

**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-011932**Date Inspected:** 16-Jan-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:** Mr. Zhao Chen Sun**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:** 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.

**IN PROCESS INSPECTION:-****TOWER TRAIL ASSEMBLY AREA:-****EAST SHAFT LIFT 1:-**

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA296-B/E-30 located on Skin D Bearing Plate. Welder is identified as 070478. ZPMC QC is identified as Mr. Qui Wen Tiny. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: ESD1-SA233-22 located on Skin B Bearing Plate. Welder is identified as 070046. ZPMC QC is identified as Mr. Qui Wen Tiny. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

**WEST SHAFT LIFT 1:-**

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSD1-SA279-21 located on Skin B Bearing Plate. Welder is identified as 070254. ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

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This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSD1-SA294F/G-65 located on Skin C Bearing Plate. Welder is identified as 670046.ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSD1-SA295B/E-25 located on Skin D Bearing Plate. Welder is identified as 068864.ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: WSD1-SA225F/H-51 located on Skin E Bearing Plate. Welder is identified as 068206.ZPMC CWI is identified as Mr. Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This QA Inspector carried out the measurements on strut plate for flange to flange, bolt hole distance, stiffener to stiffener, 10mm to CJP. The measurements carried out wherever accessible and recorded on the data sheet and submitted to the task leader. The members are identified as Tower Components. The member designations reviewed are as follows:-

WD1-A467-33M-1,2,3,4

WD1-A468-33M-2

During the random Quality Assurance(QA) in process verification of Tower strut, this QA Inspector observed the following issues:

- Free hand thermal cutting were carried out on edges of the strut plate towards South Tower side.
  - The strut is identified as ND1-A468-33M-1 at elevation level 33M.
  - The thermal cut area is measured approximately 1010 mm.
  - The material is designated as Seismic Performance Critical Member (SPCM).
  - The member is located at Tower assembly area (Jetty Area). Incident report for the same has been raised.
- The attached photographs provide additional details.

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

### **Summary of Conversations:**

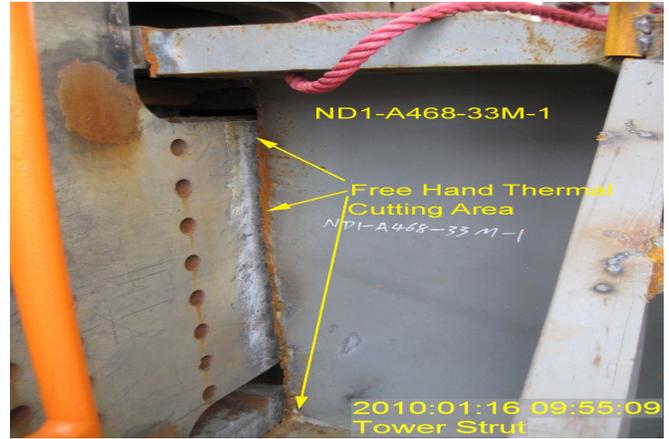
The incident report is issued for the above mentioned discrepancy observed in Tower Trail Assembly Area, Strut plate and prior to issue it was informed to ZPMC QC and ABF QA.

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## 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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<b>Inspected By:</b>	Pillai,Pandaram	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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