

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-010228**Date Inspected:** 14-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:** Li Yang**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 day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

1AE+1AAE

SMAW repair welding on weld joint 001 located at OBE1 deck plate.

Welder is identified as Mr. Xu Changxue (066002). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #868-R1.

Y Locations of excavations by above noted welder (066002) are located at approximately 2885~2930mm

SMAW repair welding on weld joint 001 located at OBE1 deck plate.

Welder is identified as Mr. Yun Chuansheng (045221). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #868-R1.

Y Locations of excavations by above noted welder (045221) are located at approximately 13380~13520mm.

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1AE+1AAE

SMAW repair welding on weld joint 007 located at SEG004A cross beam side of segment.

Welder is identified as Mr. Li Jun (051348). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #900.

Y Locations of excavations by above noted welder (051348) are located at approximately 535, 815 and 1175mm.

SMAW repair welding on weld joint 004 located at SEG004A bike path side of segment.

Welder is identified as Mr. Zang Yanbo (051348). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #900.

Y Locations of excavations by above noted welder (045196) are located at approximately 80, 350 and 760mm.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

1AE+1AAE

Excavation areas at OBE1-001 deck plate (external) weld joint on segment 1E. Y locations and numbers of MT Indications observed are as followed:

Y locations are 11535mm, 11790mm (3 MT transverse indication observed), 12230mm, 15180mm, 17590mm (2 MT transverse indications observed), 17817~17960mm (10 MT transverse indications observed), 17997, 20585~10790mm (3 MT transverse indications observed) and 21010~21140mm (4 MT transverse indications observed).

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at edge to deck plate weld joint on segment 2AE cross beam and bike path side of segment. (This QA Inspector also performed MT inspection in excavations) Y locations indications are as followed:

Cross Beam side

1. Y location 9010mm (slag), 6140mm (slag), 5910mm (slag), 5060mm (linear porosity) and 2770mm (2 transverse indications).

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Bike Path side

2. Y location 18400mm (slag), 5100~5130mm (5 MT transverse indications), 5170mm (1 MT transverse indication), 23355mm (slag), 24075mm (slag), 22155mm (slag), 5290mm (slag), 2300mm (1 MT transverse indication), 8470mm (1 MT transverse indication) 8670mm (slag), 8690 (1 MT transverse indication) 8750mm (slag), 8935mm, 9075mm, 28095mm(slag), 29235~29265mm (5 MT transverse indications), 29290~29390mm (5 MT transverse indications), 29500mm (1 MT transverse indication), 29520mm (1 MT transverse indication) and 29430mm (1 MT transverse indication).

3. ZPMC work removed backing bar on weld joint 008 located at OBW1A bottom plate.

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

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
