

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029978**Date Inspected:** 05-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Steward Machine Co.**Location:** Birmingham, AL**CWI Name:** Fred Hudson**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:** E2 Shear Key Anchorages**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Andrew Webster was present on the date and times noted above in order to observe the fabrication and Quality Control (QC) functions performed by Steward Machine Company for the E2 Shear Key Anchorages for the SFOBB project. The following items were observed:

Steward Machine - Plant 1:

This QAI performed a walkthrough at the shop to verify plates on site and to observe Steward Machine personnel at work machining and welding. Work performed at the Steward Machine shop as noted below:

CNC Machine #176 milling plate S4C-g4. (Milling inside radius)

CNC Machine #211 milling plate S4C-d4. (Milling inside radius)

CNC Machine #225 milling plate S3C-a3. (Milling inside radius)

CNC Machine #231 milling assembly S10B. (Milling to size)

CNC Machine #240 milling plate S4C-b4. (Milling excess stock off ends)

CNC Machine #245 milling plate S4B-h4. (Milling excess stock off ends)

The following plates were noted staged throughout the shop in various stages of processing.

Bay 1 – Plates:

S3B-g3. Formed, stressed relieved and partially machined.

S3B-h3. Formed, stressed relieved and partially machined.

S4B-g4. Formed, stressed relieved and partially machined.

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Bay 2 – Plates:

S3C-b3. Formed, stressed relieved and partially machined.
S3C-c3. Formed, stressed relieved and partially machined.
S3C-g3. Formed, stressed relieved and partially machined.
S3C-h3. Formed, stressed relieved and partially machined.
S4B-c4. Formed, stressed relieved and partially machined.
S4C-h4. Formed, stressed relieved and partially machined.

Bay 3 – Plates:

S3B-e3. Formed, stressed relieved and partially machined.
S4B-e4. Formed, stressed relieved and partially machined.
S3C-e3. Formed, stressed relieved and partially machined.
S4C-e4. Formed, stressed relieved and partially machined.

Bay 4 – Plates:

S3B-a3. Formed, stressed relieved and partially machined.
S3B-b3. Formed, stressed relieved and partially machined.
S3B-c3. Formed, stressed relieved and partially machined.
S3B-f3. Formed, stressed relieved and partially machined.
S3C-d3. Formed, stressed relieved and partially machined.
S3C-f3. Formed, stressed relieved and partially machined.
S4B-a4. Formed, stressed relieved and partially machined.
S4B-b4. Formed, stressed relieved and partially machined.
S4B-d4. Formed, stressed relieved and partially machined.
S4B-f4. Formed, stressed relieved and partially machined.
S4C-a4. Formed, stressed relieved and partially machined.
S4C-f4. Formed, stressed relieved and partially machined.
Pallet of R3 plates.

Welding jig Bay 4 – S10C assembly Plates:

S10C-a1. Formed, stressed relieved and partially machined.
S10C-a2. Formed, stressed relieved and partially machined.
S10C-b1. Formed, stressed relieved and partially machined.
S10C-b2. Formed, stressed relieved and partially machined.
S10C-c1. Formed, stressed relieved and partially machined.
S10C-d1. Formed, stressed relieved and partially machined.

This QAI noted the tack welding of the above mentioned plates in the welding jig. The tack welding was done by qualified Jeffery Hennington (476) and Benjamin Rhodes (4810). The tack welding was done to the approved welding procedure (WPS) P2-W126-B. All tack welding done at the time of this inspector's arrival was monitored by Certified Welding Inspector (CWI) Fred Hudson. The tack welding finished up at 1630.

Hardie Tynes:

This QAI performed a walkthrough at the shop to verify plates on site and to observe Hardie Tynes personnel at

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work machining plates. Work performed at the Hardie Tynes shop as noted below:

It was noted by this QAI that there was no work being performed for this job at Hardie Tynes this evening.

The following plate was noted staged in the shop.

S3B-d3. Formed, stressed relieved and partially machined.



Summary of Conversations:

This QAI spoke with CWI Fred Hudson and the welding supervisor about the plan for welding the root pass on the S10C assembly this evening. This QAI was informed that they would weld the root pass in the morning as they did not have the time to do it this evening.

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: Webster, Andrew

Quality Assurance Inspector

Reviewed By: Foerder, Mike

QA Reviewer