

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-015771**Date Inspected:** 19-Jul-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. Huang min**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:

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The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06228.

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

1. 10TR3-030-005~007,010,013,014.
2. 10TR3-033-005~007,010,013,014.
3. 11TR1-004-005~007,010,013,014.
4. 11TR1-017-005~007,010,013,014.
5. 11TR2-002-005~007,010,013,014.

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6. 11TR2-012-005~007,010,013,014.
7. 11TR3-015-005~007,010,013,014.
8. 11TR3-019-005~007,010,013,014.
9. 11TR3-023-005~007,010,013,014.
10. 11TR3-024-005~007,010,013,014.
11. 11TR4-002-005~007,010,013,014.

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 Traveler Rail (TR) weld Components. Total number of welds MT Tested: 77 No's. The weld designations are review as follows:

1. 10TR3-030-005~008,011,013,014.
2. 10TR3-033-005~008,011,013,014.
3. 11TR1-004-005~008,011,013,014.
4. 11TR1-017-005~008,011,013,014.
5. 11TR2-002-005~008,011,013,014.
6. 11TR2-012-005~008,011,013,014.
7. 11TR3-015-005~008,011,013,014.
8. 11TR3-019-005~008,011,013,014.
9. 11TR3-023-005~008,011,013,014.
10. 11TR3-024-005~008,011,013,014.
11. 11TR4-002-005~008,011,013,014.

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) TR 10TR3-033, this QA Inspector observed One (1) Transverse surface Linear indication measuring approximately 5 mm in length. The weld is identified as: 10TR3-033-014. The weld is a Complete Joint Penetration with reinforcement fillet weld joining TR web to flange plate. The "Y" location is approximately 1300 mm from the nearest end of the weld. This indication has been ground out and MT re tested found to be acceptable. The indication is 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.

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Signed off the following green tags.

1. 13358~13364.

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This QA Inspector Randomly observed the following work in progress:

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Shielded Metal Arc Welding (SMAW) Tack welding of weld joint DP3113-001-005,006. Welder is identified as 046813. ZPMC Quality Control (QC) is identified as Mr. Wang Liang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

Flux Cored Arc Welding of weld joint BP3051-001-007,008. Welder is identified as 062447. ZPMC Quality Control (QC) is identified as Mr. Guopan. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

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