

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026585**Date Inspected:** 26-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2100**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 (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 performed a random QA Verification on deck plate SEI112667AC-2 for dimensional checks for the treads, counter bores, bolt holes and thicknesses. This was performed along with Mr. Reno Davis the ABF representative here at WBA. The dimensions were checked using a bridge cam gauge, tape measure and digital slide ruler. The large counter bore diameter measured 90mm across with a depth of 38mm from the top tread the bolt hole measured 40mm in diameter. The small counter bore diameter was measured at 38mm with a bolt hole diameter of 22mm. The depth was 25mm for the counter bore. The treads were measured at 3mm overall height with 1mm recess 25mm in length. The spacing between tread runs and recesses were 25mm also. Plate thickness from tread height was 85mm with an overall width and length of 1780x2873. The random observation appeared to be within the contract documents at the time of verification.

This QAI spoke with Greg Ross the QCM of the ongoing status for the submittals that were discussed last week when the SMR was onsite. As of this date no submittals have been sent for approval to ABF or Caltrans as discussed on 10-18-11. The time line that was given to this QAI and the SMR was by close of business on Friday

# WELDING INSPECTION REPORT

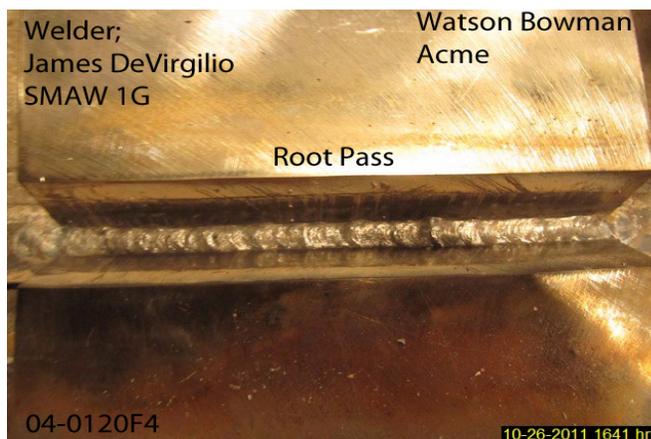
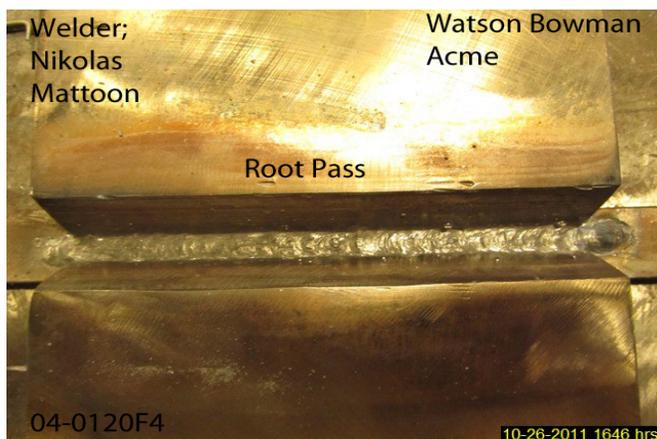
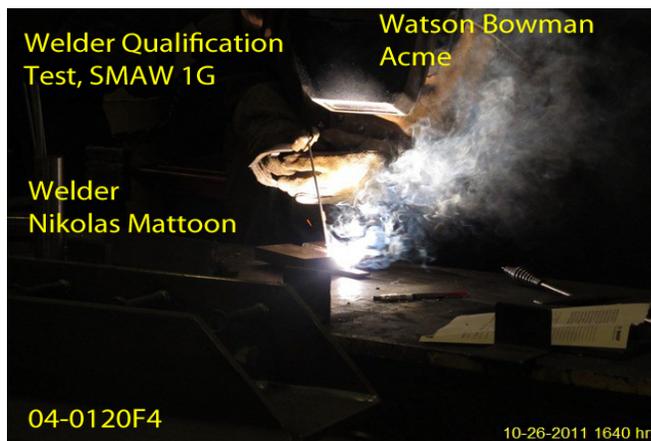
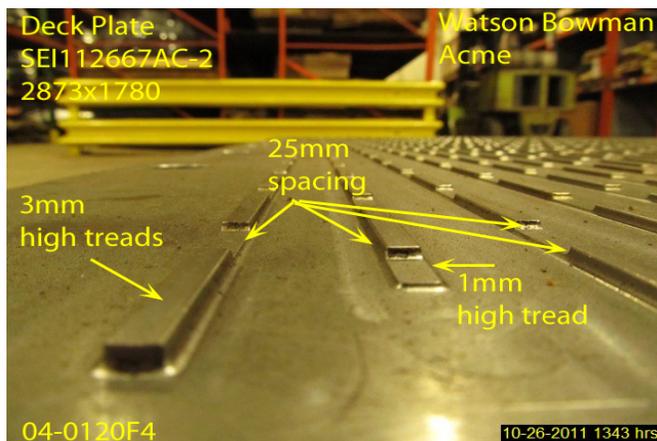
( Continued Page 2 of 3 )

the 21st of October 2011 which was not met. The QCM Mr. Ross stated today that he was still working on the matrix for WBA and needed to add the SMAW welder qualifications. The outstanding items are listed below.

- 1)WQCP red line notes
- 2)Top Plates
- 3)Base Metal Repairs
- 4)PJP WPS
- 5)Fillet weld soundness test single pass

WBA performed two (2) welder qualifications for Shielded Metal Arc Welding (SMAW) process with the test plate in the Flat (1g) position [changed from the previous 3F as stated in yesterday's report]. The welders were Nikolas Mattoon and James DeVirgilio. The WPS that was used was identified as SMAW-5-Welder Test-1G using 3/32 E7018H4R electrodes. The measured amps were 110+/- and volts 26.5 +/- . Material used for the test was 25mm, A588 to A588 steel with backing. The welding started at 1930 hrs and concluded at 0200 hrs. The root pass was welded in 3 passes for both welders which appeared to have an acceptable visual appearance. Mr. John Miller the WBA QC supervisor, Mr. John Crabtree and this QAI was present for the welder qualification tests. This QAI was informed that the test pieces would be sent to Niagara Testing for cutting and side bend test. This QAI requested to be present during the bend test.

No production welding was observed on the day or night shift.



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# WELDING INSPECTION REPORT

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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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