

MOTION NO. M2011-20
Rail Engineering and Investigation Services for Link Light Rail

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:	PHONE:
Capital Committee	03/10/11	Final Action	Ahmad Fazel, DECM Executive Director Barry Alavi, Project Manager	206-398-5389 206-398-5433

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract with Advanced Rail Management Corporation to provide investigative and technical services in assessing noise and vibration issues associated with the Link light rail system in the amount of \$499,868, with a 10% contingency of \$49,987, for a total authorized contract amount not to exceed of \$549,855.

KEY FEATURES

- The contractor will review and assess the existing rail conditions for Central and Airport Link and provide recommendations to manage system wear and noise.
- The scope includes the following:
 - Review existing light rail vehicle (LRV) wheel and suspension system.
 - Perform rail profile and wear survey.
 - Measure actual wheel profile of new wheels and sample wheel profile of in-service wheels.
 - Review adequacy of existing rail lubrication system.
 - Develop recommended rail profiles to reduce noise with LRV wheels.
 - Recommend modifications to existing wheel lubrication system.
- Following completion of review and assessment, the contractor will prepare a final report with complete recommendations on existing system modifications, future system design, and ongoing maintenance items and schedule. In addition, the consultant may provide limited investigative testing and rail grinding at select locations to validate the recommendations pending separate negotiations and Board authorization.

PROJECT DESCRIPTION

The 14-mile Initial Segment of the Central Link light rail line has a northern terminus in the Pine Street Stub Tunnel (PSST), with passenger service beginning at Westlake Station serving downtown Seattle, the SODO industrial area, Beacon Hill, Rainier Valley, and Tukwila. Passenger stations include Westlake, University Street, Pioneer Square, International District/Chinatown, Stadium, SODO, Beacon Hill, Mount Baker, Columbia City, Othello Rainier Veach, and Tukwila International Boulevard.

Airport Link is a 1.7-mile light rail extension between the Tukwila International Boulevard Station and the SeaTac International Airport. The Airport Link route is a combination of elevated and at-grade guideway, and includes a light rail station near the main terminal of the Airport, a pedestrian bridge, and a pick-up and drop-off facility located on the east side of International Boulevard in the City of SeaTac.

FISCAL INFORMATION

Budget Table

(Year of Expenditure \$000)

Initial Segment	Adopted 2011 Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
Agency Administration	184,333	183,758		183,758	575
Preliminary Engineering	33,275	33,269		33,269	6
Final Design	144,142	143,939		143,939	203
Right of Way	206,729	204,529		204,529	2,200
Construction	1,203,397	1,196,674	490	1,197,164	6,232
Construction Services	104,912	105,617		105,617	(705) ⁽¹⁾
Third Party Agreements	61,409	61,917		61,917	(508) ⁽²⁾
Vehicles	131,803	131,803		131,803	(0)
Total Current Budget	2,070,000	2,061,506	490	2,061,996	8,004

Construction Phase Detail

Other Miscellaneous Construction	11,290	9,024	490	9,514	1,776
Other Construction	1,192,107	1,187,650		1,187,650	4,456
Total Phase	1,203,397	1,196,674	490	1,197,164	6,232

Airport Link

	Adopted 2011 Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
Agency Administration	11,859	9,413		9,413	2,446
Preliminary Engineering	3,691	3,666		3,666	25
Final Design	15,924	15,840		15,840	84
Right of Way	12,513	12,010		12,010	503
Construction	193,601	188,071	60	188,131	5,470
Construction Services	15,539	15,439		15,439	100
Third Party Agreements	1,387	1,454		1,454	(67) ⁽²⁾
Vehicles	14,587	14,587		14,587	-
Total Current Budget	269,100	260,480	60	260,540	8,560

Construction Phase Detail

Other Miscellaneous Construction	8,251	7,555	60	7,615	637
Other Construction	185,350	180,516		180,516	4,834
Total Phase	193,601	188,071	60	188,131	5,470

Contract Amount	Board Approvals to Date (F)	Current Approved Contract Value (G)	Proposed Action (H)	Proposed Total for Board Approval (I)	Proposed Contract Value (J)
Contract Amount - Initial Segment	-	-	445	445	445
Contract Amount - Airport Link	-	-	54	54	54
Total Contract Amount	-	-	500	500	500
Contingency - Initial Segment	-	-	45	45	45
Contingency - Airport Link	-	-	5	5	5
Total Contingency	-	-	50	50	50
Total Contract - Initial Segment	-	-	490	490	490
Total Contract - Airport Link	-	-	60	60	60
Total Contract	-	-	550	550	550
Percent Contingency	0%	0%	10%	10%	10%

(B) COMMITTED TO DATE amounts are from Agency WBS Report as of January 2011 + approved and pending board actions not recorded as of 1/31/11, or submitted after that date, and include allocated contingencies.

(1) "SHORTFALL" to the Adopted 2011 Budget for Construction Services phase of the Initial Segment project: "Committed to Date" amount shown here reflects the pending board motion for Payne Jones Group, Inc. to provide additional CM services for Residential Sound Insulation Program (RSIP) construction to mitigate noise in the Rainier Valley, which will be funded from unallocated contingency within the construction phase of the projects.

(2) "SHORTFALL" to the Adopted 2011 Budget for Third Party Agreements phases of the Initial Segment and Airport Link projects: "Committed to Date" amounts shown here include unused funds authorized for allocated contract contingencies that will be decommitted as these contracts complete.

SMALL BUSINESS PARTICIPATION

Sound Transit Goal: 0%
Commitment: 39.8%

Subconsultant/Subcontractor	Business Type	% of Work	Dollar Value
Acoustic Strategies	Small Business	18.8%	\$93,932
Michael Minor	DBE	8.8%	\$43,888
Rail Sciences	Small Business	12.3%	\$61,372
Total		39.8%	\$199,184

APPRENTICE UTILIZATION COMMITMENT

Not applicable to this action.

EQUAL EMPLOYMENT WORKFORCE PROFILE

51 employees; 14% women; 16% minorities.

BACKGROUND

Prior to the start of revenue service for the Central Link Initial Segment in July 2009, Sound Transit began receiving complaints from Rainier Valley and Tukwila residents about noise from LRVs. Testing performed in October 2010 revealed that in certain locations, LRV-related noise exceeded Federal Transit Administration (FTA) criteria. The FTA Record of Decision for the Central Link project requires Sound Transit to mitigate noise above the FTA criteria.

In certain locations, the condition of the Link rail surface contributed to LRV noise levels exceeding FTA criteria. Sound Transit has successfully implemented a number of measures to reduce LRV-related noise below the FTA criteria including rail grinding and lubrication. In an ongoing effort by Sound Transit to mitigate Light Rail noise levels, this action authorizes the consultant to investigate the characteristics of the rail/wheel interface and make recommendations for measures to reduce noise and develop a comprehensive maintenance plan to maintain noise levels within the FTA criteria. The maintenance plan will address existing issues, as well as future design considerations that will need to be incorporated into the design of future Link extensions.

Advanced Rail Management Corporation was selected through a competitive procurement process. A request for qualifications for these services was issued on November 4, 2010. Six submittals were received. One submittal was deemed non-responsive and was removed from consideration. After the remaining five submittals were evaluated, Advanced Rail Management Corporation was selected and staff negotiated a contract for these services. Negotiations with Advanced Rail Management Corporation were successfully concluded on February 8, 2011.

ENVIRONMENTAL COMPLIANCE

JI 02/16/2011

TIME CONSTRAINTS

A one month delay would not create a significant impact to operations or maintenance.

LEGAL REVIEW

LA 3/4/11

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A motion of the Capital Committee of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with Advanced Rail Management Corporation to provide investigative and technical services in assessing noise and vibration issues associated with the Link light rail system in the amount of \$499,868, with a 10% contingency of \$49,987, for a total authorized contract amount not to exceed of \$549,855.

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MOTION:

It is hereby moved by the Capital Committee of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with Advanced Rail Management Corporation to provide investigative and technical services in assessing noise and vibration issues associated with the Link light rail system in the amount of \$499,868, with a 10% contingency of \$49,987, for a total authorized contract amount not to exceed of \$549,855.

APPROVED by the Capital Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 10, 2011.



Fred Butler
Capital Committee Chair

ATTEST:



Marcia Walker
Board Administrator