

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015644**Date Inspected:** 12-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Bonifacio Daquinag, Mike Johnson, CWI Present			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:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 5W/6W, and the following observations were made:

5W/6W-A

A5

Upon the arrival of the QA Inspector in the am it was observed the above identified weld joint was fit up with the approved temporary attachments or fit up gear in place. The QA Inspector performed dimensional measurements of the fit up of the two top deck plate members. The QA Inspector noted prior to any weld being deposited in the weld joint, the above identified weld joint was found to have zero planar misalignment. Upon the arrival of the QA Inspector in the am the flowing locations were found to have planar misalignment. It was noted the dimensional measurements were taken at 0800 while the steel was 58°F:

- 1.) Y=0mm-80mm (8mm-2mm) A1
- 2.) Y=2025mm-2055mm (3mm-3.5mm)A1
- 3.) Y=8890mm-8950mm (3mm) A2
- 4.) Y=22870mm-23135mm (3mm) A5
- 5.) Y=23460mm-23650mm (3.5mm) A5

The QA Inspector informed the SE QC Inspector Bonifacio Daquinag of the planar misalignment identified above (see summary of conversation). The QA Inspector randomly observed both of the top deck plates had been joined

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

by welding. The QA Inspector noted the full length tack welds appeared to approximately 60% complete upon the arrival of the QA Inspector in the am. The QA Inspector noted the all of the weld segment A1 and approximately at the 6800mm mark in weld segment A2 was tack welded with flux cored arc welding (FCAW). The QA Inspector noted the all of the weld segment A5 and approximately at the 20000mm mark in weld segment A4 was tack welded with flux cored arc welding (FCAW). The QA Inspector noted the entire remaining weld joint was welded with shielded metal arc welding (SMAW). The QA Inspector noted the ABF welder James Zhen was performing SMAW in the center of the weld joint. The QA Inspector repeated the dimensional measurements of the same areas previously measured and noted the time and temperature were 1130 and the steel was 63°F. The QA Inspector noted there was no change from the dimensional measurements taken above.



Summary of Conversations:

The QA Inspector informed the QC Inspector of the planar misalignment and asked him if he wanted to review it together for continuity of the dimensional measurements. The QC Inspector informed the QA Inspector no additional measurements will be performed by SE QC. The QC Inspector went on to inform the QA Inspector he was instructed by the Lead QC Inspector Mike Johnson not to perform any additional measurements, the weld joint was previously accepted and will not be rechecked. The QA Inspector informed the QC Inspector the original measurements have changed and some areas of the weld joint are not within the tolerances of AWS D1.5. The QC Inspector reiterated no additional measurements will be taken. The QA Inspector informed the QC Inspector and made sure he was aware there are areas of the weld joint that he accepted that did not comply with the bridge welding code.

The ABF Welding Superintendent Dan Ieraci informed the QA Inspector after the tack welding is completed, ABF will begin setting up to perform the submerged arc welding root pass. Mr. Ieraci informed the QA Inspector the root pass will be started late tomorrow or Wednesday morning.

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 Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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