

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-011565**Date Inspected:** 23-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Fawen**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:** Orthotropic Box Girder (OBG) Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 002 located on Traveler Rail Bracket 13TB1 – 196. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Tian lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

Weld joint # 002 located on Traveler Rail Bracket 13TB1 – 171. Welder is identified as 216872. ZPMC Quality Control (QC) Inspector is identified as Tian lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

BAY 2

This QA Inspector observed the following work in progress:

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Flux Core Arc Welding (FCAW):

Weld joint # 001 located on Traveler Rail 20TR1 – 008. Welder is identified as 045240. ZPMC Quality Control (QC) Inspector is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U5 – F.

Weld joint # 005 located on Traveler Rail 20TR1 – 008. Welder is identified as 045227. ZPMC Quality Control (QC) Inspector is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U5 – F.

BAY 3

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005119

Magnetic Particle Testing (MT)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. LD3008 – 001 – 002; 005; 013; 020
2. CA3003D – 033~038; 153; 233; 277
3. CA3003C – 033~038
4. CA3004D – 033~038; 284; 287; 299
5. CA3001F – 033~038; 139~143
6. CA3002C – 2 – 033~038
7. CA3002C – 1 – 033~038
8. CA3005C – 033~038; 173; 174
9. CA3004C – 033~038; 277; 278
10. CA6501C – 033~038
11. CA3005D – 173~180
12. CA6501D – 033~038; 277; 278
13. CA3004E – 273~278; 083; 105; 090; 102

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 009 located on Traveler Rail 20TR2 – 002. Welder is identified as 214945. ZPMC Quality Control (QC) Inspector is identified as Yin Donghai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U5 – F.

Weld joint # 017 located on Traveler Rail 20TR2 – 014. Welder is identified as 204338. ZPMC Quality Control (QC) Inspector is identified as Yin Donghai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U5 – F.

Weld joint # 009 located on Traveler Rail 20TR2 – 016. Welder is identified as 044824. ZPMC Quality Control (QC) Inspector is identified as Yin Donghai. The welding variables recorded by QC appeared to comply with the

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WPS – B – T – 2231 – Tc – U5 – F.

BAY 5

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 05120

Magnetic Particle Testing (MT)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. 10TR6 – 001 – 002; 005; 010; 014
2. 10TR6 – 002 – 002; 005; 010; 014

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. 10TR6 – 001 – 002; 005; 010; 014
2. 10TR6 – 002 – 002; 005; 010; 014

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Repair welding of a weld joint # 014 according to weld repair report #B-WR10137 located on Traveler Rail 11TR4 – 002. Welder is identified as 215185. ZPMC Quality Control (QC) Inspector is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Repair welding of a weld joint # 014 according to weld repair report #B-WR10141 located on Traveler Rail 10TR3 – 033. Welder is identified as 217185. ZPMC Quality Control (QC) Inspector is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Repair welding of a weld joint # 014 according to weld repair report #B-WR10155 located on Traveler Rail 11TR3 – 024. Welder is identified as 215250. ZPMC Quality Control (QC) Inspector is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

BAY 6

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 002 located on U-rib connection plate USPL1 – 292. Welder is identified as 048625. ZPMC Quality

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Control (QC) Inspector is identified as Huang Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

Weld joint # 001 located on U-rib connection plate USPL1 – 293. Welder is identified as 051246. ZPMC Quality Control (QC) Inspector is identified as Huang Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4b – F.

BAY 7

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Repair welding of a weld joint # 006 according to weld repair report #B-WR10167 located on Traveler Rail 11TR3 – 017. Welder is identified as 066695. ZPMC Quality Control (QC) Inspector is identified as Cui Junjie. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

Repair welding of a weld joint # 006 according to weld repair report #B-WR10061 located on Traveler Rail 11TR3 – 006. Welder is identified as 066695. ZPMC Quality Control (QC) Inspector is identified as Cui Junjie. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 2G (2F) – Repair – 1.

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

Summary of Conversations:

No Relevant 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 - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
