

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-001668**Date Inspected:** 29-Feb-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 400**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sha Zhi**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 and 89 Meter Mockup**Summary of Items Observed:**

Caltrans Quality Assurance Inspector Gabriel Quintana (QA Inspector) arrived at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to observe fabrication and Quality Control Inspectors (QC Inspectors) perform their duties and responsibilities as specified in the contract documents, approved plans, fabrications documents and Special Provisions for this project. While on site the QA Inspector observed the following:

Bay 1- QA Inspector performed a Quality Assurance visual weld inspection on Orthotropic Box Girder (OBG) Deck Plate Assembly on welds DP019-001-001 and DP019-001-010. Caltrans QA Inspector Dan Hernandez and Mike Hasler performed a Quality Assurance visual weld inspection on the remaining welds DP019-001-002 thru DP019-001-09. QA Inspectors observed various defects which include excess weld buildup, overlap, underfill, undercut and incomplete fusion. The length and the location of each of these areas were recorded on the Caltrans QA Visual Weld Inspection Report for the Orthotropic Box Girder (OBG) and Deck Panel for tracking and distributed to the appropriate personnel for review. At this stage of fabrication, the above work appears to be within the general requirements of approved plans and contract documents.

Bay 1- QA Inspector performed a Quality Assurance visual weld inspection on Orthotropic Box Girder (OBG) Deck Plate Assembly on welds DP030-001-002 thru DP030-001-005. QA Inspector was instructed by Caltrans Task Leader Robert Cuellar to re-inspect and evaluate surface imperfections and disregard any superficial surface blemishes that appear to be on the weld surface and report only the obvious defects including excess weld buildup, overlap, underfill, undercut and incomplete fusion. The length and the location of each of these areas were recorded on the Caltrans QA Visual Weld Inspection Report for the Orthotropic Box Girder (OBG) and Deck

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Panel for tracking and distributed to the appropriate personnel for review. At this stage of fabrication, the above work appears to be within the general requirements of approved plans and contract documents.

Tower Shop- QA Inspector observed ZPMC qualified welder Pen Meng ID #066673 welding fill passes on the 89 Meter Mockup Cross Brace MUB-A117 weld joint #7A and #7B. QA Inspector observed QC Inspector Sha Zhi monitoring the Flux Core Arc Welding (FCAW) process per the approved Weld Procedure Specification (WPS) WPS-B-2233-TC-U5-F. QA Inspector observed QC Inspector perform frequent monitoring of preheat and interpass temperature. QA Inspector observed that the welding parameters are in accordance with the approved WPS and verified the following: interpass 188° Celsius, 216 amps and 25 volts. QA observations appear to comply with contract requirements and the approved WPS.



Summary of Conversations:

General conversations took place between the QA and QC Inspector.

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:	Quintana, Gabriel	Quality Assurance Inspector
----------------------	-------------------	-----------------------------

Reviewed By:	Hager, Craig	QA Reviewer
---------------------	--------------	-------------