

**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-001356**Date Inspected:** 05-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Hue Wei Qing, Sha Zhi & Xu Le			<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>	OBG, 89 & 114 Meter Mock-Up		

**Summary of Items Observed:**

OBG

This Quality Assurance Inspector observed Zhenhua Port Machinery Company Welder Hong Shi Li, welder identification 044815 welding with the flux core arc welding process on FB008-04-009. Some of the essential welding variables were checked and found to be as follows; preheat 147° Celsius, voltage 29.7, and amperage 295 and travel speed 520 millimeters per minute. The Certified Welding Inspector Hu Wei Qing was observed overseeing the welding quality control functions.

This Quality Assurance Inspector observed Zhenhua Port Machinery Company Welder Ren Jin Zhu, welder identification 044837 welding with the shield metal arc welding process on FB006-03-018. Some of the essential welding variables were checked and found to be as follows; preheat 147° Celsius, voltage 22, and amperage 171 and travel speed 111 millimeters per minute. The Certified Welding Inspector was Hu Wei Qing.

This Quality Assurance Inspector observed a cracked tack weld on weld joint FB008-06-043. The Certified Welding Inspector, Hu Wei Qing question this quality assurance inspector as to what should be done with the broken tack weld. Mr. Hu was informed that they he should direct that question to the American Bridge/Fluor staff.

89 Meter Mock-Up

This Quality Assurance Inspector observed Zhenhua Port Machinery Company Welder Dai Lu, welder

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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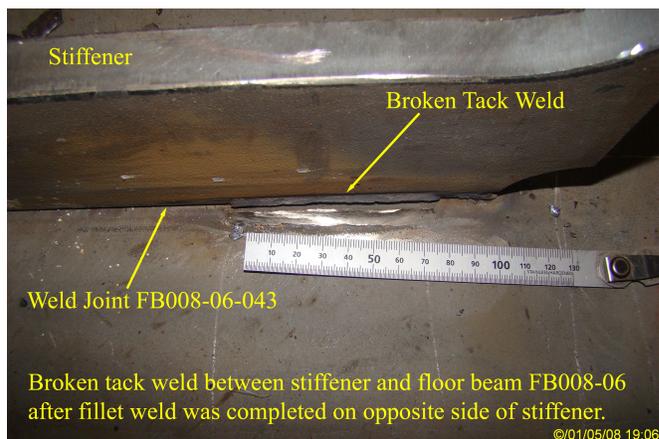
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identification 048659 welding with the shield metal arc welding process on MUB-MA21-H/J-4. Some of the essential welding variables were checked and found to be as follows; preheat 192° Celsius, voltage 23.8, and amperage 190 and travel speed 108 millimeters per minute. The Certified Welding Inspector Sha Zhi was observed overseeing the welding quality control functions.

This Quality Assurance Inspector observed Zenhua Port Machinery Company Welder Han Xiao Feng, welder identification 054467 welding with the shield metal arc welding process on MUB-MA21-H/J-7. Some of the essential welding variables were checked and found to be as follows; preheat 195° Celsius, voltage 23.8, and amperage 172 and travel speed 115 millimeters per minute. The Certified Welding Inspector Xu Le Feng was observed overseeing the welding quality control functions.

## 114 Meter Mock-Up

This Quality Assurance Inspector observed Zenhua Port Machinery Company Welder Bai Wen Ming, welder identification 040434 welding with the flux core arc welding process on MUC-MA107-B/C-2B. Some of the essential welding variables were checked and found to be as follows; preheat 221° Celsius, voltage 31.3, and amperage 307 and travel speed 306 millimeters per minute. The Quality Control Inspector Chen Xi was observed overseeing the welding quality control functions.



## Summary of Conversations:

As noted 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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**Inspected By:** Berger, Bruce

Quality Assurance Inspector

**Reviewed By:** Cochran, Jim

QA Reviewer