



Metropolitan  
Transportation  
Authority

One Gateway Plaza  
Los Angeles, CA  
90012-2932

Phone: 213.922.6000

**PROJECT:** METRO GREEN LINE

**CONTRACT:** CONTRACT NO. H1100, AUTOMATIC TRAIN CONTROL, UNION SWITCH & SIGNAL, INC.

**ACTION:** AUTHORIZE CONTRACT CHANGE ORDER IN THE AMOUNT OF \$1,900,000 AND APPROVE AN INCREASE IN THE AUTHORIZATION FOR EXPENDITURE IN THE AMOUNT OF \$112,943

#### RECOMMENDATION

- A. Authorize the Chief Executive Officer to execute Change Order No. 58 to Contract No. H1100, Union Switch & Signal, Inc., in an amount not-to-exceed \$1,900,000 to provide compensation for delays and inefficiencies, increasing the Total Contract Value from \$60,723,743 to \$62,623,743; and
- B. Approve an increase in the Authorization for Expenditure (AFE) for Contract No. H1100 to provide funding for Change Order No. 58 and for pending changes that are within the Board-delegated authority in the amount of \$112,943, increasing the current AFE from \$62,407,800 to \$62,520,743.

Within Construction Committee authority:  Yes  No  N/A

#### RATIONALE

The H1100 Train Control contract with Union Switch & Signal consisted of providing and installing equipment on the Metro Green Line (MGL) right-of-way as well as in individual vehicles. However, when the H1100 Contractor was given the Notice to Proceed, only temporary vehicles were available for Design Interface. The first of the MGL permanent P2000 vehicles were scheduled by contract for delivery on October 25, 1996, but were not delivered until June 23, 2000. A major portion of the H1100 Contract involved development of on-board vehicle control software. Consequently, the H1100 Contractor was delayed.

In addition, the H1100 Contract stated that the MTA would provide operators and a defined test window for the Contractor to perform testing. A decreased test window, late delivery in the P2000 vehicles, lack of operator availability, and lack of track allocation priority, all contributed to the delays and inefficiencies in the ability of the H1100 train control contractor to perform the contractual work required. The train control contract (H1100) is currently the only active contract left on the MGL project.

These delays impacted the H1100 Contractor, who in turn submitted Requests for Change (RFC) covering the time period from March 13, 1999 to September 30, 2002, totaling \$4,417,359. MTA staff and PinnacleOne evaluated the RFCs, the related audits, and also reviewed project documents. The backup data submitted to support the proposals was incomplete. The Contractor did not provide adequate documentation to substantiate all of their costs in spite of being given numerous opportunities to do so.

Negotiations deadlocked with MTA unable to support anything in excess of \$1,900,000 as being fair and reasonable. Consequently, MTA will issue a unilateral Change Order in an amount not-to-exceed \$1,900,000. Settlement of any claims or litigation resulting from this action will be the subject of a future board report.

Delay issues and the resulting inefficiencies, as indicated above, and pending changes, are the reasons for this request for an increase in the AFE in the amount of \$112,943 for Contract No. H1100.

The Board's approval is needed in order to compensate the Contractor for costs related to the delays and inefficiencies.

The funds for this additional AFE request for Contract No. H1100 will come from the remaining available budget of the Metro Green Line Project.

### **FINANCIAL IMPACT**

Funding of \$1,900,000 for this action is included in the FY04 Budget in Cost Center 8510 Construction Contracts, Line Item 53102, under Project No. 800023, Metro Green line Project. This increase is within the Board approved project budget of \$712,302,000.

Potential for Cost Recovery:  Yes  No  N/A

## **ALTERNATIVES CONSIDERED**

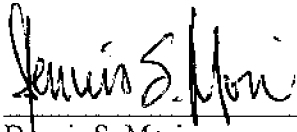
The MTA Board may reject this increase in AFE, which will result in not being able to address the aforementioned change notices to the H1100 contract. Staff does not recommend this alternative.

## **ATTACHMENTS**

- A. Contract Value Status Summary
- B. Status of Changes
- C. Procurement Summary\*
- C-1. Procurement History\*
- D. Small Business Participation

\*Documents deal with the inefficiencies compensation Change Notices only  
(CNs 89, 90 & 92)

Prepared by: Nick Brown, Director Systems Integration  
Michael T. Holguin, Senior Contract Administrator



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Dennis S. Mori  
Interim Executive Officer,  
Construction Project Management



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Roger Snoble  
Chief Executive Officer

**ATTACHMENT A**  
**Contract Value Status Summary – Contract No. H1100**

• Current Approved AFE	\$62,407,800
• Requested Additional AFE	+ <u>\$112,943</u>
• Proposed New Total AFE	\$62,520,743
• Obligated Value	- <u>\$60,723,743</u>
• Proposed Available New AFE	\$1,797,000
• Pending Changes to Contract Work	- <u>\$1,797,000</u>
• Anticipated Residual @ Time Of Contract Close-Out	\$0

**ATTACHMENT B**  
**Status of Changes**  
**III1100 Train Control Contract**

EXECUTED CN'S (71)	\$2,938,744
PENDING CHANGE NOTICES :	\$1,797,000
POTENTIAL CHANGE NOTICES (0):	\$0.00
TOTAL:	\$4,735,744
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BASE CONTRACT:	\$57,785,000
	\$62,520,744

**ATTACHMENT C**  
**PROCUREMENT SUMMARY**  
(Change Notice Numbers 89, 90 & 92 only)

**Contract No. H1100, Automatic Train Control**

1.	Contract Number: H1100		
2.	Recommended Vendor: Union Switch & Signal Inc.		
3.	Cost/Price Analysis Information: TBD		
	A. Bid/Proposed Price: \$4.2M	Recommended Price: \$ 1.9M	
	B. Details of Significant Variances are in Attachment A-1.D		
4.	Contract Type: Fixed Price		
5.	Procurement Dates:		
	A. Issued: N/A		
	B. Advertised: N/A		
	C. Pre-proposal Conference: N/A		
	D. Proposals Due: N/A		
	E. Pre-Qualification Completed: N/A		
	F. Conflict of Interest Form Submitted to Ethics: N/A		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: 5.0% DBE	Date Small Business Evaluation Completed: N/A	
	Small Business Commitment: 5.0% Details are in Attachment A-2		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: Include no. N/A	Bids/Proposals Picked up: Include no. N/A	Bids/Proposals Received: Include no. N/A
8.	Evaluation Information:		
	A. Bidders/Proposers Names:  N/A	Bid/Proposal Amount:  N/A	Best and Final Offer Amount: N/A
	B. Evaluation Methodology: N/A Details are in Attachment A-1.C		
9.	Protest Information:		
	A. Protest Period End Date: N/A		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: Michael T. Holguin	Telephone Number: 922-7365	
11.	Project Manager: Frank T. Okleson	Telephone Number: 922-7253	

**ATTACHMENT C-1  
PROCUREMENT HISTORY**

**Contract No. H1100, Automatic Train Control**

**Background on Contractor**

The H1100 prime contractor, Union Switch and Signal, Inc. (US&S), Pittsburgh, Pennsylvania has been in business since 1878. Its major line of business is train control and railroad signaling.

**Procurement Background**

Contract No. H1100 is a firm fixed-priced, state and local funded procurement for the Automatic Train Control System, Metro Green Line. The work being performed under this contract is the design, manufacture, installation and testing of the Automatic Train Control System (ATCS) for an automated with driver system on the Metro Green Line that could also be capable of driverless operation on the Metro Green Line. The H1100 contractor is responsible for managing the interface between this systems contract (H1100) and the LA Standard Car Contract No. P2000 during the design and testing phase. It is mandatory that the P2000 vehicles be available for testing to enable the H1100 contractor to proceed with and finish its work.

**Evaluation of US&S Proposals**

The Contractor's proposals are being evaluated. Project Engineering and Project Construction Management performed Technical Evaluations of the changes. Multiple Audit Reports were and are being prepared by the MTA's Management Audit Services Department in support of the evaluation. Also, a claims consultant was hired to evaluate the delay changes for merit, quantum and to recommend a fair and reasonable price for each. Pre-negotiation plans were prepared and approved prior to negotiations.

**D. Cost/Price Analysis Explanation of Variances**

The recommended price has been determined to be fair and reasonable based upon estimates audit, cost/price analysis.

<b>Bid/Proposal Amount</b>	<b>MTA Estimate</b>	<b>Recommended/Negotiated Amount</b>
\$ 4,417,359	\$ TBD	\$ TBD



**ATTACHMENT D**  
**Small Business Participation**  
**Contract No. H1100, Automatic Train Control**

This Contract has a 5% Disadvantaged Business Enterprise (DBE) participation goal. The Contract was awarded December 23, 1991 to Union Switch & Signal, Inc., and is 98% complete. DBE attainment<sup>1</sup> based on the relevant contract amount<sup>2</sup> is 8.55%. DBE participation<sup>3</sup> based on the total actual amount paid-to-date to prime and total actual amount paid-to-date to DBE is 9.03%. The DBE scope of work was completed in July 1995. The listed DBE Subcontractor performed on the contract as listed.

<b>Original Award Amount</b>	<b>\$57,785,000</b>
<b>Relevant Contract Amount<sup>2</sup></b>	<b>\$62,407,800</b>
<b>Total Actual Amount Paid to Date to Prime</b>	<b>\$59,120,730</b>

<b>Subcontractor</b>	<b>% Commitment</b>	<b>Current Attainment<sup>1</sup></b>	<b>Current Participation<sup>3</sup></b>	<b>Current Status</b>
L & B Electric, Inc.	5.00%	8.55%	9.03%	Completed
<b>TOTAL</b>	<b>5.00%</b>	<b>8.55%</b>	<b>9.03%</b>	<b>Exceeded the Goal</b>

<sup>1</sup>Current Attainment = Total Actual Amount Paid-to-Date to Subs ÷ Total Relevant Contract Amount

<sup>2</sup>Relevant Contract Amount = Original Contract Value - Contract Cost Modifications affecting DBE or SBE Scope of Work

<sup>3</sup>Current Participation = Total Actual Amount Paid-to-Date to Subs ÷ Total Actual Amount Paid-to-Date to Prime

April 2003 Board Report H1100  
 Draft #2 - 3/20/03.bb  
 Based on May 2000's 103 -(FINAL)

