

**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-002925**Date Inspected:** 27-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 400**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:** OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 3 – New Tower Building

The QA Inspector observed ZPMC qualified welder Xu Guoyin ID 05944 utilizing WPS-345-FCAW-2G (2F) Repair to perform Flux Core Arc Welding (FCAW) repairs of deck panel Partial Joint Penetration (PJP) welds on DP038-002.

The deck panel repair welding in the progress generally appeared to conform to contract specifications.

The QA Inspector was issued a notification to witness ZPMC perform final magnetic particle testing (MT) on deck panel weld repairs on the following: DP004-001, and DP006-001.

The final consist of ZPMC performing MT testing on both ends of the deck panel U-Rib welds, and the middle section. These deck panels had been repaired at an earlier date, removed from the shop and were stored outside and light rust had formed over all of the welded areas.

After the final MT was finished The QA Inspector contacted ZPMC QC Inspector Mr. Wang Lu and informed him that Caltrans QA had been unable to complete a visual inspection during or after the initial repairs were completed because the deck panels were removed from the shop without Caltrans being notified. Mr. Wang Lu agreed to

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# WELDING INSPECTION REPORT

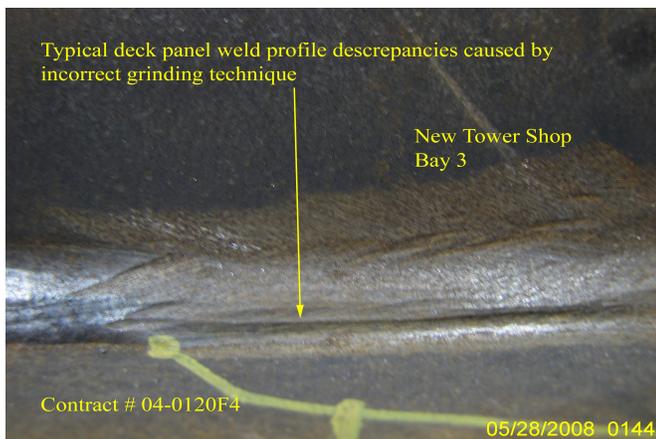
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have ZPMC personnel remove surface rust from the weld repair areas with grinder using a wire wheel. The QA performed a visual inspection of the weld repairs and found numerous weld repairs which had been repaired using a grinder at the toe of the weld and removing the smooth transition from the weld to the base metal causing a 90 degree edge to be formed which produced an incorrect weld profile.

The QA Inspector informed Mr. Wang Lu, and Mr. Fu Yuhong and they both agreed that these repairs appeared unacceptable, and that ZPMC would correct the weld profile discrepancies. The QA Inspector informed both Mr. Fu Hong and Mr. Wang Lu that in the future, all request for Caltrans to witness a final MT on deck panels must have already have ZPMC QC final visual completed.



### Summary of Conversations:

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

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<b>Inspected By:</b>	Dixon, Roscoe	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

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