

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-009755**Date Inspected:** 05-Oct-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:** Xu Yumin and Li Jia**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

This QA inspector performed MT of approximately 15% of the repaired area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as OBG 1E LD to BP. The weld designations reviewed are as follows:

1. SEG004B-012, 018
2. SEG004C-006, 018
3. SEG006B-020, 004
4. SEG006C-004, 022

2AW & 2BW

This QA Inspector performed Ultra Sonic (UT) inspection of weld joint OBW2A-005(side plate on cross beam side of segment) utilizing scanning pattern D to detect transverse indication reflectors. Noted UT inspection was performed in conjunction with ABF UT Department.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

See Caltrans's Ultrasonic Transverse Indication Evaluation report sheet dated 10-05-09 for future information on inspection performed on this work day.

1AAW+1AW

This QA Inspector performed Magnetic Particle (MT) inspection of weld joint OBW1-001 excavation performed by ZPMC. MT inspection was performed at two (2) separate Y locations on deck panel. Y locations, depth and number of transverse indication are as followed:

1. Y location 21,480~23,620mm (off cross beam side), length of excavation 1,556mm, depth of excavation approximately 14mm, approximately 12 indications present.

2. Y location 660~3,090mm (off cross beam side), length of excavation 2,430mm, depth of excavation approximately 17mm, approximately 59 indications present.

Above noted excavation areas were performed per WR78676 and repair twice. A CWR will need to be submitted for engineer approval for repair work. This QA Inspector issued an incident report on the work.

NDT Observation

This QA Inspector observed ZPMC Ultra Sonic (UT) Technician performing UT on various locations in the trial assembly yard. Locations are as followed:

1. UT was performed on weld OBE1A-003 (bottom plate) with a 70° wedge. Scanning "D" and "E" pattern was observed at time of UT inspection. Y location is approximately 2,506mm off bike path side of segment.

2. UT was performed on whole length of weld OBE1-001 (Deck plate) with a 70° wedge. Scanning "D" pattern was observed at time of UT inspection.

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:

1. UT reject excavation was performed on OBW1A-003 bottom plate weld joint. Y location is approximately 2,506mm off bike path side of segment.

2. UT reject excavations in OBW1-001 deck plate weld joint located on counter weight side of segment. Y location is as followed: 23,120mm.

Note:

Due to China National Holiday, work was limited in the OBG Trail Assembly Yard on today's work shift.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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:	Carreon,Albert	QA Reviewer
