

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022538**Date Inspected:** 14-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** Gary Ehram**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:**

Quality Assurance inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. Access Plate Longitudinal Stiffener Field Splice @ 8W PP70.5 W5
2. Longitudinal Stiffener #5 Field Splice @ 7W 8W
3. Access Plate Longitudinal Stiffener Field Splice @ PP70.5 LSW6

1. Longitudinal Stiffener Field Splice 8W PP70.5 W5

The QA Inspector observed that the ABF welder Jin Pei Wang begin the root pass in the am. The QA Inspector noted that The QC Inspector Identified as Gary Ehram periodically monitored the welding parameters and the welder's progression. The QA observed the induction heating blankets on the opposite face of the Longitudinal Stiffener (LS) to ensure the minimum required preheat for grade 485W HPS steel was achieved prior to welding. The QA Inspector randomly verified utilizing a 200°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector observed the ABF welder to be utilizing shielded metal arc welding (SMAW) manually for the above identified weld joint. The QA Inspector randomly observed the QC Inspector set the SMAW machine to the parameters of the approved WPS identified as ABF-WPS-D1.5-1012-3. The QA Inspector randomly and periodically observed the welding at the above identified location. It was noted by the QA Inspector the ABF welder completed the weld prior to the end of the QA Inspectors shift.

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# WELDING INSPECTION REPORT

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## 2. 7W 8W Longitudinal Stiffener #5

The QA Inspector observed the QC inspector perform Magnetic Particle Testing on the back gouge of face A. It was noted by the QA Inspector that several indications appeared to be identified. The QA Inspector periodically observed the ABF welder Kit Kitlai repair by grinding the area previously mentioned above to conform to the contract documents. It was noted by the QA Inspector that the welder did not complete the repair by the end of the QA Inspectors shift.

## PP70.5 Longitudinal Stiffener #6

The QA Inspector randomly observed the ABF welder Jin Pei Wang to be utilizing (SMAW) manually for the above identified weld joint. The QA Inspector randomly observed the welding. The QA Inspector observed the QC Inspector identified as Gary Ehram periodically monitor the welding parameters as specified by the approved WPS ABF-WPS-D1.5-1012-3. It was noted by the QA Inspector that the welder had not completed the weld by the end of the QA Inspectors shift.

### Summary of Conversations:

As noted above.



### 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:** Frey,Doug

Quality Assurance Inspector

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**Reviewed By:** Levell,Bill

QA Reviewer