

**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-019786**Date Inspected:** 18-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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, Kelly Leavitt, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Li peng fei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path

PCMK: BK004A6-031

Weld No: 080,082,086,090

Welder: 052075

WPS-B-T-2232-ESAB

Component; Bike Path

PCMK: BK004A8-031

Weld No: 082,086,092,096

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Welder: 040533  
WPS-B-T-2232-ESAB

Component; Bike Path  
PCMK: BK004A2-032  
Weld No: 018  
Welder: 040343  
WPS-B-T-2231-ESAB

Component; Bike Path  
PCMK: BK004A2-033  
Weld No: 018  
Welder: 053869  
WPS-B-T-2231-ESAB

Bay 11

This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Mao bin bin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path  
PCMK: BK004A5-024  
Weld No: 002  
Welder: 040723  
Weld Repair No. B-WR19214  
WPS-345-SMAW-1G(1F)-Repair

This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Shao Hai Lang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path  
PCMK: BK004ASD1-022  
Weld No: 024  
Welder: 046769  
Weld Repair No. B-WR18897  
WPS-345-SMAW-1G(1F)-Repair

Trial Assembly

This QA Inspector observed the following work in progress for Trial Assembly.

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ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Liu hua Jic.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; OBG 12AE to 12BE

PCMK: OBE12

Weld No: 001

Welder: 044515

WPS-B-P-2213-B-Ut-FCM-1

Component; OBG 12AE

PCMK: SEC3001A to SEC3002A

Weld No: 004

Welder: 053831

WPS-B-P-2214-B-Ut-FCM-1

Component; OBG 12AE

PCMK: SEC3001A

Weld No: 015

Welder: 050289

Weld Repair No. B-CWR2457

WPS-345-SMAW-1G(1F)-FCM-Repair-1

Component; OBG 12AE

PCMK: SEC3001A

Weld No: 016

Welder: 050289

Weld Repair No. B-CWR2480

WPS-345-SMAW-1G(1F)-FCM-Repair-1

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Shi Kei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; OBG 12AW to 12BW

PCMK: OBW12B

Weld No: 001

Welders: 049220, 053486

WPS-B-T-2231T-ESAB

Blast Bay 1

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This Caltrans QA Inspector performed a pre-blast visual inspection of the interior surface and internal components, Lift 4, NSDI tower subassembly, 116~131 meter mark to the bottom surface of the double diaphragm. Surface defects and base metal surface irregularities that required grinding were marked up with colored chalk, and weld defects that require welding were taped with gray masking tape for repair after the coating has been applied. ZPMC QC and ABF inspection personnel were present during the inspection and informed of QA findings. ( see picture below )

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



### Summary of Conversations:

No significant 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 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Leavitt,Kelly	Quality Assurance Inspector
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<b>Reviewed By:</b>	Riley,Ken	QA Reviewer
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