# 2016 Annual Inspection Report











<u>Section</u>	<u>Title</u>		Page
	Execu	tive Summary	E-1
1	Introc	luction	
	1.1	Background	
	1.2	CFX's Maintenance Program	
2	Rating	g Systems	
	2.1	Roadway Rating System	
	2.2	Building Rating System	
	2.3	Bridge Rating System	
2	are	adway and Building Inspection Samples, and the Bridge Inspection included as part of this section.	
3	-	ction Results	
	3.1	Summary of Findings for Roadways, Buildings and Bridges	
		3.1.1 SR 408 (East-West Expressway)	
		3.1.2 SR 414 (John Land Apopka Expressway)	
		3.1.3 SR 417 (Central Florida GreeneWay)	
		3.1.4 SR 429 (Daniel Webster Western Beltway)	
		3.1.5 SR 451	
		3.1.6 SR 528 (Beachline Expressway)	
	3.2	Critical Items Summary	

Critical Item Alerts are included as part of this section.

### **List of Tables**

<u>Table</u>	<u>Title</u>	Page
2-1	Rating System for Roadways and Buildings	
3-1	Systemwide Summary of Findings	
3-2	SR 408 Summary of Findings	
3-3	SR 414 Summary of Findings	
3-4	SR 417 Summary of Findings	
3-5	SR 429 Summary of Findings	
3-6	SR 451 Summary of Findings	
3-7	SR 528 Summary of Findings	

## **List of Figures**

<b>Figure</b>	<u>Title</u>	Page
1-1	SR 408, SR 414, SR 417, SR 429, SR 451 and SR 528 Toll Facilities	1-5
1-2	Systemwide Mile Post Locations	1-6
3-1	SR 408 (East-West Expressway) Mile Post	
3-2	SR 414 (John Land Apopka Expressway) Mile Post	
3-3	SR 417 (Central Florida GreeneWay) Mile Post	
3-4	SR 417 (Central Florida GreeneWay) Mile Post	
3-5	SR 429 (Daniel Webster Western Beltway) Mile Post	
3-6	SR 451 Mile Post	
3-7	SR 528 (Beachline Expressway) Mile Post	

Roadway, Building, and Night Inspection Worksheets are included on the compact disk (CD) attached to the back cover of this report. Information about the CD is also included as the last page in this report.

Ροσο

# **2016 Annual Inspection Report**



# **Executive Summary**



### **Executive Summary**

The 2016 inspection of the Central Florida Expressway Authority's (CFX) System, performed by Atkins, CFX's General Engineering Consultant, included a visual inspection of the roadways, buildings and bridges under CFX jurisdiction.

CFX's roadway system includes SR 408 (East-West Expressway), SR 414 (John Land Apopka Expressway), SR 417 (Central Florida GreeneWay) from International Drive to the Orange / Seminole County line, SR 429 (Daniel Webster Western Beltway) from Seidel Road to US 441, SR 451, and SR 528 (Beachline Expressway) from McCoy/Boggy Creek Road to SR 520. The system consists of 109 centerline miles of highway with 63 interchanges, 13 mainline toll plazas, 71 ramp toll plazas, and 295 bridges. CFX also operates a non-system, two-mile tolled expressway (Goldenrod Extension) with one mainline plaza. The inspection results for the Goldenrod Extension are included under separate cover.

The findings of the 2016 inspection concluded that CFX's roadway system is in good condition, with an average rating of 7.9 out of 10. This includes Roadway/Pavement, Roadside, Traffic Services, Drainage and Vegetation/Aesthetics features. The overall appearance of CFX's toll facilities and buildings along SR 408, SR 414, SR 417, SR 429, SR 451 and SR 528 remains generally good, with an average rating of 7.7 out of 10. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent or good.

The findings, summarized in the 2016 Annual Inspection Report, reflect the condition of the feature(s) on the day the inspection was performed. Many of the deficiencies noted have been corrected subsequent to the inspection as part of the Maintenance Program currently administered by CFX.

Rating systems were used to evaluate the condition of the roadways, buildings and bridges on CFX's System. A ten (10) point rating system was used for the roadways and buildings, where 10 is excellent or "like new" condition and 1 is emergency or unacceptable and requires immediate maintenance. Features receiving a rating of 3 or lower are considered deficient and require action from CFX's maintenance contractor. For features receiving a rating of 4, action is recommended before the feature becomes deficient. Features receiving a rating of 5 are considered degraded due to age and should be evaluated for inclusion in a future Renewal and Replacement (R&R) project. Bridges are rated on a four (4) point scale where 1 is excellent and 4 is poor.

Bridge inspections are conducted by Certified Bridge Inspectors under a program administered by the Florida Department of Transportation (FDOT) and funded by CFX. Inspection results are published every two years on each bridge. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on CFX's System.

This report will serve as a tool for CFX to identify and prioritize the areas of the system that are in need of maintenance. The deficiencies identified in this year's report can be corrected through maintenance contracts as part of CFX's Maintenance Program.

# **2016 Annual Inspection Report**



# Section 1 Introduction



## 1. Introduction

#### 1.1 Background

Between July and October 2016, Atkins, the Central Florida Expressway Authority's (CFX) General Engineering Consultant, conducted the annual inspection of CFX's System as required by Article V, Section 5.12 (C) of the Amended and Restated Master Bond Resolution.

CFX's roadway system includes SR 408 (East-West Expressway), SR 414 (John Land Apopka Expressway), SR 417 (Central Florida GreeneWay) from International Drive to the Orange / Seminole County line, SR 429 (Daniel Webster Western Beltway) from Seidel Road to US 441, SR 451, and SR 528 (Beachline Expressway) from McCoy/Boggy Creek Road to SR 520. The system consists of 109 centerline miles of highway with 63 interchanges, 13 mainline toll plazas, 71 ramp toll plazas, and 295 bridges. CFX also operates a non-system, two-mile tolled expressway (Goldenrod Extension) with one mainline toll plaza. The inspection results for the Goldenrod Extension are included under separate cover.

CFX's System was examined by means of a visual inspection. The 2016 Annual Inspection Report summarizes the findings of these examinations by category:

- Roadways
- Buildings
- Bridges

Each category has been divided into segments corresponding to the roadway being inspected (SR 408, SR 414, SR 417, SR 429, SR 451 and SR 528). Figure 1-1 depicts CFX's System and toll facilities. For purposes of reporting, the roadway inspection references mile post locations. The mile post locations on CFX's System can be found in Figure 1-2.

Rating systems were used to evaluate the condition status of roadways, buildings, and bridges. The procedures for these rating systems are summarized in Section 2.

The inspection results, summarized in Section 3, reflect the condition of the feature(s) on the day the inspection was performed. Many of the deficiencies noted have already been corrected as part of CFX's

At the time the 2016 inspection was performed, the following major construction projects were underway:

- SR 408 / SR 417 Interchange
- SR 408 / I-4 Interchange (Florida Department of Transportation (FDOT) Project)
- SR 417 Milling and Resurfacing from International Drive to Moss Park
- SR 417 / Innovation Way Interchange

As a result, some of these portions of the roadway were not inspected. Section 3 of this report identifies the specific roadway sections that were not inspected due to construction activities.

#### **1.2 CFX's Maintenance Program**

#### Highway Maintenance Program

CFX's fiscal year<sup>1</sup> (FY) 2017 Highway Maintenance Fund is budgeted at \$12.3 million for maintenance administration and routine maintenance.

CFX employs two contractors to perform asset maintenance management services for roadways and bridges. One contractor maintains SR 408, SR 417 and SR 528, while the other maintains SR 414, SR 429 and SR 451.

#### **Building Maintenance Program**

The toll facilities shown on Figure 1-1, as well as CFX's headquarters building are maintained by a single contractor. CFX's building maintenance budget for FY 2017 is approximately \$1.77 million.

#### Maintenance Program Overview

As part of the report preparation process, a representative of Atkins met with CFX's Director of Maintenance to discuss the major achievements of the past fiscal year (FY 2016) and the goals and objectives for the coming fiscal year (FY 2017).

Staff identified the following major achievements during the past fiscal year (FY 2016):

- Continued a landscape maintenance program to keep the aesthetics of the system at the desired levels.
- Continued a modified aquatic maintenance program to make stormwater ponds an aesthetic feature and part of the roadway landscape.
- Continued replacement and upgrades of retro-reflective pavement markers (RPM) that display less than satisfactory reflectivity.
- Implemented the next phase of the systemwide signing upgrades and rehabilitation in compliance with Federal Highway Administration (FHWA) requirements.
- Performed pavement inspections that identified areas that were raveling and/or damaged and required maintenance. These inspections identified repairs needed to extend the pavement life in order to meet the planned and programmed milling and resurfacing schedules based on the Five Year Work Plan and the Pavement Management Program.

<sup>1</sup> CFX's 2017 fiscal year runs from July 1, 2016 to June 30, 2017.

- Performed periodic inspections of systemwide fencing to help ensure that unauthorized access to CFX right-of-way through damaged or missing fence sections is minimized.
- Identified generators and air conditioners at the toll plazas that have reached their expected useful life and need to be replaced versus those that need maintenance to extend their life and identified funding sources. Completed the first phase of air conditioner replacements.
- Identified toll facility roofs in need of replacement based on results of the roof inspections and identified funding sources.
- Attained a Final Annual Maintenance Rating Program (MRP) score from the FDOT of 89 out of 100.

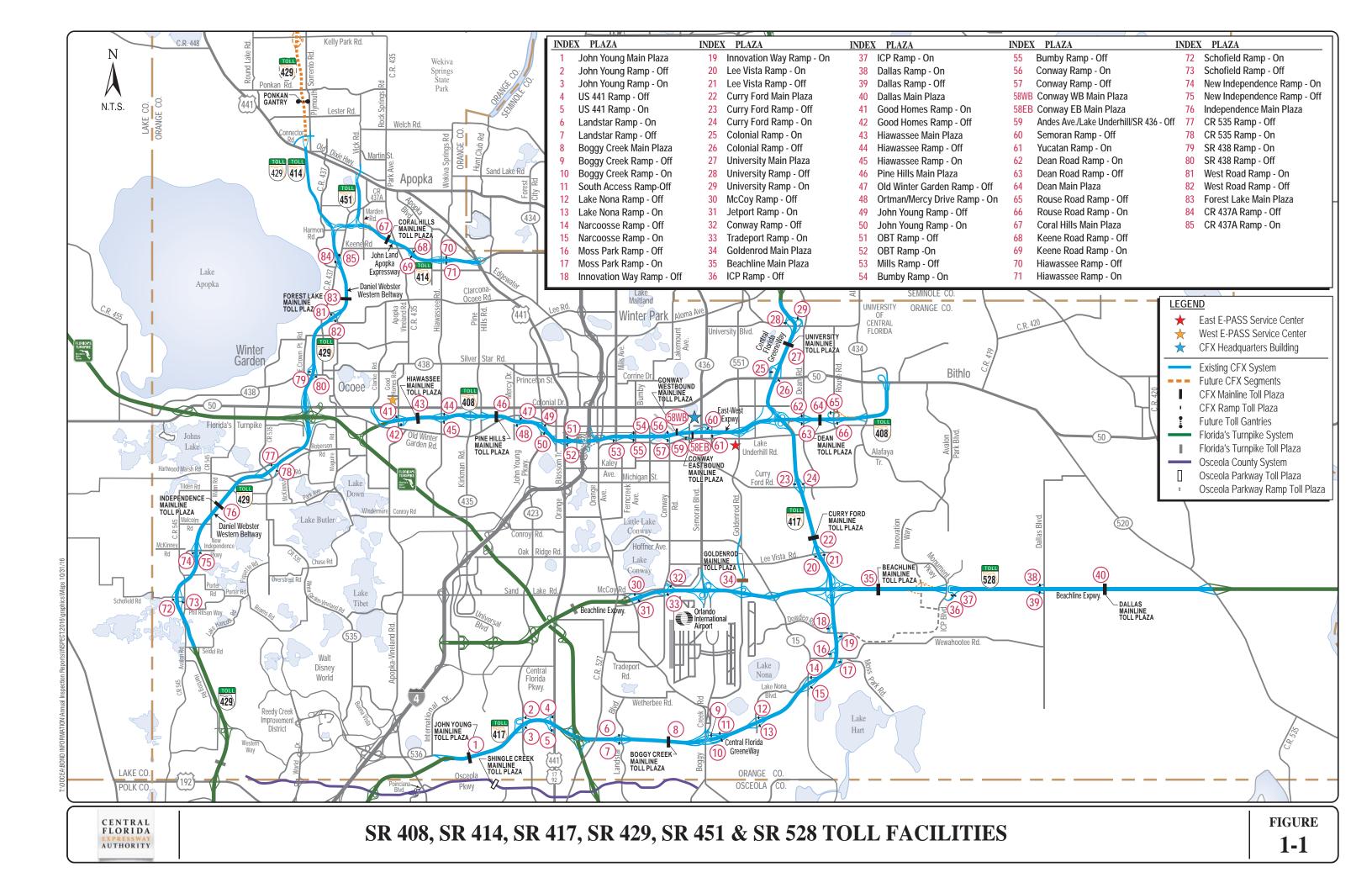
CFX staff has identified the following goals and objectives for the coming fiscal year (FY 2017). These items primarily involve the physical activities associated with construction and maintenance of roadways, bridges and toll plaza facilities:

