

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-026724**Date Inspected:** 15-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**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**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Douglas Frey-OBG W12/W13-C1.2 and C2(QA/UT Verification), OBG E12/E13-C1.2-C2 (QA/UT Verification)
OBG W14(Welding of Lifting Lug Holes).

Joselito Lizardo-OBG E13/E14 ("D1" Bottom "I" Vertical Plates), OBG E13/E14-E and F (Preliminary Fit-up)

Art Peterson-observed the work on the skyway in regards to CCO #193, #178, #128 and #179.

Craig Hager-OBG E14 (Lifting Lug & Ventilation Holes, field fit-up and welding).

William Clifford-OBG W13/W14 ("D1" Bottom, "H" Bottom Side Plate) and OBG E14 (Lifting Lug and Ventilation Holes). Note: See the Quality Assurance Lead Inspector's Summary and Summary of Conversations in regards to a base metal crack at on page 2 of this report.

Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, Douglas Frey, Art Peterson, Craig Hager and William Clifford monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted on this date.

For additional detailed information see the individual, submitted and approved, QA TL-6031 Weld Inspection Reports (WIR) and QA TL-6027 Ultrasonic Test Reports (UTR).

Issue

At approximately 1500 QAI, William Clifford, contacted and informed this QALI that a linear indication (crack) was noted on the base metal of the 20 mm deck plate. The indication was found during the Magnetic Particle Test (MPT) and QA observation of the Lifting Lug Hole (LLH) identified as 14W-PP128-W4-W2. The indication appeared to be located approximately 25 mm from the toe of the Complete Joint Penetration (CJP) groove weld and running transverse to the direct of the roll for approximately 100 mm in length. For additional information see Summary of Conversation.

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates).

Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

This QALI discussed the issue regarding the base metal crack with the QC Lead Inspector, Bonifacio Daquinag, Jr., and informed Mr. Daquinag that prior to the weld repair process that the contractor is required to submit a Critical Weld Repair (CWR) report for the Engineer's approval. At the conclusion of this conversation this QALI notified the QA Supervisor, William Levell, regarding this issue.

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.

Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
