

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009765**Date Inspected:** 15-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

1AE & 1BE

This QA Inspector trained and observed ABF quality control Ultra Sonic (UT) technician S006 performed inspection of weld joint OBE1A- (deck plate) on segment 1W, utilizing scanning pattern D to detect transverse indication reflectors. Training and testing was performed per San Francisco Bay Bridge (04-0120F4) Transverse Segment Assembly Splice Ultrasonic Testing Procedure for Compliance to AWS D1.5-2002, Section 6.26.3.3 Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension.

1AW & 1AAW

SMAW welding performed on weld joint 004 located on OBE1A.

Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Li Jia.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1 and CWR845.

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SMAW welding performed on weld joint 004 located on OBE1A.

Welder is identified as Mr. Zhang Feng (049769). ZPMC QC is identified as Li Jia.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1 and CWR845.

SMAW welding performed on weld joint 004 located on OBE1A.

Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Jia.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1 and CWR845.

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 OBE2A-003 (bottom plate) SWAW repair area with a 70° wedge. Scanning “D” pattern was observed at time of UT inspection.

Y locations of transverse indications measurements were taken from the bike path side of segment and are as followed:

1. 3840mm, 4140mm, 4160mm, 4230mm, 4280mm, 4460mm and 4500mm. Length of excavation is approximately 850mm and 1 transverse indication is noted at each y location mark.

2. 5360mm, 5390mm, 5440mm and 5550mm. Length of excavation is approximately 180mm and 1 transverse indication is noted at each y location mark.

3. 6190mm, 6000mm~ 6730mm, 6955mm and 7265. Length of excavation is approximately 2800mm and 1 transverse indication is noted at each y location mark and 1 transverse indication is noted at each y location mark. Between 6000mm~ 6730mm y locations QA Inspector observed approximately 8 transverse indications marked on weldment by ZPMC.

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

1. Excavation area at weld joint OBW1A-001 on the cross beam side of segment 1AAW to 1AW.

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

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remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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| Inspected By: | Alaniz,Joe | Quality Assurance Inspector |
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| Reviewed By: | Carreon,Albert | QA Reviewer |
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