

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023632**Date Inspected:** 11-May-2011**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. An Qing Xiang**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:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Trial Assembly open yard.

Segment:13AW

The following Non Destructive Testing (NDT) Inspection was carried out as per the ZPMC submitted Notification No.09096.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The members are identified as OBG weld Components. Total number of welds MT tested: (2).The weld designations inspected were as follows:

1. SEG3013D-223
2. SEG3013B-246

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This QA Inspector randomly observed the following work in progress:

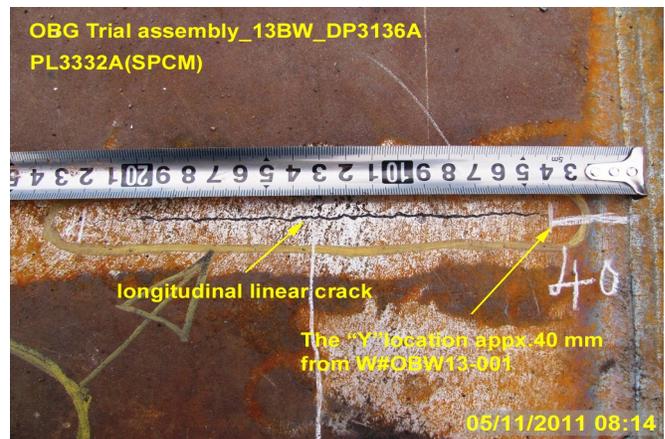
Shielded Metal Arc Welding (SMAW) repair welding of weld joint identified as SEG3013AH-035. Welder is identified as 066019. ZPMC QC is identified as Mr. Zhang lin. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-345-SMAW-1G (1F)-FCM-repair-1. The repair welding was being performed as per Welding Repair Report (WRR) No: B-WR20703.

SMAW repair welding of weld joint identified as SEG3013B-090. Welder is identified as 037779. ZPMC QC is identified as Mr. Zhang lin. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-345-SMAW-3G (3F)-FCM-repair-1. The repair welding was being performed as per WRR No: B-WR20606.

Flux Cored Arc Welding (FCAW) repair welding of weld joint identified as SEG3013H-025. Welder is identified as 203871. ZPMC QC is identified as Mr. Zhang lin. The welding variables recorded by QC personnel observed appeared to comply with WPS: B-T-2233-ESAB.

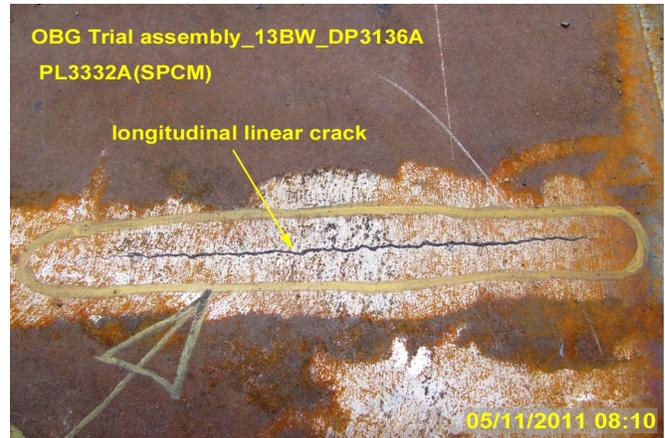
During random in process visual inspection of OBG member identified as deck plate DP3136A, this QA observed 1 longitudinal linear crack on deck plate base metal where the temporary attachment removed area. The length of crack measuring approximately 180 mm in length. The deck plate member is identified as PL3332A. The deck plate is designated as Seismic Performance Critical Material (SPCM) on the approved shop drawing. The nearest welds are identified as SEG3014-001 and OBW13-001. The "Y" locations measured to be approximately 470 mm and 40 mm from the weld toes respectively as shown on the picture below. The thickness of the deck plate is 20 mm. This QA marked the affected area and informed ZPMC Quality Control (QC) CWI identified as Mr. An Qing Xiang of this issue. Mr. An Qing Xiang informed this QA that the crack would be corrected in a manner compliant with the contract documents. This QA Inspector also informed to Lead QA Inspector of the issue. See attached photos for further details.

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



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Summary of Conversations:

No significant conversations were reported on this date.

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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
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Reviewed By:	Peterson,Art	QA Reviewer
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