

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-028628
Date Inspected: 16-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, 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:

*Note- Depths are recorded from Face A.

Page #1

Indication #1: Y= 4225mm

Sizing - A=71db, B= 42db, C= 8db, D= 21db

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Sound Path= 129mm, Depth= 34mm

Indication #2: Y= 4235mm

Sizing – A=67db, B= 42db, C= 9db, D= 16db

Sound Path= 143mm, Depth= 39mm

Indication #3: Y= 4260mm

Sizing – A=60db, B= 42db, C= 6db, D= 12db

X= -9mm, L= 50mm

Sound Path= 101mm, Depth= 44mm

Indication #4: Y= 4360mm

Sizing – A=71db, B= 42db, C= 6db, D= 23db

Sound Path= 105mm, Depth= 42mm

Indication #5: Y= 4415mm

Sizing – A=70db, B= 42db, C= 5db, D= 23db

Sound Path= 89mm, Depth= 48mm

Indication #6: Y= 4590mm

Sizing – A=68db, B= 42db, C= 14db, D= 12db

Sound Path= 197mm, Depth= 9mm

Indication #7: Y= 4625mm

Sizing – A=58db, B= 42db, C= 7db, D= 9db

X= -17m, L= 25mm

Sound Path= 111mm, Depth= 41mm

Indication #8: Y= 4995mm

Sizing – A=71db, B= 42db, C= 8db, D= 21db

Sound Path= 122mm, Depth= 36mm

Indication #9: Y= 5120mm

Sizing – A=61db, B= 42db, C= 5db, D= 14db

X= 0mm, L= 35mm

Sound Path= 92mm, Depth= 48mm

Indication #10: Y= 5190mm

Sizing – A=70db, B= 42db, C= 15db, D= 13db

Sound Path= 214mm, Depth= 4mm

Indication #11: Y= 5270mm

Sizing – A=60db, B= 42db, C= 8db, D= 10db

X= -19mm, L= 35mm

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Sound Path= 132mm, Depth= 33mm

Indication #12: Y= 5370mm

Sizing – A=67db, B= 42db, C= 7db, D= 18db

Sound Path= 108mm, Depth= 41mm

Indication #13: Y= 5485mm

Sizing – A=70db, B= 42db, C= 14db, D= 14db

Sound Path= 199mm, Depth= 9mm

Indication #14: Y= 5495mm

Sizing – A=70db, B= 42db, C= 8db, D= 20db

Sound Path= 122mm, Depth= 36mm

Indication #15: Y= 5660mm

Sizing – A=70db, B= 42db, C= 8db, D= 20db

Sound Path= 122mm, Depth= 36mm

Indication #16: Y= 5720mm

Sizing – A=64db, B= 42db, C= 7db, D= 15db

Sound Path= 120mm, Depth= 37mm

Indication #17: Y= 5725mm

Sizing – A=70db, B= 42db, C= 8db, D= 20db

Sound Path= 121mm, Depth= 36mm

Indication #18: Y= 5870mm

Sizing – A=71db, B= 42db, C= 8db, D= 21db

Sound Path= 130mm, Depth= 33mm

Indication #19: Y= 5960mm

Sizing – A=70db, B= 42db, C= 8db, D= 20db

Sound Path= 123mm, Depth= 36mm

Page #2

Indication #1: Y= 2110mm

Sizing – A=59db, B= 43db, C= 7db, D= 10db

X= -3mm, L= 70mm

Sound Path= 120mm, Depth= 37mm

Indication #2: Y= 2290mm

Sizing – A=71db, B= 43db, C= 15db, D= 15db

Sound Path= 216mm, Depth= 3mm

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Indication #3: Y= 2310mm

Sizing – A=70db, B= 43db, C= 9db, D= 19db

Sound Path= 139mm, Depth= 31mm

Indication #4: Y= 2700mm

Sizing – A=58db, B= 43db, C= 7db, D= 9db

X= -5mm, L= 65mm

Sound Path= 111mm, Depth= 41mm

Indication #5: Y= 3120mm

Sizing – A=56db, B= 43db, C= 5db, D= 9db

X= -8mm, L= 130mm

Sound Path= 93mm, Depth= 47mm

Indication #6: Y= 3125mm

Sizing – A=66db, B= 43db, C= 7db, D= 17db

Sound Path= 111mm, Depth= 41mm

Indication #7: Y= 3200mm

Sizing – A=70db, B= 43db, C= 9db, D= 19db

Sound Path= 137mm, Depth= 31mm

Indication #8: Y= 3340mm

Sizing – A=59db, B= 43db, C= 8db, D= 9db

X= -7mm, L= 70mm

Sound Path= 123mm, Depth= 36mm

Indication #9: Y= 3490mm

Sizing – A=69db, B= 43db, C= 7db, D= 20db

Sound Path= 111mm, Depth= 41mm

Indication #10: Y= 3585mm

Sizing – A=69db, B= 43db, C= 7db, D= 20db

Sound Path= 109mm, Depth= 41mm

Indication #11: Y= 3630mm

Sizing – A=55db, B= 43db, C= 4db, D= 9db

X= -7mm, L= 95mm

Sound Path= 75mm, Depth= 54mm

Indication #12: Y= 110mm

Sizing – A=72db, B= 43db, C= 6db, D= 24db

Sound Path= 102mm, Depth= 43mm

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Indication #13: Y= 3740mm

Sizing – A=68db, B= 43db, C= 9db, D= 17db

Sound Path= 145mm, Depth= 28mm

Indication #14: Y= 3960mm

Sizing – A=66db, B= 43db, C= 9db, D= 15db

Sound Path= 140mm, Depth= 30mm

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
