



Motion No. M2024-13

Contract Amendment for Extended Series 2 LRV Engineering Inspection services by Hatch Associates Consultants Inc.

Meeting:	Date:	Type of action:	Staff contact:
System Expansion Committee	03/14/2024	Final action	Ron Lewis, DECM Executive Director Tracy Reed, Deputy Executive Director Project Management & Program Strategy Shankar Rajaram, Executive Project Director – Revenue Vehicles

Proposed action

Authorizes the chief executive officer to execute a contract modification with Hatch Associates Consultants Inc. (formerly known as LTK Engineering) to (1) extend engineering consulting and inspection services for the 152 Series 2 Light rail vehicles (LRVs) in the amount of \$5,499,667 with a 10 percent contingency of \$549,966, not to exceed \$6,049,633 and (2) support the purchase and delivery of 10 additional Series 2 LRVs from Siemens, contingent on Board approval of Motion No. M2024-14, in the amount \$3,509,917, with a 10 percent contingency of \$350,992, not to exceed \$3,860,909, for a new total authorized contract amount not to exceed \$30,853,185.

Key features summary

- This action would authorize a contract modification with Hatch Associates Consultants Inc. (Hatch) to provide funding for an approximately two-year extension of engineering and inspection services for the delivery and commissioning of 152 LRVs, and, if authorized by the Board through Motion No. M2024-14, to provide engineering and inspection for the manufacture, delivery, and commissioning of the 10 additional LRVs.
- This Board authorization includes a modification not to exceed \$3,509,917, plus 10% contingency, to support the delivery of the 10 additional LRVs. The 10 additional LRVs would be scheduled to complete delivery no later than Q1 2028.
- Delays experienced during the commissioning phase of the project since 2020 due to the Covid-19 pandemic, later than planned mainline access to the Link OMF East facility, and other challenges have resulted in a longer project duration and additional resources needed to complete the delivery of 152 LRVs.
- After Board approval of Resolution No. R2023-35 in November 2023, the Series 2 LRV Conditional Acceptance milestone for the 152nd LRV was extended by approximately eighteen months to Q4 2025, and the Conditional Acceptance of the 162nd LRV was established as no later than end of Q1 2028.
- The current contract with Hatch is split between services for the Hilltop Tacoma Link Extension (HTLE) vehicles and the Series 2 LRV project. The HTLE portion of the contract amount is

\$4,909,424. If this contract modification and M2024-14 are approved, the Series 2 LRV project portion of the contract's not to exceed amount would be \$25,943,761.

Background

Delays in onsite commissioning during the qualification phase of the LRV Fleet Expansion Project between 2020 and 2021 resulted in approximately one-and-a-half-year schedule slip to the Conditional Acceptance milestone and two-year schedule slip to the Final Acceptance milestone for the 152 LRV fleet. These delays have resulted in the need for two additional years of support resources for the commissioning effort. Also, the commissioning support during COVID years between 2020 and mid-2022 required higher than planned resources such as field inspectors to ensure reliable coverage. As a result, additional time and funds are needed to complete the delivery of 152 LRVs.

In September 2014, the Board approved Motion No. M2014-46, a contract with LTK Engineering Services, LLC to provide support in the preparation of contract documents and technical specifications for the LRV procurement and to prepare reports, schedules, cost estimates, and inspection services for the initial 40 vehicles required for the Northgate Link Extension.

In April 2016, the Board approved Motion M2016-42, modifying the contract to include services related to supporting the procurement of streetcar vehicles for the Hilltop Tacoma Link Extension.

In February 2019, the Board Motion No. M2019-12, modifying the contract to provide engineering and inspection services for an additional 112 light rail vehicles in support of ST2 and ST3 light rail system expansion projects through 2024.

Purchasing 10 additional LRVs through the existing Siemens Industry, Inc. contract will help to alleviate the projected service capacity shortages by bringing the service levels closer to the original 2016 ST2 plan. It has the advantage of utilizing an approved design verified by successful qualification tests and enables Siemens to reuse the existing manufacturing jigs and expedite delivery of the additional cars to Seattle for commissioning and acceptance at least four years earlier than would otherwise be feasible through the future Series 3 LRV delivery. Modifying the existing LRV oversight contract with Hatch will likewise allow continuous support to Sound Transit, and to continue to provide engineering and inspection services through delivery and acceptance of the additional 10 Series 2 LRVs.

Procurement Information

A Request for Qualifications was advertised in January 2014 for ST2 Light Rail Vehicles (LRV) Engineering and Inspection Consultant Services in accordance with requirements for Architect/Engineer contracts. On February 25, 2014, four firms provided submittals and they were all determined to be responsive. Evaluations were held in March using the evaluation criteria published in the solicitation, where price was not a factor in accordance with requirements. LTK Engineering (now Hatch Associates Consultants Inc.) was determined to be the most qualified firm and was invited to enter into negotiations.

The negotiated price for this cost-plus-fixed-fee (CPFF) contract was determined to be fair and reasonable by the Contract Specialist in conjunction with the project team and moved forward for recommendation to award by the Capital Committee on July 10, 2014. The contract was executed with LTK Engineering Services, LLC on July 24, 2014. Sound Transit agreed to a novation of this Contract on 11/15/2022 when consultant firm merged with Hatch Associates Consultants, Inc. ("Hatch"). The Contract, now with Hatch, has been amended once to support the Series 2 LRV project and three times to support LRV purchases from Brookville for the Hilltop Tacoma Link Extension.

This action would approve modifying the contract to provide additional quantities of the LRV engineering and inspection services that have already been performed under the contract and are a part of the

original scope of the contract. The original scope included assistance with the purchase and commissioning of LRV's as well as on-going inspection and engineering consulting. The schedule for completion is expected to be in 2028. The authorized amount is intended to cover the entire period. The support for the purchase and delivery of 10 additional Series 2 LRVs is from Siemens.

The following are the justifications for using the contract with Hatch for additional engineering and inspectional services: (1) Hatch has specific knowledge of the design of Series 2 LRVS and the open unresolved issues. Using the existing contract will ensure continuity of the same group of professionals who are delivering the 152 LRVs. (2) Hatch is familiar with the Series LRV contract terms and conditions with Siemens. (3) We have a need for seamless coverage of engineering and inspection activities regarding our LRVs and there is a significant benefit of knowledge base and cost efficiencies to having only one consultant to work on this. (4) Time is a significant factor in the purchase of the additional vehicles and there would be a 6-month procurement process to hire services through a new contract.

The term of the contract is through completion of project services. The term will thus be extended only relative to additional services provided and a specific term extension will not be used.

A cost analysis was performed on the price for the change, which evaluated each cost element with profit as its own element. The costs were also evaluated against the ICE that had been prepared prior to the receipt of the cost proposal. The final price for the change was then determined to be fair and reasonable by the Contract Specialist in conjunction with the project team.

Fiscal information

This is a concurrent action with Contract Modification with Siemens Industry Inc. for 10 Additional Light Rail Vehicles and Spare Parts Motion No. M2024-14.

This action is within the baseline budget and sufficient monies remain after approval of this action to fund the remaining work in the Construction Services phase. The current project budget is included in the existing Long Range Financial Plan.

The baseline budget for the Series 2 LRV Fleet Expansion project is \$836,874,000. Within that amount, \$31,684,885 has been set aside in the Construction Services phase. Within the Construction Services phase, \$30,025,000 has been allocated to the budget line item for LRV engineering and inspection. The action would commit \$9,910,542 to this line item and leave a budget balance of \$4,016,544.

Series 2 LRV Fleet Expansion
(in thousands)

Phase	Authorized Project Allocation	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration	\$18,020	\$9,124	\$0	\$9,124	\$8,896
Construction Services	31,685	16,156	9,911	26,066	5,619
Vehicles	787,169	\$776,956	-	776,956	10,213
Total	\$836,874	\$802,236	\$9,911	\$812,146	\$24,728

Phase Detail - Vehicles					
LRV Eng & Inspection	\$30,025	\$16,098	\$9,911	\$26,008	\$4,017
Other Vehicles	1,660	58	-	58	1,602
Total Phase	\$31,685	\$16,156	\$9,911	\$26,066	\$5,619

Hatch incl. former LTK Engineering	Board Approvals to Date	Proposed Action	Proposed Total for Board Approval	Current Contract Spend Status
Hatch Contract - Series 2 LRV	\$2,845	\$9,010	\$11,855	\$1,995
Hatch Contingency - Series 2 LRV	0	901	901	-
Hatch Total - Series 2 LRV	2,845	9,911	12,756	1,995
LTK Contract - Series 2 LRV	13,188	-	13,188	13,188
LTK Contingency - Series 2 LRV	-	-	-	-
LTK Total - Series 2 LRV	13,188	-	13,188	13,188
LTK Contract - Hilltop Tacoma Link	4,640	-	4,640	4,640
LTK Contingency - Hilltop Tacoma Link	269	-	269	-
LTK Total - Hilltop Tacoma Link	4,909	-	4,909	4,640
Total Contract	20,674	9,010	29,683	19,823
Total Contingency	269	901	1,170	-
Total Contract Amount	\$20,943	\$9,911	\$30,853	\$19,823
Percent Contingency	1%	10%	4%	0%

Notes:
 Amounts are expressed in Year of Expenditure \$000s.
 System Testing and Start-up are combined with Vehicles.
 For detailed project information, see page 70 of 194 in the 2024 Financial Plan and Proposed Budget.
 * Board Approvals = Commitment and PO Contingency Remaining as of 1/31/2024.

Disadvantaged and small business participation

Participation by small businesses and disadvantaged business enterprises (DBEs)

Sound Transit promotes and encourages small business participation, which also includes disadvantaged business enterprises (DBEs). Consistent with Sound Transit Policies and federal regulations, Sound Transit has established small business/DBE goals for this contract. These goals are based upon an examination of subcontracting opportunities contained in the work of this contract and the number of small businesses/DBEs available to perform such subcontracting work.

For this specific contract, the following goals were set and Hatch Associates Consultants Inc. (formerly known as LTK Engineering) has committed to the following small business/DBE participation:

Small business and disadvantaged business enterprise (DBE) goals	
Sound Transit small business goal: 6%	Sound Transit DBE Goal: 0%
Small business commitment: 6%	DBE commitment: 0%
Small business participation: 27.64%	Current DBE participation: 0%

Public involvement

Not applicable to this action.

Time constraints

Timely action on this item is required to support negotiation on the pricing for the additional LRVs.

Prior Board/Committee actions

Resolution No. R2023-35: (1) Amended the Light Rail Vehicle Fleet Expansion project baseline budget by increasing the allocated project baseline budget by \$96,156,000 from \$740,718,000 to \$836,874,000 to allow for the purchase of 10 additional light rail vehicles, additional spare parts, and to replenish contingency for the remainder of commissioning Sound Transit's existing 152 vehicle order, (2) revised the Project Completion Milestone from September 2024 to two distinct Completion Milestones -- Q4 2025 for Conditional Acceptance of the existing order of 152 light rail vehicles, and Q1 2028 for Conditional Acceptance of the additional 10 light rail vehicles, and (3) changed the project name from "Light Rail Vehicle Fleet Expansion" to "Series 2 Light Rail Vehicle Fleet Expansion."

Motion No. M2022-09: Authorized the chief executive officer to execute contract modifications to specific light rail vehicle contracts for the Hilltop Tacoma Extension with: a) Brookville Equipment Corporation for light rail vehicles in the amount of \$5,000,000, with a 10 percent contingency of \$500,000 totaling \$5,500,000, for a new total authorized contract amount not to exceed \$35,725,025; and b) LTK Engineering Services LLC for light rail vehicle testing and inspection services in the amount of \$874,191, with a 10 percent contingency of \$87,419 totaling \$961,610, for a new total authorized contract amount not to exceed \$4,909,264. All contingent upon Board approval of Budget Amendment through Resolution No. R2022-03.

Motion No. M2020-34: Authorized the chief executive officer to execute a contract modification with LTK Engineering Services, LLC to provide light rail vehicle engineering and inspection consultant services for the Hilltop Tacoma Link Extension in the amount not to exceed \$1,816,194, with a 10 percent contingency of \$181,619 totaling \$1,997,814, for a new total authorized contract amount not to exceed \$19,981,033, contingent upon Board approval of Resolution No. R2020-12.

Motion No. M2019-12: Authorized the chief executive officer to execute a contract modification with LTK Engineering Services LLC to provide light rail vehicle engineering consulting and inspection services for ST2 and ST3 light rail system expansion projects in the amount of \$10,304,751, with a 10% contingency of \$1,030,475, totaling \$11,335,226, for a new total authorized contract amount not to exceed \$17,983,219.

Motion No. M2016-42: Authorized the chief executive officer to amend the contract with LTK Engineering Services, LLC to provide light rail vehicle engineering and inspection consultant services for the Tacoma Link Expansion in the amount of \$1,950,000 for a new total contract amount of \$6,647,993.

Motion No. M2014-46: Authorized the chief executive officer to execute a contract with LTK Engineering Services, LLC to provide light rail vehicle engineering and inspection services for the Northgate Link Extension for a total authorized contract amount not to exceed \$4,697,993.

Environmental review – KH 2/29/24

Legal review – JSA 3/12/24

Motion No. M2024-13

A motion of the System Expansion Committee of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract modification with Hatch Associates Consultants Inc. (formerly known as LTK Engineering) to (1) extend engineering consulting and inspection services for the 152 Series 2 Light rail vehicles (LRVs) in the amount of \$5,499,667 with a 10 percent contingency of \$549,966, not to exceed \$6,049,633 and (2) support the purchase and delivery of 10 additional Series 2 LRVs from Siemens, contingent on Board approval of Motion No. M2024-14, in the amount \$3,509,917, with a 10 percent contingency of \$350,992, not to exceed \$3,860,909, for a new total authorized contract amount not to exceed \$30,853,185.

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Motion

It is hereby moved by the System Expansion Committee of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract modification with Hatch Associates Consultants Inc. (formerly known as LTK Engineering) to (1) extend engineering consulting and inspection services for the 152 Series 2 Light rail vehicles (LRVs) in the amount of \$5,499,667 with a 10 percent contingency of \$549,966, not to exceed \$6,049,633 and (2) support the purchase and delivery of 10 additional Series 2 LRVs from Siemens, contingent on Board approval of Motion No. M2024-14, in the amount of \$3,509,917, with a 10 percent contingency of \$350,992, not to exceed \$3,860,909, for a new total authorized contract amount not to exceed \$30,853,185.

APPROVED by the System Expansion Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 14, 2024.



Claudia Balducci
System Expansion Committee Chair

Attest:



Kathryn Flores
Board Administrator