

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-026777**Date Inspected:** 28-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Westmont Industries**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).

SAS WB Traveler

This QA Inspector randomly observed Smith Emery, CWI, QC Inspector Mr. Chris Concha performing visual inspection on the SAS WB traveler. Mr. Concha informed this QA Inspector that he had found several areas for in process grinding and welding. This QA Inspector randomly observed WMI production welder Mr. Eutimo Lopez (WID # 3035) grinding and welding areas found Mr. Concha using Flux Core Arc Welding (FCAW) process in all positions on tube steel and plate material, randomly throughout the shift. QC visual inspection and pick-up welding not completed on this date.

RPI Coating (Blast and Paint)

This QA Inspector performed random shop observations and observed that RPI Coating is on site to continue abrasive blast and prime coat application on the Elevating Platforms and Bike Path Traveler Assemblies. QA Inspector was informed by RPI Coating Quality Control (QC) Representative Mr. Preston Keen that RPI is going to sweep/spot blast and apply the Sherwin Williams Zinc Clad II prime coat to the today on remaining bike path traveler assemblies and touch-up damaged coating from WMI handling with the Sherwin Williams Polysiloxane XLE-80. Later in the morning this QA Inspector randomly observed that RPI personnel performing sweep/spot blasting activities on bike path traveler assemblies. After sweep/spot blasting was completed, QA Inspector then observed Mr. Keen performing random surface profile checks on the sweep blasted base metal surfaces. This QA

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Inspector observed Mr. Keen utilizing a Testex Press-O-Film and a micrometer to perform the testing. During observation, this QA Inspector observed that the readings appeared to be 3.5 mils, 3.8 mils, and 3.3 mils. QA Inspector then observed Mr. Keen perform a test for soluble salts on the previously blasted base metal surface. Soluble salt test results were zero (0) parts per million (PPM) which appeared to meet one test per 200 square meters, per the contract requirements. Testing observed by QA Inspector appears to be in compliance with the contract requirements.

Later in the shift, this QA Inspector randomly observed RPI Coating performing what appeared to be primer application activities within what appeared to be within and 8 hour time frame from the above mentioned sweep blasting activities. Environmental readings taken by RPI at the time of the coating application are as follows Air Temperature 63/72 F, Relative Humidity 65/51%, Wet Bulb Temperature 52/44 F, Dew point 56/54 F and Surface Temperature 64/70 F.

This QA Inspector performed measurement on dry coating thickness with Type 2 (magnetic gage), DFT's thickness reading of the prime coated surface coated on 11-23-11 are an average of three (3) thickness reading are as follows 3.5 mils, 4.5 mils, 4.1 mils 4.3 mils, 4.8 mils, and 4.4 mils.

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 11-21-11 (section 1), Adhesion Test – 1250 psi, Pencil Test (pass), Quarter Test (pass) and Rub test (pass).

Prime coated on 11-22-11 (section 2), Adhesion Test – 1200 psi, Pencil Test (pass), Quarter Test (pass) and Rub test (pass).

Prime coated on 11-23-11 (section 3), Adhesion Test – 700 psi, Pencil Test (pass), Quarter Test (pass) and Rub test (pass).

Testing observed by QA Inspector appears to be in compliance with the contract requirements.

After testing was completed Mr. Keen informed QA Inspector that RPI will start sanding and pressure washing. This QA randomly RPI personnel hand sanding prime coated elevating platforms and Bike Path Traveler Assemblies using 100grit sandpaper and pressure washing using a 6000 psi pressure washer.

QA Inspector sampled of part A, part B, and part F, of Sherwin Williams Zinc Clad II Plus Inorganic Zinc-Rich Coating representing 25 gallons. QA Inspector assigned Caltrans Lot #B208-028-11 and TL-101 # 712426.

QA Inspector sampled of part A, and part B, of Sherwin Williams Polysiloxane XLE-80 Coating representing 10 gallons. QA Inspector assigned Caltrans Lot #B208-029-11 and TL-101 # 712427.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

QA Inspector was informed by Assistant SMR Mr. Nicolai Hvass that the sample of Sherwin Williams Polysiloxane XLE-80 Coating sampled on 11-4-11, TL101-C711700, Caltrans, QA Lot # B208-021-11 is satisfactory for use. Chemistry Lab Sample No.:C112518. Mr. Hvass stated that the paint sample color was off by a delta of 2.5 and that Caltrans Mrs. Lisa Dobeck has accepted. QA Inspector informed RPI Coating Mr. Preston Keen of the above information. Mr. Keen stated that he would inform his Supervisor Mr. Carlos Torres.

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