

**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-021998**Date Inspected:** 13-Mar-2011**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:** Mr. An Qing Xian.**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Chang xing Island in Shanghai, China. QA observed and/or found the following:

BAY # 14

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 (UT) report for this date. The member is identified as OBG Segment. The weld designations reviewed are as follows.

SEG3019BB-157

SEG3019D-1-179, 178

NDT Notification No-08534

This QA Inspector observed the following work in progress:

OBG 14EAST

Repair Welding, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 201087 Perform Shielded Metal Arc

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

Welding (SMAW) on OBG Segment. Joint identified as SEG3019D-1-323. ZPMC QC Identified as Zhu Yang Yang with Critical welding repair report CWR-B-CWR2677 Rev 2. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) Repair. For more information see attached picture number 1.

Repair Welding, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 066398 Perform Shielded Metal Arc Welding (SMAW) on OBG Saddle plate. Joint identified as SA3173-001-041. ZPMC QC Identified as Li Ping with Temporary welding repair report WRR-B-WR10730. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F) Repair. For more information see attached picture number 2.

OBG 14WEST

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 067876 Perform Flux Core Arc Welding (FCAW) on OBG Segment I Rib to Floor beam. Joint identified as SEG3013-M040. ZPMC CWI Identified as An Qing Xing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 067876 Perform Flux Core Arc Welding (FCAW) on OBG Segment I Rib to Floor beam. Joint identified as SEG3013-M041, 042. ZPMC CWI Identified as An Qing Xing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2232-ESAB.

Repair Welding, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 051348 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment Longitudinal diaphragm to Floor Beam. Joint identified as SEG3020AV-012. ZPMC QC Identified as Zhu Lin with Temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) Repair. For more information see attached picture number 3.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

---

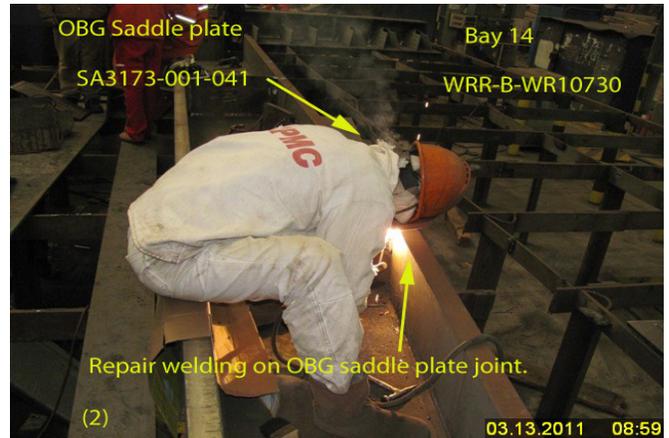
---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---



## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## 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 Thomas Ho: 150002048250, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Gaikwad,Shailesh

Quality Assurance Inspector

---

**Reviewed By:** Patterson,Rodney

QA Reviewer