MOTION NO. M2015-82

Contract for Three Hi-rail Non-Revenue Vehicles

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Operations and Administration Committee	09/03/2015	Final Action	Bonnie Todd, Executive Director of Operations **George D. McGinn, Central Link Maintenance Manager**

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract with Nelson Truck Equipment Co. to purchase three specialized hi-rail non-revenue vehicles to support Link operations and maintenance for a total not-to-exceed contract amount of $546,584.

KEY FEATURES SUMMARY

- This action authorizes the purchase of three hi-rail non-revenue vehicles (NRV) to maintain and repair power, track, signal, and related components for Link operations and maintenance. They will be used for regular repairs and inspections and for responding to operations or maintenance emergencies, such as Overhead Contact System (OCS) failures, rail breaks, switch failures or floating slab failures.
- The vehicles include hi-rail equipment that will allow them to travel directly on the Link track system. This will allow the Link light rail staff to access all areas of the track/rail system including the University Link tunnel, Angle Lake, and the existing Link segments.
- The current number of fleet hi-rail-equipped NRVs is insufficient to support regular maintenance and emergency response through the new University Link tunnel, Angle Lake and existing Link segments.
- Each of the three NRVs have been designed specifically for the Link alignment and each has a separate specification that will allow it to service the Link traction power, track, and signals systems, respectively.
- These NRVs have a life expectancy of seven to ten years and will provide support for the current alignment and future University Link/Angle Lake segments. They are included in the start-up equipment list for University Link and are eligible for federal grant funding.

BACKGROUND

The Link light rail system uses three types of rail – embedded rail, ballast rail and direct fixation rail. Embedded rail is used in the Downtown Seattle Transit Tunnel and along Martin Luther King Jr. Blvd. and allows buses and other non-specialized vehicles to travel over the tracks. Ballast rail is the common track design used along railroad right of ways. It contains materials such as rail, ties, and ballast (rocks). Direct fixation rail is used along elevated guideways and in rail tunnels. Direct fixation rail is supported with a curbed concrete structure elevating the rail from the bridge structure deck and/or tunnel floor. The University Link tunnel is entirely direct fixation rail. Hi-rail NRVs are designed to travel directly on ballast and direct fixation rail.

Sound Transit currently has a fleet of four hi-rail-equipped NRVs used to support daily Link wayside power & signal maintenance activities. The current fleet is insufficient for maintaining the University and South 200th Link Extensions.

Each NRV provides specific functions to assist with repairs and maintenance of different operating systems. The function of each system and the NRV requested for procurement are described below:

- Traction Power System: The Traction Power System provides the power to operate Link light rail trains and includes overhead wires, poles, auto-tension assemblies, sub-stations and related equipment.
    - *Vehicle needed:* F-550 Traction Power: This NRV is outfitted with specialized equipment including hi-rail, lift gate, and crane. This allows the traction power staff to access all areas relative to power distribution throughout the U-Link tunnel and existing Link segments. The lift gate and crane allow staff to load/un-load tools, equipment, and materials used in the regular maintenance and repair activities typically found in a light rail system.

- Track System: The Track System includes bridge and tunnel structures, direct fixation rail, ballast rail, ultra-straight rail, embedded rail and special track work, as well as related plinths, ties, flange lubrication and floating slabs.
    - *Vehicle needed:* F-550 Track: This NRV is outfitted with specialized equipment including hi-rail and a multi-power unit. This allows the track staff to access all areas relative to the track/rail system throughout the University Link tunnel and existing Link segments. The multi-power unit allows staff to combine compressed air, hydraulic pump and generator functions into a single multi-use unit. This equipment allows for remote use of power tools requiring pneumatic, hydraulic or electric power used in the regular maintenance and repair activities typically found in a light rail system.

- Signals System: The signals system includes switches to allow light rail vehicles to transfer from, to, and across opposing track segments, as well as pocket tracks, turn back tracks, interlocks, and crossovers. The Signals System allows for the safe and controlled movement of the light rail vehicles throughout the Link Light Rail system.
    - *Vehicle needed:* F-450 Signals: This NRV is outfitted with hi-rail equipment. This allows the Signals staff to access all areas relative to the signals system throughout the University Link tunnel and existing Link segments. At this time, Sound Transit does not possess a hi-rail equipped NRV for signal systems. This vehicle is required for access to the University Link tunnel segment signal system. This specialized NRV equipment allows regular maintenance and repair activities typically found in a light rail system.

Sound Transit issued a request for proposals on January 23, 2015. Two proposals were received. An evaluation committee reviewed the proposals based on a pre-set criteria and Nelson Truck Equipment Co. ranked highest based on overall best value criteria.

FISCAL INFORMATION

The lifetime budget in the 2015 Transportation Improvement Plan (TIP) for the University Link Extension is $1.756 billion. Within that amount $576,000 has been set aside for Non-Revenue Vehicles in the Construction phase. The proposed action would increase the commitment of $127,552 for this line item by $546,584 to a revised total commitment of $674,136, and result in a budget shortfall of $98,136, which will be funded from available uncommitted budget within the Construction phase. Should the proposed action be approved, the Construction phase will have a remaining budget balance of $160,078,834.

This action is within the adopted budget and sufficient monies remain after approval of this action to fund the remaining work in the Construction phase as contained in the current cost estimates. Use of Construction phase unallocated contingency is not required for this action.

University Link Extension

	2015 TIP	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration	113,554	73,620		73,620	39,935
Preliminary Engineering	24,261	24,261		24,261	-
Final Design	89,308	87,081		87,081	2,227
Right of Way	152,332	125,631		125,631	26,701
Construction	1,158,183	997,558	547	998,104	160,079
Construction Services	95,814	84,861		84,861	10,953
Third Party Agreements	18,646	12,510		12,510	6,136
Vehicles	103,909	99,206		99,206	4,703
Total Current Budget	**1,756,007**	**1,504,727**	**547**	**1,505,274**	**250,733**

Phase Detail
Construction

Non-Revenue Vehicles	576	128	547	674	(98)
Other Construction	1,029,315	997,430		997,430	31,885
Construction Unallocated Contingency	128,292	-		-	128,292
Total Phase	**1,158,183**	**997,558**	**547**	**998,104**	**160,079**

Contract Detail **Nelson Truck Equipment Co.**	**Board Approvals to Date**	**Current Approved Contract Status**	**Proposed Action**	**Proposed Total for Board Approval**
Contract Amount	-	-	547	547
Contingency	-	-	-	-
Total	**-**	**-**	**547**	**547**
Percent Contingency	0%	0%	0%	0%

Budget Shortfall Funding	98
Other Construction Uncommitted Budget	31,885
Remaining Other Construction Budget	31,787

Notes:
Amounts are expressed in Year of Expenditure $000s.
Board Approvals = Committed To-Date + Contingency, and includes pending Board actions.
2015 TIP = Project budget located on page 39 of the 2015 Transit Improvement Plan (TIP) as endorsed in Board Resolution R2014-36 adopted by the ST Board on 12/18/14.

SMALL BUSINESS/DBE PARTICIPATION AND APPRENTICESHIP UTILIZATION

Sound Transit determined that few Small Business and DBE subcontracting opportunities based upon the work described in this contract, so Small Business/DBE goals were not established or required.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

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

ENVIRONMENTAL REVIEW

JI 07/24/15

LEGAL REVIEW

LA 28 August 2015

SOUNDTRANSIT

MOTION NO. M2015-82

A motion of the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with Nelson Truck Equipment Co. to purchase three specialized hi-rail non-revenue vehicles to support Link operations and maintenance for a total not-to-exceed contract amount of $546,584.

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MOTION:

It is hereby moved by the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with Nelson Truck Equipment Co. to purchase three specialized hi-rail non-revenue vehicles to support Link operations and maintenance for a total not-to-exceed contract amount of $546,584.

APPROVED by the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on September 3, 2015.

Paul Roberts
Operations and Administration Committee Chair

ATTEST:

Kathryn Flores
Board Administrator