

**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-012021**Date Inspected:** 09-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

7AW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at SEG033A on counter weight side of segment. Welder is identified as Mr. Feng Changdou (067572). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and WR10059 repair procedure.

6CW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 001 located at SEG031D side plate splice on cross beam side of segment. Welder is identified as Mr. Tang Xinjian (066041). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

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## NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations are as followed:

### 6AW+6BW

1. Deck plate weld splice OBW6-002/003/004 splice weld and temporary attachment areas on segment.

### 7BW+7CW

1. Deck plate root pass on OBW7-003/004 splice weld at cross beam side of segment.

### 6AE+6BE

1. Side plate weld splice OBW6B-002/003 temporary attachment areas on cross beam side of segment.

## Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

### 6CE

1. Excavations (UT reject areas) were performed on the edge plate to deck plate weld joint SEG32\*-043 located on the cross beam side of segment. Y location is as followed: 290mm.

### 6AW+6BW

1. Excavations (UT reject areas) were performed on the side plate weld joint OBW6B-002 located on the cross beam side of segment. Y location is as followed: 140 and 295mm.

### 6CE

1. Observed back gouging of weld joint OBW6F-012 on counter weight connection plate.

## Note:

Due to Chinese holiday, work was limited in the OBG Trail Assembly Yard on today's work shift.

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

## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

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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>	Alaniz,Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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