

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-015357**Date Inspected:** 30-Jun-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:** Mr. Tian Lei / Mr. 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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu 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 Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) Repair welding of Traveler Rail weld joint 20TR1-020-003. Welder is identified as 215397. ZPMC Quality Control (QC) is identified as Mr. Ai Wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-1G (1F)-Repair-1. This weld has been rejected by ZPMC UT Technicians and recorded on UT report number B787-UT-13611. The Repair welding was performed as per the Welding Repair Report (WRR) No: B-WR13813.

ZPMC Personnel performing Heat Straightening for the Traveler Rail (TR) 21TR4-004. Heat straightening was being performed appeared to comply with the Caltrans Engineer approved Applicable HSR Report# HSR (B)-363 Rev.No:1. ZPMC Quality Control (QC) is identified as Mr. Ai Wei.

ZPMC Personnel performing flush grinding on buttering welded area on Traveler Rail identified as 20TR1-020. Refer the attached photo for reference.

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BAY- 2

FCAW of weld joint FB3189-001-104. Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong gang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U5-F-2.

Shielded Metal Arc Welding (SMAW) Tack welding of weld joint FB3226-001-034. Welder is identified as 207464. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong gang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112. Refer the attached photo for reference.

BAY- 3

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06089.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Floor beam weld Components. Total number of welds UT Tested: 03 No's. The weld designations are review as follows:

1. FB3154A-001-017,020,023.

FCAW of weld joint FB3121-001-038. Welder is identified as 052696. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B- T-2132.

FCAW of weld joint FB3108-001-053. Welder is identified as 055564. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint FB3138-001-144. Welder is identified as 206386. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U4b-F.

BAY- 5

This QA Inspector performed dimension check for the below mentioned Traveler Rails, measured length Thickness, deformation, depth and tilt of the TR. The measured readings were fed in spread sheet, generated the report and submitted to the Team Leader for further action.

1. 20TR2-009.

2. 20TR2-001.

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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 Quality Control (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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
