

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018637**Date Inspected:** 13-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**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**Summary of Items Observed:**

The following report is based on METS observations at Goodwin International, Trentham, UK on this date.

The QA Inspector was requested to observe measurement of the length of the suspender rope grooves on the cable band for panel point 22 east bound. The QA Inspector noted the following:

- ~The surface profile of the suspender rope grooves does not meet the requirement of ANSI 500.
- ~discontinuities in the suspender rope groove were noted.
- ~An arc strike was noted on an as cast surface.

This was pointed out to Mr. A. Cashmore who marked the casting for additional dressing. Digital photographs are included in this report.

The QA Inspector verified the condition of the B15 and B16 cable bands as follows:

B15 castings

- Male ID 1: both ends of the casting are machined with a counter bore, and the casting bore is finish machined
- Female ID 4: both ends of the casting are machined with a counter bore, and the casting bore is finish machined
- Male ID 2: both ends of the casting are machined with a counter bore.
- Female ID 2: both ends of the casting are machined with a counter bore.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

- Male ID 3: both ends of the casting are machined with a counter bore.
- Female ID 3: both ends of the casting are machined with a counter bore.

- Male ID 4: both ends of the casting are machined with a counter bore.
- Female ID 1: both ends of the casting are machined with a counter bore.

B16 castings

- Male ID 1: both ends of the casting are machined with a counter bore
- Female ID 1: both ends of the casting are machined with a counter bore.

- Male ID 2: both ends of the casting are machined with a counter bore.
- Female ID 2: both ends of the casting are machined with a counter bore.

- Male ID 3: both ends of the casting are machined with a counter bore.
- Female ID 3: both ends of the casting are machined with a counter bore.

- Male ID 4: both ends of the casting are machined with a counter bore.
- Female ID 4: No counter bore

The QA Inspector observed welding of Casting GG29438-2, Drawing Number 5540-B10-1-M. The welding was being performed by Mr. Dan McDonagh . Mr. McDonagh was using WPS 271 Revision 1. The welding was being performed at 17.3 volts and 160 amps. The heat input and the travel speed were being monitored. The filler metal was AWS A5.28 ER70S-A1 batch 14585. The shielding gas was Argon with a flow rate of 14 L/min These are within the allowable range of the WPS. Welding was being performed in the 3G position.

The QA Inspector observed casting GG29443-2(R2), Drawing 5540-B11-2-F in the welding booth being welded using WPS271 Rev. 1. This is a major repair and WPS 271 is qualified with out post weld heat treatment. The repair has not been approved by the engineer. Welding was immediately halted and Mr. M. Copestake, Production Manager was notified of the occurrence.

SHOP REVIEW:

The QA Inspector periodically observed the in process machining of an casting 5540-B16-1-F(3), GG29451-3, at horizontal a horizontal CNC Mill. The spot faces were being machined to finished dimensions. Goodwin International personnel performed the machining.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

Relevant conversations are documented above

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
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Reviewed By:	Edmondson,Fred	QA Reviewer
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