

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-006198**Date Inspected:** 06-Apr-2009**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:** Xu Tao**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:** OBG crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall 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:

OBG bay 19

This QA observed ZPMC qualified welding personnel identified as 062808 perform FCAW root welding on weld joint identified as BP026-007-002. ZPMC QC identified as Mr. Shang Jian Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 062816 perform SAW welding on weld joint identified as BP026-008-002. ZPMC QC identified as Mr. Shang Jian Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-Tc-U4b-F.

This QA observed ABF inspector identified as Mr. Kelvin Cheung along with several other ABF inspectors perform dimensional inspection on bike path segment identified on the material as BK006A. The inspection was still in process when QA departed this area of the shop.

This QA noted that ZPMC appears to have approximately 10 to 12 bike path segments currently in process in this bay. QA also noted that there appeared to be no significant work being performed on cross beam identified on the material as CB3.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

OBG bay 1

This QA observed ZPMC qualified welding personnel identified as 250672 perform FCAW welding on weld joint identified as 2B-001-026~030. ZPMC QC identified as Mr. Zhang Yaxu was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

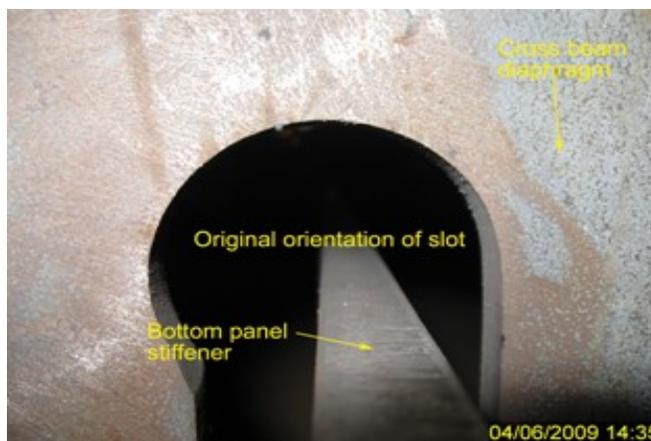
This QA observed ZPMC qualified welding personnel identified as 059450 perform FCAW welding on weld joint identified as CB203J-1-001-002. ZPMC QC identified as Mr. Shang Jian Guo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

OBG bay 5

QA observed ZPMC personnel fitting and welding cross beam identified as CB4 in this bay. QA observed numerous weld joints with excessive root openings. These root openings range from 5mm to 11mm. The joints in question are where the bottom panel and side panel stiffeners pass through the clearance slots cut in the four intermediate diaphragms. See attached photos for details. These joints have not yet been welded. This QA has brought this issue to the attention of ZPMC QA identified as Mr. Lei Tau and ABF QA inspector identified as Mr. Kelvin Cheung. ZPMC and ABF informed this QA that they would look into this issue and propose a solution prior to completing the welds on these joints.

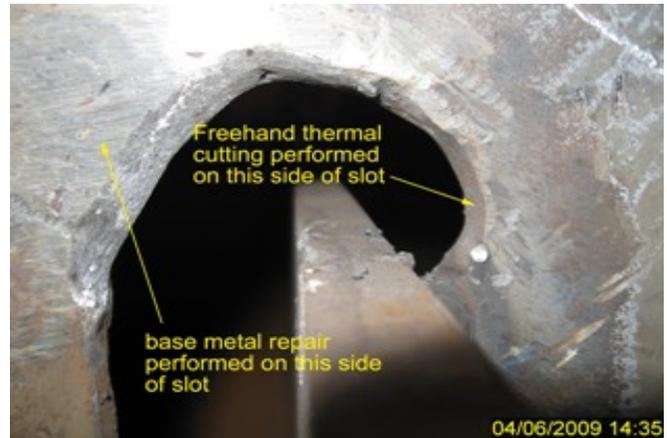
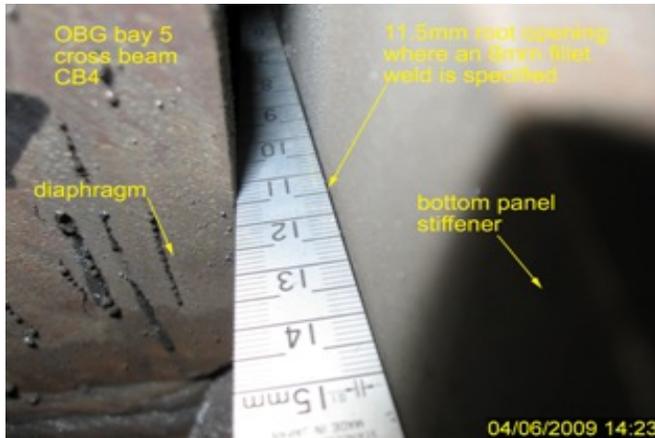
This QA observed that the contractor has performed free hand thermal cutting on the stiffener clearance slots on the above mentioned cross beam diaphragms and performed base metal weld repairs in order to reverse the direction of the opening at the tops of the slots without the engineers approval. This condition exists at three locations on each of the four floorbeams in this crossbeam. See attached photos for details. This QA has brought this issue to the attention of ZPMC QA identified as Mr. Lei Tau and ABF QA inspector identified as Mr. Kelvin Cheung and informed both of them that an incident report will be issued for this non-conformance.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

As mentioned above.

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 Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Hall, Steven	Quality Assurance Inspector
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Reviewed By:	Carreon, Albert	QA Reviewer
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