

**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-002786**Date Inspected:** 03-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Wang Sai Fa**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 and Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present perform Ultrasonic Testing (UT) verification of Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector observed ZPMC welder Mr. Liu Xiaomin performing Gas Metal Arc Welding (GMAW) on Deck Panel DP591-001 tack welds. It was observed that weight and hydraulic jacks were utilized by ZPMC to achieve the .5 mm root gap required by the contract documents. It was also noted that ZPMC were preheating the weld area up to 90 degrees Celsius prior to welding. Welding appeared to be compliant with the posted Welding Procedure Specification WPS-B-T-2342-U2 (u-rib) and contract documents. The attached photo below shows ZPMC checking the root gap with a ¼ mm filler gauge.

The Caltrans QA Inspector performed random UT verification of ZPMC Quality Control (QC) inspected and accepted Complete Joint penetration welds of East Tower Skin Plate "C". The QA Inspector performed UT verification of welds ESD1-SA294 A/G-3A & 3B. The welds tested appeared to be in general conformance with AWS D1.5 table 6.3 and contract documents. See UT report TL-6027 generated on this date for further information.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

No relevant conversations occurred this date.

## 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>	Viars,Larry	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
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