

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-016685**Date Inspected:** 01-Sep-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:** Qiu Wen**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 & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

TOWER JETTY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 00473

Bolting Tension Verification:

This QA Inspector witnessed final Bolt tension verification approximately 10% for East and south tower lift-2 ladder supports. Final tension verification found to be in general compliance.

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

Bolt sizes used were M22*110, RC Set #DHGM220010 and final torque value was 437 N-m.

Manual Torque wrench used with serial number noted as XO2-778.

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 10 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as

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037932. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC –U4c.

Weld joint # 16 located on South tower Lift-5 Grillage Assembly SSD1 – TL5 – 1B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC –U4c.

Weld joint # 04 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 066002. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC –U4c.

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 17 located on Bottom plate BP3091 – 001. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F. (See attached photo)

Weld joint # 01 located on Bottom plate BP3089 – 001. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

Submerged Arc Welding (SAW):

Weld joint # 001 located on Bottom plate BP3089 – 001. Welder is identified as 0503060. ZPMC Quality Control (QC) Inspector is identified as Sun Tain Liang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 18 located on East tower Lift-5 Grillage Assembly ESD1 – TL5 – 2B/F. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4c.

Weld joint # 05 located on West tower Lift-5 Grillage Assembly WSD1 – TL5 – 4B/F. Welder is identified as 067993. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4c.

Weld joint # 15 located on East tower Lift-5 Grillage Assembly ESD1 – TL5 – 2B/F. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4c.

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

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This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 01 located on Bike path panel assembly BK004A7. Welder is identified as 046706. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132. (See attached photo)

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



Summary of Conversations:

No Relevant Conversations.

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 - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer
