

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-016304**Date Inspected:** 19-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**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:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 1E/2E, 2E/3E, and the following observations were made:

1E/2E-A-LS-1

Upon the arrival of the QA Inspector at the above identified location, the QA Inspector randomly observed the ABF welder James Zhen preparing to begin the SMAW fill/cover pass. The QA Inspector randomly observed the ABF welder preheat the material to 200°F utilizing a rosebud torch. The QA Inspector noted the SE QC Inspector John Pagliero was on site monitoring the in process preheats and welding parameters of approved welding procedure identified as ABF-WPS-D1.5-1012-3. The QA Inspector performed a random visual inspection of the above identified stiffener plate and noted the production welding appeared to be in general compliance with the contract requirements and approximately 80% complete. The QA Inspector randomly observed the ABF welder remove the E9018 1/8" electrodes from the rod container at 0730. The QA Inspector noted the maximum exposure time for the above identified electrodes is on hour. The QA Inspector randomly observed the ABF welder continue the SMAW fill passes on the above identified weld joint. The QA Inspector noted the SMAW parameters were 130 amps and appeared to be in general compliance with the above identified WPS. The QA Inspector noted the ABF welder completed the production welding at 0900. The QA Inspector randomly observed the ABF welder perform grinding tasks of the weld reinforcement on both sides of the weld joint. The QA Inspector noted the 48 hour NDT hold will begin at 0900 on this date. The QA Inspector spoke with the QC Inspector John Pagliero (see summary of conversations)

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2E/3E-A-LS-5

Upon the arrival of the QA Inspector at the above identified location, the QA Inspector randomly observed the ABF welder Xiao Jian Wan had completed the SMAW cover pass from one side of the weld joint. The QA Inspector randomly observed the ABF helper was performing grinding of the weld reinforcement from one side of the weld joint as well as performing grinding of the back gouge. The QA Inspector randomly observed the ABF welder preheat the material to 200°F utilizing a rosebud torch. The QA Inspector noted the SE QC Inspector John Pagliero was on site monitoring the in process preheats and welding parameters of approved welding procedure identified as ABF-WPS-D1.5-1012-3. The QA Inspector performed a random visual inspection of the above identified stiffener plate and noted the production welding appeared to be approximately 50% from one side only. The QA Inspector performed a visual inspection of the above identified stiffener plate and noted approximately 3mm of planar misalignment was present at the top of the weld joint near the "A" deck plate. The QA Inspector noted previously the ABF welder utilized a strong back in the form of a steel bar stock and bridge clamps to correct the misalignment. The QA Inspector noted due to the rigidity of the steel near the top deck plate "A", the ABF welder was unable to correct the planar misalignment. The QA Inspector performed dimensional measurements of the planar misalignment and noted the maximum off set or planar misalignment was 3mm. The QA Inspector noted the planar misalignment measured and identified did meet the requirements of planar misalignment in AWS D1.5 and was determined to be acceptable. The QA Inspector randomly observed the ABF welder remove the E9018 1/8" electrodes from the rod container at 0830. The QA Inspector noted the maximum exposure time for the above identified electrodes is on hour. The QA Inspector randomly observed the ABF welder continue the SMAW fill/cover pass on the above identified weld joint. The QA Inspector noted the SMAW parameters were 130 amps and appeared to be in general compliance with the above identified WPS. The QA Inspector noted the ABF welder completed the above identified weld joint from one side and continued to perform welding from the back side of the weld joint or back weld.

The QC Inspector John Pagliero informed the QA Inspector the stiffener plates identified as 1E/2E-LS-A-1,2,3 were previously ultrasonically tested and no rejectable indications were located. The QC Inspector went on to inform the QA Inspector the testing was performed after the 48 hold had expired, but all three stiffener plates would no be turned over to Caltrans METS QA until Friday 8-20-10 after the 1E/2E-LS-A-1 stiffener had been officially tested.

Summary of Conversations:

As noted above.

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:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
