

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-020460**Date Inspected:** 06-Feb-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:** Qiu Wen**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:

Bay 14

WELDING:

Segment 14W

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020X-012; located On Orthotropic Box Girder (OBG) Bottom Plate to Floor Beam CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Wang Jiang Hua. The Critical Welding Repair Report (CWRR) was B-CWR2659 Rev- 2. This QA Inspector observed a welding current of approximately 238 amps and 25.4 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Wang Jiang Hua was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1. See attached photo for further details.

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This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3177-001-030; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Panel diaphragm CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Shen Jian Yuan. This QA Inspector observed a welding current of approximately 213 amps and 24 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067888 perform Flux Cored Arc Welding (FCAW), weld joint identified as DP3172-001-074; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Panel diaphragm CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Shen Jian Yuan. This QA Inspector observed a welding current of approximately 300 amps and 26.1 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066421 perform Flux Cored Arc Welding (FCAW), weld joint identified as SEG3020M-186; located On Orthotropic Box Girder (OBG) FB3319 to EB3056A CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Wang Jiang Hua. This QA Inspector observed a welding current of approximately 270 amps and 26.3 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Wang Jiang Hua was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066038 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020D-052; located On Orthotropic Box Girder (OBG) Bottom Plate to floor Beam CJP Weld; The Critical Welding Repair Report (CWRR) was B-WR2734 This QA Inspector observed a welding current of approximately 232 amps and 24.8 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Wang Jiang Hua was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067904 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3175-001-045; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener CJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3176-001-120; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener CJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

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This QA Inspector observed ZPMC qualified welding personnel identified as 067904 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3176-001-124; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener CJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

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

Inspected By: Prabhune,Manoj

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer