

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-011148**Date Inspected:** 01-Jan-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**CWI Name:** ZPMC and ABF**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:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay#10

Tower strut: - Caltrans QA Inspector performed QA final VT and dry MT testing on the CJP welds and fillet welds of tower strut. The ZPMC inspection request number is 004973. The strut welds ID are ED1-A6003-2. All the CJP and fillet welds have been accepted by ZPMC and ABF prior Caltrans QA inspection. Base on Caltrans VT and MT testing, the CJP welds and fillet welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents. A green tag # 11688 has been signed on this tower strut by ABF after Caltrans completed the testing.

South tower lift#4:- Caltrans QA Inspector observed six welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D of south tower lift #4. The welding located at elevation 114m to 146.28m. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North Tower Lift #4:- Caltrans QA inspector observed a ZPMC welder performed SMAW on outer corner longitudinal seam weld that connected skin plate A and skin plate E of north tower lift #4. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The CJP welding located between ASTM 345 material and 485 material connecting zones which can't use semi-automatic SAW welding. The minimum

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preheat and maximum interpass temperature requirements for SMAW longitudinal seam weld are 110C degree and 230 C degree. The SMAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Bay#11

East tower lift#4:- Caltrans QA Inspector observed five welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D of east tower lift #4. The welding located at elevation 114m to 146.28m. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East tower Lift #4:- Caltrans QA inspector observed three ZPMC welding operators performed semi-automatic SAW on outer corner longitudinal seam weld that connected skin plate A and skin plate B of east tower lift #4. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The minimum preheat and maximum interpass temperature requirements for SAW longitudinal seam weld are 110C degree and 230 C degree. The semi-automatic SAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

West tower connection plate: - Caltrans QA Inspector performed QA final VT and UT test on the CJP welds of west tower connection plate. The connection plate and welds ID are WSD1-SPSA4-3-1A/B, 2A/B, 3A/B, 4A/B. All the CJP welds have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans VT and UT inspection, the CJP welds and fillet welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

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

Summary of Conversations:

As notes within report above.

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 Serge Sinevod 13482570045 , who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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