

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-014865**Date Inspected:** 03-Jun-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. Xu Le Feng, Mr. An Qing Xiang

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:

Tower Bay 10

This QA Inspector observed ZPMC welder Mr. Zhang You Zhi, stencil 040675 is using shielded metal arc weld procedure WPS-B-T-2114 to weld temporary plates to elevation 109 meters on West tower lift 3 skin plates adjacent to the rotation collar. This QA Inspector observed that the base material adjacent to where the weld was made was preheated with a torch to a minimum of 110 degrees Celsius prior to welding. This QA Inspector observed Mr. Zhang You Zhi appears to be certified to make this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder Mr. Shi Xingyu, stencil 052930 is using shielded metal arc process procedure WPS-B-T-3211-TC-U5b-1 to make South tower weld SSD1-SPSa5-19-2A. This QA Inspector observed a welding current of approximately 265 amps and that the welding electrodes are being stored in a heated electrode storage container that is connected to an electric power supply. This QA Inspector observed ZPMC has energized electrical heaters heating the back side of the skin plates and ZPMC QC Inspector Mr. Jiang Xiao Bo is

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monitoring the welding parameters and base material interpass temperatures. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Fan Yongjie, stencil 054547 using shielded metal arc welding procedure WPS-B-P-2133 to make fillet tack welds between a North Tower Lift 3 manway ring plate and the manway doubler plate. This QA Inspector observed the base material was preheated with a torch prior to tack welding. This QA Inspector asked ZPMC Quality Control Inspector Mr. Li Jun what is the weld number for this weld and Mr. Li Jun informed this QA Inspector that ZPMC QC does not have a welding record for this welding since it is only a tack weld and he does not know the weld number. This QA Inspector measured a welding current of approximately 150 amps. Items observed on this date appear to generally comply with applicable contract documents. See the photograph below for additional information.

OBG Segment Trial Assembly

This QA Inspector observed no ZPMC personnel performing welding of OBG components in at the OBG segment trial assembly area.

OBG Bays 13, 14 and 16

This QA Inspector observed no ZPMC personnel performing welding of OBG components in Bays 13, 14 and 16.



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 Micheal Ng, Phone 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer