

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-023496**Date Inspected:** 11-May-2011**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:	N/A	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:	Orthotropic Box Girder (OBG)	

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

DCP:

BAY 10

This QA received ZPMC inspection notification sheet 09095 to perform dimensional inspection of traveler rails identified as 3025TR1-002. Dimensional inspections performed on each of these traveler rails include, but is not limited to, overall length, thickness at typical section, Flange width at typical section, rail sweep, Depth typical section. The results of the inspection were recorded on Caltrans (CT) QA form "OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

Segment 12CW (Traveler Rail)

WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector witnessed final tension verification for Traveler Rails. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00676 Dated May 11, 2011.

Bolt sizes used were M24 x 75 DHGM240020 and final torque required was 600 N-m.

Bolt sizes used were M24 x 100 DHGM240022 and final torque required was 527 N-m.

Manual Torque wrench used was SN. XQ2-676.

Tower Lift 6

This Quality Assurance (QA) Inspector witnessed final tension verification for Splice Plate East, North, South, and West. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00679 Dated May 11, 2011.

Bolt sizes used were M27 x 75 DHGM270030 and final torque required was 586 N-m.

Manual Torque wrench used was SN. XQ2-666. See attached photo for further details.

WELDING:

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013-001; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20812. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F)

FCM-Repair-1. See attached photo for further details.

Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform Shielded Metal Arc Welding (SMAW), Base metal repair ; located On Orthotropic Box Girder (OBG) Deck Plate Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Critical Welding Repair Report (CWRR) was B-CWR2969. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 1G (1F) FCM-Repair-1. See attached photo for further details.

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

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Summary of Conversations:

No significant conversations were reported on this date.

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 James Devey - 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
