

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-010215**Date Inspected:** 07-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW tack welding of weld joint NSD1-SPSA4-20-2A and 2B located on PCMK north tower, lift 4, splice plate.

Welders were identified as 054547, 040586. ZPMC QC was identified as Wan Wen Zhong (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Peng Fei, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2212-TC-U5.

SMAW welding of weld joint SSSL4-1B/L-4A located outside PCMK south tower, lift 4, skin A to skin B at the upper tower rotation fender area, approximately 136M to 138M elevation. Welder was identified as 057220.

ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-C-U2.

SMAW welding of weld joint SSSL4-1B/L-5A located outside PCMK south tower, lift 4, skin B to skin C at the upper tower rotation fender area, approximately 136M to 138M elevation. Welder was identified as 040581.

ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-C-U2.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

SMAW welding of weld joint SSTL4-1B/L-4A located outside PCMK south tower, lift 4, skin A to skin B at the lower tower rotation fender area, approximately 120M to 122M elevation. Welder was identified as 056200. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-C-U2.

FCAW welding of weld joint SSTL4-1B/L-3A located outside PCMK south tower, lift 4, skin A to skin E at the lower tower rotation fender area, approximately 120M to 122M elevation. Welder was identified as 040343. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2232-C-U2-F.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

FCAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E at 132M elevation. Welder was identified as 040759. ZPMC QC was identified as CWI Zhang Zhi Neng (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2231-C-U2-F. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Luo Lai Quan.

FCAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E at 123M elevation. Welder was identified as 040723. ZPMC QC was identified as CWI Liu Xiao Zhong (QC3). The welding variables recorded by QC3 appeared to comply with WPS-B-T-2231-C-U2-F. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Luo Lai Quan.

Blast Shop 2

This QA Inspector and Caltrans OSM Quality Assurance Inspector Paul Dawson performed a random inspection of the exterior surfaces of OBG segment 7BE which was located in Blast Shop 2:

These exterior surfaces had recently been sandblasted and were, at the time of this inspection, free of rust oxide and other contaminants that had previously obscured portions of the welds and base material surfaces. The QA Inspectors visually observed and marked approximately 100 locations which exhibited weld overlap and other unacceptable weld profiles as well as scratches and other sharp edges left from unknown sources. All marked areas were subsequently ground by ZPMC workers to blend these areas. After grinding, all marked areas that had been ground appeared to comply with project specifications.

Summary of Conversations:

No significant conversations.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By: Goulet,George

Quality Assurance Inspector

Reviewed By: Dawson,Paul

QA Reviewer