

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-011827**Date Inspected:** 06-Feb-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. Wuzhi Chang**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 TRIAL ASSEMBLY

This QA inspector measured and recorded root gap and offset for below segment along with QA inspector Mr. Manoj Prabhune. Reports forwarded to team leader for further action.

7BW-7CW

This QA Inspector observed the following work in progress:

SEGMENT: Crossbeam-CB6

Shielded Metal Arc Welding (SMAW) welding of weld joint CB202-006-006. Welder is identified as 067764. ZPMC Quality Control (QC) is identified as Mr. Zhang Hai Tao. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2212-TC-U4b-FCM-1.

SEGMENT: 7BW-7CW

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Shielded Metal Arc Welding (SMAW) welding of weld joint OBW7A-005. Welder is identified as 068717. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2213-B-U2-FCM-1.

Shielded Metal Arc Welding (SMAW) welding of weld joint OBW7A-005. Welder is identified as 069683. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2213-B-U2-FCM-1.

This QA Inspector observed the following work not in compliance:

During Quality Assurance Random Visual Inspection (VT) review of welds located on Cross Beam CB6 (outside), this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) Transverse Linear indication observed on back gouged weld area, measuring approximately 08 mm in length. - The indication has been confirmed by Magnetic Particle Testing (MT).
- The weld is identified as: CB202-006-004.
- This weld joint is designated as Seismic Performance Critical Member (SPCM).
- The weld is a complete joint penetration (CJP) weld joining Side plate (to Bottom plate).
- CB6 is located near the OBG TRIAL ASSEMBLY AREA.

This QA notified ZPMC QC identified as Mr. Zhang Hai Tao and ABF inspector identified as Mr. Wang of the above issue.

The attached photographs provide additional detail.

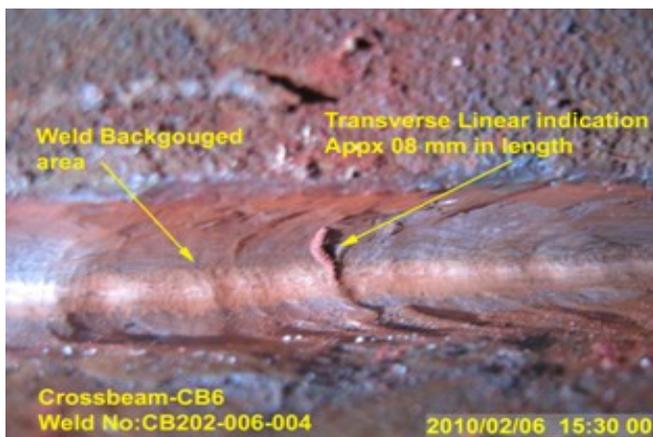
Applicable reference:

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks”.

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

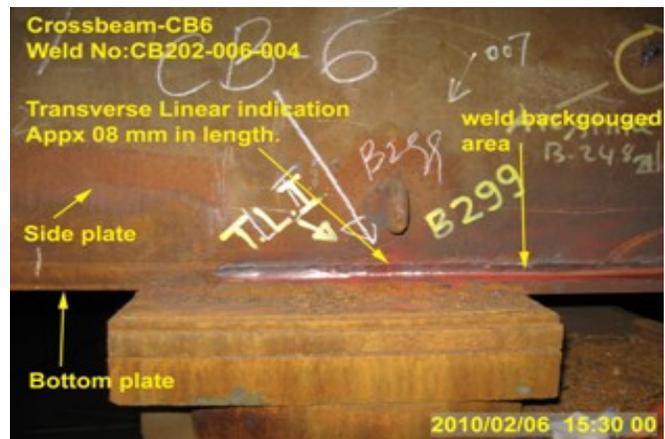
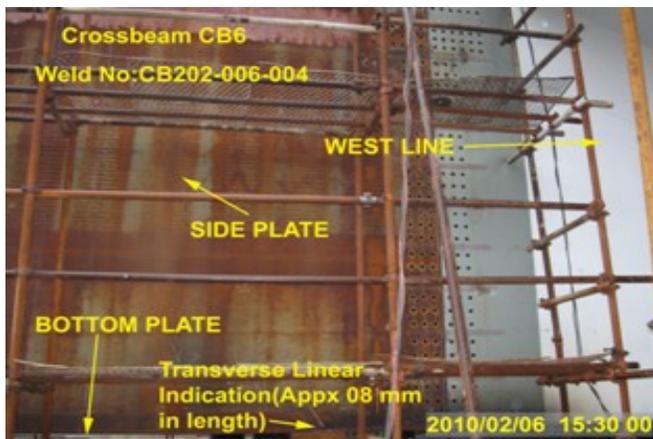
AWS D1.5 (2002) Section 6.26.1.1 - “The weld shall have no cracks.”

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: Miller,Mark

QA Reviewer