

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012136**Date Inspected:** 12-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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:** OBG & Tower**Summary of Items Observed:**

CWI Inspector: Mr. Li Yang

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Trial Assembly

At around 2000 hours this QA Inspector observed that ZPMC QC Inspector Mr. Zhong Guo Hui and another ZPMC worker had recently completed heat straightening of the complete joint penetration weld in OBG segment 5BE, between side plate 305A and side plate 424A. Mr. Zhong Guo Hui informed this QA Inspector that he was aware that the ZPMC workers that had been performing heat straightening yesterday evening, reference HSR(B)-353 did not have any equipment to measure the base material temperature and the laser temperature measurement device that Mr. Zhong Guo Hui had used today during this heat straightening was a new piece of equipment. Items observed on this date appeared to generally comply with applicable contract documents.

ABF issued "Inspection Notification Sheet" number 02122010-1 informing QA that at 1630 hours ABF Inspectors will be performing magnetic particle (MT) and ultrasonic (UT) inspections of various welds on OBG segment 6BE, 6CE and 5AE including weld CA030-002, -004, -006. This QA Inspector observed weld CA030-002, 004, 006 has been marked by ABF ultrasonic inspectors as having a transverse indication at Y=5290mm and that at location

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Y=13240mm the weld is acceptable. This QA Inspector performed preliminary ultrasonic inspections at location Y=5290mm and confirmed the transverse indication. The ambient outside air temperature was approximately 0 degrees Celsius and when this QA Inspector applied water based the ultrasonic couplant on weld CA030-002, -004, -006 the couplant started to freeze shortly after it was applied to the surface of the steel. Due to this formation of ice, no reliable ultrasonic inspections could be completed and no additional ultrasonic inspections were performed this shift. Due to the weld surfaces being covered by ultrasonic couplant this QA Inspector could not perform magnetic particle inspections of these weld repairs.

OBG Bays 1 through 9

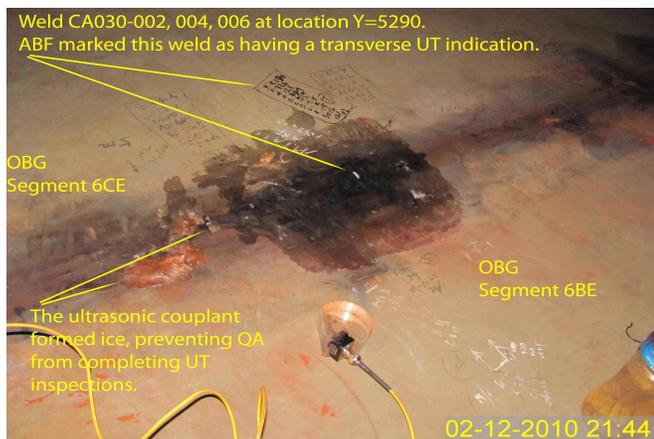
This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 1 through 9.

Tower Bays 10 and 11

This QA Inspector observed no ZPMC personnel were working on Caltrans tower assemblies in Bays 10 or 11.

OBG Bays 13 and 14

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 13 or 14 and the overhead lights were turned off. Many of the ZPMC workers are not at work due to the Chinese New Year holiday.



Summary of Conversations:

See 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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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