

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-001061**Date Inspected:** 17-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Ji Jianjiang & Cui Yi Ru**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**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 7 OBG:

The QA Inspector randomly observed a ZPMC torch cutter utilizing a track mounted torch cutting apparatus to remove lifting lugs from the edges of Floor Beam Webs X46D+X46A+X14A (WJ's FB001-01-021, 026) and X46C+X46A+X14A (FB007-01-021, 026). The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Wang Changfu ID Number 058102, utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC approved Weld Procedure Specification (WPS) WPS-B-P-2112 in the 2F position to weld lifting lugs to Floor Beam Sub-Assemblies X46C+X46A+X14A (WJ's FB007-06-021, 026), X94A+X47A+X15A (WJ's FB008-04-023, 026), X46C+X46A+X14A (WJ's FB007-05-021, 026) and X94A+X47A+X15A (WJ's FB008-05-023, 026). The QA Inspector randomly observed ZPMC CWI Li Jianjiang, monitoring weld parameters for the welding of the lifting lugs on Floor Beam Sub-Assembly X46C+X46A+X14A (WJ's FB007-05-021, 026). The QA Inspector also randomly monitored weld parameters and documented them as follows: 160 amps and 24 volts. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed a ZPMC helper utilizing a grinder to remove the coating prior to fit up and tack welding of I-Stiffeners to Floor Beam Webs X46D+X46A+X14A (WJ's FB001-01-021, 026) and

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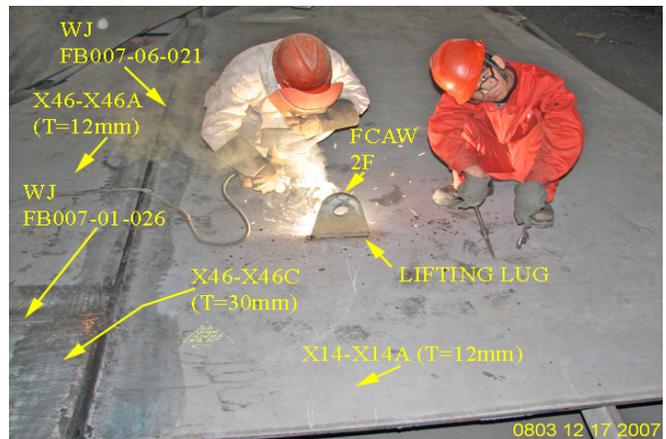
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X46C+X46A+X14A (WJ's FB007-01-021, 023). The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Hong Shuili ID Number 044815, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC approved Weld Procedure Specification (WPS) WPS-B-T-2132-3 in the 2F position tack weld I-Stiffeners piece marks X2E, X2F and X2H to Floor Beam Webs X46D+X46A+X14A (WJ's FB001-01-021, 026) and X46C+X46A+X14A (WJ's FB007-01-021, 023). The WJ's identify the Floor Beam Webs and are not the I-Stiffener to Floor Beam Web WJ's. The QA Inspector randomly observed ZPMC CWI Cui Yi Ru, monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

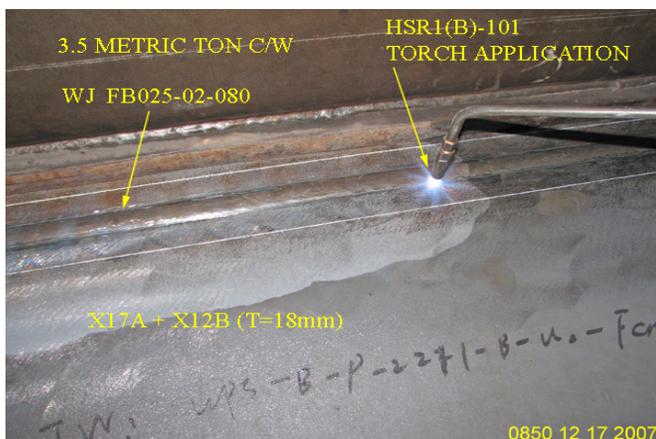
The QA Inspector observed ZPMC personnel performing heat straightening operations with a rose bud on Floor Beam Sub-Assemblies per ZPMC Heat Straightening Request (HSR) HSR1(B)-101, X17A + X12B (WJ FB025-02-080), HSR1(B)-098, X18A + X12F (WJ018-02-080), HSR1(B)-100, X17B + X12B (WJ FB025-01-080) and HSR1(B)-097, X18A + X12E (WJ FB018-01-080). The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Ren Jinzhu ID Number 0544837, utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC approved Weld Procedure Specification (WPS) WPS-B-P-2112 in the 2F position to weld tack weld gusset stiffeners piece marks X3K and X3L to Floor Beam Webs X46D+X46A+X14A (WJ's FB001-01-021, 026) and X46C+X46A+X14A (WJ's FB007-01-021, 023). The WJ's identify the Floor Beam Webs and are not the I-Stiffener to Floor Beam Web WJ's. The attached photographs provide additional detail.



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Summary of Conversations:

There were no relevant conversations.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer
