

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018669**Date Inspected:** 30-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**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**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

Heat straightening of PCMK, E2-SB1D-030, under approved Heat Straightening procedure, HSR 1(B)-9389, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ai Wei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm.

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ai Wei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3343-001-200

Welder: 067942

Report: B-WR 17879

WPS-345-SMAW-2G (2F)-Repair

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PCMK: FB3343-001-203
Welder: 066674
Report: B-WR 17869
WPS-345-SMAW-2G (2F)-Repair

Components: Grillage Assembly
PCMK: SA7512-001-031
Welder: 066236
Report: B-WR 17784
WPS-345-FCAW-3G (3F)-ESAB-Repair-FCM

Components: Longitudinal Diaphragm
PCMK: LD3051-001-014,023
Welder: 058245
WPS-B-T-2233-ESAB

Components: Segment Assembly
PCMK: SA3020K-170
Welder: 058245
WPS-B-T-2233-ESAB

PCMK: SA3020K-221
Welder: 045203
WPS-B-T-2233-ESAB

PCMK: SA3020K-227
Welder: 045209
WPS-B-T-2233-ESAB

PCMK: SA3020K-187
Welder: 066239
WPS-B-T-2233-ESAB

PCMK: SA3020K-244
Welder: 045276
WPS-B-T-2233-ESAB

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; SEG3020K, on Item number 1 of NWIT tracker document # 07564,

Heat straightening of PCMK, SA3447-001, under approved Heat Straightening procedure, HSR 1(B)-9798, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was

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identified as Ai Wei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 13mm.

Bay 6

This QA Inspector observed the following work in progress for Bay 6.

ZPMC was using the Shield Metal Arc Welding (FCAW) process.

ZPMC QC is identified as Shu Yang HUA.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Deck Plate

PCMK: DP3168-001-127

Welder: 048159

Report: B-CWR 2303

WPS-345-SMAW-2G (2F)-Repair

Bay 7

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Shield Metal Arc Welding (FCAW) process.

ZPMC QC is identified as Shu Yang HUA.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3244-001-061

Welder: 057795

WPS-B-P-2212-B-U2-FCM

PCMK: FB3244-002-036

Welder: 053753

WPS-B-P-2212-B-U2-FCM

Components: Cross Beam

PCMK: CB3003J-002-031,032

Welder: 049659

WPS-B-P-2114-FCM

PCMK: CB3003K-002-001,002

Welder: 049659

WPS-B-P-2114-FCM

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; SP3112C-001,SP3079-001, on item number 1

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and 3 of NWIT tracker document # 07563

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; SP3122C-001, on Item number 2 of NWIT tracker document # 07563,

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

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

Inspected By:	Shin,DJ	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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