

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024919**Date Inspected:** 30-Jun-2010**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: Mike Johnson
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A

Bridge No: 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation 13Meters Shear Plate Electro Slag Welding (ESW);

This QA was present at the Tower Base to observe the Electro Slag Welding of the weld number E-043 located at 'Q' position per ABF weld map. The weld joint to be welded is an 80-100 mm transition butt joint on shear plate to Tower East Shaft. ABF intends to implement Caltrans approved welding procedure ABF-WPS-ESW-80-100TR in performing the ESW.

Upon QA's arrival, ABF personnel were noted preparing to weld the shear plate transition butt joint by checking all the necessary electrical and water hose weld shoe cooling connections are all in place prior to commence ESW. It was noted that three weld shoes were in position at each opposing side of the joint and so with the consumable guide tube that was placed in between the joint gap which was separated every six inches with consumable ceramic insulators. Other ABF personnel that were noted assisting the preparation of the ESW include ABF Production Manager John Callaghan, ABF Engineer Daniel Hester and Dan Danks of Oregon Institute of Technology.

The fit up alignment was jointly checked by ABF QC Jesse Cayabyab and this QA. The root gap was measured from bottom to top and the result noted was 16mm minimum and 25mm maximum which deemed in compliance to the WPS. The result noted on the offset verification was less than 3.0mm on most of the part except on the

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following which has exceeded the maximum allowed. According to Mike Johnson, results of the fit up verification will also be submitted to ABF and Caltrans for review;

Y-location Offset Length

5100mm to 9780mm 6mm 4680mm

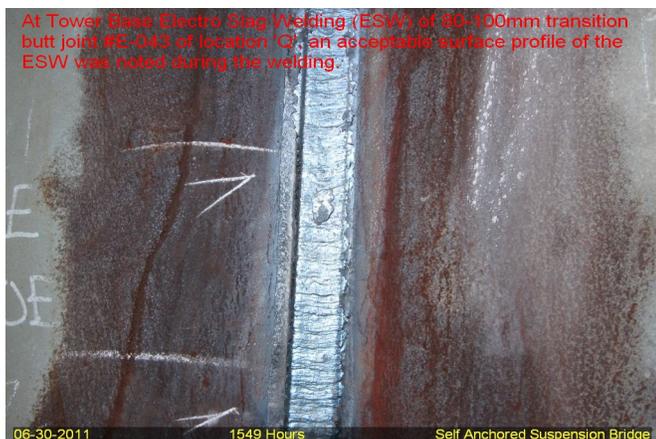
4640mm to 5100mm 4mm 460mm

2030mm to 4640mm 2mm 2610mm

At 1400hours, due to absence of ABF Operations Superintendent Dan Ieraci, ABF Production Manager John Callaghan took over and performed the check list verification with ABF QC Mike Johnson.

At around 1410hours, all ABF personnel involved in the ESW converged and performed a pre-operations meeting reminding each and everyone's role in performing their job. After the meeting, ABF personnel went to their own respective assignment and positioned themselves and got ready for the start.

Initial firing of the ESW has started at 1424 hours and it was successful and that the welding parameters have stabilized. The operation continued until the successful completion of the joint at around 1842 hours.



Summary of Conversations:

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No significant conversation occurred today.

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

Inspected By:	Lizardo,Josecito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
