

EXTINGUISH THE TORCH – SESSION 3

Turnpike Resurfacing and Roadside Improvements Suncoast Parkway (MM 37- MM 46) Financial Project Number: 427324-1-52-01, 427324-3-52-01 Contract: E8M46

SUMMARY REPORT

PROJECT DETAILS

Resurfacing and Roadway Improvements, Milling and Resurfacing approximately 7.2 miles (FPID 427324-1-52-01) and safety upgrades (FDIP 427324-1-52-01) along the Suncoast Parkway (SR 589) from County Line Road to Cortez Boulevard (SR 50). The safety upgrades include installation of high tension cable barrier in the medians.

Contractor – Ajax Paving Industries of Florida, LLC CEI – AIM Engineering & Surveying, Inc. Notice To Proceed – E8M46 – April 25, 2013 First Chargeable Contract Day – May 29, 2013 Original Contract amount - \$ 5,445,619.60 Original Completion Date - June 12, 2014 Percentage of Original Time - 120.5% Percentage of Time with Weather/Holidays – 107.6% Department's Goal for Time is achieved: 7.6% < 20% Original Contract Time - 380 Calendar Days + 20 days flex time Work Order processed to extend flex time an additional 14 days for a total of 34 days. Supplemental Agreement processed for additional slippage costs included 29 days. Time for Weather/Holidays – Twenty-Nine (29) Weather / Twenty-Seven (27) Holidays Revised Completion Date - September 5, 2014 Actual Completion Date - August 29, 2014 Final Contract Amount - \$6,166,358.93 Percentage of Original Money – 113.2% Department's Goal for Money is not achieved 13.2% > 10% Biggest issue = asphalt slippage

*- See Attached Presentation for Time and Money Charts

Spreadsheet of Overruns and Underruns in Excess of 10% provided as a separate document.

LESSONS LEARNED

1. Additional Post (Floating Posts)-

While excavating for the foundations of each post, debris, drainage and utilities were encountered at fourteen locations. Posts were added to the system to avoid the conflict areas, while maintaining the minimum spacing and avoiding costs associated with designing, approving and installing shallow foundations at the conflict areas.

<u>Lesson Learned</u>: Include additional HTCB post to avoid conflicts in original contract or include a note in the plans that spacing may vary to avoid installation of floating posts for underground conflicts.

2. Miscellaneous Asphalt Repairs-

The direct sheet flow of water from the roadway eroded the embankment that surrounds the socketed posts of the high tension cable barriers at two locations along horizontal curves on the project. Additional miscellaneous asphalt was placed to completely fill any gaps between the socket and the asphalt pad and prevent erosion.

<u>Lesson Learned</u>: Include additional MAP to accommodate the wider HTCB sockets and include additional MAP at areas of steeper slopes to prevent erosion.

3. Asphalt Slippage-

The existing layers of structural course were not sufficiently bonded causing the asphalt to slip. Also, the base thickness varied along the profile, leading to areas of scabbing when the Contractor milled into the first existing layer of structural course assumed to be of constant thickness. The areas were milled to depths ranging from 2.25" to 2.5" in order to remove the existing top lift of structural course. Areas where scabbing occurred were corrected with milling down to the lime rock and placing structural course in two lifts where appropriate.

<u>Lesson Learned</u>: After the 60% design submittal, require Design, Maintenance Construction PM and Materials conduct a field meeting to review project conditions prior to letting. For the construction field staff, it is important that tacking operations be closely monitored to ensure the surface to be tacked in properly cleaned and that application rates are per the project specifications. Base construction must be within allowable limits per the specifications. Base construction irregularities should not be corrected by varying the thicknesses of structural course layers.

<u>Session 2 Comments – from DBE</u> – recommend that design does not leave a minimal layer of existing asphalt during milling operations. If possible, review asphalt cores to determine where the original asphalt layers were created to set milling depths. DBE indicated that the last lift of SP should always be 1-1/2 inches.

4. Wooden Posts for Guardrail

Wood posts are more work to install due to post holes requiring drilling prior to driving the posts. The previous supplemental agreement to change to a galvanized guardrail system included steel posts rather than wood posts. The Suncoast Aesthetic Design Guidelines allow the use of wood and steel posts. A supplemental agreement paid for difference in costs of wood post materials and installation.

Lesson Learned: A plan note can be included to specify that wood posts are required.

5. Maintenance of Traffic

The distance between exits created significant detour routes during ramp closures. Due to weather and other unforeseen issues, ramp closures were extended to multiple nights or were cancelled and rescheduled. This information was not always conveyed timely to FTE or the travelling public.

<u>Session 2 Comment</u> - On projects where the detour required is significant, review the design for alternatives to closing the ramp, when possible (ie, provide temporary pavement, etc.)

Session 2 Comment – CEI to track the warranty period for RPM adhesion. The RPM adhesion failed prematurely and maintenance had to replace many RPMs under their thermoplastic contract.

FIN	Description	Specification
427324-1-52-01	Three Year Asphalt Warranty	Standard Specification 338
427324-1-52-01	Performance Turf Establishment	Standard Specification 570
427324-1-52-01	Preformed Tape 180 Day Observation Period	Standard Specification 713
427324-1-52-01	TMS Manufacturer Guaranties	Supplemental Specification 745
427324-3-52-01	Guardrail Material Compliance Certification	Standard Specification 536
427324-3-52-01	Performance Turf Establishment	Standard Specification 570

E8M46 Warranties