

**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-012685**Date Inspected:** 13-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:** Li Yang**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

## MAGNETIC PARTICLE INSPECTION

## OBG SEGMENT 6 WEST

This Q.A Inspector performed Magnetic particle Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA Inspector generated a (M.T) report for this date. The members are identified as the OBG segment 6AW Designation are as follows.

DP25-001-015, 016; DP515-001-011, 012; EP24-002-016, 017; SP085-002-030, 031; SP517-002-049, 050, 051, 052; BP142-001-039~41; BP034-001-060, 061; EP042-001-014, 015; SP123-001-060, 061; SP414-001-029, 030; SP150-001-050~055; SP755-002-043~46

SSD11-PP45-004; DP625-001-009, 010; DP624-001-015, 016; SP083-002-033, 034; SP83-003-013, 014; SP515-001-029 ~036; SP516-001-015~022; SP753-001-033~036; SP754-001-045~048; EP042-001-010, 011; EP041-001-011, 012; SP413-001-025, 026; SP414-001-021, 022; SP149-001-033, ~036; SP150-001-045~48; BP142-001-025, 026, 031~036; BP141-001-043, 044, 049~054.

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## WELDING INSPECTION REPORT

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During the magnetic particle inspection this QA found a longitudinal linear indication having length 20mm in the weld SP414-001-030. After 5mm grinding weld material the indication was still there with length approximately 3mm. As per QA lead inspector Rodney Patterson contractor will fix this without issuing the incident report for detail see attached photos.

This QA Inspector randomly observed the following work in progress.

### OBG SEGMENT 7AW

This Quality Assurance (QA) Inspector observed ZPMC personnel performing carbon air arc gouging on the weld between longitudinal diaphragm top flanges to floor beam at PP48 counter weight side.

### OBG SEGMENT 7AW-7BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067589 performing Shielded Metal Arc Welding process for weld OBW7-002 located on PCMK deck panel splice weld between OBG segment 7AW and 7BW ZPMC QC Mr. Zang Hai Tao monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 066361, 045196, 066326 performing Shielded Metal Arc Welding process for weld OBW7-003 located on PCMK deck panel splice weld between OBG segment 7AW and 7BW ZPMC QC Mr. Zang Hai Tao monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

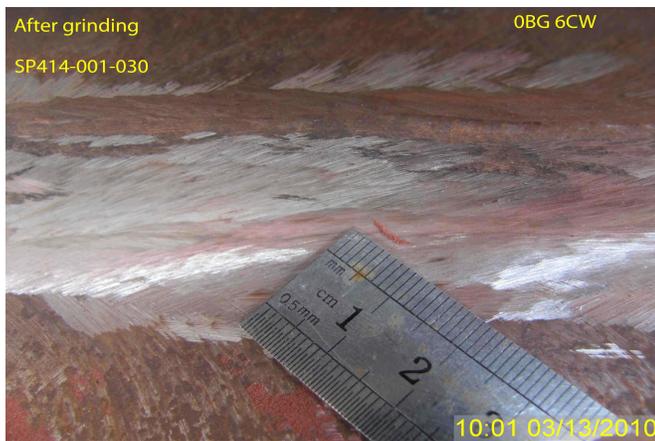
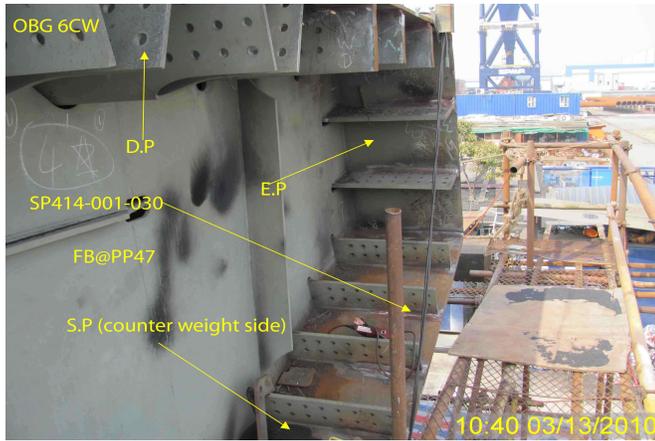
### OBG SEGMENT 7AW-7BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 066413, 067829, 067183 performing Shielded Metal Arc Welding process for weld OBE7C-009, 010 located on PCMK side panel splice weld between OBG segment 7BE and 7CE (cross beam side) ZPMC QC Mr. Wang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

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

# WELDING INSPECTION REPORT

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## 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.

**Inspected By:** Utekar,Shrikant

Quality Assurance Inspector

**Reviewed By:** Dawson,Paul

QA Reviewer