

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015206**Date Inspected:** 17-Jun-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:	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:	TOWER	

Summary of Items Observed:

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

TOWER JETTY

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

TOWER JETTY

This QA Inspector witnessed final Bolt tension verification for the Lift 1 North tower 9 and 13 M Interior diaphragm (except 1 location at 9M and 2 locations at 13M due to gap is exceeded the limit, to correct the gap shim to be installed) and Lift1 East tower ladder supports. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed as per the ZPMC submitted Notification No. 00390, dated: June 17, 2010.

Details of bolt size, RC Set # and final torque value are as follows:

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Bolt sizes used were M20X55, RC Set# DHGM200008 and final torque value was 367 N-m.

Bolt sizes used were M16X50, RC Set# DHGM160026 and final torque value was 193 N-m.

Manual Torque wrenches were used with serial number noted as XO2-687.

During Quality Assurance Inspection of fabrication in East and North Tower Lift 1 this Caltrans Quality Assurance

(QA) Inspector observed Two (2) additional bolt holes at 43m in East Tower. These additional holes are deviation from the approved contract drawings. ZPMC personnel installed two (2) bolts into slotted/elongated holes in East Tower at 43m for ladder supports. ZPMC personnel installed four (4) bolts into slotted/elongated holes in North Tower at 18m for ladder supports.

This QA Inspector generated an incident report for the above issue, for further information see the incident report and attached photos.

This QA Inspector witnessed final Bolt tension verification for the Lift 1 East and West tower 9 and 13 M Interior diaphragm (except 3 locations in east tower at 9M and 6 locations at 13M and 4 locations in west tower at 9M due to gap is exceeded the limit, to correct the gap shim to be installed). Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed as per the ZPMC submitted Notification No. 00392, dated: June 17, 2010.

Details of bolt size, RC Set # and final torque value are as follows:

Bolt sizes used were M20X55, RC Set# DHGM200008 and final torque value was 367 N-m.

Bolt sizes used were M16X50, RC Set# DHGM160026 and final torque value was 193 N-m.

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



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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

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 Michael Ng 159-21845703, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
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Reviewed By:	Hall,Steven	QA Reviewer
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