

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-019619**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), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. 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:**

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

OBG Assembly Bay- 14.

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) Repair welding of weld joint identified as SEG3020X-008. Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Wang xiang pin. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS):

WPS-345-SMAW-3G (3F)-FCM-Repair. The repair welding was being performed as per approved Critical Welding Repair Report (CWR) No: B-CWR2792. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-19154R1.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as DP3171-001-299. Welder is identified as 067572. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-T-2232-ESAB.

FCAW welding of weld joint identified as DP3170-001-114. Welder is identified as 067520. American

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Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-T-2232-ESAB.

SMAW welding of weld joint identified as DP3169-001-158. Welder is identified as 037779. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM.

SMAW welding of weld joint identified as DP3070-001-216. Welder is identified as 069493. ZPMC Quality Control (QC) is identified as Mr. Qui wen. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM.

SMAW welding of weld joint identified as SEG3013P-197. Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhang lin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2213-TC-U4b-FCM-1.

FCAW welding of weld joint identified as SEG3020J-078. Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Zhang lin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2231-ESAB.

This QA inspector performed random visual inspection of a total of 2 repair excavations for the longitudinal diaphragm LD3051A to Floor beam FB3343A Tee joint connection at panel point 128. The welds are identified as 3020D-032 and 035. The welds are designated as SPCM and repairs are being carried out in accordance with B-WR20077 and B-WR20078 respectively. There were no visible indications present at the time of inspection.

ZPMC Grinder was performing flush grinding for the bevel cut area on deck panel diaphragm identified as DP3117A-X4080K. Refer the attached photos for reference.

During random in process inspection of member identified as Deck panel diaphragm this QA observed a cracked tack weld on weld joint identified as SEG3014B-015. This QA marked the cracked tack and informed ZPMC Quality Control (QC) identified as Mr. Qui wen of this issue. Mr. Qui wen informed this QA that the cracked tack would be corrected in a manner compliant with the contract documents prior to start the welding. Refer the attached photos for reference.

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

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

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer