

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-026888**Date Inspected:** 14-Dec-2011**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:** OBG Component**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford 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:

13W/14W

This QA observed, at random intervals, ABF/JV qualified welder Eric Sparks #3040 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004R. Two (2) repairs were welded at the 20mm plate insert at the "A" deck to close a ventilation hole. This work was located at 14W-PP125.7-W3.2 / 14W-PP125.7-W3.7 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Sal Moreno was noted monitoring the welding parameters. Welding parameters were recorded as (A=136).

This joint is a Seismic Performance Critical Member (SPCM) member.

This QA observed, at random intervals, ABF/JV qualified welder Jorge Lopez #6149 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004R. One (1) repair was welded at the 20mm plate insert at the "A" deck to close a ventilation hole. This work was located at 14W-PP126.2-W3.7 and was performed in the overhead position from the bottom of the "A" deck plate.

During welding, ABF Quality Control (QC) Sal Moreno was noted monitoring the welding parameters. Welding parameters were recorded as (A=135).

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This joint is a Seismic Performance Critical Member (SPCM) member.

13W/14W A2.2

This QA observed, at random intervals, an ABF/JV qualified welder, Richard Garcia #5892, performing Flux Cored Arc Welding (FCAW) and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3040B-3. Welding was performed at the 20mm butt weld joint (B-U2-S) connecting Lift 13 and Lift 14 "A" deck plates. Y=2100~3650 (approximately 1550mm)

This weld is a Seismic Performance Critical Member (SPCM) member.

During welding, ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters. Welding parameters were recorded as (A=213, V=23.3, T=152).

Approximately:

9:30 this QA observed QC William Sherwood perform Magnetic Particle (MT) of the back gouged welds at the Lift 13 and Lift 14 "A" deck plate splice location. Mr. Sherwood recorded no rejectable indications at this time.

West Line

This QA randomly observed ABF/JV qualified welder Mike Jiminez #4671 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110-R1. This was a Complete Joint Penetration (CJP) weld on a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 11W-PP104-W3-LLH#1,3 and was performed in the overhead position from the inside of the "A" deck plate.

During welding, ABF Quality Control (QC) Salvador Mareno was noted monitoring the welding parameters. Welding parameters were recorded as (A=129).

This QA randomly observed ABF/JV qualified welder Mike Jiminez #4671 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110-R1. This was a Complete Joint Penetration (CJP) weld on a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 11W-PP103-W3-LLH#2,4 and was performed in the overhead position from the inside of the "A" deck plate.

During welding, ABF Quality Control (QC) Salvador Mareno was noted monitoring the welding parameters. Welding parameters were recorded as (A=129).

Approximately:

8:15 this QA observed QC Salvador Moreno perform Magnetic Particle (MT) of the back gouged welds at panel point 11W-PP104-W3-LLH#1,3 location. Mr. Moreno recorded no rejectable indications at this time.

13:45 this QA observed QC Salvador Moreno perform Magnetic Particle (MT) of the back gouged welds at panel point 11W-PP103-W3-LLH#2,4 location. Mr. Moreno recorded no rejectable indications at this time.

Observation of QCUT:

QC John Pagliero performed Ultrasonic Testing (UT) of the completed welds at various locations. Mr. Pagliero recorded:

Location 14E-PP127.2-E5

- one (1) indications that were within six (6) decibels of the rejectable criteria.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Ultrasonic Testing

This QA performed Ultrasonic Testing (UT) on approximately 50% of the deck ventilation hole welds at -14E-PP127.2-E5
-14W-PP125.2-W5

These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

This weld is a Seismic Performance Critical Member (SPCM) member.

This QA performed Ultrasonic Testing (UT) on approximately 50% of the lifting lug hole weld at 14E-PP125-E4-LLH #2. This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3.

This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

This weld is a Seismic Performance Critical Member (SPCM) member.

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

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

Summary of Conversations:

No relevant conversations.

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

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
