

**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-003255**Date Inspected:** 16-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sha Zhi**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 & Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present observe production welding of the deck plate U-rib splice welds and perform random Visual Testing (VT) of the Orthotropic Box Girder (OBG) and Tower 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. Li Shuqiang performing Flux Cored Arc Welding (FCAW) on diaphragm Complete Joint Penetration (CJP) splice weld ESD1-SA268-17A in the 3G position. The following parameters were recorded from weld ESD1-SA268-17A amperage 216, volts 26.0, travel speed of 117 mm/min., with a heat input of 2.88 kJ/mm. The above mentioned welding appeared to be in conformance with the posted welding procedure specification, WPS-B-T2233-B-U3F.

The Caltrans QA Inspector went to perform Magnetic Particle Testing (MT) verification of OBGSP386-001 welds 001 through 012 and SP172-001 welds 008 through 021 in OBG assembly bay # 4. QA inspector MT verification was performed in Tower Heavy Machinery Shop Bay # 3 for Final MT of Deck Plate U-rib welds DP073-001 welds 001 through 010 and DP079-001 weld 001 through 010. Final Visual inspection was also performed on DP079-001. Please see MT report TL-6028, generated on this date for further information. The picture below shows illustrates ZPMC Quality Control performing MT of DP079-001 Partial Joint Penetration U-rib welds.

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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 Ady Velasco, 138 1694 2685, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Lanz,Joe	QA Reviewer

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