

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-007049**Date Inspected:** 01-Mar-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 10:

The QA Inspector performed a Final Visual Inspection (VT) of the Lift 1 South Tower 47.6 M Diaphragm Fit Lug welds to Skin Plates A, D and E per ZPMC Notification Sheet 002107. The QA Inspector randomly observed unacceptable weld profiles in the cope areas at Weld Joint (WJ) Numbers SSD1-A164H/J-216, 138 and 145. ZPMC informed the QA Inspector that there is an RFI in process and that

OBG Sub-Assembly Bay 12:

The QA Inspector randomly observed ZPMC welder Xu Guo Yin ID 059443, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2G/2F (Horizontal Groove/Horizontal Fillet) Positions with ZPMC Weld Procedure Specification (WPS) WPS-345-FCAW-2G (2F)-Repair-1 to weld repairs in WJ 003, attaching a U-Rib to Deck Plate 7BW-DP196-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Tang Ke ID 062305, utilizing the Gas Metal Arc Welding (GMAW) Process in the 2G/2F (Horizontal Groove/Horizontal Fillet) Positions with ZPMC WPS

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WPS-B-T-2342-U5 (U-Rib) to weld the root pass U-Rib Extensions to Deck Plate 1AW-DP555-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector performed a 100% Final Visual (VT) "In Process" Inspection of the 7 areas which had been repaired after the initial VT of 02-28-09 on all the welds on Deck Plate 1AE-DP595-001. The QA Inspector re-inspected the 7 areas and there appeared to be no indications. The QA Inspector accepted the welds and signed the "In Process" Yellow Tag Number 004027 with Lot Number B216 on 1AE-DP595-001.

The QA Inspector randomly observed 4 ZPMC helpers utilizing angle grinders to blend U-Rib WJ's 001 through 010 on Deck Plate 7AW-DP195-001.

The QA Inspector performed an initial 100% VT "In Process" Inspection of WJ's 001 through 010 on Deck Plate 7AW-DP195-001. The QA Inspector marked up areas to be reworked and signed the bottom of "In Process" Yellow Tag Number 4648 with Lot Number B216 on 7AW-DP195-001.

The QA Inspector performed an initial 100% VT "In Process" Inspection of on Deck Plate 1AW-DP168-001. The QA Inspector marked up areas to be reworked and signed the bottom of "In Process" Yellow Tag Number 4647 with Lot Number B216 on 1AW-DP168-001.

The QA Inspector randomly observed ZPMC welder Tang Ke ID 062305, utilizing the utilizing the Flux Cored Arc Welding (FCAW) Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U2a-F to weld U-Rib Extensions to the U-Ribs on Deck Plate 1AW-DP555-001. 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.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
