

**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-011785**Date Inspected:** 30-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Gong Liang Zhu**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) Shrikant Utekar 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:

## TRIAL ASSEMBLY YARD

## ULTRASONIC INSPECTION

## OBG SEGMENT 6BW

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the weld between edge panel and deck panel (counter weight side) (CA027-002, 004, 006) utilizing scanning pattern A, B, C and D (Fig 6.7). During the Ultrasonic Testing (UT) this Quality Assurance (QA) Inspector found one class "A" longitudinal linear indication that had not identified by ABF. American Bridge Fluor (ABF) request number was 01292010-2.

## ULTRASONIC INSPECTION

## OBG SEGMENT 6AW

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the weld between edge panel and deck panel (counter weight side) (CA025-002, 004, 006) utilizing scanning pattern A, B, C and D (Fig 6.7). During the inspection ABF found one transverse linear indication. American Bridge Fluor (ABF) request number was 01302010-1.

## ULTRASONIC INSPECTION

### OBG SEGMENT 5AW-5BW

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the weld between side panel and bottom panel (cross beam side) (SEG021A-007, SEG023A-021) utilizing scanning pattern A, B, C and D (Fig 6.7). American Bridge Fluor (ABF) request number was 01292010-1.

No relevant indication found.

## TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

### OBG SEGMENT 6AW – 6BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067665 performing Shielded Metal Arc Welding process for the weld SEG03B-021 located on weld between side panel and bottom panel (cross beam side). ZPMC QC Mr. Song Hui monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-1G (1F)-FCM- Repair-1. Critical weld report identified T-CWR1142.

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

### Summary of Conversations:

No relevant conversations.

### 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, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
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<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer
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