

# 2019 Annual Inspection Report

Volume I





Dewberry Engineers Inc. 800 N. Magnolia Ave, Suite 1000 Orlando, FL 32803 407.843.5120 407.649.8664 fax www.dewberry.com

January 28, 2020

Mr. Glenn Pressimone, P.E. Chief of Infrastructure Central Florida Expressway Authority 4974 ORL Tower Road Orlando, Florida 32807

Re: 2019 Annual Inspection Report

Dear Mr. Pressimone:

In accordance with the requirements of Article V, Section 5.12 (C), of the Amended and Restated Master Bond Resolution, Dewberry is pleased to submit two (2) copies of the 2019 Annual Inspection Report. This report summarizes our observations based on a visual examination of the facilities that constitute the Central Florida Expressway Authority (CFX) system.

At the time the 2019 inspection was performed, portions of the CFX System were under construction and not inspected. Those portions are identified in the report.

Dewberry conducted the System inspection from July – December 2019 and reports that the CFX system has been maintained in good repair, working order and condition. This observation was based on a general visual inspection of the roadway, walls, bridges, and facilities. Results of the inspections are presented in greater detail within this report.

Staff anticipates continuing improvements in all roadway features for these roadways in the coming year as a result of the routine maintenance program and special projects. The observations that were noted can be evaluated and appropriate action taken by the CFX Maintenance Department.

The latest bridge inspection reports have been transmitted from the Florida Department of Transportation (FDOT) to the CFX. No load limits or weight restrictions have been imposed by FDOT that would prevent any bridge on the CFX system from being used. Currently 99.4% of CFX bridge structures have a condition rating of Good or higher.

Further, 92% of all CFX lane miles have a Pavement Condition Rating of Good or higher.

We have distributed both electronic and hard copies of the report to the individuals listed below. Additional copies of the report are available should you need them.

We believe that this Annual Inspection Report continues to be an important tool in the identification of maintenance needs and planning asset management strategies. If you wish to discuss the report in more detail, please let us know.



#### Attachments

cc: Don Budnovich (3 copies; includes copies for DBI & Jorgensen) Robert Glasemann (1 copy) Steve Geiss (1 copy) Matt Lewis (1 copy) Chris Bloodwell (1 electronic copy) Will Hawthorne (1 electronic copy) Dave Wynne (1 electronic copy) Mike Bakidis (1 electronic copy)

### **TABLE OF CONTENTS**

#### VOLUME I

| GEC Letter  |    |
|---|----|
| List of Figures   | v  |
| List of Tables  | vi |
| Executive Summary   | 1  |
| 1.0 Introduction  | 2  |
| 1.1 Background  | 2  |
| 1.2 Inspection Process  | 2  |
| 1.3 System Description  | 3  |
| 1.3.1 SR 408 (Spessard L. Holland East-West Expressway)                   | 3  |
| 1.3.2 SR 414 (John Land Apopka Expressway)                                | 3  |
| 1.3.3 SR 417 (Central Florida GreeneWay)                                  | 3  |
| 1.3.4 SR 429 (Daniel Webster Western Beltway / Wekiva Parkway)            | 3  |
| 1.3.5 SR 451  | 3  |
| 1.3.6 SR 453  | 3  |
| 1.3.7 SR 528 (Martin B. Andersen Beachline Expressway)                    | 3  |
| 1.3.8 SR 538 (Poinciana Parkway)  | 4  |
| 1.3.9 CFX Facilities / Buildings  | 4  |
| 1.4 CFX Maintenance Program   | 4  |
| 1.4.1 Roadway Maintenance Budget  | 6  |
| 1.4.2 Facilities Maintenance Budget                                       | 6  |
| 1.4.3 Systemwide Landscape Maintenance Budget                             | 6  |
| 1.4.4 Maintenance Rating Program  | 6  |
| 1.4.5 Specialized Inspection  | 6  |
| 2.0 Inspection Findings   | 7  |
| 2.1 SR 408 (Spessard L. Holland East-West Expressway) Findings            | 7  |
| 2.1.1 (SR 408 Spessard L. Holland East-West Expressway) Roadway           | 7  |
| 2.1.2 (SR 408 Spessard L. Holland East-West Expressway) Bridges           | 7  |
| 2.1.3 (SR 408 Spessard L. Holland East-West Expressway) Walls and Fencing | 8  |
| 2.1.4 (SR 408 Spessard L. Holland East-West Expressway) Facilities        | 8  |
| 2.2 SR 414 (John Land Apopka Expressway) Findings                         | 8  |
| 2.2.1 SR 414 (John Land Apopka Expressway) Roadway                        | 8  |
| 2.2.2 SR 414 (John Land Apopka Expressway) Bridges                        | 8  |
| 2.2.3 SR 414 (John Land Apopka Expressway) Walls and Fencing              | 9  |
| 2.2.4 SR 414 (John Land Apopka Expressway) Facilities                     | 9  |

| 2.3 | SR 417 (Central Florida GreeneWay) Findings                                     | 9    |
|-----|---|------|
|     | 2.3.1 SR 417 (Central Florida GreeneWay) Roadway                                | 9    |
|     | 2.3.2 SR 417 (Central Florida GreeneWay) Bridges                                | 10   |
|     | 2.3.3 SR 417 (Central Florida GreeneWay) Walls and Fencing                      | 10   |
|     | 2.3.4 SR 417 (Central Florida GreeneWay) Facilities                             | 10   |
| 2.4 | SR 429 (Daniel Webster Western Beltway / Wekiva Parkway) Findings               | 11   |
|     | 2.4.1 SR 429 (Daniel Webster Wester Beltway / Wekiva) Parkway Roadway           | 11   |
|     | 2.4.2 SR 429 (Daniel Webster Wester Beltway / Wekiva) Parkway Bridges           | 11   |
|     | 2.4.3 SR 429 (Daniel Webster Wester Beltway / Wekiva) Parkway Walls and Fencing | 11   |
|     | 2.4.4 SR 429 (Daniel Webster Wester Beltway / Wekiva) Parkway Facilities        | 11   |
| 2.5 | SR 451  | 12   |
|     | 2.5.1 SR 451 Roadway  | 12   |
|     | 2.5.2 SR 451 Bridges  | 12   |
|     | 2.5.3 SR 451 Walls and Fencing  | 12   |
|     | 2.5.4 SR 451 Facilities   | 12   |
| 2.6 | SR 453  | 12   |
|     | 2.6.1 SR 453 Roadway  | 12   |
|     | 2.6.2 SR 453 Bridges  | 12   |
|     | 2.6.3 SR 453 Walls and Fencing  | 12   |
|     | 2.6.4 SR 453 Facilities   | 12   |
| 2.7 | SR 528 (Martin B. Andersen Beachline Expressway) Findings                       | 13   |
|     | 2.7.1 SR 528 (Martin Andersen Beachline Expressway) Roadway                     | 13   |
|     | 2.7.2 SR 528 (Martin Andersen Beachline Expressway) Bridges                     | 13   |
|     | 2.7.3 SR 528 (Martin Andersen Beachline Expressway) Walls and Fencing           | 13   |
|     | 2.7.4 SR 528 (Martin Andersen Beachline Expressway) Facilities                  | 13   |
| 2.8 | SR 538 (Poinciana Parkway) Findings   | 14   |
|     | 2.8.1 SR 538 (Poinciana Parkway) Roadway  | 14   |
|     | 2.8.2 SR 538 (Poinciana Parkway) Bridges  | 14   |
|     | 2.8.3 SR 538 (Poinciana Parkway) Walls and Fencing                              | 14   |
|     | 2.8.4 SR 538 (Poinciana Parkway) Facilities                                     | 14   |
| 2.9 | Non-System Facilities   | 14   |
|     | 2.9.1 Goldenrod Road Extension Roadway  | 14   |
|     | 2.9.2 Goldenrod Road Extension Walls and Fencing                                |      |
|     | 2.9.3 Goldenrod Road Extension Mainline Toll Plaza                              | 15   |
|     | 2.9.4 CFX Headquarters Building   | . 15 |
|     |   |      |
|     |   |      |

| 3.0 Projects Completed Since FY 19 Inspection         | 15 |
|---|----|
| 3.1 Roadway   | 15 |
| 3.2 Facilities  | 15 |
| 4.0 Summary   | 16 |
| Appendix 1: Bridge Ratings                            |    |
| Appendix 2: System/Non-System Facility Reports        |    |
| Appendix 3: Major Cross-Drain Maintenance Evaluations |    |

#### **VOLUME II**

Appendix 4: SR 408 Appendix 5: SR 414 Appendix 6: SR 417 Appendix 7: SR 429 Appendix 8: SR 451 Appendix 9: SR 453 Appendix 10: SR 528 Appendix 11: SR 538



# List of Figures

### **2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY



### **LIST OF FIGURES**

Figure 1: System Wide Map

| Figure 2: System Wide Toll Facilities   |
|---|
| Figure 3: Drainage Structure west of John Young Parkway 7                             |
| Figure 4: Fence corrosion Econlockhatchee Trail Bridge 7                              |
| Figure 5: MSE Vegetation Westbound on Ramp Chickasaw Trail 8                          |
| Figure 6: Obstructed drainage structure at SR 414 east of Ocoee Apopka Road           |
| Figure 7: Bridge pier graffiti over Overland Road                                     |
| Figure 8: Damaged ROW fence SR 414 dry pond at Hiawassee Road                         |
| Figure 9: Broken flag pole luminaire at Coral Hills Mainline Plaza                    |
| Figure 10: SR 417 erosion along lane edge (Lee Vista Boulevard Southbound on Ramp) 10 |
| Figure 11: SR 417 over SR 50 MSE wall coating failing10                               |
| Figure 12: SR 417 Moss Park on Ramp damaged sealing tile 10                           |
| Figure 13: SR 429 minor erosion northbound east of Kelly Park Road 11                 |
| Figure 14: SR 429 fence fabric missing ties 11  |
| Figure 15: Independence Mainline IT room missing ceiling tiles 12                     |
| Figure 16: Overgrown front slope along SR 451 12                                      |
| Figure 17: SR 528 slope erosion at pond east of SR 417 13                             |
| Figure 18: SR 528 over Dallas Boulevard overgrown slope pavement 13                   |
| Figure 19: Dallas Mainline Pedestrian Bridge minor mold growth 14                     |
| Figure 20: SR 538 (Poinciana Parkway) minor roadside erosion 14                       |
| Figure 21: SR 538 (Poinciana Parkway) damaged fence 14                                |
| Figure 22: CFX Headquarters Second Floor Room 211 damaged ceiling tile 15             |



List of Tables

**2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY



### **List of Tables**

| Table 1: Three Point Scale |  | . 2 |
|----------------------------|--|-----|
|----------------------------|--|-----|



# **Executive Summary**

**2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY



# **Executive Summary**

The 2019 inspection of Central Florida Expressway Authority's (CFX) System, was performed by Dewberry, CFX's General Engineering Consultant, and included a visual inspection of the roadways, facilities, landscape, ponds, and bridges currently under CFX jurisdiction, with special emphasis on cross drains flow condition and accessibility. Results for cross drain flow conditions are located in Appendix 3.

CFX's roadway system includes SR 408 (East-West Expressway), SR 414 (John Land Apopka Expressway), SR 417 (Central Florida GreeneWay), SR 429 (Daniel Webster Western Beltway), SR 451, SR 453, SR 528 (Beachline Expressway), and SR 538 (Poinciana Parkway). Please note that at the time of inspection SR 538 (Poinciana Parkway) was not fully incorporated into the CFX roadway system. SR 538 was incorporated into the CFX system in December of 2019.

CFX also operates the Goldenrod Road Extension, a non-system two-mile tolled road with one mainline plaza.

Based on the findings for the 2019 inspection, it is concluded that the CFX roadway system has been well maintained and in good repair, working order, and condition. It is recommended that the Authority continue the implementation of routine maintenance as budgeted and scoped, and also continue to implement Renewal and Replacement projects as identified in CFX's Five-Year Work Plan.



**Central Florida Expressway Authority** 



Report

### **2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY



# **1.0 Introduction**

### 1.1 BACKGROUND

Between July and November 2019, Dewberry, Central Florida Expressway Authority's (CFX) General Engineering Consultant (GEC), 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. These inspections provide a basis to plan funding levels needed to maintain assets for the Highway Maintenance Fund, Building Maintenance Fund, and Five-Year Work Plan Renewal and replacement projects budgets for the ensuing fiscal year (FY).

### **1.2 INSPECTION PROCESS**

The GEC Annual Inspection process assessed four main elements:

- 1. Roadway
- 2. Bridges
- 3. Walls
- 4. Buildings / facilities

The inspection process excluded any part of the system that was currently under construction at the time of observations.

The roadway portion of the inspection focused on observations of ponds, fencing, pavements, drainage structures, erosion issues, signing, striping, illumination, barriers, main line and ramp plaza gantries, and overall safety of each corridor.

Wall inspections focused on observations of panels, joint, coping, flumes, inlets, rails, slope paving, visible underdrain pipes, sound walls, and adjacent elements.

Buildings / facilities observations focused on the interior and exteriors of mainline plazas, and ramp plazas.

Bridge and Sign Structures inspections were conducted by Certified Bridge and Structural 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 and sign structure. The bridge inspection process for the basis of this report addressed items that could be visually observed based on FDOT bridge inspection reports.

Inspections involved a general visual examination of element features. The inspection results, summarized in Section 2, reflect the condition of the feature(s) on the day the examination was performed. No detailed in-place or destructive testing was performed.

Items observed were recorded and rated using a three-point scale (Table 1):

| Table 1 |  |
|---------|--|
| Rating  | Action                                 |
| 3       | Continue Routine Maintenance.          |
| 2       | Operable Routine Maintenance Required. |
| 1       | Requires Immediate Attention.          |

Many of the observations noted have already been corrected as part of the CFX's Assets Management Contracts.

During the 2019 inspection process, the following major construction projects were underway:

- SR 408 / 417 Interchange
- SR 408 / I-4 Interchange (FDOT Project)
- SR 408 Widening SR 417 to Alafaya Trail
- SR 408 Milling and Resurfacing (I-4 to Lake Underhill Bridge)
- SR 417 to SR 528 Ramp Re-alignment
- SR 417 Widening (Econlockhatchee to Seminole County Line)
- SR 417 / Turnpike Interchange (FDOT Project)
- SR 429 / CR 535 Ramp Improvements

 SR 528 Milling and Resurfacing (SR 417 to SR 520)

As a result, some of these portions of the roadway were not inspected.

### **1.3 SYSTEM DESCRIPTION**

CFX's roadway system consists of eight expressways: the Spessard L. Holland East-West Expressway and Arnold Palmer Expressway (SR 408), the John Land Apopka Expressway (SR 414), the Central Florida GreeneWay (SR 417), the Daniel Webster Western Beltway and Wekiva Parkway (SR 429), the Western Beltway Connector (SR 451), SR 453, the Martin Andersen Beachline Expressway (SR 528), and the Poinciana Parkway (SR 538) (Figure 1)

The system consists of 128 centerline miles (including Poinciana Parkway) of highway with 66 interchanges, 13 mainline toll plazas, 5 mainline gantries, 71 ramp toll plazas, 3 ramp gantries, and 335 bridges. CFX also operates a nonsystem, two-mile tolled expressway (Goldenrod Road Extension) with one mainline toll plaza. The inspection results for the Goldenrod Road Extension are included as a non-system facility.

# 1.3.1 SR 408 (Spessard L. Holland East-West Expressway)

SR 408 (Spessard L. Holland East-West Expressway) is a 22-mile toll road running eastwest. This toll road connects Ocoee from Florida's Turnpike in west Orange County to SR 50 (Colonial Drive) east of Alafaya Trail near the University of Central Florida in east Orange County. Florida's Turnpike (FTE) owns, operates, and maintains the portion from the Turnpike east to the Old Winter Garden Road Overpass.

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

The first phase of SR 414 (John Land Apopka Expressway) opened on May 15, 2009. SR 414 extends south and east from U.S. Highway 441 in Apopka to Maitland Boulevard. Of the 9 miles, 3 miles are part of a dual route with SR 429 (Daniel Webster Western Beltway).

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

SR 417 (Central Florida GreeneWay), is a 55mile toll road operated by CFX and FTE. CFX operates the 33 miles of SR 417 in Orange County. Known as the Central Florida GreeneWay, this stretch runs from SR 535 / 536 (International Drive) to SR 426 (Aloma Avenue) at the Orange-Seminole County line.

### 1.3.4 SR 429 (Daniel Webster Western Beltway/Wekiva Parkway)

SR 429 (Daniel Webster Western Beltway/Wekiva Parkway) extends north from I-4 in Osceola County to SR 46 in Lake County. CFX's portion includes 31 miles from Seidel Road to just south of the Orange / Lake County line. Of the total 31 miles, 3 miles are part of the dual route with SR 414 (SR 429 / 414).

The portions of SR 429 from south of Seidel Road to I-4 and north of the Orange / Lake County line are owned and operated by the FTE and FDOT.

#### 1.3.5 SR 451

Originally part of SR 429 (Daniel Webster Western Beltway), SR 451 connects SR 414 (John Land Apopka Expressway) and SR 429 north to U.S. Highway 441 (SR 500 / Orange Blossom Trail at Vick Road). SR 451 is approximately 3 miles in length.

#### 1.3.6 SR 453

SR 453 is a tolled spur road connecting SR 429 (Wekiva Parkway) with SR 46 east of Round Lake Road in Lake County. CFX built the 1.6-mile Mount Dora Connector as part of its overall contribution to the parkway project

# 1.3.7 SR 528 (Martin Andersen Beachline Expressway)

SR 528 (Martin B. Anderson Beachline Expressway) was the first road on the

expressway system. The approximately 52-mile expressway extends east from Interstate 4 across SR 417 (Central Florida GreeneWay) and Interstate 95, ending at U.S. Highway 1 in Cocoa.

SR 528 (the Beachline) is owned and maintained by two agencies: CFX operating the 23 miles extending from Boggy Creek Road to SR 520, and FTE operating the remainder.

#### 1.3.8 SR 538 (Poinciana Parkway)

SR 538 (Poinciana Parkway) is a 7.2 mile toll road extending from Polk County Line south to Cypress Parkway in Osceola County, with two interchanges and two mainline gantries.

#### 1.3.9 CFX Facilities / Buildings

CFX operates facilities in support of the safe and reliable operation of CFX's mobility network. These facilities include 13 mainline plazas, 71 ramp plazas, three mainline gantries, one backup data center, and one administration and operations center (Figure 2).

CFX also owns a facility at 7001 McCoy Road and owns a facility at 525 South Magnolia Avenue. These facilities were not inspected.

### 1.4 CFX MAINTENANCE PROGRAM

The Maintenance Department for CFX is integral in providing the region with a world-class integrated mobility network. The Maintenance Department is responsible for day to day routine roadway and landscape maintenance for the System, certain System Renewal and Replacement projects, and facilities.

Maintenance Program projects include, but are not limited to, repairs and maintenance, coatings, renewals, replacements, improvements, and other projects necessary for the safe and efficient operation of CFX's System and to prevent loss of revenue. These projects include such costs for engineering, equipment purchases / additions and replacements, maintenance expenses for roadway, bridge, buildings, walls, etc. not occurring at annual or shorter periods. The Maintenance Department utilizes outsourced resources to accomplish the requirements of routine maintenance. CFX has created contracts to provide these services to improve efficiency and to increase fiscal responsibility.

CFX employs three contractors to perform asset maintenance management services for roadways, bridges, and traffic signals.

- 1. Roy Jorgensen Associates Inc. maintains SR 408, SR 417 and SR 528
- 2. DBI maintains SR 414, SR 429, SR 451, and SR 453.
- 3. Control Specialists maintains 47 traffic signals systemwide.

Three additional maintenance contracts for SR 538 for fencing, mowing and roadway sweeping are held by:

- 1. Chapco Fence
- 2. Chavez Lawn Service
- 3. USA Services

In addition to these routine maintenance contracts, CFX continues to identify maintenance needs and award specific contracts to meet those needs.

Systemwide landscape maintenance is performed by one systemwide landscape maintenance contractor, GroundTek of Central Florida, while aquatic vegetation is completed by Rockhopper Services, Inc.

The Maintenance Department staff is supported by the GEC, Dewberry. As the GEC, Dewberry provides professional services in support of Maintenance Department responsibilities, which include items such as:

- Annual independent inspection and report concerning system condition
- Systemwide specific maintenance problems resolution

- CFX Pavement Management Program support
- Systemwide sign inventory and engineering for maintenance and replacement of signs
- Asset management needs analysis
- Identification of appropriate maintenance and repair actions and cycles to minimize deteriorating conditions of CFX assets.
- Environmental support

In addition, the GEC provides resources to support CFX management and administration of engineering activities associated with major maintenance projects. The disciplines Dewberry utilizes as the GEC include: civil, structural, traffic, environmental, mechanical, electrical engineering, and architectural services.

As part of the report preparation process, Dewberry met with CFX's Director of Maintenance to discuss the major achievements of the past fiscal year (FY 2019) and the goals and objectives for the upcoming fiscal year (FY 2020).

The following are identified as major achievements during the past fiscal year (FY 2019):

- Achieved a MRP score of at least 90.
- Received two Florida Nursery Growers and Landscape Association Achievement awards for renewal and highway beautification projects.
- Increased routine observation of Asset Management Contracts to identify areas of maintenance activities in need of improvement.
- Continued implementation of systemwide signing upgrades and rehabilitation.
- Identified HVAC and Generator projects that will be funded under the Renewal and Replacement budget.
- Incorporated pavement striping in multiple milling and resurfacing projects in order to maintain a high level of reflectivity.

CFX Maintenance Staff has identified the following goals and objectives for the coming fiscal year (FY 2020). These items involve activities associated with construction and maintenance of roadways, bridges, facilities, and landscape.

- Achieve a MRP score of at least 90.
- Continue to increase routine observation of Asset Management Contracts to identify areas of maintenance activities in need of improvement.
- Continue to implement systemwide signing upgrades and rehabilitation.
- Continue the identification of projects that should be funded under the Renewal and Replacement budget.
- Continue the identification of projects that require routine maintenance and should be included in the maintenance budget.
- Maintain pavement striping at a high level of reflectivity by identifying areas in need of rehabilitation.
- Proceed with design for the next phases of the systemwide coatings upgrades.

In addition to goals and objectives for the physical activities associated with construction and maintenance of roadways, bridges and plaza facilities, staff identified goals and objectives related to program, process and procedural initiatives. 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 is immediately identifiable with a CFX roadway.

These initiatives are:

 Meet with FDOT District 5 and FTE personnel on an as-needed basis to discuss maintenance and other issues of mutual importance.

- Continue traffic signal coordination with the City of Orlando, Orange County, and FDOT District 5.
- 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.

#### 1.4.1 Roadway Maintenance Budget

CFX's FY 2020 Roadway Maintenance Fund, is budgeted at \$20.2 million for maintenance administration, routine maintenance, landscape maintenance, and pond maintenance.

#### 1.4.2 Facilities Maintenance Budget

CFX toll facilities, as well as the CFX headquarters building, have a facilities maintenance budget for FY 2020 of approximately \$1.9 million.

# 1.4.3 Systemwide Landscape and Aquatic Maintenance Budget

CFX's FY 2020 Systemwide Landscape Maintenance Fund is budgeted at \$4.0 million for maintenance administration and routine maintenance.

#### 1.4.4 Maintenance Rating Program

CFX has instituted a Maintenance Rating Program (MRP) to evaluate the performance of roadway and bridge maintenance contractors. The MRP monitors current operations and is used to identify recurring problems. The program allows for early identification of maintenance issues, increased accountability, and provides assurance that assets are being maintained at an adequate level.

Under the MRP, sample units for different asset groups (roads, bridges, and facilities) are randomly selected for the entire year. Inspections are conducted every two months on a portion of the sample units from each corridor. Individual characteristics are evaluated on Pass / Fail criteria. The resulting scores are weighted and combined for the asset groups. A total composite score is used to evaluate maintenance effectiveness.

#### 1.4.5 Specialized Inspection

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 2019. The Performance Rating rates the condition of the bridge. It is autocalculated 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
- 2 = Good
- 3 = Fair
- 4 (and above) = Poor

There are currently 335 bridge structures on the system with 99.4% of them having a condition rating of Good or higher. There are currently no bridge condition weight restrictions. See Appendix 1 for a summary of FDOT Bridge Ratings.

CFX currently conducts a Pavement Management Analysis based on FDOT criteria. This report is used to assess the condition and performance of a roadway as well as predict future rehabilitation needs. The 2018 Pavement Condition Survey data shows 92% of CFX maintained lane miles currently have good or higher Pavement Condition Rating Measures goal of 85%. CFX continues to invest in the system's assets to deliver a world class mobility network

# 2.0 Inspection Findings

The inspection results summarized in this section reflect features that were rated two or three. Features with a rating of one were immediately reported to CFX maintenance staff for immediate maintenance.

### 2.1 SR 408 (SPESSARD L. HOLLAND EAST-WEST EXPRESSWAY) FINDINGS -RATINGS 2 OR 3

See Appendix 4 for detailed inspection sheets, maps, and photos.

# 2.1.1 SR 408 (Spessard L. Holland East-West Expressway) Roadway

During this year's inspection period, two major areas where under construction and not inspected:

- 1. The area in and around the SR 408 / I-4 interchange
- 2. The SR 408 / SR 417 interchange east to Alafaya Trail

The majority of observations were located along SR 408 from the west end at Clarke Road to the Good Homes Road interchange, and the section from Powers Drive to Kirkman Road. The observations included erosion and obstructed or overgrown drainage structures. Roadside erosion was prevalent from Powers Drive to Kirkman Road, in particular washouts creating drop off hazards. Pond slope erosion could be seen at various locations in and around the Good Homes Road interchange.



Figure 3: Drainage Structure west of John Young Parkway.

# 2.1.2 SR 408 (Spessard L. Holland East-West Expressway) Bridges

Bridge observations along SR 408 included asphalt cracking at an approach slab, bridge barrier junction boxes with rusted covers, general coatings degradation, and graffiti.

Asphalt cracking at an approach slab was present at Powers Drive. Graffiti was observed on the pedestrian railing at Econlockhatchee Trail. Rusting connections for fencing and screening were also observed at Econlockhatchee Trail.

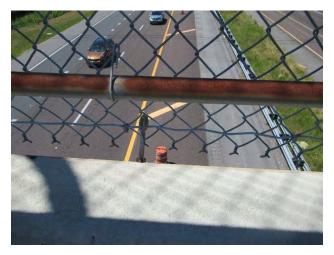


Figure 4: Fence corrosion Econlockhatchee Trail Bridge.

### 2.1.3 SR 408 (Spessard L. Holland East-West Expressway) Walls and Fencing

Notable wall and fence observations included graffiti, color fade, vegetation overgrowing fence lines, and damaged or downed right-of-way (ROW) fencing.

Retaining walls with graffiti were observed at various locations throughout SR 408, including the SR 408 MSE walls at Chickasaw Trail.

Overgrown fence observations for both ROW and retaining wall were noted at various locations including, SR 50 / Colonial and Woodbury Road.



Figure 5: MSE Vegetation Westbound on Ramp Chickasaw Trail.

# 2.1.4 SR 408 (Spessard L. Holland East-West Expressway) Facilities

SR 408 consists of 5 Mainline Toll Plazas (Hiawassee, Pine Hills, Conway West, Conway East, and Dean) and 23 ramp plazas.

The facilities along SR 408 are generally in good condition. Observations for various features in the facilities along SR 408 were typically for wiring, switchboards and breakers, receptacles, ceiling tiles and vents, duct work, and flooring.

Individual summaries of facilities along SR 408 are indicated in the Annual Facilities Inspection Reports included in this document.

#### 2.2 SR 414 (JOHN LAND APOPKA EXPRESSWAY) FINDINGS -RATINGS 2 OR 3

See Appendix 5 for detailed inspection sheets, maps, and photos.

# 2.2.1 SR 414 (John Land Apopka Expressway) Roadway

Roadway observations were minimal throughout the corridor and included erosion, drainage structures, and overgrown or damaged ROW fencing.

Roadside erosion was observed at the slope of the dry pond along Hiawassee Road.

Various fence lines with varying degrees of overgrowth and damage we observed throughout the corridor.

Obstructed and overgrown drainage structures were observed throughout the roadway without a concentration in any specific area.



Figure 6: Obstructed drainage structure at SR 414 east of Ocoee Apopka Road.

# 2.2.2 SR 414 (John Land Apopka Expressway) Bridges

Bridge observations included spalling at joints and walls, adhesion loss in joints, minor cracking in walls, corroded junction box covers, and graffiti.

Observations of adhesion loss in joints, graffiti, and corroded junction box covers were present on the bridge over Overland Road. MSE wall Graffiti and cheek wall cracks were observed at the SR 414 Bridge over Hawthorne Road.



Figure 7: Bridge pier graffiti over Overland Road.

### 2.2.3 SR 414 (John Land Apopka Expressway) Walls and Fencing

Notable fence observations included damaged and/or vegetation covered ROW fence along the corridor.



Figure 8: Damaged ROW fence on SR 414 dry pond at Hiawassee Road.

### 2.2.4 SR 414 (John Land Apopka Expressway) Facilities

SR 414 consists of 1 Mainline Toll Plaza (Coral Hills), and 5 ramp plazas.

The facilities along SR 414 were generally in good condition. Observations for various features

in the facilities along SR 414 were typically for wiring, switchboards and breakers, receptacles, duct work, ceiling tiles, vents, and flooring. Individual summaries of facilities along SR 414 are indicated in the Annual Facilities Inspection Reports included in this document.



**Figure 9:** Broken flag pole luminaire at Coral Hills Mainline Plaza.

### 2.3 SR 417 (CENTRAL FLORIDA GREENEWAY) FINDINGS - RATINGS 2 OR 3

See Appendix 6 for detailed inspection sheets, maps, and photos.

#### 2.3.1 SR 417 (Central Florida GreeneWay) Roadway

Roadway observations included front slope erosion, erosion adjacent to miscellaneous asphalt, missing object markers, and drainage structure obstructions both sediment and vegetation.

Front slope erosion observations were made at the SR 417 / Boggy Creek Road Interchange through Moss Park Road.

Erosion adjacent to the miscellaneous asphalt behind guardrail was observed from Lee Vista Boulevard to the SR 528 Interchange.

Drainage structure obstructions and roadside erosion were observed at various locations throughout the roadway without any concentration in any specific area.



**Figure 10:** SR 417 Erosion along lane edge (Lee Vista Boulevard Southbound on Ramp).

#### 2.3.2 SR 417 (Central Florida GreeneWay) Bridges

Bridge observations included overgrown vegetation in and along drainage flumes and slope pavement, bridge coatings that were peeling and fading on walls and beams.

Vegetation in and along drainage flumes and MSE wall coating peeling was observed at SR 417 and SR 50. Vegetation growing from MSE wall coping was observed at SR 417 and John Young Parkway.



Figure 11: SR 417 over SR 50 MSE wall coating failing.

### 2.3.3 SR 417 Central Florida GreeneWay Walls and Fencing

In general SR 417 walls were in good standing with no noticeable issues outside of a small amount of graffiti.

Fencing observations for both ROW and retaining wall were noted at various locations, with a higher concentration from Boggy Creek Road Interchange through Moss Park Road, including vegetation overgrown fence lines, and damaged or downed ROW fencings.

### 2.3.4 SR 417 (Central Florida GreeneWay) Facilities

SR 417 consists of 4 Mainline Toll Plazas (John Young, Boggy Creek, Curry Ford, and University), and 25 ramp plazas.

The facilities along SR 417 were generally in good condition.

Observations for various features in the facilities along SR 417 were typically for wiring, switchboards and breakers, receptacles, duct work, ceiling tiles, vents, and flooring.

Individual summaries of facilities along SR 417 are indicated in the Annual Facilities Inspection Reports included in this document.



Figure 12: SR 417 Moss Park on Ramp damaged sealing tile.

### 2.4 SR 429 (DANIEL WEBSTER WESTERN BELTWAY / WEKIVA PARKWAY) FINDINGS - RATINGS 2 OR 3

SR 429 inspection limits were at Seidel Road, the south end of the CFX's jurisdiction, north and east to the Wekiva Parkway jurisdictional limits. See Appendix 7 for detailed inspection sheets, maps, and photos.

#### 2.4.1 SR 429 (Daniel Webster Western Beltway / Wekiva Parkway) Roadway

SR 429 roadway observations included roadside erosion, drainage structure obstructions, and paved shoulder edge ravel.



Figure 13: SR 429 minor erosion northbound east of Kelly Park Road.

Roadside erosion was observed along the shoulders, front slopes, and swales in various locations of the roadway with the heaviest concentration observed from Schofield Road to New Independence, and in and around Franklin Street.

Drainage structure obstructions were observed at various locations throughout the roadway without any concentration in any specific area.

#### 2.4.2 SR 429 (Daniel Webster Western Beltway / Wekiva Parkway) Bridges

Fiscal Year 2019 Bridge observations were minimal with amount of vegetation growth along

slope pavement and approach slab joint vegetation growing along the shoulder at CR 437A.

#### 2.4.3 SR 429 (Daniel Webster Western Beltway / Wekiva Parkway) Walls and Fencing

Notable wall and fence observations included graffiti, vegetation overgrown fence lines, open gates, and damaged or downed ROW fencing.



Figure 14: SR 429 fence fabric missing ties.

Fencing observations for both ROW and retaining wall were noted at various locations including vegetation overgrown fence lines, open gates along Wekiva Parkway, and damaged or downed ROW fencing throughout the corridor.

#### 2.4.4 SR 429 (Daniel Webster Western Beltway / Wekiva Parkway) Facilities

SR 429 consists of 2 Mainline Toll Plazas (Independence and Forest Lake), 3 Toll Gantries (Ponkan, Coronado, and Mt. Plymouth), and 12 ramp plazas.

The facilities along SR 429 were generally in good to excellent condition.

Observations for various features in the facilities along SR 429 were typically for wiring, switchboards and breakers, receptacles, duct work, ceiling tiles, vents, and flooring. As well as aesthetic cleaning.



Figure 15: Independence Mainline IT room missing ceiling tiles.

Individual summaries of facilities along SR 429 are indicated in the Annual Facilities Inspection Reports included in this document.

### 2.5 SR 451 FINDINGS - RATINGS 2 OR 3

See Appendix 8 for detailed inspection sheets, maps, and photos.

#### 2.5.1 SR 451 Roadway

SR 451 roadway observations consisted of overgrown drainage structures with moderate erosion and overgrown front and back slopes.

Drainage structure observations were concentrated from SR 414 to Johns Road.



Figure 16: Overgrown front slope along SR 451.

#### 2.5.2 SR 451 Bridges

Bridge observations were minimal cracking in MSE wall coping and pedestrian traffic barrier at Johns Road and Marshall Lake Road. Bridge observations also included vegetation growth in the flume along the MSE coping at Marshall Lake Road.

#### 2.5.3 SR 451 Walls and Fencing

No observations were noted on SR 451 walls; however, overgrown ROW fencing was observed in various locations throughout the roadway.

#### 2.5.4 SR 451 Facilities

There are no facilities located on SR 451.

#### 2.6 SR 453 FINDINGS - RATINGS 2 OR 3

See Appendix 9 for detailed inspection sheets, maps, and photos

#### 2.6.1 SR 453 Roadway

SR 453 observations were minor erosion points at road edge and overgrown drainage structures.

#### 2.6.2 SR 453 Bridges

No observations were noted on SR 453 bridges.

#### 2.6.3 SR 453 Walls and Fencing

Minor fence damage from fallen trees was observed in 2 places on the corridor.

#### 2.6.4 SR 453 Facilities

SR 453 facilities were found to be in good condition with minimal observations of mildew stains on the interior of the gantry building.

An individual summary of the SR 453 facility is indicated in the Annual Facilities Inspection Reports included in this document.

### 2.7 SR 528 (MARTIN B. ANDERSEN BEACHLINE EXPRESSWAY) FINDINGS -RATINGS 2 OR 3

See Appendix 10 for detailed inspection sheets, maps, and photos.

# 2.7.1 SR 528 (Martin Andersen Beachline Expressway0 Roadway

SR 528 roadway observations included bank erosion around drainage structures, minor slope erosion, and general roadside erosion.



Figure 17: SR 528 slope erosion at pond east of SR 417.

Drainage structure obstructions and erosion were observed at various locations throughout the roadway with concentrated areas at the SR 528 / SR 417 Interchange.

# 2.7.2 SR 528 (Martin B. Andersen Beachline Expressway) Bridges

Bridge observations included ponding on shoulder, vegetation growth in concrete slope pavement, and graffiti.

Graffiti and vegetation in concrete slope pavement was observed at the eastbound Farm Access Road.

Ponding on shoulder and vegetation in concrete slope pavement was observed at the Dallas Boulevard Bridge.



Figure 18: SR 528 over Dallas Boulevard overgrown slope pavement.

# 2.7.3 SR 528 (Martin B. Andersen Beachline Expressway) Walls and Fencing

No observations were noted on SR 528 walls minor fence damage and overgrown fence lines was observed throughout the corridor.

### 2.7.4 SR 528 (Martin B. Andersen Beachline Expressway) Facilities

The SR 528 consists of 2 Mainline Toll Plazas (Beachline and Dallas), and 8 ramp plazas.

The facilities along SR 528 are generally in good condition.

Observations for various features in the facilities along SR 528 were typically for wiring, switchboards and breakers, receptacles, duct work, ceiling tiles, vents, and flooring.

Individual summaries of facilities along SR 528 are indicated in the Annual Facilities Inspection Reports included in this document.



Figure 19: Dallas Mainline Pedestrian Bridge minor mold growth.

### 2.8 SR 538 (POINCIANA PARWAY) FINDINGS - RATINGS 2 OR 3

See Appendix 11 for detailed inspection sheets, maps, and photos.

#### 2.8.1 SR 538 (Poinciana Parkway) Roadway

SR 538 observations consisted of minor overgrown drainage structures and minor roadside erosion.



Figure 20: SR 538 (Poinciana Parkway) minor roadside erosion.

#### 2.8.2 SR 538 (Poinciana Parkway) Bridges

No observations were noted on SR 453 bridges.

### 2.8.3 SR 538 (Poinciana Parkway) Walls and Fencing

Minor fence damage from fallen trees was observed in one place along the corridor.



Figure 21: SR 538 (Poinciana Parkway) damaged fence.

#### 2.8.4 SR 538 (Poinciana Parkway) Facilities

SR 538 facilities are in good condition with some minor caulking at wall joints needed on the interior of the plaza.

Individual summaries of facilities along SR 538 are indicated in the Annual Facilities Inspection Reports included in this document.

### 2.9 NON-SYSTEM FACILITIES FINDINGS - RATINGS 2 OR 3

See Appendix 2 for detailed inspection sheets, maps, and photos.

#### 2.9.1 Goldenrod Road Extension

No observations were noted on Goldenrod Road Extension.

### 2.9.2 Goldenrod Road Extension Walls and Fencing

No observations were noted on Goldenrod Road Extension walls and fencing.

# 2.9.3 Goldenrod Road Extension Mainline Toll Plaza

The Goldenrod Road Extension facility is generally in good condition.

An individual summary of the Goldenrod facility is indicated in the Annual Non-System Facilities Inspection Reports included in this document.

#### 2.9.4 CFX Headquarters Building

The CFX Headquarters Building was observed to be generally in good condition overall with no identified major deficiencies both on exterior and interior.

Minor interior deficiencies included areas of damaged drywall, window caulking degradation, and isolated appearances of leaking above the ceiling tiles.



Figure 22: CFX Headquarters Second Floor Room 211 damaged ceiling tile.

An individual summary of the CFX Headquarters Building is included in the Annual Non-System Facilities Inspection Reports included in this document.

# 3.0 Projects Completed Since 2018 Inspection

Listed below are Renewal and Replacement Projects completed (July 1, 2018 to June 30, 2019), after the 2018 Annual Inspection.

### 3.1 ROADWAY

- Systemwide Line Dynamic Message Sign Upgrades
- Systemwide E-Pass Signage
  Improvements
- Goldenrod Road Extension Milling and Resurfacing Lee Vista Boulevard to Narcoosee Road
- Systemwide Logo Panel Replacement and Service Signage
- SR 408 Milling and Resurfacing Lake Underhill to Yucatan Drive

### 3.2 FACILITIES

- Systemwide Generator Replacements
  Phase I
- SR 417 Toll Plaza Roof Replacements
- CFX Administration and Operations Center Security Systems Upgrades.

# 4.0 Summary

Overall, the CFX System has been well maintained and in good repair, working order, and condition. The condition of the System shows CFX's commitment to funding, maintaining, and operating a safe mobility network.

CFX reported an overall MRP score of 90. There are currently 335 bridge structures on the CFX system with a rating of "Excellent or Good" for a Bridge Condition Rating of 99.4%, as well as, a Pavement Condition Rating of 92% of CFX maintained lane miles currently good or higher.

Continued routine maintenance and implementation of Renewal and Replacement Projects ensures CFX will continue to provide the region with a world-class integrated mobility network.





# Appendix 1: Bridge Ratings

**2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY



#### Central Florida Expressway Authority Bridge Ratings

#### Using FDOT Criteria

#### Summary Key

#### Deck Rating, Superstructure Rating, Substructure Rating

| N Not Applicable         | Culvert Rating  |
|--------------------------|---|
| 9 Excellent Condition    | N Not Applicable  |
| 8 Very Good Condition    | 9 No Deficiencies   |
| 7 Good Condition         | 8 No Noticeable Deficiencies                                |
| 6 Satisfactory Condition | 7 Minor Deficiencies  |
| 5 Fair Condition         | 6 Deterioration   |
| 4 Poor Condition         | 5 Moderate to Major Deterioration                           |
| 3 Serious Condition      | 4 Large Spalls, Heavy Scaling, Wide Cracks                  |
| 2 Critical Condition     | <b>3</b> Excessive Large Spalls, Heavy Scaling, Wide Cracks |
| 1 "Imminent" Failure     | 2 Corrective Action Required to Maintain Traffic            |
| <b>0</b> Failed          | 1 Bridge Closed   |
|                          | 0 Replacement Necessary                                     |
| Channel Rating           |   |

| N Not Applicable         | Structure Rating   |
|--------------------------|--------------------|
| 9 Excellent Condition    | 1 Excellent        |
| 8 Very Good Condition    | 2 Good             |
| 7 Good Condition         | <b>3</b> Fair      |
| 6 Satisfactory Condition | 4 (and above) Poor |
| 5 Fair Condition         |                    |
| 4 Poor Condition         |                    |
|                          |                    |

3 Serious Condition

2 Critical Condition

1 "Imminent" Failure

0 Failed

| Bridge<br>Number | Facility           | Deck<br>Rating | Superstructure<br>Rating | Substructure<br>Rating | Channel<br>Rating | Culvert<br>Rating | Structure<br>Rating |
|------------------|--------------------|----------------|--------------------------|------------------------|-------------------|-------------------|---------------------|
| 110123           | SR 453 Wekiva Pkwy | 8              | 8                        | 8                      | N                 | N                 | 1                   |
| 110124           | SR 453 Wekiva Pkwy | 8              | 8                        | 8                      | N                 | Ν                 | 1                   |
| 110125           | SR 453 Wekiva Pkwy | 8              | 8                        | 8                      | N                 | Ν                 | 1                   |
| 110126           | SR 453 Wekiva Pkwy | 8              | 7                        | 8                      | N                 | Ν                 | 2                   |
| 750055           | SR 528             | N              | N                        | N                      | 6                 | 7                 | 2                   |
| 750056           | SR 528             | 6              | 7                        | 6                      | N                 | N                 | 2                   |
| 750058           | SR 528             | 6              | 7                        | 7                      | N                 | N                 | 2                   |
| 750059           | SR 528             | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750100           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750102           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750103           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750104           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | N                 | 2                   |
| 750106           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750107           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750108           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750112           | SR 408 Exit Ramp   | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750114           | SR 408 WB          | 6              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750116           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750119           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750120           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750121           | SR 408 WB          | 7              | 7                        | 7                      | N                 | Ν                 | 2                   |
| 750123           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750124           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750126           | SR 408 WB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750128           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | N                 | 2                   |
| 750129           | SR 408 WB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750137           | SR 400 Connector   | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750138           | SR 400 Connector   | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750179           | SR 528             | 6              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750182           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750183           | SR 408 EB          | 6              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750184           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750185           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750186           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750213           | SR 528             | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750214           | SR 528             | 7              | 7                        | 7                      | Ν                 | N                 | 2                   |
| 750220           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750231           | SR 408 EB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750232           | SR 408 EB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750233           | SR 408 EB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |
| 750234           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750235           | SR 408 EB          | 7              | 7                        | 7                      | Ν                 | Ν                 | 2                   |
| 750236           | SR 408 EB          | 7              | 7                        | 7                      | N                 | Ν                 | 2                   |
| 750237           | SR 408 EB          | 7              | 7                        | 7                      | N                 | N                 | 2                   |

District 5

| -      |                 | - |   |   |   |   |   |
|--------|-----------------|---|---|---|---|---|---|
| 750365 | SR 408 WB       | 7 | 8 | 8 | Ν | N | 2 |
| 750366 | SR 408 EB       | 7 | 7 | 7 | Ν | Ν | 2 |
| 750369 | SR 408 EB       | 8 | 8 | 7 | Ν | Ν | 1 |
| 750370 | SR 408 WB       | 8 | 8 | 8 | Ν | Ν | 1 |
| 750373 | SR 417 Ramp SB  | 7 | 7 | 7 | Ν | N | 2 |
| 750374 | SR 417 NB Ramp  | 7 | 7 | 7 | Ν | Ν | 2 |
| 750375 | SR 417 SB       | 7 | 7 | 7 | Ν | N | 2 |
| 750376 | SR 417 NB       | 7 | 7 | 7 | Ν | Ν | 2 |
| 750377 | SR 417 NB       | Ν | Ν | N | 7 | 6 | 2 |
| 750378 | SR 417 SB       | 7 | 7 | 7 | Ν | Ν | 2 |
| 750379 | SR 417 NB       | 8 | 7 | 7 | Ν | Ν | 2 |
| 750380 | SR 417 SB       | 7 | 7 | 7 | N | N | 2 |
| 750381 | SR 417 NB       | 7 | 7 | 8 | N | N | 1 |
| 750382 | SR 417 SB       | 7 | 7 | 7 | N | N | 2 |
| 750383 | SR 417 NB       | 8 | 7 | 8 | N | N | 2 |
| 750384 | SR 417 SB       | 7 | 7 | 8 | N | N | 2 |
| 750385 | SR 417 NB       | 7 | 7 | 7 | N | N | 2 |
| 750390 | SR 408 EB       | 8 | 7 | 8 | N | N | 2 |
| 750391 | SR 408 WB       | 7 | 7 | 7 | N | N | 2 |
| 750392 | Good Homes Road | 7 | 7 | 7 | N | N | 2 |
| 750393 | SR 408 WB       | 7 | 7 | 7 | N | N | 2 |
| 750394 | SR 408 EB       | 7 | 7 | 7 | N | N | 2 |
| 750395 | Dorscher Road   | 7 | 8 | 7 | N | N | 2 |
| 750396 | SR 408 WB       | 7 | 7 | 7 | N | N | 2 |
| 750397 | SR 408 EB       | 7 | 7 | 7 | N | N | 2 |
| 750398 | Powers Drive    | 7 | 6 | 8 | N | N | 2 |
| 750399 | Paul Street     | 7 | 7 | 8 | N | N | 2 |
| 750406 | SR 429 SB       | 7 | 8 | 7 | N | N | 2 |
| 750407 | SR 429 NB       | 7 | 8 | 7 | N | N | 2 |
| 750408 | Ramp L          | 7 | 8 | 7 | N | N | 2 |
| 750409 | SR 429 SB       | 7 | 8 | 7 | N | N | 2 |
| 750410 | SR 429 NB       | 7 | 7 | 7 | N | N | 2 |
| 750411 | Ramp A          | 7 | 8 | 7 | N | N | 2 |
| 750412 | SR 429 SB       | 8 | 8 | 8 | N | N | 1 |
| 750413 | SR 429 NB       | 8 | 7 | 8 | N | N | 2 |
| 750414 | SR 429 SB       | 8 | 7 | 7 | N | N | 2 |
| 750415 | SR 429 NB       | 7 | 8 | 7 | N | N | 2 |
| 750416 | SR 429 SB       | 8 | 8 | 8 | N | N | 1 |
| 750417 | SR 429 NB       | 8 | 8 | 8 | N | N | 1 |
| 750418 | SR 429 SB       | 8 | 8 | 8 | N | N | 1 |
| 750419 | SR 429 NB       | 8 | 8 | 8 | N | N | 1 |
| 750420 | SR 429 SB       | 7 | 8 | 8 | N | N | 2 |
| 750421 | SR 429 NB       | 8 | 8 | 8 | N | N | 1 |
| 750422 | West Road       | 8 | 7 | 8 | N | N | 2 |
|        |                 | 8 | 8 | 8 |   | N | 1 |

SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν Ν Ν SR 417 NB SR 417 SB Ν Ν SR 417 NB Ν Ν SR-417 SB off Ramp Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR-417 SB off Ramp Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 Off Ramp Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν Ν SR 417 SB On Ramp Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 NB Off–Ramp Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 NB Ν Ν SR 417 Ν Ν Ν Ν SR 417 SB SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 NB Off Ramp Ν Ν SR 417 Ramp C Ν Ν 

Ramp To SR-528 WB Ν Ν SR 417 SB Ν Ν SR 417 NB Ν Ν SR 417 NB Ν Ν Ν SR 417 Ν Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν Johns Road Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν Ramp A1 Ν Ν Ramp B1 Ν Ν Ramp C Ν Ν SR 551 Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν SR 429 SB Ν Ν SR 429 NB Ν Ν 

SR 528 WB Ν Ν SR 429 Ν Ν SR 429 Ν Ν SR 429 Ν Ν SR 429 Ν Ν Ν Ν SR 429 SR 429 Ν Ν SR 429 Ν Ν SR 429 Ν Ν SR 429 Ν Ν SR 408 Ν Ν SR 408 Ν Ν SR 414 Ν Ν SR 417 Ν SR 417 Ν Ν SR 417 Ν South Access Rd Ν Ν SR 417 Ν SR 528 Ν Ν SR 528 Ν Ν SR 408 Ν Ν SR 417 Ν Ν SR 408 Ν Ν SR 528 Ν Ν SR 528 Ν Ν SR 417 Ν Ν Ν SR 417 Ν Ν No Report Provided Ν



# Appendix 2: System/Non-System Facilities

**2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY





# **2019 Annual Facilities Inspection Report**



Hiawassee Main Plaza November 1, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 11/01/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Hiawassee Mainline Plaza and associated ramps.

### 43 – Hiawassee Main Plaza

### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

### Interior Observations:

- Mainline computer room repairs to attach unistrut flexible conduit and electrical box properly to the wall. (Figure 1)
- Mainline computer room repairs to attach fire alarm electrical box properly to the wall. (Figure 2)

### **Tunnel Observations:**

- The above referenced tunnel is in good condition overall with no identified deficiencies.

### **Exterior Observations:**

- The above referenced area is in good condition overall with no identified deficiencies. Located missing equipment cover in area behind building exterior. (Figure 3 & Figure 4)
- Located some areas showing cracks in overpass structure. (Figure 5 & Figure 6)

### **Recommendations:**

- Recommend repairs to attach fire alarm electrical box in computer room.
- Recommend electrical contractor fix the electrical box, conduit & unistrut in the computer room.
- Recommend to install missing equipment cover in area behind building exterior.



### 41 – Good Homes Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 7 & Figure 8)

### 42 – Good Homes Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 9 & Figure 10)

### 44 – Hiawassee Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 11 & Figure 12)

### 45 – Hiawassee Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to fireproof ceiling penetration exposed to outside is recommended. (Figure 13, Figure 14, Figure 15 & Figure 16)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews

### Dewberry

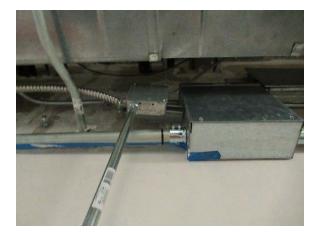


Figure 1 Hiawassee Mainline



Figure 3 Hiawassee Mainline



Figure 5 Hiawassee Mainline



Figure 2 Hiawassee Mainline



Figure 4 Hiawassee Mainline



Figure 6 Hiawassee Mainline





Figure 7 Good Homes Ramp On



Figure 8 Good Homes Ramp On



Figure 9 Good Homes Ramp Off



Figure 10 Good Homes Ramp Off



Figure 11 Hiawassee Ramp Off



Figure 12 Hiawassee Ramp Off





Figure 13 Hiawassee Ramp On



Figure 15 Hiawassee Ramp Off



Figure 14 Hiawassee Ramp On



Figure 16 Hiawassee Ramp Off

# Dewberry



# **2019 Annual Facilities Inspection Report**



Pine Hills Main Plaza November 13, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 11/13/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Pine Hills Mainline Plaza and associated ramps.

### 46 – Pine Hills Main Plaza

### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

### Interior Observations:

- Mainline elevator machine room has portable HVAC. (Figure 1 & Figure 2)
- Mainline computer room is missing HVAC vent covers. (Figure 3 & Figure 4)

### **Overpass Observations:**

- The above referenced overpass has rusted members identified. (Figure 5 & Figure 6)

### **Exterior Observations:**

- Guardrail missing attenuators. (Figure 7 & Figure 8)

### **Recommendations:**

- Recommend HVAC contractor to ensure that all vents have covers installed.
- Recommend repairs to ventilation system in elevator machine room.
- Recommend routine maintenance on overpass.
- Recommend attenuators are installed in guardrails.



### 47 – Old Winter Garden Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 9 & Figure 10)

#### 48 – Ortman/Mercy Drive Ramp – On Observations:

The above referenced on ramp is in good condition overall. Maintenance is recommended to test and balance HVAC. (Figure 11, Figure 12, Figure 13 & Figure 14)

### 49 – John Young Parkway Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 15 & Figure 16)

#### 50 – John Young Parkway Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

### 51 – OBT Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to fix broken generator fence gate and fireproof ceiling penetration exposed to outside is recommended. (Figure 19, Figure 20, Figure 21 & Figure 22)

### 52 – OBT Ramp – On Observations:

The above referenced on ramp is in good condition overall. Maintenance to repair broken door latch is recommended. (Figure 23 & Figure 24)

### 53 – Mills Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to fireproof ceiling penetration exposed to outside is recommended. (Figure 25, Figure 26 & Figure 27)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews

Dewberry



Figure 1 Pine Hills Mainline



Figure 3 Pine Hills Mainline



Figure 5 Pine Hills Mainline



Figure 2 Pine Hills Mainline



Figure 4 Pine Hills Mainline



Figure 6 Pine Hills Mainline





Figure 7 Pine Hills Mainline



Figure 9 Old Winter Garden Ramp Off



Figure 11 Ortman Mercy Drive Ramp On



Figure 8 Pine Hills Mainline



Figure 10 Old Winter Garden Ramp Off



Figure 12 Ortman Mercy Drive Ramp On





Figure 13 Ortman Mercy Drive Ramp On



Figure 15 John Young Parkway Ramp Off



Figure 17 John Young Parkway Ramp On



Figure 14 Ortman Mercy Drive Ramp On



Figure 16 John Young Parkway Ramp Off



Figure 18 John Young Parkway Ramp On





Figure 19 OBT Ramp Off



Figure 21 OBT Ramp Off



Figure 23 OBT Ramp On



Figure 20 OBT Ramp Off



Figure 22 OBT Ramp Off



Figure 24 OBT Ramp On





Figure 25 Mills Ramp Off



Figure 27 Mills Ramp Off



Figure 26 Mills Ramp Off



# **2019 Annual Facilities Inspection Report**



Conway Main Plaza November 15, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 11/15/19 Arrived: 7:00 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Conway Mainline Plaza and associated ramps.

### 58EB – Conway EB Main Plaza 58EB – Conway WB Main Plaza

### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

### Interior Observations:

- EB Mainline computer room electrical wiring, power strips and equipment on floor under equipment rack. (Figure 1)
- EB Mainline counting room appears to have a leak above ceiling tile. (Figure 2)
- WB Mainline computer room temporary duct issue identified. (Figure 3 & Figure 4)

### Tunnel Observations:

- EB Tunnel is in good condition overall with no identified deficiencies.
- WB Tunnel is in good condition overall with no identified deficiencies. During a storm, the tunnel has large leaks inside tunnel. (Figure 6)

### **Exterior Observations:**

- EB Exterior is in good condition overall with no identified deficiencies
- WB Exterior façade separating from building with visible cracks. (Figure 5)

### **Recommendations:**

- Recommend maintenance on of isolated wiring for computer room.
- Recommend HVAC contractor to test and balance Mainline.
- Recommend maintenance on building façade to address separation from building.

# Dewberry

### 54 – Bumby Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance to inspect corrosion above electric panel, fireproof ceiling penetration exposed to outside and repair broken door is recommended. (Figure 7, Figure 8, Figure 9 & Figure 10)

### 55 – Bumby Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 11 & Figure 12)

### 56 – Conway Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance to securely fasten underground cover is recommended. (Figure 13, Figure 14, Figure 15 & Figure 16)

### 57 – Conway Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

### 59 – Andes Ave/Lake Underhill/436 Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 19 & Figure 20)

### 60 – Semoran Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to repair exposed exterior wall and fireproof ceiling penetration exposed to outside is recommended. (Figure 21, Figure 22, Figure 23, Figure 24, Figure 25 & Figure 26)

### 61 – Yucatan Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to repair guardrail and fireproof ceiling penetration exposed to outside is recommended. (Figure 27, Figure 28, Figure 29, Figure 30, Figure 31 & Figure 32)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews





Figure 1 Conway EB Mainline



Figure 3 Conway WB Mainline



Figure 5 Conway WB Mainline



Figure 2 Conway EB Mainline Counting Room



Figure 4 Conway WB Mainline



Figure 6 Conway WB Mainline





Figure 7 Bumby Ramp On



Figure 9 Bumby Ramp On



Figure 11 Bumby Ramp Off



Figure 8 Bumby Ramp On



Figure 10 Bumby Ramp On



Figure 12 Bumby Ramp Off





Figure 13 Conway Ramp On



Figure 15 Conway Ramp On



Figure 17 Conway Ramp Off



Figure 14 Conway Ramp On



Figure 16 Conway Ramp On



Figure 18 Conway Ramp Off





Figure 19 Andes Ave/LkUndehill/436 Ramp Off



Figure 20 Andes Ave/LkUndehill/436 Ramp Off



Figure 21 Semoran Ramp Off



Figure 23 Semoran Ramp On



Figure 22 Semoran Ramp Off



Figure 24 Semoran Ramp Off





Figure 25 Semoran Ramp Off



Figure 27 Yucatan Ramp On



Figure 29 Yucatan Ramp On



Figure 26 Semoran Ramp Off



Figure 28 Yucatan Ramp On



Figure 30 Yucatan Ramp On





Figure 31 Yucatan Ramp On



Figure 32 Yucatan Ramp On



# **2019 Annual Facilities Inspection Report**



Dean Main Plaza October 25, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 10/25/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Dean Mainline Plaza and associated ramps.

### 64 – Dean Main Plaza

### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

### Interior Observations:

- The above referenced is in good condition overall.

### **Tunnel Observations:**

- Mainline tunnel control panel NEMA enclosures are rusted out. (Figure 3 & Figure 4)

### **Exterior Observations:**

- Exterior exposed pipes and equipment located behind mainline building. (Figure 1 & Figure 2)

#### **Recommendations:**

- Recommend electrical contractor replace the rusted enclosure on the tunnel control panels.
- Recommend general maintenance to address exposed pipes and equipment located behind mainline building.



### 62 – Dean Road Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance is recommended on the identified erosion area and general landscaping maintenance is recommended. (Figure 5, Figure 6, Figure 7 & Figure 8)

### 63 – Dean Road Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance to fireproof ceiling penetration is recommended. (Figure 9, Figure 10, Figure 11 & Figure 12)

### 65 – Rouse Road Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 13 & Figure 14)

### 66 – Rouse Road Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance to repair the guardrail is recommended. (Figure 15, Figure 16, Figure 17 & Figure 18)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_\_\_\_

Julie A Andrews





Figure 1 Dean Mainline



Figure 3 Dean Mainline



Figure 5 Dean Ramp On



Figure 2 Dean Mainline



Figure 4 Dean Mainline



Figure 6 Dean Ramp On





Figure 7 Dean Ramp On



Figure 9 Dean Ramp Off



Figure 11 Dean Ramp Off



Figure 8 Dean Ramp On



Figure 10 Dean Ramp Off



Figure 12 Dean Ramp Off





Figure 13 Rouse Road Ramp Off



Figure 15 Rouse Road Ramp On



Figure 17 Dean Road Ramp On



Figure 14 Rouse Road Ramp Off



Figure 16 Rouse Road Ramp On



Figure 18 Dean Road Ramp On





# **2019 Annual Facilities Inspection Report**



Coral Hills Main Plaza October 4, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 10/04/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Coral Hills Mainline Plaza and associated ramps.

### 67 – Coral Hills Main Plaza

### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

### Interior Observations:

- Mainline has cracks in the glass windows in the manager's office and break room. (Figure 1)
- Mainline has potential leak above ceiling tile in computer room. (Figure 2)
- Mainline has potential leak above ceiling tile in computer room on EB facility location. (Figure 3 & Figure 4)

### **Overpass Observations:**

- The above referenced overpass is in good condition overall with no identified deficiencies.

### **Exterior Observations:**

- Exterior building has a number of wasp nests on building façade. (Figure 5 & Figure 6)
- Exterior light fixture is in need of repair (Figure 7 & Figure 8)

### **Recommendations:**

- Recommend maintenance to locate any potential leaks.
- Recommend maintenance to repair exterior light fixture.
- Recommend routine pest control to remove wasp nests on building exterior.



### 68 – Keene Road Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 9 & Figure 10)

### 69 – Keene Road Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 11 & Figure 12)

### 70 – Hiawassee Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Maintenance on guardrail safety is recommended. (Figure 13, Figure 14, Figure 15 & Figure 16)

### 71 – Hiawassee Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews

### Dewberry



Figure 1 Coral Hills Mainline



Figure 3 Coral Hills Mainline



Figure 5 Coral Hills Mainline



Figure 2 Coral Hills Mainline



Figure 4 Coral Hills Mainline



Figure 6 Coral Hills Mainline





Figure 7 Coral Hills Mainline



Figure 9 Keene Road Ramp Off



Figure 8 Coral Hills Mainline



Figure 10 Keene Road Ramp Off



Figure 11 Keene Road Ramp On



Figure 12 Keene Road Ramp On





Figure 13 Hiawassee Ramp Off



Figure 15 Hiawassee Ramp On



Figure 14 Hiawassee Ramp Off



Figure 16 Hiawassee Ramp On



Figure 17 Hiawassee Ramp On



Figure 18 Hiawassee Ramp On





# **2019 Annual Facilities Inspection Report**



John Young Main Plaza August 29, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 08/29/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the John Young Parkway Mainline Plaza and associated ramps.

# 1 – John Young Parkway Main Plaza

#### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### **Interior Observations:**

- Main Plaza elevator is out of service. (Figure 1)
- Main Plaza stairwell has potential leak above ceiling tile. (Figure 2)

#### **Tunnel Observations:**

- The above referenced tunnel is in good condition overall.

#### **Exterior Observations:**

Exterior erosion surrounding utility pole located adjacent to toll lanes. (Figure 3, Figure 4, Figure 5, Figure 6, Figure 7 & Figure 8)

#### **Recommendations:**

- Recommend elevator contractor repair out of service elevator.
- Recommend examination of roof to locate any potential leaks.
- Recommend general maintenance to repair exterior erosion areas near utility poles.

# Dewberry

# 2 - John Young Parkway Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 9 & Figure 10)

#### 3 - John Young Parkway Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 11 & Figure 12)

# 4 – US 441 Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance is recommended to fasten electrical box and unistrut on the camera equipment securely to the building. Maintenance is recommended to check above ceiling tiles for potential leaks. (Figure 13, Figure 14, Figure 15 & Figure 16)

#### 5 – US 441 Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

#### 6 – Landstar Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance of isolated wiring and uneven pavement is recommended. Some general landscaping is also recommended. (Figure 21, Figure 22, Figure 23 & Figure 24)

#### 7 – Landstar Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some maintenance on potential leaks above ceiling and uneven pavement is recommended. (Figure 25, Figure 26, Figure 27 & Figure 28)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Figure 1 John Young Pkwy Mainline



Figure 3 John Young Pkwy Mainline



Figure 5 John Young Pkwy Mainline



Figure 2 John Young Pkwy Mainline



Figure 4 John Young Pkwy Mainline



Figure 6 John Young Pkwy Mainline





Figure 7 John Young Pkwy Mainline



Figure 9 John Young Pkwy Ramp Off



Figure 11 John Young Pkwy Ramp On



Figure 8 John Young Pkwy Mainline



Figure 10 John Young Pkwy Ramp Off



Figure 12 John Young Pkwy Ramp On





Figure 13 US-441 Ramp Off



Figure 15 US-441 Ramp Off



Figure 17 US-441 Ramp On



Figure 14 US-441 Ramp Off



Figure 16 US-441 Ramp Off



Figure 18 US-441 Ramp On





Figure 19 Landstar Ramp On



Figure 21 Landstar Ramp On



Figure 23 Landstar Ramp On



Figure 20 Landstar Ramp On



Figure 22 Landstar Ramp On



Figure 24 Landstar Ramp On





Figure 25 Landstar Ramp Off



Figure 27 Landstar Ramp Off



Figure 26 Landstar Ramp Off



Figure 28 Landstar Ramp Off

# Dewberry



# **2019 Annual Facilities Inspection Report**



Boggy Creek Main Plaza August 6, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 09/06/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Boggy Creek Mainline Plaza and associated ramps.

# 8 – Boggy Creek Main Plaza

#### **Summary of Noted Observations:**

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### Interior Observations:

- Portable HVAC equipment in computer room and missing vent cover. (Figure 1 & Figure 2)
- Ceiling tiles showing potential roof leaks (Figure 3 & Figure 4)

# **Tunnel Observations:**

- Mainline tunnel seams are showing deterioration. (Figure 5 & Figure 6)

#### **Exterior Observations:**

- Exterior handhole cover is missing behind main building. (Figure 7 & Figure 8)
- Exterior erosion surrounding utility poles located adjacent to toll lanes. (Figure 9, Figure 10, Figure 11 & Figure 12)

# **Recommendations:**

- Recommend test and balance on HVAC system.
- Recommend examination of roof to locate any potential leaks.
- Recommend general maintenance in tunnel to repair noted deficiencies.
- Recommend general maintenance to repair exterior erosion areas near utility poles.



#### 9 – Boggy Creek Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Maintenance is recommended on some ceiling tiles and potential leaks need to be addressed. (Figure 13, Figure 14, Figure 15 & Figure 16)

#### 10 – Boggy Creek Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

#### 11 – South Access Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 19 & Figure 20)

#### 12 – Lake Nona Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance on the guardrail is recommended. (Figure 21, Figure 22, Figure 23 & Figure 24)

#### 13 – Lake Nona Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 25 & Figure 26)

#### 14 – Narcoosse Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Maintenance on the building façade and vent is recommended. (Figure 27, Figure 28, Figure 29, Figure 30, Figure 31 & Figure 32)

#### 15 – Narcoosse Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 33 & Figure 34)

#### 16 – Moss Park Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 35 & Figure 36)

#### 17 – Moss Park Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some maintenance on potential leaks above ceiling tiles is recommended. (Figure 37, Figure 38, Figure 39 & Figure 40)

#### 18 – Innovation Way Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 41 & Figure 42)

#### 19 – Innovation Way Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 43 & Figure 44)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews





Figure 1 Boggy Creek Mainline



Figure 3 Boggy Creek Mainline



Figure 5 Boggy Creek Mainline Tunnel



Figure 2 Boggy Creek Mainline



Figure 4 Boggy Creek Mainline



Figure 6 Boggy Creek Mainline Tunnel





Figure 7 Boggy Creek Mainline Exterior



Figure 9 Boggy Creek Mainline Exterior



Figure 11 Boggy Creek Mainline Exterior



Figure 8 Boggy Creek Mainline Exterior



Figure 10 Boggy Creek Mainline Exterior



Figure 12 Boggy Creek Mainline Exterior





Figure 13 Boggy Creek Ramp Off



Figure 15 Boggy Creek Ramp Off



Figure 17 Boggy Creek Ramp On



Figure 14 Boggy Creek Ramp Off



Figure 16 Boggy Creek Ramp Off



Figure 18 Boggy Creek Ramp On





Figure 19 South Access Ramp Off



Figure 21 Lake Nona Ramp Off



Figure 23 South Access Ramp Off



Figure 20 South Access Ramp Off



Figure 22 Lake Nona Ramp Off



Figure 24 Lake Nona Ramp Off





Figure 25 Lake Nona Ramp On



Figure 27 Narcoosse Ramp Off



Figure 29 Narcoosse Ramp Off



Figure 26 Lake Nona Ramp On



Figure 28 Narcoosse Ramp Off



Figure 30 Narcoosse Ramp Off





Figure 31 Narcoosse Ramp Off



Figure 33 Narcoosse Ramp On



Figure 35 Moss Park Ramp Off



Figure 32 Narcoosse Ramp Off



Figure 34 Narcoosse Ramp On



Figure 36 Moss Park Ramp Off





Figure 37 Moss Park Ramp On



Figure 39 Moss Park Ramp On



Figure 41 Innovation Ramp Off



Figure 38 Moss Park Ramp On



Figure 40 Moss Park Ramp On



Figure 42 Innovation Ramp Off





Figure 43 Innovation Ramp On



Figure 44 Innovation Ramp On



# **2019 Annual Facilities Inspection Report**



Curry Ford Main Plaza August 13, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 09/13/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Curry Ford Mainline Plaza and associated ramps.

# 22 – Curry Ford Main Plaza

# Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### Interior Observations:

- Main Plaza break room telephone line is connected with duct tape. (Figure 1 & Figure 2)
- Main Plaza locker area and hallway show potential leaks above ceiling tile. (Figure 3 & Figure 4)

# **Tunnel Observations:**

- Main Plaza tunnel ceiling seam/wood separation from ceiling. (Figure 5 & Figure 6)
- Main Plaza tunnel has water leaking through the tunnel. (Figure 7 & Figure 8)

# **Exterior Observations:**

- The above referenced exterior is in good condition overall.

# **Recommendations:**

- Recommend general maintenance to repair telephone line in break room.
- Recommend general maintenance in tunnel to repair noted deficiencies.
- Recommend general maintenance to determine if there are leaks above ceiling tiles.



# 20 – Lee Vista Ramp – On Observations:

The above referenced on ramp is in good condition overall. General maintenance on building façade showing separation from building, replace missing vent cover and determine solution for overhead piping is recommended. (Figure 9, Figure 10, Figure 11 & Figure 12)

# 21 – Lee Vista Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance on building façade showing separation from building and general landscaping is recommended. (Figure 13, Figure 14, Figure 15, Figure 16, Figure 17 & Figure 18)

# 23 – Curry Ford Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance to fireproof ceiling penetration exposed to outside is recommended. (Figure 19, Figure 20, Figure 21 & Figure 22)

# 24 – Curry Ford Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 23 & Figure 24)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews

# Dewberry



Figure 1 Curry Ford Mainline



Figure 3 Curry Ford Mainline



Figure 5 Curry Ford Mainline Tunnel



Figure 2 Curry Ford Mainline



Figure 4 Curry Ford Mainline



Figure 6 Curry Ford Mainline Tunnel





Figure 7 Curry Ford Mainline Tunnel



Figure 8 Curry Ford Mainline Tunnel



Figure 9 Lee Vista Ramp On



Figure 11 Lee Vista Ramp On



Figure 10 Lee Vista Ramp On



Figure 12 Lee Vista Ramp On





Figure 13 Lee Vista Ramp Off



Figure 14 Lee Vista Ramp Off



Figure 15 Lee Vista Ramp Off



Figure 17 Lee Vista Ramp Off



Figure 16 Lee Vista Ramp Off



Figure 18 Lee Vista Ramp Off





Figure 19 Curry Ford Ramp Off



Figure 21 Curry Ford Ramp Off



Figure 23 Curry Ford Ramp On



Figure 20 Curry Ford Ramp Off



Figure 22 Curry Ford Ramp Off



Figure 24 Curry Ford Ramp On





# **2019 Annual Facilities Inspection Report**



University Mainline Plaza August 20, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 08/20/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the University Creek Mainline Plaza and associated ramps.

# 27 – University Main Plaza

# Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

# Interior Observations:

- Mainline computer room has portable HVAC equipment. (Figure 1 & Figure 2)
- Mainline restroom has opening in wall behind fixture. (Figure 3 & Figure 4)
- Mainline computer room has potential leak above ceiling tile. (Figure 5 & Figure 6)

# **Tunnel Observations:**

- The above referenced tunnel is in good condition overall.

# **Exterior Observations:**

- The above referenced exterior is in good condition overall.

# **Recommendations:**

- Recommend test and balance of HVAC system.
- Recommend examination of roof to locate any potential leaks.
- Recommend general maintenance in restroom to address noted deficiencies.



# 25 – Colonial Ramp – On Observations:

The above referenced on ramp is in good condition overall. General maintenance to fireproof ceiling penetration exposed to outside is recommended. (Figure 7, Figure 8, Figure 9 & Figure 10)

# 26 – Colonial Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance to fireproof ceiling penetration exposed to outside and repair broken door latch is recommended. (Figure 11, Figure 12, Figure 13 & Figure 14)

# 28 – University Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General landscape maintenance is recommended. (Figure 15, Figure 16, Figure 17, Figure 18, Figure 19 & Figure 20)

# 29 – University Ramp – On Observations:

The above referenced on ramp is in good condition overall. General landscape maintenance is recommended. (Figure 21, Figure 22, Figure 23 & Figure 24)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews

Dewberry



Figure 1 University Mainline



Figure 3 University Mainline



Figure 5 University Mainline



Figure 2 University Mainline



Figure 4 University Mainline



Figure 6 University Mainline





Figure 7 Colonial Ramp On



Figure 9 Colonial Ramp On



Figure 11 Colonial Ramp Off



Figure 8 Colonial Ramp On



Figure 10 Colonial Ramp On



Figure 12 Colonial Ramp Off





Figure 13 Colonial Ramp Off



Figure 15 University Ramp Off



Figure 17 University Ramp Off



Figure 14 Colonial Ramp Off



Figure 16 University Ramp Off



Figure 18 University Ramp Off





Figure 19 University Ramp Off



Figure 20 University Ramp Off



Figure 21 University Ramp On



Figure 23 University Ramp On



Figure 22 University Ramp On



Figure 24 University Ramp On





# **2019 Annual Facilities Inspection Report**



Forest Lake Main Plaza October 18, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 10/18/19 & 10/23/19 Arrived: 7:00 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Forest Lake Mainline Plaza and associated ramps.

# 83 – Forest Lake Main Plaza

# Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### Interior Observations:

- Mainline has identified leaks above ceiling tile and temporary HVAC equipment in computer room. (Figure 1 & Figure 2)
- Mainline HVAC equipment paint is peeling off existing duct work. (Figure 7 & Figure 8)

# **Overpass Observations:**

- Overpass has some recommended areas of repair in seam as shown in inspection photos. (Figure 3, Figure 4, Figure 9 & Figure 10)

# **Exterior Observations:**

- Building façade showing separation from building. (Figure 5 & Figure 6)

#### **Recommendations:**

- Recommend maintenance on building façade to address separation from building
- Recommend maintenance on overpass to restore and repaint identified area in need of repair.
- Recommend maintenance to determine the cause of the leaks in the ceiling tiles.



Central Florida Expressway Authority Forest Lake Main Plaza 2019 Annual Inspection Report Date on Site: October 18 & October 23, 2019

# 79 – SR-438 Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 11 & Figure 12)

#### 80 – SR-438 Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance to determine cause of building façade separation is recommended. (Figure 13, Figure 14, Figure 15 & Figure 16)

#### 81 – West Road Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

#### 82 – West Road Ramp – Off Observations:

The above referenced on ramp is in good condition overall. General maintenance to determine cause of building façade separation is recommended. (Figure 19, Figure 20, Figure 21 & Figure 22)

# 84 – CR 437 Ramp – On Observations:

The above referenced on ramp is in good condition overall. (Figure 23 & Figure 24)

#### 85 – CR 437 Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 25 & Figure 26)

#### 86 – Ponkan Gantry – Observations:

The above referenced on ramp is in good condition overall. General maintenance is recommended to address the condensation issue. (Figure 27, Figure 28, Figure 29 & Figure 30)

#### 88 – Mt. Plymouth Gantry – Observations:

The above referenced on ramp is in good condition overall. General maintenance is recommended to address the condensation issue. (Figure 31 & Figure 32)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews





Figure 1 Forest Lake Mainline IT Room



Figure 3 Forest Lake Mainline



Figure 5 Forest Lake Mainline



Figure 2 Forest Lake Mainline IT Room



Figure 4 Forest Lake Mainline



Figure 6 Forest Lake Mainline





Figure 7 Forest Lake Mainline



Figure 9 Forest Lake Mainline



Figure 11 SR-438 Ramp On



Figure 8 Forest Lake Mainline



Figure 10 Forest Lake Mainline



Figure 12 SR-438 Ramp On





Figure 13 SR-438 Ramp Off



Figure 15 SR-438 Ramp Off



Figure 17 West Road Ramp On



Figure 14 SR-438 Ramp Off



Figure 16 SR-438 Ramp Off



Figure 18 West Road Ramp On





Figure 19 West Road Ramp Off



Figure 21 West Road Ramp Off



Figure 23 CR-437A Ramp Off



Figure 20 West Road Ramp Off



Figure 22 West Road Ramp Off



Figure 24 CR-437A Ramp Off





Figure 25 CR-437A Ramp On



Figure 27 Ponkan Gantry



Figure 29 Ponkan Gantry



Figure 26 CR-437A Ramp On



Figure 28 Ponkan Gantry



Figure 30 Ponkan Gantry





Figure 31 Mt. Plymouth Gantry



Figure 32 Mt. Plymouth Gantry



# **2019 Annual Facilities Inspection Report**



Independence Main Plaza October 14, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 10/14/19 Arrived: 7:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Independence Mainline Plaza and associated ramps.

#### 76 – Independence Main Plaza

#### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### Interior Observations:

- Mainline computer room is missing ceiling tiles and has exposed duct work. (Figure 1 & Figure 2)

#### **Overpass Observations:**

- The above referenced overpass is in good condition overall.

#### **Exterior Observations:**

- The above referenced exterior is in good condition overall.

#### **Recommendations:**

- Recommend pressure wash overpass area.
- Recommend test and balance of HVAC to ensure system is working properly.

# 72 – Schofield Ramp – On Observations:

The above referenced on ramp is in good condition overall. Maintenance on ceiling tiles to locate potential is recommended. (Figure 3, Figure 4, Figure 5 & Figure 6)

# 73 – Schofield Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 7 & Figure 8)

#### 74 – New Independence Ramp – On Observations:

The above referenced on ramp is in good condition overall. General maintenance to repair/paint area where old signage used to be. (Figure 9, Figure 10, Figure 11 & Figure 12)

#### 75 – New Independence Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Maintenance to address the peeling paint on the signage post is recommended. (Figure 13, Figure 14, Figure 15 & Figure 16)

# 77 – CR-535 Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 17 & Figure 18)

#### 78 – CR-535 Ramp – On Observations:

The above referenced on ramp is in good condition overall. Maintenance to address the peeling paint on the signage post is recommended. (Figure 19, Figure 20, Figure 21 & Figure 22)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews





Figure 1 Independence Mainline IT Room



Figure 3 Schofield Ramp On



Figure 5 Schofield Ramp On



Figure 2 Independence Mainline IT Room



Figure 4 Schofield Ramp On



Figure 6 Schofield Ramp On





Figure 7 Schofield Ramp Off



Figure 9 New Independence Ramp On



Figure 11 New Independence Ramp On



Figure 8 Schofield Ramp Off



Figure 10 New Independence Ramp On



Figure 12 New Independence Ramp On





Figure 13 New Independence Ramp Off



Figure 15 New Independence Ramp Off



Figure 17 CR-535 Ramp Off



Figure 14 New Independence Ramp Off



Figure 16 New Independence Ramp Off



Figure 18 CR-535 Ramp Off





Figure 19 CR-535 Ramp On



Figure 21 CR-535 Ramp On



Figure 20 CR-535 Ramp On



Figure 22 CR-535 Ramp On



# **2019 Annual Facilities Inspection Report**



Coronado Gantry October 23, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 10/23/19 Arrived: 7:00 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Coronado Gantry.

# 87 – Coronado Gantry

# Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### 87 – Coronado Gantry – Observations:

The above referenced gantry is in good condition overall. General maintenance is recommended to address the condensation issue. (Figure 1, Figure 2, Figure 3 & Figure 4)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Central Florida Expressway Authority Coronado Gantry 2019 Annual Inspection Report Date on Site: October 23, 2019



Figure 1 Coronado Gantry



Figure 3 Coronado Gantry



Figure 2 Coronado Gantry



Figure 4 Coronado Gantry



# **2019 Annual Facilities Inspection Report**



Beachline Main Plaza August 23, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 08/23/19 Arrived: 6:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Beachline Young Parkway Mainline Plaza and associated ramps.

# 35 – Beachline Main Plaza

#### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

# Interior Observations:

- Mainline has isolated ceiling vent cover missing. (Figure 1)
- Mainline isolated wiring bundle is pulling from ceiling. (Figure 2)

#### **Tunnel Observations:**

- Interior tunnel wall has isolated deficiency. (Figure 3)

#### **Exterior Observations:**

- Exterior building is in good condition overall.
- Condenser unit located behind mainline building has pipe corrosion. (Figure 4)

#### **Recommendations:**

- Recommend maintenance on of isolated wiring in computer room.
- Recommend maintenance on interior tunnel wall.
- Recommend HVAC contractor inspect and address exterior condenser unit pipe corrosion.

# 30 – McCoy Ramp – Off Observations:

The above referenced off ramp is in good condition overall. (Figure 5 & Figure 6)

#### 31 – Jetport Ramp – On Observations:

The above referenced on ramp is in good condition overall. Maintenance to ensure underground propane tank cover is securely fastened. (Figure 7, Figure 8, Figure 9 & Figure 10)

#### 32 – Conway Ramp – Off Observations:

The above referenced off ramp is in good condition overall. (Figure 11 & Figure 12)

# 33 - Tradeport Ramp - On Observations:

The above referenced on ramp is in good condition overall. Maintenance to ensure underground propane tank cover is securely fastened. Maintenance to verify potential leaks above ceiling tile. (Figure 13 & Figure 14, Figure 15, Figure 16, Figure 17 & Figure 18)

# 36 – ICP Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 19 & Figure 20)

# 37 – ICP Ramp – Off Observations:

The above referenced on ramp is in good condition overall. (Figure 21 & Figure 22)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Figure 1 Beachline Mainline



Figure 3 Beachline Mainline



Figure 5 McCoy Road Ramp Off



Figure 2 Beachline Mainline



Figure 4 Beachline Mainline



Figure 6 McCoy Road Ramp Off





Figure 7 Jetport Ramp On



Figure 9 Jetport Ramp On



Figure 11 Conway Ramp On



Figure 8 Jetport Ramp On



Figure 10 Jetport Ramp On



Figure 12 Conway Ramp On





Figure 13 Tradeport Ramp On



Figure 15 Tradeport Ramp On



Figure 17 Tradeport Ramp On



Figure 14 Tradeport Ramp On



Figure 16 Tradeport Ramp On



Figure 18 Tradeport Ramp On





Figure 19 ICP Ramp Off



Figure 21 ICP Ramp On



Figure 20 ICP Ramp Off



Figure 22 ICP Ramp On



# **2019 Annual Facilities Inspection Report**



Dallas Main Plaza August 16, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 08/16/19 Arrived: 7:15 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Dallas Mainline Plaza and associated ramps.

# 38 – Dallas Main Plaza

# Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

# Interior Observations:

- Mainline computer room has potential leak in ceiling tile located above equipment rack. (Figure 1 & Figure 2)
- Mainline electrical junction box is missing cover. (Figure 3 & Figure 4)

# **Overpass Observations:**

- Mainline overpass is in need of pressure wash. (Figure 13 & Figure 14)
- Mainline overpass connections are showing rusted hardware.
  (Figure 11, Figure 12, Figure 15, Figure 16, Figure 17 & Figure 18)

# **Exterior Observations:**

- Exterior observations show erosion around mow pad behind mainline facility. (Figure 5, Figure 6, Figure 7 & Figure 8)
- Exterior observations show erosion area behind mainline facility. (Figure 9 & Figure 10)

# **Recommendations:**

- Recommend pressure wash for the building exterior and overpass.
- Recommend maintenance to locate/address leaks in ceiling tile.
- Recommend general maintenance to address erosion areas behind facility.



#### 39 – Dallas Ramp – On Observations:

The above referenced on ramp is in good condition overall. Some general landscaping is recommended. (Figure 19, Figure 20, Figure 21, Figure 22, Figure 23 & Figure 24)

## 40 – Dallas Ramp – Off Observations:

The above referenced on ramp is in good condition overall. Some general landscaping is recommended. (Figure 25, Figure 26, Figure 27, Figure 28, Figure 29 & Figure 30)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Figure 1 Dallas Mainline IT Room



Figure 3 Dallas Mainline



Figure 5 Dallas Mainline



Figure 2 Dallas Mainline IT Room



Figure 4 Dallas Mainline



Figure 6 Dallas Mainline





Figure 7 Dallas Mainline



Figure 9 Dallas Mainline



Figure 11 Dallas Mainline Overpass



Figure 8 Dallas Mainline



Figure 10 Dallas Mainline



Figure 12 Dallas Mainline Overpass





Figure 13 Dallas Mainline Overpass



Figure 15 Dallas Mainline EB Overpass



Figure 17 Dallas Mainline EB Overpass



Figure 14 Dallas Mainline Overpass



Figure 16 Dallas Mainline EB Overpass



Figure 18 Dallas Mainline EB





Figure 19 Dallas Ramp On



Figure 21 Dallas Ramp On



Figure 23 Dallas Ramp On



Figure 20 Dallas Ramp On



Figure 22 Dallas Ramp On



Figure 24 Dallas Ramp On





Figure 25 Dallas Ramp Off



Figure 27 Dallas Ramp Off



Figure 29 Dallas Ramp Off



Figure 26 Dallas Ramp Off



Figure 28 Dallas Ramp Off



Figure 30 Dallas Ramp Off





# **2019 Annual Facilities Inspection Report**



Poinciana Parkway December 3, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

# Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 12/03/19 Arrived: 9:00 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Poinciana Parkway.

# 538 – Poinciana Parkway

#### **Summary of Noted Observations:**

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### 89 – Marigold AET Toll Plaza – Observations:

The above referenced plaza is in good condition overall. Some general maintenance to caulk/seal building framing is recommended. (Figure 1, Figure 2, Figure 3, Figure 4, Figure 5 & Figure 6)

# 90 – KOA AET Toll Plaza – Observations:

The above referenced plaza is in good condition overall. Some general maintenance to caulk/seal building framing and general landscaping is recommended. (Figure 7, Figure 8, Figure 9, Figure 10, Figure 11 & Figure 12)

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Central Florida Expressway Authority Poinciana Parkway 2019 Annual Inspection Report Date on Site: December 3, 2019



Figure 1 Marigold AET Toll Plaza



Figure 3 Marigold AET Toll Plaza



Figure 2 Marigold AET Toll Plaza



Figure 4 Marigold AET Toll Plaza



Figure 5 Marigold AET Toll Plaza



Figure 6 Marigold AET Toll Plaza



Central Florida Expressway Authority Poinciana Parkway 2019 Annual Inspection Report Date on Site: December 3, 2019



Figure 7 KOA AET Toll Plaza



Figure 9 KOA AET Toll Plaza



Figure 11 KOA AET Toll Plaza



Figure 8 KOA AET Toll Plaza



Figure 10 KOA AET Toll Plaza



Figure 12 KOA AET Toll Plaza





# **2019 Annual Facilities Inspection Report**



Goldenrod Main Plaza

September 13, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

#### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 09/13/19 Arrived: 10:00 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Goldenrod Mainline Plaza.

#### 34 – Goldenrod Main Plaza

#### Summary of Noted Observations:

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### Interior Observations:

- Mainline has potential leak above ceiling tile. (Figure 3 & Figure 4)

#### **Exterior Observations:**

- The above referenced site is in good condition overall with no identified deficiencies. (Figure 1 & Figure 2)

#### **Recommendations:**

- Recommend maintenance to locate any potential leaks above ceiling tiles.

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews



Central Florida Expressway Authority Goldenrod Main Plaza 2019 Annual Inspection Report Date on Site: September 9, 2019



Figure 1 Goldenrod Main Plaza



Figure 3 Goldenrod Main Plaza



Figure 2 Goldenrod Main Plaza



Figure 4 Goldenrod Main Plaza

### Dewberry

### Dewberry

### **2019 Annual Facilities Inspection Report**



Building Headquarters

December 4, 2019

SUBMITTED BY:

**Dewberry Engineers Inc.** 800 N. Magnolia Avenue, Suite 1000 Orlando, Florida 32803 407.843.5120

SUBMITTED TO:

**Central Florida Expressway Authority** Corporate Office 4974 ORL Tower Road Orlando, Florida 32807 407.690.5000

#### Attn: Robert Glasemann Facilities Supervisor Central Florida Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Inspection Date: 12/04/19 Arrived: 5:30 AM

Dewberry Engineers Inc. (Dewberry) was called to perform the annual building inspection of the Central Florida Expressway Authority headquarters building.

#### **Building Headquarters**

#### **Summary of Noted Observations:**

The above referenced site is in good condition overall with no identified deficiencies. Maintenance is recommended on some isolated items as referenced below. Please refer to inspection photos for visual observations. The following items were observed:

#### **Exterior Observations:**

Building exterior is in good condition overall with no identified deficiencies.
 (Figure 1 - Figure 12)

#### Interior Observations:

\_

Building interior is in good condition overall with no identified deficiencies. (Figure 13 - Figure 66)

#### First Floor – Observations:

- Identified areas in need of patch and paint. (Figure 67 & Figure 68)
  - Identified areas with potential leak above ceiling tile. (Figure 71, Figure 72, Figure 73, Figure 74 & Figure 75)

#### Second Floor – Observations:

- Identified areas with potential leak above ceiling tile. (Figure 76 & Figure 77)
- Identified condensation collecting under HVAC equipment in second floor mechanical room 232. (Figure 79, Figure 80, Figure 81 & Figure 82)

#### Third Floor – Observations:

- Identified areas with potential leak above ceiling tile. (Figure 83 & Figure 84)
- Identified areas in need of patch and paint. (Figure 85, Figure 86, Figure 89 & Figure 90)

#### **Recommendations:**

- Recommend general maintenance to locate potential leaks above ceiling.
- Recommend mechanical contractor inspect HVAC equipment for source of condensation.
- Recommend patch and paint in areas in need of touch up.

All notes and items in this report are a record of observations provided by the site visit. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, photos and items observed.

Prepared By: \_

Julie A Andrews







Figure 1 Building Headquarters

Figure 2 Building Headquarters



Figure 3 Building Headquarters



Figure 4 Building Headquarters



Figure 5 Building Headquarters



Figure 6 Building Headquarters





Figure 7 Building Headquarters



Figure 9 Building Headquarters



Figure 11 Building Headquarters



Figure 8 Building Headquarters

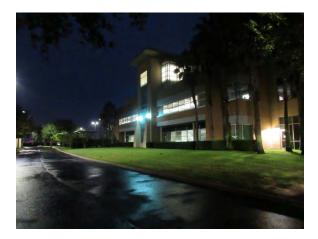


Figure 10 Building Headquarters



Figure 12 Building Headquarters





Figure 13 Building Headquarters First Floor



Figure 15 Building Headquarters First Floor



Figure 17 Building Headquarters First Floor



Figure 14 Building Headquarters First Floor



Figure 16 Building Headquarters First Floor



Figure 18 Building Headquarters First Floor





Figure 19 Building Headquarters First Floor



Figure 21 Building Headquarters First Floor



Figure 23 Building Headquarters First Floor



Figure 20 Building Headquarters First Floor



Figure 22 Building Headquarters First Floor



Figure 24 Building Headquarters First Floor





Figure 25 Building Headquarters First Floor



Figure 27 Building Headquarters First Floor



Figure 29 Building Headquarters First Floor



Figure 26 Building Headquarters First Floor



Figure 28 Building Headquarters First Floor



Figure 30 Building Headquarters First Floor





Figure 31 Building Headquarters First Floor



Figure 33 Building Headquarters First Floor



Figure 35 Building Headquarters First Floor



Figure 32 Building Headquarters First Floor



Figure 34 Building Headquarters First Floor



Figure 36 Building Headquarters First Floor





Figure 37 Building Headquarters Second Floor



Figure 39 Building Headquarters Second Floor



Figure 41 Building Headquarters Second Floor



Figure 38 Building Headquarters Second Floor



Figure 40 Building Headquarters Second Floor



Figure 42 Building Headquarters Second Floor





Figure 43 Building Headquarters Second Floor



Figure 45 Building Headquarters Second Floor



Figure 47 Building Headquarters Second Floor



Figure 44 Building Headquarters Second Floor



Figure 46 Building Headquarters Second Floor



Figure 48 Building Headquarters Second Floor





Figure 49 Building Headquarters Second Floor



Figure 51 Building Headquarters Second Floor



Figure 53 Building Headquarters Second Floor



Figure 50 Building Headquarters Second Floor



Figure 52 Building Headquarters Second Floor



Figure 54 Building Headquarters Second Floor





Figure 55 Building Headquarters Third Floor



Figure 57 Building Headquarters Third Floor



Figure 59 Building Headquarters Third Floor



Figure 56 Building Headquarters Third Floor



Figure 58 Building Headquarters Third Floor



Figure 60 Building Headquarters Third Floor





Figure 61 Building Headquarters Third Floor

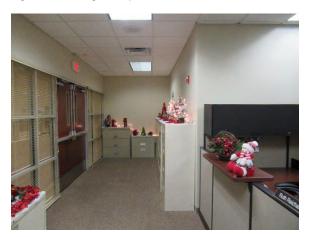


Figure 63 Building Headquarters Third Floor



Figure 65 Building Headquarters Third Floor



Figure 62 Building Headquarters Third Floor



Figure 64 Building Headquarters Third Floor



Figure 66 Building Headquarters Third Floor





Figure 67 Building Headquarters First Floor Room 147



Figure 69 Building Headquarters First Floor



Figure 71 Building Headquarters First Floor Room 135

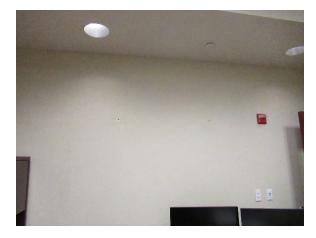


Figure 68 Building Headquarters First Floor Room 147



Figure 70 Building Headquarters First Floor



Figure 72 Building Headquarters First Floor Room 135





Figure 73 Building Headquarters First Floor Room 135



Figure 75 Building Headquarters First Floor Room 135



Figure 77 Building Headquarters Second Floor Room 211



Figure 74 Building Headquarters First Floor Room 135



Figure 76 Building Headquarters Second Floor Room 213



Figure 78 Building Headquarters Second Floor





Figure 79 Building Headquarters Second Floor Room 232



Figure 81 Building Headquarters Second Floor Room 232



Figure 83 Building Headquarters Third Floor



Figure 80 Building Headquarters Second Floor Room 232



Figure 82 Building Headquarters Second Floor Room 232



Figure 84 Building Headquarters Third Floor





Figure 85 Building Headquarters Third Floor Room 323



Figure 87 Building Headquarters Third Floor



Figure 89 Building Headquarters Third Floor Room 337



Figure 86 Building Headquarters Third Floor Room 323



Figure 88 Building Headquarters Third Floor



Figure 90 Building Headquarters Third Floor Room 337





## Appendix 3: Major Cross-Drain Maintenance Evaluations

**2019 Annual Inspection Report** CENTRAL FLORIDA EXPRESSWAY AUTHORITY







## **Central Florida Expressway** Major Cross-Drain Maintenance Evaluation

## **Maintenance Ratings**

- Requires Immediate Attention (1) Heavy amounts of scour or sediment measured, cross drain is inaccessible or overgrown with vegetation that could potentially impede flow. No access.
- Medium (2) Moderate amounts of vegetation that don't seem to be impeding flow. Operable Routine Maintenance Required
- Minor (3) Light debris, vegetation that does not impede flow. Continue Routine Maintenance.
- None- Cross drain is clean



# **System-wide Issue Totals**

| Roadway | Rating (1)<br>Sediment | Rating (1)<br>Scour | Rating (1)<br>Vegetation | Rating (1)<br>No Access | Rating (2)<br>Medium | Rating (3)<br>Minor | None | Total<br>Evaluated |
|---------|------------------------|---------------------|--------------------------|-------------------------|----------------------|---------------------|------|--------------------|
| SR 429  | 2                      | 0                   | 1                        | 6                       | 3                    | 1                   | 5    | 18                 |
| SR 528  | 0                      | 1                   | 1                        | 1                       | 4                    | 3                   | 7    | 17                 |
| SR 417  | 6                      | 0                   | 9                        | 3                       | 4                    | 3                   | 3    | 28                 |
| SR 408  | 2                      | 1                   | 1                        | 4                       | 1                    | 2                   | 1    | 12                 |
| SR 414  | 0                      | 0                   | 0                        | 0                       | 0                    | 0                   | 1    | 1                  |
| SR 451  | 1                      | 0                   | 0                        | 0                       | 0                    | 0                   | 0    | 1                  |
| SR 453  | 0                      | 0                   | 0                        | 0                       | 0                    | 0                   | 0    | 0                  |
| SR 551  | 0                      | 0                   | 3                        | 0                       | 1                    | 0                   | 1    | 5                  |
| SR 538  | 0                      | 2                   | 0                        | 2                       | 1                    | 0                   | 1    | 6                  |
| TOTAL   | 11                     | 4                   | 15                       | 16                      | 14                   | 9                   | 19   | 88                 |

## System-wide Rating Level 1 Issues Totals

| Roadway | Rating (1)<br>Vegetation | Rating (1) No<br>Access | Rating (1)<br>Sedimentation | Rating (2)<br>Scour | Rating (1)<br>Erosion and/or<br>Structural<br>Damage |
|---------|--------------------------|-------------------------|-----------------------------|---------------------|--|
| SR 429  | 7                        | 6                       | 1                           | 0                   | 3  |
| SR 528  | 1                        | 3                       | 0                           | 0                   | 1  |
| SR 417  | 9                        | 5                       | 3                           | 2                   | 2  |
| SR 408  | 3                        | 5                       | 0                           | 1                   | 2  |
| SR 414  | 0                        | 0                       | 0                           | 0                   | 0  |
| SR 451  | 1                        | 0                       | 1                           | 0                   | 0  |
| SR 453  | 0                        | 0                       | 0                           | 0                   | 0  |
| SR 551  | 4                        | 0                       | 1                           | 0                   | 0  |
| SR 538  | 0                        | 2                       | 0                           | 1                   | 4  |
| TOTAL   | 25                       | 21                      | 6                           | 4                   | 12   |

### Dewberry

# SR 429- All Evaluated Cross-Drains

| Structure No. | Station | Project No. | End Treatment<br>Type      | Pipe Size/Type    | Maintenance<br>Rating Level                                |
|---------------|---------|-------------|----------------------------|-------------------|--|
| C-1           | 626+00  | 653         | Straight Endwall           | 3 - 6' x 4' CBC   | (2) Medium   |
| S-314         | 655+00  | 653         | Straight Endwall to<br>MES | 2 - 36″ RCP       | (2) Medium   |
| C-4           | 950+00  | 654A        | Straight Endwall           | 10' x 4' CBC      | (1) No Access  |
| C-5           | 996+62  | 654A        | Straight Endwall           | 10' x 8' CBC      | (1) No Access  |
| S-13          | 1104+40 | 655         | MES                        | 60" RCP           | (1) No Access  |
| OS-1          | 157+00  | 602         | Straight Endwall           | 3 - 8' x 5' CBC   | (1) No Access  |
| OS-2          | 174+00  | 602         | Straight Endwall           | 54" RCP           | (2) Medium   |
| OS-11         | 300+00  | 603         | Straight Endwall           | 3 - 34" x 53" RCP | (1) Requires<br>Immediate<br>Attention Heavy<br>Vegetation |
| OS-13         | 309+00  | 603         | Straight Endwall           | 2 - 36" RCP       | (3) Minor  |

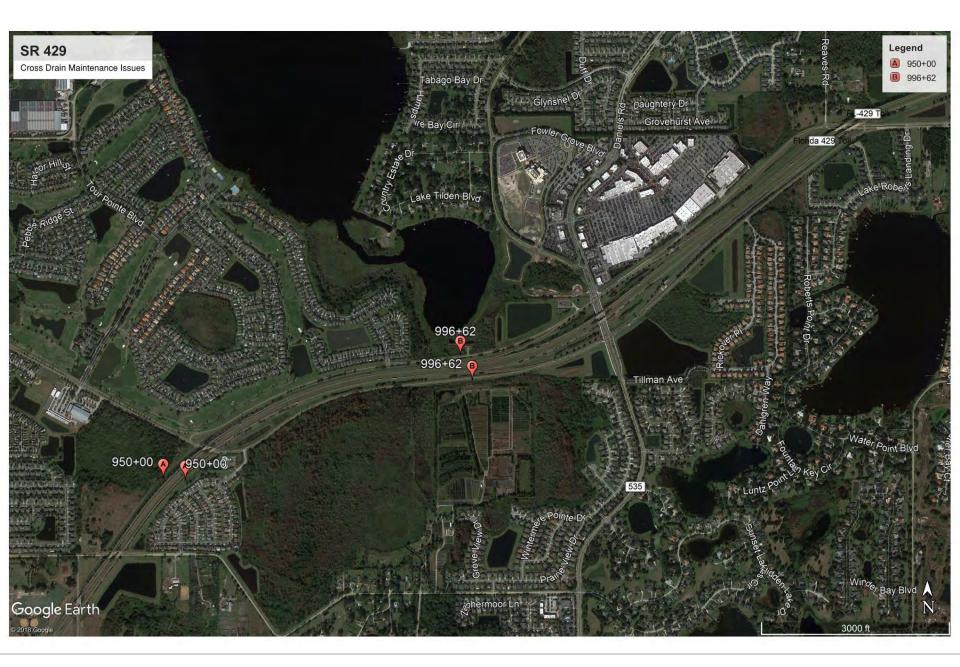


## **SR 429- All Evaluated Cross-Drains**

| 587+00<br>605+00 | 201  | Straight Endwall   | 36" RCP   | (1) Requires<br>Immediate<br>Attention-   |
|------------------|--|--|---|---|
| 605+00           |  |  |   | No Access   |
|                  | 201  | Straight Endwall   | 30" RCP   | (1) No Access   |
| 627+20           | 201  | Straight Endwall   | 2 - 42" RCP   | None  |
| 640+00           | 201  | Straight Endwall   | 2 - 42″ RCP   | (1) Requires<br>Immediate<br>Attention-<br>Sediment   |
| 336+00           | 204  | Straight Endwall to<br>DBI   | 36" RCP   | None  |
| 343+00           | 204  | Straight Endwall to<br>DBI   | 24" RCP   | None  |
| 352+50           | 204  | Straight Endwall to<br>DBI   | 36" RCP   | None  |
| 240+00           | 414-210  | DBI  | 24" RCP   | None  |
| 621+92           | 451-604  | Straight Endwall   | 84" RCP   | (1) Requires<br>Immediate<br>Attention-<br>Sediment   |
|                  | 640+00<br>336+00<br>343+00<br>352+50<br>240+00<br>621+92 | 640+00    201      336+00    204      343+00    204      352+50    204      240+00    414-210      621+92    451-604 | 640+00201Straight Endwall336+00204Straight Endwall to<br>DBI343+00204Straight Endwall to<br>DBI352+50204Straight Endwall to<br>DBI240+00414-210DBI621+92451-604Straight Endwall | 640+00      201      Straight Endwall      2 - 42" RCP        336+00      204      Straight Endwall to<br>DBI      36" RCP        343+00      204      Straight Endwall to<br>DBI      24" RCP        352+50      204      Straight Endwall to<br>DBI      36" RCP        240+00      414-210      DBI      24" RCP |

 Total- 18, Requires Immediate Attention- 9 (6 No Access, 2 Sediment, 1 Vegetation), Medium- 3, Minor- 1, None- 5







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| C-4           | 950+00  | 654A        | Straight Endwall      | 10' x 4' CBC   | 1                           |





Left

Left

- Structure is beyond fence line
- Could not inspect

Dewberry<sup>.</sup>

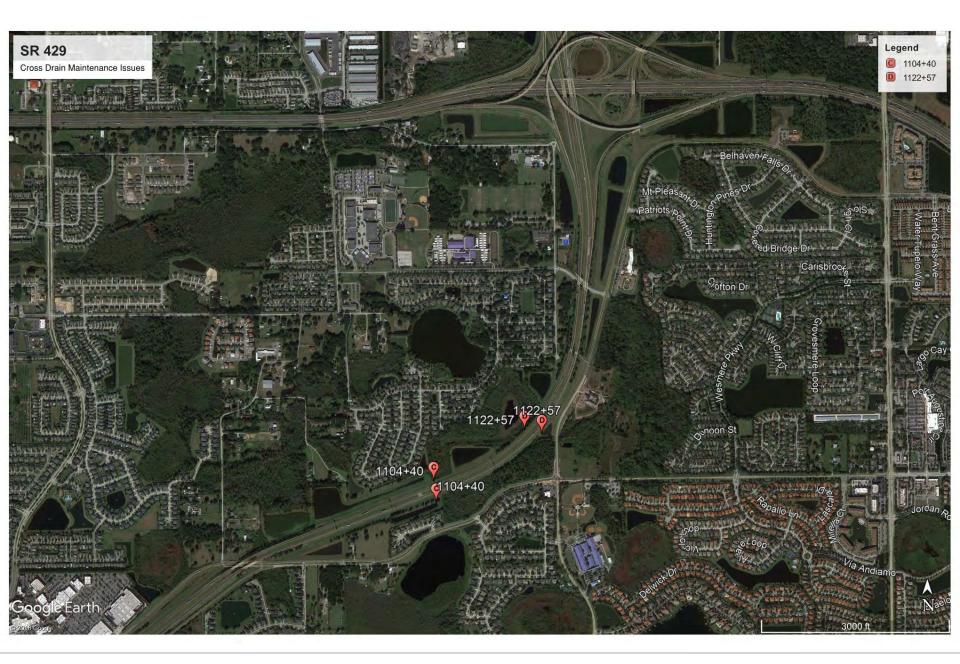
| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| C-5           | 996+62  | 654A        | Straight Endwall      | 10' x 8' CBC   | 1                           |



Right Left
 Structure is beyond fence line, fence overgrown with vegetation

• Could not inspect







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-13          | 1104+40 | 655         | MES                   | 60" RCP        | 1                           |

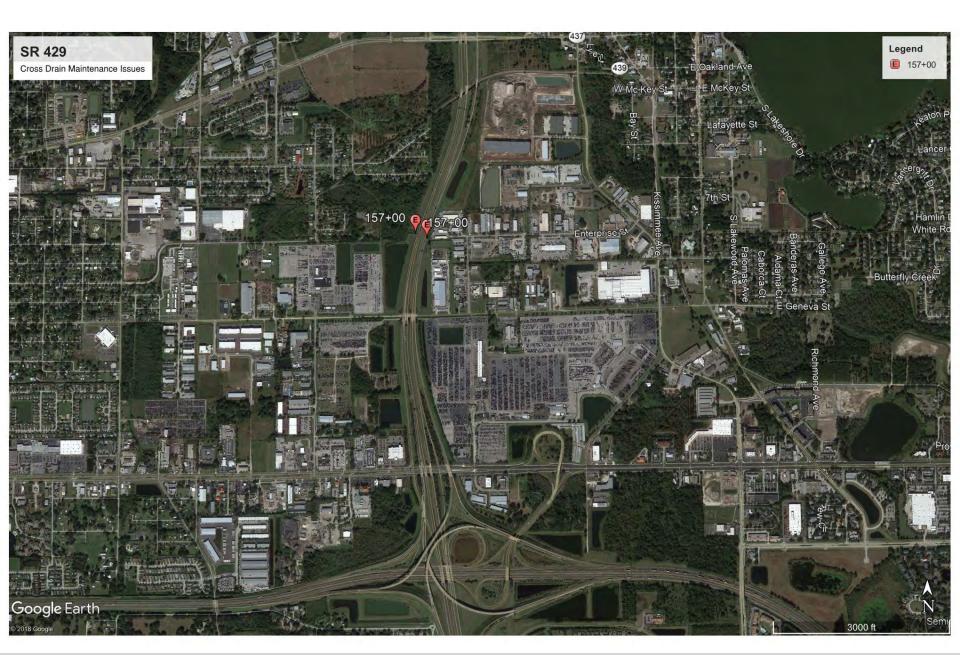


### Right

Left

- Left Structure is beyond fence line
- Could not inspect on Left side







12 | CFX Major Cross-Drain Evaluation August 5, 2019

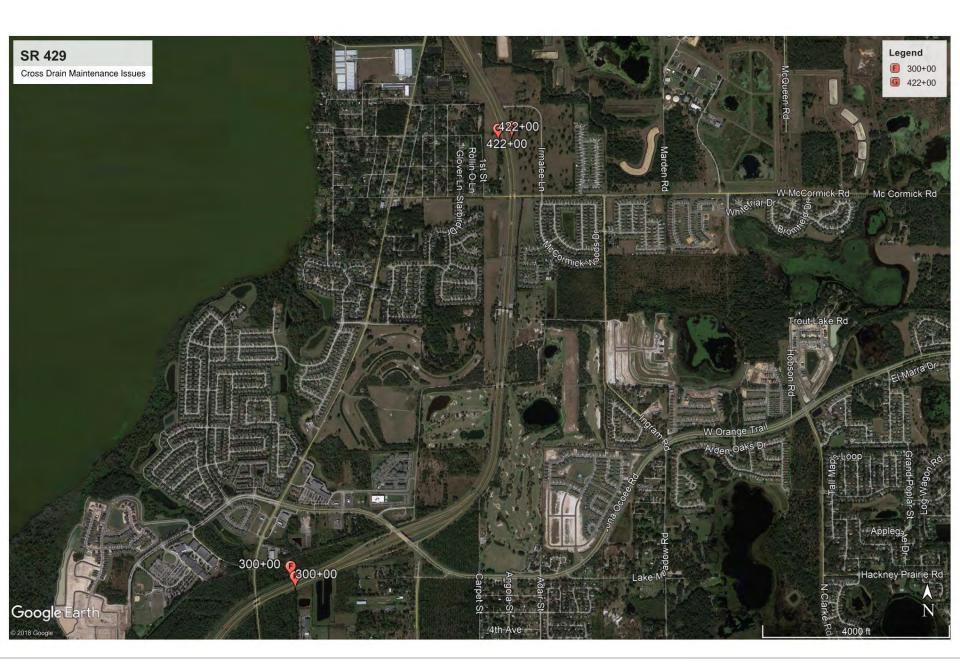
| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| OS-1          | 157+00  | 602         | Straight Endwall      | 3 - 8' x 5' CBC | 1                           |



Left Right
 Left Structure heavy vegetation. Right Structure beyond fence line

- Could not inspect Right structure
- Damage to fence







14 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| OS-11         | 300+00  | 603         | Straight Endwall      | 3 - 34" x 53" RCP | 1                           |



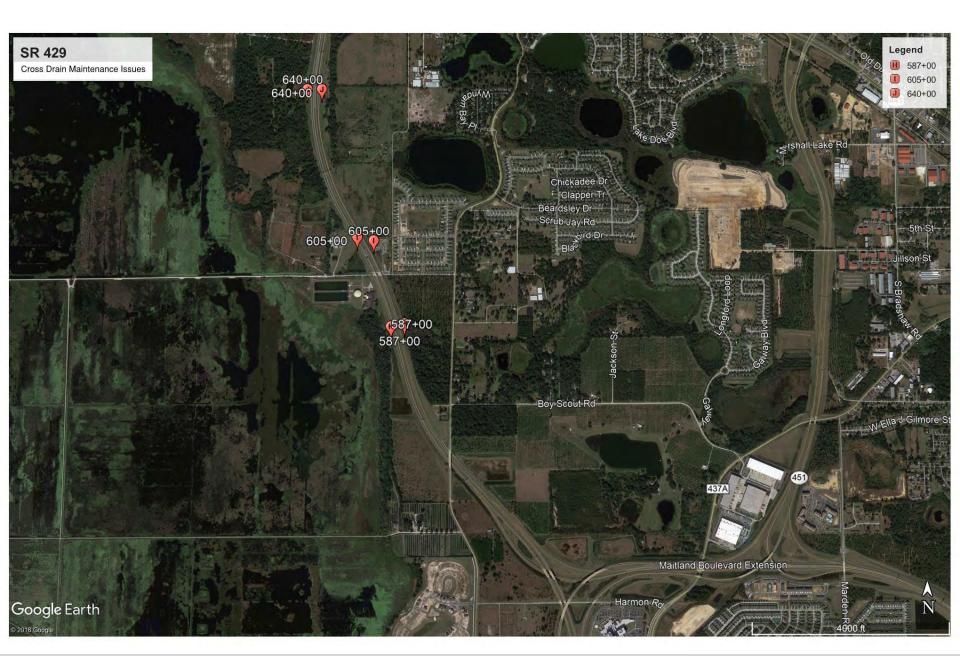
Left



Right

Both ends covered in heavy vegetation







16 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| CD-1          | 587+00  | 201         | Straight Endwall      | 36" RCP        | 1                           |



Left

- Right Structure is beyond fence line, Left Structure heavy vegetation
- Could not inspect Right Structure



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| CD-2          | 605+00  | 201         | Straight Endwall      | 30" RCP        | 1                           |



- Structure is beyond fence line
- Could not inspect



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| CD-4          | 640+00  | 201         | Straight Endwall      | 2 - 42" RCP    | 1                           |





Left

- Heavy vegetation surrounding structures
- 24" of sediment observed in 42" pipes







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-5           | 621+92  | 451-604     | Straight Endwall      | 84" RCP        | 1                           |



Left



- Heavy vegetation surrounding structures, Left structure beyond fence
- 60" of sediment measured in 84" pipe on Right structure



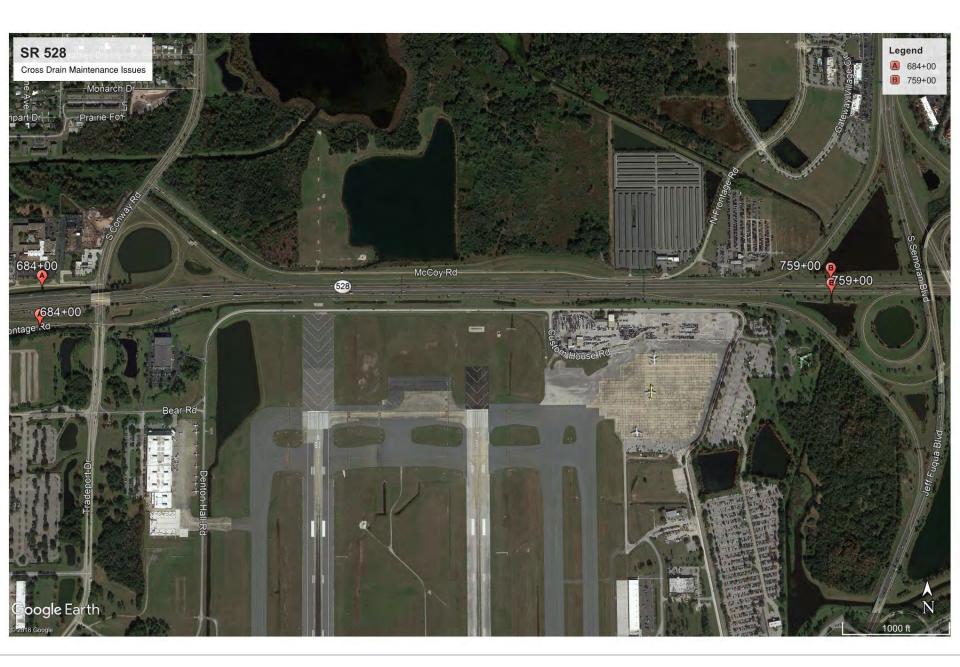
| Structure No. | Station | Project No. | End Treatment<br>Type      | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|---------------|---------|-------------|----------------------------|-------------------|--|
| N/A           | 684+00  | 405         | Straight Endwall to<br>DBI | N/A               | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| CD-1          | 692+40  | 405         | Straight Endwall           | 2 - 60" RCP       | None   |
| CD-2          | 759+00  | 405         | Straight Endwall           | 2 - 9' x 10' CBC  | (1) Requires<br>Immediate<br>Attention-<br>Scour     |
| S-1           | 898+50  | 900         | Straight Endwall           | 2 - 4' x 6' CBC   | No Access  |
| N/A           | 1017+50 | N/A         | MES                        | 3 - 24" x 38" RCP | (3) Minor  |
| S-23          | 1096+20 | 457         | Straight Endwall           | 2 - 4' x 6' CBC   | (2) Medium   |
| S-27          | 1164+00 | 1.1         | Straight Endwall           | 2 - 8' x 3' CBC   | (2) Medium   |
| S-29          | 1201+00 | 1.1         | Straight Endwall           | 3 - 30" RCP       | None   |
| C-2           | 1228+00 | 900A        | MES                        | 24" RCP           | (3) Minor  |
| S-37          | 1295+00 | 1.1         | Straight Endwall           | 3 - 7' x 3' CBC   | None   |
| N/A           | 1372+00 | N/A         | Straight Endwall           | 2 - 10' x 7' CBC  | (2) Medium   |



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type   | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|------------------|-----------------------------|
| S-55          | 1551+00 | 1.1         | Straight Endwall      | 24" RCP          | None                        |
| S-70          | 1716+50 | 1.1         | Straight Endwall      | 3 - 42" RCP      | (3) Minor                   |
| S-73          | 1745+00 | 1.1         | Straight Endwall      | 2 - 36" RCP      | (2) Medium                  |
| S-75          | 1779+50 | 1.1         | Straight Endwall      | 2 - 36" RCP      | None                        |
| S-76          | 1792+00 | 1.1         | Straight Endwall      | 2 – 36" RCP      | None                        |
| N/A           | 1815+00 | N/A         | Straight Endwall      | 3 - 10' x 4' CBC | None                        |

 Total- 17, Requires Immediate Attention- 3 (1 No Access, 1 Scour, 1 Vegetation), Medium- 4, Minor- 3, None- 7







#### SR 528- Rating Level 1 Issues

| Structure No. | Station | Project No. | End Treatment<br>Type      | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|----------------------------|----------------|-----------------------------|
| N/A           | 684+00  | 405         | Straight Endwall to<br>DBI | N/A            | 1                           |



#### Right

• Structure overgrown with heavy vegetation



# SR 528- Rating Level 1 Issues

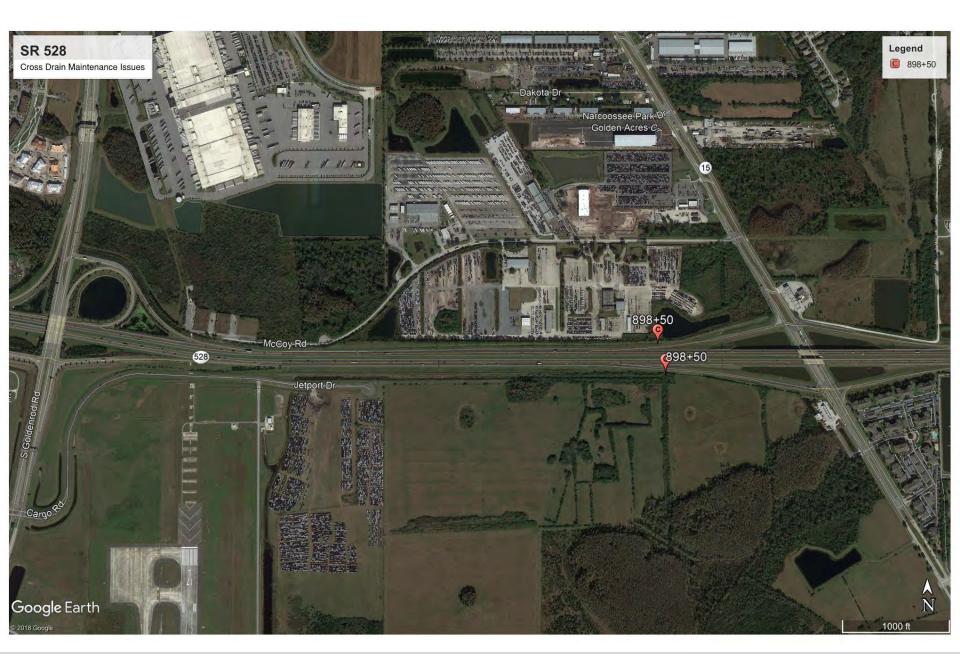
| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type   | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|------------------|-----------------------------|
| CD-2          | 759+00  | 405         | Straight Endwall      | 2 - 9' x 10' CBC | 1                           |



Right

- · Concrete flume near Right end damaged
- 6" of scour on Right structure







# SR 528- Rating Level 1 Issues

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| S-1           | 898+50  | 900         | Straight Endwall      | 2 - 4' x 6' CBC | 1                           |





- Left
  Both end structures behind R/W fence line
- Could not inspect



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|---------------|---------|-------------|-----------------------|-------------------|--|
| S-27          | 433+50  | 450         | Straight Endwall      | 72" RCP           | (2) Medium   |
| S-12          | 435+00  | 450         | MES                   | 2 - 34" x 53" RCP | (2) Medium   |
| C-18          | 458+20  | 450         | MES                   | 2 - 36" RCP       | None   |
| S-13          | 510+50  | 450         | Straight Endwall      | 15 - 12' x 4' CBC | (3) Minor  |
| S-24          | 594+30  | 450         | MES                   | 48" RCP           | (3) Minor  |
| S-5           | 685+00  | 451         | Straight Endwall      | 2 - 9' x 3' CBC   | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| B-30          | 687+50  | 451         | Straight Endwall      | 84" RCP           | (1) Requires<br>Immediate<br>Attention<br>Sediment   |
| S-6           | 692+40  | 451         | Straight Endwall      | 8' x 3' CBC       | (1) Requires<br>Immediate<br>Attention<br>Sediment   |



| Structure No.  | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|----------------|---------|-------------|-----------------------|-------------------|--|
| S-8            | 747+00  | 451         | Straight Endwall      | 4 - 36″ RCP       | (1) Requires<br>Immediate<br>Attention No<br>Access  |
| S-9            | 756+00  | 451         | Straight Endwall      | 2 - 24" RCP       | None   |
| S-63A          | 887+57  | 453         | Straight Endwall      | 2 - 9' x 4' CBC   | (1) Requires<br>Immediate<br>Attention No<br>Access  |
| S-73           | 923+25  | 453         | MES                   | 3 - 29" x 45" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S-5            | 1005+00 | 301C        | MES                   | 2 - 36" RCP       | (3) Minor  |
| S-520 to S-521 | 1021+15 | 454         | MES                   | 2 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention<br>Sediment   |



| Structure No.    | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                                |
|------------------|---------|-------------|-----------------------|-------------------|--|
| S-523A to S-523B | 1022+70 | 454         | MES                   | 2 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation       |
| S-523C to S-523D | 1024+30 | 454         | MES                   | 2 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation       |
| S-525 to S-526   | 1025+85 | 454         | MES                   | 2 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation       |
| S-7              | 1072+00 | 455         | Straight Endwall      | 2 - 29" x 45"     | (1) Requires<br>Immediate<br>Attention Major<br>Vegetation |
| S-21             | 1123+00 | 455         | Straight Endwall      | 2 - 29" x 45"     | (1) Requires<br>Immediate<br>Attention<br>Vegetation       |



| Structure No. | Station | Project No. | End Treatment<br>Type            | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|---------------|---------|-------------|----------------------------------|-------------------|--|
| S-34          | 1176+50 | 455         | Straight Endwall to<br>U-Endwall | 30" RCP           | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S-3           | 1268+00 | 457         | Wingwall                         | 6 - 8' x 4' CBC   | (1) Requires<br>Immediate<br>Attention<br>Sediment   |
| B-9A          | 1324+00 | 457         | Straight Endwall                 | 4 - 34" x 53" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| B-9B          | 1326+00 | 457         | Straight Endwall                 | 3 - 29" x 45" RCP | (1) Requires<br>Immediate<br>Attention<br>Sediment   |
| D-1A          | 1377+60 | 457         | Straight Endwall                 | 2 - 9' x 4' CBC   | No Access  |
| S-6           | 183+00  | 402         | Straight Endwall to<br>MES       | 2 - 14" x 23" RCP | (2) Medium   |

#### Dewberry

| Structure No.          | Station | Project No. | End Treatment<br>Type      | Pipe Size/Type    | Maintenance<br>Rating Level                        |
|------------------------|---------|-------------|----------------------------|-------------------|--|
| S-14                   | 235+00  | 402         | MES                        | 3 - 19" x 30" RCP | (1) Requires<br>Immediate<br>Attention<br>Sediment |
| CD-17                  | 516+25  | 253E-E1     | Straight Endwall           | 12' x 7' CBC      | None   |
| OS-5B05 to OS-<br>5B04 | 520+10  | 253E-E1     | Straight Endwall to<br>DBI | 42" RCP           | (2) Medium   |

 Total- 28, Requires Immediate Attention - 18 (3 No Access, 6 Sediment, 9 Vegetation), Medium- 4, Minor- 3, None- 3







34 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-27          | 433+50  | 450         | Straight Endwall      | 72" RCP        | 1                           |

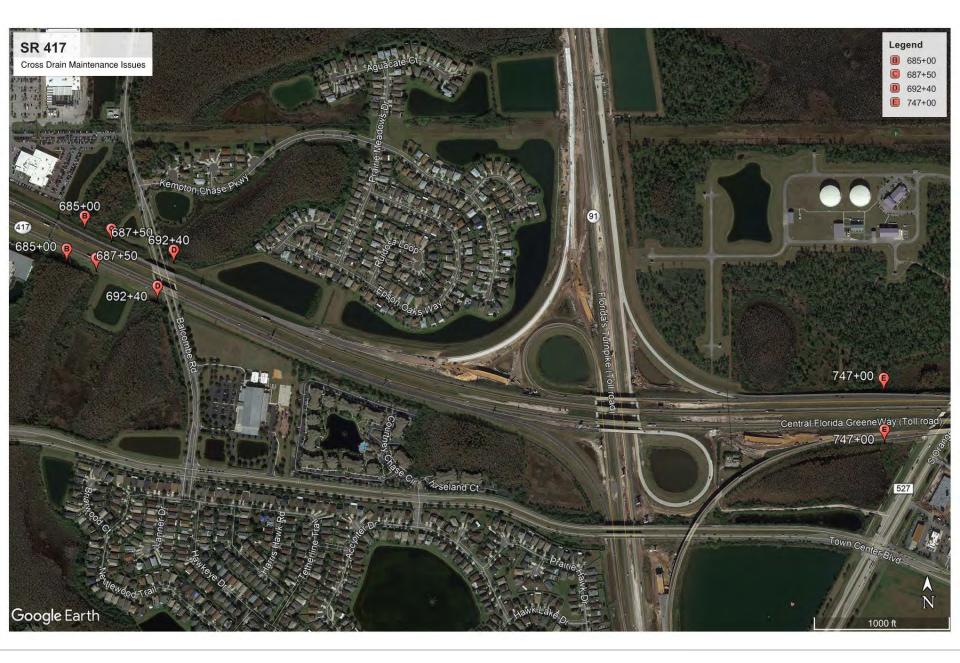


Left

Right

• 12" of sediment measured on both ends





#### Dewberry

36 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| S-5           | 685+00  | 451         | Straight Endwall      | 2 - 9' x 3' CBC | 1                           |



Left



Right

• Right structure covered in heavy vegetation, structure not observed



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| B-30          | 687+50  | 451         | Straight Endwall      | 84" RCP        | 1                           |





Left

Right

**Dewberry**<sup>®</sup>

- Left structure covered in heavy vegetation, structure not observed
- Left structure: 13" of sediment observed in 84" pipe



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-6           | 692+40  | 451         | Straight Endwall      | 8' x 3' CBC    | 1                           |





Left

- Up to 16" of sediment observed in 8' x 3' CBC
- Moderate vegetation around culvert openings



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-8           | 747+00  | 451         | Straight Endwall      | 4 - 36" RCP    | 1                           |



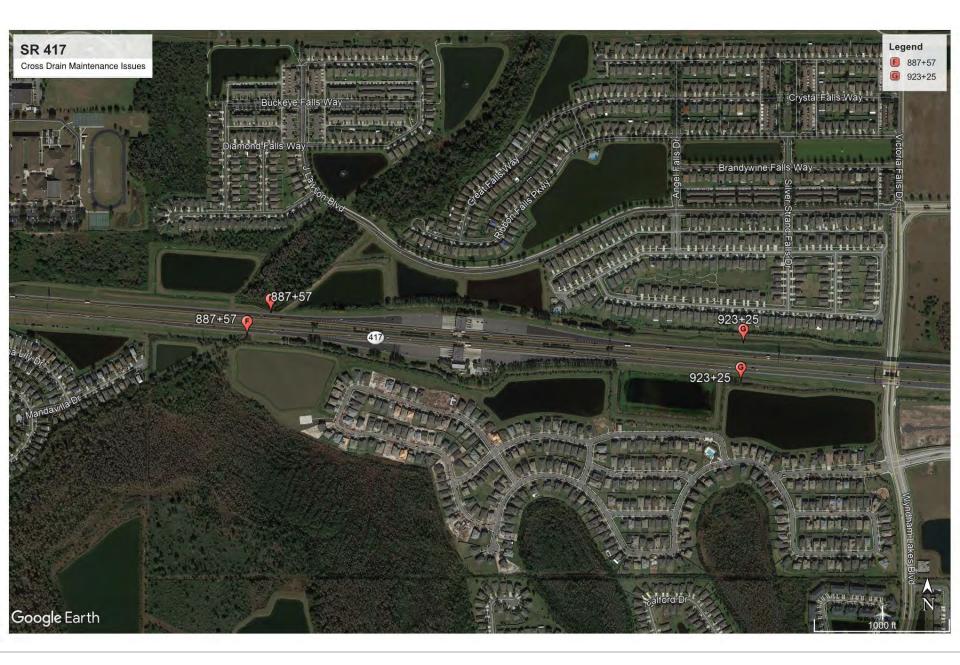
Right



Left

- Right structure behind fence line
- Could not inspect Right structure







41 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| S-63A         | 887+57  | 453         | Straight Endwall      | 2 - 9' x 4' CBC | 1                           |



Left

- Structures beyond fence line
- Could not inspect



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-73          | 923+25  | 453         | MES                   | 3 - 29" x 45" RCP | 1                           |



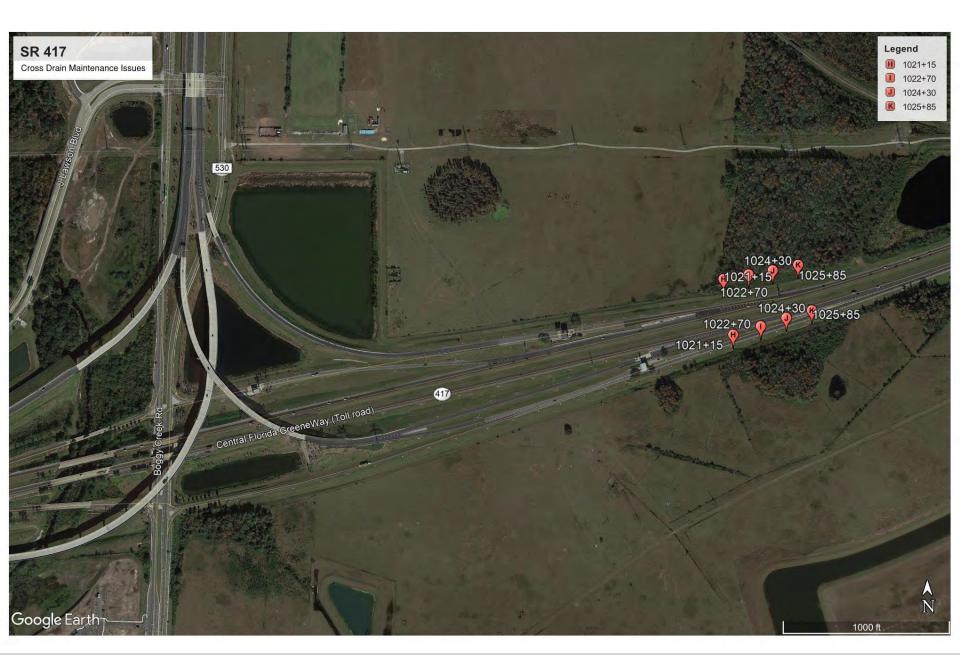


Right

Left

- Heavy vegetation surrounding structures
- Difficult access for maintenance







44 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No.  | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|----------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-520 to S-521 | 1021+15 | 454         | MES                   | 2 - 38" x 60" RCP | 1                           |





Left

- Heavy vegetation surrounding structures, difficult access
- 16" Sediment measured



| Structure No.    | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|------------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-523A to S-523B | 1022+70 | 454         | MES                   | 2 - 38" x 60" RCP | 1                           |





- Heavy vegetation surrounding structures, difficult access
- 8" Sediment measured



| Structure No.    | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|------------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-523C to S-523D | 1024+30 | 454         | MES                   | 2 - 38" x 60" RCP | 1                           |





Left

- Heavy vegetation surrounding structures, difficult access
- 9" Sediment measured



| Structure No.  | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|----------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-525 to S-526 | 1025+85 | 454         | MES                   | 2 - 38" x 60" RCP | 1                           |

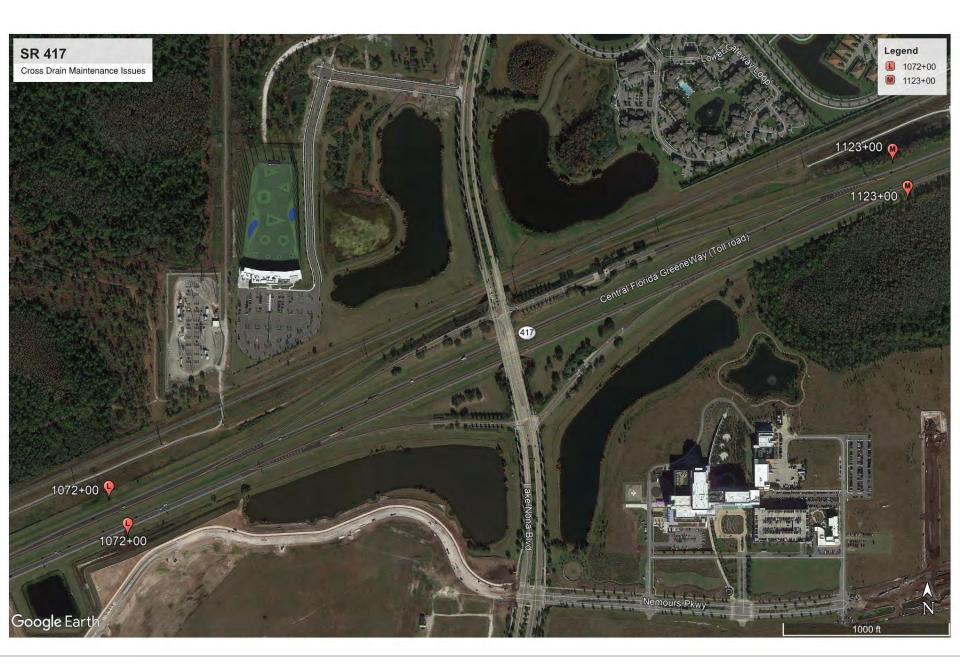




Left

- Heavy vegetation surrounding structures, difficult access
- 9" Sediment measured







49 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-7           | 1072+00 | 455         | Straight Endwall      | 2 - 29" x 45"  | 1                           |



Heavy vegetation surrounding EB structure, difficult access



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-21          | 1123+00 | 455         | Straight Endwall      | 2 - 29" x 45"  | 1                           |



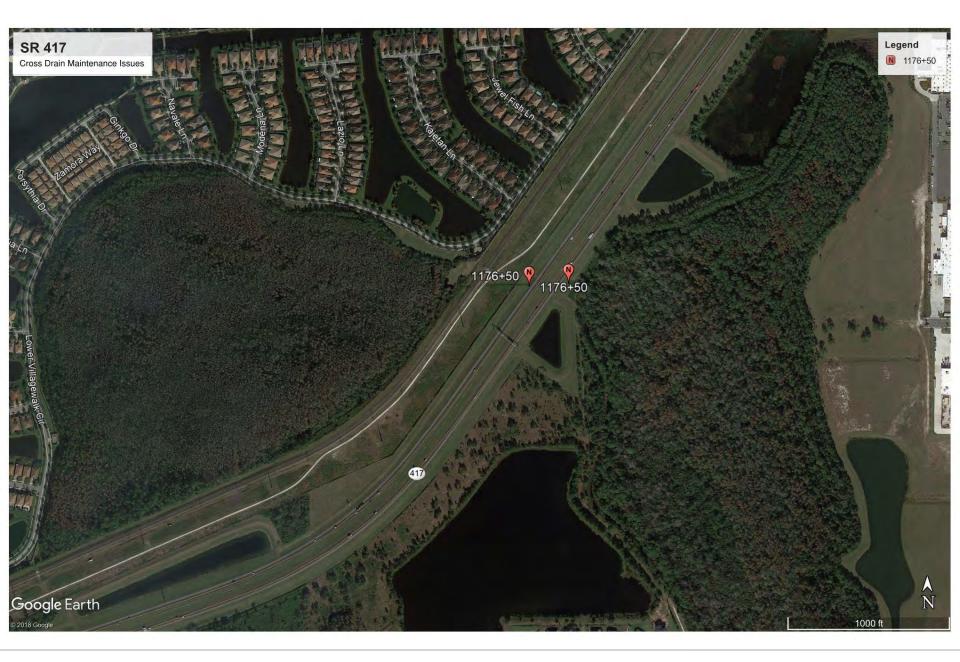
Left



Right

Heavy vegetation surrounding Left structure







| Structure No. | Station | Project No. | End Treatment<br>Type            | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|----------------------------------|----------------|-----------------------------|
| S-34          | 1176+50 | 455         | Straight Endwall to<br>U-Endwall | 30" RCP        | 1                           |



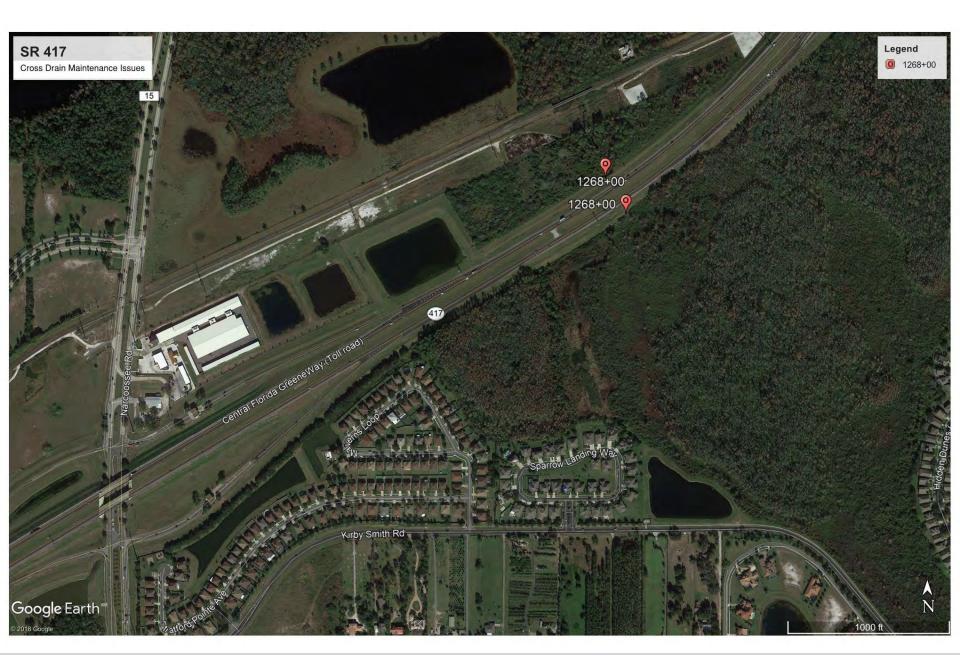
Left



Right

Heavy vegetation surrounding Left structure





#### Dewberry

54 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| S-3           | 1268+00 | 457         | Wingwall              | 6 - 8' x 4' CBC | 1                           |



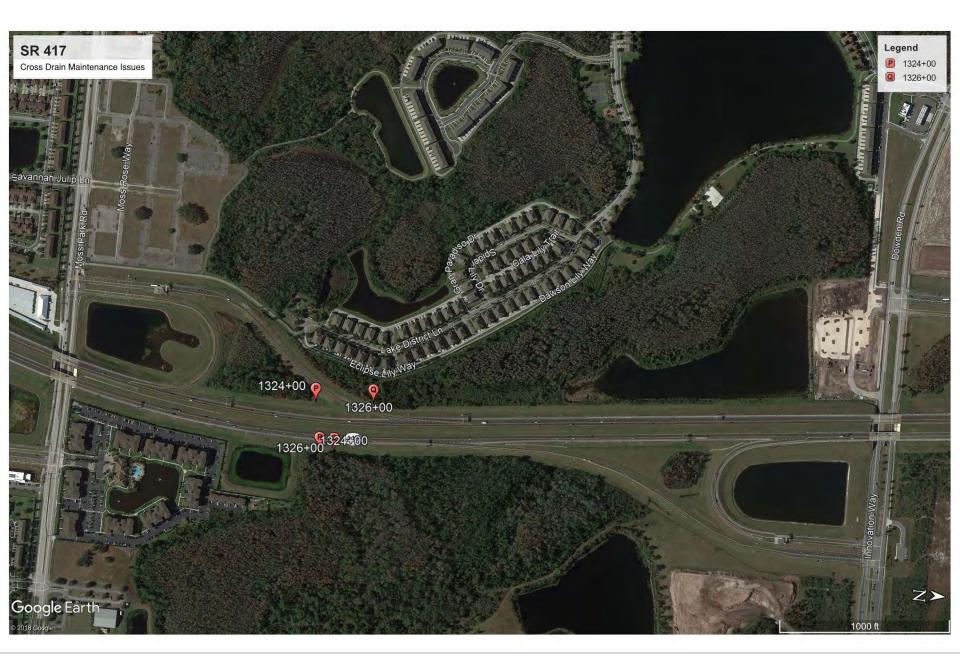
Right



Left

• 6" Sediment observed end of Right structure







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| B-9A          | 1324+00 | 457         | Straight Endwall      | 4 - 34" x 53" RCP | 1                           |



Left



Right

• Heavy vegetation, difficult access



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| B-9B          | 1326+00 | 457         | Straight Endwall      | 3 - 29" x 45" RCP | 1                           |



Left



Right

• 8" Sediment measured







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| D-1A          | 1377+60 | 457         | Straight Endwall      | 2 - 9' x 4' CBC | 1                           |



Right



Left

- Left structure behind fence, no access
- Could not inspect

60 | CFX Major Cross-Drain Evaluation August 5, 2019







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-14          | 235+00  | 402         | MES                   | 3 - 19" x 30" RCP | 1                           |



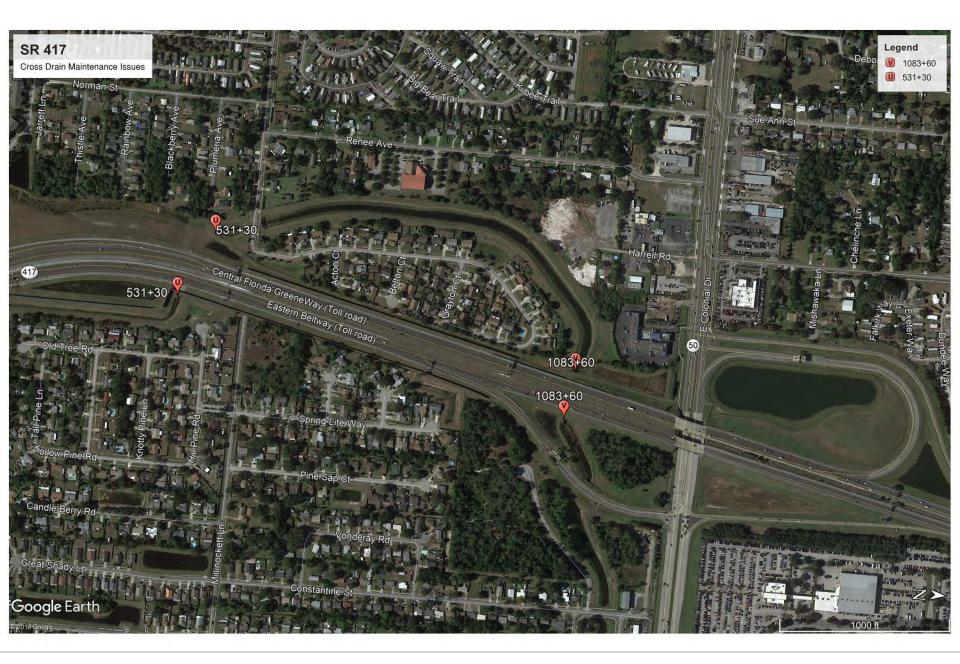
Right



Left

• 8" Sediment measured







#### **SR 408- All Evaluated Cross-Drains**

| Structure No.   | Station | Project No. | End Treatment<br>Type      | Pipe Size/Type    | Maintenance<br>Rating Level                                      |
|-----------------|---------|-------------|----------------------------|-------------------|--|
| S-4             | 165+57  | 502         | Straight Endwall           | 10' x 6' CBC      | (1) Requires<br>Immediate<br>Attention No<br>Access              |
| S-99            | 500+50  | 1.1         | Straight Endwall           | 2 - 7' x 3' CBC   | (1) Requires<br>Immediate<br>Attention Heavy<br>Structural Issue |
| S-111           | 524+50  | 1.1         | Straight Endwall           | 2 - 9' x 3' CBC   | None   |
| C-1             | 582+37  | 252A        | Straight Endwall           | 6' x 3' CBC       | (1) Requires<br>Immediate<br>Attention No<br>Access              |
| N/A             | 719+20  | 253A        | Straight Endwall           | 6' x 8' CBC       | (3) Minor  |
| S-436A to S-433 | 818+00  | 253B        | Straight Endwall to<br>DBI | 2 - 34" x 53" RCP | (3) Minor  |
| A-9             | 1933+00 | 253D-D1     | Straight Endwall           | 2 - 6' x 7' CBC   | (1) Requires<br>Immediate<br>Attention Scour                     |



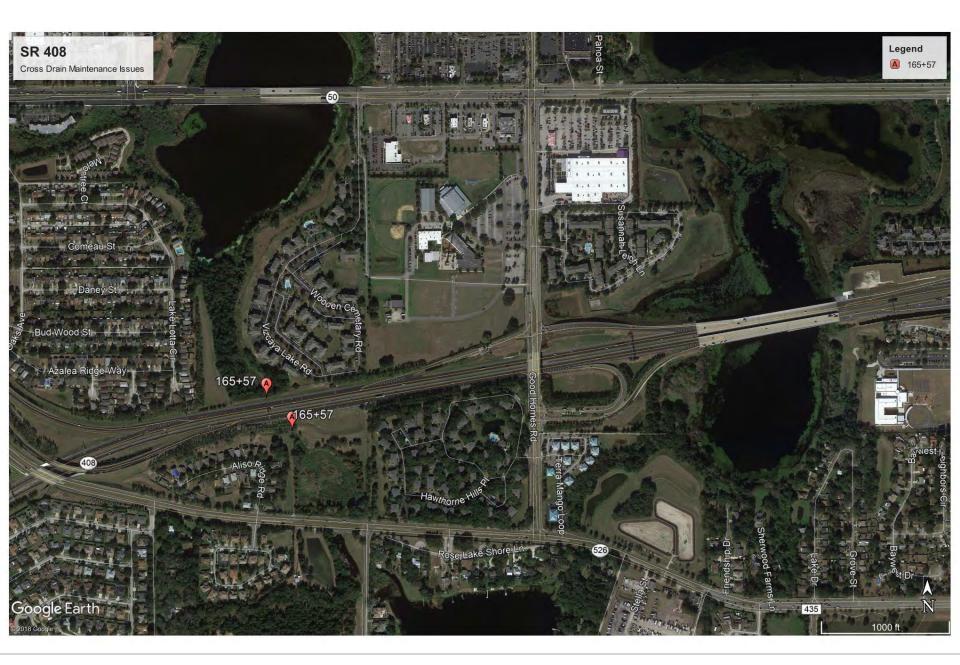
#### **SR 408- All Evaluated Cross-Drains**

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|---------------|---------|-------------|-----------------------|-------------------|--|
| S-9           | 408+85  | 113         | MES                   | 3 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention No<br>Access  |
| S-14          | 416+00  | 113         | MES                   | 2 - 36" RCP       | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S-17          | 426+00  | 113         | MES                   | 2 - 38" x 60" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation |

 Total- 12, Requires Immediate Attention- 8 (4 No Access, 2 Vegetation, 1 Scour, 1 Structural), Medium- 1, Minor- 2, None- 1

65 | CFX Major Cross-Drain Evaluation August 5, 2019

#### Dewberry





| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-4           | 165+57  | 502         | Straight Endwall      | 10' x 6' CBC   | 1                           |

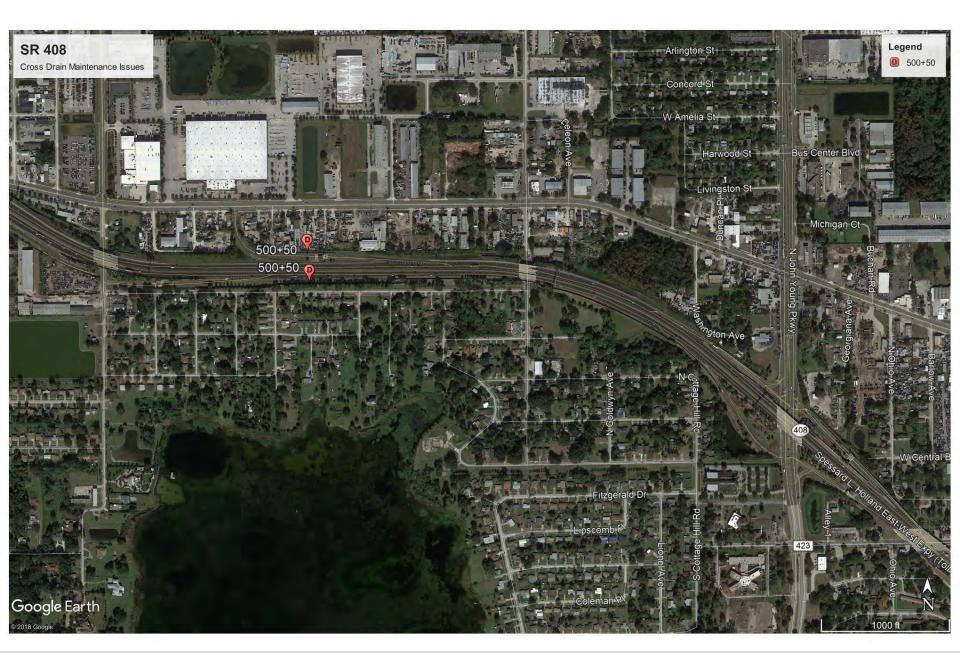




Left

- SB structure behind fence, no access
- · Could not inspect







68 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| S-99          | 500+50  | 1.1         | Straight Endwall      | 2 - 7' x 3' CBC | 1                           |

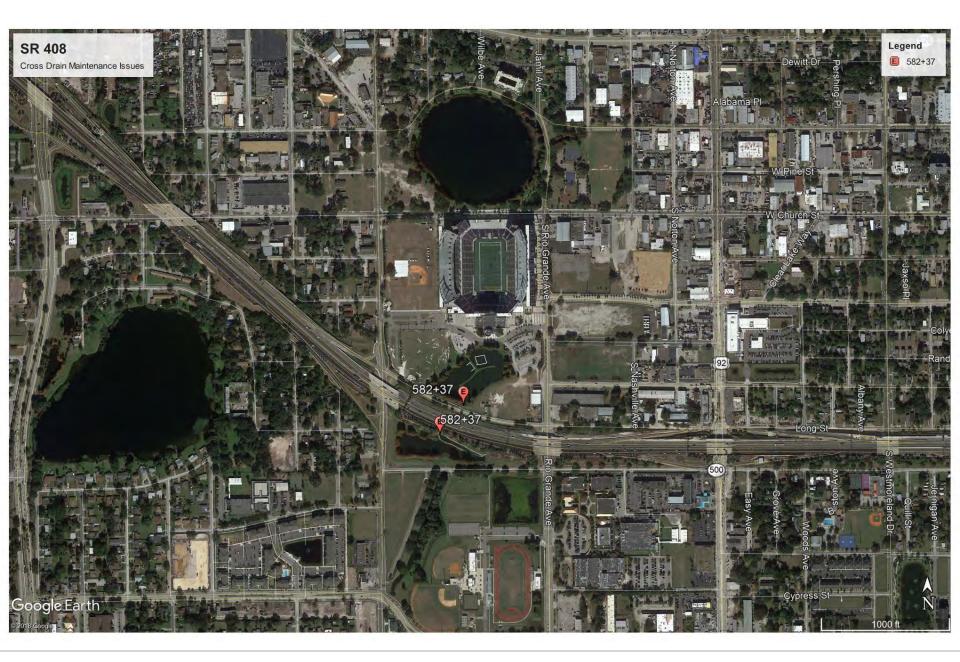


Left

Left

- Piles of sediment up to 8" in depth
- Cracking in concrete around opening- 36" deep





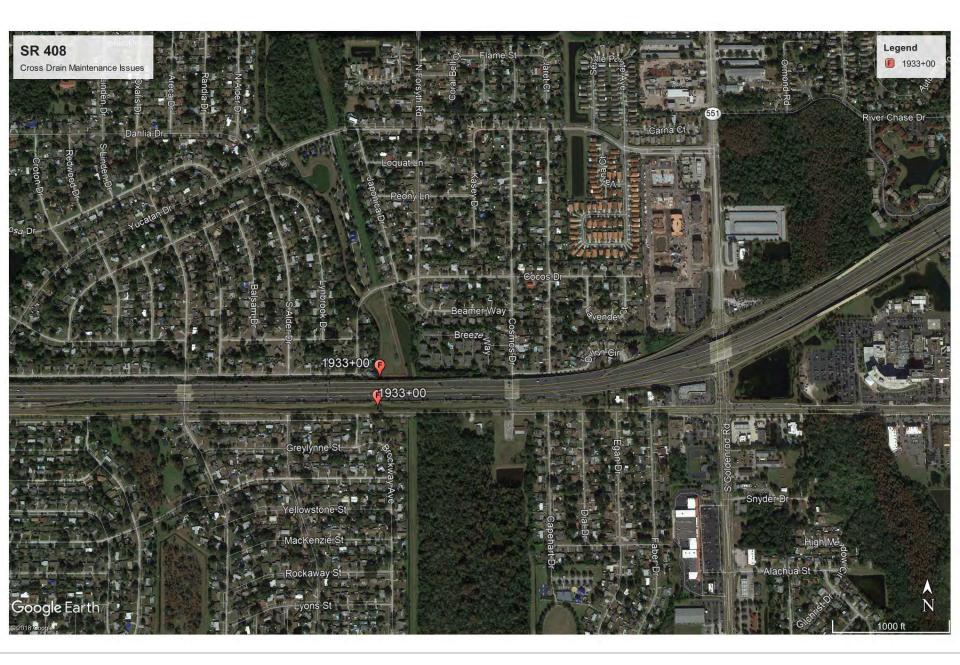


| Struct | ture No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Raing Level |
|--------|----------|---------|-------------|-----------------------|----------------|----------------------------|
| (      | C-1      | 582+37  | 252A        | Straight Endwall      | 6' x 3' CBC    | 1                          |



- WB structure behind fence line, no access
- Could not inspect







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| A-9           | 1933+00 | 253D-D1     | Straight Endwall      | 2 - 6' x 7' CBC | 1                           |



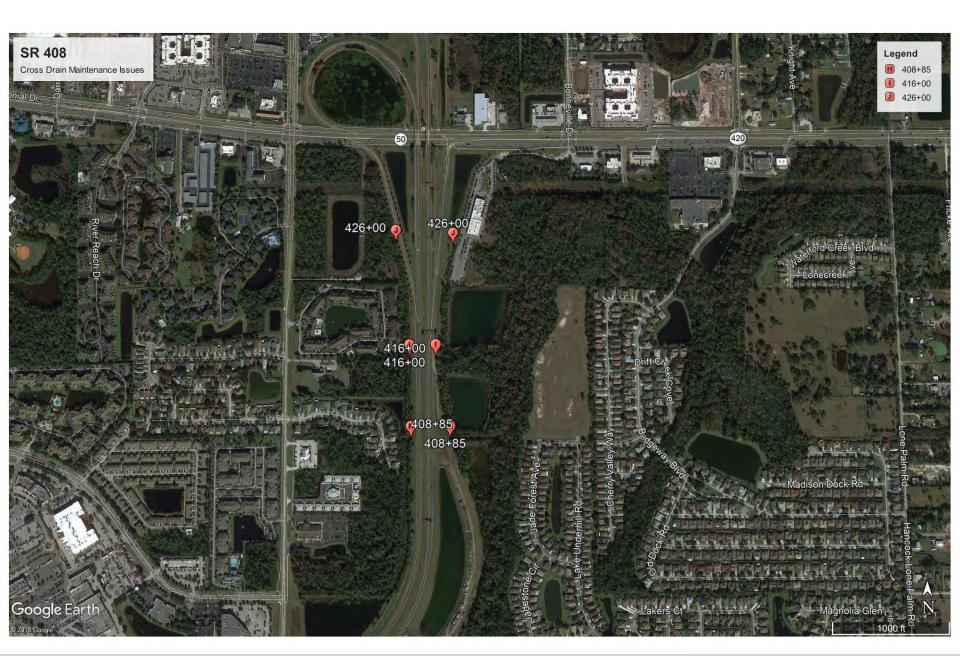
Right



Left

• 30" scour measured Right structure







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-9           | 408+85  | 113         | MES                   | 3 - 38" x 60" RCP | 1                           |





Left

- Right structure behind fence line, no access
- Could not inspect



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S-14          | 416+00  | 113         | MES                   | 2 - 36" RCP    | 1                           |





Left

- Left structure covered in heavy vegetation
- Right structure moderate vegetation



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S-17          | 426+00  | 113         | MES                   | 2 - 38" x 60" RCP | 1                           |





Left

- Left structure covered in heavy vegetation
- Right structure moderate vegetation

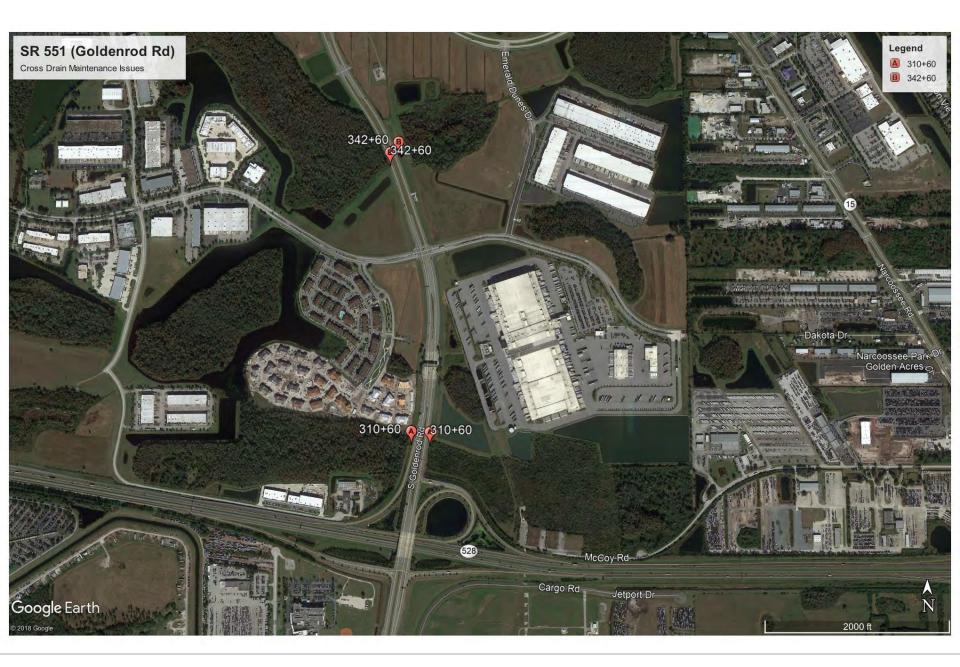


#### SR 551 (Goldenrod Rd)- All Evaluated Cross-Drains

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                          |
|---------------|---------|-------------|-----------------------|-------------------|--|
| S0-26         | 284+00  | 903A        | MES                   | 2 - 42" RCP       | None   |
| S1-12         | 310+60  | 903         | MES                   | 3 - 29" x 45" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S4-27         | 342+60  | 903B        | Straight Endwall      | 3 - 48" RCP       | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S5-21         | 372+50  | 903B        | MES to MH             | 3 - 29" x 45" RCP | (1) Requires<br>Immediate<br>Attention<br>Vegetation |
| S5-22         | 389+20  | 903B        | MES to MH             | 2 - 24" x 38" RCP | (2) Medium   |

 Total- 5, Requires Immediate Attention - 3 (3 Vegetation), Medium- 1, Minor-0, None- 1

**Dewberry** 





| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S1-12         | 310+60  | 903         | MES                   | 3 - 29" x 45" RCP | 1                           |



Left

Right

**Dewberry**<sup>®</sup>

• Both structures covered in heavy vegetation, pipes submerged

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| S4-27         | 342+60  | 903B        | Straight Endwall      | 3 - 48" RCP    | 1                           |



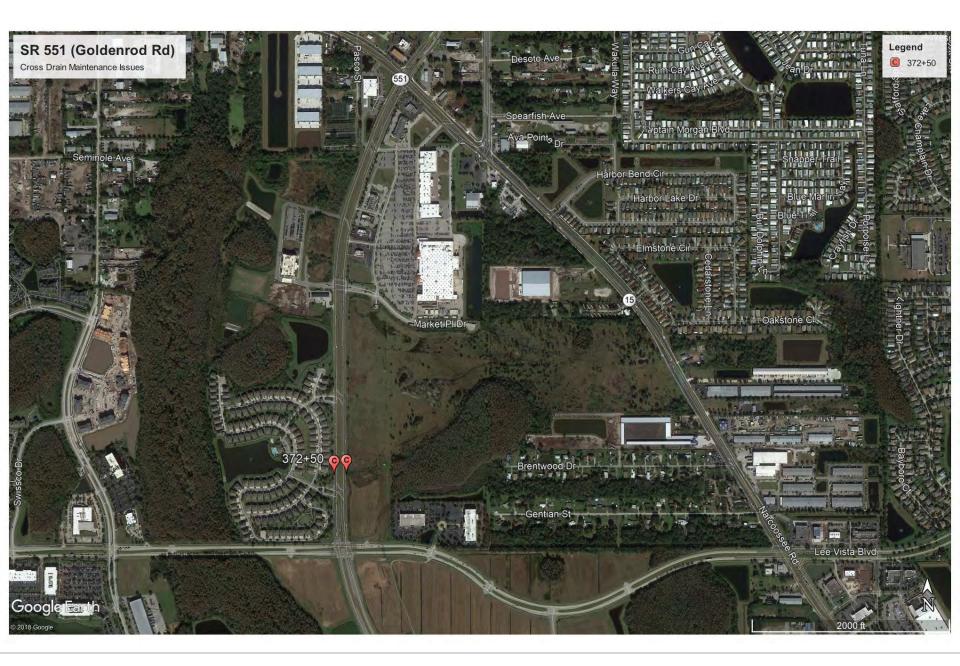
Left



Right

• Left structure covered by heavy vegetation, inaccessible







| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-------------------|-----------------------------|
| S5-21         | 372+50  | 903B        | MES to MH             | 3 - 29" x 45" RCP | 1                           |





Right

Right

• Right structure covered by heavy vegetation



#### SR 538 (Poinciana Pkwy)- All Evaluated Cross-Drains

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type    | Maintenance<br>Rating Level                         |
|---------------|---------|-------------|-----------------------|-------------------|---|
| CD-6          | 174+64  | Segment 3   | Straight Endwall      | 2 - 24" x 38" RCP | None  |
| CD-7          | 324+00  | Segment 3   | Straight Endwall      | 2 - 36" RCP       | (1) Requires<br>Immediate<br>Attention Scour        |
| CD-8          | 328+00  | Segment 3   | Straight Endwall      | 2 - 36" RCP       | (1) Requires<br>Immediate<br>Attention Scour        |
| CD 4-7        | 596+78  | Segment 4   | Straight Endwall      | 2 - 8' x 4' CBC   | (1) Requires<br>Immediate<br>Attention No<br>Access |
| N/A           | 551+25  | Segment 4   | Straight Endwall      | 2 - 10' x 4' CBC  | (1) Requires<br>Immediate<br>Attention No<br>Access |
| CD 4-4        | 466+09  | Segment 4   | Straight Endwall      | 2 - 42" RCP       | (2) Medium  |

 Total- 6, Requires Immediate Attention- 4 (2 No Access, 2 Scour), Medium-1, Minor- 0, None- 1





#### Dewberry

85 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| CD-7          | 324+00  | Segment 3   | Straight Endwall      | 2 - 36" RCP    | 1                           |



#### Left



- 8" scour measured Right structure
- Washout around Right headwall



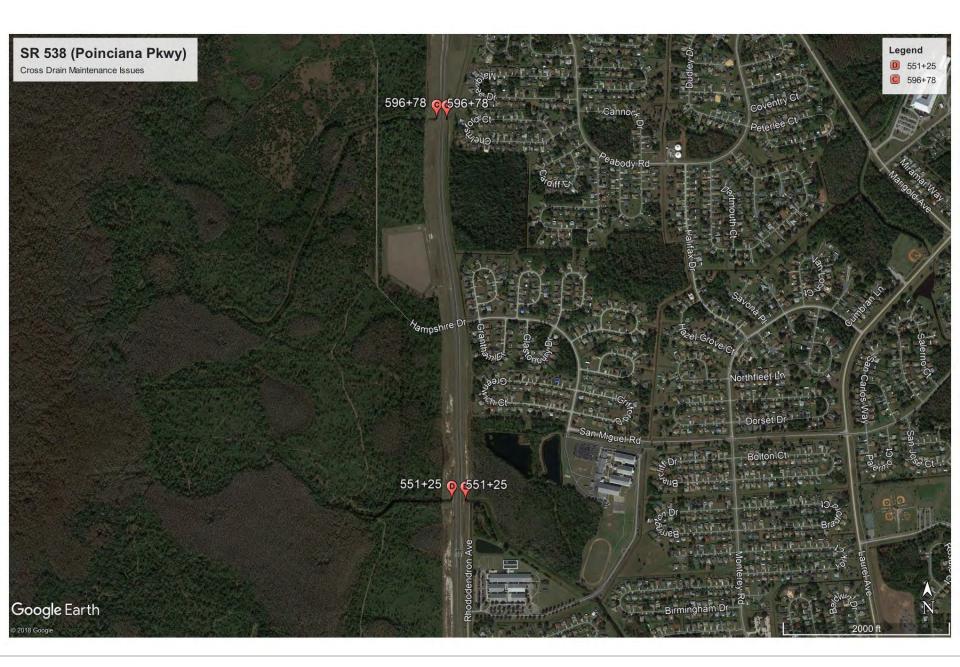
| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|----------------|-----------------------------|
| CD-8          | 328+00  | Segment 3   | Straight Endwall      | 2 - 36" RCP    | 1                           |





- Left
  9" scour measured Right structure
- Washout around both headwalls







88 | CFX Major Cross-Drain Evaluation August 5, 2019

| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type  | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|-----------------|-----------------------------|
| CD 4-7        | 596+78  | Segment 4   | Straight Endwall      | 2 - 8' x 4' CBC | 1                           |



#### Left



- Left structure behind fence
- No CFX lock on gate, no access
- Could not inspect



| Structure No. | Station | Project No. | End Treatment<br>Type | Pipe Size/Type   | Maintenance<br>Rating Level |
|---------------|---------|-------------|-----------------------|------------------|-----------------------------|
| N/A           | 551+25  | Segment 4   | Straight Endwall      | 2 - 10' x 4' CBC | 1                           |



#### Left



- Both structures behind fence
- No CFX lock on gates, no access
- Could not inspect





CFXway.com