

**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-002889**Date Inspected:** 27-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** C.M. Chen**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:** OBG Deck Sections**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Mahlon Lindenmuth, arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following:

QA Inspector, Lindenmuth, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication performed includes but is not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP) on Side Plates and Bottom Plates, heat straightening of Side Plates and Bottom Plates.

**South Jig Fixture:**

\*Segment 3AE(SEG14)- Caltrans QA Inspector, Lindenmuth, observed ZPMC personnel preparing bevels for the Complete Joint Penetration (CJP) weld joining the 3AE-C5 segment to the 3AE-D6 segment. The bevels are initially flame cut then countoured by grinding.

\*Segment 3BE(SEG16)/Panel Point 23- Caltrans QA Inspector, Lindenmuth, observed ZPMC personnel welding the joint SSD19A-PP023-127. The joint is a CJP weld located at the end of the FL2-1 bottom flange. Caltrans QA noted the welding essential variables and recorded them below. It was also observed that the weld joint SSD19A-PP023-131 was being prepared for welding.

\*Segment 4AE(SEG 18)- Caltrans QA Inspector, Lindenmuth, observed ZPMC personnel preparing bevels for the

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Complete Joint Penetration (CJP) weld joining the 3AE-C5 segment to the 3AE-D6 segment. The bevels are initially flame cut then countoured by grinding.

### Shop Welding:

\*SEG020A-001- Caltrans QA Inspector, Lindenmuth, observed that ZPMC personnel had completed the weld repairs on the CJP weld joining the side plate SP18A to SP29A. ZPMC personnel have begun to grind the weld crown flush prior to performing Ultrasonic Testing (UT) of the repaired portions of the weld.

Item	Weld Identification	Applicable WPS	CWI Name	Amperage	Voltage	TravelSpeed	Preheat Temp	Remarks
1	SSD19A-PP023-127	WPS-B-P-2114-TC-10	M. Chen	155	25	225mmpm	48 C	Welder ID: 066418

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

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<b>Inspected By:</b>	Lindenmuth, Mahlon	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer
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