

## Motion No. M2019-12

### Modification for Additional LRV Engineering & Inspection Consultant Services

Meeting:	Date:	Type of action:	Staff contact:
System Expansion Committee	02/14/2019	Final action	Ron Lewis, DECM Executive Director, Tracy Reed, Deputy Executive Director, PM – New and Existing Facilities <b>Shankar Rajaram, Engineering Manager – Rail Vehicles</b>

### Proposed action

Authorizes 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.

### Key features summary

- This action modifies the contract with LTK Engineering Services LLC (LTK) to exercise the option contained in the original contract to provide engineering and inspection services for an additional 112 light rail vehicles (LRVs) in support of ST2 and ST3 light rail system expansion projects through 2024, including East Link, Lynnwood Link, Federal Way Link, and Downtown Redmond Link Extensions.
- This action also provides funding for an increased level of effort in engineering and inspection services relative to the 40 LRVs authorized by the Board through Motion No. M2014-46.
- The scope of work includes preparing technical specifications, procurement, and design review, testing, inspection, and certification for the 112 LRV's. Additionally, LTK will provide subject matter expert services to support Sound Transit staff for the original 40 LRVs and to evaluate the LRV design and the customization of special tools to integrate the Siemens vehicles with the Operations and Maintenance Facility.

### Background

The ST2 and ST3 system expansion plans include funding to purchase new low floor LRVs to deliver service on approximately 45 miles of new light rail lines including Northgate Link, Lynnwood Link, East Link, Federal Way Link, and Downtown Redmond Link Extensions as well as Hilltop Tacoma Link Extension. The LRV Fleet Expansion Project was established in November 2008 to initiate work on procuring vehicles early enough to support Northgate Link Extension's delivery schedule.

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.

The successful passage of the ST3 Plan in November 2016 led to a re-evaluation of Sound Transit's Rail Fleet Management Plan. In April 2017, the Sound Transit Board modified the LRV Fleet Expansion Project Baseline (Resolution No. R2017-15) to fund the total order of the 152 LRVs included in the Siemens contract to enable the delivery of Federal Way Link and Downtown Redmond Link Extensions by 2024, and to increase Sound Transit's total vehicle purchase from Siemens to its current level. The current action modifies LTK's contract to increase the engineering support and inspection services for an additional 112 LRVs consistent with the modified project baseline schedule.

This modification also addresses a higher than anticipated level of effort by LTK for engineering and inspection services for the first 40 LRVs including:

- Additional subject matter expert resources required to support Sound Transit staff during the design phase in 2017 and 2018.
- Unforeseen evaluation of the LRV design and the customization of special tools was needed to integrate the Siemens vehicles with the Operations and Maintenance Facility equipment, such as jack lifts, fall protection equipment, and wheel truing adapters.

## **Procurement information**

A Request for Qualifications was issued in January 2014 for ST2 Light Rail Vehicles (LRV) Engineering and Inspection Consultant Services. On February 25, 2014, four firms submitted a Statements of Qualifications (SOQ). Each submitter was evaluated on their past performance in connection with similar work, overall team capacity and project organization, knowledge and experience of key individuals, qualifications of the Project Manager, good faith efforts and commitment to DBEs and small businesses and equal employment opportunity (EEO) commitment.

LTK was selected as the highest ranked firm and a contract was negotiated and executed on July 24, 2014 to provide engineering and inspection services to support the purchase of new Light Rail Vehicles required to fulfill the ST2 ballot measure, which included the East Link Extension, Lynnwood Link Extension, the Tacoma Link Extension as well as the light rail extension from Sea-Tac International Airport to Federal Way.

## **Fiscal information**

This action is within the authorized project allocation to date and sufficient monies remain after approval of this action to fund the remaining work in the construction services phase as contained in the current cost estimates.

The authorized project allocation to date budget for the LRV Fleet Expansion project is \$740,718,000. Within the construction services phase, \$17,080,000 has been allocated to the budget line item for LRV Engineering & Inspection. The proposed action would commit an additional \$11,335,226 to this line item and leave a remaining budget balance of \$938,074.

## LRV Fleet Expansion

(in thousands)

Project Phase	Proposed Project Allocation to Date	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration	\$6,367	\$1,501	\$	\$1,501	\$4,866
Preliminary Engineering					
Final Design					
Third Party					
Right of Way					
Construction					
Construction Services	18,040	\$4,807	\$11,335	\$16,142	\$1,898
Vehicles	716,311	\$685,492	\$	\$685,492	\$30,819
<b>Total Current Budget</b>	<b>\$740,718</b>	<b>\$691,799</b>	<b>\$11,335</b>	<b>\$703,135</b>	<b>\$37,583</b>
<b>Phase Detail - Construction Services</b>					
LRV Engineering & Inspection	\$17,080	\$4,807	\$11,335	\$16,142	\$938
Other Construction Services Phase	960	0		0	960
<b>Total Phase</b>	<b>\$18,040</b>	<b>\$4,807</b>	<b>\$11,335</b>	<b>\$16,142</b>	<b>\$1,898</b>

Contract Detail	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
<b>LTK Engineering Services</b>				
Contract Amount_LRV Fleet Expansion	\$4,698	\$4,698	\$10,305	\$15,003
Contingency_LRV Fleet Expansion			1,030	1,030
<b>Total LRV Fleet Expansion</b>	<b>\$4,698</b>	<b>\$4,698</b>	<b>\$11,335</b>	<b>\$16,033</b>
Contract Amount Hilltop Tacoma Link Extension	\$1,950	\$1,950		\$1,950
Contingency Hilltop Tacoma Link Extension				
<b>Total Hilltop Tacoma Link Extension</b>	<b>\$1,950</b>	<b>\$1,950</b>	<b>\$</b>	<b>\$1,950</b>
Contract Amount Total	\$6,648	\$6,648	\$10,305	\$16,953
Contingency Total			1,030	1,030
<b>Total Contract</b>	<b>\$6,648</b>	<b>\$6,648</b>	<b>11,335</b>	<b>\$17,983</b>
Percent Contingency	0%	0%	10%	6%

**Notes:**

Amounts are expressed in Year of Expenditure \$000s.  
 Board Approvals = Committed To-Date + Contingency as of Dec 2018, and includes pending Board actions.  
 For detailed project information, see page 82 of 212 of the 2019 Financial Plan and Proposed Budget

## Small business/DBE participation

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 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%	Small business commitment: 6%
DBE goal: 6%	DBE commitment: 6%

## 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. 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: Authorizes 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.

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**Environmental review** – KH 1/24/19

**Legal review** – JEN 02/08/2019



## Motion No. M2019-12

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 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.

### Background

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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 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..

APPROVED by the System Expansion Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on February 14, 2019.

  
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Claudia Balducci  
System Expansion Committee Chair

**Attest:**

  
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Kathryn Flores  
Board Administrator