

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009891**Date Inspected:** 17-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 & Tower Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Shen Fu You, Mr. Lv Li Qing, Mr. Sun Bo, Mr. Li Yang

OBG BAY 5

This QA Inspector observed ZPMC welder Ms. Gao Yulin, stencil 217805 is using flux cored welding process WPS-B-T-2232-TC-U5-F to make traveler rail fillet weld 10TR3-007-008. This QA Inspector observed a welding current of approximately 310 amps and 29.0 volts and ZPMC QC representative Mr. Zhong Hung Biao had previously recorded a welding current of 310 amps and 30.6 volts. This QA Inspector observed Ms. Gao Yulin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Si Gao Feng, stencil 204342, is using flux cored welding procedure WPS-B-T-2132 to make traveler rail weld 10TR3-029-008. This QA Inspector observed a welding current of approximately 305 amps 30.0 volts and Mr. Si Gao Feng is certified to make this weld. ZPMC QC Inspector Mr. Zhong Chong Biao had previously recorded a welding current of 314 amps and 30.5 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Naijun, stencil 205390 is using flux cored welding procedure WPS-B-T-2233-TC-U5-F to make traveler rail weld 10TR3-018-014. This QA Inspector observed a welding current of approximately 280 amps 30.0 volts and Mr. Chen Naijun is certified to make this weld. ZPMC QC Inspector Mr. Zhong Chong Biao had previously recorded a welding current of 310 amps and 30.4 volts. Items

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observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 9

This QA Inspector observed ZPMC welder Mr. Xu Guo Xin, stencil 059443 is using flux cored welding procedure WPS-B-T-2133 to make deck plate weld DP3046-001-128. This weld attaches a stiffener plate to the inside of closed rib for OBG deck panel DP3046-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed. This QA Inspector observed a welding current of approximately 215 amps 25.0 volts and Mr. Xu Guo Xin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xiang Jie, stencil 059378 is using flux cored welding procedure WPS-B-T-2133 to make deck plate weld DP3046-001-171. This weld attaches a stiffener plate to the inside of a closed rib for OBG deck panel DP3046-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed. This QA Inspector observed a welding current of approximately 210 amps 26.0 volts and Mr. Xiang Jie is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xiao Bianbin stencil 059440 is using gas metal arc welding procedure WPS-B-T-2342-U5(U-rib) to tack weld OBG closed ribs to deck plate DP3044-001. Prior to welding this QA Inspector observed ZPMC workers are using a feeler gauge to verify zero gap in the partial penetration weld groove between the closed rib and the baseplate prior to making each tack weld. This QA Inspector observed a welding current of approximately 340 amps and 25.0 volts and Mr. Xiao Bianbin is certified to make this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

OBG BAY 14

This QA Inspector observed ZPMC welder Mr. Wang Zhenbing, stencil 216086 has recently used shielded metal arc welding procedure WPS-B-P-2213-TC-U4B-FCM to deposit shielded metal arc weld SEG052D-027. The QA Inspector observed ZPMC QC representative Mr. Guo Zing Hui has recorded a welding current of 158 amps. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xu Liguang, stencil 200114 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM to complete weld SSD20A-PP79-222. This QA Inspector observed ZPMC QC Inspector Mr. Xu Tau has recorded a welding current of 170 amps. This QA Inspector observed that Mr. Xu Liguang is certified to make this weld and shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Li Jiao, stencil 049861 has been using shielded metal arc welding procedure specification WPS-B-P-2211-B-U2-FCM-1 to make tack weld SEG066*-008 which attaches side plate SP481A to SP346A. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 170 amps. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an

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electrically heated electrode storage container which appears to be connected to an electrical power supply, but this QA Inspector observed the welding electrode container and shielded metal arc electrodes inside the container appear to be at an ambient temperature instead of being warm to the touch. This QA Inspector informed ZPMC QC Inspector Mr. Guo Xing Hui that the welding electrode container appears to be at an ambient temperature and Mr. Guo Xing Hui had Ms. Li Jiao discard these electrodes. Note: the tack welds that are being made will later be removed when the complete joint penetration weld is backgouged. Items observed on this date appeared to generally comply with applicable contract documents.

QC Inspector Mr. Guo Xing Hui informed this QA Inspector that ZPMC welder Mr. Wang Changming, stencil 047864 has used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4b-FCM-1 to complete weld SEG051A-016. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 152 amps. Items observed on this date appeared to generally comply with applicable contract documents.

QC Inspector Mr. Guo Xing Hui informed this QA Inspector that ZPMC welder Mr. Yang Changming, stencil 058242 has used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4b-FCM-1 to complete weld SEG051A-015. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 160 amps. Items observed on this date appeared to generally comply with applicable contract documents.

QC Inspector Mr. Guo Xing Hui informed this QA Inspector that ZPMC welder Mr. Li Jun, stencil 051348 has used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4b-FCM-1 to complete weld SEG051A-009. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 155 amps. Items observed on this date appeared to generally comply with applicable contract documents.

QC Inspector Mr. Guo Xing Hui informed this QA Inspector that ZPMC welder Mr. Tian Zhaoquan, stencil 045246, stencil 047864 has used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4b-FCM-1 to complete weld SEG051A-010. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 154 amps. Items observed on this date appeared to generally comply with applicable contract documents.

Tower Milling Station

This QA Inspector performed random observations and observed North Tower Lift 1 has hydraulic jacks underneath the bottom of the tower located inside the milling machine shed, with the top end of the tower closest to the milling head. The only ZPMC workers that appear to be working near this location are two people who are completing the final finish of the new concrete that appears to have been placed in front of the tower milling machine earlier today.

Yard, North of Tower Milling Station

This QA Inspector observed Chinese speaking ABF Inspectors are performing magnetic particle inspections of the interior of south tower lift 2 near diaphragms at elevations 28 meters and 89 meters.

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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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
