

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-028917**Date Inspected:** 20-Dec-2012**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 Barry Drake**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**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.

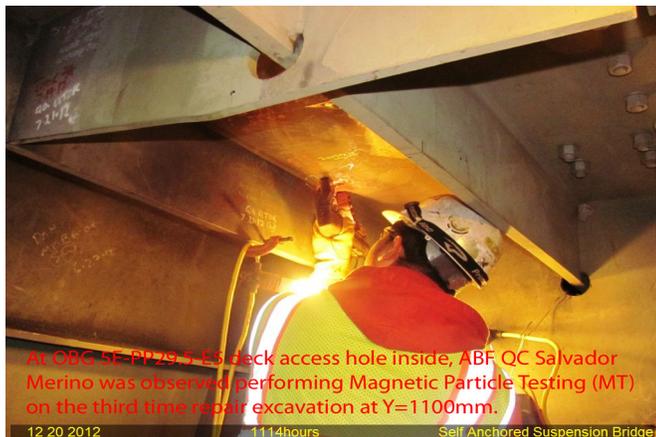
At OBG 5E-PP29.5-E5 deck access hole inside, QA randomly observed ABF/JV welder Chris Bruce continuing to perform CJP groove welding third time repair on a Non-Seismic Performance Critical Member (SPCM) due to Ultrasonic Testing (UT) detected defect on welded splice butt joint. The welder excavated the defect using a die grinder and after its completion, ABF QC Salvador Merino performed Magnetic Particle Testing (MT) on the removal of the defects with no relevant defect noted during the test. The welder was noted using propylene gas torch to preheat the repair area and its vicinity to 150°F and as soon as the required temperature was attained the welder started performing the welding repair. Welder Chris Bruce was observed manually welding in 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 4.0mm diameter E7018H4R electrode implementing the welding procedure ABF-WPS-D15-1000 Repair. Welder Chris Bruce was noted welding at location Y=1100mm with excavation dimensions 110mm long x 40mm wide x 11mm deep. During welding, ABF QC Barry Drake was observed monitoring the welding parameters which were noted as 160 amperes. The RWR #201212-005 was utilized as a reference during the welding of the R3 cycle repair and was completed during this shift.

At Tower elevation 155 meters, QA randomly observed ABF welder Richard Garcia performing the 8mm all around fillet welding between the west Tower head vertical plate to 213mm long x 150mm wide x 12mm thick relocated ladder bracket. The welder was observed fillet welding utilizing self-shielded Flux Cored Arc Welding

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(FCAW-S) with 0.072” diameter E71T-8 wire electrode implementing Welding Procedure Specification (WPS) ABF-WPS-D15-F2200-2. Prior to welding, the paint coating on both sides of the joint was removed by grinding and the plates were preheated to 150 degrees Fahrenheit. During the shift, QA noted ABF QC Fred Michels monitoring the preheat temperature and welding parameters. The fillet welding of the west Tower head vertical plate to the 213mm long x 150mm wide x 12mm thick ladder bracket was completed during this shift.



Summary of Conversations:

No significant conversation 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