

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017915**Date Inspected:** 01-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Tao**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**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing:-

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This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Steel Barriers. The weld designation reviewed is as follows:

W5-SB3-002-039,041,056,071,058

W5-SB8-002-069,071,104,128,130

W5-SB1-014-040,055,048,128,130

W5-SB12-002-055,086,070,128,130

W5-SB3A-002-055,086,070,128,130

During random Quality Assurance visual verification of welds located on OBG Component steel barrier, Caltrans (CT) Quality Assurance Inspectors (QA) discovered the following issues:

- Two Longitudinal Linear Indications with each measuring approximately 10 to 15mm in length.
- The Longitudinal Linear Indications were found on barriers identified as W5-SB3-002-066 and

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W5-SB3A-002-042.

- These welds are fillet welds, joining the diaphragm (W5-P-5) to the web stiffener (W5-P-4).
- The indications are clearly marked on the material near the weld.
- OBG Component Steel barriers are located in Bay#16.
- The indications were discovered visually and confirmed by Magnetic particle Testing (MT) by Caltrans QA.

The Notice of Witness Inspection Number (NWIT) is 007083. The Longitudinal Linear Indications are located within an area that had been previously inspected by ZPMC Quality Control (QC) personnel. As per contract documents ZPMC is required to perform 100% Visual Testing (VT) of these welds.

This Quality Assurance (QA) Inspector wrote an Incident Report for VT Cracks in Steel Barriers. Please reference the Incident Report # 04-0120F4_TL-15_B286_11-01-10_VT_ Longitudinal Linear Indication. For further information, please see the attached pictures.

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Ultrasonic Testing (UT)

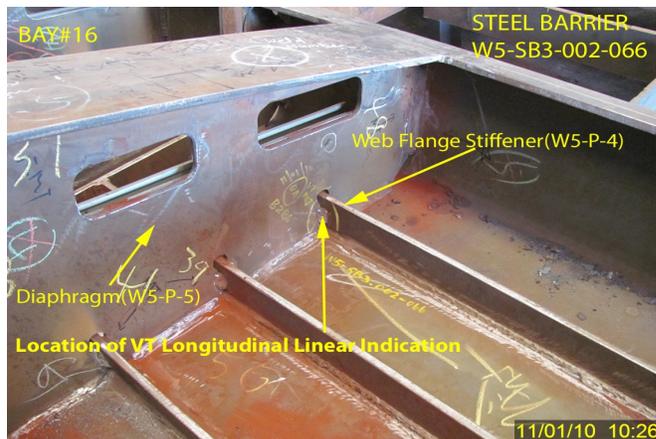
This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG Steel Barriers .The weld designation reviewed is as follows:

W5-SB10-001-081
W5-SB12-003-050
W5-SB13A-001-050
W5-SB5A-001-019
W5-SB3A-002-050
W5-SB1E-002-081
W5-SB4-001-081
W5-SB5B-001-081
W5-SB5-001-050
W5-SB1C-001-081
W5-SB9-001-081
W5-SB8-001-019
W5-SB1-026-019
W5-SB3-003-050

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No Relevant Conversation.

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 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Pillai,Pandaram

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer