

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-029256**Date Inspected:** 09-Mar-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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:

This QA Inspector randomly observed the ABF welders Mike Jimenez #4671, Guo Wu Chen #1556 and E Yun Chin #9344 perform the 2G horizontal SMAW on the diverter bars located at 13W PP120 to PP124.5 on the west OBG. The welders were observed utilizing the WPS ABF-D1.5-F1200A and was also observed preheating the weld joints prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 136 amperes and appeared to be in compliance with the WPS noted above. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance with the contract documents.

This QA Inspector at random intervals, observed the ABF welder Chris Bruce #8901 utilize the Shielded Metal Arc Welding (SMAW) process in the 1G flat position to fill the Weld Joint Designation identified as B-U2a, a Complete Joint Penetration (CJP) groove weld on the Deck Access Hole (DAH) located at 12W PP116.5-W2-DAH. The welder was observed utilizing a 4.0mm E7018 Low Hydrogen electrodes with a measured amperage of 136. The QC Inspector monitored the welding and the parameters to ensure compliance with ABF-WPS-D1.5-1040C-CU. This QA Inspector made subsequent observations 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.

This QA Inspector performed 100% Magnetic Particle (MT) testing on the lifting lug removal sites located at 13E

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

PP118.5-E4-North and 13E PP119.5-E4-North on the interior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed 100% Magnetic Particle (MT) testing on the Skyway lifting lug holes #2, 3 and 6 on the east bound skyway. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed an Ultrasonic (UT) inspection on the Skyway lifting lug holes #2, 3 and 6 on the east bound skyway. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, Section 6, Table 6.3. The testing was performed in accordance with AWS.D1.5-2002 Section 6.13. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6027 UT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed 100% Magnetic Particle (MT) testing on the longitudinal stiffeners located at 12W PP116.5-W2-LSW/LSE on the interior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed an Ultrasonic (UT) inspection on the longitudinal stiffeners located at 12W PP116.5-W2-LSW/LSE on the interior of the OBG. These welds were previously performed and accepted by the QC Ultrasonic technicians in accordance with AWS D1.5-2002, Section 6.13 and the UT Acceptance-Reject Criteria Table 6.3. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6027 UT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed an Ultrasonic (UT) inspection on the repair weld on the Jacking Frame Saddle at W2. These welds were previously performed and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, Section 6.13 and the UT Acceptance-Reject Criteria Table 6.3. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6027 UT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.
(Reference-RWR #201111-003)

This QA observed QC Inspector Salvador Merino and William Sherwood performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW). QC Inspectors were observed performing inspection per applicable code and or contract criteria. Unless

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

Summary of Conversations:

Conversations were relevant to work performed.



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 Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
