

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024057**Date Inspected:** 18-May-2011**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:** 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.

OBG Trial Assembly Area

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

SMAW repair welding of weld joint SEG3019C-001 located on PCMK OBG 14E. Welder was identified as 216086. QC was identified as ZPMC CWI Sha Zhi (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Xie Ming Feng (QCA1), who was not a CWI.

Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR21037 as presented to this QA Inspector and verbally identified by QCA1.

FCAW repair welding of weld joint SEG3019AJ-139, 140, 142, 143, 144 located on PCMK OBG 14E. Welder was identified as 067877. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-FCAW-3G(3F)-ESAB-repair-1 as displayed on ZPMC Weld Repair Report B-WR21029 as presented to this QA Inspector and verbally identified by QCA1.

FCAW repair welding of weld joint SEG3019J-185, 190, 195, 200, 205 located on PCMK OBG 14E. Welder was identified as 051356. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring

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the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-FCAW-3G(3F)-ESAB-repair-1 as displayed on ZPMC Weld Repair Report B-WR21029 as presented to this QA Inspector and verbally identified by QCA1.

SMAW welding of weld joint SEG3019D-1-015~020 located on PCMK OBG 14E. Welder was identified as 501946. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2213-FCM-1 and WPS-B-P-2214-FCM-1 as verbally identified by QCA1.

SMAW repair welding of weld joint DP3019C-001-012, 211, 338, 381 located on PCMK OBG 14E. Welder was identified as 215553. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-3G(3F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20985 as presented to this QA Inspector and verbally identified by QCA1.

Heat treatment of plate number X3490A located on PCMK OBG Segment 13AE at panel point 118. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the heat treating operation and recording data was QCA1, who was not a CWI. Heat treatment variables recorded by QC2 appeared to comply with ZPMC document HSR1(B)-10371 as presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of weld joint SEG3007AH-030 located on PCMK OBG 13AE. Welder was identified as 043611. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-3G(3F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20583 as presented to this QA Inspector and verbally identified by QCA1.

FCAW welding of weld joints SEG3012-001-045~048-002, 004 located on PCMK OBG 13AE. Welder was identified as 055491. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA1.

Heat treatment of weld joint SEG3009C-005 located on PCMK OBG Segment 13BE at panel point 122. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the heat treating operation and recording data was QCA1, who was not a CWI. Heat treatment variables recorded by QC2 appeared to comply with ZPMC document HSR1(B)-10352 as presented to this QA Inspector and verbally identified by QCA1.

FCAW welding of weld joints SA7009-001~004-003, 005 located at PCMK OBG 13BE/13CE transverse joint. Welder was identified as 050977. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2231-ESAB as verbally identified by QCA1.

SMAW repair welding of weld joint CA3014A-108 located on PCMK OBG 13BE. Welder was identified as 058102. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to

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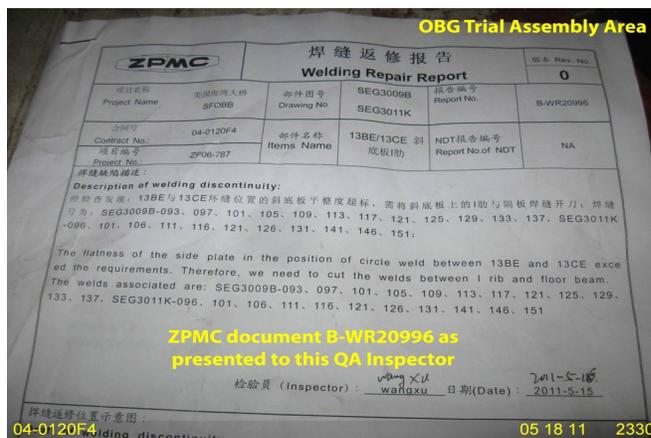
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comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR21036 as presented to this QA Inspector and verbally identified by QCA1.

FCAW welding of temporary alignment plates located at PCMK OBG 13BW/13CW transverse joint, deck plates. Welder was identified as 066239. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Wang Xiang Pin (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2132-FCM-1 as verbally identified by QCA2.

Weld removal of bottom plate I-ribs to floor beam welds at both ends of I-ribs between panel points 122 and 122.5 using an oxy-fuel torch. QC informed this QA Inspector that removal of the welds was in conformance with ZPMC document B-WR20996. See photos below of B-WR20996 and the weld removal operation in progress.

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



Summary of Conversations:

As noted above.

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 James Devey 15000026784, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer