

**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-001633**Date Inspected:** 26-Feb-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

<b>CWI Name:</b>	Sha Zhi			<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>	Tower 89m mockup		

**Summary of Items Observed:**

89m Mockup

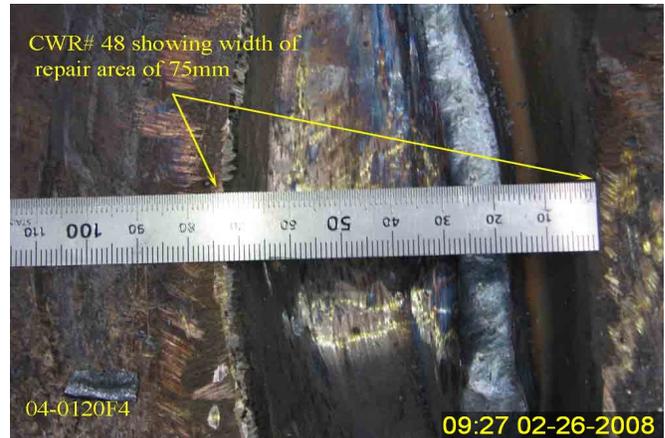
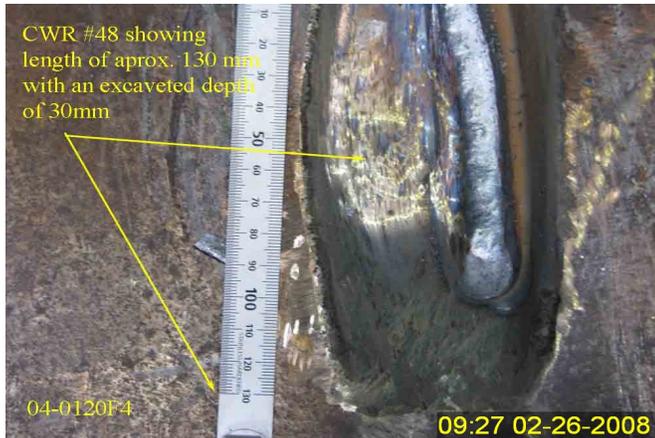
This Quality Assurance (QA) inspector arrived at ZPMC for observation at the tower shop for the 89m mock-up and witnessed ZPMC personnel performing work on Critical Weld Repair (CWR) number 48 for the corner stiffener plate Sa184 weld number MUB-MA21 J/J-8. This QA Inspector observed the welding process ZPMC had started the repair prior to the arrival of this QA inspector. The excavation was measured to be 130mm long by 75mm wide with a depth 30mm. ( See digital photo below) ZPMC Quality Control/ Certified Welding Inspector (QC/CWI) Sha Zhi was observed as being present at the time for the repairs and was monitoring the progress and welding parameters. This QA Inspector spoke with the QC/CWI in regards to preheat and Welding Procedure Specification (WPS) that was being applied to this location. It was relayed that WPS-345-FCAW-1G (1F)-Repair was being utilized and preheat required prior to Air Carbon Arc gouging (CAC) was 65°C with preheat prior to welding of 200°C. This QA inspector verified the interpass temperature with a temperature indicating marker melting at 200°C but not at 230°C. This QA Inspector performed a Ultrasonic Testing (UT) verification on shear link beam MUSB-MA26.1 weld number 2813-1 and discovered a rejectable indication for the web to flange connection T-joint. This QA inspector notified QC inspector Zhang Jiadi of the finding and he relayed to this QA Inspector that he would have the ZPMC UT technician re-evaluate the area. The Location for the indication is as follows; Y= 831mm, X= -10, depth 22 mm with a class A reading. This QA Inspector will generate an incident report due to ZPMC missing a Class A indication. The Work above appeared to be in the general conformance with contract documents. see digital photo below for CWR excavation

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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## Summary of Conversations:

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

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