DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 82.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-017623
Date Inspected: 21-Oct-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Westmont Industries

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Santa Fe Springs, CA.

CWI Name:	R. Rodriguez, R. 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 perform fitting and Gas Metal Arc Welding (GMAW) activities for the assembly identified as Rail Y Assembly 2-A4, web to flange. The QA Inspector observed Mr. Jimenez performing the GMAW in the Horizontal (2F) position on the previously fit Web to Top Flange plate material and the fit up T-joint appeared to be designated as an 8 mm fillet weld. The QA Inspector observed that near the end of the shift,the FCAW had been completed on this weld joint and Mr. Jimenez was utilizing a mechanical grinder to blend the weld termination areas. The QA Inspector observed that SE QC Inspector Ruben Dominguez was present and Mr. Dominguez explained that once the grinding is complete, that the Rail Y Assembly will then be flipped over to start the 8 mm Fillet welds on the bottom flange to web plate. At this time, the QA Inspector observed that the above mentioned GMAW on the above mentioned assembly, appeared to be approximately 50 % complete.

Traveler Test Rack

See Summary of Conversations below.

SAS-EB Traveler

Fixed Stairs Section

On this date, the QA Inspector observed Westmont Industries (WMI), production personnel Mr. Cesar Canales and Mr. Jose Rodriguez (WID # 3031), continuing to perform fitting and Flux Core Arc Welding (FCAW) activities for the fabrication of the Fixed Stairs Section Assembly. The QA Inspector observed that the activities were being performed on the previously placed and fit Frame Assemblies, identified as A237, B237, A218, A219 and A223. The QA Inspector observed Mr. Canales and Rodriguez occasionally reference the shop drawings and then fit and tack weld various pieces of previously cut material, including Tube Steel (TS) and connector plates. The QA Inspector observed that Mr. Canales and Rodriguez continued these activities throughout the shift.

Frame Assemblies

On this date, the QA Inspector observed WMI production personnel Mr. Jerry Smith, continuing to utilize the flame cutting table, to cut plate material. The QA Inspector then spoke with Mr. Smith and he explained that the material currently being cut, will be utilized for the fabrication of the SAS-EB Traveler Frame Assemblies. The QA Inspector observed that the cutting operations were being performed, utilizing two oxygen acetylene cutting torches and that the plate material was stationary on the cutting table. The QA Inspector observed that the two torches were mobile and cutting specific dimensional shapes in the material, which Mr. Smith had previously programmed into the computer software. The QA Inspector observed that the plate material had been previously inspected with the MTR's provided and the QA Inspector had previously written "OK to Cut" on the material.

On this date, the QA Inspector observed Westmont Industries (WMI) production personnel Mr. Tim Hartnett, continuing to cut material which will be utilized, for the Traveler Frame Assemblies. The QA Inspector observed that Mr. Hartnett was continuing to utilize a Marvel® 15 A series horizontal band saw, to perform the cutting operations and observed that the material being cut, is identified as rectangular and square Tube Steel (TS). The QA Inspector spoke with Mr. Hartnett and he explained that WMI shop supervisor, Mr. George Grayum, had provided a list of TS material, with specific dimensions, per the shop drawing bill of materials. Mr. Hartnett further explained that he was cutting the material to these specific lengths and marking the material with a white paint stick marker, to identify the individual cut pieces of material. After the material was cut and marked, the QA Inspector observed Mr. Hartnett utilize the overhead bay crane, chain and hook to lift and place the material into neatly stacked piles, nearby the cutting area. The QA Inspector noted that the Mill Test Reports (MTR's) had been previously provided and the QA Inspector had previously written "OK to Cut" on the material.

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.

See attached picture below.

The QA Inspector observed WMI production welder, Mr. Raymundo Anaya (WID # 3196) performing FCAW

fitting and tacking, activities for the E2/E3-EB Traveler frame assemblies. The QA Inspector observed Mr. Anaya initially fit previous cut to length Tube Steel (TS) material. Once fit the QA Inspector observed Mr. Anaya perform dimensional checks on the fit material and then perform the FCAW tacking. The QA Inspector observed that the frame assemblies appeared to be identified as A317, A324 and A323, per the shop drawings. 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 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 was informed by WMI QCM Rick Rodriguez that the earth excavation had started, in preparation for the Traveler Testing Rack concrete footings.

See attached picture below.

Comments

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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