

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-007431**Date Inspected:** 14-Jun-2009**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 Fabrication**Summary of Items Observed:**

CWI Inspector: Mr. Lv Li Qing

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. The QA Inspector observed the following:

OBG Bay 5

This QA Inspector performed random magnetic particle (MT) inspection of OBG Traveler Rail welds TR1B-PP19-003, TR1D-PP21-007, TR1E-PP20-009 and TR1E-PP26-009. These welds had previously been MT inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that were MT inspected by this QA Inspector appear to comply with project specifications. For additional information on these inspections see the TL6028 Magnetic Particle Test Report.

ZPMC issued an "Inspection Notification Sheet" #3423 requesting QA to perform magnetic particle inspections of nine bikepath cantilever beam welds including BK001-015-009, BK001-012-009 and BK001-017-009. The QA Inspector performed random visual inspections of several of these welds and observed that portions of the welds have visually rejectable indications near the terminations of the welds. The QA Inspector showed these indications to the ZPMC CWI that was in OBG Bay 5 and he said he had not been the Inspector that visually accepted these welds. A short time later ZPMC QC representative Mr. Wang Lu (Mr. Testino) called this QA

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Inspector and he said that this inspection request has been cancelled due to the bikepath cantilever beam welds having visual rejections. See the photograph below for additional information.

OBG Bay 2

This QA Inspector performed visual and magnetic particle (MT) inspections of Segment 1AAE base material where end and strand stiffener welds had been removed due to having excessive root gaps. The following weld removal locations were MT inspected:

SEG2E-365, -323, -278, -296, -420, -338, -175, -361, -319, -451, -369, -327, -409.

SEG2C-104, -106, -101, -103, -130.

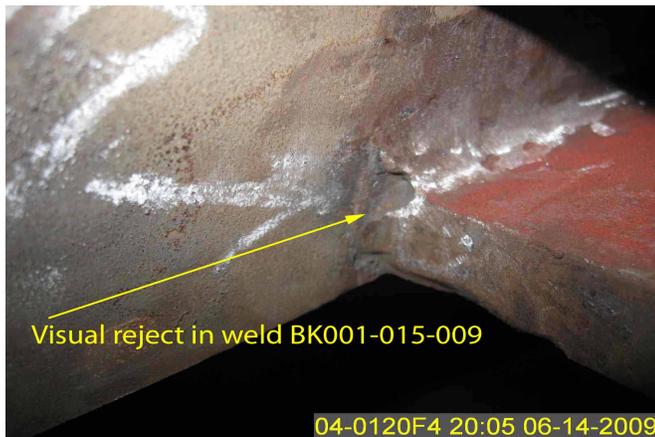
Items observed on this date appeared to generally comply with applicable contract documents.

The QA Inspector also performed weld fitup inspections of the following welds:

SEG2E-323, -365; SEG2C-116; SEG2F-083, -022; SEG2D-002

The QA Inspector observed ZPMC had not removed the paint from the base material adjacent to weld SEG2E-365 and the QA Inspector informed Quality Control (QC) CWI Mr. Lv Li Qing who said the painted areas would be ground prior to making the weld.

The QA Inspector observed ZPMC welder Mr. Xu Zichuan, stencil 205098 is using flux cored welding process to weld SEG2F-001. The QA Inspector observed a welding current of approximately 260 amps and 28.0 volts when he was welding in the 2G position and approximately 200 amps and 27.0 volts when he was welding in the 3G position. The QA Inspector observed Quality Control (QC) CWI Mr. Lv Li Qing measuring the welding current and adjusting the welding machine settings when Mr Xu Zichuan switched from the 2G (horizontal) position to the 3G position. 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
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Reviewed By:	Carreon,Albert	QA Reviewer
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