

**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-010386**Date Inspected:** 30-Oct-2009**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, China**CWI Name:** Chen Xi**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 Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall 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 CROSS BEAM CB1**

This crossbeam appears to be complete and has been loaded on the ship.

**OBG CROSS BEAM CB2**

This crossbeam appears to be complete and has been loaded on the ship.

**OBG CROSS BEAM CB3**

This crossbeam appears to be complete and has been loaded on the ship.

**OBG CROSS BEAM CB4**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

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### OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB7

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB8

This QA observed ZPMC personnel flame straightening the bottom panel of this crossbeam. ZPMC QC identified as Mr. Meng Linnan was present to monitor the process. The work performed appeared to be in general compliance with ZPMCs WQCP and flame straightening procedure HSR1(B)-7805.

Mr. Meng informed this QA that ZPMC will most likely be straightening various other components of this crossbeam. Mr. Meng presented four other flame straightening procedures ZPMC intends to use. The procedure numbers and components and/or welds to be straightened are as follows:

HSR1 (B)-7643 on west side panel weld joint CB202D-008-002.

HSR1 (B)-7824 on east side panel weld joint CB202C-008-002.

HSR1 (B)-7466 on the side, deck and intermediate panels weld joints CB202G-017/018/019/020-139~146, 157~164 and 180~183.

HSR1 (B)-7780 on west side panel wave distortion between stiffeners near weld joint CB202D-008-002.

This QA reviewed the above mentioned procedures. Each appeared to be in general compliance with the contract documents.

### OBG CROSS BEAM CB9

This QA observed ZPMC qualified welding personnel identified as 051246 perform FCAW welding on weld joint identified as CB202G-021-148. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as 220077 perform FCAW welding on weld joint identified as CB202G-023-148. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA observed ZPMC qualified welding personnel identified as 053742 perform FCAW welding on weld joint identified as CB202C-009-002. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding

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process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

### OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB13

This QA observed the contractors personnel fitting and tack welding floor beam sections for the bottom panel. No other significant work was observed during the time QA was present.

### OBG CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

### OBG CROSS BEAM CB16

This QA observed the contractors personnel fitting and tack welding floor beam sections to the deck panel. No other significant work was observed during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

#### **Summary of Conversations:**

As mentioned above.

#### **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 (15000422372), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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