

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011151**Date Inspected:** 04-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#11

East tower lift#4:- Caltrans QA Inspector observed nine 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.

West tower lift #4:- Caltrans QA Inspector observed two welders performed FCAW repair process on four spots for inner corner longitudinal seam weld that connected skin plate C and D. All the excavated weld areas have been MT test prior repair welding. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Tower yard

South tower lift #1 bearing stiffeners: - Caltrans QA Inspector observed seven ZPMC welders in process FCAW process on exterior bearing stiffeners for skin A, B and C of south tower lift #1. The weld is designed PJP weld use ZPMC joint detail WT10 with welded in 3G position. The welds ID are SSD1-SA15-DF-14, SSD1-SA18-24, SSD1-SA18-33, SSD1-SA17-F/G-79, SSD1-SA17-F/G-67, SSD1-SA17-F/G-55 and SSD1-SA17-F/G-53. The bearing stiffeners weld joint has been pre heat prior welding. The FCAW was monitored and recorded by ZPMC

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East tower lift #1 bearing stiffeners: - Caltrans QA Inspector observed eight ZPMC welders in process FCAW process on exterior bearing stiffeners for skin A, B, C and D of east tower lift #1. The weld is designed PJP weld use ZPMC joint detail WT10 with welded in 3G position. The welds ID are ESD1-SA294-F/G-65, ESD1-SA294-F/G-50, ESD1-SA284-F/G-62, ESD1-SA294F/G-53, ESD1-SA296-B/E-22, ESD1-SA296-B/E-25, ESD1-SA237-D/F-42 and ESD1-SA233-25. The bearing stiffeners weld joint has been pre heat prior welding. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

West tower lift #1:- Caltrans QA Inspector observed six ZPMC welders in process FCAW process on interior bearing stiffeners for skin B and C of west tower lift #1. The weld is designed PJP weld use ZPMC joint detail WT10 with welded in 3G position. The welds ID are WSD1-SA279-4/6/12/15, WSD1-SA294-F/G-20/22. The bearing stiffeners weld joint has been pre heat prior welding. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

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.



FCAW process on west tower lift #1 interior bearing stiffeners



FCAW process on south tower bearing stiffeners

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

Reviewed By: Clifford,William

QA Reviewer