

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

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

DATE: March 27, 2017

SUBJECT: Consent Agenda
Construction Contract Modifications

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

Project No.	Contractor	Contract Description	Original Contract Amount (\$)	Previous Authorized Adjustments (\$)	Requested (\$) April 2017	Total Amount (\$) to Date*	Time Increase or Decrease
417-625	Traffic Control Devices, Inc.	Lake Nona Sports District Supplemental Signing	\$ 51,301.00	\$ -	\$ (5,000.00)	\$ 46,301.00	0
429-739	The Lane Construction Corp.	SR 429 Seidel Rd. to CR 535 Milling & Resurfacing	\$ 9,775,561.71	\$ -	\$ 12,924.37	\$ 9,788,486.08	0
417-733	Ranger Construction Industries, Inc.	SR 417 Milling & Resurfacing, International Dr. to Moss Park Rd.	\$ 18,513,580.17	\$ 711,976.70	\$ 17,160.90	\$ 19,242,717.77	0
429-202	Prince Contracting, LLC	SR 429, US 441 to North of Ponkan Rd.	\$ 56,152,429.00	\$ 401,347.11	\$ 122,162.16	\$ 56,675,938.27	92
429-203	Superior Construction Co. Southeast, LLC	SR 429, North of Ponkan Rd. to North Kelly Park Rd.	\$ 46,617,017.39	\$ 253,999.05	\$ -	\$ 46,871,016.44	63
429-204	Southland Construction, Inc.	SR 429 Systems Interchange	\$ 79,625,302.60	\$ 1,975,702.97	\$ 769,686.29	\$ 82,370,691.86	5
429-206	GLF Construction Corp.	SR 453, Lake County Line to SR 46	\$ 49,482,671.93	\$ 31,829.31	\$ (82,104.90)	\$ 49,432,396.34	6
408-127	The Lane Construction Corp.	SR 408 Widening, Hiawassee Rd. to Good Homes Rd.	\$ 23,569,000.00	\$ -	\$ 114,920.01	\$ 23,683,920.01	0
528-313	The Lane Construction Corp.	SR 528 / Innovation Way Interchange	\$ 62,452,032.01	\$ (1,010,313.80)	\$ 98,141.11	\$ 61,539,859.32	0
599-624	Traffic Control Devices, Inc.	Systemwide E-Pass Signage Improvements	\$ 351,900.00	\$ -	\$ (32,126.81)	\$ 319,773.19	0

TOTAL \$ 1,015,763.13

* Includes Requested Amount for this current month.

Reviewed By: Joseph A. Berenis
Joseph A. Berenis, P.E., Chief of Infrastructure

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Contract 417-625: Lake Nona Sports District Supplemental Signing
Traffic Control Devices, Inc.
SA 417-625-0417-01

Contract Contract Pay Item Quantity Adjustment

This change is to adjust contract quantities to reflect the actual expenditures on the project.

UNDERRUN THE FOLLOWING PAY ITEM:

Work Order Allowance	\$ (5,000.00)
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TOTAL AMOUNT FOR PROJECT 417-625

\$ (5,000.00)

Contract 429-739: SR 429 Seidel Rd. to CR 535 Milling & Resurfacing
The Lane Construction Corp.
SA 429-739-0417-01

Plan Revision #01 Remove and Replace Avalon Road Exit Guide Sign

This change will add new pay items to compensate for the Avalon Road Exit signage added in plan revision #01.

ADD THE FOLLOWING PAY ITEMS:

Multi-Post Sign, F&I, Ground Mount, 100SF - 200SF	\$	15,322.82
Multi-Post Sign Remove	\$	939.03
	\$	<u>16,261.85</u>

Remove Polymer From Initial Asphalt Lift

CFX wishes to adjust the following pay items to account for the elimination of polymer modified asphalt in the first lift of asphalt.

DECREASE THE FOLLOWING PAY ITEM:

Superpave Asphaltic Concrete, Traffic D, PG 76-22, PMA	\$	(63,254.13)
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ADD THE FOLLOWING PAY ITEM:

Superpave Asphaltic Concrete, Traffic D	\$	59,916.65
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Subtotal: Remove Polymer from Initial Asphalt Lift	\$	(3,337.48)
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<u>TOTAL AMOUNT FOR PROJECT 429-739</u>	\$	<u>12,924.37</u>
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Contract 417-733: SR 417 Milling & Resurfacing, International Dr. to Moss Park Rd.
Ranger Construction Industries, Inc.
SA 417-733-0417-05

"R" Logo for Reload Lane at John Young Parkway Toll Plaza

CFX has added Reload Lanes on SR 417 at the John Young Mainline Toll Plaza in both the northbound and southbound directions. New "R" logo pavement markings are now required in the limits of this resurfacing project. As the final asphalt pavement layer is placed, these logos will be installed as part of this resurfacing project. This request is to add the furnish and install of 4 "R" Logo pavement markings for these new RE-Load Lanes.

ADD THE FOLLOWING PAY ITEM:

"R" Logos for Reload Lanes	\$	17,160.90
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TOTAL AMOUNT FOR PROJECT 417-733

\$ 17,160.90

Contract 429-202: SR 429, US 441 to North of Ponkan Rd.

Prince Contracting, LLC

SA 429-202-0417-05

Toll Plaza Conduit Routing

This item provides compensation for the extra work to reroute the power/HVAC conduit and conductors around the concrete pavement. This work was tracked on an actual cost (Time and Materials) basis.

ADD THE FOLLOWING ITEM:

Toll Plaza Conduit Routing	\$	11,923.19
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AET Plaza Loop Conduit Boxes

CFX requested adjustments to the AET conduit for power to the E6 cabinets, loop conduit in the concrete pavement and changes to the E6 cabinet itself. This item provides compensation for this change to the loop conduit. The plans provided for 6 pull boxes and associated conduit to the concrete pavement, 3 in each direction. CFX requested 5 boxes and loop conduit in each direction for a total of 10 boxes and associated conduit to the concrete pavement. This work was tracked on an actual cost (time and materials) basis.

ADD THE FOLLOWING ITEM:

Concrete Pavement Loop Conduit	\$	16,115.88
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ITS Power Conductor Size Change

This change is to up size the electrical conductors serving the Intelligent Traffic System (ITS). The upsize is from a #6 to a heavier #1 conductor.

ADD THE FOLLOWING ITEM:

Conductor #1 Insulated	\$	12,281.43
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DECREASE THE FOLLOWING ITEM:

Conductor #8 and #6 Insulated	\$	(6,852.30)
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Subtotal: ITS Power Conductor Size Change	\$	5,429.13
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Plan Revision 10 Paving Details

CFX adopted new guidelines for the location of transitioning from a highway pavement surface to a ramp pavement surface on CFX entrance and exit ramps. CFX wishes to revise this project in accordance with these guidelines and has memorialized those changes in Plan Revision 10. Other clarifications included adjustments to milling and resurface limits.

ADD THE FOLLOWING ITEM:

Asphalt Concrete FC, TL C, FC 12.5, PG 76-22	\$	174,496.00
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INCREASE THE FOLLOWING ITEMS:

Milling Existing Asphalt Pavement, 1 1/2" Avg. Depth	\$	5,416.00
Milling Existing Asphalt Pavement, 3/4" Avg. Depth	\$	790.00
Superpave Asphaltic Concrete, TL C	\$	29,986.00
	\$	36,192.00

DECREASE THE FOLLOWING ITEMS:

Superpave Asphaltic Concrete, TL C, PG 76-22	\$ (62,056.20)
Asphaltic Concrete FC, 3/4", FC-5, PG 76-22, Black Granite	\$ (20,069.20)
Asphaltic Concrete FC, TL C, FC-12.5, Rubber	\$ (132,708.80)
	\$ (214,834.20)

Subtotal: Plan Revision 10 Paving Details \$ (4,146.20)

Adding E6 Cabinet

CFX has requested the addition of an additional E6 cabinet to accommodate the new all electronic toll devices that were added in Plan Revision 16.

ADD THE FOLLOWING ITEM:

E6 Cabinet	\$ 37,770.81
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Belgian Deck Grades

The change is full and complete settlement to issues associated with NOI 14, Belgian Bridge Deck Grades and Beam Buildups. The Contractor was pursuing constructing Belgian Bridge deck when they discovered a discrepancy in the plans related to the anticipated beam buildups. Plan Revision 9 was published providing the required adjustments.

ADD THE FOLLOWING ITEM:

Belgian Deck Grades and Buildup, Plan Revision 9 PS B6-25	\$ 6,984.85
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Increase Contract Time 22 Non-Compensable Calendar Days

Connector Rd. Bridge Plan Revision 11 Time Impacts

This time extension is the additional contract time required to overcome effects of issues associated with Connector Rd. Bridge rebar plan discrepancies that were memorialized in Plan Revision 11. This is resolution of the additional contract time impacts only; direct and indirect costs associated with this issue are pending resolution.

Increase Contract Time 70 Calendar Days

Tentative Final Quantities for Pay Items of Work Completed

The following are adjustments to Pay Item Quantities to reflect Tentative Final Quantities for pay items of completed work.

INCREASE THE FOLLOWING ITEMS:

Flowable Fill	\$	450.00
Inlet Dt Bot, Ty B Jbot <10'	\$	9,200.00
Prestressed Concrete Piling	\$	85,605.00
Test Piles, Prestressed Concrete, 18" SQ	\$	15,540.00
Utility Pipe, F&I, PVC, Water/Sewer, 5-7.9"	\$	480.00
Utility Pipe, F&I, DI/CI, Water/Sewer, 8-19.9"	\$	9,605.00
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	480.00
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	3,552.00
Utility Fixtures, F&I, 2-4.9", BAC/AIR Assembly	\$	6,000.00
Double Water Service	\$	885.00
	\$	131,797.00

DECREASE THE FOLLOWING ITEMS:

Prestressed Beams, Special, Spliced U-Beams	\$	(60,900.00)
Piles, Polyethylene Sheeting	\$	(622.50)
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	(1,600.00)
Utility Pipe, F&I, PVC, Water/Sewer, 8-19.9"	\$	(9,840.00)
Utility Fixtures, F&I, 5-7.9" Valve Assembly	\$	(2,000.00)
Utility Fixtures, F&I, 8-19.9" Valve Assembly	\$	(4,000.00)
Utility Pipe, F&I, DI/CI, Water/Sewer, 8-19.9"	\$	(3,700.00)
Utility Fixtures, F&I, 2-4.9", Backflow Assembly	\$	(1,050.00)
	\$	(83,712.50)

Subtotal: Tentative Final Quantities for Pay Items of Work Completed \$ 48,084.50

TOTAL AMOUNT FOR PROJECT 429-202 **\$ 122,162.16**

Contract 429-203: SR 429, North of Ponkan Rd. to North of Kelly Park Rd.
Superior Construction Co. Southeast, LLC
SA 429-203-0417-003

Contract Completion Time Extension

Add 63 Calendar Days of non- compensable Contract Time and adjust the Substantial Completion date to occur 7 Calendar Days prior to the expiration of Contract Time. This time extension is necessary as the Fiber Optic Network (FON) on the adjacent 429-202 project is not expected to be operational until May 15, 2017. This contract (429-203) contains a DMS sign and other ITS devices that need an operational FON network to allow for their completion. Concurrent with this time extension, Superior Construction has not yet completed other Contract Work that contractually provides for this to be a non-compensable time extension.

Increase Contract Time 63 Non-Compensable Calendar Days

TOTAL AMOUNT FOR PROJECT 429-203

0.00

Contract 429-204: SR 429 Systems Interchange
Southland Construction, Inc.
SA 429-204-0417-05

Time Extension - Hurricane Matthew

The Governor issued a State of Emergency for Orange County related to Hurricane Matthew (Executive Order 16-230 October 5, 2016). The project critical path was impacted a total of 5 days. As provided by the contract a non-compensable 5 calendar days are to be granted for this event.

Increase Contract Time 5 Non-Compensable Calendar Days

Plan Quantity Analysis

The CEI completed a plan quantity analysis and found variances in the following items. The CEI reviewed their findings with the EOR and agreed to the following plan quantity modifications were appropriate. These items are the result of computation errors during the design and plans preparation process causing the actual pay item quantities to be understated. The work is consistent with the original design and is therefore not considered a premium cost and will be paid for using Contract unit prices per the original bid.

MODIFY THE FOLLOWING ITEMS:

Excavation, Regular	\$ 5,201.50
Embankment	\$ 126,717.15
Class IV Concrete, Superstructure	\$ 632,867.08
Piles, Polyethylene Sheeting	\$ 9,340.38
Bridge Drainage Pipe	\$ (4,439.82)
	<u>\$ 769,686.29</u>

TOTAL AMOUNT FOR PROJECT 429-204

\$ 769,686.29

Contract 429-206: SR 453, Lake County Line to SR 46
GLF Construction Corp.
SA 429-206-0417-02

Time Extension - Hurricane Hermine

The Governor issued a State of Emergency for Orange County related to Hurricane Hermine (Executive Order 16-205 August 31, 2016). The project critical path was impacted a total of 2 days by this event. As provided by the contract a non-compensable 2 calendar days are to be granted for this event.

Increase Contract Time 2 Non-Compensable Calendar Days

Time Extension - Hurricane Matthew

This change is requested by CFX. The Governor issued a State of Emergency for Orange County related to Hurricane Matthew (Executive Order 16-230 October 5, 2016). The project critical path was impacted a total of 4 calendar days by this event. As provided by the contract a non-compensable 4 calendar days are to be granted for this event.

Increase Contract Time 4 Non-Compensable Calendar Days

Credit for Silica Flume Deletion and Mass Concrete Monitoring

The Plans call for the concrete for the cast in-place retaining walls to contain silica flume for a highly aggressive subsoil condition. On site testing and the EOR have confirmed that the subsoil condition is moderately aggressive resulting in the concrete additive silica flume to be unnecessary. The deletion of the silica flume additive results in a credit. Similarly, new (2016) FDOT Specifications for Mass Concrete allow for reduced monitoring under certain circumstances. This project meets those requirements. Given this project was bid under the older 2014 Specification requirements, CFX is due a credit.

ADD THE FOLLOWING ITEMS:

Class IV Retaining Wall Concrete (Silica Flume Credit)	\$ (79,303.50)
Class IV Substructure Concrete (Mass Concrete Monitoring Credit)	\$ (2,801.40)
	\$ (82,104.90)

TOTAL AMOUNT FOR PROJECT 429-206

\$ (82,104.90)

Contract 408-127: SR 408 Widening, Hiawasse Rd. to Good Homes Rd.
The Lane Construction Corp.
SA 408-127-0417-02

Contract Plan Revision # 2 MOT on Ramp B

Plan revision # 2 required the furnishing and installation of 2 temporary crash cushions at Ramp B.

ADD THE FOLLOWING PAY ITEM:

Temporary Crash Cushions at Ramp B	\$	8,122.41
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Survey Existing Pavement

CFX requested the contractor perform a survey the existing pavement elevation of SR 408 due to resolve the deviations that were being encountered from design elevations.

ADD THE FOLLOWING PAY ITEM:

Survey Existing SR 408 EB and WB Pavement	\$	21,802.44
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Contract Plan Revision #4 MOT EB at Hiawasse

Plan revision #4 required the furnishing, installation and removal of a temporary crash cushion and temporary concrete barrier wall on SR 408 eastbound, Sta. 3669+59. This additional work was required to meet travel lane drop off criteria.

ADD THE FOLLOWING PAY ITEM:

Temporary Crash Cushions and Concrete Barrier Walls on SR 408 EB	\$	84,995.16
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TOTAL AMOUNT FOR PROJECT 408-127

\$ 114,920.01

Contract 528-313: SR 528 / Innovation Way Interchange
The Lane Construction Corp.
SA 528-313-0417-04

Sunbridge Parkway Signage

At the request of a project partner, Suburban Land Reserve, Inc., the proposed highway signage will be revised to accommodate the change in local road name, Innovation Way to Sunbridge Parkway south of SR 528.

ADD THE FOLLOWING ITEM:

Sunbridge Parkway Signage	\$	97,004.11
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INCREASE THE FOLLOWING ITEM:

Sign Panel, Remove, 201-300SF	\$	1,137.00
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TOTAL AMOUNT FOR PROJECT 528-313

\$ 98,141.11

Contract 599-624: Systemwide E-PASS Signage Improvements
Traffic Control Devices, Inc.
SA 599-624-0417-01

Contract Pay Item Quantity Adjustment

This change is to adjust contract quantities to reflect the actual expenditures on the project.

DECREASE THE FOLLOWING PAY ITEMS:

Sign Panel, Remove, 51-100 SF	\$ (3,075.00)
Allowance for Disputes Review Board	\$ (5,000.00)
Work Order Allowance	<u>\$ (35,000.00)</u>
	\$ (43,075.00)

Add Hospital Signage

The opening of a new hospital proximate to SR 429 necessitated additional signage.

ADD THE FOLLOWING PAY ITEM:

Hospital Signage on SR 429 at CR 535 Interchange, F&I	\$ 10,948.19
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TOTAL AMOUNT FOR PROJECT 599-624

\$ (32,126.81)