

**Board Report**

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**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
JANUARY 16, 2020****SUBJECT: P2000 LIGHT RAIL VEHICLE (LRV) POWERED AXLE ASSEMBLY OVERHAUL****ACTION: CONTRACT AWARD****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award a 60-month, Indefinite Delivery/Indefinite Quantity (IDIQ) Contract No. MA53169000 to Pamco Machine Works, the lowest responsive and responsible bidder, for the overhaul of P2000 Light Rail Vehicle (LRV) Powered Axle Assembly Overhaul. This award is a not-to-exceed amount of \$3,132,902 subject to resolution of protest(s), if any.

**ISSUE**

This procurement is for the acquisition of Powered Axle Assembly overhaul services as described by the Original Equipment Manufacturer (OEM) established maintenance guidelines. This project encompasses overhaul of fifty-two (52) LRVs in addition to (10) spare Powered Axle assemblies or 228 axle assemblies in total. Completion of this overhaul ensures the P2000 fleet remains in a constant State of Good Repair (SGR) while safeguarding passenger safety, vehicle performance and equipment longevity.

**DISCUSSION**

The P2000 Light Rail Vehicle (LRV) fleet is in its eighteenth (18) year of revenue operation with the highest mileage car at 1.75 million miles and a cumulative fleet mileage of 45 million miles. To ensure continued passenger safety and equipment reliability the Powered Axle Assembly overhaul is recommended by the OEM at a time base interval of 4 years. The Powered Axle Assembly consists of heavy-duty mechanical components including axle sets, wheels, traction gear units, brake disc, ground rings and journal bearings assemblies. Wear and tear of these component are predictable, necessitating periodic overhauls accomplished by a vendor with specialized equipment and mechanical expertise.

The P2000 Powered Axle Overhaul is in its 2nd overhaul cycle since and is (1 of 5) systems currently under a component overhaul program. This overhaul is defined by the OEM as a standard maintenance activity to be completed every 4 years. Other systems include Coupler, Friction Brake & Air Compressor, Auxiliary Inverter (completed), and GTO Driver Board Overhaul (completed).

Metro's Transit Asset Management and Operations staff conducted a condition assessment of the

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P2000 fleet in the fall of 2016. The P2000 fleet's overall State of Good Repair (SGR) rating is 2.45 out of 5.0 for an overall adequate rating. This represents an asset that has reached its mid-life and has some moderately defective or deteriorated components. The condition assessment suggested that by performing the recommended OEM mid-life (Modernization) overhauls, currently accomplished under a separate project, overhauling or replacing in-kind the Propulsion equipment, Heating Ventilation & Cooling (HVAC) equipment, Traction Motors, and Auxiliary Power equipment, the vehicles would then be expected to reach the intended design life of 30-years based on statistical condition decay models.

Rail Fleet Services (RFS) Engineering developed an equipment overhaul specification for the Powered Truck Assembly overhaul based upon the OEM recommendations and with RFS maintenance experience. The contractor will perform overhaul services in accordance with a defined schedule and with Metro's technical specifications requirements.

Metro's Diversity & Economic Opportunity Department (DEOD) did not establish a goal for this procurement based on the lack of subcontractor opportunities.

### **DETERMINATION OF SAFETY IMPACT**

Safety is of the utmost importance to Metro and, therefore, it is imperative to maintain the P2000 fleet without deferred maintenance and in a constant state of good repair. The Powered Axle Assembly overhaul will be accomplished in conjunction with the Modernization overhaul program thereby ensuring the fleet is overhauled in accordance with regulatory standards, according to the defined schedule and technical specifications requirements, and within Metro's internal standards, policies and procedures. This procurement is part of the on-going LRV preventive maintenance program.

### **FINANCIAL IMPACT**

Funding in the amount of \$100,000 for this procurement is included in the FY20 budget under account 50316, Professional and Technical Services, Cost Center 3940, Executive Director, Rail Maintenance, Project 300055, Gold Line Operations.

Since this is a multi-year contract, the cost center Manager, Project Manager, and Sr. Executive Officer will ensure that the balance of funds are budgeted in future fiscal years.

### **IMPACT TO BUDGET**

The current source of funds for this action are Fares, Prop A, Measure R, Measure M, State SB1, STA, Cap and Trade, and Federal formula grants. Using these funding sources will maximize allowable project funding allocations given approved provisions and guidelines.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Approval of this recommendation supports the following Metro Strategic Plan Goal 2, Deliver outstanding trip experience for all users of the transportation system.

### **ALTERNATIVES CONSIDERED**

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Deferral of this program is not recommended as the Powered Axle Assembly is an integral component of the vehicle systems that if not properly maintained could result in equipment failures, service delays, risk to passenger safety, with negative impact to vehicle available and reliability.

**NEXT STEPS**

Overhaul of the P2000 LRV Powered Axle Assembly overhaul will continue in accordance with Rail Fleet Services' scheduled requirements. If approved, the project is scheduled to commence in February 2020.

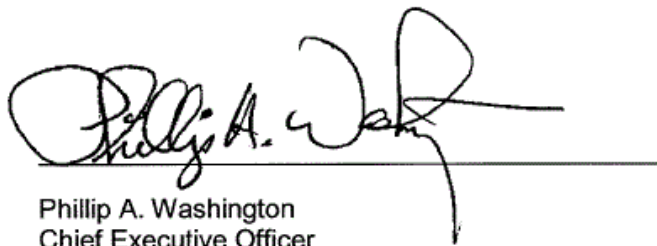
**ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - DEOD Summary

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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

### P2000 Light Rail Vehicle (LRV) Powered Axle Assembly Overhaul Contract No. MA53169000

1.	<b>Contract Number: MA53169000</b>	
2.	<b>Recommended Vendor: Pamco Machine Works</b>	
3.	<b>Type of Procurement (check one):</b> <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	<b>A. Issued: 9/05/2018</b>	
	<b>B. Advertised/Publicized: 9/05/2018</b>	
	<b>C. Pre-Bid Conference: 9/14/2018</b>	
	<b>D. Bids Due: 10/17/2019</b>	
	<b>E. Pre-Qualification Completed: 11/21/19</b>	
	<b>F. Conflict of Interest Form Submitted to Ethics: 01/15/2019</b>	
	<b>G. Protest Period End Date: 12/09/2019</b>	
5.	<b>Solicitations Picked Up/Downloaded: 25</b>	<b>Bids Received: 2</b>
6.	<b>Contract Administrator:</b> Edmund Gonzales	<b>Telephone Number:</b> 213/418-3073
7.	<b>Project Manager:</b> Richard Wurtele	<b>Telephone Number:</b> 310/816-5504

#### **A. Procurement Background**

This Board Action is to approve Contract No. MA53169000 to procure overhaul services for the P2000 Light Rail Vehicle (LRV) Powered Assembly Axles in support of Metro's Blue and Green Lines. Board approval of contract award is subject to resolution of any properly submitted protest.

The Request for Proposal (RFP) No. MA53169 was issued in accordance with Metro's Acquisition Policy and the contract type is an Indefinite Delivery/Indefinite Quantity (ID/IQ).

Seven (7) amendments were issued during the solicitation phase of the RFP:

- Amendment No. 1, issued on October 9, 2018, extended the due date for proposals to October 29, 2018.
- Amendment No. 2, issued on October 24, 2018, extended the due date for proposals to November 13, 2018.
- Amendment No. 3, issued on November 9, 2018, provided Revision 1 to the Technical Specification and extended the due date for proposals to November 30, 2018.
- Amendment No. 4, issued on April 11, 2019, changed the contract Period of Performance; provided a revised Statement and Work, Specifications, technical documents; revised the Schedule of Quantities and Prices to reduce the quantity of AC Traction Motors to be overhauled; and extended the proposal due date April 19, 2019.
- Amendment No. 5, issued on April 18, 2019, revised the Schedule of Quantities and Prices and extended the proposal due date to April 22, 2019.
- Amendment No. 6, issued on June 21, 2019, provided a revised Statement of Work, revised Minimum Contractor Qualifications and Requirements, provided a revised

Schedule of Quantities and Prices to delete all remaining Traction Motors from the procurement, and extended the proposal due date to July 1, 2019.

- Amendment No. 7, issued on October 10, 2019, provided a revised Schedule of Quantities and Prices to delete pricing for Powered Axle spare parts and substitute pricing for Gear Unit spare parts, and extended the proposal due date to October 17, 2019.

A total of two (2) proposals were received on October 17, 2019. The proposers are listed below in alphabetical order:

1. ORX
2. Pamco Machine Works (Pamco)

### **Evaluation of Proposals**

This procurement was conducted in accordance with and complies with Metro's Acquisition Policy for a competitive Technically Acceptable Low Price (TALP) RFP. The Proposal Evaluation Team (PET) evaluated each proposal to determine technical compliance and acceptability on a pass/fail basis against the evaluation criteria and posed questions that were answered by the proposers. Both firms, ORX and Pamco, met the RFP's technically acceptable requirements and the award recommendation was made to the lowest priced technically acceptable firm. Pamco was found to be the lowest priced proposer in full compliance with the RFP and its technical requirements.

### **B. Price Analysis**

This procurement was a TALP. Pamco offered the lowest technically acceptable priced proposal. The recommended total price from Pamco has been determined to be fair and reasonable based upon Metro's award to the lowest price offer and adequate price competition in accordance with TALP RFP requirements. Pamco's price proposal was nine percent (9%) lower than Metro's Independent Cost Estimate (ICE).

	<b>Contractor</b>	<b>Proposed Total Price</b>	<b>Metro ICE</b>
1.	Pamco	\$3,132,902	\$3,446,776
2.	ORX	\$3,776,795	

### **C. Background on Recommended Contractor:**

Pamco Machine Works., located in Rancho Cucamonga, CA, has been in business since 1967. They provide mechanical repair services for several types of rotating equipment including gearboxes and rail wheelsets. Pamco has provided similar products to other transit agencies including Miami-Dade Transit, San Francisco Bay Area Rapid Transit (BART) Maryland Transit Authority, and New Jersey Port Authority Transit. They are currently performing light rail powered axle repair services for Metro. Their performance has been satisfactory.

DEOD SUMMARY

P2000 LIGHT RAIL VEHICLE (LRV) POWERED AXLE ASSEMBLY  
OVERHAUL/MA53169000

**A. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) did not establish a Small Business Enterprise (SBE) or a Disabled Veteran Business Enterprise (DVBE) goal for this Original Equipment Manufacturer (OEM) procurement of P2000 Light Rail Vehicle (LRV) Powered Axle Assembly Overhaul services. DEOD determined there was a lack of available SBE/DVBE certified firms to perform assembly overhaul services. Pamco Machine Works proposed one non-SBE/DVBE subcontractor, the OEM of the P2000 LRV Powered Axle Assembly. Pamco Machine Works did not make an SBE/DVBE commitment.

**B. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to this contract.

**C. Prevailing Wage Applicability**

Prevailing wage is not applicable to this contract.

**D. Project Labor Agreement/Construction Careers Policy**

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.