

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018004**Date Inspected:** 28-Oct-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. Li zhi jiang**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- 2

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07143.

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: 14 No's. The weld designations are review as follows:

1. FB3343-001-091,031,029,077,244,356,227,221,049,105,107,097,099,063.

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint FB3315-001-075,076. Welder is identified as 045209. ZPMC

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Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint LD3049-001-315,334. Welder is identified as 045276. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

FCAW of weld joint LD3049-001-236,237. Welder is identified as 068852. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2133.

Signed off the following green tag:

1.15162.

During QA random in-process observations of the fabrication of OBG Steel barrier subassemblies this QA Inspector observed the dimension of the diaphragm flange width does not match the approved shop drawings and the bolt screw / holes drilled too close to the edges. Additionally bolt / screw holes diameter also does not match the approved shop drawings. The width of the diaphragm flange as measured by this QA was 192 mm, required width as per the approved shop drawing is 212 mm. The bolt hole size as measured by this QA was 10 mm, required size as per the approved shop drawing is 13.5 mm. The flange plate is identified as E5-P-18. Total of 8 bolt holes are affected by this condition. The flange plate Material thickness is 12 mm.

This QA generated an incident report on this date for the above issue, for further information see the incident report and attached photos.

BAY- 3

FCAW of weld joint SA3338-001-014,015. Welder is identified as 2080752. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint RS3018A-001-001. Welder is identified as 044830. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2231-TC-U4b-F.

FCAW of weld joint RS3110C-002-001. Welder is identified as 055564. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2231-TC-U4b-F.

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

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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