

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-016525**Date Inspected:** 30-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**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 Segment**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 10AE/10BE

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 OBE10-002, Deck Plate splice. The welder is identified as #040504 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-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 OBE10-004, Deck Plate splice. The welder is identified as #044515 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-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 OBE10-003, Deck Plate splice. The welder is identified as

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#040320 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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 BP129-001-028, Bottom Plate WT stiffener web splice. The welder is identified as #047353 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 BP183-001-026, Bottom Plate WT stiffener web splice. The welder is identified as #040367 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

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 SP377-001-052, Side Plate WT stiffener web splice. The welder is identified as #046960 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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 BP075-001-022, Bottom Plate WT stiffener web splice. The welder is identified as #040367 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

Longitudinal Diaphragm LD17C

This QA Inspector observed buttering of the LD web at the Bottom Plate connection using the Flux Cored Arc Welding (FCAW) Process. The welder is identified as #202211 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-FCAW-1G (1F)-repair for WR14796.

Longitudinal Diaphragm LD18C

This QA Inspector observed buttering of the LD web at the Bottom Plate connection using the Flux Cored Arc Welding (FCAW) Process. The welder is identified as #040458 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-FCAW-1G (1F)-repair for WR14796.

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

QA Verification

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC MT personnel. The following items were tested:

9AW
SEG049*-303

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FB009-024-003

FB003-137-005

9BW

SEG051-305

FB011-023-003

SEG051-302

FB003-139-005

FB023-006-092

9CW

SEG053-307

FB009-026-003

FB003-157-005

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
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Reviewed By:	Peterson,Art	QA Reviewer
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