

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-029879**Date Inspected:** 27-Jul-2013**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:** Salvador Merino**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:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At the bikepath emergency exit panel point 122.5 to PP123, ABF welder Rick Clayborn was observed performing the Complete Joint Penetration welding of the ½" thick plate x 76" long closure plate to the bikepath. The welder was utilizing the Shielded Metal Arc Welding (SMAW) process using the 1/8" diameter E7018H4R electrode with the welding of the root in the overhead (4G) position. After the completion of the root pass, the welder back gouged the other side of the joint using carbon air arc gouging. The air arc gouging surface was ground before ABF QC William Sherwood performed the Magnetic Particle testing (MT). After the QC acceptance of the back gouging MT, the welder resumed welding the CJP joint using self shielded Flux Cored Arc Welding (FCAW-S). The CJP welding of the emergency ramp gap closure was being welded per Railing Layout #38, drawing #48052. During welding, ABF QC William Sherwood was on site monitoring the workmanship and welding parameters. At the end of the shift, CJP welding on the closure plate to the bikepath was completed but the weld cover was not flush ground. According to the welder, ABF will perform the flush grinding by Monday to be followed by MT on the weld joint.

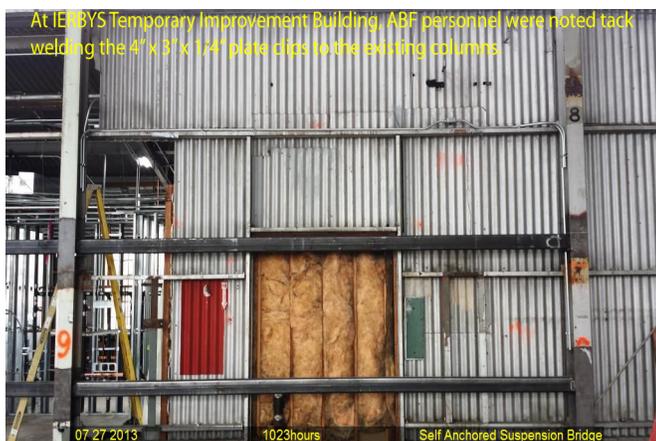
At the bikepath panel point PP124.5 and PP125.5, ABF personnel were observed continuing to perform stud welding on the 1 ¼" long x ¼" diameter Nelson threaded stud for the electrical conduit support. The ABF personnel Matt Cochran and Mike Draper performed the preproduction test by welding three ¼" diameter x 1 ¼" long Nelson studs prior to production welding. The ABF QC William Sherwood performed the visual inspection

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for the 360 degree flash on all the studs with acceptable results. This QA also performed visual verification on the 360 degree flash on all studs and noted same results. After the visual inspection/verification, ABF QC William Sherwood performed the test on the welded studs using a calibrated torque wrench. The studs were tested at 5 foot pounds torque and noted acceptable results.

At 210 Burma Road, Oakland, CA, where IERBYS Temporary Improvement Building is being renovated, ABF personnel were observed continuing to perform layout on the 4" x 3" x 1/4" thick clip plate to the existing building column. The welder was noted tack welding the 4" x 3" x 1/4" clip to the existing column using self shielded Flux Cored Arc Welding (FCAW-S) with 0.072" diameter E71T-8 wire electrode implementing Caltrans procedure ABF-WPS-D11-F2200. The welder was noted tack welding the clip plates to the existing W-column at columns 8 and 9, columns 9 and 10, and columns 10 and 11. During the shift, ABF personnel were only able to tack weld the clips to the existing columns. There was no fillet welding performed on the clips to the existing columns.



Summary of Conversations:

No significant conversation occurred today.

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 SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer