

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-022657**Date Inspected:** 16-Apr-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:** Shi 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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the Self-Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Segment 13BE-13CE

This QA Inspector performed verification Ultrasonic Testing (ABF Request No: UT-13E-025R1 and UT-13E-022R1) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between two Deck panels at intersection of OBG segment 11AE & 11BE. The weld designations were as;

CA3013A-006 & CA3014A-101 (SP to EP @ E16 HOLD BACK)

OBE13C-003,004 (SP TO SP @ E8)

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Repair welding of weld joint no: SEG3020AQ-025 [Top Anchorage Plate PL3519A to Side Panel (SP) 3144B, Complete Joint Penetration (CJP) weld in between panel point (PP) 125 to PP126]. The welders are identified as 066361 and 045246 and were observed welding in the 1G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-1G(1F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2923 Rev-0.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-048 [Vertical Shear Plate extension plate X5062A to Anchor Plate (AP) 3032A, complete joint penetration (CJP) weld at PP 126]. The welder is identified as 066261 and was observed welding in 4G position. ZPMC Quality Control (QC) was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2214-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-066 [Vertical Shear Plate extension plate X5064A to AP 3032A, complete joint penetration (CJP) weld at PP 126]. The welder is identified as 037932 and was observed welding in 4G position. ZPMC Quality Control (QC) was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020M-009 [Deck Panel (DP) diaphragm X4817D of DP 3174A to Floor Beam (FB) 3328A, CJP weld at PP127]. The welder is identified as 067580 and was observed welding in 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2212-B-U2-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020H-010 [DP diaphragm X4856M of DP 3171A to DP diaphragm X4857G of DP 3172A, CJP weld at PP127.5]. The welder is identified as 066881 and was observed welding in 3G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

The FCAW process on weld joint no: SEG3020F-014 [DP diaphragm X4856M of DP 3171A to DP diaphragm X4857C of DP 3172A, CJP weld at PP128]. The welder is identified as 067275 and was observed welding in 3G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

The FCAW process on weld joint no: SEG3020F-011 [DP diaphragm X4856C of DP 3170A to flange of FB3336A, CJP weld at PP128]. The welder is identified as 067888 and was observed welding in 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020L-017 [DP diaphragm X4818B of DP 3170A to DP diaphragm X4818A of DP 3171A, CJP weld at PP127]. The welder is identified as 066881 and was observed welding in 3G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The FCAW process on weld joint no: SEG3020Y-015 [Longitudinal Diaphragm (LD) 3051A to DP diaphragm X4882E of DP 3172A, CJP weld at PP127 to PP127.5]. The welder is identified as 066421 and was observed welding in 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020Y-016 [LD 3051A to DP diaphragm X4882G of DP 3172A, CJP weld at PP127.5 to PP128]. The welder is identified as 067949 and was observed welding in 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020Y-017 [LD 3051A to DP diaphragm X4882H of DP 3172A, CJP weld at PP128 to PP128.3]. The welder is identified as 045143 and was observed welding in 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

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 : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
----------------------	---------------	-----------------------------

Reviewed By:	Peterson,Art	QA Reviewer
---------------------	--------------	-------------