

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019622**Date Inspected:** 05-Jan-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) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. LIU HUA JIE**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 Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to side plate hold back weld joint located on 12AW+12BW at counter weight side. The weld is designated as CA3007-005(12AW) & CA3008-001(12BW). The welder is identified as 040656. ZPMC QC Mr. SHI LIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as WR-18910.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to deck plate hold back weld joint located on 12AW+12BW at cross beam side. The weld is designated as SEG3004AA-021(12AW) & CA3009-002(12BW). The welder is identified as 046709. ZPMC QC Mr. ZHU ZHONG HAI was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

WR-18909.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the deck plate to deck plate transverse splice weld joint located on 12BE+12CE at Cross Beam side. The weld is designated as OBE12A-002. The welder is identified as 047353. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-223(2)1T-ESAB. During the visual inspection of root pass weld, longitudinal linear cracks are found. The 'Y'-location is 1400mm from CB side & length of the crack is 10mm measured approximately. After grinding over the crack, Magnetic Particle Testing performed by ABF Quality Assurance (QA) before hot pass weld.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the deck plate to deck plate transverse splice weld joint located on 12BE+12CE. The weld is designated as OBE12A-003. The welder is identified as 040458 & 040367. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-223(2)1T-ESAB. During the visual inspection of root pass weld, longitudinal linear cracks are found. The 'Y'-location & length of the crack is measured approximately from CB side & mentioned in below list. After grinding over the crack, Magnetic Particle Testing performed by ABF Quality Assurance (QA) before hot pass weld. Further weld detail mention in attached picture. Y Location in mm (Length in mm)= 50 (10), 330 (5), 450 (6), 635 (12), 3010 (16), 4510 (10), 4570 (3), 4690 (4), 4850 (15), 4900 (8), 6960 (15), 7120 (15), 7770 (8), 7880 (4), 8270 (6), 8390 (5), 8440 (10), 8530 (20), 8610 (7), 8660 (8), 8960 (25), 9640 (20), 10530 (20), 12900 (10), 13100 (15), 19600 (5) & 19860 (10).

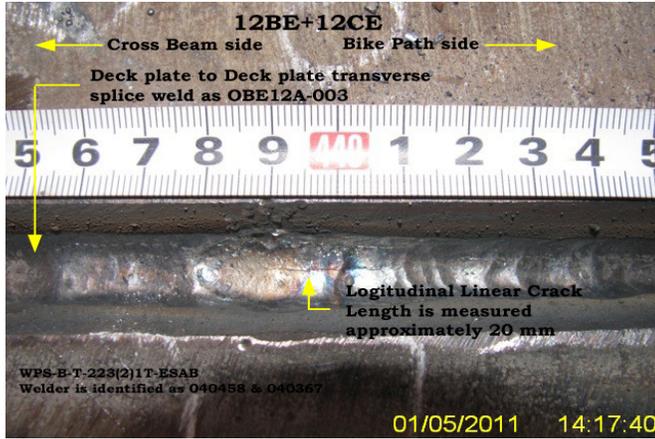
ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to deck plate hold back weld joint located on 12AE+12BE at bike path side. The weld is designated as CA3001-006. The welder is identified as 040320. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2683.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the deck plate to deck plate transverse splice weld joint located on 12BE+12CE at bike path side. The weld is designated as CA6502-012. The welder is identified as 040458. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-223(2)1T-ESAB.

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 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
