

**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-015382**Date Inspected:** 29-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Bo.**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

This QA Inspector observed the following work in progress:

Subassembly, Bay 09, Deck Panel 13BE-DP3092-001.

This QA inspector performed conventional Ultrasonic Testing (UT) Inspection on deck panel tack weld areas. The inspection is preliminary prior to using the phased array (PAUT) testing system to verify indications found with conventional Ultrasonic testing. QA inspector performed UT on deck panel DP3092-001, 10 ribs, 20 welds, 180 total tack welds inspected.

Weld 1 scanned 9 locations with no indication.

Weld 2 scanned 9 locations with 1 indications.

Weld 3 scanned 9 locations with 3 indications.

Weld 4 scanned 9 locations with 1 indication.

Weld 5 scanned 9 locations with 1 indications.

Weld 6 scanned 9 locations with 2 indications.

Weld 7 scanned 9 locations with 3 indication.

Weld 8 scanned 9 locations with 1 indications.

Weld 9 scanned 9 locations with 1 indications.

Weld 10 scanned 9 locations with no indication.

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Weld 171 scanned 9 locations with 2 indications.  
Weld 172 scanned 9 locations with no indications.  
Weld 173 scanned 9 locations with no indications.  
Weld 174 scanned 9 locations with 1 indications.  
Weld 175 scanned 9 locations with 2 indications.  
Weld 176 scanned 9 locations with no indications.  
Weld 177 scanned 9 locations with no indications.  
Weld 178 scanned 9 locations with no indications.  
Weld 179 scanned 9 locations with no indications.  
Weld 180 scanned 9 locations with 1 indications.

QA Inspector performed initial Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled “Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld” after conventional UT was performed on tack welded areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panels examined are as follows:

DP-3092-001: 6 tack weld locations found compliant and 13 tack weld location found non-compliant.

Subassembly, Bay 09, 13AE, Deck panel to U-rib.

FCAW Repair welding of partial penetration weld joints DP3075 (PL3171A)-001-010(Y-Locations 2150, 3950); located on subassembly, Bay 09, 13AE. Welder is identified as 062265; ZPMC Quality Control Inspector (QC) is identified as Sun Bo. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR.

Subassembly, Bay 09, 13AE, Deck panel to U-rib.

FCAW Repair welding of partial penetration weld joints DP3075 (PL3171A)-001-007 (Y-Location 8150); located on subassembly, Bay 09, 13AE. Welder is identified as 062265; ZPMC Quality Control Inspector (QC) is identified as Sun Bo. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR. The attached photographs provide additional detail.

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

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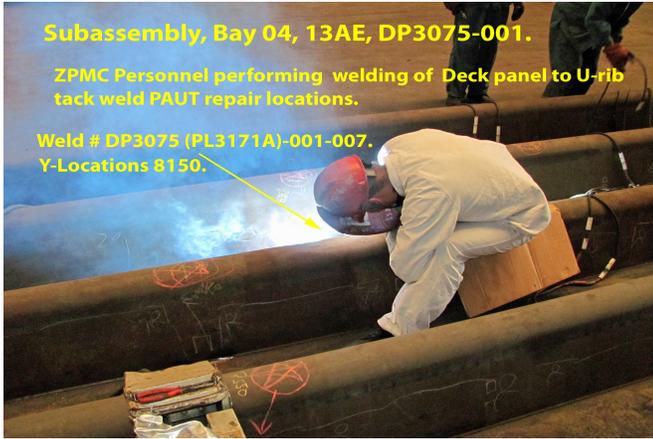
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## Summary of Conversations:

No relevant 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, 1500.042.2372, who represents the Office of Structural Materials for your project.

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

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