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 #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

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

Report No: WIR-028606
Date Inspected: 15-Oct-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: Tower

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford 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:

Ultrasonic Testing of ESW
ESW T, Face B:

This QA performed Ultrasonic Testing (UT) of Tower Electroslag Complete Joint Penetration (CJP) shear plate welds designated as “ESW T” on face B.

This weld was tested in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

Due to safety concerns and access to testing area, testing was performed in tandem using Quality Control Technician Andrew Keech’s scope. This QA observed Mr. Keech calibrate his scope and perform testing on this date.

The following indications were observed. Due to joint configuration and weld cap shape, indications observed as having a transverse orientation could not be evaluated for length or “X” location.
Y locations are recorded as:

Indication #1: Y= 2110mm
Sizing – A=59db, B= 42db, C= 7db, D= 10db
X= -3mm, L= 70mm

Sound Path= 120mm, Depth= 45mm

Indication #2: Y= 2290mm
Sizing – A=71db, B= 42db, C= 15db, D= 14db
Sound Path= 216mm, Depth= 77mm

Indication #3: Y= 2310mm
Sizing – A=70db, B= 42db, C= 9db, D= 19db
Sound Path= 139mm, Depth= 50mm

Indication #4: Y= 2700mm
Sizing – A=58db, B= 42db, C= 7db, D= 9db
X= -5mm, L= 65mm
Sound Path= 111mm, Depth= 43mm

Indication #5: Y= 3120mm
Sizing – A=56db, B= 42db, C= 5db, D= 9db
X= -8mm, L= 130mm
Sound Path= 93mm, Depth= 47mm

Indication #6: Y= 3125mm
Sizing – A=66db, B= 42db, C= 7db, D= 17db
Sound Path= 111mm, Depth= 40mm

Indication #7: Y= 3200mm
Sizing – A=70db, B= 42db, C= 9db, D= 19db
Sound Path= 137mm, Depth= 49mm

Indication #8: Y= 3340mm
Sizing – A=59db, B= 42db, C= 8db, D= 9db
X= -7mm, L= 70mm
Sound Path= 123mm, Depth= 45mm

Indication #9: Y= 3490mm
Sizing – A=69db, B= 42db, C= 7db, D= 20db
Sound Path= 111mm, Depth= 40mm

Indication #10: Y= 3585mm
Sizing – A=69db, B= 42db, C= 7db, D= 20db
Sound Path= 109mm, Depth= 39mm

Indication #11: Y= 3630mm
Sizing – A=55db, B= 42db, C= 4db, D= 9db
X= -7mm, L= 75mm

Sound Path= 75mm, Depth= 53mm

Indication #12: Y= 3690mm
Sizing – A=72db, B= 42db, C= 6db, D= 24db
Sound Path= 102mm, Depth= 37mm

Indication #13: Y= 3740mm
Sizing – A=68db, B= 42db, C= 9db, D= 17db
Sound Path= 145mm, Depth= 52mm

Indication #14: Y= 3960mm
Sizing – A=66db, B= 42db, C= 9db, D= 15db
Sound Path= 140mm, Depth= 50mm

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Conversation was relevant to testing performed during this shift.

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:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer