

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004456**Date Inspected:** 25-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wen Pang**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:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Sub-Assembly Bay 7:

The QA Inspector was requested by ZPMC QC Representative Shen Xue Jun, to perform a final Magnetic Particle Testing (MT) Verification on Floor Beam Wing Diaphragm FB016-009 and informed the QA Inspector that it was in the middle of OBG Sub-Assembly Bay 7. The QA Inspector along with ZPMC and ABF QC personnel could not immediately locate FB016-009. ABF QC asked ZPMC production where the panel was located and ZPMC production informed ABF that the panel had been moved to the front of Bay 7. The QA Inspector then located FB016-009 and observed that it had been flipped to Side B and that bolt holes had been drilled at the edges of the web. The QA Inspector also randomly observed that the panel was covered in cutting oil and metal from the bolt hole drilling. The QA Inspector also randomly observed several of the welds covered in rust. The QA Inspector requested from Shen Xue Jun, that the panel be cleaned and that all cutting oil, metal from drilling and rust be removed. Mr. Shen directed ZPMC welding personnel to do the cleaning. The QA Inspector then performed a 10% final Visual (VT) and MT verification on the cover pass of all the welds on Floor Beam Wing Diaphragms FB016-009 Side A. The QA Inspector randomly observed a linear indication on the edge of the 30 millimeter (mm) web plate which extended through Flange X7J-8. The linear indication was not in any weld and was entirely located in the base metal of the web plate. ZPMC CWI CHuang Wen Pang, directed ZPMC production to grind the area lightly with a pencil grinder. The QA Inspector re-examined the area and the linear

WELDING INSPECTION REPORT

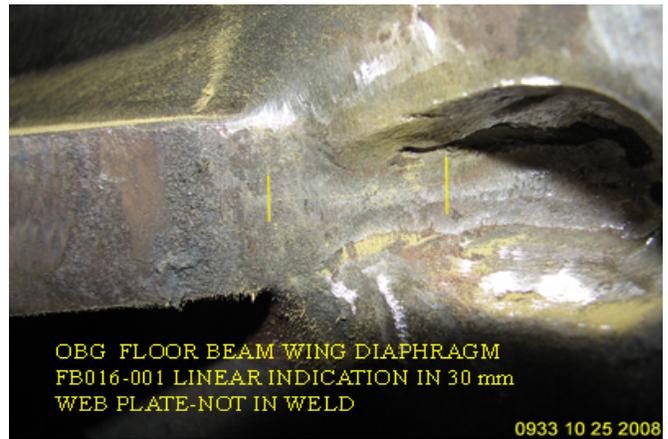
(Continued Page 2 of 2)

indication appeared to have been removed. The QA Inspector continued with the rest of the MT Verification and there appeared to be no further indications. The QA Inspector accepted all welds on the above listed Floor Beam Wing Diaphragms and initialed the In Process Yellow Tag. The attached photographs provide additional detail.

OBG Sub-Assembly Bay 8:

The QA Inspector randomly observed ZPMC NDT Technician Zhou Dong Yun, the MT Method to perform a final MT Inspection on the cover pass of Tower Diaphragms ESD1-SA399 Weld Joint (WJ) Numbers ESD1-SA399-14/16, ESD1-SA421 WJ's ESD1-SA421-3/5 and SSD1-SA363 WJ's 2/16. There appeared to be no indications and ZPMC QC accepted all welds.

The QA Inspector performed a 10% final VT and MT verification on the cover passes of Tower Diaphragms ESD1-SA399 Weld Joint (WJ) Numbers ESD1-SA399-14/16, ESD1-SA421 WJ's ESD1-SA421-3/5 and SSD1-SA363 WJ's 2/16. There appeared to be no indications and the QA Inspector accepted all welds.



Summary of Conversations:

There were no relevant conversations.

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 Josh Ishibashi 13764716411, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Wright,Mark

QA Reviewer