

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-011993**Date Inspected:** 11-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**

This QA inspector performed 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 member(s) is/are identified as OBG 6AW panel point 38. The weld designations reviewed are as follows:

6AW

1. FB019-001-101

6CW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 08 located at SEG026 on bike path side of segment. Welder is identified as Mr. Li Zhengxu (066179). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2g (2F)-FCM-Repair-1.

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7BW+7CW

Flux Core Arc Welding (FCAW) welding was performed on weld joints 31 and 32 located at SP430-001 on counter weight side of segment. Welder is identified as Mr. Wang Quanlin (066746). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2233-B-U2-F.

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:

7AW+7BW

1. Back gouging of deck plate I ribs in progress located on the counter weight side of segment.

5CW

1. Heat straightening was performed on weld joint SEG025A located on the cross beam side of segment between panel point 35 & 36 per HSR (B)-350.

5AW

1. ZPMC workers removing residual grit from internal segment areas for coating.

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

1. Performed and accepted MT at heat straightening areas on panel point 38 cross beam side of segment.

5CE

1. Excavations (UT reject) area on the bottom plate to side plate weld joint SEG026-008 located on the bike path side of segment at panel point 36. Y locations are as followed: 730mm~760mm and 170mm~290mm.

5BW

This QA Inspector observed heat straightening being performed on side plate to side plate splice (SEG023A-031)

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located at count weight side of segment per HSR (B)-349 R0. This QA Inspector observed rain water present at time of heating observation. This QA Inspector issued an incident report for today's work shift.

**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**

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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