



Utility Assessment Technical Memorandum

DANIEL WEBSTER WESTERN BELTWAY SR 429 / BINION ROAD INTERCHANGE PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

Submitted By:

Signature:

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The Balmoral Group, LLC
November 23, 2022



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Technical Memorandum written to align with Level 1 PEIR chapter format

1.0 - Project Information

Project Name:	State Road (SR) 429/Binion Road Interchange
Projects Limits:	The study area runs along the vicinity of South Binion Road and Boy Scout Road at SR 429. Currently, drivers must enter and exit SR 429 by traveling approximately three miles north to just north of US 441 at the SR 429 Connector Road interchange or travel three miles south to the interchange at Ocoee Apopka Road.
County:	Orange
Proposed Activity:	Evaluating a proposed half interchange (northbound on-ramp and southbound off-ramp) expressway connection from Binion Road to SR 429 to provide enhanced access and mobility to southwest Apopka. Analyze intersection improvements and access management modifications along the proposed interchange.
Responsible Agency:	Central Florida Expressway Authority (CFX)
Planning Organization:	CFX
Phase:	Project Development & Environment (PD&E) Study

Project Contact Information:

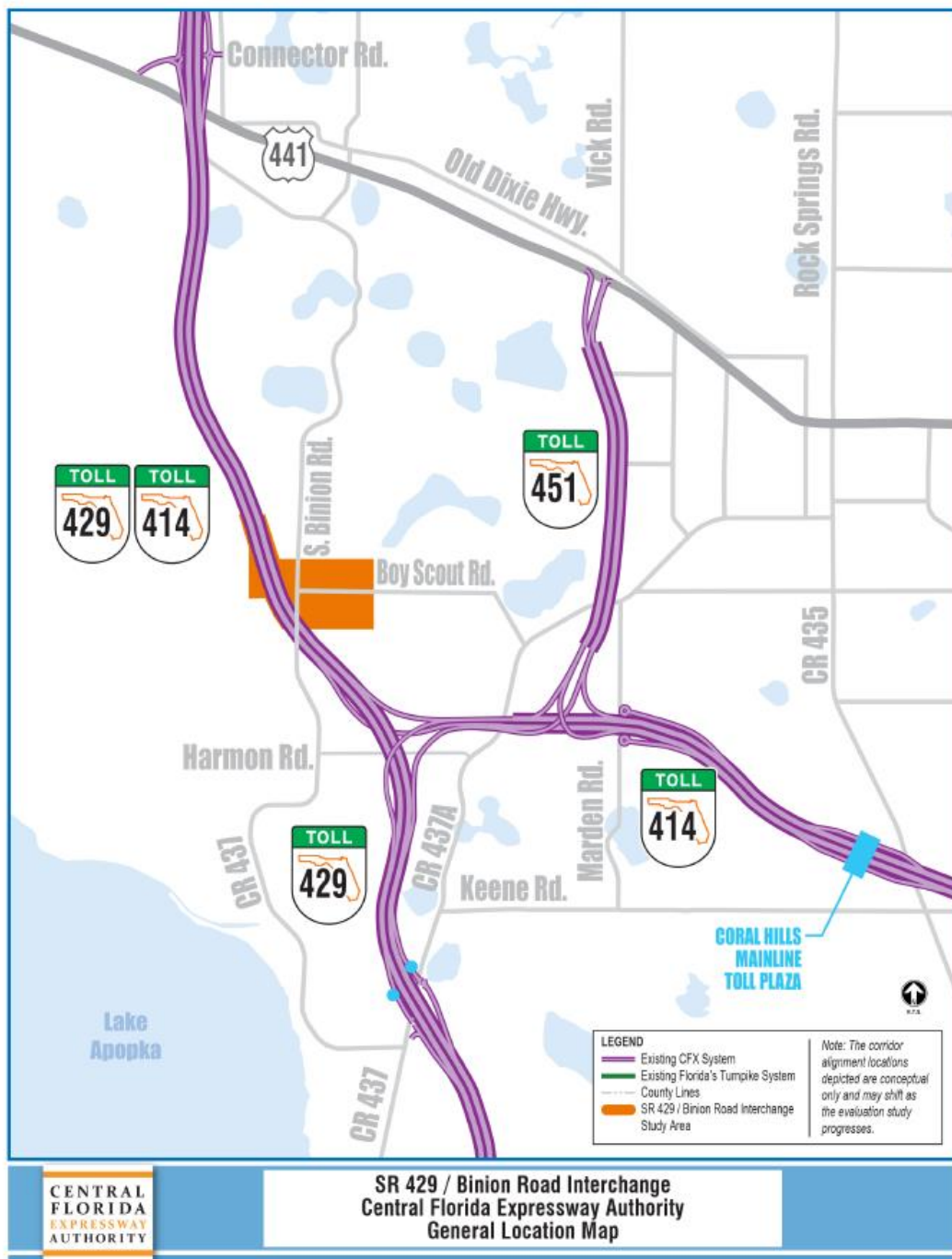
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1.0 - Project Location Map



1.0 - Project Background & Description

Background

In August 2022, CFX began a Project Development and Environment (PD&E) Study of the State Road 429/Binion Road Interchange. The study is evaluating a proposed half interchange (northbound on-ramp and southbound off-ramp) expressway connection from Binion Road to SR 429 to provide enhanced access and mobility to southwest Apopka.

Study Description

The study area runs along the vicinity of South Binion Road and Boy Scout Road at SR 429. Currently, drivers must enter and exit SR 429 by traveling approximately three miles north to just north of US 441 at the SR 429 Connector Road interchange or travel three miles south to the interchange at Ocoee Apopka Road. The 6-month study will analyze intersection improvements and access management modifications along the proposed interchange.

Study Goals

The goals of the SR 429/Binion Road Interchange PD&E Study include:

- Identify transportation mobility options and programs that could meet future demand.
- Enhance mobility of the area's growing population and economy by providing additional transportation infrastructure.
- Provide consistency with local plans and policies.
- Promote regional connectivity.

Scope

The CONSULTANT shall meet and/or coordinate with all affected utility providers concerning proposed utility improvements, some of which may influence location/design considerations. The CONSULTANT shall ascertain the cost of utility relocation (if necessary based on design alternatives), from all affected utility providers. These costs shall be provided to CFX.

The CONSULTANT will prepare a basic Utility Assessment Technical Memorandum, which shall contain information that can be used for the Preliminary Engineering Report and the Environmental Analysis

Data shall be provided by all disciplines in the creation of the basic Existing Conditions Technical Memorandum. All data collection and documentation efforts should be performed in accordance with the CFX PD&E Guidance for a Level 1 PEIR.

4.e - Utilities - Overview

Purpose of Utility Assessment Package

This Utility Assessment Package has been assembled to provide information on existing and planned utilities within the study limits. This package contains information on the names of utility companies, arials denoting the location of major existing and proposed facilities, descriptions of the identified utilities, project coordination efforts, potential impacts, and, where known, information on the cost of relocation.

Existing Roadway Facilities

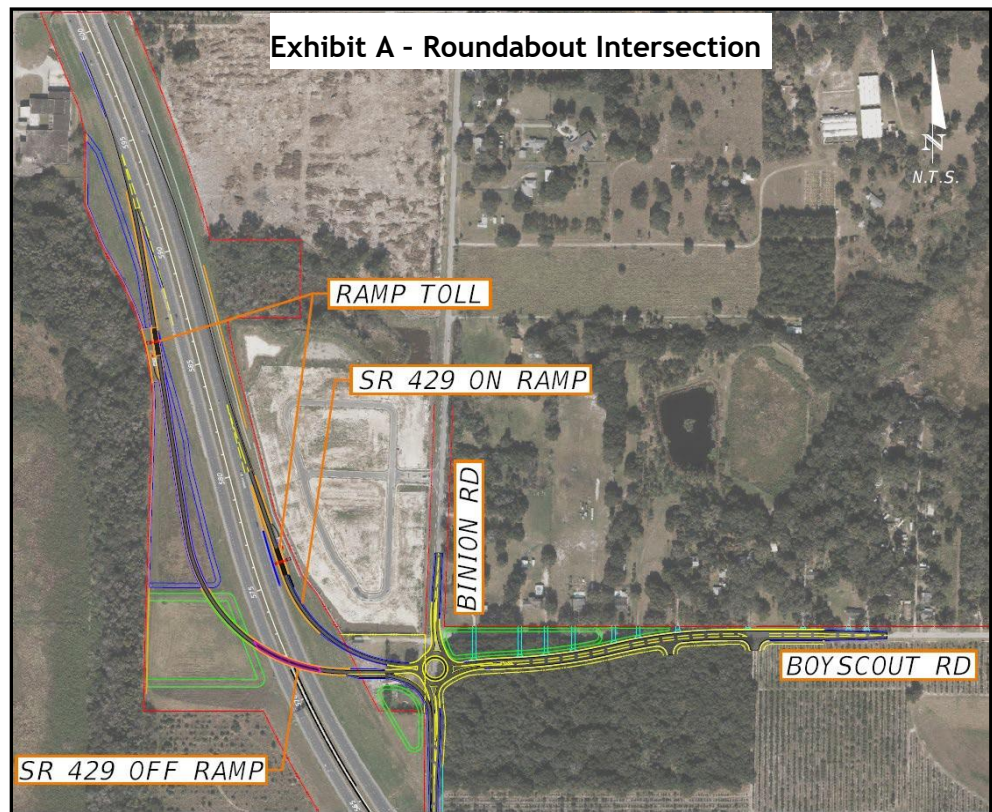
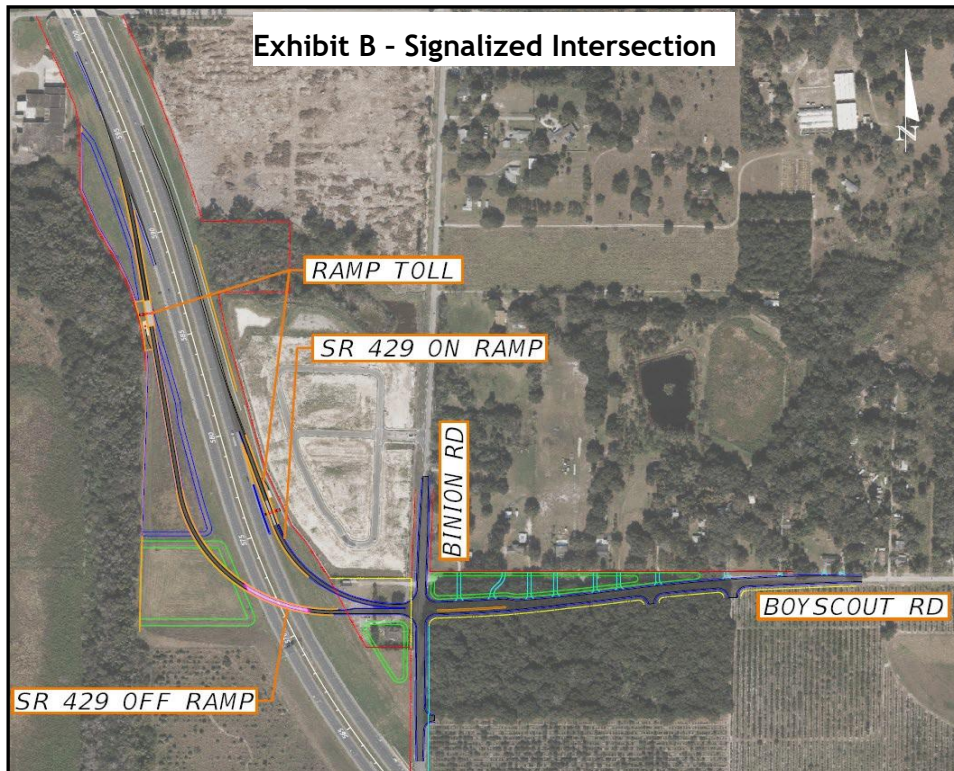
There is a mixture of roadways with different functional classifications within the project study area. Listed below are the local roadways within the project study area affected by the different build alternatives:

Binion Road is a two-lane undivided roadway in Orange County, and is oriented North-South. There are several large residential subdivisions connecting to Binion Road and several single-family residential homes. Within the study limits, Boy Scout Road intersects Binion Road at a T-intersection. Just south of Boy Scout Road is a bridge over the CFX owned and maintained SR 429. Binion Road is currently being widened for operational improvements which include a right turn auxiliary lane and a left turn storage lane at Boy Scout Road. Existing right-of-way is being maintained.

Boy Scout Road is a two-lane undivided roadway in Orange County, and is oriented East-West. The roadway terminates at its westerly end with Binion Road and at its easterly end with Ocoee Apopka Road. Several single residential homes connect to the road and one large subdivision is also connected. Improvements are scheduled for Boy Scout Road to provide a left turn storage lane at Binion Road. Existing right-of-way is being maintained.

Proposed Roadway Improvements - Alternatives Description

The proposed SR 429 and Binion Road interchange will form a partial interchange on SR 429, providing access to/from the north only. The ramps will be tolled and will terminate at the Binion Road and Boy Scout Road intersection. Due to right-of-way constraints on SR 429, a concept was developed in which the southbound ramp flies over the SR 429 mainline. To accommodate the geometrics for the flyover ramp, Boy Scout Road will need to be realigned to the south as it intersects with Binion Road. Two configurations were developed for the ramp terminal intersection at Binion Road: a signalized and a roundabout intersection (see **Exhibits A & B** below). Each of the alternatives would require relocation of utilities along the new Boy Scout Road alignment, and the Selected Alternative will determine the utility relocation requirements, based on the type of intersection selected. The utility impacts and intersection-related utility relocations will be determined at Final Design and will coordinated with the identified Utility Agency.



4.e - Existing Conditions - Utilities

Existing Utility Agency Owner (UAO) Assessment

The UAOs in the study area were determined using a variety of sources. First, a Sunshine 811 Design Ticket was made to identify the utility providers and operators registered in the area. Next, a site visit was performed to visually identify marked utilities and the providers. These utility providers were then contacted to establish the proper personnel to assist with locating and identifying existing and planned utilities in the area. Lastly, plans, permits and/or mapping of the utilities were requested for review including any right-of-way or easement agreements along the affected corridors. UAO dispositions will be requested and documented at a later date as part of the design phase for this project. Cost and scheduling estimates associated with any relocation efforts will be documented as part of the design phase. The UAOs identified on the project are summarized in **Table 1**. The responses and other correspondence from the UAOs are provided in **Appendix A**. A description of all existing and planned utilities per UAO is listed below.

Table 1 - List of Utility Contact Information

Utility Owner	Contact	Email/ Phone	FACILITIES
CenturyLink	TBD	relocations@lumen.com	Buried Copper (Telephone)
City of Apopka	Vladimir Simonovski	vsimonovski@apopka.net	Reclaimed Water, Water, Sewer
Duke Energy Distribution	TBD	defdistributiongov@duke-energy.com	Electric
Lake Apopka Natural Gas District	Mingo Colon	mcolon@langd.org	Gas
MCI	Tim Cole	timothy.cole@verizon.com	Fiber, Communication Lines

CenturyLink

CenturyLink has facilities on Binion Road and Boy Scout Road. They have an underground copper line for telephone service. Along Binion Road, their service line is located on the west side of the road. There is also a crossing just south of Boy Scout Road. Along Boy Scout Road, the service line runs on the south side, and has several crossings that service the residential homes and subdivisions.

Lake Apopka Natural Gas District (LANGD)

LANGD has facilities along Binion Road. They have a 6" Poly Gas Main located on the east side of the road. A crossing exists on the east leg of Boy Scout Road. A 10" steel casing is proposed around the 6" gas main at the SR 429 overpass as well as just beyond the overpass for both directions. Installation began November 11, 2022.

City of Apopka

Within the study area, the City of Apopka Public Works owns and maintains the water, sewer and reclaimed water facilities. Along Binion Road, the water line is a 16" DIP, and the sewer line is a 12" PVC. Both are located on the east side of the road. The reclaimed water line varies from a 30" PVC, 30" DIP, and 36" DIP, and is located on the west side of the road. The water and sewer lines cross just north of the SR 429 overpass and run adjacently with the reclaimed water line under the SR 429 to the south. Similarly, the water and sewer line cross Binion Road just north of Boy Scout Road to service the nearby subdivisions. The Sewer line and reclaimed water line also run east along Boy Scout Road. Along Boy Scout Road, the reclaimed water line is a 16" PVC, and the sewer line is an 8" PVC. Both lines are located on the south side of the road. Operational improvements are planned for both Binion Road and Boy Scout Road which will add left turn storage lanes and right turn auxiliary lanes at the intersection. Public works have begun to relocate utilities within the existing right-of-way and have moved the utilities immediately adjacent to the right-of-way as part of the planned roadway improvements.

Duke Energy (Distribution)

Duke Energy is the electric service provider for this area. They have aerial and underground facilities on both Binion Road and Boy Scout Road. Along Binion Road, service poles carry overhead electric lines and are located on the west side of the road. There is also underground electric on the west side that crosses Binion Road just north of the intersection. Along Boy Scout Road, service poles and overhead electric exist on the south side of the road. These facilities service nearby residential homes using both aerial and ground transformers. These service points would need to be addressed prior to any relocation efforts.

MCI

MCI has facilities along Binion Road and Boy Scout Road. For the most part MCI shares Duke Energy's service poles. Their facilities start at the intersection and continue northward and eastward. They have an underground crossing through the intersection which run between pull boxes and ultimately lead to the risers attached to the service poles. Future relocation efforts involving MCI are dependent on Duke Energy's relocations.

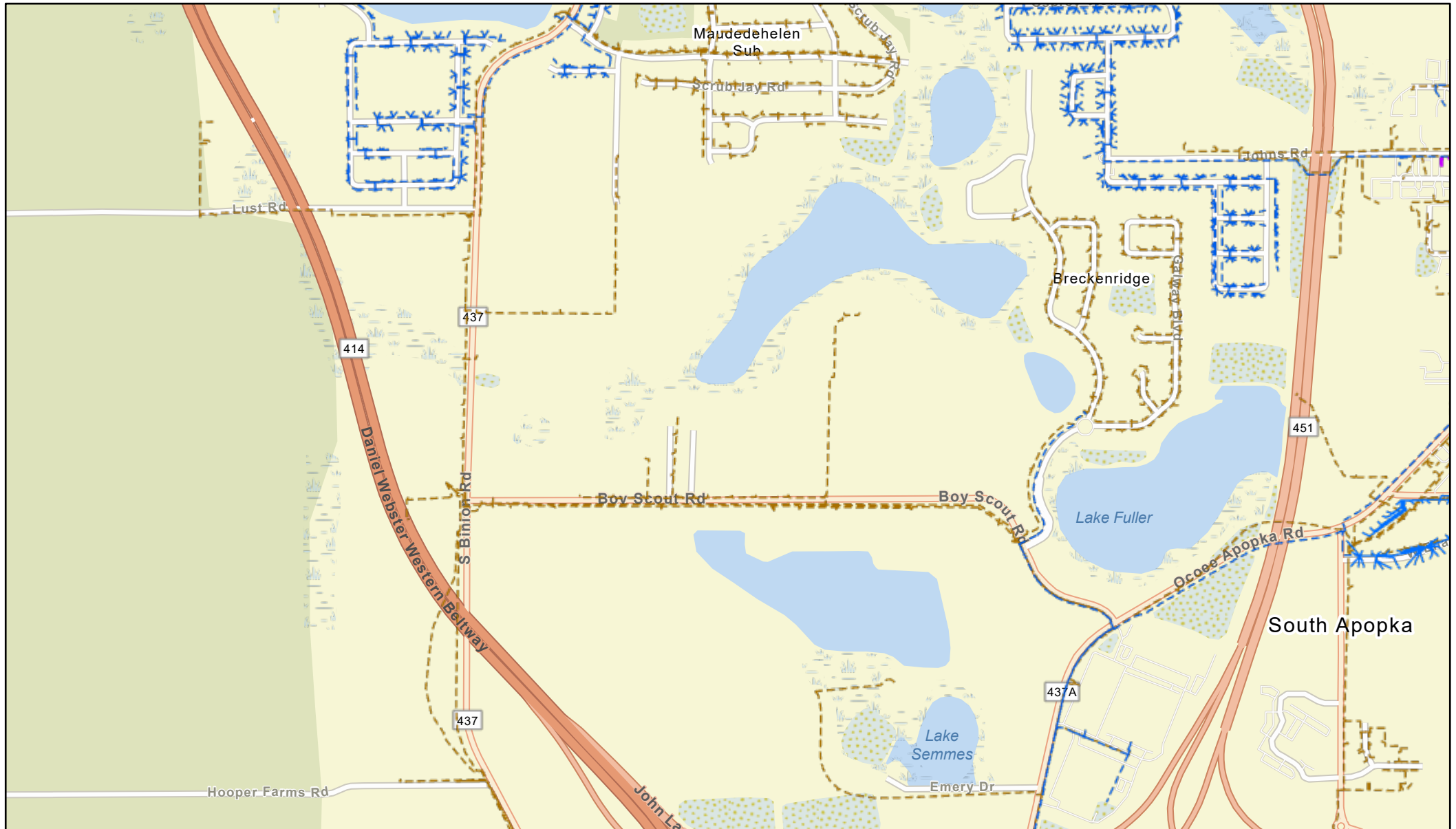
4.e. – Utilities Assessment

Utility Impacts

Given the build alternatives, utility relocation is anticipated for all five utility providers. Cost and scheduling as well as any UAO dispositions and agreements pertaining to the relocation of any facilities will be further investigated as part of the design phase for this project. Listed providers in **Table 1** should be contacted as part of the ongoing utility coordination efforts.

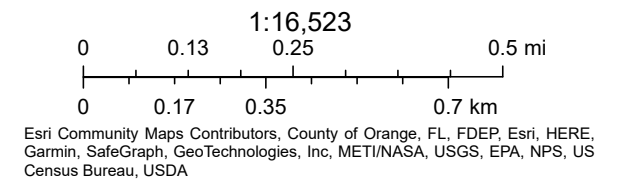
Appendix A – Correspondence Records

LUMEN Relocate Utility Map



11/16/2022, 8:18:36 AM

- Local Copper UG Route
- Local Copper Aerial Route
- Fiber Routes
 - METRO LATERAL, UNDERGROUND
- Underground
- Routes Owned
- Aerial



UTILITIES

Water Main
Sewer Forcemain
Sewer Gravity Main
Reclaimed Main
Storm Inlet
Storm Discharge
Storm Gravity Main

Storm Detention
<all other values>

Pond Type
Swale
Dry Detention
Dry Retention
Exfiltration Trench
Wet Detention



1 INCH = 350 FEET

DATE: 11/16/2022

GREEN ENGLISH ST

CLIMBING CT

WINTER STONE ST

SUMMER STONE LOOP

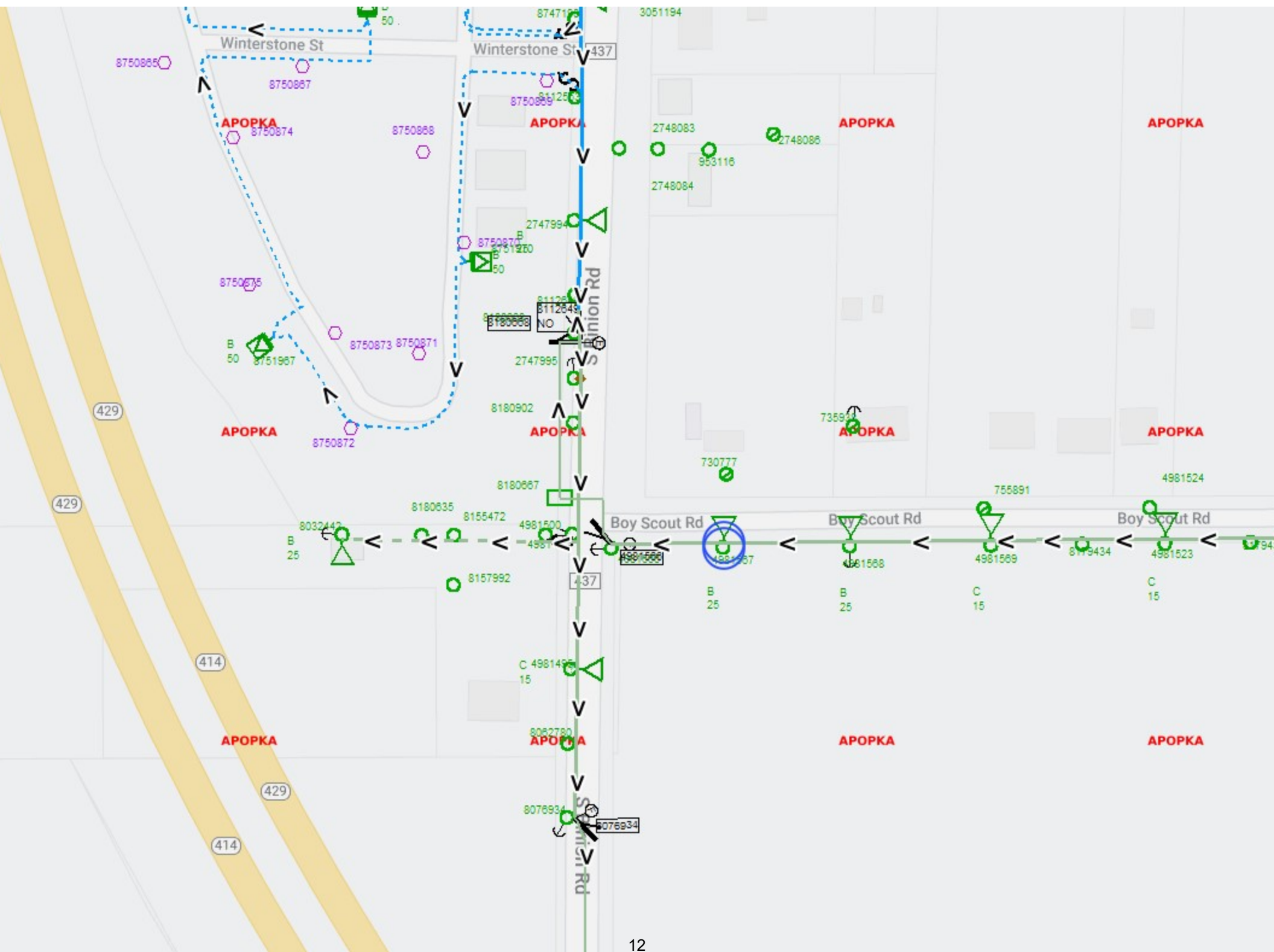
S SINION RD CR 437

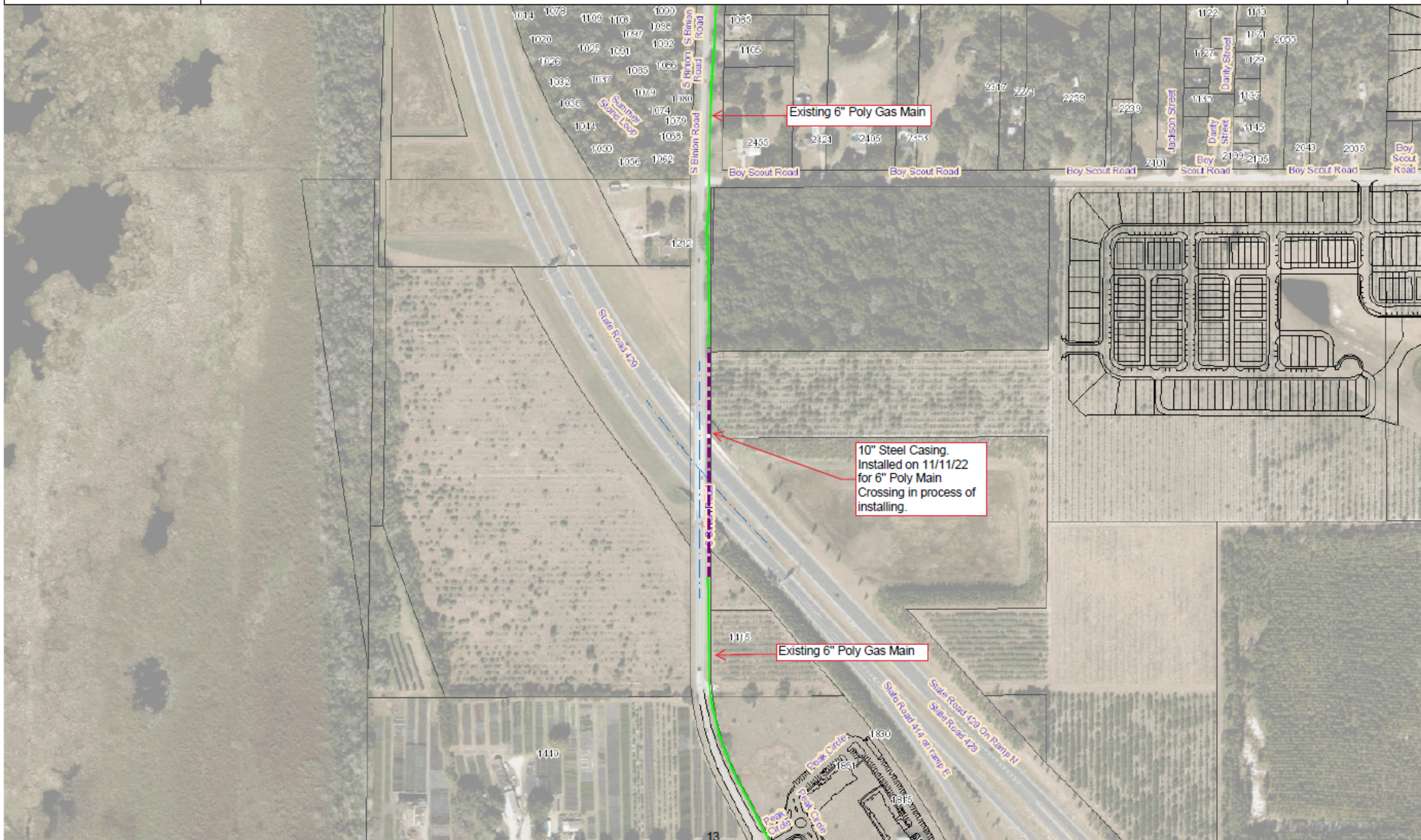
SR 429 / SR 414

JACKSON ST

DARITY ST

BOY SCOUT RD







MCI METRO [864]
 (1-36) = AP7401:1-36
 (37-72) = XD:68570397:37-72
 (73-86) = ORIQ03:73-86
 (87-94) = XD:68570397:87-94
 (95-180) = ORIQ03:95-180
 (181-192) = XD:68572641:181-192
 (193-282) = ORIQ03:193-282
 (283-284) = XD:68571540:283-284
 (285-286) = XD:68576359:285-286
 (287-288) = XD:68570342:287-288
 (649-720) = CL1903:217-288
 (721-864) = XD:68572038:721-864

FIB: BUR::68071699
 MCI METRO [864]
 (1-36) = AP7401:1-36
 (37-72) = XD:68570397:37-72
 (73-86) = ORIQ03:73-86
 (87-94) = XD:68570397:87-94
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 (193-282) = ORIQ03:193-282
 (283-284) = XD:68571540:283-284
 (285-286) = XD:68576359:285-286
 (287-288) = XD:68570342:287-288
 (289-648) = XD:68572641:289-648
 (649-720) = CL1903:217-288
 (721-864) = XD:68572038:721-864

FIB: AER::500151346
 MCI METRO [864]
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 (721-864) = XD:68572038:721-864

POLES: POLE::50002626
 4981499

ACPT: HH::68572144
 HH# 102045

OSP: AER::68405423
 0 -

ACTL PERMIT::500076955
 0 -

OSP: AER::68405423
 0 -

ACTL PERMIT::500076955
 OSP: UGSPAN::68689575
 1 - 2 HDPE

ACPT: HH::68572143
 HH# 102044

POLES: POLE::50002987
 M4981566

FIB: TRNSPLC::50000553

OSP: AER::68405759
 0 -

Appendix B – Sunshine 811

Byron Sprague

From: Sunshine 811 Exactix <no-reply@exactix.sunshine811.com>
Sent: Wednesday, September 21, 2022 10:14 PM
To: Armando Perez
Subject: Responses for Sunshine 811 locate request 264202148

Follow Up Flag: Follow up
Flag Status: Flagged

The following facility operators have responded for this locate request:

Ticket 264202148
FL : ORANGE County, APOPKA
SR 429 TOLL

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

- Ongoing Job - locate technician and excavator have established an agreement on scheduled marking

CENTURYLINK

- No Conflict - utility is outside of the requested work site

CHARTER COMMUNICATIONS

- Clear No Facilities

CITY OF APOPKA

- Active Facilities are present - the member has active facilities within the area described by the noticed demolition. DO NOT demolish until the member notifies you the site is clear

DUKE ENERGY

- Clear No Facilities

LAKE APOPKA NATURAL GAS DISTRICT

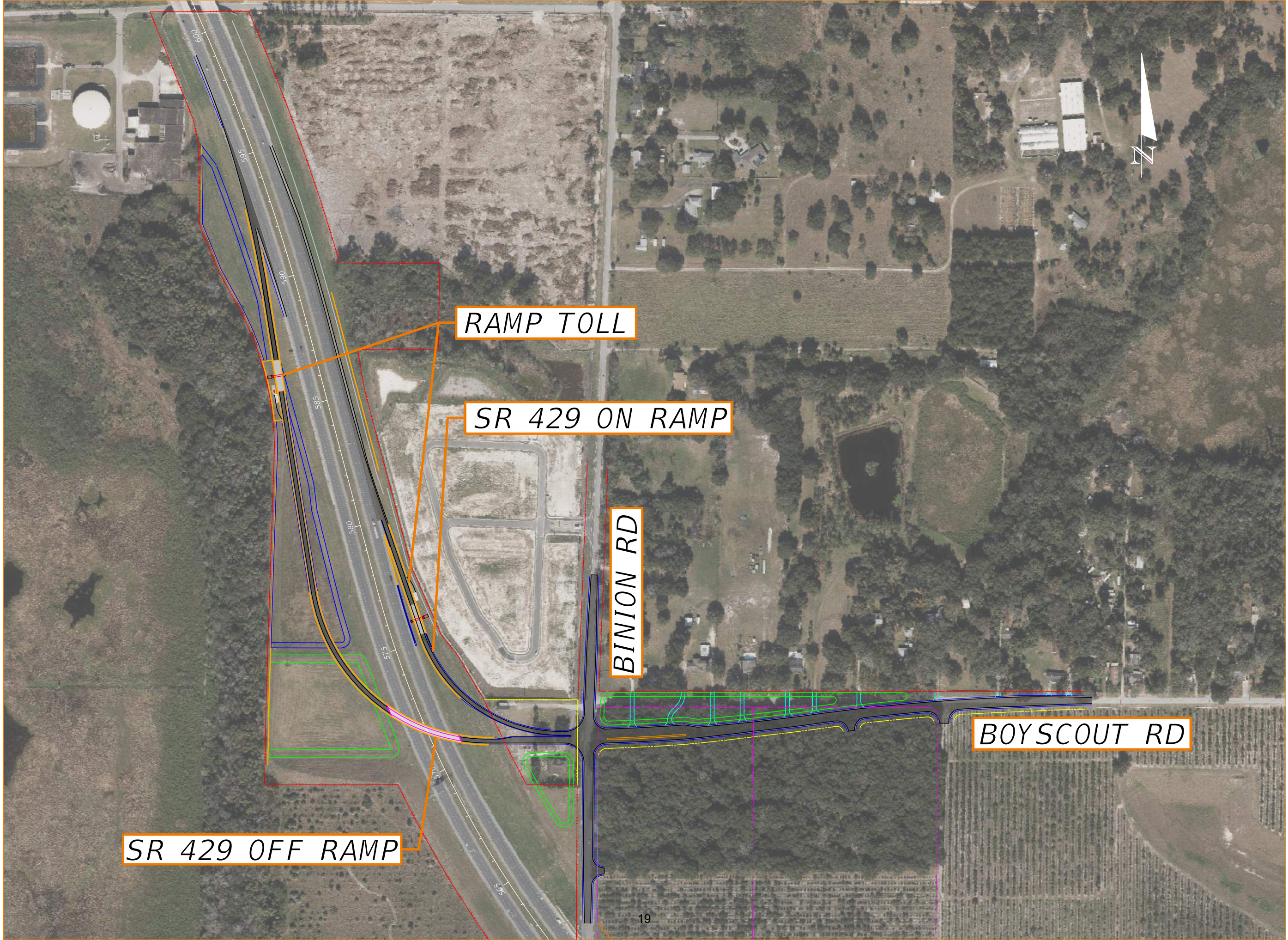
- Unmarked - Member does not have accurate information to perform the requested locate - please contact the utility for further details per 556.105 (7)(a), F.S.

