

**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-006616**Date Inspected:** 25-Apr-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 Ying Xin**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 9-

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) of OBG deck panel u-rib Partial Joint Penetration (PJP) welds at tack weld locations. Caltrans NDT personnel performed conventional ultrasonic testing of tack welds. Tack weld locations that exhibited crack like indications in the area of interest were marked and recorded prior to PAUT. PAUT was performed in accordance with Caltrans UT procedure "Phased Array Testing for detection of planar discontinuities (cracks) in PJP welds. Results of Deck Panels evaluated are as follows:

DP314-001 (9DE): 7 locations tested with 4 locations rejected.

DP449-001 (9DE): 38 locations tested with 18 locations rejected.

DP340-001 (9DE): 21 locations tested with 9 locations rejected.

Bay 10-

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as North Tower Lift 3Skin C and D plates, NSD1-FESA3-1 A/C and NSD1-FESA3-1

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A/C (A side). The weld identification numbers are as follows, NSD1-FESA3-1 A/C-1A, 2A, 3A and NSD1-FESA3-1 A/C-1A and 2A. All welds tested from the A side of plates.

QA Inspector observed the following work in progress: SAW welding of weld joint 46A located on North Tower Lift 3 NSD1-FDSA3-1 B/C. ZPMC welder was identified as 052917. ZPMC QC is identified as Chen Ying Xin. The welding appeared to be in conformance with welding procedure specification, WPS-B-T-2221-B-U3c-S-2.

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

### Summary of Conversations:

Only general conversations between QC and QA occurred this date.

### 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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