

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000598**Date Inspected:** 05-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Cui Yi Ru	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	77 Meter Mock-Up	

**Summary of Items Observed:**

On this date, Caltrans Office of Structural Materials (OSM), Quality Assurance (QA) Inspector, David A. Smith was present for the random observations related to the following;

Item-1 114 Meter Mock-Up, Skin-C Plates MA 111-1 to MP 1018-1. The Magnetic Particle (MT) testing of the tack welds was visually monitored during the MT tests being performed by Zhou Dong Yun #12179 and were MT/OK. Caltrans QA Inspector performed a 40% MT test of the tack welding and found them to be in compliance with project specifications. The CWI present was Cui Yi Ru & QA Fu Yuhong.

Item-2 114 Meter Mock-Up, Skin-B, Bottom Plate, the cover pass was visually monitored during MT testing that was being performed by Cai Xin Xin on side 1. The MT test on the cover pass was performed in one direction only. The ends of the plate, the areas where the lifting devices were welded and ground smooth and the cover pass on side 2 the MT was performed in an acceptable two directions MT test. Caltrans QA Inspector did perform a 100% MT inspection on the cover passes, ends of the weld and the lifting devices areas and was found to be in compliance with project specifications. There was one area located on the plates edge in the center of the weld where the MT technician observed a small vertical indication in the center of the weld area 30mm down from the top and 30mm up from the bottom of the thinner plate, 60mm to 90mm plate weld thickness. The indication was very faint and at most 0.79 mm in length, 1/32". The QA present was Shen Xue Jun and the CWI was Cui Yi Ru.

Item-3 114 Meter Mock-Up, Skin-C, Top Plate MP1019 to MA112 filler pass welding. The welder operator was Han Changhou #059464. The welding parameters recorded by this QA Inspector were, Temperature 124C/136C, Amps 635, Volts 31.6 and the travel speed was 626.99 mm/min.

Item-4 114 Meter Mock-Up, Skin-D, Top Plate, 345 material. The Shielded Metal Arc Welding (SMAW) of the tack welding was being performed by Zhang Quan Fa #066326 and Li Dong #066256 on plate MP1020 to MA112.

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# WELDING INSPECTION REPORT

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**Summary of Conversations:**

There were no conversations pertinent to this project that took place during this shift.

**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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Smith,David	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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