

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-021917**Date Inspected:** 01-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:** An Qing Xiang**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 Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

WELDING

This QA Inspector observed the following work in progress:

BAY 14

This QA Inspector observed ZPMC qualified welding personnel identified as 066673 perform welding by Flux Cored Arc Welding (FCAW), on OBG Segment 14W. Weld joint is identified as FB3316-001-094/095. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2132-ESAB. This QA Inspector noted welding variables were 290~305 amperes and 26 volts, which appears to be in compliance with the approved WPS. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067942 perform repair welding by Shielded Metal Arc Welding (SMAW), on OBG Segment 14W. Weld joint is identified as SEG3020BB-046. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and Critical welding repair report B-CWR2752. This QA Inspector noted welding variables were 200~210 amperes and 24.8 volts, which appears to be in compliance with the approved WPS.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform repair welding by Shielded Metal Arc Welding (SMAW), on OBG Segment 14W. Weld joint is identified as SEG3020BB-028. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and Critical welding repair report B-CWR2752. This QA Inspector noted welding variables were 195~210 amperes and 26 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066239, 066695 perform welding by Flux Cored Arc Welding (FCAW), on OBG Segment 14W. Weld joint is identified as SEG3020U-588. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 284~300 amperes and 25.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067588 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3174-001-034. ABF Quality Assurance (QA) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and welding repair report B-WR20289. This QA Inspector noted welding variables were 185~195 amperes and 25 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066398 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3173-001-022. ABF Quality Assurance (QA) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and welding repair report B-WR20289. This QA Inspector noted welding variables were 180~190 amperes and 26 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 204730 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel of OBG Segment 13BW. Weld joint is identified as DP3138-001-127/128. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2132-ESAB. This QA Inspector noted welding variables were 298~310 amperes and 26.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066179 perform welding by Shielded Metal Arc Welding (SMAW), on K-Plate to Floor beam weld of OBG Segment 13AW. Weld joint is identified as SEG3013P-061. ZPMC Quality Control (QC) Inspector identified as Liu Fang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 142~155 amperes and 24.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified NDT personnel perform Ultrasonic testing on Side plate I-Ribs to Floor beam welds of OBG Segment 14W. See attached picture.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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



Summary of Conversations:

No significant 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, phone: 15000422372 , who represents the Office of Structural Materials for your project.

Inspected By: Upadhye, Anand

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer
