

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-009906**Date Inspected:** 23-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:** T. Imai**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:**

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 Shop at Japan Steel Works.

Fabrication Shop #4:

Dismantling of Segments completed after the Trial Assembly Survey: West Deviation Saddle Segments - East Side

The QA Inspector observed that the JSW personnel completed the dismantling of west deviation saddle segments W2-E1, W2-E2, and W2-E3. The JSW personnel have moved the west deviation saddle segments into storage until the paint quality work plan (PQWP) is submitted and approved so JSW can start the blast cleaning, metalizing and painting operations of the west deviation saddle segments.

Final NDT Operation in-process on Saddle: West Deviation Saddle Segment W2-W1

The QA Inspector observed Nikko Inspection Services (NIS) Quality Control (QC) Non-Destructive Testing (NDT) Inspector Mr. N. Osawa (#340) performing the magnetic particle test (MPT) inspection by the (wet method) on west deviation saddle segment W2-W1 on the final machined surfaces of the level (1) and level (3) areas as shown on the plans of the machined surfaces on interior of the trough and of the machined surfaces on the exterior side of the end rib sections. The NIS QC NDT Inspector Mr. N. Osawa verified the lifting force 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's recommendations. The actual settling volume was recorded at

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(1.8) mL as measured using a centrifuge tube with a (1.5) mL stem 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. N. Osawa was in-process at the end of the QA Inspectors' shift.

Foundry Shop:

Grinding Operation completed on the repair areas of Saddle: West Jacking Saddle

The QA Inspector observed that the JSW personnel completed the grinding operation on the major excavation and minor excavation repair welds previously performed on the west jacking saddle. The purpose of the JSW personnel performing the grinding operation was to grind the repair welds to an acceptable profile in accordance with ASTM A802 surface quality category (J) - (metal removal marks- welds) until the visual quality standard level (3) requirement was met. The next operation will be for Nikko Inspection Services (NIS) inspection personnel to perform the ultrasonic test (UT) inspection on the repaired areas and the magnetic particle test (MPT) inspection on the interior and exterior of the west jacking saddle in the final post weld heat treated condition.

Unless otherwise noted in this report, 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 at (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson, Art	Quality Assurance Inspector
Reviewed By:	Edmondson, Fred	QA Reviewer
