

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023387**Date Inspected:** 06-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shen Fu Yoo**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 Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

BAY 14

Orthotropic Box Girder (OBG)

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7EW. The weld joint no. SEG-041B-014 is in progress. The welder is identified as 201215. Welder was welding CJP in 3G (Vertical) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233-TC-U4b-F.

This QA Inspector observed ZPMC welding personnel performing Shielding Metal Arc Welding (SMAW) of Side Plate T stiffeners for Segment 7BW. The side plates were identified as SP-758 and SP-480. The weld joint no. SP-758-001, 003 till 007; SP-758-013 to 036; SP-480-001, 029 to 035 and SP-480-001, 050 to 056 is in progress. The welders are identified as 069841, 066038, 066361 and 037996. Welder was welding CJP and Fillet in 4G and 4F (Vertical) position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2 and WPS-B-P-2114.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7BW. The weld joint no. SEG-035B-001 is in progress. The welder is identified as 066401. Welder was welding CJP in 1G (Flat) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Unequal Angle to Bottom Plate for Segment 7BW. The weld joint no. SSD-21-PP50.5 from 005 to 084 is in progress. The welder is identified as 066401. Welder was welding Fillet in 1F (Flat) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2131.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7AW. The weld joint no. SEG-033C-002 is in progress. The welder is identified as 066401. Welder was welding Fillet in 1F (Flat) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Plate between BP 053A to BP 045A for Segment 9CW. The weld joint no. SEG-053A-005 is in progress. The welder is identified as 045265. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2221-B-L2c-S.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Side Plate between BP-128 to BP74 for Segment 9EE. The weld joint no. SEG-058A-006 is in progress. The welder is identified as 208035. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Plate between BP 542A to BP 582A for Segment 9AE. The weld joint no. SEG-050A-002 is in progress. The welder is identified as 207288. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2221-B-L2c-S.

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for FL3 for Segment 7CW. The weld joint no. SEG-027B-015 is in progress. The welder is identified as 045196. Welder was welding in 4G (Overhead) position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b.

This QA Inspector observed ZPMC welding personnel performing Stud Welding for Corner Panel CA29A for Segment 6CW. Welder was welding in Vertical position. In process Stud Welding appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2143.

The designated ZPMC CWI for the West Line is Mr. Shen Fu Yoo and QC Mr. Li Ming Yang and Mr. Liu Rudan.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

**Summary of Conversations:**

No relevant conversations were reported 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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

---