

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016642**Date Inspected:** 02-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**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:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). PP13 Shear Plate Insert ABF-SUB-001503R00 – (SMAW)
- 2). OBG Field Splice 1W/2W Weld ID: A LS1 and A LS5 - (SMAW)
- 3). OBG Field Splice 4W/5W Weld ID: E1 & E2, Face B - (FCAW-G)
- 4). OBG Field Splice 3E/4E Weld ID: A LS3 - (SMAW)
- 5). OBG Field Splice 4E/5E Weld ID: A LS1, A LS2, A LS3
- 6). OBG Field Splice 6E/7E Weld ID: D1 & D2, - (Fit-up)

- 1). PP13 Shear Plate Insert ABF-SUB-001503R00 – (SMAW)

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 2G (horizontal) position to repair (1) one R-1 Ultrasonic Testing reject repair. The QAI observed AB/F approved welder Kenneth Chappell (ID 3833) performing grinding to excavate the repair area and QC Inspector Tom Pasqualone performing Magnetic Particle Testing of the excavated area prior to welding. The QAI observed QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000 Repair. Welding was completed and the repaired area was ground flush. The work at this location appeared to be in general compliance with contract documents.

- 2). OBG Field Splice 1W/2W Weld ID: A LS1 and A LS5 - (SMAW)

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The QAI periodically observed AB/F approved welders Wai Kitlai (ID 2953) and Yao Xin Liang (ID 7238) performing welding per the SMAW process in the 3G (vertical) position. Mr. Wai Kitlai was welding at A LS1 to butter the bevel faces and Mr. Yao Xin Liang was welding the splice with ceramic backing at A LS5. QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI also periodically observed that AB/F approved welder Kenneth Chappell was present and that Mr. Chappell periodically supplied 9018 electrodes to the welders at this location and returned their unused electrodes to a drying oven located in the Eastbound line. The QAI observed that the work at this location was in process for the duration of the shift and appeared to be in general compliance with contract documents.

3). OBG Field Splice 4W/5W Weld ID: E1 & E2, Face B - (FCAW-G)

The QAI periodically observed AB/F approved welder Rory Hogan (ID 3186) setting up to perform welding per the Flux Cored Arc Welding (FCAW-G) process in the 4G (overhead) position of fill passes in the prepared groove on the exterior of the field splice. The QAI did not observe the welding commence at this location on this date.

4). OBG Field Splice 3E/4E Weld ID: A LS3 - (SMAW)

The QAI periodically observed AB/F approved welder Hua Qiang Huang (ID 2930) performing welding per the SMAW process in the 3G (vertical) position and was welding from the A face with ceramic backing. The QAI observed QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved Welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI observed that the work at this location was in process for the duration of the shift and appeared to be in general compliance with contract documents.

5). OBG Field Splice 4E/5E Weld ID: A LS1, A LS2, A LS3

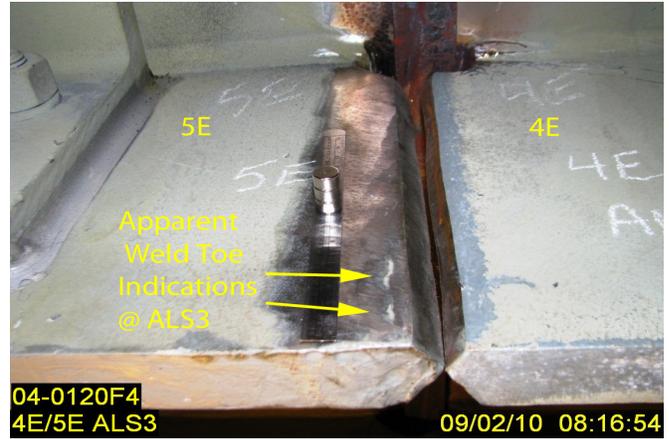
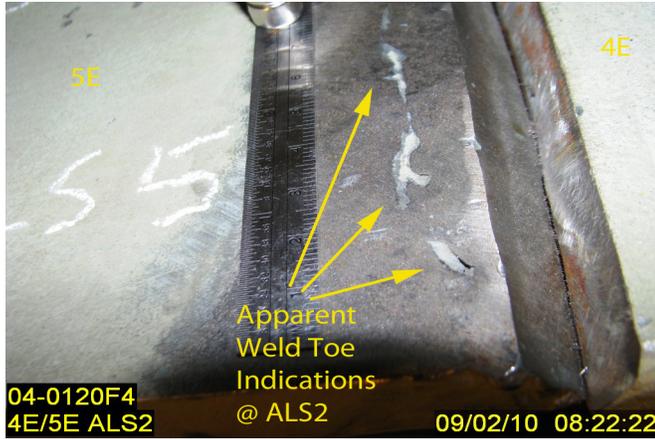
The QAI observed the fit-up at OBG Field Splice 4E/5E Weld ID: A LS1, A LS2, A LS3. While measuring the planar misalignment and root gap dimensions the QAI noted the appearance of a weld toe on the 5E side of the three splice locations. It appears that buttering has been performed prior to painting. See photos below. The QAI asked QC Inspector John Pagliero to observe the stiffeners. Mr. Pagliero concurred with the QA Inspectors conclusion that there appears to be remnants of weld toes and stated that he would pass on the information to his superiors.

6). OBG Field Splice 6E/7E Weld ID: D1 & D2, - (Fit-up)

The QAI periodically observed AB/F approved welder Rick Clayborn (ID 2773) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position to install blank nuts. The QAI observed QC Inspector Jesse Cayabyab was present to monitor the progress and verify that the welding parameters were within the limits established by the approved Welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1200A. The QAI observed that the fit-up activities at this location were in process for the duration of the shift and appeared to be in general compliance with contract documents. While at this location the QAI spoke with QC Inspector Jesse Cayabyab. See Summary of Conversations below.

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Summary of Conversations:

From Item 6).

The QAI in conversation with QC Mr. Cayabyab was told that (3) three OBG Field Splice welds would be ready for QAI Verification on 9/3/2010. The Splice welds are 4E/5E - E1 & E2, 5E/6E – E1 & E2 and 4E/5E – C1 & C2.

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 Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By: Madison,Bert

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer