

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-010465**Date Inspected:** 26-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 745**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Goodwin Steel, UK**Location:** Trentham, UK

CWI Name:	N/A		
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:** Cable Band Castings**Summary of Items Observed:**

On this date, 11/26/2009, Caltrans, METS, Quality Assurance (QA) Inspector Mr. Mike Brcic was on site, Goodwin International (GI), Trentham, UK, to oversee the Quality Control processes with regard to material intended for use on our project.

NDT WITNESS

This QA inspector was on site, GI, to witness Magnetic Particle Inspection (MPI) of Cable Band Castings, steps G2 and G3, per Manufacturing Inspection Test Plan (MITP) 12-02-2009. Areas under test were of newly machined areas called Joint and Spot faces, identified as areas C and D in MITP.

QA Inspector witnessed inspection by Mr. Chris Fallows, Level II MT, of GI, performed on the following castings:

5540-B5-1-F (GG29425-5), machined Spot face and Joint face, areas C and D of MITP, no defects noted.

Method employed was Fluorescent Particle applied by aerosol, longitudinal magnetism induced by way of a contour probe, AC power. Particles were applied during induction of magnetism, making it the Continuous Method, as per Goodwin Procedure MT06-09-02 rev 4, ASTM E709 and contract documents.

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REPAIR WELDING

* GG29417-5 (B1-1-F) Observed welder W. Whyte, welder ID W6, performing Shielded Metal Arc Welding (SMAW) process using 3.2mm, E7018-1 electrode, in a 1G position. Parameters of WPS 04-0120F4A issue 4, were verified and followed; Amp average during observation was 120, voltage 21.7. Temperatures of casting exceeded 170° Celsius (preheat) and was below 232° Celsius for an interpass temperature (both values obtained by temperature sticks). Excavation was identified as #1R, "Minor", on the Weld Excavation Map.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.

Summary of Conversations:

A conversation took place between this MET's QA Inspector, Mr Mike Brcic, and Clive Ellis Weld Engineer, Chris Ryder QC Representative, as well as Steve Young, Weld Supervisor, of Goodwin International. It was observed on 11/25/09 by this QA Inspector, 4 separate excavations had been made one with a joining 'cap pass' (casting GG29417-7, B1-1-F). While there was no discrepancy regarding resulting weld, it was made clear in a discussion held this day, of the area limitation, established to be 65 squared centimeters, (found within the WPS) that which would change a Minor to a Major and then, require a Post Weld Heat Treat. All agreed and this QA Inspector is confident that all personnel will be made aware of WPS and contract requirements.

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, 1(510)385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Brcic,Michael	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer
