

**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-013810**Date Inspected:** 01-May-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**Summary of Items Observed:**

CWI Inspector: Mr. Li Yang

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 Segment Assembly**

This QA Inspector observed ZPMC welder Mr. Zhang Hanming, stencil 220066 has recently used flux cored welding procedure WPS-B-T-2132 to make cross beam hold back welds CB201A-007-007 and CB201A-007-019 on OBG cross beam 7. This QA Inspector observed ZPMC QC has recorded a welding current of 316 amps and 27.8 volts. This QA Inspector observed that Mr. Zhang Hanming appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhou Bing, stencil 067764 has recently used flux cored welding procedure WPS-B-T-2132 to make cross beam hold back welds SP203-008-024 and SP203-008-024 on cross beam 8. This QA Inspector observed ZPMC QC has recorded a welding current of 312 amps and 28.2 volts. This QA Inspector observed that Mr. Zhou Bing appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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## WELDING INSPECTION REPORT

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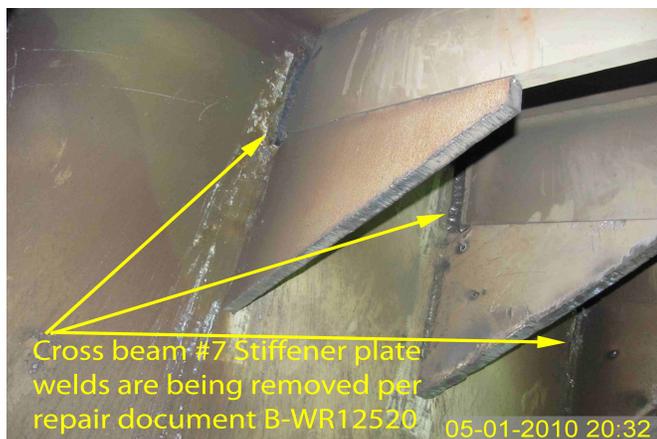
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This QA Inspector observed ZPMC welder Mr. Wang Quanlin, stencil 066746 has recently used flux cored welding procedure WPS-B-P-2114-FCM-1 to make cross beam hold back welds CB202-007-020 and CB202-007-022 on cross beam 7. This QA Inspector observed ZPMC QC has recorded a welding current of 310 amps and 28.9 volts. This QA Inspector observed that Mr. Wang Quanlin appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Hu Yanming, stencil 062092 is using shielded metal arc procedure WPS-B-P-2214-B-U2-FCM-1 to make weld OBE8-002 butt weld which joins OBG segments 7BE to 8CE side plates. This QA Inspector observed the welding electrodes are being stored in a portable rod oven which is warm to the touch and it is connected to an electric power cable. This QA Inspector measured a welding current of approximately 140 amps and Mr. Hu Yanming appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ABF/Sense personnel were performing magnetic particle inspections of OBG segment 8AE diaphragm to floor beam welds near panel point PP64.

This QA Inspector observed ZPMC personnel are performing air carbon arc gouging of OBG cross beam 7 stiffener plates to OBG segment 7BW edge plate welds. ZPMC CWI Mr. Li Yong informed this QA Inspector that the gouging of the welds in OBG cross beam 7 is being performed in accordance with weld repair document B-WR12520 and this document identifies that stiffener plates in cross beam 7 had been misaligned. See the photographs below for additional information.



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

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**Inspected By:** Dawson,Paul

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer