

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-001126**Date Inspected:** 06-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun 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:** 114 meter mock up assembly**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) inspector, Scott Croff, was present at Zhenhua Port Machinery Company, Ltd (ZPMC) to observe the scheduled mock up construction and production construction of the SAS Superstructure.

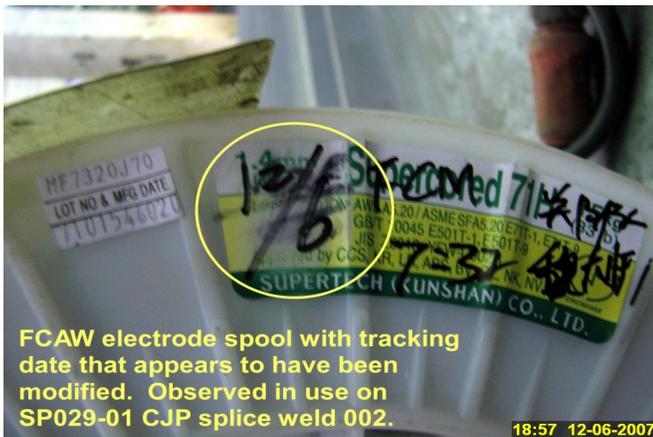
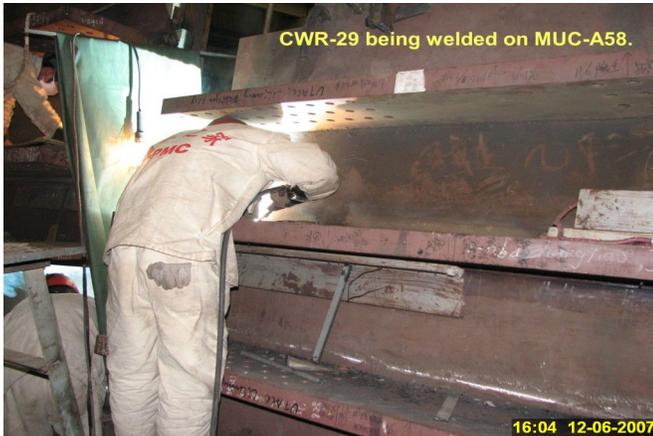
Bay 2: The QA inspector observed work in progress of critical weld repair (CWR) 26 on MUSC-A75 and CWR 29 on MUSC-A58. The QA inspector noted that welders and welding are being monitored by several ZPMC "Quality Control" (QC) personnel. The QA inspector observed that some of the "QC" personnel are measuring the welding parameters, other personnel are writing the information on the weld tracking logs. The QA inspector asked for the names of the "QC" persons who were observed measuring the welding parameters. The QA inspector was informed that their names were Zhang Qiao and Yin Chun Feng. The QA inspector reviewed the list of approved CWI/CAWI QC personnel and could not locate these "QC" persons as being approved by the Engineer.

Bay 3: The QA inspector observed complete joint penetration (CJP) butt splice welds being made by Wei Dashuai with flux cored arc welding (FCAW). The QA inspector noted that the electrode spool being used has a tracking date written on the side of the spool. The QA inspector observed that the tracking date appears to have been changed and is not legible. The QA inspector also noted that the "QC" person Wang Liang is on the list of approved CWI/CAWI QC personnel. As the QA inspector was making these observations, the "QC" person informed the QA inspector that CWI Sun Wei is also monitoring the welding. The QA inspector observed that this CWI was near the work area.

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The QA inspector reviewed ZPMC's welding quality control plan (WQCP) to determine the role of "QC" personnel, as approved by the Engineer. The QA inspector noted that several references to "QC Inspector" are made through out the WQCP, however, section 3; "Organization of Quality Control Personnel" does not describe any job position of "QC Inspector" without being a Certified Welding Inspector (CWI) or Certified Assistant Welding Inspector (CAWI) The QA inspector was able to identify a description for the Quality Control Manager, Quality Control Administrator, Quality Control Engineer/Quality Control Inspector (CWI) and Quality Control Inspector (CAWI). Upon review of all of the job duties and descriptions, including the approved lists of personnel, the unapproved "QC" personnel that were observed do not appear to be conforming to the contract requirements.



Summary of Conversations:

As noted above, the QA inspector had several conversations with "QC" personnel in an attempt to ascertain their names and what exact jobs each person was doing. As the observations of what each "QC" person were being made, the QA inspector was informed of their names, and if they were CWI or CAWI. Most of the "QC" personnel that were asked if they were CWI or CAWI replied that they were not. The QA inspector then verified their names on the most recent available list of CWI/CAWI QC personnel.

The QA inspector Scott Croff informed the QA inspector Bruce Berger of the above mentioned observations and conversations. The QA inspector Bruce Berger was also informed of the observed personnel that do not appear to be approved to function as "Quality Control Inspectors." The QA inspector then generated a summary report to be included in the daily shift notes. There were no other notable conversations during this shift.

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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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Croff,Scott	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
