

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-022551**Date Inspected:** 01-Nov-2010**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 Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

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 Complete Joint Penetration (CJP) welds joining the T-rib web to web transverse splice weld joint for side plate located on 11BE+11CE at cross beam side. The weld is designated as SP596-001-048. The welder is identified as 050289. ZPMC QC Mr. LIU HUA JIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2214-B-U2-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the T-rib web to web transverse splice weld joint for bottom plate located on 11BE+11CE at cross beam side. The weld is designated as BP187-001-020. The welder is identified as 040367. ZPMC QC Mr. LIU HUA JIE

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was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2233-B-U2-F.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Fillet welds joining the side plate to T-rib hold back weld joint located on 11BE+11CE at bike path side. The weld is designated as SP354-001-035(11BE) & SP355-001-011(11CE). The welder is identified as 047353. ZPMC QC Mr. LIU HUA JIE was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2132.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Base Metal Repair weld (temporary attachment removal area) near the deck plate to deck plate transverse splice weld joint located on 11BE+11CE. The location near the weld is designated as OBW11-008. 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-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-1957.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the side plate to side plate transverse splice weld joint located on 11CW+11DW at cross beam side. The weld is designated as OBW11C-004. The welder is identified as 049220 & 053486. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2233T-1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the side plate to side plate transverse splice weld joint located on 11CW+11DW at counter weight side. The weld is designated as OBW11C-002. The welder is identified as 040609 & 040759. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2233T-1.

ZPMC welding personnel performing Submerge Arc Welding (SAW) of Complete Joint Penetration (CJP) welds joining the deck plate to deck plate transverse splice weld joint located on 11CW+11DW. The weld is designated as OBW11A-003. The welder is identified as 044560. ZPMC QC Mr. ZHU ZHONG HAI was onsite monitoring the welding variables. The inprocess SAW appears to be progressing in compliance with WPS-B-T-223(2)1-T-1.

2. NDT:

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 07194.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were SEG067E-019 & 110, SSD22-PP98.5-0168.

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

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documents.

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
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Reviewed By:	Miller,Mark	QA Reviewer
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