

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 #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-000172**Date Inspected:** 29-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Quality Control Contact:	CWI-Zhao Chen Sun and ZPMC	Quality Control Present:	Yes	No
Material transfer:	Yes No N/A	Sampled Items:	Yes	No N/A
Stock Transfer:	Yes No N/A	OK to Cut:	Yes	No N/A
Rebar Test Witness:	Yes No N/A	Delayed/Cancelled:	Yes	No N/A

Other: N/A**Bridge No:** 34-0006**Component:** Plates with Yield Strength Problems- Charpy**Bid Item:** 52**Lot No:** N/A**Summary of Items Observed:**

On this date the Caltrans Quality Assurance (QA) representative, John P. Tracy, performed a witness of Charpy Vee Notch (CVN) mechanical testing samples. Following is a list of plate specimen numbers and the details of the review.

Upon arriving at the ZPMC mechanical testing lab, Jeff Evans of American Bridge Fabricator (ABF) plus Quality Control (QC) inspector - Xie Ping and Certified Welding Inspector (CWI) - Zhao Chen Sun, of ZPMC, were present.

NOTE: This is the fourth batch of CVN test for this plate.

For testing purposes, three pieces were fabricated and notched for each of the nineteen individual sample lots. ZPMC and ABF chose thirteen random, individual samples to view under an optical comparator in order to verify notch profiles. Additionally, I chose two random samples making it fifteen viewed samples in all. No discrepancies were observed.

The sample sets were separated into two distinct groupings. Six identified groups were tested at -39 degrees Centigrade (16 degrees lower than the previous test at -23 degrees Centigrade, per ASTM E709). The bath for these CVN samples was verified at -39.8 degrees Centigrade and the specimens soaked at this temperature from 9:51am until 10:09am. Impact tests were performed and appeared to be in accordance to the criteria set forth in contractual documents.

Per CWI- Zhao Chen Sun and Xie Ping, of ZPMC, the results of their impact tests are as follows: Specimen # 787-4-2 failed to achieve satisfactory values and the five other samples were accepted.

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The other thirteen specimen sets were to be tested at -31 degrees Centigrade (8 degrees lower than the previous failed tests at -23 degrees Centigrade, per ASTM E709-05). The bath for these CVN samples was verified at -31.5 degrees Centigrade and the specimens soaked at this temperature from 10:18am until 10:34am. Impact tests were performed and appeared to be in accordance with contractual documents.

Per CWI- Zhao Chen Sun and Xie Ping of ZPMC, the results of their impact tests are as follows: Specimen numbers 787-4-3, 787-4-5, 787-4-18 and 787-4-19 failed to achieve satisfactory values and the nine other samples were accepted.

Summary of Conversations:

At the completion of the mechanical testing the CWI / QC Inspector-Zhao Chen Sun and Xie Ping, of ZPMC, reported that the mechanical tests specimen #'s 787-4-2, 787-4-3, 787-4-5, 787-4-18 and 787-4-19 were rejected thus needing retest and all remaining sample sets were found to be acceptable, in accordance to the criteria set forth in contractual documents. Further action is pending.

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:	Tracy,John	Quality Assurance Inspector
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Reviewed By:	Cuellar,Robert	QA Reviewer
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