

**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-002897**Date Inspected:** 12-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lui Hua jie**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:** Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

**New Tower Bay 1**

The Caltrans QA Inspector randomly observed the machine Submerged Arc Welding (SAW) of fill passes on Weld Nos. SSD1-SA40C/E-1, 32A, 30; and SSD1-SA40B/E-1, 3A, 4A, Skin Plate Face "B". The six weld numbers are actually on one weld joint. The "A" welds are CJP and the remaining welds are PJP. They alternate CJP/PJP along the joint. Two welding operators were welding, Xu Xiu shui (I. D. No. 040489), and Xu Yan (I. D. No. 052917). Two Welding Procedure Specifications (WPS) were also being used. WPS-B-T-2221-B-U3c-S was used for the CJP portion of the weld and WPS-B-T-2321-B-P3-S-1 was used for the PJP. Certified Welding Inspector (CWI), Liu Hua jie (CWI No. 07120741), was present during the welding, as was ABF QA Inspector, Kong Yian hui. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were within the specified ranges on the WPS. These welds were completed during this shift.

The Caltrans QA Inspector also randomly observed the milling of the weld bevels on miscellaneous tower parts.

**New Tower Bay 2**

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# WELDING INSPECTION REPORT

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The Caltrans QA Inspector also randomly observed the milling of the weld bevels on miscellaneous tower parts and flame cutting at two work stations. One work station was burning miscellaneous parts and the other was burning a diaphragm plate.

No welding was done in this bay during this shift.

All above observations appeared to meet the requirements of the job specifications.



## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Jobses, Kenneth

Quality Assurance Inspector

**Reviewed By:** Cochran, Jim

QA Reviewer