MCI

- Clear No Facilities

The most up-to-date response status can always be gathered at <https://exactix.sunshine811.com/> or by calling 1 - (800) 852 - 8057.

Appendix C – Build Alternatives



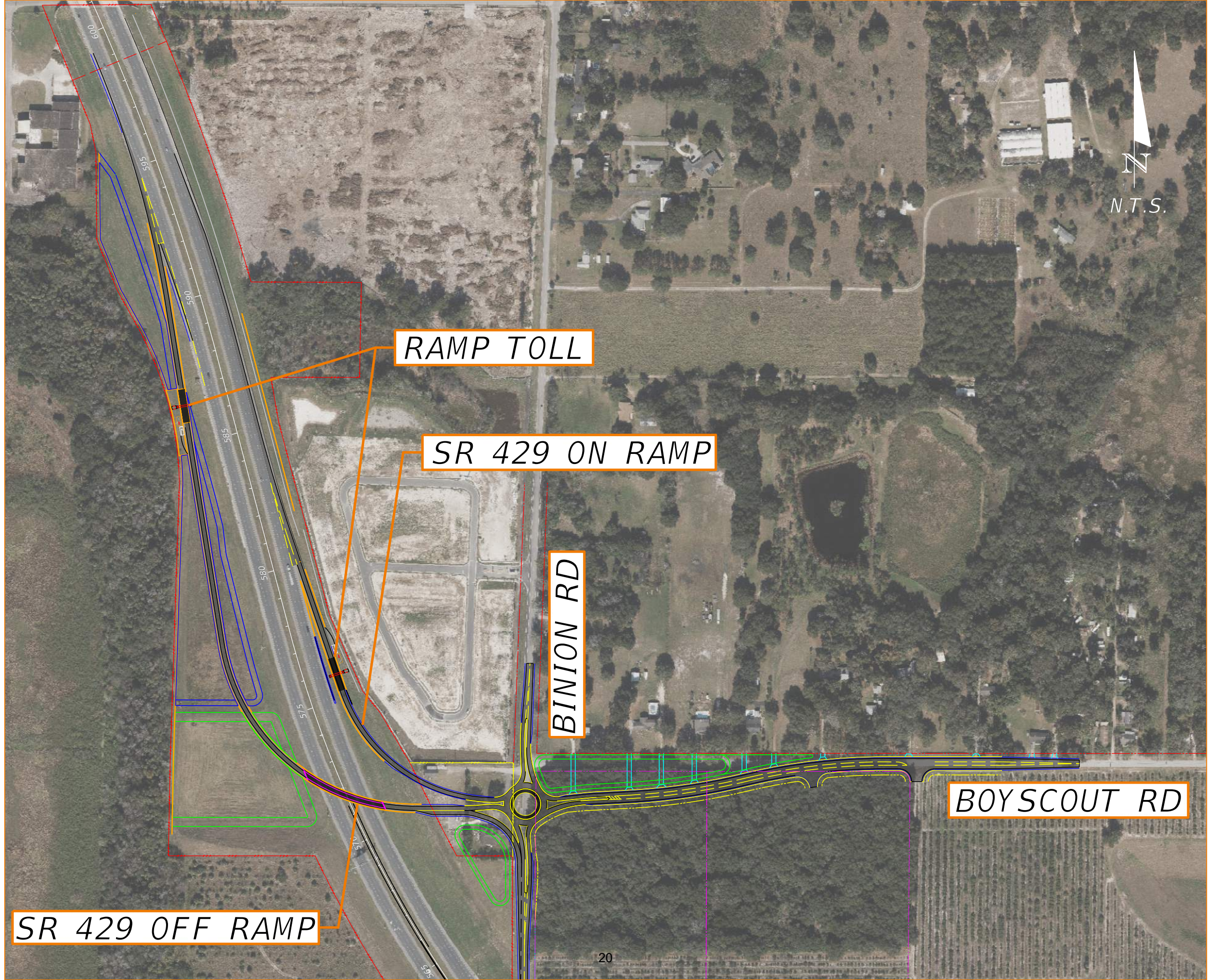
RAMP TOLL

SR 429 ON RAMP

BINION RD

BOYSCOUT RD

SR 429 OFF RAMP



SR 429 OFF RAMP

RAMP TOLL

SR 429 ON RAMP

BINION RD

BOYSCOUT RD

