

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 78.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030089**Date Inspected:** 30-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Steward Machine Co.**Location:** Birmingham, AL

CWI Name:	Fred Hudson (Cert. #01061501)	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:	E3 Shear Key Anchorages	

Summary of Items Observed:

Quality Assurance Inspector (QAI) Fritz Belford 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. Material Test Reports (MTRs) for all materials used have been reviewed and approved by others at the XKT shop in Vallejo California prior to shipping to Steward Machine Company. The following items were observed:

STEWARD MACHINE - PLANT 1:

The QA 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:

S3B Assembly:

The assembly straps and S3 fillet welds at side A were MT inspected. Sikadur 35LV was reapplied to the bottom side of the assembly to fill a 10mm deep incomplete fill. After the Sikadur 35LV has cured the assembly was prepped for coating.

S4C Assembly:

Steward shop personnel were observed fitting and welding the assembly straps in place after the final MT of the e4 to f4 welds at sides A & B. Welder Jeff Hennington (#476) was observed utilizing Welding Procedure Specifications (WPS) P2-W128-B and P2-W126-B for FCAW-G in the 1G position. The welding parameters were observed adjusted and monitored by Certified Welding Inspector (CWI) Fred Hudson (Cert. #01061501) who was onsite with the WPS as required by contract documents. The welding parameters were measured to be

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28volts/290amps using 1/16" Class E70T-1 filler and 100% CO2 at 40cfm.

S3C Assembly:

Staged at Bay 4 for further processing.

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

Bay 4 – Plate:

S3C-e3. Milling complete.

COMPONENT RELEASES.

None.

NON-DESTRUCTIVE TESTING (NDT).

S3B:

- Strap PJP Welds and S3 Fillet welds on side A. (MT acceptable. See TL-6028 for MT report)

S4C:

- Final MT for the e4 to f4 weld at sides A & B. (MT acceptable. See TL-6028 for MT report)

- Root pass at Sides A & B straps. (MT acceptable. See TL-6028 for MT report)

The QC Inspector was observed performing 100% Magnetic Particle Testing (MPT) and accepting of items noted above prior to QA Inspector's verification MPT.



Summary of Conversations:

While performing VT and MT of assembly S3B the QAI noted the bottom side gap was not completely filled to the top with the Sikadur 35LV. The QAI inquired of the QCI if he was aware of the issue and was informed he was and that the matter will corrected before painting of the assembly.

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.

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Inspected By:	Belford, Fritz	Quality Assurance Inspector
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Reviewed By:	Foerder, Mike	QA Reviewer
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