

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021902**Date Inspected:** 18-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Li Yan Hua**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, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #19

This QA Inspector observed the following work in progress,

**Flux Cored Arc Welding (FCAW)**

Repair of Weld joint- X6043A as per CWR no. B-CWR-2835, Located on Cable bracket SA6030. Welder is identified as 062783. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) –Esab-Repair-FCM..

Repair of Weld joint- X6043B as per CWR no. B-CWR-2835, Located on Cable bracket SA6031. Welder is identified as 062749. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) –Esab-Repair-FCM.

Repair of Weld joint- X6550A as per CWR no. B-CWR-2835, Located on Cable bracket SA6330. Welder is identified as 062306. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-1G (1F) –Esab-Repair-FCM.

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### Shielded Metal Arc Welding (SMAW)

Weld joint- 014, Located on Suspender Bracket SB26-001-106W. Welder is identified as 259566. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-P-2211-U2-U4B.

Weld joint- 014, Located on Suspender Bracket SB27-001-110E. Welder is identified as 259906. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-P-2211-U2-U4B.

### Heat Straightening:

Heat Straightening being performed on Cable Bracket identified as SA6029A-001, SA6030A-001 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Li Ping present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) – 10157.

### Bay #16

This QA Inspector observed the following work in progress

### Flux Cored Arc Welding (FCAW)

Weld joint- 012B Located on Crash Barrier W5-SB36-001. Welder is identified as 053742. ZPMC Quality Control Inspector (QC) is identified as Liu tao. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

Weld joint- 017, 018 Located on Crash Barrier W2-SB18-004. Welder is identified as 048625. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-T-2133-ESAB.

Weld joint- 022, 023 Located on Crash Barrier W5-SB38A-001. Welder is identified as 206296. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

Weld joint- 126 Located on Crash Barrier W5-SB30D-001. Welder is identified as 222396. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-T-2133-ESAB.

### Shielded Metal Arc Welding (SMAW)

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## WELDING INSPECTION REPORT

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Weld joint- 063, 064, Located on Crash Barrier W5-SB30-001. Welder is identified as 201905. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-P-2113.

Weld joint- 073, 074, Located on Crash Barrier E2-SB30C-001. Welder is identified as 053753. ZPMC Quality Control Inspector (QC) is identified as Liu Tao. The welding variables recorded by QC appeared to comply with the WPS-B-P-2113.

Bay #14

Ultrasonic Testing (UT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 08574

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report (TL 6027) for this date. The member is identified as OBG Lift13 Components. The weld designation reviewed as follows:

SEG3009N – Jt. no. -035

SEG3011J – Jt. nos. -192, 197, 202, 216 –P.P 123

SEG 3011G- Jt. nos -196, 206, 211, 216

For further information see below pictures:-

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

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# WELDING INSPECTION REPORT

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## 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 Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

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**Inspected By:** Baskar, Govindarajan

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer