

**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-004056**Date Inspected:** 11-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Li Jia**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 Fabrication**Summary of Items Observed:**

Caltrans 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. The QA Inspector observed the following:

**Assembly bay 2:**

ZPMC notification of witness inspection document #01012 dated 9-11-2008 states that ZPMC QC inspection personnel will be conducting final magnetic particle inspections of welds on OBG floorbeams FB015-015, FB015-016 and three other OBG floorbeams. ZPMC CWI Mr. Li Jia has marked the welds on these floorbeams as being visually accepted. ZPMC MT Inspector performed magnetic particle inspections of weld FB015-016-009, FB015-016-024 and FB015-016-044 and Mr. Jia indicated the welds are MT acceptable. The QA Inspector performed random visual inspections of weld FB015-016-044 and observed the weld has undercut, overlap and portions of the weld have an oxide covering that obscures the weld surface. The QA Inspector showed ZPMC CWI Mr. Li Jia weld -044 weld overlap, undercut and the oxide material and Mr. Li Jia agreed the weld is not visually acceptable. Mr. Jie said the weld will be repaired and MT of these welds will be performed tomorrow after the weld is repaired. See the photograph below for additional information.

ABF QC representative Mr. Art Peterson informed the QA Inspector he has performed magnetic particle inspection of deck plate DP007-001 diaphragm weld 54 where a linear indication was partially removed. Mr. Peterson said ZPMC has ground this linear indication for a depth of approximately 3mm deep into the baseplate

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# WELDING INSPECTION REPORT

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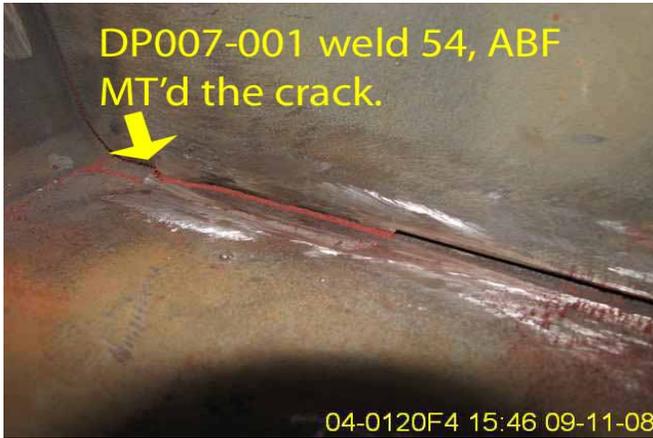
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and the linear indication has not been removed. The QA Inspector issued an Incident Report documenting this diaphragm has been installed in violation of the August 15 temporary suspension letter and the incident report identifies weld repairs have been commenced without engineering approval. See the photograph below for additional information.

Bay #1

The QA Inspector performed AWS D1.5 ultrasonic inspections of OBG deck panel base plate splice welds DP575-001-300, DP585-001-300, DP585-002-300, DP565-001-300 and DP545-001-300. Items observed appear to comply with project specifications. See the TL6027 ultrasonic test report for additional information.



### 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 Ady Velasco 13816942685, 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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