

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-002669**Date Inspected:** 21-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wen Pang**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:** Caltrans OBG, Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

OBG - Bay 2

The Caltrans QA Inspector randomly observed the machining of the weld bevel on stiffeners (Member I. D. p327B) for tower deck plate and the rolling of tower skin plate (Member I. D. p229).

OBG - Bay 3

The Caltrans QA Inspector also randomly observed the fitting and tacking of WT stiffeners on Bottom Plate BP 88 using the shielded metal arc welding process (SMAW), electrode classification E7018-1. Portable electrode ovens were being used and preheat was being administered.

In addition, the drilling of holes in the flanges of WT stiffeners and the inspection of fillet welds on WT stiffeners by ZPMC quality control (QC) personnel was also observed.

OBG - Bay 4

The Caltrans QA Inspector was informed of a cracked weld by ZPMC's, Lai Tao. Both the Caltrans QA Inspector

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and Lai Tao proceeded to investigate. The crack was found by ZPMC nondestructive examination technicians, using magnetic particle examination. It had been excavated by grinding, but the crack was still visible. See picture. The fillet weld was made using the flux cored arc welding (FCAW) process in the horizontal fillet (2F) welding position. The weld is on Bottom Plate No. BP033, Weld No. BP033-001-016, and is located approximately 4600 mm from the end with the drilled holes.

The Caltrans QA Inspector also randomly observed the fitting and tacking of flanges to internal diaphragms at three work stations. See picture. Tacking was being performed in the vertical groove (3G) welding position using the shielded metal arc welding (SMAW) process.

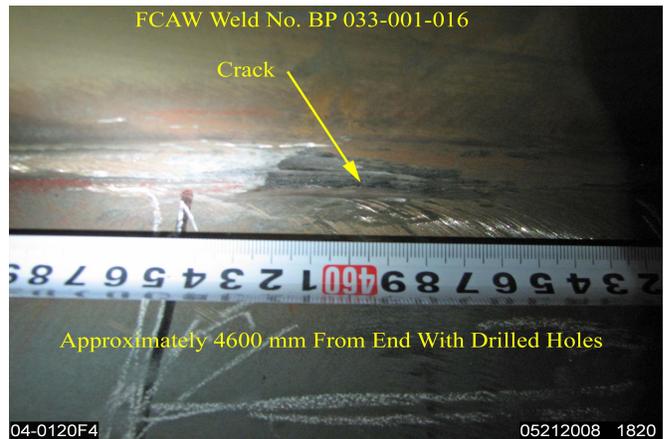
The Caltrans QA Inspector also randomly observed the preheating of Weld No. SSD1-SA20-110B in preparation for machine submerged arc welding (SAW), and the SMAW tack welding of Weld No. SSD1-SA261-1A 1B in the flat groove (1G) welding position.

OBG - Bay 7

The Caltrans QA Inspector also randomly observed the fitting and tack welding of diaphragm knife stiffeners. ZPMC Certified welding Inspector, Huang Wen Pang was present during this process, as was ZPMC QC Inspector, Xiang Feng.

Assembly of OBG diaphragm was also observed.

All above observations appeared to meet the requirements of the job specifications.



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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:	Jobs, Kenneth	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
