

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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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-022159**Date Inspected:** 21-Mar-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. ZHU ZHONG HAI**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 of Base Metal Repair weld (temporary attachment removal area) near the longitudinal shear plate located on 12BW+12CW at counter weight side. The location near the weld is longitudinal shear plate to deck plate & bottom plate. The welder is identified as 041713. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2130. Further weld detail mention in attached picture.

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (temporary attachment removal area) near the longitudinal shear plate located on 12BW+12CW at cross beam side. The

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location near the weld is longitudinal shear plate to deck plate & bottom plate. The welder is identified as 041713. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2130.

ABF Quality Assurance (QA) personnel performing Magnetic particle Testing (MT) for the floor beam to I-stiffener weld joint located on 12AW at cross beam side, Panel Point (PP-110). The weld is designated as SEG3004E-130~134.

ABF Quality Assurance (QA) personnel performing Ultrasonic Testing (UT) for the bottom plate to side plate hold back weld joint located on 13AE at bike path side.

ABF Quality Assurance (QA) personnel performing Magnetic particle Testing (MT) for the floor beam extension partial diaphragm weld joint located on 12AW+CB-17 at cross beam side, Panel Point (PP-110 to 112).

Orthotropic Box Girder (OBG) at Bay-16:

ZPMC welding personnel performing Flux Core Arc Welding of Fillet welds joining the steel barrier weld joint located on W5-SB31A-001. The weld is designated as W5-SB31A-001-032. The welder is identified as 201074. ZPMC QC Mr. GUO XIN HUI was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2133-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding of Fillet welds joining the steel barrier weld joint located on W5-SB30D-001. The weld is designated as W5-SB30D-001-085. The welder is identified as 206296. ZPMC QC Mr. GUO XIN HUI was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2132-ESAB.

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



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**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.

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<b>Inspected By:</b>	Pillai,Santosh	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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