

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-018541**Date Inspected:** 06-Dec-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. Wang 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:** 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

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07646.

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 Traveler rail weld Components. Total number of welds UT Tested: 30 No's. The weld designations are review as follows:

1. 20TR2-049-009,011,013,015,017
2. 20TR2-048-009,011,013,015,017
3. 20TR2-050-009,011,013,015,017
4. 20TR2-046-009,011,013,015,017
5. 20TR2-045-009,011,013,015,017

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6. 20TR2-031-009,011,013,015,017.

BAY- 2

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07659.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Hinge plate weld Components. Total number of welds MT Tested: 7 No's. The weld designations are review as follows:

1. SEG3020K-238,234,240,273,275,277,279.

During QA MT review of welds located on OBG Floor beam hinge plate SEG3020K, this QA Inspector observed Two (2) Transverse surface linear indications measuring approximately 8 and 4 mm in length. The weld is identified as: SEG3020K-279. The weld is a fillet welds joining to Stiffener plate (X4942F) to hinge plate web plate (X4950A). The "Y" locations are 150 mm and 175 mm from the stiffener(X4948G) cope hole as shown on the picture. These indications has been ground out and MT re tested found to be acceptable. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of these welds. Refer the attached photos for reference.

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint FB3327-001-038,039. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-ESAB.

BAY- 3

FCAW Tack welding of weld joint SA8009-001-001. Welder is identified as 044790. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2231-ESAB.

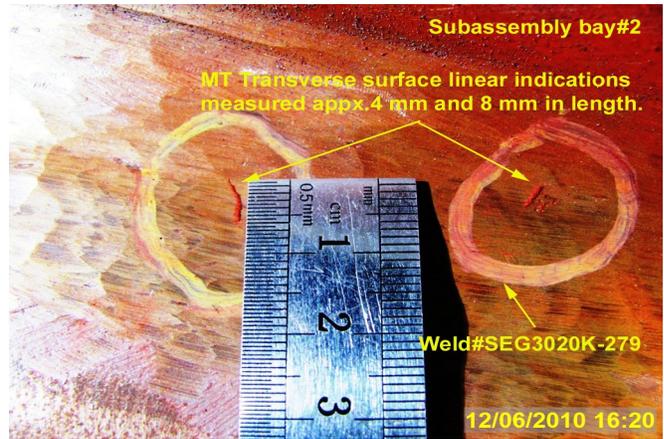
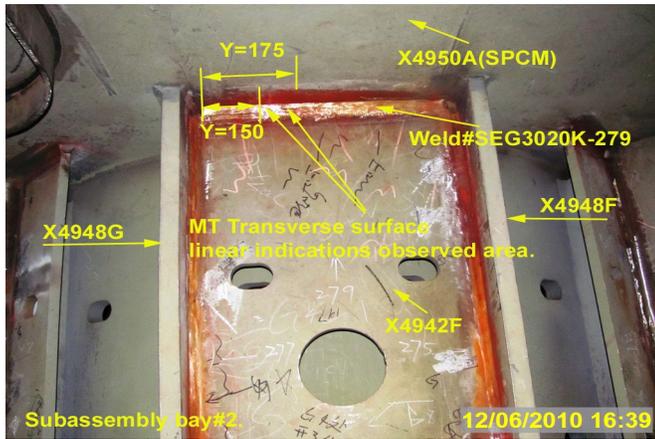
FCAW Tack welding of weld joint AH3150-002. Welder is identified as 050977. ZPMC Quality Control (QC) is identified as Mr. Zhng yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2231-ESAB.

This QA Inspector performed photo documentation on Lift 14 Hinge plates are identified as FB3343A,SA3325A, FB3273A,FB3327A,SA3409A,FB3328A,SA3410A located in sub assembly bay 2 and 3. These photos has been sent to QA lead Inspector and Structural Material Representative (SMR) by mail.

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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
