

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-007966**Date Inspected:** 27-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:

Re-location of Saddle: Tower Saddle Segment T1-2

The QA Inspector observed that tower saddle segment T1-2 was moved out of fabrication shop #4 and has been re-located to Machine Shop #4 to have the final machining performed. On this date, the QA Inspector observed that no machining was performed on the tower saddle segment.

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

The QA Inspector observed that the JSW personnel are in the process of re-positioning tower saddle segment T1-3 in preparation to change the position of the tower saddle segment to start the fit-up and weld operation of the stiffener plates. The QA Inspector observed that the re-positioning of the tower saddle segment was in process at the end of the QA Inspectors' shift.

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

The QA Inspector observed Nikko Inspection Services (NIS) Quality Control (QC) NDT Inspector Mr. R. Kumagai (#132) performing the magnetic particle test (MPT) inspection (dry method) of the partial-joint penetration (PJP) groove welds prior to the final post weld heat treatment (PWHT) stress relief operation on the rib plate to stem plate; stem plate to base plate; and the rib plate to base plate of west deviation saddle segment

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W2-W2. The QA Inspector observed that the MPT inspection was in process at the end of the QA Inspectors' shift.

Re-positioning of Saddle: West Deviation Saddle Segment W2-W3

The QA Inspector observed that JSW personnel are in the process of re-positioning west deviation saddle segment W2-W3 in preparation to change the location of the rib plate (built-up section) to rib (cast section) partial-joint penetration (PJP) double bevel groove butt-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 west deviation saddle segment was in process at the end of the QA Inspectors' shift.

Foundry:

Post Weld Heat Treatment Operation in process on Saddle: East Saddle E2-E1 (cast saddle)

The QA Inspector observed that the post weld heat treatment (PWHT) operation was in process on east saddle E2-E1. The reason for the PWHT operation being performed on the east saddle was after the major excavation and minor excavation repair weld operation was completed.

NDT Operation on Saddle: East Saddle E2-W1 (cast saddle)

The QA Inspector observed Nikko Inspection Services (NIS) QC NDT personnel Mr. H. Kohama (#86) performing the magnetic particle test (MPT) inspection (wet method) on the as finished surface of the base plate of east saddle E2-W1 after the final post weld heat treatment operation. The NIS QC NDT Inspector verified the lifting force of the yoke and the sensitivity of the yoke as per ASTM E709 prior to the start of the MPT inspection. The QA Inspector also verified that the bath concentration of the non-fluorescent particles were between (1.2 and 2.4) mL per (100) mL as per ASTM E709 Section 20.6.3 and the manufacturer recommendations. The actual settling volume was recorded at (2.2) mL as measured using a centrifuge tube with a (1.5) mL stem and after allowing the particles to settle for approximately (30) minutes prior to taking the settling volume measurement. The QA Inspector observed that the MPT inspection performed by Mr. H. Kohama was in process at the end of the QA Inspectors' shift.

NDT Operation pending on Saddle: West Jacking Saddle (cast saddle)

The QA Inspector observed that the JSW Quality Control (QC) NDT personnel completed the preliminary visual test (VT) inspection on the outside of the trough section and on the rib sections. The QA Inspector observed that there were areas marked up for repair and that the JSW personnel were in process on re-locating the west jacking saddle to an area in the shop to start the liquid penetrant test (PT) inspection. The JSW Representative Mr. Hideaki Kon informed the QA Inspector previously that the VT verification inspection was ready to be performed by the QA Inspector. Afterwards, the QA Inspector informed Mr. Hideaki Kon that once the VT inspection has being performed and accepted by JSW QC NDT personnel and the notification has been received by the QA Inspector then the QA Inspector would perform his VT verification inspection. The QA Inspector observed that the west jacking saddle was in process on being re-located to another area in the Foundry shop.

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

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remedial efforts please contact Nina Choy, 510 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson, Art	Quality Assurance Inspector
Reviewed By:	Guest, Kittric	QA Reviewer
