

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-003638**Date Inspected:** 11-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	NA	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 Fabrication	

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, 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:

Orthotropic Box Girder (OBG):

QC: Mr. Duan Ya Bing

Heavy Tower Shop #3:

Around 1500 hours ZPMC QC representative Mr. Fu Yuhong informed the QA Inspector that ZPMC QC and ABF QA Inspection personnel have completed initial visual inspections of deck panels DP584-001 and DP549-001 and the areas of the closed rib welds that need to be repaired have been marked by soapstone. The QA Inspector performed random visual inspections of each of the welds on deck panels DP584-001 and DP549-001 and the approximately ten additional areas of weld overlap were identified by the QA Inspector as needing to be repaired. The QA Inspector documented the initial visual inspections on the yellow inspection status tag that is attached to each of the two deck panels. See the photograph below for additional information.

Bay 1

The QA Inspector observed two people welding diaphragm plates in deck panel DP333-001 closed ribs and no QC

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Inspectors were observed in this bay. Approximately five minutes later the QA Inspector asked ABF QA Inspector Mr. Huang Wen Guang if he has recently observed any ZPMC QC Inspectors in Bay 1. Mr. Huang Wen Guang called someone on his phone and in a few minutes ZPMC QC Inspector Mr. Duan Ya Bing arrived in Bay 1. Mr. Duan Ya Bing does not speak English and the QA Inspector called ZPMC QC representative Mr. Fu Yuhong to assist in the translation between English language and Chinese language. The QA Inspector inquired if ZPMC QC Inspectors had recorded any of the welding parameters for the six completed diaphragm plate welds and Mr. Bing replied that QC had recently been in Bay 1 and they had not completed any documentation for this welding. Mr. Bing then measured and recorded the welding information for the two workers that were welding deck panel DP333-001 closed ribs diaphragm welds.

Bay 4

The QA Inspector observed ZPMC Ultrasonic Inspector Mr. Ma Ji Long performing ultrasonic inspections of base plate weld BP199-001-007, side plate weld SP188-001-007 and side plate SP642-001-041. Prior to inspecting any welds the QA Inspector observed Mr. Long using an IIW calibration block to verify the angle of his 70° transducer to be approximately 68° which is in compliance with AWS D1.5 angle limitations. Mr. Long first scanned the base materials with a 0° transducer then he scanned all three welds with the 70 degree transducer. Mr. Long did not record any relevant ultrasonic indications for any of these welds. Items observed appear to comply with project specifications.



Summary of Conversations:

See above.

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 13816942685, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer