

**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-027518  
**Date Inspected:** 27-Apr-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:** 1730  
**Location:** Job Site

<b>CWI Name:</b>	As noted below	<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No	N/A
		<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	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:

## 12E PP109.5 E2-LSE (Interior)

This QA Inspector made random observations of Shielded Metal Arc Welding (SMAW) in the 3G vertical position by ABF welder Edward Brown (ID 9331) on the East Longitudinal Stiffener (LSE) of the Deck Access Hole (DAH) on the interior of the OBG. The welder was observed utilizing 3.2mm E7018-H4R electrodes drawing amperage of 127. QC Inspector John Pagliero was observed monitoring the welding and the parameters to ensure compliance with ABF-WPS-D1.5-1012-3. On a subsequent observation, the welder was observed employing a small disc grinder to blend and smooth the work. The QC Inspector was present to continue observance of the welding to maintain the parameters set at the beginning of the shift. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work at this location is in progress and appeared to be in general compliance with the contract specifications.

## 12W PP109.5 W2-TS (Interior)

This QA Inspector made random observations of ABF welder Steve Davis (ID 7889) completing the fit up of the Transverse Stiffener (TS) of the DAH at 12W PP109.5 W2 on the interior of the OBG. The welder was observed pre-heating the "T" joint to 150°F which this QA Inspector verified utilizing a 150°F Tempilstik and

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commenced welding in the 3G vertical position utilizing the SMAW process. QC Inspector John Pagliero was observed setting the parameters to comply with ABF-WPS-D1.5-F1200A for the E7018-H4R electrodes. During subsequent observations the welder was observed cleaning the start/stop edges of the work with a small disc grinder and brushes. The QC Inspector was present to measure the required 7/16" fillet welds and consecutive passes were made to achieve the correct size. The work at this location was completed on this date and this QA Inspector noted that the work appeared to be in general conformance with the contract documents. This QA Inspector performed MT testing on the East Longitudinal Stiffener (LSE) located at 12W PP109.5 W2 on the interior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications. This QA Inspector performed a UT inspection on approximately 10% of the welds on the LSE and these welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

### 12W PP109.5 W5-DAH (Exterior)

This QA Inspector performed MT testing on the Deck Access Hole located at 12W PP109.5 W5 on the exterior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications. This QA Inspector performed a UT inspection on approximately 10% of the welds on the DAH and these welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications. This QA Inspector made random observations of ABF welder Khit Lounechaney (ID 4985) performing the fit up of the Transverse Stiffener (TS) of the DAH at 12W PP109.5 W5 on the interior of the OBG. The welder was observed pre-heating the "T" joint to 150°F which this QA Inspector verified utilizing a 150°F Tempilstik and commenced welding in the 3G vertical position utilizing the SMAW process. QC Inspector John Pagliero was observed setting the parameters to comply with ABF-WPS-D1.5-F1200A for the E7018-H4R electrodes. During subsequent observations the welder was observed cleaning the start/stop edges of the work with a small disc grinder and brushes. The QC Inspector was present to measure the required 7/16" fillet welds. This QA Inspector noted that the work at this location was in progress and appeared to be in general conformance with the contract documents.

### Deck Panel SA3013A (West)

This QA Inspector randomly observed ABF personnel using the 4100 Ringer Crane, lift deck panel SA3013A from a storage barge, and place it on the OBG deck. The workers used bolts and pins to temporarily secure it in place. It was noted that the welding of the temporary attachment alignment fit-up gear did not commence on this date. Submittal ABF-SUB-002652R00 was reference during this QA Inspectors observation.

### Summary of Conversations:

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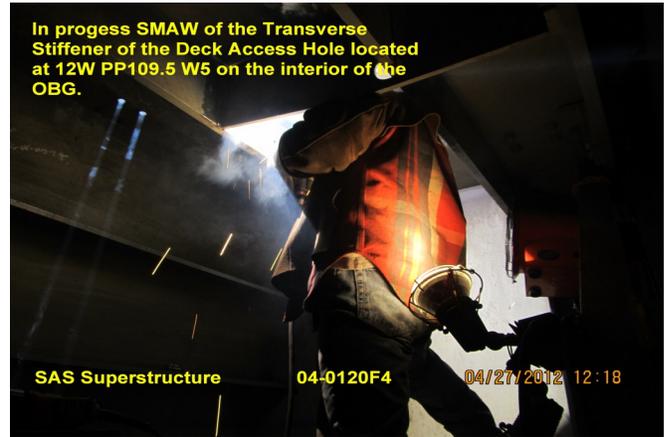
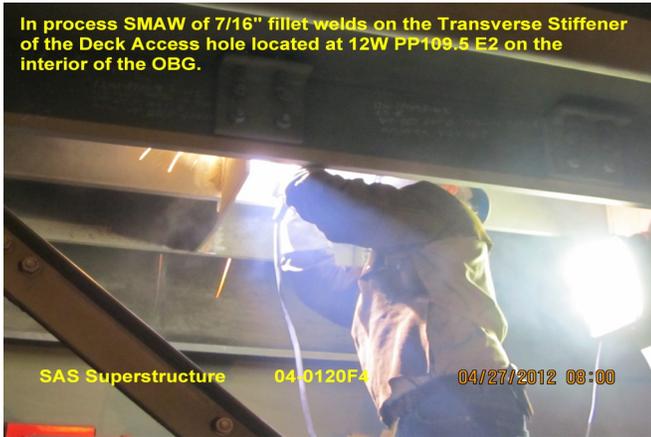
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There were no pertinent conversations on this date.



## 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

**Reviewed By:** Levell,Bill

QA Reviewer