

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-007745**Date Inspected:** 27-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**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 and Tower**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 2:

1AAW

This Caltrans QA inspector monitored activities related to internal stiffener replacement for Partial Joint Penetration (PJP) welds exceeding Welding Procedure Specification root gap tolerance on OBG segments 1AAW. This Quality Assurance (QA) Inspector observed ZPMC personnel performing mechanical straightening without applied heat on Edge Plate 1472A Segment 1AAW. QA observed ZPMC personnel using hydraulic jacks to apply force to the distorted portion of the Edge Plate 1472A there was no heating of the base metal during the operation. The Heat Straightening Request (HSR) presented by ZPMC personnel was identified as, HSR(B)-298. The HSR specified the use of heat during the straightening procedure. An incident report was issued for the above mentioned mechanical straightening. Please see the attached photo of mechanical straightening by ZPMC personnel.

1AAE

During visual inspection of base metal excavations QA observed that ZPMC had excavated a 150 mm diameter circle in the edge plate approximately 2 mm deep and 15 mm in width. Please see the attached photo of the base

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# WELDING INSPECTION REPORT

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metal excavation area.

The following base metal excavation area and base metal repair were tested and accepted by ZPMC MT technicians were verified and accepted by QA.

SEG2F-043, 024, 044, 025, 026, SEG2E-334, SEG2D-088 at location A00  
SEG2F- 041, 001, 002, 003, 004, 005, SEG2E-255, 233, SEG2C-044, 002

Caltrans QA observed ZPMC welder 200569 performing base metal repairs of base metal excavations at location A00. ZPMC QC was identified as Chen Xi. Welding appeared to in conformance with welding procedure specifications, WPS-345-SMAW-1G (1F)-Repair, WPS-345-SMAW-2G (2F)-Repair and WPS-345-SMAW-3G (3F)-Repair.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## Summary of Conversations:

As identified within the contents of this report.

## 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 Eric Tsang, 150 0042 2372, who represents the Office of Structural Materials for your project.

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

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