AMENDED AGENDA ENVIRONMENTAL STEWARDSHIP COMMITTEE MEETING February 17, 2022 10:00 a.m.

Meeting location: Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807 Pelican Conference Room

A. CALL TO ORDER

B. PUBLIC COMMENT

Pursuant to Section 286.0114, Florida Statutes and CFX Rule 1-1.011, the Environmental Stewardship Committee provides for an opportunity for public comment at the beginning of each regular meeting. The Public may address the Committee on any matter of public interest under the Committee's authority and jurisdiction, regardless of whether the matter is on the Committee's agenda but excluding pending procurement issues. Each speaker shall be limited to 3 minutes. The Public may also submit written comments in advance of the meeting to be read into the record except that if the comments exceed 3 minutes in length, when read, they will only be attached as part of the minutes.

C. APPROVAL OF AUGUST 19, 2021 COMMITTEE MEETING MINUTES (action item)

D. AGENDA ITEMS

- 1. SR 538 POINCIANA PARKWAY EXTENSION DESIGN UPDATE Carnot Evans, Project Manager, PE, and Nicole Gough, Environmental Biologist, Dewberry Engineers, Inc. (info item)
- 2. SR 516 LAKE/ORANGE EXPRESSWAY UPDATE Keith Jackson, Project Manager, PE, and Nicole Gough, Environmental Biologist, Dewberry Engineers, Inc. (info item)
- 3. SUSTAINABILITY AND ENVISION PROCESS UPDATE Bryan Homayouni, Director of Intelligent Transportation Systems and James D. Heeren, Senior Associate, Department Manager Environmental Services PE, ENV SP, Dewberry Engineers, Inc. (info item)

E. OTHER BUSINESS

F. ADJOURNMENT

(CONTINUED ON PAGE 2)

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

This meeting is open to the public.

Section 286.0105, Florida Statutes states that if a person decides to appeal any decision made by a board, agency, or commission with respect to any matter considered at a meeting or hearing, they will need a record of the proceedings, and that, for such purpose, they may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Persons who require translation services, which are provided at no cost, should contact CFX at (407) 690-5000 x5316 or by email at <u>tranetta.Dennis@cfxway.com</u> at least three (3) business days prior to the event.

In accordance with the Americans with Disabilities Act (ADA), if any person with a disability as defined by the ADA needs special accommodations to participate in this proceeding, then they should contact the Central Florida Expressway Authority at (407) 690-5000 no later than two (2) business days prior to the proceeding.

Please note that participants attending meetings held at the CFX Headquarters Building are subject to certain limitations and restrictions in order to adhere to the CDC guidelines and to ensure the safety and welfare of the public.

C. **APPROVAL OF** AUGUST 19, 2021 **ENVIRONMENTAL STEWARDSHIP** COMMITTEE MEETING MINUTES

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

DRAFT MINUTES ENVIRONMENTAL STEWARDSHIP COMMITTEE MEETING August 19, 2021

Location: Central Florida Expressway Authority 4974 ORL Tower Road, Orlando, FL 32807 Boardroom

<u>Committee Members Present:</u> Timothee Sallin, Lake County Representative, Committee Chairman Beth Jackson, Orange County Representative Charles Lee, Citizen Representative Robert Mindick, Osceola County Representative Brittany Sellers, City of Orlando Representative

<u>Committee Members Not Present:</u> Jim Barfield, Brevard County Representative Richard Durr, Seminole County Representative

<u>Others Present:</u> Laura Kelley, Executive Director Michelle Maikisch, Chief of Staff/Public Affairs Officer Mimi Lamaute, Board Services Coordinator/ CFX Financial Disclosure Coordinator Rita Moore, Recording Secretary/Executive Administrative Coordinator Woody Rodriguez, General Counsel Glenn Pressimone, Chief of Infrastructure Ralph Bove, Volkert, Inc. Dan Kristoff, RS&H, Inc. Sunserea Dalton, Jacobs Engineering Group, Inc. Carnot Evans, Dewberry Engineers, Inc. Keith Jackson, Dewberry Engineers, Inc. Nicole Gough, Dewberry Engineers, Inc.

A. CALL TO ORDER

The meeting was called to order at approximately 10:00 am by Chairman Sallin.

B. PUBLIC COMMENT

Ms. Rita Moore, Recording Secretary announced there was one public comment.

Ms. Janet Bowman of the Nature Conservancy gave her comment on the Southport Connector alignments and conservation.

There were no written public comments received by the deadline.

C. APPROVAL OF THE JUNE 17, 2021 MEETING MINUTES

A motion was made by Mr. Mindick and seconded by Mr. Lee to approve the June 17, 2021 minutes as presented. The motion carried unanimously with five (5) members present voting AYE by voice vote. Mr. Barfield and Mr. Durr were not present.

D. AGENDA ITEMS

1. <u>SOUTHPORT CONNECTOR EXPRESSWAY PROJECT DEVELOPMENT AND ENVIRONMENT</u> (PD&E) STUDY

Mr. Pressimone, Chief of Infrastructure introduced the project and explained the CFX PD&E study workflow. Mr. Ralph Bove of Volkert, Inc. presented the Southport Connector Expressway Project Development and Environment (PD&E) Study. He described the goals and objectives of the PD&E study. Mr. Bove detailed the study area, the social and environmental constraints, and the refined alternatives identified based on the input provided by the Environmental Stewardship Committee. Mr. Bove then outlined the process for the comparative evaluation of alternatives and the study schedule.

Mr. Bove elaborated on the alternatives evaluated referring to the handouts titled Preliminary Alternative Evaluation Matrix, provided to the Committee and attached as **Exhibit "A"**; Preliminary Purpose and Need Matrix attached as **Exhibit "B"**, and Preliminary Southport Connector Expressway Alternative Corridor Impact Evaluation Matrix attached as **Exhibit "C"**.

Committee members asked questions which were answered by Mr. Bove.

Discussion ensued regarding the alternatives presented.

(This item was presented for information only. No committee action was taken.)

2. <u>PREFERRED ALTERNATIVE FOR THE NORTHEAST CONNECTOR EXPRESSWAY PHASE 1</u> <u>PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY</u>

Mr. Dan Kristoff of RS&H, Inc. presented the Northeast Connector Expressway Phase 1 Project Development and Environment (PD&E) Study. He reiterated the study area, project goals, and the CFX 2040 Master Plan. Mr. Kristoff described the input received from the Environmental Stewardship Committee, Environmental Advisory Group, Project Advisory Group, and Public Meeting input and identified what has been implemented. He presented the preferred alternatives and explained the PD&E study evaluation criteria.

Mr. Kristoff elaborated on the alternatives evaluated referring to the handouts titled Northeast Connector Expressway – Phase 1 PD&E Study Evaluation Matrix and Environmental Evaluation Matrix Northeast Connector Phase 1 PD&E Study, provided to the Committee and attached as **Exhibit "D"** and **Exhibit "E"**.

Mr. Glenn Pressimone, Chief of Infrastructure asked that the committee accept the preferred alternative as presented.

The Committee Members asked questions which were answered by Mr. Kristoff and Mr. Pressimone.

A motion was made by Mr. Lee and seconded by Mr. Mindick to recommend to the Board approval to move forward with a Public Hearing for the Northeast Connector Expressway – Phase 1 PD&E Study Preferred Alternative as presented. The motion carried unanimously with five (5) members present voting AYE by voice vote. Mr. Barfield and Mr. Durr were not present.

3. <u>PREFERRED ALTERNATIVE FOR THE STATE ROAD 414 EXPRESSWAY EXTENSION</u> <u>PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY</u>

Ms. Sunserea Dalton of Jacobs Engineering Group, Inc. presented the Preferred Alternative for the State Road 414 Expressway Extension Project Development and Environment (PD&E) Study. She described the study area, purpose and need, and the study objectives. Ms. Dalton described the input received from the Environmental Stewardship Committee, Environmental Advisory Group, Project Advisory Group, and Public meeting input and identified what has been implemented from the input. She presented the preferred alternatives concept plans and explained the PD&E evaluation criteria.

Mr. Glenn Pressimone, Chief of Infrastructure asked that the committee accept the preferred alternative as presented.

Ms. Dalton elaborated on the alternatives evaluated referring to the handout titled SR 414 Expressway Extension PD&E Study: Environmental Evaluation Matrix, provided to the Committee and attached as **Exhibit "F"**.

The Committee Members asked questions which were answered by Ms. Dalton and Mr. Pressimone.

A motion was made by Mr. Mindick and seconded by Mr. Lee to recommend to the Board approval to move forward with a Public Hearing for the SR 414 Expressway Extension PD&E Study Preferred Alternative as presented. The motion carried unanimously with five (5) members present voting AYE by voice vote. Mr. Barfield and Mr. Durr were not present.

4. STATE ROAD 516 LAKE/ORANGE EXPRESSWAY PERMITTING REVIEW

Ms. Nicole Gough of Dewberry Engineers, Inc. and Mr. Keith Jackson of Dewberry Engineers, Inc. presented the State Road 516 Lake/Orange Expressway Permitting Review. They outlined the preliminary segmental corridors and the design phase.

Chairman Sallin left the meeting at 12:05 p.m. and turned the meeting over to Mr. Lee as the acting Chairman.

The Committee Members asked questions which were answered by Mr. Jackson.

Discussion ensued on jurisdiction, mitigation, and additional facilities.

(This item was presented for information only. No committee action was taken.)

E. OTHER BUSINESS

Discussion ensued regarding future agenda items, projects, property acquisition and mitigation.

Acting Chairman Lee announced that the next Environmental Stewardship Committee meeting is scheduled for October 21st, 2021 at 10:00 a.m.

F. ADJOURNMENT

Acting Chairman Lee adjourned the meeting at 12:25 p.m.

Minutes approved on _____, 2022.

Pursuant to the Florida Public Records Law and CFX Records Management Policy, audio tapes of all Board and applicable Committee meetings are maintained and available upon request to the Records Management Liaison Officer at <u>publicrecords@CFXway.com</u> or 4974 ORL Tower Road, Orlando, FL 32807.

PRELIMINARY

CENTRAL FLORIDA EXPRESSWAY Southport Connector Expressway	PURPOSE AND NEED MATRIX							
August 2021	Southport Connector Alternatives							
Purpose and Need Criteria	Cypress Parkway	Alternative 2000	Alternative 3000	Alternative 4000	Alternative 7000			
PURPOSE								
Local Expressway Access	3	3	3	3	3			
NEEDS								
System Linkage	3	2 ^a	3	3	3			
Regional Connectivity and Mobility	3	2	3	3	3			
Social / Economic Needs	3	1 ^b	3	3	3			
Capacity Constraints	3	3	3	3	3			
Consistency with Transportation Plans	3	1 ^c	3	3	3			
Multimodal Opportunities	3	1 ^d	3	3	3			
Safety and Evacuation Support	3	1 ^e	3	3	3			
Total Ranking	24	14	24	24	24			

Legend:

3 - Good

2 - Fair

1 - Poor

0 - None

^a East terminus is at Florida's Turnpike with no direct connection to the Northeast Connector Expressway

^b Does not serve the South Lake Toho Master Plan

^c Inconsistent with local and/or regional Master Plan

^d No available space on bridge section over Lake Toho to accommodate multimodal opportunities

^e Terminates on east end at Florida's Turnpike which is another major evacuation route

Exhibit "A"

Project Development & Environment Study Southport Connector Expressway August 2021

PRELIMINARY

ALTERNATIVES EVALUATION MATRIX

Evaluation Criteria	Unit of Measure	Cypress Parkway	Alternative 2000	Alternative 3000	Alternative 4000	
Design						
Alternative Length (approximate)	Miles	4.5	14.1	16.8	16.9	
Proposed Right-of-Way Width						
(general: varies at interchanges and environmentally sensitive areas)	Feet	300	330	330	330	
Proposed Bridges - total structures per alternative	Structures	10	13	17	15	
Total length of all structures	Feet	4,033	22,411	7,410	7,100	
Proposed Interchanges	Number	2	5	5	5	
(includes FTE and Canoe Creek)			-	-	-	
Projected 2045 Annual Average Daily Traffic (AADT) Volume (as a tolled facility)	Vehicles	46,098	53,390	53,390	53,390	
Physical						-
Major Utility Conflicts - Existing	No. of Conflicts	16	10	3	3	
Major Utility Conflicts - Planned	No. of Conflicts	2	0	0	0	
Contamination Sites & Facilities	No. of Conflicts	24	14	9	8	
Cultural Environment Effects						
Public Lands	Acres	0	0	0	0	
(Public Recreation Lands)	heres	5	ő			
Potential Historic Resources	No. of Conflicts	18	3	2	1	
Potential Historic Linear Resources	No. of Resources	0	2	2	2	
(Caliais) Figliways/ Kalifodus)	No. of Posourcos	0	2	1	1	
Potential Archaeological Resources	NO. OT RESOURCES	U	2	1	1	1
						T
Ponds / Lakes (ponds + surface waters)	Δςτος	0	14	2	2	-
Canals / Regulated Floodways	No. of Conflicts	1	2	2	3	-
Elood Hazard Areas - 100 Year Eloodalain		21	57	200	2	-
Wetlands (non-forested and forested)	Acres	0	45	73	59	-
Potential Habitat - Federal and State Listed Species	Acres	0	264	343	461	
Submerged Aquatic Vegetation (SAV)	Acres	0	1	0	0	
Potential Bald Eagle Nest (Direct + Buffer Zone)	Y/N	N	- Y	N	Ŷ	
Mitigation Banks	,					1
None	Acres	0.0	0.0	0.0	0.0	
Conservation Easement						
Solivita HOA	Acres	0.0	0.0	0.0	0.0	
SFWMD Lands						
Upper Lakes Basin Watershed/KCOLA	Acres	0.0	18	18	19	
Social		1				
Right-of-Way Area (not including proposed ponds)	Acres	24	519	686	694	
Includes FTE and Canoe Creek interchanges						
Estimated Pond Area (mainline)	Acres	22	42	62	60	
Potential Existing Residential Impacts	Total Parcels	13	68	9	5	
(includes partially impacted parcels)	Total Larceis	15	00	,	5	
Potential Existing Commercial Impacts	Total Parcels	19	11	7	7	
(includes partially impacted parcels)		-				<u> </u>
Potential Existing Parcel Impacts (Other ⁺)	Total Parcels	13	54	45	41	
(includes partially impacted parcels)		-				
Community Facilities (Environmental Learning Center)	No. of Conflicts	0	1	1	1	
Trails	No. of Conflicts	0	1	2	2	-
Community Cohesion Effects *according to CF&M	High/Med/Low	Med	High	Med	Med	
Proposed Development (PD) /						
Development of Regional Impact (DRI)	Acres	0	286	503	453	
(South Lake Toho and East Lake Toho)						<u> </u>
Estimated Costs		** *******	4447.000.475	\$100 750 55C	A100 101 107	-
Roadway Construction		\$164,199,106	\$117,929,475	\$138,758,556	\$139,134,107	
Bridges Construction		<u>کەخ,866,458</u>	\$306,071,464	\$89,082,919	\$84,734,094	
Toll Collection Equipment		ېU د 775 000	2224,334,837	\$403,100,934 \$6,600,000	\$403,100,954 \$6,600,000	+
Right-of-Way Areas (including proposed pends)		şο,775,000	ວຸ4,ສວບ,ບບບ	ο,ουυ,υυυ	ο,ουυ,υυυ	
Mitigation: Wetlands Floodnlains & Wildlife		\$4.415.250	\$4 567 500	\$7 427 770	\$6.030.115	1
			÷	<i><i><i>qi</i>,<i>¬Li</i>,<i>ii</i>0</i></i>	\$0,030,113	
Total Estimated Alternative Costs		\$238,255,814	\$988,513,276	\$646,970,199	\$641,599,270	
GRAND TOTAL Estimated Alternative Costs			\$1,226,769,090	\$885,226,013	\$879,855,084	
(Includes Cypress Parkway)			Ŷ1,220,703,030	ç003,220,013	ç075,555,00 4	
Projected Traffic Revenue (2045)						

RED = Relatively High Impacts when Compared to Other Alternatives

YELLOW = Relatively Medium Impacts when Compared to Other

Alternatives

CENTRAL FLORIDA

EXPRESSWAY AUTHORITY

GREEN = Relatively Low Impacts when Compared to Other Alternatives

 1 "Other" includes Government and Vacant parcels $% \left(\mathcal{A}^{\prime}\right) =\left(\mathcal{A}^{\prime}\right) \left(\mathcal{A}^{\prime}\right)$

Exhibit "B"

Alternative 7000
17.4
330
15
6,119
5
53,390
3
0
8
0
0
2
1
3
2
301
74
376
0 N
0.0
0.0
19
747
/1/
64
5
6
40
1
2
LOW
479
\$144,794 944
\$75,317,977
\$405,100,954
\$6,600,000
\$7,528,255
\$639,342,130
\$877,597,944

PRELIMINARY

Southport Connector Expressway Alternative Corridor Impact Evaluation Matrix

+ + SUBSTANTIALLY POSITIVE EFFECT OR BEST ALTERNATIVE 1.0 + GENERALLY POSITIVE EFFECT OR GOOD ALTERNATIVE 0.8	LEGENDS						
+ GENERALLY POSITIVE EFFECT OR GOOD ALTERNATIVE 0.8	+ +	SUBSTANTIALLY POSITIVE EFFECT OR BEST ALTERNATIVE	1.0				
	+	GENERALLY POSITIVE EFFECT OR GOOD ALTERNATIVE	0.8				
0 GENERALLY NO EFFECT OR MODERATE ALTERNATIVE 0.6	0	GENERALLY NO EFFECT OR MODERATE ALTERNATIVE	0.6				
- GENERALLY NEGATIVE EFFECT OR INFERIOR ALTERNATIVE 0.4	-	GENERALLY NEGATIVE EFFECT OR INFERIOR ALTERNATIVE	0.4				
GENERALLY NEGATIVE EFFECT OR WORST ALTERNATIVE 0.2		GENERALLY NEGATIVE EFFECT OR WORST ALTERNATIVE	0.2				

		Engineering		25		Social Envir	onment		11		Na	atural En	vironment			15
IMPACTS ALTERNATIVES	Provides adequate Turnpike Interchange Spacing	Accommodates Expandabi	pility Permitting Complexity	E 7	Potential Existing Residen Impacts 4	Pot tial Existing C Imp	ential Commercial pacts 4	Potential Parcel Impacts (other existing)	Wetland Impa	acts 5	100 Year Flood	dplain 2	Potential Habita Federal & State Li Species	it - isted 6	Potential Impacts to Ba Eagle Nests	ald 2
Alternative 2000	Less than 2 miles south of Nolte Rd.; within 1 mile of new ramps at Canoe Creek Rd.; less than 2 miles north of Friars Cove Road.	- Segment with 3.1 mile bridge over open water creates regulatory and financial challenges.	- Impacts 1.3 acres of submerged aquatic vegetation; encroaches into snail kite habitat; requires 3.1 mile bridge in Lake Toho; 44.3 acres of surface water; requires vessel survey and significant federal action with USACOE/USCG/FDEP.		- 68	11	-	- 54	45 acres; has the least amount of direct impact.	0	57	+	263.5 acres and 1.3 acres of SAV	0	Direct impact: 1 + 139 ft inside Primary/ Secondary Buffer: 1	
		1	5.2	1.4	0.	3	1.6	0	6	3	_	1.6		3.6	(0.4
Alternative 3000	~ 2 miles north of Service Plaza; ~ 3 miles south of Friars Cove Road; ~ 6 miles south of Nolte Road.	Provides R/W width to accommodate system expansion.	+ + Standard permitting requirements; USCG anticipates non-controversial permitting for Southport Canal crossing.	0	9	7	0	45	73.2 acres; within one acre of the worst alternative.		199.7 acres	0	343.4 acres	-	Direct impact: 0 + Primary/ Secondary Buffer Impact: 0	0
		2	13	4.2	2.	4	2.4	1	2	1		1.2		2.4	1	1.2
Alternative 4000	~ 2 miles north of Service Plaza; ~ 3 miles south of Friars Cove Road; ~ 6 miles south of Nolte Road.	- Provides R/W width to accommodate system expansion.	+ + Standard permitting requirements; USCG anticipates non-controversial permitting for Southport Canal crossing.	0	5	7	0	41	59.4 acres; inferio to other alternatives.	r	228.8 acres	-	460.5 acres		Direct impact: 0 + 20 ft inside Primary/ Secondary Buffer: 1	-
		2	13	4.2	2.	4	2.4	1	3	2		0.8		1.2	(0.8
Alternative 7000	~ 2 miles north of Service Plaza; ~ 3 miles south of Friars Cove Road; ~ 6 miles south of Nolte Road.	- Provides R/W width to accommodate system expansion.	+ + Standard permitting requirements; USCG anticipates non-controversial permitting for Southport Canal crossing.	0	5	6	0	40	74.2 acres; worst of all alternatives considered.		300.7 acres		375.5 acres	-	Direct impact: 0 + Primary/ Secondary Buffer Impact: 0	0
		2	13	4.2	2.	1	2.4	1	3	1		0.4		2.4	4	1.2

Exhibit "C"

August 2021

PRELIMINARY

Southport Connector Expressway Alternative Corridor Impact Evaluation Matrix

LEGENDS						
+ +	SUBSTANTIALLY POSITIVE EFFECT OR BEST ALTERNATIVE	1.0				
+	GENERALLY POSITIVE EFFECT OR GOOD ALTERNATIVE	0.8				
0	GENERALLY NO EFFECT OR MODERATE ALTERNATIVE	0.6				
-	GENERALLY NEGATIVE EFFECT OR INFERIOR ALTERNATIVE	0.4				
	GENERALLY NEGATIVE EFFECT OR WORST ALTERNATIVE	0.2				

	Physical Envi	ronment 4	ŀ	Planning Co	nsistency	1	5	Estimated Costs		30
IMPACTS ALTERNATIVES	Potential Contamination Sites 2	Utility Conflicts	System linkage	Consistency with Adopted Plans (transportation / land use) 5	Regional Connectivity / Mobility 4	Minimize Parcel Remnants (uneconomic remainders) 2	Right-of-Way Cost	Wetland Mitigation Cost 5	Construction Cost	15
Alternative 2000	14	10	0 Circuitous, disjointed routing; requires use of ~ 5 miles of TPK (an off-CFX system) as a link.	 Not consistent with any adopted long range plans.	- Provides least direct connection to East Central Florida region.	 Highest number of potential parcel remnants.	 Lowest number of total R/W acres; largest number of individual parcels.	+ Lowest cost for direct wetland impacts.	Highest total construction cost.	34.4
Alternative 3000	9	3	Provides direct system linkage.	Generally consistent with adopted land use plans; requires comp plan amendment for SLT.	Provides all systems connections in a direct manor; optimal mobility.	Results in fewer number of potential parcel remnants; co-located along Green Island and Bronson Ranch boundaries.	Impacts comparable to others.	Second highest cost for direct wetland impacts.	Comparable cost to Alt. 7000.	- 58
Alternative 4000	8	3	+ + Provides direct system linkage. 4	0 Generally consistent with adopted land use plans; requires comp plan amendment for SLT. 3	+ Provides all systems connections in a direct manor; optimal mobility. 3.2	Results in fewer number of potential parcel remnants; may have uneconomic remainders on north side of Bronson Ranch.	Impacts comparable to others.	0 Second lowest cost for direct wetland impacts.	Lowest cost of all alternatives considered.	0 61.2
Alternative 7000	8	3	+ + Provides direct system linkage. 4	+ + Most consistent with all adopted plans.	+ Provides all systems connections in a direct manor; optimal mobility. 3.2	- Results in fewer number of potential parcel remnants; maximizes space on north side of Bronson Ranch. 0.8	0 Impacts comparable to others. 6	 Highest cost for direct wetland impacts.	Third lowest total construction cost.	- 58.4

Exhibit "C"

August 2021

Exhibit "D"

Northeast Connector Expressway – Phase 1 PD&E Study Evaluation Matrix

Estimated Costs	Preferred Alternative	No-Build
	Design I	Elements
Alternative Length (miles)	3.7	0
Proposed Number of Bridges	8	0
Proposed Bridge Length (feet)	1,555	0
	Physical	Impacts
Major Utility Conflicts - Existing	0	0
Major Utility Conflicts - Planned	0	0
Contamination Sites and Facilities	2	0
Railroad Involvement	None	None
	Cultural	Impacts
Potential Historic Resources	2	0
Potential Historic Linear Resources	2	0
Potential Archaeological Resources	0	0
	Natural Enviro	onment Impacts
Number of Canal Crossings	1	0
100-year Floodplain (acres)	41	0
Wetlands (acres)	10	0
Surface Waters (acres)	1	0
Potential Bald Eagle Nest	0	0
Potential Species Impacts	Moderate	None
(composite rating)	Moderate	Itolio
Mitigation Properties	0	0
Conservation Easements	0	0
	Socioeconoi	nic Impacts
Community Facilities Impacted	0	0
Parks and Recreation Facilities Impacted	0	0
Trails Impacted	0	0
Community Cohesion Effects	None	None
Socioeconomic Impacts to Special Populations	None	None
Residential Planned Developments Impacted (acres)	234	0
	Right-of-W	ay Impacts
Right-of-Way Area (acres)	234	0
Potential Residential Parcel Impacts	0	0
Potential Non-Residential Parcel Impacts	6	0
	Preliminary Co	osts (\$ millions)
Roadway Construction (Preliminary)	59	0
Bridges Construction (Preliminary)	18	0
Interchanges Construction (Preliminary)	9	0
Toll Collection Equipment (Preliminary)	2	0
Right-of-Way Cost	19	0
Mitigation, Wetlands, & Wildlife	2	0
Engineering/Administration/Legal (Preliminary)	21	0
Total Estimated Alternative Costs (Preliminary)	130	0

Exhibit "E"

Environmental Evaluation Matrix Northeast Connector Phase 1 PD&E Study

	Natural Environment	
Criteria	Preferred Alternative	No Build
Number of Canal Crossings	1	N/A
100-year Floodplain (acres)	41 ac	-
Wetlands (acres)	10 ac	-
Surface Waters (acres)	1 ac	-
Potential Species Impacts (composite rating)	Moderate	None
Audubon's Crested Caracara (habitat acres)	0 ac	-
Florida Scrub-Jay (habitat acres)	0 ac	-
Gopher Tortoise (habitat acres)	22 ac	-
Florida Sandhill Crane (habitat acres)	2 ac	-
Mitigation Properties	0	-
Conservation Easements	0	-

Species Effects Determination

Common Name	Preliminary Effect Determination	Federal Status
Florida Panther	No Effect	Endangered
Eastern Indigo Snake	May Affect, Not Likely to Adversely Affect	Threatened
Florida Grasshopper Sparrow	No Effect	Endangered
American Alligator	May Affect, Not Likely to Adversely Affect	Threatened, due to Similar Appearance
Everglade Snail Kite	No Effect	Endangered
Red-Cockaded Woodpecker	No Effect	Endangered
Wood Stork	May Affect, Not Likely to Adversely Affect	Threatened
Audubon's Crested Caracara	May Affect, Not Likely to Adversely Affect	Threatened
Florida Scrub-Jay	May Affect, Not Likely to Adversely Affect	Threatened

Exhibit "F" SR 414 Expressway Extension PD&E Study: Environmental Evaluation Matrix

Evaluation Fac	tors	No-Build Alternative	Build Alternative
	Total Acres of Impacts	0 acres	0 acres
SOCIAL	Total Parcels Affected (Residential and Non-Residential):	0 parcels	0 parcels
	Potential Displacements	None	None
	Potential Community Uses Affected	None	None
CULIURAL	Potential Effects to Historic/Archaeological Resources	None	None
	Potential Jurisdictional Wetland Impacts (Acres)	Unknown	1 acre
	Potential Jurisdictional Surface Water Impacts (Acres)	Unknown	<0.5 acre
	Floodplain Impacts (Acre Feet)	Unknown	<0.5 acre
	Potential Impacts to Federally Protected Species		
	Eastern Indigo Snake (Drymarchon corais couperi)	Unknown	No effect
	Sand skink (Neoseps reynoldsi)	Unknown	No effect
	Florida scrub-jay (Aphelocoma coerulescens)	Unknown	No effect
	Red-cockaded woodpecker (Picoides borealis)	Unknown	No effect
ΝΑΤΠΡΑΙ	Everglade snail kite (Rostrhamus sociabilis plumbeus)	Unknown	No effect
NAIORAL	Wood stork (<i>Mycteria americana</i>)	Unknown	MANLA
	Potential Impacts to State Protected Species		
	Short-tailed snake (Lampropeltis extenuate)	Unknown	No effect
	Florida pine snake (Pituophis melanoleucus mugitus)	Unknown	No effect
	Florida burrowing owl (Athene cunicularia floridana)	Unknown	No effect
	Gopher tortoise (Gopherus polyphemus)	Unknown	No adverse effect
	Florida sandhill crane (Antigone pratensis canadensis)	Unknown	No adverse effect
	Southeastern American kestrel (Falco sparverius paulus)	Unknown	No adverse effect
	Little Blue Heron (<i>Egretta caerulea</i>)	Unknown	No adverse effect
	Roseate Spoonbill (<i>Platalea ajaja</i>)	Unknown	No adverse effect
	Impacted Noise Sensitive Areas	Unknown	1
DUVCICAL	Impacted Noise Sensitive Parcels (residential and trail)	Unknown	46
PHISICAL	Potential Medium/High Risk Contamination Sites impacted	Unknown	4
	Utilities relocated (No. of utility owners affected)	Unknown	5

D.1 SR 538 POINCIANA PARKWAY **EXTENSION DESIGN UPDATE**



SR 538 Poinciana Parkway Extension

Carnot Evans, P.E., Senior Project Manager, Dewberry Nicole Gough, Senior Environmental Scientist, Dewberry February 17, 2022

Regional Project

- Concept, Feasibility, & Mobility Study to Connect SR 538 to I-4/SR 429
- Widen existing SR 538 (pink) by CFX
 - Construction underway
- Phase 1 extend to CR 532 (yellow) by CFX
 - FDOT improving I-4/CR 532 interchange
 - Osceola County/CFX to widen CR 532
- Phase 2 extend to I-4/SR 429 (orange) by FTE
 - PD&E Study underway



Background

2018

 Poinciana Parkway Extension / I-4 Concept, Feasibility, & Mobility Study

2019

 Poinciana Parkway Extension PD&E to CR 532

2020

- CFX Initiates Design of Poinciana Parkway Extension to CR 532
- CFX & Osceola County initiate Study & Design of CR 532
- FDOT & Osceola County initiate design for improved CR 532/I-4 interchange
- FDOT & Turnpike initiate widening design for I-4 between CR 532 and SR 429



Other Studies and Design Projects

• Current

- Turnpike PD&Es for Poinciana Parkway Extension to I-4 and widening of SR 429
- Osceola County PD&E for widening
 S. Old Lake Wilson Road
- Polk County design of improvements to Lake Wilson Road
- FDOT PD&E for widening US 17/92



PD&E Study Alternatives

- Built upon Concept, Feasibility, & Mobility Study Alternatives
- Alternative 1A
 - Minimizes impacts to Reedy Creek Mitigation Bank
 - Large impacts to residences and community resources
- Alternative 4A
 - Reduces social impacts
 - Additional impact to Reedy Creek Mitigation Bank compared to Alternative 5A
- Alternative 5A
 - Reduces social impacts



Preferred Alternative

Alternative 5A

- Lowest social impacts
- Lower natural impacts
- Lowest overall cost
- Highest traffic



Public Involvement

PUBLIC MEETINGS

Kick-Off Meeting - September 25, 2018 Alternatives Workshop - March 14, 2019 Public Hearing - August 29, 2019



August 15, 2018 February 19, 2019 May 21, 2019



May 21, 2019





Stakeholder Outreach



Design Projects

Two Design Segments for SR 538

- Segment 1 (538-234)
 - Ronald Reagan Parkway to US 17/92
 - 4,000-foot long bridges over wetland
 - Bridges over Delmar Lane
- Segment 2 (538-235)
 - US 17/92 to CR 532
 - Interchange with 17/92
 - Bridges over CSX RR
 - Bridges over Old Tampa Hwy
 - Includes major utility relocations



Design Projects

Partnership with Osceola County for CR 532 Widening (538-235A)



AUTHORITY

Segment 1 (538-234) US 17/92 to Ronald Reagan Parkway





Segment 2 (538-235) CR 532 to US 17/92





CR 532 Widening (538-235A) Lake Wilson Road to US 17/92





CR 532 Widening (538-235A) Lake Wilson Road to US 17/92



SFWMD Involvement



April 14, 2021

ENVIRONMENTAL ADVISORY GROUP MEETINGS August 15, 2018 May 21, 2019

Concerns/Ideas Expressed:

- Social impacts of other alternatives are large (EAG #1)
- Use existing Poinciana Parkway permit as a template for this project (Pre-App #1)
- Need for MOA with SWFWMD for small areas outside SFWMD jurisdiction
- Avoidance and minimization of impacts
- Coordinate with real estate division (Pre-App #2)
- Need for agreement with RCMB for permit modification
- Potential acquisition of the private parcel to the west of SFWMD to preserve wetlands (EAG #2)
- Nutrient loading requirements for stormwater treatment (Pre-App #3)
- Floodplain compensation can utilize existing excess volume



Permitting

- Wetland Impacts
- Elimination and Reduction

- Mitigation
- Wildlife and Listed Species
- Previously Permitted Facilities



Permitting Jurisdiction

- FDEP 404
- SFWMD ERP

Special Case Agreement

• SWFWMD



Advancing Design Wetland Impacts

- PD&E identified approximately 52 acres direct impact over the 2 segments
- Design potentially affects 82 acres of wetlands and surface waters over the 2 segments and CR 532
 - Addition of pond sites
 - Reduced bridge footprints



Mitigation

Preference Hierarchy for Mitigation (33 CFR 332.3(b))

- Mitigation bank credits

- In-lieu fee program credits

- Permittee-responsible mitigation (PRM) under a watershed approach

- Permittee-responsible mitigation through on-site and in-kind mitigation

- Permittee-responsible mitigation through off-site and/or out-of-kind mitigation

373.4137 Mitigation requirements for specified **transportation projects.** - (1) The Legislature finds that environmental mitigation for the impact of transportation projects proposed by the Department of Transportation or a transportation authority established pursuant to chapter 348 or chapter 349 can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. It is the intent of the Legislature that mitigation to offset the adverse effects of these transportation projects be funded by the Department of Transportation and be carried out by the use of mitigation banks and any other mitigation options that satisfy state and federal requirements in a manner that promotes efficiency, timeliness in project delivery, and cost-effectiveness.





Wildlife Connectivity

- Bridge locations provide open access for large mammals
- Directional Fencing guides animals to crossing locations





Wildlife and Listed Species

USFWS and FWC Technical Assistance

"No Effect"	"MANLAA"	Species surveys and Effect Determination ongoing
 Caracara Everglade snail kite Scrub Jay Listed plants 	 Skink species Bald eagle (MBTA) Florida grasshopper sparrow Eastern Indigo snake 	 Wood stork Gopher tortoise (state/federal) SE American kestrel (state) Florida pine snake (state) Sandhill crane (state) Florida Black Bear (state) Wading birds (state)


Discussion



D.2 SR 516 LAKE/ ORANGE EXPRESSWAY UPDATE



SR 516 LAKE/ORANGE EXPRESSWAY

Keith Jackson, P.E., Project Manager, Dewberry Nicole Gough, Senior Environmental Scientist, Dewberry February 17, 2022

Design Phase





SR 516 and Bike Trail



Permitting Jurisdiction



- FDEP ERP
- Special Case
 Agreements
 - -SJRWMD
 - -SFWMD

• FDEP 404



SR 516 and Bike Trail



Segment 1 US 27 to Cook Road



Design

With Trail



Segment 2 Cook Road to Lake/Orange County Line



Design

With Trail



Sustainability

Envision Certification

ASPIRE



Solar Power





In-Pavement Charging



In-Pavement Charging System





Permitting

- Wetland Impacts
- Elimination and Reduction

- Mitigation
- Wildlife and Listed Species
- Previously Permitted Facilities





Permitting Jurisdiction

- FDEP ERP
- Special Case Agreements
 - SJRWMD
 - SFWMD
- FDEP 404





Floodplain

Cross 2 major Floodplains

- Lake Adain/Sawgrass
- Lake Needham
- Historic flows maintained
- Project drains to Reedy Creek Hydrologic Basin in SFWMD



Advancing Design Wetland Impacts

 PD&E identified approximately 64 acres direct impact over the 3 segments

- Design potentially affects 83.1 acres of wetlands and surface waters over the 3 segments
 - Addition of facilities
 - Reduced bridge footprints



Mitigation

Preference Hierarchy for Mitigation (33 CFR 332.3(b))

Mitigation bank credits

In-lieu fee program credits

Permittee-responsible mitigation (PRM) under a watershed approach

Permittee-responsible mitigation through on-site and in-kind mitigation

Permittee-responsible mitigation through off-site and/or out-of-kind mitigation

373.4137 Mitigation requirements for specified transportation projects. - (1) The Legislature finds that environmental mitigation for the impact of transportation projects proposed by the Department of Transportation or a transportation authority established pursuant to chapter 348 or chapter 349 can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. It is the intent of the Legislature that mitigation to offset the adverse effects of these transportation projects be funded by the Department of Transportation and be carried out by the use of mitigation banks and any other mitigation options that satisfy state and federal requirements in a manner that promotes efficiency, timeliness in project delivery, and costeffectiveness.



Wildlife and Listed Species

USFWS Technical Assistance

"No Effect"

- Caracara
- Scrub Jay
- Listed plants

"MANLAA"

- Skink
- Bald eagle (MBTA)
- Indigo snake

Species surveys and Effect Determination ongoing

- Wood stork
- Gopher tortoise (state/federal)
- SE American kestrel (state)
- Burrowing owl (state)
- Wading birds (state)



Wildlife Corridor Considerations

Florida Department of Transportation Wildlife Crossing Guidelines 2018

A wildlife crossing is a road-related structure that provides wildlife an option to cross under roadways. These crossings have the potential to reduce motor vehicle collisions with wildlife, consequently reducing the likelihood of injuries and mortalities to humans and wildlife as well as reducing the potential for damage to motor vehicles. These guidelines have been developed for use by the Florida Department of Transportation (FDOT) to evaluate the appropriateness of including wildlife crossings (upland or wetland) and associated features (herein referred to collectively as "wildlife crossing features") for proposed projects on the State Highway System (SHS) or as possible stand-alone retrofit projects on the SHS when warranted. These guidelines have been developed in coordination with the United States Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC), which agencies have regulatory authority and are the recognized experts for wildlife species nationwide and within the State of Florida, respectively,

For these guidelines, the term "wildlife crossing feature(s)" may include, but is not limited to new or modified structures, such as bridges, bridges with shelves¹, specially designed culverts, enlarged culverts or drainage culverts and/or exclusionary devices such as fencing, walls or other barriers. or some combination of these features. Further, as used in these guidelines, the term "wildlife" refers to listed, protected or otherwise regulated species that the USFWS and/or FWC have jurisdiction over.

In cases where a FDOT District has an off-SHS project, the District will coordinate with the Office of Environmental Management regarding possible inclusion of any wildlife crossing features. Wildlife crossing feature locations should be identified as early as possible in the project planning and development processes, and prior to project design. These guidelines also establish criteria that must be considered during design of wildlife crossing features.

In developing projects, the FDOT District Offices, in coordination with USFWS and/or FWC, will determine if a wildlife crossing feature is appropriate. As part of the planning and project development processes, the FDOT also considers input from other stakeholders, including local governments, non-governmental organizations and the public. Although opportunities for input exist throughout the process, the FDOT has two prescribed phases where early coordination and input are solicited during project planning and development. These two phases are:

1) Efficient Transportation Decision Making (ETDM) is the process where projects are screened and wildlife agency and other stakeholder input is solicited to provide early scoping information regarding potential effects and resources of concern in the project area. During the screening event(s), wildlife agencies and stakeholders have the opportunity to

¹ This structure modification includes a shelf at the toe of the riprap slope protection area under a bridge. This modification can be used to provide a raised alternative for wildlife accommodations when flooding limits wildlife passage at the ground level. An example of these plans can be found in Section 6 of the FDOT Structures Detailing Manual (revised January 2018). 1

WMD



SWFWMD Conservation Easements

AUTHORITY

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SWEWMD

Wildlife Underpass



Discussion

Permit submittal late Spring (2022)



D.3 SUSTAINABILITY AND **ENVISION** PROCESS UPDATE



Sustainability and Envision Process Update

Bryan Homayouni, Director of Intelligent Transportation Systems James D. Heeren, Senior Associate, Department Manager Environmental Services PE, ENV SP, Dewberry Engineers, Inc.

— February 17, 2022 —

Sustainability Study

- Board Approved April 2019
- Key Elements
 - Deployment of Photovoltaic (PV) Power Solutions
 - Improved Energy Efficiencies at CFX Buildings
 - Readiness for Vehicle Electrification



Central Florida Expressway Authority SUSTAINABILITY STUDY June 24, 2019



https://www.cfxway.com/wp-content/uploads/2019/11/CFX_Sustainability_Report-FINAL.pdf

Sustainability Projects FY 2022-2026 Work Plan

- Five Solar Deployment (PV) Projects (Facilities Projects Summary Page)
- Includes Solar Deployment Projects at Eight Toll Plaza Facilities
- Total capital investment estimated at \$10.3M
- Total estimated lifetime benefit of +/- \$25.0M



Hiawassee Plaza: Elevated Ground Mount PV



Components	Hiawassee Mainline Data Center	Hiawassee Mainline Plaza
System Description	PV Solar Panels with inverter sized for meter load; system comprised of PV panels and inverters	PV Solar Panels with inverter sized for meter load; system comprised of PV panels and inverters
Basic Sizing Information	~ 320 kW	~ 250 kW
Benefits of System	Sustainable Power	



Hiawassee Plaza: Elevated Ground Mount PV





DMS Power Source: Floating PV



Components	Solar Power System (SPS)	Energy Storage System (ESS)	Utility Power System
Functionality	Provide Primary Power to the DMS & Charge the ESS	Provide Power to DMS when SPS is not generating	Backup source - provides power when SPS and ESS are not available (battery drained & PV unavailable)
Basic Sizing Information	~ 9 kW	~ 2 Day storage	NA
Benefits of System	Sustainable Power and added reliability and power redundancy to the system		
			CENTRA

FLORIDA EXPRESSWAY AUTHORITY

DMS Power Source: Floating PV







Independence Mainline: Floating PV



Components	Independence Mainline
Functionality	PV Solar Panels with inverter sized for meter load; system comprised of PV panels and inverters
Basic Sizing Information	~ 160 kW
Benefits of System	Sustainable Power



CFX HQ Energy Audit



CFX Headquarters Assessment:

- Review of current energy and water consumption, maintenance activities
- Evaluation of potential modifications and improvements
 - HVAC Performance, Controls
 - Lighting Control/Retrofits
 - Maintenance Work
- Identify Low-cost / High-return energy reductions
- Implement Improvements and Measure Performance





Electric Vehicle Charging Stations





Conclusion

Floating PV

- Dynamic Message Sign Alternative Power Source
 - Completed: 2021

Elevated PV

- Hiawassee Data Center, Hiawassee Mainline Plaza
 - Completed: 2022

Building Efficiency

- CFX Headquarters Building
 - Study Completed: 2021

Ground Mount, Floating & Elevated/ PV

8 Additional Projects scheduled within Work Plan

- Review of SR 516 Lake/Orange Expressway
- Review of Headquarters

EV Charging

- Pilot Charging Station at CFX HQ
 - Completed: 2021
- Charging Station at Magnolia Service Center
 - Est. Completion: 2022







Principles of Sustainability

- Rooted in the National Environment Policy Act (NEPA), passed in 1969
- "...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."


