

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-000976**Date Inspected:** 03-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:** Xu Le Feng**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:** Floor Beam Diaphragms, 89 meter & 77 meter**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.

As noted on the TL-6031 report from 12-2-2007, the QA inspector noted that parts SA-24 welds 11 & 12 are made in material that is approximately 77mm thick and the approved drawings for these parts and weld design require a 60mm thick part. The QA inspector Scott Croff asked the QA inspector Alfred Acuna to confirm that these parts should be verified as completed. The QA inspector Scott Croff was informed that verification ultrasonic testing (UT) should be completed on these parts in their current condition. The QA inspector conducted verification UT of SA-24 weld 11 and SA-24 weld 12. At the time of examination, no rejectable indications were observed. See the attached TL-6027 report for more information.

The Quality Control Liaison (QCL) "Ken" Zhang Jiadi informed the QA inspector that UT has been conducted on repairs of MUSB-MA21 and that the technician who conducted UT accepted the welds. The QA inspector did not witness this testing or make any observations of the completed welds at this time.

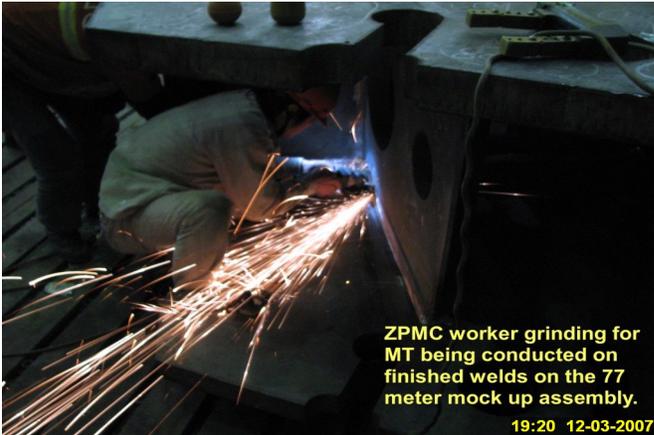
The QA inspector observed flux cored arc welding (FCAW) on MUSB-MA38 complete joint penetration (CJP) weld #9. The QA inspector noted that Li Shu Qiang is the welder and is being monitored by CWI Xu Le Feng. The QA inspector noted that electrode spools being used at this location are dated 12-2-2007. The QA inspector was unable to verify how long the spools have been in-use or if the spools have been properly stored. The QA inspector observed that the forms being used for the electrode/flux tracking appear to not conform to the approved

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WQCP sample form. See the attached photo.

The QA inspector observed ZPMC personnel conducting visual inspection and magnetic particle inspection of the completed welds on the 77 meter mock up assembly. See the attached photos.



Summary of Conversations:

As noted above, at the QA inspector Alfredo Acuna asked the QA inspector to conduct UT verification of the completed web connection plates (SA-24). The QA inspector Scott Croff was informed that UT should be conducted despite the 17mm difference in actual part thickness and the approved shop drawings.

As noted above, the QA inspector Scott Croff had conversations with the QCL "Ken" regarding the status of inspections that were conducted by ZPMC technicians. The notable conversations between the QA inspector and the QCL are described above. 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 for your project.

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