

**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 #: 74.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012892**Date Inspected:** 31-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** Goodwin Steel, UK**Location:** Stoke-on-Trent, UK

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	Cable Band	

**Summary of Items Observed:**

The following report is based on METS observations at Goodwin Steel Castings, Stoke-on-Trent on this date:

QA inspector observed, Goodwin Steel Castings NDT Level II technician Mr. Alan Banks perform Magnetic Particle testing (MT) of Cable Band casting GG29441-2, B10-2-F. The MT was performed in accordance with ASTM standard E709 and Goodwin Steel Castings Magnetic Particle Procedure for Cable Band Castings MT06-09-02 revision 5, using the prod method with leach magnet contacts. Wet florescent magnetic particles were utilized. The direct current magnetizing current appeared to be approximately 1,800 amps. Mr. Banks marked several areas for additional surface preparation. The testing was not completed on this date.

The QA Inspector observed weld repairs in progress on Casting GG29438-2. Drawing Number 5540-B10-1-M. Mr. A. Barnett, Welder Number 59 was observed welding excavation number 6 on the Weld Excavation Map. Mr. Barnett was using WPS04-0120F4B Issue 5 which was available at the work station. The casting was preheated to 160 degrees C, and verified with a temp stick. Five (5) mm E7018-1 was being used and the rod quiver in use was warm to the touch. The welder was using 205 amps and 29 volts which is within the limits of the Welding Procedure Specification (WPS).

The QA inspector received a copy of the Goodwin Steel Castings "Weld Excavation Map" for casting GG29436-4 (R1), B9-1-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This second repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-100-10 was assigned for tracking purposes.

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# WELDING INSPECTION REPORT

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**Summary of Conversations:**

No relevant conversations.

**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>	Riegler,Randy	Quality Assurance Inspector
<b>Reviewed By:</b>	Edmondson,Fred	QA Reviewer

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