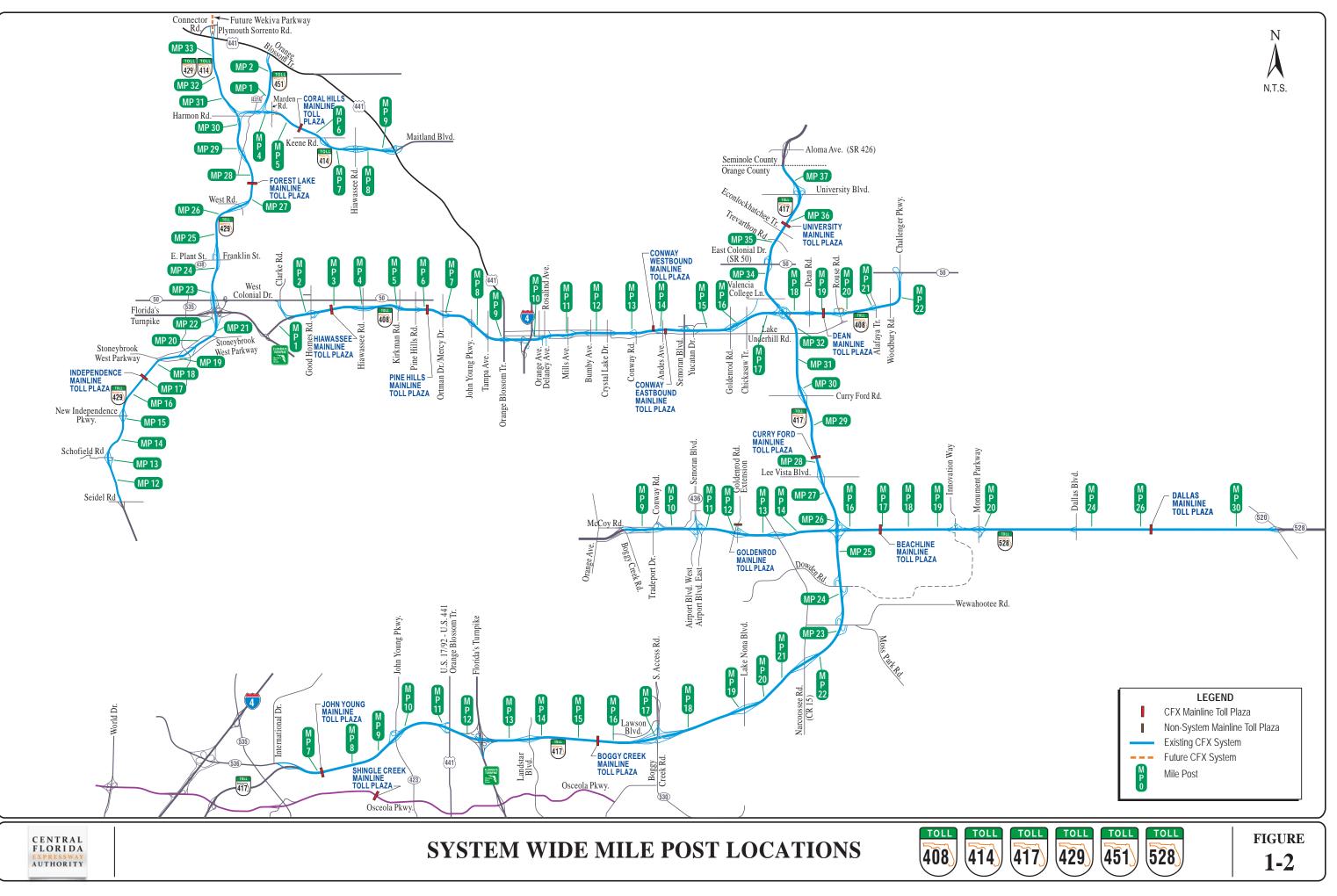
- Achieve a Maintenance Rating Program (MRP) score from the FDOT of at least 90.
- Continue the next phase of replacement and upgrades of retro-reflective pavement markers (RPM).
- Implement the next phase of systemwide signing upgrades and rehabilitation.
- Continue to perform periodic detailed inspections of systemwide fencing.
- Continue to identify those projects that should be funded under the Renewal and Replacement (R&R) budget and those projects that are clearly routine maintenance and should be included in the maintenance budget.
- Analyze the observations from Florida Highway Patrol (FHP), Road Ranger program and fiber optic locators to enhance surveillance and maintenance of CFX's System.
- Maintain pavement striping at a high level of reflectivity and replace unsatisfactory striping where needed.
- Keep the roadway, roadside and aesthetic features maintained at the highest possible levels. For those portions of CFX's System under construction, identify problem areas (e.g. shoulder and barrier wall inlets blocked with debris; pot holes; washouts, etc.) and advise the appropriate construction contractors through CFX's representative.
- Proceed with design for the next phases of the systemwide toll facility generator and air conditioner replacement.

- Continue to monitor systemwide roof performance to determine needed repairs.
- Continue to use the Annual Inspection findings as a tool to aid in determining maintenance needs versus future renewal and replacement projects.
- Continue to address deficiencies identified in the FDOT bridge inspections reports in a timely manner. FDOT gives a priority of 1 through 4 to the identified deficiencies. Priority 1 requires the work be done in 60 days, priorities 2 and 3 in 180 days, and priority 4 in 2 years.
- Continue to monitor FDOT bridge performance ratings and take action as necessary. FDOT assigns performance rating factors of 1 through 4, where 1 is excellent, 2 is good, 3 is fair, and 4 is poor.

In addition to goals and objectives for the physical activities associated with construction and maintenance of roadways, bridges and toll plaza facilities, staff has identified goals and objectives related to program, process and procedural initiatives for the coming year. The ultimate purpose of these initiatives is to provide CFX's customers with a smooth ride and aesthetically pleasing surroundings creating a unique driving experience that will be immediately identifiable with CFX roadway. These initiatives are:

- Meet with FDOT District 5 and Florida Turnpike Enterprise (FTE) personnel on an asneeded basis to discuss maintenance and other issues of mutual importance to both agencies.
- Evaluate and enhance CFX's program to manage its assets to provide maximum control over the timing and implementation of replacement programs and initiatives.
- Provide a timely response to customer feedback on maintenance issues.





# **2016 Annual Inspection Report**



# Section 2 Rating Systems



## 2. Rating Systems

#### 2.1 Roadway Rating System

The roadway rating system used for the annual inspection includes an in-depth review of 49 features divided into five groups: Roadway/Pavement, Roadside, Traffic Services, Drainage and Vegetation/Aesthetics. Table 2-1 shows the rating system used for the roadways and buildings.

Rating	Description	Comment	Feature appearance and functionality / operability	Action required / recommended
0	Under Construction	Location not inspected.	-	-
1	Emergency	Immediate maintenance is required to protect public or system.	Unacceptable	10 days or less (Required)
2	Unsatisfactory	Maintenance is required to protect the public	Poor	30 days or less (Required)
3	Requires Attention	Maintenance is required to protect the system	Poor	90 days or less (Required)
4	Degraded (due to maintenance)	Improve maintenance to protect feature.	Below Average	180 days or less (Recommended)
5	Degraded (due to age)	Evaluate for future R&R project.	Average	-
6-7	Fair	Continue to monitor feature.	Satisfactory / Fair	-
8-9	Good	No deficiencies noted. No maintenance necessary.	Satisfactory / Good Condition	-
10	Excellent	No deficiencies noted.	"Like New" condition	-
NI	Not Inspected	Inaccessible location	-	-
N/A	Not Applicable	Feature does not apply at this location	-	-

Table 2-1: Rating System for Roadways and Buildings

Anything rated below a 3 will trigger a response from CFX's maintenance contractor and require action to improve the feature. Features receiving a rating of 4 are considered degraded due to maintenance and action is recommended before they become deficient. Features receiving a rating of 5 are considered degraded due to age and should be evaluated for inclusion in a future Renewal and Replacement project. For reporting purposes, the deficiencies noted in Section 3 of this report are those features rated 3 or below.

The groups and features inspected include:

- 1. **Roadway/Pavement** Includes all features/deficiencies found in the pavement area. It includes the visual review of pavement condition with particular attention directed towards the presence of potholes, edge ravel, and similar deficiencies.
  - Bridge Pavement Void a. g. b. Cracking h Pothole Depression i. Rutting c. d. Edge Ravel j. Shoving Joint e. k
  - f Paved Shoulder

- Stripping
- 2. Roadside - Includes the evaluation of features found along the roadside not associated with drainage or vegetation/aesthetics.

a.	Back Slope	e.	Sidewalk
b.	Fence	f.	<b>Slope Protection</b>
c.	Front Slope	g.	Soil Shoulder
d.	Rip Rap	h.	Turnout

3. **Traffic Services** – Includes the evaluation of features that guide, protect and assist the drivers. Highway and sign lighting were inspected at night. Sign reflectivity was not rated as part of the visual inspection.

a.	Attenuator	g.	Pavement Marker
b.	Barrier Wall	h.	Pavement Symbol
c.	Guardrail	i.	Regulatory Sign
d.	Highway Lighting	j.	Sign Light
e.	Information Sign	k.	Striping
f.	Object Marker	1.	Warning Sign

1. Warning Sign

4 Drainage – Includes the evaluation of drainage structures and associated appurtenances.

- Cross Drain a.
- Curb Inlet b.
- Median Ditch с
- d. Miscellaneous Drain
- Miscellaneous Inlet e.
- f. Other Inlet

- Outfall Ditch g.
- h. Pond / Lake / Canal
- Roadside Ditch i
- į. Side Drain
- Storm Drain k.
- 5. Vegetation/Aesthetics – Includes the evaluation of features found along the roadside. These features tend to have a high visual influence on travelers.

a.	Landscaping	e.	Slope Mowing
b.	Litter Removal	f.	Tree Trim

**Roadway Mowing** c.

d.

**Turf** Condition g.

Roadway Sweep

A sample of an actual roadway inspection worksheet is included at the end of this section. All reports are included on the Roadway Inspection Worksheets on the CD attached at the end of this report.

#### 2.2 Building Rating System

The building inspection included all mainline and ramp toll plaza buildings along CFX's System, as well as CFX's headquarters building in ORL Tower Road. Building components such as grounds, building exterior and interior, lights, restrooms, signs and equipment were divided into a number of subcomponents and rated as shown in Table 2-1.

Anything rated below a 3 will trigger a response from CFX's maintenance contractor and require action to improve the feature. Features receiving a rating of 4 are considered degraded due to maintenance and action is recommended before they become deficient. Features receiving a rating of 5 should be evaluated for inclusion in a future Renewal and Replacement project. For reporting purposes, the deficiencies noted in Section 3 of this report are those features rated 3 or below.

A sample of an actual building inspection worksheet is included at the end of this section. All reports are included on the Building Inspection Worksheets on the CD attached to the back of this report.

#### 2.3 Bridge Rating System

Inspections of the bridges on CFX's system are conducted by Certified Bridge Inspectors under a program administered by the FDOT and funded by CFX. Detailed Bridge Inspection Reports are prepared and filed every two years for each bridge. The most current bridge ratings were received from FDOT in August 2016.

The Performance Rating rates the condition of the bridge. It is auto-calculated and is based on the lowest rating for Deck, Superstructure and Substructure. For culverts, the rating is based on the Culvert Rating. The performance rating factors are as follows:

1 = Excellent	$3 = \operatorname{Fair}$
<b>2</b> = Good	4 (and above) = Poor

The bridge inspection summary is included at the end of this section. Detailed bridge inspection reports are available for review upon written request to CFX.

**Roadway Inspection Sample** 



## Report of all Roadway features

Prepared by:



#### SR 451 - Northbound

M.P. 000 to M.P. 001 .000999 8 Storm Drain	No deficiencies noted
	No deficiencies noted
.000999 8 Turf Condition	
.000999 8 Tree Trim	No deficiencies noted
.000999 8 Cracking	No deficiencies noted
.000999 8 Striping	No deficiencies noted
.000999 8 Soil Shoulder	No deficiencies noted
.000999 8 Slope Protection	No deficiencies noted
.000999 8 Slope Mowing	No deficiencies noted
.000999 8 Shoving	No deficiencies noted
.000999 8 Rutting	No deficiencies noted
.000999 8 Roadway Sweep	No deficiencies noted
.000999 8 Roadway Mowing	No deficiencies noted
.000999 8 Roadside Ditch	No deficiencies noted
.000999 8 Pothole	No deficiencies noted
.000999 8 Pond Lake Canal	No deficiencies noted
.000999 8 Front Slope	No deficiencies noted
.000999 8 Stripping	No deficiencies noted
.000999 8 Pavement Void	No deficiencies noted
.000999 8 Depression	No deficiencies noted
.000999 8 Edge Ravel	No deficiencies noted
.000999 8 Joint	No deficiencies noted
.000999 8 Litter Removal	No deficiencies noted
.000999 8 Pavement Marker	No deficiencies noted
.000999 8 Pavement Symbol	No deficiencies noted
.000999 8 Paved Shoulder	No deficiencies noted
.000999 9 Guardrail	No deficiencies noted
.000999 9 Warning Sign	No deficiencies noted



#### Report of all Roadway features

Prepared by:



#### SR 451 - Northbound Rating Comments Milepost location Item M.P. 000 to M.P. 001 9 **Object Marker** No deficiencies noted .000-.999 9 .000-.999 **Regulatory Sign** No deficiencies noted .000-.999 9 Highway light No deficiencies noted .000-.999 9 Information Sign < 30 No deficiencies noted .000-.999 9 Information Sign > 30 No deficiencies noted .000-.999 9 Other Inlet No deficiencies noted M.P. 001 to M.P. 002 .100-.233 5 Roadway Mowing Vegetation in excess of 30" .000-.999 8 Roadside Ditch No deficiencies noted .000-.999 8 Edge Ravel No deficiencies noted .000-.999 8 Cracking No deficiencies noted 8 Soil Shoulder .000-.999 No deficiencies noted .000-.999 8 Slope Protection No deficiencies noted .000-.999 8 Front Slope No deficiencies noted 8 .000-.999 Fence No deficiencies noted 8 .000-.999 Storm Drain No deficiencies noted .000-.999 8 Side Drain No deficiencies noted .000-.999 8 Depression No deficiencies noted 8 .000-.999 Rip Rap No deficiencies noted Pond Lake Canal .000-.999 8 No deficiencies noted .000-.999 8 Outfall Ditch No deficiencies noted .000-.999 8 Median Ditch No deficiencies noted 8 Cross Drain .000-.999 No deficiencies noted .000-.999 8 Turf Condition No deficiencies noted .000-.999 8 Tree Trim No deficiencies noted .000-.999 8 Slope Mowing No deficiencies noted 8 Litter Removal .000-.999 No deficiencies noted



#### Report of all Roadway features

Prepared by:



#### SR 451 - Northbound **Milepost location** Rating Comments Item M.P. 001 to M.P. 002 .000-.999 8 Landscape No deficiencies noted 8 .000-.999 Pavement Void No deficiencies noted .000-.999 8 Roadway Sweep No deficiencies noted .000-.999 8 Sign light No deficiencies noted .000-.999 8 Paved Shoulder No deficiencies noted 8 Joint .000-.999 No deficiencies noted .000-.999 8 Information sign > 30No deficiencies noted. .000-.999 8 Information sign < 30No deficiencies noted. .000-.999 8 Striping No deficiencies noted .000-.999 8 **Regulatory Sign** No deficiencies noted 8 Pavement Symbol .000-.999 No deficiencies noted 8 .000-.999 Pavement Marker No deficiencies noted .000-.999 8 Rutting No deficiencies noted 8 .000-.999 Highway light No deficiencies noted .000-.999 8 Guardrail No deficiencies noted .000-.999 8 Stripping No deficiencies noted .000-.999 8 Shoving No deficiencies noted 8 .000-.999 **Object Marker** No deficiencies noted .000-.999 8 Pothole No deficiencies noted .000-.999 8 Warning Sign No deficiencies noted M.P. 002 to M.P. 002.577 .354 6 Guardrail Minor guardrail damage. 8 .000-.577 Pavement Void No deficiencies noted 8 .000-.577 **Barrier Wall** No deficiencies noted 8 .000-.577 Stripping No deficiencies noted 8 .000-.577 Shoving No deficiencies noted 8 Pothole .000-.577 No deficiencies noted



#### **Report of all Roadway features**

Prepared by:



#### SR 451 - Northbound **Milepost location** Rating Comments Item M.P. 002 to M.P. 002.577 .000-.577 8 Highway light No deficiencies noted 8 Information sign > 30No deficiencies noted. .000-.577 .000-.577 8 Rutting No deficiencies noted .000-.577 8 **Object Marker** No deficiencies noted .000-.577 8 Pavement Marker No deficiencies noted 8 .000-.577 Pavement Symbol No deficiencies noted .000-.577 8 **Regulatory Sign** No deficiencies noted .000-.577 8 Sign light No deficiencies noted .000-.577 8 Striping No deficiencies noted .000-.577 8 Paved Shoulder No deficiencies noted 8 Information sign < 30.000-.577 No deficiencies noted. 8 .000-.577 **Roadside Ditch** No deficiencies noted .000-.577 8 Roadway Mowing No deficiencies noted 8 .000-.577 Warning Sign No deficiencies noted 8 .000-.577 Median Ditch No deficiencies noted .000-.577 8 Storm Drain No deficiencies noted .000-.577 8 Landscape No deficiencies noted 8 .000-.577 Litter Removal No deficiencies noted .000-.577 8 Roadway Sweep No deficiencies noted .000-.577 8 Slope Mowing No deficiencies noted .000-.577 8 Tree Trim No deficiencies noted .000-.577 8 **Turf Condition** No deficiencies noted .000-.577 8 Fence No deficiencies noted .000-.577 8 Curb Inlet No deficiencies noted .000-.577 8 Joint No deficiencies noted .000-.577 8 Pond Lake Canal No deficiencies noted 8 No deficiencies noted .000-.577 Side Drain



#### **Report of all Roadway features**

Prepared by:



#### SR 451 - Northbound

Comments
----------

Milepost location	Rating	Item	Comments
M.P. 002 to M.P. 002.577			
.000577	8	Front Slope	No deficiencies noted
.000577	8	Slope Protection	No deficiencies noted
.000577	8	Soil Shoulder	No deficiencies noted
.000577	8	Cracking	No deficiencies noted
.000577	8	Depression	No deficiencies noted
.000577	8	Edge Ravel	No deficiencies noted
.000577	8	Cross Drain	No deficiencies noted

SAMPLE

**Building Inspection Sample** 



Report of all facility features

Prepared by:





### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Apron

Feature	Rating	Comments
Apron Sweep	8	No deficiencies noted
Cracking	8	No deficiencies noted
Joints	8	No deficiencies noted
Pavement Voids	8	No deficiencies noted
Striping	8	No deficiencies noted



Report of all facility features

Prepared by:

**ATKINS** 



### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Canopy

Feature	Rating	Comments
Canopy Columns	8	No deficiencies noted
Canopy Fascia	8	No deficiencies noted
Canopy lighting	8	No deficiencies noted
Canopy Underside	8	No deficiencies noted
Sign Lighting	8	No deficiencies noted
Sign Structure	8	No deficiencies noted
Signs	8	No deficiencies noted
Traffic Red / Green Lighting	8	No deficiencies noted
Variable Message Signs	8	No deficiencies noted



Report of all facility features

Prepared by:





## Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Combo Bldg - Bldg Exterior

Feature	Rating	Comments
Concrete Pavement	6	Cracked pavement or sidewalk.
Bollards	8	No deficiencies noted
Concrete	8	No deficiencies noted
Condensing Units	8	No deficiencies noted
Doors / Frames (Interior and Exterior)	8	No deficiencies noted
Joint Sealants	8	No deficiencies noted
Lighting (Exterior)	8	No deficiencies noted
Nose Flashers	8	No deficiencies noted
Paint - Interior and Exterior	8	No deficiencies noted
Receptacle	8	No deficiencies noted
Signs	8	No deficiencies noted
Site Grounds	8	No deficiencies noted
Stand-By Generator	8	No deficiencies noted
Windows and Storefronts	8	No deficiencies noted
Wiring	8	No deficiencies noted



Report of all facility features

Prepared by:





### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Combo Bldg - Collection Area

Feature	Rating	Comments
Flooring (Interior and Accessories)	6	Tiles are scuffed.
Panelboards	6	Manual override light does not work
Walls (Concrete Block, Brick, Stucco or EIFS)	6	Cracked block. Wall not sealed properly around ACM.
ACM	8	No deficiencies noted
Ceilings and Ceiling Grids	8	No deficiencies noted
Counters/Cabinets and Drawers	8	No deficiencies noted
Doors / Splash Door (Booth)	8	No deficiencies noted
Fire Extinguisher	8	No deficiencies noted
HVAC Control Systems	8	No deficiencies noted
Joint Sealants	8	No deficiencies noted
Lighting (Interior)	8	No deficiencies noted
Paint - Interior and Exterior	8	No deficiencies noted
Receptacle	8	No deficiencies noted
Security	8	No deficiencies noted
Switchboards and Breakers	8	No deficiencies noted
Telephone System	8	No deficiencies noted
Ventilation Outlets	8	No deficiencies noted
Windows and Storefronts	8	No deficiencies noted
Wiring	8	No deficiencies noted



Report of all facility features

Prepared by:





### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Combo Bldg - Recorder Room

Feature	Rating	Comments
Flooring (Interior and Accessories)	6	Access tiles stained.
Switchboards and Breakers	6	Circuit breakers, switches are missing number identification in both panels. Missing numbers on breakers
Walls (Interior)	6	Walls not sealed around duct work.
Ceiling	8	No deficiencies noted
Doors / Frames (Interior and Exterior)	8	No deficiencies noted
Ductwork and Insulation	8	No deficiencies noted
Fire Extinguisher	8	No deficiencies noted
HVAC Control Systems	8	No deficiencies noted
Lighting (Interior)	8	No deficiencies noted
Paint - Interior and Exterior	8	No deficiencies noted
Panelboards	8	No deficiencies noted
Receptacle	8	No deficiencies noted
TVSS (Transitent Voltage Surge Suppressor)	8	No deficiencies noted
UPS (Uninterrupted Power Supply)	8	No deficiencies noted
Ventilation Outlets	8	No deficiencies noted
Wiring	8	No deficiencies noted



Report of all facility features

Prepared by:





### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Combo Bldg - Restroom

Feature	Rating	Comments
Ceilings and Ceiling Grids	8	No deficiencies noted
Doors / Frames (Interior and Exterior)	8	No deficiencies noted
Flooring (Interior and Accessories)	8	No deficiencies noted
Joint Sealants	8	No deficiencies noted
Lighting (Interior)	8	No deficiencies noted
Paint - Interior and Exterior	8	No deficiencies noted
Receptacle	8	No deficiencies noted
Walls (Interior)	8	No deficiencies noted



Report of all facility features

Prepared by:





### Apopka John Land Expressway

Keene Rd - EB On ramp

MP 006

Island A - Island

Feature	Ratin	ng	Comments
Signs	7		Reflective material is chipped / missing
Attenuator	8		No deficiencies noted
Concrete	8		No deficiencies noted
Nose Flashers	8		No deficiencies noted
Receptacle	8		No deficiencies noted

**Bridge Inspection Summary** 

Bridge Number	Facility	Deck	Superstructure	Substructure	Channel	Culvert	Structure	Performance
110603	SR–429 (Wekiva Pkw	Rating	Rating	Rating 8	Rating	Rating N	Evaluation	Rating
110603	SR-429 (Weriva Prw SR-429 SB	8	8	8	N N	N	8	1
750055	SR-528	o N	o N	N N	6	7	8 7	2
750055	SR-528	6	7	6	N	, N	6	2
750050	SR-528 WB	7	7	5	5	N	6	3
750057	SR-528 WB	6	7	7	N	N	7	2
750058	SR-528 WB		7	7	N	N	7	2
750100	SR-528 WB SR-408 WB	6	7	7	N	N	7	2
750100		7	7	7	N		7	2
	SR-408 WB					N		
750103	SR-408 WB	7	7	7	N	N	7	2
750104	SR-408 WB	7	7	7	N	N	7	2
750106	SR-408	7	7	7	N	N	7	2
750107	SR-408 WB	7	7	7	N	N	7	2
750108	SR-408 WB	7	7	7	N	N	7	2
750112	SR–408 Exit Ramp	7	7	7	N	N	7	2
750114	SR-408	6	7	7	7	N	7	2
750116	SR-408 WB	7	7	7	N	N	7	2
750119	SR-408 WB	7	7	7	N	N	7	2
750120	SR-408	7	7	7	N	N	7	2
750121	SR-408 WB	7	7	7	8	N	7	2
750123	SR-408 WB	7	7	7	N	N	7	2
750124	SR-408 WB	7	7	7	N	N	7	2
750126	SR-408 WB	7	7	7	N	N	7	2
750128	SR-408 WB	7	7	7	N	N	7	2
750129	SR-408	7	7	7	N	N	7	2
750130	I–4 Con. to SR–408	7	7	7	N	Ν	7	2
750137	I–4 Connector	7	7	7	N	N	7	2
750138	I–4 Connector	7	7	7	N	N	7	2
750179	SR–528	6	7	7	N	Ν	7	2
750182	SR-408 EB	7	7	7	N	Ν	7	2
750183	SR-408	6	7	7	9	Ν	7	2
750184	SR-408	7	7	7	N	N	7	2
750185	SR-408 EB	7	7	7	N	Ν	7	2
750186	SR-408 EB	7	7	7	N	N	7	2
750212	SR–528	7	7	5	5	Ν	6	3
750213	SR-528	7	7	7	N	N	7	2
750214	SR-528	7	7	7	N	N	7	2
750220	SR-408 EB	7	7	7	N	N	7	2
750231	SR-408 EB	7	7	7	N	N	7	2
750232	SR-408	7	7	7	N	N	7	2
750233	SR-408 EB	7	7	7	N	N	7	2
750234	SR-408 EB	7	7	7	N	N	7	2
750235	SR-408	7	7	7	N	N	7	2
750236	SR-408 EB	7	7	7	N	N	7	2
750237	SR-408 EB	7	7	7	N	N	7	2
750237	SR-408	7	7	7	N	N	7	2
750230	SR-408	7	7	7	N	N	7	2
750235	SR-408	7	7	7	N	N	7	2
750240	SR-408	7	7	7	N	N	7	2
750241	SR-408	7	7	7	N	N	4	2
750242	SR-408	7	7	7	N	N	7	2
750243	SR-408 SR-408	7	7	7	N	N	4	2
750244	SR-408	7	7	7	N	N	6	2
750245		7	7	7	-			
750246	SR-408 EB SR-408 EB	7	7	7	N 7	N N	7 7	2
		7	7	7				
750248	SR-408 EB				N	N	7	2
750249	SR-408 EB	7	7	7	N	N	7	2
750251	SR-408 WB	7	7	7	N	N	7	2
750252	SR-408 EB	7	7	7	N	N	7	2
750253	SR-408	7	7	7	N	N	7	2
750300	SR-528	N	N	N	7	6	6	2
750315	SR-436	5	7	7	N	N	7	3
750316	SR-436	5	7	7	N	N	7	3

Bridge	Facility	Deck	Superstructure	Substructure	Channel	Culvert	Structure	Performance
Number	CD 42C ND	Rating	Rating	Rating	Rating	Rating	Evaluation	Rating
750317	SR-436 NB	6	7	7	N	N	7	2
750318	SR-528	8	7	7	N	N	7	2
750319	SR-528	8	7	7	N	N	7	2
750320	SR-528	9	7	7	N	N	7	2
750330	SR-528	N	N	N	7	6	6	2
750332	SR-528	7	7	7	N	N	7	2
750333	SR-528	6	7	7	N	N	7	2
750337	Chickasaw Trail	7	7	8	N	N	7	2
750342	SR-417 NB	7	7	7	N	N	7	2
750343	SR-417 SB	7	7	7	N	N	7	2
750344	SR-417 SB	7	7	7	7	N	7	2
750345	SR-417 NB	7	7	7	8	N	7	2
750346	Trevarthon Rd.	7	7	7	N	N	7	2
750347	Econlockhatcee Trl	7	8	8	N	N	8	2
750348	SR-417	7	7	7	N	Ν	7	2
750349	SR-417 NB	7	7	7	N	Ν	7	2
750350	SR-417 SB	7	7	7	N	Ν	7	2
750351	SR-417 NB	7	7	7	Ν	N	7	2
750352	SR–408 Ramp AR–2	7	8	7	Ν	Ν	7	2
750353	SR–408 Ramp AR–1	7	7	7	Ν	Ν	7	2
750354	SR-417 SB	7	7	7	Ν	Ν	7	2
750355	SR-417 NB	7	7	7	Ν	N	7	2
750356	Econlockhatchee Tr	7	7	7	N	N	7	2
750357	SR-408 WB	7	8	8	7	N	8	2
750358	SR-408 EB	7	7	7	7	N	7	2
750359	Dean Road	7	7	7	N	N	7	2
750360	SR-408 WB	7	7	7	N	N	7	2
750361	SR-408 EB	7	7	7	N	N	7	2
750362	SR-408 WB	7	7	7	N	N	7	2
750363	SR-408 EB	8	7	7	N	N	7	2
750364	Woodbury Road	7	7	7	N	N	7	2
750365	SR-408 WB	7	8	8	N	N	8	2
750366	SR-408 EB	7	7	7	N	N	7	2
750369	SR-408 EB	8	8	8	N	N	8	1
750370	SR-408 WB	8	8	8	N	N	8	1
750373	SR-417 Ramp SB	7	7	7	N	N	7	2
750374	SR-417 NB Ramp	7	7	7	N	N	7	2
750375	SR-417 SB	7	7	7	N	N	7	2
750376	SR-417 NB	7	7	7	N	N	7	2
750370	SR-417 NB	, N	, N	N	7	6	6	2
750378	SR-417 SB	7	7	7	, N	N	7	2
	SR-417 NB	8	7	7			7	2
750379 750380	SR-417 NB SR-417 SB	8	8	7	N	N	-	2
				8	N	N	/ 8	
750381	SR-417 NB	8	8	-	N	N	-	1
750382	SR-417 SB	7	7	7	N	N	7	2
750383	SR-417 NB	8	8	8	N	N	8	1
750384	SR-417 SB	7	7	8	N	N	7	2
750385	SR-417 NB	7	7	7	N	N	7	2
750390	SR–408 EB Ramp	8	7	8	N	N	7	2
750391	SR-408 WB Ramp	7	7	7	N	N	7	2
750392	Good Homes Road	7	7	7	N	N	7	2
750393	SR-408 WB	7	7	7	7	N	7	2
750394	SR-408 EB	7	7	7	7	N	7	2
750395	Dorscher Road	7	8	7	N	N	7	2
750396	SR-408 WB	7	7	7	N	N	5	2
750397	SR-408	7	7	7	Ν	N	5	2
750398	Powers Drive	7	6	8	N	N	6	2
750399	Paul Street	7	7	8	Ν	Ν	7	2
750406	SR-429 SB	7	8	7	Ν	N	7	2
750407	SR-429 NB	7	8	7	Ν	N	7	2
750408	SR–429 Ramp L	7	8	7	N	N	7	2
750409	SR-429 SB	7	8	7	N	N	7	2
750410	SR-429 NB	7	7	7	Ν	N	7	2

Bridge Number	Facility	Deck Rating	Superstructure	Substructure Rating	Channel Rating	Culvert Rating	Structure Evaluation	Performance Rating
750411	Ramp A–NB Exit Ram	7	Rating 8	7	N	N	7	2
750411	SR-429 SB	8	8	8	N	N	8	1
750412	SR-429 NB	8	7	8	N	N	7	2
750413	SR-429 SB	8	7	7	N	N	7	2
750414	SR-429 NB	7	8	7	N	N	7	2
750415	SR-429 SB	8	8	8	7	N	8	1
750410	SR-429 SB	8	8	8	7	N	8	1
750417	SR-429 NB	8	8	8	, N	N	8	1
750418	SR-429 SB	8	8	8	N	N	8	1
							-	
750420	SR-429 SB	7	8	8	N	N	8	2
750421	SR-429 NB	8	8	8	N	N	8	1
750422	West Road	8	7	8	N	N	7	2
750423	West Road	8	8	8	N	N	8	1
750424	SR-417 NB		7	8	N	N	7	2
750425	SR-417 SB	7	7	8	N	N	7	2
750426	SR-417 SB	7	7	7	7	N	7	2
750427	SR-417 NB	7	7	7	7	N	7	2
750428	SR-417 SB	7	7	8	N	N	7	2
750429	SR-417 NB	7	7	8	N	N	7	2
750430	SR-417 SB	7	8	7	N	N	7	2
750431	SR-417 NB	7	7	7	N	N	7	2
750432	SR–417 Off Ramp	7	7	7	N	N	7	2
750433	SR-417 SB	7	7	8	N	N	7	2
750434	SR-417 NB	7	8	8	N	N	8	2
750435	SR–417 SB Off Ramp	7	8	8	N	N	8	2
750436	SR-417 SB	8	7	7	N	N	7	2
750437	SR-417 NB	7	7	7	N	N	7	2
750438	SR-417 SB	7	8	7	N	Ν	7	2
750439	SR-417 NB	7	8	7	N	Ν	7	2
750440	SR-417 SB	7	7	6	N	Ν	6	2
750441	SR-417 NB	7	7	7	N	Ν	7	2
750442	SR-417 SB	7	7	7	N	N	7	2
750443	SR-417 NB	7	7	7	N	N	7	2
750444	SR–417 NB Off Ramp	8	7	7	N	N	7	2
750445	SR-417 SB	7	7	7	N	N	7	2
750446	SR-417 NB	7	7	7	N	N	7	2
750447	SR-417 SB	7	7	7	N	N	7	2
750448	SR-417 NB	7	7	8	N	N	7	2
750449	SR-417 SB Ramp	7	8	7	7	N	7	2
750450	SR-417	7	7	7	7	N	7	2
750451	SR-417	7	7	7	7	N	7	2
750452	SR–417 Off Ramp	7	8	7	7	N	7	2
750453	SR-417	7	7	7	N	N	7	2
750454	SR-417	7	7	7	N	N	7	2
750457	SR-417	8	8	7	N	N	7	2
750457	SR-417	8	8	7	N	N	7	2
750450	SR-417 SB	6	7	7	N	N	7	2
750455	SR-417	6	7	7	N	N	7	2
750460	SR-417 NB	8	7	7	N	N	7	2
750462	SR-417 NB	7	7	7	N	N	7	2
750462	SR-417 SB	7	8	7	N	N	7	2
750463	SR-417 SB	8	° 7	7	N	N	7	2
750465	SR-417 NB	7	7	7	N	N	7	2
750465	SR-417 SR-417	7	7	7	N	N	7	2
750466	SR-417 SR-417	7	7	8	N	N	7	2
750467	SR-417 SR-417	7	7	8	N	N	7	2
		7						
750469	SR-417 NB Off Ramp		8	8	N	N	8	2
750470	SR-417 Ramp C	7	7	7	N	N	6	2
750471	Ramp To SR–528 WB	7	7	7	N	N	7	2
750472	SR-417	7	7	8	N	N	7	2
750473	SR-417	7	7	8	N	N	7	2
750480	SR-417	N	N	N	6	7	7	2
750481	SR-417	N	N	N	7	7	7	2

Bridge	Facility	Deck	Superstructure	Substructure	Channel	Culvert	Structure	Performance
Number	•	Rating	Rating	Rating	Rating	Rating	Evaluation	Rating
750492	SR-429 SB	8	8	8	N	N	8	1
750493	SR-429 NB	8	8	8	N	N	8	1
750494	SR-429 SB	8	8	7	N	N	7	2
750495	SR-429 NB	8	8	7	N	N	7	2
750496	SR-429 SB	7	8	7	N	N	7	2
750497	SR-429 NB	8	8	7	N	N	7	2
750502	SR-451 SB	8	8	8	N	N	8	1
750503	SR-451 NB	8	8	8	N	N	8	1
750504	Johns Road	8	8	8	N	N	8	1
750505	SR-451 SB	8	8	8	N	N	8	1
750506	SR-451 NB	8	8	8	N	N	8	1
750507	SR-451 SB	8	8	8	N	N	8	1
750508	SR-451	8	8	8	N	N	8	1
750509	Ramp C	8	8	7	N	N	7	2
750512	Goldenrod Rd.	7	7	7	N	N	7	2
750520	SR-429 SB	8	8	8	N	N	7	1
750521	SR-429 NB	8	8	8	N	Ν	7	1
750522	SR-429 SB	8	8	8	N	N	8	1
750523	SR-429 NB	8	8	8	Ν	N	8	1
750524	SR-429 SB	8	8	8	Ν	N	8	1
750525	SR-429 NB	8	8	8	Ν	N	8	1
750526	SR-429 SB	8	8	8	Ν	N	8	1
750527	SR-429 NB	8	8	8	N	N	8	1
750528	SR-429 SB	8	8	8	N	N	8	1
750529	SR-429 NB	8	8	8	N	N	8	1
750530	Malcolm Rd.	8	7	8	N	N	7	2
750531	SR-429 SB	8	8	8	N	N	8	1
750532	SR-429 NB	8	8	8	N	N	8	1
750533	SR-429 SB	8	8	7	N	N	7	2
750534	SR-429 NB	8	8	7	N	N	7	2
750535	SR-429 SB	8	8	8	N	N	8	1
750536	SR-429 NB	8	8	7	N	N	7	2
750537	SR-429 SB	8	8	8	N	N	8	1
750538	SR-429 NB	8	8	8	N	N	8	1
750539	SR-429 SB	8	7	8	N	N	7	2
750540	SR-429 NB	8	7	8	N	N	7	2
750540	SR-429 SB	8	8	8	N	N	8	1
750541	SR-429 NB	8	8	8	N	N	8	1
750542	SR-429 SB	8	7	7	N	N	7	2
750543	SR-429 NB	8	8	8	N	N	8	1
750547	SR-429 NB	8	8	8	N	N	8	1
750547	SR-429 SB SR-429 NB	8	8	8	N	N	8	1
750548	SR-429 NB SR-429 SB	8	8	8				2
		7	8	8	N	N	8	2
750550	SR-429 NB			-	N	N		
750553	SR-429 SB	7	7	8	8	N	7	2
750554	SR-429 NB	7	8	7	6	N	7	2
750557	NB C–D Road Ramp	8	7	7	N	N	5	2
750567	New Indepence Pkwy	8	7	8	N	N	7	2
750569	SR-408 EB Ramp C	7	7	8	N	N	7	2
750570	SR-408WB to I-4EB	7	8	8	N	N	8	2
750571	SR-408WB to I-4EB	7	8	8	N	N	8	2
750576	SR-417 NB Ramp B1	8	8	8	N	N	8	1
750579	Lake Underhill Dr.	8	8	8	N	N	8	1
750580	SR-408 EB	8	8	8	N	N	8	1
750581	SR-408	8	8	8	N	N	8	1
750589	Conway Rd Ramp	8	8	8	Ν	N	8	1
750701	SR-408 WB	7	8	8	N	N	8	2
750703	SR-414	8	8	8	N	N	8	1
750704	SR-414	8	8	8	Ν	N	8	1
750705	SR-414	8	8	8	Ν	N	8	1
750706	SR-414	8	8	8	N	N	8	1
750707	SR-414	7	7	7	8	N	7	2

Bridge Number	Facility	Deck Rating	Superstructure Rating	Substructure Rating	Channel Rating	Culvert Rating	Structure Evaluation	Performance Rating
750709	SR-414	8	8	8	N	N	8	1
750710	SR–44 WB Ramp	8	8	8	N	N	8	1
750711	SR-414 EB Ramp	8	8	8	N	N	8	1
750712	SR-414	8	8	8	N	N	8	1
750714	SR-429 SB	8	8	8	N	N	8	1
750715	SR-429 NB	8	8	8	N	N	8	1
750716	SR-429 SB	8	8	8	N	N	8	1
750717	SR-429 NB	8	8	8	N	N	8	1
750718	SR–414 Ramp CA	8	8	8	N	N	8	1
750719	SR-429 NB Ramp BF	8	8	8	N	N	8	1
750720	SR-414 WB	8	7	8	N	N	7	2
750721	SR-414 EB	8	8	8	N	N	8	1
750722	SR-429 NB Ramp EG	8	8	8	N	N	8	1
750723	SR-451 NB Ramp	8	7	8	Ν	N	7	2
750724	Maitland Blvd Ext.	8	8	8	N	N	8	1
750725	Marden Rd	7	7	7	N	N	7	2
750726	SR-414	7	7	7	N	N	7	2
750727	SR-414	8	8	8	N	N	8	1
750728	SR–414 Ramp CA	8	8	8	N	N	8	1
750729	Ramp K	8	8	8	N	N	7	1
750730	Ramp K	7	8	8	N	N	8	2
750731	CR-437 Binion Road	8	8	8	N	N	8	1
750732	SR-429 SB	8	8	8	N	N	8	1
750732	SR-429 NB	8	8	8	N	N	8	1
750734	SR-429 SB	8	8	8	N	N	8	1
750735	SR-429 NB	8	8	8	N	N	8	1
750736	SR-429 Viaduct SB	8	8	8	N	N	8	1
750737	SR-429 NB	8	8	8	N	N	8	1
750738	SR-429 SB	9	9	9	N	N	9	1
750739	SR-429 NB	9	9	9	N	N	9	1
750735	SR-408 WB On-Ramp	8	8	8	N	N	8	1
750741	SR-408 KB Off-Ramp	8	8	8	N	N	8	1
750742	SR-414	8	8	8	N	N	8	1
750802	Airport to SR417	9	7	8	9	N	7	2
750802	SR-417 NB Ramp J	8	8	8	N	N	8	1
750803	Airport to SR417SB	9	8	9	9	N	7	2
750804	South Acess Rd.	8	8	8	9 N	N	8	1
750805	SR417 NB to Airpor	8	8 7	9	9	N	8 7	2
750806	SR417 NB to Airpor	8	8	8	9 N	N	8	1
750807	SR 528 WB	8	8	8	N	N	8	1
750808	Ramp G	8	8	8	8	N	8	1
750823	SR–417 Ramp G	8	8	8	o N	N	8 7	2
750824	Ramp D Flyover	8	8	8	N	N	8	1
750825	SR-528 Ramp BC-1	8	8	8	N	N	8	1
750829	SR-528 Ramp BC-1 SR-528 Ramp BC-2	8	8	8	N	N	8	1
750830	Ramp D2	8	8	8	N	N	8	1
750839	Ramp D2 Ramp C2	8	8	8	N	N	8	1
750840	Ramp C2 Ramp C1	8	8	8	N	N	8	1
750841	Ramp B2 (SR–417)	8	8	8	N	N	8	1

Note: The inspection does not include pedestrian bridges at plazas.



# Section 3 Inspection Results



### **3. Inspection Results**

#### 3.1 Summary of Findings for Roadways, Buildings and Bridges

For reporting purposes, features rated 3 or below are considered deficient and require maintenance in order to improve the feature and protect the public or the system. For features receiving a rating of 4, maintenance is recommended before they become deficient. Maintenance action requirements are specified in Section 2. It should be noted that between the time of the inspection and the time this report is published, many of these deficiencies have already been corrected as part of CFX's Maintenance Program. Furthermore, emergency deficiencies considered critical have already been addressed. Refer to Section 3.2 for additional information. Other deficiencies identified can generally be addressed in a timely manner. Table 3-1 summarizes the findings for CFX's System as a whole. All average ratings for the System for the 2016 inspection are equal or higher than the ones for the 2015 inspection.

	Feature	2015 Rating <sup>(1)</sup>	<b>2016</b> Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	7.8	7.9	Good	Cracking / Pothole
'ays	Roadside	7.7	7.8	Good	Soil Shoulder
Roadway	Traffic Services	8.0	8.0	Good	N/A
$\mathbb{R}_0$	Drainage	7.8	7.9	Good	Miscellaneous Inlet
	Vegetation / Aesthetics	7.7	7.8	Good	N/A
Buildings		7.6	7.7	Good	Wiring
Bridges		1.7	1.7	Good	See note 4

Table 3-1:	Systemwide	Summarv	of Findings
	Systemiciae	$\sim$ units of $j$	01 I III 0111-8-

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. Deficiencies identified on the reports are being addressed by CFX. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on CFX's System.

A summary of findings of the physical condition of the roadways, buildings, and bridges for each of CFX's system roadways: SR 408 (East-West Expressway), SR 414 (John Land

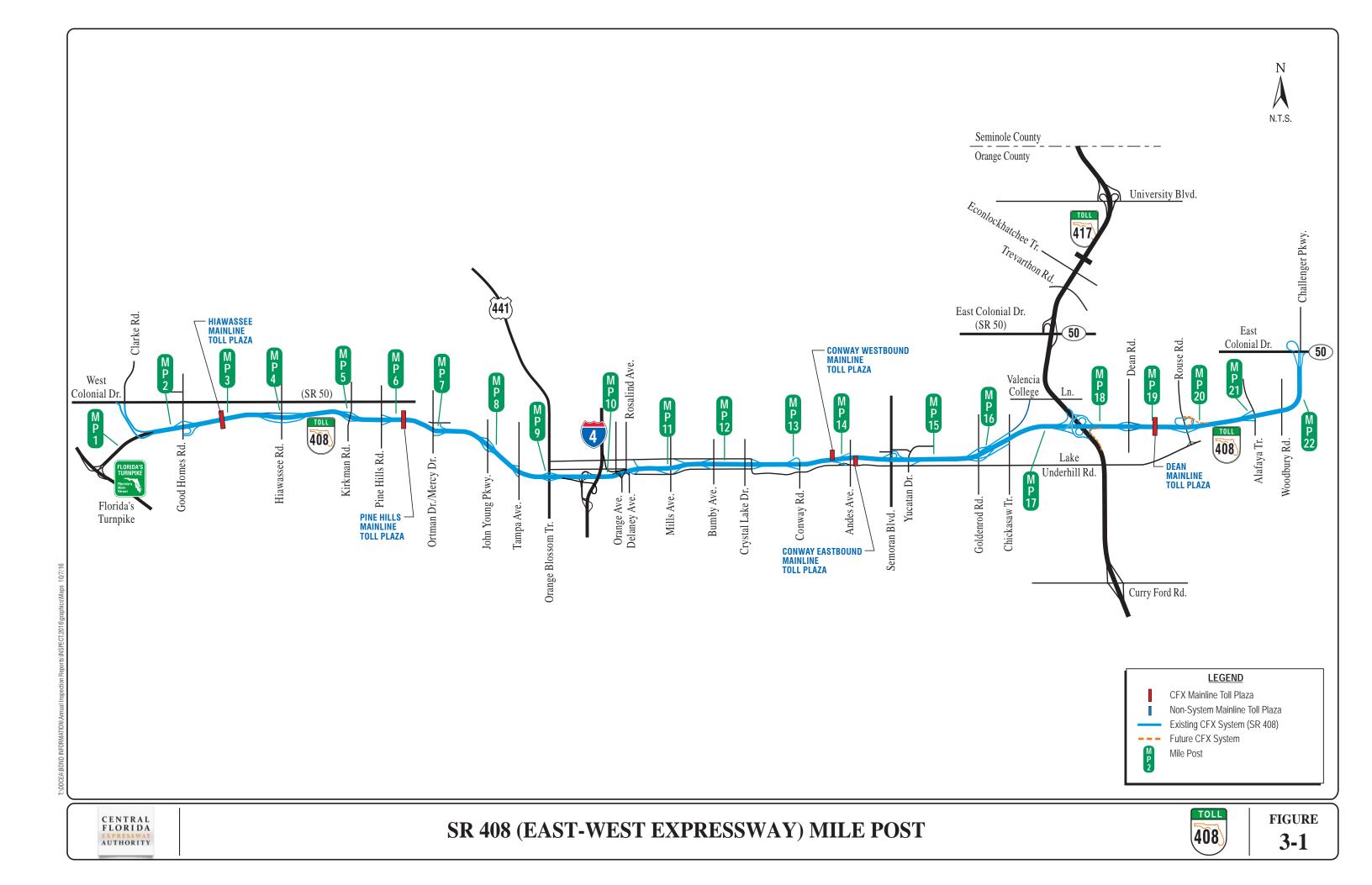
Apopka Expressway), SR 417 (Central Florida GreeneWay), SR 429 (Daniel Webster Western Beltway), SR 451, and SR 528 (Beachline Expressway) is included in the following sections.

Inspection Worksheets for roadways and buildings are included on the compact disk (CD) attached to the back of this report. For security purposes, the latest bridge inspection reports for the bridges along SR 408, SR 414, SR 417, SR 429, SR 451, and SR 528 are not included, but are available for review upon written request to CFX.

### **East-West Expressway**







#### 3.1.1 SR 408 (East - West Expressway)

Table 3-2 summarizes the findings for SR 408. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	7.7	Good	N/A
ays	Roadside	7.8	Good	Soil Shoulder
Roadways	Traffic Services	8.0	Good	N/A
$\mathbb{R}_0$	Drainage	7.9	Good	N/A
	Vegetation / Aesthetics	7.5	Good	N/A
Buildings		7.6	Good	NA
Bridges <sup>(4)</sup>		1 & 2	Good	N/A

#### Table 3-2: SR 408 Summary of Findings

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 408.

#### Roadway

The inspection of the roadway and its appurtenances for SR 408 starts near mile post (MP) 1 (at Florida's Turnpike) and extends east past MP 22, which is the beginning of Challenger Parkway. A map showing SR 408 and its mile posts can be found in Figure 3-1.

It should be noted that at the time the 2016 inspection was performed, the SR 408 / I-4 interchange was under construction by FDOT. This interchange is part of the I-4 Ultimate Project. Also, the SR 408 / SR 417 Interchange was under construction by CFX as part of project 253F Phase I. The following portions of SR 408 that were under construction and not inspected and are shown on the Inspection Worksheets with a rating of 0:

- SR 408 Eastbound and Westbound Mainline from approximately MP 8 to 10
- SR 408 Eastbound and Westbound Mainline from approximately MP 17 to 18

- SR 408 / Orange Avenue Westbound On Ramp
- SR 408 / Tampa Avenue Westbound On Ramp
- SR 408 / US 441 Westbound On and Off Ramps
- Westbound SR 408 to Southbound SR 417 Ramp

Specific deficiencies and locations of all SR 408 roadway features are shown in the Roadway Inspection Worksheets on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features for SR 408 are in generally good condition with no deficiencies noted.

Cracking was the most common feature that received a rating of 4. Class III cracking is occurring mostly along SR 408 (both eastbound and westbound) west of the SR 408 / I-4 Interchange. These sections are identified on the Roadway Inspection Worksheets. All of the locations where pavement cracking was identified were also identified in CFX's Pavement Management System Needs Analysis and have been included in the Five Year Work Plan (FY 17-21) for repair as widening or resurfacing projects. Two specific projects have been scheduled to address problematic areas. Project 408-127 includes the roadway widening and milling and resurfacing of existing lanes on SR 408 between Good Homes Road and Hiawassee Road. This project started construction in November 2016. A milling and resurfacing project on SR 408 from West SR 50 to I-4 has been included in the Work Plan with construction anticipated in FY 2018. If specific locations require attention prior to the programmed projects, they can be addressed with the miscellaneous resurfacing projects, also included in the Work Plan.

Maintenance is also recommended for a few stripping, joint, paved shoulder and pothole features that received a rating of 4.

Out of a total of 1,166 Roadway/Pavement features that were inspected on SR 408, 44 features were rated 4. Maintenance is suggested for those features to protect the features and prevent them from becoming deficient. No Roadway/Pavement features were rated below a 4.

#### Roadside

Roadside features on SR 408 are in good condition with one soil shoulder deficiency identified at one of the Hiawassee ramps where the shoulder exhibits erosion. At the time this report was published, the deficiency had already been repaired. Maintenance is recommended for soil shoulder, fence and front slope features that were rated at 4 in order to protect them.

Out of a total of 538 Roadside features that were inspected on SR 408, 16 received a rating of 4 and one received a rating of 3. No Roadside features received a rating lower than 3.

#### Traffic Services

Traffic Services features on SR 408 are in good condition with no deficiencies identified. Maintenance is recommended for a few information signs and object markers as well as some isolated pavement symbols, striping and guardrail that were rated at 4.

Out of a total of 1,371 Traffic Services features inspected on SR 408, 18 received a rating of 4. No Traffic Services features received a rating lower than 4.

Highway and sign lighting was inspected at night and is in overall good condition. The lights that were out at the time of the inspection are identified on the Night Inspection Worksheets on the CD attached to the back of this report.

#### Drainage

Drainage features on SR 408 are in good condition with no deficiencies identified.

The most common features that were rated as 4 involve storm drains where the shoulder gutter is cracked. Maintenance is also proposed at a few locations for inlets and cross drains.

Maintenance is suggested for 8 out of the 748 inspected Drainage features on SR 408 that were rated as 4. No Drainage features received a rating lower than 4.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features along SR 408 are in generally good condition with no deficiencies identified.

Tree trimming is proposed at various locations throughout SR 408. Litter removal is also suggested at those locations that were rated as 4, and mowing is recommended where vegetation height needs to be controlled.

Out of the total 750 Vegetation/Aesthetics features that were inspected on SR 408, maintenance is proposed for the 24 that received a rating of 4. No Vegetation/Aesthetic features received a rating lower than 4.

#### Buildings

Buildings along SR 408 are generally in good condition with no deficiencies identified.

Facility maintenance is recommended for various features along SR 408, typically for wiring, switchboards and breakers, receptacles, and flooring.



Picture 1 – CFX Headquarters Building

CFX's headquarters building, shown in Picture 1, is located along SR 408 near the Conway Westbound Mainline Toll Plaza. The building is in good condition with no deficiencies identified. No features received a rating lower than 4.

Individual summaries of building conditions along SR 408 are indicated in the Building Inspection Worksheets included on the CD attached to the back of this report.

#### Bridges

Picture 2 shows the bridges of SR 408 over SR 417. The latest bridge inspection reports for the bridges along SR 408 are available for review upon request to CFX. No significant deficiencies were reported. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 408.



Picture 2 – SR 408 Bridges Over SR 417

# John Land Apopka Expressway

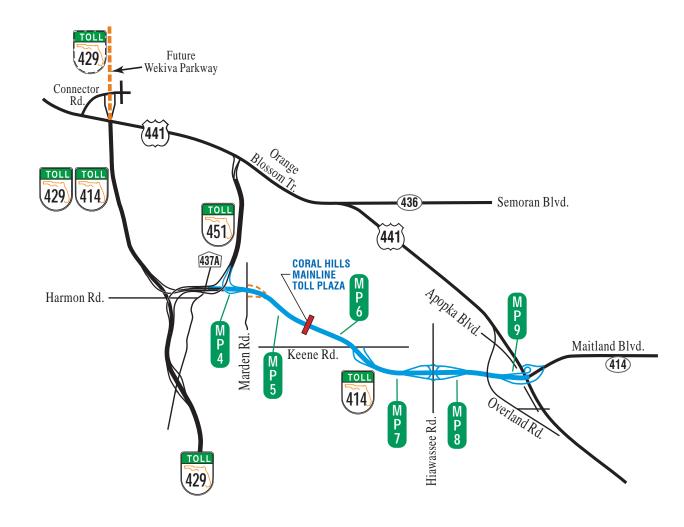






### SR 414 (JOHN LAND APOPKA EXPRESSWAY) MILE POST







#### **LEGEND**



CFX Mainline Toll Plaza Non-System Mainline Toll Plaza Existing CFX System (SR 414) --- Future CFX System Mile Post





#### 3.1.2 SR 414 (John Land Apopka Expressway)

Table 3-3 summarizes the findings for SR 414. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	7.9	Good	N/A
'ays	Roadside	7.9	Good	N/A
Roadways	Traffic Services	8.0	Good	N/A
R0	Drainage	8.0	Good	N/A
	Vegetation / Aesthetics	7.8	Good	N/A
Buildings		8.1	Good	N/A
Bridges <sup>(4)</sup>		1&2	Good	N/A

#### Table 3-3: SR 414 Summary of Findings

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 414.

#### Roadway

The inspection of the roadway and its appurtenances for SR 414 starts near MP 3 at SR 429 and extends east past MP 9. A map showing SR 414 and its mile posts can be found in Figure 3-2.

Specific deficiencies and locations of all roadway features along SR 414 are shown in the Roadway Inspection Worksheets included on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features on SR 414 are in good condition with no deficiencies noted.

Maintenance is recommended at a few isolated locations that received a rating of 4 due to spalled joint edges, cracking, voids in pavement, and erosion in paved shoulder.

Out of the 308 inspected Roadway/Pavement features on SR 414, only 5 received a rating of 4. Maintenance is suggested in order to prevent those features from becoming deficient. No Roadway/Pavement features received a rating lower than 4.

#### Roadside

Roadside features along SR 414 are in good condition. Of the total 138 inspected Roadside features, none were rated deficient, and only one requires maintenance due to front slope erosion. No Roadside features received a rating below a 4.

#### Traffic Services

Traffic Services features for SR 414 (refer to Picture 3) are in good condition, identifying no deficiencies and no needed maintenance.

Out of a total of 359 inspected Traffic Services features none received a rating lower than 5.

Highway and sign lighting was inspected at night and is in good condition with no deficiencies noted. The isolated sign lights that were out at the time of the inspection are identified on the Night Inspection Worksheets on the CD attached to the back of this report.



Picture 3 – SR 414 Overhead Sign

#### Drainage

Drainage features on SR 414 are in good condition with no deficiencies and no maintenance required. Out of a total 200 Drainage features that were inspected, none received a rating lower than 5.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features for SR 414 are in generally good condition with no deficiencies.

Out of the total 213 Vegetation/Aesthetics features that were inspected on SR 414, only one isolated location is in need to mowing. No features received a rating lower than 4.

#### Buildings

Buildings along SR 414 are in good condition with no identified deficiencies. Maintenance is suggested for some isolated wiring, switchboard and breakers, and lighting issues identified at the Coral Hills Mainline Toll Plaza, the Hiawassee Road eastbound on ramp and the Keene Road westbound off ramp. No features were rated below a 4.

Individual summaries of building conditions along SR 414 are indicated in the Building Inspection Worksheets on the CD attached to this report.

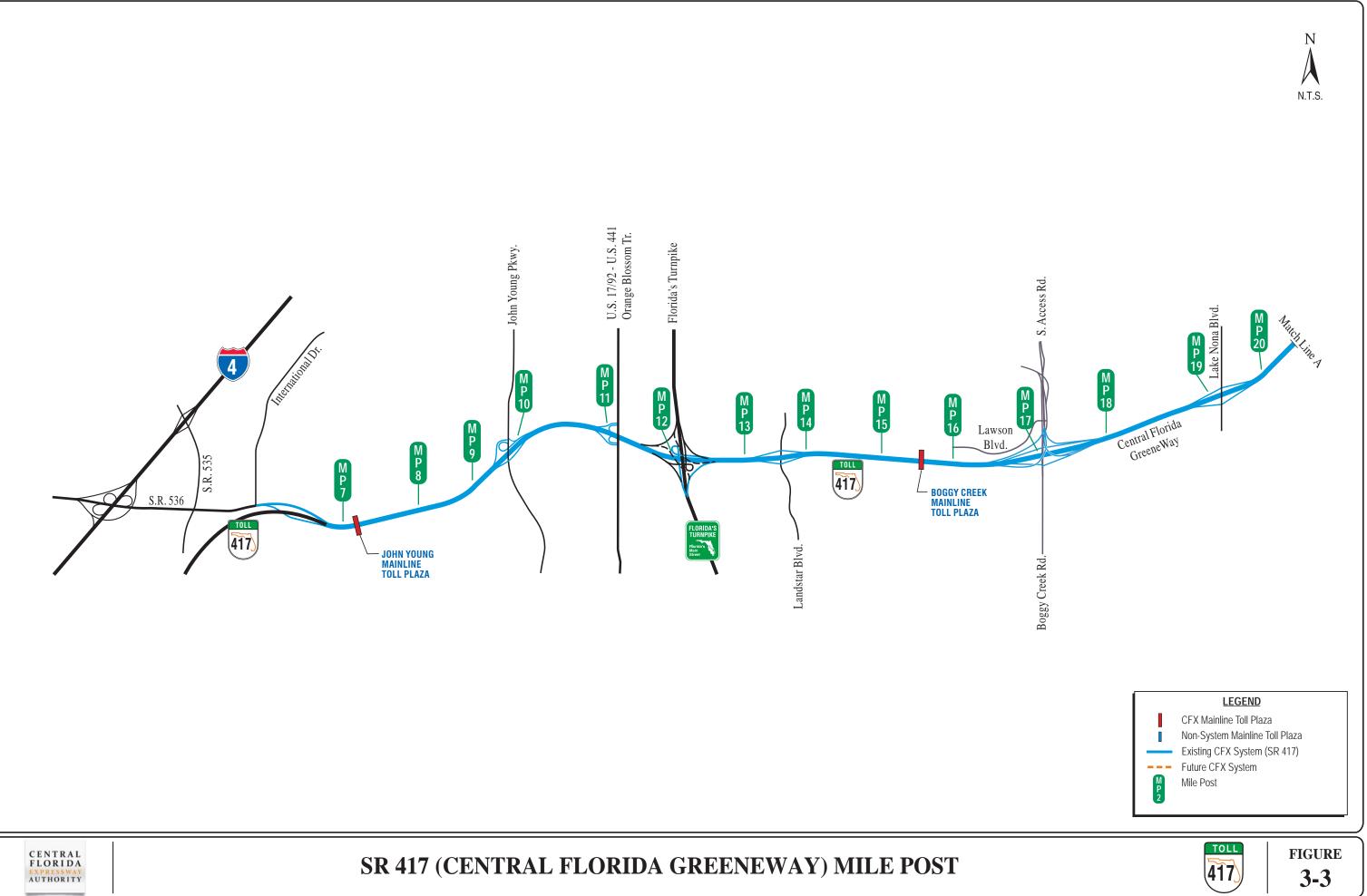
#### Bridges

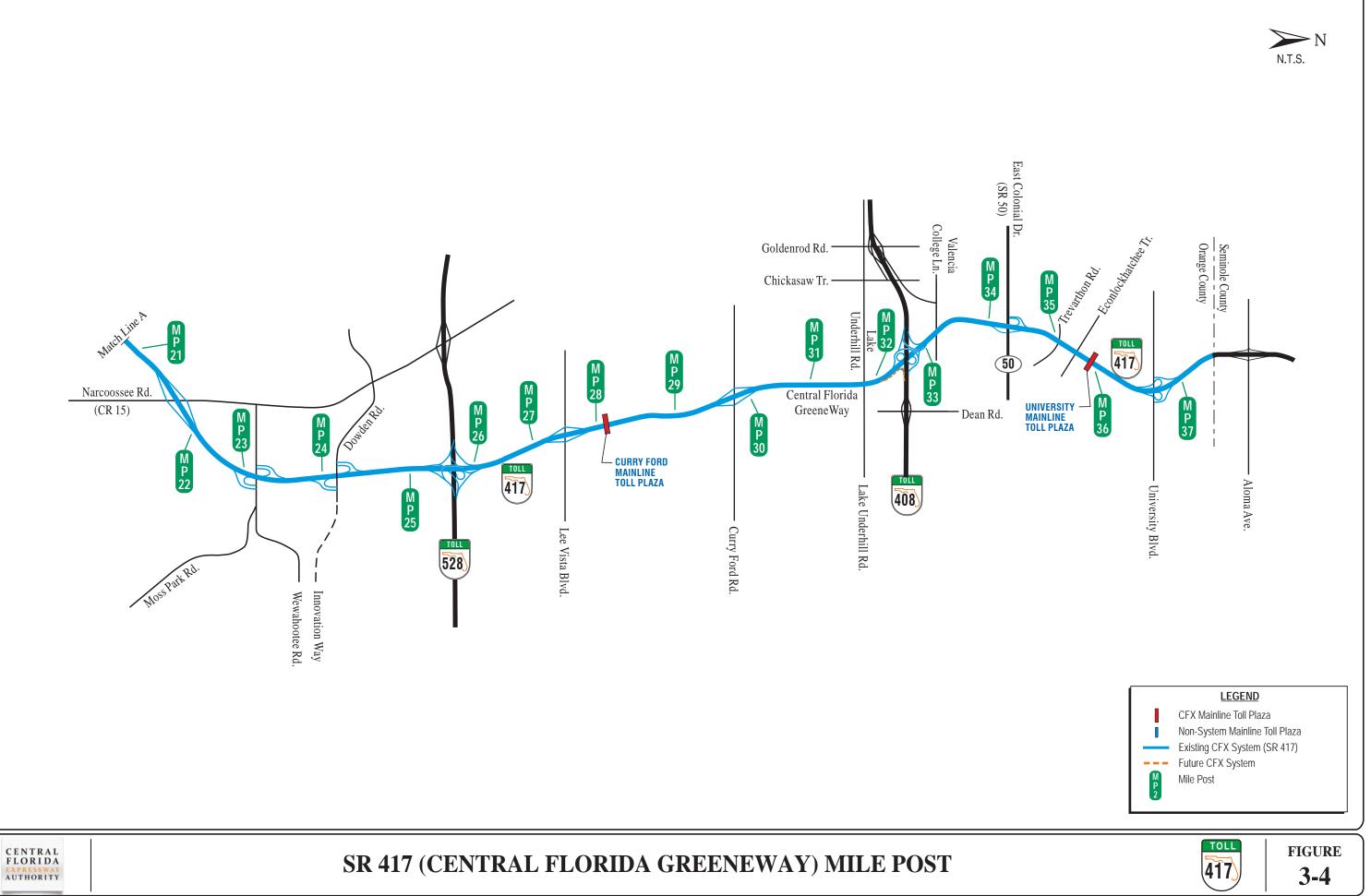
The latest bridge inspection reports for the bridges along SR 414 are available for review upon request to CFX. No significant deficiencies were reported. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 414.

# **Central Florida GreeneWay**









#### 3.1.3 SR 417 (Central Florida GreeneWay)

Table 3-4 summarizes the findings for SR 417. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	8.2	Good	Cracking / Pothole
'ays	Roadside	7.8	Good	Front Slope / Soil Shoulder
Roadways	Traffic Services	8.1	Good	N/A
R0	Drainage	8.0	Good	Miscellaneous Inlet
	Vegetation / Aesthetics	7.9	Good	N/A
Buildings		7.6	Good	N/A
Bri	dges <sup>(4)</sup>	1 & 2	Good	N/A

#### Table 3-4: SR 417 Summary of Findings

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 417.

#### Roadway

The inspection of the roadway and its appurtenances for SR 417 starts around MP 6 and extends north past MP 37 to the Orange/Seminole County Line. Figures 3-3 and 3-4 show SR 417 and its mile posts. At the time the 2016 inspection was performed, the SR 417 Milling and Resurfacing from International Drive to Moss Park project (417-733) and the SR 417 / SR 408 Interchange project (253F Phase I) were under construction. The following portions of SR 417 were not inspected and are shown on the Inspection Worksheets with a rating of 0:

- SR 417 Northbound and Southbound Mainline from MP 6 to 23 and associated ramps
- SR 417 Northbound and Southbound Mainline from MP 31 to 33

Specific deficiencies and locations of all Roadway features along SR 417 are shown in the Roadway Inspection Worksheets included on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features for SR 417 are in good condition with only two deficiencies noted. A rating of 3 was assigned to the following: a pavement pothole near the Curry Ford Road bridge; cracking in the Lee Vista Boulevard bridge approach slab. Both were reported to CFX maintenance staff and have been addressed.

Pavement cracking features were the most commonly rated as 4. Locations where pavement cracking was noted during the inspection were also identified in CFX's Pavement Management System Needs Analysis and have been included in the Five Year Work Plan (FY 17-21) for repair as resurfacing projects. While isolated, most of the Class III cracking was observed on SR 417 between Innovation Way / Dowden Road and the SR 528 Interchange. A project for milling and resurfacing of SR 528 in this area, which also includes SR 417 south to Innovation Way is scheduled for construction in FY 2018. If other specific locations require attention prior to the programmed projects, they can be addressed with the miscellaneous resurfacing projects, also included in the Work Plan.

Maintenance is also suggested at various locations along SR 417 for features that were rated as 4 related mostly to paved shoulder, shoving, stripping, edge ravel, pavement void and pothole.

Out of the 899 inspected Roadway/Pavement features on SR 417, 19 received a rating of 4 and two received a rating of 3. Maintenance is recommended for all items rated 4 in order to prevent them from becoming deficient. No Roadway/Pavement features received a rating lower than 3.

#### <u>Roadside</u>

Roadside features along SR 417 are generally in good condition. Two deficiencies related to erosion were rated as 1. Both deficiencies were reported as a critical item at the time they were identified, and have already been addressed.

Features that received a rating of 4 were related to front slopes, soil shoulders, and fences. Maintenance is suggested to prevent the features from becoming deficient.

Out of the 431 inspected Roadside features on SR 417, 19 received a rating of 4, and two received a rating of 1.

#### Traffic Services

Traffic Services features on SR 417 are in good condition with no deficiencies noted.

19 of the 1,065 inspected Traffic Services features on SR 417 received a rating of 4. Various information sign, guardrail, object marker, barrier wall, highway lighting, pavement symbol and warning sign features throughout the corridor were all listed as needing maintenance. It is advised that these concerns be corrected to protect the features and prevent them from becoming deficient.

No Traffic Services features received a rating lower than 4.

Highway and sign lighting was inspected at night and is in good condition. The lights that were out at the time of the inspection are identified on the Night Inspection Worksheets on the CD attached to the back of this report.

#### Drainage

Drainage features on SR 417 are in good condition with one deficiency related to a collapsed inlet at the University mainline plaza. This deficiency was reported as part of a critical item and has already been addressed.

A couple isolated storm drain, cross drain and roadside ditch features were rated as 4. Maintenance is suggested to inhibit them from becoming deficient.

Out of the 577 Drainage features that were inspected on SR 417, only 5 received a rating of 4 and one received a rating of 1.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features along SR 417 are in good condition with no deficiencies reported.

Maintenance is recommended for the following features which received ratings of 4: tree trimming, slope mowing and turf condition.

Of the total 603 inspected Vegetation/Aesthetics features on SR 417, 8 received a rating of 4. Maintenance should be performed in order to protect these features. No features on SR 417 received a rating lower than 4.

#### Buildings

Buildings along SR 417 are in overall good condition with a few areas in need of some attention.

Maintenance is recommended at various locations that had features rated at 4. The most common features rated as 4 were related to air conditioners, wiring, panelboards, and receptacles.

Individual summaries of building conditions along SR 417 are indicated in the Building Inspection Worksheets on the CD included attached to the back of this report.

#### Bridges

Picture 4 shows the recently constructed bridges at the SR 417 / Boggy Creek Road interchange. The latest bridge inspection reports for the bridges along SR 417 are available for review upon request to CFX. No significant deficiencies were reported. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 417.

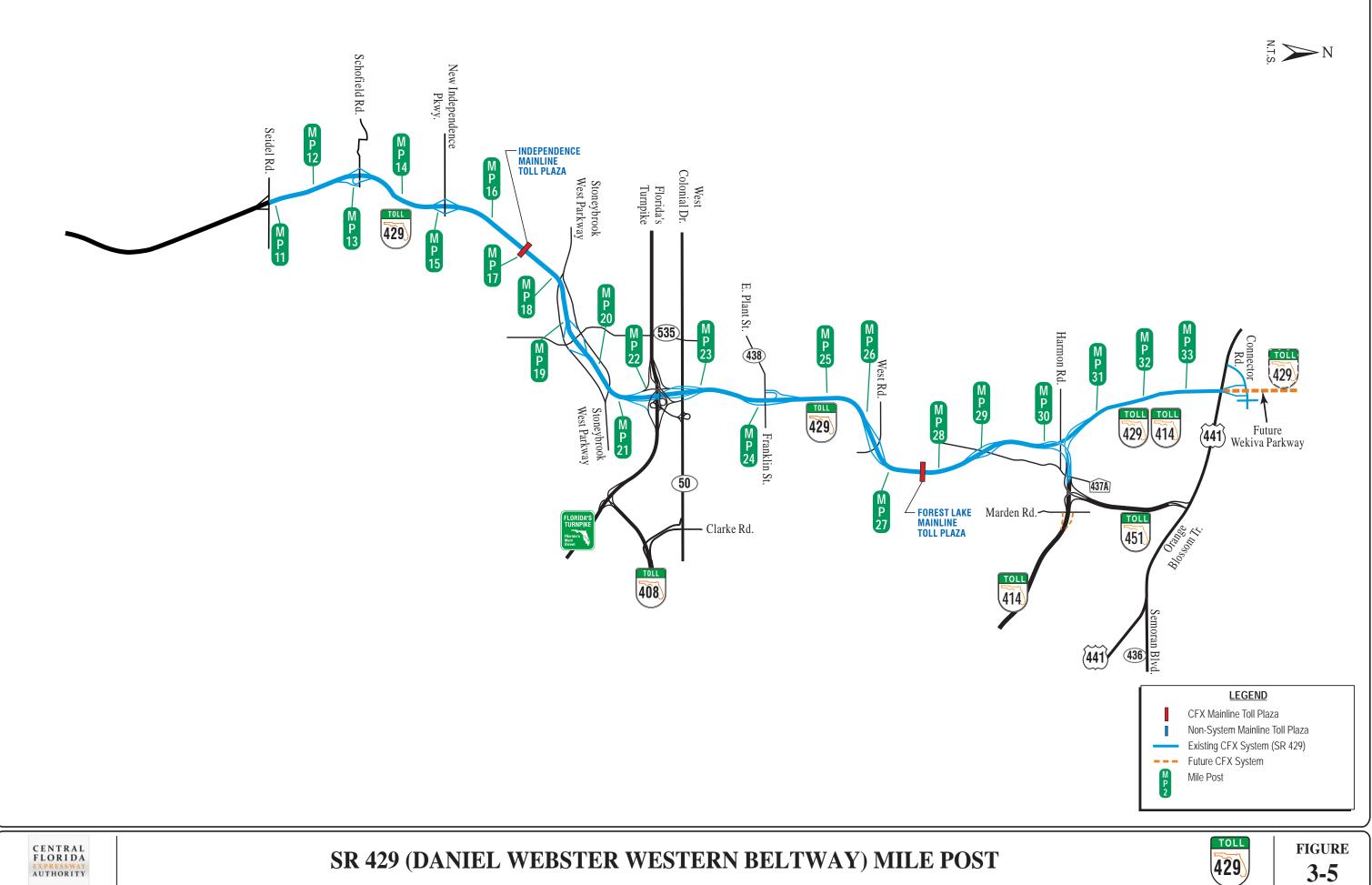


Picture 4 – SR 417 / Boggy Creek Interchange

### **Daniel Webster Western Beltway**







AUTHORITY

SR 429 (DANIEL WEBSTER WESTERN BELTWAY) MILE POST

#### 3.1.4 SR 429 (Daniel Webster Western Beltway)

Table 3-5 summarizes the findings for SR 429. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	7.8	Good	N/A
'ays	Roadside	7.7	Good	N/A
Roadways	Traffic Services	8.0	Good	N/A
$\mathbb{R}_0$	Drainage	7.9	Good	N/A
	Vegetation / Aesthetics	7.8	Good	N/A
Buildings		7.7	Good	NA
Bridges <sup>(4)</sup>		1 & 2	Good	N/A

Table 3-5: SR 429 Summary of Findings

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 429.

#### Roadway

The inspection of the roadway and its appurtenances for SR 429 starts at Seidel Road (near MP 11) and extends north past SR 414 and up to US 441 near Plymouth Sorrento Road (past MP 33). The north portion of SR 429, from SR 414 to US 441 was opened to traffic in January 2013, and is known as SR 429/414. A map showing SR 429, the SR 429/414 extension and its mile posts can be found in Figure 3-5.

Specific deficiencies and locations of all roadway features along SR 429 are shown in the Roadway Inspection Worksheets included on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features on SR 429 are in good condition with no deficiencies noted.

Maintenance is suggested at the locations that received ratings of 4 mostly for pavement cracking, along with some isolated joint, paved shoulder, shoving and stripping features in order to prevent these features from becoming deficient.

Most of the Class III cracking was observed on SR 429 between New Independence Parkway and CR 535. Locations where pavement cracking was noted during the inspection were also identified in CFX's Pavement Management System Needs Analysis and have been included in the Five Year Work Plan (FY 17-21) for repair as resurfacing projects. The SR 429 Milling and Resurfacing from Seidel Road to CR 535 project (429-739) is currently under construction and will address most of the identified areas. If other specific locations require attention prior to the programmed projects, they can be addressed with the miscellaneous resurfacing projects, also included in the Work Plan.

32 out of the total 873 inspected Roadway/ Pavement features on SR 429 received a rating of 4. No Roadway/Pavement features on SR 429 received a rating lower than 4.

#### Roadside

Roadside features along SR 429 are in generally good condition. There were no deficiencies identified.

Maintenance is proposed at some locations that exhibit soil shoulder and front slope erosion along with a few isolated fence and slope protection features.

Out of a total of 406 inspected Roadside features on SR 429, 16 received a rating of 4. These features should be considered for maintenance in order to prevent them from becoming deficient. No Roadside features on SR 429 received a rating lower than 4.

#### Traffic Services

Traffic service features on SR 429 are in good condition with no deficiencies.

24 of the total 997 inspected Traffic Services features on SR 429 received a rating of 4 and were mostly related to object markers and information signs. It is suggested that maintenance is performed in order to prevent the features from becoming deficient. No Traffic Services features on SR 429 received a rating lower than 4.

The Night Inspection Worksheets on the CD attached to the back of this report include the locations of the lights that were out at the time of the inspection.

#### Drainage

Drainage features on SR 429 are in good condition with no identified deficiencies.

Only 3 of the 518 inspected drainage features on SR 429 were rated at 4 and were related to storm drains and inlets. Maintenance is recommended to protect those features and prevent them from becoming deficient. No Drainage features on SR 429 received a rating lower than 4.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features for SR 429 are in good condition, with no deficiencies.

Out of the total 585 inspected Vegetation/Aesthetic features on SR 429, mowing is suggested at the 13 isolated locations that received a rating of 4. No Vegetation/Aesthetics features received a rating lower than 4.

#### Buildings

Buildings along SR 429 are in good condition with no deficiencies identified.

Maintenance is recommended throughout the facilities along SR 429, with the most common maintenance issues being related to emergency lighting not working properly.

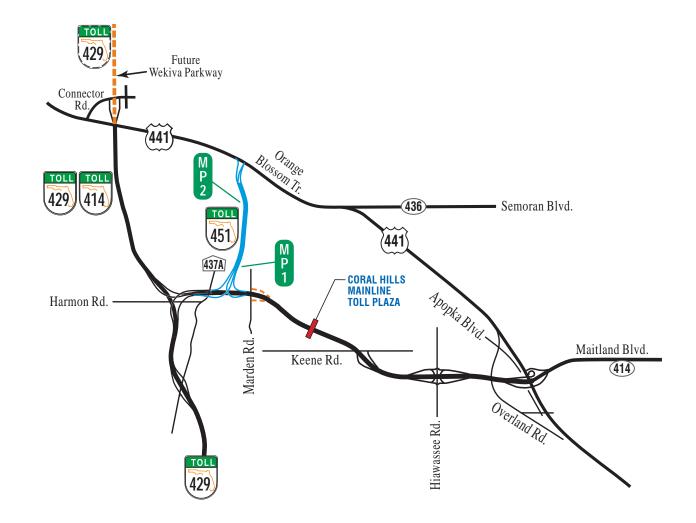
Individual summaries of building conditions along SR 429 are indicated in the Building Inspection Worksheets on the CD attached to this document.

#### Bridges

The latest bridge inspection reports for the bridges along SR 429 are available for review upon request to CFX. No significant deficiencies were reported. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 429.









### SR 451 MILE POST



#### LEGEND



CFX Mainline Toll Plaza Non-System Mainline Toll Plaza Existing CFX System (SR 451) --- Future CFX System Mile Post





#### 3.1.5 SR 451

Table 3-6 summarizes the findings for SR 451. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	8.0	Good	N/A
'ays	Roadside	8.0	Good	N/A
Roadways	Traffic Services	8.3	Good	N/A
R0	Drainage	8.1	Good	N/A
	Vegetation / Aesthetics	7.9	Good	N/A
Buildings		N	lo buildings are ass	sociated with SR 451
Bridges <sup>(4)</sup>		1 & 2	Good	N/A

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 451.

#### Roadway

The inspection of the roadway and its appurtenances for SR 451 starts at SR 414 and extends north to US 441. With the opening of the SR 429/414 expressway in January 2013, this northern portion of the existing SR 429 was re-designated as SR 451. A map showing SR 451 and its mile posts can be found in Figure 3-6.

Specific deficiencies and locations of all roadway features along SR 451 are shown in the Roadway Inspection Worksheets included on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features on SR 451 are in good condition with no deficiencies. No maintenance requirements were identified.

Of the 89 Roadway/Pavement features identified on SR 451, no items were rated below 8.

#### Roadside

Roadside features along SR 451 are in good condition with no noted deficiencies and no maintenance requirements identified.

There were 38 Roadside features that were evaluated on SR 451 and none were rated lower than 8.

#### Traffic Services

Traffic Services features on SR 451 are in good condition with no deficiencies noted. No Traffic Services features on SR 451 received a rating lower than 8.

Highway and sign lighting was inspected at night and is also in good condition with no deficiencies identified. A few lights were out at the time of the inspection and are identified on the Night Inspection Worksheets on the CD attached to the back of this report.

#### <u>Drainage</u>

Drainage features along SR 451 are in good condition with no identified deficiencies.

None of the 52 Drainage features on SR 451 that were inspected received a rating lower than 8.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features on SR 451 are in good condition with no noted deficiencies.

There were 59 Vegetation/Aesthetics features examined with no items receiving a rating lower than 5.

#### Buildings

There are no buildings associated with SR 451.

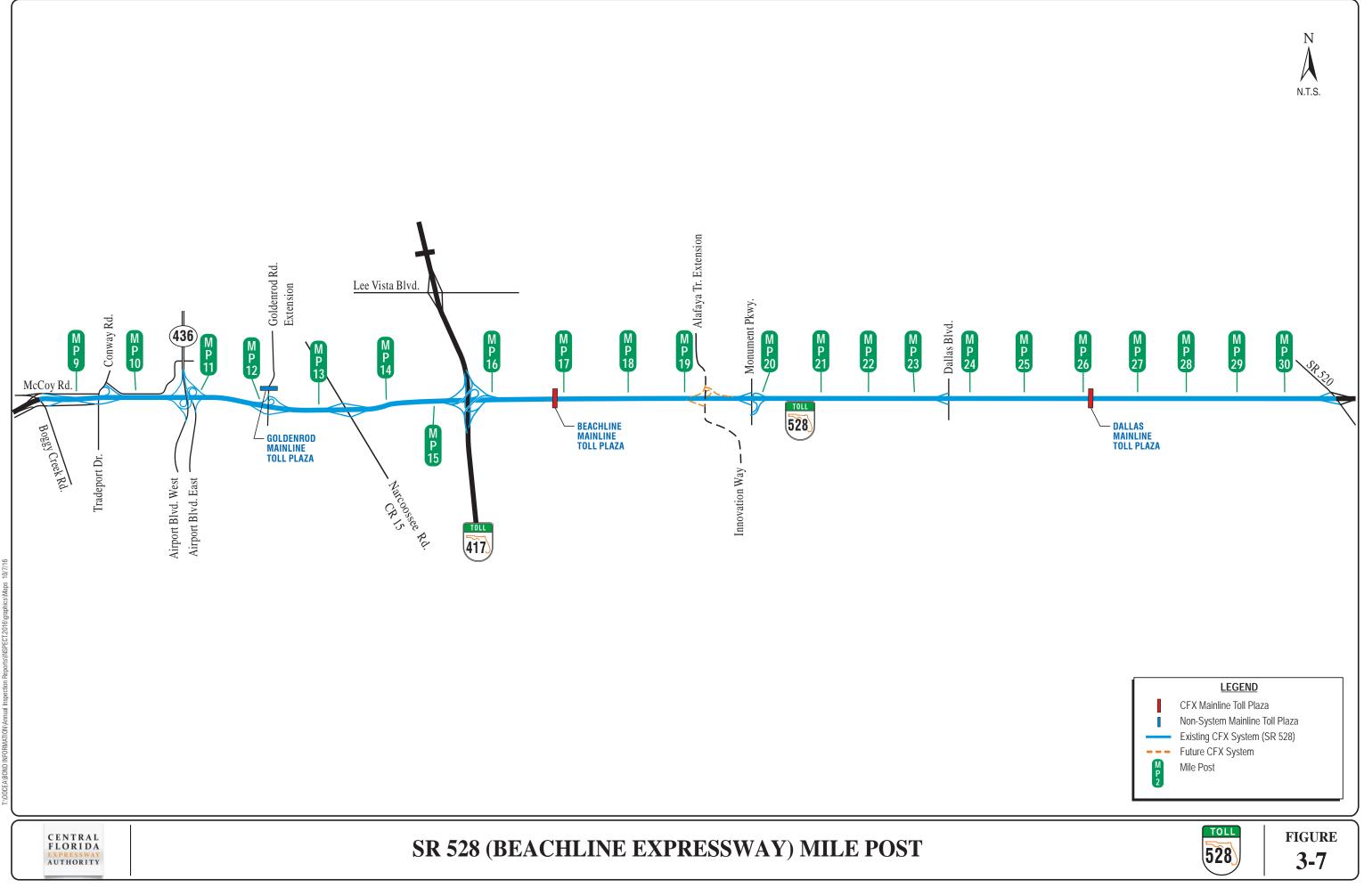
#### Bridges

The latest bridge inspection reports for the bridges along SR 451 are available for review upon request to CFX. No significant deficiencies were reported. No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 451.

### **Beachline Expressway**







#### 3.1.6 SR 528 (Beachline Expressway)

Table 3-7 summarizes the findings for SR 528. Roadway, Buildings and Bridges are further discussed in the following paragraphs.

	Feature	Rating <sup>(1)</sup>	Description <sup>(2)</sup>	Most Common Deficient Features <sup>(3)</sup>
	Roadway / Pavement	8.0	Good	N/A
'ays	Roadside	7.9	Good	N/A
Roadways	Traffic Services	8.1	Good	N/A
$\mathbb{R}_0$	Drainage	7.8	Good	N/A
	Vegetation / Aesthetics	7.8	Good	N/A
Buildings		8.4	Good	Wiring
Bridges <sup>(4)</sup>		1, 2 & 3	Good	4 bridges identified

#### Table 3-7: SR 528 Summary of Findings

Notes:

- 1. The rating is the average rating of all inspected features for each category.
- 2. The description is based on the average rating rounded to the nearest whole value.
- 3. For Roadways and Buildings, features that are considered deficient are those rated 3 or below.
- 4. As reported for the Florida Transportation Commission (FTC) performance measures, 98.7% of the bridges on CFX's System are rated excellent (1) or good (2). Work order recommendations were issued for 4 bridges along SR 528. No load or weight restrictions have been imposed that would constrain the use of any bridge on SR 528.

#### Roadway

The inspection of the roadway and its appurtenances for SR 528 starts before MP 9 (near McCoy Road / Boggy Creek Road) and extends east to SR 520. A map showing SR 528 and its mile posts can be found in Figure 3-7.

At the time the 2016 inspection was performed, the SR 528 / Innovation Way Interchange project (528-313) was in the early stages of construction, and the following portions of SR 528 were not inspected:

• SR 528 Westbound Mainline from MP 18.5 to 19

Those portions under construction are shown on the Inspection Worksheets with a rating of 0.

For SR 528, specific deficiencies and locations of all roadway features are shown in the Roadway Inspection Worksheets included on the CD attached to the back of this report.

#### Roadway/Pavement

Roadway/Pavement features on SR 528 are in good condition with no deficiencies noted.

Ratings of 4 were most commonly assigned to pavement cracking. If these isolated locations require attention prior to the programmed projects in the Five Year Work Plan (FY 17-21), they can be addressed with the miscellaneous resurfacing projects, also included in the Work Plan.

Maintenance is recommended for the 24 out of a total of 821 Roadway/Pavement features inspected on SR 528 that received a rating of 4 in order to prevent them from becoming deficient. No Roadway/Pavement features received a rating lower than 4.

#### Roadside

Roadside features along SR 528 are in good condition with no deficiencies to report.

Maintenance is advised for the few soil shoulder and front slope features that received a rating of 4, as it will prevent the features from becoming deficient.

For SR 528, 6 of the total 379 inspected Roadside features received a rating of 4. No Roadside features received a rating lower than 4.

#### Traffic Services

Traffic Service features on SR 528 are in good condition with no identified deficiencies. Maintenance is proposed for object markers and some isolated striping and information signs that were rated as 4.

11 out of the total 954 inspected Traffic Services features on SR 528 received a rating of 4, and maintenance is suggested to protect the features. No Traffic Services features on SR 528 were rated lower than 4.

Maintenance is also recommended for a pull box cover at a highway light on westbound SR 528. Highway and sign lighting was inspected at night as is in good condition. The lights that were out at the time of the inspection are identified on the Night Inspection Worksheets on the CD attached to the back of this report.

#### Drainage

Drainage features along SR 528 are in good condition with no noted deficiencies. The features that were most commonly rated as 4 were related to roadside ditches where vegetation is overgrown. Maintenance is recommended to protect the features.

Out of a total of 496 inspected Drainage features on SR 528, 9 received a rating of 4. No Drainage features received a rating lower than 4.

#### Vegetation/Aesthetics

Vegetation/Aesthetics features for SR 528 are in good condition with no documented deficiencies.

Roadway mowing is suggested in some areas to control vegetation height at a few isolated locations.

For SR 528, maintenance is advised for the 3 out of a total of 543 inspected Vegetation/Aesthetics features that were rated at 4. No Vegetation/Aesthetics features received a rating lower than 4.

#### Buildings

Buildings along SR 528 are generally in good condition. Three critical deficiencies with a rating of 1 were reported at the Beachline Mainline Toll Plaza related to unprotected wiring and a generator that is not working properly. These were reported at the time of the inspection. The wiring has been addressed and the generators are a work in progress. Another deficiency was identified at the Dallas Mainline Toll Plaza where a ceiling is leaking.

The most common rating of 4 on the building / facilities along SR 528 were related to receptacles. Maintenance is recommended to protect the features.

Individual summaries of building conditions along SR 528 are indicated in the Building Inspection Worksheets on the CD included attached to this document.

#### Bridges

The latest bridge inspection reports for the bridges along SR 528 are available for review upon request to CFX.

The latest bridge inspection reports identified deficiencies and included work order recommendations for the following bridges:

- Bridge # 750057, SR 528 westbound over Econlockhatchee River
- Bridge # 750212, SR 528 eastbound over Econlockhatchee River
- Bridge # 750315, SR 436 southbound over Ramp M on SR 528
- Bridge # 750316, SR 436 southbound over SR 528

The SR 528/SR 436 Bridge Deck Replacement project (528-130) is included in the current Five Year Work Plan (FY 17-21) and addresses reported deficiencies at SR 436. The project is currently at 60% design. The SR 528/Econlockhatchee Bridge Replacement project (528-131) is currently under construction and addresses the other two bridges at that location.

No load limits or weight restrictions have been imposed that would constrain the use of any bridge on SR 528.

### 3.2 Critical Items Summary

Items that received a rating of 1 during the inspection are considered in need of emergency repair, and require immediate maintenance to protect the public or the system. Critical items rated at 1 were immediately reported to CFX's maintenance staff, where the item was routed appropriately and resolved. In addition, some of the features that were rated 2 and 3 were also reported in order to expedite a resolution. The following sheets contain the identified critical features, location, condition, and the resolution by CFX's maintenance staff.

**Critical Item Alerts** 

### Soil Shoulder

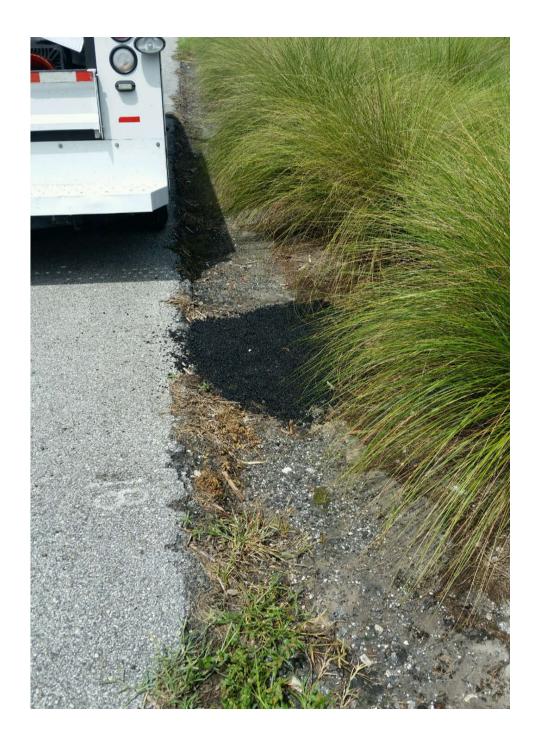
Roadway:SR 408Item Location:Hiawassee Rd Off Ramp -<br/>.139Atkins Contact:MaldonadoDate Reported:08/02/2015Inspector:FranklinDescription:Soil shoulder exhibits 18"- 24" erosion adjacent paved shoulder.



Photo 1 & 2 – Soil Shoulder erosion 18"-24 adjacent paved shoulder



Photo 3 - Soil Shoulder erosion 18"-24 adjacent paved shoulder



SR 408 Hiawassee Off Ramp Repair

### Soil Shoulder - Conc Flume - Front Slope

Roadway:	SR 417 SB		
Item Location:	University Pay Toll Ramp - .221	Atkins Contact:	Maldonado
Date Reported:	08/16/2016	Inspector:	Franklin

Description: 36" deep erosion of soil shoulder and front slope. Conc. flume has collapsed and broken apart. Shoulder gutter and paved shoulder has been undermined..



Photo 1 & 2 –36" deep erosion of Soil Shoulder and Front Slope. Conc. Flume collapsed and broken apart



Photo 3 & 4 –36" deep erosion.

Conc. Flume collapsed and broken apart. Shoulder gutter and paved shoulder has been undermined.



### **Approach Slab**

Roadway:SR 417 SBItem Location:MP 27.562Date Reported:08/02/2016

Atkins Contact: Maldonado Inspector: Franklin

Description: 1/16 - 1/8 cracks in south approach slab (Lee Vista bridge no. 750375). Crack cells have formed.



Photo 1 - 1/16 - 1/8 cracks in south approach slab (Lee Vista bridge no. 750375).

Crack cells have formed. Slab is depressed 1" adjacent middle lane.

Product Data Sheet Edition 10.2.2014 Sikadur<sup>®</sup> Crack Fix

# Sikadur<sup>®</sup> Crack Fix

Low-viscosity, high-strength epoxy sealing system

Description	Sikadur <sup>®</sup> Crack Fix is a 2-component, 100% solids, moisture-tolerant, low-viscosity, high-strength, multi-purpose, epoxy resin adhesive. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.				
Where to Use	<ul> <li>Gravity-feed of cracks in horizontal concrete and masonry.</li> <li>Low pressure injection of cracks in structural concrete, masonry, wood, etc.</li> <li>Grouting bolts, dowels, pins, etc. into horizontal concrete surfaces.</li> </ul>				
Advantages	<ul> <li>Formulation identical to popular, high strength adhesive Sikadur<sup>®</sup> 35, Hi-Mod LV.</li> <li>Five times stronger than concrete.</li> <li>Convenient easy to use, single tube cartridge - fits standard caulk guns.</li> <li>Deep, penetrating and tenacious bonding of cracks in structural concrete.</li> <li>No mess - self-mixing.</li> </ul>				
Coverage	1 cartridge yields approximately 10.7-11.0 cu. in. (175-180 ml) of usable epoxy resin.				
Packaging	Carton contains 12 single caulk tube-style cartridges; each cartridge packaged with 2 static mixers and 2 flow restrictors.				
	RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT,         TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.         Shelf Life       2 years in original, unopened containers.         Storage Condition       Store dry at 40°-95°F (4°-35°C). Condition material to 60°-75°F (15°-24°C) before using.         Color       Clear, amber.         Mixing Ratio       Component A : Component B = 2:1 by volume.         Viscosity (Mixed)       Approximately 375 cps.         Pot Life       Approximately 25 minutes. (60 gram mass)         Tack Free Time       40°F (4°C)*       73°F (23°C)*         (3-5 mils)       14-16 hrs.       3-3.5 hrs.       1.5-2 hrs.         Tensile Properties (ASTM D-638)       7,000 psi (48.3 MPa) Elongation at Break       6.9%         Flexural Properties (ASTM D-790)       11,000 psi (75.9 MPa) Tangent Modulus of Elasticity in Bending       3.1 x 10° psi (2,139 MPa)         14 day       Flexural Strength       4,800 psi (33.1 MPa)         Heat Deflection Temperature (ASTM D-648)       7 day       [fiber stress loading = 264 psi (1.8 MPa)]       121°F (49°C)         Bond Strength       (ASTM C-882): Hardened concrete to hardened concrete       2 day       (moist cure)       Bond Strength       1,300 psi (9.0 MPa)         14 day       (moist cure)       Bond St				
	Compressive Properties (ASTM D-695)				
	Compressive Strength, psi (MPa)         40°F (4°C)*         73°F (23°C)*         90°F (32°C)*           4 hour         -         -         -           8 hour         -         180 (1.2)         3,200 (22.1)				



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT HTTP://USA.SIKA.COM/ OR BY CALLING SIKA'S TECHNICAL SERVICE DE-PARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CUR-RENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

	16 hour 1 day 3 day 7 day 14 day 28 day Compressive Modulus 7 day 7 day		4,500 (31.1) 6,000 (41.4) 9,000 (62.1) 11,000 (75.9) 12,000 (82.8) 13,000 (89.7) ⁵ psi (2,000 MPa)	6,300 (43.5) 9,100 (62.8) 10,500 (72.5) 10,500 (72.5) 10,500 (72.5) 10,500 (72.5)			
How to Use							
Surface Preparation	Surface must be clean, dry and sound. Remove dust from crack by brushing or by blowing clean with oil free compressed air.						
Mixing	Cartridge Set-Up: Remove twist-cap and port plug from top of cartridge. Press one of enclosed "flow restrictors" into opening. Insert one of the enclosed static mixers through twist-cap and attach to threading. Insert Sikadur® Crack Fix cartridge into good quality caulking gun. Point upward during initial squeeze of gun's trigger to purge any entrapped air. As mixed resin approaches end of mixer, discard rest of initial squeeze and portion of next squeeze to ensure uniform blend of adhesive components.						
Application	To gravity feed cracks - Blow vee-notched crack clean with oil-free compressed air. Dispense Sikadur <sup>®</sup> Crack Fix slowly into vee-notched crack. Continue placement until completely filled. Seal underside of slab prior to filling if cracks reflect through.						
	<b>To inject cracks</b> - Set appropriate injection ports. Seal ports and surface of crack with Sikadur <sup>®</sup> 31, Hi-Mod Gel or Sikadur <sup>®</sup> 33. When the epoxy adhesive seal has cured, inject Sikadur <sup>®</sup> Crack Fix with slow steady pressure. Consult Technical Service for additional information.						
Limitations	<ul> <li>Minimum substrate and aml</li> <li>Minimum age of concrete m</li> <li>Do not apply over wet, gliste</li> <li>Not for injection of cracks su</li> <li>Do not inject cracks greater</li> <li>Not an aesthetic product. C</li> </ul>	ust be 21-28 day ening surface. ubjected to osmot than ¼ in. (6 mm	s, depending on curin ic or hydrostatic press ) Consult Technical S	g and drying conditions. ure during application. ervice at 1-800-933-SIKA.	5°F (35°C).		

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT HTTP://USA.SIKA.COM/ OR BY CALLING SIKA'S TECHNICAL SERVICE DE-PARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CUR-RENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

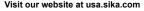
Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at http://usa.sika.com/ or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. SALE OF SIKA PRODUCTS ARE SUBJECT SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT HTTP://USA.SIKA.COM/ OR BY CALLING 201-933-8800.

Fracc. Industrial Balvanera Corregidora, Queretaro

Phone: 52 442 2385800 Fax: 52 442 2250537

C.P. 76920



Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225 Sika Canada Inc. 601 Delmar Avenue Pointe Claire Quebec H9R 4A9 Phone: 514-697-2610 Fax: 514-694-2792 1-800-933-SIKA NATIONWIDE

 
 Sika Corporation 201 Polito Avenue
 Sika Canada Inc. 601 Delmar Avenue
 Sika Mexicana S.A. de C.V. Carretera Libre Celaya Km. 8.5
 Sisting





Sika and Sikadur are registered trademarks. Printed in Canada.

# Pothole

Roadway:SR 417 SBItem Location:MP 29.879Atkins Contact:MaldonadoDate Reported:08/02/2016Inspector:Franklin

Description: 60" x 6" x 6" Asphalt void in wheel path of right lane. Up to 6" of bridge deck exposed.



Photo 1 – 2 Pothole / Asphalt void adjacent south approach Curry Ford Bridge.



Photo 3 – Pothole / Asphalt void adjacent south approach Curry Ford Bridge





SR 417 SB MP 29.879 Pothole Repair

### **Electrical – Standby Generator**

Roadway: Item Location: Date Reported:

SR 528 Beachline Beachline Mainline MP 17 10/17/2016

Atkins Contact: Maldonado Inspector: Franklin

Description: Standby generator is not operational. Unit has damaged fan and broken fan belt. 2 portable generators are being utilized. Wires are laying on the ground unprotected and no electrical disconnect in place. Hazardous condition exist. (See photos below)



Photo 1 & 2 –Electrical wires laying on the ground unprotected.



Photo 3 & 4 – Damaged fan and broken belt.

Solution / Repairs: At the time of this report, the wires have been addressed. The generators are a work in progress.

# **Information about CD**

The attached CD contains the following:

- a. 2016 Annual Inspection Report.pdf (electronic copy of this report)
- b. 2016 Roadway Inspection Worksheets
  - Roadway Inspection Reports are listed by SR, then by Eastbound/Westbound and Northbound/Southbound directions, and by Ramps
  - Ramps are further organized by alphabetical order
  - Night Inspection Worksheets are included here showing the condition of highway and sign lighting
- c. 2016 Building\_Facilities Inspection Worksheets
  - Building\_Facilities Inspection Reports are listed by Roadway, then alphabetically by Plaza Name
  - Ramp Plazas are further broken down as follows:
    - a. Apron
    - b. Canopy
    - c. Combination Building
    - d. Island
  - Mainline Plazas are further broken down as follows:
    - a. Administration Building (further broken down into rooms/areas)
    - b. Apron
    - c. Canopy
    - d. Islands (include Booths)
- d. Photos
  - Photos are divided into folders that are listed by Roadway and Plaza Name
  - Photos are then named by location (i.e. Canopy, Apron, Combo Bldg)
  - Extra photos for each location have been placed in a "Misc" folder



GENERAL CONSULTANT 482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.atkinsglobal.com/northamerica



4974 ORL Tower Road Orlando, FL 32807 (407) 690-5000 www.CFXway.com