

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024521**Date Inspected:** 20-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Steve Jensen**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:** S.A.S. components**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) North Tower field splice welding
- 2) East Tower field splice fit-up

1) The QAI observed ABF personnel welding field splice closure plates inside the North tower shaft at field splice #3. The QAI observed Xiao Jian Wan, ID 9677, at the North lower plate (weld N166) and Salvador Sandoval, ID 2202, at the North-East lower plate (weld NE166). The QAI noted that both welders are making vertical fillet welds (3F) using self shielded flux cored arc welding (FCAW-S) with 1.8mm diameter E71T-8-H16 electrode (NR-232). The QAI observed that Quality Control Inspector (QCI) Steve Jensen is monitoring this welding. The QAI was informed that welding procedure specification ABF-WPS-D15-F2200-3 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters, with the exception of travel speed, and noted that they appeared to be conforming to the WPS requirements. As the welding progressed, the QAI observed that at weld N166, the welder appeared to be incorporating broken fit-up welds into the final fillet weld. The QAI asked the QCI why this was being done. The QCI verified the QAI's observation and remarked that the fit-up welds should have been removed. The QAI was informed that the welder has been instructed to grind the fit-up welds off including what has been incorporated into the fillet welds. The QAI estimated that approximately 5mm of weld has been incorporated on each side of the closure plate. The QAI was informed that this work will begin at the next shift and there was no more welding at this location during this shift.

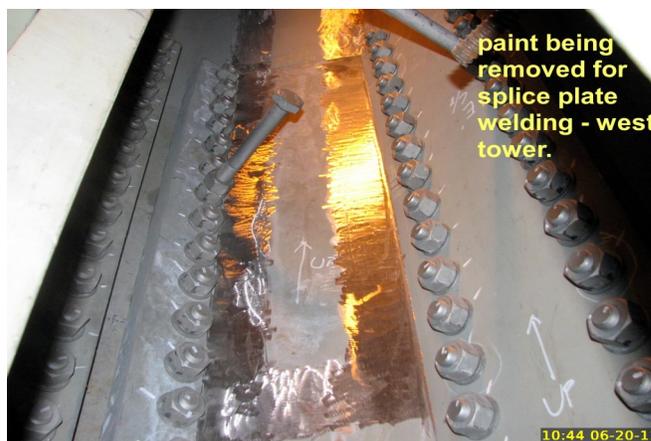
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See the attached photos.

2) The QAI observed ABF personnel preparing field splice closure plates and base metal of tower inside the East tower shaft at field splice #3. The QAI observed Mike Jininez, ID 4671, inside the tower grinding the zinc primer from the base metal at the splice locations. The QAI did not observe any fit-up or welding at this location during this shift. See the attached photo.

While the QAI was traveling to the above mentioned work locations, the QAI noted that other ABF personnel are in the process of fitting up ladder pieces on the tower facade. The QAI noted that the ladder pieces will be welded onto the facade between elevations of 112m up to 140m. The QAI noted that the ladders are bolted and held in place with heavy wire. The QAI observed a worker grinding paint from the tower facade and ladder attachments in preparations for welding. The QAI spoke with the area foreman and was informed that welding for these punch list items has not been scheduled at this time.



Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. As noted above, the QAI had a conversation with the QCI Steve Jensen, regarding the fit-up welds being incorporated into the tower splice closure plate fillet welds. The QAI relayed the QCI's stated plans to the QAI Danny Reyes and the QAI Lead Bill Levell. Except as described above, there were no other notable conversations or observations.

Comments

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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.

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| Inspected By: | Croff, Scott | Quality Assurance Inspector |
| Reviewed By: | Levell, Bill | QA Reviewer |
