

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-010168**Date Inspected:** 12-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shen Fu You**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 Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

**Segment 6AE**

This QA Inspector performed a preliminary random visual inspection after the grit blast of the internal components of the deck panel and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

**Bay#14**

This Quality Assurance Inspector (QA) observed during random visual inspection of segment 10BE and segment 10CE that excessive root opening on weld joints Seg064A-031, SSD16A-PP092-008(10CE) and SSD18A-PP091-003(10BE). According to approved drawing weld details and approved WPS, maximum root opening is 0~5mm. The recorded root opening is 10~20 mm. The contractor has deviated the contract drawings and use steel backing bar on those welds because of excessive root opening. Please see incident report on this date. For further information, please see the attached pictures below.

**Bay#14**

FCAW welding of weld joint SSD19A-PP89-002, 007 located on 10BE. Welder is identified as 216623(3G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

Applicable WPS-B-T-2233-B-U2-F.

FCAW welding of weld joint SSD19A-PP90-002, 007 located on 10BE. Welder is identified as 044790(3G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

FCAW welding of weld joint SSD19A-PP91-002, 007 located on 10BE. Welder is identified as 058551(3G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

FCAW welding of weld joint Seg062\*-010 located on 10BE. Welder is identified as 048038(1G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-223(2)1-T-2.

SMAW welding of weld joint Seg056A-024 located on 9DE. Welder is identified as 067764(4G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg056A-026 located on 9DE. Welder is identified as 200114(4G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

FCAW welding of weld joint Seg52D-049 located on 9BE. Welder is identified as 066683(3G). ZPMC QC is identified as Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

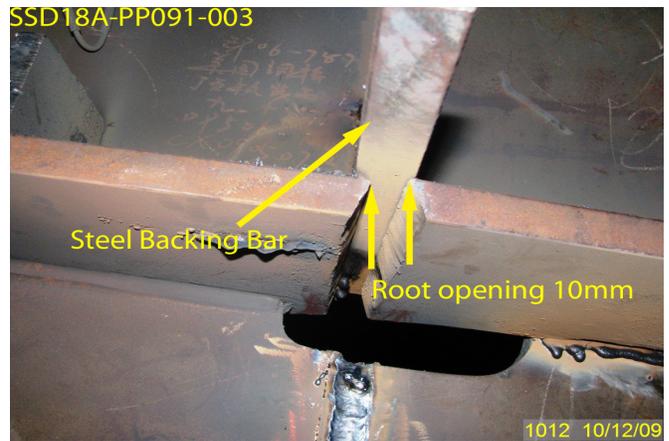
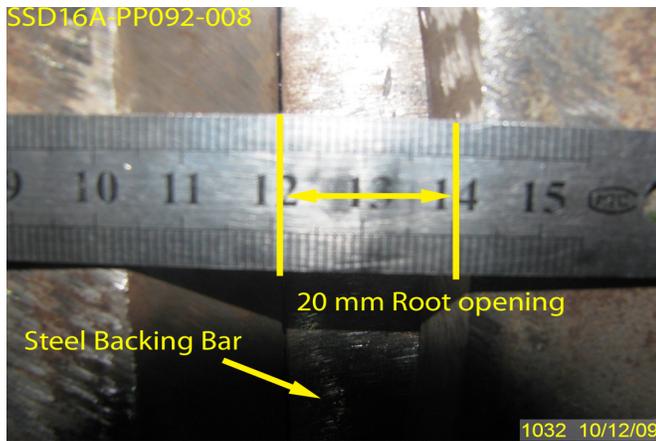
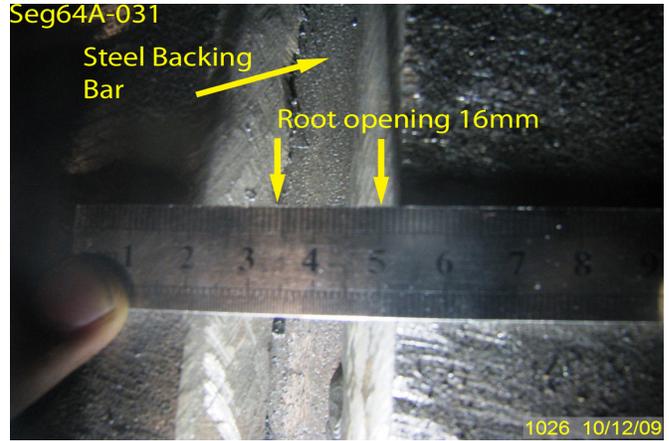
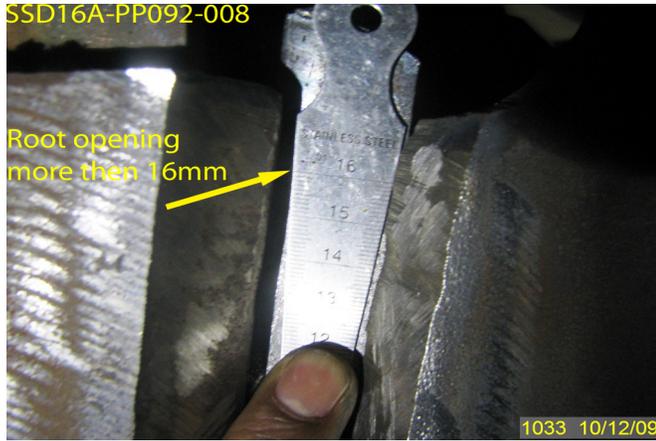
Bay#13

SMAW welding of weld joint Seg070A-004 located on 11CE. Welder is identified as 049339/044772(4G). ZPMC QC is identified as Tang Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1.

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

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )



## 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 150-0042-2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Patel, Hiranch

Quality Assurance Inspector

**Reviewed By:** Patterson, Rodney

QA Reviewer