

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011834**Date Inspected:** 03-Feb-2010**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:** Job Site**CWI Name:** Bernard Docena/Jim Bowers**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:** Orthotropic Box Girder (OBG) Lift 2 and 3 East**Summary of Items Observed:**

Quality Assurance (QA) Inspectors, Bill Levell and Michael Foerder, were on site between the times noted above at the job site as part of the arrival inspection team to perform a general arrival inspection and review of the exterior of lifts 2 and 3 East. The following is a list of the items observed; see individual item numbers in the body of this report for further details.

1. Exterior Sea Fastening Support Locations.
2. Top Deck Plate Wood Support Frame.
3. Bottom Plate Wood Support Frame.
4. Transverse Tie Locations.
5. W OBG Connection Points.

The QA inspectors arrived on site at 0700 and met with ABF personnel, Caltrans Structure personnel, the Structure Material Representative (SMR) and the QC inspection team for a brief general safety and orientation meeting prior to entering and accessing OBG Lift 2 East. The South side of both lift 2 and 3 East has been previously reviewed by QA with no significant issues observed. The following areas and observations were reviewed and noted:

**LIFT 2 EAST**

Item 1 Exterior Sea Fastening Support Locations.

Minor Coating abrasions and surface discolorations were noted at support locations designated number 2 and number 5. At support location number 2 along the North side of the OBG between PP13.5 and PP14 it was noted

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

the drip plate attached to the bottom of the edge plate/corner assembly has been bent during transit or handling. See digital photo in the body of this report. This information was relayed to the SMR Anthony Mullen verbally on this date.

Item 2 Top Deck Plate Wood Support Frame - No apparent issues observed.

It was noted the lifting block attachments will stay in place on the top deck plate until the OBG is erected in the field. The contact points of the attachments will need to be reviewed at these locations at a later date. No apparent issues were observed in the general area surrounding them at this time.

Deflection of 8mm was observed at the location just prior to PP13 at the E3 and E4 line of the top deck plate along the edge of the OBG. These areas are in the location where the full height diaphragm plates intersect with the top deck plate. See digital photo included further in the body of this report. This information was relayed to the Structure Material Representative (SMR) Anthony Mullen and China liaison John Kinsey in which Mr. Kinsey relayed this condition was discussed previously and determined to exist prior to the shipment voyage. General waviness of the top deck plate along the edge of the crossbeam connection was observed and this condition was also confirmed to exist previously by Mr. Kinsey. Mr. Kinsey also relayed this condition will exist at the crossbeam location for lift 3 East also. See digital photo in the body of this report for lift 3E example.

It was noted the contractor performed flame cutting of the top deck plate in order to install access points at the Northwest and Southeast corners of the OBG prior to the arrival inspection. An additional access point was scribed on the top deck plate at the Southwest corner of the OBG and the QA inspectors spoke with the QCM regarding this issue. The QCM relayed these access hatches were detailed in a request for information (RFI) and he would need to research the submittal number and relay this information to QA. Further discussions took place regarding the contractor notifying Caltrans when work is scheduled in order for review of the in-process work being performed. This information was relayed to the SMR for future discussion and disposition. See digital photo below for general information.

Item 3 Bottom Plate Wood Support Frame

No apparent issues observed. The contact points from the barge and the OBG currently have bearing pads in place with no apparent issues observed in the general area.

Item 4 Transverse Tie Locations – No apparent issues observed.

Item 5 W OBG connection point – No apparent issues observed.

## LIFT 3 EAST

Item 1 Exterior Sea Fastening Support Locations.

Minor Coating abrasions and surface discolorations were noted at support locations designated number 2 and number 5.

Item 2 Top Deck Plate Wood Support Frame - No apparent issues observed.

It was noted the lifting block attachments will stay in place on the top deck plate until the OBG is erected in the field. The contact points of the attachments will need to be reviewed at these locations at a later date. No apparent issues were observed in the general area surrounding them at this time.

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

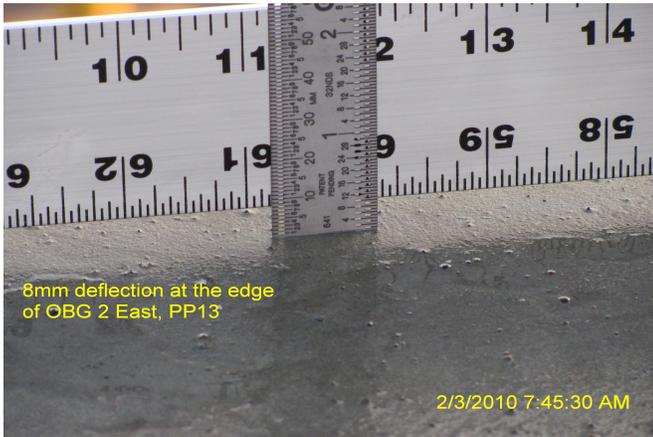
---

## Item 3 Bottom Plate Wood Support Frame

No apparent issues observed. The contact points from the barge and the OBG currently have bearing pads in place with no apparent issues observed in the general area.

Item 4 Transverse Tie Locations – No apparent issues observed.

Item 5 W OBG connection point – No apparent issues observed.



## Summary of Conversations:

As noted above in summary of items observed.

## 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 Mohammad Fatemi (916)813-3677, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Foerder, Mike

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer