**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Siegenthaler, Peter
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-023565
**Date Inspected:** 23-Apr-2011

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**OSM Arrival Time:** 700
**OSM Departure Time:** 1900
**Location:** Shanghai

**CWI Name:** Tian Lei, Liu Fa Wen, Chen Shigang

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|---|---|---|---|---|---|---|---|
| **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 |

**CWI Present:** ☑ Yes ☐ No

**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 observed ZPMC personnel welding of components identified as Lift 13 & 14 lifting frame beam.

Bay Number 4

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3025TR1-001 for weld(s) 001~016. 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. HSR(B)-10291.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3023TR1-001 for weld(s) 001~016. 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. HSR(B)-10291.

SMAW welding of complete joint penetration welds located on Traveler Rail component identified as

3025TR1-003 as identified on weld repair data sheet B-WR-20795 for repaired complete joint penetration welds identified as weld no.(s): 011. Welder is identified as welder no. 068764. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-repair.

Bay Number 7

This inspector did not observe any work being performed in this bay today.

Bay Number 8

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. All components were as listed on NWIT notification no. 08907. The member(s) is/are identified as OBG Light Pole Base components identified below with the following identifying weld no.(s):

1 SB3001-001-027/051/061.
2 SB3001-001-042/043/056/057.
3 SB3001A-001-001.

Performed verification VT for the component(s) identified as OBG Light Pole Base Assembly for component listed as SB3001 & SB3001A, This QA inspector signed green tag #15926.

Performed verification VT for the component(s) identified as OBG Light Pole Base Assembly for component listed as LB3100A, This QA inspector signed green tag #15924.

Performed verification VT for the component(s) identified as OBG Light Pole Base Assembly for component listed as LB3001, This QA inspector signed green tag #15923.

Bay Number 9

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. All components were as listed on NWIT notification no. 08906. The member(s) is/are identified as OBG Traveler Rail components identified below with the following identifying weld no.(s):

1. 3024TR1-001-001/002.

FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as SA7503E-001 weld no.(s) 001. Welder is identified as welder no. 059378. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

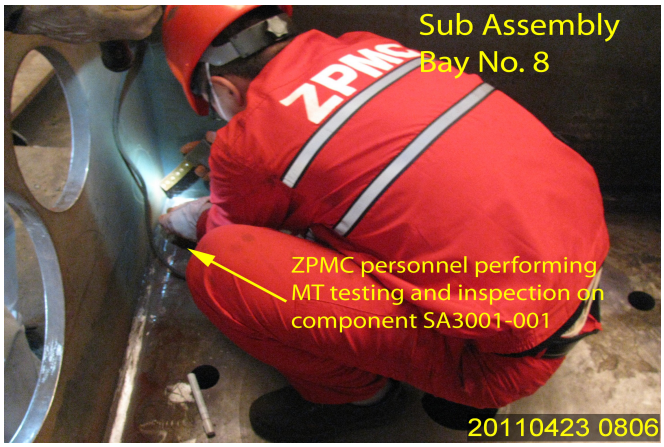
FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as SA7504A-001 weld no.(s) 001. Welder is identified as welder no. 059443. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as SA7504B-001 weld no.(s) 001. Welder is identified as welder no. 203805. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as SA7503B-001 weld no.(s) 001. Welder is identified as welder no. 062265. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

Performed verification VT for the component(s) identified as OBG Traveler Rail for component listed as 3024TR1-001, This QA inspector signed green tag #15922.

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 |