

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-025645**Date Inspected:** 03-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**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:	OBG	

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

In response to ZPMC Bolting Inspection Notification request #00747 this QA Inspector performed random observations of ZPMC personnel used torque wrench serial number X02-666 to perform final tension verification of bolted connections of OBG segment 13EE at the following locations:

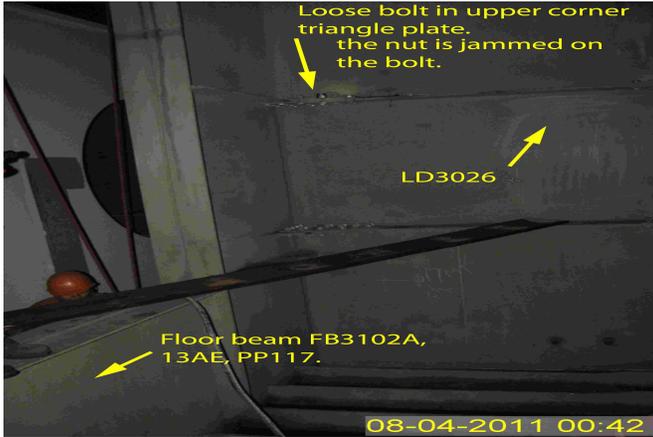
Item 1: Triangle plates between LD3025A stiffeners X3458D, X3458F and X3459A near PP119.65 / PP120; between LD3026A stiffeners X3458F, X3458D and X3459A near PP119.65 / PP120, between LD3025 stiffeners X3458B, X3458C and X3458J near PP117 / PP118 and between LD3026 stiffeners X3458J, X3458C and X3458B near PP117 / PP118. ZPMC workers adjusted the torque wrench to approximately 390 nM. and ZPMC workers tested two fasteners (10%) on each of the plate connections. RC Set No. DHGM220140 – M22x80 – required torque 380 nM. for tensioning from the nut end. One bolt on stiffener plate X3458B, near PP117, rotated when ZPMC applied the torque. ZPMC workers used an air operated wrench to attempt to remove this nut from the bolt and the nut appears to be jammed onto the bolt. Due to the late hour and the lack of grinding or cutting equipment, ZPMC workers decided to request that dayshift workers remove and replace this bolt. All other bolted connections appear to comply with project specifications. See the photographs below for additional information.

Item 2: Incline supports on bottom plates and side plates at panel points PP120.5, 121, 121.5, 122, 122.5, 123, 123.

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5, 124 and 124.5. ZPMC QC Inspector Mr. Xu Jia Long informed this QA Inspector that the following bolting materials had been installed: RC Set No. DHGM220105 – M22x65 required torque 380 nM. for tensioning from the nut end and RC Set No. DHGM220134 – M22x55 required torque 387 nM. for tensioning from the nut end. ZPMC workers adjusted the torque wrench to approximately 390 nM. and they tested one fastener (10%) on each of the plate connections. Items observed appear to comply with project specifications.



Summary of Conversations:

See Above.

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 phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Riley,Ken

QA Reviewer
