

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-010437**Date Inspected:** 17-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 2

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 004661 to perform Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel (QC). This QA Inspector generated a Magnetic Particle Test report for this date. The member is identified as Floor beam. The weld tested is identified as follows:

(FB3019-001-033,041,010,026,027) Green Tag # 11207

(FB3024-001-012,006,007,027,033,034,047,048,063) Green Tag # 11212

(FB3051-001-033,004,010,013,014,022,023,049,038) Green Tag # 11187

(FB3009-001-014,043,044,045,046) Green Tag # 11200

(FB3053-001-004,010,013,014,022,023,029,030,049,033,034) Green Tag # 11189

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 004660 to perform Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an Ultrasonic Test report for this date. The member is identified as Floor beam. The weld tested is identified as follows:

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(FB3022-001-045,046)
(FB3026-001-041,042)
(FB3046-001-077,078)
(FB3094-001-046,047)
(FB3047-001-052,054)

This QA Inspector randomly observed the following work in progress:

OBG # BAY 2

Flux Cored Arc Welding Process:

Welding of weld joints – LD017-026-005,007. Welder is identified as 045209. ZPMC QC is identified as Zhan hai feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

Welding of weld joints – LD018-026-005,007. Welder is identified as 045209. ZPMC QC is identified as Zhan hai feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

Welding of weld joints – LD015-046-006. Welder is identified as 045209. ZPMC QC is identified as Zhan hai feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-TC-U4b-F.

This Quality Assurance Inspector (QA) observed ZPMC personnel performing Flux Cored Arc Welding (FCAW) of weld joint FB3054-001-126. The welder identified as #045227 was observed to be welding with a 60mm (mm/min) travel speed. This does not comply with the applicable WPS-B-T-2231-TC-U4b-F which requires a travel speed of 182.6 - 442.4 (mm/min). Welding amp & volts were found to be in compliance with aforementioned Welding Procedure Specification (WPS). This QA notified ZPMC QC identified as Mr. Zhan hai feng and ABF QC identified as Mr. Luo of this issue and that an incident report would be generated.

During random in process visual inspection this Quality Assurance (QA) Inspector observed the cope-hole radius on stiffener X3111 of FB3013-003 measured approximately 50mm. The approved shop drawing presented to this QA Inspector required this radius to be 25mm. This QA notified ZPMC QC identified as Mr. Yang qing feng and ABF QC identified as Mr. Luo of this issue and that an incident report would be generated.

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

Summary of Conversations:

As mention 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 150-00422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Sukanthan,Dhanasingh	Quality Assurance Inspector
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Reviewed By:	Hall,Steven	QA Reviewer
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