

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026659**Date Inspected:** 04-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Watson Bowman ACME**Location:** Buffalo, NY**CWI Name:** Reno Davis, John Crabtree**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:** Hinge A**Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Kenneth Riley was present at the Watson Bowman Acme Corporation (WBA) facility, as requested, in Buffalo, New York to observe fabrication activities of the Seismic Expansion Joint Hinge A lanes for the San Francisco Oakland Bay Bridge (SFOBB) project.

This (QAI) Inspector met with Watson Bowman Acme Corporation (WBA) Quality Control (QCS) Supervisor John Miller and KTA-Tator (ABF Representative), Certified Welding Inspectors (CWI), Reno Davis Day Shift, and Mr. John Crabtree night shift. ABF Representatives are the Quality Control personnel for this location.

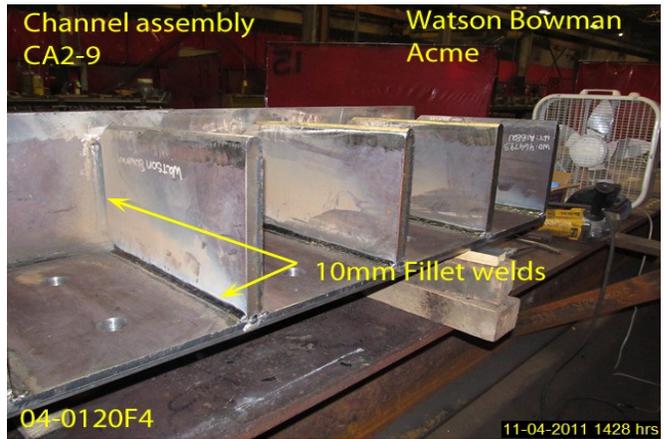
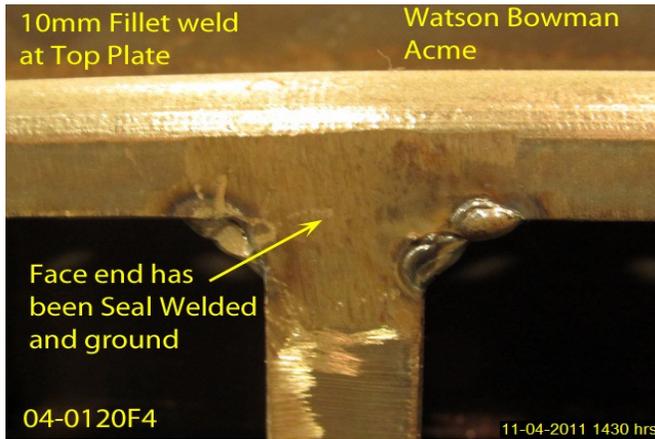
This QAI arrived at Eagle Fabrication the Sub Contractor for Watson Bowman Acme (WBA) that is doing the 19mm taper for the support plates. The first plate that was placed into the rollers and the 19mm taper was applied at the wrong location. This was discovered after the taper was applied. Eagle fabrication stated that they could flatten the plate to the original flatness with the rollers then place the proper taper at the correct location on it at a later date. Eagle Fabrication then placed the second SP2 support plate SEI112667SP2 into the rollers to produce the taper at the proper location 1111mm from the end. After the pressure was applied and the plate was measured, it was discovered that the measurements were not consecutive across the entire width of the plate or at the required 19mm measurement. The measured taper was +3mm on the left edge and approximately +/- 12mm on the right edge. The fabricator then measured SP1 plate prior to the taper to be applied and discovered that the flatness appeared to vary from 3mm ~ 16mm. This QAI suggested that Eagle Fabrication contact WBA with the measurements from this morning process and to get measurements from a variety of the support plates and send them to WBA QCM Greg Ross.

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During random observations it was observed that WBA was adding a seal weld at the face of the stiffeners were the 10mm fillet weld and the PJP weld terminated. This weld is not approved on the shop drawings. An incident report will be generated for this issue and submitted to the Structural Materials Representative (SMR) see photos below.

Also noted was welder Jayson Gray performing Flux Core Arc Welding (FCAW) welding on component SEI112667-CA2-9, using Hobart (Tri-Mark) TM-811N1 electrode. The weld joint was identified as a 10mm fillet weld that joined the top plate and back plates to the stiffeners. WBA was using WPS, FCAW-11 for multi-pass fillet weld. The parameters were checked by ABF QC which appeared to be within the specified Welding Procedure Specification's (WPS). Mr. Gray was also observed using a rose bud torch to pre-heat the areas to 93 degrees Celsius (200F). John Crabtree is monitoring the welding for ABF on the night shift were James DiVirgillio is performing welding and fit up of CA2-10.

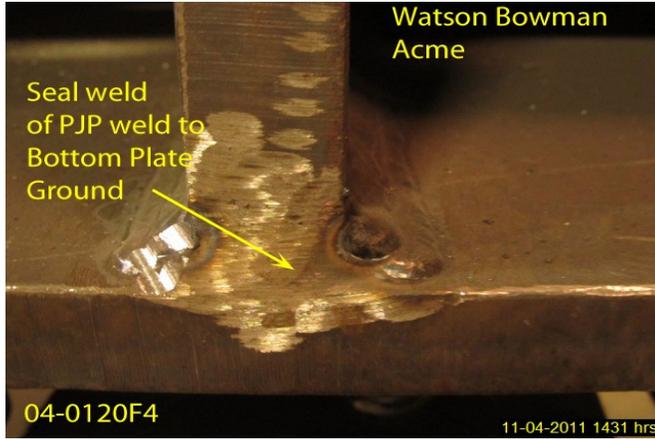


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## Summary of Conversations:

Basic conversation, fundamental to completion of the tasks at hand, occurred between this QAI, ABF QC, and WBA personnel .

## 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.

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<b>Inspected By:</b>	Riley, Ken	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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