



**OPERATIONS COMMITTEE
MAY 18, 2006**

PROJECT: METRO BLUE LINE (MBL) GRADE CROSSING IMPROVEMENTS

ACTION: APPROVE INCREASE TO THE LIFE OF PROJECT BUDGET

RECOMMENDATION

Increase the life-of-project (LOP) budget for the Metro Blue Line (MBL) Grade Crossing Improvements project by \$6,478,000, increasing the life-of project budget from \$4,122,000 to \$10,600,000.

ISSUE

This project involves replacement upgrades of deteriorated grade crossing materials consisting of various designs and exhibiting accelerated rates of decay at numerous high traffic density locations along Metro Blue Line (MBL) right-of-way. These upgrades involve installation with tested, proven low maintenance, longer lasting, corrosion inhibiting materials, which allows improved drainage along the MBL main line corridor.

Since inception this project has developed into two phases. The first phase being replacement and upgrades within the *embedded track structure* of rubber grade crossings and improved track drainage within the City of Long Beach (90% complete). The second phase is replacement upgrades of deteriorated grade crossings within the *ballasted track structures* in the mid-corridor area defined between Artesia and Washington Stations. Most all of the materials to complete this second phase have been procured by contract under current funding and are presently being delivered to staging area for scheduled installation.

Beginning with the start-up of Light Rail Transit with the construction of the MBL the final designs accepted for the grade crossings allowed for inclusion of any bidders who manufactured these products to have a share of the construction. Over the years, the failure and inadequacies of these product designs have become apparent. The safety and longevity of the track structure was directly affected. A corrosion control study performed along the entire MBL linked these failed crossing designs as a contributing problem to accelerated track structure corrosion. This Grade Crossing Improvement Project included the installation and testing of new materials and maintenance practices by Wayside Track personnel. The product designs that have shown longevity and proven maintenance savings capabilities have guided the procurement process of replacement upgrades.

For the *First Phase* of the project with nearly all replacement installations completed in the embedded track portion, the full depth rubber panel interlocking system supplied by Hi-Rail Manufacturing Inc. was installed. This material has withstood the test of time since first introduced at select locations with start of MBL operation. The lessons learned from the MBL helped contribute to the grade crossing designs and installations within the ballasted track portions on the Pasadena Gold Line resulting with the installation of the OMNI System Concrete and Rubber Panels on Concrete Ties design. It is this system that is approved and currently being procured for installation upgrade in the second phase within the ballasted track portion of the project on the MBL. The added advantage of utilizing the same design will result in cost savings aiding maintenance efficiency from not having to store spare parts for and maintain multiple designs.

Within the *second phase* there are twenty-five ballasted track grade crossing locations due for replacement upgrade along the mid-corridor location area as defined above. Each of these locations is composed of double main line tracks with several different types of crossing material installed on rock ballast with wood ties for support. They are in various stages of structural decay. Recent temporary repairs have yielded discovery that some of these crossings were constructed with soft wood ties accelerating this structural decay.

FINANCIAL IMPACT

This action will increase the life-of-project budget by \$6,478,000. A detailed matrix showing the uses and sources of funds broken down by year is shown in Attachment A. This project has prior year costs of \$2,187,415 and estimated FY06 expenses of \$1,269,365. Funding of \$1,348,546 is included in the FY07 budget in project 205006. The balance is spread through all fiscal years to and including FY11.

Since this is a multi-year project, the Project Manager and Deputy Chief Executive Officer is responsible for budgeting the cost in future years consistent with the board-adopted total life-of-project budget.

ALTERNATIVES CONSIDERED

Not proceeding with the current proposal will result in increased Rail operational expenses to support temporary repairs that will continue to accelerate. The entire MBL was constructed at one time resulting in uniform rate of structural decay in these identified grade crossing locations. Public safety to the ridership as well as pedestrian vehicle traffic is impacted. Contracting work outside could result in labor disputes since historically this work has been performed in house. Wayside Systems Track maintenance forces have been perfecting installation and maintenance practices for these installations. As installations take place their efficiency will increase possibly shortening the schedule resulting in project and operational cost savings. By scheduling the worst locations for earliest installation upgrades will keep ahead of the rate of decay. A delay in increasing the budget ceiling may impact this schedule and could adversely affect overall costs.


NEXT STEPS

Implement the second phase plan for succeeding years of the project to schedule installation upgrades with OMNI System design at minimum of four grade crossing locations per fiscal year, extending out to 2011, or earlier, for completion.

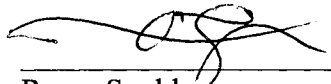
ATTACHMENT

A. Funding/Expenditure Plan

Prepared by: Jeff Root, Wayside Systems Manager (Project Manager)
Rob Chappell, DEO – Wayside Systems



John B. Catoe, Jr.
Deputy Chief Executive Officer



Roger Snoble
Chief Executive Officer

ATTACHMENT A

MBL Grade Crossing Improvements – CP 205006

Funding/Expenditure Plan

	ITD	FY06	FY07	FY08	FY09	FY10	FY11	TOTAL	% of Total
Uses of Funds:									
ITD Costs	\$ 2,187,415							\$ 2,187,415	21%
1. Project Administration		\$ 50,000	\$ 86,751	\$ 44,488	\$ 45,761	\$ 47,075	\$ 48,427	\$ 322,502	3%
3. Construction		\$ 418,176	\$ 483,016	\$ 696,198	\$ 717,083	\$ 738,595	\$ 760,754	\$ 3,813,822	36%
4. Parts/Materials		\$ 1,077,482	\$ 678,779	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 2,356,261	22%
5. Contingency		\$ -	\$ -	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 220,000	2%
7. Professional Services		\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000	4%
10. Vehicles		\$ -	\$ 100,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 1,300,000	12%
Total Project Cost	\$ 2,187,415	\$ 1,545,658	\$ 1,348,546	\$ 1,345,686	\$ 1,367,844	\$ 1,390,670	\$ 1,414,181	\$ 10,600,000	100%
Sources of Funds:									
Prop A 35% Cash	\$ 2,187,415	\$ 1,545,658	\$ 1,276,159	\$ 672,843	\$ 683,922	\$ 695,335	\$ 707,091	\$ 3,733,073	35%
STA (Rail)			\$ 72,387	\$ 672,843	\$ 683,922	\$ 695,335	\$ 707,091	\$ 2,831,578	38%
Total Project Funding	\$ 2,187,415	\$ 1,545,658	\$ 1,348,546	\$ 1,345,686	\$ 1,367,844	\$ 1,390,670	\$ 1,414,181	\$ 10,600,000	100%

