MOTION NO. M2016-17

Operations and Maintenance Agreement with University of Washington for Vibration and Magnetic Fields

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Operations and Administration Committee	02/04/16	Recommend to Board	Ahmad Fazel, DECM Executive Director **Joseph Gildner, Executive Project Director – University Link Extension**
Board	02/25/16	Final Action	**Julie Marshall, Corridor Design Manager – Systems**

PROPOSED ACTION

Authorizes the chief executive officer to execute the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement (Segment 1) During Revenue Service.

KEY FEATURES SUMMARY

- The Master Implementation Agreement (MIA), adopted in 2007 and amended in 2014, provided terms and conditions for Sound Transit's access and use of University of Washington (UW) property for purposes of constructing, operating, monitoring and maintaining the light rail transit system. The MIA anticipated development of follow-on agreements including one documenting detailed vibration and magnetic field monitoring programs prior to revenue service. This Operations and Maintenance Agreement for Vibration and Magnetic Fields (MF) On University of Washington Transportation Easement (Segment 1) During Revenue Service (the "Vibration and MF Agreement") implements that directive in the MIA.
- Under this Vibration and MF Agreement, Sound Transit is responsible for providing a long-term vibration monitoring program, while the UW is responsible for providing a long-term magnetic field monitoring program.
- The Vibration and MF Agreement provides detailed communication and reporting protocols between Sound Transit and the UW for notification and verification of, and response to, suspected and confirmed vibration and magnetic field threshold exceedances and trends.
- The agreement re-states the liquidated damages provisions of the MIA in order to clarify when and how the provisions would take effect if Sound Transit exceeds the thresholds for magnetic field and vibration or Sound Transit's vibration monitoring system fails.
- The Vibration and MF Agreement covers only operation of the University Link Extension; the UW and Sound Transit plan to amend or replace this agreement with one that incorporates the tunnel that will pass under the campus (i.e., "Segment 2") prior to the start of revenue service of the Northgate Link Extension.

BACKGROUND

University Link Extension is a 3.15-mile light rail extension located entirely underground with tunnels traveling east from Pine Street, under the I-5 freeway to an underground station at Capitol Hill, continuing north beneath SR 520 and the Lake Washington Ship Canal to an underground station on the UW campus, located near Husky Stadium.

In 2007, Sound Transit and the UW entered into the MIA, which established terms and conditions for access and use of UW property for purposes of constructing, operating, monitoring, and maintaining the light rail transit system. University officials were intensely focused on protecting

their sensitive research facilities from potential impacts from magnetic fields and vibration created by light rail operations under campus. The MIA identified magnetic field and vibration thresholds for 26 UW buildings, as well as mitigation and operations monitoring requirements, to prevent and/or mitigate impacts to UW research from magnetic fields and vibration caused by Link operations. The MIA included financial disincentives by way of liquidated damages provisions, for exceeding thresholds established for magnetic field and vibration impacts directly associated with light rail operations, and for failing to maintain an effective monitoring vibration monitoring system.

The MIA was amended in 2014. The amendment established thresholds for operational vibration and magnetic field levels higher than originally defined in the MIA for some sensitive buildings near the light rail line under the UW campus, substantially reducing Sound Transit's risk of not achieving or maintaining these levels during operations. Sound Transit agreed to operate light rail transit service at or below the newly established thresholds for all sensitive receiver buildings identified in the MIA. The UW accepted the responsibility for relocating, or otherwise mitigating impacts, to all sensitive research facilities at the receiver end that would be impacted by light rail operations generating vibration or magnetic field levels equal to or less than the newly established thresholds. The UW also accepted the responsibility for designing, implementing, and maintaining a continuous and long-term magnetic field monitoring system. The amendment authorized a lump sum payment to the UW which compensated for and funded the UW's implementation of lab relocation or other additional receiver-based mitigation measures and the UW's implementation of the magnetic field monitoring.

The MIA anticipated that Sound Transit and the UW would enter follow-on agreements to support a range of design, construction, and operations functions. The University granted Sound Transit transportation easements for two light rail segments on UW property: University Link (Segment 1), which comes from the south and ends at the northern end of the University of Washington Station, and Northgate Link (Segment 2) which goes north from the University of Washington Station and travels in a northwesterly direction through the UW campus. The MIA specifically required an operating agreement for a detailed vibration and magnetic field monitoring program be developed before revenue service of each segment.

