

**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 #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007492**Date Inspected:** 29-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Japan Steel Works**Location:** Muroran, Japan

<b>CWI Name:</b>	Chung Fu Kuan		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No	
<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved WPS:</b>	Yes	No	N/A
<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** Tower, Jacking, and Deviation Saddles**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Art Peterson was present during the times noted above for observations relative to the work being performed in Fabrication shop #4 at Japan Steel Works.

**Machine Shop #4:**

Final Machining Operation in process on Saddle: Tower Saddle Segment T1-1

The QA Inspector observed that tower saddle segment T1-1 is located in Machine Shop #4 to have the final machining performed. On this date, the QA Inspector observed the JSW personnel were in process on re-positioning the tower saddle segment to perform the machining operation in a different location on tower saddle segment T1-1.

**Fabrication Shop #4:**

Weld Operation in process on Saddle: Tower Saddle Segment T1-2

The QA Inspector observed the fillet weld operation on the second side of the lower stiffener plates welded to the rib plate (steel section) and stem plate (steel section) of tower saddle T1-2. The QA Inspector observed Quality Control (QC) Inspector Mr. Chung Fu Kuan verify prior to and during the fillet weld operation that the minimum preheat temperature of 110 degrees Celsius was maintained and the welding parameters of JSW welding personnel Mr. M. Kashiwada (08-2008) on plate no. 8ST-29 (rib 8-11) side and Mr. T. Watanabe (08-5169) on plate no. 8ST-25- (rib 8-6) side were in compliance with WPS SJ-3012-3 per the FCAW-G process in the (2F) horizontal position using (1.6) mm diameter TM55 electrode. The QA Inspector observed that the fillet weld operation was in process at the end of the QA Inspectors' shift.

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## Re-Beveling Operation in process on Saddle: Tower Saddle Segment T1-3

The QA Inspector observed JSW personnel performing the re-beveling operation on the rib plates and stem plate's prepared edges (face of bevels) on tower saddle T1-3 (steel section). These areas are being re-beveled to the layout marks (scribe lines and punch marks) of the final dimensions of the groove areas prior to the fit-up operation of the base plate. The QA Inspector observed that the re-beveling operation was in process at the end of the QA Inspectors' shift.

## Storage of Saddle: West Deviation Saddle Segment W2-E1

The QA Inspector observed that west deviation saddle segment W2-E1 is located in Fabrication Shop #4. The QA Inspector observed that no other work was performed on west deviation saddle segment W2-E1 on this date.

## Storage of Saddle: West Deviation Saddle Segment W2-E2

The QA Inspector observed that west deviation saddle segment W2-E2 is located in Fabrication Shop #4. The QA Inspector observed that no other work was performed on west deviation saddle segment W2-E2 on this date.

## Machine Shop #2

### Final Machining Operation in process on Saddle: West Deviation Saddle Segment W2-E3

The QA Inspector observed that west deviation saddle segment W2-W3 is located in Machine Shop #2 to have the final machining performed. On this date, the QA Inspector observed the machining of the base plate was being performed on west deviation saddle segment W2-W3.

## Fabrication Shop #4

### Cleaning Operation completed on Saddle: West Deviation Saddle Segment W2-W1

The QA Inspector observed that the blast cleaning operation was completed on west deviation saddle W2-W1 on the weldments and surrounding base metal. The next operation on the west deviation saddle segment will be the NDT- magnetic particle test inspection (dry method) operation.

### Weld Operation pending on Saddle: West Deviation Saddle Segment W2-W2

On this date, the QA Inspector observed that no welding was performed on the partial-joint penetration (PJP) groove welds on the rib plate (steel section) to rib (cast section) or the stem plate (steel section) to stem (cast section) of west deviation saddle segment W2-W2.

### Cleaning Operation completed on Saddle: West Deviation Saddle Segment W2-W3

The QA Inspector observed that the blast cleaning operation was completed on west deviation saddle W2-W3 on the weldments and surrounding base metal. The next operation on the west deviation saddle segment will be the NDT- magnetic particle test inspection (dry method) operation.

## Storage of Saddle: West Deviation Saddle Segment W2-W3

The QA Inspector observed that west deviation saddle segment W2-W3 (cast section) is located in Fabrication Shop #4. The QA Inspector observed that no work was performed on west deviation saddle segment W2-W3 on this date.

## Layout Operation on "Hold" of Rocker Bearing Plate Assembly: East Saddle E2-W1

The QA Inspector observed that rocker bearing plate assembly for E2-W1 is located in Machine Shop #2. The

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JSW personnel were in preparation to perform the layout operation of the rocker bearing dowel locations against the approved dimensional drawings and assembly control lines but the operation has been put on "hold". The JSW Representative Mr. Hideaki Kon informed the QA Inspector that the reason why the layout operation was put on "hold" was that JSW is waiting the response back from prime contractor American Bridge Fluor / JV regarding the confirmation of the location of the anchor bolt holes on east saddle rocker bearing plate E2-W1.

PWHT Operation completed on End Splay Cover Plate Assemblies: East Saddle E2-E1 and East Saddle E2-W1

The QA Inspector observed that the post weld heat treatment (stress relief) operation was completed on the end splay cover plate assemblies for east saddle E2-E1 and E2-W1 on this date. The next operation on the end splay saddles will be the blast cleaning operation.

### **Summary of Conversations:**

No significant conversations were reported 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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<b>Inspected By:</b>	Peterson, Art	Quality Assurance Inspector
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<b>Reviewed By:</b>	Guest, Kittric	QA Reviewer
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