

**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-016173**Date Inspected:** 19-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Geng Wei**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 13 section**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay #14**

Caltrans QA inspector observed two ZPMC welders performing FCAW fillet welding on the OBG 25mm wall thick side plates (SP). The fillet weld is designed a T-joint and connecting rib stiffeners to side plate. The welding was carried out in the horizontal position (2F) with size 8mm fillet weld. The side plate and weld ID are as follows; SP3103A/PL395A / SP3103-001-106~111 of 13BE east line section. The parameters used for the FCAW fillet weld welding of the side plate were conducted in accordance with Caltrans approved WPS. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QA inspector observed a fit up group performed fit up and SMAW tack weld process on stiffeners of 22mm and 25mm wall thick side plate. The weld is designed T-joint and connected to stiffeners and side plate (SP) with size 8mm fillet weld. The side plate and plate ID are # SP3071A/PL3251A, and SP3094A/PL3391A of Segment 13AW. Numerous temporary tack welds have been welded between plate and stiffeners and adjusted by a hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

**Bay #16**

Caltrans QA Inspector observed two ZPMC welding operator performing semi-automatic SAW process on the

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plate splices of the longitudinal diaphragm. The CJP weld is designed as a butt joint with back gouging for the root treatment and welded flat position (1G). The longitudinal diaphragm, plate ID and weld number are as follows; LD3033/X4118B, X4119A/LD3033-001-004 side B, LD3031/X3754B, X3754A/LD3031-001-003 side A and LD3031/X3775A, X3755B/LD3031-001-005 side A. The region of the weld joint has been pre-heated to the specific desired temperature prior SAW welding. The parameters used for the SAW CJP welding of the longitudinal diaphragm were conducted in accordance with Caltrans approved WPS. The SAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted. Based on Caltrans QAI observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted 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 James Devey 15000026784 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau,Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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