

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-018442**Date Inspected:** 24-Nov-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, 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 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.

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

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fillet and flare groove welds.

E2/E3-EB Traveler

On this date, the QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) and Mr. Jim Muetzel (WID # 3133), performing Flux Core Arc Welding (FCAW) welding activities on the intermediate and diagonal bracing Tube Steel (TS) material. The QA Inspector observed that the FCAW being performed by Mr. Jimenez and Mr. Muetzel 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 and Mr. Muetzel were performing the FCAW in the flat (1G) and vertical (3F) positions, throughout the shift. In addition to the above mentioned activities, the QA Inspector observed WMI Production fitter Mr. Cesar Canales and Raymundo Anaya, performing layout and fitting activities on tube steel material, for the Frame Assembly identified as 2-A314, per the shop drawings. The QA Inspector observed that Mr. Canales and Mr. Anaya were performing the activities on the intermediate and diagonal bracing for the above mentioned Frame Assembly, prior to tack welding.

The QA Inspector randomly observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and fitting activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. During random observation, the QA Inspector observed that the applicable WPS's and copies of the shop drawings, were located near 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 and the parameters appeared to be in compliance to the applicable WPS.

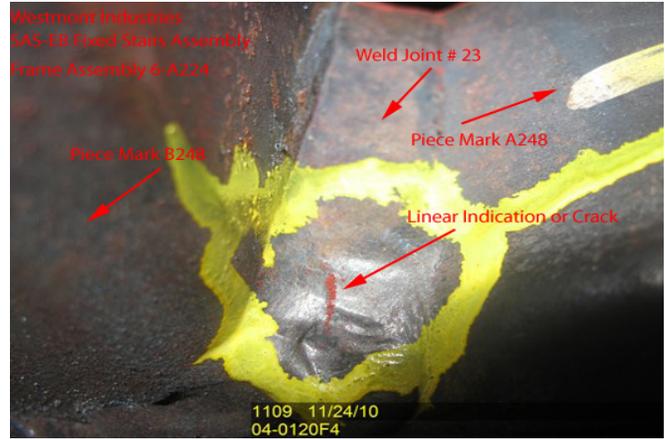
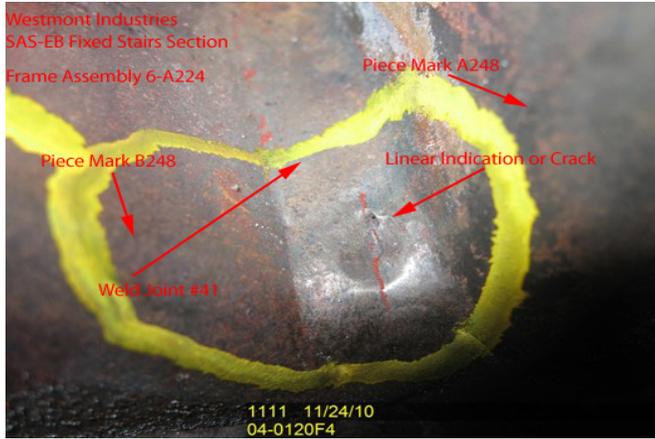
Summary of Conversations:

On this date, the QA Inspector performed random Magnetic Particle (MT) testing on the completed Frame assemblies, identified as 5-A223 and 6-A224, for the SAS –EB Traveler. After performing the testing, the QA Inspector discovered 3 rejectable indications on 3 completed fillet welds, which appeared to be linear indications or cracks at the weld termination areas. After discovering the cracks, the QA Inspector then notified SE QC Inspector Ruben Dominguez that the cracks were present. Mr. Dominguez then viewed the cracks and explained to the QA Inspector that the indications appear to be crater cracks in the weld. The QA Inspector then agreed with Mr. Dominguez. After agreeing with Mr. Dominguez, the QA Inspector then explained that prior to the repair commencing, per AWS D1.1 and Caltrans Special Provisions that prior approval of the Engineer shall be obtained before the repairs commence.

At this time, Mr. Dominguez appeared to understand these requirements, prior to the weld repairs commencing. See completed TL6028 and attached pictures below, for additional details.

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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