

**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-009588**Date Inspected:** 07-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 has been loaded on the ship.

**OBG CROSS BEAM CB2**

This crossbeam has been loaded on the ship.

**OBG CROSS BEAM CB3**

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

### OBG CROSS BEAM CB9

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

### 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 that no significant work was being performed on this crossbeam during the time QA was

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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 welding personnel identified as 205390, 217185 and 066268 performing FCAW and SMAW Complete Joint Penetration (CJP) weld repairs on welds that have been rejected by the contractors Quality Control (QC) Ultrasonic Testing (UT) technicians. The weld joints are identified as FB205-052-013 and 016, FB205-050-005, FB205-049-005, FB205-051-009, FB205-052-021, FB205-051-016 and 019, FB205-049-016, FB205-050-025, 031 and 034, FB205-049-031 and 034, FB205-052-046, FB205-049-021 and 024, FB205-050-015 and 024, FB205-052-006, FB205-051-025 and 031, FB205-050-005, FB205-049-043 and 046 and FB205-052-025 and 028. ZPMC QC identified as Mr. Wang Liang was present to monitor the repair welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G (2F)-repair and WPS-345-FCAW-2G (2F)-repair.

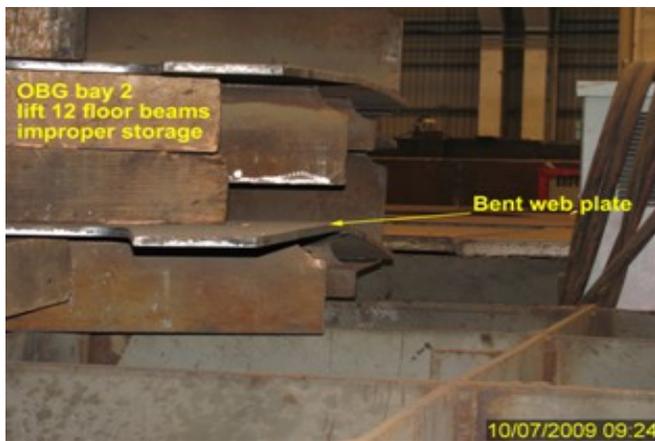
### OBG BAY 2

This QA observed lift 12 floor beam components that appear to have been bent/warped due to improper handling and/or storage. See attached photos. Caltrans standard specifications 1999 Section 6-1.3 states "Articles or materials to be incorporated in the work shall be stored in such a manner as to ensure the preservation of their quality and fitness for the work, and to facilitate inspection". Section 55-1.04. states " In handling and shipping of the steel work, every care shall be taken to avoid bending, scraping or overstressing the pieces. All pieces bent or otherwise injured will be rejected". This QA and other Caltrans QA inspectors have repeatedly requested that the contractor correct this issue over the last several days. The contractor has done little if anything to re-stack these floorbeam components in a manner compliant to the contract documents. This QA notified ZPMC QC CWI identified as Mr. Chen Xi and ABF QA inspector identified as Mr. Wang Wen Bin that an incident report would be generated for this issue.

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

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## Summary of Conversations:

As mentioned above.

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

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