

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 #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017689**Date Inspected:** 29-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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 of the Travelers. The QA Inspector arrived on site to randomly observe the WMI Quality Control (QC) Inspectors in process and completed visual and nondestructive testing.

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

Trolley Test Stand

On this date, the QA Inspector observed WMI production welder, Mr. Juan Jimenez (WID # 3059), continuing to utilize a mechanical grinder to perform grinding activities on the previously completed web to bottom flange, 8mm fillet weld, for the Rail Y Assembly 2-A4. The QA Inspector observed that the grinding was being performed on the areas which were previously marked by SE QC Inspector Ruben Dominguez, during the Visual Testing (VT) previously performed by Mr. Dominguez. Later in the shift, the QA Inspector spoke with SE QC Inspector Ruben Dominguez and Mr. Dominguez explained that the Gas Metal Arc Welding (GMAW) and Non-Destructive Testing (NDT) on this assembly, was now complete. Mr. Dominguez further explained that 100% final Visual and 10% Magnetic Particle Testing (VT/MT) was performed on the previously completed welds and no rejectable indications were found, at the time of testing.

See attached picture below.

Traveler Test Rack

On this date, the QA Inspector observed production welder Mr. Daniel Grayum (WID # 3049) performing Flux Core Arc welding (FCAW) tacking activities on the vertical post to base support columns, connector plate, for the

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Traveler Test Rack. The QA Inspector observed that the assembly appeared to be identified as Column A4. Later in the shift, the QA Inspector observed that the tacking had been complete and Mr. Grayum had started the FCAW on the above mentioned tacked areas. The QA Inspector observed Mr. Grayum performing the FCAW in the horizontal position (2F) and the weld joints appeared to be designated as 10 mm fillet welds, per the shop drawings.

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 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.

See attached picture below.

Lower Truss Section

On this date, the QA Inspector observed Westmont Industries (WMI) production personnel Mr. Eutimo Lopez, Mr. Cesar Canales and a helper fitting the previously completed Frame assemblies, for the SAS-EB Lower Truss Section.

The QA Inspector observed that the Frame assemblies had been previously lifted and placed and appeared to be identified as A240, B240, A225 and A230, per the assembly #, which appeared to have been previously written on the Frame assemblies. 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.

See attached picture below.

E2/E3-EB Traveler

The QA Inspector observed WMI production personnel, Mr. Ruiz Villasenor, continuing to utilize the Pearson shear to cut plate material. The QA Inspector observed that the material being cut, appeared to material which will be utilized for the fabrication of the E2/E3-EB Traveler. The QA Inspector randomly observed that Mr. Villasenor had copies of the shop drawings and appeared to reference the Bill of Material list, to cut the material to the specific dimensions. Once the material was cut, the QA Inspector observed Mr. Villasenor utilize a paint stick marker to identify each piece of plate material per the piece mark and job #. The QA Inspector observed that the above mentioned plate material had been previously inspected, the MTR's had been previously provided and the QA Inspector had previously written "OK to Cut", on the plate material.

The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and tacking activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. The QA Inspector randomly observed that the applicable WPS's and copies of the shop drawings, were located near each work station, where the above mentioned FCAW and fitting activities were being performed. The QA Inspector randomly verified that the consumable material, utilized during the welding was in compliance to 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

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Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.



Summary of Conversations:

On this date, the QA Inspector observed WMI Production Personnel Raymundo Anaya, generating what appeared to be weld maps, for tracking purposes of the in process and completed welds, for the SAS-EB Fixed Stairs Section Assembly. After observing this activity, the QA Inspector then spoke with Mr. Anaya and he explained that he had been previously instructed by WMI Director of Quality Assurance, Mr. Curtis Bell to perform this activity. Mr. Anaya then showed the QA Inspector some examples of what he had completed, on the weld maps. After viewing the weld maps, it appeared that individual weld joints had been assigned a unique number, on what appeared to be copies of the shop drawings. Mr. Anaya then asked the QA Inspector if this was an acceptable method for tracking the weld joints. The QA Inspector then explained to Mr. Anaya that this method appears to be an efficient method for tracking the weld joints.

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.

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