

Appendix N  
Mitigation Plan



## **APPENDIX N – MITIGATION PLAN**

The mitigation plan for Lynnwood Link Extension describes Sound Transit’s preliminary mitigation commitments, which include all the mitigation measures Sound Transit proposes to implement to avoid or minimize impacts from the Preferred Alternative identified in the Final EIS. Many of the potential project impacts identified through the EIS process have been mitigated through incorporation of avoidance, minimization or improvement elements that are now included in the definition and design of the project. If the Sound Transit Board ultimately selects another alternative to build differing from the Preferred Alternative, the mitigation plan will be modified accordingly.

The mitigation measures described below are based on the potential mitigation measures identified in the Final EIS. Measures associated with the operation of Lynnwood Link (long-term impacts) are described first; measures associated with construction are described second. These mitigation measures are anticipated to be included as part of FTA’s Record of Decision for the project, and would be tracked in a monitoring program to ensure that the mitigation commitments are being met and addressed.

**Table N-1. Mitigation Plan**

EIS Chapter/ Section	Resource	Impact Topic	Period	Mitigation Description
3	Transportation	General Impacts	Long-term & Construction	The following sections discuss measures Sound Transit would take to mitigate the impacts of the light rail alternatives. They also describe measures that Sound Transit proposes to take but which require the agreement of other parties. For instance, Sound Transit has identified certain intersection improvements, traffic management, safety, and parking strategies to mitigate project-related impacts, but the agency does not have the sole authority to make those improvements when the facilities are owned and managed by others. Others may also have alternative plans or projects to address project future conditions with or without the project. In these cases, Sound Transit would coordinate with these other agencies and jurisdictions to further define and implement improvements to mitigate the Lynnwood Link Extension's impacts.
3	Transportation	Arterials and Local Streets	Long-term	The following intersection improvements will improve the AM and PM peak hour intersection delay to meet LOS standards, or to achieve the same level of service or better for intersections that will be below standards with the No Build Alternative. Sound Transit will provide these improvements or other improvements as agreed to by the local jurisdictions. In lieu of constructing the proposed improvements, Sound Transit could instead contribute to a local jurisdiction's project to improve intersection performance where the No Build Alternative would already be below standards, as agreed to with local jurisdictions.
3	Transportation	Arterials and Local Streets	Long-term	Segment A: North 185th Street and Meridian Avenue North (City of Shoreline): Add protected-permissive phasing to the northbound and southbound left turns.
3	Transportation	Arterials and Local Streets	Long-term	Segment A: NE 185th Street and 2nd Avenue NE (City of Shoreline): Add a two-way left-turn lane or refuge area on NE 185th Street.
3	Transportation	Arterials and Local Streets	Long-term	Segment C: 200th Street SW and 50th Avenue West (City of Lynnwood): Add overlap phase to northbound right-turn movement.
3	Transportation	Arterials and Local Streets	Long-term	Segment C: 200th Street SW and 48th Avenue West (City of Lynnwood): Add an eastbound and southbound right-turn pocket.
3	Transportation	Arterials and Local Streets	Long-term	Segment C: 52nd Avenue West and 204th Street SW (City of Lynnwood): Change traffic control from two-way stop control to signal or roundabout.
3	Transportation	Arterials and Local Streets	Long-term	Segment C: 200th Street SW and 44th Avenue West (City of Lynnwood): Add a second northbound left-turn lane and extend the eastbound right-turn pocket back to the park-and-ride driveway.
3	Transportation	Arterials and Local Streets	Long-term	Segment C: 200th Street SW and 50th Avenue West (City of Lynnwood): Add overlap phase to northbound right-turn movement.

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3	Transportation	Arterials and Local Streets	Long-term	Segment C: 200th Street SW and 48th Avenue West (City of Lynnwood): Add an eastbound right-turn pocket and a southbound right-turn pocket.
3	Transportation	Property Access and Local Circulation	Long-term	In areas where property access and local circulation will be modified by the project, Sound Transit will work with local jurisdictions to develop plans to maintain safe and effective access and circulation. In areas near modified interchanges, FHWA and WSDOT would also be consulted.
3	Transportation	Property Access and Local Circulation	Long-term	To discourage cut-through traffic that may occur on residential streets in station areas, Sound Transit will work with local jurisdictions where such activity may occur and support the local agency in implementing measures, such as neighborhood traffic controls.
3	Transportation	Parking	Long-term & Construction	Where the project will remove off-street private parking spaces, Sound Transit will work with property owners to provide compensation or equivalent replacement parking.
3	Transportation	Parking	Long-term	For all stations Sound Transit will work with local jurisdictions to evaluate and, if necessary, implement hide-and-ride mitigation. Sound Transit will inventory on-street parking around each station before and after the start of light rail revenue service, and would then work with the local jurisdictions to determine where appropriate mitigation measures would be needed. Potential parking control measures include parking meters, restricted parking signage, passenger and truck load zones, and residential parking zone programs. Sound Transit will be responsible for the cost of installing the signage or other parking controls for 1 year after the light rail extension begins operation. The local jurisdiction will be responsible for monitoring, enforcing, and maintaining the parking controls.
3	Transportation	Safety	Long-term	To address potential safety concerns related to the placement of project structures in the I-5 right-of-way, Sound Transit will coordinate with FHWA and WSDOT during final design and to secure highway-related design approval.
3	Transportation	Transit	Construction	Sound Transit will mitigate the temporary loss of parking at park-and-ride lots through one or more of the following, determined in consultation with local jurisdictions, facility owners, and involved transit agencies: Implement service increases or other measures to encourage transit trips that do not require automobile access. Redirect transit riders that use these locations to other nearby park-and-ride lots. Develop temporary parking for transit riders to use during construction. Use construction phasing strategies to build new park-and-ride spaces before the loss

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				of existing spaces. Lease parking lots and/or new parking areas near the closed park-and-ride lots.
3	Transportation	Transit	Construction	<p>Sound Transit will mitigate for partial closures of the Mountlake Terrace Transit Center and Lynnwood Transit Center by implementing one or more of the following, as appropriate, or other measures developed in coordination with transit agencies and local jurisdictions:</p> <ul style="list-style-type: none"> <li>Relocate transit stops to adjacent streets.</li> <li>Provide a temporary transit center at a nearby off-street location.</li> <li>Revise transit services (including temporary service between Mountlake Terrace and destinations in King County due to temporary closure of the Mountlake Terrace freeway station).</li> </ul>
3	Transportation	Transit	Construction	<p>Transit service mitigation measures for partial or full closures of streets will include rerouting of buses, where appropriate, to maintain transit service. Sound Transit will coordinate with local jurisdictions, King County Metro, Community Transit, and private transit service providers to minimize construction impacts and disruptions to bus facilities and services. Sound Transit will coordinate with those providers to inform passengers about changes with measures such as signage at existing transit stops, and using website information, rider information systems, emails, and agency mailing lists.</p>
3	Transportation	Freeway Operations	Construction	<p>As part of the WSDOT and FHWA approval process for construction within I-5 right-of-way and to minimize safety and operational impacts during construction, Sound Transit will collaborate with WSDOT and FHWA to develop and implement the project's Maintenance of Traffic plan.</p>
3	Transportation	Freeway Operations	Construction	<p>Sound Transit will coordinate construction with incident management, construction staging, and traffic control in places where the light rail construction will affect freeway traffic or involve changes to the roadside environment. Sound Transit will also coordinate with WSDOT to disseminate construction closure information to the public as needed.</p>
3	Transportation	Arterials and Local Streets	Construction	<p>Sound Transit will develop and implement detailed construction mitigation plans in coordination with local jurisdictions and WSDOT during the final design and permitting. To mitigate impacts to arterials and local streets, Sound Transit will:</p> <ul style="list-style-type: none"> <li>Develop the Maintenance of Traffic plan to conform to the <i>Manual on Uniform Traffic Control Devices</i> and jurisdictional agency requirements for traffic control.</li> <li>Use lighted or reflective signage to direct drivers to truck haul routes to ensure visibility</li> </ul>

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				<p>during nighttime work hours.</p> <p>Use temporary reflective truck prohibition signs on streets with a high likelihood of cut-through truck traffic.</p> <p>Communicate public information about construction activities through tools such as print, radio, posted signs, Web sites, email and direct communication with other agencies and affected parties; ongoing communications will update interested parties regarding street or freeway lane closures, detours, hours of construction, business access, and parking impacts.</p> <p>Coordinate access closures with affected businesses and residents. If access closures are required, property access to residences and businesses will be maintained to the extent possible. If access to the property cannot be maintained, the specific construction activity will be reviewed to determine if it could occur during non-business hours, or if the parking spaces and users of this access (for example, deliveries) could be provided at an alternative location.</p> <p>Require the contractor to provide parking areas for construction workers, where necessary. This may include remote parking with shuttle service to and from the construction site if sufficient on-site parking cannot be provided.</p> <p>Post signs prior to construction in areas where surface construction activities will affect access to surrounding businesses.</p> <p>Schedule traffic lane closures and high volumes of construction truck traffic during off-peak hours.</p> <p>Evaluate and limit concurrent construction to minimize construction impacts.</p> <p>Cover potholes and open trenches, where possible, and use protective barriers to protect drivers from trenches remaining open.</p> <p>Provide temporary parking to mitigate loss due to construction staging or work activities, as appropriate.</p>
3	Transportation	Nonmotorized Facilities	Construction	Sound Transit will provide detour routes through construction areas. Sound Transit will also notify the public of these changes.
3	Transportation	Nonmotorized Facilities	Construction	Multi-use trails that might be affected by construction will generally be kept open. Detours will be provided when trails are closed, unless they are closed for short durations or in areas where a detour option is not feasible.
3	Transportation	Nonmotorized Facilities	Construction	Closures or restrictions of I-5 overcrossings will be sequenced to maintain travel across I-5 at the next nearest crossing.
3	Transportation	Freight Mobility	Construction	Sound Transit will work with local jurisdictions to develop and implement construction

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		and Access		traffic control plans. The agency also will coordinate with affected businesses before and during the construction period to maintain business access as much as possible.
3	Transportation	Freight Mobility and Access	Construction	For construction associated with I-5, Sound Transit will coordinate with freight stakeholder groups by providing construction information to WSDOT for use in the state's freight notification system. Sound Transit will provide information in a format acceptable to WSDOT.
3	Transportation	Cumulative	Construction	Sound Transit will coordinate the construction activities of the Northgate Link Extension and Lynnwood Link Extension projects, and would also coordinate with the King County Metro TOD project to minimize impacts of overlapping construction periods.
4.1	Acquisitions, Displacements, and Relocations	Acquisitions, Displacements, and Relocations	Long-term	For property that is acquired for this project, Sound Transit will compensate property owners affected by the project, according to the provisions specified in Sound Transit's Real Estate Property Acquisition and Relocation Policy, Procedures, and Guidelines; the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; and the State of Washington's relocation and property acquisition law and regulations.
4.1	Acquisitions, Displacements, and Relocations	Acquisitions, Displacements, and Relocations	Construction	For temporary construction easements, in addition to just compensation, the property will be restored to its previous condition for the owner and/or another type of compensation will be employed as outlined during the easement's negotiation process.
4.1	Acquisitions, Displacements, and Relocations	Acquisitions, Displacements, and Relocations	Construction	If federally designated highway beautification areas are converted for project rights-of-way, Sound Transit will mitigate for these impacts by providing property along I-5 to replace the converted beautification areas, or with other measures as agreed by WSDOT and FHWA.
4.2	Land Use	Land Use	Long-term & construction	No specific mitigation is proposed.
4.3	Economics	Economics	Construction	<p>Sound Transit will dedicate staff to work specifically with affected businesses during construction to minimize project-associated impacts. Construction mitigation plans will be developed to address the needs of businesses and will include, but are not limited to, the following measures:</p> <ul style="list-style-type: none"> <li>Provide a 24-hour construction telephone hotline.</li> <li>Provide business cleaning services on a case-by-case basis.</li> <li>Provide signage such as 'detour,' 'open for business,' and others as appropriate.</li> <li>Establish effective communications with the public through measures such as meetings and construction updates, alerts, and schedules.</li> <li>Implement promotion and marketing measures to help affected business districts</li> </ul>



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				maintain their customer base, consistent with Sound Transit policies, during construction. Maintain access as much as possible to each business and coordinate with businesses during times of limited access. Provide a community ombudsman.
4.3	Economics	Economics	Construction	To avoid cumulative construction impacts, Sound Transit will coordinate construction mitigation planning with other project owners and potentially affected parties in construction areas with multiple projects in the same vicinity at similar times.
4.4	Social Impacts, Community Facilities, and Neighborhoods	Social Impacts, Community Facilities, and Neighborhoods	Long term & construction	No specific mitigation is proposed.
4.5	Visual and Aesthetic Resources	Visual and Aesthetic Resources	Long-term	Sound Transit will incorporate specific measures to mitigate visual impacts as it develops the detailed design. Mitigation measures will be focused on areas identified as having high visual impacts, and must be compatible with the project's maintenance and operations requirements. Sound Transit will adhere to the tree replacement and landscaping policies of WSDOT and local jurisdictions. A Roadside Master Plan will be developed in accordance with WSDOT guidelines for the portion of the route on the I-5 right-of-way. Sound Transit will mitigate conversion of WSDOT beautification areas along I-5 to right-of-way with replacement property, or with other measures agreed to by WSDOT and FHWA. Replacement parcels will meet the intended function of the original beautification area. In areas identified as having high visual impacts, Sound Transit would mitigate with landscaping or visual treatments to retaining walls and other structures, practical, as based on available land, safety, and maintenance and operation needs.
4.5	Visual and Aesthetic Resources	Visual and Aesthetic Resources	Construction	Sound Transit will shield light sources used in nighttime construction to reduce the lighting impacts. Sound Transit will design and place construction screens or barriers to limit the visibility of work areas that will intrude on adjacent activities such as public open space, community facilities, and recreational areas and trails, where practical.
4.6	Air Quality and Greenhouse Gases	Air Quality and Greenhouse Gases	Long-Term	No specific mitigation is proposed.

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4.6	Air Quality and Greenhouse Gases	Air Quality and Greenhouse Gases	Construction	<p>Consistent with Puget Sound Clean Air Agency requirements, Sound Transit will use best management practices (BMPs) to prevent and reduce air quality impacts resulting from construction activities. Construction activities must comply with local regulations governing air quality, including those for controlling fugitive dust during construction. The following mitigation measures will be used, as necessary, and in accordance with standard practice to control PM10, PM2.5, and emissions of CO and NOx during construction. Several of these measures will also reduce GHG emissions:</p> <ul style="list-style-type: none"> <li>Spray exposed soil with a dust control agent, such as water.</li> <li>Cover all transported loads of soils and wet materials before transport, or provide adequate freeboard (i.e., space from the top of the material to the top of the truck).</li> <li>Install wheel washes or manually wash truck wheels, where needed.</li> <li>Remove the dust and mud that are deposited on paved, public roads.</li> <li>Route and schedule high volumes of construction traffic, where practicable.</li> <li>Require appropriate emission-control devices on all construction equipment powered by gasoline or diesel fuel.</li> <li>Use well-maintained heavy equipment.</li> <li>Cover, install mulch, or plant vegetation as soon as practicable after grading.</li> <li>Encourage contractors to employ emission-reduction technologies and practices for both on-road and off-road equipment and vehicles (e.g., retrofit equipment with diesel control technology and/or use ultra-low sulfur diesel).</li> <li>Implement idling restrictions for construction trucks.</li> <li>Locate construction equipment and truck staging zones away from sensitive receptors, as practicable, and in consideration of other factors such as noise and safety.</li> </ul>
4.7	Noise and Vibration	Noise	Long-Term	<p>Noise mitigation measures will be provided consistent with Sound Transit's Light Rail Noise Mitigation Policy (Motion No. M2004-08). The FTA manual also defines when mitigation is needed and bases this on the impact's severity, with severe impacts requiring the most consideration. During final design, all predicted impacts and mitigation measures will be reviewed for verification. During final design, if it is discovered that equivalent mitigation can be achieved by a less costly means, or if the detailed analysis shows no impact, then the mitigation measure may be modified or eliminated. While the mitigation provided herein is based on predicted impacts, further noise mitigation will be provided if, after operations commence, noise impacts occur for which mitigation is deemed necessary and appropriate under FTA noise standards.</p> <p>When source mitigation measures, noise walls, or sound barriers are infeasible or not</p>

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				entirely effective at reducing noise levels below the FTA impact criteria or applicable requirement, residential sound insulation will be evaluated and offered at properties where the existing building does not already achieve a sufficient exterior-to-interior reduction of noise levels.
4.7	Noise and Vibration	Noise	Long-Term	<p>In Segment A replacement noise walls will range between approximately 6 and 24 feet in height to mitigate the combination of projected I-5 traffic noise levels resulting from the removal of the existing noise walls, changes to ramps and shielding, and light rail noise introduced by the project to below the impact criteria. Most noise impacts from light rail operating on an elevated structure will be mitigated by incorporating a 4- to 8-foot-tall barrier at the edge of the structure facing the noise-sensitive uses. Sound Transit will provide sound insulation where other standard measures that mitigate outdoor noise impacts are not completely effective. Mitigation for impacts from buses and cars operating in the NE 185th Street park-and-ride will include noise barriers along the edge of the facility, sound insulation, or revising the design of the facility to move access driveways and bus loading areas farther from residences. Based on the EIS analysis, mitigation for noise impacts in Segment A will include:</p> <ul style="list-style-type: none"> <li>Approximately 12,250 feet of relocated noise walls along I-5.</li> <li>Approximately 9,700 feet of additional noise walls.</li> <li>Approximately 530 feet of noise walls at NE 185th Street Station.</li> <li>Sound insulation will be offered at approximately 8 residences.</li> </ul>
4.7	Noise and Vibration	Noise	Long-Term	<p>In Segment B, at-grade noise walls will range between 4 and 10 feet above the track height, or from the top of retaining walls built as part of the project. Noise impacts from the elevated guideway will be mitigated with a 4- to 6-foot-tall barrier at the edge of the guideway structure to below the FTA criteria. Mitigation, such as a noise wall along the eastern edge of the facility, will mitigate impacts from buses serving the Mountlake Terrace Station park-and-ride. Based on the EIS analysis, mitigation for noise impacts in Segment B will include:</p> <ul style="list-style-type: none"> <li>Approximately 16,975 feet of additional noise walls.</li> <li>Approximately 400 feet of noise walls at Mountlake Terrace Station.</li> <li>Sound insulation will be offered at approximately 9 residences.</li> </ul>
4.7	Noise and Vibration	Noise	Long-Term	<p>In Segment C noise impacts will be mitigated by incorporating a 4- to 6-foot-tall barrier at the edge of the guideway structure. Based on the EIS analysis, mitigation for noise impacts in Segment C will include:</p> <ul style="list-style-type: none"> <li>Approximately 3,960 feet of noise walls for light rail noise.</li> </ul>

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				Sound insulation will be offered at approximately 58 residences for traffic noise, and 1,275 feet of noise walls or insulation for 23 additional units.
4.7	Noise and Vibration	Noise	Long-Term	All curves of less than 1,000-foot radius near noise-sensitive uses will be designed to accommodate a track lubrication system that Sound Transit will install should wheel squeal occur during operation.
4.7	Noise and Vibration	Vibration	Long-Term	Vibration impacts will be mitigated by design measures that reduce the amount of vibration energy transferred from passing trains into the ground. The use of a tire-derived aggregate (shredded tires) in a layer below the track ballast is an effective measure to reduce vibration transfer; other measures, such as ballast mats, a resiliently supported track, high-compliance rail fasteners or column isolation, are also available and may be appropriate in some locations, such as on structures. Specific vibration-isolation designs to mitigate impacts to below the FTA criteria will be determined during final design.
4.7	Noise and Vibration	Noise and Vibration	Long-Term	Special trackwork, such as a moveable-point or spring frog will be used in place of a conventional frog where cross-overs (the point at which two rails cross) will otherwise cause a noise or vibration impact.
4.7	Noise and Vibration	Noise and Vibration	Construction	Where existing noise walls will require relocation, the relocation will be completed as early in the construction process as practical so that the relocated walls will reduce noise from the ongoing construction activities. When required, Sound Transit or its contractor will seek the appropriate noise variance from the local jurisdiction.
4.7	Noise and Vibration	Noise and Vibration	Construction	<p>Construction noise and vibration control mitigation will include the following measures, as necessary, to meet required noise limits and minimize vibration:</p> <ul style="list-style-type: none"> <li>Install construction site noise barrier or noise wall by noise-sensitive receivers where feasible and appropriate.</li> <li>Use smart backup alarms during nighttime work that automatically adjust, or lower the alarm level or tone based on the background noise level, or switch off back-up alarms and replace with spotters.</li> <li>Use low-noise emission equipment.</li> <li>Implement noise-deadening measures for truck loading and operations.</li> <li>Monitor and maintain equipment to meet noise limits.</li> <li>Use lined or covered storage bins, conveyors, and chutes with sound-deadening material.</li> <li>Use acoustic enclosures, shields, or shrouds for equipment and facilities.</li> <li>Install high-grade engine exhaust silencers and engine-casing sound insulation.</li> </ul>

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				<p>Prohibit aboveground jack hammering and impact pile driving during nighttime hours.</p> <p>Minimize the use of generators or use whisper-quiet generators to power equipment.</p> <p>Limit use of public address systems.</p> <p>Use movable noise barriers at the source of the construction activity, where appropriate.</p> <p>Limit or avoid certain noisy or high vibration activities during nighttime hours.</p> <p>Demolish existing structures near vibration-sensitive receivers with methods that do not cause impact forces against the buildings or near them.</p> <p>Minimize use of vibratory soil compactors and vibratory hammers near vibration-sensitive receivers.</p> <p>Use oscillatory pile-casing techniques where appropriate.</p> <p>Avoid using variable-frequency vibratory hammers in dense residential areas, such as around the NE 130th Street, NE 145th Street, NE 155th Street, and NE 185th Street Stations.</p> <p>Avoid conventional vibratory hammers. An alternative to conventional vibratory pile drivers is a resonance-free vibrator or variable eccentric moment vibrator.</p>
4.8	Ecosystem Resources	Environmentally sensitive resources	Construction	Sound Transit's construction contractor will implement construction BMPs that will apply to all work in or around sensitive areas. The construction contractor will work within construction limits marked with fencing and signage to prevent unintended impacts on riparian vegetation, wetlands, woodlands, and other sensitive sites outside of the construction limits.
4.8	Ecosystem Resources	Aquatic habitat	Construction	Temporary work trestles will be used in extremely sensitive areas, where practical, such as the Scriber Creek wetland complex.
4.8	Ecosystem Resources	Aquatic habitat	Construction	BMPs will be employed for fish and aquatic habitat protection. All work below the ordinary high water mark will comply with the terms and conditions set forth in the HPA issued by WDFW for the project.
4.8	Ecosystem Resources	Vegetation and wildlife	Long-term	Sound Transit will coordinate with WSDOT, local jurisdictions, and resource agencies conducting restoration projects in the area to minimize the potential for the presence of light rail facilities to interfere with future restoration projects.
4.8	Ecosystem Resources	Aquatic habitat	Construction	To reduce the risk of adverse effects on migrating salmonids, Sound Transit will require construction contractors to direct lighting away from fish-bearing waters and to place hoods or shields on lights, as needed, to minimize the amount of backlight or dispersed

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				light cast toward the water's surface.
4.8	Ecosystem Resources	Surface water	Construction	For water quality protection, the project will obtain and adhere to a construction stormwater general permit under the National Pollutant Discharge Elimination System (NPDES) permit program to reduce or eliminate stormwater pollution and other impacts on surface waters. A construction stormwater pollution prevention plan (SWPPP), approved by Ecology, will also be implemented before the start of construction. The plan will include BMPs to (1) prevent erosion, (2) prevent sedimentation, and (3) identify, reduce, eliminate, or prevent stormwater contamination and water pollution from construction activity. The construction stormwater pollution prevention plan will include a temporary erosion and sediment control (TESC plan) that includes BMPS such as silt fences; protective ground covers such as straw, plastic sheeting, or jute mats; and straw bales in drainage features; spill prevention, control, and countermeasures plan; concrete containment and disposal plan; dewatering plan; and a fugitive dust plan.
4.8	Ecosystem Resources	Vegetation and wildlife	Construction	Measures will be implemented before and during project construction to avoid or minimize effects on vegetation and wildlife resources such as minimizing vegetation clearing, restoring temporarily affected areas, and preparing and implementing a revegetation plan.
4.8	Ecosystem Resources	Vegetation and wildlife	Construction	In accordance with the Migratory Bird Treaty Act, Sound Transit will consult with the U.S. Fish and Wildlife Service on measures to avoid impacts on migratory birds. Measures likely to be required may include pre-construction surveys for migratory birds and/or restrictions on vegetation clearing during the breeding season for migratory birds. Except where hazard trees pose an immediate threat to light rail safety or reliability, vegetation maintenance and hazard tree removal will be conducted outside of the breeding season for migratory birds.
4.8	Ecosystem Resources	Vegetation and wildlife	Construction	Sound Transit will implement appropriate measures to minimize the risk of introduction and spread of noxious and invasive species, including restoring temporarily disturbed areas as soon as practical following construction activities.
4.8	Ecosystem Resources	Vegetation and wildlife	Construction	To minimize use of herbicides and fertilizers, restoration of disturbed areas will include the use of mulching, ground cover, and other planting strategies that discourage growth of undesirable species.
4.8	Ecosystem Resources	Stormwater runoff and flow	Long-term	Sound Transit will also implement design and operation BMPs for permanent stormwater runoff treatment and flow control. These will include natural or engineered dispersion BMPs; biofiltration BMPs such as vegetated filter strips, biofiltration swales, or ecology embankments; wet-pool BMPs; and infiltration BMPs. The project will route

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				drainage to maintain existing stream basin contributing areas.
4.8	Ecosystem Resources	Unavoidable impacts	Long-term	<p>Long-term impacts on wetlands and wetland buffers will be mitigated through the use of available approved mitigation banks, the King County in-lieu fee program, or project-specific mitigation developed by Sound Transit. Compensatory mitigation will be implemented in accordance with applicable federal, state, and local requirements and guidelines. Mitigation for unavoidable impacts on streams, stream buffers, and wildlife habitat will comply with local critical areas ordinances. Sound Transit's actions to mitigate for impacts on wetlands and wetland buffers (e.g., planting native trees and shrubs near wetland areas) will help offset the loss of some habitat for wildlife and contribute to improved ecological function of nearby streams and stream buffers. Tree planting required for compliance with WSDOT's and local jurisdictions' tree protection rules will also mitigate for impacts on streams, stream buffers, and wildlife habitat. Potential sites currently under consideration for project-specific mitigation for impacts on wetlands and wetland buffers are:</p> <p>North Seattle Community College Campus            Jackson Park Golf Course/5th Avenue NE            NE 145th Street Vicinity            NE 155th Street Station Vicinity            Ballinger Lake Golf Course            Scriber Creek Wetland Complex (Wetland WLY4)</p>
4.9	Water Resources	Water Resources	Long-term & construction	The project would comply with all federal, state, and location regulations and apply all required BMPs to prevent or minimize long-term impacts, such as low-impact development (LID) approaches, where applicable, and stormwater flow control and water quality treatments as identified in Table 4.9-1 in the EIS. Sound Transit will mitigate construction impacts by complying with the NPDES Permit program, and implementing practices in its Construction Stormwater Pollution Prevention Plan.
4.10	Energy Impacts	Energy Impacts	Long-term & construction	No specific mitigation is proposed.
4.11	Geology and Soils	Geology and Soils	Long-term & construction	No specific mitigation is proposed. Sound Transit will use appropriate engineering design standards and BMPs to avoid adverse impacts.
4.12	Hazardous Materials	Hazardous Materials	Construction	To mitigate impacts from potential contaminated sites in the project area, Sound Transit will perform environmental due diligence for properties along the project corridor before property acquisition. Sound Transit will perform a Phase I Environmental Site Assessment (ESA) on properties to be acquired or that have substantial associated

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				<p>construction activities. A Phase II ESA might be necessary for property acquisition or for construction purposes if the Phase I ESA determines that the property has a likelihood of contamination. The results of these assessments could be used to establish the condition of acquisition properties and to determine plans for cleanup and construction management, as needed. Ecology will be notified if unknown contamination is encountered during an assessment. Some previously contaminated properties might require longer-term covenants, restrictions, or other remedial activities, which will be approved by Ecology.</p>
4.12	Hazardous Materials	Hazardous Materials	Construction	<p>To address potential impacts on environmental resources from construction activities, Sound Transit will implement applicable BMPs. These will include requiring contractors to prepare hazardous material management plans, construction stormwater pollution prevention plans, health and safety plans, spill control and prevention plans, contaminated media management plans, and lead and asbestos abatement programs, as necessary. These plans will establish the procedures for managing hazardous materials in accordance with state and federal regulations. To the extent practicable, Sound Transit will limit construction activities that might encounter contaminated groundwater or contaminated soil.</p>
4.13	Electromagnetic Fields	Electromagnetic Fields	Long-term & construction	<p>No specific mitigation is proposed.</p>
4.14	Public Services	Public Services	Construction	<p>Sound Transit will coordinate with the Shoreline Fire Department during final design to avoid construction impacts to Station No. 65, and to define measures to minimize impacts on response times and operations.</p>
4.14	Public Services	Public Services	Long-term & construction	<p>During final design and construction, Sound Transit will coordinate with the Edmonds School District to minimize property impacts on School District properties in Segments B and C.</p>
4.14	Public Services	Public Services	Construction	<p>Sound Transit will provide regular updates to schools, emergency service providers, local agencies, and postal services. It will also assist public school officials in providing advance and ongoing notices to students and parents about construction activity near schools.</p>
4.15	Utilities	Utilities	Long-term & construction	<p>Design standards and BMPs will minimize impacts. Coordination with utility providers and outreach to the public during construction and operation will minimize service disruptions and associated impacts. Sound Transit will conduct potholing and preconstruction surveys to identify utility locations. Sound Transit will follow safety protocols to protect the public and construction workers.</p>



Table N-1. Mitigation Plan

EIS Chapter/Section	Resource	Impact Topic	Period	Mitigation Description
4.16	Cultural, Archaeological, and Historic Resources	Cultural, Archaeological, and Historic Resources	Construction	<p>To minimize the risk of damage to currently unknown archaeological resources, Sound Transit will develop an Inadvertent Discovery Plan prior to ground-disturbing construction activities. FTA and Sound Transit will coordinate with the State Historic Preservation Office (SHPO) and tribes to review the plan. In addition, archaeologists will conduct training for contractors to help them identify potential archaeological remains during construction; the training will also cover protocols to implement if something is discovered.</p> <p>If potentially significant archaeological materials or sites (or evidence thereof) are discovered during construction, activities will be halted around the find. All reasonable measures will be taken to avoid or minimize harm to the property until such time as FTA and Sound Transit, in consultation with the SHPO and the tribes, determine that appropriate measures have been taken to ensure that the project is in compliance with Section 106 of the National Historic Preservation Act.</p> <p>The Inadvertent Discovery Plan also will describe the procedures that Sound Transit and FTA will follow if any human remains are discovered during project construction.</p>
4.17	Parks and Recreational Resources	Parks and Recreational Resources	Long-term	<p>Ridgecrest Park: In coordination with the City of Shoreline, Sound Transit will provide landscaping and restoration of the affected area and place a barrier between the light rail facility and the park to function like the existing berm in buffering I-5 noise and views of I-5. The project will also design and rebuild 1st Avenue NE from NE 159th to NE 161st Street, in coordination with the City, and transfer replacement property at the south end of the park, or other property as agreed to with the City, consistent with the requirements of Forward Thrust. The replacement land will be developed to a level comparable to the displaced park area, and the design process will include outreach in the adjacent neighborhood to inform roadway and park design, in coordination with the City.</p>
4.17	Parks and Recreational Resources	Parks and Recreational Resources	Construction	<p>Shoreline Park and Stadium: Sound Transit will restore affected areas after construction, and will coordinate access improvements and construction activities with the Shoreline School District.</p>
4.17	Parks and Recreational Resources	Parks and Recreational Resources	Construction	<p>Trails: For all temporary trail closures or reroutes associated with construction, Sound Transit will coordinate with appropriate local jurisdictions to develop detours and to provide public information and signed detour routes during construction to allow for continued connections.</p>

