



**Metro**

Metropolitan Transportation Authority

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CONSTRUCTION COMMITTEE  
JANUARY 20, 2005

**PROJECT:** METRO GREEN LINE

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

**ACTION:** AUTHORIZE CONTRACT MODIFICATION IN THE AMOUNT OF \$992,000 AND APPROVE AN INCREASE IN THE AUTHORIZATION FOR EXPENDITURE IN THE AMOUNT OF \$770,000

RECOMMENDATION

- A. Authorize the Chief Executive Officer to execute a Contract Modification to Contract No. H1100, Union Switch & Signal, Inc. (US&S), to provide compensation for delays and inefficiencies as part of a global settlement agreement to resolve all disputes between the Los Angeles County Metropolitan Transportation Authority (LACMTA) and US&S, including but not limited to, all current and future delay claims in the amount not-to-exceed \$992,000, increasing the Total Contract Value from \$62,298,586 to \$63,290,586;
- B. Approve an increase in the Authorization for Expenditure (AFE) for Contract No. H1100 to provide funding for the Contract Modification in the amount not-to-exceed \$770,000, increasing the current AFE from \$62,520,743 to \$63,290,743; and
- C. Authorize the Chief Executive Officer to execute a Mutual Release and Settlement Agreement between LACMTA and US&S, incorporating the terms of the Contract Modification described in Item A above and mutual release of all claims.

Within Construction Committee authority:  Yes  No  N/A

RATIONALE

The H1100 Train Control Contract with US&S consisted of providing and installing train control equipment on the Metro Green Line (MGL). The H1100 Train Control Contract is unique among Light Rail Train Control Contracts in that it provides Automatic Train Operation (ATO) capability as well as the more common Automatic Train Protection (ATP)

function. The final contract activities have focused on testing and certification of ATO, as well as software refinements.

During the course of the H1100 Contract, LACMTA was to provide operators and a defined test window for the contractor to perform testing. A decreased test window, lack of operator availability, lack of track access when requested, and late delivery of P2000 vehicles all contributed to delays and inefficiencies in the ability of the H1100 Train Control Contractor to perform the contractual work required.

These delays impacted the H1100 Contractor, who in turn submitted Requests for Change (RFC) covering the time period from October 2002 to May 2004. In addition, the H1100 Contractor submitted RFCs for delays relating to the LACMTA strikes in 2000 and 2003, and submitted a Claim for the difference between the Contractor's cost proposal and the executed amount in Unilateral Change Order No. 58. The total amount of Contractor RFCs and Claims was \$6,651,293.

The LACMTA, in turn, submitted a counter-claim of \$3,250,000 for US&S' failure to complete the work by the contractual completion milestone of December 2000.

In early 2004, negotiations deadlocked and the LACMTA and US&S retracted into positions where these commercial issues remained unresolved and were inhibiting the completion of work to enable the Green Line to re-enter Automatic Train Operation (ATO).

In April 2004, staff brought in Booz-Allen-Hamilton (BAH) to conduct an independent third party review of the issues and to assist in brokering a mutually acceptable agreement to settle the commercial issues and enable the work to be completed expeditiously. Early in August 2004, BAH concluded their analysis of the US&S claims and LACMTA counter-claims. BAH proposed a settlement amount of \$1,153,731.

On August 12, 2004, a settlement meeting was held to discuss and negotiate a final settlement amount to resolve all outstanding commercial issues. US&S accepted LACMTA's final offer of \$992,000, including withdrawal of the LACMTA claim for liquidated damages, as a reasonable settlement to resolve all claims.

This settlement amount was agreed as full compensation for all disputes between LACMTA and US&S, including but not limited to, current and future delay-related claims. A list of the disputes and their amounts, settlement amounts recommended by BAH, and final LACMTA negotiated settlement amounts are provided in Attachment B. US&S and LACMTA staff are currently finalizing the Settlement Agreement which will contain mutual releases and a final payment amount in the sum of \$1,022,568.51 inclusive of the of the \$992,000 Contract Modification. Attachment D shows the Reconciliation of the Final Payment.

The current AFE falls short of the amount required to fund the Contract Modification and the Board's approval is needed to increase the AFE to enable the Total Contract Value to be increased accordingly. The funds for this additional AFE request for Contract No. H1100 are available within the current budget for the MGL Project.

## FINANCIAL IMPACT

Funding of \$992,000 for this action is included in the FY05 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.

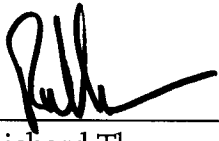
Potential for Cost Recovery:  Yes  No  N/A

## ALTERNATIVES CONSIDERED

The Board may reject the recommended increase in the Total Contract Value, which will result in not being able to address the aforementioned disputes and not being able to execute the Settlement Agreement. This will likely result either in transfer of the issues to a Disputes Resolution Board, or litigation. Staff does not recommend this alternative.

## ATTACHMENTS

- A Procurement Summary
- A1 Procurement History
- A2 List of Subcontractors
- B Disputes Summary
- C Status Summary
- D Reconciliation of Final Payment



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Richard Thorpe  
Chief Project Management Officer  
Construction Project Management



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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, Modification		
2.	Recommended Vendor: Union Switch and Signal, Inc.		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price:\$6,651,293 See Attachment B	Recommended Price: \$992,000 See Attachment B	
	B. Details of Significant Variances are in Attachment B		
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: 05% 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> See Attachment B	<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: Joel Sandberg	Telephone Number: 922-7223	

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

This information is provided in the Board Report under Rationale.

C. Evaluation of Proposals

See Attachment B

D. Cost/Price Analysis Explanation of Variances

See Attachment B

Bid/Proposal Amount	MTA Estimate	Recommended/Negotiated Amount
See Attachment B	See Attachment B	See Attachment B

**BOARD REPORT ATTACHMENT A-2**

**METRO GREEN LINE H1100 AUTOMATIC TRAIN CONTROL**

**LIST OF SUBCONTRACTORS**

This Contract has a 5% Disadvantaged Business Enterprise (DB E) participation commitment. 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 8.62%. The DBE scope of work was completed in July 1995. The listed DBE Subcontractor performed on the contract as listed.

Original Award Amount	\$57,785,000
Relevant Contract Amount <sup>2</sup>	\$62,407,800
Total Actual Amount Paid to Date to Prime	\$61,930,614

	% Commitment	% Current Attainment	% Current Participation	Current Status
L & B Electric, Inc.	5.00%	8.55%	8.62%	Completed
<b>TOTAL</b>	<b>5.00%</b>	<b>8.55%</b>	<b>8.62%</b>	<b>Exceeded the Goal</b>

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

ATTACHMENT B

H1100 DISPUTES SUMMARY

	Disputes	US&S, Inc.	Consultant (BAH)	Proposed Settlement
	US&S Claims			
1	LACMTA Delays 9/13/99 – 9/30/02	\$2,545,782	\$684,240	\$629,000
2	Overshoot Issue	\$157,753	\$126,202	\$125,000
3	LACMTA Delays 10/01/02 to 9/30/03	\$702,293	\$175,573	\$0.00
4	LACMTA Delays 10/1//03 to 2/14/04	\$422,702	\$0.00	\$0.00
5	LACMTA Delays 2/15/04 to 5/29/04	\$251,019	\$0.00	\$0.00
6	Out of Sequence V&V	\$113,244	\$56,622	\$50,000
7	Engineering Escalation after May 31, 2001	\$190,721	\$95,361	\$76,000
8	2000 Strike Delay	\$35,576	\$10,123	\$25,000
9	2003 Strike Delay	\$87,073	\$0.00	\$87,000
10	Siemens Support Compensation	\$11,220	\$5,610	\$0.00
11	Recovery of Unabsorbed Corporate OH	\$2,133,910	\$0.00	\$0.00
	Total	\$6,651,293	\$1,153,731	\$992,000
	LACMTA Claims			
12	Liquidated Damages	\$3,250,000	\$1,625,000	\$0.00



## ATTACHMENT C

### H1100 CONTRACT STATUS SUMMARY

H1100 Status August 30, 2004

Base Contract	\$57,785,000.00
Executed Cos	\$4,513,586.00
Present Contract Value	\$62,298,586.00
Closeout CO 64	\$992,000.00
Final Contract Value	\$63,290,586.00
Current AFE	\$62,520,743.00
AFE Shortfall	\$769,843.00

ATTACHMENT D

RECONCILIATION OF FINAL PAYMENT

Final Contract Price	\$63,290,585.30
Payments to date	<u>\$61,930,614.42</u>
Contract Balance	\$ 1,359,970.88
Retention (to be disbursed directly to US&S by Escrow Agent)	<u>\$ 337,402.37</u>
Final Payment from LACMTA to US&S	<u>\$ 1,022,568.21</u>