

**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-001713**Date Inspected:** 15-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**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**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector performed 15 % ultrasonic testing (UT) after ZPMC verifications on areas selected and tested by ZPMC on the partial penetration joint at the junction of the deck panel DP-057-001 to the U- ribs weld joints # 6 thru 10. ZPMC found lack of penetration that results on depth of penetration less than the minimum of 9.6 mm on weld joints. The QA inspector verified the indications. See the UT report TL\_6027 generated on this date.

The QA inspector took thickness reading by the areas where the lack of penetration were over 2.4 mm at the deck panel DP-062-001 welds 1 and 2, DP-057-001 welds joints 1 thru 10 and DP-026-001 welds joints 1 thru 5 using a 15 Mhz single element transducer with the UNS-60 test equipment. The thickness readings were reported on the UT reports TL\_6027 for these deck panels.

The QA inspector had a conversation with the QC supervisor Li Li Ming. The QA inspector requested Mr. Li Li Ming to re-check several areas where Caltrans representative did not agreed with the thickness reading marked by ZPMC on the steel. ZPMC checked the areas noted by the QA inspector and ZPMC concurred with Caltrans assessment. ZPMC initial readings were 0.2 to 0.3 mm from the reading measured on ZPMC re-inspection.

**Summary of Conversations:**

As noted above.

**Comments**

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# WELDING INSPECTION REPORT

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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>	Acuna, Alfredo	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer

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