



Board Report

File #: 2017-0703, File Type: Contract

Agenda Number: 23.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE NOVEMBER 16, 2017

**SUBJECT: P2000 FRICTION BRAKE SYSTEMS & AIR
COMPRESSOR COMPONENT OVERHAUL**

ACTION: APPROVE CONTRACT AWARD

RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award a 48-month, indefinite delivery/indefinite quantity Contract No. MA27583000 for the component overhaul of P2000 Light Rail Vehicle (LRV) Friction Brake System & Air Compressor Overhaul to Wabtec Passenger Transit, for a total not-to-exceed amount of \$3,328,499; and
- B. AWARDING a single source procurement, pursuant to Public Utilities Code section 130237 for component overhaul services of the Metro Green Line (MGL) and Blue Line Friction Brake System & Air Compressor Overhaul from the Original Equipment Manufacturer (OEM), to Wabtec Passenger Transit.

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

ISSUE

The P2000 LRV fleet is due for Friction Brake Systems and Air Compressor Overhaul as recommended by the Original Equipment Manufacturer (OEM) established guidelines. This procurement is for the professional services to complete a component overhaul of 52 assemblies inclusive of two spares. The existing friction brake system and air compressor equipment is proprietary. The purchase is for the sole purpose of purchasing overhaul services of existing equipment already in use. Execution of this component overhaul will safeguard passenger safety and maintaining equipment performance in a continuous State of Good Repair (SGR).

DISCUSSION

The P2000 fleet currently operates on Metro's Green, Blue and Expo Lines. The Siemens P2000 LRV is in its 16th year of operation. In order to ensure continued safety and performance of the safety critical friction brake and air compressor systems, a complete systems overhaul is required at the

four year service interval as defined by the OEM and monitored by the CPUC. The overhaul consists of disassembly, thorough cleaning and inspection, and repair of various components including electrical, pneumatic and mechanical component parts that wear out under normal service and operating conditions. Routine maintenance and periodic overhaul of these systems is of critical importance for passenger safety and accident prevention to ensure the vehicle stops within specified stopping distance during routine and emergency brake applications. Rail Fleet Services (RFS) Engineering developed an equipment overhaul specification for the friction brake and air condition systems overhaul based upon OEM recommendations and in conjunction with RFS maintenance experience. The contractor will perform overhaul services in accordance with predefined schedule using Metro provided technical specification requirements.

The P2000 Component Overhaul Program consists of nine major vehicle systems to be overhauled, including friction brake, air compressor, air hose replacement, power axle, non-power axel bearing replacement, car battery replacement, couplers, exterior and interior paint. The friction brake and air compressor overhaul is due for the new cycle requiring board approval. Currently, two of the systems (air hose replacement and non-power axel bearing replacement) have been completed and five of the systems are on-going.

DETERMINATION OF SAFETY IMPACT

Passenger and employee safety are of the utmost importance to Metro and, therefore, it is imperative to maintain the P2000 fleet to maintain a state of good repair. The friction brake systems overhaul is in support of routine maintenance and an established component overhaul program. This effort will ensure that the fleet is maintained in accordance with OEM recommendations, regulatory standards, and within Metro's internal Corporate Safety policies and procedures.

FINANCIAL IMPACT

The approved Life-of-Project (LOP) for the P2000 Fleet Component Overhaul Program under capital project number 206006 is for the amount of \$26,360,100 established in 2012. Funding of \$1,299,996 for this Contract is included in the FY18 budget in cost center 3941 and cost center 3943, Rail Fleet Services Maintenance, under project number 206006, line item 50441, Parts - Revenue Service.

Since this is a multi-year Contract, the cost center manager, project manager, and Sr. Executive Officer, RFS will ensure that the balance of funds is budgeted in future fiscal years.

Impact to Budget

The source of funds for this procurement will come from Federal, State and local funding sources that are eligible for Rail Capital Projects. This will maximize fund use given funding allocation provisions.

ALTERNATIVES CONSIDERED

The vehicle's friction brakes are a safety critical system which are required to be overhauled per the

OEM and regulatory requirements in order to prevent catastrophic events resulting from extending stopping distance of complete failure of the braking systems during emergency brake application. Deferring the friction brake and air compressor overhaul is not recommended as Metro could also be subject to penalties mandated by the California Public Utilities Commission.

NEXT STEPS

Overhaul of the P2000 Light Rail Vehicle Friction Brake & Air Compressor systems will continue in accordance with RFS scheduled requirements. If approved, the project is scheduled to commence in July 2018.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

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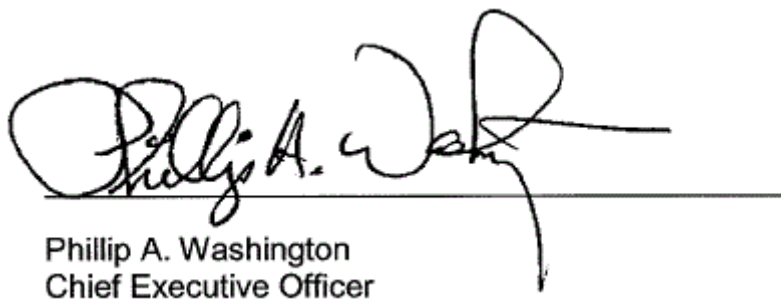
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