

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-025579**Date Inspected:** 04-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:

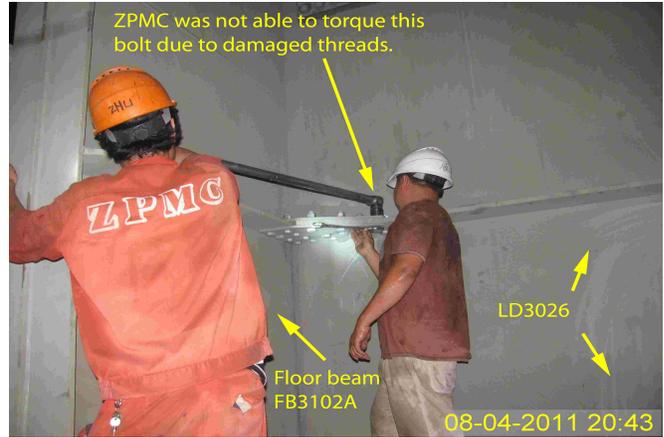
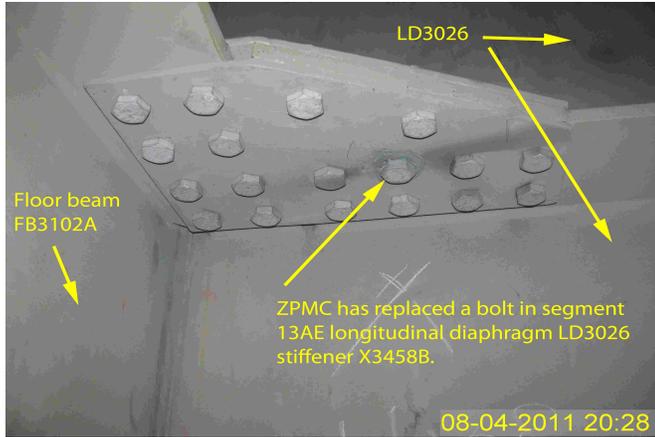
In response to ZPMC Bolting Inspection Notification request #00747 this QA Inspector performed random observations of ZPMC personnel used torque wrench serial number X02-666 to perform final tension verification of bolted connections of OBG segment 13AE at the following location:

Item 2: Yesterday, August 3, this QA Inspector performed random visual inspections as ZPMC performed torque verifications of segment 13AE "Triangle Plates" on longitudinal diaphragm LD3026 stiffener X3458B bolts near PP117. One bolt rotated when ZPMC applied torque at this location. ZPMC workers could not tighten this bolt then ZPMC used an air operated wrench to attempt to remove this nut from the bolt and the nut appears to be jammed onto the bolt. ZPMC QC Inspector Mr. Xu Jin Long informed this QA Inspector that dayshift personnel would remove the damaged bolt and a new bolt, nut and washer would be installed. At around 2000 hours ZPMC QC Inspector Mr. Xu Jin Long informed this QA Inspector that ZPMC personnel have replaced the defective bolt and ZPMC workers are ready to use torque wrench serial number X02-666 which is adjusted to approximately 380 nM. to perform final tension verification of bolted connections of this same bolted connection. ZPMC QC informed this QA Inspector that RC Set No. DHGM220140 – M22x80 – required torque 380 nM. for tensioning from the nut end have been installed at this location. This QA Inspector observed the new bolt appears to have been tightened to 308 nM. This QA Inspector informed ZPMC QC Inspector Mr. Xu Jin Long that all the other

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bolts on this splice connection should be verified for adequate tightness. This QA Inspector observed two of the bolts appeared to rotate and one other bolt rotated and it did not appear to tighten. ZPMC QC Inspector Mr. Xu Jin Long said that ZPMC will replace this bolt and they will torque this splice connection tomorrow night. See the photographs below for additional information.



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
