

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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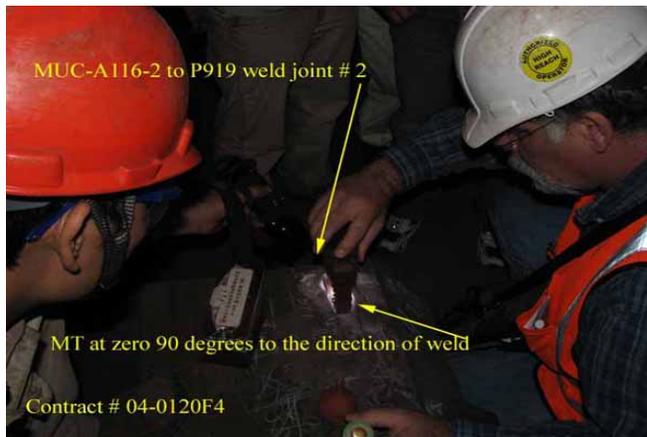
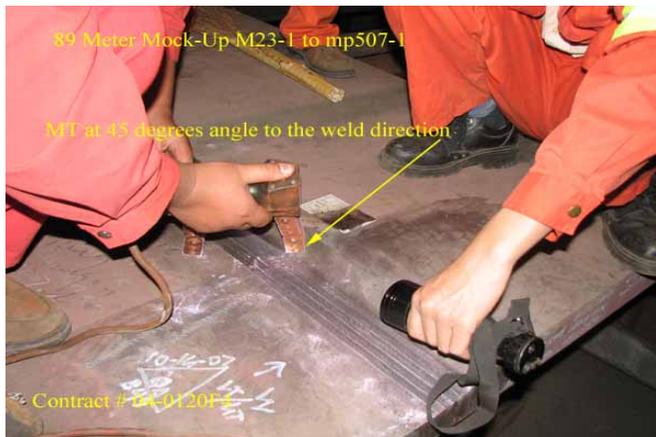
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000702**Date Inspected:** 16-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2200**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhao Chen Sun**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:** 89 Meter Mock-Up/ 114 Meter Mock-Up**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Roscoe Dixon accompanied QA Inspector Bruce Berger during the Magnetic Particle Testing (MT) on various welds on the 89 and 114 Meter Mock-Ups during the in progress fabrication. The MT Technician for ZPMC was Mr. Zhou Dong Yun. This QA Inspector Dixon observed ZPMC technician Mr. Zhou Dong Yun first performed MT on the various welds followed by QA Inspector Mr. Berger. QA Inspector observed as MT testing was performed on weld # 5 at the end of the longitudinal stiffener plate mp1012-2 and at the junction of Skin Plate C Sub-Assembly, shown on plan sheet MUSC- M111. Mr. Berger recorded the excavations measurements on Skin Plate C as 40 millimeters (mm) in length and 32mm in depth. Another set of three repair excavations were MT tested by ZPMC on weld joint 2 of the 114 Meter Mock-Up between plates A116 and p919; inside corner splice section. Mr. Berger measured the first excavation starting at 20mm from the end of the weld and recorded the length and depth measurements on the plate as follow: The first excavation 126 mm in length and 30mm the second excavation from the end was 480 mm from the weld end 140 mm in depth and 34 mm in depth, the third excavation was recorded at 480 mm from the weld end and was 140 mm in length and 30 mm in depth. Mr. Zhou reported finding no indications on the above listed welds inspected. Mr. Zhou performed MT on the 89 meter Mock-Up on the final cover passes of Skin C Lower plate MA23-1 to mp507-1, Complete Joint Penetration (CJP) welds A and B sides and Partial Joint Penetration (PJP) welds 39 and 40. Magnetic Particle Testing (MT) was also performed by ZPMC and Mr. Berger for the 89 Meter Mock-Up, Skin D upper between plate's m509-1 and mp513-1, CJP MUSB MA 22 B/B-2 weld 21 A and B side and PJP weld 1 and 2 MUSB MA 22 B/B including four weld removal areas for temporary attachments of lifting lugs. QA Inspector Dixon noticed that the ZPMC (MT) technician Mr. Zhou Dong Yun was placing the MT yoke at a 45 degree angle to the direction of the welds and The Caltrans Inspector Mr. Bruce Berger included a zero ninety degree check, when QA Dixon questioned Mr. Berger why the ZPMC technician did not use the zero ninety

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degree check Mr. Berger informed QA Dixon that he had already discussed this mater many times with ZPMC technicians and they continue to disregard the zero ninety degree check, so he will continue to write this in his report. Mr. Berger also informed This QA Dixon that Mr. Zhou reported finding no indications on the above test areas and Mr. Berger stated that he performed MT testing for 100% of the repair excavations lengths and 10% of the final cover pass weld lengths and found no recordable indications. See Photos shown below.



Summary of Conversations:

As noted above and basic communication between QC Inspector and QA inspector when and where welding inspections are to be performed.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Dixon,Roscoe

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer
