

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019078**Date Inspected:** 27-Dec-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) Chanxing Island**Location:** Shanghai, China

CWI Name:	Mr. Geng Wei		
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 Segment**Summary of Items Observed:**

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

Ultrasonic Testing (UT) – NWIT Document No: 007951

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 Component. The weld designations reviewed are as follows:

1. W5-SB1-089-050
2. W5-SB1-046-050
3. W5-SB1-082-050
4. W5-SB1D-013-019
5. W5-SB1-100-081
6. W5-SB1-097-019
7. W5-SB1-083-050
8. W5-SB1-110-081
9. W5-SB21-001-019
10. W5-SB2-010-019
11. W5-SB1-054-081
12. W5-SB28-004-050

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

13. W5-SB28-007-019

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3015B-258 located on Longitudinal Diaphragm 3050 to Floor Beam 3343A at panel point 128.3 of the OBG Segment 14W. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-P-2213-B-U2-FCM-1.

SMAW welding of weld joint SEG3015D-309 located on Edge Plate I-Stiffener at panel point 124.5 of the OBG Segment 14W. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-P-2213-B-U2-FCM-1.

SMAW welding of weld joint SEG3020D-224, 228 located on Longitudinal Diaphragm to Floor Beam (FL2) at panel point 128.3 of the OBG Segment 14W. ZPMC Welders are identified as 066038 and 045246. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-P-2213-B-U2-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020X-013 located on Longitudinal Diaphragm to Floor Beam (FL2) of the OBG Segment 14W. ZPMC Welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

FCAW welding of weld joint SEG3020X-012 located on Longitudinal Diaphragm to Floor beam of the OBG Segment 14W. ZPMC Welder is identified as 045276. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

FCAW welding of weld joint SEG3020L-169 located on Longitudinal Diaphragm to Floor Beam of the OBG Segment 14W. ZPMC Welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2233-ESAB.

FCAW welding of weld joint SEG3020Z-080 located on Floor Beam to Bottom Plate at panel point 125.5 of the OBG Segment 14W. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2132-ESAB.

FCAW welding of weld joint SEG3020K-025 and 026 located on Floor Beam to Bottom Plate at panel point 126.5 of the OBG Segment 14W. ZPMC Welders are identified as 066239 and 202122. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

FCAW welding of weld joint SEG3020E-049 and 050 located on Side Plate to Floor Beam (FL3) at panel point 128.3 of the OBG Segment 14W. ZPMC Welder is identified as 045175. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2133-ESAB.

FCAW welding of weld joint SEG3020A*-009 located on Side Plate to Bottom Plate of the OBG Segment 14W. ZPMC Welder is identified as 066421 and 066734. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2231-ESAB.

FCAW welding of weld joint SEG3020L-086 located on Floor Beam (FL2) to Bottom Plate at panel point 127 of the OBG Segment 14W. ZPMC Welder is identified as 047866. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

Description of Incident: During the Quality Assurance random visual inspection of welds located on OBG Segment 14W, this Quality Assurance Inspector (QA) observed ZMPC personnel performing un-approved Seismic Performance Critical Member (SPCM) Temporary attachment on the bottom plate of OBG Segment 14W without the Engineer's approval. The weld is identified as SEG3020Q-058. The temporary attachments are placed across the floor beam to bottom plate weld at bottom side/other side. The Floor Beam to Bottom Plate weld is identified as SEG3020D-052. This weld is designated as Seismic Performance Critical Member (SPCM). OBG segment 14W is located West Side of Bay 14 area. The ZPMC QC is identified as Mr. Li Ming Yang. The floor number is identified as FB3343A and Bottom Plate is identified as BP3092A. See the attached picture.

Description of Incident: During the Quality Assurance random visual inspection of welds located on Segment 13AW, this Quality Assurance Inspector (QA) observed the Floor beam to Key Plate cope hole is offset approximately measured 18mm in lengths. OBG segment 13AW is located West Side of Bay 14 area. The ZPMC QC is identified as Mr. Li Ming Yang. The floor number is identified as FB3200A and Key Plate is identified as KP3015A. See the attached picture. The Floor Beam and key Plate are identified as Seismic Performance Critical Member (SPCM). QA inform to ZPMC that prior to the repair welding, to prepare CWR and to perform offset correction comply with contract documents. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer