

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

MEMORANDUM

TO: CFX Board Members

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

DATE: June 20, 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 (\$) July 2017	Total Amount (\$) to Date*	Time Increase or Decrease
408-629	United Signs & Signals, Inc.	SR 408 Arnold Palmer Expressway Signing	\$ 14,904.00	\$ -	\$ (3,302.48)	\$ 11,601.52	0
599-912	The Integration Factory, Inc.	CFX HQ Boardroom Audio Video Improvements	\$ 365,567.00	\$ (172.80)	\$ (3,459.40)	\$ 361,934.80	0
429-203	Superior Const. Co. Southeast, LLC	SR 429, North of Ponkan Rd. to North of Kelly Park Rd.	\$46,617,017.39	\$ 253,999.05	\$ 21,663.61	\$ 46,892,680.05	0
528-313	The Lane Construction Corp.	SR 528 / Innovation Way Interchange	\$62,452,032.01	\$ (881,735.55)	\$ 277,940.77	\$ 61,848,237.23	0
599-411	Atlantic Civil Constructors Corp.	CFX HQ Parking Lot Lighting & Resurfacing	\$ 412,105.66	\$ -	\$ (7,756.78)	\$ 404,348.88	0
528-138	Southland Construction, Inc.	SR 528 / Conway Interchange Pond Improvements	\$ 819,000.00	\$ -	\$ 107,120.00	\$ 926,120.00	0
429-202	Prince Contracting, LLC	SR 429, US 441 to North of Ponkan Rd.	\$56,152,429.00	\$ 638,840.12	\$ 429,205.14	\$ 57,220,474.26	0
253F	Lane Construction Corp.	SR 408 / SR 417 Interchange Improvements Phase I	\$36,744,623.00	\$ (408,113.33)	\$ 348,775.28	\$ 36,685,284.95	11
599-525	Traffic Control Devices, Inc.	Single Line DMS Upgrades	\$ 4,555,555.55	\$ 43,363.95	\$ 78,685.32	\$ 4,677,604.82	0

TOTAL \$ 1,248,871.46

* Includes Requested Amount for this current month.

Contract 408-629: SR 408 Arnold Palmer Expressway Signing
United Signs & Signals, Inc.
SA 408-629-0717-01

Contract Pay Item Quantity Adjustments

Adjust the following pay items to compensate for the field changes requested.

DECREASE THE FOLLOWING PAY ITEM:

Work Order Allowance	\$	(5,000.00)
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ADD THE FOLLOWING PAY ITEM:

Multi-Post Sign, Relocate	\$	1,697.52
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Subtotal: Adjustments for Contract Items	\$	(3,302.48)
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<u>TOTAL AMOUNT FOR PROJECT 408-629</u>	\$	<u>(3,302.48)</u>
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Contract 599-912: CFX HQ Boardroom Audio Video Improvements
The Integration Factory, Inc.
SA 599-912-0717-02

Contract Pay Item Quantity Adjustments

Adjust the following pay items to reflect the field changes requested.

DECREASE THE FOLLOWING PAY ITEMS:

Work Order Allowance	\$ (459.40)
Allowance for Disputes Review Board	<u>\$ (3,000.00)</u>
	\$ (3,459.40)

<u>TOTAL AMOUNT FOR PROJECT 599-912</u>	<u>\$ (3,459.40)</u>
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Contract 429-203: SR 429, North of Ponkan Rd. to North of Kelly Park Rd.
Superior Construction Co. Southeast, LLC
SA 429-203-0717-04

Change Roadway Lighting to LED Fixtures

To upgrade the type of roadway lighting luminaires specified on this contract from high pressure sodium to LED luminaires. CFX is making LED luminaires the standard on all new projects and desires to incorporate this upgrade as part of the current construction contract. This item represents the cost difference for the materials to implement this change. While LEDs are more expensive up front, the savings in electrical consumption and service life/maintenance has been determined to conservatively provide a break even return in approximately seven (7) years.

DELETE THE FOLLOWING PAY ITEMS:

Light Pole Complete, F&I, Std. Pole, Std. Foundation, 130 MPH, 40'	\$ (146,200.00)
Light Pole Complete, F&I, Std. Pole, Std. Foundation, 130 MPH, 45'	\$ (76,500.00)
Light Pole Completed, Special Design, Single Arm Bridge Mt., Al., 45'	<u>\$ (6,200.00)</u>
	\$ (228,900.00)

ADD THE FOLLOWING PAY ITEMS:

Light Pole Complete, F&I, Std. Pole, Std. Foundation, 130 MPH, 40', LED	\$ 161,154.56
Light Pole Complete, F&I, Std. Pole, Std. Foundation, 130 MPH, 45', LED	\$ 82,419.75
Light Pole Completed, Special Design, Single Arm Bridge Mt., Al., 45', LED	<u>\$ 6,989.30</u>
	\$ 250,563.61

Subtotal: Change Roadway Lighting to LED Fixtures	\$ 21,663.61
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<u>TOTAL AMOUNT FOR PROJECT 429-203</u>	<u>\$ 21,663.61</u>
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Contract 528-313: SR 528 / Innovation Way Interchange
The Lane Construction Corp.
SA 528-313-0717-06

Plan Revision 3 - Fiber Optic Network Additional Hardware

Plan Revision 3 to the Approved for Construction Plans provides adjustments and additional equipment required for the Fiber Optic Network to become operational. This change provides continuity of communication to the proposed ramp toll plazas.

INCREASE THE FOLLOWING PAY ITEMS:

Fiber Optic Splice Enclosure, 72 Splice, F&I	\$	1,710.00
Fiber Optic Fusion Splice	\$	1,280.00
Fiber Optic Patch Panel, F&I	\$	3,022.00
Cut-To-Length Fiber Optic Jumper, F&I	\$	684.00
	\$	<u>6,696.00</u>

ADD THE FOLLOWING PAY ITEM:

Communication Rack, F&I	\$	5,088.04
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Subtotal: Plan Revision 3

\$ 11,784.04

Force Main Curved Alignment

The plans required construction of sanitary sewer force main to follow the roadway's curved alignment by utilizing pipe joint deflection to achieve such curvature in the facility. Within the curve segments, Orange County Utilities required the Contractor to provide survey data at each pipe joint (20' increments) to ensure the installed joint deflection didn't exceed the manufacturer's deflection tolerance, such deflection data was specified to be taken at 100' increments.

ADD THE FOLLOWING PAY ITEM:

Force Main Curved Alignment	\$	10,312.25
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Barrier/Pedestrian Wall Fractured Fin

CFX requested fractured fin ribbing as well as light and dark brown color scheme on the barrier and pedestrian walls instead of the proposed standard flush barrier. This change is to maintain continuity with enhanced aesthetic features CFX desires to utilize.

ADD THE FOLLOWING PAY ITEM:

Barrier/Pedestrian Wall Fractured Fin	\$	255,844.48
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TOTAL AMOUNT FOR PROJECT 528-313

\$ 277,940.77

Contract 599-411: CFX HQ Parking Lot Lighting & Resurfacing
Atlantic Civil Constructors Corp.
SA 599-411-0717-01

Contract Pay Item Quantity Adjustments

Adjust the following pay items to reflect the field changes to the contract.

ADD THE FOLLOWING PAY ITEM:

Additional Wheel Stops, F&I	\$	1,105.06
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INCREASE THE FOLLOWING PAY ITEMS:

Luminaire & Bracket Arm, Remove	\$	790.50
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Luminaire, F&I, Roadway, Wall Mount	\$	5,755.00
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	\$	6,545.50
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DECREASE THE FOLLOWING PAY ITEMS:

Allowance for Disputes Review Board	\$	(5,000.00)
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Work Order Allowance	\$	(10,407.34)
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	\$	(15,407.34)
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TOTAL AMOUNT FOR PROJECT 599-411

	\$	(7,756.78)
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Contract 528-138: SR 528 / Conway Interchange Pond Improvements
Southland Construction, Inc.
SA 528-138-0717-01

Contract Pay Item Quantity Adjustments

Add the following pay item to compensate for the submerged ground elevations encountered.

ADD THE FOLLOWING PAY ITEM:

Additional Excavation at Pond A	\$	107,120.00
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<u>TOTAL AMOUNT FOR PROJECT 528-138</u>		<u>\$ 107,120.00</u>
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Contract 429-202: SR 429, US 441 to North of Ponkan Rd.
Prince Contracting, LLC
SA 429-202-0717-07

Guardrail Conflict with Drainage Pipe

Approximately 500 feet along Ramp C, the guardrail posts conflict with the 24" storm drainage due to its shallow depth. The Contract (Standard Index) in this condition requires the conflict be resolved by the use of special posts. This contract modification will add a pay item to this contract that will compensate for the additional cost of providing and installing these special guardrail posts.

ADD THE FOLLOWING PAY ITEM:

Special Guardrail Posts	\$	1,872.00
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Existing Sign Lighters, Existing Structures OT1 & OT2

To conform with the sign lighting standard used for the rest of the Wekiva Projects, CFX wishes to upgrade the lighting on all signs on two existing sign trusses located on US 441 (OT-1 & OT-2). For each structure, 4 additional LED fixtures and 1 additional driver box will be required.

ADD THE FOLLOWING PAY ITEM:

Additional Sign Lighters for Existing OT1 & OT2	\$	35,879.76
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RKK RFI 022 Parcel 125 Brick Wall

The Contract requires the construction of a red brick wall along the property line of Parcel 125, which is the property adjacent to the intersection of Access Road. and Yothers Road. During preparations to construct the wall, it became apparent the property owner was not aware of the tree clearing necessary to clear to construct the wall. In addition, the property owner had concerns of the relationship of grades of Access Rd. to his property. These issues were mitigated by switching the design of wall to precast in lieu of red brick. The work also includes necessary fill, sod and curb repairs to restore the area along Access Rd. The completion of this work is excluded from substantial completion requirement provisions.

ADD THE FOLLOWING PAY ITEM:

Architectural Special Walls, Pre-Cast	\$	169,734.54
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DECREASE THE FOLLOWING PAY ITEM:

Architectural Special Walls	\$	(141,780.00)
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Subtotal: RKK RFI 022 Parcel 125 Brick Wall	\$	27,954.54
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Plan Revision 11 - Connector Road Bridge Plan Rebar Discrepancies

Connector Road Bridge rebar plan discrepancies resolved by Plan Revision 11 (modified).

ADD THE FOLLOWING PAY ITEM:

Connector Rd. Rebar, Plan Rev. 11 (modified)	\$	363,498.84
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<u>TOTAL AMOUNT FOR PROJECT 429-202</u>	<u>\$</u>	<u>429,205.14</u>
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Contract 253F: SR 408 / SR 417 Interchange Improvements Phase I
Lane Construction Corp.
SA 253F-0717-005

Plan Revision 6 Adjustments

Plan Revision 6 added new items of work and adjusted work depicted in the original plans. The original plans call for existing 30' TMS pole to remain and a new CCTV to be added to the pole. The existing pole has been hit by vehicles several times and is damaged. CFX issued Revision 6 requiring the installation of a new pole at a different location to avoid being hit by vehicles in the future.

ADD THE FOLLOWING PAY ITEM:

Install 40' TMS Pole (Complete) and Remove/Dispose Existing Pole/Foundation	\$	54,082.87
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INCREASE THE FOLLOWING PAY ITEM:

Traffic Monitoring Station, Relocate	\$	3,800.00
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DECREASE THE FOLLOWING PAY ITEMS:

Traffic Monitoring Station, Pole Mounted, Adjust	\$	(1,200.00)
CCTV Lowering System, 50' Pole, F&I	\$	(45,000.00)
	\$	(46,200.00)

Subtotal: Plan Revision 6 Adjustments	\$	11,682.87
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Repair Section of Existing Approach Slab

The existing approach slab at End Bent 1 for the southbound SR 417 bridge over Econ Trail is cracked and a section has settled. The settled section of existing approach slab will not adequately match the new section of approach slab for the bridge widening or the adjacent roadway. A section of the settled existing approach slab needs to be removed and reconstructed at the correct grade in order to provide the desired ride quality.

ADD THE FOLLOWING PAY ITEM:

Remove Settled Section of Existing Approach Slab SB SR 417 at Econ EB 1 LT	\$	4,770.29
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INCREASE THE FOLLOWING PAY ITEM:

Concrete Class II, Approach Slabs	\$	1,939.00
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Subtotal: Repair Section of Existing Approach Slab	\$	6,709.29
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Fuel Price Index Adjustments

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 2016 - September 2016. During this period of time \$13,913,843.96 of construction was performed/produced. Adjustments were made only if current month published Fuel Price is greater or less than 5% of published Fuel Price at time of Bid.

ADD THE FOLLOWING ITEMS:

9/15 Gas Base Price=1.5303; Diesel Base Price=1.6297

Fuel Price Adjustment January 2016 (Gas Price=1.3468/Diesel Price=1.2602)	\$	(10.43)
Fuel Price Adjustment February 2016 (Gas Price=1.1907/Diesel Price=1.1750)	\$	(167.85)
Fuel Price Adjustment March 2016 (Gas Price=1.1740/Diesel Price=1.1800)	\$	(339.61)
Fuel Price Adjustment April 2016		

(Gas Price=1.3762/Diesel Price=1.2755)	\$	(2,324.04)
Fuel Price Adjustment May 2016		
(Gas Price=1.5752/Diesel Price=1.4627)	\$	(542.10)
Fuel Price Adjustment June 2016		
(Gas Price=1.6565/Diesel Price=1.6045)	\$	172.49
Fuel Price Adjustment August 2016		
(Gas Price=1.3878/Diesel Price=1.3300)	\$	(9,321.19)
Fuel Price Adjustment September 2016		
(Gas Price=1.4535/Diesel Price=1.4985)	\$	(1,487.64)
	\$	(14,020.37)

Bituminous Price Index Adjustments

The contract contains provisions for Bituminous Price Index adjustments. In accordance with the contract specifications, the Engineer has calculated adjustments for the period of September 2016 - December 2016. During this period of time \$7,028,884.22 of construction was performed/produced. Adjustments were made only if current month's published Bituminous Price is greater or less than 5% of the published Bituminous Price at time of Bid.

ADD THE FOLLOWING ITEMS:

9/15 AC Base Price=1.8838; Polymer Base Price=2.3338

Bituminous Price Adjustment September 2016		
(AC Price=1.3330/Polymer Price=1.8233)	\$	(2,670.95)
Bituminous Price Adjustment October 2016		
(AC Price=1.3561/Polymer Price=1.8018)	\$	(33,852.24)
Bituminous Price Adjustment November 2016		
(AC Price=1.2686/Polymer Price=1.7089)	\$	(19,632.90)
Bituminous Price Adjustment December 2016		
(AC Price=1.2897/Polymer Price=1.7344)	\$	(11,561.62)
	\$	(67,717.71)

Quantity Adjustments for Completed Pay Items

Adjust quantities for completed pay items in the contract. This will adjust these contract quantities to reflect the actual authorized quantities constructed under the contract.

INCREASE THE FOLLOWING PAY ITEMS:

Prestressed Concrete Piling, 18" Square	\$	42,185.00
Prestressed Concrete Piling, 24" Square	\$	198,160.20
Test Piles, Concrete, 18" Square	\$	37,200.00
Test Piles, Concrete, 24" Square	\$	19,200.00
Test Piles, Steel, HP 14x117	\$	118,400.00
	\$	415,145.20

DECREASE THE FOLLOWING PAY ITEM:

Piling, Steel, HP 14x117	\$	(3,024.00)
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Subtotal: Quantity Adjustments for Completed Pay Items	\$	412,121.20
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Time Extension for Test Pile Claim

The Contractor submitted a claim for extra work and requested a time extension related to the extra work to install a splice section on the test pile at the SR 417 southbound bridge over Econ Trail Pier 2. The claim was denied by CFX and the issue was escalated to the DRB. Consistent with staff's position, the DRB recommended a non-compensable time extension be

Increase Contract Time 11 Non-Compensable Calendar Days

TOTAL AMOUNT FOR PROJECT 253F

\$ 348,775.28

Contract 599-525: Single Line DMS Upgrades
Traffic Control Devices, Inc.
SA 599-525-0717-03

Concrete Technician Pads

Provide payment for the addition of concrete technician pads to be used in the future maintenance of ITS equipment at all 32 pole mounted cabinet locations.

ADD THE FOLLOWING PAY ITEM:

Concrete Technician Pads	\$	23,832.32
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Plan Revisions 1, 2 and 3 Adjustments

CFX transmitted Plan Revisions 1, 2 and 3 to conform the design to the project intent. This adjustment modifies the original contract pay item quantities to incorporate payment for these changes at the original pay item unit prices.

INCREASE THE FOLLOWING PAY ITEMS:

Pull Box, F&I	\$	1,048.00
Pull Box, Remove	\$	602.00
Junction Box, F&I, Aerial	\$	8,700.00
Type 170 Cabinet, Ground Mount	\$	19,222.00
Hardened Terminal Server, Relocate	\$	963.00
Conductors, F&I, Insulated, #12 AWG	\$	30.00
Luminaire, F&I, Sign, Sign Mount	\$	50,323.00
Composite Cable, F&I	\$	80.00
	\$	<u>80,968.00</u>

DECREASE THE FOLLOWING PAY ITEMS:

Type 170 Cabinet, Pole Mount, Heat Shield	\$	(12,206.00)
Fiber Optic Media Converter, F&I	\$	(1,153.00)
Conductors, F&I, Insulated, #6 AWG	\$	(2,312.00)
RGS, Above Ground, Conduit, F&I	\$	(10,230.00)
Tubular Route Marker, Fiber	\$	<u>(214.00)</u>
	\$	(26,115.00)

Subtotal: Plan Revision 6 Adjustments	\$	54,853.00
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<u>TOTAL AMOUNT FOR PROJECT 599-525</u>	\$	<u>78,685.32</u>
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