

**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-014402**Date Inspected:** 24-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Mr. Zhao Chen Sun/An Qing Xian			<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Tower		

**Summary of Items Observed:**

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

**Magnetic Particle Testing:-**

Trail Assembly Area:-

EAST SHAFT LIFT 1

This QA inspector performed Magnetic Particle Testing (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. The member is identified as East Tower Lift 1 Corner Seam. The weld designations reviewed are as follows:-

Temporary attachment removal area Top Side (600mm Length)

AE Corner- ESD1-A165E/J-264A/B

BC Corner- ESD1-A165E/J-267A/B

CD Corner- ESD1-A165E/J-266A/B

Temporary attachment removal area Bottom Side (1880mm Length)

BC Corner-ESD1-A167B/H-126A/B

CD Corner-ESD1-A167B/H-125A/B

**SOUTH SHAFT LIFT 1**

This QA inspector performed Magnetic Particle Testing (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. The member is identified as South Tower Lift 1 BC Corner Plate, Façade Plate. The weld designations reviewed are as

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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follows:-

BC Corner Plate

SSD1-A11B/H-27

Façade Plate

SSD1-SA16E/G-8,9

SSD1-SA173-3,4,12,13

SSD1-SA159C/J-7,8

IN PROCESS INSPECTION:-

Trail Assembly Area:-

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA227A/H-64 located on East Shaft Lift 1 Façade Plate. Welder is identified as 040759. ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2131.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ESD1-SA227A/H-65 located on East Shaft Lift 1 Façade Plate. Welder is identified as 040675. ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2114.

This QA inspector observed the following work in progress:

ZPMC performed Base metal repair of South Shaft Lift 1 located on Skin B. The base metal repair area is approximately 2mm depth and 70mm length. The material is A 709M Grade 345 Non-SPCM. Welder is identified as 040280. ZPMC QC is identified as Mr. Zhu Feng. SMAW welding was been performed against Temporary weld repair report. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair. Please see the attached picture.

BAY#11

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ND1-STSA4-6-127M-1-57 located on Strut Plate. Welder is identified as 046709. ZPMC QC is identified as Mr. Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-2113. Please see the attached picture.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ED1- STSA4-6-135M-2-95 located on Strut Plate. Welder is identified as 040655. ZPMC QC is identified as Mr. Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-2113. Please see the attached picture.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ED1- STSA4-6-135M-2-90 located on Strut Plate. Welder is identified as 046769. ZPMC QC is identified as Mr. Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS-B-T-4113-1.

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

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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documents.



## Summary of Conversations:

No Relevant Conversation.

## 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 Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Pillai, Pandaram

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer