

**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-015004**Date Inspected:** 09-Jun-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Tao**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 COMPONENT**Summary of Items Observed:**

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

In process Inspection

Out Side

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 12AW side plate to bottom plate weld No. SEG3004A-011. The welder is identified as #066361. ZPMC QC is identified as Mr. Li Ping . The welding variables recorded by QC appear to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW in the 4G position for the OBG Segment 11EW side plate to Side plate weld No. SEG073A-001. The welder is identified as #051348. ZPMC QC is identified as Mr. Li Ping . The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR-1.

Bay#19

This QA Inspector observed the following work in progress:

FCAW in the 3F position for the OBG Bike Plate , weld No. BK004A7-011-160. The welder is identified as #062755. ZPMC QC is identified as Mr. Zhoe Chang . The welding variables recorded by QC appear to comply with WPS-B-T-2133.

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FCAW in the 3F position for the OBG Bike Plate , weld No. BK004A7-011-183. The welder is identified as #062788. ZPMC QC is identified as Mr. Zhoe Chang . The welding variables recorded by QC appear to comply with WPS-B-T-2133.

Bay #16

This QA Inspector observed the following work in progress:

SAW in the 1G position for the OBG Segment 13AW bottom Plate, weld No. BP3075-001-002. The welder is identified as #045265. ZPMC QC is identified as Mr. Li Ming Yang. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-U3c-S-2.

SAW in the 1G position for the OBG Segment 13AW bottom Plate, weld No. BP3074-001-005. The welder is identified as #045265. ZPMC QC is identified as Mr. Li Ming Yang. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-U3c-S-2.

Visual Inspection after Blast at CB8

This Quality Assurance (QA) Inspector performed random visual inspection of OBG Cross Beam CB8 internal side panel and bottom panel surfaces after grit blasting. Areas that marked for repair were recorded for future repair. Areas requiring additional grinding were marked by QA and repaired by ZPMC personnel.

Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as Suspender Bracket SB52E.

The weld designation reviewed is as follows:

SB014-052-005,007,008,025,017,049,061

SB014-054-004,005,037,008,025,049,061

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Suspender Bracket SB52E, this Quality Assurance Inspector (QA) discovered the following issues that One (1) longitudinal linear indication measuring approximately 15mm in length. The indication dbS rating is a +6. Material thickness is 22mm. The depth of the indication is approximately 8.5mm. The weld is identified as SB014-052-004. The weld is Complete Joint Penetration (CJP) "T" joint. The joint joining between Top Plate to Side Plate. The weld is designated as Non Seismic Performance Critical Material (Non SPCM). The indication is clearly marked on or near the weld. The Y distance for this indication is 375 mm side. Suspender Bracket SB52E is located at Bay#19. The Notice of Witness Inspection (NWIT) No. is 005939. The indication is located within the area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform hundred (100%) percent UT inspection of this weld.

The QA inspector generated an incident report for this date.

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

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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 150-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Bera,Subhasis

Quality Assurance Inspector

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**Reviewed By:** Patterson,Rodney

QA Reviewer