

**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-021591**Date Inspected:** 19-Feb-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. Xu Le Feng.**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 and 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 Changxing Island in Shanghai, China. QA observed and/or found the following:

**BAY 10**

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 Tower lift 6 Ring hole. The weld designations reviewed are as follows.

NSD1-DPSA6-3-1, 2

NDT Notification No-08346

This QA Inspector observed the following work in progress:

**BAY 10: SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 044011, Perform Shielded Metal Arc Welding (SMAW) on OBG Cantilever box bracket. Joint identified as BK15A-001-011, 012. ZPMC QC Identified as Yin Chun Fang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2212-Tc-U4c. For more information see below attached picture number 1.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

This QA Inspector observed ZPMC qualified welding personnel identified as 040581, Perform Shielded Metal Arc Welding (SMAW) on OBG Cantilever box Plate. Joint identified as BK16B-001-001, 002. ZPMC QC Identified as Wang Chang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2211-B-U2a-1.

Tower Lift 6: SMAW Process,

This QA Inspector observed ZPMC qualified welding personnel identified as 500363, Perform Shielded Metal Arc Welding (SMAW) on Tower lift 6 Diaphragm Box. Joint identified as SD1-SA6-1-1, 2. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2213-B-U2. For more information see below attached picture number 2.

This QA Inspector observed ZPMC qualified welding personnel identified as 052930, Perform Shielded Metal Arc Welding (SMAW) on Tower lift 6 Diaphragm Box. Joint identified as ND1-SA6-3- 2. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2213-B-U2.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075, Perform Flux Core Arc Welding (FCAW) on OBG Bike path Bottom cover plate. Joint identified as BK008A2-001-016, 018. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB. For more information see below attached picture number 3.

BAY 11,

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, Perform Flux Core Arc Welding (FCAW) on OBG Bike path Stringer plate. Joint identified as BK012A4-001-027, 028, 029. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB.

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:** Clifford,William

QA Reviewer