

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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029750**Date Inspected:** 19-Jun-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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:** Bikepath piping; OBG deck surface**Summary of Items Observed:**

At the start of shift, this Quality Assurance Inspector (QAI) traveled to the project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed on the various fillet welds of the East and West Orthotropic Box Girders (OBG's).

The welding was performed utilizing Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specifications (WPS's).

This QAI witnessed the fit-up and welding of the (2nd of 2) axial key plate #061813-02 to the exterior of the 2-1/2" diameter water pipe (for engagement with its pipe restraint support) at location PP28(-1600) of Bikepath. The fit-up and welding was observed being performed of the (1st of 2) axial key plate to the exterior of the adjacent 4" diameter compressed air pipe (for engagement with its pipe restraint support) at location PP28(-1600) of the Bikepath. The welding of these items was performed by F.W.Spencer welder Tim Esquivel #8348 utilizing E7018 electrodes as per the approved WPS #FWS Fillets Murex SFOBB Rev.1. The AB/F Quality Control (QC) inspector Fred Michels was present and monitoring the WPS parameters of the welding in progress. These welds all appeared to meet the requirements of the contract documents.

The Eastbound OBG deck discontinuity mapping and removals were identified and verified by this QAI along with AB/F QC William Sherwood. The following locations of Eastbound OBG deck surface discontinuities were identified as being arc-strikes: PP58(-1800)/E2(+4660), and PP41(+1500)/E4(+6804). These defects were removed by flap-wheel sanding to sound metal as determined by Magnetic Particle Testing (MPT) inspection performed by the AB/F QC William Sherwood. This QAI performed MPT verification inspection of these same welds. There were no indications noted at this time. See the TL6028 Magnetic Particle Testing report for details.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Initial Westbound OBG deck discontinuity identification and marking of areas uncovered by sandblasting operations was performed by this QAI along with QA coatings inspectors for the North half-width of the roadway from PP52 through PP101. No mapping measurements were made at this time.

The galvanizing removal (at areas to be subsequently welded) and fit-up was performed and the welding is in progress of the reinforced W-Tee assembly to the north side of Eastbound E5 Barrier Rail at PP126(+350)/E5. The work was performed by F.W. Spencer welder Barry Mullaney #6520 utilizing E7018 electrodes as per the approved WPS #FWS Fillets Murex SFOBB Rev.1. The AB/F QC Fred Michels was present, monitoring the WPS parameters of the welding in progress. The welding of this assembly at this time is not yet complete. The welds performed so far however, appear to meet the requirements of the contract documents.



Summary of Conversations:

There were general conversations with the contractor's Quality Control personnel at the start of the shift regarding the location of welding and inspection personnel scheduled for this shift.

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 SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Morris, Monty

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer