

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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026799**Date Inspected:** 29-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 13E-14E (Welding of F1, I1 & D2) and OBG W14 (Welding of Ventilation Holes).

William Clifford-OBG W14 (QA observation of Excavation & Repair Welding of Linear Indication, UT rejects, QA/UT Observations & QA/UT Verification). See QALI Summary (Issue) for additional information.

Craig Hager-FW Spencer at the South Tower Shaft (Welding of Pipe Field Splices) OBG E13/E14 (13E-14E-F1, H1 & D2), OBG E14 and W14 (Welding of Ventilation and Lifting Lug Holes) and W2 Jacking Saddle Frame (Excavation and QA/UT Information).

Art Peterson-Continued observing the modification work of Bike Path Traveler and Belvederes of the following Contract Change Orders: CCO:178.

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Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's 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 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. There was one issue noted on this date. See QALI comments below.

Issue

During the Quality Assurance Inspection (QAI) Ultrasonic Testing (UT) Verification of the Ventilation Hole identified as 14E-126.7-E3.7 it was noted that an indication of a rejectable magnitude was discovered by the QA Inspector, William Clifford. The indication was located at the "A" deck closed rib of the Orthotropic Box Girder (OBG) identified as E14 which travels parallel with the deck in which the indication appeared to generate from the root of the Partial Joint Penetration (PJP) groove of the closed rib to deck plate connection (Shop Weld). This Quality Assurance Lead Inspector (QALI) in conversation with the Quality Control (QC) Inspector, John Pagliero, was informed that he performed the initial UT and did not note the indication but did return to this location, upon Mr. Clifford's findings, and performed a second test. At the conclusion of this test Mr. Pagliero results concurred with Mr. Clifford's. Mr. Pagliero also performed UT of a second ventilation hole identified as 14E-PP125.7-E3.2 and discovered a similar rejectable indication. Additional testing and evaluation is pending upon further review.

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.

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
