

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003179**Date Inspected:** 01-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:** Kuan Chung**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower, Jacking and Deviation Saddle**Summary of Items Observed:**

The following report is based on METS observations at Japan Steel Works (JSW) in Muroran Japan. Current work: Casting, machining and repair of Saddles.

**Fabrication Shop # 4**

On this date, the QA representative Dong J, Shin arrived at Japan Steel Works (JSW) of Muroran, Japan and traveled to JSW fabrication shop # 4. The QA Inspector observed Mr. K. Kobayashi (A Shift), Mr. M. Kashiwada (A Shift), Mr. Y. Arai (B shift), Mr. S. Watanabe (B shift) and Mr. M. Kato (B shift) welding on W2-E1 weld joints E1Y-5V, E1Y-6V and E1Y-3V, fill passes (90%-100%) of rib plate to base plate and stem plate. The welding of the rib plate to stem plate and base plate second side, FCAW welding was performed utilizing the Gas Shielded Flux Core Arc Welding (FCAW) process per the welding procedure specification (WPS) SJ-3011-2 and 3. The welding was performed in the 1G (Flat) position. The filler metal utilized was identified as 1.6 mm diameter, Class TM 95K2, Brand name Tri Mark. The welding parameters and heat control were monitored by Intertek Testing Services Quality Control (QC) inspector Mr. Chung-Fu Kuan at periodic intervals. The minimum preheat temperature of 118 degrees Celsius and maximum interpass temperature of 260 degrees Celsius was verified to meet the WPS requirements by Mr. Kuan and the QA inspector utilizing Tempilstik temperature indicators. This data was entered into the QC inspector's daily log, identifying the location on a weld map. The FCAW welding average amperage and voltage by clamp type meter and travel speed were verified to be within the welding procedure specification parameter range of 311 amps to 355 amps, 34 volts to 37 volts, gas flow was 25 l/min and travel speed of 254 to 310 mm per minute for the 1.6 mm wire. The welding was continued into night shift. Visually, general welding appears to meet the minimum requirements of the welding procedure

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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specification and contract documents.

**Summary of Conversations:**

No specific conversations.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Shin,DJ	Quality Assurance Inspector
<b>Reviewed By:</b>	Lanz,Joe	QA Reviewer

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