

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-012402**Date Inspected:** 23-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 Tower**Summary of Items Observed:**

CWI Inspectors: Mr. Li Yang, Mr. Gong Liang, Zhu

On this date CALTRANS OSM 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. This QA Inspector observed the following:

OBG Bays 1 through 9

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 1 through 9.

OBG Bays 13 and 14

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 13 or 14 and the majority of the overhead lights were turned off.

Tower Bay 10

This QA Inspector observed ZPMC welder Mr. Sun Guang Ping, stencil 50289 is using shielded metal welding process WPS-BT-3211-TC-U5b to make groove weld SSD1-TL5-1B/F-52A between south tower lift 5 skin plate

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

D to skin plate E. This QA Inspector observed CWI Mr. Gong Liang Zhu has recorded a welding current of 256 amps and Mr. Sun Guang Ping appears to be certified to make this weld. This QA Inspector observed the base material had electrical heaters installed to preheat the base material prior to welding. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Trial Assembly

This QA Inspector observed ABF personnel performing magnetic particle inspections of side plate stiffener hold back welds on OBG segment 6AW adjacent to where OBG segment 5CW will be welded at a later time.

This QA Inspector observed ZPMC welder Mr. Dai Lu, stencil 048659 is using shielded metal arc procedure WPS-345-SMAW-2G(2F)-Repair-1 to make repair weld SSD17-PP039-166 as authorized by critical weld repair document B-WR-10683. This QA Inspector measured a welding current of approximately 160 amps. This QA Inspector confirmed that Mr. Dai Lu is certified to make this weld. ZPMC personnel used a torch on the back side of the steel to preheat the base material prior to commencement of the welding, and CWI Mr. Li Yang verified the base material preheat temperature prior welding. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container is connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhou Songsong, stencil 068091 appears to have used the shielded metal arc process earlier in the shift to make weld repairs to various stiffener plate hold back welds at OBG segment 6BE adjacent to where segment 6CE is to be attached. This QA Inspector did not observe any welding being performed and Mr. Songsong appears to be certified to perform these weld repairs. This QA Inspector asked ZPMC CWI Mr. Li Yang if he was aware that Mr. Zhou Songsong has been performing weld repairs at OBG segment 6BE and Mr. Li Yang said he had not been told of any welding being performed at this location. Mr. Li Yang said the magnetic particle inspector has identified a crack at the hold back weld on the 8th stiffener plate on the bottom plate, as measured from the cross beam side of the OBG, and Caltrans engineering approval will be obtained prior to making a weld repair at this location.



Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
