DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-022914
Date Inspected: 13-Apr-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai

CWI Name: Tian Lei, Liu Fa Wen, Chen Shigang

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: OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

SMAW welding of fillet welds located on Bike Path Handrail component identified as BKR-NS-3 for miscellaneous 4mm welds attaching P-45 to P-171 and P-171 to P-40 parts. Welder is identified as welder no. 049769. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2112.

SMAW welding of fillet welds located on Bike Path Handrail component identified as BKR-NS-3 for miscellaneous 4mm welds attaching P-45 to P-171 and P-171 to P-40 parts. Welder is identified as welder no. 215248. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2112.

SMAW welding of fillet welds located on Bike Path Handrail component identified as BKR-NS-3 for miscellaneous 4mm welds attaching P-45 to P-171 and P-171 to P-40 parts. Welder is identified as welder no. 062810. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2112.

This inspector observed ZPMC personnel welding of components identified as Lift 13 & 14 lifting frame beam.

Bay Number 4

FCAW welding of complete joint penetration welds located on Traveler Rails component identified as 3007TR2-001 weld no.(s) 040. Welder is identified as welder no. 066283. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rails component identified as 3007TR2-001 weld no.(s) 040. Welder is identified as welder no. 066763. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rails component identified as 3010TR1-002 weld no.(s) 009. Welder is identified as welder no. 066439. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

Bay Number 8

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no. 08811. The member(s) is/are identified as OBG Sub Assembly components as identified below with the following identifying weld no.(s):

1. WAAD-01.1-001, 004, 007, 010, 013, 016, 019, 022.
1. SA7534-001-001~004.
2. SA7046-001-001~004.

SMAW welding of fillet welds located on Bike Path component identified as BK4SD1-062 weld no.(s) 001~004. Welder is identified as welder no. 066459. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-P-2211-TC-U4C.

FCAW welding of complete joint penetration welds located on Light Pole Base component identified as SB3001A-001 as identified on weld repair data sheet B-WR-20657 for repaired complete joint penetration welds identified as weld no.(s): 001. Welder is identified as welder no. 219414. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-345-FCAW-3G(3F)-repair-ESAB.

Bay Number 9

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no. 08813. The member(s) is/are identified as OBG Traveler Rails components as identified below with the following identifying weld no.(s):

1. 3013TR2-001-003 & 004.
2. 3012TR3-001-005 & 006.

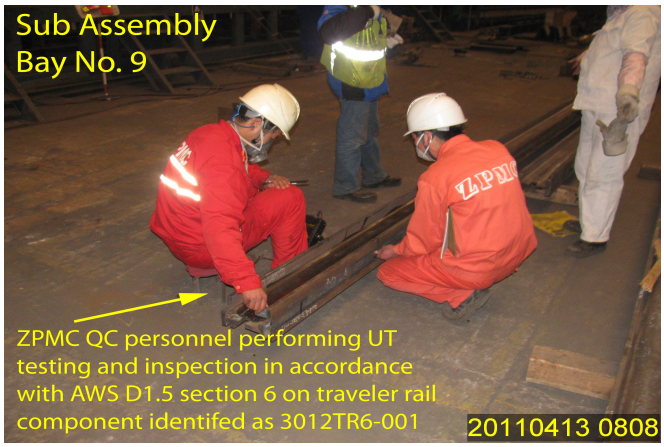
ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3014TR2-001 for weld(s) 003 & 004. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Chen Shigang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-10277.

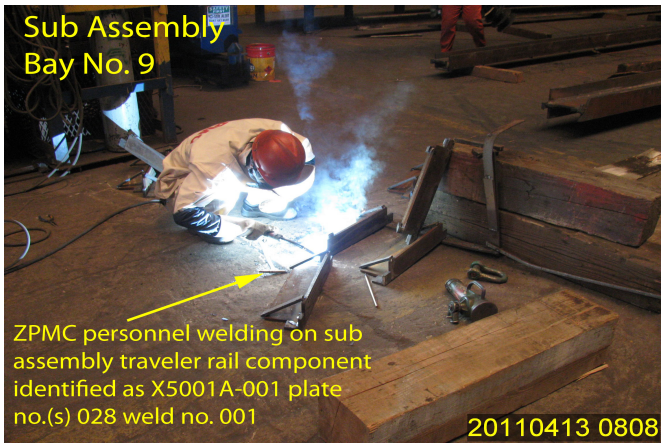
ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3024TR1-001 for weld(s) 007~019 & 022. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Chen Shigang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-10282.

FCAW welding of complete joint penetration welds located on Traveler Rail component identified as 3013TR1-001 weld no.(s) 002. Welder is identified as welder no. 059443. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rail component identified as X5001A-001 plate no.(s) 028, 038, 020, 036, 033, 029, 032, & 021 each for weld no.(s) 001. Welder is identified as welder no. 201840. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents





Summary of Conversations:
Pertinent conversations are included in the body of the report.

Comments

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer