

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009784**Date Inspected:** 20-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin and Li Jia**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz 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:

OBG Assembly Yard

1AE & 1BE

This QA Inspector performed Ultra Sonic (UT) inspection of weld joint OBE1A-007 and OBE1A-006 (side plate) utilizing scanning pattern D to detect transverse indication reflectors. Noted UT inspection was performed in conjunction with ABF UT Department.

See Caltrans's Ultrasonic Transverse Indication Evaluation report sheet dated 10-20-09 for future information on inspection performed on this work day.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG 1AW+1BW side plate (c.b side of segment) weldment previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QA Inspector observed 3 rejectable longitudinal linear indications at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. Welds UT verified was identified as listed below:

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1. OBE1A-007

This QA Inspector observed three (3) Class A discontinuities present in the weldment accepted by ZPMC QC UT personal. This QA Inspector issued an incident report on the above noted UT rejections.

5AW

SMAW welding performed on drip plate weld joint 005 located on OBW5G.

Welder is identified as Mr. Chen Zheng Hua (220067). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding performed on drip plate weld joint 005 located on OBW5G.

Welder is identified as Mr. Hu Yanming (062092). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

5CW

SMAW repair welding on various side plate stiffeners located on counter weight side of segment at panel point 35.

Welder is identified as Mr. Chen Zheng Hua (220067). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

BK1

FCAW repair welding performed on weld joint 007 located on BK001-001.

Welder is identified as Mr. Cao Caijun (220064). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-Repair-1 and repair procedure WR8133.

FCAW repair welding performed on weld joint 005 located on BK001-001.

Welder is identified as Mr. Cao Caijun (220064). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-Repair-1 and repair procedure WR8132.

NDT Observation

This QA Inspector observed ZPMC Ultra Sonic (UT) Technician performing UT on various locations in the trial assembly yard. Locations are as followed:

1. UT was performed and accept weld OBW1-010 (deck plate) repair areas with a 70° wedge. Scanning “D” pattern was observed at time of UT inspection. Y location is approximately 800mm (off cross beam side).

2. UT was performed and accept weld OBW1-001 (deck plate) repair areas with a 70° wedge. Scanning “D” pattern was observed at time of UT inspection. Y location is approximately 660mm (off OBW1-010).

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

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 Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
