

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-008901**Date Inspected:** 11-Sep-2009**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: Xu Hong Min
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A

Bridge No: 34-0006**Component:** Crossbeams and cantilever brackets**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB2

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB3

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB4

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This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed ZPMC QC perform Magnetic particle Testing (MT) on the padeyes on the west side panel of this crossbeam. No other significant work was observed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB8

This QA observed ZPMC qualified welding personnel identified as 048625 perform FCAW welding on weld joint identified as FB204-018-088. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U4c-F.

This QA observed ZPMC qualified welding personnel identified as 222396 perform FCAW welding on weld joint identified as CB202G-020-039. ZPMC QC identified as Mr. Liu Chuan Gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-B-U2-F.

OBG CROSS BEAM CB9

This QA observed ZPMC qualified welding personnel identified as 053753 perform SMAW welding on weld joints identified as CB202G-024-146. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

This QA observed ZPMC qualified welding personnel identified as 070007 perform SMAW welding on weld joint identified as CB202G-023-163. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

This QA observed ZPMC qualified welding personnel identified as 220688 perform FCAW welding on weld joint identified as CB202G-024-142. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2132.

This QA observed ZPMC qualified welding personnel identified as 220688 perform FCAW welding on weld joint identified as FB204-024-049. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding

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process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-B-U2-F.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB12

This QA observed ZPMC personnel back gouging Complete Joint Penetration (CJP) welds on this crossbeam. No other significant work was observed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB16

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG BIKE PATH CANTILEVER BRACKETS

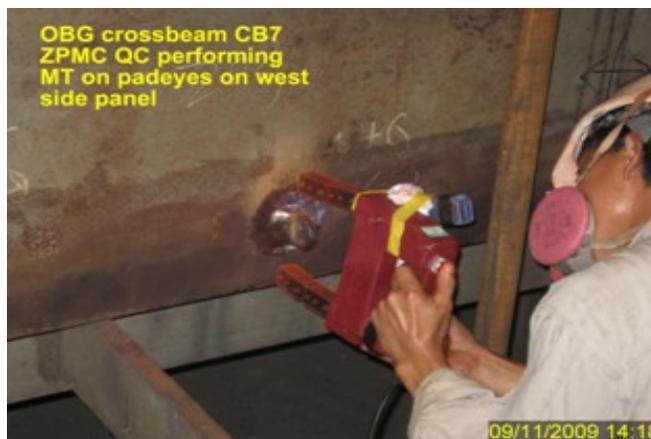
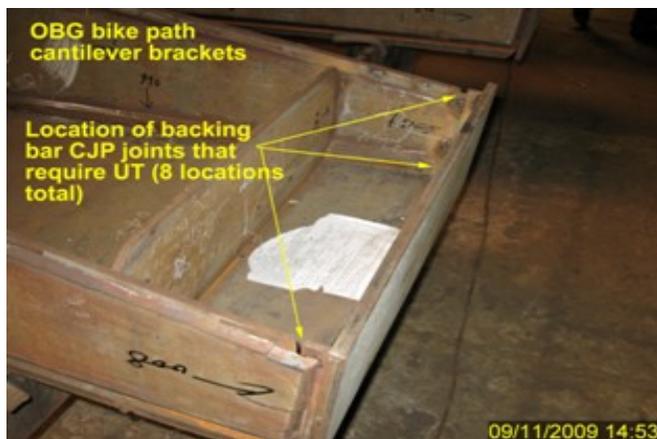
This QA observed that the contractor did not notify Caltrans QA to perform verification Ultrasonic Testing (UT) of the backing bar splice joints prior to fitting and welding the final plate making these welds inaccessible for UT. This condition exists on the following bike path cantilever brackets: BK001-019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029 and 030. AWS D1.5 2002 section 6.6.6 states "The Contractor shall schedule NDT to facilitate

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attendance by the QA Inspector. The QA Inspector shall be advised by the Contractor of operational and NDT schedules and scheduled changes". This QA informed ZPMC QC inspector identified as Mr. Xu Hong Min and ABF inspector identified as Mr. Yu Kun Ming of the above mentioned issue and that an incident report will be generated for this issue. The attached photos are for reference only and are not the actual cantilever brackets affected by the above mentioned incident.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

As mentioned above.

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: Hall,Steven

Quality Assurance Inspector

Reviewed By: Prue,Erik

QA Reviewer
