

**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-003512**Date Inspected:** 28-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**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:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 3 – Heavy Duty Machinery Shop

The QA Inspector observed ZPMC qualified and approved welder Hu Yong Cang ID 203805 in the process of performing UT Lack of penetration (LOP) repair to deck panel welds utilizing the Flux Cored Arc Weld (FCAW) process to repair excavated areas on deck panels DP405-001 identified on reject repair report provided by ZPMC as B-WR616 weld # 1, B-WR617 weld # 3, and B-WR618 weld # 4.

The QA Inspector also observed UT (LOP) repair was completed on DP486-001 identified as B-WR615 on weld # 1 and DP137-001, B-WR619 on weld # 8.

The weld repair appeared to comply with the weld procedure specification (WPS) WPS-345 FCAW-2G (2F)-repair 1 which was submitted by ZPMC as LOP repair procedure.

The Submittal number 634R2 Internal Weld Repair Demonstration dated June 11, 2008.

The QA Inspector Dixon was informed by ZPMC QC Inspector Mr. Lay Tao that ZPMC CWI Inspectors, Sun Bo, Li Yan Hua along with ABF personnel Kevin Chen and Ding Bohua were about to perform an initial three party visual repair inspection on deck panel DP108-002. Mr. Tao Then requested that a Caltrans QA Inspector also

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performed a visual inspection on the deck panels.

After an agreement was reached by all parties on the repairs which need to be made on the deck panels the QA Inspector assigned Caltrans lot number B59 and the inspection date on the yellow tag which is pasted to the outside U-Ribs of the deck panels. The ABF and ZPMC personnel also signed and dated the tag indicating the inspection had been completed.

The QA Inspector observed ZPMC qualified welder Dong Hu Yong Cang ID 203805 utilizing WPS-345-FCAW-2G (2F) Repair to perform Flux Core Arc Welding (FCAW) repairs of deck panel Partial Joint Penetration (PJP) welds on the following deck panels: DP405-001, DP137-001, DP110-001, DP216-001, and DP135-001.

The deck panel repairs and welding in the progress generally appeared to conform to contract specifications.

### Summary of Conversations:

As noted within the report shown 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 Ady Velasco, (818) 292-0659, who represents the Office of Structural Materials for your project.

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

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