

**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-012069**Date Inspected:** 25-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:** ZPMC and ABF**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:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay#11

Strut connection flat plate: - Caltrans QA Inspector observed a ZPMC welding operator performed SAW process on CJP weld of tower strut connection flat plate for tower elevation 123m, 127m and 143m. The material of strut connection flat plate is ASTM 345 with 25mm wall thickness. The CJP weld and plate ID are ED1-STSA4-6-143M-2-8A, ND1-STSA4-6-143M-1-8A, ND1-STSA4-6-143M-2-8A, ED1-STSA4-6-123M-1-4A, ND1-STSA4-6-123M-2-4A, ED1-STSA4-6-123M-2-4A, ND1-STSA4-6-123M-2-4A and ED1-STSA4-6-127M-1-4A. The SAW welding was monitored and recorded by ZPMC and ABF QC inspector.

Based on Caltrans QA inspector observations, no discrepancies were noted.

Strut connection U shape plate: - Caltrans QA Inspector observed seven ZPMC welders performed SMAW process on CJP weld of strut connection U shape plates. The material of strut connection U shape plate is ASTM 485 with 40mm wall thickness. The CJP weld and plate ID is ND1-SA4-68-123M-1-1B, ED1-SA4-68-123M-7-1B and ED1-SA4-68-123M-8-1B. The SMAW process was monitored and recorded by ZPMC and ABF QC inspector.

Based on Caltrans QA inspector observations, no discrepancies were noted.

East tower lift #5:- Caltrans QA Inspector observed two welding operators performed SAW process on exterior corner longitudinal seam welds that connected skin plate B to C of east tower lift #5. The longitudinal seam weld number is #ESD1-TL5-2B/F-11B and ESD1-TL5-2B/F-38A. The SAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

West tower lift #4:- Caltrans QA Inspector observed two welders performed SMAW repair process on the exterior corner longitudinal seam welds that connected skin plate C to D. The repair weld area has been pre heat prior

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welding. The repair welding located at elevation 123m. The SMAW repair processes were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bay #10

South tower lift #4: - Caltrans QA inspector performed final QA dry MT and UT test on corner longitudinal seam weld. The weld is connected the skin plate A and B of south tower lift #4. The ZPMC inspection request number is 005136. The corner longitudinal seam weld ID is SST14-1B/1-4A/B and SST14-1B/1-4B. The corner longitudinal seam weld for dry MT and UT test have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans MT inspection, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

### CLOSING STATEMENT

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

### Summary of Conversations:

As notes within report 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 Skyler Guest 15000422360 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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