The proposed Vibration and MF Agreement establishes the detailed vibration and magnetic field monitoring program that fulfills the MIA requirement for University Link (Segment 1). The agreement implements, interprets, and is consistent with prior Board agreements between Sound Transit and the UW with regard to vibration and magnetic fields, and provides additional detail and clarification on the parties' roles, responsibilities, and communications protocols for vibration and magnetic fields.

Sound Transit will be responsible for providing a long-term vibration monitoring program and the UW is responsible for providing a long-term magnetic field monitoring program. This Vibration and MF Agreement establishes criteria to ensure the UW's magnetic field monitoring program provides accurate and timely communication of suspected exceedances, and take steps to reduce "false positives" or exceedances that are not attributable to Sound Transit. The agreement provides detailed communication and reporting protocols between Sound Transit and the UW for notification and verification of, and response to, suspected and confirmed vibration and magnetic field threshold exceedances and trends.

The Vibration and MF Agreement covers only operation of the University Link Extension; the UW and Sound Transit plan to amend or replace this agreement with one that incorporates the tunnel that will pass under the campus (i.e., "Segment 2) prior to the start of revenue service of the Northgate Link Extension.

PROJECT STATUS

Project Identification	Alternatives Identification	Conceptual Engineering	Preliminary Engineering	Final Design	Construction

Projected Completion Date for Construction Phase: 4Q 2015
Project scope, schedule and budget summary located on page 7 of the September 2015 Agency Progress Report.

FISCAL INFORMATION

The liquidated damages described in the 2007 MIA were established for vibration and magnetic field threshold exceedances and are only enforceable under this operating agreement if they are confirmed to be directly attributable to the light rail system. The 2014 Board action to pay and relocate a University research facility was a onetime occurrence to reduce Sound Transit's risk of exceeding the thresholds during normal operations of revenue service. Sound Transit has demonstrated that normal operations of the light rail system are at or below the established thresholds for both vibration and magnetic fields.

Capital outlays to install monitoring equipment was funded through the University Link project. Ongoing monitoring of vibration will be incorporated into the agency's regular maintenance program which will be funded from purchased transportation services within the Link annual operating budget. The 2016 purchased transportation services budget is $37,094,526.* The Board adopted the 2016 operating budget in December 2015.

Estimated costs for the future years for monitoring vibration will be included in annual budgeting cycles beyond 2016.

** Link purchased transportation services budget can be found on page 33 of the Proposed 2016 Budget.*

SMALL BUSINESS/DBE PARTICIPATION AND APPRENTICESHIP UTILIZATION

Not applicable to this action.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

A one-month delay would not create a significant impact to the project schedule.

PRIOR BOARD/COMMITTEE ACTIONS

Motion No. M2014-35: Authorized the chief executive officer to execute an amendment to the Master Implementation Agreement with the University of Washington to establish new vibration and magnetic field level thresholds that Sound Transit will meet during operation of light rail transit under University property, confirms the University's approval of the University Link and Northgate Link Extensions final design, mitigation plan, and monitoring plan, and includes compensation to the University of Washington in the amount of $43,300,000 to relocate or otherwise mitigate anticipated impacts to sensitive research labs and activities.
Motion No. M2007-62: Authorized the chief executive officer to execute a Master Implementation Agreement with the University of Washington establishing terms and conditions to acquire access to and use of University of Washington property for purposes of design, construction, operation, monitoring, and maintenance of Link light rail transit system for a total authorized agreement amount of $35,200,000.
Resolution No. R2000-08: Approved a Memorandum of Agreement with the University of Washington related to the purchase of University of Washington property to build a portion of the Central Link Light Rail line on and adjacent to University of Washington owned property.

ENVIRONMENTAL REVIEW

JI 11/16/2015

LEGAL REVIEW

JW 1/28/2016

SOUNDTRANSIT

MOTION NO. M2016-17

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement (Segment 1) During Revenue Service.

BACKGROUND:

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MOTION:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement (Segment 1) During Revenue Service.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on February 25, 2016.

Dow Constantine
Board Chair

ATTEST:

Kathryn Flores
Board Administrator