

SR 520 Bridge Replacement and HOV Program SR 520/I-5 Express Lanes Connection Project



Community Construction Management Plan

SR 520/I-5 Express Lanes Connection Project

(Contract name: SR520: I-5/Mercer St to SR520/Portage Bay – I-5 Interchange Improvements)

Updated January 2020

The Community Construction Management Plan (CCMP) outlines the process through which members of the public have an ongoing opportunity to provide input that may be considered for construction management decisions to help avoid, minimize, and/or mitigate the effects of construction activities on historic and other properties. It also guides the actions of construction contractors, provides opportunities for the Washington State Department of Transportation (WSDOT) and hired contractors to keep the public and Section 106 concurring parties informed, and gathers input to improve and modify the construction practices addressed by the CCMP.

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Acronyms and Abbreviations

BMP	Best management practice
CCMP	Community Construction Management Plan
CFR	Code of Federal Regulations
DAHP	Washington State Department of Archaeology and Historic Preservation
FHWA	Federal Highway Administration
HOV	High-occupancy vehicle
PA	Programmatic Agreement
RCW	Revised Code of Washington
ROTW	Rest of the West
SDCI	City of Seattle Department of Construction and Inspections
SPCC	Spill Prevention, Control and Countermeasure Plans
TESC	Temporary Erosion and Sediment Control
TVMPP	Tree and Vegetation Management and Protection Plan
WAC	Washington Administrative Code
WQMPP	Water Quality Monitoring and Protection Plan
WSDOT	Washington State Department of Transportation

I. Community Construction Management Plan Overview

A. Purpose and background

In 2015, WSDOT received full funding through the Connecting Washington package for the I-5 to Lake Washington Project. The SR 520 I-5 to Medina Program is a 12.8-mile-long corridor beginning at SR 202 in Redmond and extending west to I-5 in Seattle. The Program has included the <u>Pontoon Construction</u> <u>Project</u>, the <u>Medina to SR 202: Eastside Transit and HOV Project</u>, the <u>Floating Bridge and Landings</u> <u>Project</u>, and the <u>West Approach Bridge North Project</u>, which have since been completed. The remaining work will be delivered in four project phases, collectively called <u>The Rest of the West</u>, and will complete WSDOT's enhancement of the SR 520 corridor. The SR 520/I-5 Project is the second of these four project phases.

WSDOT developed the Community Construction Management Plan (CCMP) as a mitigation commitment for adverse effects from the <u>I-5 to Medina: Bridge Replacement and HOV Project</u> (I-5 to Medina Project) to historic properties during the National Historic Preservation Act Section 106 Consultation process. Because Section 106 consulting parties had significant concerns related to construction effects (both indirect and direct) to historic properties, development of the CCMP was included in the earliest iterations of the <u>Section 106 Programmatic Agreement</u> (PA). Construction effects (as defined in <u>36 CFR</u> <u>800.5(a)(2)</u>) may include vibration, noise, change of use or physical features of a property's setting, visual, atmospheric or audible intrusions. During the consultation process, participants recognized that the effects the CCMP was intended to mitigate were not exclusive to historic properties, but could potentially affect other resources in similar ways. The CCMP then became a project-wide commitment, not exclusive to Section 106 PA concurring parties. The PA language references the concurring parties "and others potentially affected by Project construction."

The CCMP allows members of the public an ongoing opportunity to provide input that may be considered for construction management decisions to avoid, minimize, or mitigate the effects of construction activities on historic and other properties. Additional volumes and/or updates to existing CCMPs will be developed in conjunction with each contract awarded for future construction phases of the I-5 to Medina Project.

This volume of the CCMP has been developed specifically for the <u>SR 520/I-5 Express Lanes Connection</u> <u>Project</u> (SR 520/I-5 Project). The SR 520/I-5 Project will construct a new, reversible transit/HOV ramp between SR 520 and the I-5 express lanes; modify the reversible ramp between the I-5 express lanes and Mercer Street; and restripe the I-5 express lanes to retain the four existing lanes while adding a reversible transit/HOV lane between the I-5/SR 520 interchange and Mercer Street.

B. How to use the CCMP

The SR 520/I-5 Project CCMP is a living document which will be updated throughout the course of the Project to incorporate changes to construction activities or approaches to the work. The initial version of the SR 520/I-5 Project CCMP was developed prior to selection of a contractor for the project, and will be reviewed and potentially updated with the contractor, once the selected construction contract has been executed.

The CCMP includes commitments made through the <u>Section 106 PA</u>, best management practices (BMPs), the SR 520/I-5 Project contract documents, environmental commitments made through other regulatory processes, and additional tools that will help to avoid, minimize, and/or mitigate construction effects on local communities and historic properties. WSDOT and the contractor, as appropriate, will meet with the concurring parties to the <u>Section 106 PA</u> and others potentially affected by construction regularly during the construction of the project to discuss the CCMP.

The public is encouraged to provide feedback about the effectiveness of the CCMP and suggest changes. Information about this CCMP will be available at project-related public meetings and on the <u>SR 520/I-5</u> <u>Project page</u>. While the SR 520/I-5 Project CCMP is for construction effects, questions on other topics such as design, permitting, operations and maintenance, and other non-construction related activities on the SR 520/I-5 Project can be directed to <u>SR520Bridge@wsdot.wa.gov</u>. Contact information for CCMP-related effects is listed in the <u>Questions or Concerns?</u> section of this document.

C. WSDOT Roles and Responsibilities for the SR 520/I-5 Project

The SR 520/I-5 Project will be constructed using a design-bid-build contract, with design and plan preparation under the direct control of WSDOT. An open competitive bidding process will be used to select the contractor. The contract is scheduled for advertisement to contractors in 2020, with construction expected to be completed by 2023.

WSDOT's responsibilities include:

- Preparing final design including the specifications, criteria, and commitments to which the contractor will be held.
- Performing construction management, including inspection and monitoring of contractor activities to ensure contract requirements are met.
- Ensuring all local, state, and federal permits are obtained as necessary for compliance with applicable laws and regulations.
- Coordinating and communicating with local governments, neighborhoods, and businesses about possible project effects.

D. Contractor Roles and Responsibilities for the SR 520/I-5 Project

The responsibilities of the contractor include:

- Determining construction methods and techniques for project implementation.
- Constructing the project for SR 520/I-5 Project improvements in accordance with the contract plan and specifications.

Once the construction contract has been executed, WSDOT will work with the contractor to ensure the contractor reviews the CCMP and incorporates means and methods as appropriate.

II. Project Overview

A. About the SR 520/I-5 Express Lanes Connection Project

Description

The SR 520/I-5 Project will create a safer, more reliable transit/HOV connection between SR 520 and the South Lake Union area via the reversible I-5 express lanes. Main elements of the project include:

- A new, reversible transit/HOV ramp between SR 520 and the I-5 express lanes
- Restriped I-5 express lanes that retain the four existing lanes while adding a new reversible transit/HOV lane between the I-5/SR 520 interchange and Mercer Street
- A modified Mercer Street ramp, providing a reversible connection with the I-5 express lanes

Construction activities within the project area are anticipated to begin as early as 2020. The completed reversible transit/HOV connection will initially open to transit only, until the new Portage Bay Bridge is completed.

The addition of the features above will allow for direct transit/HOV access from SR 520 to the South Lake Union area, which has grown to be an important business and high-tech district for the region. The Mercer Street ramp will have a reversible lane control system with swing gates. It will be illuminated with overhead lights and have signage alerting drivers about the status of the ramp (see Figure 1 for Project limits).

Locations of activities and access points

Construction activities for the SR 520/I-5 Project will occur at several locations and via various access points in the SR 520/I-5 Interchange area, on I-5 between the SR 520 Interchange and the Mercer Street Express Lanes Ramps, and on the Mercer Street Express lanes ramps:

- SR 520 mainline access: The contractor will be able to access the SR 520 mainline from westbound and eastbound SR 520.
- I-5 mainline access: I-5 work will be accessed from northbound and southbound I-5 and from the SR 520 westbound to I-5 southbound ramp. The I-5 express lanes will be accessed from construction traffic only access via the express lanes southbound off-ramp to Mercer, and from the northbound and southbound 1-5 express lanes.
- Mercer ramps access: Mercer Street on- and off-ramps will be accessed from northbound and southbound I-5 mainline, northbound and southbound I-5 express lanes, and from the ramps terminal.
- Staging areas. Available construction staging areas are located within WSDOT-owned right of way adjacent to the work to be performed. Potential staging area sites include the Mercer Street on- and off-ramps, WSDOT right of way adjacent to East Roanoke Street, and the WSDOT right of way under the Ship Canal Bridge.
- Access from arterial streets. Limited use of local arterial streets could be used for access to construction sites.

Figure 2 illustrates construction location access.

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B. Agency Coordination

As part of the development process for the Project, WSDOT has coordinated with and/or obtained numerous permits and/or approvals from agencies, tribes and jurisdictions, including:

- Advisory Council on Historic Preservation
- Federal Highway Administration (FHWA)
- National Park Service
- National Oceanic and Atmospheric Administration National Marine Fisheries Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Puget Sound Clean Air Agency
- Washington State Department of Archaeology and Historic Preservation (DAHP)
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- Washington State Recreation and Conservation Office
- King County
- City of Seattle
- Tribal nations

During construction, WSDOT will comply with permit requirements and will continue to coordinate with the permitting agencies, tribes and jurisdictions as needed throughout the SR 520/I-5 Project.

III. Construction Components and Effects

This section of the CCMP is organized by potential construction effect. Construction effects covered in this section include:

- <u>Noise</u>
- <u>Vibration</u>
- Air Quality and Fugitive Dust
- Visual Quality: Aesthetics, Glare, Lighting
- <u>Traffic and Transportation</u>
- <u>Utilities and Services</u>
- <u>Vegetation Management</u>
- Erosion Control
- Construction Staging in WSDOT Right of Way

Each of these construction effects sections includes four subsections to provide the reader with details on the particular effect:

- What to Expect During Construction: Characterizes the location, potential construction activities, duration and intensity of activity for each construction effect.
- Applicable Commitments: Provides information about and web links to documents describing construction-related commitments, including resources that the contractor and WSDOT will use to determine mitigation activities.
- **Measures and Practices:** Describes the potential mitigation activities that may be implemented to mitigate for the stated construction effect.
- For More Information: Provides resources and contact information to assist with questions that may arise during construction.

A. Project construction overview

Construction activities vary by location. The information in this section will be updated as needed by the contractor prior to construction. See <u>Figure 1</u> for a map that identifies the construction and staging areas for the SR 520/I-5 Project.

B. Potential construction effects

1. Noise

The contractor will perform many construction activities throughout the duration of the SR 520/I-5 Project construction. Each activity uses different types of equipment and results in different levels and kinds of noise.

Construction is expected to occur at/on several locations including:

- Within the I-5 express lanes area
- Along I-5 southbound, and SR 520, in the vicinity of the SR 520/I-5 interchange
- Adjacent to the Mercer Street/I-5 on- and off-ramps
- Staging underneath I-5 near the Ship Canal Bridge

What to expect during construction

WSDOT anticipates that the contractor will work during daytime hours when possible and at night as necessary to complete the project. WSDOT has coordinated with the city of Seattle to obtain a <u>Major</u> <u>Public Project Construction Noise Variance</u> (record number: 6733975-NV) for nighttime work activities. SR 520/I-5 Project construction during nighttime hours are necessary in order to:

- Provide a safe work environment for the contractor and traveling public.
- Avoid further exacerbating existing congestion on SR 520 and I-5.
- Minimize the impacts to the surrounding communities and the economic cost to taxpayers caused by extended project duration and significant daytime traffic impacts.
- Make use of access that is only available during overnight hours when the I-5 express lanes are closed to traffic.

The information in this section will be updated when more information is known about specific conditions that will be identified by the city of Seattle for nighttime work for this project.

Daytime work

Daytime work will occur between 7 a.m. and 10 p.m. Monday through Friday, and between 9 a.m. and 10 p.m. Saturday, Sunday, and legal holidays.

Nighttime work

Nighttime work activities will be required to meet the conditions identified in the Major Public Project Construction Noise Variance granted by the city of Seattle throughout the duration of project construction.

Nighttime work will occur between 10 p.m. and 7 a.m. Monday through Friday, and between 10 p.m. and 9 a.m. Saturday, Sunday, and legal holidays. Due to existing traffic congestion on I-5 and SR 520, work in these areas is not feasible during daytime hours. Therefore, work along the project corridor will be completed at night or during off-peak commute hours.

Potentially noisy activities

Noise may sound different based on the surface over which it is travelling. Noise from construction activities attenuates over a "hard" surface (like pavement) less quickly than over "soft" surfaces (like grass). Therefore the same equipment may sound different depending on where you are standing. Figure 3 helps illustrate how such noise is perceived at varying distances. More information about noise can be found on the WSDOT website and in the I-5 to Medina Project Construction Noise and Vibration Mitigation and Monitoring Plan.

Applicable commitments

WSDOT's <u>Noise Program</u> ensures compliance with local, state and federal environmental regulations on noise from traffic and construction. During construction, WSDOT and the contractor need to comply with permit requirements, including measures and practices described in more detail later in this section. The process for determining appropriate mitigation for construction noise is a dynamic process because there is variation between construction projects. During daytime hours, construction noise is typically exempt from noise control requirements in the <u>Washington Administrative Code (WAC)</u>, but is subject to local noise level limits as required through permits.

WSDOT and the contractor will adhere to all WSDOT, federal, local and statewide regulatory requirements and as required by the contract documents. WSDOT has prepared a <u>Construction Noise and</u> <u>Vibration Mitigation and Monitoring Plan</u> that identifies the expected noise levels at identified locations, risk of exceeding allowable levels and measures for the contractor to implement if levels are anticipated to exceed allowable levels. A detailed mathematical model, based on the types of equipment and activities, is used to determine the expected levels of noise at nearby receivers.

The <u>Seattle Municipal Code chapter 25.08.425</u> addresses sounds created by construction and maintenance equipment. City of Seattle noise-level limits allow different levels for various types of equipment. For this project, the construction noise analysis used the FHWA's <u>construction noise method</u> to determine future construction noise levels. WSDOT have received a Major Public Project Noise Variance, from the city of Seattle, which establishes noise levels and requirements that must be met during project construction.

Measures and practices

The following requirements are written into WSDOT's noise variance will be in place for all SR 520/I-5 Project construction activities occurring between 10 p.m. and 7 a.m., Monday through Friday, and between 10 p.m. and 9 a.m. on Saturday, Sunday, and legal holidays:

- The contractor will meet the noise level limits established in the noise variance.
- The contractor will use broadband or strobe backup warning devices, or use backup observers in lieu of backup warning devices for all equipment, in compliance with <u>Washington Administrative</u> <u>Code</u>, <u>Sections 296-155-610</u> and <u>296-155-615</u>. For dump trucks, if the surrounding noise level is so loud that broadband or strobe backup warning devices are not effective, then an observer must be used (WAC 296-155-610). This condition will apply to activity conducted between 10 p.m. and 7 a.m., Monday through Friday, and between 10 p.m. and 9 a.m. on Saturday, Sunday, and legal holidays. No pure-tone backup warning devices will be used after 10 p.m. and before 7 a.m. weekdays or 9 a.m. weekends and legal holidays.

- Except as described below, there will be no impact work, such as auger shaking, jack hammering and impact pile driving, during nighttime hours from 10 p.m. to 7 a.m. on weekdays and 10 p.m. to 9 a.m. on weekends and legal holidays. Nighttime impact work will be conducted within the noise level limits established in the variance.
 - There will be impact work for the creation of access and work space. These activities are expected to occur on up to 25 non-consecutive nights at the 10th Avenue abutment, 5 non-consecutive nights at the Mercer Ramp, and 15 non-consecutive nights in the I-5 express lanes.
 - There will be impact work for the demolition of the existing retaining wall at the westbound SR 520/northbound I-5 on-ramps. This work is expected to occur on 72 non-consecutive nights.
 - Additional notifications will be sent to residences within 300 feet of any nighttime impact work. Notices will be sent with a minimum of 3 days prior to the start of nighttime impact work.
- The contractor will securely fasten truck tailgates.
- The contractor will use sand, rubber or plastic lined truck beds for all haul-trucks to reduce noise, unless an exception is approved by WSDOT.
- The contractor will not use compression brakes.
- The contractor will not leave equipment to idle for longer than five minutes.
- The contractor will use temporary noise mitigation shields, enclose, or use low noise-generating stationary equipment, such as light plants, generators, pumps, and air compressors, near residences where practical.

Additional noise-control measures

Once hired, the contractor for the SR 520/I-5 Project may choose to implement additional measures, such as temporary mobile noise barriers and noise-shielding equipment, and/or hotel accommodation for residents near the work area. SDCI and WSDOT would review the contractor's selected noise-mitigation measures to verify compliance with the limits set in a variance.

For more information

The issuance of a Major Public Project Construction Noise Variance is a formal process with the city of Seattle. Additional information will be provided as part of the noise variance review process through future CCMP revisions once it is known.

To find out more about noise variances and the process for the city of Seattle, visit the <u>Seattle Department</u> of <u>Construction & Inspections website</u>.

To contact the project about construction noise happening in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

2. Vibration

Similar to noise, different types of construction activities and equipment may cause varying vibration levels. While low vibration levels may be imperceptible or only slightly noticeable, higher levels could be

more noticeable to the point of being annoying or unpleasant. The highest levels could possibly result in damage to properties. However, the vibration-causing activities conducted during the construction of the SR 520/I-5 Project will be limited to levels below criteria expected to damage structures.

What to expect during construction

While some activities necessary for SR 520/I-5 Project construction may cause vibrations, WSDOT is committed to minimizing activities that would result in noticeable vibrations and will work to prevent property damage. As described in the <u>Construction Noise and Vibration Plan</u>, construction activities anticipated for the SR 520/I-5 Project that may induce vibrations include demolition of existing structures and drilled shaft foundation construction.

The construction contract will specify threshold limits for vibration levels. WSDOT will provide information to the residents about upcoming construction activities that may cause vibrations.

Applicable commitments

WSDOT engaged the services of a vibration expert to evaluate the I-5 to Medina Project corridor, including any potential haul routes along city arterial streets, and to identify areas where impacts to properties within the affected area may occur as a result of vibration. The vibration expert prepared a <u>Construction Noise and Vibration Plan</u> for the I-5 to Medina corridor that identifies the expected vibration levels at nearby receivers, risk of exceeding the damage risk criteria for vibration, control measures for the contractor to implement where exceeding the criteria is predicted, and locations where monitoring should be conducted. Mathematical modeling, based on the types of construction equipment and activities, was used to determine the expected levels of vibration at nearby receivers.

WSDOT will identify how construction activities will be carried out in such a way as to ensure that vibrations do not reach a level that causes architectural or structural damage to any properties.

If property owners observe damage to their properties, WSDOT will consult with them to assess any necessary monitoring and/or repairs if the damage is determined to be caused by SR 520/I-5 Project construction. If the private property affected is a historic property as defined by the National Historic Preservation Act, the repairs will be consistent with the U.S. Secretary of the Interior's <u>Standards for the Treatment of Historic Properties</u>. Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards. WSDOT will also coordinate with the city of Seattle Landmarks Board as necessary.

Measures and practices

As described above, the Construction Noise and Vibration Plan indicates that if a property is potentially vulnerable to construction-related vibration, WSDOT will take vibration measurements before construction. The analysis does not indicate vibration damage risk associated with SR 520/I-5 Project construction to identified historic properties.

For more information

If damage is identified by a property owner during construction, the property owner should notify WSDOT <u>by email</u> or using the 24-hour construction hotline phone number listed in the <u>Questions or</u>

<u>Concerns?</u> section of this document. WSDOT will respond within 72 hours and will consult with property owners to assess the cause of the damage to identify and provide for any necessary repairs. If WSDOT determines that project construction activities are resulting in structural or architectural damage to properties, WSDOT will direct the contractor to stop working on that construction activity until appropriate safeguards can be put in place. If WSDOT determines that an emergency situation is occurring (or has occurred) that threatens injury or significant structural damage, WSDOT will halt the construction activities as rapidly as possible and take necessary measures to stabilize structures and protect public safety.

You can also visit the <u>SR 520 Construction Corner</u> for up-to-date construction information.

3. Air Quality and Fugitive Dust

Some construction activities, especially those involving movement of soil, may result in emissions of air pollutants such as fugitive dust, engine exhaust from trucks or other construction equipment, and volatile organic compounds from asphalt paving. Fugitive dust is particulate matter that is suspended in the air by wind or human activities. Projects that require moving soil or otherwise have the potential to create fugitive dust are required to employ BMPs to control dust at project sites.

What to expect during construction

Air quality issues and fugitive dust are generally associated with activities such as mobilization, general construction (particularly earthmoving operations and construction truck traffic), and demolition. Air quality can also be adversely affected by construction truck traffic and the hauling of materials over large distances.

Applicable commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or requirements as required by the contract. A Fugitive Dust Prevention and Control Plan will be prepared by the contractor that provides additional details on activities to mitigate air quality impacts during construction.

The contractor will also identify the methods for controlling concrete dust and saw-cutting residue in the Concrete Containment and Disposal Plan, which will be completed prior to performing any dust-generating activities.

The Puget Sound Clean Air Agency is the primary agency overseeing air quality and fugitive dust issues in the Seattle area. More information about their operations and enforcement authority can be found at the <u>Puget Sound Clean Air Agency website</u>.

WSDOT and the contractor will comply with environmental commitments made through regulatory and permitting processes. The SR 520/I-5 Project CCMP and the contract documents include the commitments contained in those permits and approvals.

Measures and practices

WSDOT will require the contractor to implement the following BMPs to help prevent, control, and manage the production of fugitive dust and reduce short-term impacts to air quality:

- Applying water to the dust generating active construction work areas as needed and, if applicable, to other areas of the work site, to keep the soil damp to minimize fugitive dust without creating unnecessary muddy areas.
- During the demolition of concrete structures, as well as loading of construction trucks with demolition debris, using a water spray to minimize fugitive dust.
- Limiting idling equipment to reduce emissions.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- When appropriate, installing tarpaulins on trucks to cover their loads prior to leaving the site to control loss of material while the trucks are in transit.
- Using efficient and modern equipment with appropriate emission-control devices (where applicable) to reduce emissions from vehicular exhaust. Low-sulfur diesel is used when possible.
- When possible, using cleaners with low hazardous air pollutant and volatile organic compound content such as water-based, alkaline or microbial cleaners.
- Immediately containing spent material from construction activities such as sandblasting and disposing at an appropriate facility.
- Implementing methods for efficient paint application to reduce over-spraying, including proper training for painters.

For more information

To contact the project about construction air quality effects happening in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit <u>SR 520 Construction Corner</u>.

4. Visual Quality: Aesthetics, Glare, Lighting

Construction of roadways can affect the quality and character of the surrounding community and landscape. Construction would cause temporary, and in some instances, permanent changes to views and visual context of the SR 520 roadway within the existing landscape, primarily due to the presence of construction equipment, new infrastructure, staging areas, and vegetation removal.

What to expect during construction

The new SR 520/I-5 express lane ramp connection bridge will be built immediately to the south of the existing westbound SR 520 to southbound I-5 mainline structure. During construction operations, residents will see work in the interchange, including cranes, drills, and paving. Residents will also see work in and near construction staging. Active construction will occur in these areas for the duration of the construction period, anticipated between 2020 and 2023.

While the contractor will conduct some active construction activities during daytime hours, most construction activities will occur during night during low traffic volume hours and will require lighting for the safety of workers and the public. During the winter months (November through March), there may be increased work zone lighting at the beginning and end of the work day due to decreased daylight hours.

Applicable commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or requirements as required by the contract documents. This includes <u>WSDOT standard</u> <u>specifications</u>.

As described in the <u>Section 106 Programmatic Agreement</u>, WSDOT will protect trees and other screening vegetation identified adjacent to construction work areas to the maximum extent possible. Information related to tree protection and screening vegetation can be found in the <u>Vegetation Management section</u> of this document.

Measures and practices

WSDOT will require the contractor to implement the following BMPs to minimize visual quality effects:

• Limit the use of construction lighting as much as possible. When lighting is required, it will be shielded, directed toward the work, and pointed away from residences, traffic, and other sensitive areas to the maximum extent practicable.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

• Use directional lights instead of flood lights, and direct light to the work zones and away from residents in order to minimize light spillover beyond the construction limits to the maximum extent practicable.

For more information

To contact the project about construction visual effects happening in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit the <u>SR 520 Construction</u> <u>Corner</u>

5. Traffic and Transportation

Construction of the project will, at times, temporarily affect traffic and transportation along the project corridor due to adjustments to the existing roadways, changes to freeway access, or temporary ramp and lane closures. In addition, construction equipment and activities may occupy a portion of the transportation right of way, and construction truck traffic would be present on the roadways to haul materials and equipment.

Almost all construction activities will occur within existing WSDOT right of way, including nighttime work. There will be lane and ramp closures on I-5 general purpose lanes and SR 520. Nighttime work on the I-5 express lanes will occur while the lanes are closed. Project traffic impacts on local streets will include limited construction vehicle traffic.

What to expect during construction

Construction effects related to traffic and transportation may occur related to:

• Haul routes

- Lane closures, ramp closures, and roadway directional closures
- Maintaining access, including emergency service access

Local traffic

Lane closures and/or directional closures of local streets are not expected to be necessary except for few off-peak hour lane closures.

Highway traffic

Traffic conditions on the highways would remain similar to existing conditions during the most congested times of the day for the I-5 northbound and southbound general purpose lanes. Delays can be expected due to planned construction activities, to include the partial or full closure of the I-5 express lanes for temporary durations. WSDOT will work with the contractor to minimize daytime disruptions as much as possible by implementing any higher-impact closures during nights and weekends when traffic volumes are lower. WSDOT will notify the public of the times when travel through the area could be disrupted.

Applicable commitments

WSDOT will require the contractor to adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or other regulations as required by the contract. This includes <u>WSDOT standard</u> <u>specifications</u> and coordination with the city of Seattle. The contractor will be required to comply with the haul route terms outlined in the <u>Section 106 PA</u>.

Because the SR 520/I-5 Project will focus on reconstruction of the SR 520/I-5 interchange area, and is expected to have very limited local street impacts, WSDOT and SDOT have agreed that a standalone Neighborhood Traffic Management Plan (NTMP) is not necessary for this project. WSDOT and SDOT will continue to monitor and address any traffic concerns that arise during the construction of the SR 520/I-5 Project.

Figure 2 shows anticipated SR 520/I-5 Project construction access and haul routes.

Measures and practices

The contractor will follow established BMPs, including:

Haul routes

The I-5 express lanes and SR 520 in Seattle will be used for major material haul routes. Other major arterials designated as truck routes may also be used, such as Harvard Avenue East north of SR 520 and the SR 520 on- and off-ramps near I-5, to access construction staging areas.

Additional Section 106 coordination will be required if the contractor proposes the use of haul routes outside of those previously identified or restricted in the Section 106 coordination process. If WSDOT determines that haul routes in Seattle not outlined in the <u>SR 520, I-5 to Medina: Bridge</u> <u>Replacement and HOV project Final Environmental Impact Statement</u> might be used, WSDOT will follow the process described in the <u>Section 106 PA</u>.

Planning and compliance

- Perform the work in such a way as to prevent tracking of dirt and gravel onto local streets in accordance with the WSDOT's Temporary Erosion and Sediment Control (TESC) requirements.
- Access the site according to the terms of street use permit with the city of Seattle where applicable.

Detours and closures

- Though not anticipated, any local street closures would be coordinated with the city of Seattle through city-issued Street Use Permits.
- Coordinate closures/detours in advance with transit providers.
- Provide adequate signing for detours and closures.
- Have all detours, including all signing, in place prior to the closure of any road or lanes, and acquiring all detour agreements with the affected local jurisdiction.

WSDOT will ensure advance notices regarding closures and/or detours are provided.

Damage minimization and repair

- Repair any project-generated potholes as needed.
- Repair any project-generated damage to guardrails, barriers, attenuators, and traffic system signs.
- Provide adequate stormwater management during the project.
- Restore property and landscaping that is damaged in the course of construction to a condition similar or equal to existing before the damage occurred by repairing, replacing, rebuilding, or replanting.

Local, Public and Emergency Access

- Minimize interruptions to access to public facilities affected by the project unless such access is determined to be a public/construction safety risk.
- Allow access to the site for spill response and make personnel and equipment available to respond to emergencies.
- Cooperate with law enforcement and other emergency response agencies in response to accidents, fires, spills, or other emergencies in any area affected by the project.
- Work with emergency service providers to address their concerns about emergency access to and through the project corridor.
- WSDOT will ensure access to all historic properties is maintained. Except for emergency situations, provide 24 hours advance notice to affected property owners before any unavoidable interruptions of access. Consult with the affected property owners to address their needs, which may include the development of an alternate access strategy for short-term interruptions of access and longer-term detours.

If damage is identified by the owner during construction, the property owner is requested to notify WSDOT using the contact phone number described in <u>Questions or Concerns?</u> section of this document. This contact phone number is available 24 hours per day, 7 days per week. WSDOT will respond within 72 hours and consult with the property owner to assess the cause of the damage and will identify and

provide for any necessary repairs. If WSDOT determines that project hauling activities are resulting in structural or architectural damage, WSDOT will direct the contractor to stop use of that route until appropriate safeguards can be put in place.

If the private property affected is a historic property, the repairs will be consistent with the U.S. Secretary of the Interior's <u>Standards for the Treatment of Historic Properties</u>. Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards.

To contact the project about traffic or transportation issues in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

6. Utilities and Services

SR 520/I-5 Project construction will require relocation or connection to some utilities such as sewer, water, power, and fiber optic lines. Effects to utilities and services have been identified through coordination with Seattle Public Utilities and Seattle City Light, and this section will be updated as necessary.

What to expect during construction

Relocation of a sewer line under the Mercer Street on-ramp to southbound I-5 will involve excavation work on the ramp. Weekend lane closures will be required for this utility relocation. The contractor will provide a work plan for utility installation. As excavation occurs, the trench opening will be temporarily covered when work is not in progress. The trench will be backfilled and the area restored similar to existing condition.

For worker safety, connection to power supply lines will require short interruptions in service.

WSDOT and the contractor will notify potentially impacted residents of necessary work that may result in service interruptions or closures.

Additional effects to utilities and services may be identified through further coordination with Seattle Public Utilities and Seattle City Light. This section will be updated as necessary.

Applicable commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or regulations as required by the contract documents.

WSDOT will coordinate with the Utility Owners prior to any service interruption. WSDOT and the contractor will coordinate with the city of Seattle prior to any service interruption.

Work will be performed in conformance with WSDOT standard specifications.

Measures and practices

Advanced notification will be provided to potentially impacted residents and other stakeholders before conducting work that may affect utilities or services. Notifications will include contact information for comments or questions.

Coordination with Seattle City Light, and Seattle Public Utilities, regarding utility relocations and/or effects to service is anticipated. Disruptions to services that would affect surrounding homes or businesses will be minimized; advanced notification would be provided if such disruptions are required.

For more information

To contact the project about utility or services in your area, see the contact information in the <u>Questions</u> or <u>Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

7. Vegetation Management

Some vegetation will be removed from the project area for construction staging or resulting project improvements.

What to expect during construction

WSDOT has developed a Tree and Vegetation Management and Protection Plan (TVMPP) to be implemented prior to construction. The TVMPP can be found as Appendix A of this document. The plan addresses areas of the SR 520/I-5 Project corridor where specific trees and/or vegetation are to be removed or disturbed as part of the construction or resulting project improvements.

The TVMPP identifies areas of mature tree removal, protection, potential relocation, and restoration of project areas. It also shows areas temporarily dedicated to construction, including staging and lay down areas. The goal of the plan is to minimize tree and vegetation removal. WSDOT will ensure that contractors adhere to the plan, notify neighborhoods prior to impacts, and that tree and vegetation removal would only occur at the approximate time required for construction.

Applicable commitments

WSDOT and the contractor will adhere to all WSDOT, Federal, local, and statewide regulatory requirements and/or regulations as required by the contract.

The contractor will also comply with tree and vegetation protection measures outlined in the TVMPP, as outlined in Appendix A of this document.

For more information

Please see Appendix A for the complete TVMPP.

To contact the project about vegetation management issues in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

8. Erosion Control

Construction activities such as clearing, grubbing and grading expose bare soil, or pavement removal and replacement, create conditions that increase stormwater volume and velocity. WSDOT is preparing the Temporary Erosion and Sediment Control (TESC) Plan and Spill Prevention, Control and Countermeasures (SPCC) plan to manage erosion and spill related risks during construction. Together, the

TESC and SPCC plans are designed to meet the Stormwater Pollution Prevention Plan (SWPPP) requirements.

What to expect during construction

WSDOT is preparing a TESC Plan to identify BMPs for on-land work. TESC BMPs are used to mitigate for the increased stormwater volume and velocity cause by construction activities. TESC BMPs may include schedules of activities, stabilization practices, and maintenance procedures used to prevent or reduce the source and release of pollutants during construction.

Applicable commitments

The SR 520/I-5 Project TESC Plan will be included in the contract documents. If needed, the contractor will submit any proposed modifications to the TESC Plan to WSDOT for review.

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide permits and approvals, including, but not limited to:

- Sections <u>401</u> & <u>404</u> of the Clean Water Act
- Formal Endangered Species Act consultation
- <u>WSDOT Temporary Erosion and Sediment Control Manual</u> (TESCM)
- Construction NPDES Permit

The WSDOT *Temporary Erosion and Sediment Control Manual* (TESCM) provides policy for preventing erosion related impacts to waters of the state during construction. This manual also outlines WSDOT's policies for meeting the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit requirements, and the requirements in Volume II of the stormwater management manuals published by the Washington State Department of Ecology.

Measures and practices

The contractor will implement TESC BMPs where needed for on-land work, including:

- Marking sensitive and vegetation protection areas with high-visibility fencing.
- Installing silt fencing where needed to limit sediment transport downslope from construction areas.
- Implementing BMPs, such as temporary and permanent seeding, plastic covering, erosion control fabrics and matting, or early application of a gravel base on areas to be paved, for disturbed areas.
- Installing sediment retention BMPs on catch basins and inlets.
- Stabilizing channels and outlets using check dams, vegetation, or rock as required.
- Utilization of on-site storage tanks, pumps, and chemical treatment systems to remove total suspended solids or sediment prior to discharge into downstream systems.
- Re-vegetating exposed areas and maintaining vegetation.
- Stabilizing construction entrances for ingress and egress points to prevent tracking of mud and soil onto paved roads.
- Inspecting and maintaining BMPs during the course of construction.
- Following the TESC Plan and SPCC Plans.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- Installing tire washes at construction entrances to reduce tracking of mud and soil onto paved roads.
- Settling dust with water or other dust palliatives.

The contractor will work closely with WSDOT to ensure that work operations are in compliance with the commitments listed above.

For more information

To contact the project about erosion control issues in your area, see the contact information in the <u>Questions or Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

9. Construction Staging in WSDOT Right of Way

WSDOT anticipates that the contractor will stage equipment and materials on land near the SR 520 Program construction areas. Staging areas would vary in size and function, but will be available for use by the contractor 24 hours per day, 7 days per week.

What to expect during construction

WSDOT anticipates that the contractor will load and unload materials and equipment at work areas. In addition, the contractor will have the option of storing of equipment and materials at identified construction staging locations, which could include the SR 520/I-5 interchange, the Mercer Street on- and off- ramps to I-5, and underneath the Ship Canal Bridge.

Changes, if any, to staging areas will need to be reflected in updated TESC plans and an updated SPCC Plan.

Figure 1 and Figure 2 illustrate construction staging areas, contractor access points, and haul routes.

Applicable commitments

WSDOT and the contractor will adhere to all WSDOT, Federal, local, and statewide regulatory requirements and or regulations as required by the contract.

Measures and practices

BMPs utilized on WSDOT projects may include but are not limited to:

- Locate construction sheds, barricades, and material storage away from private properties, and avoid obscuring views of and from private properties.
- Avoid short-term construction features where they would require permanent removal of or would damage mature trees.

For more information

To contact the project about an SR 520 staging area, see the contact information in the <u>Questions or</u> <u>Concerns?</u> section of this document or visit the <u>SR 520 Construction Corner</u>.

IV. Questions or Concerns?

Construction is complex and at times will be disruptive to neighbors. WSDOT maintains on-site inspectors to ensure compliance with various project commitments and requirements. WSDOT is committed to being a responsible project owner and also committed to being responsive to community concerns as they arise.

WSDOT has a process for determining if a non-compliance event occurs. In the event of non-compliance, WSDOT has a process for determining the appropriate corrective actions. <u>WSDOT's March 2019</u> <u>construction manual</u> further outlines the process for identifying non-compliance.

Information on property damage concerns

If damage is identified or suspected by a property owner during construction, the property owner is requested to notify WSDOT by calling the 24-hour construction hotline listed below. WSDOT will respond within 72 hours and consult with the property owner to assess the cause of the damage and will identify and provide for any necessary repairs that are a result of the project. If WSDOT determines that hauling activities are resulting in structural or architectural damage, WSDOT will stop use of that route until appropriate safeguards can be put in place. If the property affected is a historic property, WSDOT is required to ensure the repairs will be consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties. Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards.

Contact information

Below is additional information on how to stay informed through project construction and how to contact WSDOT with questions and/or concerns:

Visit the website:

- <u>SR 520 Bridge Replacement and HOV Program</u>
- <u>SR 520/I-5 Express Lanes Connection Project</u>

Call the project:

- For routine questions and information, call the SR 520 Program front desk from 8 a.m. to 5 p.m., Monday through Friday: 206-770-3554
- A 24-hour construction hotline for concerns regarding construction activities and possible property impacts will be provided in advance of construction activities.

Email the project team:

• Submit a question or request information by emailing <u>SR520Bridge@wsdot.wa.gov.</u>

Stay informed about project construction:

Other tools available for the public to stay informed and involved related to project construction:

• <u>SR 520 Construction Corner</u> for up to date construction information and closure updates.

- <u>E-mail updates</u> Subscribe to SR 520 project updates to get regular information about construction activities.
- Highway advisory radio, variable message signs, active traffic management signs, project identification signs.
- SR 520 social media accounts:
- <u>Twitter</u>
- <u>Flickr</u>
- <u>YouTube</u>





V. Figures

Figure 1: Project Construction and Staging Areas







Figure 2: Construction Access and Haul Routes



Figure 3: How do we hear noise?

- Movement causes vibrations, or waves, in the air that produce sound once they reach our ears.
- Sound is measured in units called decibels (dBA).
- An average person's ear can perceive a 3 dBA or greater change in noise levels.
- A 10 dBA reduction sounds half as loud to the human ear; a 10 dBA increase sounds twice as loud.

