

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-011081**Date Inspected:** 13-Dec-2009**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:** Du Zhi Qun, Chen Ying Xin**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 day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 10 SOUTH TOWER LIFT 4 CAPPING PLATE ON SMALL DOUBLER PLATE

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

SSD1-FASA4-1A/E-3 GREEN TAG NO. 11549

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 10

SPARE STRUT

SMAW welding of weld joint 15 located on ED1-STSA3-2-99M-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Welder is identified as 057259. ZPMC QC is identified as Mr. Chen Ying Xin.
The welding variables recorded by QC appeared to comply with WPS-B-T-2113.

SMAW welding of weld joint 47 located on ED1-STSA3-2-89M-2.
Welder is identified as 040268. ZPMC CWI is identified as Mr. Chen Ying Xin.
The welding variables recorded by QC appeared to comply with WPS-B-T-2112.

REPAIR

SMAW welding of weld joint 9A(Repair) located on ND1-STSA3-1-99M-1.
Welder is identified as 066155. ZPMC QC is identified as Mr. Yu Zhi Lai.
The welding variables recorded by QC appeared to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.

INTERIOR SPLICE PLATE REPAIR

FCAW welding of weld joint 2A/B(Repair) located on NSD1-SPSA4-26.
Welder is identified as 066733. ZPMC QC is identified as Jiang La Mei.
The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR.

NORTH TOWER LIFT 4 B/C CORNER SEAM

FCAW welding of weld joint 5A located on NSTL4-3B/L.
Welder is identified as 062782. ZPMC CWI is identified as Mr. Liu Zhong An.
The welding variables recorded by QC appeared to comply with WPS-B-T-2231-C-U2-F.

SAW welding of weld joint 3A located on NSTL4-3L/L.
Welder is identified as 201750. ZPMC CWI is identified as Mr. Liu Zhong An.
The welding variables recorded by QC appeared to comply with WPS-B-T-3221-C-U2b-S.

NORTH TOWER LIFT 4 A/B CORNER SEAM

SAW welding of weld joint 4A located on NSTL4-3B/L.
Welder is identified as 052917. ZPMC CWI is identified as Mr. Liu Zhong An.
The welding variables recorded by QC appeared to comply with WPS-B-T-2221-C-U2b-S-2.

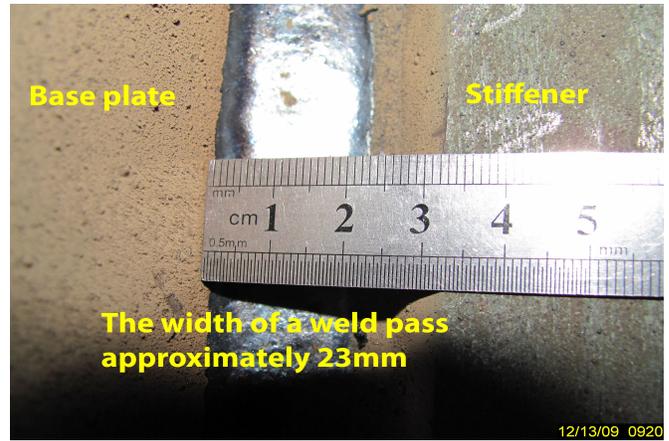
During random in-process visual inspection of North tower interior splice plate weld no. NSD1-SPSA4-18-2A/B, Caltrans Quality Assurance Inspector observed the width of a weld pass measured to be approximately 23mm. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.

The attached photographs provide additional detail.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad, Umesh

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer