

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-012804**Date Inspected:** 25-Mar-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:	Bernard Docena, Jesse Cayabayab			CWI Presentation:	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 2E/3E-A,F		

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 as 2E/3E-F, 2E/3E-A and the following observations were made:

2E/3E-A

Upon the arrival of the QA Inspector, it was observed 27 total ultrasonic testing (UT) rejections had been located and indicated by the SE QC Inspectors. The QA Inspector noted approximately 20 had been repaired by welding. The QA Inspector noted to SE QC was performed on the QA Inspectors shift. The QA Inspector randomly observed and noted the rejected areas of weld had been indicated with a distinguishing marking directly on the weld. The QA Inspector randomly observed the ABF welder identified as Mitch Sittinger was setting up to begin excavating the previously rejected areas of weld. The QA Inspector randomly observed the ABF welder excavate and repair 1 total rejected area on the QA Inspectors shift (listed below).

A5

The QA Inspector randomly observed the ABF welder begin excavating the UT rejection in A4. The QA Inspector randomly observed the excavation was being performed with a burr bit grinder. After the excavation was complete the QA Inspector randomly observed the SE QC Inspector Tom Pasqualone perform magnetic particle testing of the excavation prior to the repair welding. The QA Inspector noted no relevant indications were located at the time of the testing. The QA Inspector randomly observed the QC Inspector perform the MT and the QA Inspector concurred, no relevant indications appeared to be present at the time of the testing. The QA Inspector noted the excavation was ground to a weldable profile prior to the repair welding. The QA Inspector performed

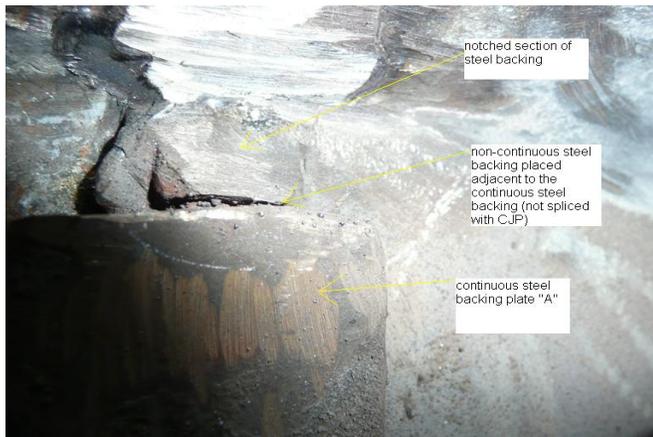
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dimensional measurements of the excavation and noted it appeared to be 190mm x 30mm x 14mm. The QA Inspector observed an ABF apprentice welder, preheat the isolated area to be welded to the minimum required preheat of 150°F. After the minimum required preheat was achieved, the QA Inspector randomly observed the ABF welder begin the weld repair utilizing the shielded metal arc welding (SMAW) process. The QA Inspector randomly observed the ABF welder utilizing 1/8" E7018 low hydrogen electrodes with 125 Amps. The QA Inspector noted the SMAW parameters and minimum required preheat appeared to be in general compliance with ABF-WPS-D1.5-1000-repair. After the above identified repair was completed, the QA Inspector randomly observed the ABF welder move to the next UT reject and begin excavating the indicated area utilizing the same method identified above. After the excavation was completed the QA Inspector randomly observed the QC Inspector perform MT in the same manner performed in the above identified repair. The QA Inspector noted no relevant indications were located at the time of the testing. The QA Inspector performed dimensional measurements of the excavation and noted it appeared to be 300mm x 28mm x 20mm. The QA Inspector noted the same welding process and welding parameters were utilized for the above identified weld repair. The QA Inspector noted the ABF welder was performing the SMAW repair for the remainder of the shift.

2E-3E-F

The QA Inspector randomly observed the steel backing attached on the bottom side of the top deck plate identified as "A" did not appear to be continuous. The QA Inspector randomly observed the steel backing was continuous through out the majority of the top deck plate except for the ends. The QA Inspector randomly observed the steel backing near the ends of the "A" joint where the steel backing meets the "B" and "F" vertical corner joint assemblies, to be butted up and not welded (pictured). The QA Inspector noted it appears a piece of notched steel backing was slid through the root opening of the vertical "B" and "F" CJP grooves prior to welding and butted up to the continuous steel backing of the "A" plate. The QA Inspector noted an incident report was written and submitted for the above identified issue.



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.

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