

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-008922**Date Inspected:** 05-Sep-2009**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:	Xu Xian Ping		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

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

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Traveler Rail TR7A – PP08.5. Welder is identified as 217185. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – U4c – F – 1.

FCAW process welding of weld joint #004 located on Traveler Rail 11TR1 – 013. Welder is identified as 217805. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #004 located on Traveler Rail 11TR1 – 012. Welder is identified as 217185. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #003 located on Traveler Rail 11TR1 – 015. Welder is identified as 215689. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the

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WPS – B – T – 2231 – B – U2 – F.

BAY 6

Magnetic Particle Testing

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. EP3001 – 001 – 020~023 – Green Tag # 0010371
2. EP3002-001-001; 003
3. EP3001-001-034~037 – Green Tag # 0010370
4. EP3010-001-001~003
5. EP3010-001-013~016
6. EP3001-001-049~052; 061~064 – Green Tag # 0010375
7. EP3007-001-001~004; 009~012 – Green Tag # 0010376
8. EP3004-001-001~004; 013~016 – Green Tag # 0010378
9. EP3001-001-001~004; 009~012 – Green Tag # 0010377
10. DP3022-001-001~006 – Green Tag # 0010369

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #39 located on WD1 – A305 – 77M – 4. Welder is identified as 053753. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

SMAW process welding of weld joint #17 located on WD1 – A305 – 65M – 4. Welder is identified as 048659. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

SMAW process welding of weld joint #21 located on WD1 – A305 – 77M – 4. Welder is identified as 049769. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

SMAW process welding of weld joint #39 located on WD1 – A305 – 65M – 4. Welder is identified as 048617. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

This QA Inspector observed the following work not in compliance:

During random verification Magnetic Particle Testing (MT) of the OBG Edge Plates located in Bay # 6, observed a total of Twenty Four (24) transverse linear indications. The indication lengths measured approximately 3mm to 10mm in length. The Edge Plates are identified as EP3002-001 and EP3010-001.

The affected weld designations are as follows:

- EP3002-001-002 - Eleven (11) Transverse linear indications
- EP3002-001-004 - Eleven (11) Transverse linear indications
- EP3010-001-004 - Two (2) Transverse linear indications

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The above mentioned Edge Plates had been welded on the gantry with automatic FCAW by electrode Super cored 71H (1.4 diameter) (E71T-1) using WPS-B-T-2132-3.

These areas are outside of the 10% area tested by ZPMC Quality Control personnel.

For Further details please see the incident report: - 040120F4_TL-15_B227_09-05-09_ (MT) Transverse Indications.

BAY 7

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Side Plate SP3025 – 017. Welder is identified as 222396. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #005 located on Side Plate SP3025 – 017. Welder is identified as 051246. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

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:	Prue,Erik	QA Reviewer
