

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-016981**Date Inspected:** 27-Aug-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 Trial Assembly

This QA Inspector observed ZPMC welder Mr. Xu Nai Jun stencil 044551 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2-FCM-1 to complete weld SEG059A-019. This weld joins the cross beam side plate to the bottom plate at OBG segment 10AW. This QA Inspector observed a welding current of approximately 150 amps, Mr. Xu Nai Jun appeared to be certified to make this weld and the base materials appeared to have been preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Feng, stencil 049769 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM-1 to make OBG segment 9DE weld OBE9B-025. This weld joins a traveler rail attachment plate to the bottom of OBG segment 9DE cross beam side plate. This QA Inspector measured a welding current of approximately 170 amps and Mr. Zhang Feng 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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This QA Inspector observed ZPMC welder Mr. Han Yiaofeng, stencil 054467 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM-1 to make OBG segment 9DE weld OBE9B-025. This weld joins a traveler rail attachment plate to the bottom of OBG segment 9DE cross beam side plate. This QA Inspector measured a welding current of approximately 160 amps and Mr. Han Yiaofeng 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. Liu Zihong, stencil 062447 used shielded metal arc procedure WPS-B-T-2132 to make fillet welds on various Retro welds. These welds attach stiffener plates to the side plates to OBG segment 9CE between panel points PP099 and PP100. This QA Inspector observed ZPMC appears to have used a torch to preheat the base material prior to welding and Mr. Liu Zihong appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Wang Xiaomin, stencil 046709 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-Repair-1 to complete repairs of weld LD012-011 as directed on weld repair document B-WR14757. This weld repair document was issued to perform realignment of the OBG longitudinal diaphragm in segment 9CW near panel point PP079. This QA Inspector observed Mr. Wang Xiaomin appeared to be certified to make this weld and ZPMC QC is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Rui stencil 041713 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-Repair-1 to complete repairs of weld LD013-011 as directed on weld repair document B-WR14757. This weld repair document was issued to perform realignment of the OBG longitudinal diaphragm in segment 9CW near panel point PP079. This QA Inspector observed Mr. Chen Rui appeared to be certified to make this weld and ZPMC QC is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Cao Hu, stencil 066306 used shielded metal arc welding procedure WPS-B-T-2113-FCM-1 to make weld repairs of visual rejections on OBG segments 9DW to 9EW side plate "T" stiffener hold back welds. This QA Inspector observed Mr. Cao Hu appeared to be certified to make these welds and ZPMC personnel appeared to have used a torch to preheat the base material prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.

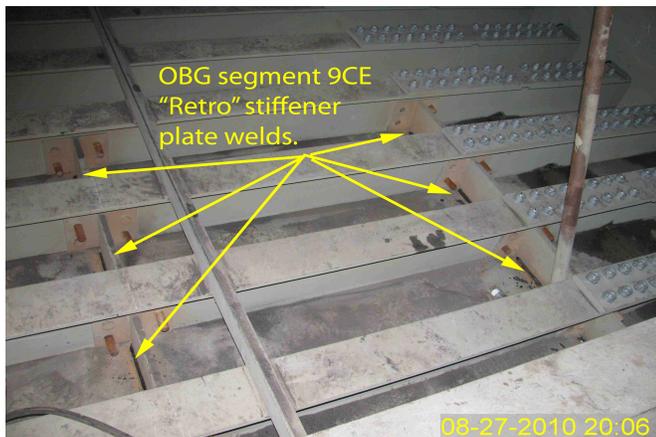
This QA Inspector observed ZPMC welder Mr. Yun Qiang stencil 040504 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2-FCM-1 to complete weld OBW10-001. This weld was located on the cross beam side edge plate between OBG segments 10AE and 10BE. This QA Inspector observed a welding current of approximately 165 amps, Mr. Yun Qiang appeared to be certified to make this weld and the base materials appeared to have been preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Dai Lu, stencil 048659 used shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-FCM-Repair-1 to make repairs of ultrasonic rejections in weld CA072-006. This weld joins OBG segment 10AE bikepath side plate to the edge plate and the weld repair is being tracked on document

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B-WR14665. This QA Inspector measured a welding current of approximately 175 amps and Mr. Dai Lu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.



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 |
| Reviewed By: | Carreon,Albert | QA Reviewer |
