



**OPERATIONS COMMITTEE  
MARCH 17, 2005**

**PROJECT: CROSSING GATE EQUIPMENT REPLACEMENT PROJECT**

**ACTION: INCREASE THE LIFE OF PROJECT BUDGET**

**RECOMMENDATION**

Increase the Life of Project for the Crossing Gate Equipment Replacement Project by \$402,128, increasing the Life of Project Budget from \$836,000 to \$1,238,128.

**RATIONALE**

This project involves the installation of crossing gate equipment on the Metro Blue Line. This is a multi-year project involving procurement of new equipment to include S-40 Gate Mechanisms, L.E.D., Flashing Lamps, Electronic Bells, verification of as-built drawings, engineering, and subcontracting the building of four new crossing cases. The project includes the installation and testing of new equipment by signal personnel.

Four crossing cases were damaged in crossing accidents and cannot be adequately repaired. These crossing cases need to be replaced to provide the security and required operating environment to the equipment inside.

The original crossing gate mechanisms have had thousands of operations during the past thirteen years. These mechanisms are requiring increased maintenance and are affecting revenue operations. Mechanism replacement is a cost effective means of providing the reliability and margin of safety that grade crossing warning systems require, while reducing the maintenance costs.

The project will reduce the power requirements at the grade crossings thereby extending the life of the associated relays and reducing the labor costs of maintaining the equipment at the grade crossings. Safety at the grade crossings will be enhanced due to the increased visibility of the LED flashing lights. The L.E.D. replacements will provide a 33% reduction in the power consumption of the flashing lamps as well as a significant savings in labor costs to replace burned-out lamps. In addition, the project calls for the updating of the mechanical bells to electronic bells in order to reduce increasing maintenance costs.

The sole bid received from Mass Electric for the grade crossing equipment upgrade was higher than the original estimate due to the additional cost of upgrading the flashing lamp backgrounds according to CPUC requirements.

The grade crossings involved are along the Right-of-Way on the Metro Blue Line from Washington and Long Beach Avenue to Greenleaf Boulevard and Wilmington Avenue. The following is a list of the location of each grade crossing and the cost of the equipment being replaced:

24 <sup>th</sup> Street	\$114,722
Greenleaf Blvd.	\$115,030
Vernon Avenue	\$116,913
41 <sup>st</sup> Street	\$103,548

**FINANCIAL IMPACT**

The total cost of the Crossing Gate Equipment Replacement project is comprised of the following line items:

Source	Amount
Crossing Gate Equip. Replacement (FY00-FY04) - Materials & Labor	\$ 369,970
Crossing Gate Equip. Replacement - Contract Cost	\$ 512,659
Crossing Gate Equip. Replacement – FY05 – Labor Estimate	\$ 68,395
Crossing Gate Equip. Replacement – FY06 – Labor Forecast	\$ 108,657
Crossing Gate Equip. Replacement – FY07 – Labor Forecast	\$ 178,447
Total	\$1,238,128

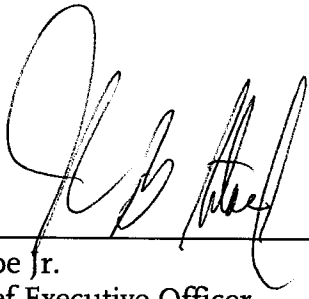
There will be no impact to the Capital Budget since funds for this project are included in the FY05 budget, and funded by the following projects:

Source	Amount
Crossing Gate Equip. Replacement (CP 3300009- FY00 – FY04)	\$ 369,970
Crossing Gate Equip. Replacement (CP 3300009 - FY05)	\$ 508,941
Crossing Gate Equip. Replacement (CP 3300009 – FY06)	\$ 359,217
Total	\$1,238,128

**ALTERNATIVES CONSIDERED**

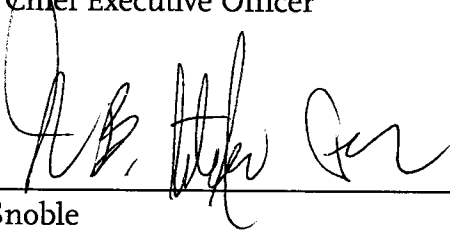
Not proceeding with the current proposal will result in increased Rail Operations operational expenses to support daily revenue service requirements. A delay in increasing the budget ceiling may prevent the award of the contract for the competitive price at the present value therefore if this current scope was revisited at a later date the cost of the same project will only increase in value.

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