

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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026982**Date Inspected:** 30-Dec-2011**Project Name:** SAS Superstructure**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Contractor:** Westmont Industries**OSM Arrival Time:** 600**OSM Departure Time:** 1430**Location:** Santa Fe Springs, CA**CWI Name:** Chris Concha**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:** Maintenance Travelers**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Westmont Industries (WMI) jobsite in Santa Fe Springs, California for the purpose of observing fabrication and QC functions for the SAS Superstructure, Bid Item #99, Maintenance Traveler and Bid Item #100, Maintenance Traveler (Bike Path).

E2/E3 EB Traveler

This QA Inspector randomly observed WMI production welder Mr. Daniel Grayum (WID # 3049) grinding to remove paint and performing Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler piping supports. This QA Inspector observed Mr. Grayum tack welding in all positions on angle plates to tube steel material, randomly throughout the shift.

SAS Travelers Supplementary Platforms

This QA Inspector made random shop observations and observed no fit-up performed on the SAS Travelers Supplementary Platforms Assemblies on this date.

This QA Inspector randomly observed that Smith Emery, CWI, QC Inspector Mr. Chris Concha was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This 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. This QA Inspector randomly observed QC Inspector Mr. Concha verifying the in-process welding parameters,

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

RPI Coating (Blast and Paint)

This QA Inspector performed random shop observations and observed that RPI is on site to continuing with the coating application on the SAS WB Traveler. QA Inspector was informed by RPI Coating Mr. Preston Keen that RPI is going to perform tests on the prime coating, sand prime coating, and apply a mist coat to the fixed stair section using the Sherwin Williams Polysiloxane XLE-80, today. Environmental readings taken by RPI at the time of mist coat application are as follows respectively: Air Temperature 48/79 F, Relative Humidity 69/48%, Wet Bulb Temperature 43/70 F, Dew point 49/62 F and Surface Temperature 46/68 F. QA Inspector also, observed Mr. Keen documenting daily actives on RPI Coating QC Daily Inspection Report.

This QA Inspector performed a DFT (dry film thickness) survey of the SAS Balconies and Anti Twist Beams on the Sherwin Williams, Zinc Clad II Plus prime coating application. The S Sherwin Williams, Zinc Clad II Plus had been spray applied by RPI Coating. A total of seven measurements were taken randomly throughout the structure in accordance with SSPC PA2 criteria. The overall average was in compliance with the contract requirements of 90 microns to 150 microns. The prime coating was found to be well cured and to generally meet the contract requirements.

Mr. Keen informed QA Inspector that on the interim coating of the Sherman Williams Zinc Clad II Plus, Inorganic Zinc Rich prime coating he would be performing ASTM D4541 – Standard Test Method for Pull-Off Strength of Coating Using Portable Adhesion Tester, ASTM D3363 - Film Hardness by Pencil Test, ASTM D4752 Measuring MEK Resistance to Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub and performing the Quarter test at section 3 and Caltrans test plate. Mr. Keen stated that he will be using a calibrated Elcometer Hydraulic Adhesion Tester Model 108 for the adhesion test and Sherman Williams R7 KIII High Solids compliant thinner #1 for the solvent rub test. Testing observed is as follows:

Prime coated on 12-21-11 – Fixed stairs - Adhesion Test – 1000 psi, 900 psi & 800 psi, Pencil Test (pass), Quarter Test (pass) and Rub test (pass). Prime coated on 12-22-1 – middle section, Lower Truss – Adhesion Test – 800 psi and glue failure) Pencil Test (pass), Quarter Test (pass) and Rub test (pass). Testing observed by QA Inspector appears to be in compliance with the contract requirements.

This QA noted above items observed appear to comply with contract documents.



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Summary of Conversations:

As stated within this report.

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:	Brannon, Sherri	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
