

**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-026486**Date Inspected:** 07-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**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:** OBG**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 (QA) Inspector met with Watson Bowman Acme Corporation (WBA) Quality Control (QC) Supervisor John Miller and KTA-Tator (ABF Representative), Certified Welding Inspectors (CWI), Reno Davis (Day Shift, and Mr. John Crabtree night shift.

This QAI observed WBA welding personnel Jason Gray performing Flux Core Arc Welding (FCAW) welding on component SEI112667-CA3-2, using Hobart (Tri-Mark) TM-811N1 electrode. The weld joint was identified as a Complete Joint Penetration weld that joined the top plate to the back plate and side plate to top plate. WBA is using WPS, FCAW-13 (CJP) TC-U4b-F, the parameters were checked by ABF QC which appeared to be within the specified Welding Procedure Specification's (WPS). Mr. Gray completed the welding on this component and proceeded with visual pick up as identified by QC and QA.

This QAI also observed WBA welding personnel John DiVirgillio performing Flux Core Arc Welding (FCAW) welding on component SEI112667-CA3-1, using Hobart (Tri-Mark) TM-811N1 electrode. The weld joint was identified as a Complete Joint Penetration weld that joined the Back plate to the bottom plate under, TC-U4b-F under WPS FCAW-13 (CJP). This weld was completed during the working shift for this component. Mr. DiVirgillio was also observed using a rose bud torch to pre-heat the areas to 93 degrees Celsius (200F). The FCAW-11 is waiting for the single pass soundness test to be passed by WBA. Contractor is proceeding at their own risk with single pass welding which they have been informed.

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

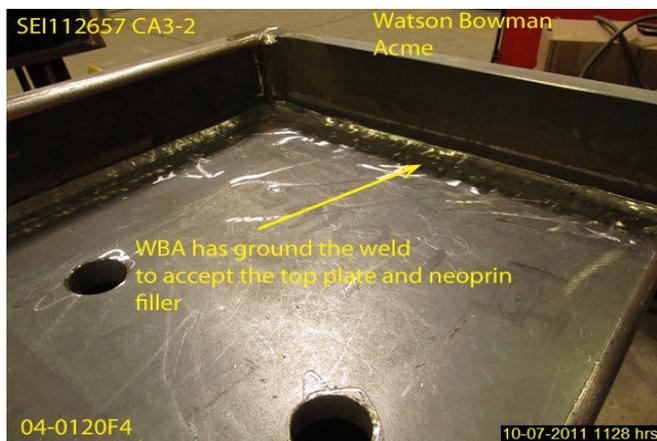
---

All CJP welds were back gouged to visual sound metal and verified by ABF QC prior to performing the welding operations.

WBA has the following outstanding work items;

- 1)WPS soundness test for single pass fillet
- 2)Needs approved WPS for Partial Joint Penetration (PJP) Weld for Joint detail TC-P5-F
- 3)16 plates rejected for CA2 due to burned (flame Cut) Holes.
- 4)Base metal repair procedure.

WBA Quality Control Manager (QCM) Greg Ross spoke with this QAI concerning the weld soundness test for single pass fillet. The QCM stated that he would respond to the NCR that had been written by removing all single pass fillet welds and welding them with Shielded Metal Arc Welding (SMAW) and from this date forward he would weld with the SMAW process for the single pass fillet welds.



### 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.

---

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

---