

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: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027760
Date Inspected: 13-Jun-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
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:

Electroslag Weld Repairs

This QA Inspector randomly observed ABF/JV qualified welder Wai Kit Lai #2953 performing Flux Core Arc Welding (FCAW) using E71T-1M ESAB Dual Shield 70 Ultra Plus electrodes and implementing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-3000-3-Repair. The joint being welded was tower shear plate designated as ESW weld, location "T" from face B was initiated on 6/12/2012. Location for this repair was: Weld "T" – Y=6810mm. During welding, ABF Quality Control (QC) Ted Ilo was noted monitoring the welding parameters (Amps, Volts and Travel Speed). This QA Inspector noted that between passes the welder was cleaning the work using a small disc grinder as QC measured the inter-pass temperatures with Tempilstik Heat Indicators. At the time of the observations no issues were noted by this QA Inspector. On subsequent observations to monitor quality, it was noted that the work was completed and appeared to be in general conformance with the contract documents.

This QA Inspector randomly observed ABF/JV qualified welder Jin Pei Wang #7299 performing FCAW using E71T-1M ESAB Dual Shield 70 Ultra Plus electrodes and implementing Caltrans approved WPS, ABF-WPS-D1.5-3000-3-Repair. The joint being welded was tower shear plate designated as ESW weld, location "T" from face B was initiated on 6/12/2012. Location for this repair was: Weld "T" – Y=9135mm. During welding,

WELDING INSPECTION REPORT

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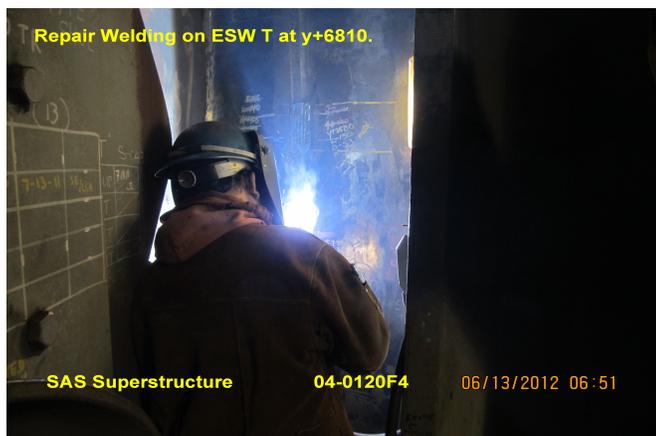
ABF QC Ted Ilo was observed monitoring the welding parameters (Amps, Volts and Travel Speed). This QA Inspector noted that between passes the welder was cleaning the work using a small disc grinder as QC measured the inter-pass temperatures with Tempilstik Heat Indicators. At the time of the observations no issues were noted by this QA Inspector. On subsequent observations to monitor quality, it was noted that the work was completed and appeared to be in general conformance with the contract documents.

Electroslag Weld Excavation

This QA observed ABF/JV welding personnel Jin Pei Wang #7299 performing excavation of an Electroslag Weld (ESW) previously Ultrasonic Tested (UT) by Quality Control (QC) technicians. The weld being excavated is designated as "ESW F" and was excavated at locations: Weld "F" – Y=8640mm, L=158mm, W=33mm, D=40mm. The carbon arc gouging process, as well as machine grinding, was used to excavate approximately 2mm-5mm at a time. In between excavation passes both QA and QC performed Magnetic Particle Testing (MT). At 20mm depth and 25mm depth, no indications were found.

Summary of Conversations:

Conversations were relevant to welding performed and information unique with each location.



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

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
