

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-012847**Date Inspected:** 25-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Goodwin Steel, UK**Location:** Trentham, UK

CWI Name:	N/A	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
Bridge No:	34-0006	Delayed / Cancelled:	Yes	No N/A
		Component:	Cable Band Castings	

Summary of Items Observed:

The following report is based on Caltrans METS QA Inspector Mr. Mike Brcic's observations at Goodwin International (GI), Trentham, UK on 25 March 2010.

SHOP REVIEW:

While this Caltrans QA Inspector was on site, GI, he had opportunity to review the progress of current castings located in the machine shop. The following castings and their current status, as they were observed this day by the Caltrans Inspector, is reflected here:

~ West Panel Point 100, B2 cable band GG29418-4 and GG29419-6: ABF-RFI-002073R00; Bore, over machined, with a reported, 30mm wide band. After conversation between Goodwin Works Production Supervisor, Darren Edwards and Machinist, Paul Great, it the opinion of Goodwin that by reducing the "25mm" gap to a dimension 24.6mm, that this will allow for a new surfacing to take place per the response in RFI. (The discussion was relayed to this QA Inspector through Mr. Great) Upon return of this Caltrans QA Inspector to the TSS30 work station, the machinist performed a dimensional verification of the actual resultant bore, subsequent to new machining, overall maximum measurement (diametrically) was 784.580mm, radially equating to 392.29mm. Drawing requirement of 392 +.15 is exceeded by .14mm. As expected, the surface (30mm band) did, in fact clean up, with an acceptable groove profile. The intent of Goodwin International, per Mr. Alan Bentley, Quality Director, is to initiate an RFI, requesting a "fit for purpose" condition to exist for this panel point.

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REPAIR WELDING

GG29421-18 (B3-1-F) Observed welder D. McDonagh, welder ID DM596, performing Gas Tungsten Arc Welding (GTAW) process using 2.4 mm diameter filler material ER70S-A1 (.5% Mo), 3.2mm ceriated tungsten electrode in a 2G position. Shielding gas in use was 99.9 % pure Argon, at a flow rate of 12 liters a minute. Parameters of WPS 271 Rev 1 (casting repair cycle is classified as a Minor), were verified and followed; actual Amps during observation was 160, voltage 17.2. Temperature of casting was room temperature, 20°C (above 5°C minimum) interpass was below 235°C, confirmed with a temperature melting stick labeled 204C. "Excavation" in work was identified as #43, per the Weld Excavation Map. Observed travel speed and Heat input was 148 mm/min and 1.1 kj/min respectively.

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



Summary of Conversations:

See above for conversations that this QA Inspector was a party to.

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
