

**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-012134**Date Inspected:** 10-Feb-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

<b>CWI Name:</b>	NA	<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>	OBG	

**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Trial Assembly**

This QA Inspector observed no ZPMC personnel were welding or grinding on any of the OBG segments located in the OBG Trial Assembly yard. One welder was fabricating various pieces of steel that appear to be intended to be used as scaffolding or similar uses. Three ABF personnel appeared to be performing magnetic particle inspections of various welds in OBG segments 5BE and 5CE. This QA Inspector observed that one of the welds that were inspected with the magnetic particle process by ABF Inspectors was the longitudinal diaphragm to deck plate "hold back" weld on the cross beam side adjacent to where segment 6AE is to be joined to segment 5CE. This QA Inspector observed that the base material at top edge of the fillet weld located at approximately 20 mm from the end of the segment has been ground to a depth of approximately 1.5 mm and that the maximum allowable depth that can be ground is 1.0 mm. This QA Inspector informed ABF magnetic particle Inspectors that this weld appears to be visually unacceptable due to the depth of the grinding. The ABF Inspectors informed this QA Inspector that they were only performing magnetic particle inspections and they were not responsible for performing visual inspections of these welds. Since there were no ZPMC QC Inspectors in the area, this QA Inspector has left a turnover for dayshift Caltrans QA Personnel to contact ZPMC QC personnel to resolve this

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visual rejection. See the photographs below for additional information.

## OBG Bays 1 through 9

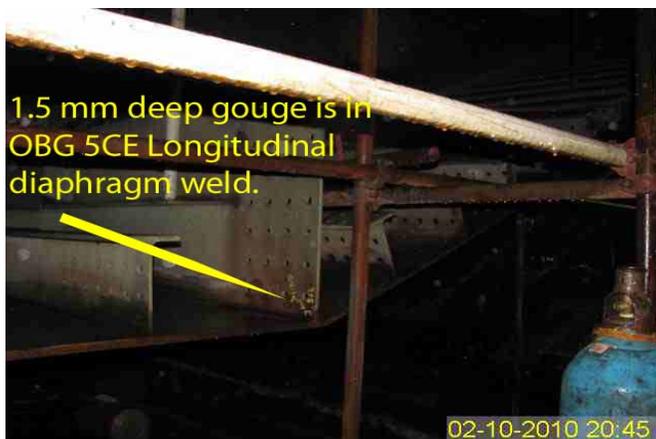
This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 1 through 9.

## OBG Bays 13 and 14

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 13 or 14 and the overhead lights were turned off. Many of the ZPMC workers are not at work due to the Chinese New Year holiday.

## Heavy Dock Tower

This QA Inspector observed ZPMC personnel have installed East tower lift 2 on top of East tower lift 1 and ZPMC workers are continuing to install temporary bolts to secure these two tower components together. The East tower lift 2 is still being supported by the 400 ton floating crane. South tower lift 2 is in a horizontal position near the end of the heavy dock and ZPMC appears to be preparing to install South tower lift 2 on South tower lift 1 once the temporary bolting of East tower lift 2 to East tower lift 1 is completed.



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**Summary of Conversations:**

See Above.

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

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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