

FINAL DRAFT

Sociocultural Effects Evaluation Technical Memorandum

State Road 414 Expressway Extension
Project Development and Environment Study
From US 441 to SR 434
Orange County and Seminole County, Florida

CFX Project Number: 414-227

Prepared for:

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

Submitted by:

Jacobs Engineering Group Inc.
200 S. Orange Ave., Suite 900
Orlando, FL 32801

PPS0218210640ORL

FEBRUARY 2022

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**



Contents

Acronyms and Abbreviations.....	iii
1. Project Overview	1-1
1.1 Project Background and Description	1-1
1.2 Purpose and Need	1-4
1.3 Report Purpose	1-4
1.4 Alternatives Considered	1-4
1.4.1 Viable Alternatives	1-4
1.4.2 Preferred Alternative	1-5
1.4.3 No-Build Alternative	1-5
2. Methodology	2-6
2.1 Study Area	2-6
2.2 SCE Study Resources	2-6
2.3 Agency Comments	2-6
2.4 Advisory Group Coordination	2-8
2.4.1 Summary of EAG Input – December 8, 2020	2-9
2.4.2 Summary of EAG Input – August 31, 2021	2-9
2.4.3 Summary of PAG Input – December 8, 2020	2-9
2.4.4 Summary of PAG Input – August 31, 2021	2-10
2.5 CFX Environmental Stewardship Committee	2-10
2.5.3 Summary of ESC Input – August 19, 2021	2-11
2.6 Summary of Public Comments	2-11
3. Social and Economic Existing Conditions	3-1
3.1 Land Use	3-1
3.2 Community Facilities	3-1
3.3 Parks and Recreation	3-4
3.4 Planned Developments	3-5
3.5 Modal Interrelationships	3-5
3.5.1 Pedestrians and Bicyclists	3-5
3.5.2 Transit	3-5
3.5.3 Trails	3-7
4. Social and Economic Impacts	4-1
4.1 Social Effects	4-1
4.1.1 Demographics	4-1
4.1.2 Community Cohesion	4-3
4.1.3 Safety/Emergency Response	4-4

4.2 Economic4-4

4.3 Land Use Changes.....4-5

4.4 Mobility.....4-5

4.5 Aesthetic Effects4-6

4.6 Relocation Potential4-7

5. Summary and Commitments 5-7

5.1 Summary of Project Sociocultural Effects5-7

5.2 Project Commitments.....5-7

6. References..... 6-7

Appendix

A Proposed Typical Sections and Preliminary Concept Plans

Tables

Table 2-1. AN Comments Received 2-7

Table 3-1. Community Facilities In or Near the Study Area 3-4

Table 4-1. Study Area 2015 Census Data 4-1

Figures

Figure 1-1. Regional Location Map 1-2

Figure 1-2. Project Location Map 1-3

Figure 3-1. Existing Land Use Map 3-2

Figure 3-2. Community Facilities..... 3-3

Figure 3-3. Planned Developments 3-6

Figure 4-1. 2015 Census Demographics 4-2

Acronyms and Abbreviations

AMA	Alternative Mobility Area
AN	Advanced Notification
CFX	Central Florida Expressway Authority
EAG	Environmental Advisory Group
EPA	U.S. Environmental Protection Agency
EST	Environmental Screening Tool
FCMP	Florida Coastal Management Program
FDOT	Florida Department of Transportation
I-4	Interstate 4
mph	mile(s) per hour
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
NSA	Neighborhood Stabilization Area
PAG	Project Advisory Group
PD&E	Project Development and Environment
ROW	right-of-way
SCE	Sociocultural Effects Evaluation
SHPO	State Historic Preservation Officer
SR 414	State Road 414
SR 429	State Road 429
SR 434	State Road 434
US 441	U.S. Highway 441
USACE	U.S. Army Corps of Engineers

1. Project Overview

1.1 Project Background and Description

The Central Florida Expressway Authority is conducting the State Road 414 Expressway Extension Project Development and Environment Study to evaluate alternatives for a proposed grade-separated expressway extension of the tolled SR 414 (John Land Apopka Expressway). The existing SR 414 Expressway provides regional connectivity from State Road 429 and U.S. Highway 441 in Apopka and extends south and east to SR 414 (Maitland Boulevard) just east of U.S. 441. Figure 1-1 presents the Regional Location Map. The study limits extend along the existing SR 414 (Maitland Boulevard) corridor from US 441 (Orange Blossom Trail) to State Road 434 (Forest City Road). Figure 1-2 presents the Project Location Map. The approximate 2.3-mile-long study corridor generally runs along the Orange and Seminole county lines and is located within the city of Maitland (Orange County) and the city of Altamonte Springs (Seminole County). Both CFX and Florida Department of Transportation own portions of SR 414 within the project study limits. CFX owns and operates the SR 414 (John Land Apopka Expressway) from SR 429 to just east of US 441, and FDOT owns and operates SR 414 (Maitland Boulevard) from just east of US 441 to U.S. Highway 17/U.S. Highway 92. The existing SR 414 (Maitland Boulevard) is a four-lane divided urban principal arterial with three major signalized intersections at Rose Avenue/Bear Lake Road, Eden Park Road and Magnolia Homes Road, and an unsignalized intersection at Gateway Drive between the grade-separated intersections of SR 414/US 441 and SR 414/SR 434. A minor grade-separated overpass exists over the Little Wekiva Canal and an access road between the Lake Lotus Park and Ride lot and Lake Lotus Park.

The PD&E Study is evaluating alternatives for a proposed grade-separated SR 414 Expressway Extension to provide system linkage between the western terminus of the SR 414 (John Land Apopka Expressway) and Interstate 4. The SR 414 Expressway Extension includes alternatives for a facility with up to two lanes in each direction from US 441 to SR 434. Project alternatives involve various configurations of grade-separated express lanes on SR 414 (Maitland Boulevard) to provide needed capacity between US 441 and SR 434 while maintaining the existing local access lanes. Alternatives considered include reversible, bi-directional and convertible express lanes along the project corridor to avoid right-of-way acquisition needs.

Prior to the PD&E Study, CFX completed the SR 414 *Reversible Express Lanes Schematic Report* that included an assessment of tolled, directional express lanes within the median of SR 414 (CFX 2019). The Report recommended a two-lane reversible grade separated viaduct in the median of SR 414. The Report also found that a single lane bi-directional express lane would require a 75 percent wider bridge and was not considered viable.

The proposed improvements also include reconfiguring the existing at-grade SR 414 (Maitland Boulevard) to accommodate the SR 414 toll facility while maintaining two SR 414 local access lanes in each direction. The study will involve analysis of intersection improvements, bridge modifications at Lake Bosse and Little Wekiva Canal, stormwater management facilities, pedestrian and bicycle needs and access management modifications. The No-Build Alternative is a viable option throughout the study.

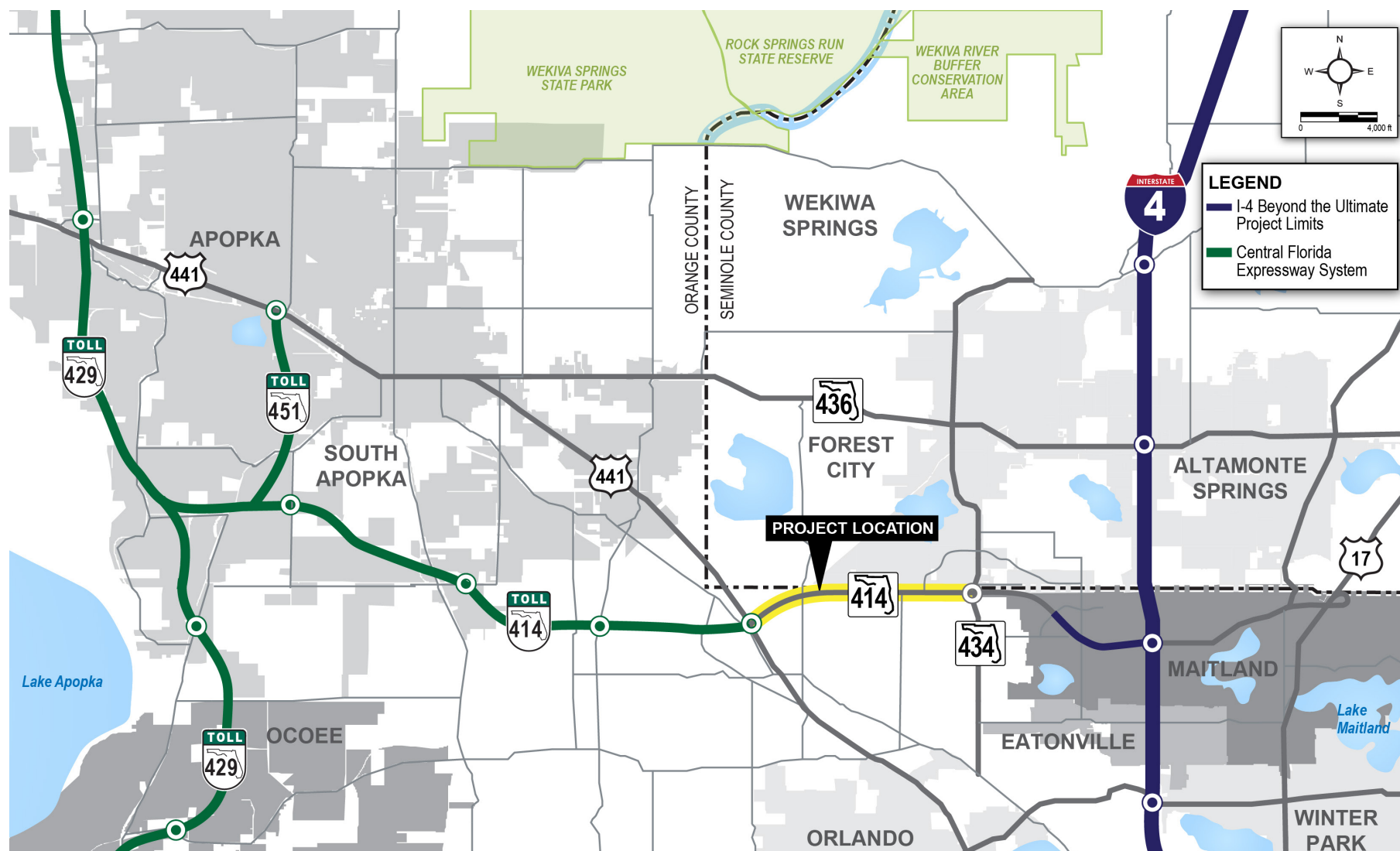


Figure 1-1. Regional Location Map

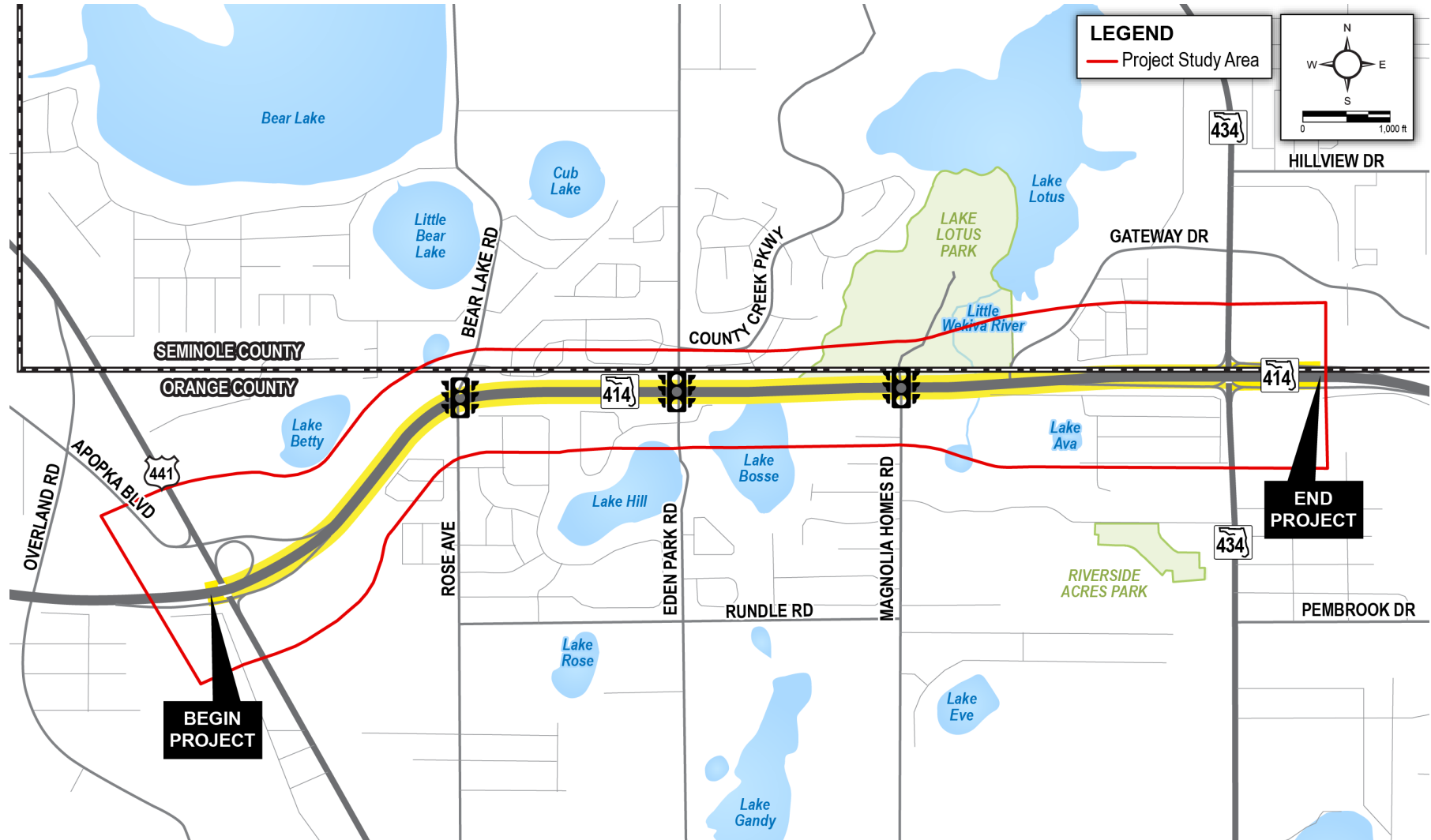


Figure 1-2. Project Location Map

1.2 Purpose and Need

The purpose of the SR 414 Expressway Extension PD&E Study is to provide needed capacity on SR 414 and improve system connectivity between SR 429 and I-4 to meet future traffic needs. The 2.3-mile-long project corridor of SR 414 is an arterial connecting two limited-access facilities. The proposed project will complete the limited-access gap between US 441 and SR 434 and provide limited-access regional connectivity between SR 429 and I-4. The proposed grade-separated SR 414 Expressway Extension will separate the through traffic from the local traffic, allowing for greater mobility and reduced congestion for both facilities. The proposed improvements are to 1) accommodate anticipated transportation demand, 2) improve safety, 3) improve system connectivity/linkage and 4) support multimodal opportunities.

1.3 Report Purpose

This *Sociocultural Effects Evaluation Technical Memorandum* documents the sociocultural effects process conducted for the PD&E Study. The SCE evaluation process assesses social, economic, land use changes, mobility, aesthetics effects and relocations, including potential issues associated with Environmental Justice, Civil Rights and other nondiscrimination laws.

1.4 Alternatives Considered

Alternatives were evaluated for environmental and operational constraints. An at-grade alternative within the median of SR 414 was eliminated because while it provided uninterrupted travel along SR 414, traffic from the local cross streets would not be able to cross Maitland Boulevard. Another alternative considered included an adjacent corridor to SR 414. However, because Maitland Boulevard is mostly developed, this alternative was not viable. Finally, an alternative that included individual overpasses at each of the existing intersections was also considered. However, due to the limited spacing between each intersection, this alternative was not feasible and therefore eliminated.

Viable alternatives were developed and presented for public input at the Alternatives Public Workshop held on February 10, 2021. These viable alternatives included roadway concepts for the SR 414 Expressway Extension project, including the SR 414 toll lanes and the Maitland Boulevard local access lanes. The viable alternatives were updated after the Alternative Public Workshop to reflect ongoing alternatives refinements that avoid and minimize environmental and social impacts.

1.4.1 Viable Alternatives

The evaluation of typical section options is documented in the SR 414 Expressway Extension *Final Typical Section Technical Memorandum* (CFX 2022f). All typical section options require widening within the ROW and, therefore, a variety of elevated expressway alternatives were developed. Initially, two typical section options for the at-grade Maitland Boulevard and five typical section options for the elevated SR 414 Expressway Extension were qualitatively evaluated. The alignment analysis was evaluated based on the maximum viable typical section footprint of 118 feet wide. The alignment is constrained by the ROW and median width needed for pier placement of the proposed elevated structure. To maximize the use of the existing typical section of 118 feet, the proposed alignment for both the at-grade and elevated facilities is along the centerline of the existing ROW. The piers for the elevated SR 414 bridge are proposed within the median of the at-grade Maitland Boulevard facility. Based on the design criteria, the design speed was reduced from 55 miles per hour to 45 mph along the at-grade Maitland Boulevard facility.

Based on the initial analyses, the viable typical section for the at-grade Maitland Boulevard maintains the pavement footprint of the four-lane facility but shifts and restripes the lanes to provide a 7-foot-wide buffered bike lane and proposed Type F curb and gutter in the median. The viable typical section options for the elevated SR 414 Expressway Extension include Options 4 and 6 as detailed in the following text. The *Final Typical Section Technical Memorandum* provides descriptions of each typical section option.

- Elevated Typical Section Option 4: provides four 12-foot-wide express lanes (two per direction) separated by a median barrier wall.
- Elevated Typical Section Option 6: provides three 12-foot-wide express lanes separated by a movable barrier wall. In morning peak traffic, there are two lanes eastbound and one lane westbound. In afternoon peak traffic, there is one lane eastbound and two lanes westbound. The movable barrier would be shifted approximately 12 feet via specialty vehicle twice daily. This option is both reversible and convertible and requires advance signing, access equipment, specialty barrier and specialty vehicle with onsite or nearby storage.

The Elevated Typical Section Option 4 construction costs are higher, but are offset by the significant capital and operating costs for Option 6. Additionally, Option 4 provides higher capacity and safer incident management. Therefore, the recommended option for the elevated SR 414 Expressway Extension is Option 4. The proposed design speed for the elevated expressway is 50 mph. Appendix A provides the proposed typical section.

1.4.2 Preferred Alternative

As a result of the alternatives analyses conducted for the project, a Build Alternative was identified for further analysis and public input. The proposed SR 414 Expressway Extension typical section for the Preferred Alternative includes maintaining the pavement footprint (60 feet) of the four-lane at-grade Maitland Boulevard but shifts and restripes the lanes to provide a 7-foot-wide buffered bike lane implemented with the elevated SR 414 facility in the median, as four 12-foot-wide express lanes (two lanes per direction) separated by a median barrier wall. Using these recommendations and ongoing traffic analysis, the Preferred Alternative is developed for the corridor to consider connections between existing facilities and include operational improvements at intersections. In addition, impacts to environmental resources including social, cultural, natural, and physical are considered as the Preferred Alternative is further developed. Appendix A includes the preliminary concept plans for the Preferred Alternative.

1.4.3 No-Build Alternative

The No-Build Alternative for the study area assumes previously programmed improvements are built including widening SR 414 to six lanes from US 441 to SR 434 as noted in MetroPlan Orlando's 2045 *Metropolitan Transportation Plan Cost Feasible Plan*, Revised June 9, 2021. The programmed improvements to SR 414 do not meet the 2045 traffic needs and the purpose and need for the project. Therefore, the No-Build Alternative is not the Preferred Alternative. However, the No-Build Alternative shall remain under consideration throughout the PD&E Study for public input and to provide a comparison to the Preferred Alternative and ultimately the Adopted Preferred Alternative (upon CFX Board adoption).

2. Methodology

The SCE evaluation process is collaborative, involving government agencies, the public and other stakeholders, and ensures that community values and concerns receive consideration during project delivery and that no population groups are significantly affected. The data used to evaluate the study area's social and cultural impacts were derived from literature, agency comments, geographic information system and field survey.

2.1 Study Area

Desktop data collection and research for the SCE generally extends 500 feet from the centerline of SR 414 and 1,000 feet near the interchanges at US 441 and SR 434. Additional research for potentially affected sociocultural resources within the surrounding community (such as neighborhoods and community features) was documented up to 2,000 feet from the centerline of SR 414. The potential area of the effect was identified based on the proposed improvements. The existing SR 414 corridor is generally 118 feet wide based on the proposed typical section. Figure 1-2 presents the limits of the SCE study area.

2.2 SCE Study Resources

A desktop review of the social resources within and near the study area was performed. The FDOT Environmental Screening Tool (FDOT 2021a), which integrates Internet mapping technology, relational database management systems and geographic information systems, was used to determine sociocultural resources near the project corridor. The EST Map Viewer was accessed between June and November 2020. In addition to the EST, the 2030 Orange County Comprehensive Plan (Orange County 2019) and the Seminole County Comprehensive Plan (Seminole County 2021) were reviewed, as well as data from the U.S. Census Bureau 2014 – 2018 American Community Survey 5-Year Data (Census Bureau 2019), and Central Florida Transit Authority's 2020 Transit Development Plan (LYNX 2019). References are further documented in Section 5 of this SCE Report and in document figures.

A field visit was performed in April 2020 to verify desktop information and collect any additional corridor information not identified during the desktop review.

2.3 Agency Comments

An Advanced Notification Package was prepared by CFX and distributed through the Florida State Clearinghouse on April 27, 2020. The AN Package included a Preliminary Environmental Discussion to give stakeholders an opportunity to provide input and become involved in the project. The AN was distributed to 62 stakeholders. As a result of the AN distribution, nine comments were received. Table 2-1 summarizes agency/stakeholder comments received.

Table 2-1. AN Comments Received

Stakeholder/Agency	Comment Date	Comment Summary
Florida Department of Environmental Protection	4/27/20	Confirmed AN Package received.
MetroPlan Orlando	4/28/20	I have reviewed the attached information and have no specific questions or comments.
Orange County Transportation Planning Division Planning, Environmental and Development Services Department	5/21/20	<p>Signal maintenance:</p> <ul style="list-style-type: none"> Existing signals owned by FDOT; maintained by Seminole County I-4 Ultimate improvements; local road signal at SR 434 to be maintained by City of Maitland Signal inspection Future interagency agreements and coordination <p>Assessment/ documentation:</p> <ul style="list-style-type: none"> Water quality and quantity impacts; floodplain; infrastructure related to stormwater utilities
City of Altamonte Springs City Engineer	6/1/20	<p>Support for project need.</p> <p>Recreation Areas:</p> <ul style="list-style-type: none"> Working with FDOT to take ownership of Lake Lotus Park parking lot <ul style="list-style-type: none"> Critical that the amount of parking in this area is not decreased as a result of this project. Tram access under the SR 414 bridge will need to be maintained. Continue coordination with Orange County who is moving forward with an improvement to the Little Wekiva River adjacent to Lake Lotus Park parking area. Please be sure to take into account the design of this project into your study as well. A connection between Lake Lotus Park and the Seminole Wekiva Trail would be very beneficial for recreational purposes; Please consider providing a multi-use path that is at least 10 feet wide on the north side of the corridor.
Southeast Regional Office, Habitat Conservation, National Oceanic and Atmospheric Administration Fisheries U.S. Department of Commerce	6/4/20	<ul style="list-style-type: none"> The project is likely to impact forested and herbaceous freshwater wetlands, marshes and surface waters. There will be no impact to Essential Fish Habitat or federally managed fisheries in the unnamed wetlands, nor impacts to Endangered Species Act listed species under National Marine Fisheries Service purview. Construction activities may impact adjacent wetlands through sedimentation and runoff; to minimize these impacts, NMFS recommends the applicant utilize best management practices. Mitigation for unavoidable impacts to freshwater wetlands should be offset by purchasing appropriate credits from a mitigation bank, or through another suitable mitigation strategy to ensure functional values are offset in the same watershed as the impact.

Table 2-1. AN Comments Received

Stakeholder/Agency	Comment Date	Comment Summary
Office of the Regional Administrator, U.S. Environmental Protection Agency, Region 4, NEPA Section, Chief Strategic Programs Office	6/11/20	<ul style="list-style-type: none"> ▪ EPA recommends that new or enhanced stormwater management facilities be considered to maximize the collection and treatment of stormwater to prevent receiving waters from experiencing secondary impacts from the proposed new construction. ▪ EPA suggests that CFX consider the potential adverse effect of construction, urban runoff and hydrologic modifications on surface and groundwater and the potential benefits of wetlands such as absorption of various pollutants, including excess nutrients and sediment, before these pollutants reach rivers, lakes and other water bodies. Where applicable, EPA also recommends that CFX consider vegetated buffers or filter strips along stream corridors to stabilize the banks, trap sediments and nutrients and reduce peak flows. ▪ EPA recommends meaningful public involvement that enables transportation professionals to develop systems, services and solutions that meet the needs of the community and the vulnerable populations that potentially may be temporarily or permanently impacted by the project. We also recommend that CFX consider strategies to help communicate effectively with Limited English Proficiency individuals within the affected community.
Florida State Clearing House Coordinator	6/18/20	<ul style="list-style-type: none"> ▪ Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended. ▪ The state has no objections to the subject project and, therefore, it is consistent with the Florida Coastal Management Program. ▪ Please refer to comments provided earlier by state agencies during the Efficient Transportation Decision Making review period. ▪ The state's final concurrence of the project's consistency with the FCMP will be determined during any environmental permitting processes, in accordance with Section 373.428, Florida Statutes.
Historic and Cultural Preservation Department Cultural Resource Specialist Muscogee (Creek) Nation	6/23/20	We would definitely like to engage in government-to-government consultation once or if this undertaking will acquire federal involvement.
Owner of CVS at SR 414 and Bear Lake Road	5/19/20	Seeking information as to a sign in the median of SR 414 detailing closures

2.4 Advisory Group Coordination

Additional agency coordination and outreach for the project is also facilitated through the development of special advisory groups for the project that include an Environmental Advisory Group and a Project Advisory Group. The EAG provides input on potential environmental impacts as a result of the project alternatives. The PAG provides input in the project alternatives and informs the project team of local knowledge, issues and concerns. The project study team met with each advisory group separately on December 8, 2020, and August 31, 2021, which included 15 EAG members (45 total EAG members) and

11 PAG members (49 total PAG members). The following describes general input received from each advisory group.

2.4.1 Summary of EAG Input – December 8, 2020

- General consensus that an elevated facility would reduce natural environment impacts.
- Ongoing sedimentation issue with the Wekiva River should be addressed.
- Adjacent residential properties are close to the corridor, which could be challenging.
- Deep geological feature in the segment of the alignment east of Lake Bosse that could cause design challenges.
- Questioned the possibility to extend the elevated expressway to I-4.
- Existing 5-foot-wide sidewalk should be wider because SR 414 is a busy road; requested an 8-foot-to 12-foot-wide sidewalk for future access and connectivity.
- Minority populations noted on both sides of Maitland Boulevard and concerns for air quality effects on those populations as well as to pedestrians and nearby green spaces.
- Prioritize high-performing native plants and plants local to this region; consider mowing schedules that balance driver visibility needs and the needs of native plants; plant no more than 20 percent of each plant genus in an area to improve diversity.
- Noted that the U.S. Army Corps of Engineers is going through a period of flux, but based on the latest available information does not appear that any waters within the study area are under the jurisdiction of the USACE.
- Orange County currently preparing for a water quality improvement project at Magnolia Homes Road, east of Lake Lotus parking area; concerned that stormwater from the proposed project may impact their project.
- Do not want to see any new stormwater ponds between Lake Bosse to Lake Lotus Park.

2.4.2 Summary of EAG Input – August 31, 2021

- Consider porous pavement opportunities and lighting that does not affect insect populations.
- Consider incidental take permits instead of mitigation banks for wetland impacts.
- Wildlife fencing does not appear feasible because of constraints.
- As the study progresses, it should be noted that FDEP is currently updating the stormwater design and operation regulations for environmental resource permitting.

2.4.3 Summary of PAG Input – December 8, 2020

- Lake Lotus Park includes parcels set aside for mitigation and should be considered a constraint.
- Buffered bike lanes should be included on Maitland Boulevard.
- Concern about bicyclist safety on bike lanes at the current posted speed of 50 mph on Maitland Boulevard.
- Consider a bicycle/pedestrian connection from Lake Lotus Park to the Seminole Wekiva Trail.
- Questioned access to the elevated facility from SR 434 and US 441; suggested additional signage to alert drivers on how to access SR 434 from the elevated expressway.

- Questioned if lighting would be present underneath the elevated expressway for Maitland Boulevard.
- Concern regarding additional weaving movements associated with the I-4 Ultimate project and if this project would exacerbate the problem.
- Potential utility conflict with the Seminole County water main on the north side of Maitland Boulevard.
- Concern regarding the visual impacts from the height of the elevated expressway.
- Bicycle connections east of SR 434 and the ability for this project to address the lack of bicycle connectivity in that area.
- Seminole/Orange County boundary runs along Maitland Boulevard in the study area; students living south and north of the study area do not need to cross Maitland Boulevard to access their schools.
- Project noted as a good connection between SR 429 and I-4.
- Questions on cost of projects and toll implementation.

2.4.4 Summary of PAG Input – August 31, 2021

- Existing interconnected potable water main with Orange County near Bear Lake Road.
- Appreciated the close coordination and communication throughout the project.
- Please continue to coordinate with FDOT regarding A-FIRST pipeline impacts.
- Request monitoring of sedimentation issues associated with Little Wekiva River and potential to return area to pre-construction conditions.

2.5 CFX Environmental Stewardship Committee

The CFX Environmental Stewardship Committee's primary function is to assist the CFX Board in fulfilling its responsibilities by providing oversight and guidance for the protection of the natural environment through conservation and sustainable practices. The ESC meets as required to review projects and programs designed to support the responsible use and protection of the natural environment and provide guidance to CFX staff and consultants. The following summarize the ESC comments on this project.

2.5.1 Summary of ESC Input – October 2020

- Updated Stakeholder list
- Erosion issues surrounding Little Wekiva Canal
- Evaluate trail connectivity opportunities
- Minimize impacts to wetlands and habitats associated with Lake Bosse and Lake Lotus
- Geotechnical and archaeological issues associated with Lake Bosse bridge
- Noise and aesthetic impacts to surrounding residents

2.5.2 Summary of ESC Input – June 2021

- Preliminary per mile cost for elevated viaduct and bridge construction

2.5.3 Summary of ESC Input – August 19, 2021

- Motorist access to express lanes from US 441 and SR 434
- Minimize wetland and surface water impacts
- Traffic incident maintenance of traffic consideration
- Motioned to approve Preferred Alternative for CFX Board approval

2.6 Summary of Public Comments

Pending Public Hearing

3. Social and Economic Existing Conditions

The existing conditions for social and economic resources were documented in the project's *Final Existing Conditions Technical Memorandum* (CFX 2022a).

3.1 Land Use

Adjacent land uses and cover types along SR 414 and adjacent to the study area consist of a diverse mixture of developed properties, natural and altered uplands, wetlands and surface water. During a site visit conducted in May 2020, these areas were assessed, with a focus on the natural vegetative communities for potential use by federal- and state-listed wildlife.

The *St. Johns River Water Management District Florida Land Use Cover Classification System (FLUCCS), 2014* along with field verification was used to classify the various land uses and land covers within the study area. Figure 3-1 presents the Existing Land Use map.

Developed areas include Residential (FLUCCS 1100, 1200, 1300), Commercial (FLUCCS 1400, 1490), Light Industrial (FLUCCS 1550), Heavy Industrial (FLUCCS 1560), Parks and Zoos (FLUCCS 1850), Roads (FLUCCS 8140) and Electrical Power (FLUCCS 8320). Upland areas (vegetated) include Herbaceous Upland Non-forested (FLUCCS 3100), Upland Coniferous Forests (FLUCCS 4100), Pine Mesic Oak (FLUCCS 4140), Upland Hardwood Forests (FLUCCS 4200) and Upland Mixed Coniferous/Hardwood (FLUCCS 4340).

Wetlands and surface waters include Streams and Waterways (FLUCCS 5100), Lakes (FLUCCS 5200), Reservoirs (FLUCCS 5300), Wetland Forested Mix (FLUCCS 6300), Freshwater Marshes (FLUCCS 6410), Emergent Aquatic Vegetation (FLUCCS 6440), Mixed Scrub-Shrub Wetland (FLUCCS 6460) and Surface Water Collection Basins (FLUCCS 8370).

3.2 Community Facilities

Community facilities include both private and public places that are important to the community. Public facilities include government buildings, fire and emergency protection, police protection, healthcare facilities, social service facilities, intermodal facilities, business districts and maintenance of public facilities, such as schools, community centers and cultural facilities. Private facilities may include health-care facilities, schools, religious places of worship, theme parks, grocery stores, major attractors, cemeteries, historic places and other significant quality-of-life features. A field visit was performed in April 2020 to collect corridor information including nearby social resources that could be potentially impacted by the proposed project. The field data along with a desktop review of the study area indicates that there are two community facilities within the study area: a pharmacy and the Lake Lotus Park parking lot.

Table 3-1 presents community facilities within or near the study area. Figure 3-2 presents the community facility locations.

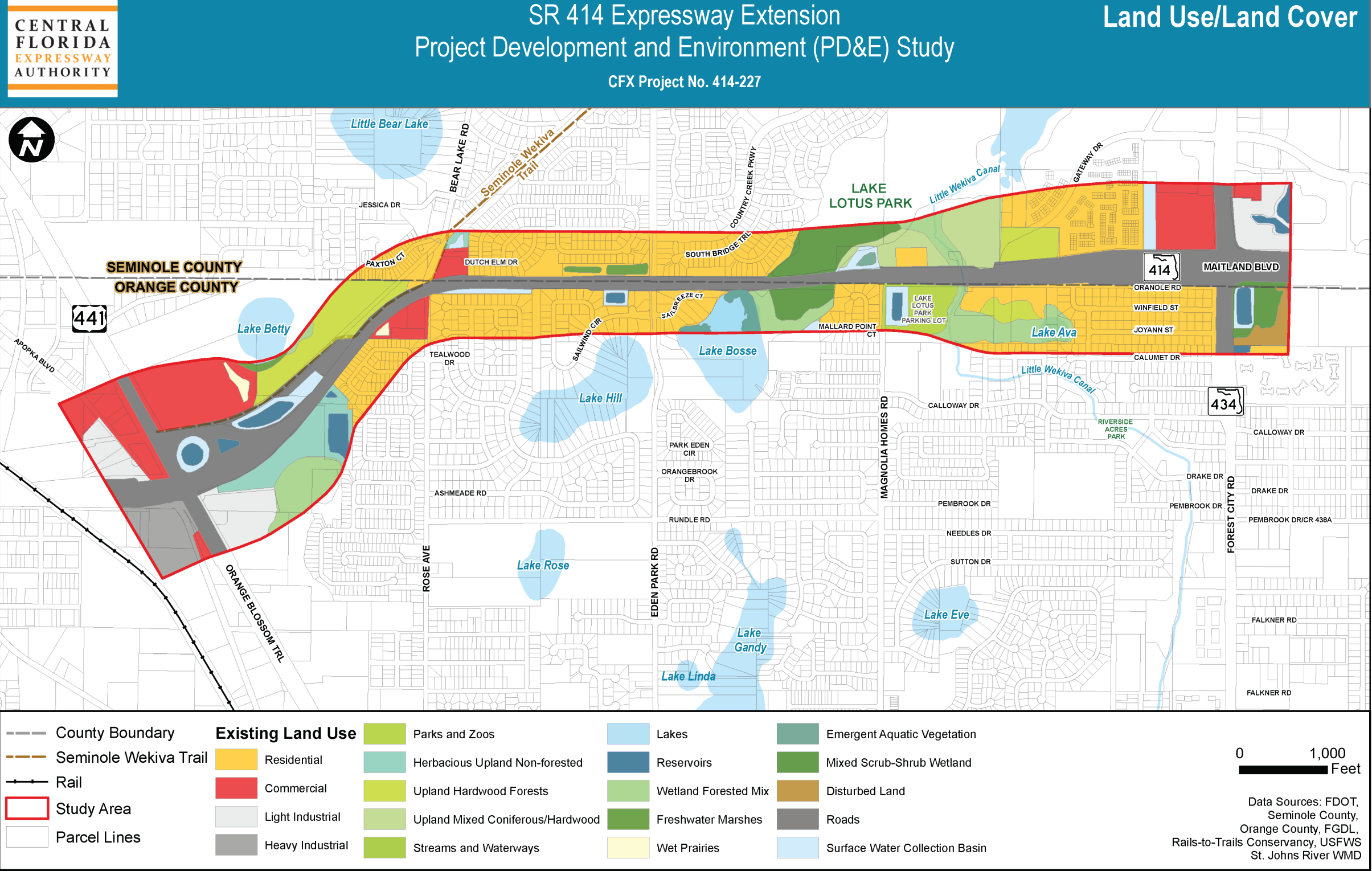


Figure 3-1. Existing Land Use Map

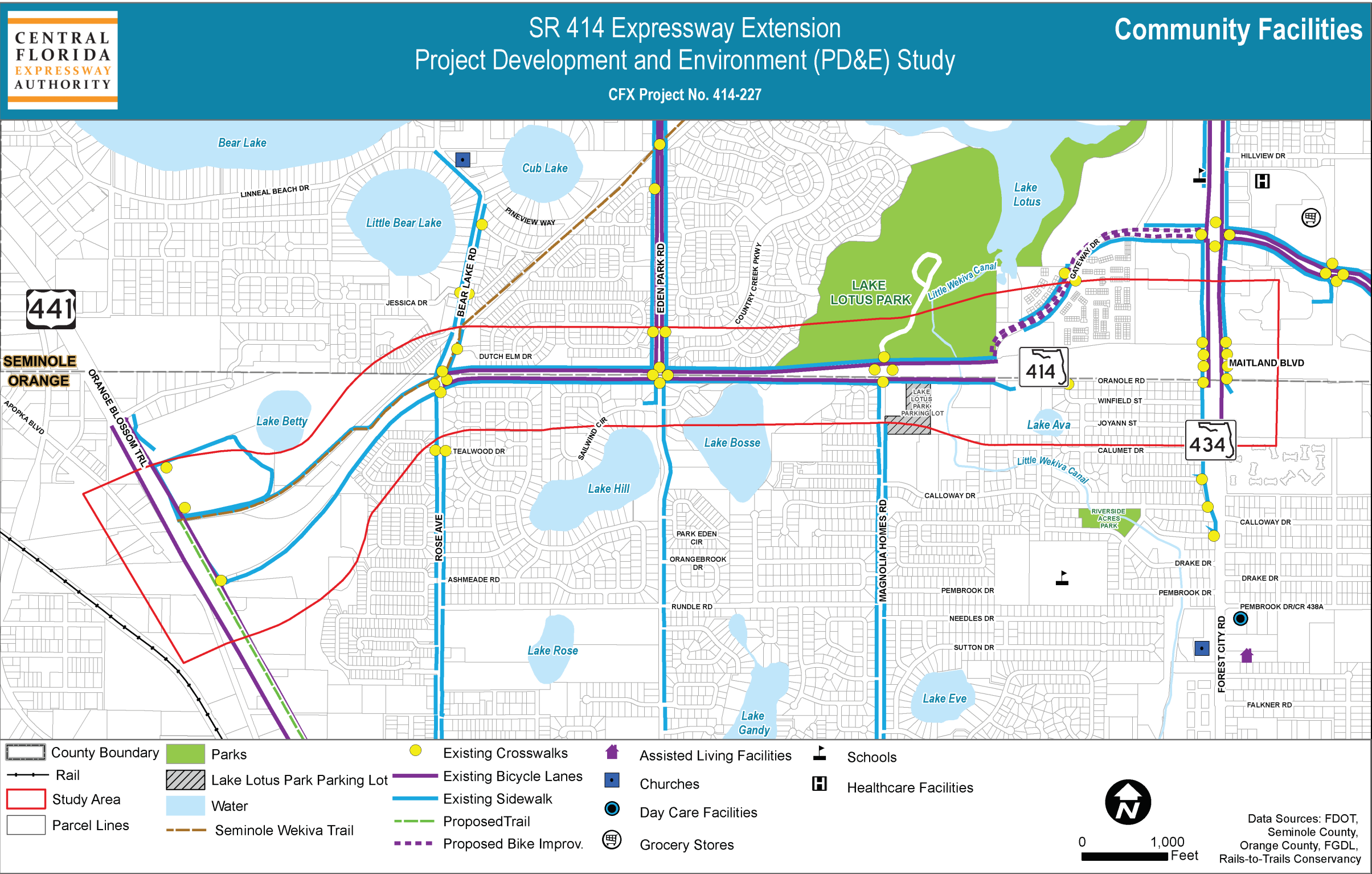


Figure 3-2. Community Facilities

Table 3-1. Community Facilities In or Near the Study Area

Name	Location	Proximity to Study Area
Public Facilities		
Lake Lotus Park Parking Lot	Magnolia Homes Road	Within the study area
Schools		
Seminole State College – Altamonte Springs	850 SR 434	0.3 mile north of the study area
Riverside Elementary School	3125 Pembroke Drive	0.2 mile south of the study area
Forest City Adventist School	7563 Forest City Road	0.7 mile north of the study area
Day Care Facilities		
La Petite Academy of Orlando Day Care Center	2650 Pembroke Drive	0.4 mile south of the study area
Grocery Stores		
Publix Supermarket	851 SR 434	0.2 mile south of the study area
Churches		
Circle Community Church	2200 Pembroke Drive	0.4 mile south of the study area
Spirit of Joy Ministries	8310 Forest City Road	0.5 mile south of the study area
Time of Refreshing Christian Church	7919 Magnolia Homes Road	0.8 mile south of the study area
Compass Community Church	9635 Bear Lake Road	0.4 mile north of the study area
St Andrews Presbyterian Church	9913 Bear Lake Road	0.6 mile north of the study area
Forest City Seventh-day Adventist Church	7601 Forest City Road	0.7 mile north of the study area
Mt. Tabor Ame Church	685 Oaklondo Drive	0.6 mile north of the study area
Pentecostal Church of God	560 Hillview Drive	0.4 mile north of the study area
Assisted Living Facilities		
Green Tree Assisted Living	8207 Forest City Road	0.5 mile south of the study area
Beggs Pointe Assisted Living Facility	4711 Beggs Road	0.8 mile south of the study area

3.3 Parks and Recreation

Lake Lotus Park is located within the study area and is a nature preserve owned and operated by the city of Altamonte Springs. The park is located adjacent to SR 414 to the north. The preserve encompasses approximately 150 acres including 120 acres of woods and wetlands. Lake Lotus Park includes picnic areas, an enclosed pavilion, an education center and a 1-mile-long trail. Weekday parking is available inside the park. However, tram service is available from the offsite parking area on the south side of SR 414 on Magnolia Homes Road on weekends and during special events. FDOT owns the offsite parking area for the park, but it is leased by the city of Altamonte Springs.

Riverside Acres Park is just south of the study area along the Little Wekiva Canal. Operated by Orange County Parks and Recreation, the park encompasses 8.1 acres and includes a playground, trails, picnic tables and fishing.

3.4 Planned Developments

Review of the Orange and Seminole county comprehensive plans revealed the planned developments projected near the project area. Figure 3-3 presents the locations of the planned developments. While there are no Developments of Regional Impact within the study area, residential land development projects are located in the northeast corner of US 441 and SR 414, as well as in the southeast corner of SR 434 and SR 414. The Polo Glen development on the north side of SR 414 near the US 441 interchange is approved as a 366-unit apartment complex.

3.5 Modal Interrelationships

The study area is supported by different modes and services of travel along the SR 414. Refer to Figure 3-2 for the existing and proposed pedestrian and bicycle facilities.

3.5.1 Pedestrians and Bicyclists

As presented on Figure 3-2, continuous sidewalks extend along both sides of SR 414 from US 441 to Gateway Drive. Further, sidewalks extend along all of the cross streets within the study area. The sidewalks discontinue at Gateway Drive, which limits pedestrian access to SR 434.

Undesignated bicycle lanes are present between Bear Lake Road and Gateway Drive through the use of wide shoulders along both sides of SR 414 (4 feet wide along the mainline and 8 feet wide along the bridges). In addition, bicycle lanes are present north of the study area at Eden Park Road and SR 434. The City of Altamonte Springs *City Plan 2030* includes bicycle lanes planned along Gateway Drive from SR 414 to SR 434 (City of Altamonte Springs 2010). However, a timeline is not available. Coordination with the City is ongoing throughout this Study.

3.5.2 Transit

There are no LYNX routes along SR 414, but service routes are present along SR 434 and US 441 in the study area.

- **23 – Winter Park/Springs Village** provides service along SR 434 from the Springs Village Shopping Center in Altamonte Springs to Edgewater Drive and Winter Park, Monday through Saturday every 60 minutes. This route makes a connection with the Winter Park SunRail Station and includes a *superstop* where riders can transfer to four other bus service routes.
- **106 – N US 441/Apopka** provides service along US 441 from the LYNX Central Station in downtown Orlando to Apopka, every 30 minutes Monday through Saturday and every 50 minutes on Sundays. Service is not regular and is offered between 5:25 a.m. and 7:05 p.m. Mondays through Saturdays. This route has two superstops where riders can transfer to four other bus service routes at one stop and five at the other.
- **434 – SR 434 Crosstown** is just north of the study area and provides service from the Seminole State College Altamonte Springs Campus to the University of Central Florida every 60 minutes, Monday through Saturday. The 434 bus service makes a connection at the Longwood SunRail Station and includes a superstop at the University of Central Florida.

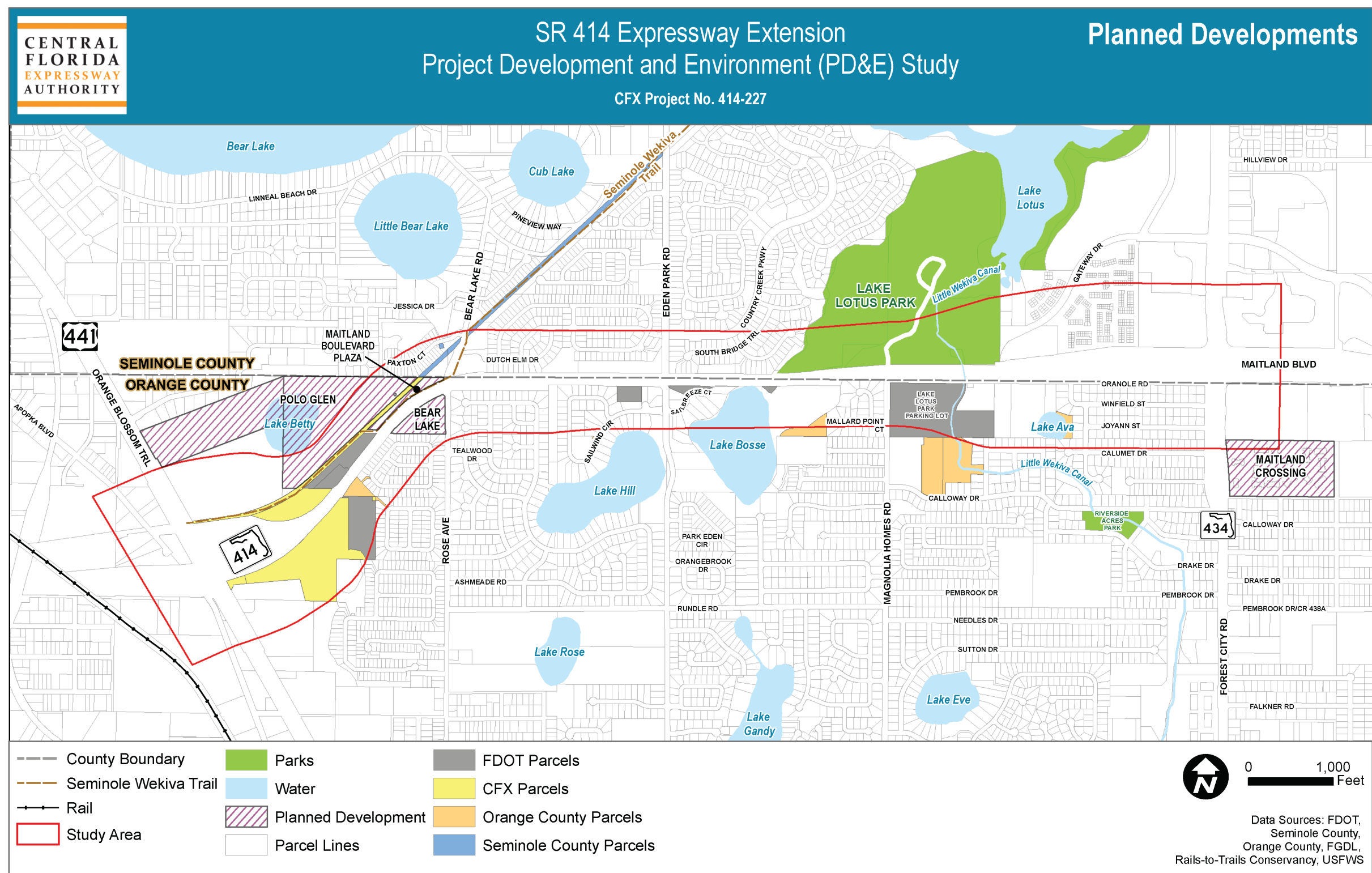


Figure 3-3. Planned Developments

3.5.3 Trails

The Seminole Wekiva Trail is adjacent to the north side of the corridor just west of Bear Lake Road. The trail begins southwest of the SR 46 and I-4 interchange in Seminole County and ends at the west end of the project study corridor at US 441 and SR 414. The trail was constructed on former railroad ROW and is 14 miles long. A section of the trail north of the study corridor at the Wekiva River is also a designated part of the Florida National Scenic Trail.

The Florida Coast-to-Coast Trail, planned by the FDEP Office of Greenways and Trail, is planned through the study area along the same corridor as the Pine Hills Trail. The trail is approximately 250 miles long and links St. Petersburg (west coast) to Titusville (east) coast, and includes most of the 51-mile-long East Central Regional Rail Trail. The Phase III Design Plans (dated April 29, 2020, from the Hiawassee Road/Clarcona Ocoee Road intersection to the termination of the Seminole Wekiva Trail within the study area) are under review. Concepts for this PD&E Study include accommodating this trail.

The Pine Hills Trail (refer to Figure 3-2) is planned as an 8-mile-long, multiuse regional trail from Pine Hills (southwest of the study area) to the Seminole Wekiva Trail. The trail is being developed in three phases along an existing 100- to 200-foot-wide Florida Power & Light powerline corridor in its alignment from State Road 50/Colonial Drive north to the Seminole Wekiva Trail at Rose Avenue. Phase 1 construction was planned to be complete in 2018. Phase 3 is planned along the same corridor as the Coast-to-Coast Trail. On July 22, 2020, an email communication from Orange County Public Works noted that the Coast-to-Coast Trail is being designed by FDOT District 5 and will encompass Orange County's Phase 3 plans for the Pine Hills Trail, and therefore will be the same facility. In addition to the connection to the Coast-to-Coast Trail and Seminole Wekiva Trail, the Pine Hills Trail provides a connection to the West Orange Trail, Lake County's trail system via Clarcona Ocoee Road and joins the Shingle Creek Trail at its terminus at Colonial Drive (SR 50).

4. Social and Economic Impacts

Potential involvement with historical and archaeological resources is summarized in the project's *Cultural Resources Assessment Survey* (CFX 2022c). Based on review of previous cultural resource assessments performed along the project corridor, existing historic resources have been previously determined ineligible for the National Register of Historic Places by the State Historic Preservation Officer. In addition, one archaeological resource was also determined to be ineligible by the SHPO for the NRHP. The CRAS was reviewed by the SHPO and the concurrence letter was signed on September 7, 2021.

To evaluate potential sociocultural effects of the project, the Preferred Alternative footprint is used to estimate impacts. A major project goal is to construct the proposed project within the existing ROW to minimize or avoid human environment impacts. The following section details potential sociocultural effects from the proposed project.

4.1 Social Effects

4.1.1 Demographics

The study area was reviewed to identify minority and/or low-income populations as well as under-represented population groups protected under *Title VI of the Civil Rights Act of 1964* and related nondiscrimination statutes and regulations. Figure 4-1 presents the location and demographics for the 2015 Census Block Group Demographics in the study area. Table 4-1 provides study area demographics.

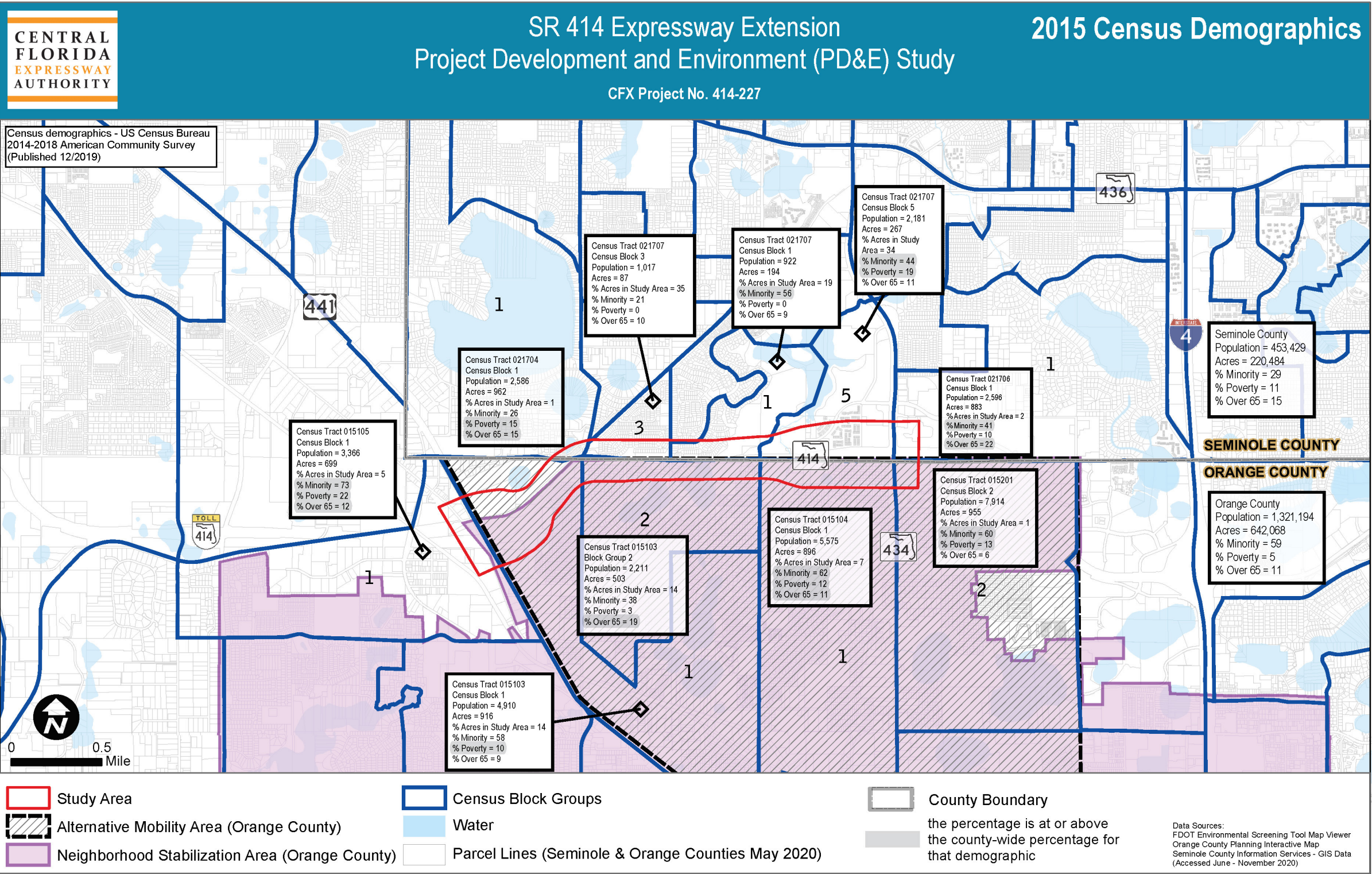
Table 4-1. Study Area 2015 Census Data

Block Group ^a	Tract	Population	County	Area (acre)	Population Density	% Acres in Study Area	% Minority	% Poverty	% Over 65
1	021704	2,586	Seminole	962	2.7	1%	26%	15%	15%
1	021707	922	Seminole	154	6.0	19%	56%	0%	9%
3	021707	1,017	Seminole	87	11.7	35%	21%	0%	10%
5	021707	2,181	Seminole	267	8.2	34%	44%	19%	11%
1	021706	2,596	Seminole	883	2.9	2%	41%	10%	22%
Seminole County	-	453,429	-	220,484	2.1	-	29%	11%	15%
1	015105	3,366	Orange	699	4.8	5%	73%	22%	12%
1	015103	4,910	Orange	916	5.4	14%	58%	10%	9%
2	015103	2,211	Orange	503	4.4	14%	38%	3%	19%
1	015104	5,575	Orange	896	6.2	7%	62%	12%	11%
2	015201	7,914	Orange	955	8.3	1%	60%	13%	6%
Orange County	-	1,321,194	-	642,068	2.1	-	59%	5%	11%

Shading indicates that the percentage is at or above the county-wide percentage for that demographic

Source: US Census Bureau 2014–2018 American Community Survey (Published 12/2019)

^a Refer to Figure 4-1 for map of block groups.



Two block groups within the Seminole County portion of study area may include populations that are greater than the poverty rate of 11 percent for Seminole County, while three block groups may include populations that are greater than the county minority rate of 29 percent. Census Tract 021707, Block Group 5 (Seminole County), may include populations where both poverty and minority rates are greater than those for Seminole County.

Four block groups within the Orange County portion of the study area may include populations that are greater than the poverty rate of 5 percent for Orange County, while three block groups may include populations that are greater than the county minority rate of 59 percent. While Census Tract 015105, Block Group 1 (Orange County) appears to disproportionately affect minority and low-income populations, the residential areas are outside the study area. Three census tracts may include populations where both poverty and minority rates are greater than those for Orange County. Figure 3-1 presents the boundaries of the Orange County Neighborhood Stabilization Area (Pine Hills NSA), which was created by the Housing and Economic Recovery Act of 2008 to respond to increasing residential foreclosures and property abandonment. The Orange County Neighborhood Stabilization Program defines the NSA boundaries in Orange County and serves low- to moderate-income families, with 25 percent of the program funds serving very low income families.

Two block groups within the Seminole County portion of the study area may include populations aged 65 and older that are above the 15 percent average for the same age group in Seminole County. Three block groups within the Orange County portion of the study area may include populations aged 65 and older that are above the 11 percent average for the same age group in Orange County.

This SCE considers project benefits and effects with special concern for minority, low-income and other sensitive populations. Of the 10 census block groups that intersect with the Preferred Alternative, eight block groups have low-income and/or minority populations greater than the county average. While the census block group may not be representative of the specific neighborhoods and business affected by the Preferred Alternative (because of the large size of the block group compared to the affected area), it is assumed that sensitive populations may be affected by the project.

4.1.2 Community Cohesion

Community cohesion is a term used to assess the sense of belonging residents feel toward their community or neighborhood. This may include a resident's commitment to the community or attachment to neighbors, community institutions or particular subgroups (FDOT 2021b).

This project involves improvements to the existing SR 414 roadway, which serves as a physical barrier between the north and south sides of the roadway. The roadway already serves as a boundary from which development patterns have established. Therefore, adding limited-access toll lanes to the center of the existing SR 414 will not further isolate a portion of an ethnic group or neighborhood nor further separate residences from any community services facility. Additionally, the project area is divided by the Seminole and Orange County line, which acts as a boundary for county services including schools. The project corridor is mostly a limited-access roadway and has only one median opening (at Gateway Drive) for opposing traffic flow to access adjacent properties. Access to adjacent openings for opposing traffic flow must be done through the existing signalized intersections. The addition of the elevated expressway is not expected to change any existing median openings or intersections. Access to existing community facilities in the build condition will be maintained and is anticipated to be similar to the existing condition.

Given the existing physical barrier presented by SR 414, the project improvements will result in minimal additional impacts to community cohesion.

4.1.3 Safety/Emergency Response

The introduction of an elevated toll facility will separate higher-speed through traffic from local traffic along Maitland Boulevard, which allows the design and posted speed along the at-grade Maitland Boulevard facility to be reduced from 55 mph to 45 mph. Research conducted by the Insurance Institute for Highway Safety indicates that lowering the speed limit by 5 mph on city streets can improve safety for motorists, pedestrians and bicyclists alike (AASHTO 2018). Therefore, the Preferred Alternative is expected to improve safety for all travel modes along the at-grade Maitland Boulevard.

As noted in the *Final Existing Conditions Technical Memorandum* (CFX 2022a), 5-foot-wide sidewalks are located on both sides of SR 414 along with a 4-foot-wide undesignated bicycle lane, west of Gateway Drive. The proposed improvements along Maitland Boulevard include 7-foot-wide bicycle lanes adjacent to the outside lane in each direction, allowing for a safety buffer between the motorized vehicle travel lanes and the bicycle lanes.

Enhanced lighting is recommended as part of the proposed improvements to improve safety for all travel modes, as there is limited lighting along the project corridor (lighting at signalized intersections and grade-separated interchanges). An analysis for lighting justification is included in the project's *Preliminary Engineering Report* (CFX 2022e). Underdeck lighting is recommended for underneath the elevated expressway to illuminate the travel areas underneath the overpasses. Lighting is also recommended along the limited-access elevated facility to illuminate the toll lanes and the at-grade Maitland Boulevard. Considering the project's proximity to residential communities, the proposed lighting will be shielded to the extent possible to prevent lighting impacts to the residential communities.

There are no emergency facilities within or adjacent to the project study area. Emergency vehicle access will not change along the at-grade Maitland Boulevard as a result of the Preferred Alternative. Because the SR 414 elevated expressway provides a higher-speed travel option and congestion is anticipated to improve along Maitland Boulevard, emergency response times are anticipated to improve through this area.

4.2 Economic

A review of the most recently adopted county comprehensive plans (2030 Orange County Comprehensive Plan and the adopted Seminole County Vision 2020 Comprehensive Plans) was performed for this evaluation. The plans provide a forecast of planned land use changes and economic impacts and help to evaluate the economic impacts related to the proposed improvements.

The adopted 2030 Orange County's Comprehensive Plan shows that the study area is within the County Urban Boundary Area. Approximately half of the study area is within an Orange County Alternative Mobility Area (refer to Figure 3-1). The Orange County AMA is exempt from transportation concurrency requirements and promotes urban development and redevelopment to maximize the use of existing public infrastructure. The proposed project does not include additional ROW that would impact the AMA. Economic enhancement of the AMA is expected because of increased mobility and access to the area. The adopted Seminole County Vision 2020 Comprehensive Plan shows that the study area is within the County Urban Boundary and further notes that SR 434 within the study area is an Urban Corridor. The Urban Corridor incentivizes a mixed development pattern consistent with the Central Florida

Regional Growth Vision. The proposed improvements are expected to enhance economic development of the SR 434 Urban Corridor by improving mobility and access to the area.

The SR 414 corridor provides regional connectivity between Orange and Seminole counties (greater Orlando area) and Lake County (Apopka), providing system linkage to designated Strategic Intermodal Systems including SR 429 and I-4. The project improvements will provide enhanced mobility of people and goods along this corridor and may also provide a positive economic effect for regional freight mobility. The project supports regional plans for a transportation network that connects workforce residences with concentrated areas of economic activity. In that way, the limited-access SR 414 facility will facilitate commuting to regional economic centers, including the Maitland Center Office Park located on the eastern end of the corridor, the city of Altamonte Springs and downtown Orlando.

4.3 Land Use Changes

Review of the Orange and Seminole county future land use maps¹ indicates that the future land use of the study area is expected to remain similar to the existing condition. The proposed project includes expanding an existing roadway corridor within an existing transportation network, and no ROW acquisition is anticipated. Stormwater as a result of the proposed improvements will be treated using the existing drainage ponds, which are expected to be modified with no additional ponds anticipated outside the existing ROW.

The purpose of the proposed project is to accommodate anticipated east-west travel demands forecasted for the study region. Additionally, there is a need in the region to relieve existing and future congestion. While regional growth is forecasted, it is not anticipated to occur because of the implementation of the proposed project. The proposed project is to support already forecasted growth and the needs that result from the growth. Therefore, no future land use changes are anticipated because of the project.

4.4 Mobility

The project will enhance regional connectivity by allowing vehicular through traffic more efficient passage through the study area using the limited-access SR 414 elevated expressway to avoid traffic signals and slower local traffic. This connectivity improves the regional transportation network and will be particularly beneficial during state-wide or regional evacuations. Connectivity to local businesses and residential areas will remain the same as the existing condition.

Access to the elevated facility is controlled and limited to two access points just east and west of the project corridor. Users of the SR 414 elevated expressway must use access ramps (entrance and exit) available just east of SR 434. Users may also access elevated expressway if already traveling west on the SR 414 toll road (John Land Expressway). Because of limited ROW and residential property impacts, access to the elevated expressway within the project corridor was not feasible. By relocating through traffic from Maitland Boulevard onto the SR 414 elevated expressway, overall circulation through the study area improves. For local Maitland Boulevard users, traffic movements will remain the same as the existing condition, but with reduced congestion and improved traffic circulation.

¹ Orange County Interactive Mapping System accessed February 16, 2021; Seminole County GIS Information Kiosk accessed March 1, 2021.

Bicyclists will benefit from the improved bicycle lanes that are part of the Preferred Alternative. Proposed improvements include 7-foot-wide bicycle lanes adjacent to the outside lane in each direction, allowing for a safety buffer between the motorized vehicle travel lanes and the bicycle lanes. Bicyclists' improved mobility will allow for safer access to nearby transit and to the existing Seminole Wekiva Trail along the north side of the corridor just west of Bear Lake Road as well as planned trails that allow for further regional mobility including the Florida Coast-to-Coast Trail and Pine Hills Trail. Pedestrian mobility will remain the same as the existing condition. Because of limited ROW and residential property impacts, widening of the existing sidewalks was not feasible.

The Central Florida Regional Transportation Authority, also known as LYNX, provides bus transit for Orange, Seminole and Osceola counties. There are no LYNX routes along SR 414 within the project corridor, but service routes are present along SR 434 and US 441 in the study area. The LYNX service along Maitland Boulevard east of the study area provides a connection to the commuter rail, SunRail. Review of the LYNX Transit Development Plan FY 2020–2029 indicates there are no proposed transit improvements along Maitland Boulevard within the project study area.

4.5 Aesthetic Effects

Aesthetics include consideration of community and environmental character, community values, sensitive areas, visual features, and overall compatibility of the project within the regional context. The ends of the study corridor include commercial and industrial areas surrounding the interchanges at US 441 and SR 434, while the majority of the corridor includes residential neighborhoods that are mostly accessible from the corridor's intersections. Most residential properties lie behind existing noise walls along SR 414, limiting the view of the existing roadway from many residences. Where Maitland Boulevard abuts Lake Lotus Park, the roadway is lined by natural landscape to the north that is heavily treed. Just west of Lake Lotus Park on the south side of the roadway is Lake Bosse, which is visible from Maitland Boulevard. The lake is surrounded by trees and residential properties that back up to the lake. A portion of the Seminole Wekiva Trail runs along the north side of Maitland Boulevard from US 441 to Bear Lake Road. The viewshed from the trail in the project corridor includes a grassy landscape with stormwater ponds, power lines, Maitland Boulevard and residential neighborhoods. Lake Lotus Park and Lake Bosse are important visual features along the project corridor. The Seminole Wekiva Trail and Lake Lotus Park are sensitive areas to the community, with many bicyclists and pedestrians traveling between the two areas for recreation.

The Preferred Alternative will change the viewshed along the study corridor with the implementation of the proposed improvements. The new toll lanes will be elevated approximately 30 feet above the at-grade Maitland Boulevard along the entire project corridor, altering the viewshed along Maitland Boulevard. The piers and their associated barrier wall for the SR 414 elevated expressway will be visible along the median of Maitland Boulevard. The SR 414 elevated expressway will be visible above the existing noise walls that currently limit the view of the roadway from many of the residential neighborhoods along the project corridor. Because of its height, the elevated expressway will be visible to residences that are distant from the project corridor. The elevated expressway will also be visible from Lake Lotus Park where the existing condition does not include a view of a roadway because of the heavily treed landscaping surrounding the park. Depending on the time of day, the elevated expressway will cast a shadow over the at-grade Maitland Boulevard travel lanes, sidewalks and bicycle lanes, changing the viewshed for all travel modes using the corridor.

The proposed improvements incorporate enhancements to aesthetics including opportunities for landscaping and hardscaping. Potential hardscape treatments will consist of cosmetic improvements to

bridge structures, such as the use of color pigments in the concrete, texturing the surfaces, modifications to fascia walls, beams, and surfaces, or more pleasing shapes for columns and caps. Typical design elements for aesthetic hardscape features are documented in the *Final Bridge Analysis Technical Memorandum* (CFX 2022b) and will be further evaluated in the Design phase. During the Design phase both standard and unique aesthetic enhancements will be considered based on community input.

In addition to the viewshed changes as a result of the Preferred Alternative, increased noise is also anticipated along the study corridor (CFX 2022d). Noise barriers such as a noise wall are exterior structures designed to prevent and mitigate noise sources, such as vehicle traffic. The project's *Noise Study Report* (CFX 2022d) includes an analysis of noise effects from the Preferred Alternative and identified reasonable and feasible noise wall locations.

4.6 Relocation Potential

Because ROW acquisition is not anticipated, no relocations or displacements of people are expected as a result of the Preferred Alternative.

5. Summary and Commitments

5.1 Summary of Project Sociocultural Effects

Some of the significant benefits of the project include reduced congestion for both local and through traffic and improved safety by reduction of the speed limit along the at-grade Maitland Boulevard and the buffered bicycle lanes. Overall mobility is anticipated to improve in the area, which may have a positive economic effect. Additionally, proposed lighting improvements will illuminate the travel areas for all travel modes, bringing an increased safety benefit to the corridor.

Effects of the project to sensitive populations are minimized by using an existing roadway corridor and an elevated expressway that eliminates the need for new ROW and relocations. However, the Preferred Alternative will result in increased aesthetic and noise effects that require mitigation.

The Preferred Alternative avoids adverse social and economic effects on minority and low-income populations with respect to the impacts to the overall community.

5.2 Project Commitments

CFX commits to the following:

Construction of feasible and reasonable noise abatement measures at the noise-impacted locations identified in the *Noise Study Report* are contingent upon the following conditions:

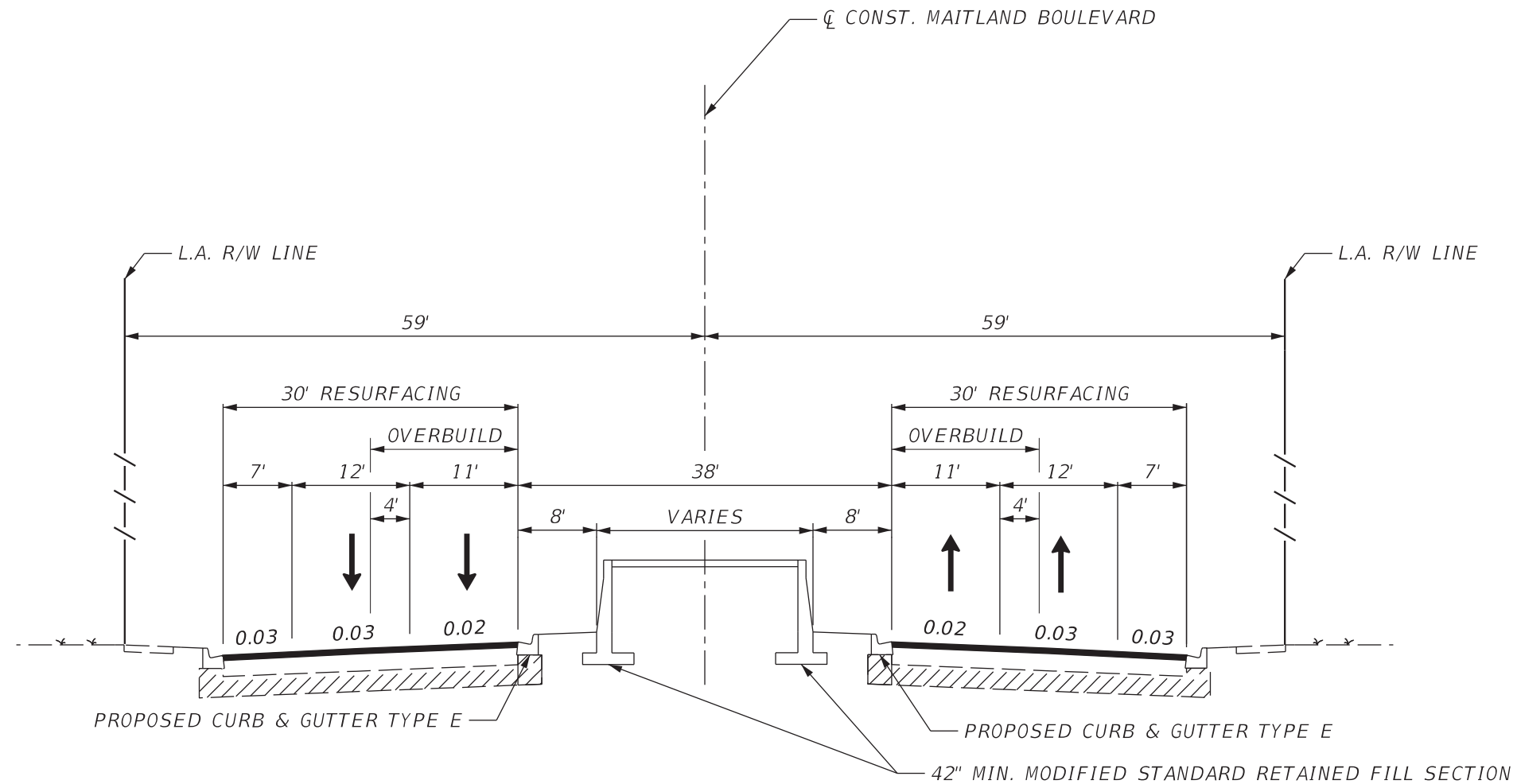
- a) Final recommendations on the construction of abatement measures is determined during the project's final design and through the public involvement process.
- b) Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement.
- c) Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion.
- d) Community input supporting types, heights and locations of the noise barrier(s) is provided to CFX.

Mitigation of aesthetic effects are determined during the project's final design and through the public involvement process. CFX will evaluate potential solutions that are feasible. Because of engineering, financial and maintenance reasons, a potential solution may not be feasible.

6. References

- American Association of State Highway and Transportation Officials (AASHTO). 2018. *The AASHTO Journal*. “Studies Say Lower Speed Limits Will Help Improve Roadway Safety”. August 31. <https://aashtojournal.org/2018/08/31/studies-say-lower-speed-limits-will-help-improve-roadway-safety>
- Central Florida Expressway Authority (CFX). 2019. *Final Technical Memo SR 414 (Maitland Blvd.) Reversible Express Lanes Schematic*. Prepared by Dewberry. July.
- Central Florida Expressway Authority (CFX). 2022a. *Final Existing Conditions Technical Memorandum*. Prepared by Jacobs. August 21.
- Central Florida Expressway Authority (CFX). 2022b. *Bridge Analysis TM*. Prepared by Jacobs.
- Central Florida Expressway Authority (CFX). 2022c. *Cultural Resources Assessment Survey*. Prepared by SEARCH, Inc.
- Central Florida Expressway Authority (CFX). 2022d. *Noise Analysis Report*. Prepared by Crawford, Murphy & Tilly.
- Central Florida Expressway Authority (CFX). 2022e. *Preliminary Engineering Report*. Prepared by Jacobs.
- Central Florida Expressway Authority (CFX). 2022f. *Typical Section Technical Memorandum*. Prepared by Jacobs.
- Central Florida Regional Transportation Authority (LYNX). 2019. *Transit Development Plan. 2020 Annual Update Plan Years: FY 2020 – 2029*. September. <https://www.golynx.com/core/fileparse.php/137536/urlt/TransitDevelopmentPlan2020.pdf>
- City of Altamonte Springs. 2010. *City Plan 2030*. October 5. <https://www.altamonte.org/410/City-Plan-2030>
- Florida Department of Transportation (FDOT). 2021a. *Environmental Screening Tool*. Accessed February 17. <https://etdmpub.fl.a-eat.org/est/>
- Florida Department of Transportation (FDOT). 2021b. *Sociocultural Effects (SCE) Considerations*. Accessed February 17. <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/environment/pubs/sce/sceconsiderations2012.pdf>
- MetroPlan Orlando. 2021. *2045 Metropolitan Transportation Plan Cost Feasible Plan*. Adopted: 12/09/2020. Revised: 06/09/21. June 9.
- Orange County. 2019. *Comprehensive Plan 2010 - 2030 Goals, Objectives & Policies*. Prepared by: Orange County Planning, Environmental and Development Services Department. Adopted: May 19, 2009 Amended: BCC Date Through Ordinance 2020-17 Effective: August 28, 2020. <https://www.orangecountyfl.net/Portals/0/resource%20library/planning%20-%20development/Goals%20Objectives%20and%20Element%20Update%202020-CERT.pdf>
- Seminole County. 2017. *Seminole County Comprehensive Plan*. Future Land Use Element. <https://www.seminolecountyfl.gov/core/fileparse.php/3289/urlt/FLU-Element.pdf>
- Seminole County. 2021. *Comprehensive Plan*. As Amended through January 23, 2018. Accessed February 19, 2021. <https://www.seminolecountyfl.gov/departments-services/development-services/planning-development/codes-regulations/comprehensive-plan/index.html>
- United States Census Bureau. 2019. American Community Survey 2014-2018 5-Year Estimates Now Available. December 19. <https://www.census.gov/newsroom/press-releases/2019/acs-5-year.html>

Appendix A
Proposed Typical Sections and
Preliminary Concept Plans



TYPICAL SECTION 1
MAITLAND BOULEVARD OVERBUILD AND RESTRIPE
BETWEEN PIER LOCATIONS

DESIGN SPEED = 45 MPH

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

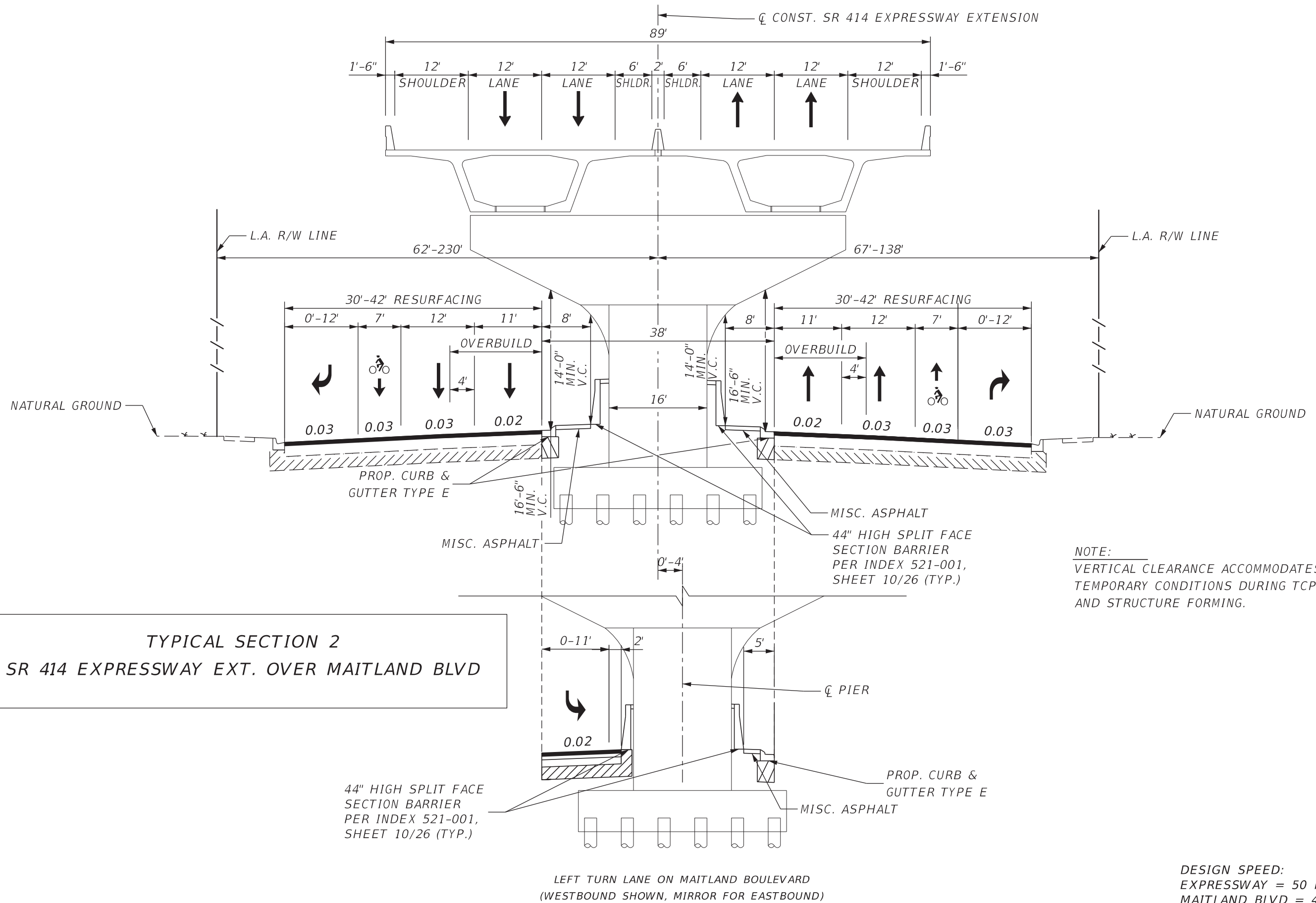
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

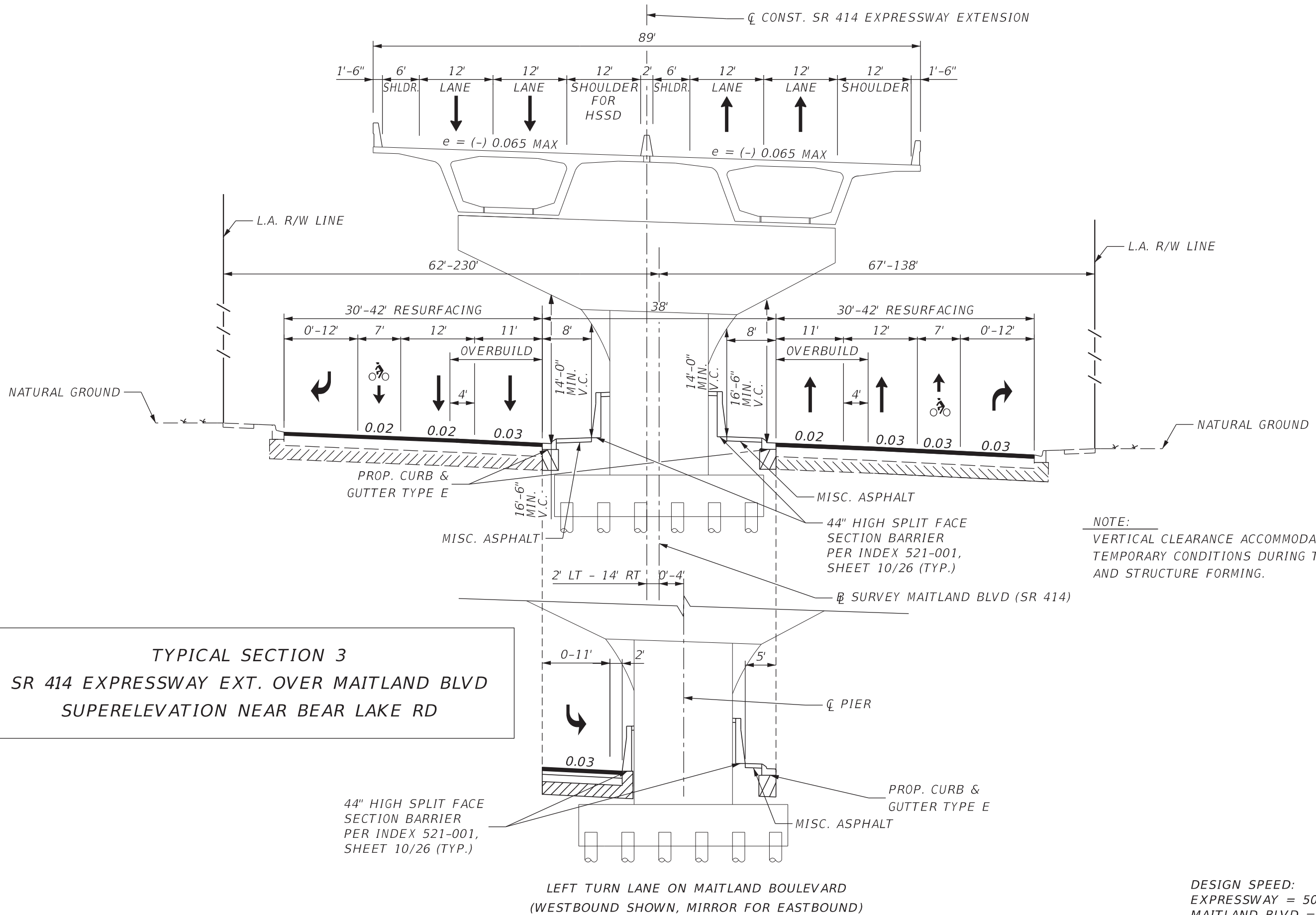
SHEET
NO.

001



TYPICAL SECTION 2
SR 414 EXPRESSWAY EXT. OVER MAITLAND BLVD

PRELIMINARY - SUBJECT TO CHANGE	ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883		SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434		CENTRAL FLORIDA EXPRESSWAY AUTHORITY	TYPICAL SECTIONS	SHEET NO.
	JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072		ROAD NO.	PROJECT NO.			002
			SR 414	414-227			



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
 P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
 200 S. ORANGE AVENUE, STE 900
 ORLANDO, FL 32801; PHONE (407) 903-5001
 CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

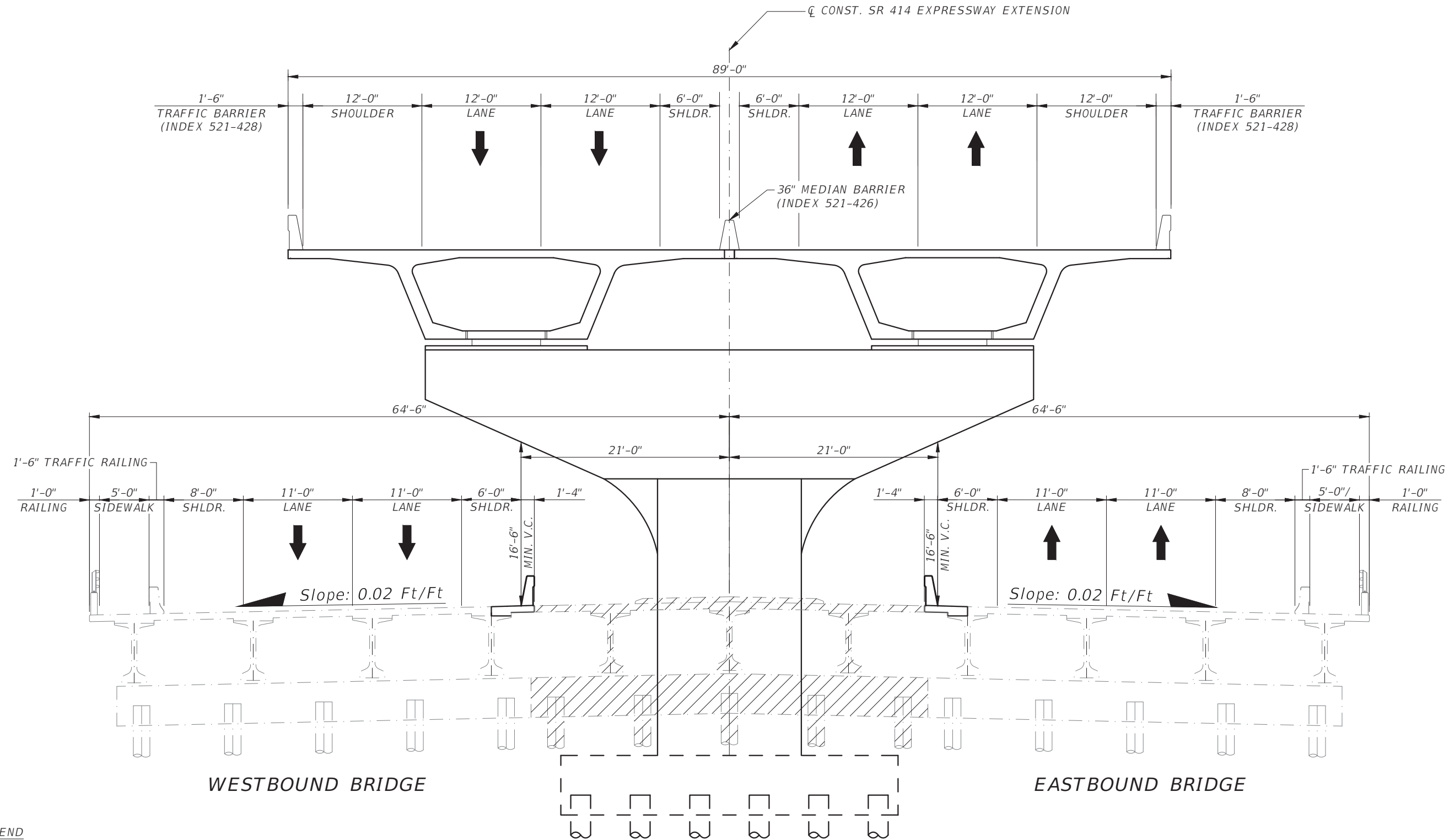
PROJECT NO.
414-227

CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY

TYPICAL SECTIONS

SHEET
 NO.

003



LEGEND

 EXISTING STRUCTURE TO BE REMOVED

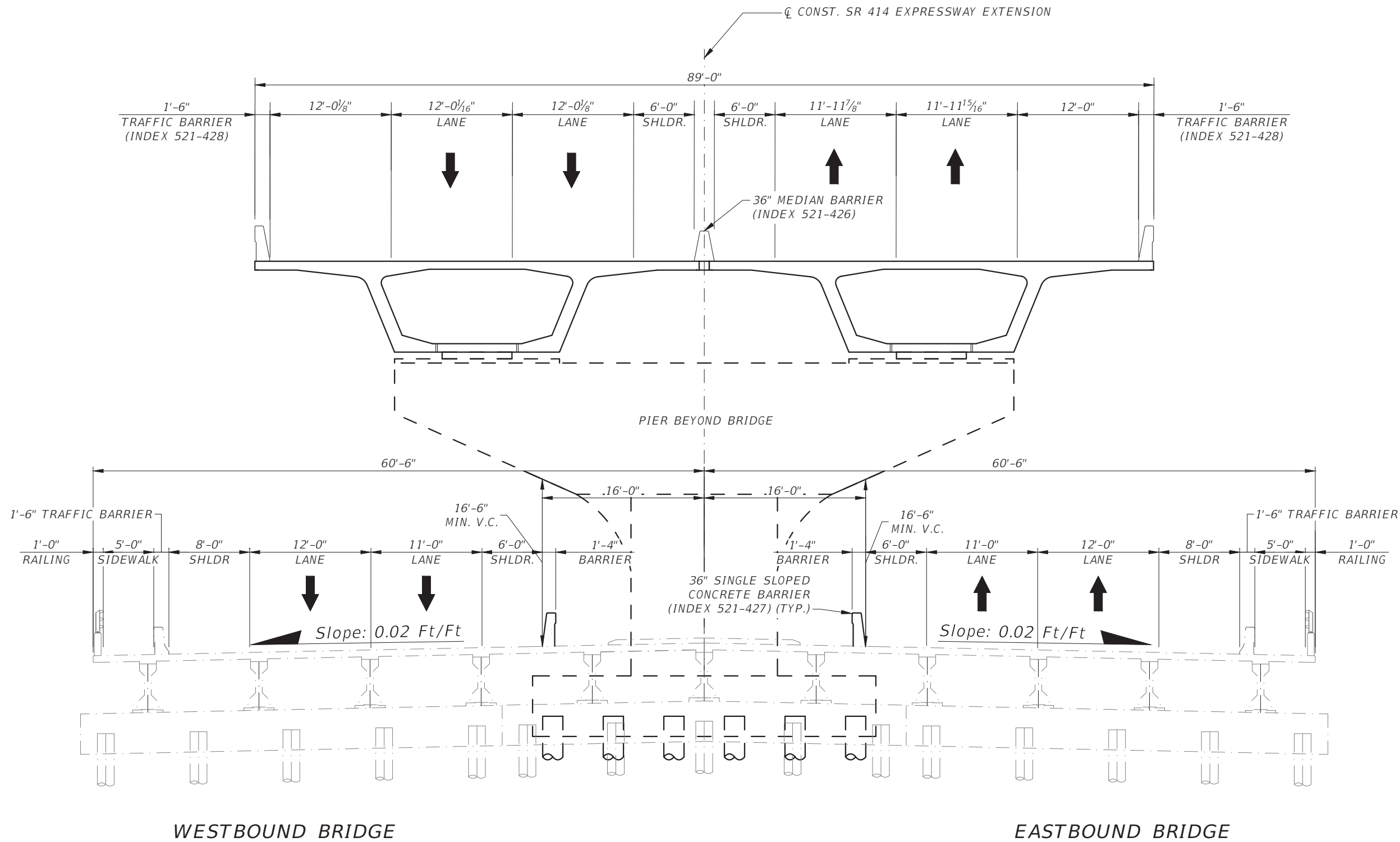
TYPICAL SECTION 4
TYPICAL VIADUCT SECTION - TWIN BOX ALTERNATIVE
SR 414 EXPRESSWAY EXT. OVER LAKE BOSSE

REVISIONS				RAM KOZHIKOTE P.E. LICENSE NUMBER 44022 BASE CONSULTANTS 1214 EAST CONCORD STREET ORLANDO, FL 32803	SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434			SHEET TITLE: TYPICAL BRIDGE SECTION	REF. DWG. NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	PROJECT NO.			
					SR 414	414-227		PROJECT NAME: SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION OVER LAKE BOSSE	SHEET NO. 004

Rashad

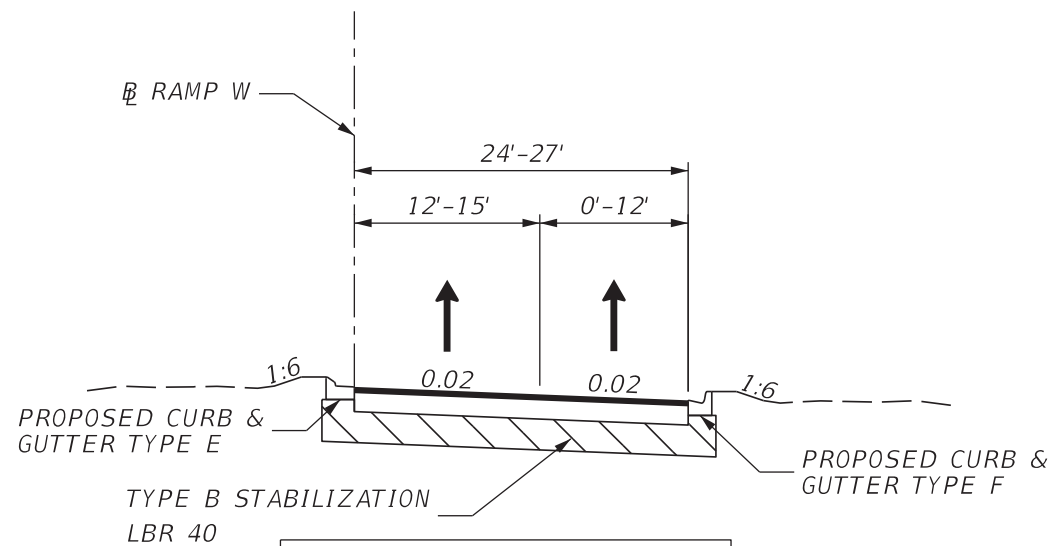
2/11/2021 9:58:02 AM P:\Projects-Transportation\Jacobs\CFX 414-227_SR 414 Expressway_Ext_PDE\CAD\Struct\B01TypicalSection01.dwg

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

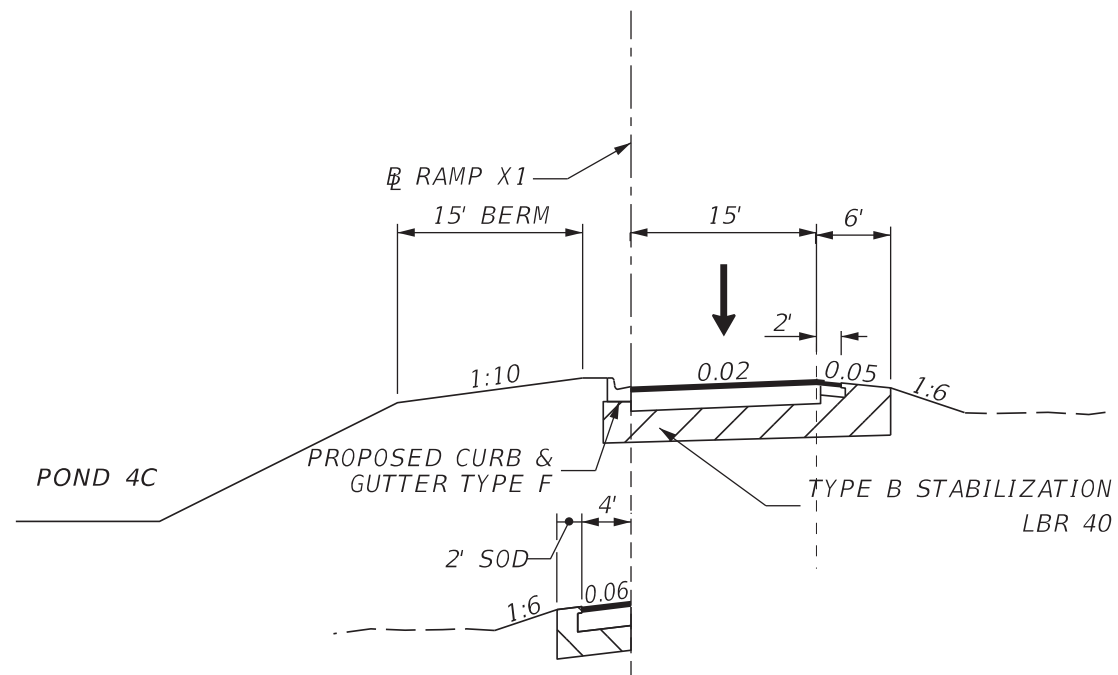


TYPICAL SECTION 5
TYPICAL VIADUCT SECTION - TWIN BOX ALTERNATIVE
SR 414 EXPRESSWAY EXT. OVER LITTLE WEKIVA RIVER

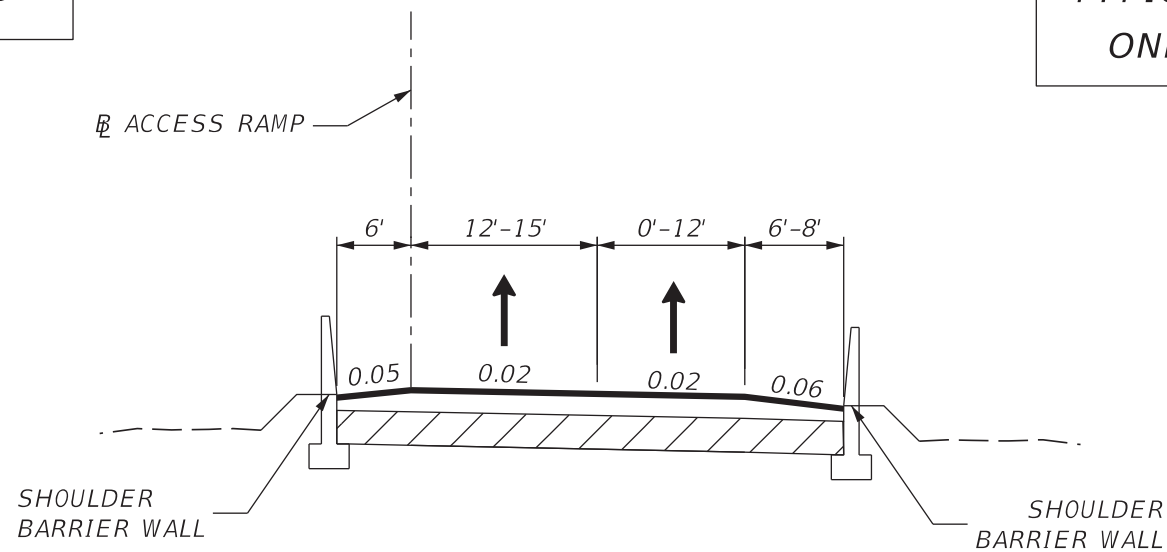
REVISIONS				RAM KOZHIKOTE P.E. LICENSE NUMBER 44022 BASE CONSULTANTS 1214 EAST CONCORD STREET ORLANDO, FL 32803	SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434		<div>CENTRAL FLORIDA EXPRESSWAY AUTHORITY</div>	SHEET TITLE: TYPICAL BRIDGE SECTION		REF. DWG. NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	PROJECT NO.		PROJECT NAME: SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION OVER LITTLE WEKIVA RIVER		SHEET NO.
					SR 414	414-227		005		



TYPICAL SECTION 6
TWO LANE RAMP



TYPICAL SECTION 7
ONE LANE RAMP



TYPICAL SECTION 8
ONE/TWO LANE RAMP
(EASTBOUND SHOWN, MIRROR FOR WESTBOUND)

DESIGN SPEED:
ACCESS RAMP A, B = 50 MPH
ACCESS RAMP W = 50 MPH
ACCESS RAMP X = VARIES 45-50 MPH
RAMP A, B = 40 MPH
RAMP W, X1 = 45 MPH

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

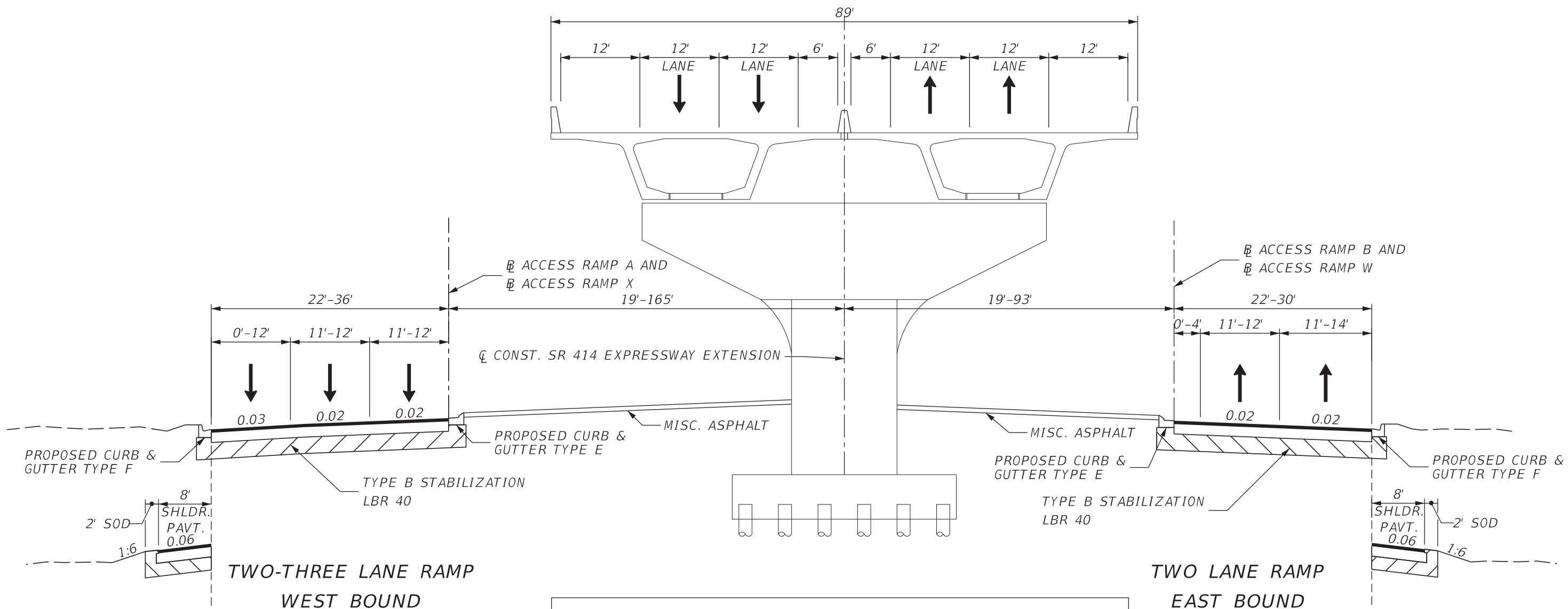
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

SHEET
NO.

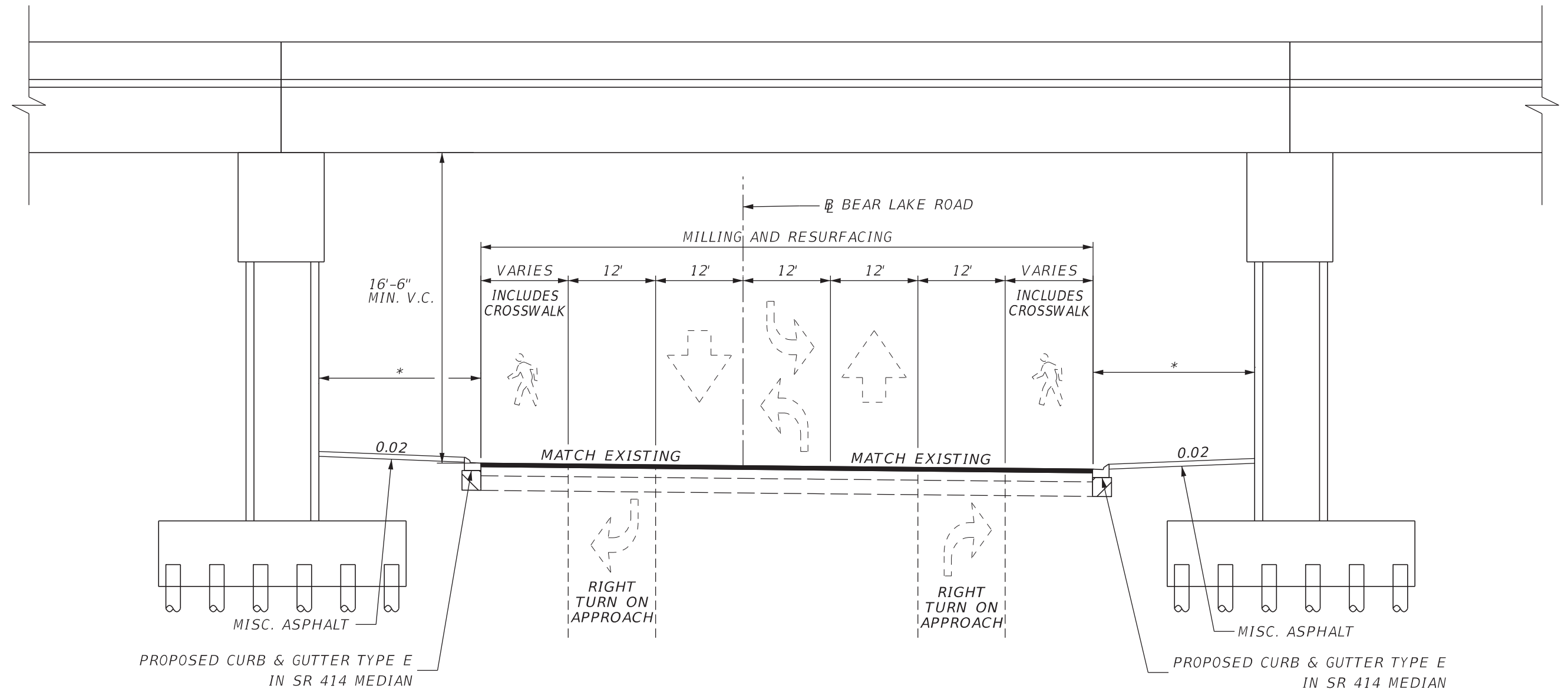
006



TYPICAL SECTION 9
EXPRESSWAY ACCESS AT PROJECT TERMINALS

DESIGN SPEED:
 ACCESS RAMP A, B = 50 MPH
 ACCESS RAMP W = 50 MPH
 ACCESS RAMP X = VARIES 45-50 MPH
 RAMP A, B = 40 MPH
 RAMP W, X1 = 45 MPH

PRELIMINARY - SUBJECT TO CHANGE	ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883 JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072	SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434	<div style="border: 1px solid black; padding: 5px; text-align: center;"> CENTRAL FLORIDA EXPRESSWAY AUTHORITY </div>	TYPICAL SECTIONS	SHEET NO.
					007



TYPICAL SECTION 10
BEAR LAKE ROAD / ROSE AVE
(LOOKING NORTH)

* EXCEEDS REQUIREMENTS FOR
CLEARZONE AND LATERAL OFFSET.

POSTED SPEED:
BEAR LAKE RD = 35 MPH
ROSE AVE = 40 MPH

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

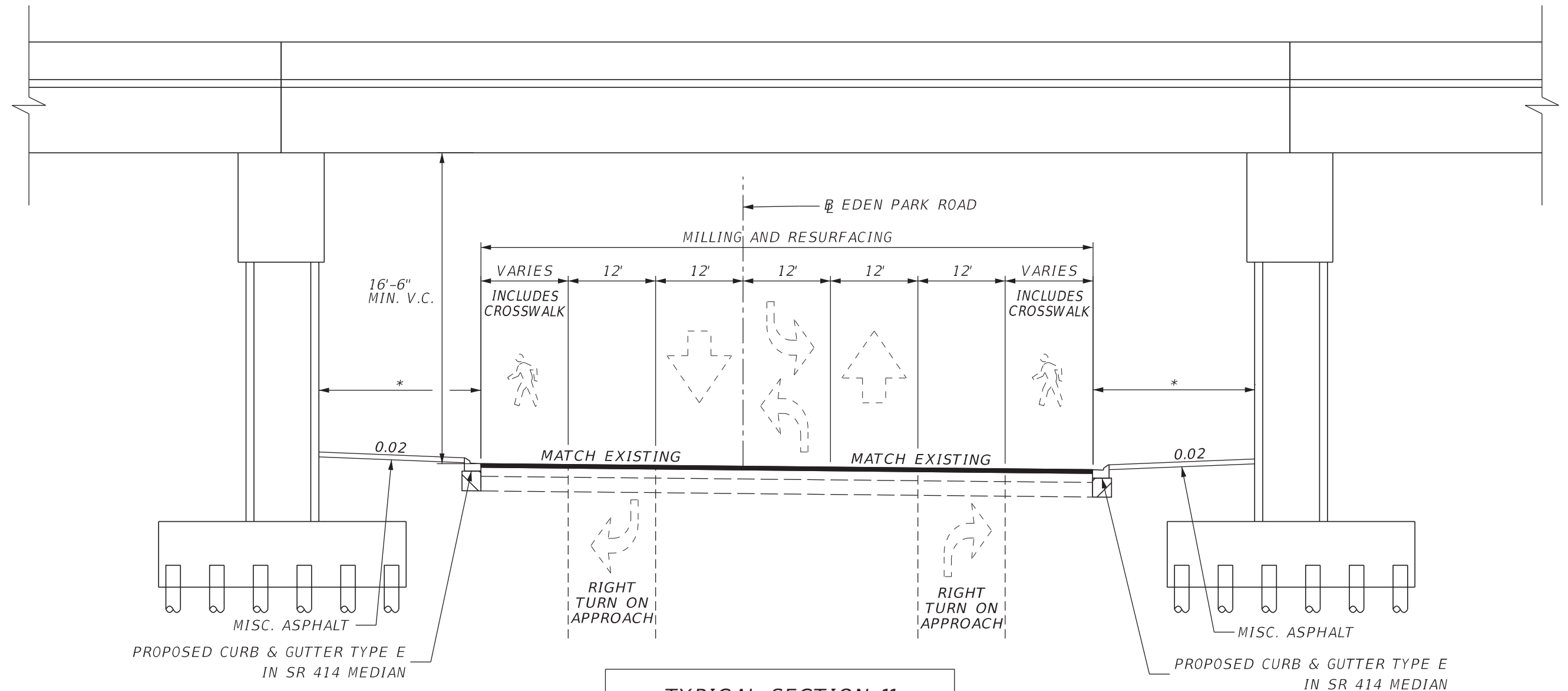
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

SHEET
NO.

008



**TYPICAL SECTION 11
EDEN PARK ROAD**

* EXCEEDS REQUIREMENTS FOR
CLEARZONE AND LATERAL OFFSET.

POSTED SPEED
EDEN PARK RD (SOUTH OF SR 414) = 35 MPH
EDEN PARK RD (NORTH OF SR 414) = 40 MPH

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

**SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434**

ROAD NO.
SR 414

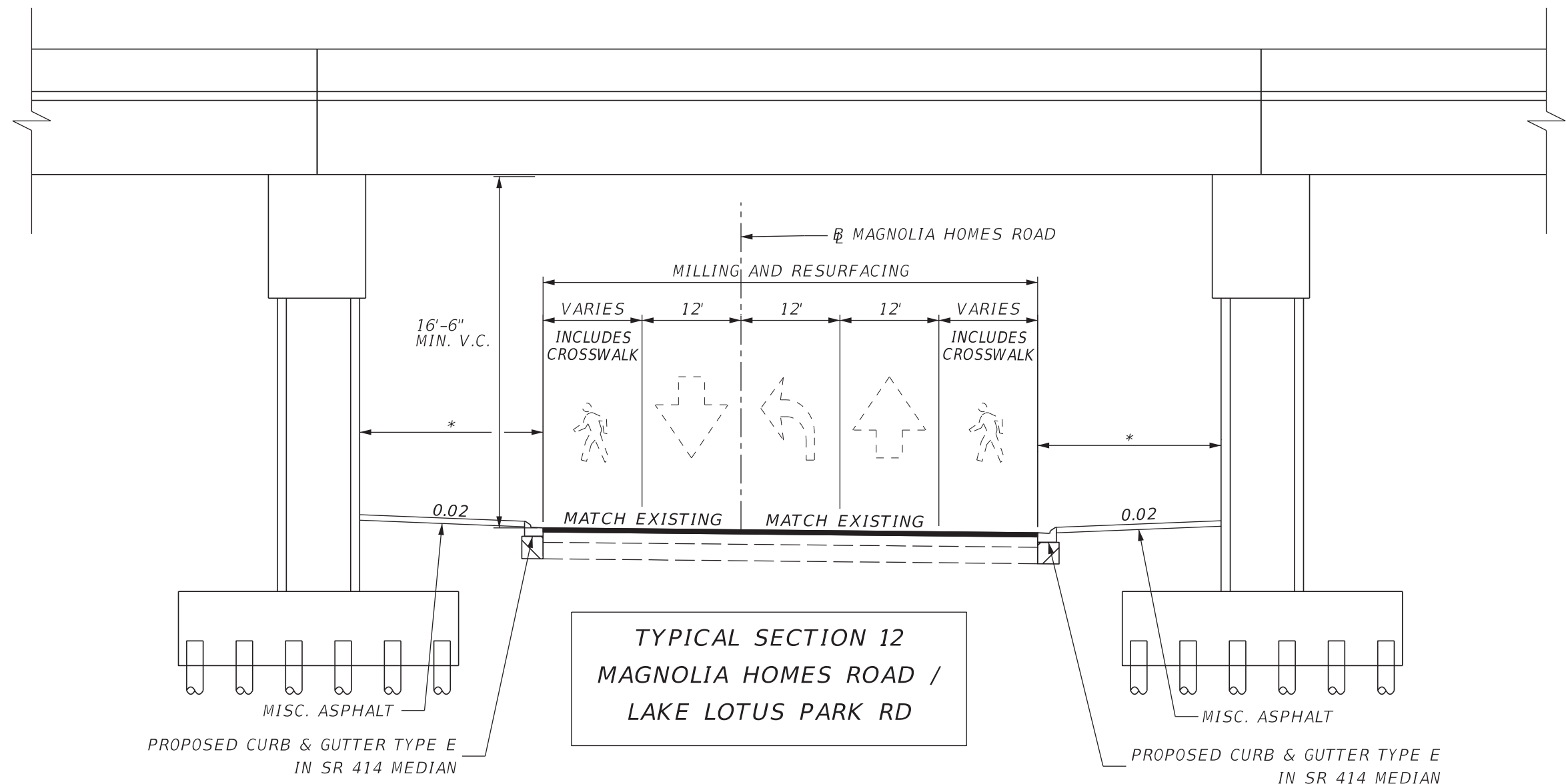
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

SHEET
NO.

009



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

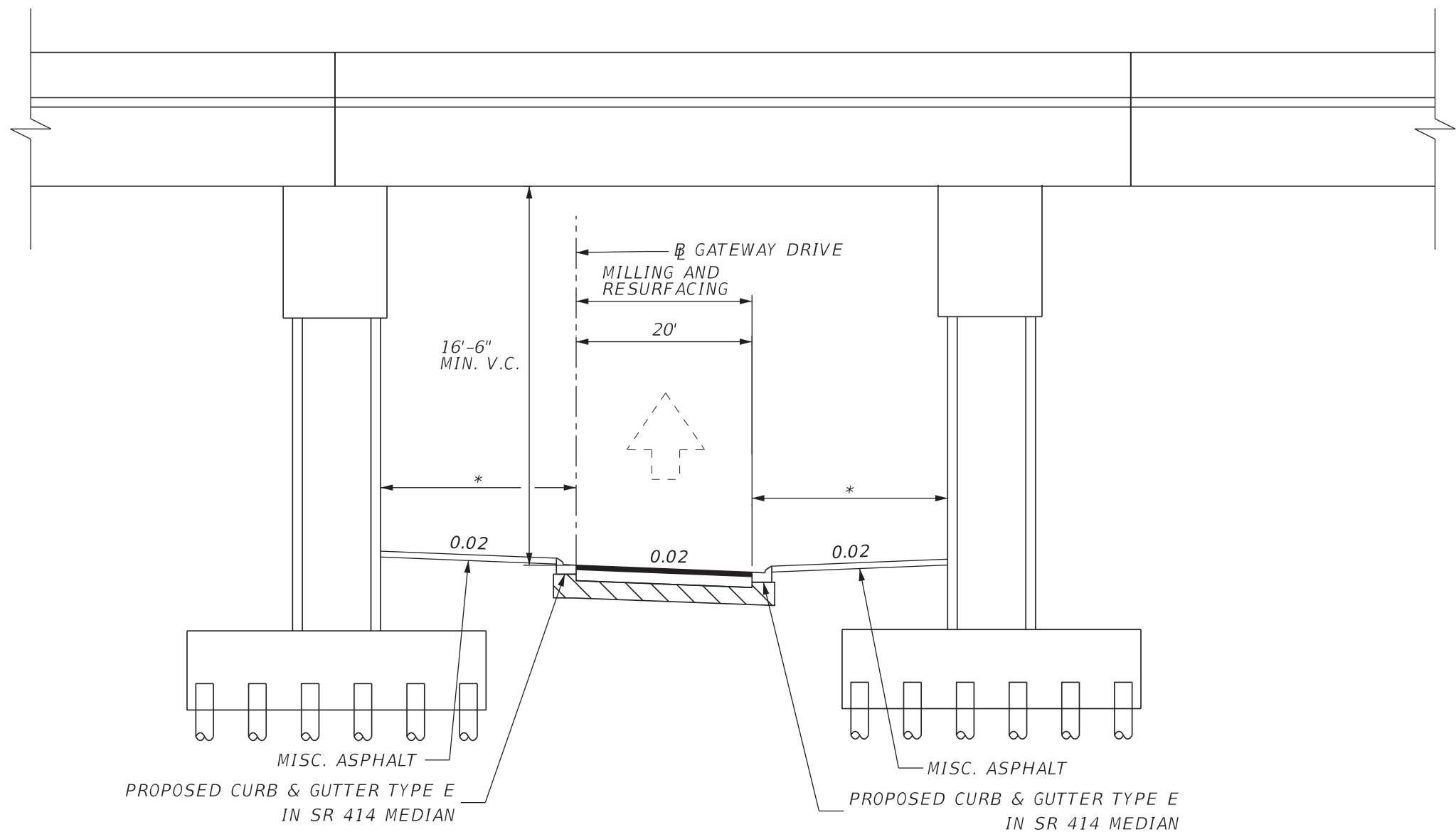
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

SHEET
NO.

010



TYPICAL SECTION 13
GATEWAY DRIVE

* EXCEEDS REQUIREMENTS FOR
CLEARZONE AND LATERAL OFFSET.

POSTED SPEED:
GATEWAY DR = 30 MPH

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

TYPICAL SECTIONS

SHEET
NO.

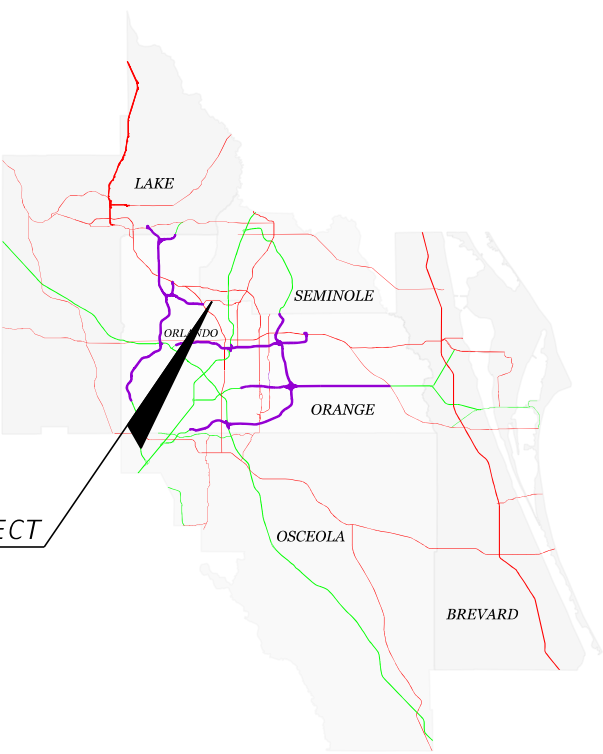
011

CENTRAL FLORIDA
EXPRESSWAY AUTHORITY

DRAFT CONCEPT PLANS

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434
STATE ROAD NO. 414

CFX PROJECT NUMBER: 414-227

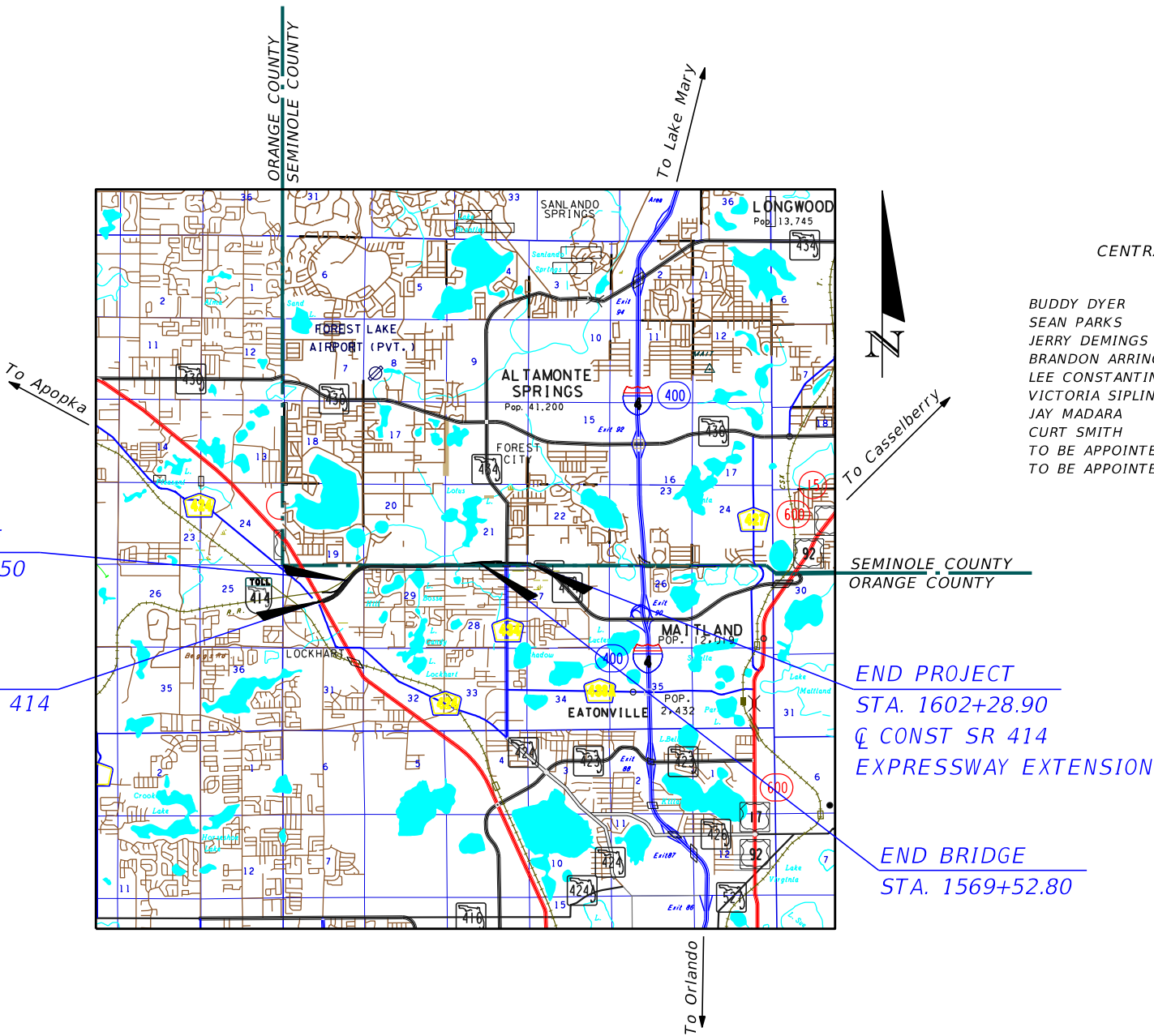


LOCATION OF PROJECT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
001	KEY SHEET
	TYPICAL SECTIONS (UNDER SEPARATE COVER)
002	PROJECT LAYOUT
003 - 005	CURVE & COORDINATE DATA
006 - 011	SR 414 EXPRESSWAY EXTENSION PLAN SHEETS
012 - 017	MAITLAND BOULEVARD AT-GRADE PLAN SHEETS
018 - 022	PROFILE SHEETS

DRAFT CONCEPT
NOT FOR CONSTRUCTION
MARCH 2021



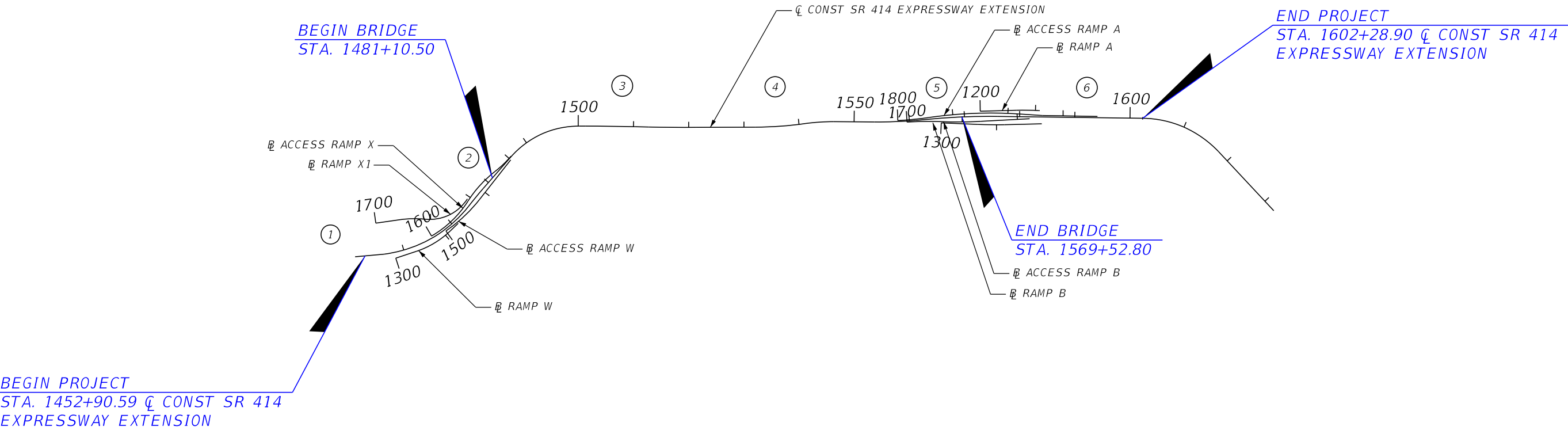
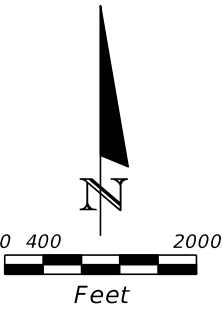
CENTRAL FLORIDA EXPRESSWAY AUTHORITY
GOVERNING BOARD

BUDDY DYER	CHAIRMAN, CITY OF ORLANDO MAYOR
SEAN PARKS	VICE CHAIRMAN, LAKE COUNTY REPRESENTATIVE
JERRY DEMINGS	TREASURER, ORANGE COUNTY MAYOR
BRANDON ARRINGTON	OSCEOLA COUNTY REPRESENTATIVE
LEE CONSTANTINE	SEMINOLE COUNTY REPRESENTATIVE
VICTORIA SIPLIN	ORANGE COUNTY REPRESENTATIVE
JAY MADARA	GOVERNOR'S APPOINTEE
CURT SMITH	BREVARD COUNTY REPRESENTATIVE
TO BE APPOINTED	GOVERNOR'S APPOINTEE
TO BE APPOINTED	GOVERNOR'S APPOINTEE

CFX PROJECT MANAGER:
CARNOT EVANS, P.E.

SHEET
NO.

001



PRELIMINARY - SUBJECT TO CHANGE	<div>ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883</div> <div>JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072</div>		<div>SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434</div> <div><div>CENTRAL FLORIDA EXPRESSWAY AUTHORITY</div></div>	PROJECT LAYOUT	SHEET NO.
					002

CURVE AND COORDINATE DATA									
CHAIN	CURVE NO.	PC STA.	PT STA.	L	R	Direction	Design Speed	Superelev.	DESIGN NOTES
				LF	LF	LT/RT	mph	(ft./ft.)	
BL_SR414_PROP	BL_SR414_PROP_3	1456+39.26	1459+58.55	319.29	2600.00	LT	55 mph	0.055	MATCH EXISTING 'e' ON BRIDGE
BL_SR414_PROP	BL_SR414_PROP_4	1459+58.55	1474+38.31	1479.76	2292.00	LT	50 mph	0.049	
BL_SR414_PROP	BL_SR414_PROP_5	1474+38.31	1478+58.70	420.39	7639.00	RT	50 mph	RC	
BL_SR414_PROP	BL_SR414_PROP_8	1486+15.01	1500+15.61	1400.60	1637.00	RT	50 mph	0.065	AT BEAR LAKE RD/ROSE AVE
BL_SR414_PROP	BL_SR414_PROP_11	1501+27.16	1510+30.43	903.26	51556.20	RT	50 mph	NC	
BL_SR414_PROP	BL_SR414_PROP_14	1512+74.96	1521+34.96	860.00	34768.27	LT	50 mph	NC	
BL_SR414_PROP	BL_SR414_PROP_17	1532+09.25	1541+20.01	910.76	6755.80	LT	50 mph	RC	
BL_SR414_PROP	BL_SR414_PROP_18	1541+20.01	1546+31.40	511.38	3500.00	RT	50 mph	0.034	
BL_SR414_PROP	BL_SR414_PROP_21	1553+64.11	1561+14.65	750.53	7950.00	LT	50 mph	RC	
BL_SR414_PROP	BL_SR414_PROP_24	1564+56.96	1576+03.15	1146.19	11459.16	RT	50 mph	NC	
BL_SR414_PROP	BL_SR414_PROP_27	1602+31.82	1617+70.15	1538.33	1909.86	RT	50 mph	0.06	MATCH EXISTING ROADWAY

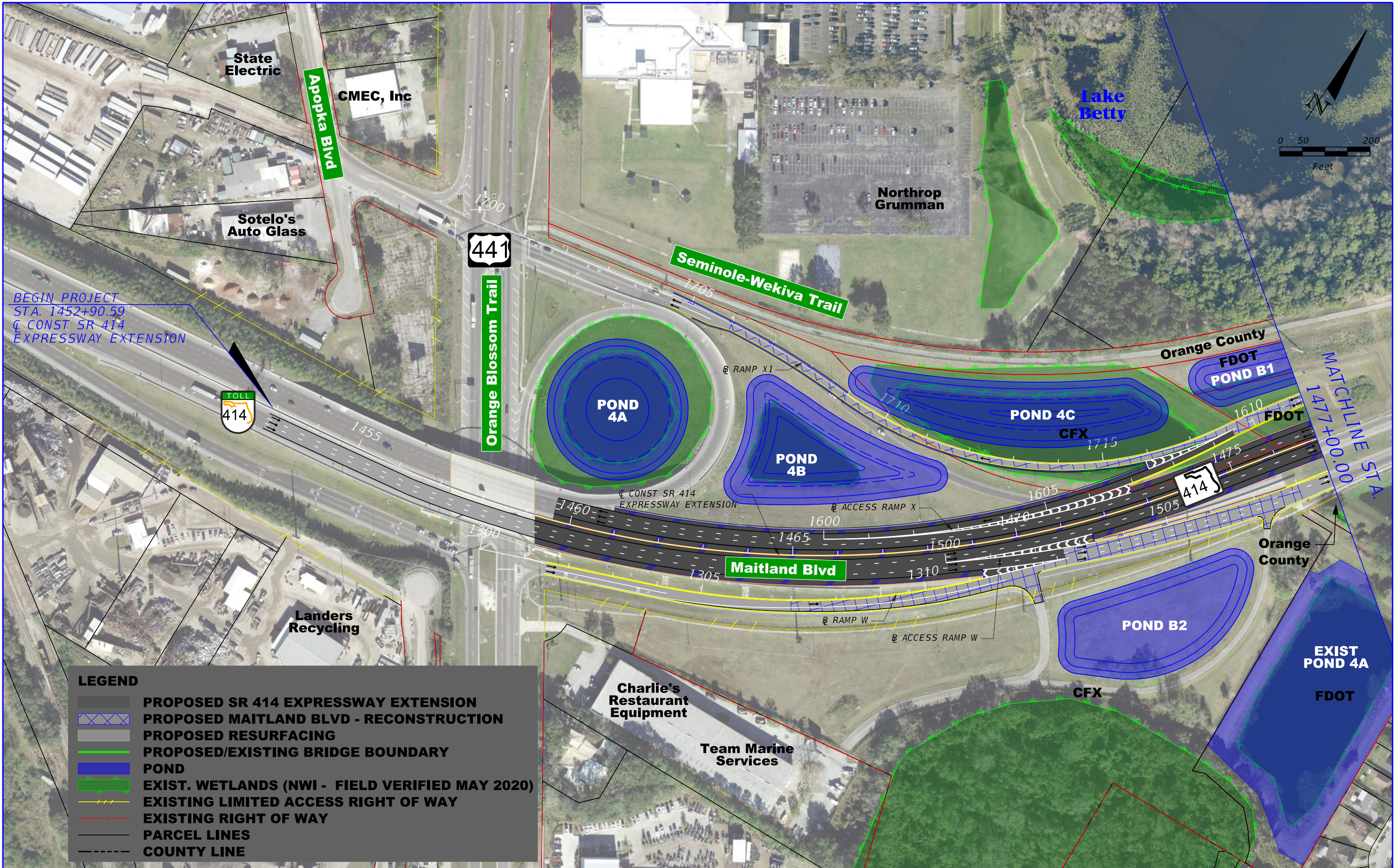
NOTE: SHADING OF PC/PT INDICATES LOCATION OF PRC FOR COMPOUND CURVES

CURVE AND COORDINATE DATA										
CHAIN	CURVE NO.	PC STA.	PT STA.	L	R	Direction	Design Speed	e _{max}	Superelev.	DESIGN NOTES
				LF	LF	LT/RT	mph	5%/10%	(ft./ft.)	
BL_SR414	BL_SR414_3	405+28.67	425+19.62	1990.95	2600.00	LT	55 mph	10% - Rural	0.055	OVER US 441
BL_SR414	BL_SR414_6	434+73.95	449+00.08	1426.13	1570.72	RT	45 mph	5% - Urban	RC	AT BEAR LAKE RD/ROSE AVE
STA EQN 449+00.08 BK = 550+00.68 AH										
BL_SR414	BL_SR414_9	501+27.16	510+30.43	903.26	51556.20	RT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_12	512+74.96	521+34.96	860.00	34768.27	LT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_15	532+09.25	541+20.01	910.07	6755.80	LT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_16	541+20.01	546+31.40	511.38	3500.00	RT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_19	553+78.79	561+00.00	721.21	7639.44	LT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_22	564+56.98	576+03.17	1146.19	11459.16	RT	45 mph	5% - Urban	NC	
BL_SR414	BL_SR414_27	602+31.84	617+70.17	1538.33	1909.86	RT	45 mph	5% - Urban	RC	MATCH EXISTING ROADWAY

NOTE: SHADING OF PC/PT INDICATES LOCATION OF PRC FOR COMPOUND CURVES

CURVE AND COORDINATE DATA									
CHAIN	CURVE NO.	PC STA.	PT STA.	L	R	Direction	Design Speed	Superelev.	DESIGN NOTES
				LF	LF	LT/RT	mph	(ft./ft.)	
RAMPA_ACC	RAMPA_ACC_1	1800+00.00	1805+67.06	567.06	5730.00	LT	50 mph	0.021	
RAMPA_ACC	RAMPA_ACC_2	1805+67.06	1821+95.53	1628.48	7639.00	RT	50 mph	RC	
RAMPB_ACC	RAMPB_ACC_1	1700+00.00	1706+22.65	622.65	5730.00	RT	50 mph	0.021	
RAMPB_ACC	RAMPB_ACC_2	1706+22.65	1713+35.05	712.40	7639.00	LT	50 mph	RC	
RAMPW_ACC	RAMPW_ACC_127	1500+80.30	1508+32.53	752.23	2700.00	LT	50 mph	0.043	
RAMPX_ACC	RAMPX_ACC_1	1600+00.00	1609+22.50	922.50	1910.00	LT	50 mph	0.057	
RAMPX_ACC	RAMPX_ACC_2	1609+22.50	1616+48.41	725.91	2083.00	RT	45 mph	NC	
RAMPX_ACC	RAMPX_ACC_3	1616+48.41	1620+53.38	404.98	1910.00	LT	45 mph	RC	
RAMPA	RAMPA_3	1206+51.13	1210+61.38	410.25	5730.00	RT	40 mph	NC	
RAMPB	RAMPB_4	1306+66.38	1311+42.69	476.31	7639.00	LT	40 mph	NC	
RAMPW	RAMPW_3	1303+90.27	1311+17.40	727.13	1637.00	LT	45 mph	RC	
RAMPX1	RAMPX1_3	1704+53.46	1708+89.86	436.40	1750.00	RT	45 mph	RC	
RAMPX1	RAMPX1_4	1708+89.86	1717+92.04	902.15	819.00	LT	45 mph	0.03	

NOTE: SHADING OF PC/PT INDICATES LOCATION OF PRC FOR COMPOUND CURVES



LEGEND

- PROPOSED SR 414 EXPRESSWAY EXTENSION
- PROPOSED MAITLAND BLVD - RECONSTRUCTION
- PROPOSED RESURFACING
- PROPOSED/EXISTING BRIDGE BOUNDARY
- POND
- EXIST. WETLANDS (NWI - FIELD VERIFIED MAY 2020)
- EXISTING LIMITED ACCESS RIGHT OF WAY
- EXISTING RIGHT OF WAY
- PARCEL LINES
- COUNTY LINE

PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

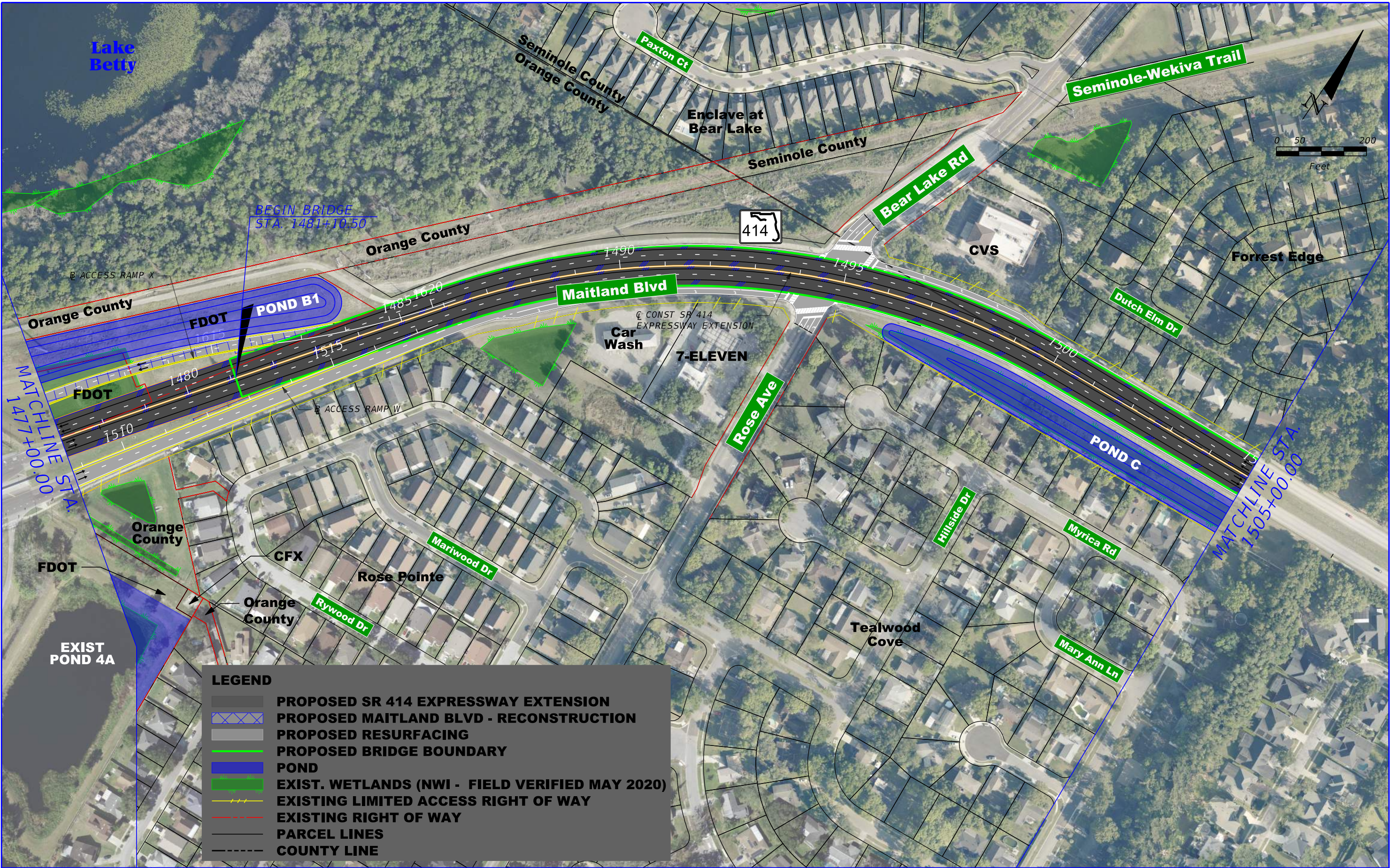
PROJECT NO.
414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

SR 414 EXPRESSWAY
PLAN SHEET (1)

SHEET
NO.

006



LEGEND

PROPOSED SR 414 EXPRESSWAY EXTENSION

PROPOSED MAITLAND BLVD - RECONSTRUCTION

PROPOSED RESURFACING

PROPOSED BRIDGE BOUNDARY

POND

EXIST. WETLANDS (NWI - FIELD VERIFIED MAY 2020)

EXISTING LIMITED ACCESS RIGHT OF WAY

EXISTING RIGHT OF WAY

PARCEL LINES

COUNTY LINE



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

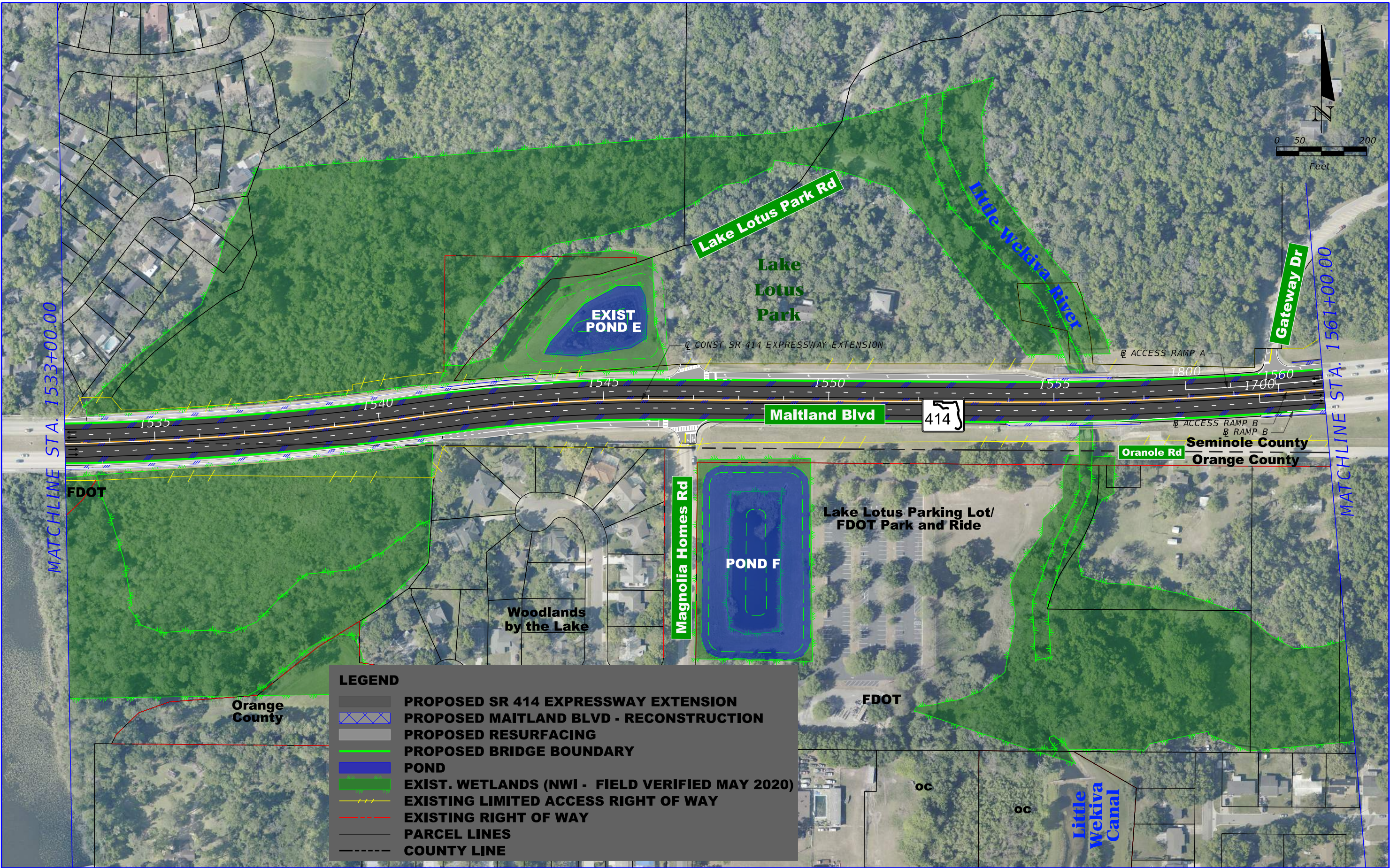
ROAD NO.	PROJECT NO.
SR 414	414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

SR 414 EXPRESSWAY
PLAN SHEET (3)

SHEET
NO.

008



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRISTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

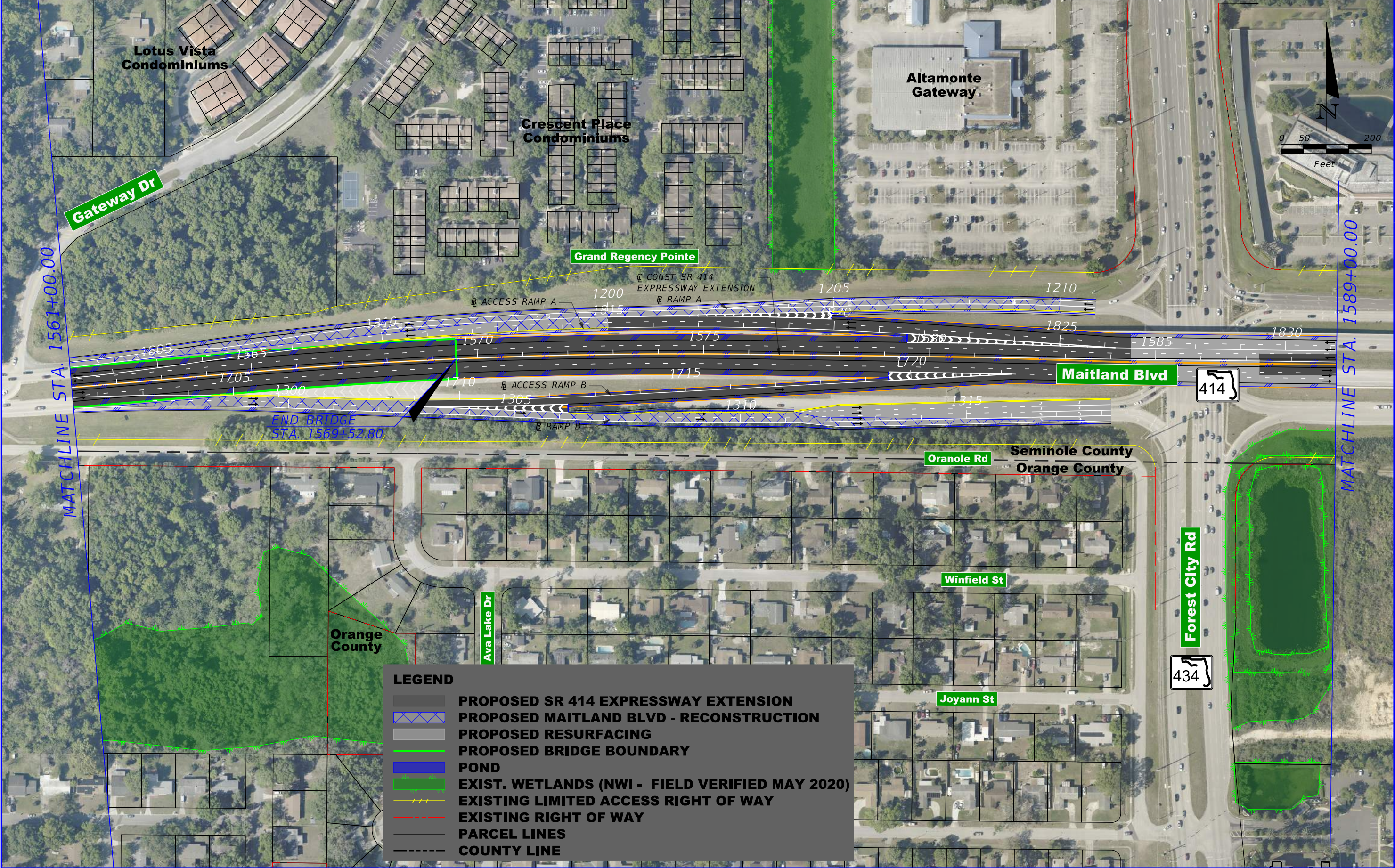
PROJECT NO.
414-227


CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY

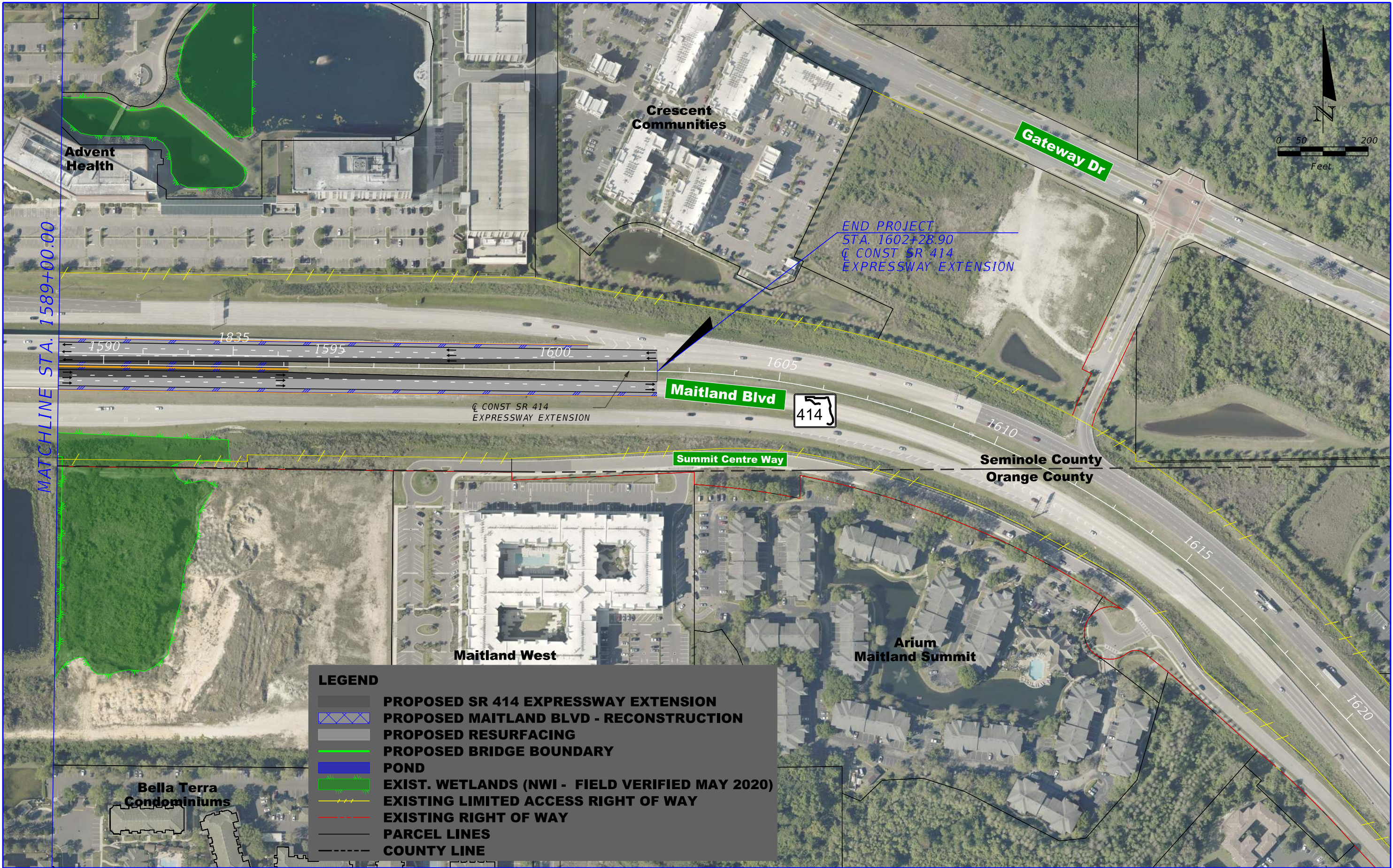
SR 414 EXPRESSWAY
PLAN SHEET (4)


SHEET
NO.

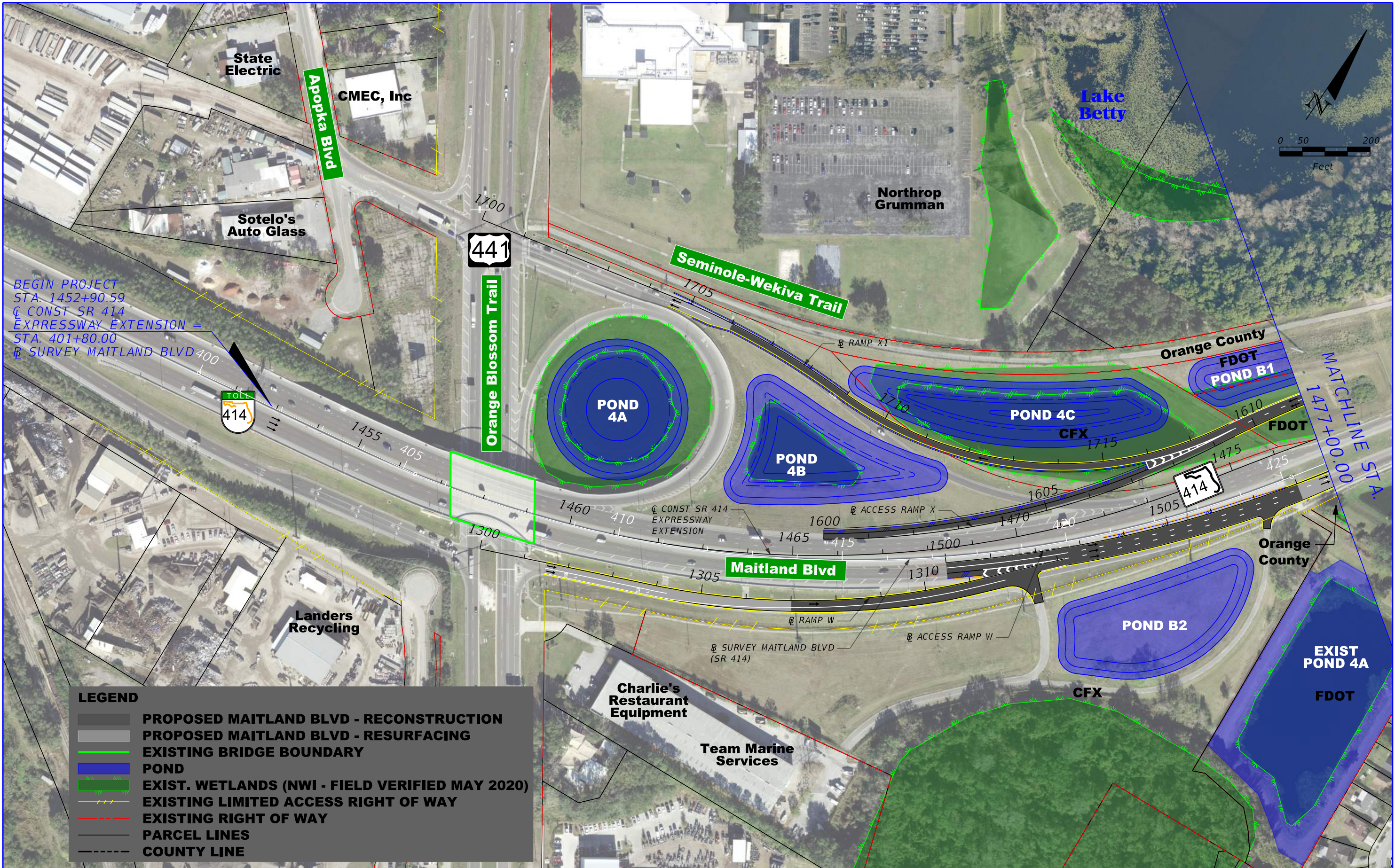
009



PRELIMINARY - SUBJECT TO CHANGE	ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883		SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434		SR 414 EXPRESSWAY PLAN SHEET (5)	SHEET NO.
	JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072					010
	ROAD NO. SR 414		PROJECT NO. 414-227			



PRELIMINARY - SUBJECT TO CHANGE	ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883		SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434		SR 414 EXPRESSWAY PLAN SHEET (6)	SHEET NO.
	JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072					011
	ROAD NO. SR 414	PROJECT NO. 414-227				





PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.	PROJECT NO.
SR 414	414-227

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

SR 414 AT-GRADE
PLAN SHEET (2)

SHEET
NO.

013



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

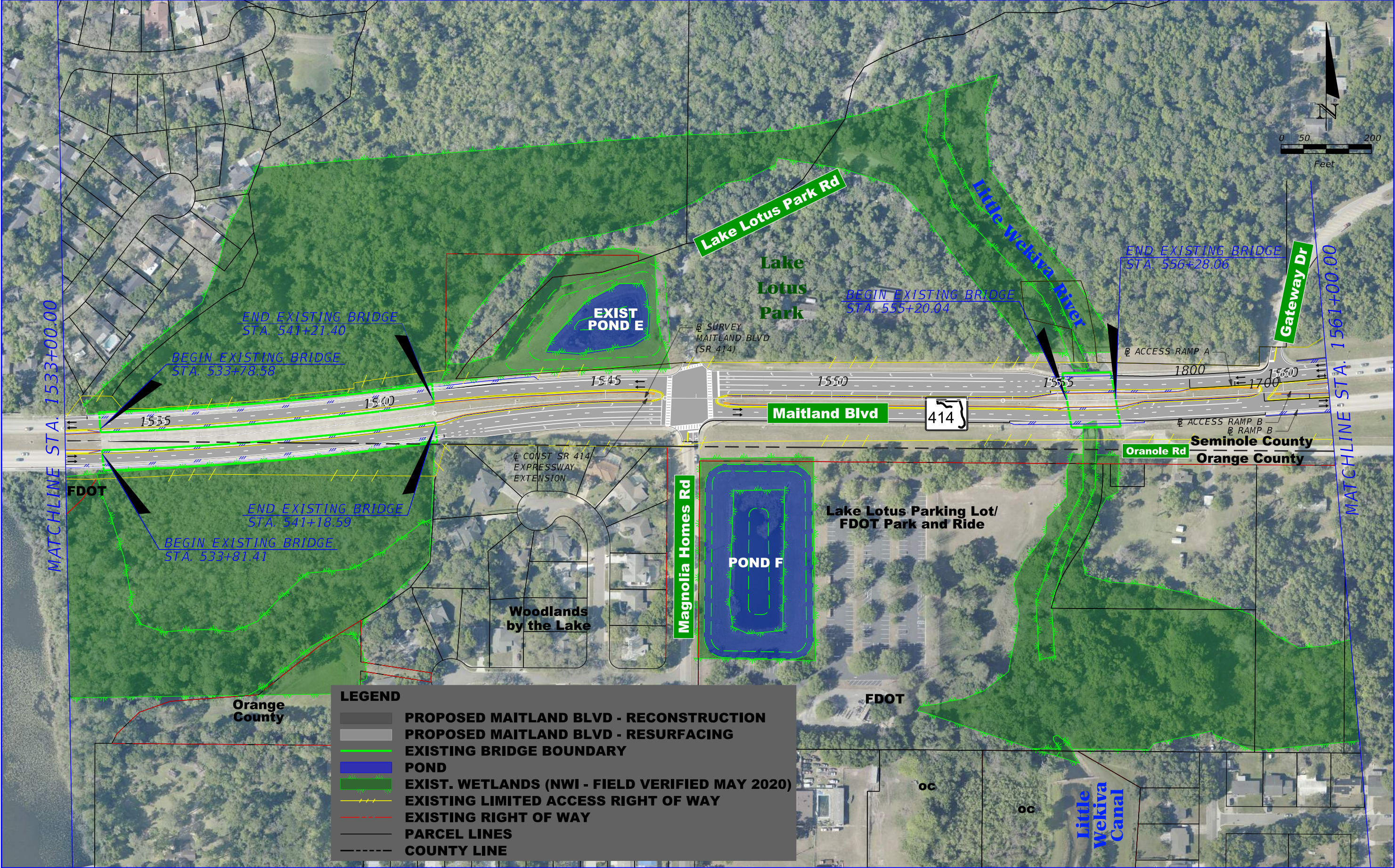
PROJECT NO.
414-227

CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY

SR 414 AT-GRADE
PLAN SHEET (3)

SHEET
NO.

014



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

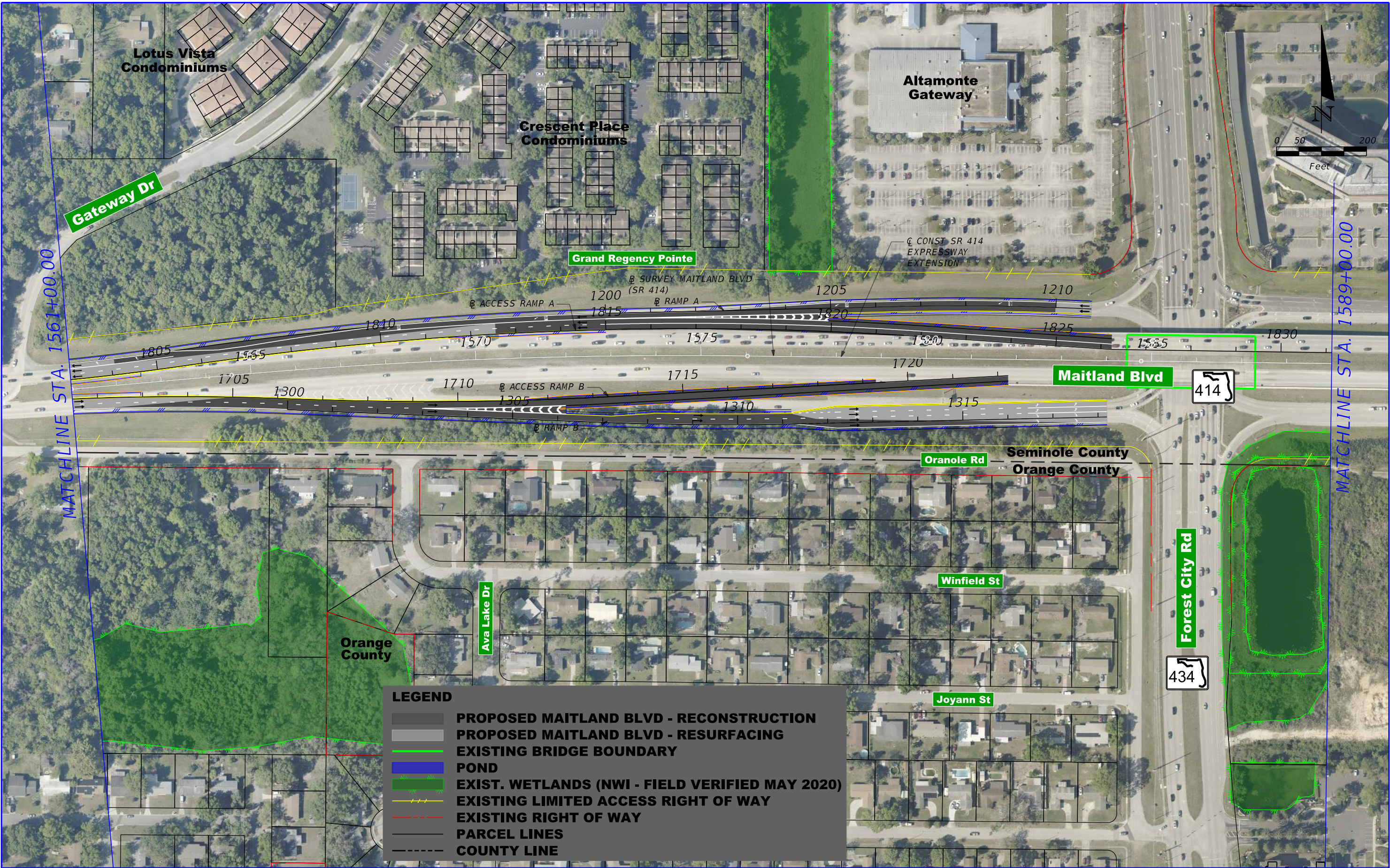
PROJECT NO.
414-227

CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY

SR 414 AT-GRADE
PLAN SHEET (4)

SHEET
NO.

015



PRELIMINARY - SUBJECT TO CHANGE

ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E.
P.E. LICENSE NO. 60883

JACOBS ENGINEERING GROUP INC.
200 S. ORANGE AVENUE, STE 900
ORLANDO, FL 32801; PHONE (407) 903-5001
CERTIFICATE OF AUTHORIZATION No. 000072

SR 414 MAITLAND BLVD.
EXPRESSWAY EXTENSION
US 441 TO SR 434

ROAD NO.
SR 414

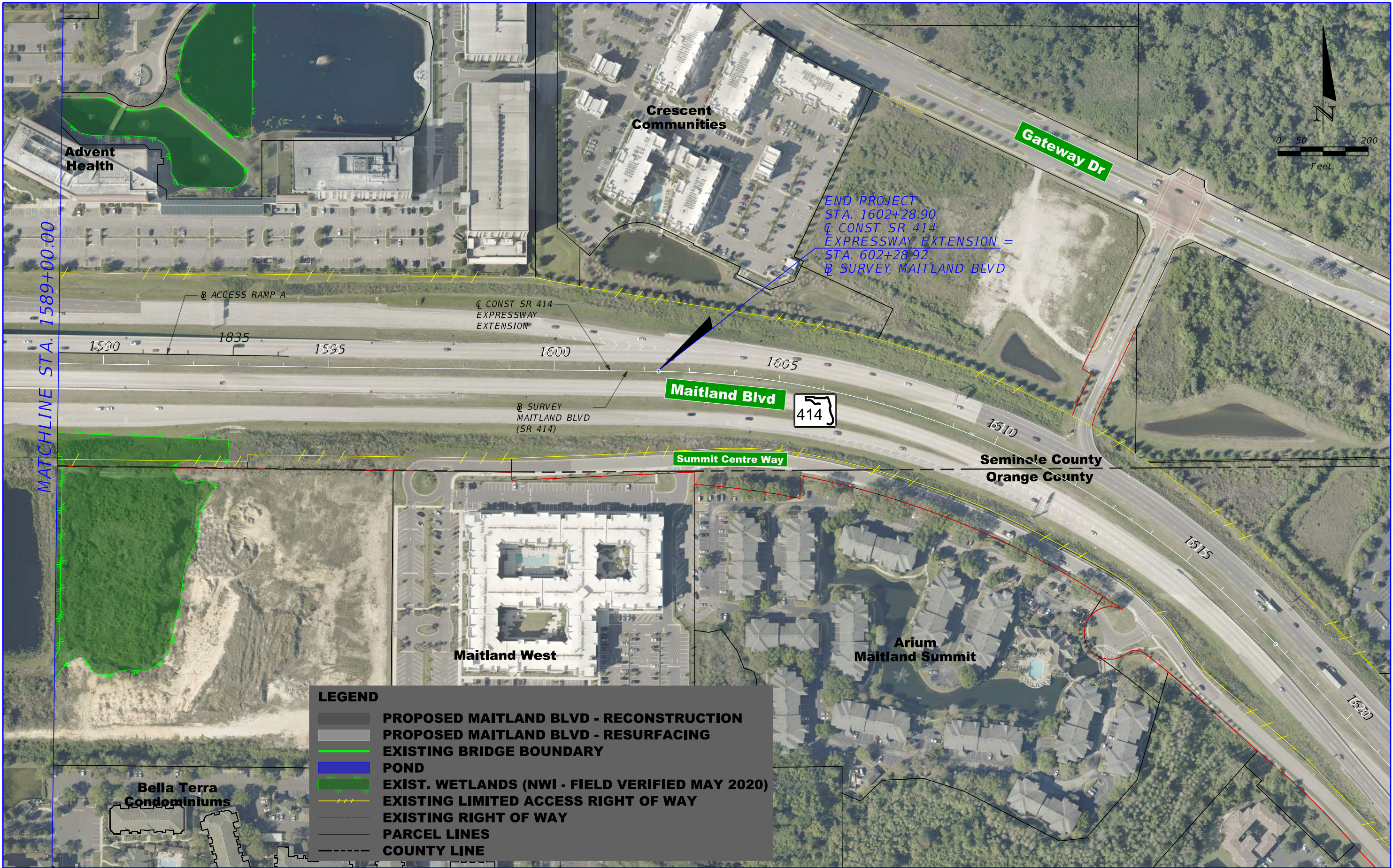
PROJECT NO.
414-227

CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY

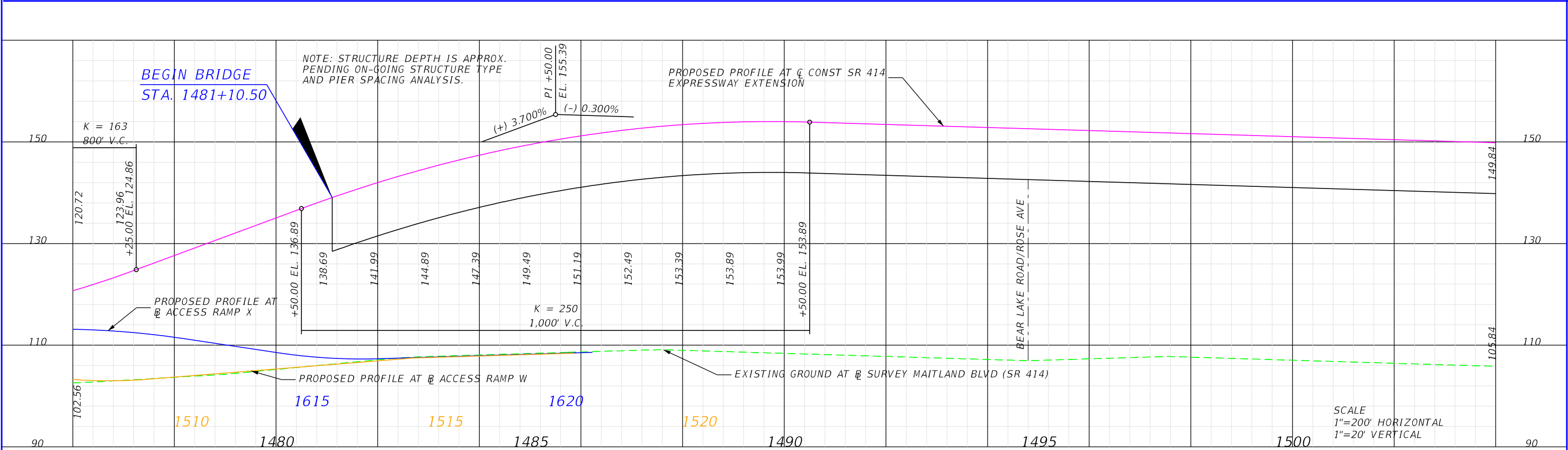
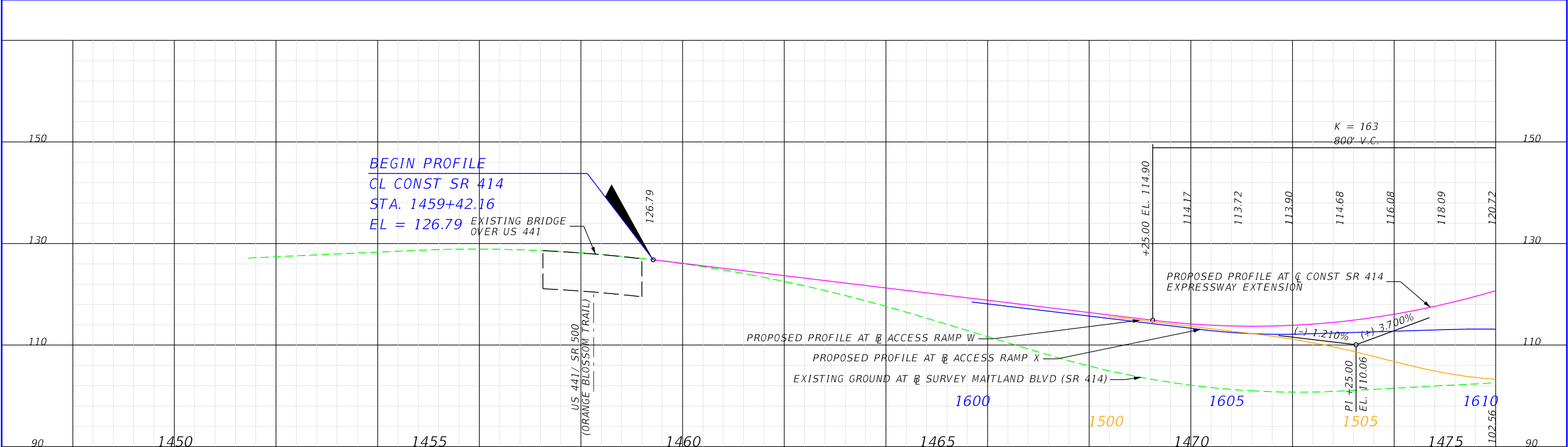
SR 414 AT-GRADE
PLAN SHEET (5)

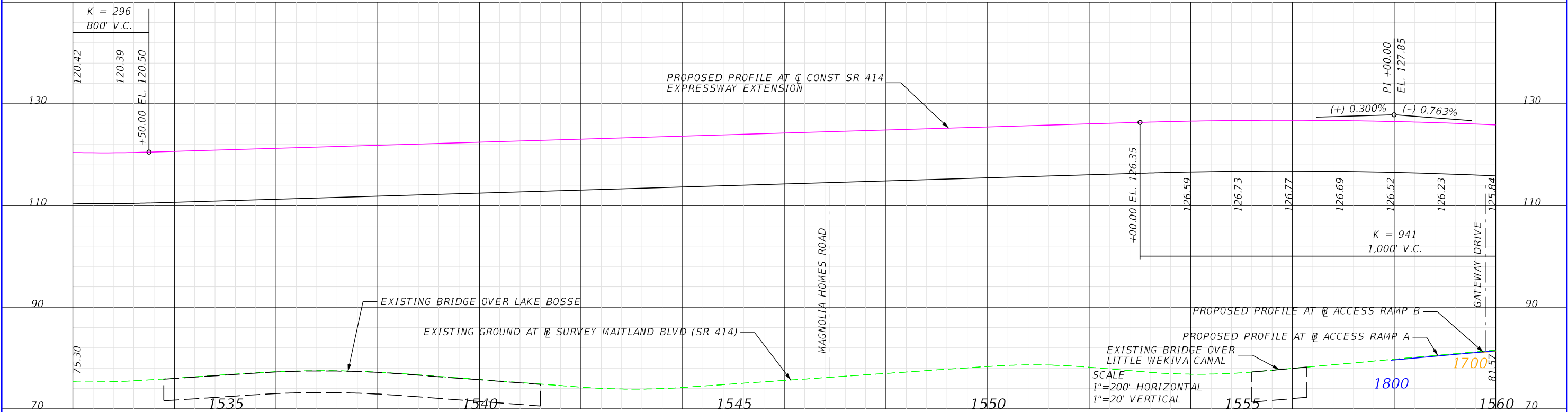
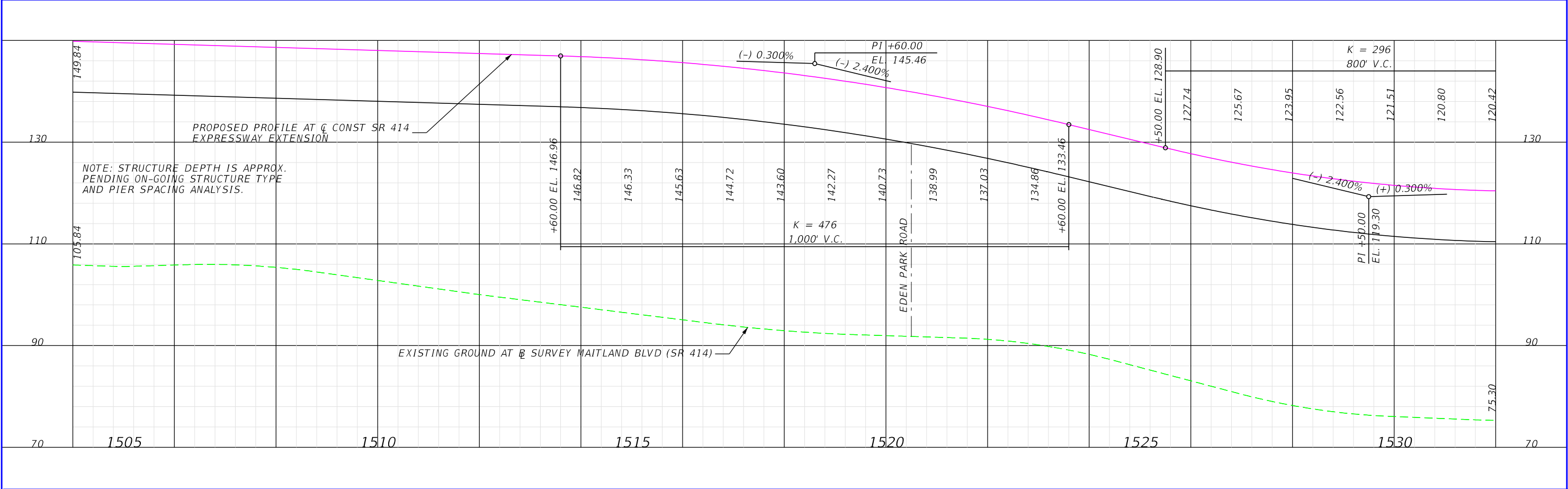
SHEET
NO.

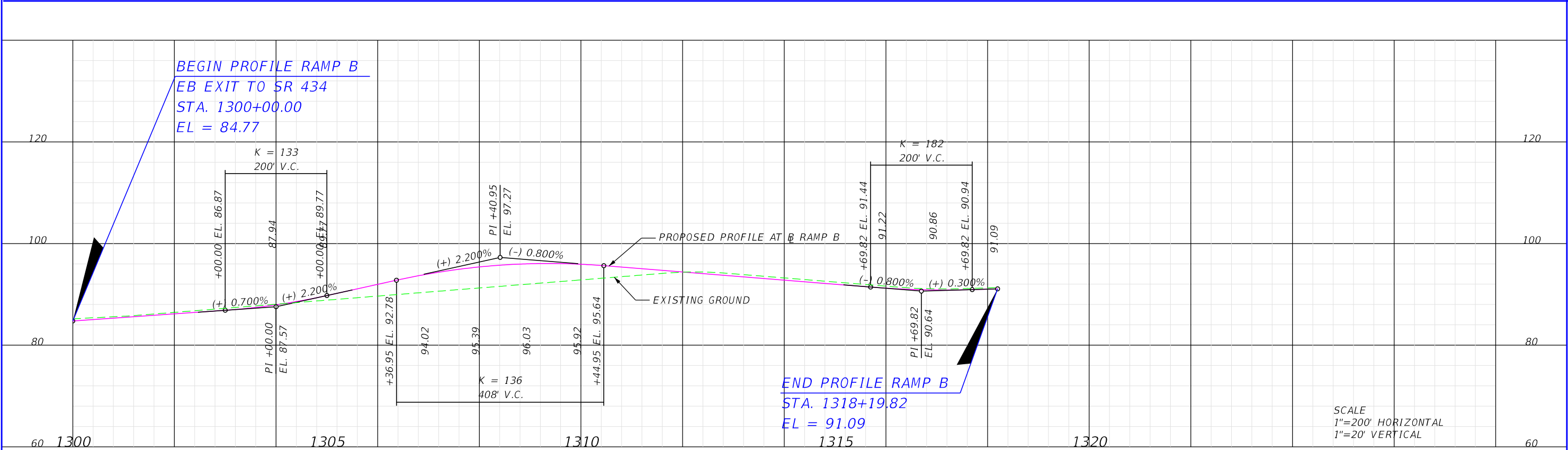
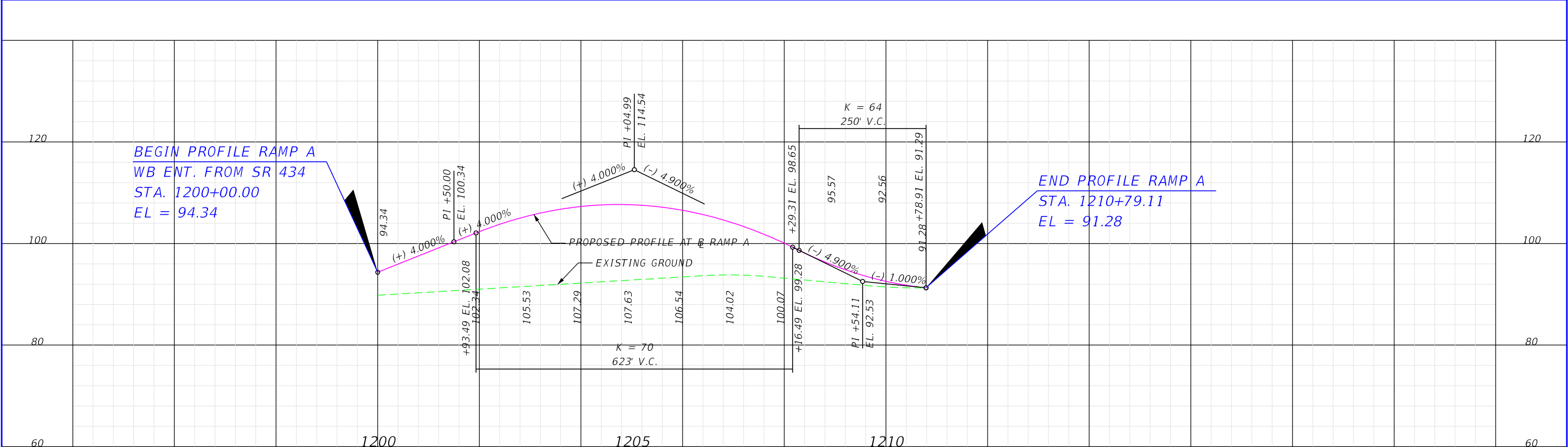
016



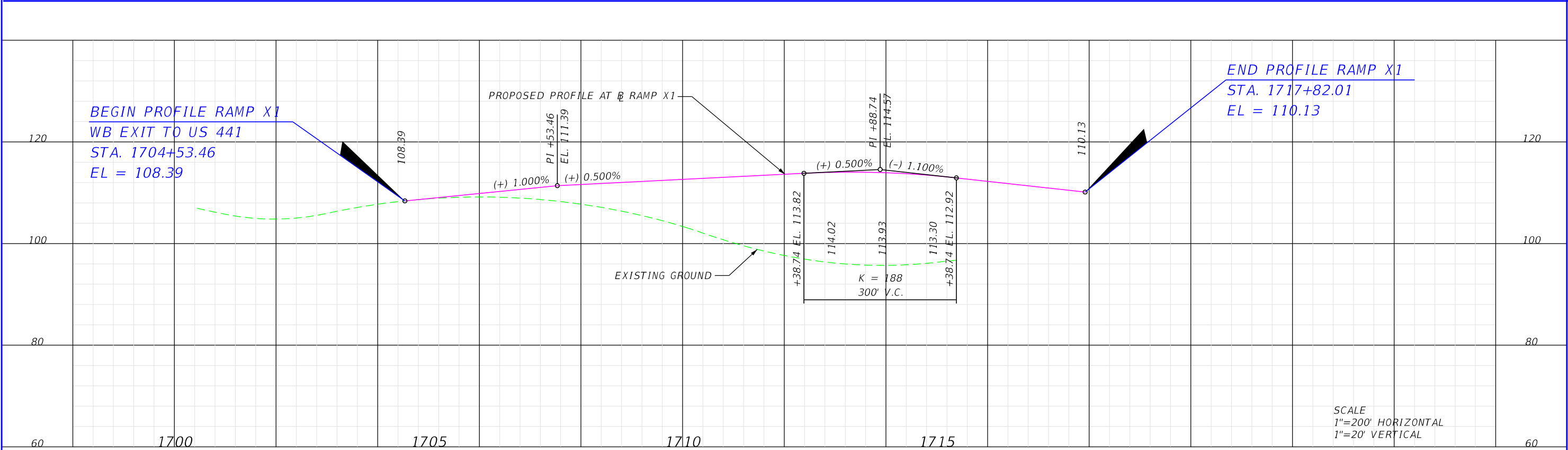
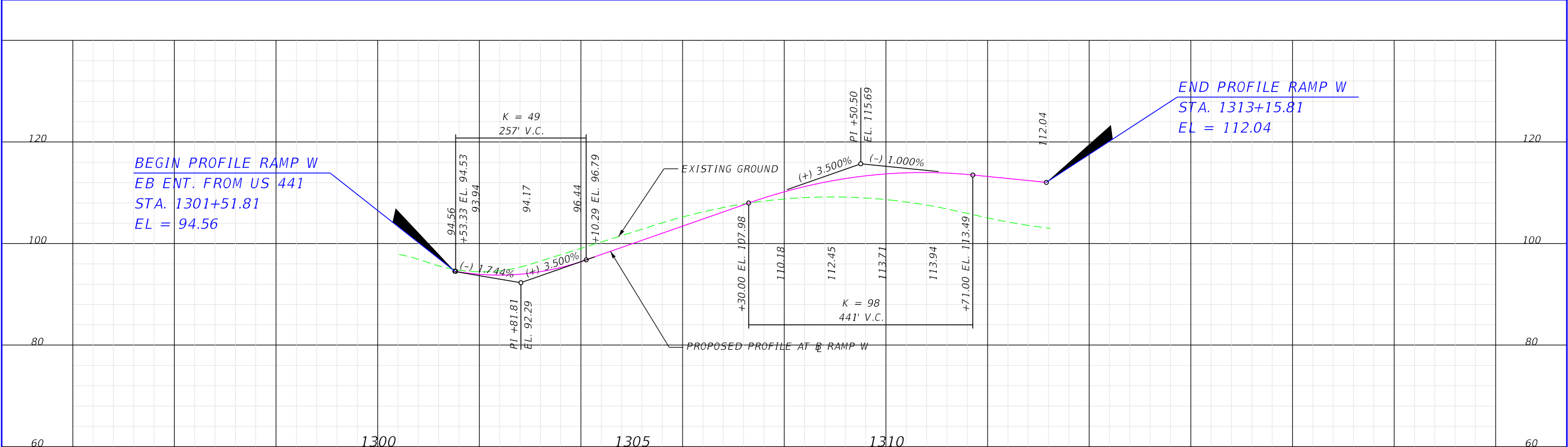
PRELIMINARY - SUBJECT TO CHANGE	ENGINEER OF RECORD: KRYSTAL H. BURNS, P.E. P.E. LICENSE NO. 60883		SR 414 MAITLAND BLVD. EXPRESSWAY EXTENSION US 441 TO SR 434	<div>CENTRAL FLORIDA EXPRESSWAY AUTHORITY</div>	SR 414 AT-GRADE PLAN SHEET (6)	SHEET NO.
	JACOBS ENGINEERING GROUP INC. 200 S. ORANGE AVENUE, STE 900 ORLANDO, FL 32801; PHONE (407) 903-5001 CERTIFICATE OF AUTHORIZATION No. 000072					017
	ROAD NO. SR 414	PROJECT NO. 414-227				







SCALE
1"=200' HORIZONTAL
1"=20' VERTICAL



SCALE
1"=200' HORIZONTAL
1"=20' VERTICAL