

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-007113**Date Inspected:** 10-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Goodwin Steel, UK**Location:** Stoke on Trent, UK**CWI Name:** Mr. Fred Hawksworth**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:** Cable Band**Summary of Items Observed:**

The following report is based on METS observations at Goodwin Foundry in Stoke on Trent, England.

Repair

QA inspector witnessed buildup welding of casting B8/M-1, GG29426-1 as submitted in ABF-SUB-000366 Rev. 31. The welder was observed welding in the flat position utilizing approved welding procedure WPS04-0120F4B. Parameters were observed to be within the limits of the WPS.

Dressing

Two Goodwin employees were observed removing excess material from the exterior surfaces of castings GG29420-16 and GG29420-10=8. The exterior surfaces of the castings were dressed by grinding. Work was not completed on this date and appears to meet the minimum requirements of the contract documents.

Radiography

The QA inspector witnessed radiography performed by Goodwin Steel Castings. Mr. Scott Bennett performed radiography on casting GG29434-1, B8/M-1. The casting was radiographed using a single wall exposure. The radiographs were performed using a 3.2mm effective focal spot size, 8MEV linear accelerator. The source to film distance was maintained at 2,500mm. Number 40 to 80 hole type and Set 1C wire type image quality indicators were placed source side on each different thickness radiographed. AGFA type D4 and D7 film of various sizes were used for single and composite views to cover the range of thicknesses. Radiography of this casting was not completed on this date. During the shift, radiography of the cable band was stopped and radiography was started on non Caltrans work.

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Visual Inspection

The QA inspector observed Applied Inspections certified welding inspector (CWI) Mr. Fred Hawksworth performing final visual inspection of cable band welded repairs. Mr. Hawksworth performed a review of the final NDT reports and Weld Logs in addition to the visual inspection.

Mr. Hawksworth found the following castings acceptable.

GG29416-2 (B1/M) repairs as submitted in ABF-SUB-000366 Rev. 31.

GG29416-7 (B1/M) repairs as submitted in ABF-SUB-000366 Rev. 32.

GG29416-8 (B1/M) repairs as submitted in ABF-SUB-000366 Rev. 32.

GG29416-9 (B1/M) repairs as submitted in ABF-SUB-000366 Rev. 28.

GG29417-4 (B1/F) repairs as submitted in ABF-SUB-000366 Rev. 31.

GG29417-10 (B1/F) repairs as submitted in ABF-SUB-000366 Rev. 30.

GG29432-1 (B8/M) repairs as submitted in ABF-SUB-000366 Rev. 31.

GG29437-1 (B9/F) repairs as submitted in ABF-SUB-000366 Rev. 31.

The QA inspector observed Applied Inspections certified welding inspector (CWI) Mr. Fred Hawksworth performing visual inspection of cable band excavation maps. Mr. Hawksworth performed a review of the excavation NDT reports and in addition to the visual inspection of the excavations.

Mr. Hawksworth found the following castings acceptable.

GG29430-1 (B7/M) repairs as submitted in ABF-SUB-000366 Rev. 33.

GG29446-2 (B14/CBT) repairs as submitted in ABF-SUB-000366 Rev. 33.

GG29447-2 (B14/CBB) repairs as submitted in ABF-SUB-000366 Rev. 33.

GG29431-1 (B7/F) repairs.

Summary of Conversations:

Goodwin Steel Castings Quality Assurance Manager Mr. Jason Cross informed the QA inspector the subcontractor BST representative Mr. Seamus McShane has reported that forging contractor, Rolovet has reported that the start of bolt forging has been delayed approximately one week, due to a breakdown of their induction heater.

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.

Inspected By:	Lanz,Joe	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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