

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-007048**Date Inspected:** 20-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 10:

The QA Inspector received ZPMC Notification Number 002036 to perform a Final Visual Inspection (VT) of the welds on the fit lugs attaching 43 M and 47.6 M Upper and Lower Diaphragms to Skin Plates B and C, in Lift 1 South Tower. The QA Inspector randomly observed that the welds were not in compliance with contract specifications. The QA Inspector identified the areas that were not in compliance and informed ZPMC Quality Control (QC) that QA would inspect again after the welds had been reworked.

The QA Inspector verified that QA Final VT and Magnetic Particle Testing (MT) Verifications had been performed on the Doubler Plates to Skin Plate E Lift 1 South. The QA Inspector signed the ZPMC Green Tag Documentation after ZPMC Representative Zhang Jia Di and ABF Representative Xiao Jun Peng. The QA Inspector observed ABF Representative Xiao Jun Peng attach Green Tag Number 2574 to Skin Plate E Lift 1 South.

OBG Sub-Assembly Bay 12:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Wang Wei performing

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MT to WJ 013 attaching a T=35 millimeter (mm) I-Rib to the base plate on Deck Plate 1AW-DP565-001. There appeared to be no indications and the Mr. Wang accepted WJ 013 on 1AW-DP565-001.

The QA Inspector performed a 100 % VT Inspection and 10% random MT Verification of Weld Joint (WJ) Numbers 015, 017 (1500 mm only) and the 2 vertical welds attaching the T=35 mm I-Ribs to the base plate on Deck Plate 1AW-DP565-001. There appeared to be no indications and the QA Inspector accepted the above listed welds on 1AW-DP565-001.

The QA Inspector randomly observed 9 magnetic drill operators and 9 helpers, 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 Non-Destructive Testing (NDT) Technician Wang Wei performing MT after an R5 repair to WJ 017 attaching a T=35 millimeter (mm) I-Rib to the base plate on Deck Plate 1AW-DP545-001. There appeared to be no indications and the Mr. Wang accepted WJ 017 on 1AW-DP545-001. The repair and MT had been performed in accordance with ZPMC Critical Weld Repair (CWR) B-CWR346.

The QA Inspector performed a 100 % VT Inspection and 10% random MT Verification of WJ 017 attaching a T=35 mm I-Rib to the base plate on Deck Plate 1AW-DP545-001. There appeared to be no indications and the QA Inspector accepted WJ 017 on 1AW-DP545-001.

The QA Inspector randomly observed ZPMC welder Lu Liang ID 059373, utilizing the FCAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U2a to tack weld backing bars to U-Ribs, to allow for the fit up of U-Rib Extensions on Deck Plate 1AW-DP565-001. 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
