

I-405, SR 169 to I-90 - Renton to Bellevue Project

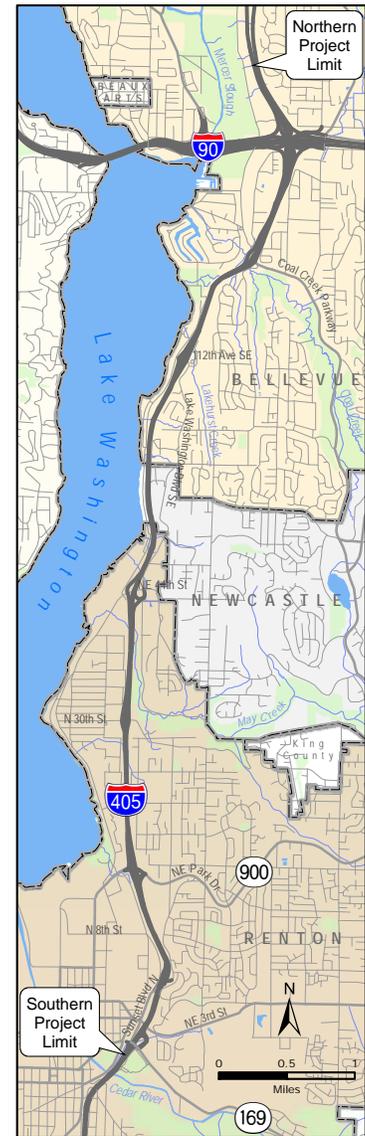
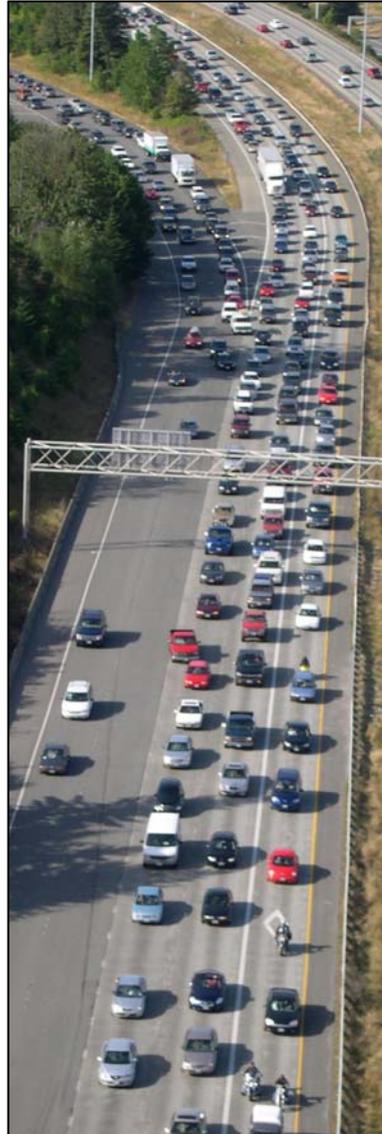


Corridor Program

Congestion Relief & Bus Rapid Transit Projects

FINDING OF NO SIGNIFICANT IMPACT AND PROGRAMMATIC SECTION 4(f) EVALUATION

November 2008



I-405, SR 169 to I-90 – Renton to Bellevue Project

Cities of Renton, Newcastle and Bellevue, and King County, Washington

Finding of No Significant Impact

***By the U.S. Department of Transportation and Federal Highway Administration,
Washington Division***

The Federal Highway Administration (FHWA) has determined, in accordance with 23 CFR 771.121, that the proposed project will have no significant impact on the environment.

This Finding of No Significant Impact (FONSI) is based on the Environmental Assessment (EA) (incorporated by reference) and other documents and attachments as itemized in this FONSI. These documents have been independently evaluated by FHWA and are determined to accurately discuss the project purpose, need, environmental issues, impacts of the proposed project, and appropriate mitigation measures. The review provided sufficient evidence and analysis for determining that an environmental impact statement is not required.

FHWA takes full responsibility for the accuracy, scope, and content of the EA, as modified by this FONSI and the referenced documents.

11/20/2008

Date of Approval



Peter A. Jilek, P.E.
Federal Highway Administration
Urban Area Engineer

In Memoriam

WSDOT staff wish to acknowledge the contribution that Jim Leonard, former FHWA Area Engineer, made to the I-405 Corridor Program. Jim had a strong dedication to the delivery of transportation projects with the continued protection and enhancement of the environment, and we are honored to continue his legacy.



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- Appendix C: Supplemental Noise Analysis
- Appendix D: Programmatic Section 4(f) Evaluation – Coal Creek Park
- Appendix E: Supplemental Wetlands Analysis

ACRONYMS

Acronym or Abbreviation	Meaning
AASHTO	American Association of State Highway and Transportation Officials
ACM	asbestos-containing materials
APA	aquifer protection area
APE	area of potential effect
BA	biological assessment
BMP	best management practice
BNSF	Burlington Northern Santa Fe Railway
BRT	bus rapid transit
CAA	Clean Air Act
CDA	critical drainage area
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CSS	context-sensitive solutions
CTR	commute trip reduction
CWA	Clean Water Act
DAHP	Washington State Department of Archaeology and Historic Preservation
dB	decibels
dBA	decibels in the A-weighted scale to show relative loudness of sound
DNS	Determination of Nonsignificance
DPS	Distinct Population Segment
DSS	Decent, safe, and sanitary
EA	environmental assessment
Ecology	Washington State Department of Ecology

Acronym or Abbreviation	Meaning
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
EJ	environmental justice
FEMA	Federal Emergency Management Agency
FHA	Federal Housing Authority
FHWA	Federal Highway Administration
FAZ	forecast analysis zone
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
GIS	geographic information system
GMA	Growth Management Act
GP	general-purpose
HOV	high-occupancy vehicle
HPA	Hydraulic Project Approval
JARPA	Joint Aquatic Resources Project Application
LBP	lead-based paint
Leq	equivalent A-weighted sound level
Leq(h)	equivalent A-weighted sound level averaged hourly
LWD	large woody debris
LOS	level of service
MAP Team	Multi-Agency Permitting Team
MLS	Multiple Listing Service
MOA	memorandum of agreement
MP	milepost

Acronym or Abbreviation	Meaning
MTCA	Model Toxics Control Act
MTP	Metropolitan Transportation Plan
NAC	Noise Abatement Criteria
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHP	National Heritage Program
NMFS	National Marine Fisheries Service
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Administration
PHS	priority habitat species
PM ₁₀	particulate matter
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
RMC	City of Renton Municipal Code
ROD	Record of Decision
RTID	Regional Transportation Investment District
SCA	sanitary control area
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer

Acronym or Abbreviation	Meaning
SOV	single-occupant vehicle
SPCC	spill prevention control and countermeasure (plan)
SR	State Route
TDM	transportation demand management
TESC	temporary erosion sediment control
TFW	Timber, fish, and wildlife
TMDL	total maximum daily load
TMP	traffic management plan
TNM	traffic noise model
UDP	unanticipated discovery plan
USC	U.S. Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VA	Veteran's Administration
VMT	vehicle miles traveled
WAC	Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WDNR	Washington State Department of Natural Resources
WRHP	Washington Register of Historic Places
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation

DESCRIPTION OF PROPOSED ACTION

The Federal Highway Administration (FHWA) and the Washington State Department of Transportation (WSDOT) issued an Environmental Assessment (EA) for the I-405, SR 169 to I-90 - Renton to Bellevue Project on March 9, 2006. The Renton to Bellevue Project provides for improvements to approximately eight miles of I-405 (milepost 3.8 to milepost 11.9) from SR 169 north to the northern on- and off-ramps of the I-90 interchange. These improvements are a part of the I-405 Corridor Program.

Note: In June 2006, FHWA and WSDOT reduced the scope of the I-405, SR 169 to I-90 - Renton to Bellevue Project. Project elements that were removed from the Renton to Bellevue Project included one of the new I-405 northbound lanes between 112th Avenue SE and I-90, the new I-405 bridge structure carrying the I-405 southbound lanes over I-90, the ramp meter at the 112th Avenue SE interchange on-ramp to I-405, and noise wall East 16. These improvements were then cleared for construction in a documented Categorical Exclusion that was issued on June 9, 2006. Noise Wall East 16 was cleared as part of the Bellevue Nickel Project. As a result, these elements are no longer part of the Renton to Bellevue Project Build Alternative, and are instead considered to be part of the existing condition since they are currently under construction. The project description contained here has been revised to reflect these changes.

The Proposed Action includes the following improvements to support construction and operation of the facility:

- Add two new northbound general-purpose lanes on I-405 from SR 169 to 112th Avenue SE, with one of these continuing on north through the I-90 interchange as an added lane and the other connecting to the new auxiliary lane between 112th Avenue SE and I-90 that is currently under construction.
- Add two new southbound general-purpose lanes on I-405 from SR 169 through the I-90 interchange.
- Widen the southbound bridge over I-90.
- Realign I-405 to bring it up to current freeway standards, where feasible.
- Construct a new in-line bus rapid transit (BRT) station in the vicinity of 112th Avenue SE.
- Construct a transit/high-occupancy vehicle (HOV) direct-access ramp at N 8th Street in coordination with Sound Transit.
- Realign and reconfigure eight interchanges.
- Make changes to local roadways related to interchange improvements and I-405 widening.
- Construct stormwater management facilities.

- Apply context-sensitive solutions (CSS) to incorporate visually pleasing and community-oriented features into the project design.

The Renton to Bellevue Project will provide many short- and long-term benefits. Some of these benefits are:

- Shortening periods of congestion on I-405 between Renton and Bellevue.
- Increasing transit reliability and safety with the addition of a new in-line station, direct-access ramps, and other transit improvements.
- Improving operations at eight interchanges.
- Improving water quality conditions in the project area by treating approximately 282 acres of new and existing impervious surfaces.
- Providing benefits to threatened salmon species by improving water quality.
- Constructing four new noise walls and relocating five existing noise walls to the edge of the right of way.
- Implementing CSS design principles to improve project appearance and the interface with the adjacent communities.

These improvements are shown in Figure 4-2 of the EA, which has been revised in Attachment 1, Errata and Revisions, of this Finding of No Significant Impact (FONSI).

WSDOT expects to construct this project using a design-build contract. Design-build is a method of project delivery in which WSDOT executes a single contract with one entity for design and construction services to provide a finished product. The design and construction contract will include many provisions to protect the environment and to ensure compliance with project-specific permit conditions and project commitments. With design-build projects, contractors have flexibility to offer innovative and cost-effective alternatives to deliver the project, improve project performance, and reduce project effects. Design modifications proposed by the contractor could affect the project footprint and design details described in this environmental assessment; however, WSDOT design standards, performance measures, and requirements to avoid or minimize effects to the environment will continue to be met.

The preliminary cost estimate for the I-405, SR 169 to I-90 – Renton to Bellevue Project is \$1.2 billion, of which approximately \$200 million will be spent to acquire right of way. This cost estimate, prepared in 2005, assumes that the project will be constructed from 2011 to 2016.

EA COORDINATION AND COMMENTS

The Washington State Department of Transportation (WSDOT) and the Federal Highway Administration (FHWA) conducted a public hearing on March 22, 2006, following issuance of the Environmental Assessment (EA) on March 9, 2006. The EA hearing took place at the Renton Senior Activity Center in Renton, Washington, where WSDOT provided a court reporter to record verbal comments and comment forms to receive written comments. Follow-up written comments also were accepted at the I-405 Project Office through June 12, 2006. The Notice of Availability of the EA and Notice of EA Hearing were advertised in the following newspaper on the dates shown:

King County Journal on March 5, 2006 and March 12, 2006

Display advertisements were placed in the following newspapers on the dates shown:

Bellevue Reporter on March 8, 2006
Chinese Post on March 9, 2006
El Mundo (in Spanish) on March 9, 2006
King County Journal on March 10, 2006
Newcastle News on March 3, 2006
Phuong Dong Times on March 10, 2006
Renton Reporter on March 15, 2006
Russian World on March 6, 2006
The Skanner on March 15, 2006

WSDOT sent approximately 3,600 postcards announcing the availability of the EA to the following recipients, inviting them to attend the public hearing and to comment on the EA document:

- NOAA Fisheries Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington State Department of Ecology, Washington State Department of Fish and Wildlife, King County Department of Transportation, Sound Transit, Community Transit, and city officials from jurisdictions in the vicinity of the project area.
- Media contacts, and individuals that participated as commenters in the Renton to Bellevue Project Scoping Report.
- Adjacent property owners, residents, and businesses whose properties are within 750 feet of the project, citizen contacts, and I-405 Corridor Program Final EIS participants.
- Identified Renton to Bellevue Project Environmental Justice (EJ) social services.
- I-405 project database resources (Renton, Newcastle and Bellevue I-405 newsletter recipients, corridor media contacts, and Renton to Bellevue project event contacts).

Additionally, we provided the EA document directly to the following agencies and citizens:

- Elected officials, tribal governments, federal agencies, local and regional governments.
- Multi-Agency Permitting Team.
- Public and private libraries in the project vicinity.

Notice of Availability of the EA was sent to the following mailing lists:

- NOAA Fisheries Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington State Department of Ecology, Washington State Department of Fish and Wildlife, King County Department of Transportation, Sound Transit, Community Transit, and city officials from jurisdictions in the vicinity of the project area.
- Media contacts, and individuals that participated as commenters in the Renton to Bellevue Project Scoping Report.

Approximately 135 people attended the public hearing. Eleven submitted comments on forms provided at the public meeting (Attachment 5). Twenty-seven people offered verbal comments, which were recorded in the Hearing Transcript (Attachment 6). During the comment period, 83 individuals, groups, and/or agencies also provided written comments on the EA (Attachment 7). The comments focused primarily on traffic noise, noise wall construction, fish and aquatic resources, water quality, and environmental justice issues.

The comment period was extended twice to accommodate the interests of two different neighborhoods. With the extensions, the comment period was open for a total of 88 days.

DETERMINATION AND FINDINGS

National Environmental Policy Act (NEPA) Finding

The Federal Highway Administration (FHWA) served as lead agency under the National Environmental Policy Act (NEPA) for the I-405, SR 169 to I-90 - Renton to Bellevue Project. The Washington State Department of Transportation (WSDOT) prepared an environmental assessment (EA) in compliance with NEPA, 42 U.S. Code (USC) Section 4321 et. seq., and with FHWA's regulations, 23 Code of Federal Regulations (CFR) Part 771. The EA discusses the potential impacts of the project so that FHWA can determine whether significant adverse impacts (as defined in Council on Environmental Quality [CEQ] 1508.27) are probable. If such a determination were made, an environmental impact statement (EIS) would need to be prepared.

WSDOT has incorporated environmental considerations into its study of project alternatives and has conducted evaluations of the project's potential environmental impacts. FHWA and WSDOT reviewed the EA prior to issuance in March 2006. The EA found that with the environmental measures that WSDOT has committed to implement, the project's construction and operation will cause no significant adverse environmental effects. This finding applies to all applicable environmental elements. Some project impacts, such as effects on wetlands, will be reduced as a result of removing the 112th Avenue SE to I-90 auxiliary lane and southbound bridge structure over I-90 from the Renton to Bellevue Project. These changes are addressed in the Errata section (Attachment 1) of this document.

After carefully considering the EA, its supporting documents, the public comments and responses, FHWA finds under 23 CFR 771.121 that the proposed project, with the mitigation to which WSDOT has committed, will have no significant adverse impacts on the environment. The record provides sufficient evidence and analysis for determining that an EIS is not required.

Air Quality Conformity Statement

The Puget Sound Regional Council has modeled the effects of this project on regional ozone and carbon monoxide emissions. This project, as well as all others in the Council's Transportation Improvement Program and Metropolitan Transportation Plan (MTP), conform to the State Implementation Plan at the regional level. The U.S. Environmental Protection Agency has approved the current State Implementation Plan for this area. FHWA has approved the Council's Transportation Improvement Program conformity analysis.

At the project level, hot-spot carbon monoxide modeling demonstrates that carbon monoxide concentrations will not exceed the National Ambient Air Quality Standards (NAAQS) of 35 parts per million (ppm) averaged over one hour or 9 ppm averaged over eight hours in either the year of opening or the design year (2030). This project conforms to the State Implementation Plan and both federal and state Clean Air Act (CAA) requirements.

Floodplain Finding

There are no Federal Emergency Management Agency (FEMA) floodplains within the immediate project area. After treatment for water quality, stormwater will be directly discharged to downstream water bodies including the Cedar River and Lake Washington. FHWA finds that no adverse impacts to any 100-year floodplains or floodways will occur as a result of the proposed project.

Endangered Species Act Finding

WSDOT served as the lead for the Endangered Species Act (ESA) Section 7 consultation on behalf of FHWA pursuant to 50 CFR 402.07. The NOAA Fisheries Service and the U.S. Fish and Wildlife Service (USFWS), the agencies responsible for administering the ESA, were contacted early in the project. The listings for threatened and endangered species are current as a result of the review of the National Marine Fisheries Service (NMFS) website and consultation with the USFWS.

There were four species listed as Threatened under the ESA that may occur in the project vicinity: bald eagle (*Haliaeetus leucocephalus*); Puget Sound Evolutionarily Significant Unit (ESU) Chinook salmon (*Oncorhynchus tshawytscha*); Coastal Puget Sound Distinct Population Segment (DPS) bull trout (*Salvelinus confluentus*); and Puget Sound DPS steelhead trout (*O. mykiss*). A biological assessment was submitted in April 2006 to NMFS and the USFWS, which concluded that the Proposed Action:

- may affect, but is not likely to adversely affect, bald eagles.
- may affect, and is likely to adversely affect, Chinook salmon.
- may affect, but is not likely to adversely affect, designated critical habitat for Chinook salmon.
- may affect, but is not likely to adversely affect, bull trout.
- may affect, but is not likely to adversely affect designated critical habitat for bull trout.

Section 7 Concurrence on the biological assessment (BA) was obtained through formal consultation with NMFS on January 3, 2007, and through informal consultation with USFWS on November 28, 2006. FHWA, USFWS, and NMFS concur that the project may affect, but is not likely to adversely affect, bald eagles; may affect, but is not likely to adversely affect, Chinook salmon; may affect, but is not likely to adversely affect, designated critical habitat for Chinook salmon; may affect, but is not likely to adversely affect, bull trout; and may affect, but is not likely to adversely affect, designated critical habitat for bull trout. Concurrence letters on the BA are provided in Attachment 8.

Following the listing of the Puget Sound DPS of steelhead trout by NMFS in June 2007, WSDOT and FHWA requested reinitiation of formal consultation with NMFS for Puget Sound steelhead. An analysis of the effects of the Proposed Action was submitted to NMFS that concluded the Proposed Action may affect, and is likely to adversely affect, Puget Sound steelhead.

Section 7 Concurrence on effects on Puget Sound steelhead was obtained through formal consultation with NMFS on March 12, 2008. FHWA and NMFS concur that the project may affect, and is likely to adversely affect, Puget Sound steelhead.

Magnuson-Stevens Fishery Conservation and Management Act Finding

The NMFS analyzed the project actions that are likely to affect essential fish habitat pursuant to Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act. Based on investigations and analysis of the types of fisheries habitat that could be affected by potential future discharge of stormwater into Lake Washington during project operation or construction, NMFS concluded that the Proposed Action will minimize or offset adverse effects on essential fish habitat. The analysis by NMFS includes seven conservation recommendations to further avoid, minimize, or otherwise offset potential adverse effects on essential fish habitat. FHWA and WSDOT will comply with these measures.

Farmland Finding

Suitable soils and active farming do not occur within the project corridor. Therefore, the Farmlands Protection Policy Act of 1981 (7 USC 4201-4209) and other state and federal farmlands protection policies, orders, and guidance do not apply to the proposed project.

Wetland Finding

Initial wetland field investigations that took place between September 2003 and January 2004 identified 36 wetlands that would be filled and permanently impacted out of the total 63 wetlands identified in the Renton to Bellevue project area. The affected wetlands total 5.52 acres. The affected wetlands are along the right of way and cannot be reasonably avoided because of the roadway alignment. Most of the permanent wetland loss evaluated during the initial investigations (3.23 acres) will occur to Category III wetlands. The remaining loss, 2.29 acres, will occur to Category IV wetlands. Approximately 0.63 acres of wetland would be affected temporarily. Temporary construction impacts may include sediment transport and erosion from disturbed soils onsite.

A second wetland investigation was conducted in late April and early May 2007 that identified an additional 48 wetlands within the project area. Most of the wetlands identified in the supplemental analysis (see Appendix E Supplemental Wetlands Discipline Report) are relatively small (less than one-third of an acre). Of the eight remaining wetlands, seven are greater than one-third of an acre, but smaller than two-thirds of an acre, and are primarily in small subbasins that drain directly to Lake Washington. In total, the second survey found 5.44 additional acres that could potentially be permanently affected and 0.47 acres that could potentially be temporarily affected during construction.

In total, 12.06 acres of wetland will be directly impacted. Several measures to avoid or minimize impacts to wetlands have been proposed as part of project design. Best

management practices and other measures will be incorporated into the construction specifications to minimize sedimentation and/or contamination of wetlands. Temporary construction impacts account for 1.10 acres of these direct impacts. In addition, the project will result in approximately 0.20 acres of indirect impacts to wetlands. Indirect wetland impacts occur where most of the existing wetland area would be filled such that the remainder of the wetland is not likely to function at the same level as occurred prior to construction.

WSDOT, in partnership with the City of Renton, is developing the Springbrook Creek Wetland and Habitat Mitigation Bank. Mitigation banking is an early-action approach to providing mitigation identified in the I-405 Corridor Program Final Environmental Impact Statement (EIS). The 8.1 acres of permanently impacted wetlands located within the service area of the bank are intended to be mitigated at this site. Sites for mitigation of impacted wetlands in Bellevue (1.93 acres), Newcastle (less than 0.75 acres), and King County (less than 0.2 acres) will be selected and site-specific mitigation proposals will be developed in conjunction with preparation of permit submittals for the project.

FHWA finds that there is no practicable alternative to the proposed new construction within wetlands. The Proposed Action includes all practicable measures to reduce harm to wetlands that may result from the Proposed Action.

Section 106 Finding

Archival review, tribal consultation, and field surveys identified no evidence of cultural resources within the project site. As part of early coordination with the tribes in preparation of the cultural resources assessment, contacts (written and by telephone) were made with the following tribes: Duwamish, Snoqualmie, Muckleshoot, and the Confederated Tribes and Bands of the Yakama Nation.

In addition to consultation with potentially-affected tribes, coordination and consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP) under Section 106 of the National Historic Preservation Act was initiated. In February of 2006, a letter was sent to WSDOT from DAHP that included a finding of “no adverse effect” to historic and cultural resources as a result of the proposed project. Consultation with the DAHP determined that no structures within the Area of Potential Effects are eligible for listing on the National Register of Historic Places. The consultation concluded that the Proposed Action will have no adverse effects on historic properties.

Cultural resource investigations determined that the Proposed Action has a low probability for hunter-fisher-gatherer, ethnographic period, historic Indian, and historic period non-Indian archaeological resources.

Based on the cultural resources analysis and coordination with the tribes and DAHP, FHWA finds that the project will have no adverse effect on any identified or likely cultural or historic resources, and that the Section 106 coordination requirements for this project have been fulfilled.

Section 6(f) Finding

The existence of Land and Water Conservation Funds Act of 1965 Section 6(f) properties was evaluated as part of the EA.

WSDOT proposes to acquire a temporary right of entry at Newcastle Beach Park to discharge treated highway stormwater through an existing channel that runs through the park. In addition, WSDOT proposes to construct several improvements to enhance recreation use and biological functions within the park, including: wetland enhancement and creation; stream enhancement; paving of two existing parking lots and a driveway; a project kiosk; and two pedestrian foot bridges.

At Gene Coulon Memorial Beach Park, WSDOT will acquire a temporary right of entry to improve the existing channel and conveyance beneath the park entrance road, construct a new stormwater outfall, and discharge treated highway stormwater directly to Lake Washington.

No land will be acquired from either of these Section 6(f) properties, and WSDOT will not acquire any rights or interests in these properties that will infringe on the cities' control over the areas for their intended park and recreation uses. The future use of the affected stream channels will be the same as their current use – they will convey stormwater to Lake Washington.

WSDOT will protect existing park uses, and will avoid or minimize physical impacts and disruption to recreation activities throughout development of the final design and construction. Park entrances will remain open to general park traffic during construction. All areas disturbed by construction will be restored or enhanced.

In summary, WSDOT will not acquire any rights to or interest in the properties; no activities, features, attributes, or uses of the properties will be impaired; and the properties will be restored to their preconstruction condition or better by the Renton to Bellevue Project.

FHWA finds that the proposed project will not cause a conversion of any property protected by Section 6(f) of the Land and Water Conservation Funds Act of 1965 at Newcastle Beach Park or Gene Coulon Memorial Beach Park.

Section 4(f) Finding

The existence of U.S. Department of Transportation (USDOT) Act of 1966 Section 4(f) resources was evaluated as part of the EA.

The Proposed Action will have no adverse effects on historic properties. Consultation with the DAHP determined that no structures within the Area of Potential Effects are eligible for listing on the National Register of Historic Places.

The Proposed Action will require a temporary right of entry at Coal Creek Park from the City of Bellevue to construct an elevated, shared-use, boardwalk trail to accommodate pedestrian and bicycle movements. In addition, WSDOT will construct a stairway connection to the existing Coal Creek Trail and provide an informational kiosk.

Temporary occupancy of Coal Creek Park will occur while the boardwalk trail, stairway, and kiosk are constructed.

A programmatic Section 4(f) evaluation was conducted to assess the project's effects on Coal Creek Park. The evaluation concluded that the amount of land to be used to construct an elevated boardwalk trail along the north edge of Coal Creek Park is minor at 0.2 acres, or approximately 0.04 percent of the overall 550-acre park. The evaluation also found that neither the location of the proposed use nor the amount of land being used will impair the use of the remaining Section 4(f) resource. Furthermore, the boardwalk trail is consistent with and will complement the intended use of the park.

WSDOT will obtain a temporary right of entry at Newcastle Beach Park from the City of Bellevue to discharge treated highway stormwater through an existing channel that runs through the park. In addition, WSDOT will construct several improvements to enhance recreation use and biological functions within the park, including: wetland enhancement and creation; stream enhancement; paving of two existing parking lots and a driveway; a project kiosk; and two pedestrian foot bridges. Temporary occupancy of Newcastle Beach Park will occur while the improvements are constructed. This short-term, temporary occupancy does not constitute a use under Section 4(f) because all of the conditions in 23 CFR 774.13(d) (1), (2), (3), (4), and (5) will be met.

WSDOT will obtain a temporary right of entry at Gene Coulon Memorial Beach Park from the City of Renton to improve the existing channel and conveyance beneath the park entrance road, construct a new stormwater outfall, and discharge treated highway stormwater directly to Lake Washington. Temporary occupancy of Gene Coulon Memorial Beach Park will occur while the drainage improvements are constructed. This short-term, temporary occupancy does not constitute a use under Section 4(f) because all of the conditions in 23 CFR 774.13(d) (1), (2), (3), (4), and (5) will be met.

At all three parks, the scope of the improvements and magnitude of the changes will be minor and beneficial within the context and use of each park. WSDOT will protect existing park uses, and will avoid or minimize physical impacts and disruption to recreation activities throughout development of the final design and construction. Park entrances will remain open to general park traffic during construction. All areas disturbed by construction will be restored or enhanced.

No land will be acquired from the parks, and WSDOT will not acquire any rights or interests in the properties that will infringe on the cities' control over the areas for their intended park and recreation uses. In summary, no activities, features, attributes, or uses of the parks will be impaired by the Renton to Bellevue Project.

FHWA finds that the proposed project will not use or significantly impact any historical resource, park, or recreational resource protected by Section 4(f) of the USDOT Act of 1966, except for the minor use at Coal Creek Park.

Environmental Justice Finding

Data from the 2000 U.S. Census indicate that approximately 27.4 percent of the population in the census block groups comprising the project area is minorities, and approximately 7.0 percent of the population is low income.

Overall, there will be few long-term adverse impacts from operation of the Proposed Action. Property acquisition for the Proposed Action will not adversely affect minority or low-income populations. No exceedances of the National Ambient Air Quality Standards for carbon monoxide will occur. Stormwater treatment included in the Proposed Action will decrease pollutant releases relative to existing conditions. No impacts to wildlife are anticipated, and substantial wetland loss will be avoided. The project area's existing visual character will change slightly as a result of pavement widening and new noise walls.

With the Build Alternative, modeling indicates that without the recommended noise barriers, noise levels would approach or exceed FHWA Noise Abatement Criteria (NAC) at 83 modeled locations, representing an equivalent of 411 residential units. Noise levels at 56 of these 83 sites currently approach or exceed FHWA criteria. With the noise abatement measures proposed, noise levels at 54 modeled sites, representing an equivalent of 288 residential units, will continue to approach or exceed the criteria. There will be no severe noise effects.

With the No Build Alternative, noise levels would approach or exceed NAC at 60 of the 146 modeled sites. These 60 sites represent an equivalent of 257 residential units.

Noise barriers were determined to be feasible and reasonable at nine areas (including five locations where noise walls will be relocated) that were evaluated for mitigation. The recommended noise barriers will reduce traffic noise levels at 37 modeled receptors, representing an equivalent of 167 residential units and a portion of Kenneydale School. Eight of these modeled receptors that will have reduced noise levels will continue to experience noise levels that approach or exceed the NAC even after noise barriers are built. With the noise barriers, traffic noise levels will be reduced at 123 residences to a level that is below the NAC where levels would otherwise approach or exceed the criteria. All residences are considered equally under WSDOT noise abatement policy, independent of their minority or low-income status.

FHWA finds that the construction and operation of the Proposed Action will not have a disproportionately high and adverse effect on minority or low-income populations in the project area. Upon completion of the Proposed Action, mobility improvements along I-405 for passenger vehicles and public transit will benefit local residents, including minority and low-income populations.

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ATTACHMENTS

The Environmental Assessment (EA) and the EA hearing transcript are incorporated by reference into the Finding of No Significant Impact (FONSI). Copies of these documents are available for purchase upon request from William Jordan, WSDOT I-405 Project Office, 600 - 108th Avenue NE, Suite 405, Bellevue, WA 98004; telephone (425) 456-8647. The EA and electronic copies of the discipline reports (on CDs) are available for \$185.00. Electronic copies (on CD) of the EA and the discipline reports are available for \$10.00. The FONSI is available for \$61.00.

The following attachments are incorporated into this FONSI and provided in hard copy:

- Glossary
- Attachment 1: Errata and Revisions to the EA
- Attachment 2: Notices
- Attachment 3: FONSI Distribution List
- Attachment 4: Mitigation Commitment List

The following attachments are incorporated into this FONSI and provided on DVD:

- Attachment 5: Public Meeting Comments and Responses
- Attachment 6: Hearing Transcript Comments and Responses
- Attachment 7: Written Comments and Responses
- Attachment 8: Concurrence Letters

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GLOSSARY

Word or Term	Meaning
area of potential effect (APE)	This is the area in which historic properties, if they are present, could be directly or indirectly affected by the project.
best management practice (BMP)	Innovative and improved environmental protection tools, practices, and methods that have been determined to be the most effective, practical means of avoiding or reducing environmental impacts.
bus rapid transit (BRT)	An express, or limited-stop, rubber-tired transit system operating predominately in roadway managed lanes such as high-occupancy vehicle (HOV) lanes.
cultural resource	Any district, site, building, structure, object, person or people, document, or traditional place that may be important in American history or prehistory.
cumulative effect	The effect on the environment that results from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Cumulative effects can result from individually minor but collectively noticeable actions taking place over a period of time.
decibel (dB)	A logarithmic based unit of measure of sound pressure.
delay	The increased travel time experienced because of circumstances that impede the desirable movement of traffic.
delineation	Establishing the boundaries of a wetland by applying adopted jurisdictional methods.
demand	The desire for travel by potential users of the transportation system.
direct effect	An effect caused by an action or alternative and occurring at the same time and location. Effects may be ecological, aesthetic, historic, cultural, economic, social, or health-related.
direct-access ramp	A freeway ramp that provides a direct connection to and from managed lanes for buses, carpools, and vanpools. This avoids the need to cross several lanes of general-purpose traffic, saving time and improving traffic flow and safety.

Word or Term	Meaning
discharge	Runoff leaving an area via overland flow, built conveyance systems, or infiltration facilities; a rate of fluid flow; or a volume of fluid passing a point per unit of time.
displacement	Removal of a business, residence, or public facility from its existing location. In the context of transportation improvements, displacement is generally the result of property acquisition for right of way expansion or elimination of access to a property due to traffic revisions.
disturbed mixed forest	A forest comprised of both coniferous and deciduous tree species, including native and non-native species, with structural and species composition that has been altered due to past human activities.
down-gradient	The direction of flow; i.e., downstream.
downstream	Referring to the direction of the flow of a stream or river.
duration	The length of time of an event.
ecosystem	A community of organisms interacting with each other, and the environment in which they live.
EDR Report	A list of databases searched for potential hazardous materials contamination, including selected detailed information from federal and state lists, and maps illustrating the identifiable sites within the indicated search radius.
effect	Something brought about by a cause or agent; a result. This may include ecological, aesthetic, historic, cultural, economic, social, health, or other effects, whether direct, indirect, or cumulative. Effects may include those resulting from actions that may have both beneficial and detrimental effects.
element	Within the context of a local government comprehensive plan, one of the functional chapters required by the Washington State Growth Management Act, including: land use, housing, capital facilities, utilities, rural development (counties only), transportation, economic development, and parks and recreation. Optional elements, e.g., subarea plans or other topics, may be addressed as well.
eligible	Refers to cultural resources that meet the National Park Service criteria for listing on the National Register of Historic Places.
emergency vehicle	Any vehicle used to respond to an incident or accident. Examples include police, fire, ambulance, maintenance vehicles, and incident response tow trucks.

Word or Term	Meaning
emergent	A plant that grows rooted in shallow water or saturated soil, where most of the plant emerges from the water or above the ground surface and stands vertically.
emergent wetlands	Wetlands comprised of plants that are rooted in shallow water or saturated soil but have foliage that extends out of the water or above the ground surface.
emission	Pollution discharged into the atmosphere from smokestacks, other vents, surface, vehicles, and other sources.
endangered species	Any species that is in danger of extinction throughout all or a substantial portion of its range.
Endangered Species Act (ESA)	Federal legislation adopted to prevent the extinction of plants and animals.
environmental impact statement (EIS)	A document prepared under the National Environmental Policy Act and/or the State Environmental Policy Act that identifies and analyzes, in detail, environmental effects of a proposed action. As a tool for decision-making, the EIS describes positive and negative effects and examines reasonable alternatives for an undertaking.
environmental justice	The provisions of Executive Order 12898 that require each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health and/or environmental effects on minority and/or low-income populations.
equivalent sound level (L_{eq})	The equivalent steady-state sound level in A-weighted decibels for a stated period of time, which contains the same acoustic energy as the actual time-varying sound level for the same period of time.
erosion	The wearing away of soil or rock by the action of running water, wind, ice, or geologic agents. For this analysis, erosion relates primarily to stormwater runoff.
express toll lane	A limited-access freeway lane that is actively managed through a variable toll system to regulate its use and thereby maintain express travel speeds and reliability. Toll prices rise or fall in real time as the lane approaches capacity or becomes less used. This ensures that traffic in the express toll lane remains flowing at express travel speeds of 45 to 60 miles per hour. Toll prices may differ for carpools, transit, motorcycles, and single-occupant vehicles. Tolls are collected electronically using overhead scanners that read a transponder inside the vehicle and automatically debit the operator's account. See also: "managed lane".

Word or Term	Meaning
feasible and prudent	Within the context of a Section 4(f) analysis, this phrase refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to the constructability of a project -whether or not it can be built using current construction methods, technologies, and practices. The term "prudent" refers to how reasonable the alternative is, in essence, whether or not it makes sense.
Federal Highway Administration (FHWA)	One of several agencies in the U.S. Department of Transportation, the FHWA provides federal financial assistance to the states through the Federal Aid Highway Program, the purpose of which is to construct and improve the National Highway System, urban and rural roads, and bridges.
federally-listed species	Any species of fish, wildlife, or plant that has been determined by the U.S. Fish and Wildlife Service or National Marine Fisheries Service to be endangered or threatened under Section 4 of the Endangered Species Act.
FEMA floodway	The federally designated channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 100-year flood can be conveyed without substantial increases in flood heights. The floodways in the Federal Emergency Management Agency Flood Insurance Study are presented to local agencies as a minimum basis for additional floodway studies.
floodplain	Any land area susceptible to being inundated by flood waters from any source. This is typically the flat or nearly flat land on the bottom of a stream valley or tidal area that is covered by water during floods, including the flood fringe and floodway.
foreground	In a visual analysis, this distance zone is where the viewer has impressions of immediate details and intensity of color is at a maximum. This area can be designated with clarity and simplicity not possible for the middleground and background because the observer is a direct participant (0 to 0.25 mile).
forest duff	Leaves, conifer needles, branches, and other organic debris in various stages of decomposition covering the forest floor on top of the mineral soil; typical of conifer forests in cool climates where the rate of decomposition is slow and accumulation exceeds decay.

Word or Term	Meaning
forested land cover	Vegetated areas where trees with an average height greater than 20 feet are the predominant vegetation. See also: “shrubs/grasses land cover” and “maintained vegetation land cover”.
forested wetland	A wetland characterized by woody vegetation that is 20 feet tall or taller.
general-purpose lane	A freeway or arterial lane available for use by all traffic.
geographic information system (GIS)	A digital computer mapping system that can overlay a wide variety of data such as land use, utilities, and vegetative cover, and provide a spatial analysis.
groundwater	That portion of the water below the ground surface that is free flowing within the soil particles. Groundwater typically moves slowly, generally at a downward angle because of gravity, and eventually enters into streams, lakes, and oceans.
Group A Wells	Groundwater wells that serve 15 or more households.
Group B Wells	Groundwater wells that serve 2 to 14 households.
habitat	The environment or specific surroundings where a plant or animal grows or lives.
high-occupancy vehicle (HOV)	High-occupancy vehicle is a special designation for a bus, carpool, or vanpool provided as an encouragement to increase ride-sharing. Specially designated HOV lanes and parking are among the incentives for persons to pool trips, use fewer vehicles, and make the transportation system more efficient. HOV lanes are generally inside (left-side) lanes, and are identified by signs and a diamond on the pavement. Currently, two or more (2+) occupants are required to use the I-405 HOV lanes. Motorcycles are allowed to use freeway HOV lanes as well.
historic property	A cultural resource that is on or eligible for listing on the National Register of Historic Places.
hydrology	Within the context of a wetland, permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the soil.
impervious surface	Pavement, roofs, and other compacted or hardened areas that do not allow the passage of rainfall or runoff into the ground.

Word or Term	Meaning
indirect effect	An effect that occurs later in time or is removed in distance from the proposed action, but is still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems.
lacustrine	Processes related to sediments deposited in a lake environment.
large woody debris	Logs, limbs, or root wads that are waterward of the ordinary high water line. To qualify as large woody debris, it must be of sufficient size to be resistant to erosion, provide bank stability, or help maintain or create habitat features important to fish life.
level of service (LOS)	A measure of how well a freeway or local signalized intersection operates. For freeways, LOS is a measure of traffic congestion typically based on volume-to-capacity ratios. For local intersections, LOS is based on how long it takes a typical vehicle to clear the intersection. Other criteria also may be used to gauge the operating performance of transit, non-motorized, and other transportation modes.
listed species	Any species of fish, wildlife, or plant that has been determined to be endangered or threatened. See also: “federally-listed species” and “state-listed species”.
L_{max}	Maximum sound level, in decibels. This is the maximum value of the noise level that occurs during a single event.
L_{min}	Minimum sound level, in decibels. This is the minimum value of the noise level that occurs during a single event.
L_n	The A-weighted sound level, in decibels, that is exceeded n percent of the time in a given interval. For example, L_{10} is the A-weighted sound level exceeded 10 percent of the time over the given interval (usually 1 hour).
low-income	A household income that is at or below the federally designated poverty level for a given household size.
maintained vegetation land cover	Areas of roadside vegetation, including roadway medians and shoulders that are regularly maintained, and landscaped areas consisting primarily of plants grown for ornamental value for residential, commercial, and industrial developments. Maintained vegetation typically provides little to no value as wildlife habitat. See also: “forested land cover” and “shrubs/grasses land cover”.

Word or Term	Meaning
maintenance area	Area that has met the National Ambient Air Quality Standards (NAAQS) for the criteria pollutants designated in the Clean Air Act and is being managed to continue to meet the NAAQS.
managed lane	Any roadway lane that is managed to balance travel demand and roadway capacity in order to achieve greater person and vehicle throughput. This may include use of one or more of the following techniques to control the number of vehicles using the lane or roadway: user eligibility requirements, such as high-occupancy vehicle (HOV), exclusive bus-only, or truck-only lanes; reversible flow lanes, such as on the I-90 express lanes; limiting access through infrequent on-ramps, such as on the I-5 express lanes; separate toll lanes constructed within freeways; and other pricing mechanisms, such as express toll lanes, high-occupancy/toll (HOT) lanes, and using tolls that vary as travel demand changes.
Metro Transit	The King County public transit agency.
Metropolitan Transportation Plan (MTP)	The detailed long-range plan for future investments in the central Puget Sound region’s regional transportation system. For planning purposes, the MTP also is recognized as the central Puget Sound region’s Regional Transportation Plan.
minimization	Taking measures to reduce potential effects to the smallest practical amount, extent, size, or degree. Minimization could include alignment shifts, a commitment to seasonal construction windows, replacement of land or facilities, restoration or landscaping, or payment of fair market value for affected lands.

Word or Term	Meaning
minority	Individuals listed in the Census as Black (a person having origins in any of the black racial groups of Africa); Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); American Indian/Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition); or some other race.
mitigation	An effort to: (1) avoid the impact altogether by not taking a certain action or parts of an action; (2) minimize the impact by limiting the magnitude of the action and its implementation, by using technology or by taking affirmative steps; (3) rectify the impact by repairing, rehabilitating, or restoring the affected environment; (4) reduce or eliminate the impact over time by preservation and maintenance operations; (5) compensate for the impact by replacing, enhancing or providing substitute resources or environments; and/or (6) monitor the impact and take appropriate corrective measures.
mitigation (Section 4(f))	Within the context of a Section 4(f) analysis, an effort to replace land or facilities either with resources that are comparable in value and function, or with monetary compensation that can be used to enhance the remaining land or facilities. The cost of mitigation should be a reasonable public expenditure in light of the severity of the impact on the Section 4(f) resource.
modeling	Use of statistics and mathematical equations to simulate and predict real events and processes.
National Ambient Air Quality Standards (NAAQS)	Standards established by the Environmental Protection Agency under the Clean Air Act for pollutant concentrations in outside air throughout the country. See also: “criteria pollutants”.

Word or Term	Meaning
National Environmental Policy Act (NEPA)	Federal legislation adopted in 1969 that established a national environmental policy intentionally focused on federal activities and the desire for a sustainable environment balanced with other essential needs of present and future generations. NEPA also established federal agency responsibility and created the basic framework for integrating environmental considerations into federal decision-making. The fundamentals of the NEPA decision-making process include: an interdisciplinary approach in planning and decision-making for actions that affect the human environment, interagency coordination, consideration of alternatives, examination of potential environmental consequences and mitigation, documentation of the analysis, and making the information available to the public for comment prior to implementation.
National Historic Preservation Act (NHPA)	Federal legislation adopted in 1966 that requires federal agencies to consider the effects of their undertakings on historic properties and provide the Advisory Council on Historic Preservation with an opportunity to comment on such undertakings.
National Register of Historic Places (NRHP)	Authorized under the National Historic Preservation Act of 1966, this is the Nation's official list of properties and other cultural resources that are recognized as deserving preservation. The National Register is administered by the National Park Service as part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archaeological resources. Properties listed in the register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.
noise abatement criteria	The FHWA noise abatement criteria specify exterior and interior noise levels for various land activity categories such as residential and commercial. WSDOT considers a noise impact to occur if predicted equivalent hourly noise levels (Leq (h)) approach within 1 dBA of the noise abatement criteria.
noise level	The sound pressure level, measured using a meter with an "A" frequency weighting and reported as dBA.
noise wall	A designed wall that provides a noise buffer between a noise source and adjacent residences or other sensitive noise receptors.

Word or Term	Meaning
off-peak	In relation to transportation, public services and utilities, off-peak means those times when fewer persons use the facility, service, or utility.
off-peak direction	The travel direction on the freeway with the lower demand.
ordinary high water mark (OHWM)	The elevation marking the highest water level that is so common and maintained for a sufficient time in all ordinary years that it leaves evidence upon the landscape, such as a clear and natural line impressed on the bank, changes in soil character, destruction of or change in vegetation, or the presence of litter and debris. Generally, it is the point where the natural vegetation changes from predominately aquatic to upland species. Where the ordinary high water mark cannot be found, it is the line of mean annual flood - the highest the water gets in an average year - but not the highest it gets during extreme flooding.
ozone (O ₃)	Ozone is a natural form of oxygen that provides a protective layer shielding the earth from ultraviolet radiation. It also is a chemical oxidant and major component of photochemical smog. Ozone can seriously impair the respiratory system and is one of the most widespread of all the criteria pollutants regulated under the Clean Air Act. Ozone in the troposphere is produced through complex chemical reactions of nitrogen oxides, which are among the primary pollutants emitted by combustion sources; hydrocarbons, released into the atmosphere through the combustion, handling and processing of petroleum products; and sunlight.
palustrine	Tidal or non-tidal freshwater areas dominated by trees, shrubs, persistent emergents, mosses, or lichens. Palustrine also includes wetlands lacking this vegetation but having the following characteristics: area less than 20 acres; no active wave-formed or bedrock shoreline; and water depth in the deepest part is less than 6.6 feet at low water.
palustrine emergent (PEM)	A wetland characterized by erect, rooted, non-woody plants such as cattails, rushes, and sedges.
palustrine forested (PFO)	A wetland characterized by woody vegetation that is 20 feet tall or taller.
palustrine scrub-shrub (PSS)	Areas dominated by woody vegetation less than 20 feet tall, such as trees, shrubs, or young trees that are stunted due to environmental conditions.
park-and-ride	A facility where individuals can park their vehicle for the day and access public transportation or rideshare for the major portion of their trip.

Word or Term	Meaning
peak	The maximum sound level during a given time interval when the normal frequency and time weighting is not used.
peak direction	The travel direction on the freeway with the higher demand.
peak flow	The maximum instantaneous rate of flow during a storm, usually in reference to a specific design storm event.
peak hour	The hour in the morning or in the afternoon when the maximum demand occurs on a given transportation facility or corridor.
peak period	The period of the day during which the maximum amount of travel occurs. It may be specified as the morning (AM) or afternoon or evening (PM) peak.
persistence	Refers to the length of time a compound remains in the environment, once introduced. A compound may persist anywhere from less than a second to indefinitely.
pollutant	Any substance introduced into the environment that contaminates or otherwise adversely affects the usefulness of a resource.
publicly owned	Property that is owned and/or operated by a public entity. If a governmental body has a proprietary interest in the land (such as fee ownership, drainage easements or wetland easements), it can be considered publicly owned. Land subject to a public easement in perpetuity can also be considered to be publicly owned land for the purpose for which the easement exists.
Puget Sound Regional Council (PSRC)	The Metropolitan Planning Organization (MPO) and Regional Transportation Planning Organization (RTPO) for the central Puget Sound region, which is comprised of Snohomish, King, Pierce, and Kitsap counties. The MPO and RTPO is the legally-mandated forum for cooperative decision-making about regional growth policies and transportation issues in the metropolitan planning area.
race	A characteristic of population. In the 2000 Census, race included White and Non-White (Persons of Color). Non-White includes Black or African-American alone, American Indian or Alaskan Native alone, Asian alone, Native Hawaiian or other Pacific Islander alone, some other race alone, or a mixture of two or more races. Non-White can include persons of Hispanic/Latino heritage; some Hispanic/Latinos, however, are White.

Word or Term	Meaning
Record of Decision (ROD)	A document prepared by the federal lead agency that presents the basis for the decision reached after completion of the Final EIS. The ROD summarizes any mitigation measures that will be incorporated into the project, and documents any required Section 4(f) or other approvals.
resident fish	Fish that do not migrate out to the ocean, but remain in fresh water.
retaining wall	A structure used to hold earth in place where the natural grade cannot be maintained.
right of way	Land purchased prior to the construction of transportation improvements along with land for sound walls, retaining walls, stormwater facilities, and other project features. This also includes permanent or temporary easements for construction and maintenance. Vacant land may also be set aside for future highway expansion under certain circumstances.
riparian	Pertaining to anything connected with or immediately adjacent to the banks of a stream, river, or other water body.
riparian area	The land and habitat adjacent to streams, lakes, estuaries, or other waterways, comprising the transition area between the aquatic ecosystem and the nearby upland terrestrial ecosystem. Riparian corridors, or zones, identified by soil characteristics or plant communities, include the wet areas in and near streams, ponds, lakes, springs, and other surface waters.
salmonid	Any member of the family Salmonidae, which includes all species of salmon, trout, and char (including bull trout).
scrub-shrub wetland	Wetland dominated by woody vegetation less than 20 feet tall. The vegetation may include shrubs, young trees, and trees or shrubs that may be stunted because of environmental conditions. Scrub-shrub wetlands are flooded for extended periods during the growing season.
secondary-level treatment	A degree of biological treatment of wastewater that consumes and removes more than 90 percent of the pollutants.
Section 106 of the National Historic Preservation Act	Under Section 106 of the Act, federal agencies must identify and evaluate cultural resources and consider how their undertakings affect historic properties eligible for inclusion in the National Register of Historic Places. See also: “National Historic Preservation Act”.

Word or Term	Meaning
Section 4(f) of the U.S. Department of Transportation Act	Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC 303) declares as a national policy that a special effort be made to preserve the natural beauty of the countryside, including public park and recreation lands, wildlife and waterfowl refuges, and historic sites.
sector	Within the context of an economic analysis, a high-level grouping of specific industries with common characteristics based on the standard industrial classification system.
sensitive species	Any native wildlife species that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range without cooperative management or removal of threats.
shrubs/grasses land cover	Vegetated areas where woody plants (distinguished from a tree by their multiple stems and lower height) less than 20 feet tall, grasses and grass-like plants, or a combination of these are the predominant vegetation. See also: “forested land cover” and “maintained vegetation land cover”.
significance	Within the context of a Section 4(f) analysis, an expression of whether a resource is considered important within the recreational, park, and refuge objectives of the community. Barring a determination from the official with jurisdiction to the contrary, the Section 4(f) resource is typically presumed to be significant.
single-occupant vehicle (SOV)	A vehicle having one occupant (i.e., the driver).
social resources	Elements of the community or social environment, including population, housing, community facilities, religious institutions, social and employment services, cultural and social institutions, and government institutions.
sole-source aquifer	An aquifer that has been designated by the Environmental Protection Agency as the sole or principal source of drinking water for an area. A sole-source aquifer receives special federal protection because few or no reasonable alternatives exist for the area served to acquire drinking water.
species of concern	Species whose conservation standing is of concern to the U.S. Fish and Wildlife Service, but for which status information is still needed for consideration to list the species under the Endangered Species Act.

Word or Term	Meaning
spill prevention control and countermeasures (SPCC) plan	A plan for minimizing effects to soil, surface water, and groundwater in the event of a spill of contaminated soil, petroleum products, contaminated water, or other hazardous substances. The SPCC plan addresses construction procedures, equipment, and materials.
State Environmental Policy Act (SEPA)	Washington State legislation adopted in 1974, that establishes an environmental review process for all development proposals and major planning studies prior to taking any action. SEPA includes early coordination to identify and mitigate any substantial issues or significant effects that may result from a project or study.
State Historic Preservation Officer (SHPO)	A governor-appointed position and, typically, a member of a state historic preservation agency, the SHPO reviews projects for compliance with Section 106 of the National Historic Preservation Act.
state-listed species	Species of wildlife that are considered to be at-risk and are protected by Washington State laws.
state monitor species	Wildlife species that are monitored by the Washington State Department of Fish and Wildlife for status and distribution to avoid their becoming threatened or endangered.
stormwater	The portion of precipitation that does not naturally percolate into the ground or evaporate, but flows overland, in channels, or in pipes into a defined surface water channel or a constructed stormwater facility.
stormwater detention	The process of storing stormwater in manmade facilities such as ponds or vaults and releasing the stormwater at a controlled rate. This helps control the volume and rate at which stormwater enters streams and rivers. Controlling the flow of stormwater helps maintain or improve conditions in the streams and minimizes erosion of stream banks.
subbasin	A smaller portion, or subarea, of a watershed or catchment area.
threatened species	Any species that is likely to become endangered within the foreseeable future throughout all or a substantial portion of its range.
transportation corridor	Primary travel routes between major origins and destinations within a region.
unanticipated discovery plan	A set of procedures identifying how the project will respond to archaeological finds or human remains found unexpectedly during project construction.

Word or Term	Meaning
urban forest	A vegetative cover type that is typically dominated by big-leaf maple and alder with an understory of smaller herbaceous and shrub species.
urban growth boundary	For jurisdictions planning under the Washington State Growth Management Act, the boundary that divides areas that are planned to support urban-type development and densities (typically having a minimum density of four residential units per acre) from those areas that are expected to remain rural in character and level of development (typically having fewer than four residential units per acre).
use	Within the context of a Section 4(f) analysis, use generally occurs when (1) land from a Section 4(f) site is acquired for a transportation project, (2) there is an occupancy of land that is adverse in terms of the statute's preservationist purposes, or (3) the proximity effect of the transportation project on the Section 4(f) site, without acquisition of land, is so great that the functions of the Section 4(f) site are substantially impaired.
vehicle	Any car, truck, van, motorcycle, or bus designed to carry passengers or goods. Bicycles and other pedestrian-oriented vehicles are not included in this definition.
view	That which can be seen either from or toward the transportation facility.
viewpoint	The position or location of the viewer.
visual effect	The degree of change in visual resources and the viewer response to those changes caused by facility development and operations.
visual quality	A subjective measure of the character of the visual resource. The many factors that contribute to a landscape's visual quality are grouped under intactness, unity, and vividness.
visual quality assessment matrix	An evaluation tool that assigns a numeric rating to physical aspects of the viewshed.
visual resources	The collection of all features and things that can be seen in an area.
Water Resource Inventory Area (WRIA)	The Washington State Department of Ecology has designated 62 WRIsAs for water and aquatic resource management issues. The terms WRIA and watershed are frequently used interchangeably, although a WRIA may include more than one watershed.

Word or Term	Meaning
watershed	The region of land that drains into a specific body of water such as a river, lake, sea, or ocean. Rain that falls anywhere within a given body of water's watershed will eventually drain into that body of water.
wetland	Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
wetland hydrology	The condition where water is present during a portion (between 5 and 12.5 percent) of the annual growing season.

ATTACHMENT 1: ERRATA AND REVISIONS TO THE EA

The following corrections and revisions apply to the Environmental Assessment (EA) and accompanying discipline reports for the I-405, SR 169 to I-90 – Renton to Bellevue Project that was issued on March 9, 2006. These corrections serve to clarify or enhance readability of the EA. Because these changes to the EA neither alter the analysis nor the conclusion of No Significant Impact, the issuance of a revised EA is not required. Changes to the EA text are identified by the corresponding page number in the March 9, 2006 EA. These minor revisions are incorporated into the EA by reference.

All revisions that appear in this chapter can be interpreted as follows:

- Text that appears as ~~strikeout~~ has been deleted from the original text.
- Text that appears in ***Bold Italics*** has been added to the original text.

Environmental Assessment (EA) Revisions

Signature Page, heading:

I-90

Chapter 1, Executive Summary

Page 1-1, Exhibit 1-1: Project overview map:

Exhibit 1-1: Project overview



Page 1-1, What is the Renton to Bellevue Project?:

The principal features of the Renton to Bellevue Project (also referred to as the Build Alternative) are:

- ~~Addition of two new general-purpose lanes on I-405 in each direction from SR 169 through the I-90 interchange;~~

Note: In June 2006, FHWA and WSDOT reduced the scope of the I-405, SR 169 to I-90, Renton to Bellevue Project. Project elements that were removed from the Renton to Bellevue Project included one of the new I-405 northbound lanes between 112th Avenue SE and I-90, the new I-405 bridge structure carrying the I-405 southbound lanes over I-90, the ramp meter at the 112th Avenue SE interchange on-ramp northbound to I-405, and noise wall East 16. These improvements were then cleared for construction in a documented categorical exclusion that was issued on June 9, 2006. Noise wall East 16 was cleared as part of the Bellevue Nickel Project. As a result, these elements are no longer part of the Renton to Bellevue Project Build Alternative, and are instead considered to be part of the existing condition since they are currently under construction.

The principal features of the Renton to Bellevue Project (also referred to as the Build Alternative) are:

- *Addition of two new northbound general-purpose lanes on I-405 from SR 169 to 112th Avenue SE, with one of these continuing on north through the I-90 interchange as an added lane and the other connecting to the new auxiliary lane between 112th Avenue SE and I-90 that is currently under construction;*
- *Addition of two new southbound general-purpose lanes on I-405 from SR 169 through the I-90 interchange;*

Page 1-2, Why are we building this project?:

The Renton to Bellevue Project is a part of a comprehensive strategy to reduce traffic congestion and improve mobility along the state's second-busiest highway. Project benefits include:

- Shortening periods of congestion on I-405 between Renton and Bellevue;
- Increasing transit reliability and safety with the addition of a new in-line station, direct access ramps, and other transit improvements;
- Improving operations at eight interchanges;
- Improving water quality conditions in the project area by treating approximately 290282 acres of new and existing impervious surfaces;
- Providing benefits to endangered salmon species ~~by improving water quality;~~
- ~~Improving fish passage by replacing culverts or installing new fish friendly structures;~~

- Constructing four new noise walls and relocating five existing noise walls *to the edge of the right of way*; ~~and~~
- Implementing CSS design principles to improve appearance and compatibility with surrounding communities.

Page 1-3, How will the project affect the built environment?:

Traffic – Although future traffic volumes will increase, traffic congestion will lessen, and there will be fewer delays with the Build Alternative. If the project is not built, the flow of traffic will become so constrained that the delays would force drivers wishing to travel on I-405 to seek alternative routes or forego some trips altogether. *Some local traffic patterns will be affected by the project due to the revisions to the local street network.*

Recreational Resources – The project will temporarily affect Gene Coulon *Memorial Beach* Park and Newcastle Beach Park during construction. Freeway widening will require that the Lake Washington Trail be realigned in several locations. In addition, partial trail closures or detours will occur during construction. Approximately ~~10,000~~ **9,000** square feet of Coal Creek Park will be used to ~~widen Coal Creek Parkway~~ *construct an elevated, shared-use boardwalk trail to accommodate pedestrians and bicycle movement. No land will be acquired from the park.*

Page 1-4:

Visual Quality – The project will result in minor changes in the visual quality experienced by I-405 users and neighbors. Freeway users will notice an increase in walls and pavement and a subsequent decrease in visual quality. Many neighbors west of I-405 look uphill toward the freeway; once project improvements are complete, these neighbors will see more of the freeway, primarily raised structures such as retaining walls, noise walls, and access ramps. *The elevated flyover ramp structure at the SR 169 interchange will be visible from adjacent land uses, including Cedar River Park.* Overall, visual quality will be minimally affected.

Page 1-4, How will the project affect the natural environment?:

Water Resources – The Renton to Bellevue Project will collect and treat ~~rainfall~~ *stormwater* runoff from the new pavement as well as from the existing roadway and replaced pavement. The project will improve water quality and conveyance and reduce some localized flooding potential. Specific measures are included in the project to avoid effects to the Cedar Valley Sole Source Aquifer *and to comply with the City of Renton's Aquifer Protection Code and Regulations*. Enhanced water quality treatment will be provided for the proposed ~~124113~~ acres of new impervious surface, and ~~162171~~ acres of presently untreated areas. Construction may cause some temporary, minor water quality effects. The project will treat approximately ~~176-250~~ percent of new impervious surface.

Page 1-5:

Wetlands – Approximately ~~0.51.1~~ acres of wetlands will be temporarily disturbed, which WSDOT will restore after construction. Construction will result in the permanent loss of approximately ~~5.510.9~~ acres of wetlands. WSDOT will mitigate ~~these displaced wetlands for these losses by creating wetland mitigation in Renton and Bellevue.~~

Fish and Aquatic Resources – Project engineers have designed the Renton to Bellevue Project to avoid or minimize effects, and to provide mitigation for any unavoidable effects. As a result, the project will have no substantial adverse effects on fish or aquatic resources. By design, the Renton to Bellevue Project will have beneficial effects on the Cedar River, May Creek, Clover Creek, Coal Creek, and Gypsy Creek. *Depending on the stream, benefits may* ~~The benefits~~ include restoring fish passage, improving instream habitat, improving water quality by treating stormwater runoff, and/or removing existing instream obstructions such as pipes and screens.

Chapter 3, Developing the Alternatives

Page 3-3, What alternatives are studied in this Environmental Assessment?:

- A Build Alternative, which will add two northbound and two southbound lanes *throughout most of* the Renton to Bellevue section from SR 169 to I-90; realign sections of I-405 to bring it up to current freeway standards; *construct a new auxiliary lane between 112th Avenue SE and Coal Creek Parkway*; construct a new in-line bus rapid transit (BRT) station at 112th Avenue SE; construct a high-occupancy vehicle (HOV) direct-access ramp at North 8th Street; realign and reconfigure eight interchanges; improve stormwater treatment; and make improvements to local roadways.

Chapter 4, Project Description

The revised and updated Chapter 4, Project Description text is included here in its entirety.

The I-405, SR 169 to I-90, Renton to Bellevue Project is being designed to add bus rapid transit (BRT) facilities, make substantial lane and interchange improvements, and improve stormwater management throughout an 8-mile section of I-405 from SR 169 north to the northern on- and off-ramps of the I-90 interchange. This project description provides an overview of the project's principal features as well as other features that are necessary to support these improvements.

What are the principal features of the Renton to Bellevue Project?

The Renton to Bellevue Project extends approximately 8 miles (milepost 3.8 to milepost 11.9) from SR 169 north to the northern on- and off-ramps of the I-90 interchange (Exhibit 4-1).

Note: *In June 2006, FHWA and WSDOT reduced the scope of the I-405, SR 169 to I-90, Renton to Bellevue Project. Project elements that were removed from the Renton to*

Bellevue Project included one of the new I-405 northbound lanes between 112th Avenue SE and I-90, the new I-405 bridge structure carrying the I-405 southbound lanes over I-90, the ramp meter at the 112th Avenue SE interchange on-ramp northbound to I-405, and noise wall East 16. These improvements were then cleared for construction in a documented categorical exclusion that was issued on June 9, 2006. Noise wall East 16 was cleared as part of the Bellevue Nickel Project. As a result, these elements are no longer part of the Renton to Bellevue Project Build Alternative, and are instead considered to be part of the existing condition since they are currently under construction. The project description contained here has been revised to reflect these changes.

The principal features of the Build Alternative are (See Exhibit 4-2):

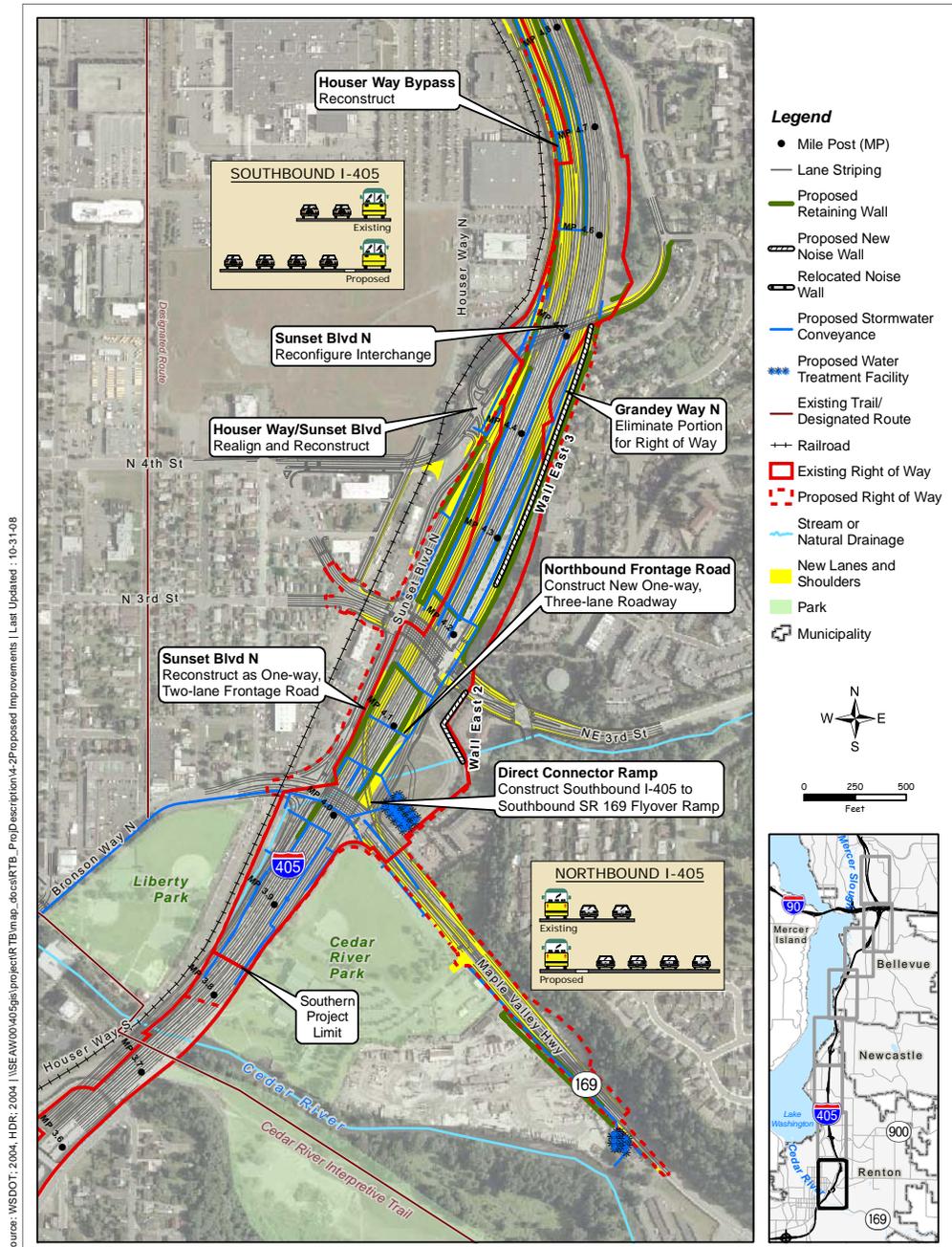
- Addition of two new general-purpose lanes on I-405 in each direction ~~from SR 169 through the I-90 interchange~~ **throughout most of the project length;**
- Realignment of I-405 to bring it up to current freeway standards where feasible;
- Construction of a new in-line BRT station in the vicinity of 112th Avenue SE;
- Construction of a transit/high occupancy vehicle (HOV) direct-access ramp at N 8th Street in coordination with Sound Transit;
- Realignment and reconfiguration of eight interchanges;
- Changes to local roadways related to interchange improvements and I-405 widening;
- Construction of stormwater management facilities; and
- Application of ~~Context Sensitive~~ **context-sensitive** Solutions (CSS) to incorporate visually-pleasing and community-oriented features into the project design.

What benefits will the project provide?

The Renton to Bellevue Project will provide many short- and long-term benefits. Some of these benefits are:

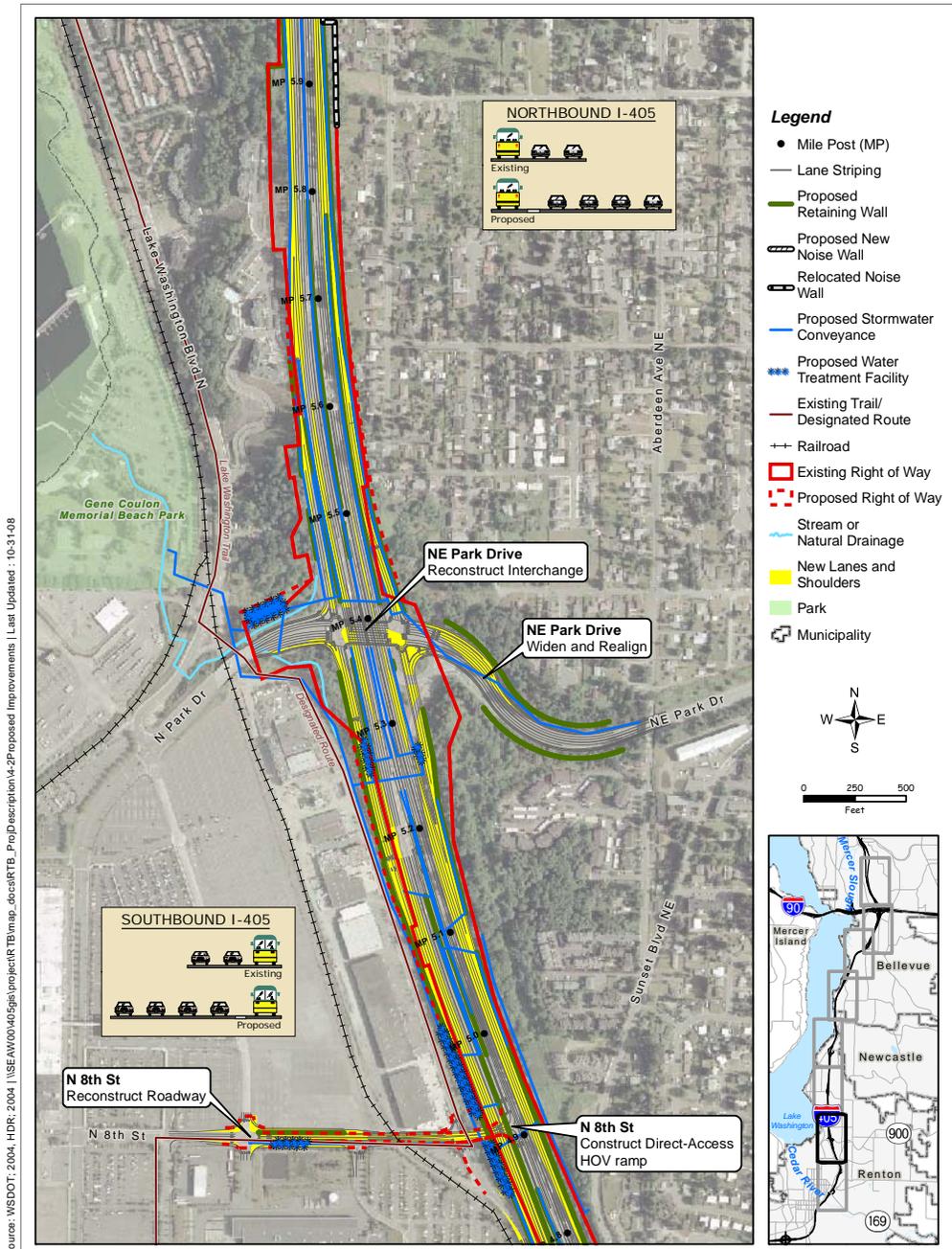
- Shortening periods of congestion on I-405 between Renton and Bellevue;
- Increasing transit reliability and safety with the addition of a new in-line station, direct-access ramps, and other transit improvements;
- Improving operations at eight interchanges;
- Improving water quality conditions in the project area by treating approximately ~~281282~~ **281282** acres of new and existing impervious surfaces;
- Providing benefits to threatened salmon species by improving water quality;

- ~~Improving fish passage by replacing culverts or installing fish-friendly structures on many streams within the area;~~
- Constructing four new noise walls and relocating five existing noise walls to the edge of right of way; and
- Implementing CSS design principles to improve appearance and compatibility with surrounding communities.



Renton to Bellevue Project Proposed Improvements
 EXHIBIT 4-2 | SHEET 1 of 8

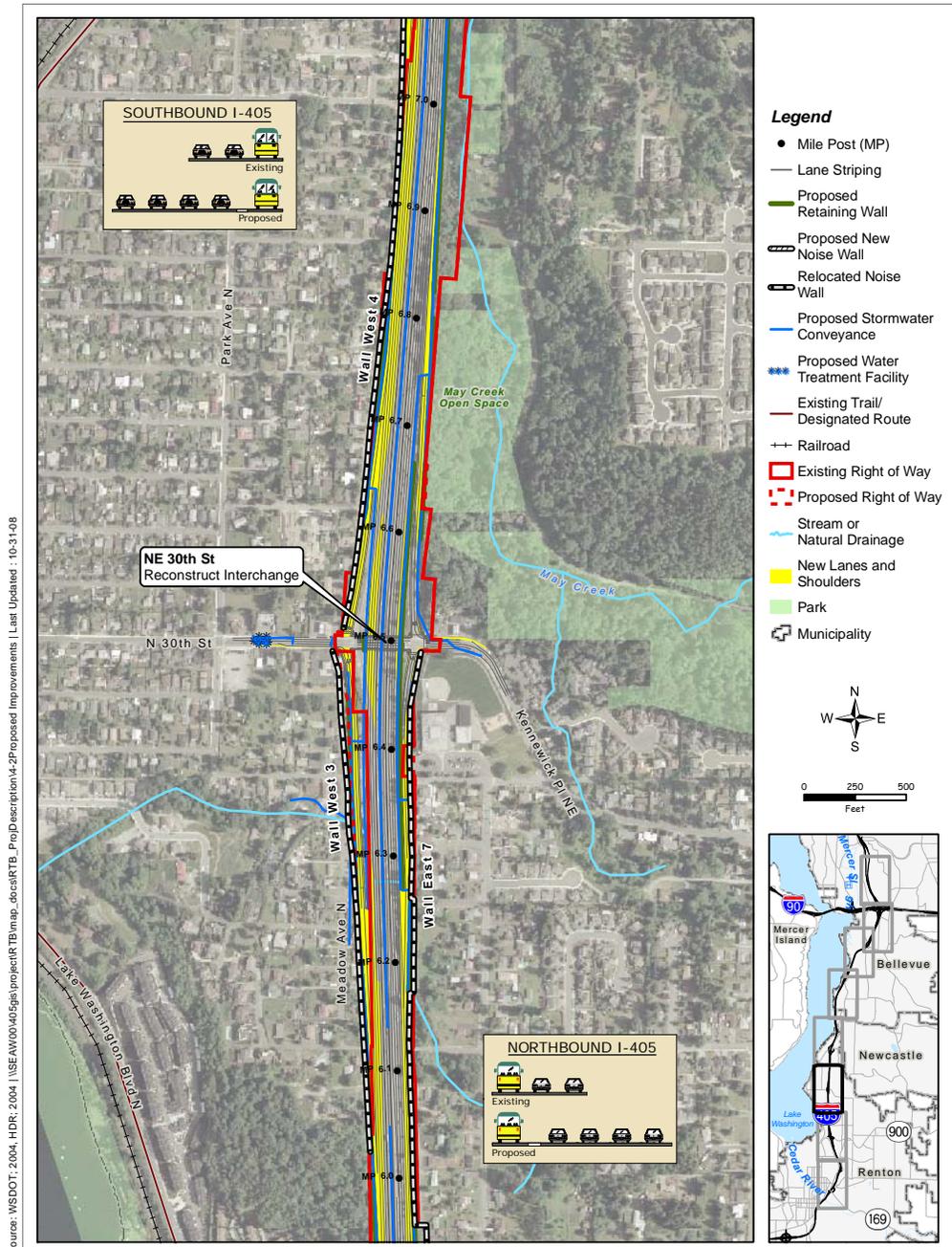
Washington State Department of Transportation | Renton to Bellevue Project Description



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Renton to Bellevue Project Proposed Improvements
EXHIBIT 4-2 | SHEET 2 of 8

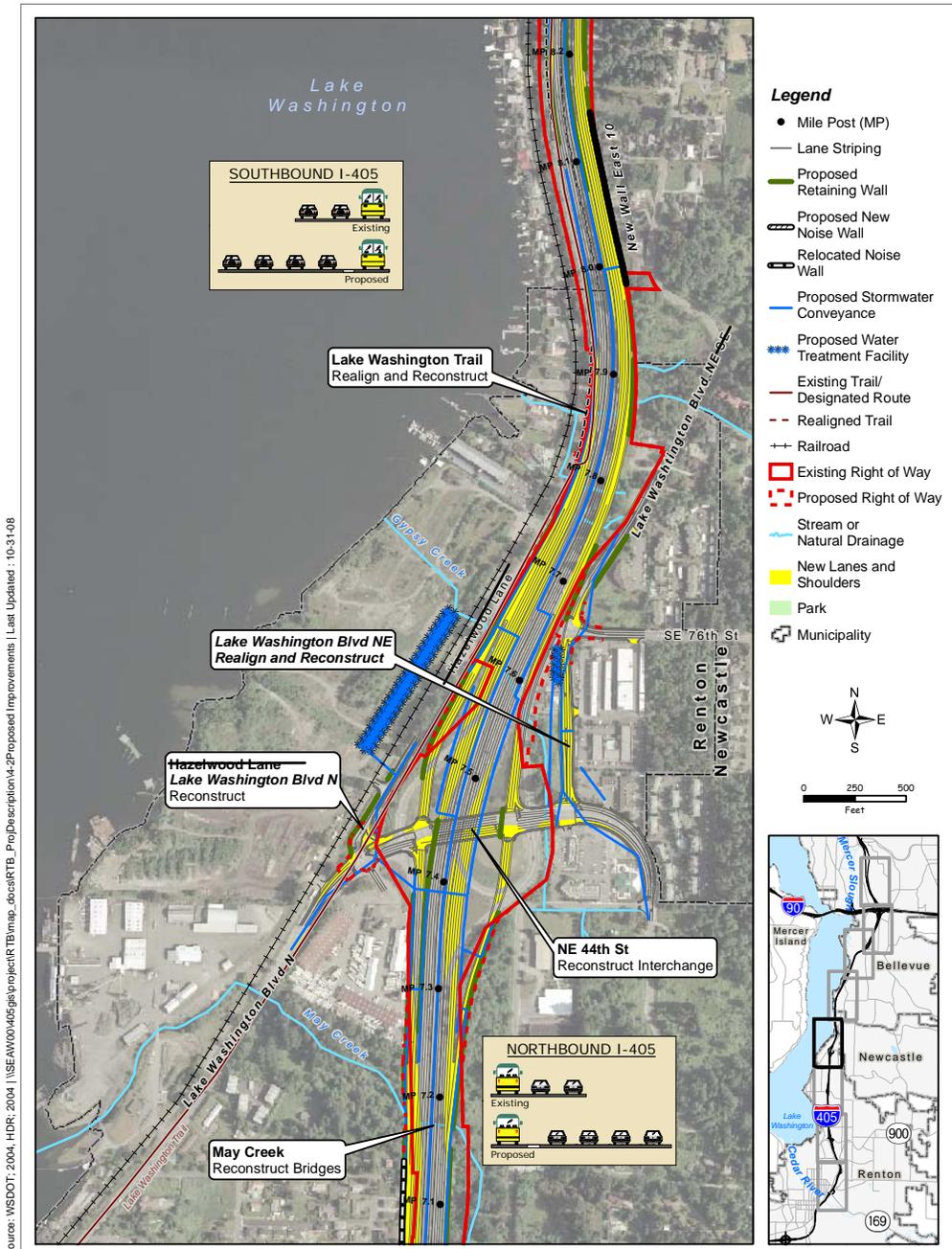
Washington State Department of Transportation | Renton to Bellevue Project Description



Source: WSDOT, 2004, HDR, 2004 | I:\SEA\100\405\gis\project\RTB\map_docs\RTB_PropDescription\4-2\Proposed Improvements | Last Updated: 10-31-08

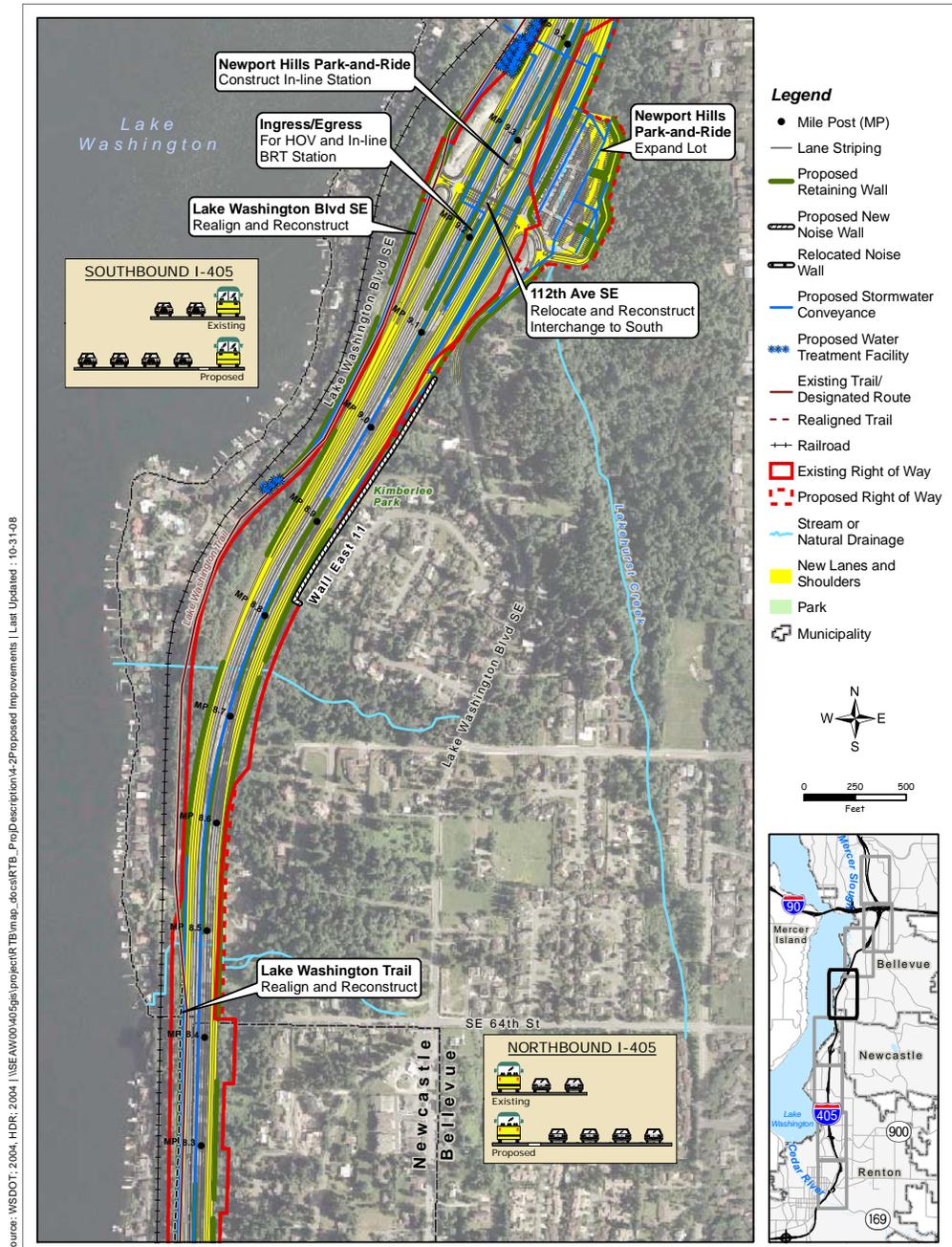
Renton to Bellevue Project Proposed Improvements
 EXHIBIT 4-2 | SHEET 3 of 8

Washington State Department of Transportation | Renton to Bellevue Project Description



Renton to Bellevue Project Proposed Improvements
 EXHIBIT 4-2 | SHEET 4 of 8

Washington State Department of Transportation | Renton to Bellevue Project Description

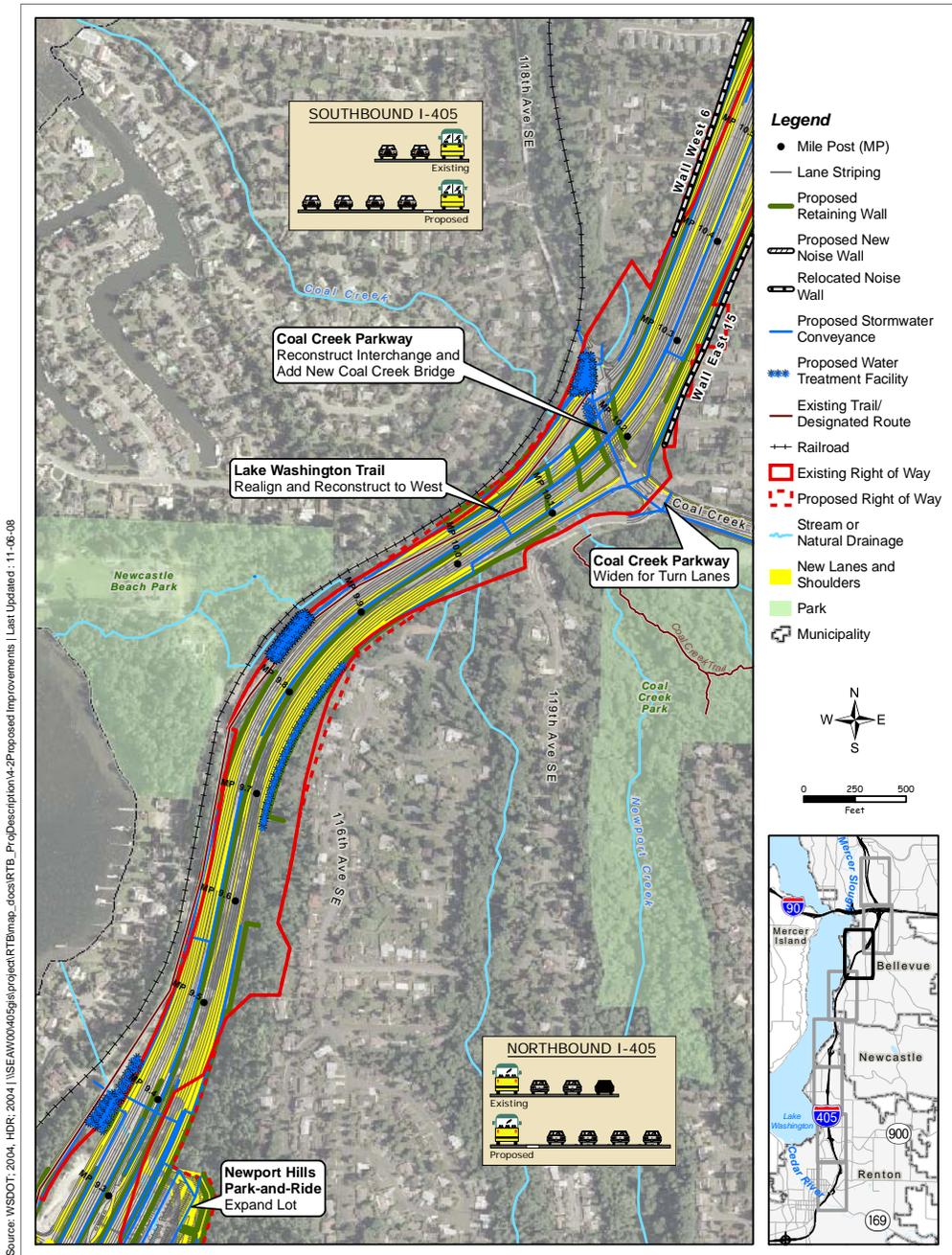


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Renton to Bellevue Project Proposed Improvements
EXHIBIT 4-2 | SHEET 5 of 8

Washington State Department of Transportation | Renton to Bellevue Project Description

I-405, SR 169 to I-90 – Renton to Bellevue Project

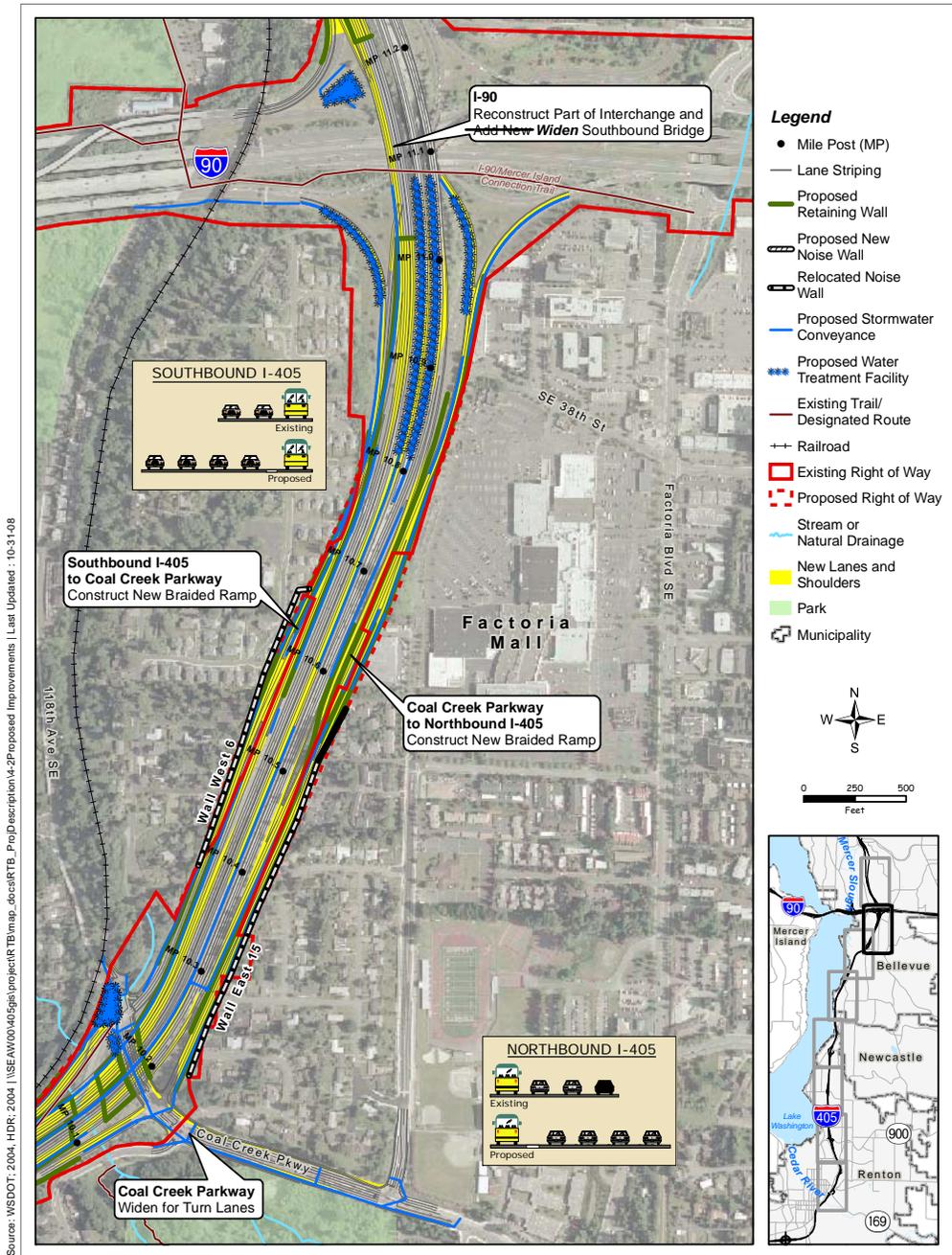


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Renton to Bellevue Project Proposed Improvements
EXHIBIT 4-2 | SHEET 6 of 8

Washington State Department of Transportation | Renton to Bellevue Project Description

I-405, SR 169 to I-90 – Renton to Bellevue Project



Source: WSDOT, 2004, HDR, 2004 | \\SEA\100\405\gis\project\RTB\map_docs\RTB_PropDescription\4-2\Proposed Improvements | Last Updated: 10-31-08

Renton to Bellevue Project Proposed Improvements
EXHIBIT 4-2 | SHEET 7 of 8

Washington State Department of Transportation | Renton to Bellevue Project Description

The design and construction contract will include many provisions to protect the environment and to ensure compliance with project-specific permit conditions and project commitments.

What types of improvements will be made?

Lane Improvements

WSDOT will realign and reconstruct I-405 to add two, 12-foot general-purpose lanes in both the northbound and southbound directions (Exhibit 4-2) throughout most of the project length. The roadway will be improved with approximately 10-foot inside shoulders (to the driver's left) and 12-foot outside shoulders (to the driver's right) in both directions. The freeway design ~~will~~ includes a four-foot painted buffer to separate the general-purpose lanes from the inside HOV lane (see northbound and southbound inserts in Exhibit 4-2). In addition to adding the new lanes, the existing lanes will be reconstructed.

Intelligent transportation system (ITS) features will be incorporated into the project. In addition to the planned ramp meters, these features may include electronic variable message signs, highway advisory radio, and enhanced data and communication equipment for incident response. The specific ITS components will be determined during the final design phase of the project.

Transit and HOV System

WSDOT uses the term bus rapid transit (BRT) to describe high-frequency bus service that incorporates capital facilities designed to increase travel speed, reliability, and passenger convenience and comfort. The Renton to Bellevue Project proposes many elements of BRT including maintaining HOV lanes, providing HOV bypasses where ramp meters exist, construction of a transit/HOV direct-access ramp, an in-line BRT station, and park-and-ride lot expansion.

HOV Lanes

WSDOT will maintain one HOV lane in each direction. The project includes a buffer area, envisioned as a four-foot-wide strip of painted pavement separating the general-purpose lanes from the HOV lane. Access to the HOV lanes will be ~~at~~ **limited to** the direct-access ramps and **other** ~~at~~ specific locations along I-405.

WSDOT will ~~reconstruct~~ **construct ramp meters and bypass lanes at** the eight interchanges in the Renton to Bellevue project area ~~with ramp meters that give to~~ **provide** HOV and transit priority over single-occupant vehicles.

Transit/HOV Direct-Access Ramps

In conjunction with Sound Transit, WSDOT will construct a transit/HOV direct-access ramp at N 8th Street that will allow buses and other HOVs to efficiently enter and leave I-405. The direct-access ramps will eliminate the need for transit, carpools, and vanpools to weave across mainline traffic to exit or enter the freeway HOV lane.

In-line Transit Station

WSDOT will construct a new in-line transit station on I-405 in the vicinity of the 112th Avenue SE interchange. The facility will include a pedestrian bridge over the northbound I-405 mainline lanes to the Newport Hills Park-and-Ride lot. The in-line transit station will eliminate the need for buses to leave the corridor to serve riders. The Newport Hills Park-and-Ride lot will be expanded to add approximately 150 more spaces.

Interchange Improvements

Because I-405 is being widened to add two new lanes in each direction, interchange bridges will need to be replaced with longer and/or wider structures to accommodate the ~~new~~ **additional** lanes. WSDOT will reconstruct the interchange overcrossings/undercrossings so that they are in compliance with the Americans with Disabilities Act (ADA). Pedestrian and bicycle facilities will also be provided at many locations. Ramp meters will be installed on all on-ramps except at the I-90 interchange.

SR 169 to N 3rd Street Interchange Area

WSDOT will make the following improvements between SR 169 and N 3rd Street (Exhibit 4-3):

- ~~▪ Widen the northbound off-ramp to SR 169 and the southbound on-ramp south to I-405;~~
- Construct a one-way, three-lane frontage road northbound from SR 169 to N 3rd Street on the east side of I-405;
- Realign and reconstruct Sunset Boulevard N as a one-way, two-lane frontage road from N 3rd Street to SR 169;
- Realign and improve Sunset Boulevard as a T-intersection with the Houser Way Bypass (the Houser Tunnel will be eliminated);
- Construct a new on-ramp with HOV bypass from N 3rd Street to I-405 northbound; and
- Construct an off-ramp from southbound I-405 to N 3rd Street and a direct connector flyover to southbound SR 169.

N 8th Street HOV Direct Access

In coordination with Sound Transit, WSDOT will make the following improvements at N 8th Street (Exhibit 4-4):

- Reconstruct and widen N 8th Street to accommodate transit/HOV direct-access ramps;
- Construct an HOV ramp over Houser Way N, the Burlington Northern Santa Fe ~~Railway~~ *Wilburton Subdivision (previously BNSF Railroad)* ~~tracks~~, the entrances to PACCAR and Java Trading and the southbound I-405 lanes; and
- Construct on- and off-ramps to both northbound and southbound I-405 HOV lanes.

Park Avenue (SR 900) Interchange Area

WSDOT will make the following improvements to Park Avenue (SR 900) (Exhibit 4-5):

- Replace the I-405 bridges over Park Avenue with longer and wider bridges and reconstruct on- and off-ramps to accommodate the mainline widening *and HOV bypass*; and
- Realign and widen Park Avenue to accommodate right- and left-turn lanes in the vicinity of the interchange.

NE 30th Street Interchange Area

WSDOT will make the following improvements to the NE 30th Street interchange (Exhibit 4-6):

- Construct a northbound auxiliary lane between the Park Avenue on-ramp and NE 30th Street off-ramp;
- Widen NE 30th Street, from Meadow Avenue N to the Kennydale Elementary School to accommodate turn lanes at the interchange and add signals at the intersections with the I-405 ramps; and
- Replace the NE 30th Street bridge over I-405 *with a longer and wider bridge, and reconstruct the on- and off-ramps to accommodate the mainline widening and HOV bypass.*

NE 44th Street Interchange Area

WSDOT will make the following improvements to the NE 44th Street interchange (Exhibit 4-7):

- Construct northbound and southbound auxiliary lanes between the NE 30th Street and the NE 44th Street on- and off-ramps;
- Replace the NE 44th Street bridge with a longer and wider bridge and reconstruct the on- and off-ramps to accommodate the mainline widening *and HOV bypass*; and
- Reconstruct the northbound and southbound I-405 bridges over May Creek.

112th Avenue SE Interchange Area

Note: Construction of one of the northbound I-405 lanes between 112th Avenue SE and I-90, the I-405 bridge structure carrying the I-405 southbound lanes over I-90, and the ramp meter at the 112th Avenue SE interchange northbound on-ramp to I-405 have been removed from the Renton to Bellevue Project. These elements, which were initially described in the March 2006 EA, have been cleared for construction in the documented categorical exclusion issued by FHWA and WSDOT on June 9, 2006. As a result, these elements are no longer part of the Renton to Bellevue Project Build Alternative, and are instead considered to be part of the existing condition since they are currently under construction.

WSDOT will make the following improvements between the 112th Avenue SE interchange and Coal Creek Parkway interchange ~~WSDOT will make the following improvements to the 112th Avenue SE interchange~~ (Exhibit 4-8):

- Replace the 112th Avenue SE bridge with a longer and wider bridge and reconstruct the on- and off-ramps to accommodate the mainline widening and HOV bypass;
- Construct a new in-line BRT station in the vicinity of 112th Avenue SE with a pedestrian bridge over the northbound I-405 mainline lanes to the Newport Hills Park-and-Ride lot; ~~and~~
- Expand the Newport Hills Park-and-Ride lot by approximately 150 more spaces; and
- *Construct a southbound auxiliary lane between the Coal Creek Parkway on-ramps and the 112th Avenue SE off-ramps.*

Coal Creek Parkway Interchange Area

WSDOT will make the following improvements ~~between the to the 112th Avenue SE interchange and Coal Creek Parkway interchange~~ *to the 112th Avenue SE interchange and Coal Creek Parkway interchange* (Exhibit 4-9):

- ~~Widen the southbound bridge over I 90;~~
- Reconstruct the on- and off-ramps to accommodate the mainline widening and HOV bypass;
- Construct longer and wider northbound and southbound I-405 bridges to span both Coal Creek Parkway and Coal Creek; and
- Reconstruct a portion of the Lake Washington Trail. ~~Reconstruct the on- and off-ramps to accommodate the mainline widening and HOV bypass; and~~

- ~~Construct a southbound auxiliary lane between the Coal Creek Parkway and the 112th Avenue SE on- and off-ramps.~~

Coal Creek Parkway to I-90 Area

WSDOT will make the following improvements between Coal Creek Parkway and I-90 (Exhibit 4-9):

- Construct a northbound braided on-ramp from Coal Creek Parkway to I-405 crossing under the I-405 off-ramp to I-90 (access from Coal Creek Parkway to I-90 will be accommodated);
- ~~Add a new northbound lane over I-90 by restriping the existing bridge;~~
- ~~Convert the existing southbound structure to a northbound HOV lane;~~
- Reconstruct the I-405 southbound off-ramp to I-90 on a new alignment to accommodate widening of I-405;
- ~~Construct a new five-lane southbound bridge over I-90, to the west of, and adjacent to, the existing southbound bridge; and~~
- *Widen the new southbound bridge over I-90, which will be constructed as part of the 112th Avenue SE to SE 8th Project, in order to accommodate the mainline widening; and*
- Construct a southbound braided off-ramp from I-405 to Coal Creek Parkway, crossing over a reconstructed southbound on-ramp from I-90 (access from I-90 to Coal Creek Parkway will be accommodated).

Other Improvements

Local roadway improvements

WSDOT will realign or widen some local streets. Specific project improvements include:

- *Widen N 3rd Street and* install a new traffic signal at the intersection with N 3rd Street and the new northbound frontage road;
- Realign Sunset Boulevard (SR 900) as a T-intersection with the Houser Way Bypass, rather than merging at an angle;
- Realign Sunset Boulevard and Houser Way Bypass to form a new intersection with N 4th Street;
- Remove the Houser Way tunnel;
- Close off a portion of Grandey Way NE/Windsor Way NE nearest I-405 and construct cul-de-sacs at the termini;
- Widen NE Park Drive (SR 900) from Aberdeen Avenue NE to the bridge over the BNSF *Wilburton Subdivision* tracks to accommodate turn lanes;

- Widen NE 30th Street, from Meadow Avenue N to the Kennydale Elementary School to accommodate turn lanes at the interchange and add signals at the intersections with the I-405 ramps;
- Widen NE 44th Street, from NE 30th Place (SE 80th Street in Newcastle) to the vicinity of Hazelwood Lane, including reconstruction of the intersection with Hazelwood Lane, for turn lanes;
- Relocate a portion of Lake Washington Boulevard SE approximately 200 feet to the east so that the NE 44th Street interchange can be reconfigured; and add signals at the intersection with the I-405 ramps;
- Remove 109th Avenue SE and adjacent properties purchased for widening of I-405;
- Realign 112th Avenue SE within the vicinity of the 112th Avenue SE interchange and add signals at the intersection with the I-405 ramps and reconstruct a portion of Lake Washington Boulevard SE; and
- Widen Coal Creek Parkway from 120th Avenue SE to 124th Avenue SE for an additional eastbound lane. As part of this widening, WSDOT ~~will~~*may* construct a ~~multi-use boardwalk (timber trail)~~*an elevated, shared-use boardwalk trail* in Coal Creek Park adjacent to the roadway.

Retaining walls

WSDOT will construct retaining walls along much of the project. Retaining walls will be used to limit areas of extensive cuts and fills and reduce the project footprint and, consequently, reduce impacts to adjacent properties and environmentally-sensitive areas. Fill walls will be used to confine the fill material used to support the mainline. Cut walls will be used to confine the earth that remains after material has been cut from adjacent hillsides. Retaining walls will also be necessary at the approach roads.

Noise walls

WSDOT is proposing to construct four new noise walls in the project area and reconstruct five existing noise walls closer to the edge of the right of way to reduce noise effects. These nine noise walls (new and reconstructed) will have a total length of ~~almost~~*approaching* 3 miles; the locations of new noise walls are identified in Exhibit 4-2. The noise walls will be built only if desired by the neighborhood residents.

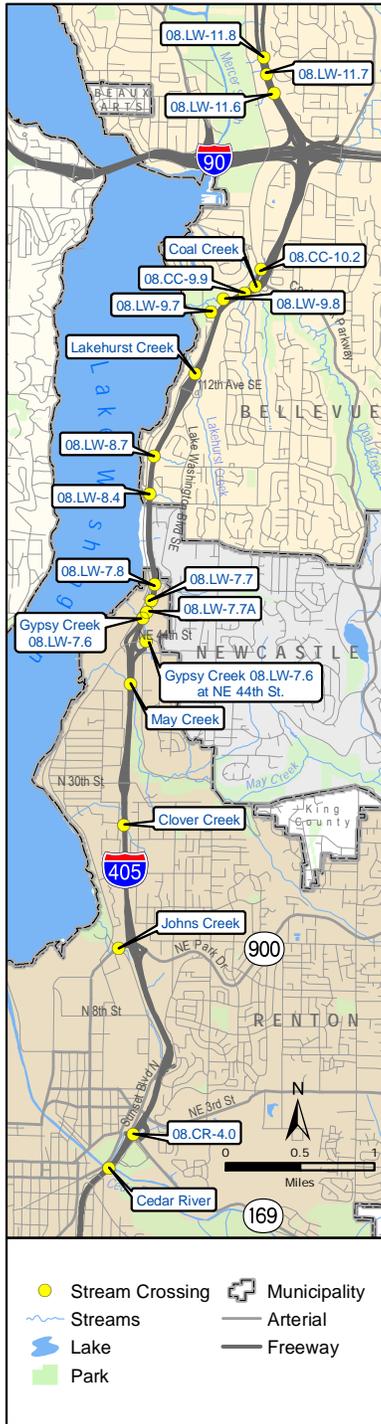
Stream Crossings

Construction of the Renton to Bellevue Project will require crossing ~~22-17~~ streams. Coal Creek and May Creek will be bridged, while other streams crossing under I-405 will remain in culverts. In a ~~number of~~*some* cases, existing culverts ~~may~~*will* be replaced with new fish-friendly structures. The stream crossings are summarized in Appendix BC, which also lists the project activity associated with each stream. Stream crossing locations are shown in Exhibit 4-10, *and the revised graphic is shown below.*

WSDOT will *work with tribal, federal, state, and local authorities to determine mitigation that best offsets impacts to the fish species affected by the Build Alternative. Final decisions on culverts affected by the project would also be examined for fish passage per the Memorandum of Understanding with Washington State Department of Fish and Wildlife and current WSDOT policies.* ~~make fish passage improvements at the following locations:~~

- ~~▪ Clover Creek crossing – a new fish friendly culvert and new stream channel;~~
- ~~▪ Gypsy Creek crossing – two new fish friendly culverts;~~
- ~~▪ Steam 08.LW 7.7A crossing – new fish friendly culvert;~~
- ~~▪ Stream 08LW 7.8 crossing – new fish friendly culvert; and~~
- Coal Creek crossing – replacement of culvert with a bridge.

Exhibit 4-10: Stream crossings



How will stormwater from the project be managed?

Stormwater Design Standards

We have designed the stormwater management facilities for the project to comply with the guidelines and procedures in the WSDOT *Highway Runoff Manual* ~~M-31-16, March 2004~~, and the WSDOT *Hydraulics Manual* ~~M-23-03~~.

The I-405 Renton to Bellevue Project spans eight primary watersheds or drainages that drain to Lake Washington. The watersheds, listed from south to north, are:

- Cedar River
- Johns Creek
- Clover Creek (Kennydale Area)
- May Creek
- Gypsy Creek
- Newport Hills Area (a collection of small drainages)
- Coal Creek
- Mercer Slough

The approximate watershed boundaries are shown in Exhibit 4-11. The watersheds are further broken down into on-site and off-site drainage subbasins. The on-site subbasins are project areas where the stormwater is contained and treated prior to discharge into the local aquatic environment. Each on-site subbasin, called a threshold discharge area, drains treated stormwater to a single existing discharge location within 0.25 miles downstream of the freeway.

Drainage from off-site subbasins will be usually kept separate from the on-site drainage, passing through the highway corridor in bridges, culverts, or cross-drain storm drains. Some off-site drainage modifications *may* will include improvements for fish passage and flow capacity. Otherwise, the off-site drainage will not be treated and will continue to pass under I-405 as it currently does.

Stormwater from project area subbasins will be collected and conveyed according to the safety and hydraulic criteria contained in the *WSDOT Hydraulics Manual*. The project will be constructing a new collection and conveyance system that will use, for the most part, new inlets and storm drain pipes. Prior to discharge, the new and replaced pavement runoff will be treated for water quality. The peak rate and duration of discharge will be controlled to mimic the theoretical flows as if the area was in a natural land cover condition, which would release runoff at a much slower rate than the urban land cover that exists today. Where stormwater ~~can~~ will be directly discharged to either the Cedar River or Lake Washington, WSDOT will not be required to control discharge rates. Water quality and flow control performance will be designed and constructed in accordance with the *WSDOT Highway Runoff Manual* ~~March 2004~~.

Stormwater Treatment Facilities

The Renton to Bellevue Project will provide water quality treatment for the new and replaced project pavement areas. A total of approximately ~~176~~**250** percent of new pavement area will be treated for water quality (see Exhibit 4-12). The primary treatment for the I-405 Corridor area will be by ecology embankment (see Exhibit 4-13) *or constructed wetland water treatment facilities*. Best management practices (BMPs), such as wet ponds or vaults, will be required for some of the city street improvements.

Exhibit 4-12: Summary of runoff treatment by watershed

Watershed	Existing Lanes and Shoulders (Impervious Area ¹) (acres)	New Lanes and Shoulders (Impervious Area) (acres)	Total Lanes and Shoulders (Impervious Area) Treated (acres)	Percent of New Lanes and Shoulders (Impervious Area) Treated
Cedar River	17	168	3324	190300%
Johns Creek	3944	1725	5668	152272%
Gypsy Creek ²	51	4536	9687	88242%
Newport Hills Area	2431	3532	5663	267197%
Coal Creek	137	26	1513	117217%
Mercer Slough	21	96	3027	141450%
Project Total	162171	124113	286282	176250%

(Numbers have been rounded)

¹ Includes I-405, interchanges, and some surface streets where construction will occur.

² Includes impervious areas in the Clover Creek and May Creek watersheds, since no stormwater is discharged to either of these two watersheds.

Ecology embankments *or constructed wetland water treatment facilities* are the preferred method of treatment because of their flexibility in construction and maintenance, enhanced treatment capabilities, and relatively low cost. The use of ecology embankments actually exceeds the HRM requirements, since direct discharge to Lake Washington only requires “basic treatment” instead of this proposed “enhanced treatment” type of BMP. WSDOT is proposing to construct a total of 17 ecology embankments *or constructed wetland water treatment facilities* in the project area that total approximately 3,800 linear feet and cover approximately 127,000 square feet.

WSDOT is proposing to construct water quality treatment facilities at N 8th Street, in the Johns Creek Watershed at MP 4.4, and in the Mercer Slough Watershed near the I-90 interchange.

A final determination of the exact treatment facilities (for example, placement, size/capacity, and mix of quantity and quality treatment) necessary to meet highway runoff discharge criteria has not yet been made.

WSDOT is exploring several approaches to collection, treatment, and discharge of stormwater from I-405 in the vicinity of Coal Creek and Newcastle Beach Park. The most innovative approach would collect I-405 stormwater, treat it, and divert it away from Coal Creek into a channel that flows directly into Lake Washington through Newcastle Beach Park. This approach avoids adding more I-405 stormwater to Coal Creek, which currently experiences flooding and water quality problems. One of the features of this plan is that it would include City of Bellevue stormwater and local groundwater as part of the discharge to Lake Washington. This approach *would* discharge treated stormwater through an existing stream channel that runs along the park entrance road, crosses the road, and flows into Lake Washington just south of the park's recreation area. Wetland, stream, and park enhancements may be provided with this approach. The enhancements may include parking lot improvements to eliminate flooding and pedestrian access improvements across the channel. Improvements will be coordinated with the City of Bellevue. WSDOT may also choose a more conventional method of stormwater management that would provide treatment and detention in vaults or ponds and subsequent discharge to Coal Creek.

Stormwater Flow Control

Project stormwater will be treated and then discharged directly to either the Cedar River or Lake Washington. Stormwater detention is not required for discharge to Lake Washington or the Cedar River, because these water bodies are so large that no measurable increase in hydraulic conditions and velocities will occur with the increased runoff.

Drainage Collection and Conveyance

Due to the reconfiguration and new construction of the highway for this project, almost all of the existing drainage system will need to be replaced. Ecology embankments *or constructed wetland water treatment facilities* on the edge of the roadway shoulders will be used as the preferred conveyance method; however, where the corridor is tightly confined by adjacent property development and sensitive areas, stormwater collection will be done using inlets and pipes.

In addition to ecology embankments *or constructed wetland water treatment facilities*, proposed collection and conveyance systems will consist of standard WSDOT catch basin and manhole structures connected to the treatment and flow control facilities. Pipe sizes will generally range from 12 to 30 inches in diameter and be installed on grades and at depths necessary for proper vertical clearances and stormwater flow. Inlets will be placed at specific locations to limit the spread of stormwater into the travel lanes, as required by the WSDOT *Hydraulics Manual*.

Ecology embankments or constructed wetland water treatment facilities and other water quality facilities located in Zone 1 of the City of Renton's Aquifer Projected Area (APA) will be designed to prevent stormwater infiltration. Pipelines will be impervious and designed according to pipeline specifications in Renton Municipal Code, RMC 4-3-050 H.6.

Culverts

WSDOT anticipates that improvements to the freeway mainline and associated interchanges will impact the existing cross-culverts. Since the highway is being reconfigured and the age of the culverts exceeds their design lifespan, WSDOT expects that most of the existing culverts will be replaced; ~~five~~ *several* of the culverts ~~may~~ *will* be replaced with fish-friendly structures.

Right of Way Requirements

WSDOT will acquire approximately 44 acres of land for right of way. This new right of way will be used for construction of additional lanes on the I-405 mainline, reconstruction of the interchanges, construction of the transit/HOV direct-access ramps, and realignment of local roadways. Additional properties will be acquired for environmental enhancements, such as wetland mitigation and stormwater facilities.

At this stage of project design, WSDOT estimates that the Renton to Bellevue Project will affect approximately 163 parcels: 102 properties within the City of Renton (53 commercial, 48 residential, and 1 publicly-owned); 51 in Bellevue (4 commercial and 47 residential); and 10 in Newcastle (all residential). Of the affected parcels, 105 are residential (43 partial and 62 full acquisitions) and 57 are commercial (38 partial and 19 full acquisitions).

What are ~~c~~Context-~~s~~Sensitive ~~s~~Solutions?
Context-~~s~~Sensitive ~~s~~Solutions (CSS) is a design process that incorporates community values on appearance, the environment, mobility, and safety. WSDOT incorporated CSS into the design of the facility by working with local agencies and citizens on the "look and feel" of the project design.

How will the project incorporate community design preferences?

The Renton to Bellevue Project is being planned, developed, and designed in accordance with guidelines called ~~C~~ontext-~~s~~sensitive ~~s~~Solutions (CSS), also referred to as ~~C~~ontext-~~s~~sensitive ~~d~~Design. These guidelines provide a means of incorporating community design preferences into the project.

How are ~~c~~Context-~~s~~Sensitive ~~s~~Solutions guidelines being incorporated?

The guidelines that were developed with each of the communities have been incorporated into the aesthetics and urban design elements throughout the corridor. These design elements include abutment walls ornamented with organic geometric designs and patterned stone finish, pedestrian-scale lights of enhanced design for walkways under and over the bridges. These lights are similar to those found at Renton's downtown Transit Station/Urban Center. Other elements include sidewalk

designs, consistent color schemes to concrete and metal surfaces, new noise wall patterns including design for transitions from existing to new, and enhanced landscaping that blends with the natural environment.

How does the cContext-sSensitive sSolutions process work?

Working with the public and elected officials, WSDOT developed design themes to be used with future improvements along the corridor. WSDOT's CSS team prepared illustrations and photos of design features, beginning with examples of local baseline design, and compared them to options implemented in other parts of the country. Committee preferences were then narrowed down to features that could be incorporated into the Urban Design Guidelines Manual (unpublished) for the I-405 Corridor. These preferences were later reviewed by WSDOT's Technical Committee and others within corridor jurisdictions to ensure they fit with corridor-wide features and maintenance standards.

How will the project be constructed?

WSDOT expects to construct this project using a design-build contract. Design-build is a method of project delivery in which WSDOT executes a single contract with one entity for design and construction services to provide a finished product. With design-build projects, contractors have the flexibility to offer innovative and cost-effective alternatives to deliver the project, ~~None of the design modifications that the contractor may make will affect the project footprint or project effects described in this environmental assessment.~~ *improve project performance, and reduce project effects. Some design modifications that the contractor may propose could affect the project footprint and design details described in this environmental assessment; however, WSDOT design standards, performance measures, and requirements to avoid or minimize effects to the environment will continue to be met.*

Project construction is expected to last from three to five years. The at-grade roadway construction work will include the removal of existing asphalt and concrete surfaces, clearing and grading adjacent areas, laying the aggregate roadway foundation, and placing of asphalt and concrete surfaces. Changing the vertical and horizontal alignments of the I-405 mainline will require substantial earthwork, with approximately 2.7 million cubic yards of cut and approximately 2.2 million cubic yards of fill.

Construction equipment such as backhoes, excavators, front loaders, pavement grinders, jack hammers, pile drivers, trucks, as well as grading and paving equipment will be used. Equipment used for construction will include cranes, pile drivers, drilling rigs and augers, backhoes and excavators, jack hammers, concrete pumping equipment, and slurry processing equipment.

Staging areas in unused right of way will provide room for employee parking, large equipment storage, and material stockpiles. Construction staging will not be permitted within the Zone 1 area of the City of Renton's sole source aquifer but will occur within areas of existing or newly-acquired right of way adjacent to the mainline. The contractor may also find other locations for staging.

What is the project construction schedule?

Construction is expected to take place in steps, with the entire construction phase lasting at least five years. It is likely that sections of the Renton to Bellevue Project will be constructed in two steps. WSDOT expects that during the first step, traffic will be maintained on the current roadway while the new roadway is constructed to the outside. The first step of construction will include the following activities:

- Utility relocation;
- Construction of drainage and stormwater treatment facilities;
- Grading and paving for new roadway;
- Retaining wall construction;
- Bridge demolition and construction; and
- Environmental improvements.

During subsequent steps, traffic will be shifted to the previously constructed portion so that we can remove and reconstruct existing lanes.

What is the No Build Alternative?

The No Build Alternative is WSDOT's continued routine maintenance. These activities include short-term minor construction necessary for continued operation of the existing I-405 facility and minor safety improvements, as required, within the project limits.

Chapter 5, Affected Environment

Page 5-1, How did WSDOT analyze the Renton to Bellevue Project's effects on the environment?:

The I-405 Project Team prepared the following discipline reports for the project. The complete discipline reports (listed below in alphabetical order) are found in Appendices EG through AA on a DVD included with this Environmental Assessment.

Chapter 5.1, Traffic and Transportation

Page 5.1-8, add as a second paragraph under the heading, How will the project affect freight movements?:

Locally within Renton, some changes in traffic patterns will result from improvements to streets and other modifications, such as the elimination of the Houser Tunnel, and the addition of other changes, such as frontage roads and new signalization.

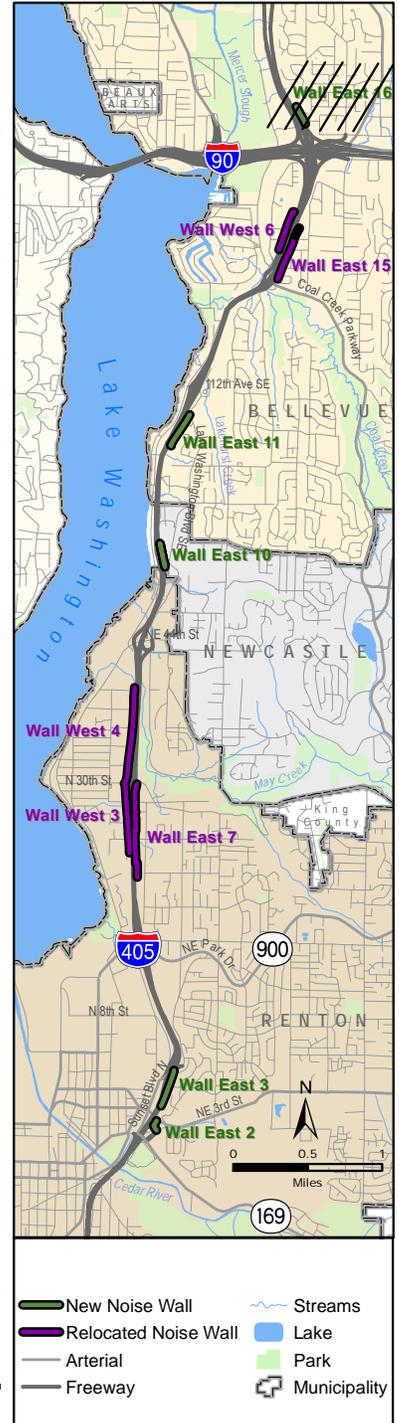
Chapter 5.2, Noise

Page 5.2-3

Exhibit 5.2-2: New and relocated noise walls

Exhibit 5.2-3: Noise wall locations

Identifier	Location	Height	Length
NEW WALLS			
Wall East 2	Between SR 169 ramps and NE 3rd Street	12 feet	300 feet
Wall East 3	Between Valmont Place NE and Sunset Boulevard	14 to 24 feet ¹	1,380 feet
<i>Wall East 10</i>	<i>Along WSDOT right of way from approximately the Newcastle/Renton city boundary north to about the equivalent of SE 68th Street</i>	<i>6 feet (on top of retaining wall)</i>	<i>950 feet</i>
Wall East 11	Between SE 60th Street and Lake Washington Boulevard SE	9 feet	1,380 feet
Wall East 16	Approximately 1,000 feet north of I-90	16 feet	725 feet
RELOCATED WALLS			
Wall West 3	Along Meadow Avenue N, south of N 30th Street	20 feet	2,360 feet
Wall East 7	Between NE 20th Street and Kennewick Place NE	14 feet	2,950 feet
Wall West 4	Between N 30th Street and N 40th Street	10 feet	3,300 feet
Wall East 15	Between SE 45th Place and SE 41st Place	14 18 feet ²	1,600 2,000 feet ²
Wall West 6	Vicinity of SE 41st Street to SE 39th Street	14 feet	1,490 feet



¹The height of the northern portion of the wall can be lowered to 14 feet to reduce visual effects on adjacent residents.

²The height of this wall can be reduced to 14 feet and the length can be reduced to 1,800 feet if the Factoria Firs Apartments are acquired.

Page 5.2-4, second paragraph:

For the Build Alternative, our modeling indicates that without the recommended noise walls, noise levels will approach or exceed the noise abatement criterion at 78 sites (an equivalent of 392 residences). Noise levels at 52 of these 78 sites currently approach or exceed FHWA criterion. The Build Alternative includes construction of nine noise walls that will reduce noise levels at 32 of the 78 sites compared to not building the walls. Of the nine new walls, five will replace walls that exist in the corridor. Noise levels at 54 locations will continue to approach or exceed FHWA criterion as abatement measures are neither feasible nor reasonable. *noise levels will change in the I-405 corridor by between an 8 dBA decrease and a 17 dBA increase relative to existing modeled noise levels. With the Build Alternative, noise levels at 83 of the modeled sites (representing an equivalent of 411 residential units) will approach or exceed FHWA criteria for the Build Alternative in 2030 if mitigation were not implemented. Each area where impacts were predicted for the Build Alternative was evaluated for noise abatement.*

Nine proposed noise walls (five of which are relocated noise walls, and including noise wall East 16) will reduce noise levels at 37 of the 83 sites modeled to approach or exceed the noise abatement criteria. These 37 sites represent a portion of Kenndale School and 167 residential units that are affected by I-405 traffic noise. Project design and mitigation measures will assure that adverse impacts will be minimized where feasible and reasonable.

Page 5.2-6, What measures are proposed to avoid or minimize effects during construction?:

To reduce construction noise at nearby receptors, the following measures will be incorporated, *where practicable*, into construction plans and specifications:

- ~~WSDOT will erect noise berms or barriers prior to other construction unless structures or features to support the berms or barriers need to be constructed first;~~
- *As construction is taking place in a specific area, if possible, WSDOT will construct proposed noise walls and barriers before other construction activities.*
- ~~WSDOT will limit the noisiest construction activities, such as pile driving, to between 7 AM and 10 PM to reduce construction noise levels during sensitive nighttime hours;~~
- ~~WSDOT will outfit construction equipment engines with adequate mufflers, intake silencers, and engine enclosures to reduce their noise by 5 to 10 dBA (U.S. EPA, 1974);~~
- *WSDOT will equip construction equipment engines with mufflers, intake silencers, and engine enclosures, as appropriate.*
- WSDOT will turn off construction equipment during prolonged periods of nonuse to reduce noise;

- ~~WSDOT will require contractors to maintain all equipment and train their equipment operators in good practices to reduce noise levels;~~
- WSDOT will locate stationary equipment away from receiving properties to decrease noise;
- ~~WSDOT will construct temporary noise barriers or curtains around stationary equipment that must be located close to residences;~~
- *WSDOT will maintain all equipment and train their equipment operators in good practices to reduce noise levels.*
- ~~WSDOT will require resilient bed liners in dump trucks to be loaded on site during nighttime hours.~~
- ~~WSDOT will require contractors to use Occupational Safety and Health Act-approved ambient sound sensing backup alarms that can reduce disturbances at night.~~
- *WSDOT will use Occupational Safety and Health Act-approved ambient sound-sensing backup alarms that could reduce disturbances from backup alarms during quieter periods.*

Page 5.2-7, What measures are proposed to avoid or minimize effects during operations?:

- WSDOT will construct new noise walls at four locations provided that adjacent residents agree (noise wall locations are shown in Exhibits 5.2-2 and 5.2-3). We will also relocate five existing noise walls at or closer to the edge of the I-405 right of way (noise wall locations are shown in Exhibits 5.2-2 and 5.2-3). *The noise walls will be built only if desired by the neighborhood residents.*

Chapter 5.4, Communities, Neighborhoods and Businesses

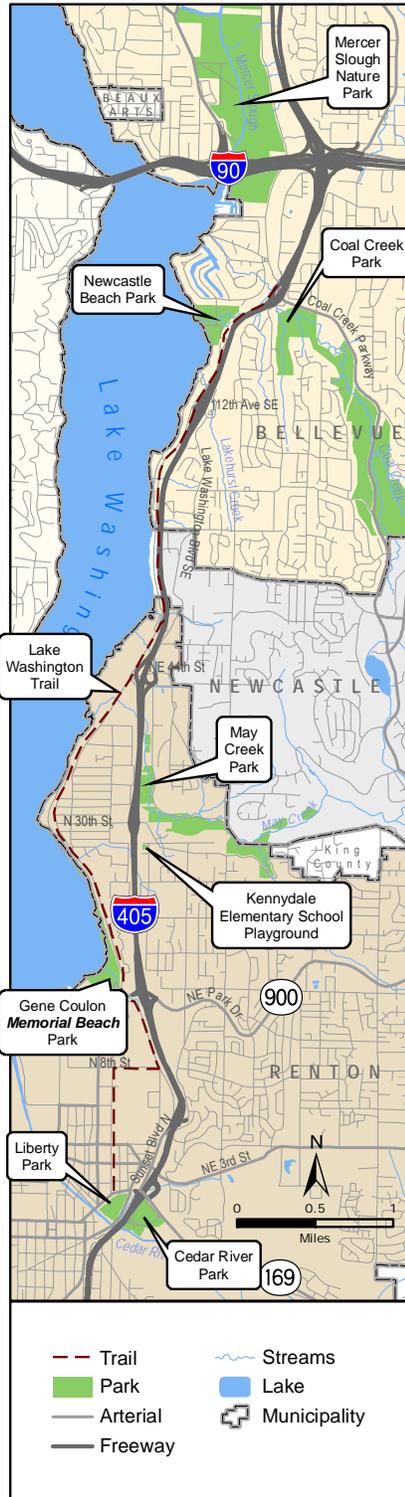
Page 5.4-8, Communities and neighborhoods:

- WSDOT will prepare and implement a traffic management plan (TMP). If local streets must be temporarily closed during construction, detour routes will be provided and clearly marked with signs;
- WSDOT will coordinate with the school districts before construction. The TMP will be implemented and coordinated with all emergency services organizations prior to any construction activity;
- WSDOT will coordinate with utility providers prior to construction to identify conflicts and resolve the conflicts before or during construction; ~~and.~~
- *WSDOT will coordinate with city officials/staff regarding citywide special events. Within Renton, this would include Renton River Days, Clam Lights, and limited hydroplane racing.*

Page 5.4-8, property acquisitions/displacements:

- WSDOT will prepare a relocation plan in advance of actual displacements. Additional information will be collected, possibly through property owner interviews, to identify the specific needs of any *residences and* business that will be relocated.

Exhibit 5.5-1: Recreational resources



Chapter 5.5, Recreational Resources

Page 5.5-2, Replace Exhibits 5.5-1 and 5.5-2:

Exhibit 5.5-2: Recreational resources in the project area

Recreational Resource	Jurisdiction	Facility Type
Cedar River Park	City of Renton	Park
Liberty Park	City of Renton	Park
Gene Coulon <i>Memorial Beach</i> Park	City of Renton	Park
May Creek Park	City of Renton, King County	Park
Newcastle Beach Park	City of Bellevue	Park
Lake Washington Trail	King County	Multi-use trail system
Coal Creek Park	City of Bellevue	Park
Kennydale Elementary School Playground	Renton School District 403	Playground
Mercer Slough Nature Park	City of Bellevue	Nature park and trail system

Note: Kimberlee Park is a private neighborhood park in the Newport Hills neighborhood in Bellevue. Because it is a private park, this park is not subject to the Section 4(f) review.

Page 5.5-4, in section pertaining to Gene Coulon Memorial Beach Park:

We have added the following paragraph as the last paragraph in this section:

FHWA and WSDOT determined that the Renton to Bellevue Project would result in a temporary occupancy of this protected Section 4(f) resource. Short-term, temporary occupancy or impact does not constitute a use under Section 4(f) as long as all of the conditions in 23 CFR 774.13(d) (1), (2), (3), (4), and (5) are met. These conditions include:

- *Occupancy is temporary and ownership does not change;*
- *Changes are minimal;*
- *No permanent adverse physical effects result and there is no interference with the activities or purposes of the resource on either a temporary or permanent basis;*
- *The land being used is restored to a condition that is at least at good as that prior to the project; and*
- *Documented agreement(s) exist between relevant jurisdictions regarding temporary use of the resource.*

All of these conditions will be met for Gene Coulon Memorial Beach Park. Based on this, FHWA also has determined that the project would not constitute a conversion under Section 6(f) of the Land and Water Conservation Funds Act of 1965.

Page 5.5-4, in section pertaining to Newcastle Beach Park:

We have added the following paragraph as the last paragraph in this section:

FHWA and WSDOT determined that the Renton to Bellevue Project would result in a temporary occupancy of this protected Section 4(f) resource. Short-term, temporary occupancy or impact does not constitute a use under Section 4(f) as long as all of the conditions in 23 CFR 774.13(d) (1), (2), (3), (4), and (5) are met. These conditions include:

- *Occupancy is temporary and ownership does not change;*
- *Changes are minimal;*
- *No permanent adverse physical effects result and there is no interference with the activities or purposes of the resource on either a temporary or permanent basis;*
- *The land being used is restored to a condition that is at least at good as that prior to the project; and*
- *Documented agreement(s) exist between relevant jurisdictions regarding temporary use of the resource.*

All of these conditions will be met for Newcastle Beach Park. Based on this, FHWA also has determined that the project would not constitute a conversion under Section 6(f) of the Land and Water Conservation Funds Act of 1965.

Page 5.5-5, in paragraph pertaining to Coal Creek Park:

Coal Creek Park is a 550-acre regional park and was a King County facility until April 2005. The City of Bellevue assumed ownership of this largely undeveloped park containing third-growth forest in a steep ravine, Coal Creek, and a fish ladder. ~~Coal Creek park features 3 miles of unpaved trail through a dense urban forest.~~

WSDOT will widen Coal Creek Parkway, an arterial immediately north of the Coal Creek Park boundary. For this purpose, WSDOT may obtain right of entry to approximately ~~10,000~~ **9,000** square feet of park land along the park's northern edge to construct a ~~multiple~~ ***elevated, shared use*** boardwalk (timber trail). This area is not usable recreation land and is characterized by very steep forested terrain. Added elements of the boardwalk approach ~~may~~ ***will*** include an interpretive kiosk and a connection into the park from street level. The City of Bellevue has determined that ~~the boardwalk will be constructed~~ in a way that enhances the park and ~~may avoid~~ ***will minimize*** Section 4(f) impacts on the park (see Appendix E).

The projected noise levels and vibration during construction will not substantially interfere with the use and enjoyment of this facility. The project will neither substantially impair visual features of the park protected by Section 4(f), nor restrict access.

Page 5.5-7, What measures are proposed to avoid or minimize effects to recreational, cultural, and archaeological resources during construction?:

- WSDOT will prepare an Inadvertent Discovery Plan for the project that construction contractors will follow;
- During construction, WSDOT will conduct archaeological monitoring for work taking place in the vicinity of Cedar River Park, the NE 44th Street interchange, and near the mouth of May Creek;
- *WSDOT will coordinate construction activities with the City of Renton regarding the use of Cedar River Park and Gene Coulon Memorial Beach Park.*
- *The I-405 Project also has a programmatic agreement regarding the Section 106 process. This programmatic agreement puts into place a process for integrating the Design-Build approach with Section 106 obligations.*

Chapter 5.7, Visual Quality

Page 5.7-3, What measures are proposed to avoid or minimize effects to visual quality during construction?

The application of CSS guidelines precludes the need ~~for~~ ***to*** further mitigating visual impacts. Because the project is being developed with local input, community concerns relating to appearance, environment, cultural resources, and other areas are being addressed early. Mitigation measures typical for transportation projects, such as retaining existing natural vegetation and planting new vegetation to screen manmade elements, are incorporated within the highway and related transportation features.

Other areas subject to CSS include structural elements, landscape features, lighting, signage, and special elements such as parking structures and pedestrian bridges.

Chapter 5.8, Air Quality

Page 5.8-1, second paragraph, How did we evaluate air quality for the Renton to Bellevue Project?:

~~In our evaluation, we modeled two future years: 2014 and 2030. We selected the year 2014 (the year the project is scheduled for completion) to determine the project's effects on air quality when first completed; and the year 2030, to show the project's long term effects.~~

Improvements to I-405 identified in the I-405 Corridor Program were modeled as part of the regional modeling completed by the Puget Sound Regional Council in 2002. This modeling demonstrated that the region will be in compliance with the Clean Air Act with the improvements included in the Renton to Bellevue Project.

Page 5.8-2, first paragraph:

Although the I-405 Corridor currently meets all NAAQS, vehicle emissions from heavy traffic congestion generates several air pollutants that are a concern in the project area—oxides of nitrogen (NO_x), *carbon monoxide* (CO), particulate matter (PM₁₀), ozone, hazardous air pollutants, and greenhouse gases, primarily carbon dioxide (CO₂). CO impacts were modeled at several intersections because CO is the most closely-tied pollutant to transportation and because it is an indicator for other pollutants.

Page 5.8-2, text box:

DID YOU KNOW?

Under the federal Clean Air Act, the U.S. Environmental Protection Agency (EPA) has set **National Ambient Air Quality Standards** (NAAQS) that specify maximum concentrations for specific pollutants. Transportation projects must conform to the NAAQS by demonstrating that:

- the proposed project will not cause or contribute to any new violation of NAAQS;
- the project will not increase the frequency or severity of any existing violation of any NAAQS;
- the project will not delay timely attainment of the NAAQS within the region; ~~and.~~
- ~~▪ the project must not increase a CO reading in the design year (2030) over the CO reading in the existing year.~~

In addition to federal requirements, the Renton to Bellevue Project must conform to Air Quality Maintenance Plans for CO that have been established for the Puget Sound Region.

Pages 5.8-3 and 5.8-4, What measures are proposed to avoid or minimize effects to air quality during construction?:

The construction contractor will be contractually obligated to control fugitive dust in accordance with the Memorandum of Agreement between WSDOT and Puget Sound Clean Air Agency Regarding Control of Fugitive Dust from Construction Projects (October 1999).

The following measures will be used to control dispersion of dust (PM₁₀), transmission of particulate matter, and emissions of CO and NO_x during construction:

- ~~WSDOT will spray exposed soil with water to reduce emissions of PM₁₀ and deposition of particulate matter.~~
- ~~WSDOT will cover truckloads of material susceptible to scattering by the wind, and materials in trucks will be wetted or provided adequate freeboard (space from the top of the material to the top of the truck) to reduce PM₁₀ and deposition of particulates during transport.~~
- ~~Wheel washers, rock aprons, or other measures will be provided to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.~~
- ~~Dust deposited on public roads will be removed to reduce mud on area roadways.~~
- ~~Dirt, gravel, and debris piles will be covered or wetted during periods of high wind when the stockpiles are not in use.~~
- ~~Construction trucks will be routed and scheduled to reduce travel delays and unnecessary fuel consumption/emissions.~~
- *WSDOT will use newer construction equipment and maintain all equipment in good mechanical condition to minimize exhaust emissions.*
- *WSDOT will assess the viability of carpooling, commute trip reduction (CTR) and other transportation demand management (TDM) programs for construction workers.*
- *If possible, considering construction scheduling, WSDOT will build and operate transit facilities (park-and-ride expansion) associated with the project so they are available at project opening.*
- *If possible, considering construction scheduling, WSDOT will build and maintain pedestrian and bicycle facilities so that they are available at project opening.*
- *WSDOT will stage construction between other I-405 transportation projects to minimize congestion that contributes to regional emissions of pollutants during construction.*
- *WSDOT will implement construction truck idling restrictions.*

- *Where possible, WSDOT will locate construction equipment and staging areas away from sensitive receptors such as fresh air intakes to buildings, air conditioners, and sensitive populations such as the elderly and the young.*
- *Where possible, WSDOT will locate truck staging zones where diesel emissions will not be noticeable to the public or near sensitive populations.*
- *WSDOT will spray exposed soil with water or other suppressant to minimize emissions of PM₁₀ and reduce deposition of particulate matter.*
- *WSDOT will cover all loads in trucks transporting materials, wet materials in trucks, or provide adequate freeboard, (space from the top of the material to the top of the truck bed), to minimize PM₁₀ and deposition of particulates during transportation.*
- *WSDOT will provide wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.*
- *WSDOT will remove particulate matter deposited on paved, public roads, sidewalks, and bicycle and pedestrian paths to reduce mud and dust.*
- *WSDOT will cover and stabilize project-site dirt, gravel, and debris piles, as needed, to minimize dust and wind-blown debris.*
- *WSDOT will restrict the speed of construction vehicles when operating in areas of exposed earth.*
- *WSDOT will route and schedule construction trucks to reduce delays to traffic during peak travel times to minimize air quality impacts caused by a reduction in traffic speeds.*

The following measures will be used to control dispersion of dust (PM₁₀), transmission of particulate matter, and emissions of CO and NO_x during operation:

- *WSDOT will connect project pedestrian and bicycle facilities with existing pedestrian and bicycle systems as part of the project.*

Chapter 5.9, Water Resources

Page 5.9-1, top sidebar:

Please refer to the Renton to Bellevue Project ~~Water Quality~~; Surface Water and Floodplains; Water Quality; and the Geology, Soils and Groundwater discipline reports in Appendices T, U, and Y, respectively, (on CD), for a complete discussion of water resources analyses.

Page 5.9-4, third paragraph, Construction effects to water quality:

~~Automotive related substances, such as petroleum hydrocarbons and heavy metals, are another concern during construction. These substances can be found in staging areas, on temporary roads, or on other work surfaces such as the freeway. If discharged~~

directly to surface waters, these contaminants can reach concentrations that are toxic to aquatic life. The SPCC plan will specify that storage of fuels and toxic materials can only take place away from drainage courses and outside of Zone 1 of the City of Renton’s Aquifer Protection Area (APA). The SPCC plan will also specify measures to be taken in the event of a spill.

Page 5.9-5, How will the project affect stormwater?:

We have added the following paragraph as the second paragraph to this section:

The Renton to Bellevue Project will replace 35 existing culverts, primarily for maintenance reasons, that have aging pipes that are at the end of their life span. One will be replaced with a bridge (Coal Creek). In addition, one existing bridge (May Creek) will be lengthened to move the piers outside of the ordinary high water mark.

Page 5.9-6:

The proposed project will include enhanced water quality treatment facilities consisting of ecology embankments *or constructed wetland water treatment facilities*. These facilities will provide enhanced treatment for the proposed ~~124113~~ acres of new impervious surfaces, and ~~162171~~ acres (a total of ~~286282~~ acres or approximately ~~176250~~ percent of new impervious surfaces within this portion of I-405) of presently untreated impervious surfaces (Exhibit 5.9 5).

We have added the following text and table after the first complete paragraph under the chart:

The I-405 pavement stormwater will be separated from the rest of the subbasin stormwater and treated. The subbasin stormwater flows will be maintained in the existing condition (usually confined in city or county storm drains, by culvert pipes or bridges under the highway). The overall subbasin area compared to the proposed I-405 corridor area within each subbasin is shown in the attached table, Exhibit 5.9-5a, (please note that all of the stormwater from I-405 within the Renton to Bellevue project area is proposed to be treated. The WSDOT Highway Runoff Manual defines a Threshold Discharge Area (TDA) as the highway corridor that discharges to a single outfall within a quarter mile of the project boundary. Stormwater from this project TDA is collected separately from the rest of the subbasin area and treated for water quality prior to discharge to the subbasin.

Exhibit 5.9-5a: Summary of Renton to Bellevue Project Watershed Subbasins

<i>Watershed</i>	<i>Subbasin Area (acres)</i>	<i>I-405 Corridor Area (acres)</i>	<i>Existing Subbasin Outlet</i>
<i>Cedar River</i>	110	35	<i>City storm drain</i>
<i>Johns Creek</i>	868	91	<i>City storm drain</i>
<i>Clover Creek</i>	107	10	<i>City storm drain</i>
<i>May Creek</i>	390,300 (14 sq. miles)	42	<i>May Creek main channel to Lake Washington</i>

<i>Watershed</i>	<i>Subbasin Area (acres)</i>	<i>I-405 Corridor Area (acres)</i>	<i>Existing Subbasin Outlet</i>
Gypsy Creek	319	66	Channel with sections of storm drain to Lake Washington
Lake Washington along the Newport Hills and Lakehurst Areas	676	78	Series of small subbasins that cross the highway in city/county storm drains or culverts outletting directly to Lake Washington
Coal Creek	5940	30	Coal Creek main channel to Lake Washington

Page 5.9-9 through 5.9-11, What measures are proposed to avoid or minimize effects to water resources during construction?:

Several measures will be incorporated into construction plans and specifications to reduce effects to water resources.

- WSDOT will protect groundwater with the use of standard BMPs.
- WSDOT will prepare and implement a temporary erosion and sedimentation control (*TESC*) plan and a spill prevention control and countermeasure (*SPCC*) plan. *The SPCC plan will include provision for an environmental compliance assurance inspector to be present during project construction within the sole source aquifer to monitor groundwater quality, storage of hazardous substances and chemical use practices, and the containment of hazardous chemicals.*
- WSDOT will not allow any in-water construction work to take place except during seasonal work windows established to protect fish, unless prior approval has been obtained from fisheries resource agencies.
- *When working in Aquifer Protection Zones 1 and 2, WSDOT will comply with the following sections of the Renton Municipal Code, as appropriate; Section 4-4-030, Development Guidelines and Regulations – General; Section 4-4-060, Grading, Excavation, and Mining Regulations; Section 4-9-015, Aquifer Protection Area Permits; and, Section 4-3-050, Critical Areas Regulations.*
- *Ecology embankments and other water quality facilities located in Zone 1 of the City of Renton’s APA will be designed to satisfy the requirements of the City’s APA, including prevention of stormwater infiltration. Pipelines will be impervious and designed according to pipeline specifications in RMC 4-3-050H.6.*
- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses, *according to environmental permit requirements, and outside of Zone 1 of the City of Renton’s APA. In Zone 1 and Zone 2 of the APA, washout from concrete trucks will not be dumped into*

- ~~stormdrains or onto soil or pavement that carries stormwater runoff. allowed to infiltrate the ground and wastewater from vehicle and equipment washing will be disposed to the sanitary sewer. Thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts. WSDOT will designate a washdown area for equipment and concrete trucks.~~
- WSDOT will ensure that fuel and chemical storage, fueling operations for construction vehicles, and equipment during construction is located within secondary containment areas. These areas will be surfaced with an impermeable material and sized to contain the volume of stored fuel and/or chemicals. *The SPCC plan will specify that storage of fuels and toxic materials can only take place away from drainage courses and outside of Zone 1 of the City of Renton's APA. The SPCC plan will also specify measures to be taken in the event of a spill.*
 - WSDOT will locate spill response equipment at regular and specified intervals along the project alignment.
 - ~~WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses.~~
 - ~~WSDOT will take added measures during construction within the Cedar Valley Sole Source Aquifer to protect the aquifer, such as prohibition of fuel and chemical storage and refueling operations. Also, construction specifications will require stormwater collection with either a lined or piped conveyance system within the Aquifer Protection Area (APA). Stormwater will be directed and discharged outside of the APA to prevent any possible degradation of water quality.~~
 - WSDOT will conduct construction within the City of Renton's APA Zones 1 and 2 in compliance with the Washington State Wellhead Protection requirements outlined in WAC 246-290-135(4) and the City of Renton Municipal Code RMC 4-9-050 C and H, and RMC 4-9-015.
 - ~~WSDOT will ensure that fuel and construction chemicals will not be stored within the City of Renton's APA Zone 1 and will minimize storing fuels and chemicals within Renton's APA Zone 2.~~
 - WSDOT will conduct groundwater monitoring to monitor for spills that can affect the Cedar Valley Sole Source Aquifer. If necessary, existing City of Renton monitoring wells can be supplemented with additional monitoring wells at key locations and used for monitoring water quality during construction activities in the APA Zone 1.
 - *During construction, WSDOT will conduct groundwater monitoring and sampling to assess project effects on the aquifer and water quality.*

- ~~WSDOT will ensure that any fill over 50 cubic yards in quantity placed over Renton's APA Zone 1 be certified by a professional engineer or geologist that the fill meets Model Toxics Control Act (MTCA) cleanup standards.~~
- ~~WSDOT will not place imported contaminated fill during construction.~~
- ~~WSDOT will ensure that imported fill meets MTCA Method A or B soil cleanup standards (WAC 173-340-740) for unrestricted use.~~
- ~~WSDOT will develop a fill evaluation and testing plan prior to commencing construction activities. The fill testing plan will also apply to suspect excavated soils encountered during construction. If analytical testing is required, WSDOT will ensure that imported fill soils are analyzed before arriving at the construction site.~~
- ~~If analytical testing is required, WSDOT will ensure that imported fill soils are analyzed before arriving at the construction site.~~
- ~~WSDOT will ensure that all sampling is performed by a professional engineer or geologist.~~
- *The proposed I-405 improvements are within the sanitary control areas (SCA) of the City's drinking water wells 8 and 9. As such, mitigation measures and design elements must be identified to address impacts on the City's water supply as required by WAC 246-290-135.*

Page 5.9-11 under the heading, What measures are proposed to avoid or minimize effects to water resources during operation?:

- ~~Stormwater discharge to the Cedar River will be downstream of the City of Renton's RW 1, 2 and 3 Group A wells.~~
- WSDOT will construct the new I-405 roadway over the Renton APA Zone 1 with an impervious liner underneath the pavement for additional protection from spills escaping the stormwater collection system.
- WSDOT will ensure that fuel and chemical spills from vehicles *within the Cedar Valley Sole Source Aquifer* are captured and contained by the stormwater collection and detention system. The stormwater system will detain spills in either vaults or ponds. The detention vault or pond will have shut-off capability for containing a spill or release.
- WSDOT will establish a plan in compliance with Washington State Wellhead Protection Requirements outlined in WAC 246-290-135(4) and the City of Renton Municipal Code RMC 4-9 4-3-050 C and H, and RMC 4-9-015 to ensure a higher level of protection for the City of Renton's APA Zones 1 and 2.
- Within APA Zones 1 and 2, WSDOT will construct either a lined or piped stormwater conveyance system. ~~Stormwater will be directed and discharged outside of the City of Renton's APA Zone 1 Wellhead Protection Area.~~

- WSDOT will ensure that the roadway and access ramps over Renton’s APA Zone 1 will have berms *or curbs* to collect and route major spills to the stormwater collection system. The system will be constructed in accordance with City of Renton requirements for sanitary sewage facilities in APA Zone 1 areas and will be sized to contain a liquid spill from a double tanker.
- WSDOT will control stormwater so that peak and base flows of receiving waters are not adversely affected by treated stormwater discharge from the expanded impervious surface areas created by the project.

Chapter 5.10, Wetlands

Page 5.10-2, first paragraph, How will the construction activities affect wetlands?:

Construction activities such as vegetation removal and short-term placement of fill material will have temporary effects on roughly ~~0-61.1~~ **5-511.0** acres of wetlands in the project area.

Page 5.10-6, first paragraph:

All or part of ~~385~~ **111** of the **111** wetlands identified in the Renton to Bellevue Project will be permanently lost as a result of the project. A total of approximately ~~5-511.0~~ **5-511.0** acres in permanent direct effects will result from WSDOT filling wetlands to construct new facilities or diverting or redirecting surface runoff needed to support wetland hydrology. The approximate acreage of lost wetlands is distributed among local jurisdictions as follows:

- *Renton – ~~3-88.1~~ acres*
- *Newcastle – less than ~~0-10.8~~ acres*
- *Bellevue – ~~1-61.9~~ acres*
- *King County – less than ~~0-010.2~~ acres*

Chapter 5.11, Wildlife and Vegetation

Page 5.11-5, What measures are proposed to avoid or minimize effects to wildlife and vegetation during construction?, first bullet:

- WSDOT will prepare and implement a revegetation plan. ~~If~~ *When* WSDOT ~~must~~ permanently removes vegetation for roadway construction, it will be replaced with native vegetation within or in the vicinity of the project area, *if possible*.

Page 5.11-5, What measures are proposed to avoid or minimize effects to wildlife and vegetation during operation?, first bullet:

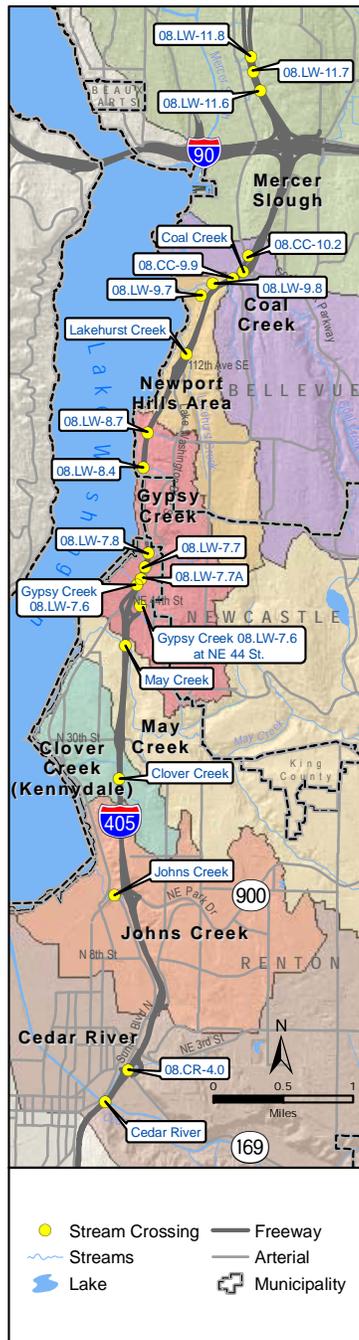
- WSDOT will revegetate areas in which vegetation removal will occur, *if possible*, (except for areas of new impervious surface).

Chapter 5.12, Fish and Aquatic Resources

Page 5.12-2, Exhibit 5.12-1: Streams surveyed:

The graphic has been revised as follows:

Exhibit 5.12-1: Streams surveyed



Page 5.12-4, second paragraph, How will the project affect fish, aquatic habitat, and threatened and endangered fish species?:

WSDOT's goal is to minimize the harmful effects and maximize the long-term, beneficial effects by maintaining existing aquatic resources, and then improve those resources over time. Project engineers have used the results of the stream evaluations as a basis for making changes in the project design to avoid, minimize, or provide on-site and like-kind mitigation for potential effects. As a result of collaboration between the project biologists and design engineers, the Renton to Bellevue Project will have no major adverse effects on fish or aquatic resources and only minor, short- and long-term effects. In fact, the project will have beneficial effects on the Cedar River, Clover Creek, Stream 08.LW-7.7A, Stream 08.LW-7.8, May Creek, Coal Creek, and Gypsy Creek, ~~including such as~~ restoring fish passage, improving instream habitat, improving water quality and habitat by treating stormwater runoff, and removing existing instream obstructions ~~such as pipes and screens.~~

Page 5.12-5, first full paragraph and second paragraph:

~~WSDOT will replace four impassable cross-culverts with new, larger fish passage culverts in the Gypsy Creek, 08.LW-7.7, and 08.LW-7.8 stream systems. Larger sections of inaccessible stream habitat will be opened up for use by several fish species, including coho salmon. The larger culverts will also provide greater stream eco-connectivity, a wider stream channel, healthier riparian habitats, and instream habitat restoration. When the direct habitat improvements occur in combination with the removal of stormwater discharge from the streams, the overall improvements to these streams result in over 5,600 feet of improved access and habitat values for fish to use.~~

~~Clover Creek is another stream where WSDOT will construct a new, larger fish passage culvert. Current effects of development throughout the Clover Creek stream corridor include the freeway, railroad, housing, a water supply diversion for a fish farm, major arterials, and stormwater projects. The stream has been degraded so much over the years that fish habitat values almost preclude fish life. WSDOT will create fish passage and instream habitat improvements that result in new access for salmonids to over 2,900 feet of stream upstream of I-405. The instream restoration phase includes 450 feet of new open channel habitat that now flows through residential neighborhoods by means of a channel lined with creosote ties or is maintained in pipes and catch basins. Removing project stormwater discharge from Clover Creek will also enhance instream habitat values for all aquatic life upstream (indirectly) and downstream (directly) from the project area. The direct water quality benefit will enhance 2,800 feet of stream habitat downstream of the improvements.~~

Page 5.12-5, Text Box:

The text box pertaining to fish-friendly culverts and structures on this page has been deleted.

Page 5.12-6, Will the project remove barriers to fish passage?:

The text has been revised in the Errata as follows:

The project includes ~~several~~ beneficial actions that will ~~restore and~~ improve fish passage.

WSDOT will construct ~~fish friendly culverts or~~ a bridge *structure* to replace the existing fish passage barriers ~~at~~ several streams (Gypsy Creek [2 culverts], 08.LW 7.7, 08.LW 7.8, and respective tributaries, Clover Creek and Coal Creek). After WSDOT constructs the structures *construction*, juvenile and adult salmonids will be able to swim upstream and downstream beneath the freeway. ~~Initially, and especially in the smaller streams, cutthroat trout and other resident species will benefit the most. The fish passage projects will have greater benefits in the future for migratory fish, as other barriers throughout the watershed are removed. Currently, these species either use lower portions of the watersheds, including the Lake Washington nearshore habitat, or have access to the lower stream sections.~~

Page 5.12-8, third sentence:

~~However, after fish friendly culverts are constructed, approximately 8,850 linear feet and 63,500 square feet of stream habitat will become available for fish use upstream of the freeway (Exhibit 5.12-2).~~

Page 5.12-8, Exhibit 5.12-2: Fish habitat gains and losses:

This exhibit has been deleted.

Page 5.12-10, first and second paragraphs:

The text has been revised as follows:

WSDOT will affect various types of stream habitat and functions during construction of the new ~~fish friendly~~ cross culverts and bridges. The quantity and quality of instream habitat (habitat below the OHWM) is critical for fish. The riparian areas protect that instream value by buffering fish life from development. When WSDOT widens I-405 and replaces open-channel habitat with a ~~fish friendly~~ culvert, there will be a loss of natural instream and riparian habitat by putting the stream flow into a culvert. The amount of habitat lost for fish and other aquatic resources ~~will be small~~ *must be* compared to ~~the total amount of any~~ habitat gained for fish use ~~after access is restored~~.

~~The greatest benefit for fish will be restoration of year round access to their spawning, feeding, and rearing habitat. Habitat is the key to fish their survival, therefore, the quantity and quality of the habitat will determine if the fish will survive on their own or need further protection. The loss of the riparian areas during construction will be offset to some degree by a large the gain in two different, but more important stream habitat functions: fish passage (five new culverts, one new bridge at Coal Creek) and access to instream habitat (a net increase of 8,450 linear feet of stream equaling 52,800 square feet of habitat below the OHWM).~~

Page 5.12-11, second paragraph:

~~A design criterion for the Renton to Bellevue Project is to limit or reduce peak flows resulting from stormwater facilities discharging to the streams in the area. The stormwater flow control design will follow the latest WSDOT Highway Runoff Manual which is considered equivalent to the Washington State Department of Ecology guidelines for flow control.~~ As a result, the increase in impervious surfaces ~~and the proper operation of stormwater detention facilities~~ will not adversely affect the peak ~~and~~ base stream flows in the Renton to Bellevue project area streams.

Page 5.12-11, What measures are proposed to avoid or minimize effects to fish and aquatic species during construction?, insert second and third bullets:

- *Some existing culverts may be replaced with new fish-friendly structures.*
- *WSDOT will work with tribal, federal, state, and local authorities to determine mitigation that best offsets impacts to the fish species affected by the Build Alternative. Final decisions on culverts affected by the project would also be examined for fish passage per the Memorandum of Agreement with Washington State Department of Fish and Wildlife and current WSDOT policies.*

Page 5.12-12, last four bullets:

- *WSDOT will work with tribal, federal, state, and local authorities to determine mitigation that best offsets impacts to the fish species affected by the Build Alternative. Final decisions on culverts affected by the project would also be examined for fish passage per the Memorandum of Agreement with Washington State Department of Fish and Wildlife and current WSDOT policies.*
- ~~WSDOT will construct fish friendly culverts at the following locations near the NE 44th Street interchange and at Clover Creek that will restore fish passage beneath the freeway. Approximately 8,50 linear feet of stream between the freeway and the upper watersheds will become available for migratory fish use.~~
- ~~WSDOT will construct a new bridge crossing at Coal Creek to improve passage and enhance fish utilization for the entire upper Coal Creek and Newport Creek Basins. There is over 4 miles of habitat in upper Coal Creek and another 4,500 feet in the Newport Creek Basin.~~
- ~~WSDOT will construct~~ *consider construction of* headwalls¹ ~~at the five new fish-friendly~~ cross-culvert inlets and outlets to minimize the amount of grading and filling and to restore and increase long-term riparian functions at each site.
- ~~WSDOT's ongoing maintenance of stormwater treatment and detention facilities will not include~~ *avoid* the application of any chemical weed control agents (herbicides).

¹ A concrete structure at the end of a culvert to protect the embankment slopes, anchor the culvert, and prevent undercutting.

Page 5.13-4, Liquefaction-prone Areas, third bullet:

- WSDOT will use appropriate measures to reduce long-term liquefaction and lateral spreading risks if it is determined that liquefaction risks are ~~unacceptable~~*high*.

Page 5.13-4, Soft Ground Areas, second bullet:

- WSDOT will design the structures and embankments to accommodate or avoid the settlement if the potential *for* settlement is ~~unacceptable~~*high*.

Chapter 6, Cumulative Effects

Page 6-4:

The following text has been added below to the numbered list of projects:

For projects to have been included in our cumulative effects analysis, they needed to occur within the timeframe established for the analysis, be within or immediately adjacent to the geographic boundaries of the study area, have developed sufficient environmental documentation to allow a meaningful evaluation, and be planned, approved, and funded.

City of Bellevue Coal Creek Stabilization Program. The Draft EIS for this project was released subsequent to development of our analysis. According to the Draft EIS, the primary purposes of the Coal Creek Stabilization Program are to:

- *Reduce sediment supply to Coal Creek and Lake Washington to a level expected for an undisturbed, or natural, condition.*
- *Stabilize the Coal Creek system to ensure the success of future restoration efforts.*
- *Minimize the potential for flooding that may be associated with excessive sedimentation.*
- *Improve water quality by minimizing erosion and sediment transport.*

Renton Airport's Proposal to Dredge Lake Washington. According to City of Renton staff, the dredging would occur near the mouth of the Cedar River at the seaplane docking area. This proposal is still under development.

Barbee Mill LLC dredging of May Creek and Lake Washington (City of Renton permit # LUA05-138, SP, SM, ECF), the Barbee Mill Plat (City of Renton IUA02-040, PP, EIS, SA-H, SM). Of the four resource areas (air quality, water quality, wetlands, and fish and aquatic habitat) addressed in the Cumulative Effects Analysis for the Renton to Bellevue Project, we would not expect the Barbee Mill dredging to have a measurable cumulative effect on air quality. The potential would exist, however, for the proposals to affect the other three resource areas. Whether the respective contributions would be positive or negative, depends on the existing conditions of the site, the characteristics of

the various design elements selected for those locations, and the effectiveness of project mitigation measures.

Page 6-10, second paragraph, Wetlands:

Based on the mitigation that will occur to compensate for the loss of the ~~5.55~~**11.0** acres, with the Renton to Bellevue Project, a positive contribution to cumulative effects on wetlands within the affected areas (more wetlands created/enhanced of greater value than filled/permanently affected) can be realized. Although the decision regarding the location and size of the mitigation site(s) has not been finalized, much of the compensation for wetlands affected will likely occur at the Springbrook Creek Wetland and Habitat Mitigation Bank. This will provide a safe, high-quality wildlife habitat away from the dangers of a roadside location. ~~This same bank will likely also be used as mitigation for the filling of 1.7 acres of wetlands associated with the Renton Nickel Improvement Project. The Bellevue Nickel Improvement Project will permanently fill 0.9 acres of wetlands with mitigation planned to occur in Kelsey Creek Park.~~

Appendix A: Project Design Features

This appendix, in its entirety, has been removed.

Appendix C: Proposed Construction at Cross Culverts

Page C-1:

Stream Identification	Project Activity
Johns Creek	Treated discharge location
Drainage to Clover Creek	The portions of this stream located within the footprint of widening will be relocated where possible or placed in a pipe.
May Creek	Both bridges over May Creek will be reconstructed as part of the widening.
Stream 08.LW-7.6 Stream 08.LW-7.6 (Tributary A) Stream 08.LW-7.7 Stream 08.LW-7.7 (Tributary A) Stream 08.LW-7.8 Stream 08.LW-7.8 (Tributary A) Stream 08.LW-8.4 Stream 08.LW-8.7 Stream 08.LW-9.9	The portions of these streams located within the footprint of widening will be relocated where possible or placed in a pipe.
Lakehurst Creek	The portions of this stream located within the footprint of widening will be relocated where possible.
Stream 08.LW-9.7	This stream is an option for direct discharge location of stormwater. The upper reach of the stream will be reconstructed and enhanced.
Stream 08.LW-9.8	This stream is an option for direct discharge location of stormwater. The upper reach of the stream will be reconstructed and enhanced.
Coal Creek	The existing culvert under I-405 will remain and a second channel will be constructed under the bridge. The bridge span for both I-405 mainline bridges will be long enough to realign the daylighted creek and provide improved habitat connectivity. The existing flood control structure on the east will be maintained.

Revised:

<i>Stream Identification</i>	<i>Project Activity</i>
<i>Johns Creek</i>	<i>Culverts are to remain and an additional outfall will be constructed.</i>
<i>Drainage to Clover Creek</i>	<i>Option 1 is to replace the existing culvert with a pipe at MP 6.33 that would connect back into the City storm drain system per existing conditions.</i> <i>Option 2 is to replace the existing pipe with a culvert at MP 6.20. This would provide about 665' of relocated (new) channel parallel to the highway.</i>
<i>May Creek</i>	<i>233-foot long bridge.</i>
<i>Stream 08.LW-7.6</i>	<i>A culvert will be installed at MP 7.61. Assume 3-side open-bottom concrete box culvert, 20' wide x 5' above OHWM. The downstream conveyance to the lake will also be improved.</i>
<i>Stream 08.LW-7.6 (Tributary A)</i>	<i>A culvert will be installed at MP 7.61. Assume 3-side open-bottom concrete box culvert, 20' wide x 5' above OHWM with downstream conveyance improved to Lake Washington.</i>
<i>Stream 08.LW-7.7</i>	<i>A culvert will be installed at MP 7.76. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' above OHWM.</i>
<i>Stream 08.LW-7.7 (Tributary A)</i>	<i>A culvert will be installed at MP 7.76. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' above OHWM.</i>
<i>Stream 08.LW-7.8</i>	<i>A culvert will be installed at MP 7.76. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' above OHWM.</i>
<i>Stream 08.LW-7.8 (Tributary A)</i>	<i>A culvert will be installed at MP 7.76. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' above OHWM.</i>
<i>Stream 08.LW-8.4</i>	<i>A culvert will be installed at MP 7.84. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' high above OHWM.</i>
<i>Stream 08.LW-8.7</i>	<i>A culvert will be installed at MP 7.84. Assume 3-sided open-bottom concrete box culvert 12' wide x 7.5' high above OHWM.</i>
<i>Lakehurst Creek</i>	<i>The outfall pipeline under I-405 will be replaced.</i>
<i>Stream 08.LW-9.7</i>	<i>None.</i>
<i>Stream 08.LW-9.8</i>	<i>Replace with 24-inch diameter culvert.</i>
<i>Stream 08.LW-9.9</i>	<i>The culvert at MP 9.96 will be replaced and flows rerouted to stream 08.LW-9.8. The culvert at MP 10.00 will be replaced with a new 24-inch culvert and rerouted to Coal Creek.</i>

<i>Stream Identification</i>	<i>Project Activity</i>
Coal Creek	<i>Four new bridges are planned. A 30-foot-wide fish-passable stream channel, which will allow for stream meandering, will be constructed under the bridges. The existing culvert under I-405 and flood control structure to the east will be maintained.</i>
08.CC-10.2	<i>No revisions to existing culvert.</i>

Appendix F: List of Commitments

This appendix, in its entirety, has been removed.

Appendix M: Environmental Justice Discipline Report

Table 7-1, Highlight fish and construction rows.

Appendix O: Section 4(f) Evaluation

Page 4-1, Table 4-1

We have changed the last sentence of footnote 1 in Table 4-1 to read: *The parcels that are in public ownership are undeveloped and are heavily vegetated with riparian vegetation and dense areas of blackberries. Public access exists for hiking and photography.*

Page 4-4, other recreation elements:

Other recreation elements include access to the Cedar River Regional Trail, picnic shelter, restrooms, three paved parking lots, and park landscaping.

Page 4-6, the description of Liberty Park:

The fifth sentence has been added: *It also serves as the venue for the annual Renton River Days.*

Page 4-6, the description of Giannini Stadium:

Giannini Stadium is a *lighted* baseball and softball complex that includes a 930-seat grandstand, restrooms, a concession area, and locker rooms. The field is located adjacent to Houser Way.

Page 4-6, the description of Wilcoxon Field:

Wilcoxon Field and bleachers provides another *lighted* venue for baseball and softball.

Page 4-6, under the description of the Skate Park:

The 10,000 square ~~feet~~-*foot* Skate Park includes obstacles for in-line skaters and skateboarders.

Page 4-6:

Other recreation elements include a lighted, multi-purpose court, lighted tennis courts, children's play equipment, restrooms, parking, *picnic area*, and access to Cedar River Trail.

Page 4-8:

Gene Coulon Memorial Beach Park is a popular regional 55-acre City of Renton park on Lake Washington. *It has tennis courts, sand volleyball courts, a boat launch, a major swimming beach, a large children's play area, parking lots, four picnic shelters, and two restaurants.* Carefully planned landscaping has transformed the lakeshore into an arboretum of labeled native and non-native trees and shrubs. Memorial trees and benches commemorate those with a connection to the Renton community. There are about 1.5 million visits to this park annually. The City of Renton used Land and Water Conservation Funds to fund some of the construction at Gene Coulon Memorial Beach Park in 1980 and 1981.

Page 5-1, Project Effects, under Proximity Effects:

The first paragraph has been revised to read:

While there will be four additional lanes on the mainline just north of the parks and a new elevated direct access ramp at the I-405/SR 169 interchange, any increase in noise and visual effects resulting from the project will not rise to the level of a constructive use as defined in 23 CFR 771.135(p). This means that after considering project mitigation, the proximity effects of the project on the activities, features, and attributes that qualify the parks for protection under Section 4(f) will not be so great that these activities, features, and attributes are meaningfully reduced or lost. This conclusion is based in part on the fact that these activities, features, and attributes exist today in the presence of similar traffic volumes, air quality conditions, noise levels, and views adjacent to I-405 and SR 169 as will exist in the future with the proposed project.

Page 5-2, second paragraph:

The second sentence has been revised to read: *WSDOT determined that the number of users at any one time over the course of a year within the noise-affected portions of these parks represents a relatively small number of citizens, and mitigation would not be feasible or reasonable.*

Appendix V: Wetlands Discipline Report

Page iv, paragraph 3, Would the proposed project have an effect on wetlands?:

The text has been revised as follows:

Permanent and temporary effects to wetlands are expected with the proposed construction and operation of the improved I-405 freeway. Construction would result in the loss and filling of ~~5.375.52~~ acres of wetland as a result of the proposed roadway design. Temporary onsite construction will affect ~~a little over half an~~ *about 0.63* acres of wetland. Temporary effects would result from sediment transport and erosion from

disturbed soils. *In addition, 0.20 acres of wetland will be indirectly affected and are likely to function at a reduced level.*

Page iv, paragraph 4, What would be the effect of the unavoidable loss of the identified wetland resources?:

The text has been revised as follows:

The project will result in an unavoidable loss of ~~5.375.52~~ acres of wetland within the study area due to filling for the proposed construction. As a result, the associated wetland functions in values will be unavoidably lost in some basins and, if unmitigated, would result in reductions of wetland habitat in each area. Most of the loss (3.23 acres) will occur to Category III wetlands. The remaining loss, ~~2.142.29~~ acres, will occur to Category IV wetlands. Anticipated effects to off-site wetlands will be avoided or minimized so that project implementation will result in no net loss of wetlands.

Page iv, paragraph 7, first sentence:

The text has been revised as follows:

With the Build Alternative, effects include the loss of ~~5.375.52~~ acres of wetland within the project area.

Page 5-1, paragraph 1, third sentence:

The text has been revised as follows:

Temporary Effects

Approximately ~~0.830.63~~ acres of wetlands will be temporarily disturbed during construction activities, including vegetation clearing and the placement of fill material.

Page 5-1, paragraph 5, first sentence:

The text has been revised as follows:

~~Forty (40)~~ **Thirty-six (36)** wetlands totaling ~~5.48~~ acres, of the 63 wetlands identified in the Renton to Bellevue Project, will be permanently affected as a result of filling, as listed in Table 5-1.

Page 5-2, paragraph 6, first sentence:

The text has been revised as follows:

Indirect Effects

In addition, the project will result in approximately ~~0.170.20~~ acres of indirect effects to wetlands.

Page 5-2, paragraphs 1, 2, and 3:

The text has been revised as follows:

Effect Summary

The Renton to Bellevue Project is estimated to result in ~~6,316.35~~ acres of wetland fill or disturbance. This represents approximately 31 percent of the wetland area delineated in the project area. Of this total amount, approximately ~~5,485.52~~ acres would be permanently filled and ~~830.63~~ acres would be temporarily disturbed during construction and subsequently restored. ~~In addition, 0.17~~ **Approximately 0.2** acres of wetland would be indirectly affected.

The amount of wetland fill within each basin is generally consistent with the percentage of wetlands within that basin. The Gypsy Creek basin has the largest total of fill (~~3,383.42~~ acres—~~64 percent of the total affected area~~) but also contains the largest total ~~number~~ **area** of wetlands (~~9,579.67~~ acres—~~59 percent of the total wetland area~~). More than half the wetland fill in the Gypsy Creek Basin is attributed to Wetland 7.2R (1.2 acres ~~or 35 percent of the Gypsy Creek Basin~~) and Wetland 7.78L (0.8 acres ~~or 24 percent of the Gypsy Creek Basin~~). These two wetlands make up approximately 38 percent of the *project's* total wetland fill. The ~~largest deviation from this trend is within the~~ Coal Creek basin. ~~This basin~~ contains approximately ~~2621~~ percent of the total wetland area and accounts for about 20 percent of the total fill or disturbance area (**1.09 acres**). Most of the fill within the ~~May~~ **Coal** Creek basin is associated with 0.4 acre of disturbance to Wetland 10.0L.

Other basins would be as follows: Lower Cedar River (~~0.01~~**0.02** acres—~~0.2 percent of the total affected wetland area~~); Johns Creek (~~0.13~~**0.14** acres—~~2.5 percent of total affected wetland~~); Clover Creek (~~0.29~~**0.30** acres—~~5.46 percent of total affected wetland~~); May Creek (no permanent fill); Mercer Slough (~~0.17~~**0.19** acres—~~3.19 percent of total affected wetland~~); and Newport Hills (~~1.05~~**0.36** acres—~~4.97 percent of total affected wetland~~).

Page B-5 in Table B-3:

For wetland 4.2R change area from 0.02 to 0.01 acres

For wetland 7.78L change area from 0.89 to 0.87 acres

Page B-6 in Table B-3:

For wetland 8.7L change area from 0.13 to 0.14 acres

Discipline Report Revisions (Revised and Supplemental)

Fish and Aquatic Resources Discipline Report

The Fish and Aquatic Resources Discipline Report has been revised to provide additional information regarding effects related to streams. This information has been added as a result of comments on the EA as well as to add clarification to the analysis contained in the discipline report. The revised discipline report is included on the DVD attached to this FONSI as Appendix A.

Surface Water and Floodplains Discipline Report

The Surface Water and Floodplains Discipline Report has been revised to provide additional detail on streams. This information has been added as a result of comments on the EA as well as to add clarification to the analysis contained in the discipline report. The revised discipline report is included on the DVD attached to this FONSI as Appendix B.

Supplemental Noise Analysis

Additional noise measurements and analysis were undertaken after distribution of the EA. This supplemental analysis is on the DVD attached to this FONSI as Appendix C.

This supplement evaluates the potential changes in noise effects associated with the locations where comments were received during the comment period on the EA and where changes in the project design were considered.

Additional noise measurements were taken at five locations. One is a new site, and the four others were modeled locations where the noise levels were validated. Noise walls were assessed in three locations. Based on the results of noise modeling for the year 2030 and WSDOT criteria for construction of noise walls, in addition to the noise walls that were proposed as part of the EA, a small portion of wall East 10 and an extended length of wall East 15 were found to be feasible and reasonable, and are proposed as part of this project.

Programmatic Section 4(f) Evaluation

The programmatic Section 4(f) evaluation for Coal Creek Park is on the DVD attached to this FONSI as Appendix D.

Supplemental Wetlands Discipline Report

Additional wetlands investigations were undertaken after distribution of the EA. A Supplemental Wetlands Discipline Report was prepared and is included on the DVD attached to this FONSI as Appendix E.

The Supplemental Report was prepared to account for potential changes in site conditions since the initial wetlands investigations were conducted. The inventory included field visits to collect field notes, photographs, and information on general landscape parameters including landscape position and general vegetation structure.

Information is provided for each wetland based primarily on visual observation of the soils, hydrology, and vegetation in the field. Wetlands discussed in the initial 2006 Wetlands Discipline Report were not further evaluated or delineated as part of this Supplemental Report.

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ATTACHMENT 2: NOTICES

This attachment provides the notices prepared for the Finding of No Significant Impact (FONSI), along with information on its publication.

NOTICE OF AVAILABILITY OF FINDING OF NO SIGNIFICANT IMPACT, I-405, SR 169 TO I-90 – RENTON TO BELLEVUE PROJECT

The Federal Highway Administration (FHWA) issued the I-405, SR 169 to I-90 – Renton to Bellevue Project Finding of No Significant Impact on November 20, 2008.

This finding is based on the evaluation of the Environmental Assessment (EA) as issued on March 9, 2006, and public and agency input at the public hearing on March 22, 2006, as well as comments received from both the public and agencies during the comment period. The comment period was open for input from the public and agencies from March 9, 2006 to June 12, 2006.

The Washington State Department of Transportation (WSDOT) intends to improve I-405 from SR 169 to I-90. These improvements are a part of the I-405 Corridor Program. The Proposed Action provides for improvements to approximately 8 miles of I-405 (milepost 3.8 to milepost 11.9) from SR 169 north to the northern on- and off-ramps of the I-90 interchange.

Note: In June 2006, the FHWA and WSDOT reduced the scope of the I-405, SR 169 to I-90, Renton to Bellevue Project. Project elements that were removed from the Renton to Bellevue Project included one of the new I-405 northbound lanes between 112th Avenue SE and I-90, the new I-405 bridge structure carrying the I-405 southbound lanes over I-90, and the ramp meter at the 112th Avenue SE interchange northbound on-ramp to I-405. These improvements were then cleared for construction in a documented Categorical Exclusion that was issued on June 9, 2006. Noise Wall East 16 was cleared as part of the Bellevue Nickel Project. As a result, these elements are no longer part of the Renton to Bellevue Project Build Alternative, and are instead considered to be part of the existing condition since they are currently under construction. The description of the project contained in this notice has been revised to reflect these changes.

The Proposed Action includes the following improvements to support construction and operation of the freeway:

- Add two new northbound general-purpose lanes on I-405 from SR 169 to 112th Avenue SE, with one of these continuing on north through the I-90 interchange as an added lane and the other connecting to the new auxiliary lane between 112th Avenue SE and I-90 that is currently under construction.
- Add two new southbound general-purpose lanes on I-405 from SR 169 through the I-90 interchange.
- Realign I-405 to bring it up to current freeway standards, where feasible.

- Construct a new in-line bus rapid transit (BRT) station in the vicinity of 112th Avenue SE.
- Construct a transit/high-occupancy vehicle (HOV) direct-access ramp at N 8th Street in coordination with Sound Transit.
- Realign and reconfigure eight interchanges.
- Make changes to local roadways related to interchange improvements and I-405 widening.
- Widen the southbound bridge over I-90.
- Construct stormwater management facilities.
- Apply context-sensitive solutions (CSS) to incorporate visually pleasing and community-oriented features into the project design.

Copies of the I-405, SR 169 to I-90 – Renton to Bellevue Project EA are available for \$185.00, which includes CDs containing the discipline reports. The EA and the discipline reports are also available on CDs for \$10.00. A hard copy of the FONSI is available for \$61.00, which does not exceed the cost of printing. Project information may also be reviewed and/or copied, at the WSDOT address provided below. It is available for review online at: <http://www.wsdot.wa.gov/projects/i405/rentontobellevue/default>, at the WSDOT I-405 Project Office, 600 - 108th Avenue NE, Suite 405, Bellevue, WA 98004.

Please contact William H. Jordan, WSDOT I-405 Project Office, 600 - 108th Avenue NE, Suite 405, Bellevue, WA 98004; telephone (425) 456-8647, email: william.jordan@i405.wsdot.wa.gov, if you have any questions or comments.

Usted puede pedir estos materiales escritos en español o solicitar un interprete llamando a (360) 705-7098.

Individuals requiring reasonable accommodations may request written materials in alternative formats, sign language interpreters and physical accessibility accommodations by calling (360) 705-7097. Persons who are deaf or hard of hearing, please call the Washington State Telecommunications Relay Service, or Tele-Braille at 7-1-1, Voice 1 (800) 833-6384, and ask to be connected to (360) 705-7097.

FHWA and WSDOT ensure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related statutes by prohibiting discrimination based on race, color, national origin, and sex in the provision of benefits and services. For questions regarding WSDOT's Title VI Program, please call the WSDOT Title VI Coordinator, at (360) 705-7098.

The preceding legal notice was advertised in the following newspaper on the date noted:

The Seattle Times, November 28, 2008

Notice of Availability of Draft Environmental Assessment and Environmental Public Hearing

I-405, SR 169 to I-90 – Renton to Bellevue Project

Purpose of Notice

The Federal Highway Administration (FHWA) and Washington State Department of Transportation (WSDOT) will issue an Environmental Assessment (EA) on March 9, 2006, for the Renton to Bellevue Project that extends from SR 169 in the south to I-90 in the north. It is the purpose of this notice and of the hearing to provide for the exchange of information regarding the effect of the proposal on the community. This purpose is in accordance with and pursuant to the National Environmental Policy Act (NEPA) and the Federal Highway Act (Title 23 U.S.C., 101 et. seq.) and amendments.

Description of Proposed Project

The purpose of this project is to improve approximately 8 miles (MP 3.8 to MP 11.9) of I-405 by adding two new northbound and southbound general-purpose lanes and reconstructing eight interchanges in the project area. The project also includes construction of a transit/HOV direct access ramp at N 8th Street in Renton in coordination with Sound Transit, changes to local roadways related to interchange improvements and I-405 widening, and construction of stormwater management facilities.

Public Hearing

- Date: Wednesday, March 22, 2006
- Time: 4:00 pm to 7:00 pm
- Renton Senior Activity Center
211 Burnett Avenue N
Renton, WA 98055

WSDOT has scheduled a combined open house and environmental public hearing to answer questions and receive comments on the Environmental Assessment. The hearing will be from 4:00 pm to 7:00 pm on March 22, 2006, in Renton, at the Renton Senior Activity Center, 211 Burnett Avenue N, Renton, WA 98055.

The hearing will use an open house format, which is an informal arrangement that allows for one on one discussion while still providing the opportunity to give testimony to a certified court reporter.

Each participant may present testimony either orally to the court reporter or in writing. Individuals should anticipate the process taking about one hour of their time. All written comments must be postmarked or received by April 14, 2006, to be considered by the project administrators and will be included in the formal hearing record. Project

questions and comments should be submitted in writing to the Project Environmental Manager, Allison Ray, at the following address or e-mail address:

Allison Ray
600 – 108th Ave NE Ste 405
Bellevue, WA 98004
Email: allison.ray@i405.wsdot.wa.gov

Plans, maps, environmental documents and other pertinent information about this project will be on display at the hearing.

The EA is available for public review and comments will be accepted until April 14, 2006.

Copies of this document are available at the above location for the cost of \$50.00 for a hard copy or \$10.00 for the four-CD set – these costs do not exceed the cost of reproduction and distribution. The EA is also available for review at libraries, City Halls, and other community facilities in Renton, Newcastle, and Bellevue. The EA document and appendices can be viewed on-line at:

<http://www.wsdot.wa.gov/projects/i405/rentontobellevue/default>

The meeting site is accessible to persons with disabilities. Individuals requiring reasonable accommodation may request written materials in alternative formats, sign language interpreters, physical accessibility accommodations, or other reasonable accommodation by calling Ben Brown collect at (206) 440-4528 or 1-800-833-6388 (Washington State Telecommunications Relay Service) and ask to be connected to (206) 515-3683.

The Federal Highway Administration and the Washington State Department of Transportation's assure that no person shall, on the grounds of race, color, national origin and sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For Title VI complaint forms and advice, please contact OEO's Title VI Coordinator at (360) 705-7098.

ATTACHMENT 3: FONSI DISTRIBUTION LIST

To promote good communication and enhance interagency coordination, we acknowledge that this Finding of No Significant Impact (FONSI) is a public document and that the Washington State Department of Transportation (WSDOT) and the Federal Highway Administration (FHWA) have involved the public, agencies, and tribes in implementing National Environmental Policy Act (NEPA) procedures. All those who received a copy of the environmental assessment (EA) have been sent postcards notifying them of the availability of the FONSI. Notices were sent to the following government agencies, tribes, organizations and elected officials. Hard copies of the FONSI were sent to the five organizations that submitted comments on the EA, indicated with an asterisk (*) below.

Federal Agencies

- National Park Service
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Department of the Interior
- U.S. Environmental Protection Agency
- U.S. Federal Highway Administration
- U.S. Federal Transit Administration
- U.S. Fish and Wildlife Service*
- U.S. National Oceanic and Atmospheric Administration

Tribal Governments

- Confederated Tribes and Bands of the Yakama Nation
- Duwamish Tribe
- Muckleshoot Tribe*
- Snoqualmie Tribe

State Agencies

- Washington State Department of Archaeological and Historic Preservation
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- Washington State Department of Transportation
- Washington State Transportation Commission

- Washington State Department of Community, Trade, and Economic Development
- Washington State Department of Agriculture
- Washington State Department of Health

Regional Agencies

- King County Department of Transportation
- King County Department of Natural Resources and Parks
- King County Transit
- Puget Sound Clean Air Agency
- Puget Sound Regional Council
- Sound Transit
- Transportation Choices Coalition

Local Agencies

- City of Bellevue*
- City of Newcastle*
- City of Renton*

Multi-Agency Permitting Team

- Katie Chamberlin, Washington State Department of Ecology
- Caroline Corcoran, Washington State Department of Ecology
- Doug Dobkins, King County Department of Development and Environmental Services
- Rebecca McAndrew, U.S. Army Corps of Engineers
- Don Ponder, Washington State Department of Fish and Wildlife
- Terry Drochak, Washington State Department of Transportation

Libraries

- Bellevue Community College
- Bellevue Regional Library
- Bothell Regional Library
- Foster Library
- Highlands Public Library
- Kingsgate Library

- Kirkland Library
- Mercer Island Library
- Newport Way Library
- Renton Public Library
- University of Washington Libraries
- University of Washington, Bothell

Elected Officials

Washington State Senate

- Senator Margarita Prentice, 11th District
- Senator Adam Kline, 37th District
- Senator Brian Weinstein, 41st District

Washington House of Representatives

- Representative Zack Hudgins, 11th District
- Representative Bob Hasegawa, 11th District
- Representative Sharon Santos, 37th District
- Representative Eric Pettigrew, 37th District
- Representative Fred Jarrett, 41st District
- Representative Judy Clibborn, 41st District

U.S. House of Representatives

- Congressman David G. Reichert, 8th Congressional District
- Congressman Adam Smith, 9th Congressional District

U.S. Senate

- Senator Maria Cantwell
- Senator Patty Murray

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ATTACHMENT 4: MITIGATION COMMITMENT LIST

This attachment describes project mitigation commitments. The mitigation measures are organized by elements of the environment, as presented in the environmental assessment (EA). These commitments were included in the EA as Appendix F, List of Commitments, issued on March 9, 2006. This List of Commitments has been modified to incorporate revisions shown in the Errata and Revisions section, Attachment 1.

Commitments have been adopted as part of the Federal Highway Administration's (FHWA) final decision on the Proposed Action. They are listed to "assist with agency planning and decision-making" and to "aid an agency's compliance with National Environmental Policy Act (NEPA) when no Environmental Impact Statement (EIS) is necessary," [40 CFR 1501.3(b) and 1508.9(a) (2)].

List of Commitments Identified in the environmental assessment

The Washington State Department of Transportation (WSDOT) has well-established design, construction, operational, and maintenance practices for avoiding or minimizing impacts resulting from environmental conditions anticipated along the project alignment. The following sections describe the measures that WSDOT will include in the project to avoid or minimize impacts during construction and operation.

Project Measures to Avoid or Minimize Effects During Construction

WSDOT will incorporate many design elements into the project specifications, as well as construction plans and procedures, that will help avoid or minimize most potential construction impacts. When appropriate, monitoring will be conducted to ensure that these design and construction measures are effective.

Traffic and Transportation

- WSDOT will prepare a traffic management plan (TMP) before making any changes to the traffic flow. We will advise the public, school districts, and emergency service providers of the changes ahead of time through a public information process.
- Prior to and during construction, WSDOT will implement strategies to manage the demand on transportation infrastructure. These transportation demand management (TDM) strategies, such as support for the use of carpools, vanpools, and public transportation programs, will form an important part of the construction management program and will be aimed at increasing public awareness of their travel options in the corridor.

Noise

To reduce construction noise at nearby receptors, the following measures will be incorporated, where practicable, into construction plans and specifications:

- As construction is taking place in a specific area, if possible, WSDOT will construct proposed noise walls and barriers before other construction activities.
- WSDOT will equip construction equipment engines with mufflers, intake silencers, and engine enclosures, as appropriate.
- WSDOT will turn off construction equipment during prolonged periods of nonuse to reduce noise.
- WSDOT will locate stationary equipment away from receiving properties to decrease noise.
- WSDOT will maintain all equipment and train their equipment operators in good practices to reduce noise levels.

- WSDOT will use Occupational Safety and Health Act (OSHA)-approved ambient sound-sensing backup alarms that could reduce disturbances from backup alarms during quieter periods.

Communities, Neighborhoods, and Businesses

To reduce the effects of construction activities on neighborhoods and businesses, the following measures will be incorporated into construction plans and specifications.

Communities and Neighborhoods

- WSDOT will prepare and implement a TMP. If local streets must be temporarily closed during construction, detour routes will be provided and clearly marked with signs.
- WSDOT will coordinate with the school districts before construction. The TMP will be implemented and coordinated with all emergency services organizations prior to any construction activity.
- WSDOT will coordinate with utility providers prior to construction to identify conflicts and resolve the conflicts before or during construction.
- WSDOT will coordinate with city officials/staff regarding citywide special events. Within Renton, this would include Renton River Days, Clam Lights, and limited hydroplane racing.

Businesses

- WSDOT will maintain access to businesses throughout the construction period.
- Because it can be difficult to determine whether a business is open, or how to access the site during the construction period, WSDOT will make provisions for posting appropriate signs to communicate the necessary information to potential customers.
- WSDOT will keep daytime street closures to a minimum.

Property Acquisition/Displacements

- In those situations where it is necessary to acquire property, WSDOT will conform to the requirements set forth in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and implemented by FHWA under 49 Code of Federal Regulations (CFR) Part 24, and according to Chapter 468-100 Washington Administrative Code (WAC) Uniform Relocation and Assistance and Real Property Acquisition. This will ensure just compensation for all properties and minimize any adverse effect on the current owners and residents. Relocation resources are available, without discrimination, to all eligible residents and businesses.
- WSDOT will prepare a relocation plan in advance of actual displacements. Additional information will be collected, possibly through property owner

interviews, to identify the specific needs of any residences and business that will be relocated.

Recreational and Cultural Resources

- WSDOT will prepare an Inadvertent Discovery Plan for the project that construction contractors will follow.
- During construction, WSDOT will conduct archaeological monitoring for work taking place in the vicinity of Cedar River Park, the NE 44th Street interchange, and near the mouth of May Creek.
- WSDOT will coordinate construction activities with the City of Renton regarding the use of Cedar River Park and Gene Coulon Memorial Beach Park.
- The I-405 Project has a programmatic agreement regarding the Section 106 process. This programmatic agreement puts into place a process for integrating the Design-Build approach with Section 106 obligations.

Public Services and Utilities

WSDOT will coordinate several efforts with local public services prior to and during construction of the project.

- WSDOT will prepare and implement a TMP.
- WSDOT will post signs to show detour routes if periods of closures are needed.
- WSDOT will coordinate with school districts before construction.
- WSDOT will coordinate with all emergency services prior to or during construction.
- WSDOT will coordinate with utility providers to identify conflicts and resolve them prior to or during construction.

Visual Quality

- The Renton to Bellevue Project is being planned, developed, and designed in accordance with context sensitive solutions (CSS) guidelines. These guidelines provide an approach that incorporates community values and improves compatibility of the transportation facility with the communities and neighborhoods through which it passes. CSS also meets local, regional, and national requirements for the safe, efficient, effective movement of people and goods. CSS considers the elements of mobility, safety, environment, and attractiveness throughout the project. Adhering to these guidelines, the Renton to Bellevue Project is being developed to fit its physical surroundings and to preserve scenic, visual, historic, and environmental resources.
- The application of CSS guidelines precludes the need to further mitigate visual impacts. Because the project is being developed with local input, community concerns relating to appearance, environment, cultural resources, and other areas

are being addressed early. Mitigation measures typical for transportation projects, such as retaining existing natural vegetation and planting new vegetation to screen manmade elements, are incorporated within the highway and related transportation features. Other areas subject to CSS include structural elements, landscape features, lighting, signage, and special elements such as parking structures and pedestrian bridges.

Air Quality

The construction contractor will be contractually obligated to control fugitive dust in accordance with the Memorandum of Agreement (MOA) between WSDOT and Puget Sound Clean Air Agency Regarding Control of Fugitive Dust from Construction Projects (October 1999).

The following measures will be used to control dispersion of dust (PM₁₀), transmission of particulate matter, and emissions of carbon monoxide (CO) and oxides of nitrogen (NO_x) during construction:

- WSDOT will use newer construction equipment and maintain all equipment in good mechanical condition to minimize exhaust emissions.
- WSDOT will assess the viability of carpooling, commute trip reduction (CTR) and other TDM programs for construction workers.
- If possible, considering construction scheduling, WSDOT will build and operate transit facilities (park-and-ride lot expansion) associated with the project so they are available at project opening.
- If possible, considering construction scheduling, WSDOT will build and maintain pedestrian and bicycle facilities so that they are available at project opening.
- WSDOT will stage construction between other I-405 transportation projects to minimize congestion that contributes to regional emissions of pollutants during construction.
- WSDOT will implement construction truck idling restrictions.
- Where possible, WSDOT will locate construction equipment and staging areas away from sensitive receptors such as fresh air intakes to buildings, air conditioners, and sensitive populations such as the elderly and the young.
- Where possible, WSDOT will locate truck staging zones where diesel emissions will not be noticeable to the public or near sensitive populations.
- WSDOT will spray exposed soil with water or other suppressant to minimize emissions of PM₁₀ and reduce deposition of particulate matter.
- WSDOT will cover all loads in trucks transporting materials, wet materials in trucks, or provide adequate freeboard, (space from the top of the material to the

top of the truck bed), to minimize PM₁₀ and deposition of particulates during transportation.

- WSDOT will provide wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.
- WSDOT will remove particulate matter deposited on paved, public roads, sidewalks, and bicycle and pedestrian paths to reduce mud and dust.
- WSDOT will cover and stabilize project-site dirt, gravel, and debris piles, as needed, to minimize dust and wind-blown debris.
- WSDOT will restrict the speed of construction vehicles when operating in areas of exposed earth.
- WSDOT will route and schedule construction trucks to reduce delays to traffic during peak travel times to minimize air quality impacts caused by a reduction in traffic speeds.

Water Resources

Several measures will be incorporated into construction plans and specifications to reduce effects to water resources.

- WSDOT will protect groundwater with the use of standard best management practices (BMPs).
- WSDOT will prepare and implement a temporary erosion and sediment control (TESC) plan and a spill prevention control and countermeasure (SPCC) plan. The SPCC plan will include provision for an environmental compliance assurance inspector to be present during project construction within the sole source aquifer to monitor groundwater quality, storage of hazardous substances and chemical use practices, and the containment of hazardous chemicals.
- WSDOT will not allow any in-water construction work to take place except during seasonal work windows established to protect fish, unless prior approval has been obtained from fisheries resource agencies.
- As appropriate, when working in Aquifer Protection Zones 1 and 2, WSDOT will comply with the following sections of the Renton Municipal Code, as appropriate; Section 4-4-030, Development Guidelines and Regulations – General; Section 4-4-060, Grading, Excavation, and Mining Regulations; Section 4-9-015, Aquifer Protection Area (APA) Permits; and, Section 4-3-050, Critical Areas Regulations.
- Ecology embankments and other water quality facilities located in Zone 1 of the City of Renton's APA will be designed to satisfy the requirements of the City's APA, including prevention of stormwater infiltration. Pipelines will be

impervious and designed according to pipeline specifications in the City of Renton Municipal Code (RMC) 4-3-050H.6.

- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses, according to environmental permit requirements, and outside of Zone 1 of the City of Renton’s APA. In Zone 1 and Zone 2 of the APA, washout of concrete trucks will not be allowed to infiltrate the ground and wastewater from vehicle and equipment washing will be disposed to the sanitary sewer.
- WSDOT will ensure that fuel and chemical storage, fueling operations for construction vehicles, and equipment during construction is located within secondary containment areas. These areas will be surfaced with an impermeable material and sized to contain the volume of stored fuel and/or chemicals. The SPCC plan will specify that storage of fuels and toxic materials can only take place away from drainage courses and outside of Zone 1 of the City of Renton’s APA. The SPCC plan will also specify measures to be taken in the event of a spill.
- WSDOT will locate spill response equipment at regular and specified intervals along the project alignment.
- WSDOT will conduct construction within the City of Renton’s APA Zones 1 and 2 in compliance with the Washington State Wellhead Protection requirements outlined in WAC 246-290-135(4) and the RMC 4-3-050 C and H, and RMC 4-9-015.
- WSDOT will conduct groundwater monitoring to monitor for spills that can affect the Cedar Valley Sole Source Aquifer. If necessary, existing City of Renton monitoring wells can be supplemented with additional monitoring wells at key locations and used for monitoring water quality during construction activities in the APA Zone 1.
- During construction, WSDOT will conduct groundwater monitoring and sampling to assess project effects on the aquifer and water quality.
- The proposed I-405 improvements are within the sanitary control areas (SCA) of the City’s drinking water wells 8 and 9. As such, mitigation measures and design elements must be identified to address impacts on the City’s water supply as required by WAC 246-290-135.

Wetlands

The following activities will be undertaken to avoid or minimize effects to wetlands:

- WSDOT will protect, preserve, and enhance wetlands in the project area during the planning, construction, and operation of transportation facilities and projects consistent with U.S. Department of Transportation (USDOT) Order 5660. 1A;

Executive Order 11990; and Governor’s Executive Orders (EO), EO 89-10 and EO 90-94.

- WSDOT will use fencing to clearly mark wetlands in the construction areas that are to be avoided.
- WSDOT will implement avoidance measures to reduce temporal losses of wetland functions prior to creating wetlands. Project-level design and environmental review has included avoidance, minimization, restoration, and compensation of wetlands.

Wildlife and Vegetation

- WSDOT will prepare and implement a revegetation plan. When WSDOT permanently removes vegetation for roadway construction, it will be replaced with native vegetation within or in the vicinity of the project area, if possible.
- WSDOT will adhere to project conditions identified in the Biological Assessment (BA) and agency concurrence letters.

Fish, Aquatic Habitat, and Threatened and Endangered Fish Species

WSDOT will use the following measures to avoid or minimize effects to fish and aquatic resources during construction:

- WSDOT will implement construction BMPs (such as silt fencing or sedimentation ponds) to avoid disturbing sensitive natural areas.
- Some existing culverts may be replaced with new fish-friendly structures.
- WSDOT will work with tribal, federal, state, and local authorities to determine mitigation that best offsets impacts to the fish species affected by the Build Alternative. Final decisions on culverts affected by the project would also be examined for fish passage per the MOA with Washington State Department of Fish and Wildlife (WDFW) and current WSDOT policies.
- WSDOT will not allow any in-water work to occur except during seasonal work windows established to protect fish unless otherwise approved by WDFW with appropriate agencies.

Geology and Soils

Seismicity

- WSDOT will meet American Association of State Highway and Transportation Officials (AASHTO) design standards with a design seismic event equivalent to a 10-percent chance of exceedance in 50 years (425-year return period).
- WSDOT will implement design methods to make project elements stable under the design American Association of State Highway and Transportation Officials (AASHTO) event and limit susceptibility to collapse under an unlikely larger event.

Liquefaction-prone Areas

- WSDOT will identify areas where liquefaction prone soils may be located.
- WSDOT will evaluate the potential effects to structures from liquefaction, if structures underlain by liquefaction-prone soils are identified.
- WSDOT will use appropriate measures to reduce long-term liquefaction and lateral spreading risks if it is determined that liquefaction risks are high.
- WSDOT will develop the means and methods to avoid or minimize settlement resulting from construction vibrations associated with measures to reduce liquefaction risks, if liquefaction prone soils are identified.

Soft Ground Areas

- WSDOT will take appropriate measures to assess and reduce potential settlement problems associated with existing utilities or structures in areas underlain by soft, compressible soil.
- WSDOT will design the structures and embankments to accommodate or avoid the settlement if the potential for settlement is high.
- WSDOT will develop the means and methods to avoid or minimize settlement resulting from construction vibrations in areas underlain by soft or loose soils.

Slope Stability and Landslide Areas

- WSDOT will develop appropriate construction procedures to maintain or enhance slope stability in areas underlain by landslides or with landslide-prone geology. The design through these areas will include suitable wall types such as soldier piles with tiebacks, possibly supplemented with enhanced drainage such as improved surface drainage or horizontal drains.
- WSDOT will design earthwork and wall placement sequencing plans, construction drainage plans, and a slope monitoring program.
- WSDOT will drain suspected or observed seepage to reduce the risk of landslide and surface sloughing through the use of gravel drainage blankets, french drains, horizontal drains, placement of a surface rock facing or other methods.

Dewatering

- WSDOT will use properly designed, installed, and operated dewatering systems.
- WSDOT will control dewatering discharge to avoid adverse effects.

Erosion

- WSDOT will prepare and implement a TESC plan.
- WSDOT will take additional action to minimize erosion, maintain water quality, and achieve the intended environmental performance, should any BMP or other operation not function as intended.

Earthworks

- WSDOT will place and maintain stockpiles properly to avoid erosion or slope stability problems.

Permanent Drainage Systems for Cut Slopes

- WSDOT will locate areas where permanent drainage will be required by site conditions for cut slopes.

Hazardous Materials

Known or Suspected Contamination within the Project Right of Way

- WSDOT will conduct preliminary site investigations before acquiring right of way property and before beginning construction activities where sites of concern have been identified.
- If ongoing remedial activity is affected by this project, WSDOT will coordinate with the respective stakeholders.
- WSDOT will prepare a SPCC plan that provides specific guidance for managing contaminated media that may be encountered within the right of way.
- WSDOT may be responsible for the remediation and monitoring of contaminated properties that will be acquired for this project. In such cases, WSDOT will further evaluate the identified properties to assess their condition before acquisition or construction occurs.
- Prior to construction, WSDOT will have a thorough asbestos containing materials/lead-based paint (ACM/LBP) building survey completed by a certified building inspector on all property structures that will be acquired and/or demolished.
- If WSDOT acquires a portion or all of a property (building, structure) suspected of containing ACM/LBP, WSDOT will properly abate and dispose of any existing ACM and LBP contamination prior to construction activities. Depending on the concentration of lead in the demolition debris, some debris may need to be disposed of as dangerous waste, which will require Ecology to be notified.
- If WSDOT encounters an underground storage tank (UST) within the right of way, WSDOT will assume cleanup liability for the appropriate decommissioning and removal of the UST.
- WSDOT will dispose of all construction waste material, such as concrete and other potentially harmful materials at approved sites.
- WSDOT may acquire the responsibility for cleanup of any soil or groundwater contamination encountered during construction within WSDOT right of way. Contamination will be evaluated relative to Model Toxics Control Act (MTCA) cleanup levels.

- WSDOT will meet all regulatory conditions imposed at contaminated properties (such as consent decree) associated with construction. These conditions can include ensuring that the site is properly contained after construction is completed so that contaminants do not migrate offsite and so that the health and safety of all on-site personnel are protected during work at the site.
- WSDOT will consider entering into a pre-purchaser's agreement for the purposes of indemnifying WSDOT against acquiring the responsibility for any long-term cleanup and monitoring costs.

Known or Suspected Contamination Outside of the Project Right of Way

- Contaminated groundwater originating from properties located up-gradient of the right of way could migrate to the project area. WSDOT generally will not incur liability for groundwater contamination that has migrated into the project footprint as long as the agency does not acquire the source of the contamination. However, WSDOT will manage the contaminated media in accordance with all applicable rules and regulations.

Unknown Contamination

- If WSDOT acquires a property that has unknown contamination, the agency could incur liability for any contamination discovered after acquisition, as well as liability for the removal of any stored materials remaining onsite at the time of the acquisition. WSDOT could be responsible for cleanup or disposal of these unknown substances, for example, USTs and contaminated media (including ACM and LBP). If unknown contamination is discovered during construction, WSDOT will follow the SPCC plan as well as all appropriate regulations.

Project Measures to Avoid or Minimize Effects During Operation

WSDOT has well-established design, operational, and maintenance practices for managing long-term operation issues associated with the types of soil, geologic, and groundwater conditions anticipated along the project alignment. The following sections describe the measures that WSDOT will implement during operation.

Noise

- WSDOT will construct new noise walls at four locations provided that adjacent residents agree. We will also relocate five existing noise walls at or closer to the edge of the I-405 right of way. The noise walls will be built only if desired by the neighborhood residents.

Air Quality

- WSDOT will connect project pedestrian and bicycle facilities with existing pedestrian and bicycle systems as part of the project.

Water Resources

- WSDOT will construct the new I-405 roadway over the Renton APA Zone 1 with an impervious liner underneath the pavement for additional protection from spills escaping the stormwater collection system.
- WSDOT will ensure that fuel and chemical spills from vehicles within the Cedar Valley Sole Source Aquifer are captured and contained by the stormwater collection and detention system. The stormwater system will detain spills in either vaults or ponds. The detention vault or pond will have shut-off capability for containing a spill or release.
- WSDOT will establish a plan in compliance with Washington State Wellhead Protection Requirements outlined in WAC 246-290-135(4) and the City of Renton Municipal Code RMC 4-3-050 C and H, and RMC 4-9-015 to ensure protection for the City of Renton's APA Zones 1 and 2.
- Within APA Zones 1 and 2, WSDOT will construct either a lined or piped stormwater conveyance system.
- WSDOT will ensure that the roadway and access ramps over Renton's APA Zone 1 will have berms or curbs to collect and route major spills to the stormwater collection system. The system will be constructed in accordance with City of Renton requirements for sanitary sewage facilities in APA Zone 1 areas and will be sized to contain a liquid spill from a double tanker.
- WSDOT will control stormwater so that peak and base flows of receiving waters are not adversely affected by treated stormwater discharge from the expanded impervious surface areas created by the project.

Wildlife and Vegetation

- WSDOT will revegetate areas in which vegetation removal will occur, if possible, (except for areas of new impervious surface).
- WSDOT will leave large woody debris found in any landslide material in riparian areas and retain it for future restoration use by WSDOT or donate it to a local watershed group if there is a need for the material.

Fish, Aquatic Habitat, and Threatened and Endangered Fish Species

- WSDOT will remove stormwater from some streams and discharge it through facilities that are located, designed, and approved to minimize long-term aquatic effects by mixing with large volumes of water in Lake Washington.
- WSDOT will work with tribal, federal, state, and local authorities to determine mitigation that best offsets impacts to the fish species affected by the Build Alternative. Final decisions on culverts affected by the project would also be examined for fish passage per the MOA with WDFW and current WSDOT policies.

- WSDOT will construct a new crossing at Coal Creek to improve passage and enhance fish utilization for the entire upper Coal Creek and Newport Creek Basins.
- WSDOT will consider construction of headwalls¹ at cross-culvert inlets and outlets to minimize the amount of grading and filling and to restore and increase long-term riparian functions at each site.
- WSDOT's ongoing maintenance of stormwater treatment and detention facilities will avoid application of any chemical weed control agents (herbicides).

Geology and Soils

Seismicity

- WSDOT will implement its procedures for inspecting critical highway elements following a major seismic event.

Soft Ground

- WSDOT will conduct long-term monitoring of embankments or walls constructed on soft ground to ensure that they are not experiencing unacceptable settlement.

Slope Stability and Landslides

- WSDOT will conduct long-term maintenance of surface and subsurface drainage in areas of landslide risk. If installed, horizontal drains will be periodically inspected and maintained, as these drains tend to clog with time. If identified as a need during the design geotechnical investigation, long-term monitoring of slopes and walls may be appropriate in selected areas.

¹ A concrete structure at the end of a culvert to protect the embankment slopes, anchor the culvert, and prevent undercutting.

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