

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-029027
Date Inspected: 22-Jan-2013

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 P, Face A:

This QA performed Ultrasonic Testing (UT) on approximately 2150mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW P" face A. Location (Y=3000~5150) of this weld was inspected using this testing method.

This weld has been confirmed by QC Ultrasonic technicians in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

This QA/QC observed three (3) recordable longitudinal indications at the time of testing.

This QA generated a TL-6027 UT report on this date.

Due to joint configuration and weld cap shape the transverse indications could not be evaluated for length or "X" location.

Indication #1: Y= 3130mm

Sizing – A=66db, B= 51db, C= 7db, D= 9db

X= -0mm, L= 40mm

Sound Path= 110mm, Depth= 37mm

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Indication #2: Y= 3470mm

Sizing – A=70db, B= 51db, C= 5db, D= 14db

X= 15mm, L= 30mm

Sound Path= 87mm, Depth= 29mm

Indication #3: Y= 3770mm

Sizing – A=71db, B= 51db, C= 7db, D= 13db

X= -0mm, L= 20mm

Sound Path= 112mm, Depth= 38mm

Indication #4: Y= 4800mm

Sizing – A=77db, B= 51db, C= 6db, D= 20db

Sound Path= 101mm, Depth= 34mm

Indication #5: Y= 5000mm

Sizing – A=81db, B= 51db, C= 5db, D= 21db

Sound Path= 94mm, Depth= 32mm

Ultrasonic Testing of ESW

ESW P, Face A:

This QA performed Ultrasonic Testing (UT) on approximately 1665mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as “ESW P” face A. Location (Y=8000~9665) of this weld was inspected using this testing method.

This weld has been confirmed by QC Ultrasonic technicians in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

This QA/QC observed three (3) recordable longitudinal indications at the time of testing.

This QA generated a TL-6027 UT report on this date.

Due to joint configuration and weld cap shape the transverse indications could not be evaluated for length or “X” location.

Indication #1: Y= 9185mm

Sizing – A=80db, B= 51db, C= 7db, D= 22db

Sound Path= 116mm, Depth= 39mm

Indication #2: Y= 9090mm

Sizing – A=75db, B= 51db, C= 8db, D= 16db

Sound Path= 125mm, Depth= 43mm

Indication #3: Y= 8600mm

Sizing – A=68db, B= 51db, C= 4db, D= 13db

X= 0mm, L= 20mm

Sound Path= 75mm, Depth= 25mm

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Indication #4: Y= 8830mm

Sizing – A=63db, B= 51db, C= 5db, D= 7db

X= 0mm, L= 90mm

Sound Path= 94mm, Depth= 32mm

Indication #5: Y= 8980mm

Sizing – A=70db, B= 51db, C= 7db, D= 12db

X= 0mm, L= 15mm

Sound Path= 114mm, Depth= 38mm

Indication #6: Y= 8690mm

Sizing – A=71db, B= 51db, C= 6db, D= 14db

Sound Path= 102mm, Depth= 33mm

Indication #7: Y= 8330mm

Sizing – A=80db, B= 51db, C= 9db, D= 18db

Sound Path= 133mm, Depth= 44mm

Indication #8: Y= 8240mm

Sizing – A=81db, B= 51db, C= 7db, D= 23db

Sound Path= 108mm, Depth= 37mm

Indication #9: Y= 8300mm

Sizing – A=81db, B= 51db, C= 9db, D= 12db

Sound Path= 132mm, Depth= 34mm

This QA performed UT of weld designated as ESW P in accordance with the approved supplemental procedure. Tandem report for work performed on this date has been completed by QC technician and signed by both QA/QC parties. Due to QA/QC disagreement on indication interpretation, tandem report may not reflect all indications discovered by QA at time of testing. Please see TL-6027 for complete listing of QA recorded indications.

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.

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Inspected By: Clifford, William

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer