

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013831**Date Inspected:** 03-May-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:** 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:** Orthotropic Box Girders (OBG)**Summary of Items Observed:**

Quality Assurance inspector (QA) Michael Foerder was at the American Bridge/Flour (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:

1. OBG Field Splice 1E/2E Face E (Inside)
2. OBG Field Splice 2E/3E Face E (Outside)
3. OBG Field Splice 3E/4E Face C (Outside)
4. OBG Field Splice 3W/4W Face A QC UT Verification

Field Splice 1E/2E Face E (Inside)

The QA inspector periodically observed QC inspector Barry Drake performing magnetic particle testing (MT) on the inside for the weld face designated E. The QC inspector was noted to be utilizing the MT yoke in areas previously identified for minor weld repairs and for UT rejectable areas which were completed previous to this date. The QC inspector was noted to be marking several areas within Y location designated 3500-5500mm for blending and grinding for excessive weld reinforcement and areas which held the MT powder but appeared to be holding powder due to mechanical traps or non-relevant indications. Later in the shift the QA inspector reviewed the areas which were blended and the area appeared to be in general conformance with the contract documents.

Field Splice 2E/3E Face E (Outside)

The QA inspector observed QC inspector Tom Pascaulone performing ultrasonic testing (UT) on the outside of weld face designated E for areas which were identified previously to be UT rejectable indications. The areas were

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reviewed and accepted by the QC inspector utilizing a 70 degree transducer and wedge combination for shear wave examination with the exception of one location identified near the side plate/bottom plate intersection. This area was marked for a "class A" rejectable indication which would require additional weld repair and this information was relayed to the QA inspector and the welding foreman Dan Ieraci. Mr. Ieraci relayed the contractor's intention was to coat this weld face on this date with the exception of the weld repair area. The QC inspector was relocated to another area when the scanning was completed. Later in the shift it was noted the weld face was coated with paint but the coating was held back from the repair area. The work appeared to be in general compliance with the contract documents; however the submittal and acceptance of the coating plan and materials (Paint Quality Control Plan) has been identified previously as not formally approved.

Field Splice 3E/4E Face C (Outside)

The QA inspector noted and periodically observed ABF welding operators Rory Hogan and Jeremy Dolan performing the grinding operations for face C on the second side (Outside). The welding operators continued setting the equipment up and periodically performing the operation throughout the shift. The work was not completed on this date or turned over to QC for verification to the QA inspector's knowledge but appeared to be progressing in general conformance with the contract documents.

Field Splice 3W/4W Face A (Outside)

The QA inspector periodically observed QC inspectors Steve McConnell and Tom Pascaulone performing ultrasonic testing (UT) on this date for welds designated A-5 and A-3, respectively. The QC inspectors were noted to be utilizing a zero degree transducer for lamination examination and a 70 degree transducer and wedge combination for shear wave examination. Several areas have been marked for further evaluation and preliminary scanning has determined multiple rejectable indications are present which will require repair. The work progressed throughout the QA inspectors shift, was not completed and appeared to be progressing in general compliance with the contract documents.

Summary of Conversations:

As noted above in items observed.

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

Inspected By:	Foerder, Mike	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
