

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028073**Date Inspected:** 28-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** Salvador Merino**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:**

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Ultrasonic Testing (OBG Deck)

This QA performed verification Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) deck drop-in web/flange connections for lift 13E. The welds have been previously tested and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QAI's findings are as follows;

Lift 13E Deck Drop-in flange Splice (Weld No. 13E-PP123-E2.8-BF1)

The QAI performed approximately 100% verification of this weld. No rejectable indications were observed at the time of inspection.

Lift 13E Deck Drop-in Web Splice (Weld No. 13E-PP123-E2.8-BW1)

The QAI performed approximately 50% random verification from Y=0~300. No rejectable indications were observed at the time of inspection.

This QA inspector observed at random intervals ABF/JV qualified welder Chow Tran #3139 performing Shielded Metal Arc Welding (SMAW) in the 3G position implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D1.5-1000-Repair. The weld is a Complete Joint Penetration (CJP) butt weld, joining the 12E corner assembly edge plate to the 11E edge plate. The weld surface and surrounding area was

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brought to temperature the use of induction heaters and the preheat temperature was confirmed by ABF Quality Control (QC) prior to welding. The Quality Control (QC) inspector Salvador Merino was observed monitoring the welding parameters at the beginning of the shift.

This QA observed ABF/JV QC inspector Salvador Merino performing magnetic particle testing (MT) of the longitudinal diaphragm base material in way of the lifting lug removal area east of panel point 122.5. The QAI observed multiple linear indications ranging from 10mm~25mm on the longitudinal diaphragm web and remaining lug attachments. The QAI informed QC Merino that the engineers approval is required for the weld repair of base metal. The lifting lugs at this location were removed in accordance with ABF-RFI-001151R00.

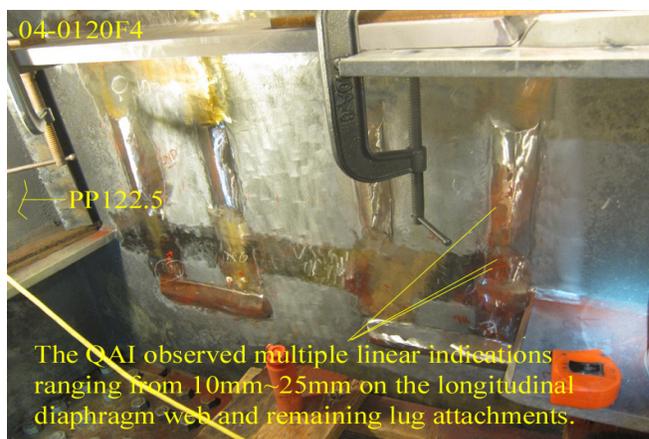
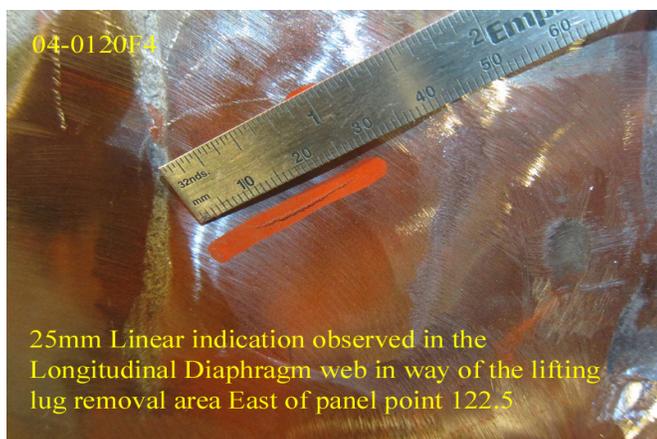
The QA inspector periodically observed, ABF/JV qualified welder Wai Kitlai # 2953 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1162-4. The welding observed was for the HPS-485 longitudinal stiffener wing plate attachment welds located between panel points 124.5 and 125 at LS8. The weld is a Partial Penetration Tee joint. The weld surface and surrounding area was brought to temperature by the use of induction heaters and the preheat temperature was confirmed ABF personnel prior to welding.

The QAI spent a portion of this shift reviewing and documenting the status and completion of various production welding tracking logs for lift 13E/14E drop-in deck work currently in-process. The QA recorded the information on the OBG tracking log.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.



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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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Inspected By:	Patterson,Rodney	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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