

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: 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-019194**Date Inspected:** 29-Dec-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:** Shi Lei**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 12AW/12BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SP3037-001-157, Side Plate WT stiffener web splice. The welder is identified as #041713 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 Base Metal Repair using the Shielded Metal Arc Welding (SMAW) process at locations of removed fit up plates along the exterior of the Side Plate transverse CJP splice. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2126.

Segment 12AW

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This QA Inspector observed Base Metal Repair using the Shielded Metal Arc Welding (SMAW) process at locations of removed fit up plates along the exterior of the Edge Plate transverse CJP splice. The welder is identified as #202316 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G (3F)-FCM-repair-1 for CWR2126.

Segment 12AE/12BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE12-003, Deck Plate transverse splice. The welder is identified as #044515 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR19643, UT repair.

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

Segment 12AE/12BE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate to Deck Plate hold back weld, bike path side. D scan was performed.

Segment 12AW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Longitudinal Diaphragm flange to Floor Beam at panel point 109 west, counter weight side.

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Side Plate WT stiffener hold back fillet welds, counter weight side at the west end of the segment.

Segment 12AW/12BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Bottom Plate transverse CJP splice and the Side Plate transverse CJP splice, counter weight side. D scan was performed.

Segment 11AW

This QA Inspector observed the installing of Traveler Rail Brackets after painting at panel points 95, 96, 97.

QA Verification

BAY 11 - Bolt Testing Room

This QA Inspector observed ZPMC personnel performing Rotational Capacity testing and Pre-installation verification of required torque for A325 High Strength Bolt assemblies with a Skidmore-Wilhelm Model: MS, serial number: 15866 (calibration expiration date 4/29/11) and torque wrench identified as #2 (calibration

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expiration date 4/14/11) on the following bolts:

M20x50 Lot # DHGM200026

5 bolt assemblies were tested per lot

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:	Dsouza,Christopher	QA Reviewer
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