

**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-012499**Date Inspected:** 01-Mar-2010**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.**Summary of Items Observed:**

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

Bay 1:

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) of OBG component – Traveler Rail; weld joint 20TR1-028 – 001, 003 & 005. Welder is identified as 219188. ZPMC Quality Control (QC) is identified as Yong Fu Zhi. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-1G.

CB 15:

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC personnel performing arc gouging of weld joint no: CB202A-015-014 & CB202A-015-002. Gouging was done having Welding Repair Report (WRR) B-WR9677 R-0 & B-WR9676 R-0 for weld no CB202A-015-014 & CB202A-015-002, respectively. ZPMC Quality Control (QC) is identified as Xiang Feng. As per ZPMC UT (Ultrasonic Testing) report no: B787-UT-10433, six (6) locations on weld no CB202A-015-014 & thirteen (13) locations on weld no CB202A-015-002 were needed to be repaired. This QA Inspector verified the WRR and did

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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random verification of the locations marked for gouging. These marked locations were found to be complying with the UT report.

Bay6: CB9.

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Outside Yard:

CB8, CB13, CB10, CB11, CB16, CB12 & CB14:

This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

Bay 15:

CB5:

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC personnel performing repair welding of following weld joint numbers:

- CB202G-005-043 (WRR - Welding Repair Report No: B-WR-10741)
- CB202G-006-043 (WRR - Welding Repair Report No: B-WR-10742)
- CB202G-007-055 (WRR - Welding Repair Report No: B-WR-10743)
- CB202G-008-061 (WRR - Welding Repair Report No: B-WR-10744)
- CB202G-008-043 (WRR - Welding Repair Report No: B-WR-10745)

For above joints, welder was identified as 201087. Welding process was identified as Shielded Metal Arc Welding (SMAW). WPS was identified as WPS-SMAW-3G (3F)-REPAIR, as per the above mentioned WRR. ZPMC QC was identified as Chen Xi. This QA verified all the WRR and found those to be complying with the contract documents.

- CB202A-005-013 (WRR - Welding Repair Report No: B-WR-10677)

For this above joint, welder was identified as 037840. Welding process was identified as Shielded Metal Arc Welding (SMAW). WPS was identified as WPS-SMAW-4G (4F)-REPAIR, as per the above mentioned WRR. ZPMC QC was identified as Chen Xi. This QA verified the WRR and found that to be complying with the contract documents.

CB6:

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC personnel performing Ultrasonic Testing (UT) of hold back welds / corner joints of this CB. ZPMC UT technician was identified as Tang Xing. Weld joint nos: CB202-006-004, CB202-006-006, CB202-006-016, CB202-006-018, CB202-006-001, CB202-006-013 & CB202-006-015 were marked for repair.

No other significant work was being performed on this CB at the time when this QA was present.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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Trial Assembly:

CB7:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

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; phone: 15000422372, who represents the Office of Structural Materials for your project.

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