

**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-004430**Date Inspected:** 10-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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:** Tower & OBG**Summary of Items Observed:**

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

**OBG Bay 1:**

The QA Inspector randomly observed 1 ZPMC magnetic drill operator and 2 drill press operators drilling bolt holes in OBG U-Rib connection plates.

The QA Inspector randomly observed 2 ZPMC magnetic drill operators drilling bolt holes in OBG U-Ribs prior to forming.

The QA Inspector randomly observed ZPMC welder Wang Jun ID 067752, utilizing the Flux Cored Arc Welding (FCAW) in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233 to weld the butt splice between U-Rib sections U-268/U-317 for Deck Plate 337-002 at Weld Joint (WJ) Number 156. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Sun Wei monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

**OBG Bay 2:**

The QA Inspector randomly observed that no contract work was being performed in this bay.

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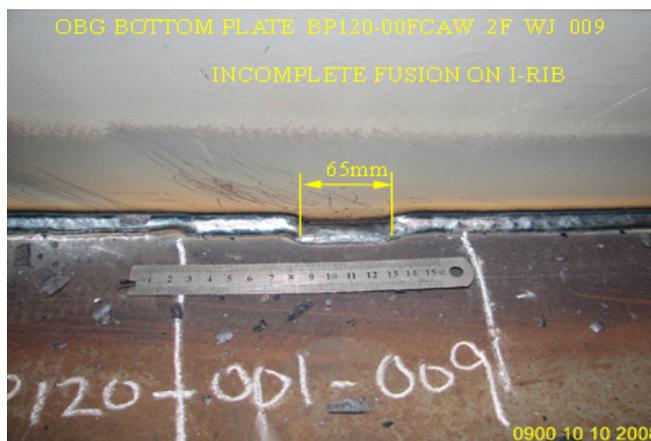
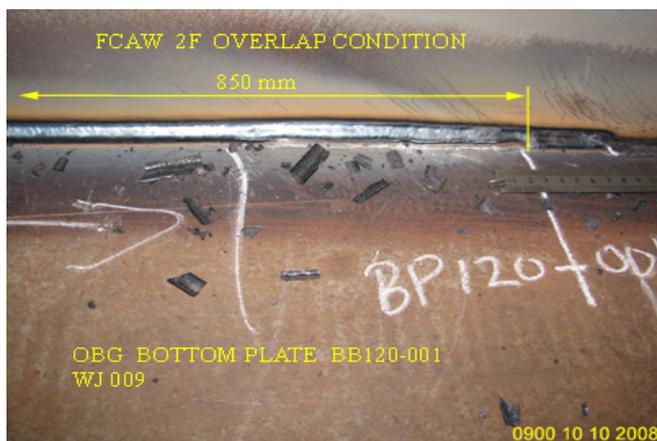
## OBG Bay 3:

The QA Inspector randomly observed ZPMC welders Sun Ti Yu ID 054459 (WJ's 009/010), Liu Ji Hong ID 062447 (WJ's 013/014) and Li Shu Liang ID 048801 (WJ's 017/018) utilizing Gantry 2 with the FCAW in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2132-3 to weld T-Ribs to Bottom Plate BP039-001. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The QA Inspector randomly observed ZPMC welders Wei Da Shui ID 051246 (WJ's 009/010), Xin Meng ID 053742 (WJ's 013/014) and Li Zhao Qian ID 048810 (WJ's 017/018) utilizing Gantry 2 with the FCAW in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2132-3 to weld T-Ribs to Bottom Plate BP120-001. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photographs provide additional detail.

## OBG Bay 4:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technicians perform a final 100% Magnetic Particle Testing (MT) examination of the fillet welds on Deck Plates DP516-001 (DP516A-Yellow Tag 477) WJ's 001-006, DP518-001 (DP518A-Yellow Tag 370) WJ's 001-006, DP635-001 (DP635A-Yellow Tag 370) WJ's 001-006 and DP513-001 (DP513A-Yellow Tag) WJ's 001-006. There appeared to be no indications and ZPMC QC accepted the above listed welds.

The QA Inspector performed a final 10% random Magnetic Particle Testing (MT) verification of Deck Plates DP516-001 (DP516A-Yellow Tag 477/Green Tag 00150) WJ's 001-006, DP518-001 (DP518A-Yellow Tag 370/Green Tag 001049) WJ's 001-006, DP635-001 (DP635A-Yellow Tag 370/Green Tag 001048) WJ's 001-006 and DP513-001 (DP513A-Yellow Tag/Green Tag 001047) WJ's 001-006. Green Tag Documentation signed and dated by ZPMC Representative Chen Chih Chien, ABF Representative Hu Gui Hua and CT QA Inspector Lot Number B75.



## Summary of Conversations:

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As noted in the above body of this report.

### **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 Joshua Ishibashi, 13764710411, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
<b>Reviewed By:</b>	Wright,Mark	QA Reviewer

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