

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-004200**Date Inspected:** 07-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhang Bao**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 Assembly**Summary of Items Observed:**

This report serves to document the events occurring on this date at the following location. Caltrans Quality Assurance (QA) Inspector Robert Vatcher arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

OBG Assembly Bay II

Mid bay-

QA observed post tack welding joining of DP459 to DP324 by the FCAW process by qualified welding operator Xie Jinxia for the 1G position. QA performed a preliminary visual examination of the fit-up and associated tack welds. QA observed that welding on a scrap piece of material is being utilized to adjust welding parameters prior to welding on production pieces. QA observed preheating by oxy acetylene flame torch occurred at this point. QA measured welding parameters in accordance with welding procedure specification WPS-B-T-2232-B-U2-F-1. Measured amperage at 280.0. Voltage at 30.0, travel speed at 505 mm per minute for the 1.4 millimeter diameter self shielded E71-T1 welding wire.

QA observed ZPMC QC personnel Wang Jie perform a preliminary visual examination on deck panel fit up prior to tack of deck panels DP378 & DP405 for super panel production.

QA observed the in process joining of deck panels DP468 to DP326 by the SAW process. QA measured welding

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parameters in accordance with welding procedure specification WPS-B-T-2221-B-L2C-S-2. Measured amperage at 630.0. Voltage at 32.0, travel speed at 438 mm per minute. ZPMC QC personnel Zhang Xiao Ming & Wang Jie were present for this welding evolution. However Certified Welding Inspector (CWI) Shi Lei was within the vicinity of said operations.

Welding repair continue on deck panel to U rib connections where cracking has occurred. As well Ultrasonic Testing (UT) of said repairs is being conducted by ZPMC Non Destructive Testing personnel on deck panel DP058-001.

NPI of Oregon continues to evaluate U rib crack indications by the Ultrasonic Testing using phased array transducers.

No diaphragm plate to deck to deck panel U rib repairs or initial joining being performed at this time. Only grinding of joint preparation where backgouging for complete joint penetration connections has occurred as well as cosmetic grinding for weld finish.

North Bay of OBG Assembly-

QA observed DECK PANELS dpo450, dp110a and dp272a joined to produce a super panel assembly are not being stored in a flat position in this location. QA explained this situation to Wang Lu who corrected the situation.

The above mentioned items as observed, corrected by contractor QC & documented by QA appear to conform to the contract documents.

Summary of Conversations:

No relevant conversations this date.

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 Ady Velasco 138-1694-2685, who represents the Office of Structural Materials for your project.

Inspected By:	Vatcher,Robert	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
