

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-007641**Date Inspected:** 09-Jul-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:** Zhoa Chen Sun**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:** crossbeams and traveler rail brackets**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 cross beam CB3

This QA noted that this crossbeam has been moved out of the trial assembly. No significant work was observed on this crossbeam during the time QA was present.

OBG cross beam CB7

This QA observed ZPMC qualified welding personnel identified as 251246 perform FCAW welding on weld joint identified as CB201G-014-141. ZPMC QC identified as Mr. Tian Lei 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-2133.

This QA observed ZPMC qualified welding personnel identified as 216575 and 054460 perform FCAW welding on weld joint identified as CB201A-007-002. ZPMC QC identified as Mr. Tian Lei 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 several fillet weld root openings in excess of 5mm. These joints are located where the west

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side panel stiffeners pass through the floorbeam diaphragm. According to markings on the material and ZPMC QC identified as Mr. Tian Lei, ZPMC intends to change these fillet welds to Complete Joint Penetration (CJP) welds. Changing the joint design has not yet been approved by the Engineer.

OBG cross beam CB8

No significant work was observed on this crossbeam during the time QA was present.

OBG cross beam CB9 sub assemblies

No significant work was observed on this crossbeam during the time QA was present.

OBG cross beam CB10

This QA observed ZPMC personnel fitting and tack welding floorbeam diaphragm sections inside this crossbeam. No other significant work was observed on this crossbeam during the time QA was present.

OBG cross beam CB11

This QA observed that ZPMC has commenced fitting and tack welding both side and intermediate panels to the deck panel on this crossbeam. ZPMC personnel were observed erecting scaffolding inside of this crossbeam during the time this QA was present. Due to this, QA was unable to enter the crossbeam for random fit up inspection.

OBG cross beam CB12 sub assemblies

No significant work was observed on this crossbeam during the time QA was present.

NOTE: This QA observed that the contractor is continuing to tack weld temporary fixtures to SPCM areas on all of the crossbeams currently under fabrication. This is an AWS D1.5 code violation. This issue has been previously addressed by this QA in the form of an incident report.

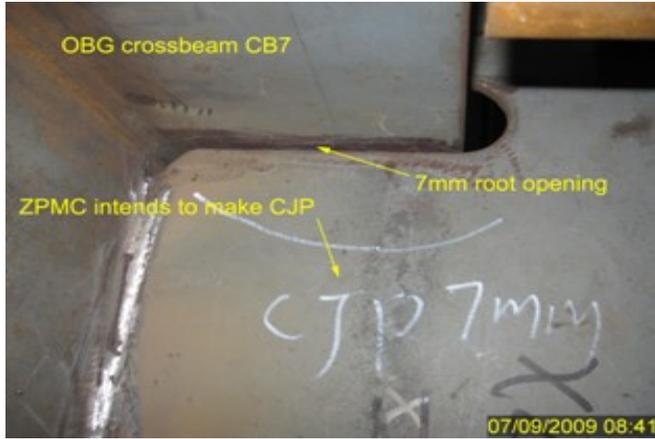
OBG bay 5

This QA received ZPMC Non Destructive Testing (NDT) notification No. 003639 and performed Ultrasonic Testing (UT) of 10% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA filled out a UT report for this date. The weld designations are as follows: TR5B-PP13-003, 004, TR5B-PP15-003, 004 and TR1A-PP17-002. These assemblies are traveler rail brackets.

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

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Summary of Conversations:

Only general conversation was held between QA and 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:	Hall,Steven	Quality Assurance Inspector
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Reviewed By:	Prue,Erik	QA Reviewer
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