

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-015970**Date Inspected:** 26-Jul-2010**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 (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

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

SMAW tack welding of unknown weld joints located on PCMK BK5A-BKX7F to BKX9C, flange to web. QC was identified as ZPMC CWI Liu Yang (QC1). Welder was identified as 202319. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Chuang Xing (QCA1), who was not a CWI. QCA1 did not know the weld joint numbers. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2114.

SMAW welding of weld joint ESD1-TL5-2E/F-21B located on PCMK east tower, lift 5, internal connection plates.

Alternating welders were identified as 046769, 046709. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Mao Bin Bin (QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint ESD1-TL5-2E/F-20A located on PCMK east tower, lift 5, internal connection plates.

Alternating welders were identified as 044541, 044551. QC was identified at QC1. Assisting QC1 at this

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location and appearing to be monitoring the welding and recording data was QCA2 who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-2E/F-24A located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 066416. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Ma Qian Li (QCA3), who was not a CWI. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-2E/F-25B located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 066261. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA3, who was not a CWI. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-4E/F-27 located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 067520. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA3, who was not a CWI. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-4E/F-22 located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 068924. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA3, who was not a CWI. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

Bay 10

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

SMAW welding of weld joint SSD1-TL5-1F-F-20 located on PCMK south tower, lift 5, internal connection plates. Welder was identified as 040582. QC was identified at QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

SMAW welding of weld joint SSD1-TL5-1F-F-9 located on PCMK south tower, lift 5, internal connection plates. Welder was identified as 040582. QC was identified at QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QC2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

SMAW welding of weld joint SSD1-TL5-1F-F-10 located on PCMK south tower, lift 5, internal connection plates. Welder was identified as 052930. QC was identified at QC1. Assisting QC1 at this location and appearing to be

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monitoring the welding and recording data was QC2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joints FB023-012-007, 008 located inside PCMK 9DW, FL3 area, holdback welds at CB12, panel point 81, I-rib to floor beam. QC was identified as ZPMC CWI Liu Hua Jie (QC2). Welder was identified as 220069. Welding variables recorded by QC2 appeared to comply with WPS-B-T-2132 and WPS-B-T-2134.

SMAW welding of temporary alignment plates located outside, across PCMK 9DW/9EW transverse joint, side plate south (crossbeam side). Welder was identified as 054217. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu (QCA4), who was not a CWI. Welding variables recorded by QC4 appeared to comply with WPS-B-P-2114.

SMAW welding of temporary alignment plates located outside, across PCMK 9DW/9EW transverse joint, side plate north (counterweight side). Welder was identified as 500432. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu (QCA4), who was not a CWI. Welding variables recorded by QC4 appeared to comply with WPS-B-P-2114.

FCAW welding of weld joint BP204-012-005 located inside PCMK CB12 at 9DE, FL3 area, panel point 82, east side plate to bottom plate, holdback weld. Welder was identified as 220067. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-B-T-2212-FCM.

FCAW welding of weld joints SP202-012-018, 019 located inside PCMK CB12, holdback welds at 9DW, FL3 area, panel point 82, I-rib to east side plate. QC was identified as ZPMC QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhou Peng (QCA5), who was not a CWI. Welding variables recorded by QC2 appeared to comply with WPS-B-T-2132 and WPS-B-T-2134.

Heavy Dock

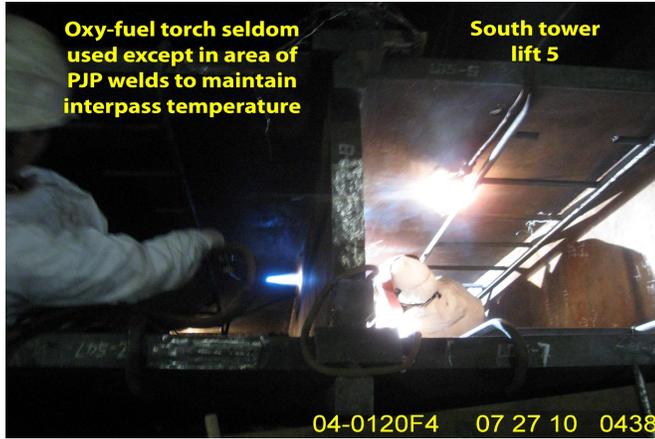
This QA Inspector randomly observed the following work being performed on the Heavy Dock:

This QA Inspector observed no apparent welding related work was being performed on the Heavy Dock. All 4 tower lifts 2 were erect with all 4 tower lifts 3 attached above, respectively. The lifts 2/3 worker access tower elevator was dark and appeared to be off and unmanned. The ship that had previously been moored to the end of the heavy dock was no longer moored there.

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

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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 Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Dawson, Paul

QA Reviewer