

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025516**Date Inspected:** 25-Jul-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**CWI Name:****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 R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Boat Lift 13W

This QA Inspector witnessed the in-process high strength bolt installation on bolts connecting the following connections:

- Vertical connection plates connecting longitudinal diaphragm (W3) to longitudinal diaphragm (E4) at PP120 to PP120.5 and PP122 to PP122.5. Tensioning is complete.
- Horizontal connection plates connecting longitudinal diaphragm to deck panels at W3 and W4 lines between PP117.5 and PP120. Tensioning is complete.
- Bottom plate and side Plate PP120 to PP124.5 stiffeners installed but not tightened at this time.
- Horizontal connection plates between Longitudinal Diaphragms and Floor Beams on W3 and W4 lines from bottom plate elevation to Deck plate elevation between PP120 and PP124.

Bolting on the above named areas is in progress and still requires final tension verification prior to final acceptance. The QA Inspector verified installation of the high strength bolts on a random basis and the results appeared to be in general compliance. No notifications have been issued for these installations.

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# WELDING INSPECTION REPORT

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This QA Inspector witnessed the final bolt tension verification on bolts connecting the Catwalk from PP117.5 to PP124.5, I-rib stiffeners from PP121~PP121.5 between E3 and E4. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00709 dated July 25, 2011.

The bolt sizes used were M16 x 50 RC Lot # DHGM160004 and the final torque value established was 200 N-m. The Manual Torque wrench used was Serial No. X02-426.

The bolt sizes used were M27x110 RC Lot# DHGM270040 and the final torque value established was 650 N-m. The Manual Torque wrench used was X02-606.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents



### Summary of Conversations:

Pertinent conversations are included in the body of the report.

### 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 1500-0042-02372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Hernandez,Rene

Quality Assurance Inspector

**Reviewed By:** Hall,Steven

QA Reviewer