

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-006465**Date Inspected:** 19-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 and Tower Fabrication**Summary of Items Observed:**

CWI Inspector: Mr. Peng Guo

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Prior to Caltrans QA Inspectors' concurring with issuance of OBG deck plate closed rib green tag releases a review of the ultrasonic inspection database is performed to verify all closed rib tack weld repair locations have been ultrasonically accepted. Today this QA Inspector, Mr. Paul Dawson, performed data entry of ultrasonic inspection information from the field generated Ultrasonic inspection data sheets onto the common drive computer database for the following OBG deck panels: DP471-001, DP256-001, DP308-001, DP335-001, DP229-001, DP444-001, DP283-001, DP337-002 and DP310-001.

Tower Bay 11

ZPMC had presented Caltrans QA with "Inspection Notification Document" #02711 which states the following welds are ready for final visual inspection inside of east tower shaft lift 1.

Diaphragm to skin "A" from elevation 9 meters through 47.6 meters; Double Diaphragm web to skin "A" welds, Diaphragm to skin "A" fit lugs at 9, 13, 15 and 18 meter elevations; Double Diaphragm lower fit lugs to skin "A" at 23 and 28 meters and Double Diaphragm web to skin "E" welds. The QA Inspector performed final random

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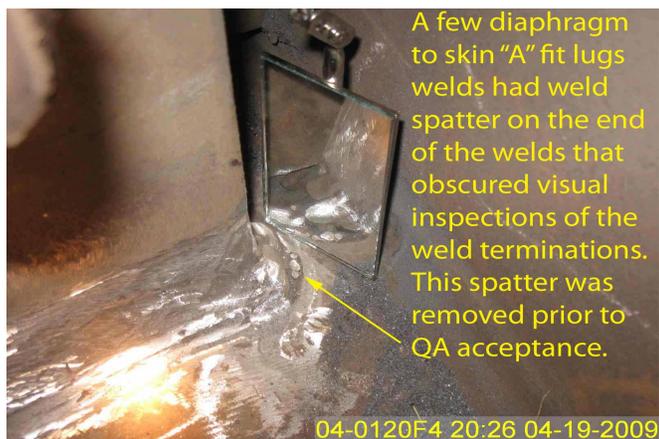
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visual inspection of these welds observed a few welds that had rough terminations, and one weld that required additional welding to resolve an underfill condition. The QA Inspector informed ZPMC QC representative Mr. Lay Tau of these weld problems and he had ZPMC personnel complete repairs of these items. Following grinding and welding of the welds the QA Inspector determined the welds listed above appear to comply with project specifications.

Note: ZPMC did not inform this QA Inspector that there were two diaphragm to skin plate welds at each of elevations and this QA Inspector was only presented with the upper diaphragm to skin plate welds for inspections. ABF had not prepared a weld signoff sheet for the diaphragm to skin plate welds. See this QA Inspector's April 21, 2009 TL-6031 Welding Inspection Report for additional information on the inspections of these other welds. See the photograph below for additional information.

OBG Bay 3

This QA Inspector performed random ultrasonic inspections of OBG 1AAW welds SEG1A-037 and SEG1A-38. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel prior to installation of other plates which are adjacent to one side of the butt weld on the top and bottom surfaces. The QA Inspector was limited to a scan from one side of the butt weld due to interfering plates adjacent to the weld. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.



Summary of Conversations:

See 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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer
