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 #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-011527
Date Inspected: 25-Dec-2009

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

OSM Arrival Time: 645
OSM Departure Time: 1845
Location: Shanghai, China

CWI Name: Zhu Zhong Hai

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ 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: OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

During the Quality Assurance random Visual Testing (VT) of welds located on Orthotropic Box Girder (OBG) segment 11BE, this Quality Assurance Inspector (QA) discovered a misalignment of a Complete Joint Penetration (CJP) butt weld joint.
-The weld joint is identified as SSD17-PP99-004.
-The joint is located in OBG segment 11BE at Panel Point (PP) 099.
-The weld is joining the Seismic Performance Critical Material (SPCM) FL-3 floor beam (FB24A) web identified as X29D to the deck panel diaphragm identified as X1A.
-The joint is a transition of thickness joint; 18mm (X29A) to 14mm (X1A).
-The misalignment at the centerline of the material thickness is approximately 5mm (7mm on the surface due to thickness transition)
-The joint is misaligned for approximately 320mm along the length of the joint.
-The maximum misalignment allowed per American Weld Society (AWS) D1.5 2002 is 1.4mm (10% of the thinner part).
-The OBG Segment is located at in OBG Bay#13.
For further information, please see the attached pictures below. Please see incident report on this date.

Bay#13

FCAW welding of weld joint SSD29-PP103.5-133~166 located on Segment 11CE. Welder is identified as 050988 (3F). ZPMC QC is identified as Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2213.

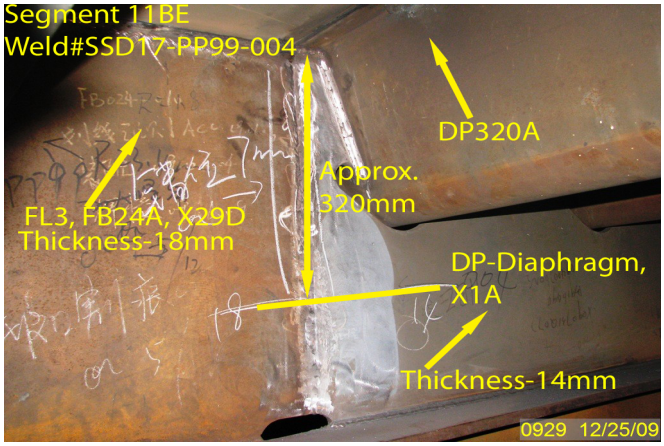
FCAW welding of weld joint SSD29-PP103.5-211~244 located on Segment 11CE. Welder is identified as 048038 (3F). ZPMC QC is identified as Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2213.

FCAW welding of weld joint Seg067A-039 located on Segment 11BW. Welder is identified as 044795 and 055491 (2G). ZPMC QC is identified as Tang Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-Tc-U4b-F.

FCAW welding of weld joint Seg067*-014, 013 located on Segment 11BW. Welder is identified as 050242 (3G). ZPMC QC is identified as Tang Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

FCAW welding of weld joint Seg067*-023 located on Segment 11BW. Welder is identified as 044801 (3G). ZPMC QC is identified as Tang Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

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 150-0042-2372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Patel,Hiranch	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer