

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016815**Date Inspected:** 15-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**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:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Welding of East Line Lifting Lug Access Hole Restoration - (SMAW)
- 2). OBG Field Welding of East Line Personnel Access Hole Restoration - (SMAW)

- 1). OBG Field Welding of East Line Lifting Lug Access Hole Restoration - (SMAW)

Exterior: PP22

The QAI periodically observed the fit-up and welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position to restore the Lifting Lug Access holes in the A deck at PP22, PP25 & PP27. The QAI observed that AB/F approved welder Yao Xin Liang (ID 7238) performed fit-up and welding at PP22 weld E3-4 then E3-2 and at PP25 weld E3-3. See photo below. The QAI observed that AB/F approved welder Wai Kitlai (ID 2953) performed fit-up and welding at PP22 weld E4-3 then E4-4 and fit-up of E4-2. The QAI observed that AB/F approved welder Darcell Jackson (ID 9967) performed fit-up and welding at PP27 weld E3-1. QC Inspector Steve McConnell was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1. 5-1050A. The QAI also periodically observed QC Inspector Steve McConnell performing checks of the planar alignment at fit-up locations prior to the root pass welding. The QAI observed that the work appeared to be in general compliance with contract documents.

Interior: PP11

The QAI periodically observed AB/F approved welder Jin Pei Wang (ID 7299) performing grinding to prepare the

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interior (B face) for back welding and subsequently observed welding per the SMAW process in the 4G (overhead) position at weld E3-4. The QAI also periodically observed AB/F personnel grinding to prepare the interior (B face) for back welding at weld E3-3. QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1110B rev.1. Later in the shift the QAI observed QC Magnetic Particle Testing (MT) technician Salvador Merino performing MT of the excavated B face of weld E3-3. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI then periodically observed AB/F approved welder Jin Pei Wang (ID 7299) performing back welding of weld E3-3. QAI observed that the work appeared to be in general compliance with contract documents.

2). OBG Field Welding of East Line Personnel Access Hole Restoration – (SMAW)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing grinding to prepare the exterior groove for welding per the SMAW process in the 1G (flat) position. The QAI observed QC Inspector Mr. Steve McConnell performing Magnetic Particle Testing (MT) of the prepared groove. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. See photo below. The QAI noted that the QC Inspector was observing and marking areas with MT indication present in the bottom of the groove. The QAI spoke with Mr. McConnell. See Summary of Conversations below. The QAI then periodically observed Mr. Kaddu welding the root pass from the exterior of the A deck between PP10 & PP11 on the Bike Path side of OBG 1E. QC Inspector Steve McConnell was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1030 rev.1. When the root pass was completed by Mr. Kaddu the QAI observed QC Inspector Mr. Steve McConnell performing Magnetic Particle Testing (MT) of the root pass. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI periodically observed that the grinding to prepare, MT of the excavated area and welding of the root pass was repeated on the Crossbeam side of OBG 1E at the A deck between PP10 & PP11. The QAI observed that the work appeared to be in general compliance with contract documents.



Summary of Conversations:

From Item 2).

The QAI asked Mr. McConnell if the indications being marked were to be ground to clear and then re-examined

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by MT. Mr. McConnell stated that the depth of the indications were all deeper than the thickness of the 20mm A deck plate. He stated that the indications were in the backing weld previously deposited from the interior and that Mr. Kaddu would weld a root pass and that QC would MT the root. He also said that the interior back weld will be flush ground and MT examined after welding is completed.

Other conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

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 Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
