

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-007043**Date Inspected:** 21-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Sun Bo**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 Components**Summary of Items Observed:**

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

Heavy Equipment Shop Bay 11:

The QA Inspector received a ZPMC Notification to perform a Final Visual Inspection (VT) and Magnetic Particle Testing (MT) Verification of the welds on Lift 1 West Skin Plate B Reinforcing Plates and Stiffeners. There appeared to be no indications and the QA Inspector accepted the above listed welds on Lift 1 West Skin Plate B. The QA Inspector signed the ZPMC Green Tag Documentation after ZPMC Representative Zhang Jia Di and ABF Representative Chen Wen Liang. The QA Inspector observed ABF Representative Chen Wen Liang attach Green Tag Number 4083 to Lift 1 West Skin Plate B.

OBG Sub-Assembly Bay 12:

The QA Inspector randomly observed 2 magnetic drill operators and 1 helper, utilizing magnetic drills with hole saw bits, to cut bolt holes in U-Rib connection plates piece mark OBE1C-X38.

The QA Inspector randomly observed ZPMC welder Lu Liang ID 059373, utilizing the Flux Cored Arc Welding (FCAW) Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U2a to weld the U-Rib Extensions to U-Ribs on Deck Plate 1AE-DP615-001. The QA Inspector randomly observed ZPMC QC

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monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed 1 ZPMC helper utilizing an angle grinder to blend WJ's 011, 013, 015 and 017 attaching T=35 millimeter (mm) I-Ribs to the base plate (2G/2F) on Deck Plate 1AW-DP575-001.

The QA Inspector randomly observed ZPMC welder Liu Xie ID 066236, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-342-SMAW-2G(2F)Repair-1 to weld repairs to WJ's 012, 014, 016 and 018 attaching T=35 mm I-Ribs to the base plate on Deck Plate 1AW-DP570-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed 1 ZPMC helper utilizing an angle grinder to blend WJ's 013, 015, 017, 19 and 021 attaching T=35 mm I-Ribs to the base plate (2G/2F) on Deck Plate 1AW-DP555-001.

The QA Inspector randomly observed 1 ZPMC helper utilizing an angle grinder to shape the 30 mm radius copes at the ends of WJ's 013, 015, 017, 19 and 021 attaching T=35 mm I-Ribs to the base plate (2G/2F) on Deck Plate 1AE-DP595-001.

The QA Inspector randomly observed ZPMC welder Han Si Qi ID 202842, utilizing the FCAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U2a to weld the U-Rib Extensions to U-Ribs on Deck Plate 1AE-DP590-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed 1 ZPMC helper utilizing an angle grinder to shape the 30 mm radius copes at the ends of WJ's 013, 015 and 017 attaching T=35 mm I-Ribs to the base plate (2G/2F) on Deck Plate 1AW-DP545-002.

The QA Inspector randomly observed ZPMC welder Lu Liang ID 059373, utilizing the Gas Metal Arc Welding (GMAW) Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2342-B-U5 (U-Rib) to weld the U-Rib Extensions to the base plate on Deck Plate 1AE-DP615-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

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

Summary of Conversations:

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 Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By: Franco,Charlie Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer