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 #: 04-0120F4
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-022523
Date Inspected: 10-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 3026TR1-001 weld no.(s) 019. 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 3025TR1-002 weld no.(s) 007 & 014. Welder is identified as welder no. 066479. 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 3020TR1-001 weld no.(s) 018, 019 & 009. 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.

Bay Number 7

This inspector observed ZPMC QC personnel performing MT examination and testing of welds located on Cantilever Box Bracket Assembly component identified as BK3003-001 weld no.(s) 012, 013, 016, & 017.

Bay Number 8

This inspector observed ZPMC QC personnel performing UT examination and testing of welds located on Saddle Housing component identified as SA7535.

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08783. The member(s) is/are identified as OBG Bike Path components as identified below with the following identifying weld no.(s):

1. BK004A8-062-001, 002, 007, & 130.
2. BK004A6-062-001, 002, 007, & 165.

FCAW welding of fillet welds located on Bike Path component identified as BK004A2-062 weld no.(s) 014, 015, 017, 019, & 020. Welder is identified as welder no. 037840. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-P-2112-PLUG.

FCAW welding of fillet welds located on Bike Path component identified as BK004A2-062 weld no.(s) 002, 008, 013, & 021. Welder is identified as welder no. 054459. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2132-ESAB.

Bay Number 9

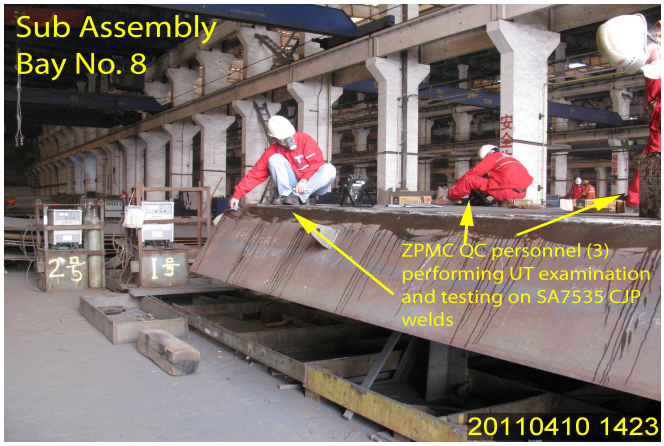
ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3012TR3-001 for weld(s) 005 & 006. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Chen Shigang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-10276.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3012TR2-001 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)-10261.

FCAW welding of complete joint penetration welds located on Traveler Rail component identified as 3014TR1-002 weld no.(s) 001. Welder is identified as welder no. 059421. 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 3012TR8-001 weld no.(s) 001. Welder is identified as welder no. 059378. 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

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.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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