

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-005345**Date Inspected:** 03-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:** MaKhmud Ashadi**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:** Tower, jacking and deviation saddles**Summary of Items Observed:**

Steel Structure Welding Shop:

W2E2 West Deviation Saddle Casting and Steel Structure Joint Section: Caltrans Quality Assurance Inspector (QAI) representative observed Japan Steel Works (JSW) welders perform grinding process on the PJP weld surfaces of all the rib plates. Some surfaces have required additional work due to weld profile exceeding AWS code limitations. The purpose for this grinding is to prepare for MT test. The stem plate PJP welding will be continuing after MT test complete. Based on Caltrans observations, no discrepancies were noted.

W2E3 West Deviation Saddle Steel Structure: Caltrans QAI representative observed two welder perform FCAW process on two rib plate welds E3Y-17L-1 and E3Y-17L-2 of W2E3 west deviation saddle. The filler metal and shield gas used for FCAW is Hoballoy wire TM-95K2, 1.6 diameter with 100% C02. The entire welding zone has been preheated to minimum 110C prior welding. The FCAW welding process and parameters have been monitored and recorded by CWI inspector Mr. MaKhmud Ashadi. Based on Caltrans QA observations, the FCAW welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

T1-3 Tower Saddle Casting: Caltrans QAI representative observed T1-3 tower saddle casting portion removed from storage after PWHT. The casting portion will be scheduled for cleaning before MT test. Based on Caltrans observations, no discrepancies were noted.

Casting Shop:

W2W3 West Deviation Saddle Casting: Caltrans QAI observed NIS NDT level II technicians perform straight

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beam UT test on rib side of W2W3 west deviation saddle. The wall thickness of saddle varied from 150mm to 500mm and the test surface has been dry MT tested prior UT test. The straight beam tests have been not completed today and continue to tomorrow. Based on Caltrans observation, no discrepancies were noted.

E2W1 East Deviation Saddle Casting: Caltrans QAI observed NIS NDT level II technician perform straight beam UT test on machining side of E2W1 east deviation saddles. The wall thickness of saddle varied from 150mm to 500mm and the test surface have been wet MT test prior UT test. The straight beam tests have been not completed today and continue to tomorrow. Based on Caltrans observations, no discrepancies were noted.

W2E3 West Deviation Saddle Casting: Caltrans QAI observed a JSW welder performed SMAW standard repair welding on exterior rib 2U of W2E3 west deviation saddle casting portion. The repair welding areas have been excavated 2mm to 5mm depth. The proper filler metal used for SMAW is LB62 with 5mm diameter electrode made by Kobe, Japan. The entire casting portion was preheated temperature at min 150C during repair welding. Based on Caltrans QA observations, the buildup SMAW welding operation appeared to be in general compliance with requirements of ASME IX 2005 and Caltrans approved RFI documents.

Summary of Conversations:

As noted within the report above.

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, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
