

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-021582**Date Inspected:** 09-Feb-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:** Mr. Xu Le Feng.**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 and Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

This QA Inspector observed the following work in progress:

Magnetic Particle Testing:

This QA Inspector observed AB/F Magnetic Particle Testing Inspector, performing MT on OBG Bike path Stringer plate. Joint identified as BK010A2-001, (30B). For more information see attached picture number 1.

Ultrasonic Testing:

This QA Inspector observed ZPMC Ultrasonic Testing Inspector, performing UT on OBG Traveler joint. Joint identified as 20TR2-030-009, 011, 013, 015, 017 and 20TR2-039-009, 011, 013, 015, 017. For more information see attached picture number 2.

Bay 14, WELDING:

Segment 14W Repair Welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 066038 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020E-044; located On Orthotropic Box Girder (OBG) Floor

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Beam to Longitudinal Diaphragm CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Yan Bao Jia. The Critical Welding Repair Report (CWRR) was B-CWR2735 Rev- 0 .This QA Inspector observed a welding current of approximately 162 amps and 23.2 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Yan Bao Jia was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 067949 perform Flux Cored Arc Welding (FCAW), weld joint identified as SEG3020AB-054; located On Orthotropic Box Girder (OBG) FB3340 to LD3050A CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Yan Bao Jia. This QA Inspector observed a welding current of approximately 287 amps and 25.5 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Yan Bao was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2232-ESAB.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and 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 Thomas Ho: 150002048250, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer