

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 #: 1.28**WELDING INSPECTION REPORT**

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027048
Date Inspected: 13-Jan-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name:	Bernard Docena	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:	OBG Sections	

Summary of Items Observed:

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and /or monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Skyway Bike Path Expansion Joint Modification, Contract Change Order (CCO) 193:

This QA Inspector observed ABF welding personnel Jason Collins (#8128) and QC Inspector Bernard Docena working at Hinge-B, East bound performing work relating to CCO 193. This QA Inspector observed ABF welding personnel Jason Collins (#8128) fitting up a plate and angle iron pieces. This QA Inspector observed QC Inspector Bernard Docena monitoring the work. This QA Inspector observed ABF welding personnel Jason Collins (#8128) using the Flux Cored Arc Welding (FCAW) process for fillet welds in the overhead (4F) position. The welding was to attach a 25 mm thick plate to the bottom of the bike path. This QA Inspector observed QC Inspector Bernard Docena monitoring the work and verify the welding parameters. This QA Inspector observed Lincoln Innershield NR-232 was being used as the filler metal for the FCAW process. This QA Inspector was not aware a WPS for this filler metal was approved for fillet welding in the overhead (4F) position and asked QC Inspector Bernard Docena regarding this issue. QC Inspector Bernard Docena stated he just realized there was not an approved WPS for this filler metal in this position. This QA Inspector observed by the time the conversation was completed and it was determined there was not a WPS for this filler metal in the overhead position the welding at this location (the 25 mm thick plate) had been completed by ABF welding personnel Jason Collins (#8128). QC Inspector Bernard Docena informed this QA Inspector a Non-Conformance Report (NCR) would be

WELDING INSPECTION REPORT

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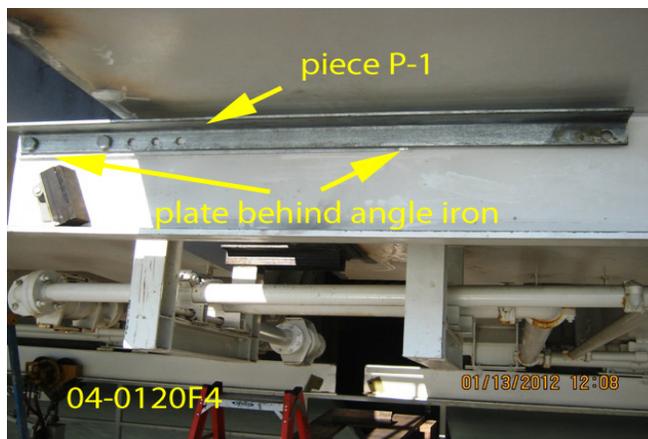
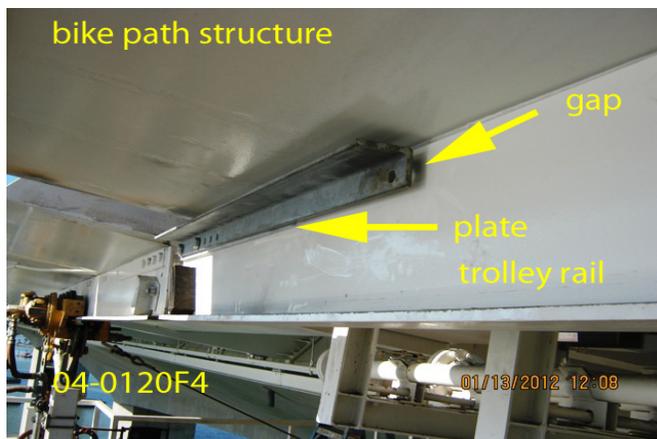
written by QC for not having an approved WPS. This QA Inspector observed ABF welding personnel Jason Collins using the Shielded Metal Arc Welding (SMAW) process for fillet welding in the overhead (4F) and vertical (3F) positions. This QA Inspector observed the welding was performed on various pieces of angle iron. This QA Inspector observed QC Inspector Bernard Docena verify the following welding parameters; 125 amperes. This QA Inspector observed a 3.2 mm diameter E7018H4R electrode was being used. This QA Inspector observed ABF-WPS-D15-F1200A was being used by the QC Inspector. This welding process, position and filler metal appeared to comply with the contract requirements.

This QA Inspector reviewed the approved drawings and observed the following items: Piece P-1 is to be welded at both ends and along the leg against the trolley rail using a 5 mm fillet weld. There is an existing doubler plate at this location for approximately 75% of the length of P-1, which prevents the angle iron from contacting the trolley rail for the full length. This QA Inspector also observed the drawing calls out “prep” at the top of the angle iron corner for a Partial Joint Penetration (PJP) weld. There does not appear to be room to perform welding at this location. See photos below of the front and end view of piece P-1.

This QA Inspector verbally informed QA Lead Inspector, Bill Level and Structural Material Representative (SMR) Nicolai Hvass, of the issues noted above in this report.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable conversations.



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: Hager,Craig

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer