**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

# WELDING INSPECTION REPORT

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

**Report No:** WIR-028210
**Date Inspected:** 18-Aug-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

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| **CWI Name:** | John Pagliero 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 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 13W-PP122.5-W2.1 BF1 drop-in floor beam inside, QA randomly observed ABF/JV qualified welder Rick Clayborn continuing to perform CJP groove welding repair from location Y=0mm to Y=460mm (whole length of the flange). Prior welding, the welder was noted excavating the repair using carbon air arc gouging and after its completion, the groove of the excavation was ground smooth by the same welder and then MT'd by ABF QC John Pagliero. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. During the shift, ABF QC Barry Drake was noted monitoring the welder with measured working current of 130 amperes on 3.2mm E7018H4R electrode. At the end of the shift, repair welding at location mentioned above was completed.

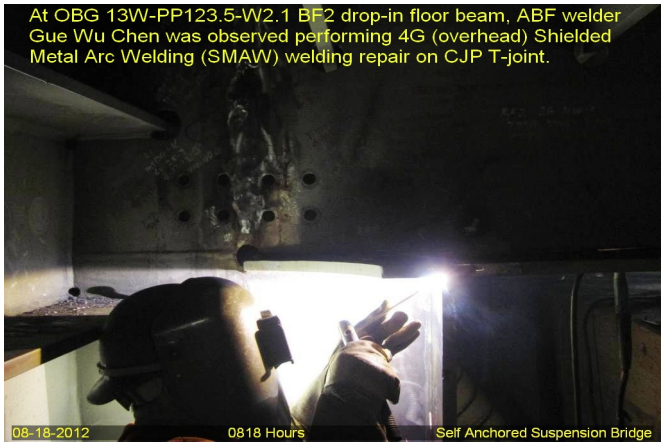
At OBG 13W-PP123.5-W2.1 BF2 drop-in floor beam inside, ABF welder Gue Wu Chen was observed continuing to perform repair welding. Prior to perform the repair, another welder was noted excavating the UT detected defects using carbon air arc gouging then ground smooth the groove of the excavation. ABF QC John Pagliero was noted performing the Magnetic Particle Testing (MT) on the defect removal with no relevant defect noted during the test. After the completion of the MT, welder Gue Wu Chen was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. During the shift, ABF QC Barry Drake was noted monitoring

the welder with measured working current of 130 amperes on the 3.2mm E7018H4R electrode. Listed below is a first time repair that was noted excavated and welded during the shift;

Y-location Length Width Depth Remarks
1. 0mm 460mm 15mm 10mm In progress.

At OBG 13W-PP123-W2.1 BF2 drop-in floor beam inside, ABF welder Gue Wu Chen was observed continuing to perform repair welding. Prior to perform the repair, another welder was noted excavating the UT detected defects using carbon air arc gouging then ground smooth the groove of the excavation. ABF QC John Pagliero was noted performing the Magnetic Particle Testing (MT) on the defect removal with no relevant defect noted during the test. After the completion of the MT, welder Gue Wu Chen was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repairs. During the shift, ABF QC Barry Drake was noted monitoring the welder with measured working current of 128 amperes on the 3.2mm E7018H4R electrode. Listed below is a first time repair that was noted excavated and welded during the shift;

Y-location Length Width Depth Remarks
2. 0mm 460mm 16mm 6mm In progress.





**Summary of Conversations:**

No significant conversation ocurred 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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Lizardo,Joselito | Quality Assurance Inspector |
| **Reviewed By:** | Levell,Bill | QA Reviewer |