

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-019060**Date Inspected:** 04-Jan-2011**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. Liu fa wen**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. 08045.

Visual Testing (VT)

This QA performed Random VT of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. The members are identified as OBG bike path (BK) welds Components. The BK is designations are review as follows:

1. BK4A-064.

During QA random VT of the OBG BK-BK4A-064, this Caltrans QA inspector observed the gap between bearing plate (BKPL7A) to the end stiffener plate (BKX11D) exceeds the maximum tolerance specified in AWS D1.5. The approved shop drawing identified as BK4E, Section N-N, specifies that this joint is tight fit and no weld. The gap

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between bearing plate to the end stiffener plate, as measured by this QA, is approximately 4.5mm. The bearing plate and to the end stiffener plates are identified as BKPL7A and BKX11D respectively. VT inspection has been carried out to prior to installation of the BK end closure plates BKPL8.

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

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) welding of weld joint identified as BK004A3-063-017,018. Welder is identified as 054459. ZPMC Quality Control (QC) is identified as Mr. Liu chuan gang. The welding variables appeared to comply with the Applicable WPS: B-T-2132-ESAB.

FCAW welding of weld joint identified as BK004A3-063-034,035. Welder is identified as 500405. ZPMC Quality Control (QC) is identified as Mr. Liu chuan gang. The welding variables appeared to comply with the Applicable WPS: B-T-2132-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as BK004A3-064-100~104. Welder is identified as 045148. ZPMC Quality Control (QC) is identified as Mr. Liu chuan gang. The welding variables appeared to comply with the Applicable WPS: B-P-2114.

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FCAW welding of weld joint identified as AH3151A-112,114. Welder is identified as 050977. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: B-T-2232-ESAB.

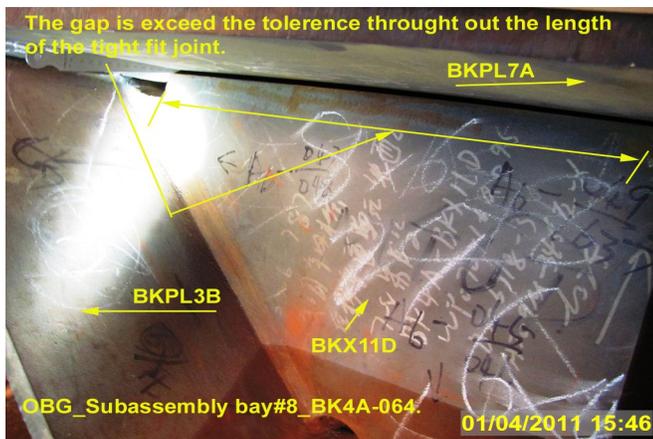
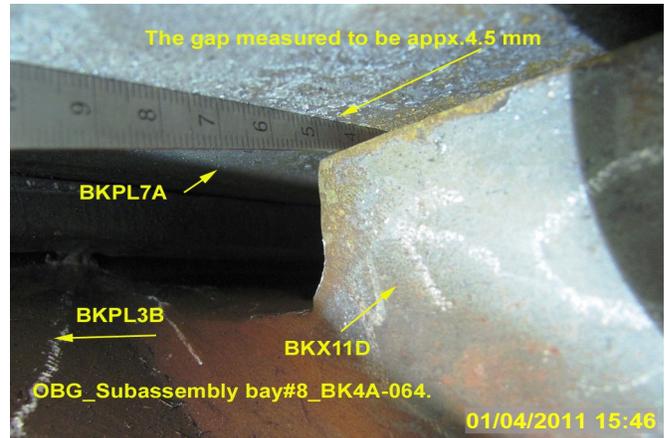
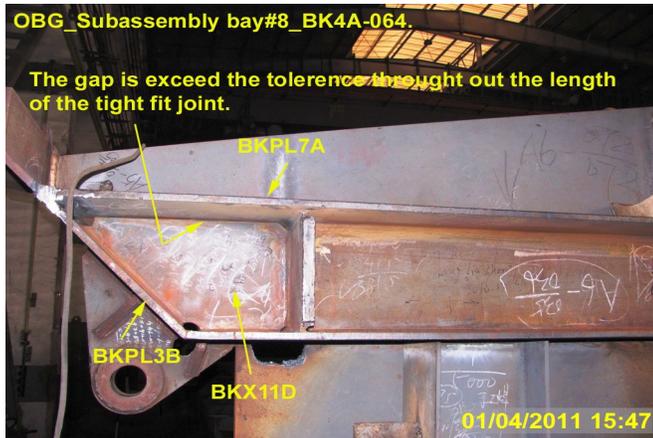
FCAW welding of weld joint identified as AH3151A-122,123. Welder is identified as 208035. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: B-T-2132-ESAB

FCAW buttering welding of traveler rail member is identified as 20TR2-041. Welder is identified as 208035. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-1G-ESAB-Repair. The repair welding was being performed as per the Caltrans Engineer approved Critical Welding Repair Report (CWR) No: B-CWR1568.

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