

**Board Report**

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**File #:** 2016-0003, **File Type:** Contract

**Agenda Number:** 30

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**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE  
APRIL 14, 2016**

**SUBJECT: BLUE LINE WHEEL TRUING MACHINE OVERHAUL**

**ACTION: APPROVE CONTRACT AWARD**

**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to award a firm fixed-price Contract No. MA4829600, a single source procurement, to Hegenscheidt-MFD Corporation (USA) to **perform a midlife overhaul of the Blue Line Wheel Truing Machine** for \$1,385,769.

**ISSUE**

This procurement is for the services of the Original Equipment Manufacturer (OEM), Hegenscheidt-MFD Corporation (USA) (HMF), to perform a midlife overhaul of the existing Wheel True Machine located at Division 11, the Blue Line Maintenance Facility. The existing machine, model 106T, was installed and went into operation in 1999. Time, usage, and parts obsolescence requires that the 15-year overhaul be performed on the wheel truing machine to bring it up to full functionality and increase the useful life of the machine by 15 more years.

**DISCUSSION**

The Blue Line Wheel Truing Machine is vital to the safe operation of the fleet as it is used to maintain the Vehicle Manufacturer's recommended tolerances for profiles and wheel diameters. Not maintaining these tolerances can increase the risk of wheel hunting, derailments, poor ride quality, and premature equipment failure.

A consultant, CH2MHILL, evaluated the current condition of the truing machine and the need to either overhaul or totally replace it. The findings were that significant costs can be avoided by not purchasing a new wheel truing machine. A comparable machine has an estimated cost of \$3,000,000, including civil engineering that will be required for installation of the new machine.

**Single Source Justification**

The significance of this single source procurement is to ensure continued safe operational availability and reliability of the wheel truing function for Blue Line cars. There are a few manufacturers of wheel truing machines. Hegenscheidt wheel truing machines utilize proprietary software that is fully

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integrated into the wheel truing process. The machine is custom fit into its "pit" location at Division 11. Significant efficiencies will be realized by utilizing the OEM instead of another vendor, as it will eliminate the need to reverse engineer new software to the machine. Thus, it was determined by Metro's engineering team, cost estimating department and CH2MHILL that it is critical the OEM perform the overhaul.

The existing control system software will be replaced with Hegenscheidt's new, current technology controls that are also used in the wheel truing machines currently in use at other Metro facilities. Utilizing similar control systems at multiple Metro facilities will allow for unified training and increased efficiency as specialists will have the ability to operate multiple wheel truing machines.

### **DETERMINATION OF SAFETY IMPACT**

Award of the Contract to procure the wheel truing machine overhaul services will improve the efficiency and accuracy of wheel cutting to meet the Vehicle Manufacturer's recommended tolerances for profiles and wheel diameters. Maintaining the Vehicle Manufacturer's recommended tolerances is vital to the continued safe operation of the vehicles as doing so reduces the risk of wheel hunting, derailments, poor ride quality, and premature equipment failure.

### **FINANCIAL IMPACT**

Funding of \$1,385,769 is included in cost center 3941 under project 206040 for the Blue Line Wheel True Machine. Since this is a multi-year contract, the cost center manager, project managers, and Executive Director, Maintenance will ensure that the balance of funds is budgeted in future years.

#### **Impact to Budget**

The source of funding for this contract will come from Prop A 35% which are eligible for bus and rail Operating and Capital Projects. This funding source will maximize the use of funds for these activities.

### **ALTERNATIVES CONSIDERED**

One alternative is to not award this Contract and continue using existing equipment with poor reliability, parts obsolescence, and poor wheel cutting performance. This will result in extended wheel rework and increase vehicle downtime.

A second alternative is a total replacement of the existing machine with a new one at a cost of approximately \$3,000,000, inclusive of civil engineering work.

### **NEXT STEPS**

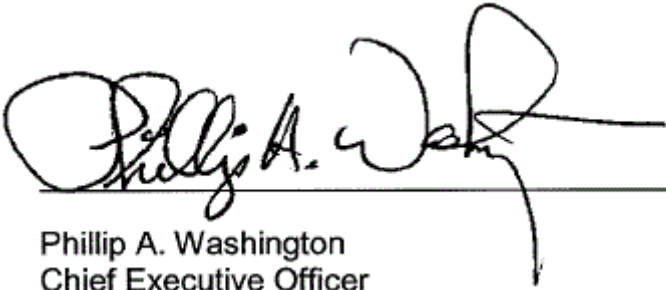
After Board approval, staff will execute the Contract award and Notice to Proceed (NTP) to the contractor, Hegenscheidt-MFD Corporation to start working on this project.

### **ATTACHMENTS**

Attachment A - Procurement Summary  
Attachment B - DEOD Summary

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