Technical Memorandum



DATE: September 4, 2025

TO: Project File, Washington State Department of Transportation,

NW Region Local Programs

FROM: Jenna Anderson and Katheryn Seckel, Parametrix

SUBJECT: Purpose and Need and Project Description

PROJECT NUMBER: 554-2441-022

PROJECT NAME: City Center Access Project

Introduction

The City of Federal Way, City Center Access Project (Project) includes a new interchange with roundabouts and a new bridge over I-5 at S 324th Street. Other elements include new and improved access for vehicles on S 324th Street and S 320th Street to and from I-5 and improved access for pedestrians and cyclists. The project also includes bus transit improvements that are planned along S 320th Street.

The Project is located in the City of Federal Way (City), Washington, with portions of the project limits east of I-5 and north of S 320th Street that extend into unincorporated King County. The City Center area within the City is served by an interchange at I-5 and S 320th Street. The City Center area is bounded by S 312th Street on the north, S 324th Street on the south, I-5 on the east, and 11th Place S and 14th Avenue S on the west. Figure 1 shows the Project vicinity.

This narrative provides Project details, including the purpose and need, the project description, anticipated construction phasing and schedule, project history and coordination, agency and tribal coordination, a description of the relationship of Sound Transit projects to the City Center Access Project, and construction methods.

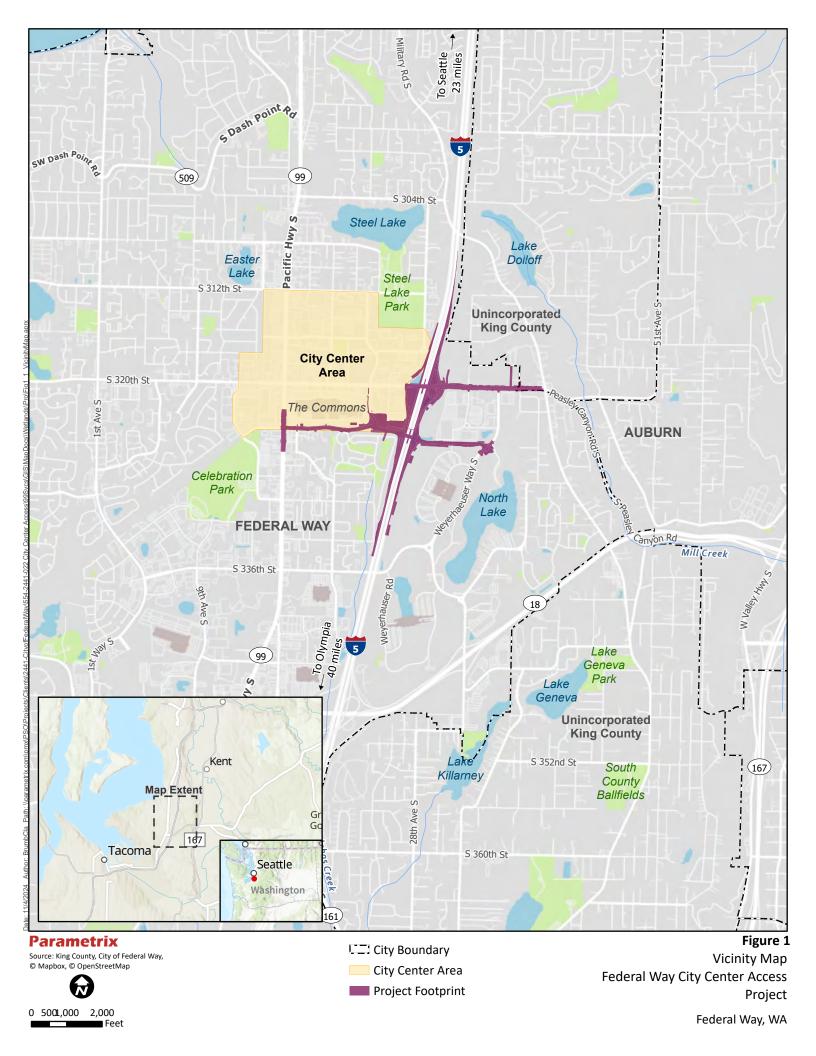
Purpose and Need

The purpose of the Project is to provide the following:

- Strengthening traffic operations with an eye on long-term growth in employment and housing.
- Increasing safety and efficiency for people traveling by car, transit, bicycle, or walking.
- Reducing dependency on cars by improving transit, pedestrian, and bicycle connections.
- Improving the economic vitality of the City Center.

The City initiated the City Center Access Project to provide transportation system changes needed to preserve future mobility in the City Center subarea of Federal Way. The purpose of the Project is to improve the economic vitality of the City Center and improve the quality of life by increasing multimodal mobility and access to regional and local trips while protecting the integrity of the Interstate Highway System. Access and mobility are limited by congestion issues along S 320th Street between Pacific Highway S (SR 99) and Military Road S, including to and from I-5, and by the lack of multimodal facilities across I-5.





The Project is also responding to resource stewardship needs. These include removing fish barriers and restoring stream connections to provide access to habitat and the management and treatment of stormwater so that water quality is protected.

Once completed, the Project will provide the following benefits to the surrounding community: improved transit access, improved safety for cyclists and pedestrians, and improved mobility between the areas on either side of I-5. Residents in the area will benefit from a new shared-use path and sidewalk improvements providing access to local businesses and the future Link light rail station.

Project Description

The Project consists of the following elements:

- Building an I-5 overcrossing at S 324th Street from 23rd Avenue S to Weyerhaeuser Way S for people to walk, bike, or drive.
- Making road improvements on S 324th Street from Pacific Highway S (SR 99) to 23rd Avenue S.
- Modifying the S 320th Street interchange.
- Adding access to I-5 at S 324th Street with roundabouts at freeway on- and off-ramps.
- Building two new roundabouts on S 324th St; at 23rd Avenue S and Weyerhaeuser Way S.
- Providing high-occupancy vehicle (HOV) lanes on S 320th Street from SR 99 to Military Road S
- Adding shared-used paths and regional trail connections, including a potential connection to the BPA Trail.
- Stream crossing upgrades to improve fish passage, including corrections to four culverts.

This description is based on the preliminary design, and is subject to change as design progresses. The improvements are shown in Figures 5 to 12 (Attachment A) at the end of this narrative.

Access Modifications

The Project includes a modified interchange at S 320th Street, with braided ramps and new access at S 324th Street. There are no new gore points along I-5, but the existing gore points north and south of the S 320th Street interchange will be relocated. The northbound off-ramp gore will move 2,100 feet south, the northbound on-ramp gore will move 150 feet north, the southbound off-ramp gore will move 550 feet north, and the southbound on-ramp gore will move 2,200 feet south.

All on-ramps from S 320th Street and S 324th Street will be metered. They will not include HOV bypasses.

S 324th Street Roadway Improvements

S 324th Street improvements include the widening of the existing roadway, extension of S 324th Street across I-5 to Weyerhaeuser Way S, the construction of four roundabouts, integration of I-5 ramp traffic movements, and pedestrian improvements (see Non-Motorized Improvements discussion). The following itemizes key Project elements associated with S 324th Street.

 West of I-5, S 324th Street will be widened from four lanes to five lanes from SR 99 to 23rd Avenue S. The existing lane configuration is two westbound lanes and one eastbound

lane with a center turn lane for both directions of traffic. The Project will add an additional eastbound lane.

- Four new lanes will be constructed from 23rd Avenue S to I-5. The proposed lane configuration will be two westbound lanes and two eastbound lanes and includes a new two-lane roundabout at the S 324th Street/23rd Avenue S intersection and a single-lane roundabout just west of I-5 to accommodate through traffic and access to I-5. The northwest and southwest quadrants of the S 324th Street/I-5 southbound roundabout will include slip lanes that enter and exit the I-5 on- and off-ramp.
- Intersection improvements at S 324th Street/Pacific Highway S (SR 99) that will help manage westbound queues from the new interchange, including an additional southbound left turn lane and an additional northbound left-turn lane.
- A new two-lane bridge across I-5 to accommodate two-way traffic. In addition to the single-lane roundabout west of I-5, the bridge's eastern extent will also include a single lane roundabout that will accommodate through traffic and ramp access to northbound I-5.
- East of the new S 324th Street bridge, three new lanes will extend from the roundabout at the I-5 bridge's eastern extent to Weyerhaeuser Way S. The lane configuration will include one westbound, one eastbound, and one center turn lane for both directions of traffic. A single-lane roundabout will be constructed at S 324th Street/Weyerhaeuser Way S.

S 320th Street Roadway Improvements

HOV lanes currently extend in both directions a short distance along S 320th Street east and west of SR 99. The Project includes extending the HOV lanes in both directions from their current terminus east of SR 99 to Military Road S. The purpose is to support future bus rapid transit along S 320th Street in response to the 2021 King County Metro Long-Range Plan. West of I-5, a general-purpose lane in each direction will be converted to HOV lanes. Crossing I-5, between I-5 southbound ramps and I-5 northbound ramps, the S 320th Street bridge will be replaced and widened to include a new HOV lane in both directions and a lengthened left turn lane for the I-5 southbound on-ramp. Between I-5 and Military Road S, S 320th Street will be widened to accommodate the added HOV lanes.

Nonmotorized Improvements

The Project includes nonmotorized improvements on both S 324th Street and S 320th Street. Between SR 99 and Weyerhaeuser Way S, there will be a shared-use path on the north side of S 324th Street and a sidewalk on the south side of S 324th Street. There is potential for the shared-use path to connect to the BPA Trail in the future. A shared-use path on the west side of 23rd Avenue S between S 324th Street and S 320th Street is included. The S 320th Street bridge crossing I-5 will have a sidewalk on the north and south side. Between I-5 northbound ramps and Military Road S, there will be a sidewalk on the north and south side.

Correction of Fish Passage Barriers

Correction of fish passage barriers, as proposed within this Project, is necessary according to a federal permanent injunction requiring the state of Washington to accelerate fish barrier corrections for salmon and steelhead streams in the Puget Sound area and the WSDOT Fish Passage Performance Report. In response to this injunction, the Project includes stream crossing upgrades to improve fish passage, including corrections to four culverts identified by the Washington Department of Fish and Wildlife (WDFW) and WSDOT as barriers to fish passage, including a privately owned culvert. There are three WSDOT-owned injunction culverts (site IDs 992364, 995299, and 995300) within the project limits. One crosses I-5 at the south end of the S 320th Street interchange ramps;

one is located under the northbound on-ramp; and one is under the northbound off-ramp. WDFW separated the downstream segment of the I-5 barrier as a privately owned culvert (WDFW culvert ID 420614, beneath Winged Foot Way), which is directly connected to the WSDOT-owned culvert ID 992364. The culvert improvements and new stream crossing will be designed to connect with East Fork Hylebos Creek Tributary 0016A on the west side of I-5 in Belmor Park. The City completed an iterative design process for the stream crossing alignment, including an alternatives evaluation that compared the existing alignment to four proposed new alignments. The evaluation process included criteria such as length of daylighted channel, impacts to wetlands, mobile home displacements, and ability to accommodate future Sound Transit projects in the area. As a result of the alternatives evaluation, the preferred alternative—as shown on Figures 1.3 through 1.6—was selected for the Project.

Design Compatibility

The Preferred Alternative design accommodates the Sound Transit Federal Way Link Extension and OMFS projects, BPA transmission tower relocations, and the future widening of I-5. The Sound Transit FWLE and OMFS WSDOT Compatibility Reports establish the WSDOT Compatibility Line, to which the City Center Access project must adhere.

Other design constraints and considerations include:

- Avoiding impacts to the existing bog and minimizing impacts to King County Metro Park and Ride and adjacent development.
- Avoiding conflicts with BP Olympic Pipeline, an existing 14-inch pipeline.
- Incorporating input to roadway design received from the City, WSDOT, and Sound Transit during design coordination meetings and submittal reviews.
- Meeting and obtaining design input from adjacent commercial and residential developments.
- Coordinating with WDFW regarding North Lake Access.

Project Phasing and Schedule

The design and construction of the Project will be phased due to funding limitations. Table 1 summarizes the anticipated project phases. The first phase of construction is at least 3 years out (2028).

Table 1. Anticipated Project Phasing

	Local Street Improvements and Connections	Ramp and Interchange Improvements
Phase 1	 Construct new S 324th Street between 23rd Avenue S and I-5 southbound ramp intersections. Widen S 324th Street between SR 99 and 23rd Avenue S. Improve S 324th Street and SR 99 intersection with added turn lanes. Improve fish passage. 	 Construct/revise I-5 southbound off-ramps to S 320th Street and S 324th Street. Construct/revise on-ramps from S 320th Street and S 324th Street to I-5 southbound.
Phase 2	 Construct new S 324th Street from I-5 southbound ramp intersection to Weyerhaeuser Way S, including S 324th Street bridge and Weyerhaeuser Way S intersection. 	 Construct/revise I-5 northbound off ramp to S 324th Street. Construct/revise portion of I-5 northbound off ramp to S 320th Street.

	Local Street Improvements and Connections	Ramp and Interchange Improvements
Phase 3A	 Replace S 320th Street bridge over I-5. Widen S 320th Street from I-5 southbound ramp intersection to Military Road S. Restripe S 320th Street to provide high-occupancy vehicle lanes from SR 99 to southbound ramp intersection. Improve fish passage. 	 Reconstruct S 320th Street loop ramp to I-5 northbound. Construct/revise the remaining portion of I-5 northbound off ramp to S 320th Street.
Phase 3B	 Make local improvements associated with this project are substantially complete. 	 Realign the I-5 northbound on ramp from S 320th Street. Construct the I-5 northbound on ramp from S 324th Street.

In January 2024, the City received funding from the State Transportation Improvement Program to finalize design and acquire right-of-way for the Phase 1 improvements. Figure 2 shows all phases of the Project, with an emphasis on Phase 1. Once environmental documentation is complete, the City will move forward with obtaining permits and acquiring right-of-way for these improvements. The City will apply for more funding to construct the Phase 1 improvements and to advance the remaining phases of the Project.

The timeline shown in Figure 3 outlines the progress of the Project through final design and construction for Phase 1 of the project. Future phases are dependent on funding.



Figure 2. Federal Way City Center Access Project - Phase 1

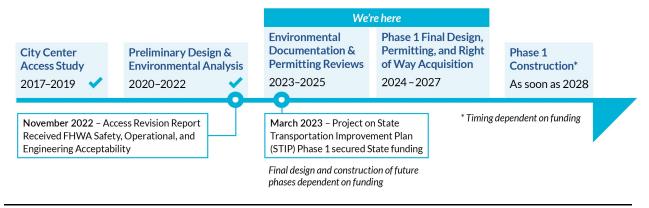


Figure 3. Federal Way City Center Access Project - Timeline

Parametrix

Project History and Coordination

The City initiated work to determine which transportation system changes were needed to preserve future mobility in the City Center in 2004. The City put the project on hold in 2009 after the City Council considered community input and selected the No Build Alternative. The City reinitiated the Federal Way City Center Access Project in fall 2017 to address a growing problem with traffic delays, safety and mobility for drivers, transit, pedestrians, and bicyclists. Over the following three years, a study support team (SST) convened to help the City evaluate ways to reduce congestion in the City Center and make it easier for people to travel into, out of, and around the City Center. Participants of the study support team included the following:

- City of Federal Way.
- Washington State Department of Transportation (WSDOT) headquarters.
- WSDOT Northwest Region.
- Federal Highway Administration (FHWA) Washington Division.
- King County Metro.
- King County Roads.

- Puget Sound Regional Council.
- Sound Transit.
- City of Federal Way Police Department.
- South King Fire and Rescue.
- Muckleshoot Indian Tribe.
- Puyallup Tribe.
- Pierce Transit.

On November 19, 2019, the Federal Way City Council voted unanimously to approve a set of improvements, known as the City Center Access Preferred Alternative.

To date, the City has met multiple milestones, including the development and approval of the Project Purpose and Need memorandum; FHWA's determination of Safety, Operational, and Engineering Acceptability on the Access Revision Report; and 10% design. In addition, the City has completed the development of several environmental discipline reports for ecosystems, hazardous materials, noise, visual, and cultural resources. National Historic Preservation Act Section 106 consultation is complete, with a determination of no adverse effect. In February 2023, FHWA submitted a biological assessment to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, in support of a request to initiate consultation as required under Section 7 of the Endangered Species Act.

Through Project planning, environmental review, and design, the City of Federal Way has conducted extensive public involvement and outreach. At the beginning of the Project, the City developed a public involvement plan, which identified the following audiences: general public; key property owners; area businesses and business associations; neighborhoods and potentially impacted residential property owners; transit users; community-based organizations and advocacy groups; and elected officials, commissions, and public agencies.

Outreach to community organizations has included communication with social service providers and other groups within Federal Way that serve populations of low income, seniors, people with disabilities, and residents whose primary language is not English, including translation services. Outreach to surrounding neighborhoods has been focused on areas where residents, including those in Belmor Park and Gold & Country Club (Belmor Park), may face impacts as a result of the Project.

Between 2018 and early 2022, the City and consultant team held numerous meetings with the above-mentioned audiences. While public involvement and community engagement have been ongoing efforts throughout the Project, there were two major periods of activity in 2019 and in 2021 to early 2022. Summaries for each of the community engagement periods are available in two

documents, the Community Outreach Summary (May to October 2019, Proposed Solution) and the Community Outreach Summary (January 2021 to May 2022, Preliminary Design and Environmental Documentation), both found on the Project website: https://www.cityoffederalway.com/page/city-center-access-project.

Agency and Tribal Coordination

For a period of three years (2017–2019), an SST consisting of local, state, and federal government agencies and tribal governments convened to help the City evaluate ways to reduce congestion in the City Center and make it easier for people to travel into, out of, and around the City Center. This process involved consideration of a range of alternatives and identifying the Preferred Alternative. The City continues to coordinate with agencies and tribal governments as design progresses, particularly with those entities that have overlapping interest in the vicinity of the project, including Sound Transit, King County Metro, WSDOT, tribal governments, and several public utilities.

Agency Coordination

The City of Federal Way coordinates with the entities listed in Table 2 on a range of issues, including design development, permitting, and other approvals needed for the Project.

Federal	State	Local
Federal Highway Administration Washington Division	WSDOT Headquarters	City of Federal Way Police Department
U.S. Fish and Wildlife Service	WSDOT Northwest Region	City of Federal Way, Community Development Department
National Marine Fisheries Service	Washington Department of Fish and Wildlife	South King Fire and Rescue
U.S. Army Corps of Engineers	Washington Department of Ecology	King County Metro
	Washington Department of Archaeology and Historic Preservation	King County Roads
		Sound Transit
		Pierce Transit
		Puget Sound Regional Council
		Bonneville Power Administration

Table 2. Coordinating Agencies and Institutions

WSDOT = Washington State Department of Transportation

Tribal Coordination

The City extended invitations to the Muckleshoot Indian Tribe, Puyallup Tribe, Confederated Tribes and Bands of the Yakama Nation, Snoqualmie Indian Tribe, and the Squaxin Island Tribe to participate in SST meetings. The Muckleshoot Indian Tribe and the Puyallup Tribe opted not to regularly attend the SST meetings, and the Confederated Tribes and Bands of the Yakama Nation, Snoqualmie Indian Tribe, and the Squaxin Island Tribe opted not to attend. Specific points of coordination beyond opportunities to participate in the SST meetings include:

- Meeting and a site walk related to the proposed fish passage improvements.
- Meeting to discuss input to alternatives for stream and culvert alignment alternatives.

- Extending invitations to participate in an environmental focus group.
- Extending invitations to share alternatives, discuss evaluation of alternatives process, and garner feedback.
- Section 106 review of the Project.
- A letter with the Project status and the City's interest in continued coordination.

