

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-024275**Date Inspected:** 01-Jun-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:	OBG Trial Assembly	

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

BAY 11 – (Skid More Test)

This QA Inspector witnessed Bolt Testing for ASTM A325 Grade. Observed ZPMC QC Mr. Zhang Hai Jung performing bolts testing and ZPMC QC Inspector Mr. Fan Xiao Hun generating report against the testing.

The testing of bolts was performed to determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning and High Tension bolt capability verification test.

Bolt assembly identified as ASTM A325 (High Strength Bolt), Bolt Assembly comprises of (a Bolt, a Nut and a Washer).

Bolt testing was performed on a Unit: Skidmore-Wilhelm; Model: HT; Serial Number: 1014 (Calibration Expiration due date on August 23, 2011) and Torque Wrench identified as XO-486 and Torque Wrench with Dial gauge on it is identified as XO-2 (Calibration Expiration due date on October 03, 2011).

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Tested bolt sizes were identified as M30x160 RC Set# DHGM300015.

Tested bolt sizes were identified as M27x110 RC Set# DHGM270040.

Tested bolt sizes were identified as M27x100 RC Set# DHGM270039.

Tested bolt sizes were identified as M27x130 RC Set# DHGM270042.

Tested bolt sizes were identified as M27x120 RC Set# DHGM270041.

Tested bolt sizes were identified as M27x90 RC Set# DHGM270038.

Tested bolt sizes were identified as M27x95 RC Set# DHGM270035.

Tested bolt sizes were identified as M27x65 RC Set# DHGM270037.

Tested bolt sizes were identified as M24x60 RC Set# DHGM240133.

Tested bolt sizes were identified as M27x95 RC Set# DHGM270034.

5 bolt assemblies were tested per lot.

After determining Rotation Capacity Test, Inspection Report # 18 for bolt size M30x160 RC Set# DHGM300015 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 13 for bolt size M27x110 RC Set# DHGM270040 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 12 for bolt size M27x100 RC Set# DHGM270039 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 14 for bolt size M27x130 RC Set# DHGM270042 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 15 for bolt size M27x120 RC Set# DHGM270041 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 11 for bolt size M27x90 RC Set# DHGM270038 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 1 for bolt size M27x95 RC Set# DHGM270035 was generated by ZPMC QC.

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After determining Rotation Capacity Test, Inspection Report # 10 for bolt size M27x65 RC Set# DHGM270037 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 24 for bolt size M24x60 RC Set# DHGM240133 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 2 for bolt size M27x95 RC Set# DHGM270034 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 346 for bolt size M30x160 RC Set# DHGM300015 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 345 for bolt size M27x110 RC Set# DHGM270040 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 344 for bolt size M27x100 RC Set# DHGM270039 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 343 for bolt size M27x130 RC Set# DHGM270042 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 342 for bolt size M27x120 RC Set# DHGM270041 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 341 for bolt size M27x90 RC Set# DHGM270038 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 340 for bolt size M27x95 RC Set# DHGM270035 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 338 for bolt size M27x65 RC Set# DHGM270037 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 337 for bolt size M24x60 RC Set# DHGM240133 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 339 for bolt size M27x95 RC Set# DHGM270034 was generated by ZPMC QC.

Please reference the pictures attached for more comprehensive details.

The generated reports were submitted to the Caltrans Lead Inspector Mr. Mark Miller for review and disposition.

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

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documents.



Summary of Conversations:

No relevant 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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer