

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017122**Date Inspected:** 30-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **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/11BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW11B-001, Side Plate transverse splice. The welder is identified as #053486 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW11-002, Deck Plate transverse splice. The welder is identified as #040759 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW11-004, Deck Plate transverse splice. The welder is identified as

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#053316 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Submerged Arc Welding (SAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW11-003, Deck Plate transverse splice. The welder is identified as #044560 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-223(2)1T-2.

Segment 11AE/11BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE11B-003, Bottom Plate transverse splice. The welder is identified as #040367 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE11B-002, Side Plate transverse splice. The welder is identified as #052763 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE11B-004, Side Plate transverse splice. The welder is identified as #040458 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

Segment 11AW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP140-001-033, Side Plate WT stiffener hold back weld. The welder is identified as #066471 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 11BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP141-001-009, Side Plate WT stiffener hold back weld. The welder is identified as #066471 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

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

Segment 11AE

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This QA Inspector observed match drilling of bolt holes in the Deck Plate U-ribs for the connection of bolted splice plates at 10CE/11AE field splice location.

Segment 10BE/10CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate to Side Plate hold back CJP weld, bike path side.

QA Verification

This QA Inspector observed ZPMC personnel performing Final Bolt tension verification on A325 high strength bolts on the following components:

10CW:

Side Plate WT stiffener Flange splice plates at FL3 location panel points 92, 93, 94

Bolts verified:

M22x65 Lot Number DHGM220105 (380 N.m.)

M22x80 Lot Number DHGM220094 (470 N.m.)

Splice Plate at row 19, east of panel point 93 was not installed due to misalignment of stiffeners.

Approved Torque Wrench X02-772 was used.

Unless otherwise noted, all work 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.

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