

**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-019620**Date Inspected:** 30-Jan-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. SHAO JIAN YUAN**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 was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed.

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 Complete Joint Penetration welds joining the deck plate to deck panel diaphragm weld joint located on 14W. The weld is designated as DP3169-001-158. The welder is identified as 037779. ABF QA Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding of Partial Joint Penetration welds joining the deck plate to deck panel longitudinal diaphragm weld joint located on 14W. The weld is designated as DP3170-001-114. The welder is identified as 067520. ZPMC QC Mr. SHAO JIAN YUAN was onsite monitoring the welding variables. The welding variables were recorded at, Amperage 281.4, Volts 25.8. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2232-ESAB.

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# WELDING INSPECTION REPORT

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ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the deck plate to deck panel diaphragm weld joint located on 14W. The weld is designated as DP3170-002-216. The welder is identified as 069493. ABF QA Mr. SHEN JIAN was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM-1.

## 2. NDT:

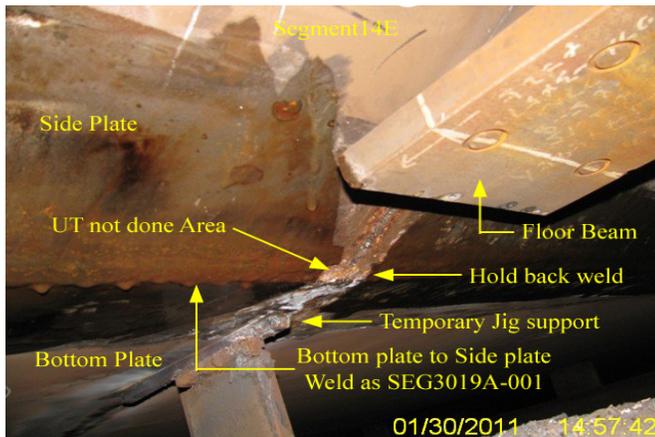
### Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 08307.

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. The members are identified as butt joint between bottom plate to side plate weld joint located on 14E at cross beam side. 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 SEG3019A-001.

Note: UT verification done, except Jig supporting areas and hold back areas. Further detail mention in attached picture.

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

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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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