

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-026259
Date Inspected: 08-Sep-2011

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 monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Self Anchored Suspension (SAS) Tower, Electro Slag Welding (ESW):

This QA Inspector performed a visual verification of the status of the Quality Control inspections and ABF production on the various ESW weld joints. This information was provided to Lead QA Inspector Danny Reyes.

ESW weld location D-face A: This QA Inspector observed ABF personnel Jeff Stone using a grinder to contour various areas of the weld previously marked by QC for grinding.

ESW weld location S-face A and B: This QA Inspector observed ABF welding personnel Rory Hogan (# 3186) using the Shielded Metal Arc Welding (SMAW) process to fill shallow (less than 15 mm deep) areas that had been marked by QC personnel. QC Inspector Bernard Docena was present and informed this QA Inspector he had performed and accepted a visual inspection and Magnetic Particle Testing (MT) of the excavations prior to welding. QC Inspector Bernard Docena informed this QA Inspector he had verified the following welding parameters; 124 amperes. This QA Inspector observed a 3.2 mm diameter E7018H4R electrode was being used in the vertical (3G) position. The welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1002 Repair.

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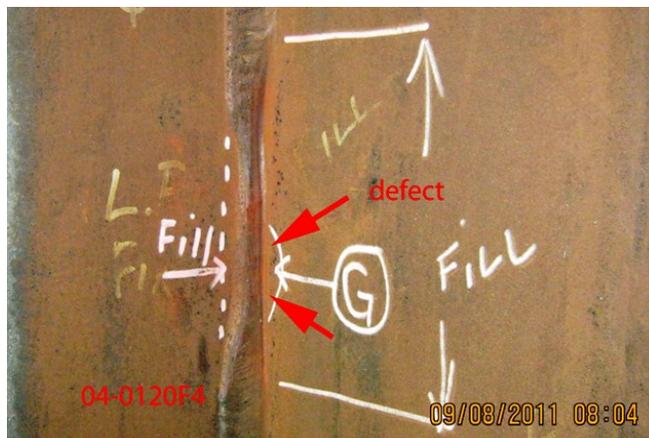
ESW weld location N: This QA Inspector was informed by QC Inspector Steve McConnell that he had observed a 50 mm long defect centered in the 60 mm thick plate originating from the sump of the weld, see photo below. QC Inspector Steve McConnell informed this QA Inspector he observed the defect after performing MT on the sump area. QC Inspector Steve McConnell also informed this QA Inspector he had performed MT on both sides/faces of the weld and the MT indication did not break the edge of the weld. This QA Inspector observed the defect appeared to be on the centerline of the weld. QC Inspector Steve McConnell stated no further grinding/work would be performed at this location at this time and that a photo of the defect would be taken a repair request would be submitted.

ESW weld location N-face A: This QA Inspector observed QC Inspector John Pagliero performing Ultrasonic Testing (UT) and was informed the repair welding at Y-3020 for a length of 200 mm appeared to be acceptable but that the UT being performed was for information purposes only.

This QA Inspector observed at ESW weld location H, face A one side of the weld had been marked "fill" and appeared ready to be welded the other side was marked "G" and "fill" (the G = Grinding). This QA Inspector also observed a MT defect was still present in the excavation area which was marked with the "G". This QA Inspector had concerns that welding could be performed prior to the removal of the defect and/or MT verification the defect had been removed. This QA Inspector observed QC Inspector Bernard Docena was in the area and asked him about the markings, see photo below. QC Inspector Bernard Docena stated ABF welding personnel knew these areas needed grinding and to have QC personnel perform MT prior to welding.

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.

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Inspected By: Hager,Craig

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer