

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-007950**Date Inspected:** 20-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Japan Steel Works**Location:** Muroran, Japan

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

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	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 and the Foundry at Japan Steel Works.

Fabrication Shop #4:

PWHT Operation completed on Saddle: Tower Saddle Segment T1-2

The QA Inspector observed that the final post weld heat treatment (stress relief) operation has been completed on tower saddle T1-2 on this date. The next operation on tower saddle segment T1-2 will be the blast cleaning operation in preparation for the final NDT inspection.

Re-positioning of Saddle: Tower Saddle Segment T1-3

The QA Inspector observed that JSW personnel were re-positioning tower saddle segment T1-3 in preparation to change the location on the rib plate to base plate complete-joint penetration (CJP) and partial-joint penetration (PJP) double bevel groove tee-joint weld operation. The change in location of the weld operation allows for the JSW welding personnel to be able to weld in a more ideal position. The QA Inspector observed that the re-positioning of the tower saddle segment was in process at the end of the QA Inspectors' shift.

Weld Operation in process on Saddle: West Deviation Saddle Segment W2-W2

The QA Inspector observed the partial-joint penetration (PJP) groove (cover pass) weld operation on the rib plate (steel section) to rib (cast section) of west deviation saddle segment W2-W2. The QA Inspector observed Quality Control (QC) Inspector Mr. Chung Fu Kuan verify prior to and during the PJP groove weld operation that the

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

minimum preheat temperature of 160 degrees Celsius was maintained and the welding parameters of JSW welding personnel Mr. K. Kobayashi (08-5023) on weld joint no's. W2Y-16U and W2Y-17U were in compliance with WPS SJ-3011-7 per the FCAW-G process in the (1G) flat position using (1.6) mm diameter TM95 electrode. The QA Inspector observed that the PJP groove (fill pass) weld operation was in process at the end of the QA Inspectors' shift.

Weld Operation of Temporary Attachment in process on Saddle: West Deviation Saddle Segment W2-W3

The QA Inspector observed JSW welding personnel Mr. K. Koyanagi (08-5144) fillet welding a temporary attachment (strong back) onto the end rib (cast section) to end rib plate (built-up section) per the SMAW process in the (3F) vertical position on west deviation saddle segment W2-W3. The location of the strong back was on an area- (built-up weld surfacing layers) that had been previously deposited onto the cast section. The purpose of welding the strong back between the rib (cast section) and rib plate (built-up section) is for dimensional and distortion control prior to the start of the weld operation on the cast section to the built-up section. The Quality Control Inspector Mr. Chung Fu Kuan informed the QA Inspector that JSW uses in-house weld procedure specification (WPS) WE08-CP15-Rev.1 to perform the weld operation of the strong back on the end rib (cast section) and the end rib plate (built-up section) of the west deviation saddle segment. The QA Inspector observed that the fillet weld operation of the strong back was in process at the end of the QA Inspectors' shift.

Foundry:

Weld Operation in process on Cast Saddle: East Saddle E2-E1 (cast saddle)

The QA Inspector observed the repair weld operation on excavated areas on the exterior of east saddle E2-E1. The QA Inspector observed Quality Control (QC) Representative Mr. T. Imai verify prior to and during the weld operation that the minimum preheat temperature of 150 degrees Celsius was maintained and the welding parameters of JSW welding personnel Mr. A. Takenami (06-8001) were in compliance with WPS SJ-3026-4 per the SMAW process in the (1G) flat position using (5.0) mm diameter E9016-G electrode. The QA Inspector observed that the repair weld operation was in process at the end of the QA Inspectors' shift.

Grinding Operation in process on Saddle: West Jacking Saddle (cast saddle)

The QA Inspector observed that JSW personnel were performing the grinding operation on the shaped areas on the outside of the trough section and on the rib sections where previously JSW personnel removed the excess cast material by the scarfing operation- (air-carbon-arc method) on the rough casting of the west jacking saddle. The purpose of the grinding operation is to profile the areas to a smooth finish and subsequently for the visual inspection and the NDT operation. The QA Inspector observed that the grinding operation was in process on the west jacking saddle at the end of the QA Inspectors shift.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with the applicable contract specifications.

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.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Peterson, Art	Quality Assurance Inspector
----------------------	---------------	-----------------------------

Reviewed By:	Guest, Kittric	QA Reviewer
---------------------	----------------	-------------
