

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014069**Date Inspected:** 27-Apr-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:** Mr. Tian Lei**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:

BAY-2

This QA Inspector Randomly observed the following work in progress:

Submerged Arc Welding (SAW) of weld joint FB3186-001-009. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

SAW of weld joint FB3189-001-005. Welder is identified as 045270. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

BAY-3

Flux Core Arc Welding (FCAW) of weld joint FB3122-001-005. Welder is identified as 206386. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the

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Applicable WPS: WPS-B-T-2231-B- U3-F-1.

SAW of weld joint FB3109-001-002. Welder is identified as 050502. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

SAW of weld joint FB3111-001-004. Welder is identified as 062406. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

BAY-5

FCAW of Repair weld joint 10TR3-016-014. Welder is identified as 215689. ZPMC Quality Control (QC) is identified as Mr. Zhang zhi wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-Repair-1. The Repair welding was been performed as per the Welding Repair Report (WRR) No: B-WR11329. This weld was rejected by ZPMC UT Technicians and recorded on Ultrasonic Testing (UT) Report No: B787-UT-10813R1-2.

BAY-6

During Quality Assurance Random in process Visual Inspection (VT) review of welds located on Orthotropic Box Girder (OBG) West Jacking Frame WJF-0- 187, this Quality Assurance Inspector (QA) observed One (1) Longitudinal Linear Crack on the tack weld measuring approximately 100 mm in length. The weld joint is identified as: WJF-0-173. This QA informed to ZPMC QC identified as Mr. Zhao jian Hang and AB/F QA Inspector identified as Mr. Wang wen bin of the above issue, and reported to the Team leader. According to ZPMC QC they will remove the tack weld and perform Magnetic Particle Testing (MT) prior to welding the joint. The attached photographs provide additional detail.

BAY-7

FCAW of Repair weld joint 22TR4-004-003. Welder is identified as 053742. ZPMC Quality Control (QC) is identified as Mr. Wang Liyang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-Repair-1. The Repair welding was been performed as per the Welding Repair Report (WRR) No: B-WR11905. This weld was rejected by ZPMC UT Technicians and recorded on ZPMC UT Report No: B787-UT-12195.

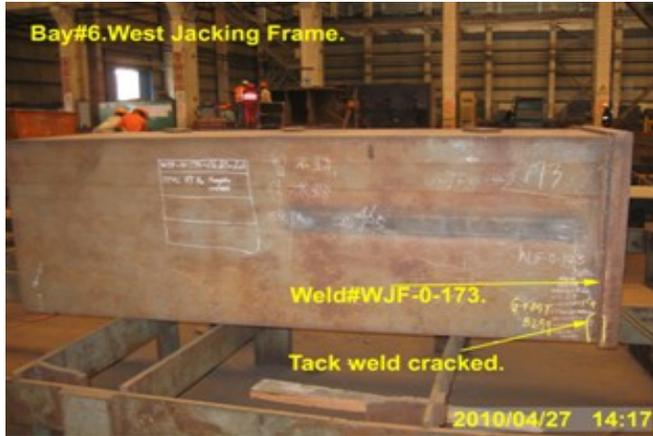
BAY-8

This QA observed Inspector ZPMC Personnel performing Heat Straightening for the BK004A6-(053~062)-68,69. The Heat Straightening was being performed appeared to comply with the Applicable HSR Report# HSR1 (B)-8267. ZPMC Quality Control (QC) is identified as Mr. Liu fa wen.

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

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Summary of Conversations:

Only general conversation was held between QA and Quality Control (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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
