

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-008635**Date Inspected:** 19-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Goodwin Steel, UK**Location:** Stoke-on-Trent, UK**CWI Name:****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 Steel Castings, Stoke-on-Trent, UK on this date.

Reviewed results of radiography for casting GG29441-2 B10/F-2 against the Weld Excavation Map with Ian Pointon. One area does not appear to be excavated and will be marked and excavated. The Weld Excavation Map will be revised.

The QA inspector received and completed a review of the document packages including the Certificate of Conformity for;

GG29417-1, Drawing 5540-B-1-F; this casting is awaiting dispatch to Goodwin International.

This casting had been returned to the foundry to correct radius dimensions. The foundry operations are complete including Visual Inspection, Nondestructive Testing, Mechanical Testing, and casting repair.

The QA inspector received a copy of the Goodwin Steel Castings "Weld Excavation Map" for casting GG29443-1, B11-1-F. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This first repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-101-09 was assigned for tracking purposes.

The QA inspector received a copy of the Goodwin Steel Castings "Weld Excavation Map" for casting GG29420-7, B3-1-M. CA1 The Weld Excavation Map was revised due to a clerical error. Caltrans Lot Number B243-102-09

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was assigned for tracking purposes.

The QA inspector received a copy of the Goodwin Steel Castings "Weld Excavation Map" for casting GG29448-4, B15-1-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This first repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-103-09 was assigned for tracking purposes. The Report of Magnetic Particle testing was reviewed. That report indicated that Hamish Milligan performed magnetic particle testing of the excavations. The MT report did not record the particles used, it has been corrected.

QA inspector witnessed buildup welding of casting B3/F-12, GG29421-12. The welder, Mr. Adrian Barnett, was observed welding in the flat position utilizing approved welding procedure WPS04-0120F4B. He was using E7018-1 4mm electrode. The amperage being used was 150 Amps which is within the WPS limits of 100-180 Amps. Parameters were observed to be within the limits of the WPS.

QA inspector witnessed buildup welding of casting B3/M-5, GG29420-5. The welder, Mr. W Kaminski, was observed welding in the flat and vertical positions utilizing approved welding procedure WPS04-0120F4B. He was using E7018-1 4mm electrode. The amperage being used was 128 to 136 Amps which is within the WPS limits of 100-180 Amps. Parameters were observed to be within the limits of the WPS.

Summary of Conversations:

In a conversation with Chris Ryder, QA representative, Goodwin International, Mr Ryder indicated that it is planned to visit Bodycote, Austin Way, Great Barr, Birmingham B42 1DL to inspect bolts for release to BST following heat treatment. Of the four batches released to heat treatment, only one is being heat treated at this time. The visit is planned for 20 August, 2009. On Friday 21 August, 2009 a visit is planned to Caparo (CTT Ductile), Willenhall, West Midlands WV13 3XA to witness mechanical testing a cable band bolt blank.

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:	Riegler,Randy	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
