

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-001710**Date Inspected:** 09-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Chen Xi**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 Deck panels**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform Visual Testing (VT) and observe Magnetic Particle Testing (MT) of the Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector Issued a Incident Report for the OBG deck panel DP042-002. ZPMC proceeded to repair a porosity area that damaged the base metal on weld # 1 when the flux hopper malfunctioned on the Submerged Arc welding (SAW) pass. The repair was performed between day shift and night with out engineering approval. Repair of the base metal requires engineer approval as per AWS D1.5 (2002). ZPMC QC Mr. Shen Xi was informed that an incident report would be issued for the weld repair.

The Caltrans QA Inspector performed visual inspection of OBG deck panel DP005-001 U-rib Partial Joint Penetration (PJP) welds. Visual testing of welding was performed in accordance with contract documents. The following discontinuities were found during inspection on the Submerged Arc Welding (SAW) cover pass, incomplete fusion, overlap, undercut, underfill and oversize welds. Welding discontinuities were marked on deck panel with a permanent marker, length and Y location recorded. Visual Inspection results were distributed to the appropriate personnel for review.

The Caltrans QA Inspector observed ZPMC QC inspector Mr. Zhou Dongyun perform MT of U-rib U107 diaphragm weld DP039-001-016. Mr. Dongyun relayed that MT of 100% of DP039-001-016 covered the 10% contract requirement for DP039-001-016, 025, 034, 043, 052, 142, 143, 144, 145 and 146. Testing appeared to in

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

conformance with AWS D1.5 (2002) and contract documents.

Summary of Conversations:

As identified within the contents of this report.

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:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
