Appendix B

AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

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What measures are proposed to minimize effects during construction?

WSDOT will use the measures below to minimize effects on elements of the natural and built environments. In addition, WSDOT expects to meet the commitments in their *I-405 Corridor Program NEPA/SEPA Final Environmental Impact Statement (EIS) Record of Decision*.

Air Quality

The following measures will be used to control PM_{10}, deposition of particulate matter, and emissions of CO and NO_x during construction:

- Exposed soil will be sprayed with water to reduce emissions of PM_{10} and deposition of particulate matter.
- To reduce PM_{10} and deposition of particulates during transportation, all truck loads of fill material will be covered, materials in trucks will be wetted, or adequate freeboard (space from the top of the material to the top of the truck) will be provided.
- Wheel washers will be provided to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of mud on area roadways.
- Particulate matter deposited on paved, public roads will be removed to reduce mud on area roadways.
- Dirt, gravel, and debris piles will be covered as needed.
- Construction trucks will be routed and scheduled in a manner that will reduce delays and the indirect air quality effects associated with traffic slowing to accommodate construction vehicles.

Cultural Resources

Although WSDOT does not anticipate any construction-related effects to historic properties and resources, it is always possible that archaeological resources could be found during construction. Because of this, WSDOT will follow their Unanticipated Discovery Plan to ensure that archaeological resources are not inadvertently disturbed during construction.

Cumulative Effects

No measures, beyond those incorporated in the project design and listed in the air quality, surface water, wetlands, and fish and aquatic resources discipline reports, will be necessary.

Economic Elements

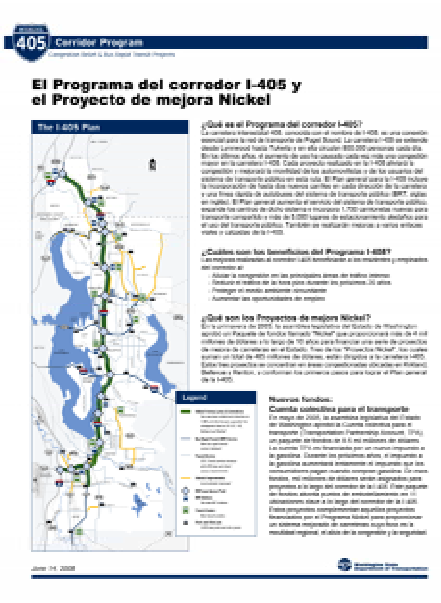
WSDOT will follow these construction planning procedures to minimize construction effects on access to local businesses:

- Daytime street closures will be kept to a minimum to provide access for businesses during regular business hours.
- Access to businesses will be maintained throughout construction by carefully planning construction activities and being aware of the need to provide adjacent properties with reasonable access during business hours.
- WSDOT will post appropriate signs that communicate revised access information to potential customers.
- As part of construction management, access measures will be prepared and included in the contract specifications.

Environmental Justice

To minimize effects on local service centers, WSDOT will inform local agencies, the public, school districts, emergency service providers, and transit agencies of traffic changes ahead of time in the following ways:

- Send information to service provider contacts so that they can include the information in newsletters and relay the information face to face. WSDOT can accomplish this in part by sending service providers the project's monthly electronic newsletter.
- Send flyers and handouts to service providers for posting and distributing in key locations at their facilities. Flyers will be printed in Spanish, Chinese, Russian, and Vietnamese.
- Post flyers at key stores and religious institutions.
- Set up a project table and talk with people at locations such as food banks.
- Translate written materials accurately.
- Ensure understanding by writing public materials at a 4th grade reading level.



Project Fact Sheet in Spanish

Fish and Aquatic Resources

WSDOT will take the following actions to minimize the effects of project construction on fish:

- All in-water work will be restricted to authorized construction periods when juvenile salmon are not likely to be present in substantial numbers. Adherence to designated in-water work windows or approved work periods, as defined by appropriate permitting agencies (Washington State Department of Fish and Wildlife, National Marine Fisheries Service, and the U.S. Fish and Wildlife Service), will also eliminate or reduce in-water interference during periods when returning adult salmon are likely to be present.
- All permanent pile driving within the ordinary high water mark will be performed in dewatered conditions. No in-water pile driving will be required to isolate surface water from work areas.

- WSDOT will restore temporarily cleared areas to preconstruction grades and replant the areas with appropriate native vegetation.

In addition, WSDOT will follow these BMPs during construction to avoid discharging sediment from bridge, culvert, and roadway construction:

- Develop and implement a temporary erosion and sediment control plan for clearing, vegetation removal, grading, ditching, filling, embankment compaction, or excavation. The BMPs in the plan will be used to control sediment input from all vegetation or ground-disturbance activities.
- Use effective erosion control measures, such as filter-fabric fence, straw mulch, straw bales, and plastic sheeting to prevent silt and soil from entering surface waters (including wetlands).
- Hydroseed bare soil areas following grading per environmental regulations.
- Clearly label streams and stream buffers on the construction plans and in the field.
- Mark clearing limits with orange barrier fencing wherever clearing is proposed in or near critical areas.
- Locate staging areas and equipment storage areas away from sensitive areas (e.g., streams and wetlands).
- Refrain from vehicle refueling and maintenance activities within 100 feet of streams, rivers, and wetlands.
- Minimize the duration of in-water work (below the OHWM) and strictly adhere to the appropriate in-water work windows, as dictated by applicable permits.
- Prohibit waste and excess materials from being disposed of or allowed to remain below the OHWM.
- Prepare and adhere to an approved Spill Prevention, Control, and Countermeasures Plan for the project prior to beginning any construction and maintain a copy of the plan with any updates at the work site.
- Identify and develop staging areas for equipment repair and maintenance away from all drainage courses. WSDOT will require that washout from concrete trucks not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. 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.
- Contain excavated sediment in tanks, or other appropriate containers, to avoid discharge to surface water, and transport the contained sediments to an approved disposal site.
- Check items regularly such as fuel hoses, oil drums, and oil and fuel transfer valves and fittings for drips or leaks to prevent spills into surface water.
- Keep the illuminated area and intensity of nighttime lighting to the minimum that is necessary for the intended purpose. Lights will be directed onto the work areas and away from the water.
- Remove the Springbrook Creek box culvert and restore the streambed in that area.
- For unavoidable stream and buffer effects, WSDOT will mitigate at a site or sites within the same watershed.

Floodplains

Adding fill to the floodplain of Springbrook Creek is an unavoidable negative effect. Compensation for this fill comes from removing the Springbrook Creek box culvert and from the Springbrook Creek Wetland and Habitat Mitigation Bank, an Early Environmental Investments (EEI) Project where large volumes of material will be removed to construct that project. The excavation at the EEI site, which is required to construct the wetlands, will provide sufficient floodplain storage to compensate for the

fill placed within the floodplain during construction of the new I-405 northbound and southbound bridges over Springbrook Creek and Oakesdale Avenue.

WSDOT will hydraulically analyze the effectiveness of the fill mitigation in order to confirm that the 100-year floodplain elevation will have no rise due to the project. If the proposed mitigation is demonstrated to be inadequate, then an additional site will be found for compensatory storage. In addition, WSDOT will evaluate headloss at stream crossings prior to construction.

Hazardous Materials

WSDOT will conduct the following activities to avoid or minimize effects to human health or the environment:

- WSDOT may be responsible for remediating and monitoring contamination found on properties that will be acquired for this project. WSDOT will further evaluate the identified properties before acquisition or construction occurs. Contamination in soils will be evaluated relative to Model Toxic Control Act cleanup levels.

What is remediation?

Remediation is an action to identify, eliminate, or minimize hazardous substances that pose a threat to human health or the environment.

What is the Model Toxics Control Act (MTCA)?

MTCA is Washington Administrative Code that describes a process to identify, investigate and clean up properties that may threaten human health or the environment.

- If WSDOT encounters an underground storage tank within the right-of-way (ROW), WSDOT will assume cleanup liability for the appropriate decommissioning and removal of the underground storage tank. If this occurs, WSDOT will follow all applicable rules and regulations associated with underground storage tank removal activities.
- WSDOT will ensure that the surrounding properties and population are not exposed to the contaminants on the site. For example, WSDOT will ensure that the site is properly contained after construction is completed so contaminants do not migrate off site and the health and safety of all on-site personnel are protected during work at the site.
- WSDOT will consider entering into pre-purchaser agreements for the purpose of indemnifying WSDOT against acquiring the responsibility for any long-term cleanup and monitoring costs.
- Construction mitigation measures will be implemented to reduce the use, transfer, and storage of hazardous materials in sensitive areas.
- WSDOT will be required to meet all appropriate discharge approvals if water affected with hazardous materials is encountered during construction and water needs to be managed.
- Contaminated groundwater originating from properties located upgradient of the ROW could migrate to the study area. In general, WSDOT will not incur liability for groundwater contamination that has migrated into the project footprint as long as it does not acquire the source of the contamination. However, WSDOT will manage the contaminated media within the project footprint in accordance with all applicable rules and regulations.

Land Use Patterns

In addition to the actions listed for Environmental Justice, WSDOT will do the following:

- Prepare and implement a traffic management plan (TMP).

- Provide detour routes and clearly mark with signs, if local streets must be temporarily closed during construction.
- Maintain access to businesses and residences throughout construction.

Land Use Plans and Policies

None identified.

Noise and Vibration

To reduce construction noise at nearby receptors, the following activities will be incorporated by WSDOT where practicable:

- Require early construction of permanent noise barriers to provide noise shielding.
- Limit noisiest construction activities, such as pile driving, to between 7 a.m. and 10 p.m. to reduce construction noise levels during sensitive nighttime hours.
- Equip construction equipment engines with adequate mufflers, intake silencers, and engine enclosures to reduce their noise.
- Turn off construction equipment during prolonged periods of nonuse to eliminate noise.
- Locate stationary equipment away from residences to decrease noise.
- Construct temporary noise barriers or curtains around stationary equipment that must be located close to residences to decrease noise levels at nearby sensitive receptors.
- Require resilient bed liners in trucks being loaded on site.
- Prohibit banging of dump truck tailgates.
- Require WSDOT to use OSHA-approved ambient sound sensing backup alarms to reduce disturbances from backup alarms during quieter periods.

Parks and Recreation, Section 4(f)

Mitigation for effects on Section 4(f) resources is not required because no Section 4(f) resources are affected by this project.

Public Services and Utilities

Effects to existing utilities will be avoided through project design where it is feasible. Where avoidance is not feasible, utilities will be relocated or protected in place. Coordination with utility service providers will identify conflicts and resolve them prior to or during construction.

In addition, if temporary disruptions in service are unavoidable, emergency and school transportation service providers will be contacted and kept informed. Contingency plans for unforeseen interruptions of access or services will be developed before construction begins.

Social

In addition to the measures listed for Land Use Patterns, WSDOT will implement the following to minimize construction effects for the general public:

- Post current information on construction and travel options on the project website.
- Increase access to travel options and incentives to use them.

- Build Benson Road Bridge over I-405 on a new alignment west of the existing bridge to avoid long-term closure.
- Meet with City of Renton staff during final design to coordinate temporary closures and detours related to replacing the Springbrook and Oakesdale bridges and widening the Talbot Road bridge. If it is not possible to maintain trail traffic during construction, then the team will identify appropriate, safe detours for use by cyclists and/or pedestrians.

Soils, Geology, and Groundwater

Contractors and consultants associated with this project will follow these procedures:

What is an admix?

An admix is a product, such as cement or kiln dust, that is mixed into soil to improve the characteristics of the soil, such as workability and compactability.

- WSDOT will reduce degradation of moisture-sensitive soils by maintaining proper surface drainage to avoid ponding of surface water or groundwater; by minimizing ground disturbance through limiting the use of heavy equipment, limiting turns, and/or not tracking directly on the subgrade; and by covering the final subgrade elevation with a working mat of crushed rock and/or geotextile for protection. A soil admix such as cement may also be mixed into the subgrade to add strength and stabilize the ground.
- If WSDOT identifies areas where dewatering will be necessary for utility work, then WSDOT will take steps to minimize the potential settlement effects. These steps may include recharge wells and/or cut-off shoring walls, as well as surveying adjacent properties to monitor for settlement.
- WSDOT identified a coal mine tunnel near Benson Road. WSDOT will design the project to avoid adverse settlement or subsidence effects from the tunnel. If necessary, avoiding settlement or subsidence may be accomplished by bridging over the tunnel with a structural slab or by adding fill to the tunnel.
- Large construction projects will cause ground vibrations as a result of heavy equipment use. WSDOT will determine acceptable limits for off-site construction-related vibration before beginning construction. WSDOT will demonstrate that off-site ground vibrations are within the limits set for the project through the use of vibration monitoring equipment.

What is compaction grouting?

Compaction grouting is a method of improving the soil by injecting a thick grout into the soil, causing the soil to become denser. The higher density of the soil causes it to be less susceptible to liquefaction and shaking during an earthquake.

- New bridges underlain by liquefaction prone soils will be designed to current seismic standards. The bridges will be founded on deep piles and/or the soil under the bridges will be improved. Soil improvement measures, if needed, will likely consist of compaction grouting.
- Retaining walls may be constructed in locations underlain by liquefaction-prone soils. In accordance with the *WSDOT Geotechnical Design Manual (GDM)*, if a retaining wall is greater than ten feet in height and within ten feet of the roadway, then the wall will be founded on deep piles or the soils under the wall will be improved using measures such as compaction grouting. WSDOT will select measures that will minimize the effect on adjacent properties.
- A large earthquake can damage existing roads, utilities, and structures near new embankment fills. WSDOT will identify these areas and mitigate risks using ground modifications or other procedures identified in the *WSDOT GDM.*

- WSDOT will only import and place clean fill for the project. Contaminated fill brought from outside sources can contaminate shallow aquifers. WSDOT will require documentation for fill brought onto the site from the supplier that the fill does not exceed Washington State soil cleanup standards. If documentation is not available, then WSDOT will require testing of imported fill soils prior to placement. WSDOT will test suspect soils encountered during project construction. Where necessary, WSDOT will require their removal from the site and proper disposal in accordance with Washington State regulations.
- WSDOT may need to install underdrains to control seepage for retaining walls and fill embankments. These underdrains may lower the groundwater table in the immediate vicinity of the project. In the unlikely scenario that the effects from this drawdown could be adverse, WSDOT will include special provisions in the design, such as discharging drain flow back into affected wetlands.

Surface Water and Water Quality

The *I-405 Corridor Program NEPA/SEPA Final EIS* makes the following commitments to protect water quality during construction of I-405 projects. These commitments will be followed for the Renton Nickel Improvement Project.

- For contruction within 300 feet of a lake or stream, or where concentrated construction site discharge may flow directly to surface waters, all site grading and initial stabilization could be scheduled to occur only during the dry season, May 1 through September 30. Where construction must occur within stream channels, such construction will occur “in the dry” whereby stream flow is temporarily diverted around the work site where practicable to prevent turbidity.
- If other construction activities occur during the wet season, such as subgrade or pavement installation, utilities placement, or curbs and sidewalks, a plan will be developed that:
  1) Limits disturbed area activities to a maximum of 48 hours at any single location, and includes provisions for temporarily ceasing construction and quickly stabilizing the site when rainfall greater than one-half inch in a 12-hour period is measured at the site.
  2) Uses alternative means to treat construction site runoff such as overland flow across a vegetated surface, uses coagulants in the sediment ponds or other stormwater chemical treatment measures, or uses polymer soil stabilizers to reduce erosion. If coagulants are used, then a nontoxic compound will be used as approved by WSDOT.
- Construction disturbances will be limited to the minimum area needed, the shortest duration, and an appropriate distance away from waterbodies as practical. Seasonal work windows will be identified and implemented.
- BMPs such as fencing, landscaping, erosion matting, hydro mulching, soil imprinting, straw bales, detention/sediment trap basins, and vegetated fringes as described in the HRM will be used.
- Clearing activities will be staged such that construction areas are cleared no earlier than one week ahead of starting construction where practicable. If this is impractical, then cleared areas will be immediately mulched, covered with plastic, or otherwise stabilized.
- WSDOT will be required to obtain a NPDES (National Pollutant Discharge Elimination System) permit. WSDOT will ensure that water encountered during construction meets the standards specified in the NPDES permit prior to the discharge of the encountered water to a surface waterbody. If necessary, water quality will be improved, such as by using sediment ponds to allow sediment to settle out prior to discharge.
- A scour analysis of any bridge piers that are below the OHWM will be submitted before bridge construction begins.

Transportation

Transportation demand management (TDM) strategies will form an important part of the construction management program. TDM strategies for the Renton Nickel Improvement Project will be implemented both before and during construction to increase public awareness and participation in HOV travel. The major focus for specific TDM efforts will be to implement programs that:

- Provide bus service, carpool, vanpool, vanshare and/or incident response;
- Divert trips from construction areas by encouraging the use of Park and Rides;
- Engage and inform the public through enhanced real-time information and resources; and
- Are targeted to specific geographic and trip markets.

What is transportation demand management (TDM)?

Institutional and operational methods to reduce travel demand on the transportation system. TDM strategies are usually implemented to support the use of HOVs, which typically include carpools, vanpools, and public transit programs.

Specific traffic control strategies have been listed under Environmental Justice, Land Use Patterns, and Social.

Upland Vegetation and Wildlife

Mitigation measures listed for Surface Water and Water Quality also apply to upland vegetation and wildlife. In addition, BMPs will be used to help protect wildlife resources. The BMPs will include revegetating construction zones and roadside areas with native plants to offset habitat loss due to construction.

Visual Quality

Measures used to minimize effects on transportation and social resources will also serve to minimize effects on visual quality during construction.

Wetlands

Measures described for Surface Water and Water Quality as well as Fisheries and Aquatic Resources will also apply to wetlands.

In addition, WSDOT will compensate for unavoidable wetland fills using credits from the Springbrook Creek Wetland and Habitat Mitigation Bank.

Temporarily disturbed wetland areas will be restored and replanted with appropriate wetland vegetation after the project is complete. WSDOT will develop a project specific plan before construction begins to identify how restoration will occur.

What measures are proposed to minimize effects during operation?

WSDOT will use the measures below to minimize effects on elements of the natural and built environments. Several discipline report topics did not need minimization measures because these topics will not be affected by the project. Disciplines with no minimization measures are as follows:

- Air Quality
- Cultural Resources
- Cumulative Effects
- Economic Elements
- Environmental Justice
- Fisheries and Aquatic Resources
- Land Use Patterns
- Land Use Plans and Policies
- Parks and Recreation, Section 4(f)
- Public Services and Utilities
- Social
- Soils, Geology, and Groundwater
- Transportation

Floodplains

Bridge piers placed within the floodplain will be designed to minimize hydraulic disturbance to flow. This can be achieved by designing piers that are all the same size and placed in lines parallel to the flow path.

Hazardous Materials

WSDOT will notify Ecology and Washington State Patrol in the event of an accidental spill along I-405 and SR 167. Ecology is the state's Incident Command for emergency spills and as such, responds to spills in highway ROW.

Noise and Vibration

WSDOT will construct a noise wall to reduce noise levels from the freeway for residences along the southern ROW of I-405, adjacent to South 14th Street at the north side of the Talbot Hill neighborhood. This wall will extend east from the South 14th Street/South 15th Street intersection to Talbot Road South. The 18-foot-tall barrier will have an area of approximately 36,800 square feet and a length of approximately 2,200 feet.

Surface Water and Water Quality

WSDOT has designed stormwater facilities for this project that will both maintain the rate of stormwater runoff at existing conditions and remove pollutants from runoff generated by the project. With these facilities, the runoff is expected to meet Washington State water quality standards listed in WAC173-201(A). WSDOT will provide routine maintenance for these facilities.

The area will also require measures to minimize hazards associated with wildlife attraction to stormwater detention ponds because of the project proximity to the Renton Municipal Airfield. The following are guidelines for stormwater management facilities sited near the airport:

- Cover or net all permanent open water surfaces.
- To minimize the frequency and duration of open water to acceptable levels, water that is detained by the 2-year design storm should completely drain or fall to a level that is covered by a

net or solid cover within 24 hours after the end of the storm event. That is, the pond should drain from the 2-year design storm depth to the bottom or covered depth within 24 hours or less.

- Site ponds away from aircraft movement areas to minimize aircraft-wildlife interactions.
- Use steep side slopes and deep pond depths to minimize shallow water areas and minimize the total water surface area.
- Slope the pond bottom to allow quick drainage and reduce the potential for standing water.
- Eliminate the potential for wetland vegetation growth on the pond bottom and side slopes by lining the pond with riprap or quarry spalls. Alternatively, plants that provide minimal habitat to wildlife can be used. Dense brush and small trees that will be perceived by waterfowl as hiding places for predators are a good choice. Avoid closely mowed grass, which is preferred by waterfowl.
- Break up possible flight lines by planting trees, setting up poles and or fences which do not allow most water fowl clear landing or takeoff room on the pond surface.
- Introduce islands within open water areas as needed to support scrub-shrub vegetation cover within wetpools with emergent aquatic planting areas.

Design of open stormwater facilities shall be reviewed and approved by USDA Wildlife Services and the Port of Seattle's Wildlife Manager to ensure the these objectives are met.

Upland Vegetation and Wildlife

Structures are being added or modified to help protect wildlife resources in the study area. One new noise wall will be built along I-405 that may help reduce noise effects to wildlife in this area. The I-405 bridges over Springbrook Creek and Oakesdale Avenue will be replaced with a single northbound structure and a single southbound structure. These new structures will have longer spans to provide additional wildlife passage underneath.

Visual Quality

Guidelines from the RCP and CSS process for the I-405 corridor will be applied to compensate for the negative visual effects caused by the project. For improvement projects such as this, the RCP requires roadside restoration from ROW to ROW throughout the project limits. For this project, the roadside will be restored to a treatment level 2, which will include the following guidelines:

- Restore environmental and visual functions, and where possible, work with agencies and landowners to preserve and establish buffer zones.
- Adjust grading limits to protect desirable vegetation, natural habitat, wetlands and sensitive areas, and heritage resources.
- Adjust grading limits to preserve and protect vegetation for screening purposes.
- Grade slopes to provide corridor continuity.
- Minimize site disturbances to protect native plant communities and specimen trees.
- Restore roadside character with trees (conifers up to 4 feet in height and deciduous trees up to 1 inch in diameter) and shrub seedlings; plant trees up to 2 inches in diameter in pedestrian areas.

How is the RCP used for this project?

The Roadside Classification Plan (RCP) provides guidance for restoring the roadside and providing needed/desirable functions such as permanent erosion control, buffering/screening, driver guidance, etc. In practice, this means that disturbed areas of the roadside are always revegetated to provide site-specific functions/needs. In some situations, as described in the RCP, revegetation and other treatments may be required beyond the disturbed areas to provide the needed/desirable functions that are identified.

- Select and locate plant material to facilitate driver guidance and to screen visual distractions and undesirable views.
- Locate plantings to enhance views.
- Select vegetation and design planting density to achieve blending with adjacent land use and/or to meet screening objectives by the tenth year after construction.

How do permanent and temporary project elements differ?

Permanent project elements are part of the I-405 Corridor Master Plan. Temporary project elements are not part of the Master Plan and will therefore be reconstructed during future Master Plan phases.

Temporary project elements will have roadside restoration applied in accordance with these RCP guidelines. However, for this project, the expected life of the roadside restoration will be affected by future reconstruction in the master plan phases. In locations where this reconstruction will disturb the roadside after this project, fast-growing vegetation (such as poplars and maples) shall be used to quickly achieve the needed/desired functions within the expected life of the planting.

How are Context Sensitive Solutions Used for this project?

CSS guidelines incorporate community design preferences into a project's design. Throughout development of the Renton Nickel Improvement Project, local input has been encouraged to ensure that community concerns for how the project fits into the landscape are addressed.

WSDOT met with affected communities to review each jurisdiction's "view to" issues such as interchange locations/designs, noise wall locations/treatments, traffic, safety, structures, lighting, and landscaping. As part of this process, a corridor-wide CSS Aesthetics Committee was formed. This committee focused on the "view from the corridor" issues. The combined efforts of these groups determined an I-405 theme of "Culture Nature, and Progress," with nature being the dominant theme for corridor-wide and local I-405 designs.

The CSS guidelines incorporate the communities design preferences. These guidelines will be applied fully to permanent elements, which are limited on the Renton Nickel Improvement Project.

CSS for the I-405 corridor complements the RCP to provide another layer of compensation for unavoidable negative effects caused by this project. In some instances, guidelines from CSS are redundant with those found in the RCP. The permanent project elements will have the "full" CSS guidelines applied where appropriate and practicable:

- Adhere to the I-405 Urban Design Guidelines Manual to ensure visual unity and consistency throughout the I-405 corridor. This includes defining the appearance and style of built elements, such as lighting, paving, railings, signs, bridges, structures (and associated elements) and walls around bridges. The guidelines address the use of aesthetic treatments in the corridor, including the process for selecting and locating architectural treatments.
- Enhance the architectural design of project features such as retaining walls including stepping and battering walls to reduce apparent height, using a consistent design vocabulary throughout the corridor, using lighter weight materials for spans to produce reduced structural silhouettes, applying texture to the concrete surfaces to reduce apparent scale, and applying concrete sealants for uniform color and to limit the effects of graffiti.
- Shield roadway light fixtures to minimize glare and ambient light spillover into adjacent residential areas.
- Minimize clearing for construction, preserving existing stands of mature trees.
- Screen views of the roadway, elevated structures, retaining walls, noise walls, and other project features from areas with high viewer sensitivity.
- Grade slopes to blend with the natural topography by softening slope transitions.
- Darken concrete surfaces to aid in reducing reflective sunlight glare.

- Follow the guidelines of the RCP to blend the project into the adjacent land uses, while creating a unified experience for the freeway user.

The new Benson Road Bridge over I-405 is the main project feature that will receive the "full" CSS treatments described above because it is a permanent project element. Temporary project elements will also receive "limited" CSS architectural treatments as described below:

- Apply texture to concrete surfaces to reduce apparent scale and to blend with other elements within the corridor.
- Darken concrete surfaces to lessen reflective sunlight glare and apparent reduction of scale.

The full CSS treatments will be applied during future Master Plan phases for the overall I-405 corridor.

Wetlands

No additional effects on wetlands are expected during operation of the Renton Nickel Improvement Project. Some wetlands that occur within the ROW are currently affected by the lack of forested upland buffer and the lack of stormwater control and management facilities. Some wetlands within WSDOT's ROW must be kept clear of forested vegetation to meet safety requirements. These wetlands and those that receive untreated or undertreated stormwater runoff will likely continue to be affected by these conditions.

WSDOT, in partnership with the City of Renton, is developing a mitigation bank called the *Springbrook Creek Wetland and Habitat Mitigation Bank*. Mitigation banking is one early-action approach identified in the I-405 Corridor Program NEPA/SEPA Final Environmental Impact Statement and the project is part of WSDOT's watershed approach to wetland mitigation. By consolidating the mitigation at one large site, the opportunity exists to work with a panel of resource agency representatives to create mitigation that specifically contributes aquatic ecosystem functions that are lacking in the local watershed while providing safe, high-quality wildlife habitat away from the dangers of a roadside location. This approach will be used as the wetland mitigation for unavoidable effects to wetlands within the Bank service area. Therefore, the 1.66 acres of permanent effects to wetlands for the Renton Nickel Improvement Project will be compensated for with credits from the Bank.

The mitigation ratios that will be used to compensate for effects to wetlands at the Springbrook Creek Wetland and Habitat Mitigation Bank have been designed to meet the "no net loss" guidance.

What is a mitigation bank?

A mitigation bank site is a property purchased and developed by a public agency or utility to earn credits to compensate for adverse effects to wetlands due to development activities of other agencies, utilities, or in specific instances, private sector developers. Credits are generated through the restoration, creation, and/or enhancement of wetlands.