

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016816**Date Inspected:** 16-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 Rod Access Penetration Patch Welds
- 2). OBG Field Welding of East Line Personnel Access Hole Restoration
- 3). QC UT of East Line Lifting Lug Rod Access Penetration Patch Welds
- 4). OBG Field Welding of Upper Horizontal CW Lug Restoration between PP12 - PP13

- 1). OBG Field Welding of East Line Lifting Lug Rod Access Penetration Patch Welds

Exterior: Exterior: PP22, PP25 & PP27

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 Rod Access Penetrations 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 PP25 weld E3-1, E3-2 and E3-4. The QAI observed that AB/F approved welder Wai Kitlai (ID 2953) performed fit-up and welding at PP22 weld E4-2. The QAI observed that AB/F approved welder Darcell Jackson (ID 9967) performed fit-up and welding at PP25 weld E4-2 and E4-1 and at PP27 weld E3-2. QC Inspector Tom Pasqualone 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 Tom Pasqualone 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.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Interior: PP8.5 and PP11

The QAI periodically observed AB/F approved welder Jin Pei Wang (ID 7299) performing welding at PP11 weld E3-3 and AB/F approved welder Hua Qiang Huang (ID 2930) performing welding at PP8.5 weld E4-4 per the SMAW process in the 4G (overhead) position. QC Inspector Tony Sherwood 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. 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 observed QC Inspector Mr. Tom Pasqualone performing Magnetic Particle Testing (MT) of the prepared groove in the A face (exterior) of the A deck between PP10 & PP11 on the Crossbeam side of OBG 1E. 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 Wai Kitlai (ID 2953) performing welding of fill passes per the SMAW process in the 1G (flat) position. The QAI also periodically observed AB/F approved welder Yao Xin Liang (ID 7238) performing welding of fill passes per the SMAW process in the 1G (flat) position in the prepared groove in the A face (exterior) of the A deck between PP10 & PP11 on the Bike Path side of OBG 1E. QC Inspector Tom Pasqualone 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. Work was in process at this location for the duration of the QA Inspectors shift and appeared to be in general compliance with contract documents.

3). QC UT of East Line Lifting Lug Rod Access Penetration Patch Welds

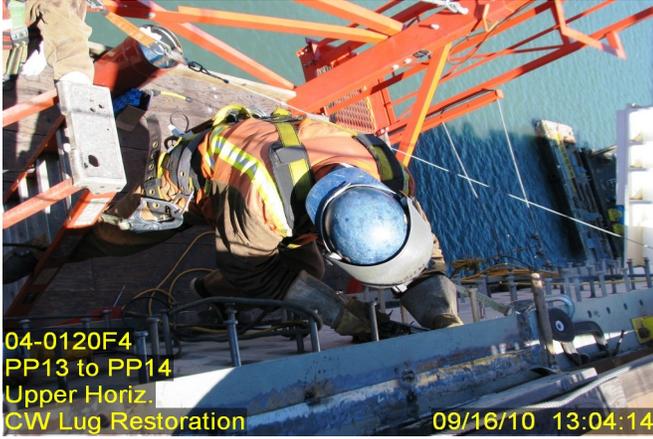
The QAI periodically observed QC Inspector John Pagliero performing UT from the A Face of East Line Lifting Lug Rod Access Penetration Patch Welds. The QAI periodically observed that Mr. Pagliero utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required longitudinal wave testing utilizing a 1" diameter transducer for base metal soundness and performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. The UT examination was completed from face A during the QA Inspectors shift at the following locations: PP8.5 E3 welds 1, 2, 3 & 4. The QAI noted that the QC UT results marked on the steel indicated that E3 welds 1, 2 and 4 contained UT rejects and weld 3 was accepted. The work at this location appeared to be in general compliance with contract documents.

4). OBG Field Welding of Upper Horizontal CW Lug Restoration between PP12 - PP13

The QAI periodically observed AB/F approved welder Rick Clayborn (ID 2773) performing CJP welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (Flat) and 4G (overhead) position to restore a portion of the counter weight assembly upper lug at the edge plate at W1. See photo below. QC Inspector Mike Johnson 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-D1.5-1000. The QAI observed that the work appeared to be in general compliance with contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

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
---------------------	-------------	-------------