

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024341**Date Inspected:** 04-Jun-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:** 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:** 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****Bay 10 (Bike Path)**

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom plate for flatness check across the longitudinal butt weld. Flatness check was performed on following mentioned Bike Path.

BK009A-001.

The QA Inspector measured the flatness using 600mm long straight edge across the Butt (CJP) weld and using 1500mm long straight edge across the longitudinal butt weld.

Observed flatness 4.7mm to 5mm using 600mm long straight edge allowable tolerance.

The results of the inspection were informed to Caltrans Lead Inspector Mr. Mark Miller and Mr. Hiranch Patel.

**WELDING:**

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## WELDING INSPECTION REPORT

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### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 066326 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020\*-012 ; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR2115. ZPMC Quality Control (QC) Mr. Zhu Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1. See attached photo for further details.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 066361 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020AH-002 ; located On Orthotropic Box Girder (OBG) Edge Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Critical Welding Repair Report (CWRR) was B-CWR2998. ZPMC Quality Control (QC) Mr. Zhu Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 068493 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020Q-107 ; located On Orthotropic Box Girder (OBG) LD3050A to X4837L CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR21174. ZPMC Quality Control (QC) Mr. Zhu Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-1G (1F) FCM-Repair-1.

### Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 069118 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020AZ-060 ; located On Orthotropic Box Girder (OBG) RS3526AA to RS3526AA CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR21153. ZPMC Quality Control (QC) Mr. Zhu Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1

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

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

No significant 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 James Devey - 15000026784, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhune,Manoj

Quality Assurance Inspector

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**Reviewed By:** Peterson,Art

QA Reviewer