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

Report No: WIR-017212
Date Inspected: 03-Oct-2010

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, China

CWI Name:	Li Yang			**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 Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 11AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA079-001, Edge Plate to Deck Plate hold back weld. The welder is identified as #067609 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG065B-001, Longitudinal Diaphragm Flange to Floor Beam. The welder is identified as #066771 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-repair-1, UT repair for WR15463.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG065A-012, Side Plate to Bottom Plate hold back weld. The

welder is identified as #040656 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 11BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA083-002, Edge Plate to Deck Plate hold back weld. The welder is identified as #067609 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG067A-021, Side Plate to Bottom Plate hold back weld. The welder is identified as #040656 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 10BE/10CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE10C-002, Side Plate transverse splice. The welder is identified as #066771 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G (3F)-repair-1, UT repair for WR15408.

Segment 10AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as FB019-005-128, FL3 web to flange hold back weld. The welder is identified as #067665 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

Segment CB13

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CB202A-013-018, Side Panel to Bottom Panel hold back weld. The welder is identified as #067904 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CB202A-013-016, Side Panel to Bottom Panel hold back weld. The welder is identified as #067665 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Zhu and Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 11AW/11BW

This QA Inspector observed back gouging of the Side Plate transverse CJP splice root pass.

Segment 10CW

This QA Inspector observed match drilling bolt holes on the Bottom Plate WT stiffener flange for the connection of bolted splice plate at 10CW/11AW field splice location.

Bay 10

QA Verification

This QA Inspector observed Tack Welder Qualification using the Shielded Metal Arc Welding (SMAW) process.

Position, Process, WPS, Test Plate ID# and name are as follows:

3F
SMAW
WPS-B-P-2113

1-Sun Jian
2-Jiang ZhaoSheng
5-Wang Pei
13-Hu Zhanya

4F
SMAW
WPS-B-P-2114

1-Sun Jian
4-Meng Yongchao
12-Yang Youli
16-Zhang Weixing

For the above mentioned welder test plates, both visual and fracture test were accepted by ZPMC CWI Li Yang.

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

WELDING INSPECTION REPORT

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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.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer