

**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-001884**Date Inspected:** 02-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**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:** 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**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Tim McClendon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

The QA inspector completed visual weld inspection on closed rib partial joint penetration welds, on production panel DP-355-001, weld # 1 and weld # 2 on rib # U27, weld # 3 and weld # 4 on rib # U21, weld # 5 and weld # 6 on rib # U29, weld # 7 and weld # 8 on rib # U30 and weld # 9 and weld #10 on rib #U12. The results of this inspection are as follows.

Weld #1 - thirty-six (36) total indications, eighteen (18) incomplete fusion, seventeen (17) underfill, and one (5) undercut.

Weld #2 - seventeen (17) total indications, ten (10) underfill, two (2) incomplete fusion and five (5) over lap.

Weld #3 – twenty (20) total indications, eight (8) underfill, three (3) over lap and nine (9) incomplete fusion.

Weld #4 - eleven (11) total indications, nine (9) underfill and two (2) incomplete fusion.

Weld #5 - eight (8) total indications, two (2) underfill, five (5) overlap and one (1) incomplete fusion.

Weld #6 – sixteen (16) total indications, three (3) incomplete fusion, five (5) over size, one (1) over lap and seven

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

(7) underfill.

Weld #7 – eight (8) total indications, one (1) incomplete fusion, five (5) over lap and two (2) underfill.

Weld #8 – twenty-three (23) total indications, eleven (11) incomplete fusion, five (5) oversize, and seven (7) underfill.

Weld #9– twenty-three (23) total indications, two (2) over lap, two (2) incomplete fusion and nineteen (19) underfill.

Weld #10 – sixty-one (61) total indications, four (4) overlap, fifty-one (51) incomplete fusion, three (3) undercut and three (3) underfill.

Visual Tracking Record is being maintained on site for reference and has been forwarded to the assistant structural materials representative Mr. Ady Velasco.

### **Summary of Conversations:**

No relevant conversations spoken on 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 Pat Lowry, (858) 344-2712, who represents the Office of Structural Materials for your project.

---

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

---