

**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-018336**Date Inspected:** 16-Nov-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 Le Feng**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/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 10, OBG BIKE PATH (NWIT # 07370)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of an 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.

BK004A6-029-023, 024, 035, 0160

BK004A3-029-017, 018, 041, 042

BK004A4-029-008, 009, 034, 035, 060, 061

BK004A8-029-035, 036, 023, 024

BK004A3-029-060, 061, 034, 035

BK004A4-029-075, 076, 049, 050, 023, 024

BAY 11, OBG BIKE PATH, PLUG WELD ON BOTTOM COVER PLATE (NWIT # 07379)

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# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of an 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.

BK004A2-053-015, 017, 019, 020

BK004A2-053-014 (MT LINEAR INDICATION OBSERVED, INCIDENT REPORT GENERATED)

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 11

## OBG BIKE PATH

FCAW welding of weld joint 002 located on BK004A3-019.

Welder is identified as 040723. ZPMC QC is identified as Mr. Wang Chuang Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U4c-F.

FCAW welding of weld joint 072 located on BK004A6-019.

Welder is identified as 205649. ZPMC QC is identified as Mr. Wang Chuang Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

FCAW welding of weld joint 073 located on BK004A8-019.

Welder is identified as 205649. ZPMC QC is identified as Mr. Wang Chuang Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

## OBG BIKE PATH, END PLATE REPAIR (B-WR17057)

SMAW welding of weld joint 045 located on BK004C1-024.

Welder is identified as 044541. ZPMC QC is identified as Mr. Wang Chuang Xin.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G(1F)-REPAIR.

During the Quality Assurance Magnetic Particle Testing (MT) review of plug welds located on OBG bike path BK004A-053, this Quality Assurance (QA) Inspector discovered the following issues:

-One (1) MT linear indication found on the plug weld of bottom cover plate (BKPL4A) measuring approximately 10mm in length.

-Y location of the indication is measured to be 650mm from bottom cover diaphragm plate (BKPL6A) as shown in picture.

-The weld is identified as: BK004A2-053-014.

-The hole is identified as fifth hole from bottom cover diaphragm plate BKPL6A.

-The thickness of the bottom cover plate is measured to be 6mm.

-This weld is a plug weld joining the bottom cover plate (BKPL4A) to the stringer plate flange (BKX7F).

-This member is located in Trial Assembly yard.

The Notice of Witness Inspection Number (NWIT) is 07379. This indication is located within the area that has

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# WELDING INSPECTION REPORT

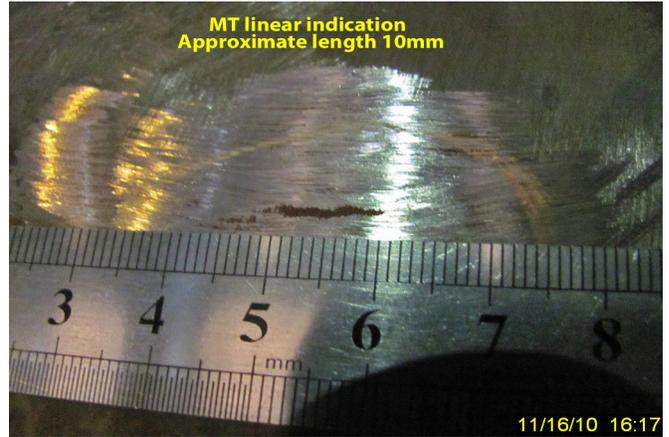
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been previously tested and accepted by AB/F Quality Control (QC) personnel. AB/F's QC personnel performed 100% MT inspection of this weld. The attached photographs provide additional detail. This issue has an incident report.

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



### 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 Eric Tsang : 15000422372/ Thomas Ho - 150002048250, who represents the Office of Structural Materials for your project.

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**Inspected By:** Gaikwad,Umesh

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer