

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-006313**Date Inspected:** 04-Apr-2009**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:** 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:** SAS tower**Summary of Items Observed:**

Bay #10 South and North Tower Shop

South tower lift#1:- Caltrans QA Inspector observed eight welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47.6m diaphragm. 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.

South Tower Lift #2:- Caltrans QA Inspector observed two welders performed carbon arc gouging process on inner corner longitudinal seam weld that connected skin plate A to E. The gouging purpose is removed the indications that rejected by ZPMC UT test. The gouging weld area located at elevation 53m and diaphragm section. Base on Caltrans observation, no discrepancies were noted.

South Tower Lift #2:- Caltrans QA Inspector observed five ZPMC workers performed grinding process on the fillet weld of fig lugs. The fig lugs are located at elevation 59m to 71m interior diaphragm of skin plate E. The grinding process is removing the weld profiles that have been rejected by ZPMC VT inspection. Base on Caltrans observation, no discrepancies were noted.

North tower lift#2:- Caltrans QA Inspector observed four welders performed SMAW root pass process on interior diaphragms of skin plate E for north tower lift #2. The interior diaphragms are located at elevation 53m to 77m. The FCAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North tower lift#1:- Caltrans QA Inspector observed four ZPMC workers performed grinding process on the root pass of interior diaphragms for north tower lift #1. The interior diaphragms are located at elevation 15m to 33m. The grinding process is removing the weld profiles prior FCAW welding. Base on Caltrans observation, no

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discrepancies were noted.

Bay #11 East and West Tower Shop

South tower lift #1:- Caltrans QA inspector performed final VT and dry MT inspection on the fillet welds of interior diaphragms. The fillet welds connected to interior diaphragms and skin plate B and C. The interior diaphragms located at elevation 9m to 47.6m. All the fillet welds for VT and MT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the fillet welds on stiffener to skin plates appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Summary of Conversations:

As noted within the 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 , who represents the Office of Structural Materials for your project.

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