

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027838**Date Inspected:** 23-Jun-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site

CWI Name:	N/A	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:	Tower	

Summary of Items Observed:

Quality Assurance Inspector (QAI) Rodney Patterson 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:

The QAI was provided ABF QC reports to verify, utilizing ultrasonic testing for the Tower Shear Plate weld connection designated as E-045 #24 "F". The weld has been previously repaired and tested by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.4 and supplemental contract document SE-UT-D1.5-CT-108-ESW. The QA was informed previously that transverse indications were observed in repair excavations on similar Electro slag welds (ESW) on earlier dates and that scanning pattern "E" will need to be utilized in order to detect these indications. Due to the presence of weld reinforcement the QAI was unable to size the length and measure the "X" location on the welds in way of the suspected transverse indications. Discrepancies were discovered on the QC report by the QAI and not reported and or miss-reported on QC UT report provided.

The following Rejectable indications discovered and not reported on QC UT report provided.

Face A (Weld E-045 #24 "F")

Y=3360, X= +10, Sound Path=143, Depth=49, Length 190mm, -4 (class A reject)

QC Report shows previous repair at Y=3340.

Y=3920, X= -35, Sound Path=42, Depth=14.5, Length 20mm, -2 (class A reject)

QC Report shows as recordable from face B at Y=3900. In way of previous repair.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The following recordable indications were detected at scanning level exceeding 50mm in length but were not present on the QC UT report.

Face B (Weld E-045 #24 "F")

Y=9330, X= -15, Sound Path=84, Depth=32, Length 70mm, +9 (ESW recordable)

Y=9520, X= -15, Sound Path=99, Depth=34, Length 235mm, +6 (ESW recordable)

The following suspected transverse indications detected ultrasonically on this date are not rejectable nor recordable in accordance with AWS D1.5-2002, section 6, table 6.4, however many were observed to exhibit planar characteristics.

Face A (Weld E-045 #24 "F")

Y=200, Sound Path=112, Depth=38, +10, Planar characteristics confirmed from face B.

Y=200, Sound Path=112, Depth=38, +10, Confirmed from face B.

Y=320, Sound Path=64, Depth=22, +22, Planar characteristics confirmed from face B.

Y=440, Sound Path=81, Depth=27, +21, Confirmed from face B.

Y=480, Sound Path=75, Depth=25, +14, Confirmed from face B.

Y=520, Sound Path=107, Depth=36, +11, Planar characteristics confirmed from face B.

Y=900, Sound Path=72, Depth=24, +11, Planar characteristics confirmed from face B.

Y=1090, Sound Path=107, Depth=36, +21, Planar characteristics confirmed from face B.

Y=1245, Sound Path=98, Depth=33, +18, Planar characteristics confirmed from face B (+2 rating from face B).

Y=1470, Sound Path=105, Depth=38, +17, Planar characteristics confirmed from face B.

Y=4580, Sound Path=105, Depth=38, +17, Confirmed from face B.

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

Inspected By: Patterson,Rodney

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer