

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: Members of the Board

FROM: Ben Dreiling, P.E.
Director of Construction & Maintenance 

DATE: September 22, 2015

RE: Consent Agenda
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 (\$) October 2015	Total Amount (\$) to Date*	Time Increase or Decrease
599-123	United Signs & Signals, Inc.	Wrong Way Detection Pilot Project	299,689.00	0.00	(\$15,144.93)	284,544.07	0
528-405	Southland Construction, Inc.	SR 528 Airport Mainline Toll Plaza Demolition & Ramp Plaza Construction	38,708,813.52	184,344.33	\$111,096.02	39,004,253.87	0
599-520	United Signs & Signals, Inc.	Systemwide Data Collection System Upgrade	4,290,457.94	60,612.00	(\$96,468.64)	4,254,601.30	0
417-301C	SEMA Construction	SR 417/Boggy Creek Rd. IC Improvements Phase III	70,900,000.00	1,675,984.23	(\$22,256.64)	72,553,727.59	0
TOTAL					(\$22,774.19)		

* Includes Requested Amount for current month.

BD/ep

cc: Laura Kelley
Joe Berenis

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

Contract 599-123: Wrong Way Detection Pilot Project

United Signs & Signals, Inc.

SA 599-123-1015-01

Adjustments for Contract Items

The Authority wishes to adjust the quantities to accommodate additional work and changes in the Contract. This will adjust the Contract quantities to reflect the changes made.

OVERRUN THE FOLLOWING ITEMS:

Fiber Optic Cable (Single Mode, 12 Fiber) (F&I)	\$	893.20
Small Fiber Optic Pull Box (F&I)	\$	2,636.06
Fiber Optic Conduit (2-1" HDPE/SDR 11) (Trench or Plow)	\$	2,149.00
Conduit (2-2" HDPE/SDR 11) (Bore)	\$	1,684.54
Removal of Existing Equipment	\$	1,518.70
Conductors (F&I) (Insulated) (#6)	\$	<u>95.13</u>
	\$	8,976.63

UNDERRUN THE FOLLOWING ITEMS:

Pull Box (F&I)	\$	(3,166.00)
Conduit (1-2" HDPE/SDR 11) (Trench or Plow)	\$	(715.08)
Conduit (1-2" HDPE/SDR 11) (Bore)	\$	(2,302.56)
Fiber Optic Conduit (2-1" HDPE/SDR 11 and 1-2" HDPE/SDR 11) (Trench or Plow)	\$	(1,538.60)
Conductors (F&I) (Insulated) (#4)	\$	(342.00)
Conduit (F&I - Surface Mount) (RGS) (2")	\$	(245.90)
Allowance for Disputes Review Board	\$	(5,000.00)
Work Order Allowance	\$	<u>(10,811.42)</u>
	\$	(24,121.56)

<u>TOTAL AMOUNT FOR PROJECT 599-123</u>	\$	<u>(15,144.93)</u>
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Contract 528-405: SR 528 Airport Mainline Toll Plaza Demolition & Ramp Plaza Construction
Southland Construction, Inc.
SA 528-405-1015-02

Adjustments for Contract Items

The Authority wishes to adjust contract quantities to reflect the actual authorized work under the Contract. Of the total associated amount for Supplemental Agreement No. 02, \$17,395.59 is directly reimbursable to the Authority in which \$14,057.53 has been received to date. The Authority has accepted a resolution from AT&T for the balance of \$3,338.06.

ADD THE FOLLOWING ITEMS:	
Work Orders 1-20	\$ 111,096.02
<u>TOTAL AMOUNT FOR PROJECT 528-405</u>	<u>\$ 111,096.02</u>

Contract 599-520: Systemwide Data Collection System Upgrade
United Signs & Signals, Inc.
SA 599-520-1015-02

Adjustments for Contract Items

The Authority wishes to adjust the quantities to accommodate additional work and changes in the Contract. This will adjust the Contract quantities to reflect the changes made.

OVERRUN THE FOLLOWING ITEMS:

Fiber Optic Cable (Single Mode, 12 Fiber) (F&I)	\$ 2,310.00
Existing Fiber Optic Enclosure Re-Entry (Install)	\$ 8,514.60
Fiber Optic Fusion Splice	\$ 2,901.92
Fiber Optic Media Converter (F&I)	\$ 1,315.26
Remote Power Manager (F&I)	\$ 4,380.64
Cabinet/Environmental Monitor (F&I)	\$ 1,081.38
Lighting - Conductors (F&I) (#4)	\$ 3,796.20
ITS Multi-Conductor Communicator Cable (F&I)	\$ 697.00
ITS Field Cabinet (Adjust/Modify)	\$ 971.68
	<u>\$ 25,968.68</u>

UNDERRUN THE FOLLOWING ITEMS:

Fiber Optic Cable Inventory	\$ (1,480.74)
Fiber Optic Splice Housing Inventory	\$ (987.16)
Fiber Optic Cable (Single Mode, 72 Fiber) (F&I)	\$ (75,870.90)
Fiber Optic Enclosure (72 Splice) (F&I)	\$ (3,430.52)
Pull & Junction Boxes (F&I) (Small - Fiber Optic)	\$ (2,636.06)
Fiber Optic Conduit (F&I) (2-1" HDPE/SDR 11)(Trench or Plow)	\$ (534.18)
Fiber Optic Conduit (F&I) (4" BSP w/ 2-1" HDPE/SDR 11)	\$ (5,493.28)
(Directional Bore)	\$ (2,591.28)
Fiber Optic Patch Panel - 12 Port (F&I)	\$ (5,000.00)
Allowance for Disputes Review Board	<u>\$ (24,413.20)</u>
Work Order Allowance	\$ (122,437.32)

TOTAL AMOUNT FOR PROJECT 599-520 **\$ (96,468.64)**

Contract 417-301C: SR 417/Boggy Creek Rd. IC Improvements Phase III
SEMA Construction
SA 417-301C-1015-05

Embankment

This change is requested by the Authority. The Contract plans included 879,376 CY of embankment for the project. As part of Design Revision 2, the Engineer of Record (EOR) increased embankment by 17,900CY for SR 417 Ramps G, H, I & J. Accordingly, the Authority will need to increase the pay item quantity to 897,276 CY.

INCREASE THE FOLLOWING ITEM:

Embankment	\$ 205,850.00
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Concrete Coping Gutter

This change is requested by the Authority. The plans did not depict a concrete coping gutter along retaining wall 13 which runs along Ramp G West of Boggy Creek. The coping gutter is needed to convey storm water per design and prevent it from overflowing the top of the wall and staining the painted wall face. The EOR provided direction to construct 1,325LF of concrete coping gutter along wall 13. Staff has reviewed and requests the following.

ADD THE FOLLOWING ITEM:

Wall 13 Coping Gutter	\$ 24,441.14
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Drilled Shaft Subsurface Debris

During the augering process of both drilled shafts at Overhead Truss #3, unforeseen subsurface debris was encountered that prevented the completion of the shaft hole. The Contractor was directed to remove the debris on a time and material basis.

ADD THE FOLLOWING ITEM:

Drilled Shaft Subsurface Debris	\$ 13,203.71
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Male Threaded Bars

The Contract plans did not identify the requirement of a threaded male coupler to connect the reinforcement of the bridge lid slabs and the diaphragms. The Engineer of Record, via response to RFI #157, has identified that the male threaded couplers are required.

ADD THE FOLLOWING ITEMS:

Male Threaded Bars	\$ 15,927.71
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Class V Painting

The Contract plans did not identify painting of the diaphragms on Ramps H and I. Based on the Authority's painting scheme, the diaphragms will require painting. The Engineer of Record has recommended that the additional painting be added to the Contract.

ADD THE FOLLOWING ITEM:

Class V Painting	\$ 30,709.93
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Credit for Wood Ramps in Girders

The Contract plans identified wood ramps inside of each concrete U-girders at the closure pours and diaphragms. The Authority requested the deletion of the wood ramps inside of all concrete U-girders.

ADD THE FOLLOWING ITEM:

Credit for Wood Ramps in Girders	\$ (26,705.06)
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Credit for Design Fees

In accordance with the Contract, the Contractor opted to provide an alternative structural design for the concrete U-girders on Ramps H, I & J. Per Contract, the Engineer of Record proceeded to review the alternative design. Also per Contract, the Contractor is responsible to reimburse the Authority for the Engineer of Record review costs of the alternative design.

ADD THE FOLLOWING ITEM:

Credit for Design Fees	\$ (61,639.04)
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Fuel Price Index Adjustment

The Contract contains provisions for Fuel Price Index adjustments. In accordance with the Contract specifications, the Engineer has calculated adjustments for the period of January 2014 - August 2015. Adjustments were made only if the current month Fuel Price is greater or less than 5% of Bid/Base Fuel Price. During this period of time \$65,908,847.59 of construction was performed/produced.

ADD THE FOLLOWING ITEMS:

Bid Month: September 2013 Gas Base Price=2.8715; Diesel Base Price=3.2633

Feb. 2014 Fuel Adj. (Gas Price=2.6188; Diesel Price=3.1432)	\$ (439.45)
Jun. 2014 Fuel Adj. (Gas Price=2.8927; Diesel Price=3.0632)	\$ (3,639.04)
Jul. 2014 Fuel Adj. (Gas Price=2.8739; Diesel Price=3.0520)	\$ (1,298.94)
Aug. 2014 Fuel Adj. (Gas Price=2.7015; Diesel Price=2.9803)	\$ (2,970.78)
Sep. 2014 Fuel Adj. (Gas Price=2.7187; Diesel Price=2.9718)	\$ (3,773.98)
Oct. 2014 Fuel Adj. (Gas Price=2.5319; Diesel Price=2.7833)	\$ (9,489.19)
Nov. 2014 Fuel Adj. (Gas Price=2.1706; Diesel Price=2.6474)	\$ (13,606.02)
Dec. 2014 Fuel Adj. (Gas Price=1.9837; Diesel Price=2.4271)	\$ (45,382.98)
Jan. 2015 Fuel Adj. (Gas Price=1.5127; Diesel Price=1.9318)	\$ (7,212.78)
Feb. 2015 Fuel Adj. (Gas Price=1.5585; Diesel Price=1.9332)	\$ (21,401.09)
Mar. 2015 Fuel Adj. (Gas Price=1.8263; Diesel Price=2.1668)	\$ (7,864.36)
Apr. 2015 Fuel Adj. (Gas Price=1.7175; Diesel Price=1.9965)	\$ (13,138.80)
May 2015 Fuel Adj. (Gas Price=1.9765; Diesel Price=2.1583)	\$ (10,208.90)
Jun. 2015 Fuel Adj. (Gas Price=2.0510; Diesel Price=2.0772)	\$ (34,984.40)
Jul. 2015 Fuel Adj. (Gas Price=2.0297; Diesel Price=1.9660)	\$ (38,127.17)
Aug. 2015 Fuel Adj. (Gas Price=1.7920; Diesel Price=1.6478)	\$ (63,518.76)
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	\$ (277,056.64)

Paving Modifications

This change is requested by the Authority in an effort to increase pavement life and durability. In order to implement the change, revisions were made to several typical section pavement details for the project. The Engineer of Record issued plan revisions to the typical sections. In addition, existing pay item quantities were adjusted and new pay items are required.

ADD THE FOLLOWING ITEMS:

Milling Existing Pavement (1 1/2" Avg)	\$ 11,423.94
Milling Existing Pavement (2 1/4" Avg)	\$ 6,456.58
Milling Existing Pavement (3/4" Avg)	\$ 749.10
FC-12.5 (PG 76-22) (PMA) (Dark Granite)	\$ 148,440.00
Mobilization and MOT for Paving Modifications	\$ 5,622.79
	<u>\$ 172,692.41</u>

DECREASE THE FOLLOWING ITEMS:

Milling Existing Pavement (1 3/4")	\$ (11,236.50)
Superpave Asphaltic Conc., Traffic C (PG 76-22)	\$ (56,994.30)
Asphaltic Concrete Friction Course incl. Bit (PG 76-22)	
(FC-5) (Dark Granite)	<u>\$ (51,450.00)</u>
	<u>\$ (119,680.80)</u>

Sub-Total: Paving Modifications	\$ 53,011.61
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<u>TOTAL AMOUNT FOR PROJECT 417-301C</u>	<u>\$ (22,256.64)</u>
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