

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022740**Date Inspected:** 12-Apr-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 and Tower 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 10

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

SMAW welding of weld joint 31TR1-001-011 located on PCMK OBG traveler rail. Welder was identified as 050038. QC was identified as ZPMC CWI Xu Le Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was Yu Zhi Lai (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212-TC-U5b as verbally identified by QCA1.

FCAW welding of weld joints 31TR1-001-006, 007; 31TR3-001-046 located on PCMK OBG traveler rail. Welder was identified as 052075. 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.

FCAW welding of weld joints 31TR1-001-009, 010; 31TR3-001-042 located on PCMK OBG traveler rail. Welder was identified as 054069. 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.

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SMAW repair welding of weld joint 28TR1-001-013 located on PCMK OBG traveler rail. Welder was identified as 040365. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-345-SMAW-2G(2F)-repair as displayed on ZPMC Weld Repair Report B-WR20664 as presented to this QA Inspector and verbally identified by QCA1.

SMAW welding of temporary lifting pads located on PCMK OBG BK009, bike path. Welders were identified as 040582, 057200, 054069. 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-2113 as verbally identified by QCA1.

Fit-up and SMAW tack welding of weld joints BK014A8-001-065, 070, 076, 078 located on PCMK OBG bike path. Welder was identified as 043727. 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-2113 as verbally identified by QCA1.

Heat straightening of BK014A8-001-016~018 located on PCMK OBG traveler rail. QC was identified as QC1. Heat treatment variables recorded by QC1 appeared to comply with ZPMC document HSR1(B)-10273 as presented to this QA Inspector and verbally identified by QC1. See photo below of ZPMC document HSR1(B)-10273 as presented to this QA Inspector and verbally identified by QC1.

Bay 11

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

SMAW welding of rigging ring (padeye) weld joints NSD1-FCSA6-3-9~14 located on PCMK north tower, lift 6, skins A through F, within approximately 300mm of the top of lift 6. Welder was identified as 040581. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2112(padeye), WPS-B-P-2113(padeye), and WPS-B-P-2114(padeye) as verbally identified by QC1.

SMAW welding of rigging ring (padeye) weld joints SSD1-FCSA6-1-26~31 located on PCMK north tower, lift 6, skins A through F, within approximately 300mm of the top of lift 6. Welder was identified as 056364. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2112(padeye), WPS-B-P-2113(padeye), and WPS-B-P-2114(padeye) as verbally identified by QC1.

SMAW welding of weld joints WSD1-FASA6-4-11~14, 17~19 located on PCMK tower, lift 6. Welder was identified as 041271. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2112, WPS-B-P-2113, WPS-B-P-2114 as verbally identified by QC1.

SMAW welding of weld joints WSD1-TL6-4C/D-42~53 located on PCMK tower, lift 6. Welder was identified as 046769. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2112, WPS-B-P-2113, WPS-B-P-2114 as verbally identified by QC1.

OBG Trial Assembly Area

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

SMAW welding of temporary alignment plates at the 12CE/13AE transverse joint, bottom plate located on PCMK

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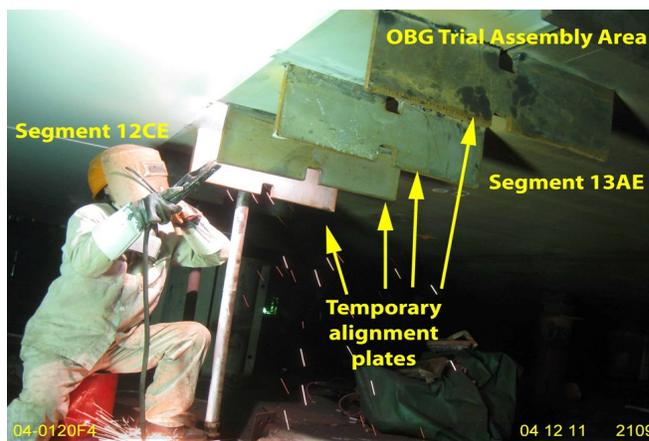
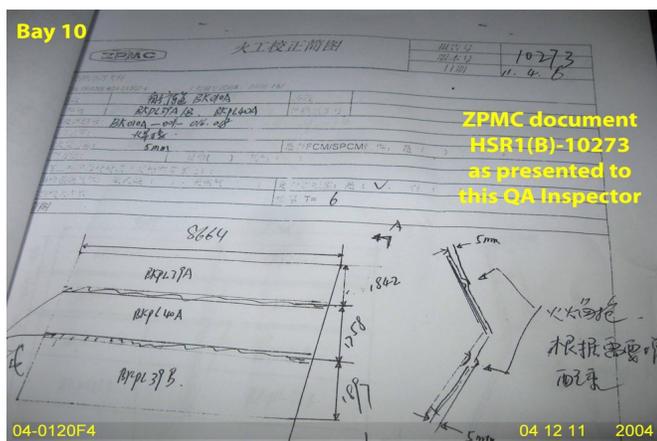
OBG Segments 12CE/13AE. Welders were identified as 500363, 044551. QC was identified as ABF CWI Sheng Qing Quan (QC2). Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Zhan Hai Feng (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2114 as verbally identified by QCA2. See photo below of the welding operation in progress at the 12CE/13AE transverse joint

FCAW welding of weld joints AH3150A-017, 019, 023, 025 located on PCMK OBG Segment 13AE. Welder was identified as 050242. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

SMAW welding of weld joints SEG3007AA-043, 046, 050, 053, 057 located on PCMK OBG Segment 13AE. Welder was identified as 215553. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-4213-TC-U4b-2 as verbally identified by QCA2.

SMAW welding of weld joints SEG3007AA-064, 067, 071, 074, 078 located on PCMK OBG Segment 13AE. Welder was identified as 216086. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-4213-TC-U4b-2 as verbally identified by QCA2.

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

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Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer