support environmental documentation for this project, in compliance with NEPA and the State Environmental Policy Act (SEPA).

- Air Quality Technical Memorandum. 2007. Prepared by Jones & Stokes for the City of Shoreline. June.
- Cultural Resources Report. 2007. Prepared by Cultural Resource Consultants, Inc. for the City of Shoreline. August.
- Environmental Justice Discipline Report. Prepared by Jones & Stokes for the City of Shoreline. October.
- Geology Technical Memorandum. 2007. Prepared by Jones & Stokes for the City of Shoreline. June.
- Hazardous Materials Discipline Report. 2007. Prepared by Jones & Stokes for the City of Shoreline. July.
- Land Use Discipline Report. Prepared by Jones & Stokes for the City of Shoreline. October.
- Public Utilities and Services. 2007. Prepared by Jones & Stokes for the City of Shoreline. July.
- Noise Discipline Report. 2007. Prepared by Jones & Stokes for the City of Shoreline. August.
- Social, Economic, and Relocation Discipline Report. Prepared by Jones & Stokes for the City of Shoreline. October.

- Transportation Discipline Report. Prepared by CH2M Hill and Jones & Stokes for the City of Shoreline. August.
- Visual Quality Discipline Report. Prepared by Jones & Stokes for the City of Shoreline. August.
- Water Quality Discipline Report. Prepared by Jones & Stokes and SvR Design for the City of Shoreline. August.
- Wetlands and Other Waters of the US Discipline Report. 2007. Prepared by Jones & Stokes for the City of Shoreline. August.

Attachment A. Project Description

Existing Characteristics

Aurora Avenue N is a major north/south urban highway that serves both local and regional traffic within the City of Shoreline (City). It is a key regional vehicular, transit, and truck corridor within the greater area of Puget Sound and serves as the City's primary arterial roadway, running approximately parallel to Interstate (I)-5 with connections at N 145th Street, N 175th Street, and N 205th Street. Development along the corridor is predominantly commercial, mixed with some multi-family housing. Echo Lake is located approximately 200 feet to the east of the roadway, north of N 192nd Street. The Interurban Trail runs roughly parallel to Aurora Avenue N, to the east in the Project corridor. Aurora Avenue N has two general-purpose lanes in each direction and a center two-way-left-turn lane, with shoulder and sidewalk of varying width located sporadically along the corridor, no curb or gutter, and little landscaping.

Under existing conditions, average daily traffic (ADT) on the roadway is 33,000 to 39,000 vehicles per day. Field observation indicates that pedestrian and bicycle travel steadily occurs along and across the roadway. However, the corridor is heavily oriented to vehicle travel and is generally not conducive to non-motorized travel. WSDOT has designated several areas of Aurora Avenue N between N 165th Street and 205th Street with poor safety ratings, which are described under the Purpose and Need (Attachment B). The corridor is served heavily by public transit provided by King County Metro, with additional service at the north end of the corridor provided by Community Transit.

Proposed Project

The Aurora Corridor North 165th Street to North 205th Street Project includes improvements to 2.0 miles of Aurora Avenue N within the City of Shoreline. The Project will include the following elements (see Figure 1, Proposed Project):

- Business Access and Transit (BAT) lane in each direction;
- two general-purpose lanes in each direction;
- continuous 7-foot sidewalk, curb, and gutter on each side of the roadway;
- 4-foot amenity/utility zone between sidewalk and curb on each side of the roadway along most of the Project length. The amenity/utility/sidewalk zone is reduced along approximately 5% (linear feet of zone) in order to minimize impacts to buildings and/or minimize impacts to parking spaces.
- 16-foot landscaped center median with left-turn and u-turn pockets;
- interconnected, coordinated signal system with transit signal priority;
- improvements to intersections, including proposed new traffic signals at the intersections of Aurora Avenue N with Firlands Way N/N 196th Street and N 182nd Street;
- marked pedestrian crossings at signalized intersections;
- improvements to Echo Lake Place, between N 195th Street and N 198th Street, including widening and conversion from a northbound one-way to a two-way roadway, and sidewalk installation;
- new street and sidewalk lighting;
- undergrounding of utilities (along Aurora from N 165th to N 205th Street, side streets, and Midvale Avenue between N 175th and N 185th Streets); and
- stormwater facilities, including Low Impact Development (LID) elements in the median and/or amenity zone.

The total width of the roadway will be 110 feet (narrower where sidewalk or amenity zone width is reduced), from back-of-sidewalk to back-of-sidewalk.



HORELINE AURORA CORRIDOR Figure 1. Proposed Project Aurora Corridor Improvement Project November 2007

Project Location

The project is located in Shoreline, Washington along Aurora Avenue N (State Route 99) beginning at N 165th Street and extending to N 205th Street (see Figure 2, Project Vicinity).



Attachment B. Purpose and Need

Project Purpose

The purpose of the Aurora Corridor Improvement Project: N 165th Street to N 205th Street, is to improve safety, circulation, and operations for vehicular and non-motorized users of the roadway corridor, to support multi-modal transportation within the corridor, and to support economic stability along the corridor.

Background Plans and Studies

The needs of the Aurora Avenue N corridor that would be addressed by this Project were identified through the:

- Puget Sound Regional Council (PSRC) Metropolitan Transportation Plan,
- City Comprehensive Plan, and
- City Multimodal Pre-Design Study.

PSRC Metropolitan Transportation Plan

Improvement to Aurora Avenue N between N 165th Street and N 205th Street is identified in *Destination 2030*, which is the regional Metropolitan Transportation Plan that addresses long-range urban transportation needs of a growing population.¹ The plan includes a detailed set of projects and programs that recognize the link between transportation and growth planning. It identifies more than 2,000 specific projects that will improve roads, transit and ferry service, bicycle and pedestrian systems, freight mobility, and traffic management and operations. *Destination 2030* calls for the development of new state and regional funding mechanisms to provide sustained and flexible

¹ PSRC (Puget Sound Regional Council). 2007. Destination 2030: Metropolitan Transportation Plan for the Central Puget Sound Region.

revenues that support plan strategies, and it outlines a monitoring and review process for ensuring that plans are current and that implementation stays on course. Improvements to Aurora Avenue N through Shoreline are included in the list of capital projects identified in the Metropolitan Transportation Plan. The Project is listed under identification number 3569.

City Comprehensive Plan

Improving Aurora has been a community goal since the City of Shoreline incorporated in 1995. However, regional and local governments recognized the need for improvements along Aurora Avenue N even prior to the City's incorporation. Before the City was incorporated, King County initiated a project to provide transit enhancements along Aurora Avenue N. After incorporation, the City requested that the project be postponed until the City could complete its comprehensive planning process to define improvements in the Aurora Avenue N corridor.

The City of Shoreline Comprehensive Plan was first adopted in November 1998 and most recently updated in June 2005. The Plan establishes the City's vision, and establishes Framework Goals intended to guide the City to meet that vision. The City's goals for Aurora Avenue N, as stated in its Comprehensive Plan, are to improve safety for all users on the roadway, to support economic stability along the corridor, and to improve mobility by supporting multimodal transportation services.²

Multimodal Pre-Design Study

In 1998, the City of Shoreline began the 1-year Aurora Corridor Multimodal Pre-Design Study. ³ The study included an extensive Community and Agency Involvement Program involving a variety of public and private stakeholders in the plan development. Multiple opportunities for community input were provided, and emphasis was placed on clearly articulating the technical elements of the plan. The Community and Agency Involvement Program included both the community and agencies because both are necessary for consensus building. A key Community and Agency Involvement Program component was the participation of a Citizens' Advisory Task Force, made up of representatives from the business and residential communities and transit users. An Interagency Technical Advisory Committee also included public sector stakeholders. These advisory committees recommended a preferred design concept, described in the following section.

Community and Agency Involvement Program elements included:

- ongoing participation of the Citizens' Advisory Task Force, Interagency Advisory Committee, and Policy Advisory Committee;
- project briefings with City Council and Planning Commission;
- three public open houses;

² City of Shoreline. 2005. Comprehensive Plan. Adopted by Ordinance 388. June 13. Shoreline, WA.

³ CH2M Hill. 1999. Aurora Corridor Multimodal Pre-Design Study Report. Prepared for City of Shoreline.

- open house announcements mailed to 3,000 addresses each time an event was held;
- canvassing by the Citizen's Advisory Task Force;
- meetings with property owners within the study area;
- meetings with community interest groups;
- newsletters distributed to landowners, business owners, and other interested parties; and
- press releases distributed to neighborhood associations, community groups, and local media.

Community Outreach

The City conducted a total of 23 meetings with the Citizens' Advisory Task Force, Interagency Technical Advisory Committee, and the general public. The City also conducted eight City Council briefings and two planning commission presentations. Three open houses were held during the course of the Pre-Design Study. Each meeting was designed to encourage interactive involvement through small group design workshops, informal ballots, prioritization exercises, and comment sheets.

32 Points

The corridor project design concept was named the 32 Points, and was approved unanimously by the Citizens' Advisory Task Force on July 8, 1999, and were adopted unanimously by the City Council as part of Resolution 156 on August 23, 1999. The 32 Points are to be used as guides during implementation and design of Aurora Avenue improvement projects, to ensure that concerns of the community and the vision of the City Council are fully addressed.

The main features of the design concept that resulted from the Pre-Design study include the addition of BAT lanes in each direction on the roadway; curbs, gutters, a landscaping/street furnishing strip (called the amenity zone for this Project) and sidewalks on both sides; and a landscaped center median safety lane with left and u-turn pockets.

Needs addressed by the Project

The needs addressed by this Project include System Linkage, Capacity, Regional Transportation Demand, Modal Relationships, Safety, and Social/Economic Development. These elements are described in the following sections.

System Linkage

The proposed project would improve regional system linkage by providing additional lane capacity, improved intersection capacity, and improved signal coordination. It would also continue the improvements underway between N 145th Street and N 165th Street, creating a consistent continuous corridor throughout the City.

Aurora Avenue N is a major north/south arterial link that serves both local and regional traffic within the City of Shoreline. It is part of the National Highway System (NHS). The portion of Aurora Avenue N within the City connects SR 104 and SR 523. In addition to serving intra-city traffic, the route serves as a regional link between cities in the Puget Sound region, connecting to the City of Seattle to the south and Snohomish County to the north. It is the significant alternative to I-5 in providing north/south regional linkage. The portion of SR 99 located within the City has also been identified as a Highway of Statewide Significance.⁴ Highways of Statewide Significance, identified under the Revised Code of Washington (RCW) 47.06.140, are those facilities deemed to provide and support transportation functions that promote and maintain significant statewide travel and economic linkages. The legislation emphasizes that these significant facilities should be planned from a statewide perspective. ⁵

The timely delivery of goods is extremely important to business operations and economic vitality. Aurora Avenue N is identified by WSDOT as a truck freight route in the statewide Freight and Goods Transportation System (FGTS). It carries more than 5 million tons of freight annually, so is classified as a T-2 tonnage class roadway.⁶ It has also been identified as part of the King County Regional Arterial Network, and the PSRC Metropolitan Transportation and Freight and Goods Systems. Aurora Avenue N also provides a connection between other routes on the FGTS, including Westminster Way/Greenwood Avenue (class T-2), SR 523 (class T-3), N 185th Street (class T-2), and SR 104 (class T-3) (WSDOT 2005).

Aurora Avenue N provides a linkage for commuters and transit to two regional Park-and-Ride facilities located at N 192nd Street and Aurora Avenue N; and on N 200th Street, two blocks east of Aurora Avenue N.

The City is currently completing improvements to Aurora Avenue N between N 145th Street and N 165th Street, which include similar elements to those proposed for this Project. Improvements include BAT lanes; curbs, gutters, landscaping/utility strip, and sidewalks on both sides; a landscaped center median with left and u-turn pockets, new signalized intersections, pedestrian-activated signalized crossings, undergrounding of utilities, and stormwater facilities.

Capacity

The proposed project would address capacity needs through improvements to intersection geometry and capacity, channelization, signal improvements, and additional lane capacity for business access and transit. By consolidating the number of access points according to WSDOT criteria, capacity in the corridor would be improved through the reduction of conflicts and traffic friction.

⁴ Washington State Transportation Commission (WSTC). 1998. Transportation Commission List of Highways of Statewide Significance. Passed by Resolution #584. December. Available: http://www.wsdot.wa.gov/ppsc/hsp/HSSLIST.pdf.

⁵ Washington State Department of Transportation (WSDOT). 2002. Washington State Highway System Plan: 2003 – 2022. Prepared by the WSDOT Planning Office. February.

⁶ Washington State Department of Transportation (WSDOT). 2005. Freight and Goods Transportation System 2005 Update. Prepared by the Office of Freight Strategy and Policy. December.

The capacity of the current facility is inadequate to accommodate projected traffic volumes. The corridor currently supports 33,000 to 39,000 vehicles per day. Traffic analysis completed for the Aurora Avenue N corridor assessed level of service (LOS) from now through the future planning year of 2030, under conditions both with and without the proposed project. Over the next 20 years, volumes along the corridor are expected to increase by 1.1% annually.

LOS is the primary measurement used to determine the operating quality of a roadway segment or intersection. LOS is generally measured by the ratio of traffic volume to capacity (V/C) or by the average delay experienced by vehicles on the facility. The quality of traffic operation is graded into one of six LOS designations: A, B, C, D, E, or F. LOS A represents the best range of operating conditions and LOS F represents the worst. LOS on transportation facilities is analyzed and measured according to procedures provided in the Highway Capacity Manual.⁷ In an urban corridor such as Aurora Avenue N, LOS at intersections controls the overall LOS of the roadway. LOS for signalized intersections is determined by the average amount of delay experienced by vehicles at the intersection. LOS standards are used to evaluate the transportation impacts of long-term growth. The Washington State Growth Management Act (GMA) (RCW 36.70A, 1990) requires that jurisdictions adopt standards by which the minimum acceptable roadway operating conditions are determined and deficiencies may be identified. The City has adopted a standard of LOS E for intersections within the City.⁸

Detailed traffic analysis of Aurora Avenue N is presented in the Transportation Discipline Report prepared for this Project. The analysis shows that without improvements, average delay at key signalized intersections along Aurora Avenue N will fall to LOS F. These conditions are considered unacceptable by most drivers and fail to meet the City's adopted standard of LOS E. A lack of adequate capacity along Aurora Avenue N could encourage drivers to use parallel neighborhood routes.

Regional Transportation Demand

The proposed project would provide additional automobile and transit capacity to help meet the demand that is anticipated to occur in the Aurora Corridor over the next 20 years. The PSRC has adopted its Destination 2030 Metropolitan Transportation Plan as the transportation element of Vision 2020, the region's growth management, economic, and transportation strategy. The City's design concept for the Project satisfies the following regional policies as discussed in Destination 2030^o:

- Optimize and manage the use of transportation facilities and services.
- Manage travel demand by addressing traffic congestion and environmental objectives.
- Focus transportation investments by supporting transit- and pedestrian-oriented land use patterns.

⁷ Transportation Research Board. Highway Capacity Manual. 2000. Special Report 209. National Research Council. Washington, DC.

⁸ City of Shoreline. 2005. Comprehensive Plan. Adopted by Ordinance 388. June 13. Shoreline, WA.

⁹ PSRC (Puget Sound Regional Council). 2007. Destination 2030: Metropolitan Transportation Plan for the Central Puget Sound Region.

• Expand transportation capacity by offering greater mobility options.

The Metropolitan Transportation Plan provides the long-range strategy for future investments in the central Puget Sound region's transportation system. It responds to federal legislative mandates such as the federal Transportation Equity Act for the 21st Century and the Clean Air Act (CAA); and state mandates such as the Commute Trip Reduction Law RCW (70.94.521-551) and the GMA (RCW 36.70A). It also is intended to respond to regional concerns of pressing transportation problems. The basic building blocks for the Metropolitan Transportation Plan are state, city, county, and transit agency plans and policies.

Improvements to Aurora Avenue N through Shoreline are included in the list of capital projects identified in the Metropolitan Transportation Plan. The Project is listed under identification number 3569. It is listed as having "Candidate" status, meaning that it is subject to PSRC approval but has not yet been approved. Once NEPA and SEPA environmental review is completed, the City will apply for upgrade to "Approved" status in the Metropolitan Transportation Plan, after which right-of-way acquisition for the Project may begin.

Modal Interrelationships

The proposed project would enhance mobility and safety for pedestrians by providing continuous sidewalk, curbs, and gutter along both sides of the roadway. Additional crosswalks would provide more safe crossings for pedestrians. Pedestrian links would also be provided to the adjacent Interurban Trail.

Bicyclists traveling along Aurora Avenue N would be allowed to travel on the sidewalks or in the BAT lanes, and would also benefit from connections provided to the Interurban Trail.

The Project would also improve transit operations and reliability through the addition of the BAT lanes, providing a lane for bus operation outside the general-purpose traffic flow.

The portion of Aurora Avenue N within the City is heavily automobile-oriented, and lacking in pedestrian or bicycle facilities. Driveway access along the corridor is largely undefined and sidewalk facilities are discontinuous and do not meet City standards. The only areas where sidewalks meet City standards are areas along developments that have been built within the last 10 years.

Buses on Aurora Avenue N travel in the general-purpose lanes and are subject to congestion. When traffic is congested, the buses are likely to be delayed. When buses stop to pick up and drop off passengers, they block traffic in one of the two general-purpose lanes that currently exist in each direction. Discontinuous sidewalks make access to transit difficult, especially for those with disabilities. The absence of even, wide, continuous pedestrian facilities can dissuade potential transit patrons from using the bus system. Bicyclists currently have to travel either on shoulders, where they exist, or in the general-purpose traffic lanes, discouraging most bicyclists.

The Interurban Trail is a pedestrian and bicycle facility that runs roughly parallel to Aurora Avenue N, providing regional connection from Everett through Seattle. Construction within the City is currently underway, with completion planned for July 2007. After construction is complete, the Interurban Trail will run throughout the entire City length, between N 145th Street and N 205th Street. In the Project area, the trail is located approximately one block east of Aurora Avenue N between N 165th Street and N 192nd Street; runs to the east of Echo Lake; runs east-west along N 200th Street to Meridian Avenue; and then runs north-south on the east side of Meridian Avenue through Ballinger Commons (City of Shoreline 2007). Existing sidewalks are inadequate to provide pedestrian connectivity along Aurora Avenue N and to the Interurban Trail.

Safety

Project elements would improve channelization; separate pedestrians from vehicular traffic; and reduce potential conflicts between vehicles, pedestrians, and bicyclists. The City is working with businesses and property owners to develop appropriate solutions that address access and parking issues, while still maintaining Project goals.

WSDOT collects and compiles historical collision data for state highways, including Aurora Avenue N (SR 99). Several areas of Aurora Avenue N, between N 165th Street and N 205th Street, have been given poor safety designations by WSDOT. WSDOT has identified one high accident corridor (HAC), three high accident locations (HALs), and two pedestrian accident locations (PALs) on Aurora Avenue N, between N 165th Street and N 205th Street, for the 2007–2009 biennium, Between 2003 and 2005, the average annual collision rate for the entire Aurora Avenue N corridor within Shoreline was calculated to be 5.5 accidents per million vehicle miles traveled. This greatly exceeds the most recently compiled (2005) statewide average for urban principal arterials of 2.6 accidents per million vehicle miles. There is strong public concern for general traffic safety and pedestrian safety along the corridor. Collision history and WSDOT safety designations are discussed in further in the Transportation Discipline Report prepared as part of the environmental analysis for this Project.

High Accident Corridor (HAC)

A highway corridor 1 mile or greater in length where a 5-year analysis of collision history indicates that the section has higher than average collision and severity factors.

High Accident Location (HAL)

A highway section typically less than 0.25 mile in length where a 2-year analysis of collision history indicates that the section has a significantly higher than average collision and severity rate.

Pedestrian Accident Location (PAL)

A highway section typically less than 0.25 mile in length where a 6-year analysis of collision history indicates that the section has had four pedestrian accidents in a 0.1-mile segment.

Numerous driveways, limited curbs and sidewalks, and erratic parking all contribute to the safety issues identified for pedestrians, bicyclists, and vehicles, and reflected in the HAL, HAC, and PAL designations described in the previous paragraph. Land use along Aurora Avenue N is predominantly commercial/retail. Most of the businesses are freestanding, with defined and undefined individual driveways, or continuous shoulder access. Development along Aurora Avenue N is characterized by a high number of individual access points that increase conflict and impact safety along the corridor. In total, there are 154 access points along the 2-mile length within the Project corridor. National Cooperative Highway Research Program (NCHRP) Report 420 indicates that the ideal number of access points is fewer than 30 per mile.¹⁰ Investigation of the area reveals that a portion of the existing

¹⁰ Gluck, Jerome, Herbert S. Levinson, and Vergil Stover. 1999. Impacts of Access Management Techniques. National Cooperative Highway Research Program (NCHRP) Report 420. Prepared for the Transportation Research Board. National Research Council. Washington, DC.

business parking along the corridor is located on city right-of-way directly adjacent to the roadway shoulders, and is angled or perpendicular to the street. Many existing parking spaces require motorists to back onto the roadway to exit. In addition to being non-compliant with city code, the parking spaces that require backing into the general traffic flow create potential for conflict between the forward moving vehicles along the roadway and backward moving vehicles onto the roadway. Parking within the Aurora Avenue N roadway right-of-way occurs primarily near retail and commercial land uses within the Project area. Several businesses along the roadway between N 165th Street and N 205th Street use the shoulder for parking in areas where there is no curb, effectively blocking pedestrians and people in wheelchairs, which may then require that they move into the traffic lanes to navigate around parked vehicles.

The Project elements that would improve channelization; separate pedestrians from vehicular traffic; and reduce potential conflicts between vehicles, pedestrians, and bicyclists include:

- addition of curbs and gutters provide physical separation between vehicular and non-motorized modes, and improve vehicle channelization;
- consolidated driveway locations reduce vehicle conflict points;
- even, wide, continuous sidewalks provide separation of pedestrians and bicyclists from vehicular traffic;
- application of driveway width and spacing standards improve vehicle channelization;
- provision of traffic signals and pedestrian crosswalks provide safer crossings for pedestrians and bicyclists across the roadway;
- conversion of the existing two-way left-turn lane into a median with channelized left-turn and uturns improve vehicle channelization and reduce the number of vehicle conflict points;
- restriction of driveways to right-turn-in and right-turn-out only reduces the number of vehicle conflict points;
- elimination of parking that requires motorists to back onto the roadway to exit ; and
- provision of the BAT lanes that would allow traffic to safely enter and exit the roadway with fewer conflicting movements and lower risk of crashes.

Social and Economic Development

The Project would address the need to continue to enhance the movement of people and goods within the SR 99 commercial corridor, as identified in the Comprehensive Plan, by improving person and freight mobility; pedestrian, bicycle, and transit linkages; and overall safety for vehicular and nonvehicular travelers.

The City Comprehensive Plan provides forecasts of population and job growth, and identifies future land use needed to support projected growth. The Washington State Growth Management Act requires that adequate transportation infrastructure be provided to support future land use.

The Comprehensive Plan sets forth a vision that concentrated activity centers will develop at several locations along the corridor. These are located between N 175th Street and N 185th Street, and between N 200th Street and N 205th Street (Aurora Village). To support the economic development goals of the Comprehensive Plan, improvements are needed for pedestrian and transit access to and between these locations. The City's objective for Aurora Avenue N is to install improvements that would lead people to the community and its businesses.¹¹

¹¹ City of Shoreline. 2005. Comprehensive Plan. Adopted by Ordinance 388. June 13. Shoreline, WA.

Attachment C. Environmental Summary Report

This report provides a summary of evaluations that were completed for each of the environmental resource areas, according to procedures defined in the WSDOT Environmental Procedures Manual (M 31-11). The information provided is consistent with information summarized in the WSDOT Local Agency Environmental Classification Summary (DOT Form 140-100 EF) prepared for this project, for which this report serves as an attachment.

1. Air Quality

The City of Shoreline is within the carbon monoxide (CO) maintenance area, so the Project is subject to state and federal Transportation Conformity regulations for CO. The City would modify several existing signalized intersections, and potentially install 2 additional traffic signals as part of the project (pending WSDOT approval).

Carbon Monoxide Hot-Spot Impacts

CO hot-spot analysis results indicate that the 1-hour average and 8-hour average CO concentrations for both the No Build and Project Alternative are much lower than the allowable National Ambient Air Quality Standards (NAAQS) limit for each of the modeled years. The model indicates that CO concentrations would decrease from 2005 to 2030, even though the traffic volumes were projected to increase from 2005 to 2030. The net improvement in ambient concentrations is due to the expected continuous improvement in emissions from individual vehicles, which more than offsets the increase in traffic volume.

In general, the modeled ambient CO concentrations for the Project are less than those for the No Build Alternative, with the exception of one intersection (Aurora Avenue N and N 175th Street). At that intersection, the modeled 8-hour CO concentration for the Project Alternative is only 0.2 ppm higher than the No Build Alternative. That slight increase is not significant. That increase is likely a modeling artifact, because the WASIST model is unable to model traffic flow in right-turn lanes; and therefore, likely over-estimates CO impacts for intersections that actually use such lanes.

Regardless, in all cases the modeled ambient CO concentrations at all intersections are below the allowable NAAQS limits. Therefore, the modeling results confirm that the Project would not cause any significant air quality impacts adjacent to study area intersections.

Mobile Source Air Toxics

Mobile Source Air Toxics (MSATs) emissions would be proportional to the Vehicle Miles Traveled (VMT). According to the Project's traffic analysis the future VMT will be higher than existing levels. However, the magnitude of the Environmental Protection Agency (EPA) projected MSAT emissions reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes proposed as part of the Project would have the effect of moving some traffic closer to nearby homes and businesses; therefore, there may be localized areas where ambient concentrations of MSATs could be higher than under the No Build Alternative. However, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be accurately quantified due to the inherent mathematical and validation deficiencies of current emission models. When a highway is widened and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Project could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). However, on a regional basis, EPA's vehicle and fuel regulations, coupled with ongoing future fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Construction Effects and Mitigation

Construction of the Project would generate temporary emissions of fugitive dust and tailpipe emissions from construction equipment. Fugitive dust emissions would be generated mainly by wind blowing across exposed soil surfaces during grading operations, and by movement of construction equipment over unpaved areas. Another potential source of fugitive dust would be trackout of mud onto public roads during construction. Fugitive dust emissions during construction would be temporary and localized.

Puget Sound Clean Air Agency (PSCAA) regulations (PSCAA Rule 1, Section 9.15) require all construction operations to employ Best Available Control Technology (BACT) to minimize fugitive dust emissions, and to prevent mud trackout onto public roads.

During Project construction, Best Management Practices (BMPs) for Fugitive Dust control will be used, which could include but are not excluded to the following:

- Maintain the engines of construction equipment according to manufacturers' specifications, to minimize exhaust emissions
- Minimize equipment idling while the equipment is not in use
- Install BACT emission controls on any temporary portable stationary construction equipment
- Use water spray as necessary to prevent visible dust emissions
- Prevent dust emissions during transport of fill material or topsoil by covering the load, either by wetting down the load or by ensuring adequate freeboard on trucks
- Promptly clean up any spills of transported material on public roads by frequently using a streetsweeper machine
- Cover loads of hot asphalt to minimize odors

2. Geology and Soils

Soil Types

The area of and around the Project is located in the glacial till geological unit (Qvt), which is also known as hardpan. Glacial till consists of an unsorted, crudely stratified mix of very dense silt, sand, gravel, cobbles, and boulders deposited at the base of a glacier. Because the depositing glacier overrode glacial till, it is highly compacted and therefore is relatively impermeable to water. Specific soil data for overlying soils are not available, as the Natural Resources Conservation Service (NCRS) has not mapped soils in the area. However, a mixture of native soils and fill are assumed to occur within the study area. Soil boring data collected for specific projects within the City of Shoreline support this assumption, and also indicates that in some areas till is present at the soil surface^{12·13}. This is likely due to past excavation and/or erosion. In areas where the native soil or fill that overlies till is permeable, it is possible that groundwater may be perched in the upper soil layer, unable to permeate the till.

Steep Slopes

The Project site is generally flat, although several small areas of steep slopes do exist within the Project area. Steep slopes occur to the east of Aurora Avenue N at approximately N 167th Street. Additional areas are located on the east and west sides of Aurora Avenue N between N 190th Street and N 205th Street, some of which are associated with an erosion hazard area (see Figure 3, Geologic Hazard Areas).

¹² AESI. 1999. Subsurface Exploration and Geotechnical Engineering Report, Shoreline Fire Training and Support building, Shoreline, Washington. Associated Earth Sciences, Inc. Kirkland, WA.

¹³ Shannon and Wilson, Inc. 1990. Geotechnical Report: Proposed Improvements Aurora Village Shopping Center Seattle, Washington. Shannon and Wilson, Inc. Seattle, WA.



Erosion Hazard Areas

The City Critical Areas Ordinance (Shoreline Municipal Code 20.80.210) defines erosion hazard areas as areas underlain with soils that the NCRS has classified as severe or very severe erosion hazards. Soils that are classified as severe or very severe erosion hazards are specific types of soils that have a high potential for erosion and that occur on slopes with a gradient equal to or greater than 15%.

One area of erosion hazard is located along the corridor, on the west side of Aurora Avenue N between N 188th Street and N 192nd Street (see Figure 3, Geologic Hazard Areas). A small portion of this area is also present on the east side of Aurora Avenue N in the vicinity of N 188th Street. The shape of this erosion hazard area, and its location within a natural topographic basin on the landscape, suggest that it may have historically been a wet area, such as a wetland, pond, or peat bog, therefore this erosion hazard area may contain wetland deposits (geologic unit Qw). Currently, the area is paved and is used as a Park-and-Ride lot. If this area contains wetland deposits, it may be underlain with soft peat or organic-rich deposits.

Erosion risk is assessed by looking at the steepness of a slope in combination with the soil type. Erosion risk generally increases with the steepness of the slope. Glacial till, which underlies the study area, is relatively stable, with minor erosion potential. The majority of the Project is on relatively flat ground; however, small portions do cross steeper slopes, and in some areas cut and fill may be required. Hillside cuts create a steep slope during construction and can become susceptible to erosion. Similarly, fill placed to widen existing embankments may also be susceptible to erosion during a storm event, particularly when stockpiled prior to its placement.

Soils within the erosion hazard area are more susceptible to erosion. The Project alignment crosses the erosion hazard area. Exposing soils in this area could lead to increased erosion.

Landslide Hazard Areas

The City Critical Areas Ordinance (Shoreline Municipal Code 20.80.210) defines three types of landslide hazard areas: moderate hazard, high hazard, and very high hazard. These classifications are based on soil type and the steepness of the slope on which they occur. Within the study area, only very high hazard landslide hazard areas have been mapped. These are slopes with a gradient equal to or greater than 40%.

There are several small landslide hazard areas within the Project area (see Figure 3, Geologic Hazard Areas). One small area occurs to the east of Aurora Avenue N at approximately N 167th Street, with additional areas near N 175th Street. The majority of the landslide hazard areas are located on the east and west sides of Aurora Avenue N between N 192nd St and N 205th Street, although some of these are located within the erosion hazard area mentioned above. Landslide hazard areas parallel Aurora Avenue N in two locations: between N 192nd Street and N 195th Street and between N 200th Street and N 205th Street. These steep slopes are the result of past development, and are either oversteepened or are behind retaining walls.

Grading and Fill

Grading and fill will be required for this Project. Although the exact quantities will not be known until detailed design is completed, it is expected they will be of similar proportion to the quantities of excavation and fill required for the Aurora Corridor Improvement Project between N 145th Street and N 165th Street. As such, it is estimated that approximately 19,000 cubic yards of roadway excavation and 40,000 cubic yards of gravel fill will be required for this project. Only clean fill will be imported and placed for the Project. This measure will require documentation from the supplier certifying that the fill is in compliance with Washington State soil cleanup standards. If documentation is not available, imported fill soils will be tested prior to placement. Suspect soils encountered during Project construction will be tested and, where necessary, removed from the site and disposed of in accordance with Washington State regulations.

Mitigation Measures

Implementation of the following measures to avoid or reduce effects will minimize Project related erosion. With these measures in place, no permanent effects from Project operations on geology or soils are expected.

- A Temporary Erosion and Sedimentation Control (TESC) plan will be prepared and implemented. This plan will include operational and structural measures to control the transport of sediment. Operational measures include removing mud and dirt from trucks before they leave the site, covering fill stockpiles or disturbed areas, and avoiding unnecessary vegetation clearing. Structural measures are temporary features used to reduce the transport of sediment, such as silt fences and sediment traps.
- The degradation of moisture-sensitive soils will be minimized. Measures include limiting major earthwork to the drier construction season in the late spring through early fall; maintaining proper surface drainage to avoid surface water ponding; minimizing ground disturbance by limiting heavy equipment use, limiting turns, and/or not tracking directly on the subgrade; and by covering the final subgrade elevation with a working mat of crushed rock and/or geotextile for protection. Mixing a soil admix such as cement into the subgrade may also add strength and stabilize the ground.
- Construction procedures identified in the geotechnical investigation will be implemented. These
 are designed to maintain or enhance slope stability in areas potentially underlain by landslideprone soils.

3. Wetlands

No inventoried wetlands are located along the Project corridor (verified by field investigation conducted in February 2007). Biologists' investigations indicated three ditches with a total area of 401 square feet within the study area. All three ditches, subject to regulation under the Clean Water Act, will be completely filled or removed as a result of the Project. The loss of the 401 square feet of water quality improvement associated with these ditches will be compensated through the construction of new stormwater treatment facilities that are part of the Project. Those stormwater

facilities will provide higher quality stormwater treatment than that currently provided by the small area of the three ditches.

4. Cultural Resources

A cultural resources assessment was completed for this Project. No places or objects listed on, or proposed for, national, state, or local preservation registers were identified within the Area of Potential Effect (APE).

Four historic properties were identified in the APE:

- Auto Cabins 17203 Aurora Avenue N
- Echo Lake Tavern 19508 Aurora Avenue N
- Erickson House 19502 Aurora Avenue N
- North Trunk Red Brick Road Ronald Place N, between N 173rd Street and N 180th Street

These properties are eligible for listing, but not listed in the National Register of Historic Places (NRHP).

Construction Effects

Construction impacts to the historic properties identified in the APE may consist of right-of-way encroachment and temporary construction easements, as well as possible driveway construction, landscaping, and installation of retaining walls. Construction impacts are anticipated to be minor, and would not change any of the characteristics that make these properties eligible for NRHP listing.

Operational Effects

The project would not result in at significant unavoidable adverse impacts to cultural resources.

Although landscaping, sidewalk construction, and related improvements may occur on the parcels on which the three historic buildings are situated, the integrity of the properties will not be affected by the Project. Operation of the project is not anticipated to generate any long-term impacts that would affect the historic integrity of the identified properties. Operational impacts are anticipated to be minor, and would not change any of the characteristics that make these properties eligible for NRHP listing.

Operational impacts to North Trunk Road would consist of parking and vehicle ingress/egress, which would contribute to gradual deterioration of the roadway over time. However, even under the No Build Alternative, this deterioration is expected due to continued vehicle use of the roadway. The Project will not directly result in removal or demolition of the North Trunk Red Brick Road. If segments of the brick road are paved over as a secondary effect of the Project, a finding of No Effect has been identified in the Cultural Resources Assessment prepared for this Project. Concurrence on this finding was provided by the Washington State Department of Archeology and Historic Preservation (DAHP) in October 2007 (see Attachment E of this report).

5. Hazardous Materials

Contaminated Sites

Many current and historical businesses adjacent to Aurora Avenue N released fuel and other hazardous materials at some point in the past. However, with the exception of the sites described below, all of the reported historical spills were either previously cleaned up or are being handled by the property owners with oversight by Ecology. Contaminated soils or groundwater at the following sites have the potential to impact Project construction or to expose the City to regulatory liability. (Site numbers refer to numbers given in the Phase I Assessment):

- Former Bill Langeberg gas station located at N 185th Avenue/Aurora Avenue N (identified as Site South O86-O88 in the Hazardous Materials Discipline Report prepared for this Project).
 Widening of Aurora Avenue N and the N 185th Street approach could encroach into areas where contaminated soil was previously left in place when the former fuel tanks were removed in 1994. Ecology has indicated they believe residual soil contamination at this site poses a risk to groundwater. Either the current owner or the City should conduct Phase II soil and groundwater investigations, and remediate any identified contamination before site grading begins.
- Former Tune N Lube, located at 17550/17560 Aurora Avenue N (identified as Site South A5-A7 in the Hazardous Materials Discipline Report prepared for this Project), which the City will acquire as part of this Project. An unknown amount of kerosene-containing soil is known to exist under the site, which could interfere with grading activity for Project construction. The City should alert the construction contractor to the likely soil contamination, and require the contractor to develop a contingency plan to remediate contaminated soil if it is encountered during site grading. Former Joe's ARCO gas station was also located at this site. Ecology files did not include any reports on when, how, or if, this former gas station was cleaned up after it ceased operation. Either the current owner or the City should conduct Phase II soil and groundwater investigations, and remediate any identified contamination before site grading begins.
- Former Mac-Ray dry cleaner, located at 18419 Aurora Avenue N (identified as Site South O85 in the Hazardous Materials Discipline Report prepared for this Project). This former dry cleaner was located close to the roadway. Soil under or adjacent to the building could contain trace amounts of cleaning solvents released during operation of the dry cleaner. Either the current owner or the City should conduct Phase II soil and groundwater investigations, and remediate any identified contamination before site grading begins.

The Project will require demolition of buildings or structures. Based on the age of those structures, it is possible they could have been constructed using asbestos-containing materials (ACM) or leadbased paint. Construction workers demolishing the structures could be exposed to airborne asbestos or lead unless those materials are removed from the structure before it is demolished.

Although analysis completed for this Project deems it unlikely, it is possible that contaminated soil or contaminated perched groundwater could be encountered during construction.

Potential Construction Effects

Construction of the project may require demolition of existing buildings or structures. Given the age of some structures within the project corridor, the potential exists for discovery of asbestos of leadbased paint. Construction workers demolishing the structures could be exposed to airborne asbestos or lead unless these materials are removed prior to demolition.

Although analysis completed for this Project deems it unlikely, it is possible that contaminated soil or contaminated perched groundwater could be encountered during construction.

Mitigation

The following measures will reduce or control environmental health hazards.

- At the sites identified above, with potential for contaminated soil or groundwater, the City will conduct Phase II soil and groundwater investigations, and remediate any identified contamination before site grading begins.
- The City will require its construction contractors to have contingency plans to ensure that construction crews can identify suspected contaminated soil and groundwater caused by unreported historical releases and will properly manage contaminated soil they might encounter during construction.
- The current 9-1-1 emergency response system used within the City will minimize the potential for future spills caused by future traffic accidents along Aurora Avenue N to impact soil, surface water, or groundwater. In addition, City maintenance crews will continue to be trained in spill prevention and spill response related to their routine maintenance activity along Aurora Avenue N.
- Before demolition of any buildings begins, the City will survey and abate asbestos and lead-based paint in accordance with federal and state regulations.
- In the unlikely event that contaminated soil or contaminated perched groundwater is encountered during construction, the contamination can be remediated using the following conventional methods:
 - Shallow Soil Contamination excavation and temporary stockpiling of suspected contaminated soil, sampling and chemical sampling of stockpiled soil, shipment of contaminated soil to an approved off-site landfill.
 - Groundwater Extracted during Construction temporary storage of extracted groundwater in portable tanks, chemical characterization, off-site disposal, disposal to sanitary or storm sewers following agency approval.

6. Noise

The project would add new through lanes, so it is a Type 1 project subject to FHWA traffic noise abatement regulations and WSDOT noise abatement policy. A noise impact occurs when predicted traffic noise levels under design-year conditions approach specified Noise Abatement Criteria (NAC), or when the predicted levels substantially exceed existing levels.

Construction Effects

During construction, noise levels will temporarily increase near construction sites due to the use of heavy equipment and the transport of construction materials.

Operational Effects

Sensitive receptors in the form of residences and tenant businesses are located within 500 feet of the road. The FHWA Traffic Noise Model Version 2.5 (TNM) was used to predict existing and future noise levels during the evening peak hour period for the baseline year (2005) and the design year (2030). Noise levels were modeled at receiver locations consisting of houses, apartments and condominium with outdoor usages, and businesses with outdoor seating areas within 500 feet of the roadway. Predicted peak-hour noise levels were compared to FHWA's Noise Abatement Criteria (NAC) to determine if the Project will result in traffic noise impacts.

For the baseline year (2005), the noise modeling results indicated that traffic noise levels at the following food service outdoor seating area currently exceeds the NAC:

Starbucks at 20121 Aurora Avenue N (labeled Outdoor Seating-3 in the Noise Discipline Report)

For the design year (2030), the modeled noise levels at the following locations will exceed the NAC for the No Build and the Project Alternatives:

- Starbucks at 20121 Aurora Avenue N
- The Mattino Condominium at 935 N 200th Street (labeled Apartment-8 in the Noise Discipline Report)
- Firlands Way Condominium at 19523 Firlands Way N (labeled Apartment-9 in the Noise Discipline Report)
- 19370 Firlands Way N (labeled House-21 in the Noise Discipline Report)
- 19344 Firlands Way N (labeled House-29 in the Noise Discipline Report)

The Project-related noise increase (2030 Project Alternative minus 2030 No Build Alternative) are projected to be no greater than 2 dBA. It is unlikely such a small noise increase would be discernible at any receiver location.

Mitigation

To reduce the potential for temporary, adverse noise impacts associated with construction, the contractor will be required to comply with all federal, state, and local regulations relating to construction noise. Construction noise could be reduced by using portable, temporary enclosures or walls to surround noisy stationary equipment, substituting quieter equipment or construction methods, minimizing time of operation, and locating equipment as far as practical from sensitive receptors. To reduce construction noise at nearby receivers, a Construction Noise Reduction Plan will be incorporated into construction plans and contractor specifications, including the following elements.

- Locating stationary equipment away from receiving properties would decrease noise from that equipment as a function of the increased distance.
- Erecting portable noise barriers around loud stationary equipment located near sensitive receivers would reduce noise.
- Turning off construction equipment during prolonged periods of nonuse would eliminate unnecessary noise.
- Requiring contractors to maintain all equipment and recommending they train their equipment operators to be aware of nearby noise sensitive areas would potentially reduce noise effects.
- Recommending training construction crews to avoid unnecessarily loud actions (e.g., dropping bundles of rebar onto the ground or dragging steel plates across pavement) near noise-sensitive areas would reduce noise effects.

For Project operations, no noise abatement measures would satisfy WSDOT's feasibility and reasonableness criteria. Noise barriers installed along the right-of-way to protect the affected homes and business would not be technically feasible because the affected units require driveway access to Aurora Avenue N.

7. Surface Water

Surface Water Bodies in Project Area

No streams have been identified in the Project area. The Project is located within 300 feet of Echo Lake, which drains to Lake Ballinger, which in turn drains to McAleer Creek, a tributary to Lake Washington, which is located east of the Project area. (see Figure 4, Surface Water Features) Boeing Creek drainage flows west of the project area into Puget Sound. There are no water bodies within the Project area that are known to have a connection to Boeing Creek. (See Attachment D, No Effect Letter, for additional information on surface water flow characteristics in the Project Area)

King County has records from 1998 and 1999 of high fecal coliform bacterial concentrations in Echo Lake. Therefore, Ecology has listed Echo Lake as impaired, as required under section 303d of the federal Clean Water Act. Similarly, the lowest reach of McAleer Creek is also 303d listed as impaired due to fecal coliform bacteria and dissolved oxygen.



Effect of Project on Impervious Surface Area

Under existing conditions, the Project site consists of 100% impervious surface (24 acres). Due to the addition of planted amenity zones and medians, the Project will provide a net decrease in impervious surface area, resulting in site coverage of approximately 93% impervious surface area.

Because the changes in impervious surface area proposed are relatively small, the most substantial changes in water quality are likely to occur as the result of stormwater treatment facilities that are proposed as part of the Project.

Stormwater Treatment

Stormwater treatment facilities will be designed to meet the requirements of the Shoreline Municipal Code (SMC), Title 20 which specifies consistency with the King County Surface Water Design Manual (KCSWDM).¹⁴ The KCSWDM has the following Core Requirements that apply to the project:

- Discharge at the Natural Locations
- Offsite Analysis
- Conveyance System
- Erosion and Sediment Control
- Maintenance and Operation
- Financial Guarantee
- Oil Control at Intersections

Conventional stormwater management, which is similar to the system that currently exists, will be designed to collect, convey, filter, and detain stormwater using curbs and gutters, concrete catch basins, pipes, wet vaults, in-ground filter systems and oil-water separators. Stormwater conveyance pipes and catch basins will be replaced and located along curbs and gutters to maximize collection. Per 1998 King County Surface Water Design Manual requirements for conveyance, as amended by the City, the pipes will be sized to convey the 25-year storm event and the overflow from the 100-year runoff event, which will be modeled using the King County continuous modeling program. Since the Project will remove and replace existing pavement, water quality will be provided to remove total suspended solids that can be collected from the roadway. In addition, due to the high traffic loads along Aurora Avenue N, oil/water separators will be located at every intersection. Low Impact Development (LID) elements will be utilized in conjunction with the conventional conveyance system, to the extent that the other Project design elements will allow. LID is an approach to stormwater management that uses the natural processes of vegetated areas to infiltrate, filter, store, evaporate, and detain runoff close to its source. When LID is coupled with conventional methods, it often reduces/removes the need and cost for large-scale conventional stormwater management

¹⁴ King County. 1998. King County Surface Water Design Manual (KCSWDM). King County Department of Natural Resources. September.

methods like detention pipes and vaults. In addition to mimicking the natural process for stormwater management, LID stormwater elements can improve the aesthetics of the project area by increasing vegetative areas.

The water quality design flow for the Aurora Avenue N project will be developed to remove 80% of total suspended solids, as required in Section 1.2.81 if the 1998 KCSWDM. Although the Project would be exempt from flow control and water quality requirements (according to the criteria specified in the KCSWDM as amended by the City), it may provide flow control and water quality treatment if LID elements are included.

Effect on Pollutant Loading

Currently there is no stormwater treatment for impervious surfaces in the project area. The project would reduce impervious surface area in each TDA, and all new pollution generating impervious surfaces would drain to new basic stormwater treatment facilities designed to meet the 1998 KCSWDM. As a result, pollutant loadings from the project area will be reduced. (See Attachment D, No Effect Letter, for additional information on pollutant loading)

Mitigation for Construction Effects on Surface Water

The specific methods for preventing stormwater contamination during construction will be the responsibility of the construction contractor, but would likely include installation of temporary storm drain filters, use of silt fences, and covering exposed soil in areas where soil is excavated, graded, or filled. Because the Project footprint and adjacent lands are generally low gradient and largely paved, erosion control can be achieved through these standard BMP erosion control measures.

8. Visual Quality

Effect of Project on Views

This Project will not result in obstruction of any views in the immediate vicinity.

View of and from the roadway will be improved after Project is completed due to undergrounding of utilities, addition of vegetation in the new median, and addition of vegetation, lighting, and pedestrian amenities in the amenity zones. The new sidewalk, median, and vegetation will tend to frame views and provide a more interesting visual composition, as well as provide more visual cohesiveness to the Project corridor. The incorporation of context sensitive solutions into Project design will create an improvement over the existing visual quality in the study area, and thus no adverse visual effects are expected to result from completion of the Project.

Construction-related activities will temporarily affect Aurora Avenue N users and neighbors during construction. It is expected that traffic cones and barriers located along the roadway, used for construction-related traffic control and channelization, will be visually prominent throughout project construction. Detours, traffic control devices, or lane shifts will require greater driver attention and might distract motorists from views outside the construction areas. Temporary clutter may appear in

some views due to the presence of construction activities, equipment, stored materials, and general disruption of landscaping with fencing, equipment, vehicles, and lighting.

Mitigation for Project effects has been made an inherent part of Project design from its inception through the use of context-sensitive solutions. Using this approach, development and implementation of a roadway project begin with outreach to the public and stakeholders, and incorporates the community's values into the overall design of the improvements. The objective is a finished design sensitive to the surrounding context that creates a safe, efficient, and effective roadway system for the movement of people and goods.

For this Project, public involvement started early with the process of defining the Project purpose and need and continued as the Build Alternatives were developed. The corridor design concept, as defined in the 32 Points adopted by the City Council (described in the Purpose and Need, Attachment B) was the culmination of this extensive public process. The input of all users and stakeholders was considered consistently and on many levels including aesthetic, social, economic and environmental values, needs, and constraints.

Project Elements that Address Visual Quality

For the Aurora Corridor Improvement Project, the corridor design concept is the culmination of extensive public process. The input of all users and stakeholders was considered consistently and on many levels including aesthetic, social, economic and environmental values, needs, and constraints.

This process molded the development of a Project concept that minimizes negative visual effects of the Project. As part of the context sensitive solutions process, elements and treatments such as new landscaping and plantings will be used to screen, soften, or enhance the visual features of the Project.

Other examples of treatments that will be employed to avoid or minimize negative operational effects include the following recommended BMPs:

- Hydro-seed all locations with exposed soil and steep slopes with Washington native grasses, to prevent soil erosion, reduce water pollution, and help preserve the existing landscape character.
- Design for aesthetic treatment (materials, pattern, texture, concrete stain color) on any retaining walls, noise barriers, barriers, and construction elements.
- Design for gradual grade transitions (slope rounding) at hinge and catch points of earthwork slopes, as well as flatter slopes (1:4 slope ratios) where applicable, so as to preserve the existing grade around the base of trees that are to remain, so their roots are not impacted by cut or fill earthwork.
- Shield light fixtures to minimize glare and uplighting. Lights will be screened and directed away
 from residences to the highest degree possible. The number of nighttime lights installed will be
 minimized to the greatest degree possible. Light fixtures and poles will be painted; no reflective
 surfaces are proposed that will contribute towards reflective daytime glare.
- Use low-sheen and non-reflective surface materials to reduce potential for glare; the finish should be matte and roughened.

During Project construction the following measures will be taken to minimize temporary visual impacts:

- Locate/screen storage and staging areas in areas that minimize visual prominence to the greatest extent possible in order to reduce the temporary visual effects during construction.
- Light and glare effects associated with possible nighttime construction activities should be addressed by using downcast lighting sources and shielding roadway lighting.

9. Environmental Justice

The study area for environmental justice includes the area within 0.5 mile east and west of Aurora Avenue N, between N 165th Street and N 205th Street, and the three census blocks immediately north of this area. This area was selected because potential direct and indirect effects will be concentrated along the corridor and are not likely to extend further than ½ mile from the project limits. The study area fully or partially encompasses 19 census block groups. Eight of these census block groups immediately abut Aurora Avenue N between N 165th Street and N 205th Street.

According to analysis of 2000 Census data, minority and low-income populations residing in the study area identified themselves as follows:

- Hispanic or Latino: 4%
- Black or African American: 4%
- Asian: 15%
- American Indian or Alaskan Native: 2%
- Living below poverty level: 7%

Race and Ethnicity

Overall, the racial and ethnic composition of the study area population is very similar to that found citywide. The largest minority group in the study area identified themselves as Asian, accounting for 15% of the population.

Ability to Speak English

The 2000 Census also gathered information on linguistically isolated households, which means that all members of the household 14 years and over have at least some difficulty with English. Review of Census Data indicates the presence of 51 linguistically isolated Spanish-speaking households and 348 linguistically isolated Asian or Pacific Island language-speaking households. This represents approximately 5 percent of the total households in the study area.

Outreach efforts for the two public meetings and other written community outreach materials (newsletters, mailings, etc.) prepared for the environmental process, and subsequently for construction activities related to the Project, include basic information in Spanish, Chinese, and Korean languages – each identified as a language spoken by at least 3% of the population in the

Project study area. The City has retained a translation service to be employed upon requests from citizens for any larger presentation or written material prepared for the Project.

Low Income

The 2000 Census reported that 7.4% of the population in the study area was below the poverty line in 1999, compared to 6.9% of the city as a whole.

Potential Effects on Environmental Justice Populations

Property Acquisition

Full acquisition is expected of three commercial properties located at 17550, 17560, and 18551 Aurora Avenue N, and one residential property located at 19522 Aurora Avenue N.

Property Acquisition and Relocation

Under all three Build Alternatives, the Project could potentially require relocation of residents of rental units located on one parcel at 19522 Aurora Avenue N. One rental house and two apartment buildings are located on the property. Full acquisition of the house will be required under all three Build Alternatives. For the two apartment buildings, remodeling may be required for up to eight units. This could result in temporary relocation of the residents of these units during construction; or, the owner may opt not to remodel, which could result in the need for permanent relocation. The maximum potential permanent and temporary relocation would affect up to approximately 3% of the total residences within the block group and less than 1% of residences within the study area.

The following structures would be fully or partially demolished as part of the Project:

Full acquisition and demolition of 3 commercial properties

- McCaughan properties 17750 and 17760 Aurora Avenue N
- James Alan Salon 18551 Aurora Avenue N (land is property of Seattle City Light property rights would be transferred to the City)

Partial acquisition and demolition of 3 commercial buildings (Aurora Rents, Key Bank, Top Tattoo).

- Aurora Rents 17244 Aurora Avenue N
- Key Bank 17504 Aurora Avenue N
- Top Tattoo 19918 Aurora Avenue N

Building and/or business owners will have the option to redevelop upon the existing site, but they may also choose to relocate.

Two churches, one market, one Vietnamese restaurant, and one thrift store were identified along the Project corridor as serving minority and/or low-income populations. No building impacts identified above are expected to affect any of these establishments.

Right-of-way acquisition is expected to affect parking along the project corridor. The Vietnamese restaurant is one of 23 businesses along the corridor expected to lose 20% or more of its existing parking. It is expected that some parking spaces would be regained by converting the parking layout on the property. Parking effects are spread among 40 properties throughout the corridor, located among eight census block groups that have varying proportions of minority and low-income populations (some higher than the study area averages and some lower). Businesses that serve minority and/or low-income populations are not disproportionately affected.

The City will compensate property owners for property acquisitions required by the Project. Acquisition and relocation will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act, as amended. Relocation resources are available to all residential and business relocatees without discrimination.

Construction Effects

The City will also obtain construction easement approximately 10 feet wide, on each side of the roadway along the entire length of the Project. Partial acquisitions and construction easements would occur along the entire 2-mile length of the Project corridor, and would not result in a disproportionately high or adverse property take for minority or low-income populations.

It is expected that minority or low-income populations would experience temporary construction impacts, including noise, dust, odors, vehicle and equipment emissions, and minor visual effects similar to those experienced by the general population in the study area. Minority or low-income populations would not bear these effects predominately, nor would they bear these effects more severely or at a greater magnitude than other residents in the study area and the general public.

Beneficial Effects

The Project would improve safety and mobility for pedestrians and transit users, which is notable with regard to minority and low-income populations, as many people within these populations rely on transit and non-motorized modes for their travel needs. The Project would improve transit operations and reliability through addition of the BAT lanes, providing a lane for bus operation outside the general-purpose traffic flow. Provision of continuous, even sidewalks would improve pedestrian connections, and provide a safe location for people waiting for transit. The addition of the pedestrian amenity zone has additional safety benefit by providing increased separation of vehicular traffic from pedestrians on the sidewalk. The Project would also improve vehicle mobility and safety.

Environmental Justice Finding

Based on the findings presented in this report, the Project would not result in disproportionately high adverse effects to minority or low-income populations.

Partial acquisitions of properties abutting the existing right-of-way would be necessary to accommodate the roadway improvements. Partial acquisitions would occur along the 2-mile length of the Project corridor, and would not result in a disproportionately high property take for minority or low-income populations.

Potential relocation could be needed of nine residences: one house due to full acquisition, and up to eight apartments due to partial acquisition. These residences are located within a block group containing a higher than average minority and low-income population compared to the study area as a whole, however only a small portion of the total block group (3%) would be affected.

It is expected that minority and low-income populations would experience temporary construction impacts, including noise, dust, odors, vehicle and equipment emissions, and minor visual effects similar to those experienced by the general population in the study area. Minority and/or low-income populations would not bear these effects predominately, nor would they bear these effects more severely or at a greater magnitude than other residents in the study area and the general public. Minority and low-income populations, along with the general public, would experience benefits due primarily to improved mobility and safety along Aurora Avenue N.

The Project would not result disproportionately high adverse impacts to minority or low-income persons; therefore, no activities to avoid or minimize adverse effects related to Executive Order 12898, Environmental Justice, would be necessary.

Attachment D. No Effect Letter

Endangered Species Act No Effect Letter

Date:	October 15, 2007
To:	Steve Saxton, Federal Highway Administration, 711 S. Capitol Way, Suite 501, Olympia, WA 98501
From:	City of Shoreline
CC:	Sam Schuyler, Assistant Local Programs Engineer, WSDOT Northwest Region, 15700 Dayton Avenue N, NB82-121, PO Box 330310, Seattle, WA 98133-9710
	Kristen Overleese, Capital Projects Manager, City of Shoreline
	Jennifer Barnes, Environmental Project Manager
Subject:	Aurora Avenue Corridor Improvement Project – N 165th Street to N 205th Street

The City of Shoreline is proposing to complete the Aurora Avenue corridor Improvement Project, N 165th Street to N 205th Street (MP 41.48 to MP 43.48, T26N R4E Sections 6&7). The project is funded in part by the Federal Highway Administration (FHWA). We have prepared this assessment on behalf of the FHWA, as several species listed under the federal Endangered Species Act (ESA) may be found in King County (USFWS 2007, NMFS 2007).

Project Description

Aurora Avenue N is a major north/south urban highway that serves both local and regional traffic within the City of Shoreline (see Figure 1, *Project Vicinity*). It is a key regional vehicular, transit, and truck corridor within the greater area of Puget Sound and serves as the City's primary arterial roadway, running approximately parallel to Interstate (I) 5 with connections at N 145th Street, N 175th Street, and N 205th Street. Development along the corridor is predominantly commercial, mixed with some multi-family housing. Aurora Avenue N has two general-purpose lanes in each direction and a center two-way-left-turn lane, with shoulder and sidewalk of varying width located sporadically along the corridor, and no curb or gutter.

The proposed Project will include the following elements:

- Business Access and Transit (BAT) lane in each direction;
- two general-purpose lanes in each direction;
- continuous 7-foot sidewalk, curb, and gutter on each side of the roadway;

- 4-foot amenity/utility zone between sidewalk and curb on each side of the roadway along most of the project length. The amenity/utility zone is reduced along approximately 5% (linear feet of zone) in order to avoid impacts to buildings and/or minimize impacts to parking spaces;
- 16-foot landscaped center median with left-turn and u-turn pockets;
- interconnected, coordinated signal system with transit signal priority;
- improvements to intersections, including proposed new traffic signals at the intersections of Aurora Avenue N with Firlands Way N/N 196th Street and N 182nd Street;
- marked pedestrian crossings at signalized intersections;
- improvements to Echo Lake Place, north of N 195th Street;
- new street and sidewalk lighting;
- undergrounding of utilities; and
- stormwater facilities, including Low Impact Development (LID) elements in the median and/or amenity zone.

The total width of the roadway will be 110 feet (narrower where sidewalk or amenity zone width is reduced) from back-of-sidewalk to back-of-sidewalk.

Project Schedule

Project construction is planned to begin in early 2009. Depending on funding, the project may be built in two to four years.

10/15/2007



Project Activities

Construction would include excavation, grading, paving, and installation of sidewalks, curbs, stormwater treatment systems, traffic signals, signs, lighting, and landscaping.

Construction would use a variety of noise-producing equipment and would cause a temporary but noticeable increase in noise in the vicinity of the equipment being used. The extent and volume of the noise increase would vary during project construction (Jones & Stokes 2007a). Background noise for the project area (generally 61 to 73 A-weighted decibels (dBA) for outdoor receptors [Jones & Stokes 2007a]) includes a high volume of traffic along Aurora Avenue N. The loudest equipment noise (concrete saw) would produce noise levels as loud as 90 dBA at 50 feet (Jones & Stokes 2007a). This would result in elevated noise to a radius of 1,425 feet (0.27 mile) from the project.

As the project would not include any in-water work, would reduce impervious surface area, and would retrofit the entire project area for stormwater treatment, the project would have no adverse water quality or aquatic habitat effects. Therefore a 1,425-foot buffer on the project footprint is identified as the action area for all species.

Listed Species

No listed species are identified within the Project Action Area.

Land Use and Availability of Habitat

Jones & Stokes biologist Andy Wones conducted a field review of the site was conducted on May 2, 2007. The Aurora Avenue N corridor has been developed for many years and currently includes a variety of commercial and industrial businesses and residences. Vegetation along Aurora Avenue N is limited to small areas of landscaped grass, trees, and shrubs. The project footprint is almost entirely paved. No suitable habitat for ESA listed species is found within the action area.

A wetland delineation for the project determined that no streams or wetlands are located in the vicinity (i.e., within 75 feet) of the project (Jones & Stokes 2007b). As no wetlands are located in the action area, there is no potential habitat for marsh sandwort. Likewise, no grassland is found in the action area, and no suitable habitat for golden paintbrush is located in the project vicinity. In addition, there are no records of marsh sandwort or golden paintbrush in the action area, and no wetlands are located in the action area.

The project area drains to three threshold discharge areas (TDAs): Boeing Creek, Echo Lake, and Lake Ballinger. In the Boeing Creek TDA (N 165th Street to N 183rd Street), the existing stormwater collection system drains to a piped stream that is one of the headwaters of Boeing Creek. Boeing Creek daylights at the intersection of Greenwood Avenue N and Carlyle Hall

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Road N, approximately 1 mile downstream of the project area. The Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) database (WDFW 2006) and WDFW SalmonScape (WDFW 2007) website documents Coho salmon use of the lower reach (approximately 0.5 mile) of Boeing Creek, located more than 1 mile downstream of the project. Steep gradient limits the upstream distribution to a point downstream of Hidden Lake. Culverts at NW Innis Arden Avenue and at the outlet to Hidden Lake are both barriers to passage as well. No ESA listed fish species have been observed in Boeing Creek.

The central portion of the project (N 183rd Street to N 200th Street) is in the Echo Lake TDA. Existing storm drains in this TDA discharge at the southern end of Echo Lake located one block east of Aurora Avenue N. The outlet of Echo Lake is piped. Although the channel is open again north of Echo Lake, it drains to another piped stream along N 205th Street before discharging to Lake Ballinger. There is no access for anadromous fish, and there are no ESA listed species in Echo Lake (WDFW 2006, 2007).

The northern portion of the project (N 200th Street to N 205th Street) is in the Lake Ballinger TDA. Stormwater from existing storm drains flows to the piped channel along N 205th Street before discharging to Lake Ballinger. No ESA listed fish species are known to use Lake Ballinger. Puget Sound Chinook salmon spawn in McAleer Creek greater than 0.75 mile downstream of Lake Ballinger, but are not known to use McAleer Creek upstream of that point (WDFW 2006, 2007). Coho salmon use Lake Ballinger Hall Creek and its tributary to the north as rearing habitat (WDFW 2007).

Stormwater Management

Currently there is no stormwater treatment for impervious surfaces in the project area. The project would reduce impervious surface area in each TDA, and all new pollution generating impervious surfaces would drain to new basic stormwater treatment facilities designed to meet the City of shorelines stormwater management standards.

The proposed Aurora Avenue N improvements are occurring at a time when stormwater management requirements are changing statewide. The City currently uses the 1998 King County Surface Water Design Manual (KCSWDM) (King County 1998). Ecology is currently reviewing the 2005 KCSWDM to confirm that is meets the requirements of the Phase I and Phase II Western Washington Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. The 2005 KCSWDM includes many updates to the 1998 KCSWDM Core Requirements and changes many of the thresholds, flow control and treatment options required. The City Surface Water and Environmental Services Department indicated an objective to use the 2005 King County Surface Water Design Manual as the target requirements considered for Aurora Avenue N. It is assumed that this updated manual will be accepted by Ecology and in turn adopted by the City. In efforts to meet the current standards as well as protecting the existing drainage resources in Shoreline, this Project will target the assumed new stormwater management requirements as a goal when designing the drainage and stormwater management facilities.

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The effect of the project on impervious surface area in each TDA is shown in Table 1. As a result, pollutant loadings of all roadway related pollutants (e.g total suspended solids, total metals, dissolved metals, and other pollutants associated with suspended solids) from the project area will be reduced compared to existing conditions.

	Existing		Proposed	
TDA	Impervious Area (acres)	Treated Area (acres)	Impervious Area (acres)	Treated Area (acres)
Boeing Creek	5.8	0	5.4	2.2
Echo Lake	15.0	0	13.9	5.6
Lake Ballinger	3.3	0	3.1	1.1

Table 1. Effect of the Project on Impervious Surface Area

Because all receiving waters are exempt from flow control under the City of Shoreline regulations (i.e., no increase in runoff during the 100-year storm event per King County 1998 Surface Water Design Manual), the project will not provide flow control. However, because the area of impervious surfaces will be reduced in each TDA, peak flows will be reduced.

Conclusion

The project will have *no effect on ESA listed species or designated critical habitat* for the three reasons listed below:

- No ESA listed species or designated critical habitat are located within the action area.
- The project would not facilitate additional growth and development outside the project area.
- The project would reduce impervious surface area and improve stormwater treatment for the action area.
- Roadway related pollutant loading from the action area would decrease.

Likewise, no essential fish habitat (EFH) is located within the action area; therefore the project would have *no effect on EFH*.

This assessment satisfies FHWA's responsibilities under Section 7(c) of the Endangered Species Act at this time. We are sending you this copy of our assessment for your files. We will continue to remain aware of any change in status of these species and will be prepared to reevaluate potential project impacts if necessary.

References

- King County. 1998. Surface Water Design Manual. King County Department of Natural Resources. Seattle, WA.
- Jones & Stokes. 2007a. Noise Discipline Report. Aurora Corridor Improvement Project: N 165th Street – N 205th Street. August. (61001.06.) Bellevue, WA. Prepared for City of Shoreline.
 - 2007b. Wetland Discipline Report. Aurora Corridor Improvement Project: N 165th
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- National Marine Fisheries Service (NMFS). 2007. Endangered Species Act Status of West Coast Salmon & Steelhead. Updated: June 15, 2007. Available at: http://www.nwr.noaa.gov/ESA-Salmon-Listings/upload/snapshot0607.pdf . Accessed: October 3, 2007.
- U.S. Fish and Wildlife Service (USFWS). 2007. Listed and Proposed Endangered and Threatened Species and Critical Habitat; Candidate Species; and Species of Concern in western Washington. Western Washington Field Office (Revised December 20, 2005). Available at: http://www.fws.gov/westwafwo/se/SE_List/KING.htm . Accessed: October 3, 2007.
- Washington State Department of Fish and Wildlife (WDFW). 2006. Priority Habitats and Species (PHS) map and report. In the vicinity of T26R04E Section 6. Printed November 1.
 - ——. 2007. SalmonScape online fish distribution maps. Available: <http://wdfw.wa.gov/mapping/salmonscape/index.html>. Accessed: August 16, 2007.

Attachment E. 4(f) Memorandum



Technical Memorandum

Date:	November 13, 2007
To:	Brian Hasselbach, Federal Highway Administration, 711 S. Capitol Way, Suite 501, Olympia, WA 98501
From:	Jennifer Barnes
cc:	Sam Schuyler, Assistant Local Programs Engineer, WSDOT Northwest Region, 15700 Dayton Avenue N, NB82-121, PO Box 330310, Seattle, WA 98133-9710
	Kristen Overleese, Capital Projects Manager, City of Shoreline
Subject:	Section 4(f) Assessment Aurora Avenue Corridor Improvement Project – N 165th Street to N 205th Street

Purpose of Memorandum

The City of Shoreline is proposing to complete the Aurora Avenue corridor Improvement Project, N 165th Street to N 205th Street (see Figure 1). The project is funded in part by the Federal Highway Administration (FHWA), and must be developed in compliance with the National Environmental Policy Act (NEPA). The Project Description is provided in the attachment to the memorandum.

Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303) applies to projects using a significant publicly owned park, recreational area, wildlife or waterfowl refuge, or historic site (23 CFR 771.135). This memorandum presents the assessment of whether or not any Section 4(f) properties could potentially be impacted by the proposed project.



HORELINE AURORA CORRIDOR Figure 1. Proposed Project Aurora Corridor Improvement Project November 2007

Public Recreational Facilities and Parks

The following public recreational facilities and parks are located in the project vicinity (see Figure 2).

Interurban Trail

The Interurban Trail is a 3.25-mile paved, multi-purpose pedestrian and bicycle trail that is located parallel to Aurora Avenue N within the Seattle City Light power transmission line right-of-way between N145th Street and N 200th Street. The trail then is on-street east along N 200th Street and then through the Ballinger Commons complex to N 205th Street (the City limits). It serves as the spine of the City's bicycle trail system and is used by commuters as well as recreational bicyclists, walkers and joggers. The trail is intended to connect neighborhoods to shopping, services, employment, transportation centers, and parks. The trail corridor provides an important north-south linkage through the City and to the rest of the regional Interurban Trail system.

Parks

- Richmond Highlands Recreation Center and Park is a 4.2-acre community park located south
 of Shorewood High School and includes: a small gym with a stage and indoor play
 equipment, a game room with billiard and ping pong tables, a meeting room with kitchen,
 outdoor children's play equipment and a ball field.
- Meridian Park is a 3.13-acre park located south of Meridian Park Elementary School and includes a wetland with a stream crossing the site as well as some passive meadow and natural areas with a circular trail. The park also includes picnic tables, benches, a basketball court and tennis courts.
- Ronald Bog Park is a city owned 13.61-acre natural area at the headwaters of Thornton Creek. The site was once a peat bog that was actively mined in the 1950's. The park currently features a small square-shaped pond that shows evidence of the past peat mining activities; in addition, the pond now serves an important function in stormwater management for the City. Local students and community members are currently monitoring wildlife and plants in the park and participating in restoration activities.
- The 9.02-acre Crowell Park is a community park composed of two separate parcels. The northern portion of the site, located to the east and south of the King County District Court, includes a playground area, a basketball court, a baseball field and a soccer field. The southern portion of the park is much smaller, and is heavily wooded.
- Echo Lake Park is a 0.77-acre park located at the north end of Echo Lake and abutting the Interurban Trail along its eastern border. The park includes restroom facilities, picnic tables and benches.



Assessment of Effects

The segment of the Interurban Trail that runs parallel to the Project area was recently completed, and it was designed to be integrated with the improvement of Aurora Avenue N. The Project will not encroach upon the trail.

None of the parks present in the area are located adjacent to the right-of-way that will be needed for the Project. Thus, neither construction nor operations of the Project will result in any direct impacts to the public parks that are located in the area.

Historic Sites

A cultural resources assessment was completed for this Project. No places or objects listed on, or proposed for, national, state, or local preservation registers were identified within the Area of Potential Effects (APE).

Four historic properties were identified in the APE:

- Auto Cabins 17203 Aurora Avenue N
- Echo Lake Tavern 19508 Aurora Avenue N
- Erickson House 19502 Aurora Avenue N
- North Trunk Red Brick Road Ronald Place N, between N 173rd Street and N 180th Street

These properties are eligible for listing, but not listed in the National Register of Historic Properties (NRHP).

Assessment of Construction Effects

Construction impacts to the historic properties identified in the APE may consist of right-of-way encroachment and temporary construction easements, as well as possible driveway construction, landscaping, and installation of retaining walls. Construction impacts are anticipated to be minor, and would not change any of the characteristics that make these properties eligible for NRHP listing.

Assessment of Operational Effects

The project would not result in at significant unavoidable adverse impacts to cultural resources.

Although landscaping, sidewalk construction, and related improvements may occur on the parcels on which the three historic buildings are situated, the integrity of the properties will not be affected by the Project. Operation of the project is not anticipated to generate any long-term impacts that would affect the historic integrity of the identified properties. Operational impacts are anticipated to be minor, and would not change any of the characteristics that make these properties eligible for NRHP listing.

Operational impacts to North Trunk Road would consist of parking and vehicle ingress/egress, which would contribute to gradual deterioration of the roadway over time. However, even under the No Build Alternative, this deterioration is expected due to continued vehicle use of the roadway. The Project will not directly result in removal or demolition of the North Trunk Red Brick Road. If segments of the brick road are paved over as a secondary effect of the Project, a finding of No Effect has been identified in the Cultural Resources Assessment prepared for this Project. Concurrence on this finding was provided by the Washington State Department of Archeology and Historic Preservation (DAHP) in October 2007 (see Attachment B to this memorandum).

Wildlife or Waterfowl Refuges

In the City of Shoreline, Aurora Avenue N is located in an urban area that is highly developed. A survey of Priority Habitat and Species was completed for this project. No wildlife or waterfowl refuges are located in the project vicinity.

Conclusion

Construction and operations of the proposed project will have no direct or indirect impact on any publicly owned park, recreational area, wildlife or waterfowl refuge, or historic site. Thus, Section 4(f) of the Department of Transportation Act of 1966 does not apply to this project.
Attachment A - Project Description

Aurora Avenue N is a major north/south urban highway that serves both local and regional traffic within the City of Shoreline. It is a key regional vehicular, transit, and truck corridor within the greater area of Puget Sound and serves as the City's primary arterial roadway, running approximately parallel to Interstate (I) 5 with connections at N 145th Street, N 175th Street, and N 205th Street. Development along the corridor is predominantly commercial, mixed with some multi-family housing. Echo Lake is located approximately 200 feet to the east of the roadway, north of N 192nd Street. The Interurban Trail runs roughly parallel to Aurora Avenue N between N 145th Street and N 192nd Street where it then veers to the east side of Echo Lake, east along 200th, and then north to the City limits. Aurora Avenue N has two general-purpose lanes in each direction and a center two-way-left-turn lane, with shoulder and sidewalk of varying width located sporadically along the corridor, no curb or gutter, and little landscaping.

Under existing conditions, average daily traffic on the roadway is 33,000 to 39,000 vehicles per day. A steady level of pedestrian and bicycle travel occurs along and across the roadway, but the corridor is heavily oriented to vehicle travel and is not conducive to non-motorized travel. The corridor is served heavily by public transit provided by King County Metro, with additional service at the north end of the corridor provided by Community Transit.

The Aurora Corridor Improvement Project, N 165th Street to N 205th Street, will include the following elements

- Business Access and Transit (BAT) lane in each direction;
- two general-purpose lanes in each direction;
- continuous 7-foot sidewalk, curb, and gutter on each side of the roadway;
- 4-foot amenity/utility zone between sidewalk and curb on each side of the roadway along most of the project length. The amenity/utility zone is reduced along approximately 5% (linear feet of zone) in order to avoid impacts to buildings and/or minimize impacts to parking spaces;
- 16-foot landscaped center median with left-turn and u-turn pockets;
- interconnected, coordinated signal system with transit signal priority;
- improvements to intersections, including proposed new traffic signals at the intersections of Aurora Avenue N with Firlands Way N/N 196th Street and N 182nd Street;
- marked pedestrian crossings at signalized intersections;
- improvements to Echo Lake Place, north of N 195th Street;
- new street and sidewalk lighting;

- undergrounding of utilities;
- stormwater facilities, including Low Impact Development (LID) elements in the median and/or amenity zone; and
- improvements on side streets to improve pedestrian connections and traffic transitions.

The total width of the roadway will be 110 feet (narrower where sidewalk or amenity zone width is reduced), from back-of-sidewalk to back-of-sidewalk.

Attachment B – Concurrence from DAHP on Cultural Assessment

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STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501 Mailing address: PO Box 48343 • Olympia, Washington 98504-8343 (360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

October 17, 2007

Mr. Trent de Boer Archaeologist WSDOT, Highways & Local Programs PO Box 47390 Olympia, WA 98504-7332

In future correspondence please refer to: Log: 102006-20-FHWA Property: Aurora Avenue North 165th St to 205th St Re: Determined Eligible

Dear Mr. de Boer:

Thank you for contacting our office. I have reviewed the materials you provided to our office and we concur with your professional opinion that the four historic properties identified as the Auto Cabins (17203 Aurora Avenue), the Erickson House (19502 Aurora Avenue North), the Echo Lake Tavern (19508 Aurora Avenue North), and the North Trunk (Brick) Road are eligible to the National Register of Historic Places (NRHP). We concur that the remaining 21 historic properties identified in the project area are not eligible for listing in the NRHP.

I would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800.

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

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Matthew Sterner, M.A., RPA Transportation Archaeologist (360) 586-3082 matthew.sterner@dahp.wa.gov



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October 17, 2007

Mr. Trent de Boer Archaeologist WSDOT, Highways & Local Programs PO Box 47390 Olympia, WA 98504-7332

In future correspondence please refer to: Log: 102006-20-FHWA Property: Aurora Avenue North 165th St to 205th St Re: NO Adverse Effect

Dear Mr. de Boer:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The Aurora Avenue North 165th St to 205th St project has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

I concur that the current project as proposed will have "NO ADVERSE EFFECT" on any of the four identified National Register eligible historic resources located within your project area. Measures to mitigate potential adverse impacts to the North Trunk (Brick) Road will be implemented as discussed.

If additional information on the project becomes available, or if any archaeological resources are uncovered during construction, please halt work in the area of discovery and contact the appropriate Native American Tribes and DAHP for further consultation.

Thank you for the opportunity to review and comment. If you have any questions, please contact me.

Sincerely,

Matthew Sterner, M.A., RPA Transportation Archaeologist (360) 586-3082 matthew.sterner@dahp.wa.gov

