

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-024097**Date Inspected:** 24-May-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**WELDING:****Segment 13AW**

This QA Inspector observed ZPMC qualified welding personnel identified as 047864 perform Shielded Metal Arc Welding (SMAW), weld joint identified as KP3009-001-001 ; located On Orthotropic Box Girder (OBG) KP to Deck Plate I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-B-U2-FCM-1.

Segment 13AE ~ 13BE

This QA Inspector observed ZPMC qualified welding personnel identified as 216086 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE13D-003 ; located On Orthotropic Box Girder (OBG) Side Plate

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to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR21075. ZPMC Quality Control (QC) Mr. Wang Li Yang 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.

Segment 13AE ~ 13BE

This QA Inspector observed ZPMC qualified welding personnel identified as 216086 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE13D-004 ; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR21075. ZPMC Quality Control (QC) Mr. Wang Li Yang 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.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 057220 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3133-001-030 ; located On Orthotropic Box Girder (OBG) Deck Plate to Longitudinal diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lee. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR21033. ZPMC Quality Control (QC) Mr. Shi Lee 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.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 066687 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3146-001-241 ; located On Orthotropic Box Girder (OBG) Deck Plate to Longitudinal diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lee. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR21033. ZPMC Quality Control (QC) Mr. Shi Lee 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.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 069896 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3015M-100 ; located On Orthotropic Box Girder (OBG) Floor Beam to I-rib Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lee. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shi Lee was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2114-FCM-1

Segment 14 East

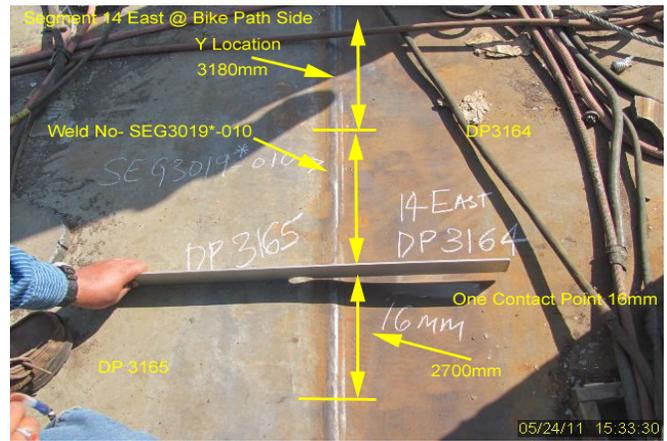
During random in process observations of the Trial Assembly Yard of Deck plate 14East, this Caltrans Quality Assurance Inspector observed the following issue:

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- The distortion measuring approximately 16mm from the Deck plate 14 East.
 - The weld joint identified as SEG3019*-010.
 - The Deck Plate is identified as 14 East: DP3164 and DP3165 (SPCM)
 - The distortion was measured using a 600mm straight edge.
 - Plate is located in the Bike Path side of Trial Assembly Yard.
- Report was forwarded to Caltrans QA Lead.
For further information, please reference the attached pictures.

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



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
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