

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4
Cty: SF Rte: 80 PM: 13.2/13.9
File #: 1x.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-000958
Date Inspected: 28-Nov-2007

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 615
OSM Departure Time: 1430
Location: Benica, CA

CWI Name:	William Norris	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:** Procedure Qualification Record (PQR) test

Summary of Items Observed:

The Quality Assurance (QA) Inspector arrived at the Ironworkers Apprenticeship Training Facility and met with Smith Emery Quality Control (QC) Inspector William Norris to observe QC functions during the welding of the Procedure Qualification Record (PQR) test plate listed below.

ABF-PQR-026-A.

1. The QA Inspector periodically observed American Bridge Floor (ABF) welding personnel Rick Clayborn assisted by Daniel Gordon performing base material preheating prior to starting welding per the Flux Cored Arc Welding Self Shielded (FCAW-S) process to continue making Complete Joint Penetration (CJP) groove weld of the PQR test plate identified as ABF-PQR-026-1-A. The welding was being performed using Electrode Hobart Fabshield XLR-8, E71T-8, 1.8 millimeter diameter. The welding was being conducted using track guided "Bug-O-System self propel wire feeder" in the 3G (vertical) position.

a) Prior to the start of welding the QA Inspector observed QC Inspector William Norris verify the base material preheating temperature, the electrical welding parameters and travel speed to be approximately 104 degrees Celsius, 262 amperes, 21.4 volts and 95 millimeters/minute travel speed. QC Inspector notified the QA Inspector the welding of the test plate will be done using welding variables to produce the maximum calculated heat input.

b) During welding QA Inspector observed ABF welding personnel Rick Clayborn performing air carbon arc cutting (gouging) to remove filler metal to open up groove to accommodate subsequent weld passes. Cutting was

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performed prior to apply the weld pass number 5, 6, 7, 8 and 9 at full length of test plate.

c) During welding QA Inspector observed Rick Clayborn having difficulties with the welding equipment and with the used welding electrode. Rick Clayborn informed the QA Inspector that the used electrode seems not be apply properly and the appearance of the weld profile does not look good. Rick Clayborn and Daniel Gordon fixed the welding equipment and Rick Claybon informed the QA Inspector per a phone conversation with the Hobart electrode manufacture representative a different spool of wire needed to be used. Rick Claybon was observed replacing the spool of wire electrode and continued welding without having any more electrode difficulties. Please note that weld pass one to eight were applied to test plate using what appeared to be a bad spool of wire.

d) During welding QA Inspector periodically observed the QC Inspector William Norris verifying and documenting the base material temperature, amperage, voltage and travel speed as well as the welding electrode difficulties. The welding was completed on test plate on this date. The welding operation was completed on this test plate on this date. QC Inspector William Norris informed the QA Inspector that visual inspection of test plate weld will not be performed on this date.

The QA Inspector observed the welding performed at this location appeared to be in general compliance with the project plan and specifications.

Summary of Conversations:

As noted in the body of the report above. QC Inspector William Norris informed the QA Inspector he intended to monitor and record the electrical welding parameters (amperage, voltage and travel speed) and document the placement of each welding pass in the groove joint.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Medina,Ricardo	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer
