

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-024517**Date Inspected:** 30-May-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:** 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 COMPONENT**Summary of Items Observed:**

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

In process Inspection

Trial Assembly Area

This QA Inspector observed the following work in progress:

SMAW in the 4G position for OBG segment 14W, welding of weld No. SEG3020E-106. The Welder is identified as 067572. ZPMC Quality Control is identified as Mr. Zhu Lin. The welding variables recorded by QC personnel appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1. The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 3G position for OBG segment 14W, welding of weld No. SEG3020R-146. The Welder is identified as 066675. ZPMC Quality Control is identified as Mr. Zhu Lin. The welding variables recorded by QC personnel appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1. The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 4F position for OBG segment 14W, welding of weld No. SEG3020AE-135/136. The Welder is identified as 068864. ZPMC Quality Control is identified as Mr. Zhu Lin. The welding variables recorded by QC

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personnel appeared to comply with WPS-B-P-2114-FCM-1. The In-process SMAW appears to be progressing in compliance with approved contract documents.

Ultrasonic Testing (A, B, C and D-Scan)

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as butt joint (additional transverse splice) joining between edge Plate to edge plate for OBG segment 13AW counter weight side. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld designations are as follows

EP3023-001-033

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as Corner joint joining between deck Plate to edge plate for OBG segment 13AE cross beam side. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

SEG3007AB-095

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as Corner joint joining between deck Plate to edge plate for OBG segment 13BE cross beam side. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

CA3013-001

CWR verifications (CWR3004R0)

Type – (D-Scan)

This QA Inspector was notified via email for verification of B-CWR3004R0 at 1030 hours the following was observed:

- The components for verification were identified as OBW13-001(13AW to 13BW DP splice joint)
- Welds repair were to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT).
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.

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-WPS to be used for repair was WPS-345-SMAW-4G(4F)-FCM-Repair-1.

CWR verifications (CWR3005R0)

Type – (D-Scan)

This QA Inspector was notified via email for verification of B-CWR3005R0 at 1030 hours the following was observed:

- The components for verification were identified as OBW13E-003(13AW to 13BW SP splice joint)
- Welds repair were to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT).
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-4G(4F)-FCM-Repair-1.

CWR verifications (CWR3006R0)

Type – (Crack Repair)

This QA Inspector was notified via email for verification of B-CWR3006 R0 at 1030 hours the following was observed:

- The component for verification was identified as SEG3019AL-006.
- Weld repair was to be performed on location where rejectable indication was observed during visual inspection.
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-4G(4F)-FCM-Repair-1.

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



Summary of Conversations:

No relevant conversations

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.

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Inspected By:	Bera,Subhasis	Quality Assurance Inspector
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Reviewed By:	Dsouza,Christopher	QA Reviewer
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