

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-001402**Date Inspected:** 18-Jan-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 and Tower Mock-up**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 10 % of ultrasonic testing (UT) to the Tower Mock-up 77 M, at the corner connection, jointing skin A and E. The areas tested, Y location 0 thru 200 mm appeared to be in accordance with contract documents. See ultrasonic testing report TL\_6027 generated on this date.

The QA inspector performed 10 % of UT to the Tower Mock-up 114 M, at the corner connection, jointing skin C and B. The areas tested, Y location 0 thru 200 mm appeared to be in accordance with contract documents. See ultrasonic testing report TL\_6027 generated on this date.

PQR HP-200801-1 UT verifications.

The QA inspector witnessed the ABF's ultrasonic testing (UT) verifications performed at procedure qualification record PQR HP-200801-1 skew joint test coupon. ZPMC rejected the skew weld joint and ABF agreed with ZPMC assessment. A class A rejectable indication was found by ZPMC. ABF's UT verifications appeared to be in compliance with the contract documents.

Item Description	WBS	Dwg No.	Status
1 ZPMC UT verifications			

The QA inspector observed that ABF allowed ZPMC to start repairing a defect found by ultrasonic testing (UT) method without marking on the steel the location, length, rating, depth from the surface. The QA inspector had a conversation with QC representative Mr. Xu Jun. The QA inspector brought to his attention that ZPMC started repairing and ZPMC did not mark on the steel their UT findings. Mr. Xu Jun agreed with Caltrans representative assessment.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

### Summary of Conversations:

The QA inspector had a conversation with Caltrans QA Larry Viars. Mr. Larry Viars informed that the Tower splice 114 M had a linear indication at the run off area that appeared to be a crack at the junction of the corner connection plate to the skin B and C. The QA inspector concurred with Mr. Larry Viars. The Shaft 114 M upper was being aligned after milling the ends. The QA inspector recommended Mr. Larry Viars to notify to Task Leader Jimmy Cochran with the issue. Mr. Jimmy Cochran said that ABF representatives were going to the shop to verify the indication. When ZPMC noticed that it was a linear indication at the run off area, ZPMC elected to proceed and repair the indication. The QA inspector informed ZPMC that ABF representatives were going to the shop area to verify the indications. ZPMC QC inspector Lay Tao relayed that ZPMC had not completed the visual and the MT verifications at the inside of the Tower splice of Mock-up 114 M upper segment.

Note # 1: ABF allowed ZPMC to complete milling operations and started alignment operations without ZPMC completing the final visual and MT verifications at the Tower splice Mock-up 114 M upper segment.

### 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.

---

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

---