

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 #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026578**Date Inspected:** 27-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** On Site**CWI Name:** Pat Swain**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:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived on site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor the welding operations performed by American Bridge Fluor (ABF) welding personnel. The following observations were:

OBG Deck Plate Field Splice 11E / 12E:

This QA Inspector randomly observed ABF Quality Control Inspector Mr. Jesse Cayabyab performing Ultrasonic Testing (UT) inspection on OBG deck plate section 11E / 12E at weld location A5. The weld length of A5 is 5280 mm long. Mr Cayabyab completed the remaining portion of the outstanding weld to be UT inspected after the scaffold was removed on this date. This QA Inspector observed that Mr. Cayabyab detected a rejectable ultrasonic indication at "Y" location 5210 mm. The deck plate section is 20 mm thick and the depth of the ultrasonic indication was 17 ~ 19 mm. The length of the indication was 20 mm and the indication rating was a (+8) db. This QA Inspector randomly observed ABF welder Mr. Fred Kaddu performing the back-gouge operation of an ultrasonic rejectable indication on OBG deck plate section 11E / 12E located at "Y" location 5190 mm. The excavated area for repair was: (20 mm wide; 80 mm length; and 20 mm in depth).

This QA Inspector randomly observed ABF welder Mr. Fred Kaddu (Welder ID 2188) performing the repair welding operation on an excavation as per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on OBG deck plate section 11E / 12E at weld location A5. The excavated area was as noted above and this QA Inspector observed QC Inspector Mr. Pat Swain verify that the preheat temperature was at the minimum

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of 125 Degrees F and that the welding parameters (Amps, Volts, and Travel Speed) were in accordance with WPS D1.5 - 1000 Repair Revision 2. The welding parameters observed at this location appeared to be in general compliance with approved WPS and the contract specifications.

This QA Inspector randomly observed QC Inspector Mr. Pat Swain perform a preliminary ultrasonic inspection of the repaired area on OBG deck plate section 11E / 12E at weld location A5. This QA Inspector observed that Mr. Swain detected a rejectable ultrasonic indication at "Y" location 5200 mm. The deck plate section is 20 mm thick and the depth of the ultrasonic indication was 20 mm. The length of the indication was 20 mm and the indication rating was a (+10) db.

This QA Inspector randomly observed ABF welder Mr. Fred Kaddu performing the back-gouge operation for the second time of an ultrasonic rejectable indication on OBG deck plate section 11E / 12E located at "Y" location 5200 mm. The excavated area for repair was: (25 mm wide; 75 mm length; and 20 mm in depth).

This QA Inspector randomly observed ABF welder Mr. Fred Kaddu (Welder ID 2188) performing the repair welding operation for the second time on an excavation as per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on OBG deck plate section 11E / 12E at weld location A5. The excavated area was as noted above for the second time and this QA Inspector observed QC Inspector Mr. Jesse Cayabyab verify that the preheat temperature was at the minimum of 125 Degrees F and that the welding parameters (Amps, Volts, and Travel Speed) were in accordance with WPS D1.5 - 1000 Repair Revision 2. The welding parameters observed at this location appeared to be in general compliance with approved WPS and the contract specifications.

The welding of the second repair at the location mentioned above was completed on this date and the preliminary UT inspection will be performed on October 28th, 2011.

OBG Bottom Plate Field Splice: 12E / 13E

This QA Inspector observed ABF welding personnel setting up their welding equipment and shielding the area for welding the second side on OBG bottom plate section 12E / 13E as per the FCAW-G process. This QA Inspector observed that the set-up of the equipment and shielding was still in process at the end of this QA Inspectors' shift.



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Summary of Conversations:

No significant conversations were reportable on this date.

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 Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson, Art	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