No formal comments were received from the tribes under Section 106. The Puyallup Tribe was engaged with the evaluation of stream and fish passage structure alignment alternatives and will continue to be involved in this process as design is furthered. Tribal contacts will continue to be updated on the Project milestones and encouraged to collaborate through the duration of the Project.

Sound Transit Projects

Two Sound Transit projects in the Project vicinity include the Federal Way Link Light Rail Extension (FWLE) and the Operations and Maintenance Facility South (OMFS) (Figure 4). The FWLE terminates north of S 324th Street in the parking lot of the Commons at Federal Way shopping center and is currently under construction.

The OMFS trackway will extend from the FWLE to a future maintenance facility at South 336th Street. The new light rail extension to the OMFS will extend south from the FWLE terminus, cross over 23rd Avenue S and S 324th Street, and transition to the westside of

I-5 along the Belmor Park manufactured home community. The alignment will continue along I-5 to the OMFS, which is located south of S 336th Street. The OMFS trackway is anticipated to start construction in 2026.

Visit the OMFS website for more information:

https://www.soundtransit.org/syst em-expansion/operationsmaintenance-facility-south

Mainline Tracks: Tracks that are used for light rail vehicles as the principal line in the light rail system.

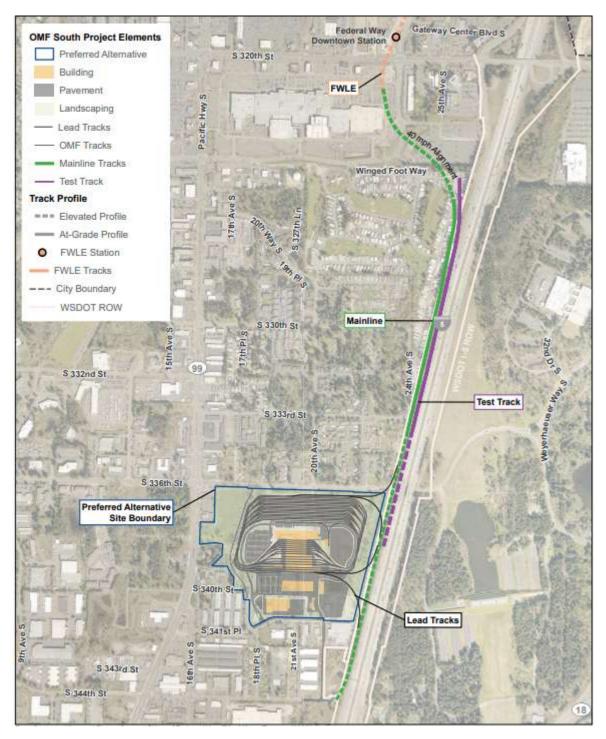
Test Track: A dedicated track that allows testing of light rail vehicles without using the mainline tracks.

The FWLE is under construction, and the OMFS has reached a National Environmental Policy Act (NEPA) Record of Decision; therefore, for the purposes of this NEPA documentation, they are considered an existing condition.

The components of the OMFS that overlap with this Project include:

- 40-mph alignment mainline tracks that will connect the OMFS facility to FWLE.
- Test track and test track facilities.
- Access roadways to test track and test track facilities.
- Realignment of the street network in Belmor Park.
- Relocation of residences in Belmor Park.

Due to the project overlap, Sound Transit plans to construct a portion of the Phase 1 improvements as part of the OMFS project. The proposed roundabout at 23rd Avenue S and 324th Street S and associated improvements would be constructed to provide access around the OMFS improvements starting as soon as 2026. Also, Sound Transit would construct a section of the proposed 324th Street S roadway extension east of the proposed 23rd Avenue S roundabout due to the aerial trackway crossing and the restrictions that would prohibit the construction of Phase 1 beneath the trackway.



Source: Operations and Maintenance Facility South, Federal Highway Administration Record of Decision, Sound Transit, August 2024

Figure 4. Sound Transit FWLE and OMF South Projects

Construction Methods

The project is anticipated to be constructed using the design-build delivery method, which integrates design and construction phases under a single contract. This approach allows for faster project delivery by overlapping design and construction activities, reducing the overall timeline.

Construction would occur in stages, with the first phase set to begin as soon as 2028 and subsequent phases to be completed as funding becomes available. Work related to road upgrades includes grinding the roadway and placing asphalt in the travel lanes, constructing planters and sidewalks adjacent to the roadway, removing existing asphalt and concrete surfaces, clearing and grading of adjacent areas, and placing subgrade material to form a stable roadbed. Construction equipment for road work may include cranes, backhoes, excavators, front loaders, pavement grinders, jackhammers, drilling rigs, pile drivers, vibratory equipment, haul trucks, air compressors, and concrete pumping equipment.

Construction of the new segment of S 324th Street will entail clearing and grading for roadway construction on both sides of I-5, construction of the new bridge over I-5, and construction of the new roadway and roundabout at Weyerhaeuser Way S. New road surfaces for S 324th Street will be primarily asphalt and concrete. The new bridge over I-5 will likely be supported on drilled shaft foundations, and fill will be required on both sides of the new S 324th Street bridge. Equipment for construction of the new bridge structure will include drilling rigs, cement mixers, concrete pumps, cranes, pavers, haul trucks, and tractor-trailers.

Proposed stream crossing structures and open channels will primarily be built in new alignments and will require grading, fill, and removal of old culverts. The project will likely integrate retaining walls along some segments of the open channels to reduce the extent of grading.

Additional major items of work will include construction of stormwater conveyance and treatment facilities, lighting, utilities, turbid water management, temporary erosion control, vegetation management (e.g., planting native species in place of non-native species), pavement marking, traffic control, and signing. Bare soils will be revegetated and hydroseeded after construction. Suitable areas within wetland boundaries and wetland and stream buffers will be replanted with native species that support the ecological functions of those areas.

Staging areas will be located within road rights-of-way and adjacent City-owned parcels, where possible, to allow for parking, large equipment storage, and material stockpiles.

Work will take place primarily during daylight hours on weekdays. However, lane restriction requirements will necessitate nighttime operations for some activities, including new bridge construction; replacement, excavation, and haul operations; setting girders; temporary soldier pile wall/shoring installation and removal; and temporary widening of existing roadways (if needed to minimize traffic impacts during construction). Work within the stream channel will be performed during the in-water work window specified by agencies with regulatory authority.

During construction, traffic flow is expected to undergo delays compared to existing conditions during the most congested times of the day. Partial lane closures would be required for I-5 ramp construction, and they would occur on nights and weekends when traffic demand is lower and detour routes can accommodate the diverted traffic. Increased vehicle delays would be experienced in construction areas and along detour routes. Full freeway closure in one or both directions of travel would be required during the S 320th Street bridge demolition and construction and for S 324th bridge construction. A portion of 23rd Avenue S and S 324th Street would be closed for approximately 9 months to accommodate the construction of the proposed roundabout at 23rd Avenue S and S 324th Street. Except for this long-term closure, other construction-related closures are expected to occur at night and may occur over one or more weekends.

During the daytime, construction vehicles are expected to cause temporary increases in traffic delays and volumes in the study area. Temporary delays are also expected to occur on roadways identified as haul routes.

Construction would require adjustments to the existing lane and intersection configurations and road closures, as discussed above. As a result, some buses would be affected by increased delays and would experience longer travel times. Bus stops may need to be temporarily relocated or closed during construction. Some bus routes may require rerouting when streets are closed. Closures will be coordinated with affected transit agencies and the school district to minimize service disruptions.

Construction activities may also temporarily affect nonmotorized travel (pedestrians and bicyclists) in the City Center. Routes for these users would be maintained to the extent possible, with neighborhood flyers, signage, and Project website updates regarding closures and detour routes as necessary.

The City of Federal Way will maintain vehicular and pedestrian points of entry to the Federal Way Transit Center and King County Metro Park and Ride throughout construction.

Attachment A

Figures

