



CONSTRUCTION COMMITTEE  
MAY 20, 2004

PROJECT: METRO GREEN LINE

CONTRACT: H1100, AUTOMATIC TRAIN CONTROL  
UNION SWITCH & SIGNAL, INC.

ACTION: APPROVE CONTRACT MODIFICATION IN THE  
CREDIT AMOUNT OF \$395,000 FOR DELETION  
OF THE DRIVERLESS DEMONSTRATION TEST

RECOMMENDATION

Authorize the Chief Executive Officer to execute Change Order No. 61 to Contract No. H1100, Automatic Train Control, with Union Switch and Signal, Inc. on the Metro Green Line for a credit in the amount of not less than \$395,000 for the deletion of Driverless Demonstration Test, decreasing the Total Contract Value from \$62,785,743 to \$62,390,743.

Within Construction Committee authority:       Yes       No       N/A

RATIONALE

Staff believes it is in MTA's best interest to eliminate the Driverless Demonstration Test, thus finalizing the deletion of the driverless feature on the Metro Green Line that was started under MTA approved Change Order No. 52. This will allow MTA to obtain the remainder of the credit that is due from the contractor. Approval of this action will also expedite the closeout of the H1100 contract.

Contract H1100 is a firm fixed-price, state and locally funded contract for the Automatic Train Control System, Metro Green Line. The work being performed under this contract is design, manufacture, installation, and testing of the Automatic Train Control System (ATCS) that originally was capable of driverless operations on the Metro Green Line.

IMPACT TO OTHER CONTRACTS

There are no impacts to other contracts since this is a credit change order to the H1100 contract.

In March 2001, the MTA Board approved Change Order No. 52 to the H1100 contract to delete some of the driverless subsystems. This action will delete the balance of work related to demonstrating the driverless function.

### FINANCIAL IMPACT

Original Contract Award	\$57,785,000
Current Cumulative Contract Value	\$62,785,743
This Action	<u>\$ -395,000</u>
New Cumulative Contract Value	\$62,390,743

The credit received by approval of this action will provide additional funds within the H1100 budget that will be used for closeout of the contract. The recommended action will decrease the H1100 Total Contract Value by \$395,000. The current status of the contract, including the impact of this action, is shown in Attachment 1.

Potential for Cost Recovery:       Yes       No       N/A

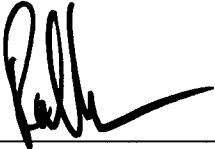
### ALTERNATIVES CONSIDERED

The MTA Board may reject this change; however, if they do not approve this action, the MTA will not receive the \$395,000 credit. The MTA Board previously approved the deletion of part of the driverless feature in March 2001 in Change Order No. 52 and received a credit in the amount of \$506,840. This brings the total credit for the deletion of the driverless feature capability to \$901,840.

### ATTACHMENTS

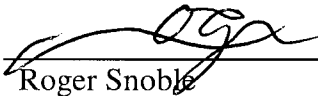
- A. Procurement Summary
- A1. Procurement History
- A2. List of Subcontractors

Prepared by: Nick Brown, Director Systems Integration



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Richard Thorpe  
Chief Capital Management Officer



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Roger Snoble  
Chief Executive Officer

**BOARD REPORT ATTACHMENT A  
PROCUREMENT SUMMARY**

**METRO GREEN LINE H1100 AUTOMATIC TRAIN CONTROL**

1.	Contract Number: H1100, Change Order Number 61		
2.	Recommended Vendor: Union Switch and Signal, Inc.		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price: (\$351,507)	Recommended Price: (\$395,000)	
	B. Details of Significant Variances are in Attachment A-1.D		
4.	Contract Type: FFP		
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: Yes		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: N/A	Date Small Business Evaluation Completed: N/A	
	B. Small Business Commitment: 5.0% Details are in Attachment A-2		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
8.	Evaluation Information:		
	A. Bidders/Proposers Names:  N/A	<u>Bid/Proposal Amount:</u> -\$351,507	<u>Best and Final Offer Amount:</u> N/A
	B. Evaluation Methodology: See Attachment A-1		
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: Nick Brown	Telephone Number: 922-7207	

**BOARD REPORT ATTACHMENT A-1  
PROCUREMENT HISTORY**

**METRO GREEN LINE H1100 AUTOMATIC TRAIN CONTROL**

**A. Background on Contractor**

Union Switch and Signal, Inc. (US&S) located in Pittsburgh, PA 15219 was founded by George Westinghouse in 1881. In 1988, Ansaldo purchased US&S from American Standard. In December 1996, US&S merged with the other signaling investments of Ansaldo located around the world. As a result of this merger, US&S is now a wholly owned subsidiary of Ansaldo Signal, a global supplier of signaling, control and automation systems with operations worldwide. In addition to the H1100 Contract, they are currently a subcontractor to Breda on the P2550 Light Rail Vehicle contract providing train control and onboard automatic train protection.

**B. Procurement Background**

The base contract included a “driverless” capability. Subsequent to the Notice- To-Proceed, a decision was made to delete the driverless capability. The Board under Change Order No. 52 approved that decision in March 2000. This Change Order deletes the driverless demonstration.

**C. Evaluation of Proposals**

An Independent Cost Estimate was prepared on April 16, 2003. MTA Consultant SYSTRA prepared a Technical Evaluation on March 15, 2004. An audit was performed by MASD in March 2004. The Contract Administrator prepared a Cost Analysis as part of preparing a Pre-negotiation Plan on March 17, 2004 utilizing the above input.

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

The recommended price has been determined to be fair and reasonable based upon the estimate, audit, cost/price analysis and negotiating positions. The difference between the negotiated amount and the MTA Estimate is that the MTA Estimate did not include credit for work paid for under Change Order 52 and additional costs incurred to delete the driverless demonstration.

<b>Bid/Proposal Amount</b>	<b>MTA Estimate</b>	<b>Recommended/Negotiated Amount</b>
(\$351,507)	(\$338,889)	(\$395,000)

BOARD REPORT ATTACHMENT A-2

METRO GREEN LINE H1100 AUTOMATIC TRAIN CONTROL

LIST OF SUBCONTRACTORS

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>\$60,956,692</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