Filling the Gap



- Current sustainability systems are sectorspecific
 - LEED covers buildings
 - Others focused on roads, airports, hydropower
- No other US system covers all aspects of infrastructure



Improving Infrastructure Integration





- Buildings are controlled by single entity with systems that can be readily optimized
- Infrastructure has multiple stakeholders with different agendas, schedules, budgets, and customers which require integration at the city/community and regional levels



Types of Infrastructure



ENERGY

- Geothermal ٠
- Hydroelectric
- Nuclear •
- Coal ٠
- Natural Gas .
- Oil/Refinery •
- Wind •
- Solar
- Biomass



WATER

- Potable water ٠ distribution
- Capture/ ٠
- ٠
- Storm Water ٠ Management
- Flood Control ٠

- storage
- Water Reuse



WASTE

- Solid waste ٠
- Recycling ٠
- Hazardous ٠
- Waste ٠
- Collection & ٠ Transfer



TRANSPORT

- Airports •
- Roads ٠
- Highways ٠
- Bikes ٠
- **Pedestrians** ٠
- Railways •
- Public Transit .
- Ports .
- Waterways ٠



- Ecosystem
- Services
- Natural .

٠

•

Infrastructure



INFORMATION

- Telecom ٠
- Internet .
- Phones .
- Data Centers .
- Sensors ٠



Institute for Sustainable Infrastructure (ISI)

- Educational and research organization
- Develops and maintains sustainability rating system for civil infrastructure in US
- Founded by ACEC, APWA and ASCE







American Council of Engineering Companies



ISI Envision™ Sustainability Rating System



• Developed by ISI and Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design







Graduate School of Design Harvard University



Performance and Pathway Contribution

Does this project truly contribute to sustainability?

- Performance contribution
 - Sought out all reasonable opportunities to improve sustainable performance
 - Raised the bar in one or more dimensions of sustainable performance
 - Achieved what was reasonable
- Pathway contribution
 - Considers how the project aligns with overall community needs
 - Enhances quality of life



Use of recycled concrete and asphalt in highway construction





Strategies For Changing the Industry

- Make incremental improvements
- Use standardized tools and metrics
- Document sustainable practices
- Monitor performance
- Share lessons learned
- Global view, keeping in mind local values



Recognizing Innovation

- Extraordinary performance
- Overcoming significant barriers
- Scalable
- Transferable





Envision™ Rating System



14 Credits

Leadership

Resource Allocation 14 Credits

Natural World 14 Credits



Climate & Resilience

10 Credits

- Project Scoring
 - 64 credits organized into 5 sections
 - 1,000 available points
 - Extra points for innovation
 - Web-based project application tool for scoring and reporting



Envision™ Structure



WELLBEING

Improve Community Quality of Life Enhance Public Health & Safety Improve Construction Safety Minimize Noise & Vibration Minimize Light Pollution Minimize Construction Impacts

MOBILITY

Improve Community Mobility & Access Encourage Sustainable Transportation Improve Access & Wayfinding

COMMUNITY

Advance Equity & Social Justice Preserve Historic & Cultural Resources Enhance Views & Local Character Enhance Public Space & Amenities

Innovate or Exceed Credit Requirements



COLLABORATION

Provide Effective Leadership & Commitment Foster Collaboration & Teamwork Provide for Stakeholder Involvement Pursue Byproduct Synergies

PLANNING

Establish a Sustainability Management Plan Plan for Sustainable Communities Plan for Long-Term Monitoring & Maintenance Plan for End-of-Life

ECONOMY

Stimulate Economic Prosperity & Development Develop Local Skills & Capabilities Conduct a Life-Cycle Economic Evaluation

Innovate or Exceed Credit Requirements



Resource Allocation 14 Credits

MATERIALS

Support Sustainable Procurement Practices Use Recycled Materials Reduce Operational Waste Reduce Construction Waste Balance Earthwork On Site

ENERGY

Reduce Operational Energy Consumption Reduce Construction Energy Consumption Use Renewable Energy Commission & Monitor Energy Systems

WATER

Preserve Water Resources Reduce Operational Water Consumption Reduce Construction Water Consumption Monitor Water Systems

Innovate or Exceed Credit Requirements



SITING

Preserve Sites of High Ecological Value Provide Wetland & Surface Water Buffers Preserve Prime Farmland Preserve Undeveloped Land

CONSERVATION

Reclaim Brownfields Manager Stormwater Reduce Pesticide & Fertilizer Impacts Protect Surface & Groundwater Quality

ECOLOGY

Enhance Functional Habitats Enhance Wetland & Surface Water Functions Maintain Floodplain Functions Control Invasive Species Protect Soil Health

Innovate or Exceed Credit Requirements



Climate & Resilience

EMISSIONS

Reduce Net Embodied Carbon Reduce Greenhouse Gas Emissions Reduce Air Pollutant Emissions

RESILIENCE

Avoid Unsuitable Development Assess Climate Change Vulnerability Evaluate Risk & Resilience Establish Resilience Goals & Strategies Maximize Resilience Improve Infrastructure Integration

Innovate or Exceed Credit Requirements



Envision™ Structure



Quality of Life 14 Credits

WELLBEING

Improve Community Quality of Life Enhance Public Health & Safety Improve Construction Safety Minimize Noise & Vibration Minimize Light Pollution Minimize Construction Impacts

MOBILITY

Improve Community Mobility & Access Encourage Sustainable Transportation Improve Access & Wayfinding

COMMUNITY

Advance Equity & Social Justice Preserve Historic & Cultural Resources Enhance Views & Local Character Enhance Public Space & Amenities

Leadership 12 Credits

COLLABORATION Provide Effective Leadership & Commitment Foster Collaboration & Teamwork Provide for Stakeholder Involvement Pursue Byproduct Synergies

PI ANNING Establish a Sustainability Management Plan Plan for Sustainable Communities Plan for Long-Term Monitoring & Maintenance Plan for End-of-Life

ECONOMY

Stimulate Economic Prosperity & Development **Develop Local Skills & Capabilities** Conduct a Life-Cycle Economic Evaluation

Innovate or Exceed Credit Requirements



Resource Allocation 14 Credits

MATERIALS Support Sustainable Procurement Practices Use Recycled Materials **Reduce Operational Waste** Reduce Construction Waste Balance Earthwork On Site

ENERGY

Reduce Operational Energy Consumption Reduce Construction Energy Consumption Use Renewable Energy Commission & Monitor Energy Systems

WATER

Preserve Water Resources **Reduce Operational Water Consumption** Reduce Construction Water Consumption Monitor Water Systems

Innovate or Exceed Credit Requirements



SITING Preserve Sites of High Ecological Value Provide Wetland & Surface Water Buffers Preserve Prime Farmland Preserve Undeveloped Land

CONSERVATION **Reclaim Brownfields** Manager Stormwater Reduce Pesticide & Fertilizer Impacts Protect Surface & Groundwater Quality

ECOLOGY Enhance Functional Habitats Enhance Wetland & Surface Water Functions Maintain Floodplain Functions **Control Invasive Species** Protect Soil Health

Innovate or Exceed Credit Requirements



Climate & Resilience

EMISSIONS

Reduce Net Embodied Carbon Reduce Greenhouse Gas Emissions Reduce Air Pollutant Emissions

RESILIENCE

Avoid Unsuitable Development Assess Climate Change Vulnerability Evaluate Risk & Resilience Establish Resilience Goals & Strategies Maximize Resilience Improve Infrastructure Integration

Innovate or Exceed Credit Requirements



Innovate or Exceed Credit Requirements

Envision[™]

v3 Pre-Assessment Checklist



	Credit Assessment Status	Evaluation Questions Assessed		Assessment Status						Assessed Maximum	Total Maximum
		Yes	No	Improved	Enhanced	Superior	Conserving	Restorative	Points	roints Available	Foints
Total Points	All Credits Assessed	171	62	33	15	75	196	128	447	880	1000

Possible Award Level: Platinum



Documentation Needs Process





QL1.1 Improve Community Quality of Life Coversheet



ENVISION® CREDIT COVER SHEET



Levels of Achievement

Note: In the table below, please mark selection with an "X" in the "Applicant Selection" row.

Levels	NA	Improved	Enhanced	Superior	Conserving	Restorative
Criteria	NA	A, B	A, B, C, D	A, B, C, D, E	A, B, C, D, E, F	A, B, C, D, E, F, G
Applicant Selection						x

Summary

Pending? (Yes/No): No

Note: If pursuing verification Pathway A: Design + Post-Construction please indicate whether the level of achievement selection is pending future construction phase documentation. Be sure to also clearly indicate this in the credit summary text and evaluation criteria documentation.

If you indicated that this credit is not applicable, explain why and make specific references to supporting documents or sections of supporting documents presented as evidence. If the credit is applicable, use this space to present an essective summary explaining why the selected level of achievement has been chosen for this credit.

The project team seeks a restorative level of achievement for this credit. The project will improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

Specific information about how the project satisfies the requirements for this credit is provided below. Please note that all supporting documents (cited below in **bold**) have been uploaded into Envision under a name that matches the citation.

Evaluation Criteria and Documentation

Note: State how each criterion was met by the project and to what degree it was met. Make direct reference to supporting documents or sections of supporting documents (e.g., page numbers, headings) to enable the verifier to confirm explanations provided.

A. Has the project team identified and taken into account community needs, goals, and issues?

Yes, the project team has identified and taken into account community needs, goals, and issues. As shown on page 19 of the attached Preliminary Engineering Report, one of the needs of the project is to provide consistency with local and regional plans. The project team created a public involvement plan which outlines the ways in which stakeholders and members of the community were involved in making sure that the project reflects the values and needs of the communities it is designed to benefit. The Public Involvement Plan can be found on page 181 of the Preliminary Engineering Report. Page 244 lists the summary of meetings held, and evaluations of the meetings can be found on pages 246-657. A summary of the public involvement can be found on pages 106-110.

B. Does the project meet or support the needs and goals of the host and/or affected communities?

Yes, the project meets and supports the needs and goals of the affected communities. There are six project needs that serve as justification for the proposed improvements. These needs are: 1) Provide improved system connectivity/linkage; 2) Accommodate anticipated transportation demand; 3) Provide consistency with local and regional plans; 4) Support economic viability and job creation; 5) Support intermodal apportunities; and 6) Enhance evacuation and emergency service. The following sections describe the needs in more detail. As described on **pages 19-24** of the **Prelimingery generics**, **Report**, these needs are aligned with the needs and goals of the surrounding communities identified in the Public Involvement Plan.

C. Has the project team assessed the social impacts the project will have on the host and affected communities' quality of life?

Yes, a social impact assessment is provided on page 18 of the attached Preliminary Environmental Impact Report. No substantial impacts to the social environment are anticipated.

D. Have the affected communities been meaningfully engaged in identifying how the project meets community needs and/or goals?

Yes, affected communities have been meaningfully engaged in identifying how the project meets community needs and goals. Pages 106-110 of the Preliminary Engineering Report summarize the public involvement process which included collected comments and concerns from the public as well as stakeholders in order to ensure that the project incorporates their needs and goals. This process is further documented in Attachment E of the report (pages 246-657).

E. Has the project team addressed negative social impacts?

Yes, the project team has addressed any potential negative social impacts. As described on page 18 of the Preliminary Environmental Impact Report, social impacts were avoided and minimized as much as possible during the corridor and alternatives evaluations. This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status. No substantial impacts to the social environment are anticipated. The project team used a series of meetings with members of the public and stakeholders (pages 246-657 of Preliminary Engineering Report) in order to select a preferred alternative with the least impacts on the effected communities.

F. Are the affected communities satisfied that the project addresses their needs and goals as well as mitigates negative impacts?

Yes, affected communities are satisfied that the project addresses their needs and goals as well as migates negative impacts. Pages 336, 460 and 553 of the Preliminary Engineering Report lists several comments from the public and stakeholders that relay thanks for addressing concerns raised in previous meetings, and includes support for the selected alternative.

G. Does the project proactively address long-term social, economic, or environmental changes that impact quality of life?

Yes, the project proactively addresses long-term social, economic, or environmental changes that impact the quality of life. As described in **pages 19-24** of the **Preliminary Engineering Report**, the project goal is to address the projected growth of the effected communities. The project is consistent with local community plans as well as traffic and economic growth forecasts.

Table of Contents

Note: Please list all supporting documents for this credit in the spaces provided. Raws may be added if required. If supporting documentation has been assembled as a single PDF, please insert the page within the PDF where the file begins.

Document Title / Name:	Page(s):		
Preliminary Engineering Report	19-24, 106-110, 181, 244, 246-657, 358, 460, 553		
Preliminary Environmental Impact Report	18		



(A) (B) (D) (E) (F) & (G) Preliminary Engineering Report

CENTRAL FLORIDA EXPRESSWAY AUTHORITY =

FINAL PRELIMINARY ENGINEERING REPORT

FEASIBILITY / PROJECT DEVELOPMENT AND ENVIRONMENT STUDY Lake / Orange County Connector (US 27 to SR 429) Lake and Orange Counties, Florida

CFX Project Number: 599-225

Prepared for

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

SEPTEMBER 2019

Prepared by Metric Engineering, Inc. 525 Technology Park, Suite 153 Lake Mary, FL 32746



(C) & (E) Preliminary Environmental Impact Report

— CENTRAL FLORIDA EXPRESSWAY AUTHORITY —

PROJECT ENVIRONMENTAL IMPACT REPORT

FEASIBILITY / PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

Lake / Orange County Connector (US 27 to SR 429)

Lake and Orange Counties, Florida

CFX Project Number: 599-225

Prepared for

CENTRAL FLORIDA EXPRESSWAY AUTHORITY



SEPTEMBER 2019



Completed Credits & Credits in Progress



NW 2.1 – Reclaim Brownfields



NW 1.2 – Provide Wetland & Surface Water Buffers



LD 2.2 – Plan for Sustainable Communities



LD 1.1 – Provide Effective Leadership & Collaboration



LD 3.1 – Stimulate Economic Prosperity & Development



Sustainable Project Elements

- Potential Credit Applicability:
 - QL2.2 Encourage Sustainable Transportation
 - LD1.4 Pursue Byproduct Synergies
 - RA2.3 Use Renewable Energy
 - CR1.2 Reduce Greenhouse Gas Emissions
 - CR1.3 Reduce Air Pollutant Emissions
- Innovate or Exceed Credit Requirements

Advancing Sustainability through Powered Infrastructure for Roadway Electrification

ASPIRE



Sustainable Project Elements

- Potential Credit Applicability:
 - QL2.1 Improve Community Quality of Life
 - QL2.1 Improve Community Mobility & Access
 - QL3.4 Enhance Public Space & Amenities
 - LD2.2 Plan for Sustainable Communities
 - CR2.1 Avoid Unsuitable
 Development



Conclusions/Questions

James Heeren P.E., ENV SP

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