

**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-005693**Date Inspected:** 03-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Japan Steel Works**Location:** Muroran, Japan

<b>CWI Name:</b>	Imai Jomio (ASME Welding Engineer)			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Tower, Jacking and Deviation saddles		

**Summary of Items Observed:****Casting Shop:**

E2-W1 East Deviation Saddle Casting Portion (shaping): Caltrans QAI observed one welder perform carbon-arc-gouging (shaping) process on exterior rough surface of rib sides of E2-W1 east deviation saddle after rough machining. The gouging surface is the exterior rough surface areas which are not uniform surface and not able to use machining. The gouging purpose is remove all of exceed metal from the rib areas. The equipment used for gouging is manual torch with 10mm gouging electrode all made in Japan. The gouging process will continue for two week. Based on Caltrans observation, no discrepancies were noted.

W2-E3 West Deviation Saddle Casting: Caltrans observed QAI NIS NDT level II technician perform QC final dry MT test on exterior rough surface of 1L to 8L rib sides after sand blasting. The dry MT test is using the yoke method. The yoke utilized appeared to be model UM 3BF, serial numbers 93-05. The magnetic field was verified with a field indicating gauge (pie gauge). Visible dry red magnetic particles were utilized and made by Magnotron, Japan. Based on Caltrans QA observation, the MT test operation appeared to be in general compliance with requirements of ASTM standard E709 and Caltrans contract documents.

W2-W1 West Deviation Saddle Casting: Caltrans QAI observed a welder perform grinding process on all of the buildup weld metal after PWHT of W2-W1 west deviation saddle casting. The purpose of grinding is remove all the excess weld metal to flush before multi NDT performing. Based on Caltrans observation, no discrepancies were noted.

**Summary of Conversations:**

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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As noted within the report above.

## **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 Nina Choy, (510) 385-5910, who represents the Office of Structural Materials for your project.

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

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