

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-027907**Date Inspected:** 04-Jul-2012**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:** As noted below**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:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

12E-E2.1 (Exterior)

This QA Inspector made random observations of ABF/JV qualified welder Mike Jimenez performing Shielded Metal Arc Welding (SMAW) in the 1F flat position on 12E-E2.1 on the East Drop-In Panel on the exterior of the OBG. This work was initiated on 7/2/2012. The welder was depositing metal forming seal passes on the edges of the joint at y+29,000mm to 31,000mm. This QA Inspector observed QC Inspector Salvador Merino verify prior to the start of the fillet weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterward's verified that the welding parameters (Amps) were in accordance with ABF-WPS-D1.5-F1200A. The welder was observed utilizing E7018-H4R electrodes and this QA Inspector verified that the electrodes were recently obtained from a baking oven. QC was observed measuring the inter-pass temperatures by employing an infra-red temperature gun as well as monitoring the welding and the parameters. It was noted that the welder was drawing amperage of 127 utilizing 3.2mm electrodes. On a subsequent observation to monitor quality it was noted that the work at this location was completed and the welder commenced work on 12E-E2.1-C1 on the interior of the OBG. The joint at this location included a copper backing and WPS-ABF-D1.5-1040C-CU was applied. The welder was observed performing SMAW in the 2F horizontal position using 3.2mm E7018-H4R electrodes drawing amperage of 132. QC Inspector Salvador Merino was present to monitor the welding and the parameters and measured the inter-pass temperatures between passes. The welder was observed grinding and

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blending the start/stop edges of the work. On a subsequent observation this QA Inspector noted that the work is in progress and appeared to be in general conformance with the contract specifications.

12E PP111.1 (Exterior)

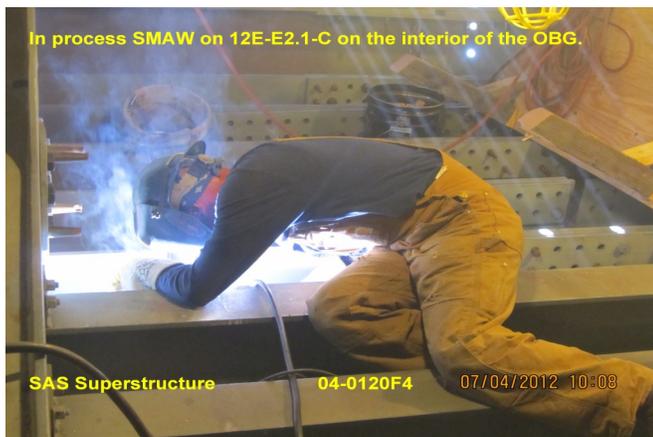
This QA Inspector at random intervals observed ABF/JV qualified welder Richard Garcia #5892 placing seal weld passes using the SMAW process in the 1G flat position on 12E PP111.1 on the exterior of the OBG. The work at this location was initiated on 7/3/2012. QC Inspector Salvador Merino was observed measuring the preheat temperature and setting the parameters to ensure compliance with the welding procedure specification (WPS) ABF-WPS-D1.5-F1200A. The welder was observed using a small disc grinder to blend the start/stop edges of the work to provide a smooth transition. The welder was observed utilizing 3.2mm E7018-H4R electrodes drawing amperage of 132. The electrodes were obtained from a baking oven verified by this QA Inspector. On a subsequent observation this QA Inspector monitored the work for quality and noted that it was completed on this date and appeared to be in general conformance with the contract documents.

12E-E2.1-C1

This QA Inspector randomly observed ABF/JV qualified welder Todd Jackson #4639 using the SMAW process in the 2G horizontal position on 12E-E2.1-C1 on the interior of the OBG. This QA Inspector observed QC Inspector Salvador Merino verify prior to the start of welding operations, that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps) were in accordance with ABF-WPS-D1.5-1-1040C-CU. The welder was observed grinding and blending the start/stop edges of the work utilizing a small disc grinder and compressed air in between passes as QC measured the inter-pass temperatures with an infra-red temperature gun. This QA Inspector verified the use of the E7018-H4R Electrodes and that they were obtained from an un-opened container. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work at this location was in progress and appeared to be in general conformance with the contract documents.

Summary of Conversations:

Conversations were relevant to the specific locations.



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.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
