

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 #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018574**Date Inspected:** 04-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1330**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA.**CWI Name:** Ruben Dominguez**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:** Travelers**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection and non-destructive testing of the Travelers.

Upon the arrival of the QA Inspector, the following observations were made:

Traveler Test Rack

On this date, the QA Inspector observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

SAS-EB Traveler**Fixed Stairs Section**

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Jose Rodriguez (WID # 3031), continuing to perform Flux Core Arc Welding (FCAW) activities on the previously fit Frame assemblies, identified as 10-A237, 11-B237, 3-A217, 4-A218, 5-A223 and 6-A224. The QA Inspector observed that the FCAW was being performed in various positions, on the connector plate and Tube Steel (TS) material fillet and flare groove welds. Additionally, the QA Inspector observed Mr. Rodriguez performing grinding and FCAW activities on the previously discovered crater cracks on 3 fillet welds, identified as weld joints # 41, # 42 and # 43, on the Frame Assembly identified as 6-A224. The QA Inspector initially observed Mr. Rodriguez utilizing a grinder with an attached burring bit to begin excavation activities on the above mentioned weld joints. During observation, the QA Inspector observed Mr. Rodriguez perform the first excavation on the weld joint identified as # 43. After the excavation was complete, the QA Inspector then observed SE QC Inspector Ruben Dominguez then perform Visual and Magnetic Particle Testing (VT/MT) on the excavated area. The QA Inspector

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

observed that 50 mm of weld material had been removed beyond the end of the crater crack. After performing the VT/MT, Mr. Dominguez explained that no rejectable indications were found, during testing. The QA Inspector then observed Mr. Rodriguez perform excavation in the same manner on the weld joint identified as # 42. After the excavation was complete, the QA Inspector observed Mr. Dominguez perform VT/MT on the excavated area. During the MT testing, Mr. Dominguez explained that rejectable indications were found. Mr. Dominguez then instructed Mr. Rodriguez to perform additional grinding on the weld joint. After further grinding, the QA Inspector observed Mr. Dominguez then perform additional MT on the excavation. After the MT was complete, Mr. Dominguez explained that no rejectable indications were found. The QA Inspector then observed Mr. Rodriguez performing the third and final excavation on the weld joint identified as # 43. Once the excavation appeared to be complete, the QA Inspector observed Mr. Dominguez performing VT/MT on the excavated area. After testing, Mr. Dominguez explained that no rejectable indications were found.

The QA Inspector then observed Mr. Rodriguez utilizing the Flux Core Arc Welding (FCAW) process to perform the welding repairs. The QA Inspector observed that the approved WMI Welding Procedure Specification (WPS) W114 appeared to be nearby the work area and appeared to be listed as the WPS to be utilized for the weld repairs on Form # ABFWEST-QC-117, Request for Weld Repair Approval. After the FCAW was complete, the QA Inspector observed Mr. Dominguez performing 100% VT on the completed welds, utilizing a Bridge Cam Gauge and flashlight. Mr. Dominguez then explained that no rejectable indications were found, after testing. After cooling to ambient temperature, the QA Inspector observed Mr. Dominguez then perform 100 % final MT on the three repairs. After testing, Mr. Dominguez explained that no rejectable indications were found and an applicable Form ABFWEST-QC-115, Weld Repair Report will be completed on this date.

The QA Inspector then performed 100% MT on the above mentioned weld repairs and found no rejectable indications after testing. See completed TL6028, for additional details. The QA Inspector noted that prior to performing the above mentioned repairs, that WMI had previously submitted the applicable Form ABFWEST-QC-117, Request for Weld Repair Approval (Submittal # 002008 Rev. # 00) and that ABFJV engineer had been notified, prior to performing the repairs. The QA Inspector also noted that the Submittal had been previously Approved as Noted and WMI had been given a METS verbal to proceed with the repairs, with the understanding that WMI perform the required changes on the submittal. The QA Inspector noted that the above mentioned weld repairs appeared to have been performed in accordance to AWS D1.1 2002 and the approved WMI Repair Procedure.

See attached pictures below.

Lower Truss Section

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Eutimo Lopez (WID # 3035), continuing to perform Flux Core Arc Welding (FCAW) activities on the previously fit Frame assemblies, identified as 12-A240, 13-B240, 7-A225, 8-A226 and 9-A230. The QA Inspector observed throughout the shift, that the FCAW was being performed in various positions, on the connector plate and Tube Steel (TS) material fillet and flare groove welds.

E2/E3-EB Traveler

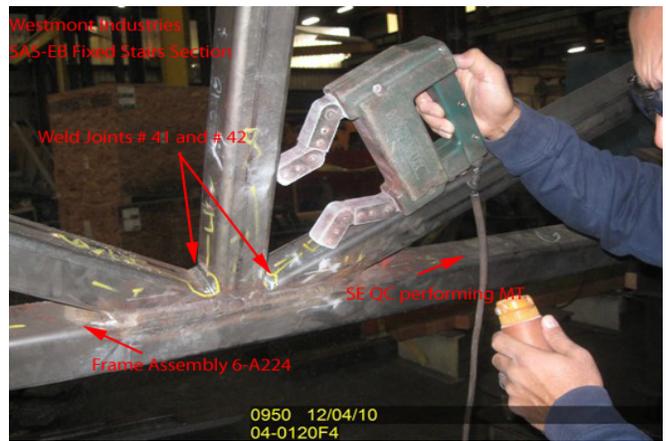
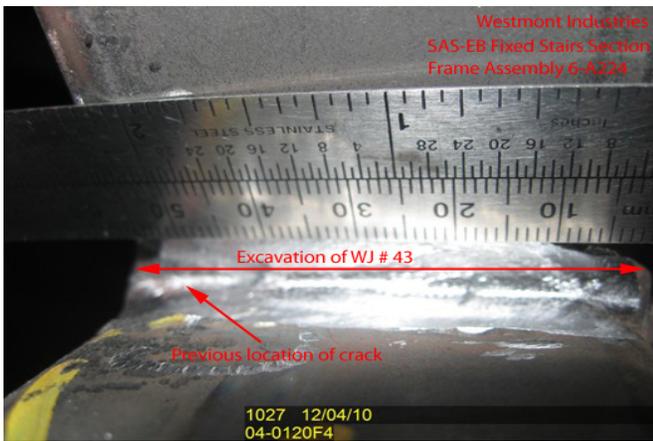
On this date, the QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) welding activities on the intermediate and diagonal bracing Tube Steel

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

(TS) material. The QA Inspector observed that the FCAW being performed by Mr. Jimenez appeared to be for the Frame Assemblies identified as 9-A332 and 10-B332, per the shop drawings. The QA Inspector observed that the weld joints appeared to be designated as fillet and flush flare groove welds and that Mr. Jimenez appeared to be performing the FCAW in the flat (1G) and vertical (3F) positions, throughout the shift.

The QA Inspector randomly observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, the QA Inspector observed that the applicable WPS's and copies of the shop drawings appeared to be located nearby each work station, where the above mentioned welding and fitting activities were being performed. The QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. The QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed.



WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

As noted 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 Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance, Sean	Quality Assurance Inspector
Reviewed By:	Edmondson, Fred	QA Reviewer
