

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-005720**Date Inspected:** 07-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Lin**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:** OBG**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue 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 Inspector observed and/or found the following:

Segment 3AE: QA Inspector randomly observed ZPMC qualified welder ID #049399 welding Seg-014-047 side plate to corner beam assembly side plate weld repair. Welder was observed welding in the 4G (overhead) position utilizing the Shielded Metal Arc Welding (SMAW) process. QA Inspector observed the ZPMC QC Inspector Geng Wei verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters taken for welder # 049399 as follows: preheat temperature to be at 165°C and measured the welding parameters to be 179 amps, 25.2 volts, a travel speed of 115 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-3435-SMAW-4G (4F) and critical welding repair B-CWR-292-Rev-1.

Segment 4BW: QA Inspector received notification that segment 4BW deck panels, corner assemblies, and floor beams welds and base material on inside top of segment had been visually inspected by ABF and ZPMC QC personnel after blast and are ready for QA visual verification. QA Inspector performed visual verification on QC inspector inspection. QA Inspector noted several indications marked for repair by ABF QC Inspectors and concur with QC findings. QA Inspector marked forty two (42) indications not marked by QC Inspection for repair by grinding with a total of twenty six (26) areas for repair by welding by QC and QA inspection. Areas marked for weld repair that are unacceptable to AWS D1.5 (02) section 6.26 have been taped and documented for tracking after segment painting. ZPMC paint foreman informed QA Inspector that the side plates, bottom plates, bottom of

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floor beams, and longitudinal diaphragms will be blasted early morning on the 8th of March and ready for QC visual inspection after segment is cleaned. See pictures below for examples of indications found.

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



Summary of Conversations:

No significant conversations this day.

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 Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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| Inspected By: | Prue,Erik | Quality Assurance Inspector |
| Reviewed By: | Carreon,Albert | QA Reviewer |
