

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-001122**Date Inspected:** 11-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:** Chen Xi**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.

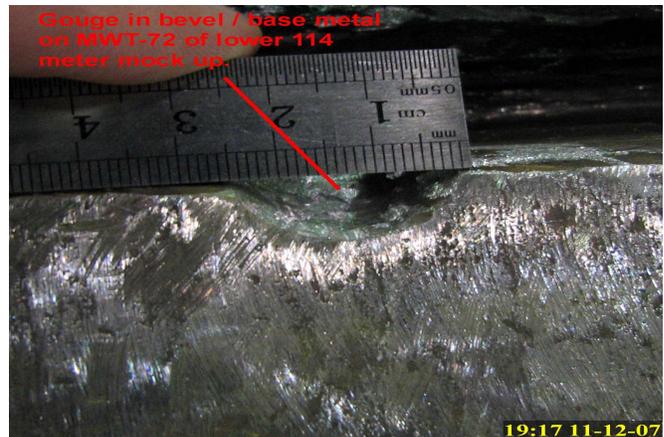
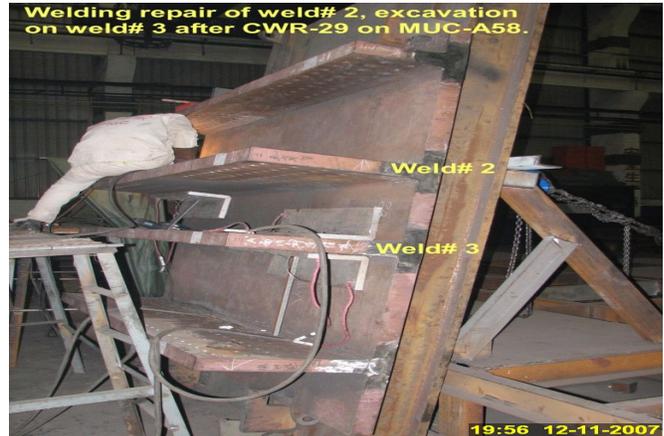
Bay 2: The QA inspector was making random observations of welds in various stages of completion and observed a large gouge in the base metal on the outside edge of weld joint MWT-72 on the lower 114 meter mock up assembly. The QA inspector noted that the gouge is located along the bevel of the weld joint and appears to have been caused by carbon arc gouging. The QA inspector measured the gouge to have approximate dimensions of 20mm long and 15mm deep with a rounded (bowl) shape from grinding. The QA inspector reviewed AWS D1.5 2002, section 3.2.3 and noted that this condition appears to require an approved base metal repair. The QA inspector could not locate any Quality Control (QC) personnel or ZPMC workers at this location when these observations were made.

The QA inspector observed temporary lifting lugs and weld tabs being welded onto the upper 114 meter mock up assembly. The QA inspector noted that shielded metal arc welding (SMAW) is being used by Li Zai Jun. The QA inspector noted that Zhen Hou Feng is monitoring the welding of the temporary lifting lugs and weld tabs. The QA inspector asked Zhen Hou Feng if he was a CWI or CAWI. Zhen Hou Feng replied that he was not a CWI or CAWI. The QA inspector asked if there was a CWI or CAWI monitoring this welding. The QA inspector was informed that Chen Xi was a CWI and he was monitoring the welding. The QA inspector noted that the approved CWI was across Bay 2 monitoring work that was being conducted on MUC-A58.

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The QA inspector observed ZPMC workers making excavations on stiffener plate welds #2 and #3. The QA inspector spoke with the CWI Chen Xi to inquire about the work that was being conducted. The QA inspector was informed that weld repairs were being made. The QA inspector asked the CWI why there were weld repairs and the QA inspector was informed that ultrasonic testing (UT) by a ZPMC technician had discovered rejectable indications. The QA inspector asked to see the reports detailing where the excavations were being made. The QA inspector was shown paperwork relating to critical weld repair (CWR) 29 and the UT report that rejected welds #2 and #3. The QA inspector photographed these documents. The QA inspector reviewed the available CWR-29 documents and noted that there appears to be no approved revision of the repair of weld #3. The QA inspector noted that CWR-29 has been previously excavated and repaired.



Summary of Conversations:

As noted above, the QA inspector Scott Croff had general conversations with ZPMC personnel regarding observations of work Bay 2. These conversations are described above.

The QA inspector Scott Croff informed the QA inspector Bruce Berger of the above mentioned observations and conversations. 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.

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

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for your project.

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