

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025169**Date Inspected:** 05-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:** Tian Lei**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 date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

This inspector did not observe any welding or contract work being conducted in this bay today.

Bay Number 2

This QA inspector assisted in the performance MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel, by the lot method testing procedure. This QA Inspector assisted in the generation an MT report for this date by inspector lot no. All components were as listed on NWIT notification no. 07241. The member(s) is/are identified as OBG Floor Beams and Vertical Plate assembly. The weld designations reviewed are as follows:

1. FB3334-001-001~016, 021~028.
2. FB3337-001-001~016, 021~028.
3. FB3323-001-001, 002.
4. FB3349A-001-001~009.

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5. FB3339-001-001~016, 021~028

6. VP3012-001-002, 004~019.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Sub Assembly assembly identified as SA3448-001 weld number(s) 001. Welder is identified as welder no. 045165. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2c-S-2.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Sub Assembly assembly identified as SA3445-001 weld number(s) 001. Welder is identified as welder no. 250050. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2c-S-2.

Bay Number 3

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3262-001. This QA inspector signed green tag #15216.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3334A-002 for the following designated weld number(s): 005~008. This QA inspector signed green tag #15276.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3334-001. for the following designated weld number(s): 001~004. This QA inspector signed green tag #15275.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3334A-001 for the following designated weld number(s): 005~008. This QA inspector signed green tag #15274.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3334A-001. for the following designated weld number(s): 001~004. This QA inspector signed green tag #15273.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3284-001. This QA inspector signed green tag #15268.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3281-001. This QA inspector signed green tag #15267.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3278-001. This QA inspector signed green tag #15266.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam

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component listed as FB3275-001. This QA inspector signed green tag #15265.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3275A-001. This QA inspector signed green tag #15264.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3271-001. This QA inspector signed green tag #15263.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3270-001. This QA inspector signed green tag #15262.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3269(B)-001. This QA inspector signed green tag #15261.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3269-001. This QA inspector signed green tag #15260.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3268-001. This QA inspector signed green tag #15259.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3268(B)-001. This QA inspector signed green tag #15258.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3264-001. This QA inspector signed green tag #15257.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3261-001. This QA inspector signed green tag #15256.

Performed verification VT for the component(s) and corresponding welds for component on OBG Floor Beam component listed as FB3260-001. This QA inspector signed green tag #15255.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 310 & 401. Welder is identified as welder no. 052696. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U4c-F & WPS-B-T-2232-TC-U4c-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 192 & 038. Welder is identified as welder no. 050242. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2232-TC-U4c-F & WPS-B-T-2232-TC-U4c-F .

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 292 & 397. Welder is identified as welder no. 055491. The welding

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variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s)
WPS-B-T-2232-TC-U4c-F & WPS-B-T-2232-TC-U4c-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 020 & 123. Welder is identified as welder no. 044830. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s)
WPS-B-T-2232-TC-U4c-F & WPS-B-T-2232-TC-U4c-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 312 & 389. Welder is identified as welder no. 068501. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s)
WPS-B-T-2232-TC-U4c-F & WPS-B-T-2232-TC-U4c-F.

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG Floor Beam component identified as FB3286-001 weld number(s) 214 & 215. Welder is identified as welder no. 067036. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s)
WPS-B-T-2233-TC-U4c-F & WPS-B-T-2232-TC-U4c-F.

Bay Number 4

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) Sub Assembly component identified as SA3358-001. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR1-9777.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) Sub Assembly component identified as SA3359-001. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR1-9776.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

Summary of Conversations:

Pertinent conversations are included in the body of the report.

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 1500-0042-02372, who represents the Office of Structural Materials for your project.

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Inspected By: Hernandez,Rene

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer