

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-017861**Date Inspected:** 14-Oct-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), 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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD**

This QA performed Visual Testing (VT) and dimensional inspection on cope and weld access holes inside Orthotropic Box Girder (OBG) lift 12AE. A number of the cope holes did not appear to comply with the contract documents. American Bridge Fluor (ABF) QA inspectors have previously inspected and accepted these cope holes and recorded their findings on ABF document CWAHIR-12AE-01 date 13/10/10.

Those locations flush grinding and sharp edges removal required. All these details noted and forwarded to team leader for further action.

Location E3 - Panel point 109(Facing West) - Floor beam to bottom panel cope hole

Location E3 - Panel point 111(Facing West) - Floor beam to side panel cope hole

Location E4 - Panel point 111(Facing East) - Floor beam to bottom panel cope hole

Location E4 - Panel point 115.5(Facing West) - Floor beam to side panel cope hole

Location E4 - Panel point 112.5(Facing West) - Floor beam to bottom panel cope hole

Location E3 - Panel point 112.5(Facing West) - Floor beam to side panel cope hole

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## WELDING INSPECTION REPORT

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### WELDING

#### Segment # 11AE

This QA inspector observed ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG066A-014; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate Transverse CJP Weld. The Critical Welding Repair Report (CWRR) was B- CWR2044. ZPMC Quality Control (QC) is identified as Mr.Liu Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW 4G (4F) FCM Repair-1 See the attached Photo.

#### Segment # 11AE

This QA inspector observed ZPMC qualified welding personnel identified as 053871 perform Shielded Metal Arc Welding (SMAW), weld joint identified as BP132-001-053; located On Orthotropic Box Girder (OBG) Bottom Plate to T-Rib Hold Back Weld . ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2112-FCM-1.

#### Segment # 11AE ~ 11BE

This QA inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP634-001-046; located On Orthotropic Box Girder (OBG) Side Plate T-Rib Web to Web joint. ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1.

#### Segment # 10BE

This QA inspector observed ZPMC qualified welding personnel identified as 040484 perform Shielded Metal Arc Welding (SMAW), weld joint identified as Retro-B1-10BE-041; located On Orthotropic Box Girder (OBG) Side Plate to Retro Plate Weld. ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2314-TC-P5-FCM-1.

#### Segment # 11AE ~ 11BE

This QA inspector observed ZPMC qualified welding personnel identified as 500363 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP380-001-044; located On Orthotropic Box Girder (OBG) Side Plate T-Rib Web to Web joint. ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1.

#### Segment # 11AE ~ 11BE

This QA inspector observed ZPMC qualified welding personnel identified as 040611 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW11-025; located On Orthotropic Box Girder (OBG) Deck Plate to Counter Weight Connection Plate CJP joint. ZPMC Quality Control (QC) is identified as Mr. Wang Zhu. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1. See the attached Photo.

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

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# WELDING INSPECTION REPORT

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

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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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