

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028957**Date Inspected:** 08-Jan-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Fred Michels and Steve Jensen**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:** SAS Tower and OBG**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 13E-PP120-E2.0 architectural housing, this QA randomly observed perform production welding on the stiffener flange of the housing manway. ABF welder Erick Sparks was observed welding in 2G position utilizing SMAW with 3.2mm diameter E7018H4R electrode implementing welding procedure specification ABF-WPS-D15-1040A CU. The welder has tack welded the infill plate stiffener then welded the splice butt joint that has a single V prep of around 45 degree, 7mm root opening with copper backing bar. The welder was able to weld the root pass up to the cover pass but was not able to back gouge and back weld the other side of the joint. The welder was assigned to another task and left the welding here unfinished.

At Tower elevation 155meter, ABF welder Richard Garcia was observed continuing to perform all around 8mm fillet welding on two (2) 212.4mm long x 150mm wide x 12mm bracket plate for East/West diaphragm ladder mitigation per drawing LASA6 between north shaft and east shaft chimney. The welder was noted using self-shielded Flux Cored Arc Welding (FCAW-S) with 1.6mm E71T-8 wire electrode implementing ABF-WPS-D1.5-F2200-3. The bracket plate being welded is the holding bracket for the mitigated ladder. Prior welding, the plates were preheated using propylene gas torch. During the shift, ABF QC Fred Michels was noted on site monitoring the welder Ric Chouinard and Richard Garcia. At the end of the shift, welding of the two bracket plates for the ladder mitigation was completed.

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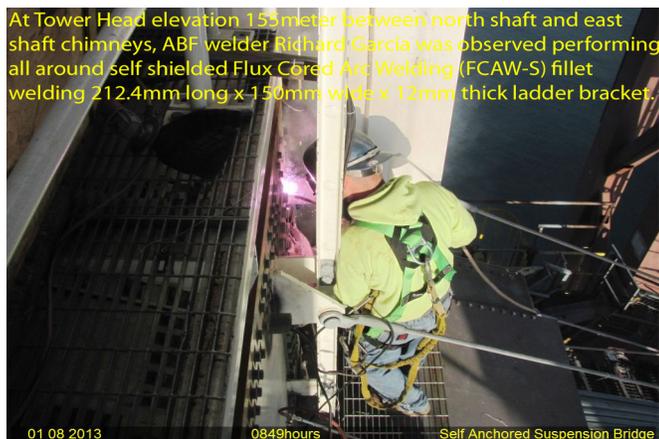
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FW Spencer:

At tower elevation 143meter, this QA randomly observed FW Spencer qualified welder Damian Llanos continuing to perform Complete Joint Penetration (CJP) 2G (horizontal position) Shielded Metal Arc Welding (SMAW) welding fill pass to cover pass on 2” diameter domestic water lines. The system line being welded is a field splice along the tower elevation. The welder was noted welding the fill pass using 3/32” diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Steve Jensen was noted monitoring the parameters of the welder. At the end of the shift, one (1) 2” diameter field splice marked 100/2/148/T was completed and visually accepted by QC. This QA performed VT verification on the completed weld splice and it appears in compliance to the Contract requirements.

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC VT/MT on fillet welded joints mentioned below. The QA verification was performed to verify that the welding and the VT/MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the welds and the QC inspection complied with the contract documents.

1. Ladder bracket marked LAS26 – 8mm all around fillet weld cover VT/MT verified.
2. Ladder bracket marked LAS12 – 8mm all around fillet weld cover VT/MT verified.
3. 2 -Pipe support brackets marked IPS9 @ elev. 159.3M - 8mm all around fillet weld cover VT/MT verified.
4. 2- Pipe support brackets marked IPS9 @ elev. 154M - 8mm all around fillet weld cover VT/MT verified.



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Summary of Conversations:

No significant conversation occurred today.

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 SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer