SEPA MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

SEATTLE DEPARTMENT OF TRANSPORTATION

CONSTRUCTION OF FIRST HILL STREETCAR

DESCRIPTION OF PROPOSAL: The City of Seattle, through a funding and cooperative agreement with Sound Transit, proposes to construct a new streetcar line and 10 stations to serve the Capitol Hill, First Hill, Central District, Chinatown/International District and Pioneer Square areas of Seattle. This 2.5-mile line would connect the First Hill employment/activity center to the regional transit system and to intercity passenger rail, provide local transit service, accommodate economic development, and contribute to neighborhood vitality. The system is expected to operate for 20 hours per day (approximately 5:00 am to 1:00 am), with 10 minutes between streetcar arrivals during the peak hours and 15 minutes between arrivals during off-peak hours.

Vicinity Description. The project would occur within six neighborhood areas: Pioneer Square, the International District, Central District, Yesler Terrace, First Hill, and Capitol Hill. All six neighborhoods have a mix of commercial and residential uses.

Track Alignment and Roadway Configuration. The proposed track alignment and roadway configuration allows for mixed-flow operations of the streetcar and automobiles and a balance of competing uses of the right-of-way for all modes of travel, parking and loading, and utilities.

***Stop Platforms*.** Streetcar stops would be provided within the street right-of-way in a variety of configurations, including center island platforms serving stops in each direction of travel, paired center and side platforms, and side platforms at termini. Typical streetcar station platforms would range from 9 to 14 feet in width.

Traction Power System. The streetcar would be powered with a traction power system featuring traction power substations (TPSS) and an overhead contact system. Up to four TPSS may be required.

***Maintenance Facility*.** The streetcar maintenance facility would be comprised of a building, approximately 100 feet by 150 feet, where light maintenance activities would be performed and streetcar operations staff would have an office, lockers, and dispatch facilities, as well as a yard for the secure storage of eight streetcars. Two optional locations are proposed: E Yesler Way between Boren Avenue and 12th Avenue S, or the City of Seattle's Charles Street Service Center at 8th Avenue S and S Charles Street.

If the location on E Yesler Way is selected, the maintenance facility would be coordinated with and would not preclude future development on the property by the Seattle Housing Authority (SHA). SHA anticipates developing multifamily residential units, ground-floor retail, and associated parking on the site. The maintenance facility would be developed first and would remain in operation regardless of SHA development plans. On this site, the maintenance yard would be covered by a parking structure, and the maintenance facility roof would be a multi-

purpose green space for use by tenants of the adjacent SHA uses. The SHA uses would be independent of the maintenance base and subject to subsequent environmental review.

If the location at S Charles Street is selected, the maintenance facility would share this site with other City of Seattle vehicle storage, maintenance, inspection and dispatch uses. If necessary to avoid displacement of these existing uses, the project may include construction of a new parking deck over a steeply sloped portion of the site.

***Utility Protection and Relocation*.** The project would include measures to protect existing public utilities in place and, if necessary, modification or relocation of conflicting utilities. Protection measures may include high-resistivity concrete for secondary stray current protection and cathodic protection through the use of sacrificial anodes.

***Streetcar Operations*.** The First Hill Streetcar would be a modern streetcar system, operating low-floor light rail vehicles primarily in mixed-flow with general purpose traffic on city streets. Modern streetcars provide easy, accessible access, excellent ride quality, premium passenger amenities, and route clarity.

PROPONENT: Seattle Department of Transportation
Seattle Municipal Tower
700 5th Avenue, Suite 3900
P.O. Box 34996
Seattle, WA 98124-4996

LOCATION OF PROPOSAL: The proposed project is located in the Capitol Hill, First Hill, Central District, Chinatown/International District and Pioneer Square areas of Seattle, Washington. The First Hill Streetcar line extends from E Denny Way southward along Broadway Avenue to E Yesler Way, eastward to 14th Avenue S, southward to S Jackson Street, and westward to 2nd Avenue S. A proposed maintenance facility would be located at either E Yesler Way between Boren Avenue and 12th Avenue S, or the City of Seattle's Charles Street Service Center at 8th Avenue S and S Charles Street. The project is located in Section 5, Township 24 North, Range 4 East, and Section 32, Township 25 North, Range 4 East.

LEAD AGENCY: Seattle Department of Transportation, nominal lead agency; Sound Transit, co-lead agency.

SEPA DETERMINATION: Seattle Department of Transportation, as lead agency for this proposal, after reviewing a completed environmental checklist, technical discipline reports, and other information on file, has determined with concurrence from Sound Transit that the project will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c), provided the SEPA conditions listed below are used to mitigate potential adverse impacts. Information on file for this project may be examined in the Seattle Department of Planning and Development Public Resource Center at 700 Fifth Avenue, Suite 200, Seattle. Documents are also available at the Central Library (1000 Fourth Avenue), Capitol Hill Branch, and International District/Chinatown Branch of the Seattle Public Library.

This MDNS is issued pursuant to WAC 197-11-350 and SMC 25.05.350. The Seattle Department of Transportation will not act on this proposal for fourteen (14) days from the issue date below. **Comments must be submitted by 5:00 p.m. October 18, 2010 to the agency contact below.**

ISSUE DATE: October 4, 2010

SEPA RESPONSIBLE OFFICIAL:

Peter Hahn
Director, Seattle Department of Transportation

Signature: Peter E. Hahn Date: 29 Sept. 2010

Date of Publication in the Seattle Daily Journal of Commerce: October 4, 2010

AGENCY CONTACT:

Ethan Melone, Rail Transit Manager
Telephone: 206-684-8066
Email: ethan.melone@seattle.gov

You may appeal this determination by submitting a Notice of Appeal and a $50.00 filing fee **no later than 5:00 p.m. on October 25, 2010 to:**

Office of the Hearing Examiner
700 Fifth Avenue, Suite 4000
P.O. Box 94729, Seattle, WA 98124-4729

The appellant should be prepared to make specific factual objections.

Contact the Hearing Examiner at (206) 684-0521 to ask about or to make arrangements to read the procedures for SEPA appeals [SMC 25.05.680 (B)(2)].

CONDITIONS – SEPA

The SEPA Environmental Checklist and associated appendices and responses to requests for information all comprise SDOT's record. Conditions imposed pursuant to SEPA assume installation of many mitigating devices, structures and measures identified in the SEPA Checklist and associated appendices. Pursuant to SMC 25.05.600.D.1, SDOT relies on the SEPA Environmental Checklist in conditioning project approval. The following conditions shall apply based on the project specific analysis and will be included as commitments in design and specifications for the construction contractor:

Earth. Temporary erosion and sediment controls will be used during construction to ensure that excavated soils and construction materials are not deposited on city streets or flowing into city conveyance piping. Controls on stormwater during construction will include:

- Preparing and implementing a stormwater pollution prevention plan and spill prevention plan to meet the requirements of SMC 22.800, as well as the City of Seattle Standard Plans and Specifications for Municipal Construction.
- Staging all construction equipment outside of any sensitive or critical area.
- Requiring the contractor to follow the City of Seattle Standard Specification for Road, Bridge, and Municipal Construction (Section 1-07.5, Prevention of Environmental Pollution and Preservation of Public Natural Resources). The contractor also will be required to follow the Regional Road Maintenance Endangered Species Act Program Guidelines for maintenance category "Road Way Surface" (1.24-1.27) and outcome categories "to Reduce Potential for Soil from Becoming Water or Airborne" (page 2.18), "Filter/Perimeter Protection" (page 2.19), and "Reducing Water Velocity/Erosive Force" (page 2.21).
- Using catch basin filters in catch basins located down-gradient of each of the project sites to prevent sediments and construction-related pollutants from entering the storm drainage system during construction. Periodic maintenance and replacement of filters will be performed.
- Covering trucked stockpiles with impervious barriers for protection from rain, mitigating any erosion or runoff.

Air. The construction contractors will be required to comply with relevant federal, state, and local air quality regulations, including the Puget Sound Clean Air Agency regulations. During construction, measures that will be implemented to minimize construction effects in the project vicinity will include some or all of the following:

- Covering stockpiles and spraying exposed soil with water or other dust palliatives to reduce emissions of particulate matter.
- Covering all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck) to reduce particulate emissions during transportation.
- Sweeping to remove particulate matter deposited on paved public roads.
- Prompt cleanup of any spills of transported material on public roads by frequent use of a street sweeper machine or other appropriate methods.
- Placing quarry spall aprons where trucks enter public roads to reduce mud track-out.
- Routing and scheduling construction trucks to reduce delays in traffic during peak travel times, to reduce secondary air quality impacts caused by increased congestion.
- Reducing idling time for vehicles and equipment
- Requiring contractors to maintain all construction machinery engines and required emission control devices in good mechanical condition to minimize exhaust emissions.

Water. The measures to prevent erosion described above also will protect water quality. No additional measures are proposed.

Energy and Natural Resources. Energy conservation features required by the City's building code will be incorporated into the maintenance building design. The following mitigation measures will reduce energy consumption:

- Limiting idling of construction equipment and employee vehicles
- Planning to minimize double handling of fill and construction materials
- Maintaining equipment in good condition
- Recycling materials generated during construction and using recycled materials
- Locating construction staging areas as close as possible to work sites

Environmental Health. Measures that will reduce or control hazards include:

- Developing project specifications to include how contamination will be addressed if encountered during construction. Include conditions on the discovery and management of hazardous substances as a condition of the City-issued Street Use Permit.
- Performing vapor surveys (i.e., photo-ionization detection) during construction activities in the areas near former and current leaking underground storage tanks.
- If not already completed, perform a thorough site reconnaissance, including a visual survey of building materials containing lead-based paint, lead, asbestos-containing materials, and polychlorinated biphenyls on structures planned for demolition.

Noise – construction. Construction mitigation will be incorporated into construction plans and contractor specifications in the construction contract. Measures to reduce or control noise and vibration impacts include:

- Using properly sized and maintained mufflers, engine intake silencers, and engine enclosures on construction equipment.
- Turning off idling equipment.
- Staging stationary equipment as far away from sensitive receptors as possible. When infeasible, place portable noise barriers around equipment.
- Substituting hydraulic or electric models for impact tools such as jack hammers, rock drills and pavement breakers. Electric pumps could be specified if pumps are required.
- Restricting particularly loud activities, such as pavement breaking, within approximately 300 feet of any residences to the hours from 10:00 pm to 7:00 am.
- Ensuring that all equipment using backup alarms use ambient-sensing alarms that broadcast a warning sound loud enough to be heard over background noise but without having to use a preset, maximum volume. Alternately, a broadband backup alarm could be used instead of typical pure tone alarms.
- Ensuring protection of any sensitive buildings identified that will be vulnerable to damage from streetcar line construction or operation (including vibration) by receiving a Certificate of Approval from the Pioneer Square Preservation Board or the International Special Review District Board to repair or stabilize them in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Noise – operation. During final design the noise analysis will be updated and provide specific definition of any necessary noise mitigation to be included in the project design. The final design noise analysis will be performed using the FTA detailed methodology and will review final crossover location and design and vehicle running noise.

Track curves with radii less than 1,000 feet have the potential for wheel "squeal" noise. The streetcar will operate at low speeds on the proposed small radius curves. On the City's South Lake Union Streetcar line, operation through similar curves, with similar vehicles and operating speeds, does not generate wheel squeal. However, measures will be taken to reduce the potential for wheel squeal and to mitigate wheel squeal if it does occur. Vehicle specifications and discussions with the vehicle manufacturer will evaluate options to accommodate the anticipated curve radii and to reduce or eliminate squeal. Use of resilient, damped, or profiled wheels can substantially reduce squeal, and the rail material used in tight-curve areas also could be changed to reduce or eliminate squeal. If there is substantial wheel squeal after the facility begins operation, rail lubrication will be implemented on the curves.

To eliminate the potential to exceed the noise limits at the E Yesler Way maintenance site, several mitigation measures will be employed, including:

- Ensuring that the exterior walls of the maintenance building provide a minimum of 30 dBA of reduction for interior to exterior noise
- Closing maintenance bay doors during the operation of pneumatic tools or during metal banging between the hours of 10:00 pm and 7:00 am.

Construction vibration. Mitigation of construction vibration will entail careful consideration of the use of large equipment near existing buildings, and especially near older buildings. The use of impact equipment for pavement removal or placement of piles will be avoided within approximately 100 feet of known fragile cast-iron water mains or within approximately 25 feet of other fragile underground utilities or historic buildings and areaways.

Housing. The City of Seattle will coordinate with the Seattle Housing Authority, currently the major property owner of the E Yesler Way site. To reduce potential displacement impacts, the City of Seattle/SHA will give advance notice to the building tenants for the need to vacate the property consistent with existing lease agreements. In addition, mitigation for the businesses or residents being displaced will comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, and the Washington Relocation Assistance-Real Property Acquisition Policy Act of 1971 as amended.

Aesthetics. Aesthetic impacts of the overhead contact system will be minimized where feasible through the use of joint use poles and wireless operating segments. Joint use pole attachments may be accomplished by attaching to existing poles (where the location and structural capacity of the existing pole is adequate), or by moving existing pole attachments to new poles and removing obsolete poles.

Light and Glare. Directional, shielded exterior lighting will be used to reduce or control light and glare at the maintenance facility and stops.

Historic and Cultural Preservation. Mitigation measures during construction will include some or all of the following:

- Scheduling construction activities to minimize effects on tourism and peak/seasonal shopping periods
- Providing information on alternative parking where parking is lost due to construction

- Following best management practices to control noise in historic districts
- Ensuring continued access to stores, offices, and residences
- Developing a communications program to keep those in historic districts informed about construction issues
- Coordination with the Seattle Historic Preservation Officer, the International Special Review District Board, and the Pioneer Square Preservation Board, as needed

Transportation – traffic operations. To mitigate potential adverse impacts on traffic operations (including bus transit speed and reliability), the project includes the following mitigation measures:

- Restricting peak hour left-turn movements from northbound Broadway to westbound E Pine Street
- Converting 14th Avenue S from two-way general purpose operations to one-way northbound general purpose operations, with southbound streetcar-only operations
- Restricting left-turn movements from westbound S Jackson Street to southbound 2nd Avenue Extension S
- Restricting the existing left-turn from southbound 2nd Avenue Extension S to S Jackson Street to bus only

These measures will be implemented either at project opening, or when intersection delay at these locations increases significantly beyond existing conditions.

Transportation – bicycles. To mitigate potential adverse impacts on bicycle travel, the project includes the following mitigation measures:

- Constructing and maintaining a two-way separated bicycle facility (cycle track) on the east side of Broadway between E Denny Way and E Yesler Way. The facility will be designed according to best practices in bicycle facility design, such as appropriate buffers or barriers, signage and striping, signalization, restriction of right-on-red vehicle movements, bike queuing areas for left turn movements, and other best practices identified during the design process.
- Constructing and maintaining bicycle lanes on E Yesler Way from Broadway to 14th Avenue S

Transportation – parking. For customer trips that will not be served by the streetcar, the project will mitigate the impacts on short-term parking through the following parking management measures:

- Installing parking wayfinding signage in affected neighborhood districts, as well as on-line parking maps and information consistent with the City's E-Park program. This will include static wayfinding signs and may include real-time parking information signs with participating private parking garages. These measures will enhance ease of access to and utilization of off-street short-term parking for customers.
- Implementing on-street parking management measures in affected neighborhood districts, including increased use of time-limited and paid parking where high parking utilization ratios (approaching 85 percent) indicate that these measures will be effective in increasing the availability of short-term customer parking.

Utilities. The following measures will be taken to minimize service disruptions:

- Not using impact equipment for pavement removal within 100 feet of known fragile cast-iron water mains or within 25 feet of other fragile underground utilities or historic buildings.
- Coordinating with utility providers and preparing a utility relocation plan to assure minimization of potential disruptions and provide information on construction schedules and sequencing. When more than a short service disruption will occur, temporary connections to businesses and residences will be provided.