

**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-026471**Date Inspected:** 06-Oct-2011**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:** As noted below.**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:** OBG Components**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford 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/13E "A" Deck**

This QA randomly observed ABF/JV qualified welders performing Flux Cored Arc Welding (FCAW) and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-F3200-2. Welding was performed at the 20mm butt weld joint (B-U2-S) connecting Lift 12 and Lift 13 "A" deck plates. This weld is a Seismic Performance Critical Member (SPCM) member.

During welding, ABF Quality Control (QC) Pat Swain was noted monitoring the welding parameters. Welding parameters were recorded as:

A1~A5 sections - Wai Kit Lai #2953 – A=269, V=25.4, T=369

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

**12E/13E "D" Plate**

This QA performed a planar alignment survey of the 12E/13E "D" bottom plate butt joint (B-U2-S). Off-set measurements were taken with the Bridge Cam Gauge placed on the 12E portion of the connection.

# WELDING INSPECTION REPORT

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(+) indicates that 13E was recorded as being higher than 12E.

(-) indicates that 13E was recorded as being lower than 12E.

All measurements were taken as close as possible to the area directly centered between the adjacent open ribs. Please see attached sketches for details of surveys on 12E/13E and 12W/13.

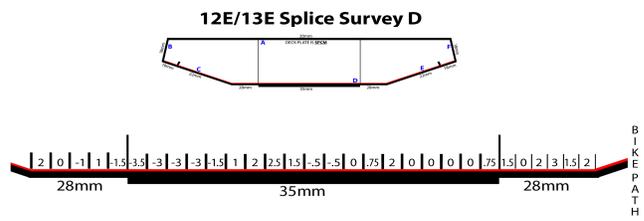
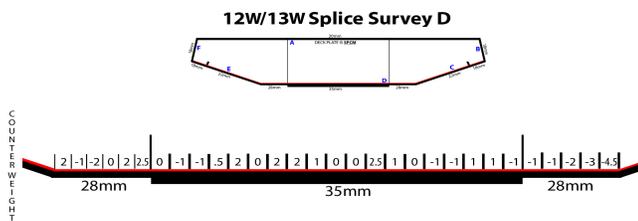
Due to persistent scattered showers throughout the scheduled work day, ZPMC welding personnel could not bring the "D" bottom plate connection up to the necessary 1500 preheat required for seal welding. ZPMC welding personnel spent the remainder of the work period prepping the work area in anticipation of improved conditions.

## East Line

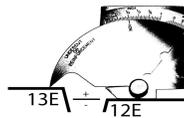
Due to inclement weather, no welding was performed at deck penetration locations.

Approximately 10:30 welding crews for these locations were informed of the work stoppage and were sent home for the day.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

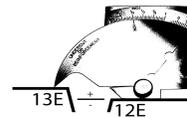


- Notes:
1. Measurements were taken with Bridge Cam Gauge placed on the 12E side of the joint.
  2. (+) indicates 13E measured higher than 12E
  3. (-) indicates 13E measured lower than 12E.
  4. Measurements were taken as close as possible to area centered between open ribs.



\*\*Not To Scale

- Notes:
1. Measurements were taken with Bridge Cam Gauge placed on the 12E side of the joint.
  2. (+) indicates 13E measured higher than 12E
  3. (-) indicates 13E measured lower than 12E.
  4. Measurements were taken as close as possible to area centered between open ribs.



\*\*Not To Scale

## Summary of Conversations:

No relevant conversations.

## 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.

**Inspected By:** Clifford, William

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer