

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-005653**Date Inspected:** 06-Feb-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:** Li Yan Hua**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 Segment**Summary of Items Observed:**

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) facility at Changxing Island in Shanghai, China. QA Inspector and/or found the following:

Outside Paint Shop lift 3AW: QA Inspector was informed by ZPMC QC and ABF QC Inspectors that welds and base material for lift 3AW had been visually inspected and found ready for QA visual verification. QA Inspector arrived at lift 3AW at 0830 and performed a visual verification of welds and base material. QA Inspector marked 10 indication areas (overlap, arc strikes, and weld spatter) inside of lift to be repaired. QA Inspector informed ZPMC and ABF QC Inspectors of areas marked by QA Inspector. ZPMC and ABF QC Inspectors inspected the marked areas and concur with QA Inspector's findings. ZPMC QC CWI Mr. Li Yan Hua directed ZPMC workers to correct marked areas for repair.

Outside Paint Shop lift 3AW: At 1030 ZPMC QC informed QA Inspector that lift 3AW is ready for QA inspection verification. QA Inspector reinspected the areas marked earlier this day and found indications to be corrected. Inside of lift 3AW visual inspection of base material and welds appears to be in compliance with AWS D1.5 (02) and the contract documents. At 1330 QA Inspector performed visual inspection verification on outside of lift 3AW welds and base material. ABF QC Inspector Mr. Peter Shaw was on site performing visual inspection and informed QA Inspector of two areas of concern. One area was on the bottom of lift side plate to bottom plate where the stanchions the lift is sitting on had created a crimp in the corner. ZPMC QC was informed of the condition and replied that the crimped area would be corrected after the lift had been painted. The second area of concern is that the 212 studs welded to the outside surface of the corner beam assembly do not exhibit a full 360 degree flash required by AWS D1.5 para. 7.8.1. See conversations below for further information.

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

Summary of Conversations:

AWS D1.5 para. 7.8.1 states that "If visual inspection reveals any stud that does not show a full 360 degree flash shall be bent to an angle of approximately 15 degrees from its original axis. The bending direction shall be bent in the opposite direction of the missing portion of the flash". QA Inspector observed ABF QC Mr. Peter Shaw bending approximately 20 studs to the requirements listed above and found to be sound. Mr. Peter Shaw informed that the issue is being addressed (Request for Information) with the Project Engineer back in the United States. QA Inspector informed Mr. Peter Shaw that until the stud issue is resolved QA inspection verification for studs is not acceptable at this time.



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.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
