CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO:

Members of the Board

Central Florida Expressway Authority

4974 ORL Tower Road

Orlando, Florida 32807

FROM:

Ben Dreiling, P.E.

Director of Construction and Maintenance

DATE:

July 28, 2015

RE:

Consent Agenda Item

Construction Contract Modifications

Authorization is requested to execute the following Construction Contract Modifications. Supporting detailed information for the proposed Construction Contract Modifications are attached.

Contract No.	Name	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) August 2015	Total Amount (\$) to Date*	Time Increase or Decrease
800-903D	Preferred Materials, Inc.	Goldenrod Rd Milling & Resurfacing	3,947,769.18	0.00	(492,197.27)	3,455,571.91	0
417-110	Masci General Contractor, Inc.	SR 417 Widening, Curry Ford Rd. to Lake Underhill Rd.	10,109,586.09	172,585.05	(213,913.89)	10,068,257.25	0
417-301C	SEMA Construction	SR 417/Boggy Creek Rd. Interchange Improvements Phase III	70,900,000.00	874,938.90	155,757.62	71,930,696.52	0

TOTAL

(\$550,353.54)

BD/ep

cc: Laura Kelley, Joe Berenis, P.E.

^{*} Includes Requested Amount for current month.

The following is a proposed Construction Contract Modification along with the detailed information:

Contract 800-903D: Goldenrod Rd. Milling & Resurfacing Preferred Materials, Inc. SA 800-903D-0815-001

Extending Project Limit WB SR 528

The Authority wishes to extend the project limits 590 LF from Sta. 815+00 to Sta. 809+10 to avoid leaving a distressed section of asphalt in place between this and a previous resurfacing project's limits.

INCREASE THE FOLLOWING ITEMS:

Mill Existing Asphalt Pavement, 1 1/2" Avg Depth	\$2,360.00
• •	
Mill Existing Asphalt Pavement, 2 1/4" Avg Depth	\$5,664.01
Superpave Asphalt, Traffic C, PG 76-22 PMA	\$11,975.99
Superpave Asphalt, Traffic D, PG 76-22 PMA	\$25,831.07
Asphalt Concrete Friction Course, FC-5, PG 76-22	\$24,645.31
Solid Traffic Stripe (PPRT) (Yellow) (6")	\$2,077.62
Solid Traffic Stripe (PPRT) (Contrast) (9")	\$3,038.24
Skip Traffic Stripe (PPRT) (Contrast) (10'-30') (9")	<u>\$927.11</u>
	\$76.519.35

Composite Pay Factor Adjustments

The Authority wishes to add the following items to allow for Composite Pay Factor (CPF) adjustments in accordance with Standard Specifications 334-8.3 and 337-12.3. This specification provides for a pay adjustment on asphalt placed with calculated pay factors for proximity to target for characteristics including asphalt binder content and gradation.

ADD THE FOLLOWING ITEMS:

Lot 2 CPF Adj. (CPF 1.02)	\$4,254.00
Lot 3 CPF Adj. (CPF 1.04)	\$8,508.00
Lot 4 CPF Adj. (CPF 1.01)	\$389.74
Lot 5 CPF Adj. (CPF 1.05)	\$10,535.44
Lot 6 CPF Adj. (CPF 1.05)	\$10,635.00
Lot 7 CPF Adj. (CPF 1.02)	\$1,976.67
Lot 8 CPF Adj. (CPF 1.05)	\$9,940.00
Lot 10 CPF Adj. (CPF 0.98)	(\$3,980.41)
Lot 11 CPF Adj. (CPF 1.05)	\$9,856.75
Lot 12 CPF Adj. (CPF 1.04)	\$2,553.54
Lot 14 CPF Adj. (CPF 0.97)	<u>(\$1,728.18)</u>
	\$52,940.55

Cross Slope Correction WB Shoulder

This change is as requested by the Authority. The plans showed the proposed cross slope on inside shoulder WB SR 528 to be corrected to 5%. The Contract Plans did not show the existing guardrail in the median. The planned cross slope correction would have adversely affected the guardrail height and put it out of standard. The Authority requested the Contractor mill and match the existing cross slope on the shoulder to eliminate the issue.

DECREASE THE FOLLOWING ITEM:

Superpave Asphalt Concrete, Traffic C

(\$31,898.24)

Eliminate Directional Bore

Due to the existing guardrail and terrain, the Contractor requested to eliminate directional bore and reuse existing conduit for the existing traffic signal for the WB off Ramp at SR 528 and Goldenrod Road. The Authority coordinated with the maintaining agency (City of Orlando) and accepted the Contractor's request.

DECREASE THE FOLLOWING ITEMS:

Conduit, F&I, Open Trench	(\$586.00)
Conduit, F&I, Directional Bore	(\$5,275.80)
Pull and Splice Box, F&I	<u>(\$2,126.85)</u>
	(\$7,988.65)

Deletion of GPS Milling

This change is requested by the Contractor. The Contract requires the use of GPS milling specifications, but due to the scope of work of matching existing cross slopes, the Contractor requested to delete the work and provide a credit to the Authority. The Authority concurred with the Contractor's request and accepted the proposed credit.

ADD THE FOLLOWING ITEM:

Deletion of GPS Milling (\$58,050.00)

Bituminous Price Index Adjustments

The Authority wishes to add the following items to allow for Bituminous Price Index adjustments in accordance with Addendum 1, Item 2, Changes to the General Specifications, Subarticle 7.2.1. In accordance with the contract specifications, the Engineer has calculated adjustments for the period of January 2015 – March 2015. Adjustments were made only if current month Fuel/Bituminous price is greater or less than 5% of Bid/Base Bituminous price.

ADD THE FOLLOWING ITEMS:

Bid Month: July 2014 AC Base Price=2.4949; Polymer Base Price=3.1675)	
January 2015 Bituminous Adj. (AC Price=2.3515; Polymer Price=2.9622)	(\$664.49)
February 2015 Bituminous Adj. (AC Price=N/A; Polymer Price=2.9048)	(\$12,852.72)
March 2015 Bituminous Ad. (AC Price=3.1675; Polymer Price=2.789)	(\$22,517.27)
	(\$36,034.48)

Quantity Adjustments for Completed Pay Items

The Authority wishes to adjust quantities for completed pay items in the Contract. This will adjust these quantities to reflect the actual authorized quantities under the Contract.

UNDERRUN THE FOLLOWING ITEMS:

Mill Existing Asphalt Pavement, 3/4" Avg Depth	(\$2,045.11)
Superpave Asphaltic Conc., Traffic C, PG 76-22, PMA	(\$30,524.50)
Asphalt Conc. FC incl. Bit., FC-5, PG 76-22, Black Granite	(\$42.50)
Asphalt Conc. FC Traffic C, FC-12.5, PG 76-22, Black Granite	(\$153,655.55)
Sod (Performance Turf)	(\$1,629.00)
Single Post Sign (F&I Ground Mount) (<12 SF)	(\$4,500.00)
Single Post Sign (F&I Ground Mount) (31+ SF)	(\$1,650.00)
Single Post Sign (Remove)	(\$240.00)
Solid Traffic Stripe (Thermoplastic) (White) (24")	(\$686.40)
Directional Arrows (Thermoplastic)	(\$72.00)
Solid Traffic Stripe (Thermoplastic) (Yellow) (18")	(\$38.50)
Solid Traffic Stripe (Thermoplastic) (White) (6")	(\$190.00)
Solid Traffic Stripe (Thermoplastic) (White) (8")	(\$357.20)

Skip Traffic Stripe (Thermoplastic) (White) (6") (10'-30') Solid Traffic Stripe (Thermoplastic) (Yellow) (6") Solid Traffic Stripe (PPRT) (White) (6") Solid Traffic Stripe (PPRT) (White) (18") Solid Traffic Stripe (PPRT) (Yellow) (6") Solid Traffic Stripe (PPRT) (Contrast) (9") Allowance for Disputes Review Board Work Order Allowance	(\$55.00) (\$152.00) (\$390.00) (\$768.00) (\$1,147.62) (\$11,742.24) (\$30,000.00) (\$293,679.67) (\$533,565.29)
OVERRUN THE FOLLOWING ITEMS:	
Superpave Asphaltic Conc., Traffic D, PG 76-22, PMA	\$35,668.70
Concrete Curb & Gutter, Type F	\$1,141.15
Single Post Sign (F&I Ground Mount) (12 SF–20 SF)	\$1,195.00
Retro-Reflective Pavement Markers	\$315.25
Painted Pavement Markings (Yellow) (Island Nose)	\$337.50
Solid Traffic Stripe (Thermoplastic) (White) (12")	\$258.75
Solid Traffic Stripe (Thermoplastic) (White) (18")	\$626.40
Skip Traffic Stripe (Thermoplastic) (White) (6") (2'-4')	\$84.00
Pavement Messages (Thermoplastic)	\$453.00
Skip Traffic Stripe (Thermoplastic) (White) (12") (3'-12')	\$30.00
Solid Traffic Stripe (PPRT) (White) (8")	\$2,948.00
Skip Traffic Stripe (PPRT) (White) (12") (3'-12')	\$700.00
Solid Traffic Stripe (PPRT) (Yellow) (18")	\$24.00
Skip Traffic Stripe (PPRT) (Contrast) (9") (10'-30')	\$234.89
Tape Pavement Marking Removal	<u>\$1,862.85</u> \$45,879.49
Sub-Total: Quantity Adjustments for Completed Pay Items	(\$487,685.80)
TOTAL AMOUNT FOR PROJECT 800-903D	(<u>\$492,197.27)</u>

Contract 417-110: SR 417 Widening, Curry Ford Rd. to Lake Underhill Rd. Masci General Contractor, Inc. SA 417-110-0815-005

Painted Pavement Markings/Striping North of Berry Dease

This change is requested by the Authority. The Authority desires to delete the FC-5 friction course on SR 417 in the northbound and southbound directions, north of the Berry Dease bridge from STA 377+65 to the north end of the project. This is being done as a cost savings measure. There is another upcoming project that will start within a few months that would have required this friction course to be removed in order to accommodate necessary traffic shifts during construction. In conjunction with the deletion of the friction course in this area, the thermoplastic striping and pavement markings will also be eliminated and painted pavement markings and temporary tape messages will be applied instead.

ADD THE FOLLOWING ITEM:

Painted Pavement Markings/Striping North of Berry Dease	\$13,517.90
DECREASE THE FOLLOWING ITEMS:	
Thermoplastic (Standard) (White) (Solid) (8")	(\$2,376.00)
Thermoplastic (Standard) (White) (Solid) (18")	(\$1,020.90)
Thermoplastic (Standard) (White) (Message)	(\$420.00)
Thermoplastic (Standard) (White) (Arrows)	(\$190.00)
Thermoplastic (Standard) (Yellow) (Solid) (8")	(\$1,651.05)
Thermoplastic (Standard) (Yellow) (Solid) (18")	(\$3,905.00)
Thermoplastic (Standard – Open Graded) (White) (Solid) (6")	(\$608.40)
Thermoplastic (Standard – Open Graded) (Yellow) (Solid) (6")	(\$1,404.00)
Preformed Tape (High Performance) (Yellow) (Solid) (6")	(\$9,872.15)
Preformed Tape (White/Black Contrast) (Yellow) (Solid) (9")	(\$15,570.56)
Preformed Tape (White/Black Contrast) (Skip) (9")	(\$13,034.65)
	(\$50,052.71)
Sub-Total: Painted Pavement Markings/Striping North of Berry Dease	(\$36,534.81)

Repair Existing Approach Slabs at Curry Ford Rd.

This change is requested by the Authority. Due to minor settlement or imperfections in the existing approach slabs in the SR 417 northbound and southbound outside lanes approaching the bridges over Curry Ford Road, there is a longitudinal grade difference where the asphalt meets the concrete. This grade difference causes an abrupt dip that does not meet the Authority's standards for ride quality on the final roadway surface. In order to repair these areas, the existing approach slabs and approx. 50' of adjoining asphalt pavement were milled out and repaved following a smooth profile which eliminated the grade difference and successfully improved the ride quality.

ADD THE FOLLOWING ITEM:

Repair Existing Approach Slabs at Curry Ford Rd.

\$26,177.05

Quantity Adjustments for Completed Pay Items

The Authority wishes to adjust quantities for completed pay items in the Contract. This will adjust these Contract quantities to reflect the actual authorized quantities under the Contract.

INCREASE THE FOLLOWING ITEMS:

Milling Existing Asphalt Pavement ¾" Avg. Depth	\$11,740.25
Superpave Asphaltic Conc., Traffic B	\$7,472.53
Superpave Asphaltic Conc., Traffic C	\$8,926.93
Superpave Asphaltic Conc., Traffic D	\$356,837.46
Misc. Asphalt Pavement	\$6,731.18
Guardrail – Roadway	<u>\$2,398.44</u>
•	\$394,106.79

DECREASE THE FOLLOWING ITEMS:

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Portable Changeable Message Sign, Temporary	(\$203.00)
Superpave Asphaltic Conc., Traffic D, PG 76-22	(\$358,656.36)
Asphaltic Friction Course, FC-5, PG 76-22	(\$30,932.87)
Pipe Culvert (Round) (30") (Storm & Cross Drain)	(\$192.69)
Performance Turf	(\$195,678.00)
Allowance for Disputes Review Board	(\$12,000.00)
·	(\$597,662.92)

Sub-Total: Quantity Adjustments for Completed Pay Items (\$203,556.13)

TOTAL AMOUNT FOR PROJECT 417-110

(\$213,913.89)

Contract 417-301C: SR 417/Boggy Creek Rd. Interchange Improvements Phase III SEMA Construction SA 417-301C-0815-003

LED Sign Lighting System

This change is as requested by the Authority. The Authority has adopted a new standard for sign lighting that requires the use of LED Sign Lighters with Remote Ballasts. The remote ballasts are located in a driver box mounted to the sign support away from traffic. This allows for a safer ballast change as no lane closure is required and personnel are servicing away from traffic. This change has been implemented on recent projects 429-621 and 417-304.

ADD THE FOLLOWING ITEMS:

Driver Remote Cable	\$85,929.12
LED Remote Luminaire Type A & B	\$34,079.79
LED Remote Luminaire Type I	\$21,635.32
Adjust Bracket Arm w/ Type A & B	\$13,489.28
Adjust Bracket Arm w/ Type I	\$8,760.90
Credit to Delete Sign Lights per Original Plans	<u>(\$39,556.08)</u>
	\$124,338.33

Ramp G Stay In Place Form Re-Work

The plans contain incorrect elevations for the setting of deck forms. This was caught after 2 spans of deck forms had been placed. Upon discovery of this issue, the Design Engineer provided revised finish grades and the Contractor removed and reinstalled the affected deck forms.

ADD THE FOLLOWING ITEM:

Ramp G SIP Repairs

\$16,217.48

Drainage Pipe Extension

The existing 42 inch diameter drainage pipe at the existing Pond #1 needs to be extended by approximately 60 feet to accommodate the new embankment on Ramp H and existing Pond #1. This work was not shown in the project plans.

ADD THE FOLLOWING ITEM:

42" Pipe Extension

\$15,201.81

TOTAL AMOUNT FOR PROJECT 417-301C

\$155,757.62