TECHNICAL REPORT COVERSHEET

DRAFT PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation
District One

S.R. 70 PD&E Study
Limits of Project: From C.R. 721 S to CR 599/SW 128th Avenue

Highlands and Okeechobee Counties, Florida

Financial Management Number: 450334-1-22-01

ETDM Number: 14491

Date: November 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

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APPENDICES

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1.0 PROJECT SUMMARY

1.1 Project Description

The Florida Department of Transportation (FDOT), District One, has conducted a Project Development and Environment (PD&E) Study to evaluate the proposed widening of State Road (S.R.) 70, from a two-lane, undivided roadway to a four-lane divided roadway, from County Road (C.R.) 721 South to CR 599/128th Avenue in unincorporated Highlands and Okeechobee Counties. The existing facility is a two-lane, undivided roadway with no multi-modal accommodation. The proposed facility is a four-lane, divided roadway with a shared-use path on the south (eastbound) side. The corridor crosses both the Slough Ditch (C-41A) Canal and the Kissimmee River (C-38 Canal). Both canals are maintained by the South Florida Water Management District (SFWMD). Recent river restoration activities have altered the Kissimmee River north of the project limits; therefore, while the Kissimmee River is a navigable waterway in the project limits, it no longer has a navigable channel. The total project length is approximately 8.6 miles, and the project limits are shown in **Figure 1-1**.

S.R. 70 is part of Florida's Strategic Intermodal System (SIS) highway network and designated state hurricane evacuation route network. As part of the National Highway System (NHS), S.R. 70 is critical in the transportation network as it facilitates local and regional traffic and the movement of goods/freight.

The project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14491. An ETDM Programming Screen Summary Report containing comments from the Environmental Technical Advisory Team (ETAT) was published on June 1, 2023. The ETAT evaluated the project's effects on various natural, physical, and social resources.

1.2 Purpose & Need

The S.R. 70 from I-75 to St. Lucie County Line Corridor Vision Report (September 2020) was prepared by the FDOT District One Planning Studio. The Planning Studio ensures that transportation projects and strategies align with community visions. This document identified two main themes, roadway safety and capacity, and branding and placemaking, as vision elements in the development of potential concepts. The Corridor Vision Report detailed a potential typical section for the roadway which included widening from two to four lanes, adding a median and paved shoulders, and including a shared-use path to accommodate multi-modal users.

Atlantic Ocean
Project

Bagin Project

Bagin Project

G L A D E S
C O U N T Y

S NORTH

O 5,000 10,000 1Feet

Figure 1-1 Project Location Map

The Heartland Regional Transportation Planning Organization (HRTPO) adopted the 2045 Long Range Transportation Plan (LRTP) on March 10, 2021. Although SIS designated roadways are typically prioritized through the Florida SIS Plan, the 2045 LRTP looks to advance improvements on S.R. 70 with available Other Arterials (OA) funding. This project is listed in the 2045 LRTP as improvements funded with OA finds as "Safety Improvements and/or PD&E". This project is also listed in the FDOT SIS Cost Feasible Plan 2035-2050, 2024 edition, as cost feasible.

The HRTPO Transportation Improvement Plan (TIP) for Fiscal Years 2025/2026 – 2029/2030 was adopted on June 18, 2025, and has identified the project in the FY 2029/2030 Transportation Project Priorities list. The PD&E Study for the project is identified in the FDOT Work Program in FY 2025. Currently, construction year is not known since funding for the subsequent project phases, consisting of final design, right-of-way (ROW) acquisition, and construction, are not yet programmed within the FDOT Five-Year Work Program. However, the next project phase, final design, is listed in the work program as "candidate" status funding.

The purpose of this project is to address traffic safety conditions on S.R. 70 from C.R. 721 South to CR 599/128th Avenue in Highlands and Okeechobee Counties. Other goals of the project are to maintain important east-west connectivity within the regional transportation network and

accommodate freight activity within the area. The need for the project is based on the following criteria:

PRIMARY NEED:

SAFETY: Improve Traffic Safety Conditions, Emergency Evacuation, and Incident Response Times

According to the FDOT State Safety Office Geographic Information System (SSOGIS) database, a total of 110 crashes were reported along the S.R. 70 project corridor during the 2015 to 2019 five-year period. Of the 110 crashes along the project corridor, 27 (25%) were front to rear crashes, 22 (20%) were other crashes, and 16 (15%) were angle crashes. The crash rate for this section of S.R. 70 is 1.56, which is notably higher than the Highlands County crash rate of 0.898 and Okeechobee County crash rate of 0.717 for similar facilities. In addition, the project segment of S.R. 70 experienced two fatal crashes during the five-year period. Both of these fatal crashes were front to front crashes, one of which involved improper passing and the other involved driving on the wrong side of the roadway.

At the start of the PD&E Study, five (5) years of crash data (from January 2018 to December 2022) were extracted from the University of Florida's Signal 4 Analytics to examine more recent crash data. A total of 117 crashes were reported along the corridor, including five (5) fatal crashes and 73 injury crashes, and no crashes involving pedestrians/bicyclists. The estimated crash rate for each study intersection along the corridor was higher than the average districtwide crash rates of 0.223 and 0.400 crashes per million entering vehicles for three and four-leg intersections, respectively. There were eight (8) same-direction sideswipe crashes and 15 rear-end crashes reported at the intersections. These crashes can be caused by the absence of turning lanes along the corridor intersections.

The project section of S.R. 70 presently features ten-foot wide travel lanes and eight-foot wide shoulders, four feet of which are paved. Guardrails, roadside swales, and fence posts are also in close proximity to the roadway. With a context classification of C2-Rural, the existing typical section does not meet current FDOT Design Manual standards. The substandard lane and shoulder widths and proximity of guardrails, roadside swales, and fence posts restrict the ability of drivers to avoid hazards within each directional travel lane without veering off the roadway causing direct impacts. According to "Evaluation of the Safety Effectiveness of the Conversion of Two-Lane Roadways to Four-Lane Divided Roadways: Bayesian vs. Empirical Bayes" referenced on the Federal Highway Administration (FHWA) Crash Modification Factors (CMF) Clearinghouse, widening a rural two-lane roadway to a four-lane divided roadway can help decrease fatal and injury crashes by 45 percent. In addition, due to the roadway's current configuration, there is limited space for an emergency service vehicle to pass to respond to a situation during periods of

congestion or to accommodate a disabled vehicle to prevent it from obstructing traffic flow. According to the Highlands County Sheriff's Office, one of the two travel lanes (if not both) is often blocked during traffic incidents within the Highlands County portion of the project corridor.

S.R. 70 is part of the emergency evacuation route network designated by the Florida Division of Emergency Management (FDEM) as well as the network established by Highlands and Okeechobee Counties. This roadway is critical in facilitating traffic during emergency evacuation periods as it connects to other arterials and highways of the state evacuation route network [such as US 27 (to the west) and C.R. 721 North (within the project limits)] and serves as one of very few major east-west facilities that traverses Highlands and Okeechobee Counties. Under various FDEM evacuation scenarios for different storm events, FDEM noted that S.R. 70 has some of the longest lasting vehicle queues in the Central Florida region, contributing to prolonged clearance times. Clearance time, comprised of time required for mobilization of the evacuating population, travel time, and the delay time caused by traffic congestion, is one input used by County emergency managers to determine when to recommend an evacuation order and is a key factor pertaining to public safety during an evacuation event.

The project is anticipated to address deficiencies of the roadway which may reduce crashes (including fatalities) and lead to enhanced emergency evacuation capabilities and incident response times.

SECONDARY NEEDS:

AREA WIDE NETWORK/SYSTEM LINKAGE: Maintain Important East-West Connectivity within the Regional Transportation Network

S.R. 70 is one of four corridors connecting Central and South Florida's west and east coasts as it spans from U.S. 41 in Manatee County (west coast) to U.S. 1 in St. Lucie County (east coast). It also connects to several major north-south transportation facilities of the state, including U.S. 41, I-75, U.S. 17, U.S. 27, U.S. 441, Florida's Turnpike, I-95, and U.S. 1. With the nearest available parallel east-west facilities being located nearly 10 miles or more to the north and south, S.R. 70 is integral to facilitating east-west travel within the regional transportation network of Florida's heartland.

The project is intended to complement other S.R. 70 corridor safety and traffic operational improvements identified in the 2029 - 2045 SIS Long Range Cost Feasible Plan from CR 675 in Manatee County to US 98 in Okeechobee County. In turn, the improvements are anticipated to maintain the corridor's function as a designated SIS highway corridor and important east-west connection for freight and commuters across the Central Florida region and state.

TRANSPORTATION DEMAND: Accommodate Freight Activity

As part of Florida's SIS highway network, S.R. 70 connects regionally important routes (such as I-75, US 27, Florida's Turnpike, and I-95) as well as serves as a regional through route for long-haul truck volumes and provides access to agricultural/ranching operations, industrial/commercial areas, and other intensive freight activity centers within Central Florida. FDOT Traffic Online 2021 data reports an Annual Average Daily Truck Traffic volume for the project corridor of 1,341 - 1,464 trucks per day; based on these volumes, truck traffic composes 24.4% - 25.3% of the Annual Average Daily Traffic volume for the project segment, which ranges between 5,300 - 6,000 vehicles per day. Truck volumes along S.R. 70 are expected to increase in the future as freight distribution and logistics activities continue to gain economic significance in Central Florida counties through the rapid growth occurring along the I-4 and I-75 corridors within the broader region. According to the HRTPO 2045 LRTP, Highlands County is in the process of diversifying their economy, expanding the potential for freight distribution and logistics activity development. While Okeechobee County will continue to support existing industries such as cattle, trade, transportation, and agriculture, potential growth in logistics and manufacturing could increase freight volume on a regional basis. With the major metro markets of Orlando, Tampa, and Fort Myers being located nearly equidistant to Highlands County and more than 86 percent of Florida's population being located within a 150-mile (or two-hour) radius of Highlands County, the S.R. 70 improvements are intended to accommodate increased population and employment growth as well as support the vision of the county and region to grow as a trade hub.

According to the FDOT District 1 Freight Mobility and Trade Study: Technical Memorandum 5 - Freight Improvements Prioritization, improvements to S.R. 70 are the #1 long-term priority in Highlands County and the #2 long-term priority of Okeechobee County to facilitate the future growth of freight traffic in the region. Additionally, the HRTPO, its committees, and community stakeholders have identified S.R. 70 as the highest priority transportation facility in the region in need of improvements due to concerns pertaining to safety, freight mobility, and economic growth. The project improvements are aligned with the goals of these plans and SIS objectives of promoting interregional transportation linked to economic development.

1.3 Commitments

- The FDOT will adhere to the stipulations included in the 2026 Memorandum of Agreement (MOA) between the FDOT and the State Historic Preservation Officer (SHPO).
- The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be utilized during construction.
- The USFWS and FWC Standard Manatee Construction Conditions for In-Water Work will be utilized during construction.

- FDOT will provide mitigation for impacts to wood stork Suitable Foraging Habitat within the Service Area of a USFWS-approved wetland mitigation bank or wood stork conservation bank.
 - FDOT commits to design and construction of wildlife shelves at the Slough Ditch (C-41A) Canal and Kissimmee River bridges per current wildlife crossing guidelines. The design details of the wildlife shelves, including evaluation of fencing/funneling and landscape features, will be further evaluated during the design phase.
- FDOT will provide a financial contribution to the Crested Caracara Conservation Fund for impacts consisting of \$100,000 for the take of caracara nest B and \$45,840 for impacts to suitable habitat within the primary zone of caracara nest C.
- The Action Area will be resurveyed prior to construction to confirm the locations of active Audubon's crested caracara nests. If the nest locations have moved or additional nests are found, consultation with the USFWS will be reinitiated.
- If the listing status of the monarch butterfly is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to re-initiating consultation with the USFWS during the design and permitting phase of the project to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the monarch butterfly.
- If the tri-colored bat is listed by the USFWS as threatened or endangered prior to the completion of construction, FDOT commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures.

1.4 Alternatives Analysis Summary

One rural typical section, consisting of two (2), 12-foot wide travel lanes in each direction, 12-foot outside shoulders (five-feet paved), eight-foot inside shoulders (four-feet paved), a 40-foot median and a 12-foot shared use path on the south side of S.R. 70, adjacent to the eastbound travel lanes, was developed. Six (6) horizontal alignment alternatives were then developed and modeled using the rural typical section. The overall ROW width need for the alignments varied, depending on the horizontal alignment and accounting for drainage patterns such as canals, utility easements and utility lines, most notably Florida Gas Transmission (FGT) and Florida Power and Light (FPL) transmission. FPL has high voltage transmission lines along the north side of S.R. 70. FGT has an easement that runs parallel to the existing S.R. 70 ROW and crosses the S.R. 70 corridor at four locations along the project limits.

Section 5.4 details how these six (6) preliminary horizontal alignments were evaluated and how two (2) build alternatives were identified; carried forward for further consideration and presented to the public at the Alternatives Public Workshop, held in-person on June 11, 2024 and via a live, online event June 18, 2024; and later refined following the workshop. The evaluation matrix presented at the Alternatives Public Workshop provided a cost estimate of \$129,563,000 for Build

Alternative 1 and \$142,328,000 for Build Alternative 2. These estimates were noted to not include utility relocation costs, off-site pond ROW costs or associated environmental impact mitigation as preferred pond sites were not yet identified. Construction costs were based on unit costs in the FDOT Long Range Estimate (LRE) from May 2024.

1.5 Description of Preferred Alternative

The Preferred Alternative, Build Alternative 1, aligns with the goals of the S.R. 70 Corridor Vision Report and meets the purpose and need for the project as it provides for improved traffic safety conditions, emergency evacuation, and response times. It also enhances transportation network connectivity along this east-west roadway and enhances freight movement. The Preferred Alternative has a rural typical section with an open roadway drainage system for the four-lane construction. The typical section consists of: two (2) 12-foot travel lanes in each direction; a 40-foot median with eight-foot inside shoulders (four-feet paved); 12-foot outside shoulders (five-feet paved); and a 12-foot shared use path on the south side of S.R. 70 adjacent to the eastbound travel lanes. The average width needed for the ROW is 260 feet but varies throughout the alignment from 210 feet to 290 feet. The target, design and posted speed are 65 miles per hour (MPH). **Figure 1-2** depicts the Preferred Alternative typical sections for the roadway and bridges.

The roadway stormwater runoff will be collected and conveyed in roadside ditches on the outside of the travel lanes to stormwater management facilities that will be constructed along the corridor. Offsite and onsite stormwater runoff will be handled separately. Therefore, the typical section includes a second ditch on the north (westbound) side of the roadway to collect and convey offsite stormwater flow. The approved typical section package and the concept plans for the Preferred Alternative are provided in **Appendix A** and **Appendix B**, respectively.

The existing two-lane Kissimmee River bridge will be demolished and two new bridge structures, each carrying one direction of traffic, will be constructed. The existing bridge over the Slough Ditch (C-41A) Canal that currently carries two lanes of traffic will be maintained and will carry westbound traffic in the future condition. A new two-lane bridge will be constructed on the south side of the existing bridge and will carry the eastbound traffic.

An evaluation matrix comparing the No-Build Alternative to the Preferred Alternative is shown in **Table 1-3**. The evaluation matrix includes environmental effects, relocations, ROW needs, and project costs including ROW acquisition, wetland and listed species mitigation, design, and construction engineering and inspection. Construction costs are based on October 2025 unit costs and were estimated using the FDOT LRE provided in **Appendix C**.

The Preferred Alternative requires a variation for border width. The proposed border width is 34-feet in one location (Typical Section #2 in **Appendix A**) which allows for runoff to be collected and sent through a culvert to a drainage pond. This reduced border width minimizes impacts to the Kissimmee River Fishing Resort and the adjacent gas station. The design variation memorandum is provided in **Appendix D**.

Figure 1-2 Preferred Alternative Typical Sections

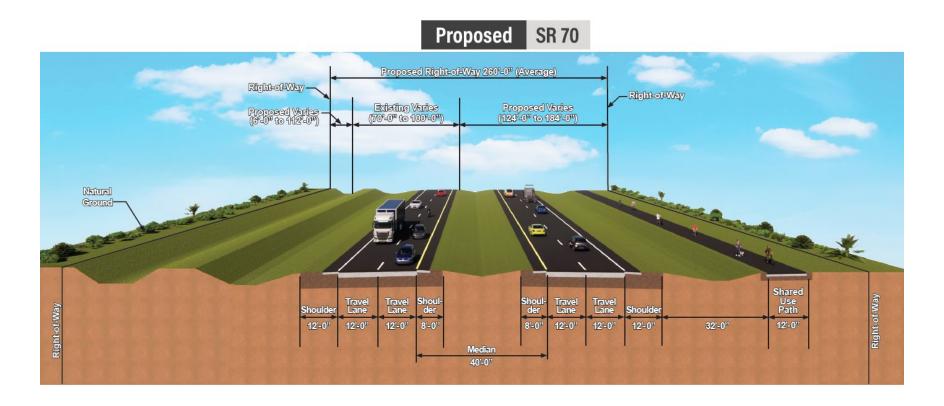


Figure 1-2 Preferred Alternative Typical Sections, Continued

Proposed SR 70 Over Kissimmee River

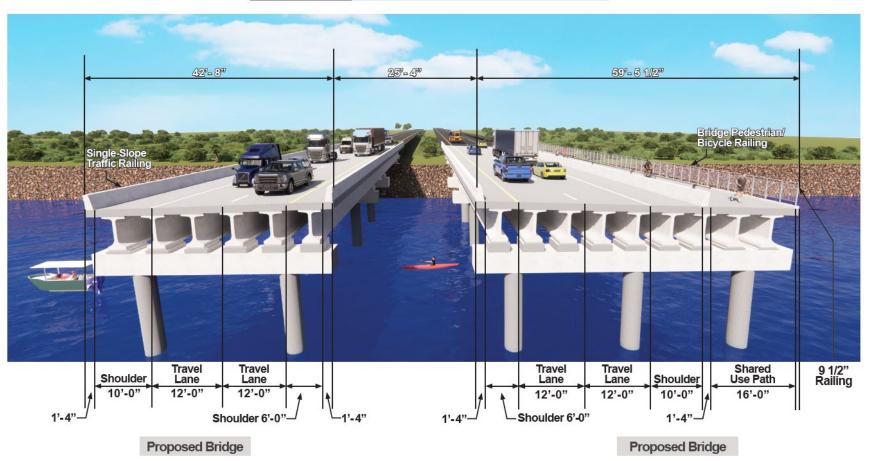


Figure 1-2 Preferred Alternative Typical Sections, Continued

Proposed SR 70 Over Slough Ditch (C-41A Canal)

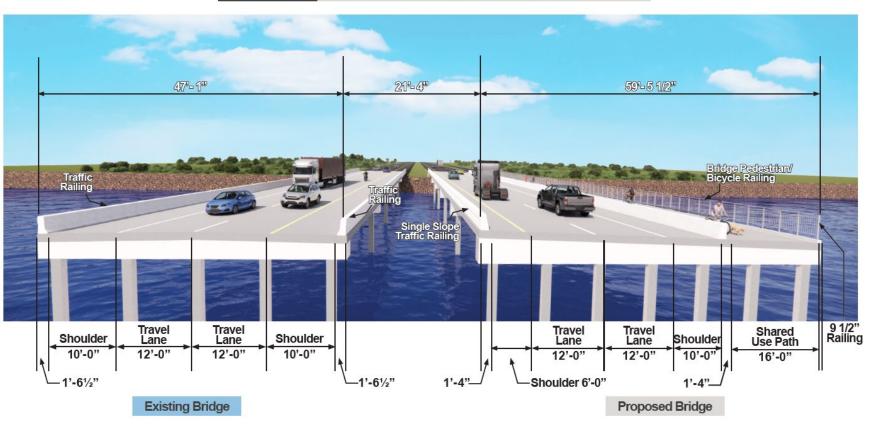


Table 1-1 Evaluation Matrix for Preferred Alternative

	Evaluation Criteria	Preferred Alternative	No-Build Alternative
10	Improves Traffic Conditions including Emergency		
	Evacuation		
BENEFITS	Addresses the Age and Existing Conditions of the		\mathbf{X}
H	Provides Bicycle and Pedestrian Accomodations		
	Enhances Safety for All Users		
	Right-of-Way to be Acquired for Roadway (acres)	206.7	0
¥	Right-of-Way to be Acquired for Off-Site Stormwater	61.7	
M-T-W	Management (acres)	01.7	0
RIGHT-OF-WAY IMPACTS	Number of Parcels Impacted	51	0
도 도	Number of Utilities Impacted	4	0
<u> </u>	Number of Potential Business Relocations	0	0
	Number of Potential Residential Relocations	2	0
	Potential Impacts to Threatened and Endangered	Medium	No Change
	Species	Mediam	No Change
	Direct Impacts to Wetlands and Other Surface Waters	41.7	No Change
ΙΨ	(acres)		
E E	Section 4(f) / Public Recreation and Conservation	2.5	No Change
N N	Number of Historic Sites Potentially Impacted	27	No Change
IIR(Archaeological Sites Probability	1 (Moderate to High)	No Change
ENVIRONMENTAL	Number of Noise-sensitive Sites Potentially Impacted	7	No Change
	Potential Contamination Sites (high/medium risk)	1 (Medium)	No Change
	Impacts to Farmland (acres)	182.5	No Change
	Impacts to Floodplain (acres)	208.8	No Change
	Design	\$18,607,000	\$0
	Right-of-Way Acquisition	\$13,985,000	\$0
H S	Roadway Construction	\$124,047,000	\$0
ESTIMATED COSTS	Construction Engineering and Inspection (CEI)	\$18,607,000	\$0
≧ö	Utility Relocation	\$77,281,000	\$0
	Wetland Mitigation	\$1,426,000	\$0
	Species Mitigation	\$206,000	\$0
	Total Project Costs	\$254,159,000	\$0

1.6 List of Technical Documents

The technical reports prepared in support of this study and their respective completion dates are listed in **Table 1-2**.

Table 1-2 List of Technical Documents

Document	Date
Planning Studio Involvement	
S.R. 70 Corridor Vision	September 2020
Public Involvement	
Advance Notification Package	June 2023
Public Involvement Plan	July 2023
Public Hearing Transcript	TBD
Comments and Coordination Report	TBD
Engineering	
Design Traffic Technical Memorandum	July 2023
Project Traffic Analysis Report	April 2024
Access Management Plan Technical Memorandum	July 2024
Location Hydraulics Report	November 2025
Roadway Geotechnical Report – Phase 1	August 2024
Pond Siting Report	October 2025
Preliminary Engineering Report	TBD
Utility Assessment Package	September 2025
Environmental	
ETDM Summary Report	June 2023
Contamination Screening Evaluation Report	November 2025
Cultural Resource Assessment Survey for Bridge	June 2024
Cultural Resource Assessment Survey for Mainline	April 2025
Cultural Resource Assessment Survey Addendum	November 2025
Section 106 Case Study	August 2025
Section 106 Memorandum of Agreement (Draft)	October 2025
Farmlands Conversion Impact Rating Form	October 2025
Natural Resources Evaluation	November 2025
Noise Study Report	November 2025
Section 4(f) Forms	November 2025
Conceptual Stage Relocation Plan	November 2025
Water Quality Impact Evaluation	October 2025
Sole Source Aquifer Documentation	August 2025
Type 2 Categorical Exclusion	TBD

2.0 EXISTING CONDITIONS

2.1 Previous Planning Studies

The S.R. 70 from I-75 to St. Lucie County Line Corridor Vision Report (September 2020) was prepared by the FDOT District One Planning Studio. The Planning Studio ensures that transportation projects and strategies align with community visions. The culminating product of the Planning Studio process is a Corridor Vision and Action Plan. It includes an integrated land use and transportation vision for the subject corridor and supporting implementation plan of multi-modal transportation strategies and complementary land use policies. This community-based evaluation determines how best to serve the needs of current and future users of the corridor and establishes a long-term plan to guide evolution of the corridor toward the intended vision.

The corridor public survey results, as detailed in the report, reinforce the need to improve roadway safety and capacity. Survey participants prioritized investments along the S.R. 70 corridor ranking roadway safety and capacity as the top priority, with roadway lighting as the second priority. The Corridor Vision Report includes a potential typical section for the roadway consisting of four (4) lanes of traffic, two in each direction separated by a median; paved shoulders; a shared-use path on one side of the roadway; and context-appropriate street lighting.

Following completion of this Corridor Vision Report, several PD&E Studies along S.R. 70 in DeSoto, Highlands, and Okeechobee Counties were programmed. This PD&E Study is one of this series of projects. Like the other PD&E Studies, this PD&E Study was guided by the Corridor Vision Report for the development of the roadway typical section including accommodation for a shared-use path and consideration of wildlife crossings.

2.2 Existing Roadway Conditions

2.2.1 Roadway Typical Sections

The existing S.R. 70 cross section and geometric features do not meet the criteria for a SIS facility or for accommodating heavy truck traffic volumes (greater than 10%), specifically the travel lane width, paved shoulder width, guardrail distance from travel lanes, and lack of a median. Within the project limits, S.R. 70 is a two-lane, undivided facility with 10-foot travel lanes (one in each direction), six-foot shoulders (four-foot paved) and no pedestrian or bicycle facilities. The Okeechobee section has 12-foot lanes and 12-foot shoulders, four-feet of which are paved. Portions of the study area have guardrail on one or both sides of the road, only seven (7) or eight (8) feet from edge of pavement of the travel lanes. Stormwater runoff is collected in roadside ditches and swales and ultimately conveyed to the Kissimmee River. There are no signalized intersections along the corridor. The intersection of S.R. 70 and C.R. 721 South has a flashing yellow on S.R. 70 and a flashing red with STOP-control on the C.R. 721 South approach to S.R. 70. S.R. 70 to the west and east of this project segment similarly is characterized by a two-lane, undivided

roadway facility. However, there are ongoing PD&E Studies to evaluate the expansion of those typical sections to a divided, four-lane roadway, similar to this project.

Overhead and buried utilities vary in location along the corridor. This includes the FPL high voltage transmission lines along the north side of S.R. 70 and the FGT line which runs parallel to and outside the existing ROW but also varies in location north and south of S.R. 70 and crosses the corridor in at four (4) locations. There are agricultural lands along both sides of the project limits. **Figure 2-1** provides a photograph of the existing roadway and **Figure 2-2** depicts the existing typical section for S.R. 70.

Figure 2-1 Existing Roadway Photograph



Right-of-Way

Right-of-Way

Right-of-Way

Right-of-Way

Asymptotyles

Right-of-Way

Right-of-Way

Right-of-Way

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Figure 2-2 Existing Roadway Typical Section

2.2.2 Roadway Functional & Context Classifications

The roadway is classified as a "Rural Principal Arterial - Other" throughout the project study limits. The posted speed limit is 60 MPH. The context classification is C2 – Rural. S.R. 70 is also a designated hurricane evacuation route as per the FDEM. As part of Florida's SIS highway network, S.R. 70 connects regionally important routes (such as I-75, US 27, Florida's Turnpike, and I-95) as well as serves as a regional through route for long-haul truck volumes and provides access to agricultural/ranching operations, industrial/commercial areas, and other intensive freight activity centers within Central Florida.

2.2.3 Access Management Classification

S.R. 70 is currently a two-lane, undivided roadway with non-restrictive access, classified as Access Class 3 according to FDOT Access Management Classification resource data. The required minimum spacing for access connections is 660 feet. Directional median openings must be spaced at least 1,320 feet apart, while full median openings require a minimum spacing of 2,640 feet. The minimum spacing between traffic signals is also 2,640 feet. with a non-restrictive access classification.

2.2.4 Right-of-Way

The ROW information was obtained from FDOT ROW maps, as-built plans for S.R. 70, and property appraiser maps from Highlands and Okeechobee Counties. Generally, the ROW along the corridor is 100 feet in width within the project limits but is approximately 70 feet on the west side of the project limits,

in Highlands County. Within the existing ROW, the current S.R. 70 horizontal alignment is centered between the north and south ROW boundary.

There are utility easements for the FPL high voltage overhead transmission line and FGT buried gas transmission within the project limits. The FPL easement runs along the north side of S.R. 70 and the FGT line runs varies in location north and south of S.R. 70 as it crosses the corridor at four (4) locations.

Adjacent Land Use 2.2.5

The majority of the existing land use adjacent to S.R. 70 includes undeveloped areas associated with agricultural lands used for sod farming, cropland, and pasture. Low and medium-density residential uses are present near the Kissimmee River area. The primary developments along the corridor include Kissimmee River Estates and the Kissimmee River Fishing Resort residential communities. A large recreational and conservation land use is the Kissimmee River Public Use Area (PUA), under the jurisdiction of the SFWMD. Figure 2-3 depicts existing land use within the project area.



Figure 2-3 Existing Land Use Map

2.2.6 Pavement Type and Condition

S.R. 70 is an asphalt paved roadway throughout the study area. According to the Pavement Condition Survey for Highlands County dated August 29, 2025, pavement along the corridor has an average cracking rating of 7.0 and an average ride rating of 7.9. The roadway was resurfaced within the project limits in 2014. According to the Pavement Condition Survey for Okeechobee County dated August 29, 2025, pavement along the corridor has an average cracking rating of 5.5 and an average ride rating of 7.8. The roadway was resurfaced within the project limits in 2004. Ratings less than 6.5 indicate that the pavement is deficient.

2.2.7 Existing Design and Posted Speed

Based on the as-built plans, the existing design speed is 65 MPH. The existing posted speed limit is 60 MPH.

2.2.8 Horizontal Alignment

The existing horizontal alignment contains three horizontal curves, as shown in **Table 2-1**. The existing curves meet current design criteria.

Table 2-1 Existing Horizontal Alignment

Baseline PI	Bea	aring	Degree of	Radius	Length	
Station	Back	Ahead	Curvature			
88+90.54	N53°41'17"E	N89°55'48"E	04°00'00"	1,432.40 ft	906.05 ft	
380+70.85	N89°55'34"E	N64°33'27"E	03°35'00"	1,598.95 ft	707.96 ft	
442+43.13	N64°28'35"E	N89°56'42"E	03°34'52"	1,600.00 ft	711.22 ft	

The data for the horizontal alignment was sourced from existing FDOT design plans along the project segment, consisting of S.R. 70 from West of Harney Pond Canal to Slough Ditch (FPID 425226-1-52-01), S.R. 70 from East of Slough Ditch to Okeechobee County Line (FPID 425227-1-52-01) and S.R. 70 from County Line to SW 21st Avenue (FPID 445474-1-52-01).

2.2.9 Vertical Alignment

The data source for the vertical alignment was obtained from the 2018-2020 USGS LiDAR Digital Elevation Model (DEM). The vertical alignment is flat due to the flush shoulder; stormwater runs off the pavement to the roadside edges. According to the National Geodatic Survey controls, the roadway profile is at an elevation of 9.7 feet (North American Vertical Datum of 1988 (NAVD 88)) near the western terminus of the project west of C41-A Canal and ends at an elevation of 9.3 feet NAVD 88 at the eastern terminus at SW 128th Avenue. The elevation rises to 10.6 feet NAVD88 at the Slough Ditch (C41-A) Canal bridge and to 13.0 feet NAVD 88 at the Kissimmee River bridge.

2.2.10 Multi-modal Facilities

There are no existing pedestrian or bicycle facilities within the study limits. Public transit (bus) service is not currently provided within the study corridor and there is no future service identified in the HRTPO 2045 cost-feasible LRTP.

2.2.11 Intersections

All intersections within the project limits are three or four-legged and two-way STOP-controlled (TWSC) intersections in which the single minor-street approach is controlled by a STOP sign. The intersection of S.R. 70 and C.R. 721 South also has a flashing red light on the side street approach to S.R. 70. There is a single right turn lane on westbound S.R. 70 between C.R. 721 North and the Slough Ditch (C-41A) Canal at the Lykes Brothers property entrance. The existing intersection lane geometry is shown in **Appendix E**.

2.2.12 Physical or Operational Restrictions

There are narrow shoulders, consisting only of six (6) feet, of which four (4) feet are paved. Also, there are no pedestrian or bicycle facilities. These pose an operational restriction in the current condition. Fixed objects include guardrail on one or both sides of the road, with existing lateral offset as limited as eight (8) feet from edge of travel lane and should be 12 feet. Guardrail is also present on both sides of the road at the bridge approaches to the Slough Ditch (C-41A) Canal bridge and the Kissimmee River bridge. While the Slough Ditch Canal bridge has 12-foot wide shoulders on each side with concrete barrier, the Kissimmee River Bridge has only two (2) feet between the edge of travel lane and raised foundation for the concrete railing.

2.2.13 Traffic Data

Traffic counts were conducted in November 2022 (weekdays prior to the Thanksgiving holiday week). The existing AADT volumes within the project limits range from 5,600 to 6,200 vehicles per day (VPD) and are depicted in **Table 2-2**. Count data was examined and the common weekday AM peak hour (7:45 – 8:45 AM) and PM peak hour (3:45 – 4:45 PM) were identified. **Appendix E** displays the existing AADT and turning movement counts (TMC) (AM and PM peak) for all study intersections. There were no pedestrians or bicyclists recorded during the TMC data collection; however, one (1) golf cart was recorded crossing NW Riverside Road. There is no transit in the study area.

Table 2-2 Existing Year (2022) Traffic Volumes

Location	Site Number	AADT	К	D	T (Daily)	
S.R. 70 Segment					•	
S.R. 70, west of C.R. 721 South	090003	5,600	9.5%	59.9%	29.4%	
S.R. 70, east of C.R. 721 South	090020	5,800	9.5%	59.9%	28.1%	
S.R. 70, east of Kissimmee River	910003	6,200	9.5%	58.1%	24.4%	
Side Street Segment						
C.R. 721, south of S.R. 70	090100	1,900	9.5%	59.6%	16.9%	
C.R. 721, north of S.R. 70	094187	700	9.5%	59.6%	16.9%	
CR 599/128 th Avenue, north of S.R. 70	914024	400	9.5%	58.1%	26.7%	

Using this traffic count data and forecasting tools, including the District 1 Regional Planning Model (D1RPM) and trends analysis, the FDOT, District 1 developed existing year (2022), opening year (2032), and design year (2052) Annual Average Daily Traffic (AADT) volumes and AM and PM peak hour turning movement volumes as part of the S.R. 70 Design Traffic Technical Memorandum (DTTM), completed in July 2023 under separate cover and included in the project file. The DTTM covered the entirety of S.R. 70 in Highlands County from the Desoto County Line to the Okeechobee County Line and the section of S.R. 70 in Okeechobee County from the Highlands County Line to CR 599/128th Avenue.

2.2.14 Roadway Operational Conditions

The rural arterial Standard K factor of 9.5% was recommended for all study roadway segments and an average daily T factor of 25.0%, calculated from the classification counts and historical traffic information, and a design hour truck (DHT) of 12.5% were recommended for the mainline. The DHT is the percentage of truck traffic during the design peak hour and is recommended as one-half of the T factor based on the FDOT Project Traffic Forecasting (PTF) Handbook. Classification counts were conducted on C.R. 721 South and C.R. 721 North, immediately south and north of S.R. 70, respectively. No other classification counts were conducted for the side streets within the study area. An average D factor of 58.0% for the mainline calculated from the classification counts and historical traffic information was recommended for the mainline. However, the measured D values for the side streets were recommended for this project as no other traffic information is available for the side streets. The measured D values for the side streets were within the allowable range in accordance with the PTF Handbook. The selected design traffic factors were approved by the Department prior to the development of future traffic projections and as outlined in the DTTM (July 2023). These design factors for the S.R. 70 segment from C.R. 721 South to CR 599/128th Avenue are shown in **Table 2-3**. These factors along with the existing traffic volumes were used for the existing (2022) intersection and segment level of service (LOS) analysis.

Table 2-3 Selected Traffic Design Factors

Intersection Name	Intersection Leg	D Factor	AM Direction	PM Direction	Hourly T Factor	K Factor
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
C.D. 721 South	West (S.R. 70)	58.0%	EB	EB	16.0%	9.5%
C.R. 721 South	North (Driveway)	60.0%	-	SB	7.5%	9.5%
	South (C.R. 721)	70.0%	SB	NB	7,5%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
C.R. 721 North	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	North (C.R. 721)	60.0%	SB	NB	7.5%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
D 1 (5.1 T	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
Boney Lane/Fulmer Terrace	North (Boney Lane)	70.0%	SB	NB	7.5%	9.5%
	South (Fulmer Terrace)	60.0%	SB	NB	7.5%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
NW New Pine Ridge Road	North (NW New Pine Ridge Road)	60.0%	NB	SB	12.5%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
NW 175th Terrace	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	North (NW 175th Terrace)	60.0%	SB	-	5.0%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
Jordan Terrace/SW Rucks Dairy	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
Road	North (Jordan Terrace)	60.0%	SB	NB	5.0%	9.5%
	South (SW Rucks Dairy Road)	70.0%	NB	SB	7.5%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
NW Riverside Road	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
Jordan Terrace/SW Rucks Dairy Road NW Riverside Road	North (NW Riverside Road)	70.0%	SB	NB	5.0%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
C.R. 721 South C.R. 721 North Boney Lane/Fulmer Terrace NW New Pine Ridge Road NW 175th Terrace Jordan Terrace/SW Rucks Dairy Road	North (Shellcracker Loop)	60.0%	SB	NB	5.0%	9.5%
	South (Driveway)	60.0%	SB	-	5.0%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
Bream Cove	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	North (Bream Cove)	55.0%	-	NB	5.0%	9.5%
	East (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
SW 144th Parkway	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
,	South (SW 144th Parkway)	70.0%	NB	SB	5.0%	9.5%
	East (S.R. 70)	58.0%	EB	EB	12.5%	9.5%
NW 141st Avenue	West (S.R. 70)	58.0%	WB	EB	12.5%	9.5%
	North (NW 141st Avenue)	60.0%	SB	SB	5.0%	9.5%
	East (S.R. 70)	58.0%	EB	EB	12.5%	9.5%
CR 599/	West (S.R. 70)	58.0%	EB	EB	12.5%	9.5%
	North (CR 599)	70.0%	SB	NB	12.5%	9.5%
120th / Wellide	South (128th Avenue)	60.0%	- JD	-	10.0%	9.5%

Table 2-4. Existing intersection operational analysis was determined using the Synchro 11 and Highway Capacity Manual (HCM) 6th Edition/Highway Capacity Software (HCS) Version 2023 methodologies, as per the project's approved traffic analysis methodology.

Table 2-4 Existing Year (2022) Intersection LOS Analysis

Intersection	Period	Intersection	Eastbound Approach	Westbound Approach	Northbound Approach	Southbound Approach	Max V/C*	
Name	Period	Delay in sec/veh (LOS)	(Mvmt)					
C.R. 721 South**	AM Peak	2.8 (A)	0.0 (A)	7.8 (A)	10.5 (B)	13.7 (B)	-	
C.R. 721 30util	PM Peak	4.2 (A)	7.6 (A)	7.8 (A)	12.4 (B)	13.7 (B)	-	
C.R. 721 North	AM Peak	1.2 (A)	0.9 (A)	0.0 (A)	-	10.3 (B)	0.05 (SB)	
C.R. 721 NORTH	PM Peak	1.3 (A)	0.8 (A)	0.0 (A)	-	11.4 (B)	0.07 (SB)	
Boney	AM Peak	0.2 (A)	0.0 (A)	0.2 (A)	9.1 (A)	11.7 (B)	-	
Lane/Fulmer Terrace	PM Peak	0.2 (A)	0.0 (A)	0.2 (A)	10.9 (B)	0.0 (A)	0.01 (NB)	
NW New Pine	AM Peak	0.1 (A)	0.1 (A)	0.0 (A)	0.0 (A)	9.8 (A)	-	
Ridge Road	PM Peak	0.1 (A)	0.0 (A)	0.0 (A)	0.0 (A)	13.1 (B)	0.01 (SB)	
NW 175 th			0.2 (A)	0.0 (A)	-	11.2 (B)	0.02 (SB)	
Terrace	PM Peak	0.3 (A)	0.1 (A)	0.0 (A)	-	11.4 (B)	0.02 (SB)	
Jordan Terrace/	AM Peak	0.7 (A)	0.0 (A)	0.0 (A)	9.4 (A)	12.6 (B)	0.04 (SB)	
SW Rucks Dairy Road	PM Peak	0.4 (A)	0.0 (A)	0.1 (A)	10.2 (B)	14.0 (B)	0.04 (SB)	
NW Riverside	AM Peak	0.1 (A)	0.0 (A)	0.0 (A)	-	11.5 (B)	0.01 (SB)	
Road	PM Peak	0.0 (A)	0.0 (A)	0.0 (A)	-	9.7 (A)	-	
Shellcracker	AM Peak	0.4 (A)	0.0 (A)	0.1 (A)	9.3 (A)	12.2 (B)	0.03 (SB)	
Loop	PM Peak	0.3 (A)	0.2 (A)	0.0 (A)	14.3 (B)	11.3 (B)	0.02 (SB)	
Bream Cove	AM Peak	0.1 (A)	0.0 (A)	0.0 (A)	-	11.3 (B)	0.01 (SB)	
bream cove	PM Peak	0.2 (A)	0.1 (A)	0.0 (A)	-	11.4 (B)	0.01 (SB)	
SW 144 th	AM Peak	0.4 (A)	0.0 (A)	0.1 (A)	9.6 (A)	-	0.02 (NB)	
Parkway	PM Peak	0.4 (A)	0.0 (A)	0.4 (A)	10.9 (B)	-	0.02 (NB)	
NW 141 st	AM Peak	0.2 (A)	0.0 (A)	0.0 (A)	-	11.8 (B)	0.02 (SB)	
Avenue	PM Peak	0.1 (A)	0.0 (A)	0.0 (A)	-	11.9 (B)	0.01 (SB)	
CR 599/	AM Peak	0.6 (A)	0.1 (A)	0.0 (A)	12.6 (B)	12.0 (B)	0.04 (SB)	
128th Avenue	PM Peak	0.3 (A)	0.1 (A)	0.0 (A)	10.3 (B)	14.5 (B)	0.03 (SB)	

The segment operational analysis for the existing condition was evaluated using the recommended mainline and side street factors outlined in **Table 2-3**. The resultant roadway segment LOS for the existing (2022) AM and PM peak hour conditions are outlined in **Table 2-5**. Existing segment operational analysis was determined using the Highway Capacity Manual (HCM) 6th Edition/Highway Capacity Software (HCS) Version 2023, as per the project's approved traffic analysis methodology and in consideration of the adopted LOS C standard for rural roadways. Density of vehicles and average speed are key considerations in determining arterial LOS. The results indicate that the operation conditions for all segments under the existing condition are acceptable. More detailed information on existing daily and peak hour traffic data

Table 2-5 Existing Year (2022) Segment LOS Analysis

Segment			AM Peak		PM Peak					
Segment	Direction	Demand/ Capacity (D/C)	Density (veh/mi/ln)	Ave Speed (mph)	LOS	Direction	Demand/ Capacity (D/C)	Density (veh/mi/ln)	Ave Speed (mph)	LOS
(1) CR 721 S - CR 721 N	EB	0.10	0.7	66.5	Α	EB	0.21	2.3	65.5	В
(2) CR 721 N - Boney Ln/Fulmer Ter	EB	0.09	0.6	66.7	Α	EB	0.20	2.1	65.7	В
(3) Boney Ln/Fulmer Ter – New Pine Ridge Rd	EB	0.09	0.6	66.7	Α	EB	0.20	2.2	65.7	В
(4) New Pine Ridge Rd – NW 175 th Ter	EB	0.10	0.6	66.7	Α	EB	0.20	2.1	65.7	В
(5) NW 175 th Ter – Jordan Ter/SW Rucks Dairy Rd	EB	0.09	0.6	66.7	Α	EB	0.19	2.1	65.7	В
(6) Jordan Ter/SW Rucks Dairy Rd – NW Riverside Rd	EB	0.11	0.8	66.5	Α	EB	0.20	2.2	65.6	В
(7) NW Riverside Rd – Shellcracker Loop	EB	0.11	0.9	66.4	Α	EB	0.20	2.3	65.7	В
(8) Shellcracker Loop – Bream Curve	EB	0.12	1.0	66.4	Α	EB	0.20	2.2	65.7	В
(9) Bream Curve – SW 144 th Pkwy	EB	0.12	1.0	66.3	Α	EB	0.20	2.1	65.7	В
(10) SW 144 th Pkwy – NW 141 st Ave	EB	0.14	1.3	66.2	Α	EB	0.21	2.4	65.7	В
(11) NW 141 st Ave – CR 599/NW 128 th Ave	EB	0.15	1.3	66.1	Α	EB	0.21	2.2	65.6	В
(1) CR 599/NW 128 th Ave – NW 141 st Ave	WB	0.14	1.2	66.1	Α	WB	0.16	1.5	65.9	Α
(2) NW 141 st Ave – SW 144 th Pkwy	WB	0.14	1.3	66.1	Α	WB	0.17	1.7	65.9	Α
(3) SW 144 th Pkwy – Bream Curve	WB	0.14	1.2	66.1	Α	WB	0.16	1.5	66.0	Α
(4) Bream Curve – Shellcracker Loop	WB	0.18	2.0	65.8	Α	WB	0.16	1.5	66.0	Α
(5) Shellcracker Loop – NW Riverside Rd	WB	0.18	2.0	65.8	Α	WB	0.16	1.6	66.0	Α
(6) NW Riverside Rd – Jordan Ter/SW Rucks Dairy Rd	WB	0.18	1.8	65.8	Α	WB	0.15	1.4	66.0	Α
(7) Jordan Ter/SW Rucks Dairy Rd – NW 175 th Ter	WB	0.17	1.8	65.9	Α	WB	0.14	1.2	66.2	Α
(8) NW 175 th Ter – New Pine Ridge Rd	WB	0.17	1.7	65.9	Α	WB	0.14	1.2	66.2	Α
(9) New Pine Ridge Rd – Boney Ln/Fulmer Ter	WB	0.15	1.4	66.0	Α	WB	0.12	0.9	66.4	Α
(10) Boney Ln/Fulmer Ter – CR 721 N	WB	0.15	1.3	66.1	Α	WB	0.11	0.8	66.4	Α
(11) CR 721 N – CR 721 S	WB	0.15	1.4	66.0	Α	WB	0.12	1.0	66.3	Α

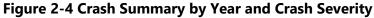
and operational analysis is provided in the Project Traffic Analysis Report (PTAR) (April 2024) prepared for this project under separate cover and included in the project file.

2.2.15 Managed Lanes

There are no managed lanes along the corridor.

2.2.16 Crash Data

Five (5) years of crash data (from January 2018 to December 2022) were obtained from the University of Florida's Signal Four Analytics. One hundred seventeen (117) crashes were reported along the corridor, including five (5) fatal crashes and 73 injury crashes, and no crashes involving pedestrians/bicyclists. **Figure 2-4** displays the crash data by year along with the respective severities.



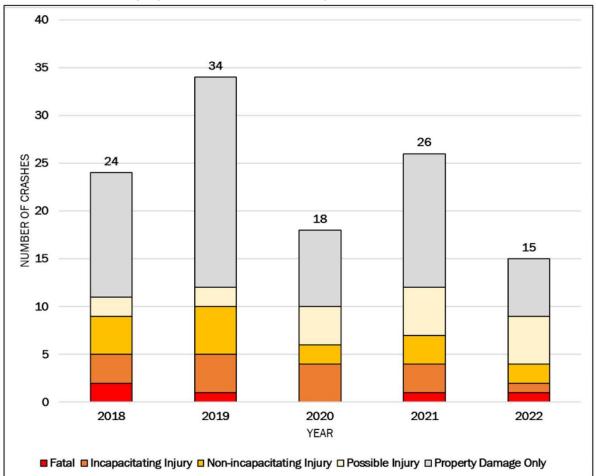


Figure 2-5 summarizes the total crashes based on crash types and reflects fatal and incapacitating injury crashes. The most prominent crash types were off-road (32%), rear end (25%), same direction sideswipes (11%), and animal (9%) crashes.

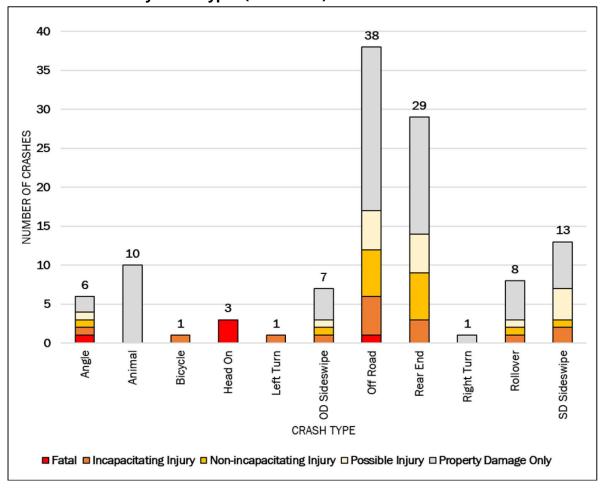


Figure 2-5 Total Crashes by Crash Types (2018-2022)

Environmental factors, including lighting and wet or dry pavement, often influence crashes. As a result, crashes within the S.R. 70 study limits were reviewed to determine if there were any patterns related to environmental factors. **Table 2-6** and **Table 2-7** summarize these crashes by severity and crash type, respectively.

Table 2-6 Dark Lighting and Wet Pavement Crashes by Severity

	Total	Dark L	ighting	Wet Pavement			
Crash Severity	Crashes	Crashes	Percent	Crashes	Percent		
Fatal	5	1	20%	1	20%		
Incapacitating Injury	15	7	47%	1	7%		
Non-Incapacitating Injury	17	10	59%	2	12%		
Possible Injury	18	6	33%	4	22%		
Property Damage Only	62	30	48%	11	18%		
Total	117	54	46%	19	16%		

Table 2-7 Dark Lighting and Wet Pavement Crashes by Crash Type

	Total	Dark L	ighting	Wet Pavement		
Crash Severity	Crashes	Crashes	Percent	Crashes	Percent	
Rear End	29	8	28%	5	17%	
Angle	6	3	50%	1	17%	
Left Turn	1	0	0%	0	0%	
Right Turn	1	1	100%	0	0%	
Head On	3	1	33%	1	33%	
Bicycle	1	1	100%	0	0%	
Same Direction Sideswipe	13	3	23%	2	15%	
Opposite Direction Sideswipe	7	6	86%	0	0%	
Off Road	38	17	45%	7	18%	
Rollover	8	5	63%	2	25%	
Animal	10	9	90%	1	10%	
Total	117	54	46%	19	16%	

Based on the review of the data, the following was determined regarding lighting and wet pavement conditions. Fifty-four (54) (46%) of the 117 crashes occurred under dark-lighting conditions. In addition, out of the 69 lane departure crashes (e.g., head-on, same-direction sideswipe, opposite-direction sideswipe, off-road, and rollover crashes), 32 (46%) occurred under dark-lighting conditions. Lighting is unavailable throughout the S.R. 70 corridor study limits, which could perpetuate dark-lighting crash results. Two (2) (10%) of the most severe crashes (e.g., fatal and incapacitating injury crashes) along the S.R. 70 corridor occurred during wet pavement conditions. In addition, 12 (63%) of the lane departure crashes occur during wet pavement conditions.

Crash data was also reviewed for intersections and roadway segments. Intersection areas were determined based on turn lane lengths or 300 feet from the center of the intersection. Minor intersections were included in relevant segments. **Figure 2-6** provides a crash heat map and **Table 2-7** and **Table 2-8** compare the intersection and segment locations by crash type, followed by detailed summaries of the study intersections and segments of interest with the highest number of crashes, or any significant or

NORTH N. T. S. HIGHLANDS 8 Crash Type Countil G-490A Angle Animal Bicycle Crash Counts 0-1 Crash Head On Left Turn

G L A D E S C O U N T Y

Figure 2-6 Total Crashes Heat Map

Table 2-7: S.R. 70 Intersection Locations by Crash Types

y y 1													
Intersecting Road	Rear End	Angle	Left Turn	Right Turn	Head On	Bicycle	Same Direction Sideswipe	Opposite Direction Sideswipe	Off Road	Rollover	Animal	Total	Percent of Total
CR 721 South	6	3	0	1	0	0	2	1	11	1	4	29	47%
CR 721 South	0	3	0		0	0			11		4	29	4170
CR 721 North	2	1	0	0	0	0	1	0	2	1	0	7	11%
Fulmar Terrace	1	2	1	0	0	0	2	1	1	0	0	8	13%
New Pine Ridge Road	1	0	0	0	0	0	0	0	2	1	0	4	6%
Roau		0	0	0	0	0	0	0	2	1	0	4	6%
Rucks Dairy Road	2	0	0	0	0	0	2	0	1	1	0	6	10%
CR 599													
(128th Avenue)	3	0	0	0	0	0	1	0	1	2	1	8	13%
Total	15	6	1	1	0	0	8	2	18	6	5	62	

2-5 Crashes

6-10 Crashes

11-15 Crashes

15-39 Crashes

40-45 Crashes

Off Road

O Rear End

o Right Turn

Rollover

Table 2-8: S.R. 70 Segment Locations by Crash Types

Segment Location	Segment Length (mi)	Rear End	Angle	Left Turn	Right Turn	Head On	Bicycle	Same Direction Sideswipe	Opposite Direction Sideswipe	Off Road	Rollover	Animal	Total	Percent of Total
CR 721 South to														
CR 721 North	2.75	1	0	0	0	2	1	0	0	5	1	1	11	20%
CR 721 North to														
Fulmar Terrace	1.51	1	0	0	0	1	0	2	4	3	0	0	11	20%
Fulmar Terrace to														
New Pine Ridge Road	0.51	1	0	0	0	0	0	0	0	0	0	1	2	4%
New Pine Ridge Road to														
Rucks Dairy Road	1.01	1	0	0	0	0	0	1	0	3	1	0	6	11%
Rucks Dairy Road to														
CR 599 (128th Avenue)	2.78	10	0	0	0	0	0	2	1	9	0	3	25	45%
	Total	14	0	0	0	3	1	5	5	20	2	5	55	

notable trends. Future conditions crash analysis will use the Highway Safety Manual (HSM) predictive method to evaluate no-build and build conditions. The crash data was analyzed to determine the predominant locations where crashes occurred during the five-year period. The following is a summary of this information from an intersection and segment consideration.

Intersection

Overall Intersection Discussion

- The estimated crash rate for each study intersection was higher than the average districtwide crash rates of 0.223 and 0.400 crashes per million entering vehicles for three and four-leg intersections, respectively.
- There were eight (8) same-direction sideswipe crashes and 15 rear-end crashes reported at the intersections. The absence of turn lanes along the corridor intersections could be contributing to these crashes.

Intersection 1 – S.R. 70 at C.R. 721 South

- The intersection experienced the most crashes compared to the other intersections within the study area, with 47% of the intersection crashes.
- There were 16 crashes at the intersection, three (3) of which were fatal, and 13 resulted in injuries. One (1) injury crash was categorized as incapacitating, and six (6) were categorized as non-incapacitating.
- Eleven (11) off-road crashes were reported at the intersection.
- The estimated crash rate was the highest between the intersections, resulting in 2.740 crashes per million entering vehicles, higher than the districtwide crash rate of 0.223 crashes per million entering vehicles.

Segment

Overall Segment Discussion

- In four (4) out of five (5) study segments, the estimated crash rate was lower than the average districtwide crash rate of 0.757 crashes per million vehicle miles traveled for an undivided rural road. Access points on rural two-lane roadways can pose a challenge due to higher vehicle speeds than the speed limits, poor lighting conditions, and concerns about sight distance.
- There were a total of 20 off-road crashes and two (2) rollover crashes reported on the study segments. These accidents were likely caused by high speeds and the inability of drivers to return to the travel lanes, resulting in loss of control and crashes.

Segment 1 – C.R. 721 South to C.R. 721 North

- From the eleven (11) crashes experienced along the 2.75 miles segment, two (2) were reported as fatal and eight (8) as injury crashes. Four (4) injury crashes were categorized as non-incapacitating and one as incapacitating.
- One (1) bicycle crash was reported along the segment when an eastbound bicyclist riding along the S.R. 70 shoulder was hit by an eastbound vehicle. The crash resulted in one incapacitating injury.
- Eight (8) lane departure crashes were reported along the segment, including two (2) headons, one (1) rollover, and six (6) off-road crashes.

Segment 5 – SW Rucks Dairy Road to CR 599/128th Avenue

- The segment had the highest number of crashes, accounting for 45% of all crashes along segments.
- Twelve (12) lane departure crashes were reported along the segment, including two (2) same-direction sideswipes, one opposite-direction sideswipe, and nine (9) off-road crashes.

Widening the two-lane undivided roadway to a four-lane divided roadway provides several safety benefits. One of the main benefits is that it is expected to reduce delays and the amount of stopping on the major road, which can help lower the number of crashes. Additionally, the proposed expansion, with the raised median and designated median openings, will restrict turning movements, which can also contribute to increased safety. Currently, the study area lacks sufficient pedestrian and bicycle facilities.

2.2.17 Railroad Crossings

There are no railroad crossings within the study limits.

2.2.18 Drainage

The project drains to two (2) maintained canals owned by SFWMD: Kissimmee River (C-38 Canal) and the Slough Ditch (C-41A) Canal. The approximate range in elevation within the vicinity of the project is from 10.5 feet-59.9 feet based on the DEM data collected. The Florida Department of Environmental Protection (FDEP) statewide comprehensive verified list of impaired waters was reviewed to identify any impaired Florida waterbody identification numbers (WBIDs). The project study limits fall within WBID 3198 (impaired for nutrients), 3202 (Impaired for nutrients), 3206 (impaired for dissolved oxygen), and 3209 (un-impaired). Runoff is split along the centerline of the road and sheet flows directly into adjacent ditches that are interconnected by side drains that ultimately outfall into the SFWMD canals mentioned previously. There are no formal water quality treatment facilities within the S.R. 70 ROW.

Existing Drainage Basins

The existing drainage patterns along S.R. 70 consist of roadway runoff sheet flowing to roadside swales and then ultimately conveyed to the Kissimmee River (C-38 Canal) and Slough Ditch (C-41A) Canal. There are six (6) existing drainage basins along the S.R. 70 corridor. An existing drainage map is provided in **Appendix F** and a description of each existing basin follows.

Basin 1 begins at station 400+00.00 and continues to station 456+50.00 which is midway on the Slough Ditch (C-41A) Canal bridge. The roadway runoff is collected and conveyed to the east in roadside swales to the Slough Ditch (C-41A) Canal. The roadside swales also collect offsite runoff from the north which is conveyed to the Slough Ditch (C-41A) Canal.

Basin 2 begins at station 456+50.00 which is midway on the Slough Ditch (C-41A) Canal bridge and continues west to station 641+00.00. The roadway runoff is collected and conveyed in roadside swales to the west to the Slough Ditch (C-41A) Canal. The roadside swales also collect offsite runoff from the north which is conveyed to the Slough Ditch (C-41A) Canal.

Basin 3 begins at station 510+00.00 and continues to station 569+00.00. The roadway runoff is collected and conveyed to the east in roadside swales to a 60-inch crossdrain located at station 569+00.00. This crossdrain conveys S.R. 70 runoff and offsite runoff to the south via a small drainage ditch to the Slough Ditch (C-41A) Canal. The roadside swales also collect offsite runoff from the north which is conveyed to the mentioned crossdrain.

Basin 4 begins at station 569+00.00 and continues to station 693+00.00. The roadway runoff is collected and conveyed west in roadside swales to a 60-inch crossdrain located at station 569+00.00. This crossdrain conveys S.R. 70 runoff and offsite runoff south via a small drainage

ditch to the Slough Ditch (C-41A) Canal. The roadside swales also collect offsite runoff from the north which is conveyed to the mentioned crossdrain.

Basin 5 begins at station 693+00.00 and continues to station 785+34.75 which is midway on the Kissimmee River (C-38 Canal) bridge. The roadway runoff is collected and conveyed to the east in roadside swales to the Kissimmee River (C-38 Canal). The roadside swales also collect offsite runoff from the north which is conveyed to the Kissimmee River (C-38 Canal).

Basin 6 begins at station 785+34.75 which is midway on the Kissimmee River (C-38 Canal) bridge and continues to station 882+50.00. The roadway runoff is collected and conveyed to the west in roadside swales to the Kissimmee River (C-38 Canal). The roadside swales also collect offsite runoff from the north which is conveyed to the Kissimmee River (C-38 Canal).

Existing Cross Drains

There is a total of five (5) cross drains within the project, two (2) of which are bridges. A summary of cross drains is shown below in **Table 2-9**.

Table 2-9 Existing Cross Drains

		9				
Cross Drain	Barrels	Size	Material	Existing Length (ft)	Mile Post	Notes
CD-1	1	24"	RCP	56	29.253	
CD-2	2	60"	RCP	65	33.606	
CD-3	1	15"	RCP	72	36.258	
Bridge	N/A	N/A	N/A	211	30.118	Slough Ditch (C-41A) Canal Bridge
Bridge	N/A	N/A	N/A	422.4	0.000	Kissimmee River (C-38 Canal) Bridge

RCP = reinforced concrete pipe

Floodplains/Floodways

This project is located within Federal Emergency Management Agency (FEMA) Insurance Rate Maps (FIRMs) 12055C0580C, 12055C0585C, and 12055C0605C in Highlands County and 12093C0455C in Okeechobee County. These FIRMs were used to identify potential floodplain and floodway encroachments. The entire project limits are within FEMA flood zone A. These floodplains outfall to the Slough Ditch (C-41A) Canal and Kissimmee River (C-38 Canal) which are not designated as regulated floodways. According to the FEMA Flood Zone A definition: "The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. A Special Flood Hazard Area (SFHA) is the area subject to flooding by the 1% annual chance flood." The only SFHA within the project corridor is Zone A. Zone A designates base flood zones with no flood elevation. Figure 2-7 depicts a FEMA floodplain map covering the project study area.

PANEL NO. 1205SC044SC eff. 1118/2015

PANEL NO. 1205SC044SC eff. 1118/2015

PANEL NO. 1205SC045SC eff. 1118/2015

PANEL NO. 1205SC045SC eff. 1118/2015

PANEL NO. 1205SC050SC eff. 1118/2015

Figure 2-7 FEMA Floodplain Map

Source: FEMA Flood Insurance Rate Map (April 2024)

2.2.19 Lighting

There is no lighting along the corridor in the current condition.

2.2.20 Utilities

The Utility Agency/Owners (UAOs) were determined using a variety of sources. A Sunshine 811 Design Ticket was requested and a field review was conducted. Above ground utility features were noted and verified with the utility providers and operators during the coordination process for the project. Base maps were sent to utility providers with a request to provide information on existing and planned utilities within the project area. The final source of data collection was from As-built plans along or adjacent to the study area. Correspondence and sketches of the existing and planned utilities are compiled into a Utility Assessment Package (September 2025), prepared under separate cover and included in the project file. **Table 2-10** summarizes utility type, location and name of utility company/owner.

Table 2-10 Existing Utility Owners

Company	Contact	Locations
Comcast	Wesley Vaughn (863) 265-9084 Wesley_vaughn@comcast.com	Buried CATV under S.R. 70 near SW 144th Parkway and along north side of S.R. 70 for limited distance Overhead CATV on power poles on north side of S.R. 70 in 2 locations and crossing S.R. 70 near SW 128 th Ave.
Florida Gas Transmission	Joseph E. Sanchez (407) 808-4607 Joseph.e.sanchez@energytrans fer.com	30-inch gas pipeline within a private easement on north side of S.R. 70 outside of ROW starting at west end of project; crossing to south of S.R. 70 just west of Mose Grade Road, running on south side of S.R. 70 to just east of Rucks Dairy Road where it crosses to north side, then crosses S.R. 70 to south side west of Riverside Road, then runs along south side to east of 145st St where it crossing back to the north side
Florida Power & Light Distribution	Chris McJunkin (941) 267-7474 Chris.mcjunkin@fpl.com	Overhead Electric running along the north side of S.R. 70 outside the ROW on private easement with numerous S.R. 70 crossings between power poles throughout the corridor including at intersections
Florida Power & Light Transmission	Craig B. Ledbetter (561) 532-7082 Craig.ledbetter@fpl.com	Overhead Electric on north side of S.R. 70 within private easement outside the S.R. 70 ROW
Lumen/ Centurylink	Kenneth R. Lutz (863) 214-1490	Buried Telephone/ Fiber on the south side of S.R. 70 with numerous S.R. 70 crossings throughout the corridor including at intersections

2.2.21 Soils and Geotechnical Data

The soil types that occur within the study area were determined using the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Geographic Information Systems (GIS) soil layer – see **Appendix G** for a soils map. Common soil types within the study area are Immokalee Sand, 0-2% Slopes, and Basinger Fine Sand, 0-2% Slopes.

Subsurface conditions along the project alignment were explored by 92 hand augers to depths of six (6) feet. Soil types encountered in the borings include A-3 (sand and sand with silt), A-2-4 (silty sand and silty sand with some organics), and wood debris. A review of the USDA soil survey indicates muck within the project area. Although not encountered in the borings performed, isolated pockets of muck may be present.

The depths to the groundwater table ranged from two (2) to six (6) feet below the existing ground surface. Groundwater conditions vary with environmental variations and seasonal conditions, such as the frequency and magnitude of rainfall patterns, as well as man-made influences (i.e., existing water management canals, swales, drainage ditch, underdrains and areas of covered soils, such as paved parking lots and sidewalks). The estimated seasonal high groundwater table levels at these locations ranged from the existing ground surface to approximately two (2) feet below the existing ground surface. In general, the estimated seasonal high groundwater table levels were based on soil stratigraphy, measured groundwater levels from the borings, Highlands County and Okeechobee County, Florida USDA Soil Survey information, and experience with similar soil conditions.

2.2.22 Aesthetics Features

There are no noteworthy aesthetics features located along the corridor aside from the Kissimmee River crossing.

2.2.23 Traffic Signs

There are no overhead signs within the project limits. Any signage along the corridor is related to regulatory signage (i.e., speed limit, STOP sign, etc.).

2.2.24 Noise Barriers and Perimeter Walls

There are no existing noise walls or perimeter walls located along the corridor.

2.2.25 ITS and TSM&O Features

There are no existing Intelligent Transportation Systems (ITS) or Transportation System Management and Operations (TSM&O) features located along the corridor.

2.3 Existing Bridges and Structures

There are two (2) bridge structures along S.R. 70 within the study limits. **Table 2-11** provides a summary of the existing bridge structures.

Table 2-11 Existing Roadway Bridges

Bridge	Location	Approx. Bridge	Year Built/	Sufficiency	Health
Number		Length	Reconstructed	Rating	Index
090053	S.R. 70 over Slough Ditch (C-41A) Canal	7 spans x 30.5 feet= 213.5 feet	2000	86.4	91.55
910001	S.R. 70 over Kissimmee River (C-38 Canal)	7 spans x 60 feet = 420 feet	1966 with 2012 repairs	70.9	83.65

The summary of existing conditions prepared for the bridges indicated above are based on the most recent above water and underwater inspection reports and construction plans available.

Bridge No. 090053 (S.R. 70 over Slough Ditch (C-41A) Canal): This bridge was built in the year 2000, and it is owned and maintained by FDOT. The typical section is comprised of two (2) 12-foot lanes and 10-foot shoulders (44 feet between the gutter lines). The traffic railing along the deck edges is 32 inches high. This seven-span reinforced concrete continuous flat slab bridge is 210 feet long (seven spans x 30 feet). The thickness of the reinforced concrete slab is 15.75 inches and has crown shape with 2% slope towards the gutter lines. The concrete bents are comprised of three-foot x two-foot-six-inch pile cap and 18-inch piles. The Bridge Inspection Report dated April 26, 2023 states that the load rating from December 23, 2009 has an inventory rating of 52.7 tons (Rating Factor of 1.46). The condition of the superstructure is classified as "Good". **Figure 2-8** depicts the existing bridge typical section for Bridge Number 090053.

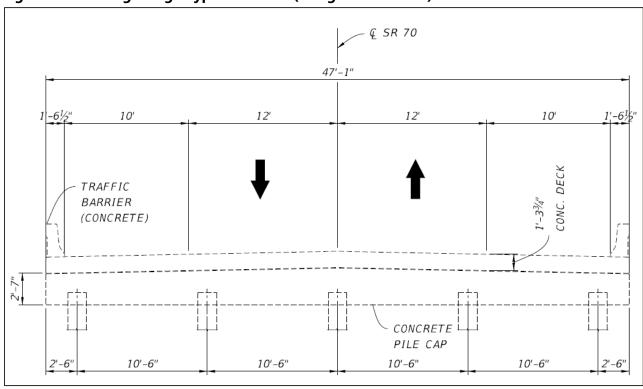


Figure 2-8 Existing Bridge Typical Section (Bridge No. 090053)

The following list is created per PD&E Manual recommendations, Section 3.2.3.3.1, Existing Bridges and Structures:

- 1. Bridge number: 090053
- 2. Bridge Type: Reinforced concrete continuous flat slab
- 3. Typical Section: Two (2) 12-foot travel lanes with 10-foot shoulders

- 4. Facility crossed (waterway, roadway, or railroad): Slough Ditch (C-41A) Canal
- 5. Year structure was built and/or modified: 2000
- 6. Type of structure Timber, concrete, or steel: Concrete
- 7. Condition Structural rating and suitability for widening or retrofitting: Overall NBI ratings 7 Good; Sufficiency Rating 86.4; Health Index 91.55; structure is suitable for widening or retrofitting.
- 8. Load posting information: N/A
- 9. Horizontal and vertical clearances: There are no structures above or alongside this bridge. The minimum vertical clearance above the channel is 3.67 feet and the minimum horizontal clearance is 26.98 feet. The elevation of the low member is 31.21 feet (NAVD).
- 10. Ship impact data: Not applicable; not a navigable channel
- 11. Span arrangement Number and length of spans: There is a total of seven (7) spans, 30 feet each, for a total of 210 feet.
- 12. Historical significance i.e., National Register of Historic Places (NRHP) eligible or may be a potentially significant historic bridge (of 50 years of age or older). If a bridge is on the NRHP, determine if the bridge is a critical landmark or a signature structure. Topic No. 650-000-001 Project Development and Environment Manual Engineering Analysis Effective: July 1, 2023, Engineering Analysis 3-13: This bridge has no historical significance.
- 13. Geotechnical information from existing bridge borings, pile driving records, scour reports, and maintenance history where available: Geotechnical information is available from the existing bridge plans.
- 14. Channel data Alignment, width, depth, and clearance requirements: The Slough Ditch (C-41A) Canal is perpendicular to the bridge structure and is not navigable. The channel is approximately 160 feet wide with the proposed bottom elevation at 6.80 feet (NAVD). The design high water elevation is 26.72 feet (NAVD).
- 15. On bridges with moveable spans The average number of times the bridge opens per day, results of boat traffic and mast height surveys, include any special navigation (shipping/boating) requirements that will require accommodation during construction: N/A
- 16. Normal High Water and Mean High Water (for coastal bridges): The crossing is not a coastal bridge.
- 17. Bridge security issues: N/A

Bridge No. 910001 (S.R. 70 over Kissimmee River [C-38 Canal]): The bridge was built in 1966, and it is owned and maintained by FDOT. The typical section is comprised of two (2) 12-foot lanes

and two-foot shoulders (28 feet between the gutter lines). The traffic railing along the deck edges is comprised of concrete post and beam for the approach spans, and Three-Beam Rail with steel posts on the movable span (main span). This is a seven-span bridge structure, with six (6) approach spans (60 feet each) on AASHTO beams with the reinforced concrete deck slab (seven inches thick and 3/16 inch/foot cross-slope), and a 60-foot movable (main) span on steel rolled girders with an open grid steel deck. The removable span accommodates the passing of larger vessels while being more cost effective than a manned, operable span. The thickness of the grid deck is five (5) inches and flat. The concrete piers are comprised of three-foot six-inch x three inch pier caps, two-foot, six-inch x two-foot, six-inch square columns, seven-foot, four-inch x seven-foot, four-inch x four-foot, six-inch (thick) pile caps, two-foot x two-foot spread beams and 20-inch battered piles. The Bridge Inspection Report dated May 18, 2022 states that the load rating from December 31, 1991 has an inventory rating of 35 tons (Rating Factor of 0.97). The condition of the superstructure is classified as "Good". **Figure 2-9** and **Figure 2-10** depict the existing bridge typical sections (i.e., approach and main spans) for Bridge Number 910001.

The following list is created per PD&E Manual recommendations, Section 3.2.3.3.1, Existing Bridges and Structures:

- 1. Bridge number: 910001
- 2. Bridge Type: There are concrete AASHTO beam spans on the bridge approaches (spans 1, 2, 6 and 7) and steel girders for spans 3, 4 (main span) and 5. The main span is removable but there have been no requests to open the bridge in more than five (5) years. This removable span was originally constructed to allow for channel maintenance but the SFWMD and U.S. Army Corps of Engineers (USACE) no longer maintain the channel for flood control or navigability. The piers for the main span are protected with a fender system.
- 3. Typical Section: Two (2) 12-foot travel lanes with two-foot shoulders
- 4. Facility crossed (waterway, roadway, or railroad): Kissimmee River
- 5. Year structure was built and/or modified: Built in 1966; in 2012, span 4 (removable span) was replaced.
- 6. Type of structure Timber, concrete, or steel: Combination of concrete and steel superstructures
- 7. Condition Structural rating and suitability for widening or retrofitting: Overall NBI ratings 6-7 Good; Sufficiency Rating 70.9; Health Index 83.65; structure is not suitable for widening or retrofitting because of the removable span and the age of the structure. Based on the 2022 Bridge Inspection Report, the existing bridge is considered satisfactory; however, due to the age of the structure (58 years), the bridge has reached the end of its service life which is designed for the service life of 50 years. The bridge currently shows signs of deterioration of the concrete and steel span, which is in line with the age of the bridge. In 2025, repairs and rehabilitation to the bridge

(cleaning and sealing the roadway, deck spall repairs, structural steel repairs, and repainting of the steel portions) were done to maintain the bridge and allow the bridge to remain in use until a solution for replacement or additional repair is made.

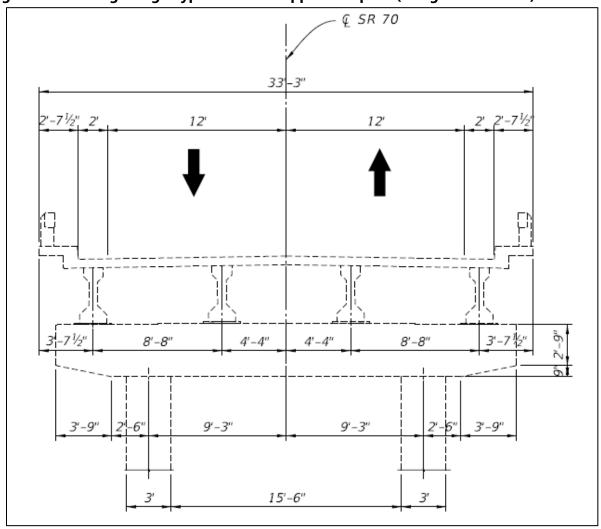


Figure 2-9 Existing Bridge Typical Section Approach Spans (Bridge No. 910001)

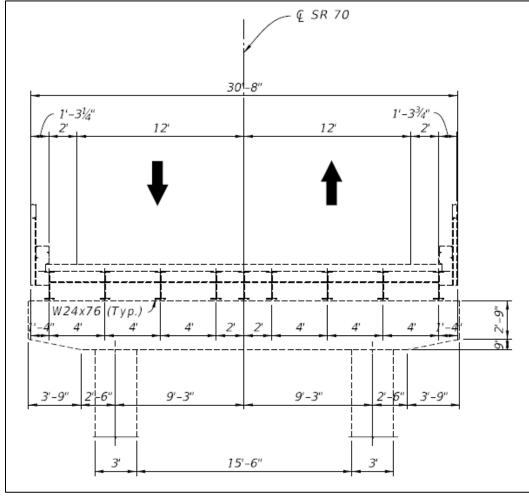


Figure 2-10 Existing Bridge Typical Section Main Spans (Bridge No. 910001)

- 8. Load posting information: N/A
- 9. Horizontal and vertical clearances: There are no structures above or alongside the bridge. The minimum vertical clearance above the channel is 17.5 feet and the minimum horizontal clearance is 36 feet. The elevation of the low member is 38.50 feet (NAVD).
- 10. Ship impact data: N/A
- 11. Span arrangement Number and length of spans: There is a total of seven (7) spans, each 60 feet in length for a total bridge length of 420 feet.
- 12. Historical significance i.e., NRHP eligible or may be a potentially significant historic bridge (of 50 years of age or older). If a bridge is on the NRHP, determine if the bridge is a critical landmark or a signature structure. Topic No. 650-000-001 Project Development and Environment Manual Engineering Analysis Effective: July 1, 2023 Engineering Analysis 3-13: **This bridge is eligible for listing in the NRHP. It is not a critical landmark or signature structure. A Cultural Resource Assessment Survey (CRAS), Section 106 Case Study Report, and Memorandum of**

Agreement between the FDOT and SHPO have been prepared for the project since bridge removal is proposed.

- 13. Geotechnical information from existing bridge borings, pile driving records, scour reports, and maintenance history where available: **Geotechnical information is available from the existing plans.**
- 14. Channel data Alignment, width, depth, and clearance requirements: The Kissimmee River centerline channel is 80 degrees skewed relative to S.R. 70. The channel bottom is 225 feet wide (elevation -11.30 feet, NAVD); the channel width is approximately 420 feet. The minimum vertical clearance is 17.5 feet and minimum horizontal clearance is 36 feet. The design water surface elevation is 21.10 feet NAVD.
- 15. On bridges with moveable spans The average number of times the bridge opens per day, results of boat traffic and mast height surveys, include any special navigation (shipping/boating) requirements that will require accommodation during construction: **N/A**
- 16. Normal High Water and Mean High Water (for coastal bridges): **The crossing is not a coastal bridge.**

17. Bridge security issues: N/A

2.4 Existing Environmental Features

There is one managed land that is adjacent to the S.R. 70 corridor, the Kissimmee River PUA which is shown in the concept plans in **Appendix B**. This property is owned by the SFWMD and operated cooperatively by the SFWMD and Florida Fish and Wildlife Conservation Commission (FWC). This property is part of the Save Our Rivers (SOR) program created by the Florida legislature in 1991 to allow for the state water management district to acquire environmentally sensitive land to manage, protect, and conserve the state's water resources. In managing these public lands, the water management districts ensure the maintenance of water resources, fish and wildlife populations, and native plant communities in an environmentally acceptable manner. These lands are also typically open for appropriate public use consistent with their environmental sensitivity. This property is open to the public for recreational use, primarily hunting. Other recreational opportunities include bird watching and boating through the open river cuts and canals.

In addition to the Kissimmee River PUA, the Kissimmee River itself is a notable environmental feature in the project limits. Once channelized, it has recently been restored just north of the project limits through a cooperative project by the USACE and SFWMD. Natural floodplain and oxbows have been constructed. While the portion of the river at the project area itself will remain as is with the existing channel, this channel will no longer be considered a navigable channel by the U.S. Coast Guard (USCG).

3.0 FUTURE CONDITIONS

3.1 Future Conditions Considerations

The existing and future context classification is C2 – Rural. Overall, the project is consistent with the land use vision for the project area. As such, limited impacts or changes to proximate land uses are anticipated as a result of the project. According to the Highlands County and Okeechobee County Future Land Use Maps, the project area will continue to support agricultural along with conservation land uses and rural estates (**Figure 3-1**). However, according to the HRTPO 2045 Long Range Transportation Plan (LRTP), Highlands County is in the process of diversifying their economy to expand opportunities to attract sectors beyond the traditional industries such as agriculture, business services, and natural resources. Freight distribution and logistics activities continue to gain economic significance in Central Florida counties including the S.R. 70 corridor. Therefore, while moderate changes to adjacent land uses will occur with the conversion of frontage areas to the expanded roadway, overall land use changes are not anticipated based on future land use maps and the HRTPO LRTP.

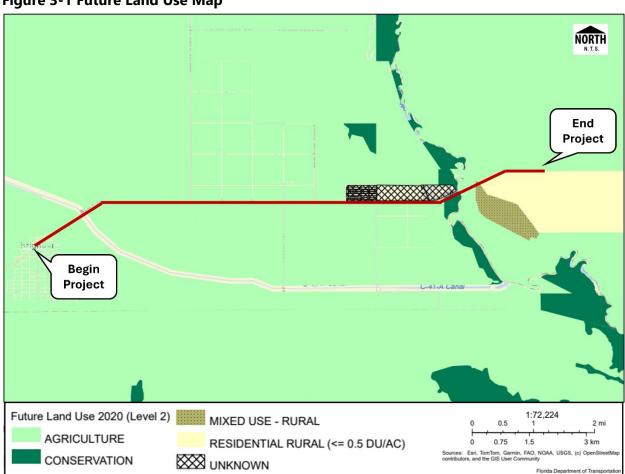


Figure 3-1 Future Land Use Map

3.1.1 Future Traffic Conditions

The PTAR (April 2024), prepared under separate cover and included in the project file. documents the operational and safety analysis conducted for the PD&E study. The future years of analysis include both the opening year (2032) and design year (2052).

As noted in **Section 2.2.13**, the S.R. 70 DTTM covered the entirety of S.R. 70 in Highlands County from the Desoto County Line to the Okeechobee County Line and the section of S.R. 70 in Okeechobee County from the Highlands County Line to CR 559/128th Avenue. The existing year TMCs, the recommended annual linear growth rates for mainline and side streets, K Factors, and D Factors were outlined in that report and provided the basis to develop future year turning movement volumes for the study intersections for the No-Build and Build Alternatives, in accordance with the Project Traffic Forecasting Handbook.

Table 3-1 summarizes the recommended growth rates approved by the Department which were used in the future traffic volumes development process for this project.

Table 3-1 Recommended Annual Growth Rates

Roadway	Roadway Recommended Annual Linear Growth Rate						
	Mainline						
S.R. 70	3.0% for "No-Build" Alternative						
	4.5% for "Build" Alternative						
	Side Streets						
All Side Streets	3.0% for "No-Build" Alternative						
	4.0% for "Build" Alternative						

All future AADT volumes were linearly projected using recommended growth rates, then rounded to the American Association of State Highway Transportation Officials (AASHTO) rounding convention, in accordance with the PTF Handbook. As agreed by the Department, the existing AADT volumes for the locations with no collected counts were estimated using the existing TMCs during peak hour and the recommended K value of 9.5%. **Appendix E** includes the approved future turning movement volumes for the No-Build opening year (2032), No-Build design year (2052), Build opening year (2032) and design year (2052) study intersections.

4.0 DESIGN CONTROLS & CRITERIA

4.1 Roadway Context Classification

The project corridor is best classified as C2 – Rural in the current and proposed conditions.

4.2 Functional Classification

S.R. 70 is classified as a Rural Principal Arterial - Other. It is a SIS facility.

4.3 Access Management

Currently, the access classification is non-restrictive since S.R. 70 is a 2-lane, undivided roadway. The proposed classification is Class 3 (Restrictive).

4.4 Design Speed and Target Speed

The design speed and target speed is 65 MPH.

4.5 Capacity and LOS Target

S.R. 70 will be widened to four-lanes to provide additional capacity for future traffic volumes. The target is LOS C standard for rural roadways.

4.6 Design Vehicle

The design vehicle for the project is a WB-62FL, the Florida Interstate Semitrailer.

4.7 Pedestrians and Bicyclists

A shared use path will be provided on the south (east bound) side of the roadway to accommodate pedestrians and cyclists. Outside paved shoulders will also be provided along the travel lanes.

4.8 Physical Constraints

Refer to **Section 2.2.12** for a description of existing physical constraints within the existing ROW.

4.9 Environmental Constraints

Within the existing ROW, environmental constraints predominantly include wetlands, which are avoided or impact minimized wherever possible. Beyond the existing ROW, protected conservation and recreational lands are described in **Section 2.4**. Avoidance and minimization also was of concern relative to these properties. Noise sensitive sites adjacent to the ROW include single-family homes primarily in the vicinity of the Kissimmee River and are described in **Section 7.2.7**. Offsite areas contained some potential contamination sites that could pose additional requirements prior to construction; these sites are described in **Section 7.2.8**.

4.10 Stormwater Management

Stormwater management includes an open drainage system with ditches and stormwater ponds.

4.11 Navigational Requirements

The design control is not applicable to the project.

4.12 Design High Water

For the Slough Ditch (C-41A) Canal, the design high water elevation is 26.72 feet (NAVD), same as existing. For the Kissimmee River, the design water surface elevation is 21.10 feet (NAVD), same as existing.

4.13 Design Wave Heights

The design control is not applicable to the project.

4.14 Design Criteria

The design criteria used for this project is provided in **Table 4-1**. Design controls were obtained from the 2025 Florida Design Manual (FDM).

Table 4-1 Design Criteria

	Design Ele	ement	Value	2025 FDOT Design Manual	Comments
	Roadway Functional Cla	ssification	Rural Principal Arterial	Not in FDM	Straight line diagram
	Design Vehicle	oomoa on	WB-62FL	FDM 201.6	etaignemio alagram
	Context Classification		C2	Not in FDM	Approved CC Memo 9/29/2023, SIS Corridor
	Design Speed		65 mph	Table 201.5.1	SIS Minimum for C2 Rural
	Target Speed		65 mph	Notin FDM	Determined by FDOT in target/design meeting July 7, 2023
	Lane Widths		12- ft	Table 210.2.1	Travel Lane/Auxiliary Lane
	Median Width		40-ft	Table 210.3.1	Flush Shoulder Roadway
	Cross Slope		2%	Figure 210.2.1	Two Lanes in each direction
	Median Shoulder Cross	Slone	5%	Section 210.4.1	Two Earles in Saon anssten
	Shoulder Cross Slope		6%	Section 210.4.1	
ction	Shoulder Width	Inside (Paved)	8-ft (4-ft)	Table 210.4.1	There Is Over 10% Truck Traffic And The Shoulder Is Without
Typical Section		Outside (Paved)	12-ft (5-ft)		Shoulder Gutter
ypi	Clear Zone Width		36-ft	Table 215.2.1	
-	Clear Zone Width from a	uxillary lane	24-ft	Table 215.2.1	
	Lateral offset to canal		In sections with ditch cuts, provide a minimum of 20 ft between the toe of the front slope and the top of the canal side slope nearest the roadway. Not less than 60 ft for flush shoulder and curbed roadway with design speeds of 50 mph or greater.	Section 215.3.2	
	Border Width		40-ft	Table 210.7.1	
	Shared Use Path Width		12-ft	Section 224.4	
	Shared Use Path Cross S	Slope	2% Max	Section 224.5	
	Shared Use Path Horizontal Clearance		4-ft	Section 224.7	
	Minimum Stopping Sight	Distance	645-ft	Table 210.11.1	Flat≤2%
tal	Maximum Deflection with		0° 45' 00"	Section 210.8.1	
Horizontal	Length of Curve	Desirable Minimum	975-ft 400-ft	Table 210.8.1	
후	Maximum Superelevation		400-π 10%	Table 210.9.1	
-			10% 13164-ft		
-	Maximum Curvature (e=N	NC)	3%	Table 210.9.1	Clot Torroin
	Maximum Grade			Table 210.10.1	Flat Terrain
1_	Maximum Change in Gra Base Course Clearance		0.3% 3-ft	Table 210.10.2 Section 210.10.3	
/ertical	base course clearance				
/erl	Crest Curve	K Value	313 450-ft	Table 210.10.3 Table 210.10.4	
-		Minimum Length	450-ii 157		
	Sag Curve	K Value		Table 210.10.3	
		Minimum Length	350-ft	Table 210.10.4	
	Design Element		Value	2025 FDOT Design Manual	Comments
tion	Lane Widths		Match roadway approach lane widths	Section 260.2	
Bridge Typical Section	Shoulder Width	Inside	6-ft	Figure 260.1.1	
dge Typ	Outside Outside		10-ft	Figure 260.1.1	
Bri	Cross Slope		2%	Section 260.4	

5.0 ALTERNATIVES ANALYSIS

The objective of the alternatives analysis process is to identify technically and environmentally sound alternatives that meet the purpose and need of the project, are acceptable to the community, minimize impacts on the environment, and are cost effective. The process results in the selection of a Preferred Alternative, which can be advanced to the design phase. This section summarizes the alternatives considered and the results of the alternatives evaluation.

5.1 No-Build (No-Action) Alternative

Throughout this study, the No-Build Alternative (no-action) is also considered. It assumes that both normal and evacuation traffic volumes continue to increase in the future without capacity or operational improvements except for routine maintenance on the existing road. The No-Build Alternative remains a viable alternative throughout the study process although it does not accomplish the purpose and need for this project.

The advantages of the No-Build Alternative include the following:

- o No associated design, construction, or ROW acquisition costs;
- o No impacts to the traveling public due to construction; and
- No impacts to the natural and human environments.

The disadvantages of the No-Build Alternative include the following:

- o Inconsistency with the purpose and need for the project or with local transportation plans;
- o Increased potential for crashes due to congestion and intersections;
- Increased evacuation and emergency vehicle response times;
- Lack of improved multi-modal accommodations for bicycles and pedestrians;
- o Increased traffic congestion along the corridor; and
- Increased vehicle emission pollutants due to higher levels of traffic congestion.

5.2 TSM&O Alternative

Under a TSM&O Alternative, operational improvements are designed to maximize the efficiency of the existing facility. TSM&O alternatives generally include intersection operational improvements such as lengthening or adding lanes to existing turn lanes, changing traffic signal phasing and timing, and access management such as closing or modifying existing median

openings. Given that existing ROW is limited on the project corridor and other notable constraints include large canals and utility easements, TSM&O alternatives such as addition of pass lanes, median, and/or intersection turn lanes would result in significant impacts. Additionally, while these TSM&O improvements may enhance safety and emergency response, they would not address emergency evacuation or project future year traffic volumes.

5.3 Multimodal Alternative(s)

As described in **Section 2.2.10**, there are no existing multi-modal facilities in the project limits. Consistent with the purpose and need, this project analyzed the addition of a shared-use path. There are no planned, stand-alone multimodal projects in the project limits as confirmed in the Heartland Regional MPO 2045 LRTP. Enhancing pedestrian and bicycle facilities and improving overall multimodal connectivity throughout the corridor may increase safety overall by accommodating and separating both motorized and non-motorized modes of travel along the corridor. However, adding multimodal accommodations alone does not meet the purpose and need of the project since it does not enhance emergency response, emergency evacuation, or future traffic volumes.

5.4 Build Alternatives

This study evaluated two (2) build alternatives following preliminary identification of six (6) horizontal alignments. The typical section evaluated was the same for all alternatives, and consists of a rural typical section with two (2), 12-foot wide travel lanes in each direction, 12-foot outside shoulders (five-feet paved), eight-foot inside shoulders (four-feet paved), a 40-foot median and a 12-foot shared use path on the south side of S.R. 70, adjacent to the eastbound travel lanes. The overall width needed varied depending on the horizontal alignment, accounting for drainage patterns such as canals, utility easements and utility lines, most notably FGT and FPL transmission. FPL has high voltage transmission lines along the north side of S.R. 70. FGT has an easement that runs parallel to the existing S.R. 70 ROW and crosses the S.R. 70 corridor at four locations along the project limits. The average ROW width needed for Build Alternative 1 is 260 feet but ranges from 210 feet to 290 feet. The average ROW width for Alternative 2 is 261 feet and ranges from 175 feet to 307 feet.

The focus of the build analysis is to identify alternatives which enhance roadway capacity, address existing safety and operational concerns, provide multi-modal accommodations within the project corridor, and minimize impacts on the natural, social, and physical environment. Corridor design challenges and constraints include:

- 1. Two (2) adjacent utility lines running parallel to the existing S.R. 70 ROW within their own easements: FGT and FPL;
- 2. A communications tower on the south side of S.R. 70;

- 3. Two (2) developed communities on the north side of S.R. 70: Kissimmee River Estates and Kissimmee River Fishing Resort;
- 4. A high ground water table that requires the roadway vertical alignment to be elevated up to 4.75 feet above the seasonal high ground water table (SHGWT) in order to meet base clearance requirements and an average of two (2) feet above the existing S.R. 70 pavement elevation; and
- 5. Notable offsite flows from the north that require capture in large ditches and conveyance under the roadway.

Option 1 consisted of widening the corridor to the north while using a portion of the existing ROW. Option 2 consisted of widening the corridor from the center while using a portion of the existing ROW. Option 3 consisted of widening the corridor to the south while using a portion of the existing ROW. Option 4 shifted the alignment south of the existing ROW limits. Option 5 consisted of widening on different sides of the existing ROW along the corridor.

Within these preliminary options, drainage design evaluated two main options:

- 1. A co-mingled roadside ditch for roadway stormwater runoff and off-site water (combining the water) on the north side and a roadside ditch on the south side for stormwater runoff, for a total of up to two ditches total. This option ties into the adjacent berm on the north side of S.R. 70 and the existing off-site ditches on the south side.
- 2. Two separate ditches on the north side of the road to isolate offsite flows from the roadway stormwater runoff. This option maintains the existing drainage patterns and captures the additional runoff from the additional impervious pavement.

Each alignment was closely reviewed for potential impacts to utilities based on estimated length of utility relocations. Options 1 and 2 were found to have the most utility impacts and Option 4 had the most property impacts. Options 3 and 5 were found to have the least impact on the adjacent properties and utilities. Therefore, Options 1, 2, and 4 were discarded given the greater utility and property impacts. Following the initial selection of Options 3 and 5 and detailed modeling, it was determined that there would be unavoidable impacts to parcels, ranging from 37 parcels to 65 parcels, including residential, agricultural, and conservation properties. However, impacts to utilities were minimized, impacts to an existing power substation were avoided, and impacts to most existing residential development (i.e., Kissimmee River Estates and the Kissimmee River Fishing Resort) were avoided.

In an effort to reduce property impacts, Option 6 was developed and reviewed. This option consisted of a four-lane bifurcation between the Kissimmee River Estates (located east of the Kissimmee River on the north side of S.R. 70) and the Kissimmee River Bridge. The intent of this

option was to avoid residential property impacts on the south side of S.R. 70, across from the Kissimmee River Fishing Resort, and reduce FGT easement impacts. This option was preliminarily modeled and found to be impractical for this area because it created an unnecessary divide in the parcels and significant ROW impacts to the Kissimmee River PUA. It was therefore discarded.

Alignment Option 3 was renamed to Alternative 2 and Alignment Option 5 was re-named to Build Alternative 1. These alternatives were carried forward for further consideration and presented to the public at the Alternatives Public Workshop, held in-person on June 11, 2024 and via a live, online event June 18, 2024. The selected drainage design for both alternatives at that time included a co-mingled, since ditch on each side of the proposed roadway for a total of two ditches in the typical section.

Following the workshop, further refinements were made to Alternatives 1 and 2. A conceptual design of the vertical alignment and drainage was prepared. Soil samples consisting of 92 hand augers to determine SHGWT elevations were collected and evaluated. The profile grade line was then elevated 4.75 feet above the SHGWT to provide base clearance. These changes resulted in alignment shifts and a wider typical section. The drainage design was modified to separate the off-site flows from the roadway stormwater runoff, which requires two (2) ditches on the north side of the roadway as previously described in **Section 5.4**. This was changed because of the desire to maintain drainage separation between adjacent properties and the FDOT roadway so that the roadway stormwater design for ditches, outfall structures, and stormwater pond sites is appropriately designed for the FDOT facility. Following these updates and refinements, the evaluation matrix was updated to compare impacts associated with the two, refined build alternatives.

5.4.1 Complete Streets

Given the rural landscape of the project corridor, complete streets were not evaluated for the build alternatives.

5.4.2 Pedestrian and Bicycle Accommodation

Both build alternatives were evaluated for the inclusion of a shared-use path, consistent with the S.R. 70 from I-75 to St. Lucie County Line Corridor Vision Report (September 2020), described in **Section 2.1.** A single, 12-foot wide path on the south (eastbound) side of the roadway was evaluated.

5.4.3 Traffic Operations and Safety

The engineering elements for traffic operations and safety are the same for each build alternative and are described in **Section 7.1.2 and Section 7.1.7**.

5.4.4 Managed Lanes

Given the rural landscape of the project, managed lanes were not evaluated for the build alternatives.

5.4.5 Access Management

An access management classification of Class 3, Restrictive, was considered for both build alternatives. Refer to **Table 5-1** for Class 3 median open spacing standards.

Table 5-1 Median Opening Spacing Standards – Access Class 3 Roadways

. 5.	
Median Opening Type	Standard
Full Median Opening	2,640 feet
Directional Median Opening	1,320 feet
Connection Spacing	660 feet (for roadways with >45 mph posted)
Minimum Signal Spacing	2,640 feet (not applicable for this project)

5.4.6 Interchanges on Interstate Highways

Given lack of interstates in the project area, interchanges were not evaluated for the build alternatives.

5.4.7 ITS and TSM&O

ITS were not evaluated for the project given the rural nature and the inappropriateness of a TSM&O Alternative for the project. TSM&O operational improvements are designed to maximize the efficiency of the existing facility. TSM&O alternatives generally include intersection operational improvements such as lengthening or adding lanes to existing turn lanes, changing traffic signal phasing and timing, and access management such as closing or modifying existing median openings. The additional capacity needed to address project future year traffic volumes would not be met through the implementation of TSM&O improvements.

5.4.8 Lane Repurposing

The majority of the locations where the new road alignment will diverge away from the existing roadway will result in the footprint of the existing roadway being abandoned for transportation use and sodded over. The portion of the existing S.R. 70 roadway immediately south of the Kissimmee River Estates will convert to a road for local access. As such, it is anticipated that it will become a jurisdictional transfer to Highlands County for operation and maintenance.

5.4.9 Landscape

Given the rural landscape of the project, landscaping was not evaluated for the build alternatives.

5.4.10 Lighting

Given the rural landscape of the project, lighting was not evaluated for the build alternatives. A lighting justification report may be requested and prepared as part of the future design phase.

5.4.11 Wildlife Features

A wildlife *crossing* is a road-related structure that provides wildlife an option to cross under roadways. These crossings have the potential to reduce motor vehicle collisions with wildlife, consequently reducing the likelihood of injuries and mortalities to humans and wildlife as well as reducing the potential for damage to motor vehicles. In following the FDOT Wildlife Crossing Guidelines, a wildlife crossing is not warranted for the project because there does not appear to be a documented or science-based need for a crossing, and a crossing was not suggested by USFWS or FWC. There is insufficient documentation of large animals (i.e. panther and bear) that would benefit from the crossing and the project is located outside of major habitat zones (i.e. Florida panther Focus Area) of these species. Additionally, conservation lands are not present on both sides of the corridor to make a crossing effective. However, the data does suggest that a benefit could be realized from the consideration of a wildlife *feature*. A wildlife feature may include, but is not limited to new or modified structures, such as bridges, bridges with shelves, specially designed culverts, enlarged culverts or drainage culverts and/or exclusionary devices such as fencing, walls or other barriers, or some combination of these features.

Wildlife features were evaluated for both build alternatives. Since the build alternatives include two bridge crossings over water features, these were considered for enhancing the bridge embankments to support wildlife movement under the roadway. See **Section 7.1.2** for details on wildlife features associated with the Preferred Alternative.

5.4.12 Permits

Permitting requirements are the same for both build alternatives. **Section 7.1.13** provides details on permitting requirements associated with the Preferred Alternative.

5.4.13 Stormwater Management

Build alternatives were evaluated for off-site stormwater management facilities. For each of the eight (8) proposed, post-construction drainage basins, three (3) alternatives were identified. These were generally in the same locations for each build alternative with the exception of proposed sites immediately adjacent to the new roadway ROW. In these instances, Build Alternative 1 pond sites and Build Alternative 2 pond sites were shifted differently from each other such that each pond alternative was flush with the proposed road ROW. The ponds will ultimately outfall into the adjacent waterways, consisting of the Slough Ditch (C-41A) Canal and Kissimmee River (C-38 Canal). A Pond Siting Report (PSR) (October 2025) was prepared under separate cover and is included in the project file. This report identifies potential pond site locations for meeting

applicable stormwater management criteria and ROW needs for the project. The sizes of these facilities were estimated using SFWMD and FDOT water quality treatment and attenuation requirements and using a volumetric approach. It also evaluates the engineering and environmental considerations associated with each pond site alternative.

The identified preferred pond sites reflect those that minimize impacts to the natural, physical, and social environment; minimize ROW and construction costs; and consider long-term maintenance. **Section 7.1.14** provides details on the preferred pond sites.

5.4.14 Sea Level Impact Protection (SLIP) Studies

A SLIP Study does not apply to this project given that it is not in the coastal environment.

5.4.15 Water Quality

A Water Quality Impact Evaluation (WQIE) (July 2025) was prepared under separate cover and is included in the project file. Neither build alternative is expected to have significant impact on water quality or quantity. Water quality and stormwater issues will mitigated through compliance with the design requirements of authorized regulatory agencies.

This project is within the Biscayne Aquifer, a Sole Source Aquifer. Coordination with the U.S. Environmental Protection Agency (USEPA) was initiated on August 27, 2025. XXXXXXplaceholder for USEPA responseXXXXX. Proposed bridge piles are approximately 50 - 70 feet deep, however the exact depth is currently unknown. According to best available data from the United States Geological Survey (USGS) and SFWMD, the project area is in a Biscayne Aquifer Recharge Zone and will not interfere with the Biscayne aquifer itself. The potentiometric surface (the level that ground water in the aquifer reaches) for the upper Floridan aquifer is approximately +50 feet, NGVD 29 in the project area, but the confining layer is greater than 100 feet. Standard penetration test (SPT) borings are recommended to be completed to determine if it is present and at what depth within the project corridor. During final design, detailed geotechnical surveys including SPT borings will be conducted. To avoid potential impacts to the Biscayne Sole Source Aquifer associated with construction of bridge foundation and/or construction dewatering, FDOT will implement BMPs from the FDM Chapter 251.

5.4.16 Hydrology and Floodplains

A Location Hydraulics Report (LHR) (November 2025) has been prepared under separate cover and is included in the project file. The LHR assesses the floodplain impacts associated with the build alternatives, which are the same regardless of the alternative. Refer to **Section 7.1.15** for details on floodplain analysis for the Preferred Alternative.

5.4.17 Utilities and Railroads

There are no railroads within the project limits. Build Alternatives 1 and 2 differ in their utility impacts. Two major utility providers, FGT and FP&L, represent significant cost factors in the evaluation of alternatives due to high relocation expenses since the UAOs are in private easements. Relocating the FGT 30-inch natural gas line is estimated at approximately \$15,000,000 per mile, while FPL overhead electric line relocations range from \$500,000 per mile for distribution lines to \$5,280,000 per mile for transmission lines. Alternative 2 includes an additional 0.8 miles of FGT easement impacts from Fulmar Terrace to Mose Grade Road, resulting in roughly \$12,000,000 in additional utility relocation costs as compared to Build Alternative 1. Other utility impacts are generally comparable between the two alternatives.

5.4.18 Survey and Mapping

No survey data was collected as part of this study.

5.4.19 Geotechnical Investigation

In order to evaluate necessary base clearance and determine the vertical alignment, soil samples consisting of 92 hand augers to depths of six (6) feet were collected at 500 – 1,000-foot intervals. These soil borings typically found ground water at two (2) to six (6) feet below ground; some borings did not encounter ground water. Details are provided in the Roadway Geotechnical Report – Phase 1 (August 2024), provided under separate cover and included in the project file.

5.4.20 Structures and Bridges

Build alternatives were evaluated for the replacement of the existing S.R. 70 bridge over the Kissimmee River and the second bridge construction over the Slough Ditch (C-41A) Canal. The proposed bridge concepts are the same regardless of the build alternative. **Section 7.1.16** provides details on the bridges associated with the Preferred Alternative.

5.4.21 Perimeter Walls

There are no existing or planned perimeter walls for the build alternatives.

5.4.22 Transportation Management Plan

The engineering elements for transportation management plan are discussed with the Preferred Alternative in **Section 7.1.17**.

5.4.23 Constructability

The engineering elements for constructability are discussed with the Preferred Alternative in **Section 7.1.18**.

5.4.24 Construction Impacts

Construction of the build alternatives is not expected to have any significant impact to property access or safety considerations. Construction is not anticipated to adversely impact listed species with adherence to project commitments, construction precautions, and conservation measures. Also, construction is not expected to have any significant impact to water quality, noise, or air quality. The project will adhere to the FDOT Standard Specifications for Road and Bridge Construction along with implementation of a Stormwater Runoff Control Concept and Best Management Practices to minimize or eliminate potential construction impacts.

5.5 Comparative Alternatives Evaluation

An evaluation matrix was prepared to present the environmental effects, ROW needs, project costs, and engineering factors for the two build alternatives as well as the no-build alternative. The evaluation matrix was presented to the public at the Alternatives Public Workshop, held inperson on June 11, 2024 and via a live, online event June 18, 2024. The evaluation matrix presented at the Alternatives Public Workshop provided a cost estimate of \$129,563,000 for Build Alternative 1 and \$142,328,000 for Build Alternative 2. These estimates were noted to not include utility relocation costs, off-site pond ROW costs, or environmental impact mitigation associated with pond sites as preferred pond sites were not yet identified. Construction costs were based on unit costs in the FDOT LRE from May 2024 which was the most current available at that time.

Since the build alternatives were further evaluated and refined following the Alternatives Public Workshop, and those refinements resulted in revised environmental impacts and costs, an updated evaluation matrix was prepared. This updated evaluation matrix is provided in **Table 5-2**. Construction costs were updated based on October 2025 unit costs in the FDOT LRE. With the refinements, cost updates and additions, as well as cost contingencies for utility relocation and construction, Build Alternative 1 is estimated to cost \$254,159,000 and Build Alternative 2 is estimated to cost \$279,092,000.

5.6 Selection of the Preferred Alternative

The Preferred Alternative, Build Alternative 1, addresses existing roadway deficiencies and improves safety for vehicles, bicyclists and pedestrians. It provides two additional travel lanes and accommodates the design year traffic volumes at an acceptable LOS. The proposed typical section consists of a four-lane divided roadway with a shared use path paralleling the eastbound lanes

Table 5-2 Alternatives Matrix

	Evaluation Criteria	Build Alternative 1 (Preferred)	Build Alternative 2	No-Build Alternative
40	Improves Traffic Conditions including Emergency			
SI:	Evacuation			
BENEFITS	Addresses the Age and Existing Conditions of the			\mathbf{X}
BE	Provides Bicycle and Pedestrian Accomodations			
	Enhances Safety for All Users			
	Right-of-Way to be Acquired for Roadway (acres)	206.7	192.0	0
Α¥	Right-of-Way to be Acquired for Off-Site Stormwater	61.7	56.8	
M-T	Management (acres)	01.7	0.00	0
- OF	Number of Parcels Impacted	51	31	0
돌톨	Number of Utilities Impacted	4	4	0
RIGHT-OF-WAY IMPACTS	Number of Potential Business Relocations	0	0	0
	Number of Potential Residential Relocations	2	6	0
	Potential Impacts to Threatened and Endangered	Medium	Medium	No Change
	Species	Medium	Medium	No Change
	Direct Impacts to Wetlands and Other Surface Waters	41.7	50.1	No Change
¥	(acres)			· ·
皇	Section 4(f) / Public Recreation and Conservation	2.5	4.4	No Change
N N	Number of Historic Sites Potentially Impacted	27	29	No Change
/IRC	Archaeological Sites Probability	,	1 (Moderate to High)	No Change
Ź	Number of Noise-sensitive Sites Potentially Impacted	7	30	No Change
	Potential Contamination Sites (high/medium risk)	1 (Medium)	1 (Medium)	No Change
	Impacts to Farmland (acres)	182.5	170.6	No Change
	Impacts to Floodplain (acres)	208.8	200.5	No Change
	Design	\$18,607,000	\$18,863,000	\$0
	Right-of-Way Acquisition	\$13,985,000	\$10,495,000	\$0
	Roadway Construction	\$124,047,000	\$125,755,000	\$0
ESTIMATED COSTS	Construction Engineering and Inspection (CEI)	\$18,607,000	\$18,863,000	\$0
≧ő	Utility Relocation	\$77,281,000	\$103,243,000	\$0
	Wetland Mitigation	\$1,426,000	\$1,667,000	\$0
	Species Mitigation	\$206,000	\$206,000	\$0
	Total Project Costs	\$254,159,000	\$279,092,000	\$0

which will improve safety and mobility by accommodating pedestrian and bicycle traffic. The proposed four-lane provides an east-west connection of the SIS facility between major transportation facilities, employment centers, agricultural lands, and residential areas across the state to address Area Wide Network/System Linkage. Build Alternative 1 results in better access management at Kissimmee River Estates, fewer residential relocations, fewer impacts to noise sensitive sites, less utility impacts, and less impact to public recreational lands as compared to Build Alternative 2. Thus, Build Alternative 1 was selected as the Preferred Alternative to meet the purpose and need of this study.

6.0 AGENCY COORDINATION & PUBLIC INVOLVEMENT

6.1 Agency Coordination

Agency coordination for this project has occurred through the ETDM process (ETDM No.: 14491) and Environmental Screening Tool (EST). Numerous local, regional, state, and federal agencies were identified as having an interest in this project through jurisdictional review or expressed interest. These agencies were identified and contacted through the Advance Notification (AN) process at the outset of the project in accordance with PD&E Manual. The AN Package was distributed by the Florida State Clearinghouse on January 10, 2019, for the project. Agency comments were focused on listed species, specifically recommending a biological assessment, which was completed as part of this study, and recommending wildlife crossings or features to reduce impacts of habitat fragmentation, which has also been evaluated. Coordination with agencies is summarized below:

- FDOT and USACE pre-application meeting on December 12, 2024 to discuss permitting, ongoing USACE restoration projects, and navigability of the Kissimmee River in this location.
- FDOT and SFWMD pre-application coordination meeting on February 26, 2025 to determine stormwater quality and quantity requirements.
- FDOT, Highlands County Floodplain Administrator, and Okeechobee County Floodplain Administrator meeting on April 9, 2025 to discuss the LHR and any future county plans that will require consideration for the project.
- FDOT sent the project's Natural Resources Evaluation (NRE) to the U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), National Marine Fisheries Service (NMFS), USACE, FWC, SFWMD, FDEP, and Florida Department of Agricultural and Consumer Services (FDACS) for review and comments.

Agency meeting minutes are provided in **Appendix H**.

Additional coordination with local, state, and federal agencies will occur during the project's design phase. Following the Alternatives Public Workshop, the project was presented to the HRTPO staff and committees on October 2, 2024 to explain the study process and the alternatives for the multiple ongoing S.R. 70 corridor projects in Highlands and Okeechobee Counties. During the meetings, general comments in support of the project were received. Regular project updates have been provided to the HRTPO through the FDOT liaison. Presentations are also planned to occur following the public hearing.

6.2 Public Involvement

A Public Involvement Plan (July 2023) was prepared under separate cover and is included in the project file. This plan details the public involvement approach for the project and documents public outreach methods including a project website, newsletters, a public meeting, and a public hearing. Agencies and elected and appointed officials were included in a mailing list as well as other project stakeholders. The Comments and Coordination Report (Date TBD), prepared under separate cover and included in the project file, fully documents the public and stakeholder involvement conducted for this project.

An in-person Alternatives Public Workshop was held on June 11, 2024, at Indian River State College Dixon Hendry campus in Okeechobee from 5:00 PM to 7:00 PM. The meeting followed an open house format and provided an opportunity for the public to review the proposed project layout and speak one-on-one with project team members. A virtual Alternatives Public Workshop was held on June 18, 2024 starting at 6:00 PM which included a meeting introduction, project video, and a question and answer period. Attendees typed-in questions, the virtual meeting moderator read the questions, and the project team provided answers while using concept plan maps for display purposes.

The in-person meeting was attended by 11 citizens and three (3) elected/appointed officials. The elected/ appointed officials in attendance included representatives from the City of Okeechobee, Okeechobee County, and the Okeechobee County Sheriff's Office. All attendees were given the opportunity to provide written comments at the meeting or within the 14-day comment period following the meeting, ending June 25, 2024. The virtual meeting was attended by eight (8) citizens, one (1) elected/appointed official, and one (1) agency representative (legislative aide).

A total of 16 comments were submitted during the commenting period. The majority of the comments expressed the need for widening S.R. 70 from a capacity and safety perspective. Other comments were related to access, both for properties on the north side east of the Slough Ditch (C-41A) Canal bridge and along the southern portion of the project. In addition, concerns were expressed on the need for noise wall and guardrail, potential relocations, and the existing and proposed elevation at the Kissimmee River Fishing Resort due to the Kissimmee River bridge approach. Public comments were discussed with FDOT staff during the June 25, 2024 public alternatives debriefing meeting. As discussed in previous sections of this report, additional evaluations and refinements of the build alternatives were completed following the Alternatives Public Workshop which fully evaluated access to adjacent properties, elevation of the proposed roadway, noise impacts, and potential relocations.

6.3 Public Hearing

To be completed after the public hearing.

7.0 PREFERRED ALTERNATIVE

Build Alternative 1 was identified as the Preferred Alternative.

7.1 Engineering Details of the Preferred Alternative

7.1.1 Typical Sections

The Preferred Alternative has a rural typical section with two (2) 12-foot travel lanes in each direction, a 40-foot median, 12-foot outside shoulders (five-feet paved), eight-foot inside shoulders (four-feet paved), and 12-foot shared use paths on the south side of S.R. 70, adjacent to the eastbound travel lanes. Design and posted speeds of 65 MPH are proposed.

The existing two-lane Kissimmee River bridge will require demolition and two (2) new bridge structures, each carrying one-directional traffic, will be constructed. The existing bridge over the Slough Ditch (C-41A) Canal that currently carries two (2) lanes of traffic will be retained and will carry westbound traffic in the future condition. A new two-lane bridge will be constructed on the south side of the existing bridge and will carry the eastbound traffic. **Figure 7-1** depicts the preferred typical sections.

The roadway stormwater runoff will be collected and conveyed in roadside ditches on each side of the travel lanes to stormwater management facilities that will be constructed along the corridor. Offsite and onsite stormwater runoff will be handled separately. Therefore, the typical section includes a second ditch on the north (westbound) side of the roadway to collect and convey offsite stormwater flow. The approved typical section package and the concept plans for the Preferred Alternative are provided in **Appendix A** and **Appendix B**, respectively.

7.1.2 Access Management

S.R. 70 has a designated C2-Rural context class and Rural Principal Arterial- Other functional class within the study limits. The existing non-restrictive access is proposed as a future Class 3 (restrictive) access and the posted speed raised from 60 mph to a proposed 65 mph, in line with SIS rural roadway design standards. The access recommendations in the access management plan are based on the future Access Class 3 standards for full and directional median openings, as reflected in **Table 5-1**. Any proposed deviations from the access management standards were developed to address existing safety, land use patterns, future turning movement volumes, and also reflect engineering judgment. Also, bulb-outs (loons) were identified in certain locations along the corridor to facilitate U-turn movements for larger vehicles (i.e., truck-trailer combinations) where full access to/from adjacent parcels is restricted and the proposed 40-foot median minimizes the ability for U-turn movements without this accommodation.

Figure 7-1 Preferred Alternative Typical Sections



Figure 7-1 Preferred Alternative Typical Sections, Continued

Proposed SR 70 Over Kissimmee River

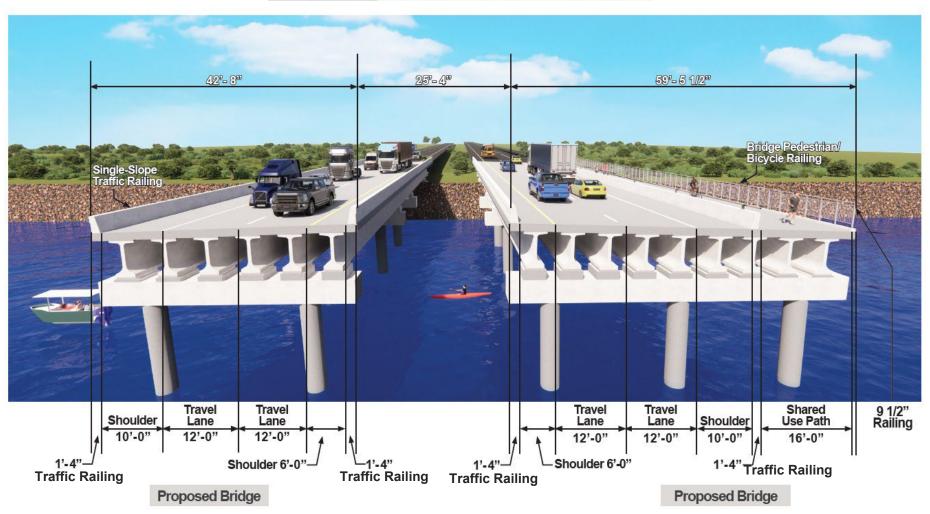
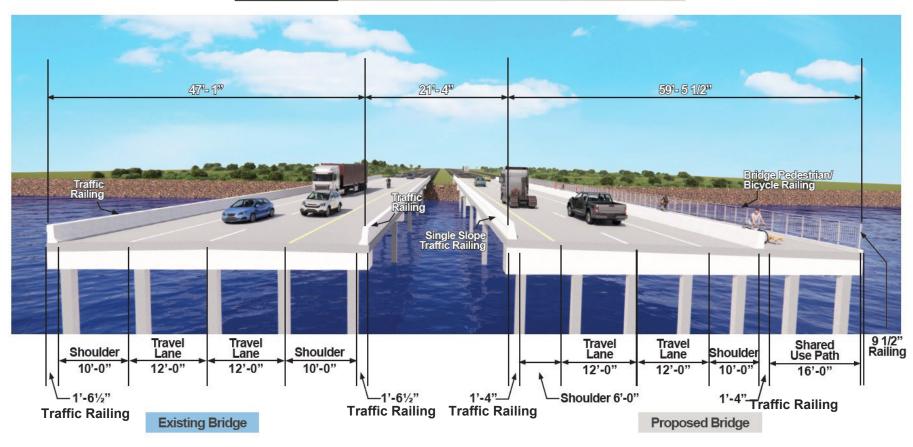


Figure 7-1 Preferred Alternative Typical Sections, Continued

Proposed SR 70 Over Slough Ditch (C-41A Canal)



The proposed access management plan is shown in **Table 7-1**. Additional documentation of the proposed directional and full median openings and U-turn locations is provided in **Appendix E**.

7.1.3 Right-of-Way

The proposed roadway improvements will require additional ROW to be acquired along the length of the corridor for mainline widening, a new alignment at the western end of the project, and stormwater ponds. The existing ROW width is predominantly 100 feet but there are some areas where existing ROW is as limited as 70 feet. The total proposed roadway ROW width required to accommodate the four-lane divided section and transitions at both ends of the corridor varies from 210 feet to 290 feet, with an average of 260 feet. A total of 51 parcels will be impacted by the Preferred Alternative. This includes one (1) parcel owned by the state of Florida for transportation use. There are two (2) potential residential relocations and no potential business relocations. The total area of additional ROW acquisition required along the entire corridor to accommodate the Preferred Alternative typical section is 268.4 acres which includes ROW for roadway and stormwater management facilities. The total ROW cost is estimated to be \$13,985,000. The proposed ROW limits are shown on the Preferred Alternative Concept Plans included in **Appendix B**.

7.1.4 Horizontal and Vertical Geometry

The horizontal alignment for the Preferred Alternative includes 11 horizontal curves within the project limits, summarized in **Table 7-2**. Plan sheets illustrating the Preferred Alternative are provided in **Appendix B**. The horizontal alignment uses the existing S.R. 70 ROW where possible but there are two (2) locations where the proposed facility is on new alignment. This includes the beginning of the project at C.R. 721 South where the alignment is on the south side of the existing S.R. 70 to avoid impacts to the businesses, utilities, and church in this area, and between Boney Lane and NW Riverside Road where the alignment is also on the south side to avoid impacts to Kissimmee River Estates.

Geotechnical soil borings were obtained at 500-foot intervals to determine the SHGWT. The ground water table was plotted on the profile and a 4.75-foot vertical clearance was provided to establish the proposed grade elevations. The Preferred Alternative base course layer will be approximately three feet above the SHGWT to meet FDOT base clearance requirements. The preliminary profile was designed with available LiDAR data and should be finalized with information approved by a licensed Florida Professional Surveyor and Mapper.

Table 7-1 Access Management Plan

Opening Number	Intersection/Opening	Milepost	Stationing	Opening Type	Spacing (in miles) Full to Full & Directional to Directional	Spacing Criteria (in miles)	U-turns?
1	CR 721 South	29.216	400+00	Full		0.50	
2	No Intersection (Lykes Bros. Inc)	30.32	466+00	Full	1.10	0.50	
3	No intersection (Driveway to Glades Electric Cooperative,	30.95	499+50	Full	0.63	0.50	
4	No intersection (Communications Tower)	31.68	537+30	Directional NB/SB	>2.40	0.25	
5	CR 721 North	31.96	552+80	Directional NB/SB	0.28	0.25	Yes
6	No intersection (Driveway to Coco Sod Farms)	32.98	606+40	Directional NB/SB	1.02	0.25	Yes
7	Fulmar Ter/Boney Ln	33.48	632+80	Full	2.53	0.50	
8	NW New Pine Ridge Rd	34.00	659+90	Full	0.52	0.50	
9	Mose Grade Rd	34.49	686+30	Full	0.49	0.50	
10	SW Rucks Dairy Rd/Jordan Ter	35.00	712+80	Full	0.51	0.50	
11	No intersection	35.49	738+00	Directional NB/SB	2.51	0.25	Yes
12	Shellcracker Loop/NW Riverside Rd	35.88	758+80	Full	0.88	0.50	
13	SW 144th Pkwy	0.33	802+80	Directional NB/SB	0.79	0.25	
14	NW 141st Ave	0.52	812+80	Full	0.98	0.50	
15	No intersection	1.09	845+20	Directional NB/SB	0.76	0.25	Yes
16	CR 599/128th Ave	1.41	860+00	Full	0.89	0.50	

Table 7-2 Proposed Horizontal Alignment

Curve	Baseline PI	Bear	ing	Degree of	Radius	Length
no.	Station	Back	Ahead	Curvature		
1	409+69.23	N 74° 32' 46" E	N 28° 42' 05" E	02° 29' 59"	2,292.00 ft	1,833.93 ft
2	434+64.42	N 28° 42' 05" E	N 52° 57' 40" E	01° 59' 59"	2,865.00 ft	1,213.08 ft
3	471+69.15	N 53° 29' 42" E	N 89° 50' 12" E	03° 29' 37"	1,640.00 ft	1,040.22 ft
4	508+18.69	N 89° 50' 12" E	N 85° 29' 57" E	00° 22' 55"	15,000.00 ft	1,135.54 ft
5	519+60.21	N 85° 29' 57" E	N 89° 52' 56" E	00° 22' 55"	15,000.00ft	1,147.47 ft
6	638+20.29	N 89° 52' 56" E	S 82° 38' 28" E	00° 25' 12"	13,640.00 ft	1,779.94 ft
7	655+97.85	S 82° 38' 28" E	N 89° 54' 07" E	00° 25' 12"	13,640.00 ft	1,775.20 ft
8	722+29.43	N 89° 54' 07" E	N 82° 54' 06" E	00° 26' 03"	13,200.00 ft	1,612.78 ft
9	738+42.21	N 82° 54' 06" E	N 89° 54' 07" E	00° 26' 03"	13,200.00 ft	1,612.78 ft
10	764+53.62	N 89° 54' 07" E	N 64° 22' 58" E	03° 29' 37"	1,640.00 ft	730.45 ft
11	827+33.10	N 64° 22' 58" E	S 89° 29' 08" E	02° 17' 31"	2,500.00 ft	1,140.21 ft

7.1.5 Design Variations and Design Exceptions

The Preferred Alternative requires a variation for border width. The proposed border width is 34-feet in one location (Typical Section #2 in **Appendix A**) which allows for runoff to be collected and sent through a culvert to a drainage pond. This reduced border width minimizes impact to the Kissimmee River Fishing Resort and the adjacent gas station. The design variation memorandum is provided in **Appendix D**.

7.1.6 Multimodal Accommodations

The Preferred Alternative provides a 12-foot shared use path on the south side of the road for the full length of the project, adjacent to the eastbound travel lanes, to enhance pedestrian and bicycle mobility. The shared use path is depicted in **Figure 7-1** and **Appendix B**. Impacts to transit and/or truck routes are not anticipated within the project limits. The project will enhance truck routes by affording a divided, four-lane roadway.

7.1.7 Intersection/Interchange Concepts and Signal Analysis

The proposed intersection layout for the corridor is shown in **Appendix E** and also on the Preferred Alternative concept plans provided in **Appendix B**. Similar to existing conditions, all intersections within the project limits are three or four-legged and Two-way STOP-controlled (TWSC) intersections in which the single minor-street approach is controlled by a STOP sign. No

signalized intersections are proposed within the study limits. The PTAR (April 2024), provided under separate cover and included in the project file, provides details on the intersection operational analysis. The Access Management Plan Technical Memorandum (July 2024), prepared under separate cover and included in the project file, details the recommended access points along the corridor.

7.1.8 Tolled Projects

There are no tolled facilities within the study area.

7.1.9 ITS and TSM&O Strategies

ITS and TSM&O strategies were deemed to not meet purpose and need for the project and were not further evaluated.

7.1.10 Landscape

There are no landscape features proposed in the Preferred Alternative.

7.1.11 Lighting

Lighting is not proposed as part of this project. A lighting justification report may be requested and prepared as part of the future design phase.

7.1.12 Wildlife Features

In following the FDOT Wildlife Crossing Guidelines, a wildlife crossing is not warranted for the project because there does not appear to be a documented or science-based need for a crossing. There is insufficient documentation of large animals (i.e. panthers and bears) that would benefit from the crossing and the project is located outside of major habitat zones (i.e. Florida panther Focus Area) of these species. Additionally, conservation lands are not present on both sides of the corridor to make a crossing effective. However, the data does suggest that a benefit could be realized from construction of a wildlife feature. Specifically, wildlife shelves at the Slough Ditch (C-41A) Canal and Kissimmee River bridges will enhance passage for small animals and could also be used by panthers and bears due to the existing vertical clearance of these bridges. Currently, these bridges have rubble rip-rap on both sides of the water features which make passage under the bridges difficult. Wildlife shelves, with a minimum width of three feet consisting of a flattened area with poured concrete or gunite within the rubble rip rap, will be constructed and the elevation of the shelves set above the seasonal high water elevation. FDOT commits to design and construction of wildlife shelves at C-41A Canal and Kissimmee River bridges per current wildlife crossing guidelines. The design details of the wildlife shelves, including evaluation of fencing/funneling and landscape features, will be further evaluated during the design phase.

7.1.13 Permits

The Preferred Alternative will require environmental permits prior to construction. A SFWMD Environmental Resource Permit (ERP) will be required for the project. Coordination with FDOT Drainage and Permitting staff has occurred during the PD&E study along with coordinating with SFWMD to confirm the permitting requirements for the project's stormwater management facilities and floodplain compensation. A USACE 404 permit will also be required for the project's proposed impacts to wetlands and surface waters. Due to potential for gopher tortoise burrows to be located in the project area, a gopher tortoise relocation permit is anticipated with Florida Fish and Wildlife Conservation Commission (FWC).

Other anticipated permits include a USACE Section 408 permit due to the project being within one USACE civil works project, Everglades and South Florida Ecosystem Restoration (CERP). According to Chapter 40E-6, F.A.C., the Kissimmee River (C-38 Canal), Slough Ditch (C-41A) Canal, Structure (lock) S-65E, and lands adjacent to the Kissimmee River are designated as "Works of the District". Therefore, a ROW Occupancy permit will need to be obtained from SFWMD for works within District owned lands. The USCG indicated that a permit is not required for either bridge location. The Slough Ditch (C-41A) Canal is outside USCG jurisdiction and the Kissimmee River is within USCG jurisdiction but does not require a permit since it is not a navigable channel.

Lastly, prior to construction, a National Pollutant Discharge Elimination System (NPDES) Construction Generic Permit issued by FDEP is required for disturbing greater than one acre of land.

7.1.14 Drainage and Stormwater Management Facilities

The Preferred Alternative includes an open drainage system with roadside ditches, separating the off-site flows from the roadway stormwater, and off-site ponds that will outfall ultimately to the Slough Ditch (C-41A) Canal and the Kissimmee River. **Table 7-3** provides a summary of the ROW requirements associated with each of the recommended pond sites. The locations of the pond sites are shown in the Preferred Alternative Concept Plans in **Appendix B**. The sizes of these facilities were estimated using SFWMD and FDOT water quality treatment and attenuation requirements. Within post-construction drainage basin 6, a regional pond alternative was evaluated. Farm property in this region has a stormwater management system permitted through the SFWMD that involves a bermed and natural storage area south of the S.R. 70 corridor with canals directing water to it. Based on the permit review, there is an excess of treatment volume and the project drainage analysis found that the addition of the impervious pavement in basin 6 would have negligible effects on the discharge volume/rate. The existing land would not require any grading and therefore, there would be no disturbance to the existing land, habitats, or any environmental resources contain within. Therefore, this regional pond concept for basin 6 is viable and will be further evaluated in the subsequent design phase. A traditional, excavated stormwater

pond, Pond 6C, has been selected as a preferred pond site within basin 6 should the regional pond concept later be found to be non-viable.

Table 7-3 Summary of Preferred Pond Sites

Basin	Preferred Pond	Size (Acres)
1	1A	5.7
2	2C	1.7
3	3B	7.8
4	4B	8.8
5	5C	8.5
6	6C	7.0
7	7A	10.3
8	8A	11.9
Total		61.7

7.1.15 Floodplain Analysis

A Location Hydraulic Report (November 2025), prepared under separate cover and included in the project file, assessed floodplain impacts associated with the project. Three (3) floodplain models were developed for the following scenarios: (1) existing conditions model, to establish the 100-year 72 hour floodplain elevations for the FEMA Zone A areas, (2) a post development model, by adding the proposed corridor to the existing model and evaluating the impacts to the existing floodplain elevations, and (3) a revised post development model with the compensation of the proposed ponds to mitigate areas where the floodplain elevation increase was greater than 0.1-inch. As detailed in the report, the proposed alignment and typical section is expected to have minimal to no impact on the existing floodplain.

Perpendicular floodplain impacts are those that result from cross drain extension in areas of the 100-year floodplain and parallel impacts occur due to Preferred Alternative's roadway reconstruction south of the existing S.R. 70 roadway and base elevation increase. While both perpendicular and parallel impacts to the 100-year floodplain will occur due to the Preferred Alternative, these impacts will be minimal. Given the limited number of cross drains, perpendicular impacts are minimal and can be mitigated through the replacement or widening of existing bridges. The floodplain analysis indicates that floodplains in adjacent basins along the corridor will experience minimal impacts, which will be addressed in the drainage design. The proposed

concepts are anticipated to provide a net improvement to the floodplain as a result of the proposed stormwater pond sites and roadside ditches. This project does not significantly alter flood risk, nor will the corridor's encroachment into existing floodplains affect transportation facilities.

Based on feedback from the Highlands and Okeechobee County floodplain administrators during a meeting on April 9, 2025, it was recommended to upsize the existing double 60-inch culvert that interconnects a farmland irrigation canal and discharges into the Slough Ditch (C-41A) Canal. This location is between Fulmar Terrace and New Pine Ridge Road and is referred to as CD-2 in the drainage documentation. This culvert may be upsized in order to accommodate future growth in Highlands County, as requested by the local agencies. This will be evaluated more fully in the design phase.

7.1.16 Bridge and Structure Analysis

The Preferred Alternative for the Slough Ditch (C-41A) Canal bridges uses the existing bridge (Bridge No. 090053) for the westbound traffic and constructs a new bridge for the eastbound traffic. This is a feasible and cost-effective option since the existing bridge (Bridge No. 090053) is in good condition. The new bridge will mirror the existing as far as span arrangement and deck thickness, which in turn, maintains the existing minimum vertical and horizontal clearance underneath the bridges. The bridge is proposed as a seven-span reinforced concrete continuous flat slab bridge with a total length of 210 feet (seven spans x 30 feet). The thickness of the reinforced concrete slab is 15.75 inches and has crown shape with 2% slope towards the gutter lines. The concrete bents are comprised of 3-foot x 2-foot-6 inch pile cap and 18-inch piles. The minimum vertical clearance above the channel is 3.67 feet and the minimum horizontal clearance is 26.98 feet. The elevation of the low member is 31.21 feet (NAVD).

The bridge will support 12-foot travel lanes, a six-foot inside shoulder, a 10-foot outside shoulder, and a 16-foot shared-use path. A 36-inch traffic railing will separate the shared-use path from the travel lane and a bridge pedestrian/bicycle railing will be constructed on the outside of the path.

Typical sections for this crossing are shown in **Figure 7-2** and **Figure 7-3** and a bridge plan and profile are included in **Appendix I**.

Construction cost for the bridge structure is estimated at \$2,682,265 based on October 2025 unit costs in the LRE (**Appendix C**).

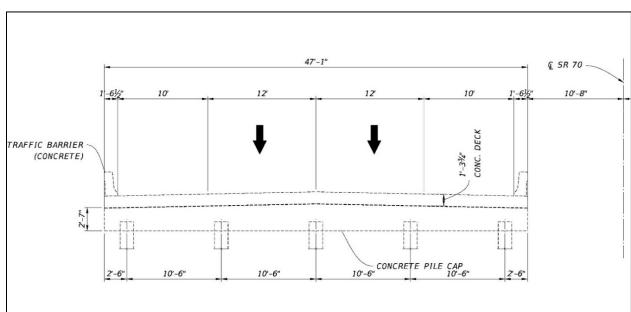
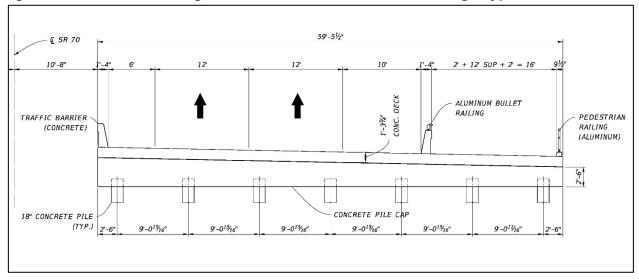


Figure 7-2 S.R. 70 over Slough Ditch (C-41A) Canal Westbound Bridge Typical Section





The Preferred Alternative for the Kissimmee River bridge crossing is replacement of the existing S.R. 70 over Kissimmee River Bridge No. 910001 with two new bridge structures. This is the only feasible option since the existing bridge cannot be preserved and widened due to its age and presence of the removable steel center span. The bridges will have three (3) spans, consisting of 150-foot, 120-foot, and 150-foot spans, for a total of 420-feet for each bridge length. A Mechanically Stabilized Earth (MSE) wall will be constructed at the bridge approach slabs. A retaining wall was selected in lieu of a slope embankment to remain within the existing ROW limits. Due to the proximity of the bridge approaches and limited available space, a conventional

embankment with side slopes could not be accommodated. The use of a mechanically stabilized earth (MSE) wall provides the necessary grade separation while minimizing ROW impacts and maintaining structural efficiency near the bridge abutments.

Two (2) piers will be required to be constructed in the waterway, with a fender system for protection. The concrete superstructure will be comprised of Florida I-Beam (FIB) 63-inch beams (at 6-foot 10-inch spacing) supporting an 8.5-inch concrete deck. The deck will have two 12-foot travel lanes with six-foot inside shoulders and 10-foot outside shoulders. The eastbound bridge will also support a 16-foot shared-use path along the southern edge of the deck. A 36-inch traffic railing will separate the shared-use path from the travel lane and a bridge pedestrian/bicycle railing will be constructed on the outside of the path. The span arrangement and vertical profile of the bridges will enhance horizontal clearance of the main spans and maintain the 17-foot six-inch minimum vertical clearance under the bridge. This clearance is sufficient for the recreational boat traffic along the river. Typical sections for this crossing are shown in **Figure 7-4** and **Figure 7-5** and a bridge plan and profile are included in **Appendix I**.

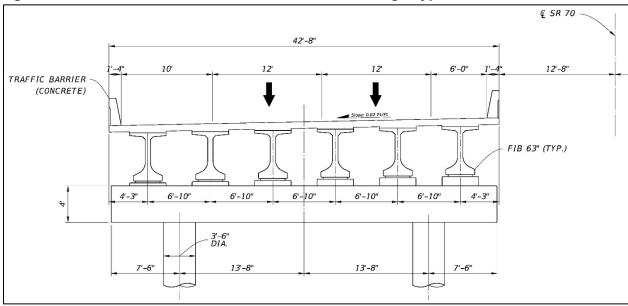


Figure 7-4 S.R. 70 over Kissimmee River Westbound Bridge Typical Section

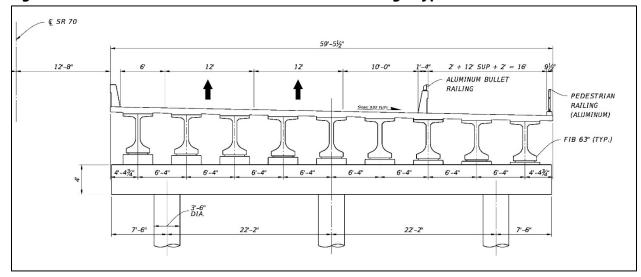


Figure 7-5 S.R. 70 over Kissimmee River Eastbound Bridge Typical Section

Construction cost for the bridge structures, including removal of the existing bridge, is estimated at \$12,084,111 and construction of the retaining walls is estimated at \$4,291,437, based on October 2025 unit costs in the LRE (**Appendix C**).

7.1.17 Transportation Management Plan

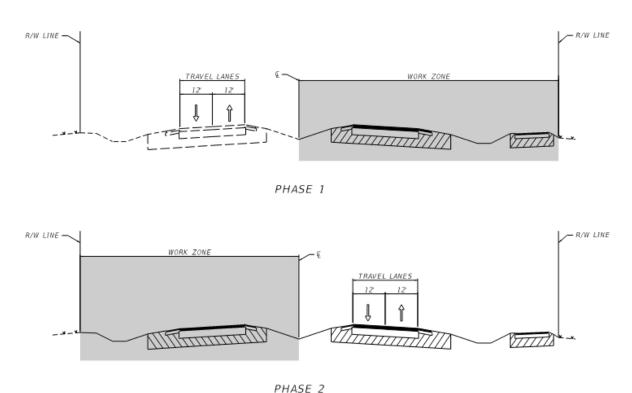
Construction activities will be phased to maintain two lanes of traffic at all times, minimizing diS.R.uptions to motorists and adjacent properties. A portion of the roadway construction will occur on new alignment outside the existing travel lanes, such as at the beginning of the project at C.R. 721 South and in the segment between Boney Lane and NW Riverside Road. This allows construction activities in these areas to proceed without affecting current traffic operations. In areas where the new roadway will be constructed along the existing S.R. 70 alignment, traffic will remain on the existing two-lane road while the contractor builds the two future eastbound lanes. This first phase also will consist of constructing the proposed stormwater facilities and cross drain extensions outside of the existing roadway. The second phase will shift the traffic to the newly constructed asphalt to enable the reconstruction of the existing travel lanes and completion of the cross drain widening. The third phase will involve completing the median construction, the final roadway friction course, and the final pavement markings.

7.1.18 Constructability

As described above for the S.R. 70 roadway segments where the new roadway footprint is along the existing alignment, Phase 1 will consist of traffic remaining on the existing two-lane roadway while the contractor builds the eastbound lanes. Where necessary to prepare for Phase 2 transitions, temporary crossovers shall be constructed, with additional crossovers added as required at strategic locations. During Phase 2, traffic will be shifted onto the newly constructed two-lane section to allow the Contractor to complete the remaining two (2) lanes of the proposed

four-lane divided roadway, along with cross drain extensions and stormwater management facilities. Phase 3 will focus on completing the median construction, applying the final roadway friction course, and installing permanent pavement markings, with traffic separated into the appropriate outside lanes while the inside lanes remain closed to allow median work to proceed. Temporary traffic control devices will remain in place as needed until final striping, delineation, and median construction are complete. **Figure 7-6** provides a schematic of this construction phasing.

Figure 7-6 General Construction Phasing



7.1.19 Construction Impacts

Construction activities for the proposed project may cause minor short-term air quality, noise, water quality, traffic congestion, and visual impacts for nearby residents and the traveling public. The air quality effect will be temporary, localized, and will primarily be in the form of construction exhaust emissions and fugitive dust generated from equipment during project construction. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials. and BMPs to minimize or eliminate potential construction impacts.

The residences in the vicinity of the project are identified in the Highway Traffic Noise Chapter of the FDOT PD&E Manual as noise- and vibration-sensitive sites. Construction of the roadway improvements, with heavy equipment movement and other construction activities, is not expected to have a significant noise or vibration effect. Should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with a noise specialist and the contractor, will investigate additional methods of controlling these impacts.

Water quality impacts resulting from erosion and sedimentation will be controlled through the use of BMPs. All state water quality criteria will be met. Short-term construction related wetland impacts will be minimized with the use of BMPs such as the use of siltation barriers, dewatering structures, and containment devices to control turbid water discharges outside of construction limits. The project will adhere to the FDOT Standard Specifications for Road and Bridge Construction along with implementation of a Stormwater Pollution Prevention Plan (SWPPP).

Maintenance of traffic and sequence of construction will be planned and scheduled so as to minimize traffic delays throughout the project. Signage will be used as appropriate to provide pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction related activities to allow for the planning of alternate routes. Access to local properties, businesses and residences will be maintained to the extent practical through controlled construction scheduling and the implementation of the project's specific Traffic Control Plan(s). Aesthetic impacts will be temporary and could consist of the staging of construction equipment and materials.

7.1.20 Special Features

There are no special features in the project limits.

7.1.21 Utilities

Utility relocation cost is a significant factor for the overall project cost as explained in **Section 5.4.7**. Both FGT and FPL have utilities adjacent to the project within easements. The Preferred

Alternative is estimated to include \$77,281,000 in relocation costs (with contingencies) which will be the responsibility of the FDOT. The other UAOs include Comcast and Lumen/Century Link; these UAOs will be responsible for relocating their utilities. **Table 2-10** provides a list of the UAOs in the project limits with contact information and the UAP (September 2025), prepared under separate cover and included in the project file, provides detailed costs.

7.1.22 Project Costs

The total estimated project costs for the Preferred Alternative are summarized in **Table 7-4**. The FDOT's LRE has been included within **Appendix C** which summarizes the construction cost for the project.

7.2 Summary of Environmental Impacts

7.2.1 Future Land Use

The Preferred Alternative is consistent with the Highlands County and Okeechobee County Comprehensive Plans and Future Land Use Maps (see **Figure 3-1**). the project area will continue to support agricultural along with conservation land uses and rural estates. The project will maintain existing access to surrounding agricultural uses and will result only in moderate conversion of frontage areas to the expanded roadway. **Section 3.1** described potential future Highlands County economic diversification to attract sectors beyond the traditional industries.

7.2.2 Section 4(f)

Potentially protected recreational Section 4(f) resources along the project corridor include the Slough Ditch (C41-A) at S.R. 70 Boat Ramp, the Okeechobee North Trail Connector, and the Kissimmee River PUA.

The Slough Ditch (C41-A) at S.R. 70 Boat Ramp, located approximately 400 feet north of S.R. 70, is part of the overall SFWMD-owned property along the canal that is used for canal maintenance. The Slough Ditch (C-41A) at S.R. 70 Boat Ramp is considered a significant resource under Section 4(f) because it provides an opportunity for public boat access to the canal and to upstream destinations such as Lake Istokpoga, and to downstream locations such as the Kissimmee River. The existing driveway on the east side of the canal will be retained in the post-project condition; this driveway services both the SFWMD property, the boat ramp, and the large privately-owned agricultural parcel to the east and north. While the S.R. 70 widening will require some ROW acquisition from the overall SFWMD property, this will not affect the boat

Table 7-4 Total Estimated Project Cost

Evaluation Criteria	Preferred Alternative	No-Build Alternative
Right-of-Way Cost		
Right-of-Way Acquisition for Roadway	\$10,885,000	\$0
Right-of-Way Acquisition for Stormwater Ponds	\$3,100,000	\$0
Total Right-of-Way Cost	\$13,985,000	\$0
Construction Cost		
Construction Cost for Roadway	\$43,701,000	\$0
Construction Cost for Drainage	\$14,428,000	\$0
Construction Cost for Structures	\$19,058,000	\$0
Construction Cost for Signing and Marking	\$1,168,000	\$0
Mobilization and Maintenance of Traffic	\$20,764,000	\$0
Project Unknowns and Contingency	\$24,929,000	\$0
Total Construction Cost	\$124,047,000	\$0
Preliminary Estimate of Engineering Cost		
Design	\$18,607,000	\$0
Construction Engineering and Inspection (CEI)	\$18,607,000	\$0
Total Preliminary Estimate of Engineering Cost	\$37,214,000	\$0
Utility Relocation and Mitigation Cost		
Utility Relocation	\$77,281,000	\$0
Wetland Mitigation	\$1,426,000	\$0
Species Mitigation	\$206,000	\$0
Total Utility Relocation and Mitigation Cost	\$78,913,000	\$0
Total Project Costs	\$254,159,000	\$0

ramp area. Since there will not be acquisition of land from the resource on a temporary or permanent basis, there will not be any proximity impacts that rise to the level of substantial impairment, and access to the resource will be maintained at all times throughout construction, there will be "no use" of this resource. A Section 4(f) No Use Determination form was completed for this resource with OEM concurrence on November 4, 2025. The Okeechobee North Trail Connector is along CR 599/SW 128th Avenue on both the north and south sides of S.R. 70 and has several names. The trail segment from the Kissimmee River to S.R. 70 is called the Okeechobee North Trail to S.R. 70 Connector and is approximately 1.1 miles in length. North of S.R. 70, the name changes to Okeechobee North Trail to Kissimmee River Trail and is approximately 6.3 miles. As part of the Florida National Scenic Trail (FNST) which begins at US 41 in Big Cypress National Preserve and terminates in Fort Pickens State Park in the Pensacola area, it is also called the S-65E

Lock Access Road/CR 599 and FNST Connector. This is a "roadwalk" trail where pedestrians may walk on the grassy roadside shoulder and is maintained by Okeechobee County. The Okeechobee North Trail to S.R. 70 Connector/ Okeechobee North Trail to Kissimmee River Trail is considered a significant resource under Section 4(f) because it provides a long segment of opportunity for walking/hiking/biking in this region. Since there will not be acquisition of land from the resource on a temporary or permanent basis, there will not be any proximity impacts that rise to the level of substantial impairment, and access to the resource will be maintained at all times throughout construction, there will be "no use" of this resource. A Section 4(f) No Use Determination form was completed for this resource with OEM concurrence on November 4, 2025.

The Kissimmee River PUA consists of 30,864 acres of land in Glades, Highlands, Okeechobee, Osceola and Polk Counties. Much of the overall property was purchased with funding from the Save Our Rivers (SOR) program created by the Florida legislature in 1981 to allow for the state water management districts to acquire environmentally sensitive land to manage, protect, and conserve the state's water resources. The Kissimmee River PUA is also managed to provide the public with fish and wildlife-based public outdoor recreational opportunities, mainly hunting. The closest parcel associated with the Kissimmee River PUA is located on the south side of S.R. 70, west of the Kissimmee River. The property is immediately adjacent to the existing S.R. 70 ROW in this location. There are no upland access points from State Road 70 or from any other upland points in the project area to the Kissimmee River PUA, either for public access or maintenance access. The only access opportunity is by boat.

The S.R. 70 widening improvements require 2.48 acres of permanent property acquisition from the boundary of the Kissimmee River PUA at S.R. 70. The impact footprint for the proposed improvements within the park comprises approximately 0.00008% of the PUA's overall total acreage. There will not be any proximity impacts that rise to the level of substantial impairment since the roadway expansion will not have any indirect/secondary impacts to the property. Recreational use of the PUA property adjacent to the proposed road ROW boundary will continue unimpeded.

The minimization of impacts to this Section 4(f)-eligible resource has been achieved by selecting Build Alternative 1 as the Preferred Alternative. When project alternatives were developed and presented to the public in June 2024, it was estimated that Build Alternative 1 would impact 2.8 acres of the Kissimmee River PUA and Build Alternative 2 would impact 3.4 acres of the Kissimmee River PUA. Since then, the alternatives were further refined and the 2.8 acres was reduced to 2.45 acres. Additionally, no stormwater pond alternatives were sited within the boundary of the Kissimmee River PUA. Based upon the above information and the measures to minimize harm, there will be no adverse effects to the activities, features and attributes that qualify the Kissimmee River PUA for protection under Section 4(f). A "de minimis" determination was preliminarily made for this impact and the Official with Jurisdiction (OWJ), the SFWMD, was notified on September

11, 2025. The public hearing will afford an opportunity for the public to review and comment on this determination. Following the public hearing, the FDOT will coordinate again with the SFWMD and request concurrence of the "de minimis" finding.

Historical sites with Section 4(f) protection include the Slough Ditch (C-41A) Canal, Kissimmee River (C-38 Canal), and the S.R. 70 bridge over the Kissimmee River.

The Slough Ditch (C-41A) Canal (8HG01127) is a SFWMD-managed canal constructed by the USACE as part of the Central and Southern Florida (C&SF) Project as a means of alleviating flooding in farmlands south of Lake Istokpoga within the Lower Kissimmee River/Lake Istokpoga Basin. The existing S.R. 70 bridge (Bridge No. 090053) carries traffic over the canal. The canal is eligible for listing in the NHRP under Criterion A in the areas of Community Planning and Development and Agriculture.

The road widening over the Slough Ditch (C-41A) Canal will construct a new eastbound bridge south of the existing bridge (Bridge No. 090053), with two travel lanes and a shared-use path. The existing bridge ROW occupancy at this location is currently 11,750 square feet (250 feet in length over the canal water by 47 feet wide bridge typical section). The roadway improvements will require additional ROW occupancy over the Slough Ditch (C-41A) Canal, consisting of approximately 28,830 square feet (390 feet in length [top of embankment to top of embankment] by 63 to 81 feet wide [includes the 60 foot wide bridge typical section, 21 feet of ROW occupancy between the bridges as well as approximately 63 feet for the new road and shared-use path]). The ROW occupancy, footprint of the new bridge, and alterations to the earthen banking along the site are in keeping with the existing conditions within the project limits and the undertaking will not damage the historic site in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP. The Section 106 effects determination for the proposed project resulted in *no adverse effect* and the OWJ concurred with this determination in a letter dated September 22, 2025. As such, the ROW occupancy will have no adverse effect on activities, features, and attributes of the site.

The public hearing will afford an opportunity for the public to review and comment on the "de minimis" determination. Placeholder for public comments and OEM concurrence.

The Kissimmee River (C-38 Canal) (8HG01236/8OB00336) is a SFWMD-managed canal that was channelized in 1966 as part of the C&SF Project to help with flood control. The existing S.R. 70 bridge (Bridge No. 910001) carries traffic over the canal. The canal is eligible for listing in the NHRP under Criterion A in the areas of Community Planning and Development and Conservation and Criterion C in the area of Engineering.

The road widening over the Kissimmee River Canal (C-38) will remove the existing S.R. 70 over Kissimmee River bridge (Bridge No. 910001) and construct a westbound and eastbound bridge with two travel lanes each. The westbound bridge will replace the existing bridge, while the

eastbound bridge will be constructed to the south of the existing bridge. The existing bridge ROW occupancy at this location is currently 13,020 square feet (420-foot length over the canal by 31-foot-wide bridge typical section). This will be replaced with approximately 18,060 square feet (420-foot length by 43-foot-wide bridge typical section) for the new westbound bridge and approximately 35,700 square feet (420-foot length by 85-foot wide [60-foot wide bridge typical section plus 25-foot ROW gap between the bridges in the post-construction condition]) for the new eastbound bridge.

Considering the canal is a state sovereign submerged land (SSL), an SSL easement is required for the new bridge that will be constructed outside of the existing ROW. While the roadway improvements will require the additional ROW occupancy/easements discussed above, the undertaking will not damage the historic site in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP. The SSL easement, footprint of the new bridges, and alterations to the earthen banking along the site are in keeping with the existing conditions within the project limits. The Section 106 effects determination for the proposed project resulted in **no adverse effect** and the OWJ concurred with this determination in a letter dated September 22, 2025. As such, the SSL easement and SFWMD ROW occupancy will have no adverse effect on activities, features, and attributes of the site.

The public hearing will afford an opportunity for the public to review and comment on the "de minimis" determination. Placeholder for public comments and OEM concurrence.

The S.R. 70 over Kissimmee River Bridge (Bridge No. 910001; [8HG01236/8OB00336]) is a seven span, concrete beam and girder bridge constructed in 1966 in order to carry S.R. 70 over the newly channelized Kissimmee River (C-38 Canal). The peak of the bridge is equipped with a steel, removable span which accommodates the passing of larger vessels while being more cost effective than a manned, operable span. The site is eligible for listing in the NHRP under Criterion C in the area of Engineering as an example of a removable span bridge.

The proposed S.R. 70 improvements involve removal of the existing Kissimmee River Bridge (Bridge No. 910001 [8HG01236/8OB00336]) and construction of a new bridge following the existing S.R. 70 alignment that will carry westbound traffic over the Kissimmee River and the construction of a second bridge to the south that will carry eastbound traffic. Two build alternatives, Build Alternative 1 and Build Alternative 2, were evaluated. Both build alternatives involve the replacement of the S.R. 70 over Kissimmee River Bridge (Bridge No. 910001 [8HG01236/8OB00336]). Alternative 1 was identified as the Preferred Alternative since it results in better access management at Kissimmee River Estates, fewer residential relocations, fewer impacts to noise sensitive sites, and less impact to public recreational lands. The alignment for Build Alternative 1 closely follows the existing roadway alignment and widens to the south. A No-Build Alternative is considered a valid alternative throughout the life of the study. The No-Build Alternative assumes no improvements to S.R. 70 within the study limits through the Design Year

of 2052, limiting work in the project area to routine maintenance. Based on the 2022 Bridge Inspection Report, the existing bridge is considered satisfactory; however, due to the age of the structure (built in 1966 [58 years]), the bridge has reached the end of its service life which is designed for the service life of 50 years. The bridge currently shows signs of deterioration of the concrete and steel span, which is in line with the age of the bridge. Routine maintenance will not correct the ongoing physical deterioration and aging of the bridge that will eventually lead to bridge failure. Furthermore, the existing bridge has substandard shoulder widths and railings, especially on the steel (movable) span. In order to meet the project purpose and need, the Kissimmee River Bridge (Bridge No. 910001) would need to be widened; however, considering the bridge type (steel span bridge), the bridge is not suitable for widening.

In 2024, repairs and rehabilitation to the bridge (cleaning and sealing the roadway, deck spall repairs, structural steel repairs, and repainting of the steel portions) were done to maintain the bridge. These repairs will allow the bridge to remain in use until a solution for replacement or additional repair is made. The repairs are anticipated to add another 10 to 15 years to the lifespan, far exceeding the intended service of the bridge to 68 to 70 years.

A Rehabilitation option was considered for this project; however, rehabilitation within its historic specifications does not address the substandard design and safety concerns and does not meet the purpose and need for the project. Rehabilitation of the bridge incorporating measures to meet the purpose and need of the project would adversely affect the characteristics that make the bridge eligible for the NRHP. Avoidance and minimization options were considered as part of the PD&E Study to avoid impacts to the historic bridge. However, there are constraints adjacent to the existing S.R. 70 alignment in the area of the Kissimmee River bridge with the FPL easement to the north and the FGT easement to the south. Due to the positioning of both easements, the potential to realign S.R. 70 to avoid replacing the bridge is not a feasible option.

Based on the information above, the No Build, Rehabilitation, and Avoidance alternatives are neither feasible nor prudent. As such, the project preferred alternative will demolish and replace the Kissimmee River Bridge (Bridge No. 910001) resulting in an *adverse effect* to the NRHP-eligible property. SHPO concurred with the adverse effect determination on July 17, 2024. FDOT and SHPO have developed a draft MOA addressing suitable measures to mitigate this adverse effect.

Local historical societies, including Okeechobee County Community Services, Okeechobee Historical Society, Heritage Association of Highlands County, Inc., Highlands County Historic Preservation Commission, and Sebring Historical Society, were contacted on July 21, 2025 to inform them of the adverse effect to the bridge, the documents prepared to date (the CRAS), and documents in process (Section 106 Case Study and MOA). The entities were asked for feedback that would be considered for development of the MOA. Responses were received from the Okeechobee Historical Society and the Highlands County Historic Preservation Commission and

incorporated into the draft MOA. The CRAS prepared for the bridge and the Section 106 Case Study were placed on the project website upon SHPO concurrence for public access.

The proposed project meets all the applicable criteria set forth by the FHWA Guidance on Programmatic Section 4(f) Evaluation and Approval for FHWA Projects Which Necessitate the Use of Historic Bridges (23 CFR Part 774). All alternatives set forth in the subject programmatic evaluation were fully analyzed and the findings made are clearly applicable to this project. There are no feasible and prudent alternatives to the use of the historic bridge, and the project includes all possible planning to minimize harm.

The Section 4(f) Report details the alternatives evaluation for this resource, public involvement activities, MOA, and is attached. The public hearing will afford an opportunity for the public to review and comment on this determination.

Placeholder for public comments and OEM concurrence.

7.2.3 Cultural Resources

A CRAS was performed for the portion of the project that crosses the Kissimmee River (June 2024) at the start of the project since it was known that regardless of the roadway alternative selected, the project will require removal of the bridge. This document was prepared under separate cover and is included in the project file. Historic background research, including a review of the Florida Master Site File (FMSF) and the National Register of Historic Places (NRHP) databases, indicated that one historic bridge (8HG01236/8OB00336), FDOT Bridge No. 910001, was previously recorded within the Area of Potential Effects (APE). Due to its location on the Okeechobee-Highlands County line, the S.R. 70 over Kissimmee River Bridge has been assigned a Highlands County FMSF number (8HG01236) and an Okeechobee County FMSF number (8OB00336). The S.R. 70 over Kissimmee River Bridge is a seven-span, concrete beam and girder bridge constructed in 1966 to carry S.R. 70 over the newly channelized Kissimmee River (C-38 Canal). The peak of the bridge is equipped with a steel, removable span which accommodates the passing of larger vessels while being more cost effective than a manned, operable span. The bridge was determined eligible for listing in the NRHP by the SHPO in 2014 under Criterion C in the area of Engineering as an example of a removable span bridge. The S.R. 70 over Kissimmee River Bridge has not been significantly altered since it was determined eligible for listing in the NRHP by the SHPO and appears to remain eligible for individual listing in the NRHP under Criterion C in the area of Engineering as an example of a removable span bridge. Based on the scope of work, the undertaking will result in the physical destruction, damage, or alteration of all or part of the S.R. 70 over Kissimmee River Bridge. Therefore, FDOT determined that the proposed undertaking will have an adverse effect on the S.R. 70 over Kissimmee River Bridge (8HG01236/8OB00336). The SHPO provided concurrence on July 17, 2024.

Historical/architectural field survey resulted in the identification of a second historic resource, the newly identified Kissimmee River (C-38 Canal) (8HG01650/8OB00489), constructed in 1966. Although the channelization of the Kissimmee River (C-38 Canal) is significant within the ecological and developmental history of south and central Florida, the majority of the linear resource is located outside of the APE, and a survey of the entire 69-mile-long channelized river is beyond the scope of this project. In addition, the linear resource has not been previously recorded elsewhere in Okeechobee or Highland Counties. As such, following the guidance of the Historic Linear Resource Guide provided by the Florida Division of Historic Resources (FDHR), there is insufficient information to evaluate the 102-foot segment of the Kissimmee River (C-38 Canal) that is contained within the APE.

Based on the scope of work, the undertaking will include the demolition of the existing S.R. 70 over Kissimmee River bridge and the construction of a westbound and eastbound bridge with two travel lanes each. Although this will result in the expansion of the existing bridge footprint and alteration to the earthen banking along the linear resource, these alterations are in keeping with the existing conditions of the Kissimmee River (C-38 Canal) (8HG01650/8OB00489) within the APE. Therefore, FDOT determined that the proposed undertaking will have *no adverse effect* on the Kissimmee River (C-38 Canal) (8HG01650/8OB00489). The SHPO provided concurrence on July 17, 2024.

A Section 106 Consultation Case Study Report (August 2025), provided under separate cover and included in the project file, was prepared to evaluate the potential effects of the proposed undertaking to the historic property located within the APE, which includes the S.R. 70 over Kissimmee River Bridge, Bridge No. 910001 (8HG01236/80B00336). Potential effects to this historic property were evaluated to comply with the provisions of Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR Part 800 ("Protection of Historic Properties," revised January 2004), and Chapter 267, Florida Statutes. This report includes a summary description of the project and of the significant historic property, as well as application of the Criteria of Adverse Effects, as defined in 36 CFR Part 800.5.

The FDOT applied the Criteria of Adverse Effect found in 36 CFR Part 800.5 to the historic property determined eligible for listing in the NRHP located within the APE. This document provides information for consultation with the SHPO and Office of Environmental Management (OEM). Based on the proposed undertaking to replace the existing significant bridge, the findings of the Section 106 Case Study Report indicate that the proposed undertaking will have an *adverse effect* to the NRHP-eligible S.R. 70 over Kissimmee River Bridge, Bridge No. 910001 (8HG01236/8OB00336). The SHPO provided concurrence on September 22, 2025.

Public engagement and appropriate coordination meetings will continue through the completion of the PD&E Study and the final design phase. As such, coordination among FDOT, District One, OEM, the SHPO, the Advisory Council on Historic Preservation (ACHP), as well as the public will

continue to ensure that a sensitive and appropriate mitigation treatment plan is developed. Measures to resolve the adverse effect will be documented in a MOA between FDOT, SHPO, and other affected parties, as appropriate. Once the MOA is executed, the FDOT will ensure that the mitigation measures outlined in the MOA are implemented.

A Draft MOA (October 2025), prepared under separate cover and included in the project file, was provided to the SHPO on October 23, 2025 for review and comment prior to the public hearing. Prior to this document submittal, the FDOT and SHPO held a meeting to discuss the project and the proposed mitigation strategies This MOA details mitigative measures including documentation prepared in accordance with Historic American Engineering Record (HAER) Level III standards, drawings, photographs, and written data. The FDOT will provide draft HAER documentation to the NPS and SHPO for concurrent review, then provide revised and final copies to the National Park Service (NPS), SHPO, and Okeechobee Historical Society. The existing commemorative bridge plaque will be salvaged for use elsewhere following preparation of a salvage and relocation plan, and affording of the SHPO, Okeechobee Historical Society, and Highlands and Okeechobee Counties an opportunity to provide comments. Lastly, FDOT will assist with the development and funding of a single panel educational exhibit and installation in proximity to the bridge. The SHPO will be afforded the opportunity to provide comment. An electronic copy of the exhibit will be provided to local entities for installation at their discretion. These mitigative measures are included as project commitments.

The Electronic Section 106 (e106) form was submitted to the Advisory Council on Historic Preservation (ACHP) on October 6, 2025. Also included was the Section 106 Case Study Report. The intent of the submittal was to notify the ACHP of a finding that an undertaking will adversely affect historic properties, and/or invite the ACHP to participate in a Section 106 consultation related to the preparation of the MOA.

A second CRAS (April 2025) was prepared for the remainder of the project, focusing on the roadway alignment. This document was prepared under separate cover and is included in the project file. Historic background research indicated that a third historic resource, the Slough Ditch (C-41A) Canal (8HG01127) was previously recorded within the APE. The segment of the Slough Ditch (C-41A) Canal was evaluated as eligible while having insufficient information for determining NRHP eligibility for the whole resource.

Historical/architectural field survey resulted in the identification of 46 historic resources within the APE. These include 34 buildings, 10 linear resources including the previously discussed Kissimmee River (C-38 Canal), the previously discussed Kissimmee River bridge, and one building complex resource group. Of these, 43 appear ineligible for listing in the NRHP. The remaining three (3) sites include the Slough Ditch (C-41A) Canal (8HG01127), Kissimmee River (C-38 Canal) (8HG01650/8OB00489), and Kissimmee River Bridge (8HG01236/8OB00336).

The segment of the Slough Ditch (C-41A) Canal (8HG01127) within the APE was constructed in approximately 1944 as a later component of the C&SF Project to improve and modify the Lake Okeechobee and Lower Kissimmee River/Lake Istokpoga Basins. The resource is also associated with the development of the Kissimmee River (C-38 Canal). The segment of the Slough Ditch (C-41A) Canal (8HG01127) within the APE appears eligible for listing in the NRHP under Criterion A in the areas of Community Planning and Development and Agriculture; however, there is insufficient information to determine NRHP eligibility for the linear resource as a whole. Based on the scope of work, the undertaking will include the construction of an eastbound bridge with two travel lanes south of an existing bridge (Bridge No. 090053). Although this will result in a new bridge footprint and alteration to the earthen banking along the linear resource, these alterations are in keeping with the existing conditions within the APE. Therefore, FDOT determined that the proposed undertaking will have *no adverse effect* on Slough Ditch (C-41A) Canal (8HG01127).

Archaeological surveys also were conducted. Archaeological field methods consisted of surface
reconnaissance and both systematic and judgmental shovel testing.

7.2.4 Wetlands

For the Preferred Alternative (mainline), 13.72 acres of direct impacts to jurisdictional wetlands, 2.60 acres to surface waters (Slough Ditch [C-41A] Canal and Kissimmee River), and 24.19 acres to other surface waters (ditches) associated with fill for new roadway and embankment are anticipated. In addition, the stormwater management facilities will directly impact 0.17-acre of wetlands and 1.03 acres of other surface waters. This results in a total of 41.70 acres of direct impact overall. As an estimate for this project, approximately 4.47 acres of secondary impacts are anticipated to wetlands. A Uniform Mitigation Assessment Method (UMAM) analysis was performed and the estimated UMAM functional loss related to the Preferred Alternative impacts results 16.51 functional units for direct impacts and 0.30 functional units for secondary impacts

for the mainline widening, and 0.46 functional units for direct impacts and 0.02 functional units for secondary impacts for the off-site stormwater management facilities. Details are provided in the NRE (November 2025), prepared under separate cover and included in the project file.

The project is located within the SFWMD South Kissimmee Basin and entirely within one mitigation bank service area, Lake Istokopoga, and partially within the service areas of Twin Oaks and Bluefield Ranch mitigation banks. The project is located within the USACE-recognized Western Okeechobee Inflow (03090103) Hydrologic Unit Code (HUC) Basin and Kissimmee (03090101) HUC Basin which differ from the SFWMD watershed boundaries. Mitigation credit availability from wetland mitigation banks changes over time, and use of some banks may require a "proximity factor" to be applied or a cumulative impact analysis to be prepared, in order to purchase credits from a bank that does not share the same watershed boundaries or mitigation bank service area as the project impacts. FDOT will continue to monitor wetland mitigation bank credit availability as the project proceeds to the design phase.

FDOT will address all state and federal permitting requirements and provide appropriate compensatory wetland mitigation for final determination of jurisdictional wetland boundaries in future phases of this project. Wetland impacts resulting from the construction of this project will be mitigated pursuant to Section 373.4137, Florida Statutes (F.S.), to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. § 1344. Mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements.

7.2.5 Protected Species and Habitat

The project study area was evaluated for potential occurrences of federal and state protected plant and animal species in accordance with Section 7 of the Endangered Species Act of 1973, as amended, and Chapters 5B-40 and 68A-27 of the Florida Administrative Code (F.A.C.). The evaluation included literature and database reviews, as well as field assessments of the project study area to identify the potential occurrence of protected species and/or presence of federal-designated Critical Habitat. Species-specific surveys were completed for Audubon's crested caracara and Florida bonneted bat. The proposed project has potential to involve several state and/or federally listed protected species and their habitats. These species and their anticipated involvement are identified in the NRE (November 2025) provided under separate cover and included in the project file.

Based on evaluation of collected data and field reviews, the federal and state listed species in **Table 7-4** and **Table 7-5** were observed or were determined to have the potential to occur within or adjacent to the project area. An effect determination was made for each of these federal and state listed species based on an analysis of the potential impacts of the proposed project on

each species. The project is not within Critical Habitat for any species; therefore, no destruction or adverse modification of Critical Habitat will occur.

Table 7-5 Federally Listed Species Determinations of Effect

Project Effect	Federal Listed Species
	BIRDS
	Red-cockaded woodpecker (Picoides borealis)
	Florida grasshopper sparrow (Ammodramus savannarum floridanus)
	Florida scrub-jay (Aphelocoma coerulescens)
No Fffort	Snail kite (Rostrhamus sociabilis plumbeus)
No Effect	Eastern black rail (Laterallus jamaicensis)
	MAMMALS
	Florida bonneted bat (Eumops floridanus)
	PLANTS
	Britton's beargrass (<i>Nolina brittoniana</i>)
	REPTILES
	Eastern indigo snake (<i>Drymarchon corais couperi</i>)
	BIRDS
May affect, not likely to adversely affect	Wood stork (Mycteria americana)
unversely unices	MAMMALS
	West Indian manatee (<i>Trichechus manatus</i>)
	Florida panther (<i>Puma concolor coryi</i>)
May affect, likely to	BIRDS
adversely affect	Crested caracara (Caracara plancus audubonii)
*N/A	MAMMALS
	Tricolored bat (Perimyotis subflavus)
14/7	INVERTEBRATES
	Monarch butterfly (<i>Danaus Plexippus</i>)

^{*}The tricolored bat and monarch butterfly are proposed for federal listing and do not have a project effect determination at this time.

Table 7-6 State Listed Species Determinations of Effect

Project Effect	State Listed Species	
	REPTILES	
	Gopher tortoise (Gopherus polyphemus)	
	Florida pine snake (Pituophis melanoleucus mugitus)	
	BIRDS	
	Florida sandhill crane (Antigone canadensis pratensis)	
	Florida burrowing owl (Athene cunicularia floridana)	
	Little blue heron (<i>Egretta caerulea</i>)	
	Tricolored heron (Egretta tricolor)	
	Southeastern American kestrel (Falco sparverius paulus)	
No adverse effect	PLANTS	
anticipated	Giant wild-pine (<i>Tillandsia utriculata</i>)	
	Cardinal wild-pine (Tillandsia fasciculata)	
	Pine lily (<i>Lilium catesbaei</i>)	
	Yellow fringeless orchid (<i>Platanthera integra</i>)	
	Celestial lily (Nemastylis floridana)	
	Cutthroatgrass (Coleataenia abscissa)	
	Piedmont jointgrass (Coelorachis tuberculosa)	
	Many-flowered grass-pink (Calopogon multiflorus)	
	Florida beargrass (Nolina atopocarpa)	
	Small's flax (Linum carteri var. smallii)	
	BIRDS	
	Least tern (Sternula antillarum)	
	PLANTS	
No effect anticipated	Sand butterfly pea (Centrosema arenicola)	
	Ashe's savory (Calamintha ashei)	
	Giant orchid (Pteroglossaspis ecristata)	
	Nodding pinweed (Lechea cernua)	

The NRE was submitted to state and federal permitting and commenting agencies on XXplaceholderXX. Comments were received from the XXplaceholderXX. Formal consultation with the USFWS is currently in progress, required for proposed impacts to the crested caracara. Several project commitments and implementation measures will help to protect species prior to and during construction.

7.2.6 Essential Fish Habitat

The proposed project has no involvement with Essential Fish Habitat as none exists within the project study area.

7.2.7 Highway Traffic Noise

A Noise Study Report (NSR) (November 2025) was prepared under separate and is included in the project file. Within the project limits, 105 receptors were modeled with the Traffic Noise Model (TNM) to evaluate traffic noise levels at 121 noise sensitive land uses consisting of 120 residences and one picnic table. Exterior traffic noise levels were evaluated at all locations. Under existing conditions (2024), exterior traffic noise levels are predicted to range from 42.0 to 66.4 dB(A), and from 46.4 to 70.9 dB(A) with the future no-build condition. In the design year (2052) with the Preferred Alternative, traffic noise levels are predicted to range from 47.2 to 68.7 dB(A). Traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at four residential receptors. When compared to existing conditions, the largest increase in traffic noise is predicted to be 12.7 dB(A), a level that does not constitute a substantial increase. Some noise sensitive land uses are predicted to experience a decrease in traffic noise as a result of the proposed southward shift in the S.R. 70 roadway alignment between Boney Lane and NW Riverside Road.

Noise abatement measures including traffic management and alternative roadway alignments were determined to not be feasible and/or reasonable abatement measures for the impacted residences. Noise contours are used to establish noise buffer zones and provide appropriate setback distances for noise sensitive development. These contours have been prepared for the future improved roadway facility and are discussed in the NSR.

A noise barrier was evaluated as a potential abatement measure for two of the impacted residential receptors located in Kissimmee River Fishing Resort. The results of the analysis indicate the barrier could not meet minimum noise reduction requirements at a reasonable cost. Noise barriers were not evaluated at the remaining two impacted residential receptors as they are considered "isolated impacts" where there is only one impacted receptor to potentially benefit, and as such, will not meet minimum feasibility requirements.

Based on the noise analyses performed to date, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the residential receptors. Therefore,

noise barriers are not recommended for further evaluation as part of this project at this time. Should changes be made to the Preferred Alternative, additional analysis may be warranted.

Residences within the project limits are identified in the FDOT listing of sites sensitive to construction noise and vibration. Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact, and it is anticipated that the application of the FDOT "Standard Specifications for Road and Bridge Construction" will minimize or eliminate potential construction noise and vibration impacts.

7.2.8 Contamination

A Level-I contamination evaluation was completed for the project and a Contamination Screening Evaluation Report (CSER) (November 2025) was prepared under separate cover and is included in the project file. It documents potential contamination concern along the project corridor. Based on the methodologies performed as part of this study, eight (8) potential contamination sites were identified as having the potential for hazardous material or petroleum impacts. Of these eight (8) sites, two (2) received an initial risk rating of "No", five (5) sites received an initial risk rating of "Low", and one (1) received an initial risk rating of "Medium".

For sites rated "No" and "Low" for potential contamination, no further action is required at this time. These sites/facilities have potential to impact the study area but based on variables such as current site operations and distance to the project area, have been determined to have low risk to the corridor at this time. Variables that may change the risk rating include a facility's non-compliance with environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change an additional assessment of the facilities will be conducted.

For the site with a risk rating of "Medium", which consists of an underground petroleum storage tank that is undergoing cleanup activities for historic groundwater contamination due to a gasoline leak, the Project Manager (PM) and District Contamination Impact Coordinator (DCIC) will coordinate to determine if Level-II testing and/or Level-III support will be warranted. This may include determining if the FDEP/FDOT Memorandum of Understanding (MOU) applies to any sites, conducting Level II activities or recommending Level III or remedial activities, notes on the plans, design modifications and/or special provisions prior to or during construction.

Appendix A Typical Section Package

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

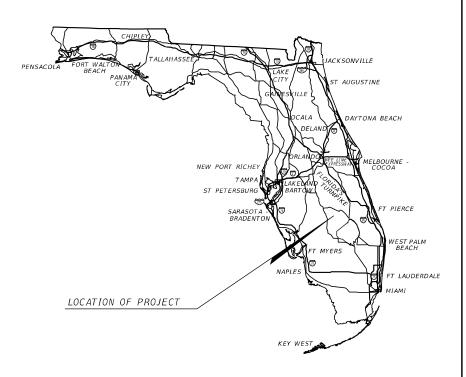
FINANCIAL PROJECT ID 450334-1-22-01

HIGHLANDS COUNTY (09060)

OKEECHOBEE COUNTY (91070)

STATE ROAD NO. 70

ADD LANES AND RECONSTRUCT FROM CR 721 S TO CR 599/128 AVE



FDOT DISTRICT DESIGN ENGINEER

Digitally signed by Kevin Ingle Date: 2025.09.29 09:10:30-04'00'

CONCURRING WITH: TYPICAL SECTION ELEMENTS TARGET SPEED DESIGN & POSTED SPEEDS

FDOT DISTRICT INTERMODAL SYSTEMS
DEVELOPMENT MANAGER

Bessie Reina C = US Q = FLORIDA DEPARTMENT OF TRANSPORTATION Date: 2025.09.26 16:51:53

CONCURRING WITH: CONTEXT CLASSIFICATION TARGET SPEED FDOT DISTRICT STRUCTURES DESIGN ENGINEER

DESIGN & POSTED SPEEDS

CONCURRING WITH:

TARGET SPEED

FDOT DISTRICT TRAFFIC OPERATIONS

Steven A Davis

08:55:25 -04'00'

2025.09.29

Peronto

Discoveration

Discoveratio

CONCURRING WITH: TYPICAL SECTION ELEMENTS

FHWA TRANSPORTATION ENGINEER LOCAL TRANSPORTATION ENGINEER

CONCURRING WITH: CONCURRING WITH: TYPICAL SECTION ELEMENTS TYPICAL SECTION ELEMENTS

PROJECT LOCATION URL: https://tinyurl.com/4k3pfhpy

PROJECT LIMITS: BEGIN MP 29.187 - END MP 1.423 STATION EQUATION: MP 36.334 (09060000) = MP 0.000 (91070000)

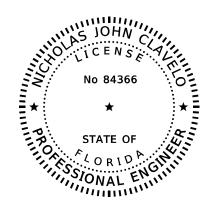
EXCEPTIONS: NONE

BRIDGE LIMITS: BR#090053 MP 30.128 - MP 30.168

BR#910001 MP 0.000 - MP 0.080

RAILROAD CROSSING: NONE

APPROVED BY:



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Nicholas J Clavelo 2025.09.17 10:12:51-04'00'

ON THE DATE ADJACENT TO THE SEAL

THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SCALAR CONSULTING GROUP, LLC. 5713 CORPORATE WAY, SUITE 200 WEST PALM BEACH, FL 33407 NICHOLAS JOHN CLAVELO, P.E. NO. 84366

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INDEX OF SHEETS

SHEET NO	SHEET DESCRIPTION	
1	COVER SHEET	
2	TYPICAL SECTION NO. 1	
3	TYPICAL SECTION NO. 2	
4	TYPICAL SECTION NO. 3	
5	TYPICAL SECTION NO. 4	
6	TYPICAL SECTION NO. 5	

SHEET

1

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 (X) C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
 () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

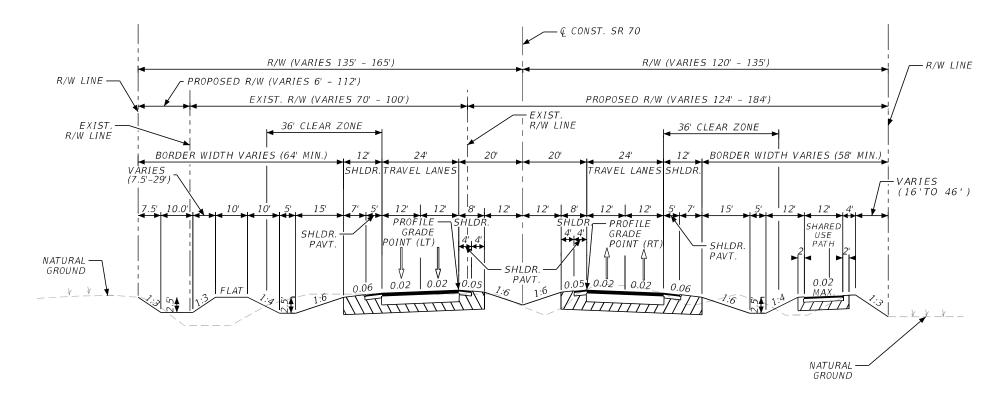
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- (X) 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



SR 70 STA. 400+00.00 TO STA. 455+37.39 STA. 457+47.39 TO STA. 754+00.00 STA. 798+03.02 TO STA. 882+60.00

TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800ESTIMATED DESIGN YEAR = 2052 AADT = 14500K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH DESIGN SPEED (PROPOSED) = 65 MPH POSTED SPEED (PROPOSED) = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
450334-1-22-01	2

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HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
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- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

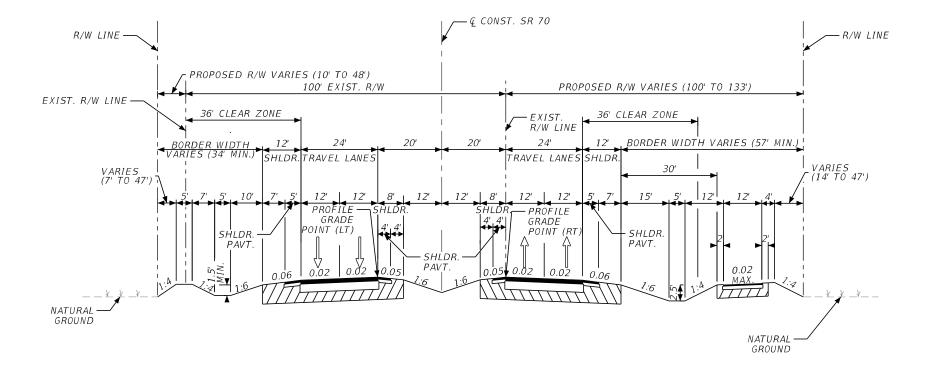
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POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

BORDER WIDTH VARIATION



SR 70 STA. 754+00.00 TO STA. 765+30.00

TRAFFIC DATA

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- (X) PRINCIPAL ARTERIAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
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- () OFF-STATE HIGHWAY SYSTEM

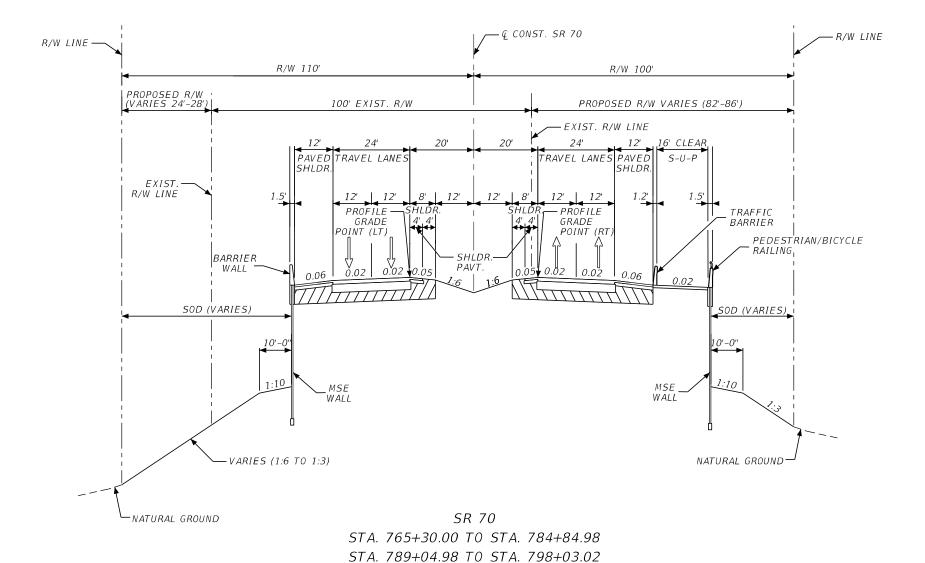
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POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



TRAFFIC DATA

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NOT TO SCALE

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- () C2T: RURAL TOWN () C5: URBAN CENTER () C3R: SUBURBAN RES. () C6: URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

() INTERSTATE

() MINOR ARTERIAL

- () MAJOR COLLECTOR
- () FREEWAY/EXPWY.
- () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL
 - AL () LOCAL

HIGHWAY SYSTEM

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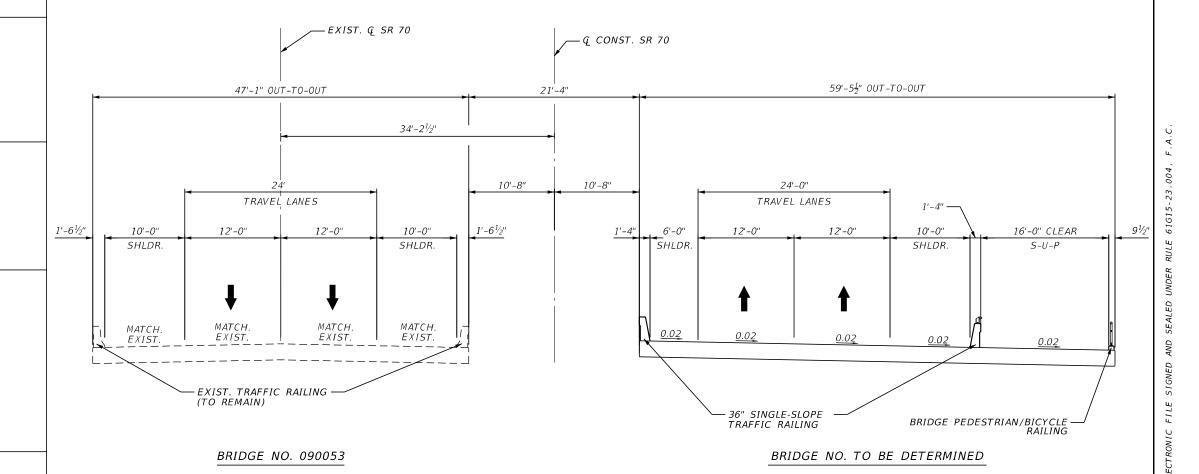
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POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



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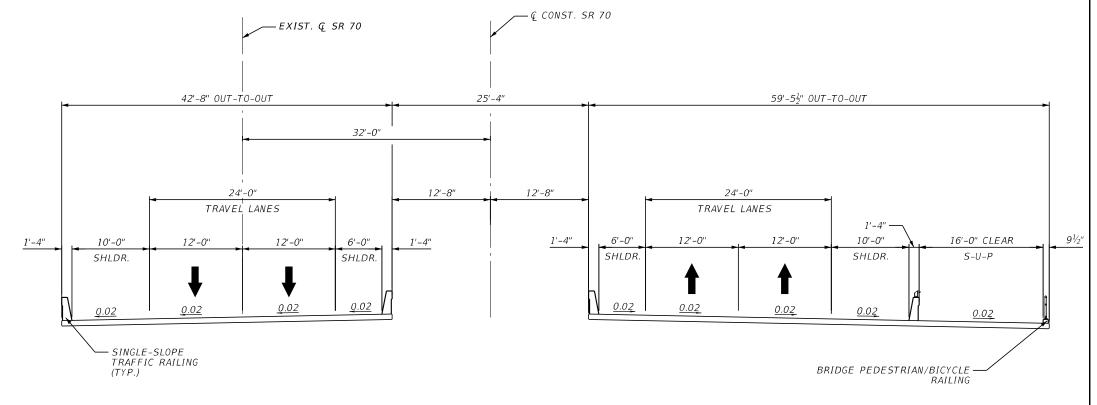
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- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



BRIDGE NO. TO BE DETERMINED

BRIDGE NO. TO BE DETERMINED

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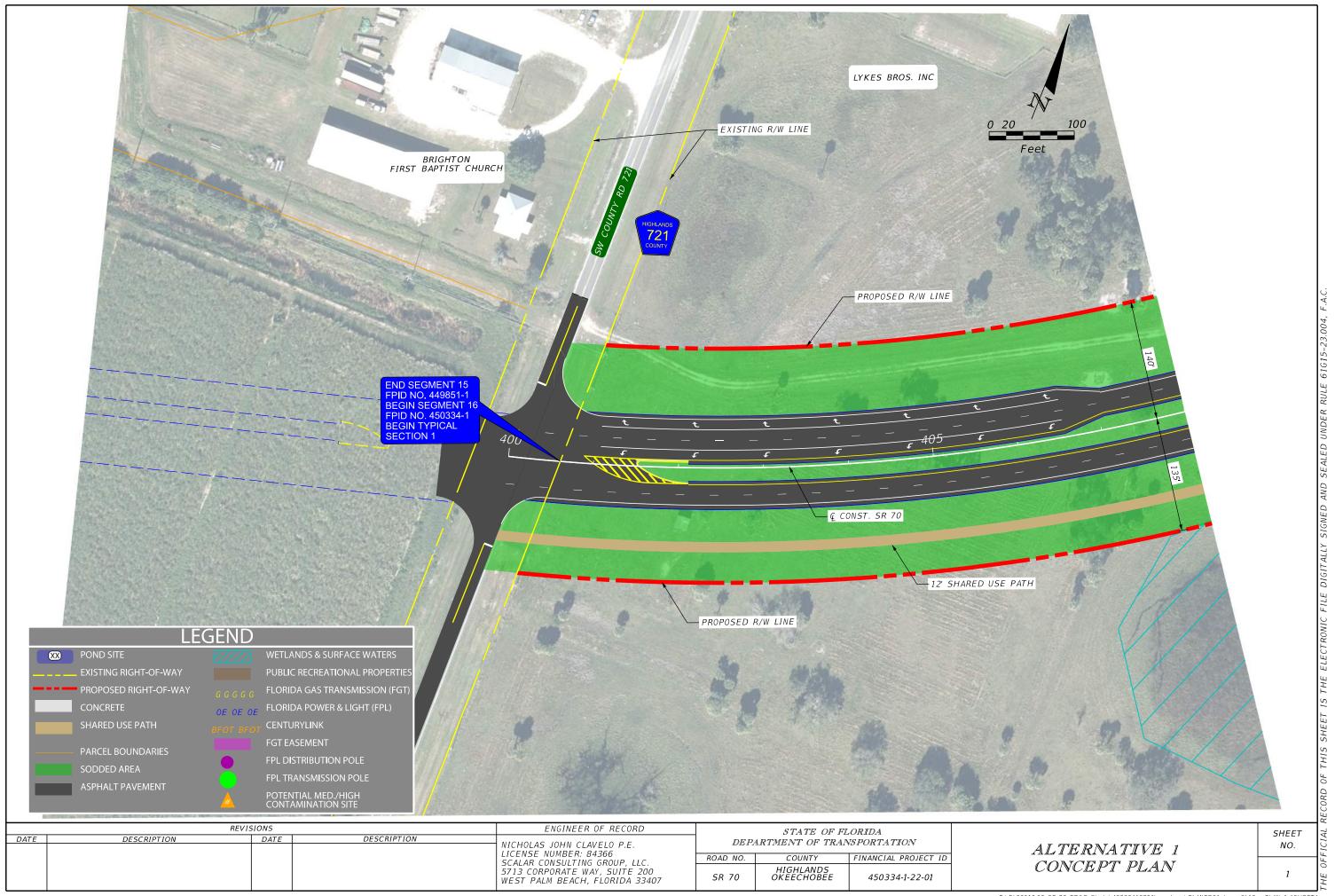
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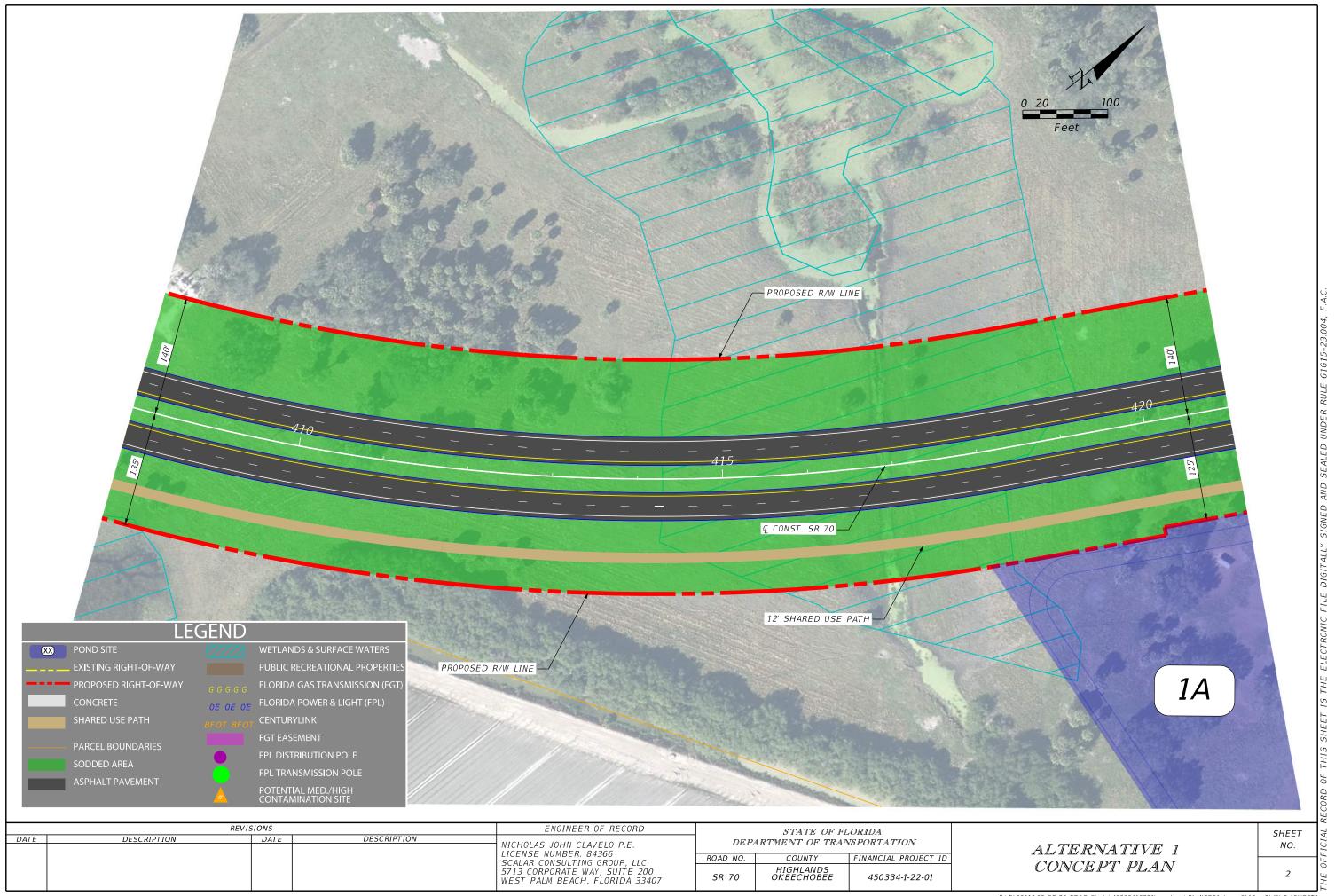
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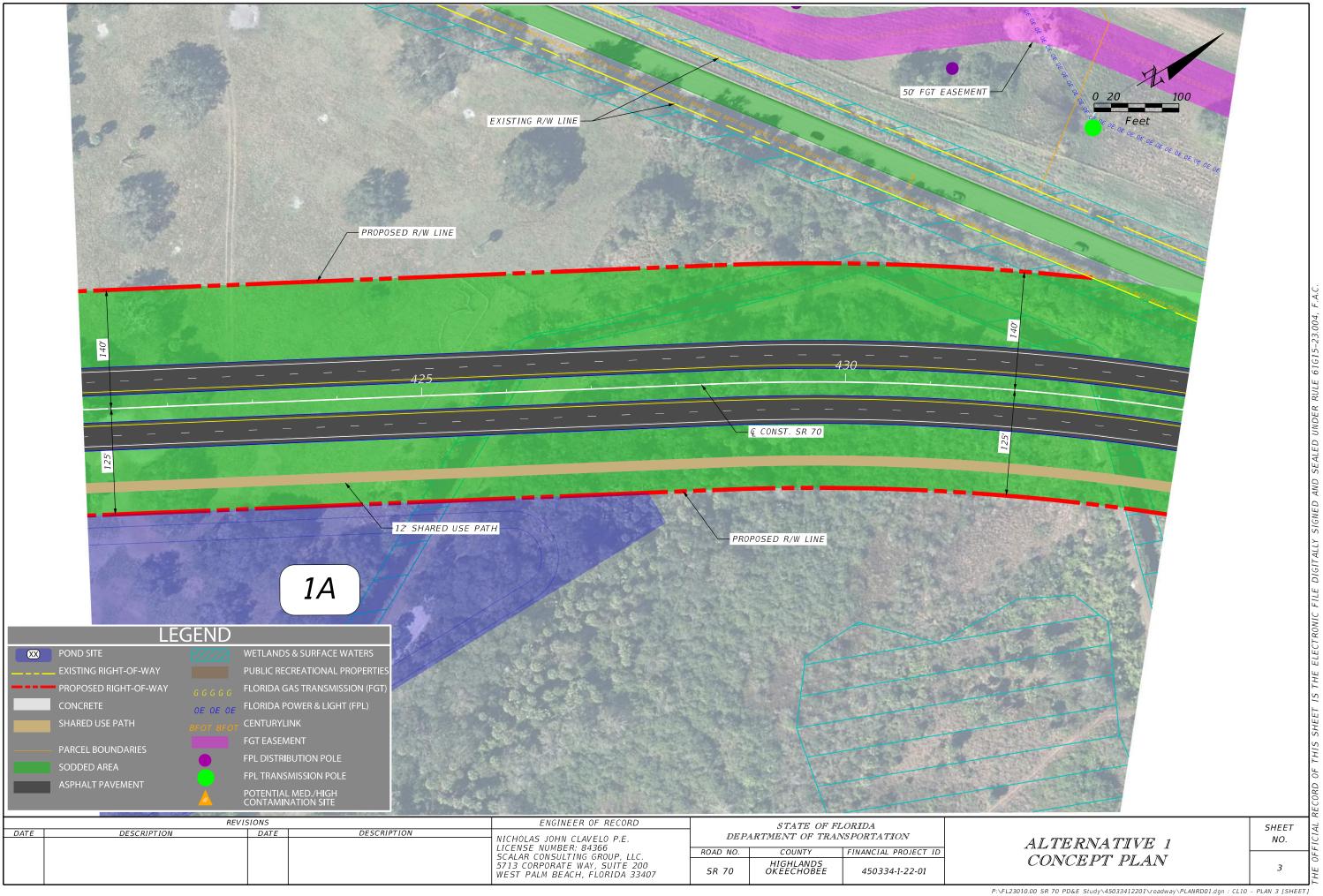
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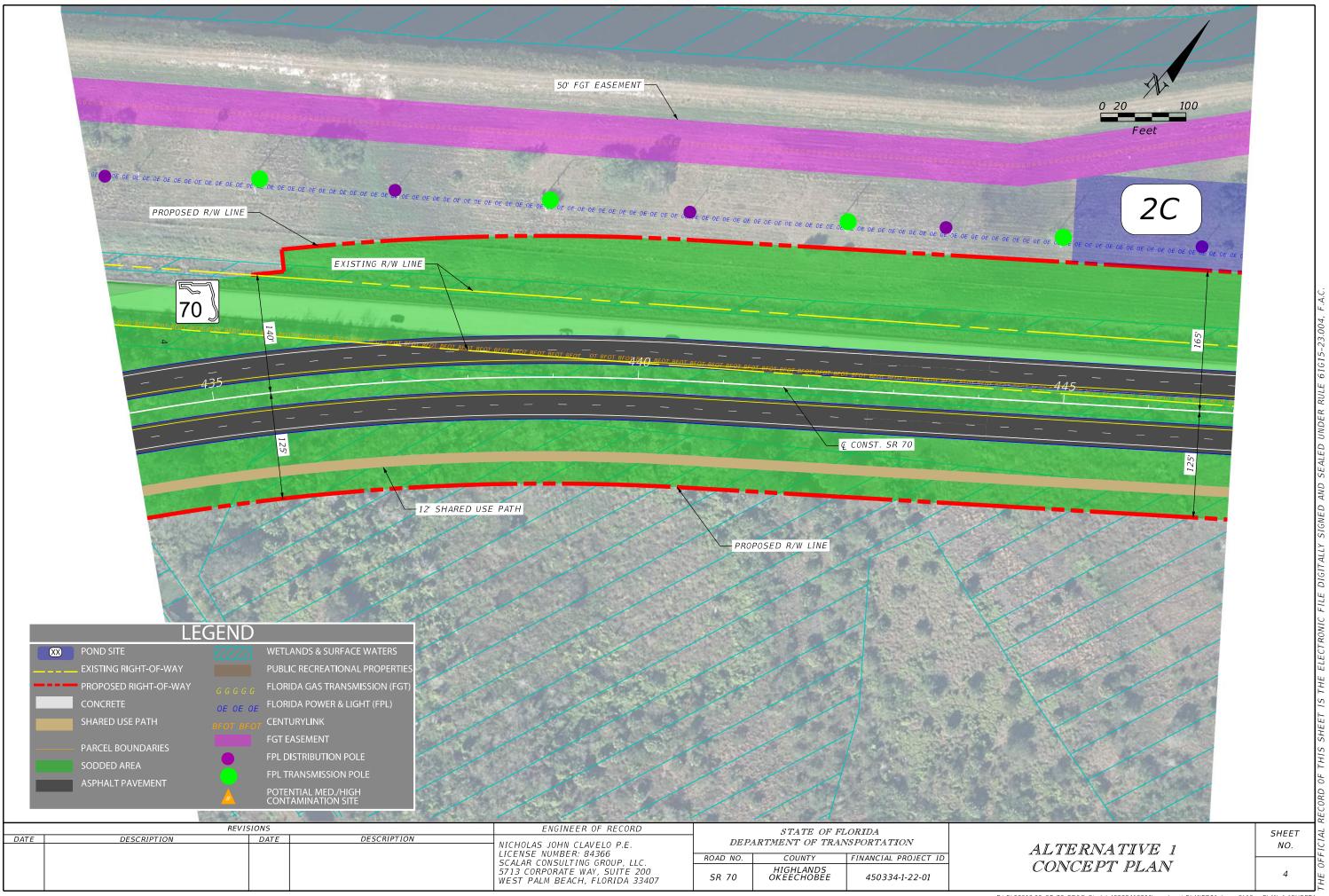
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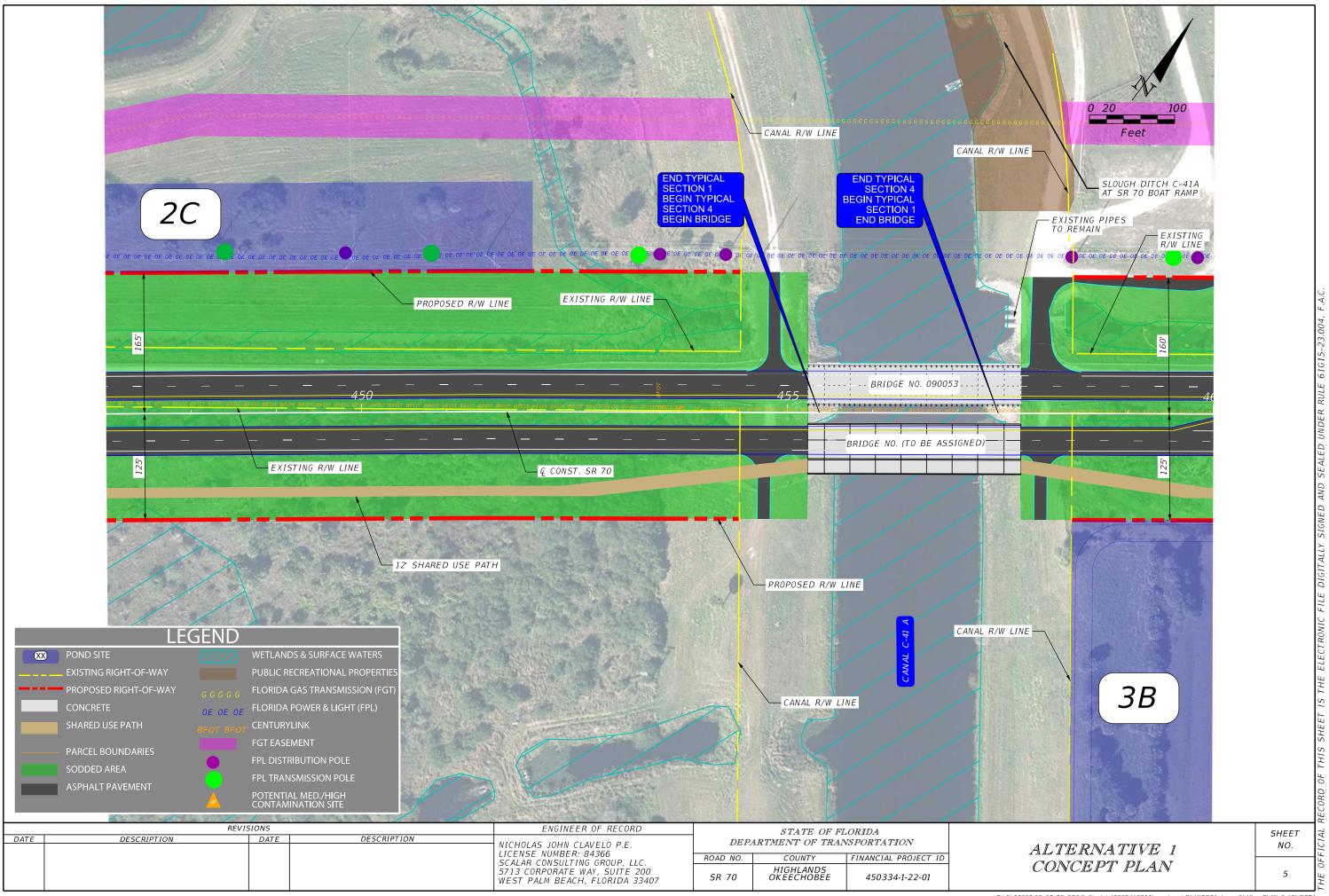
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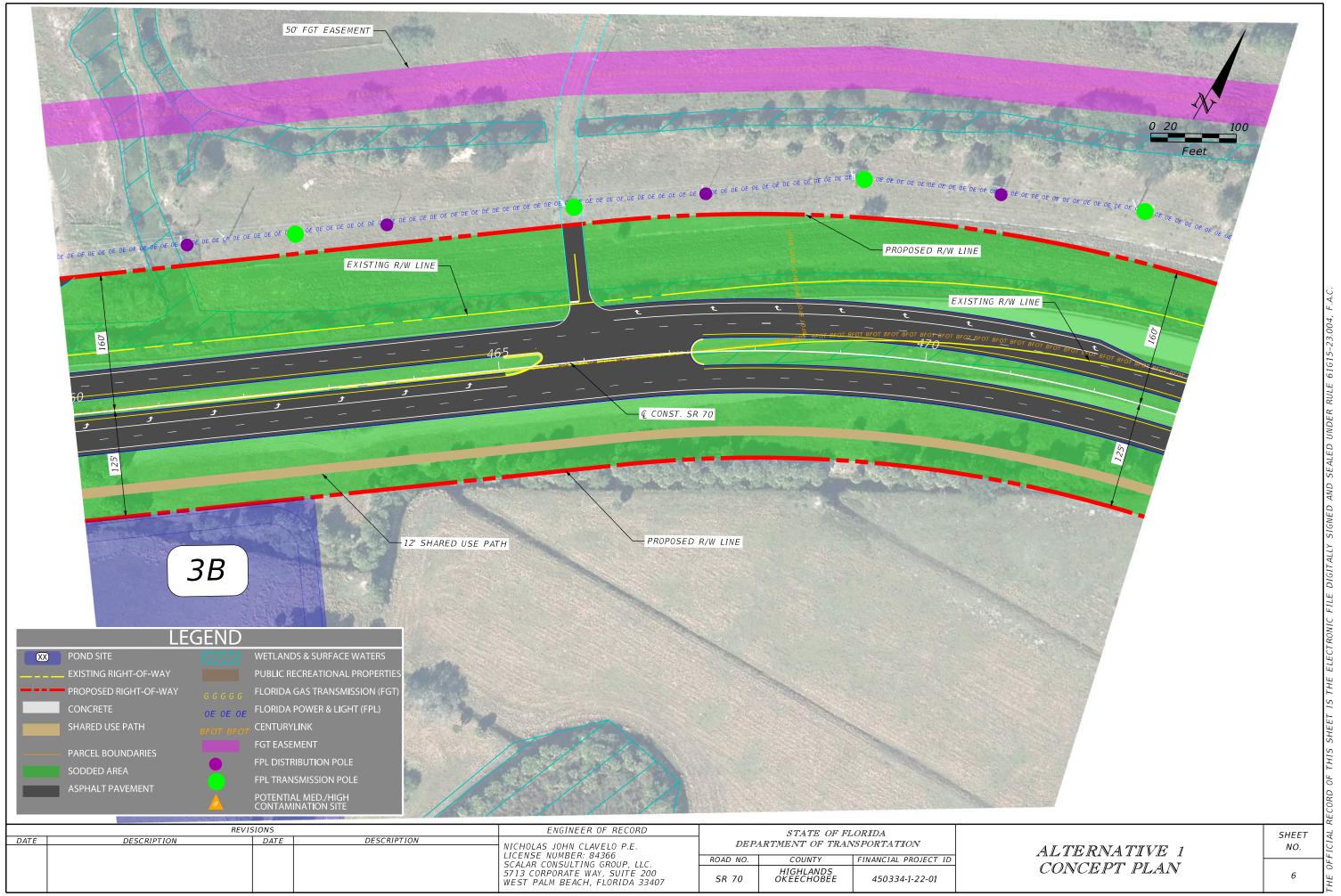


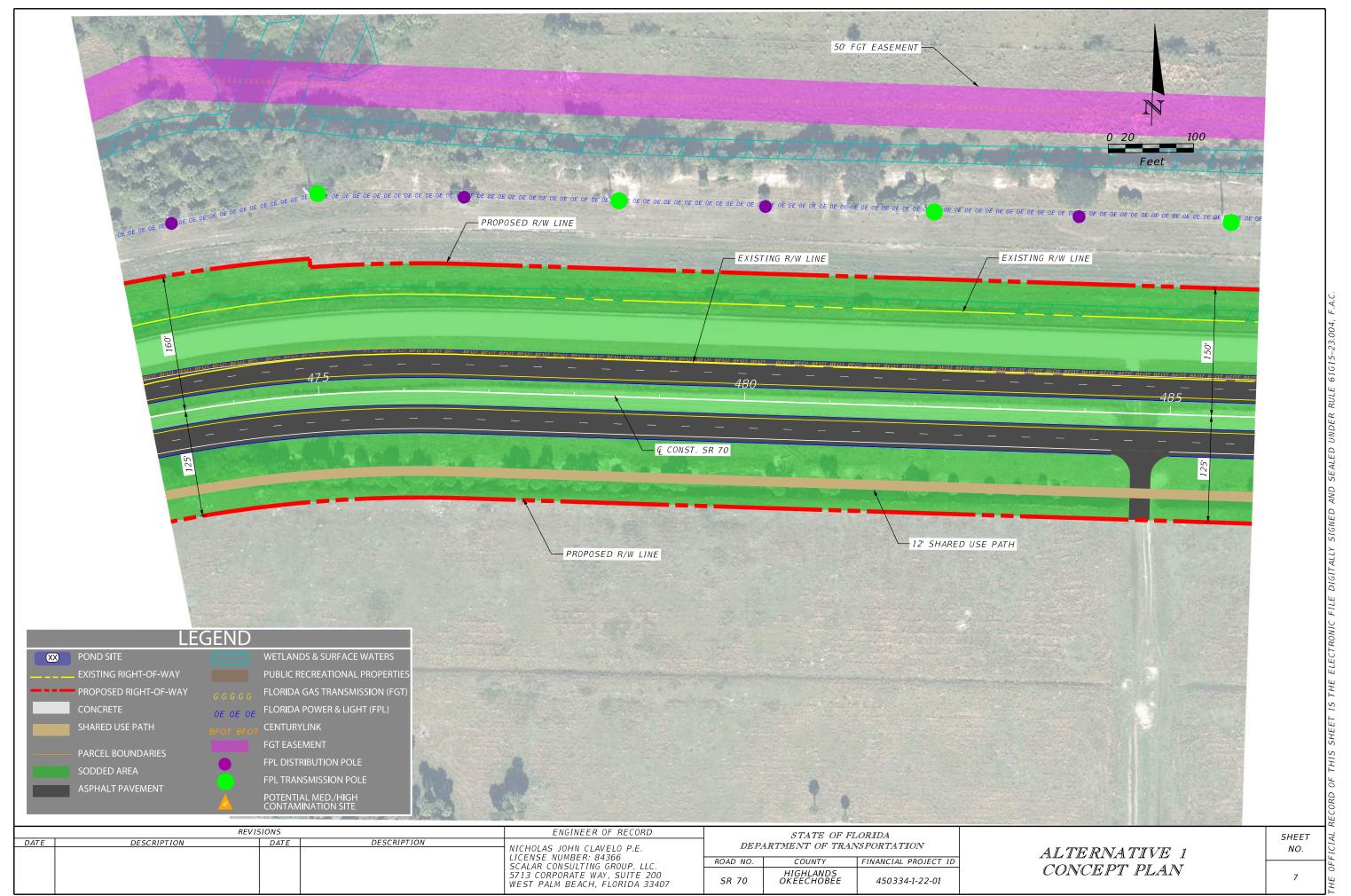


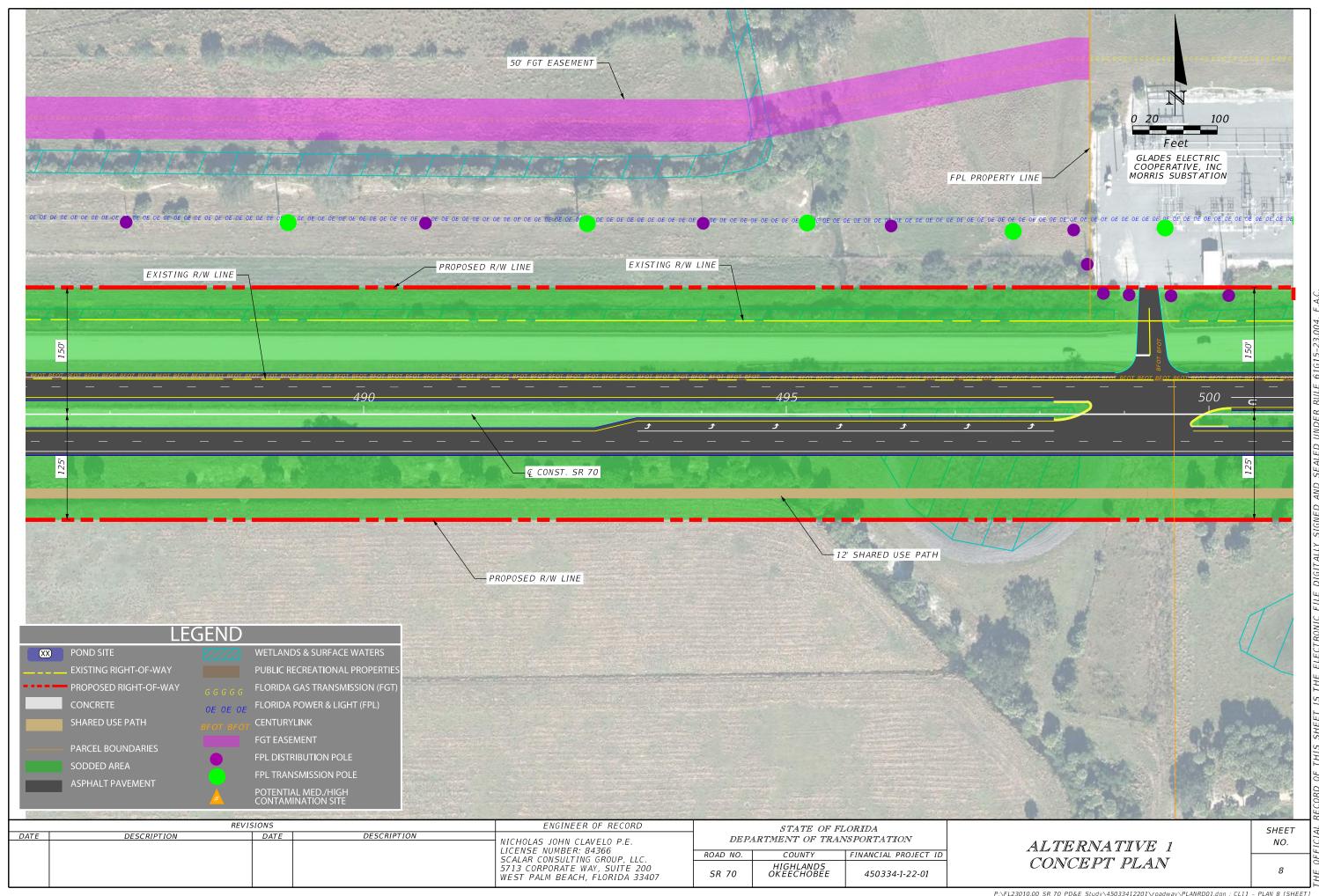


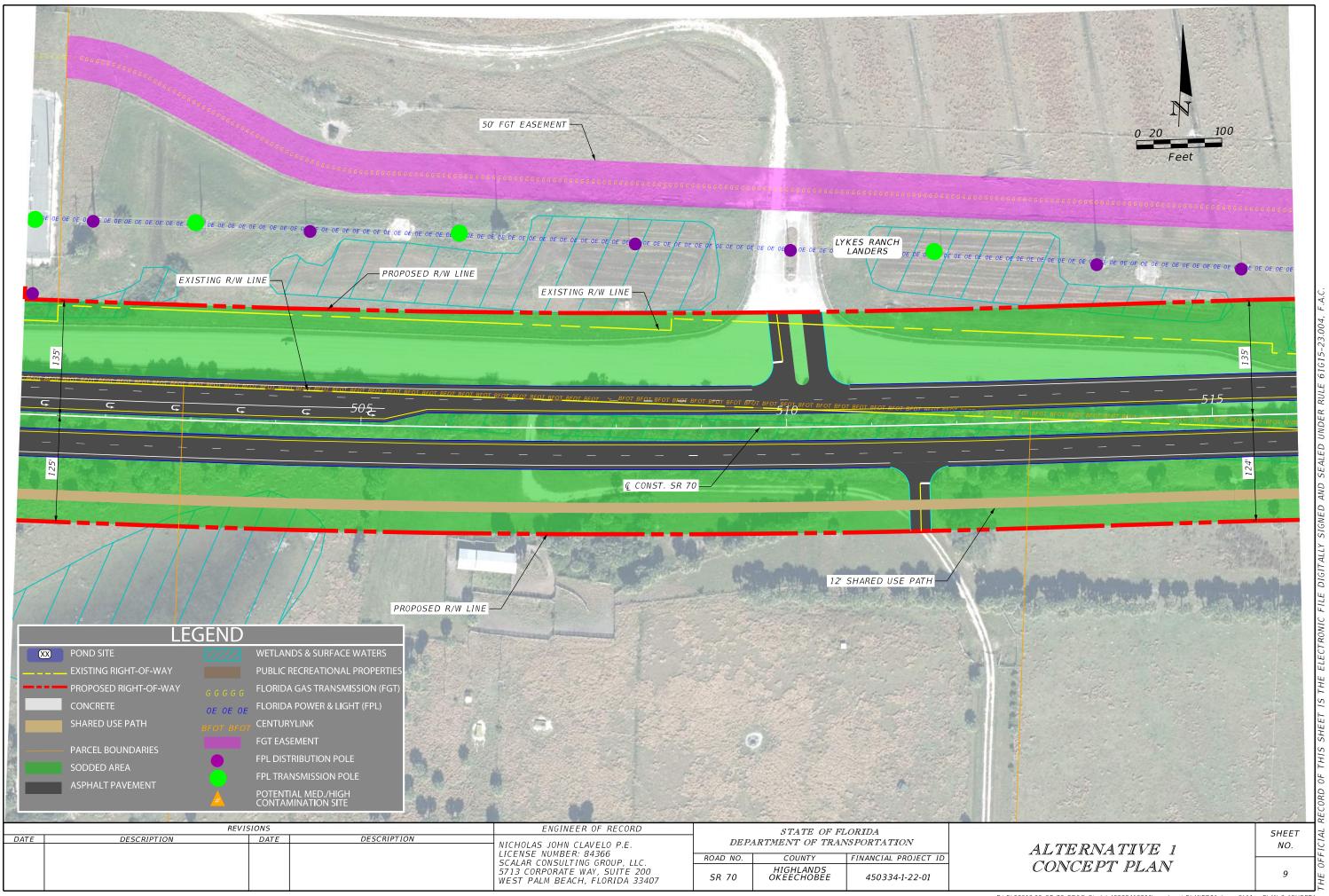


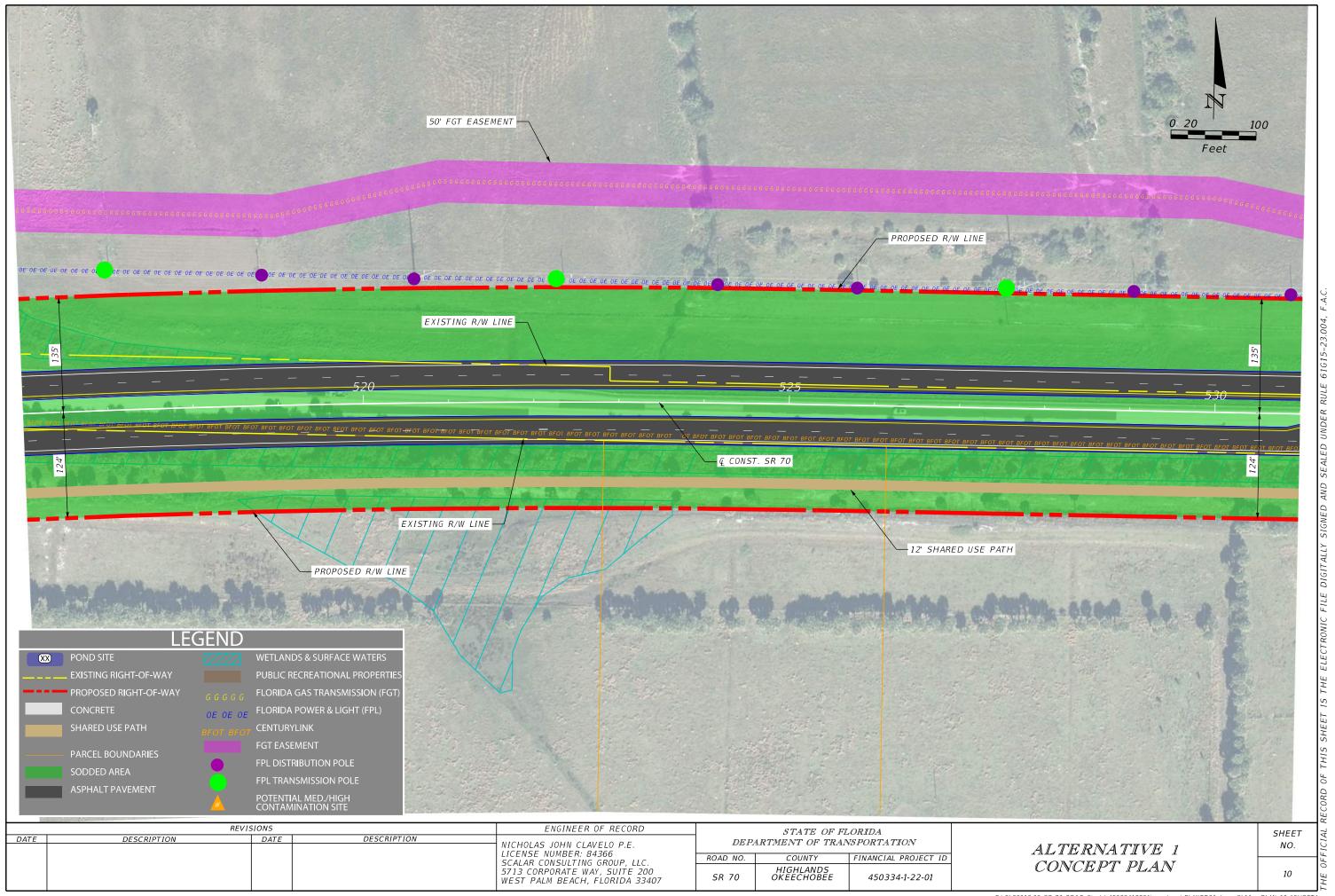


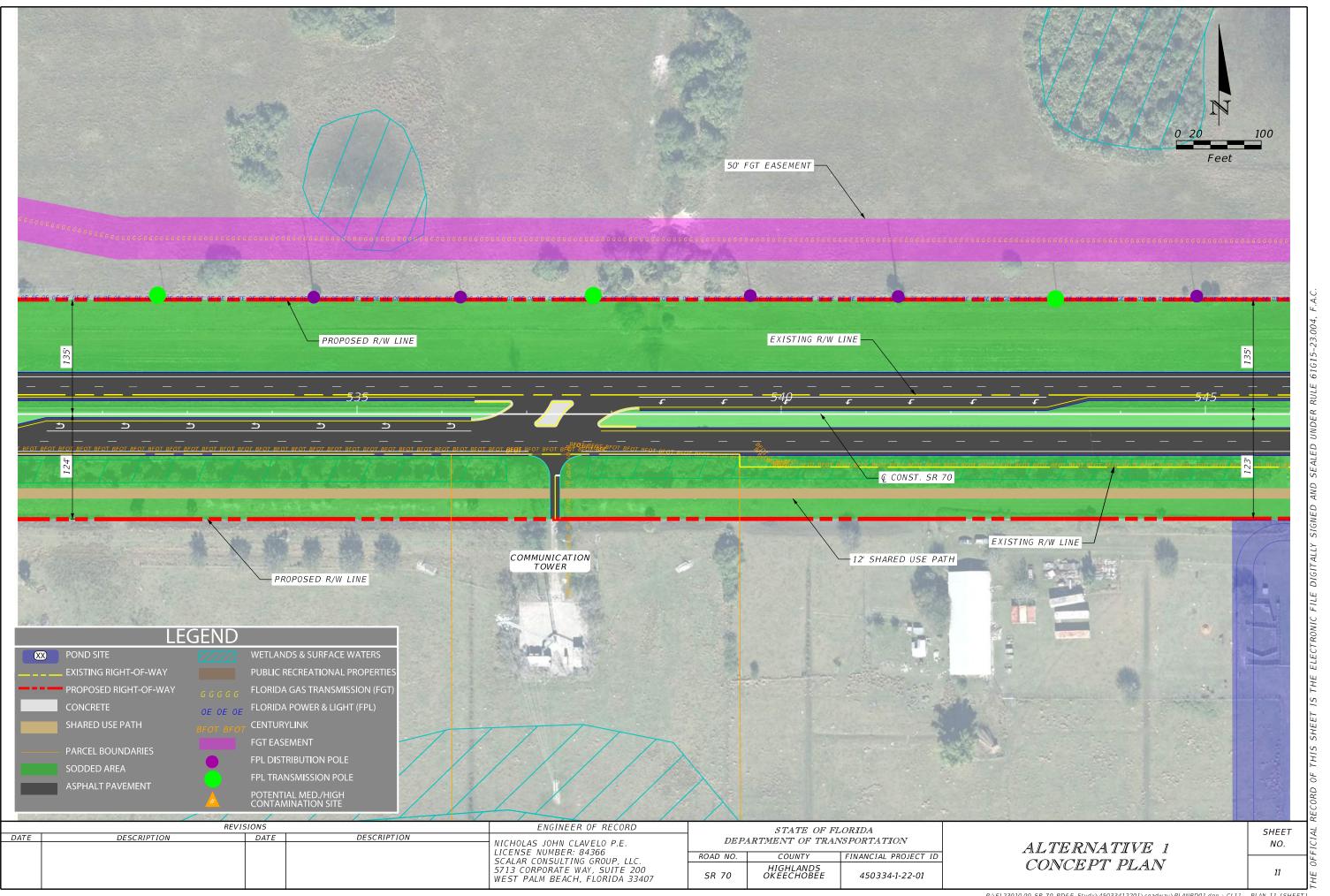


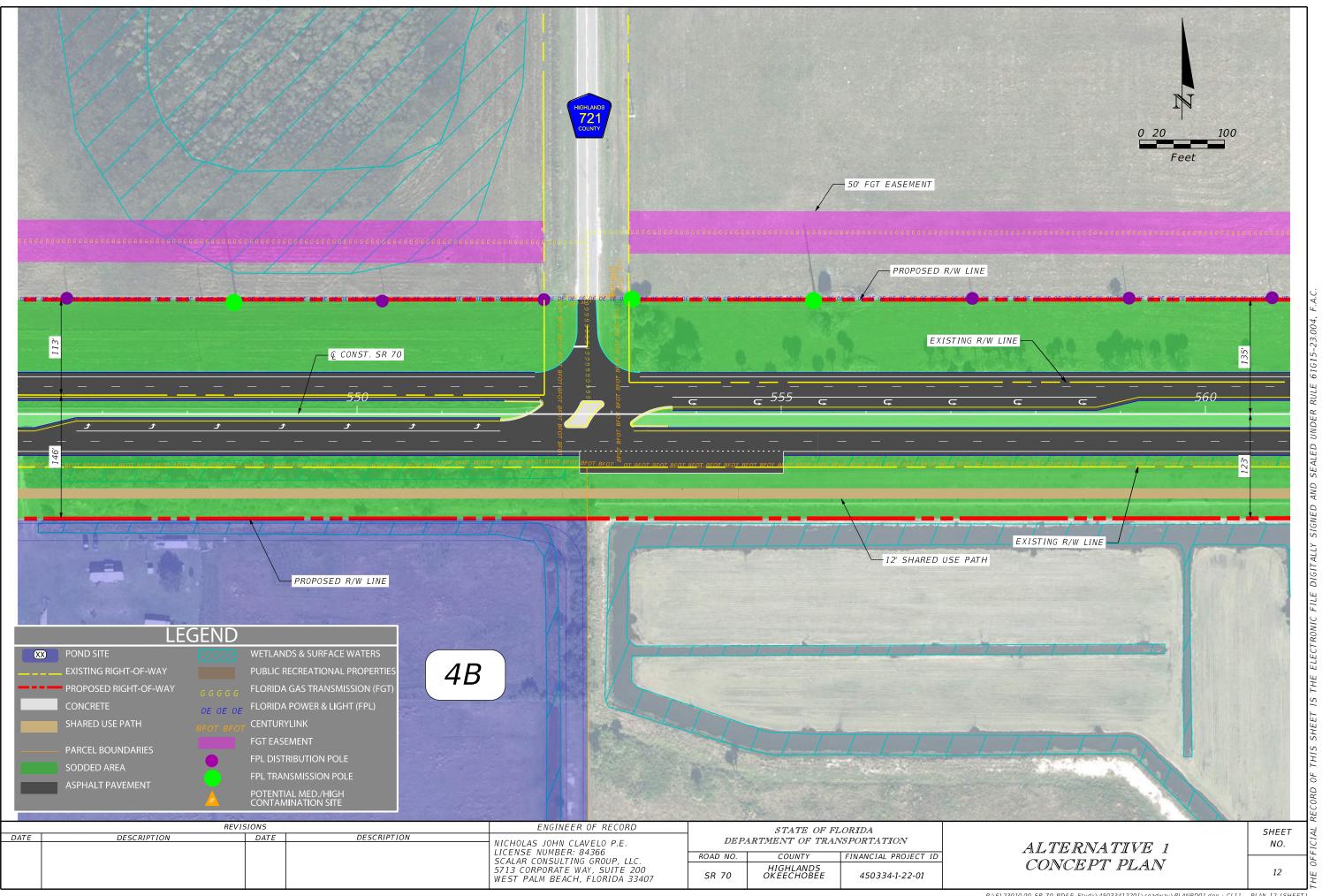


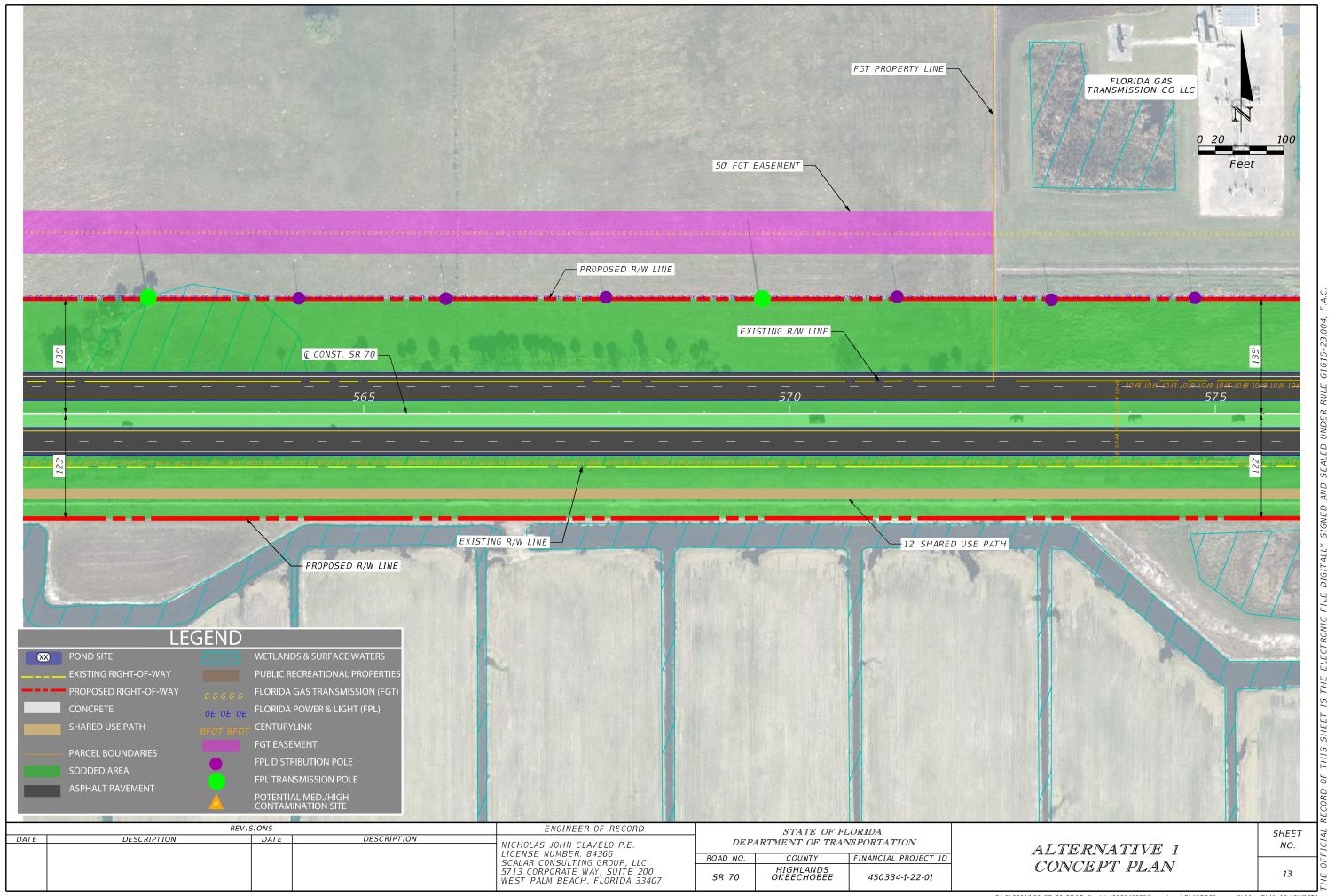


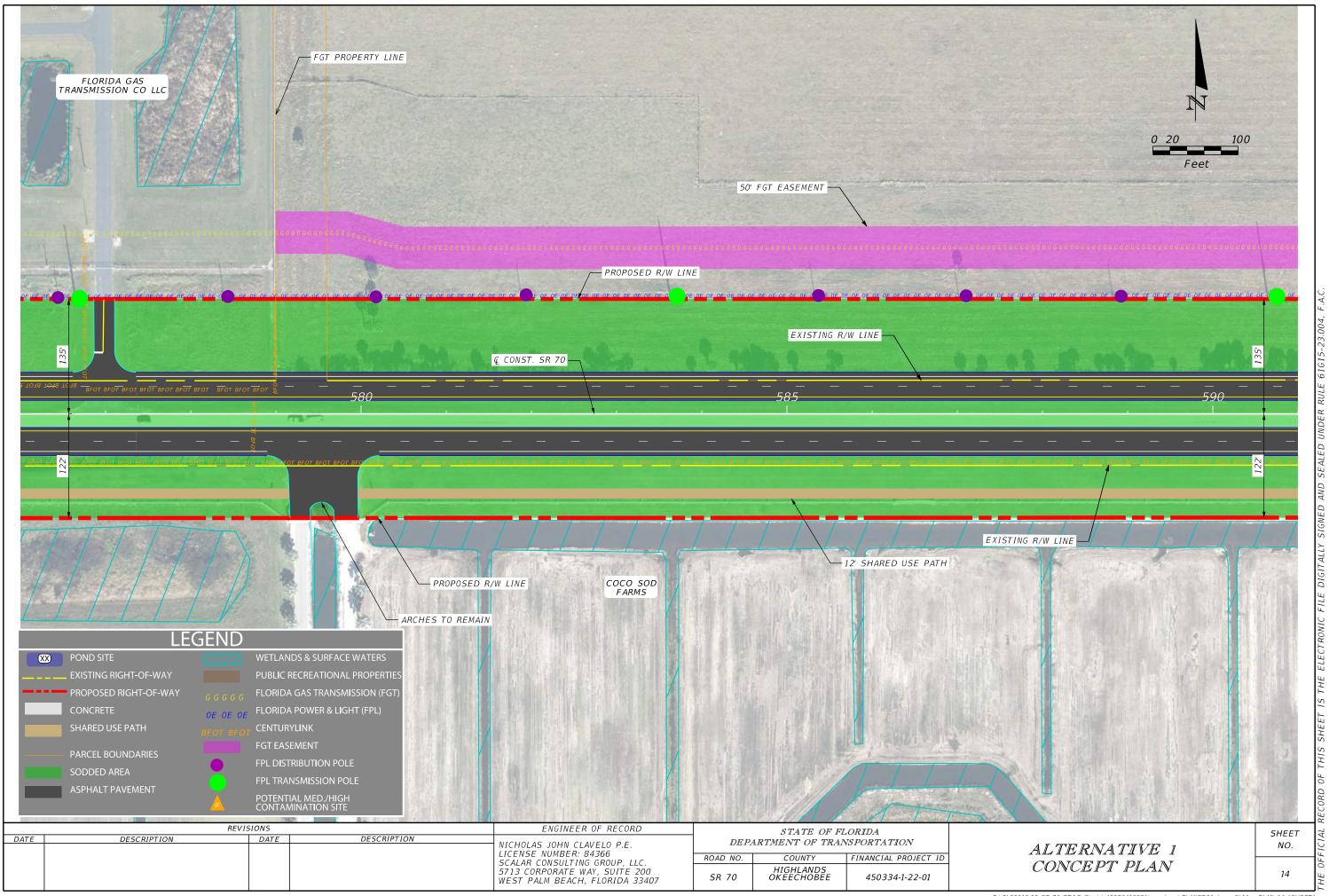


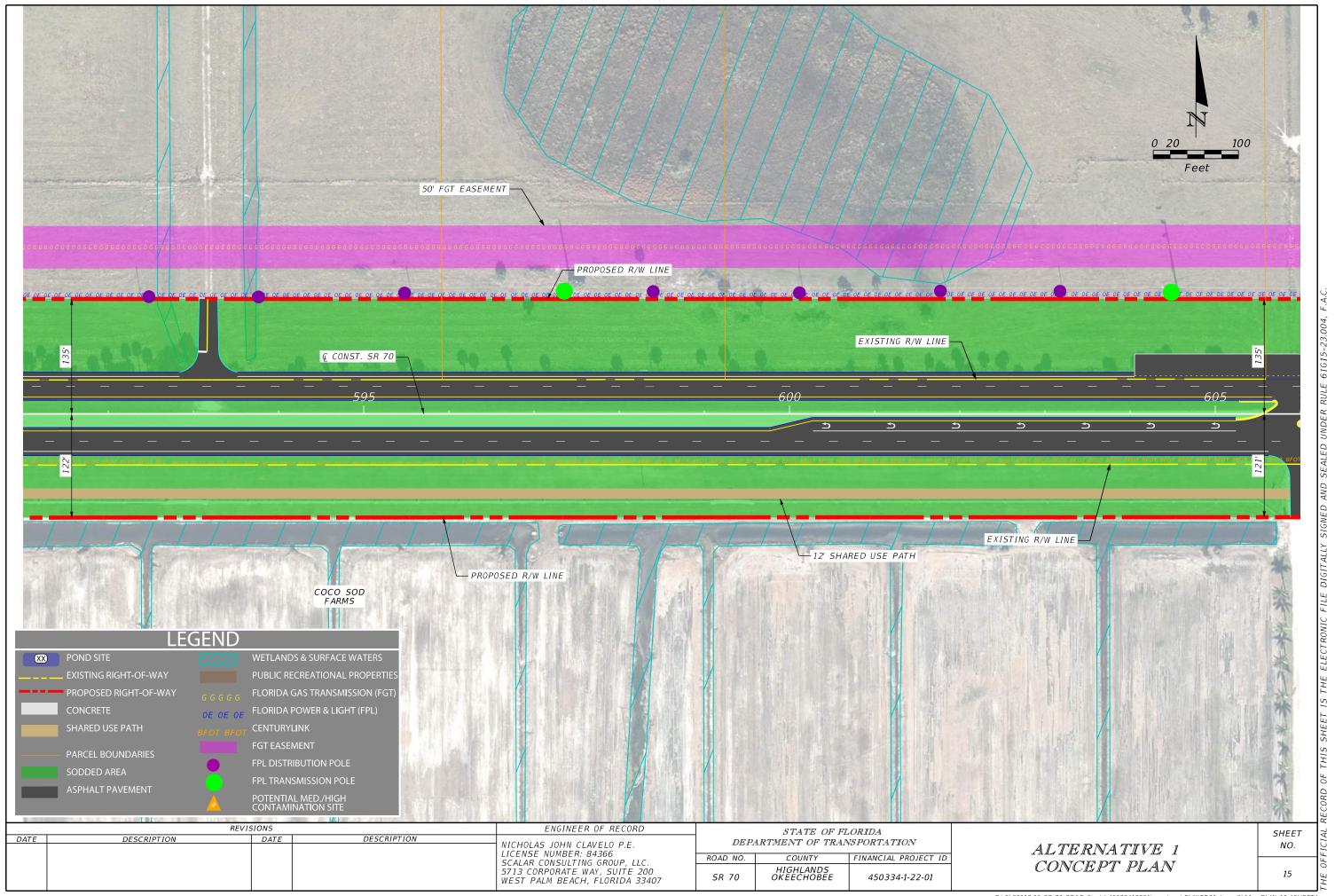


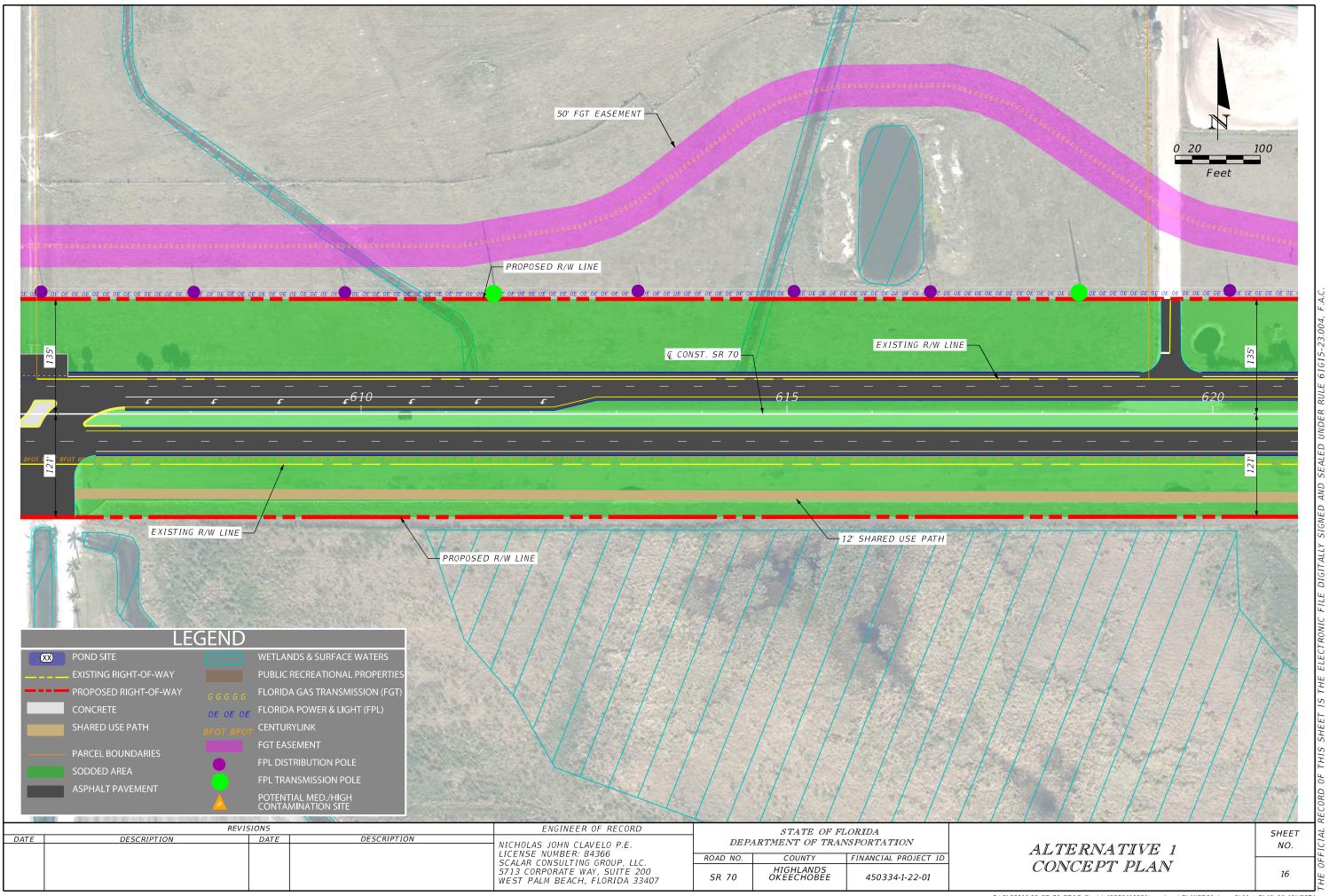


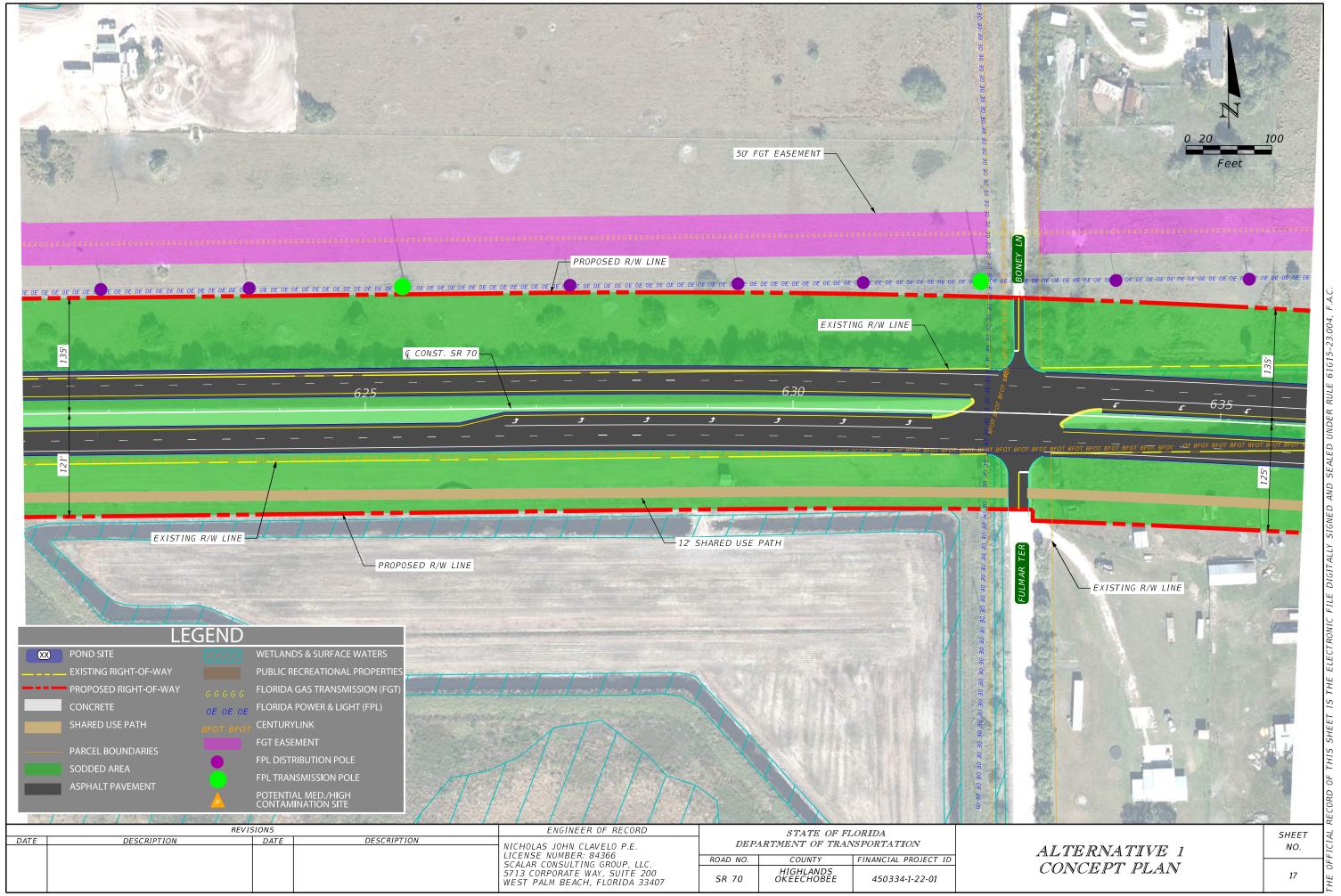


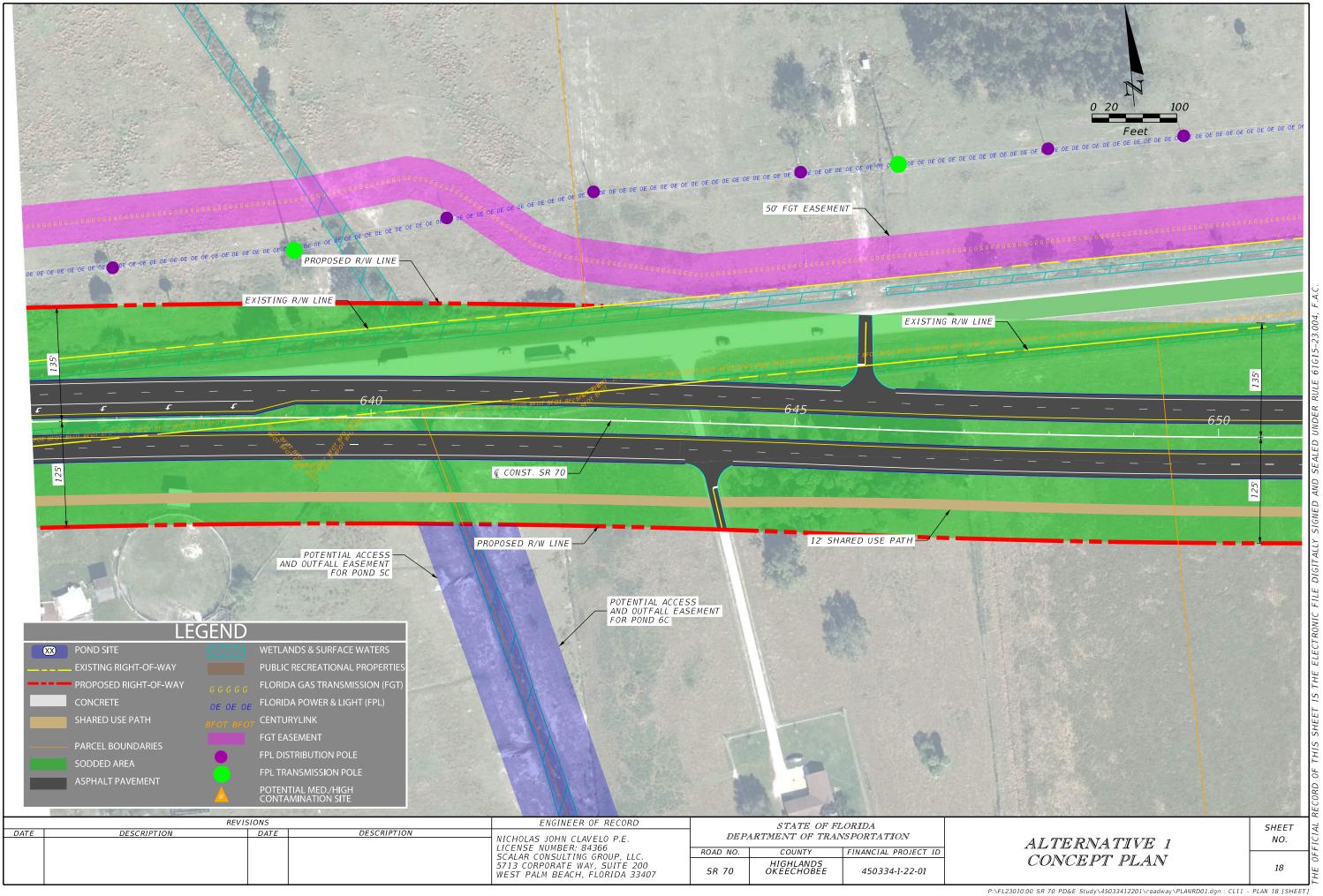


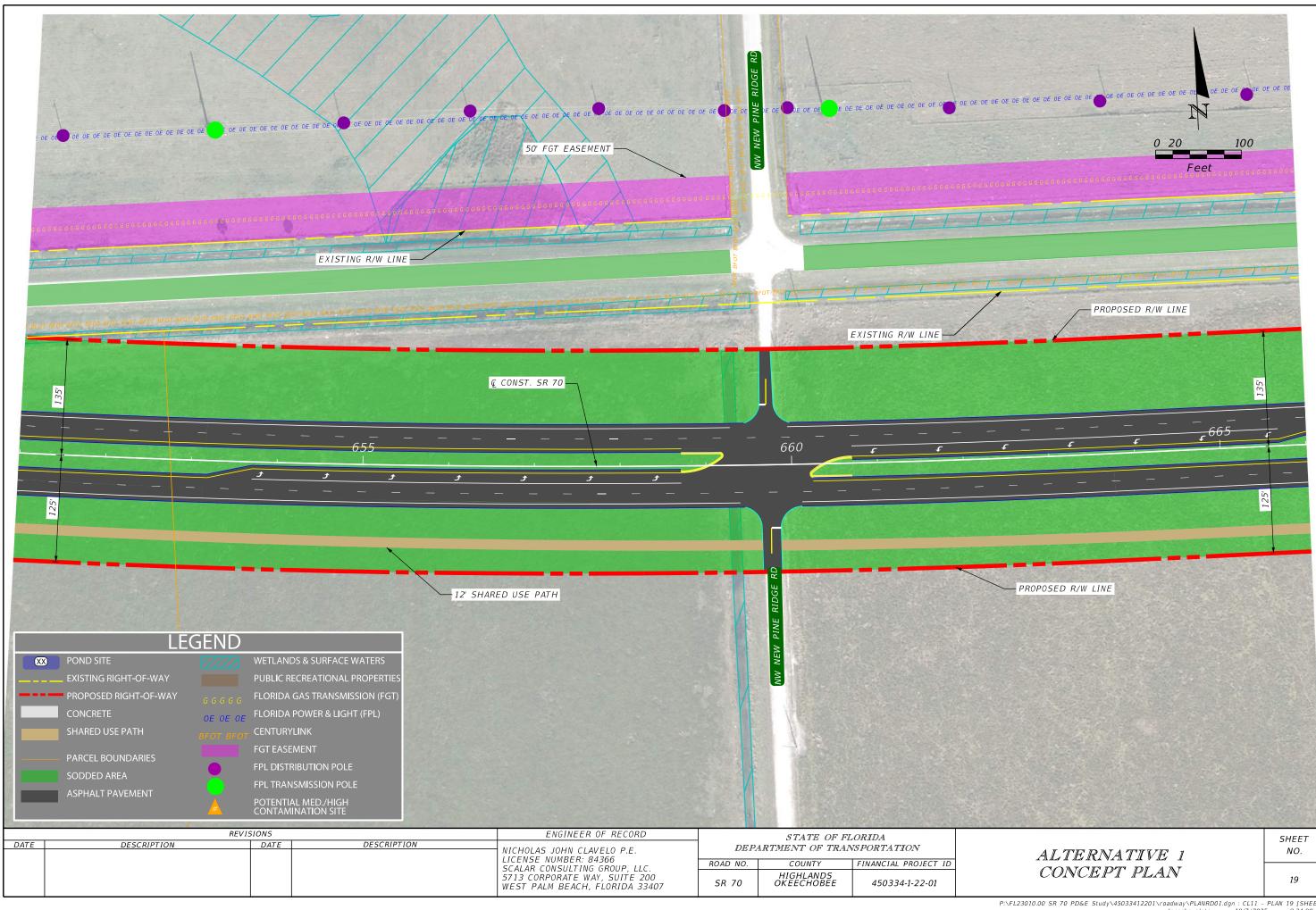


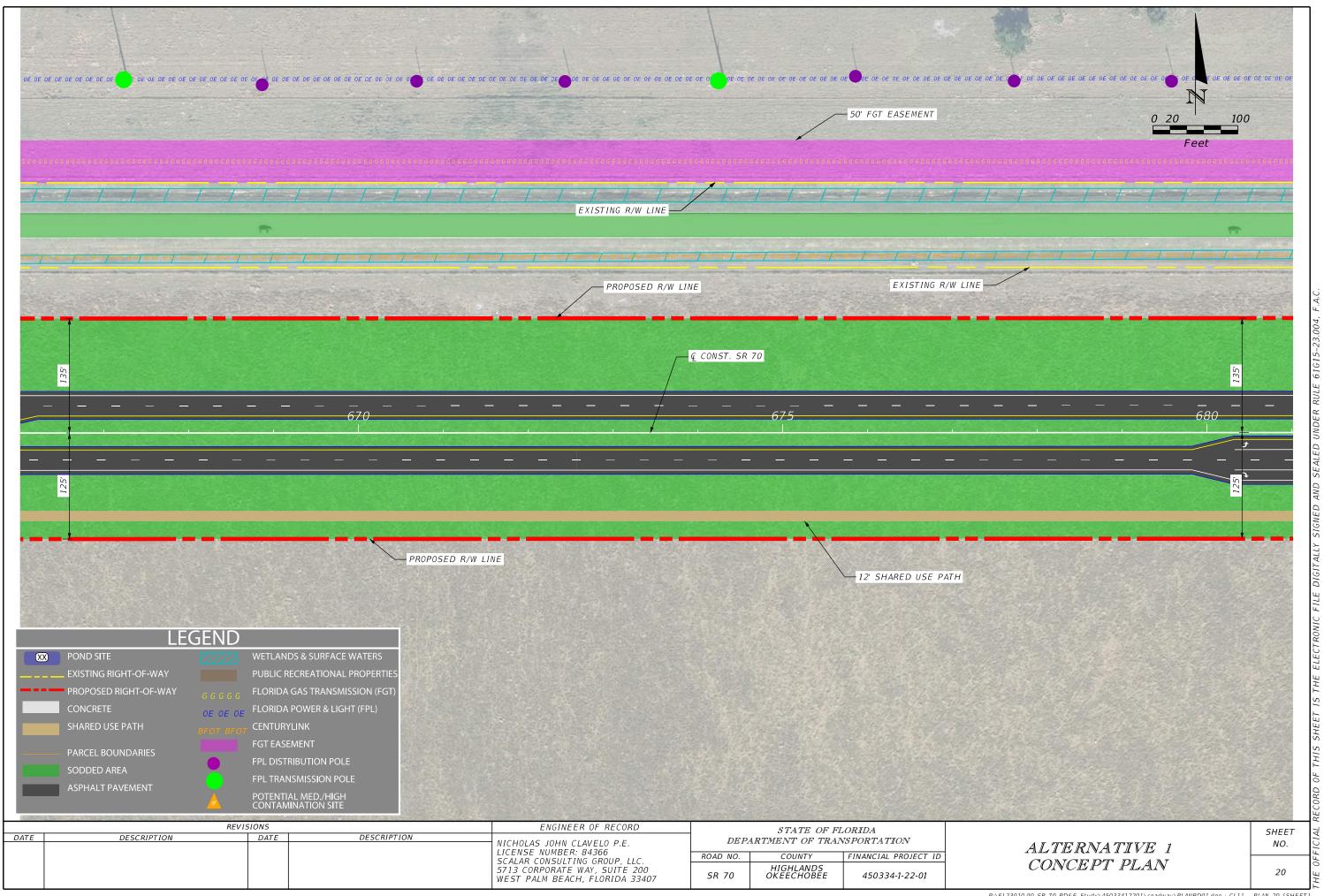


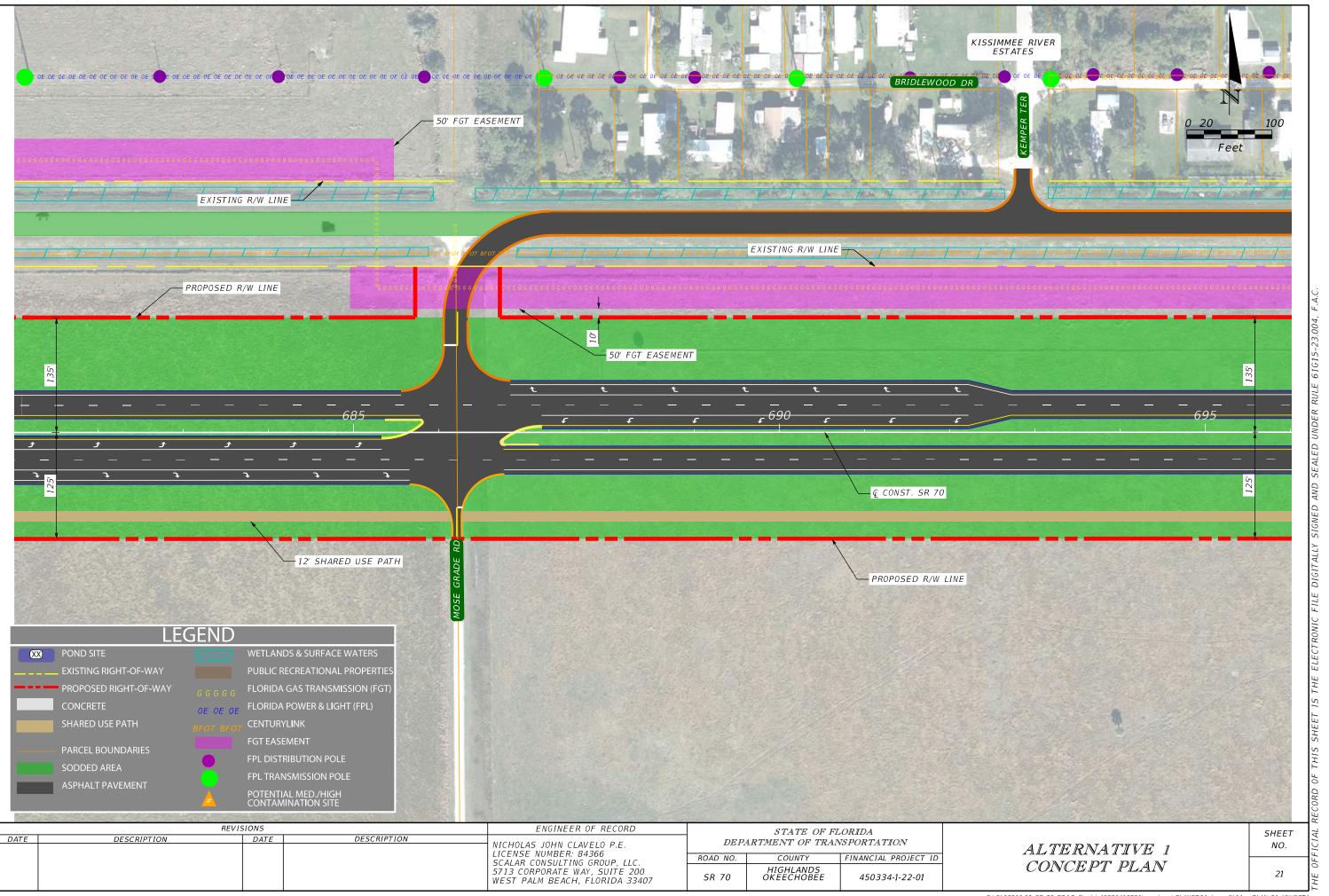


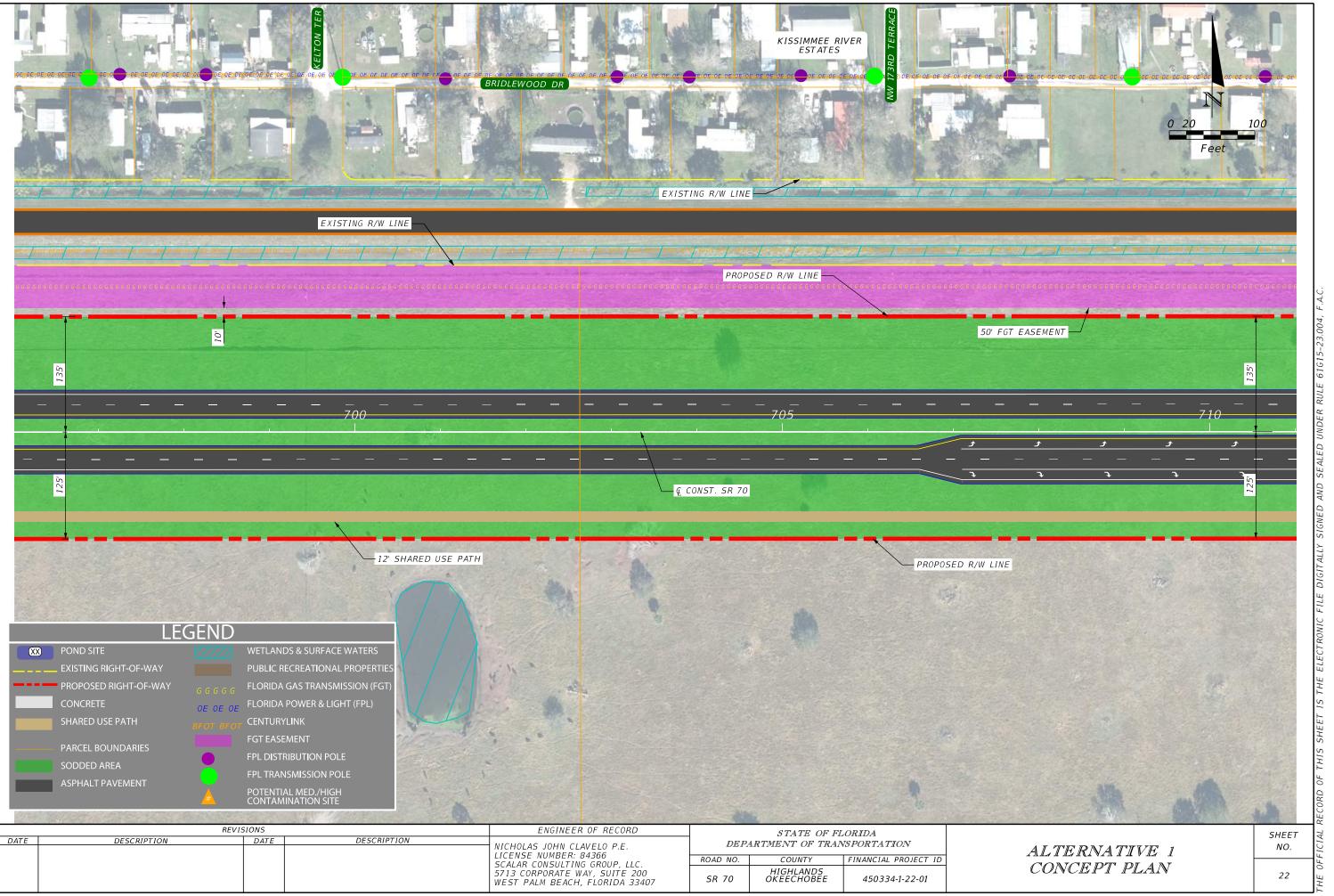


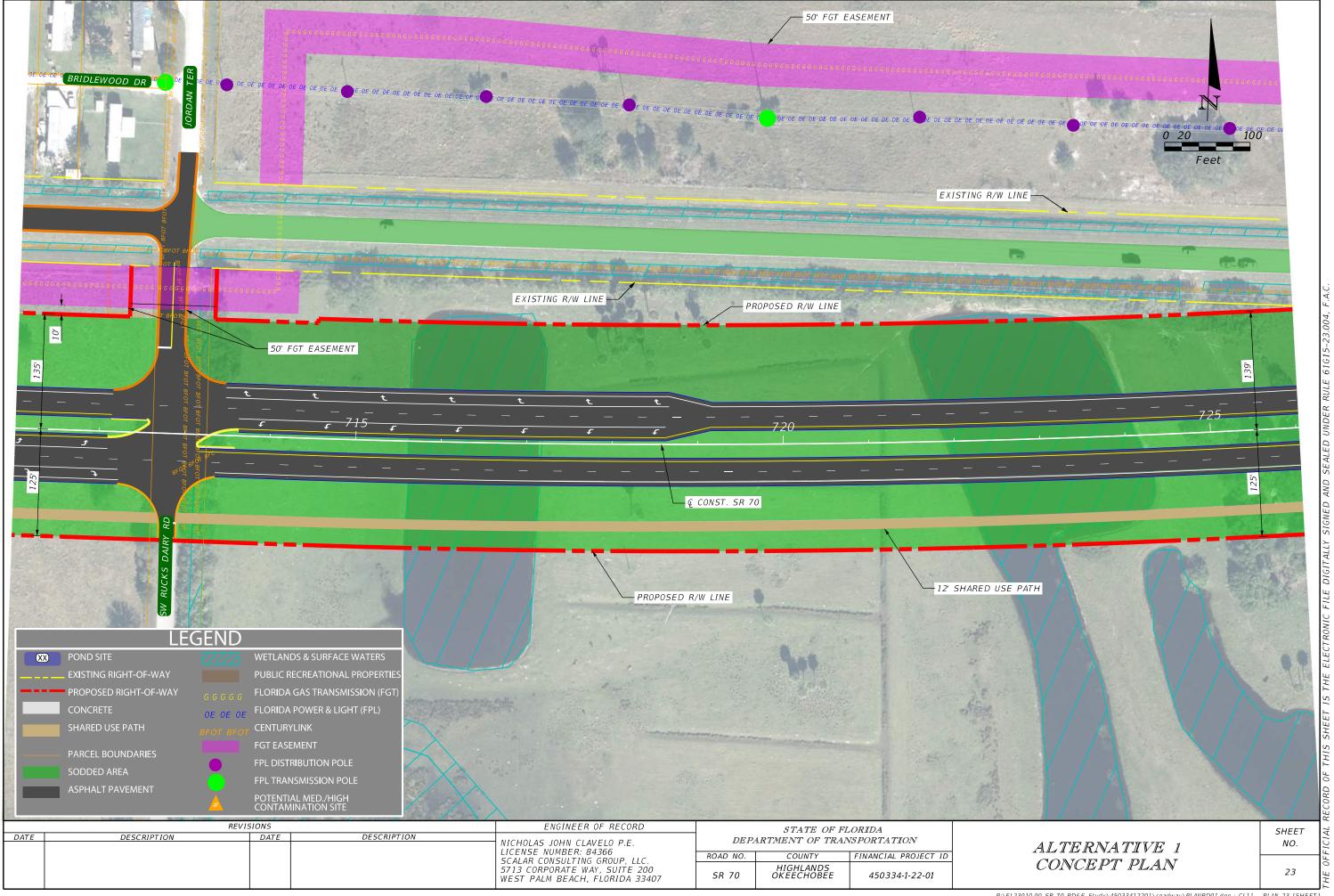


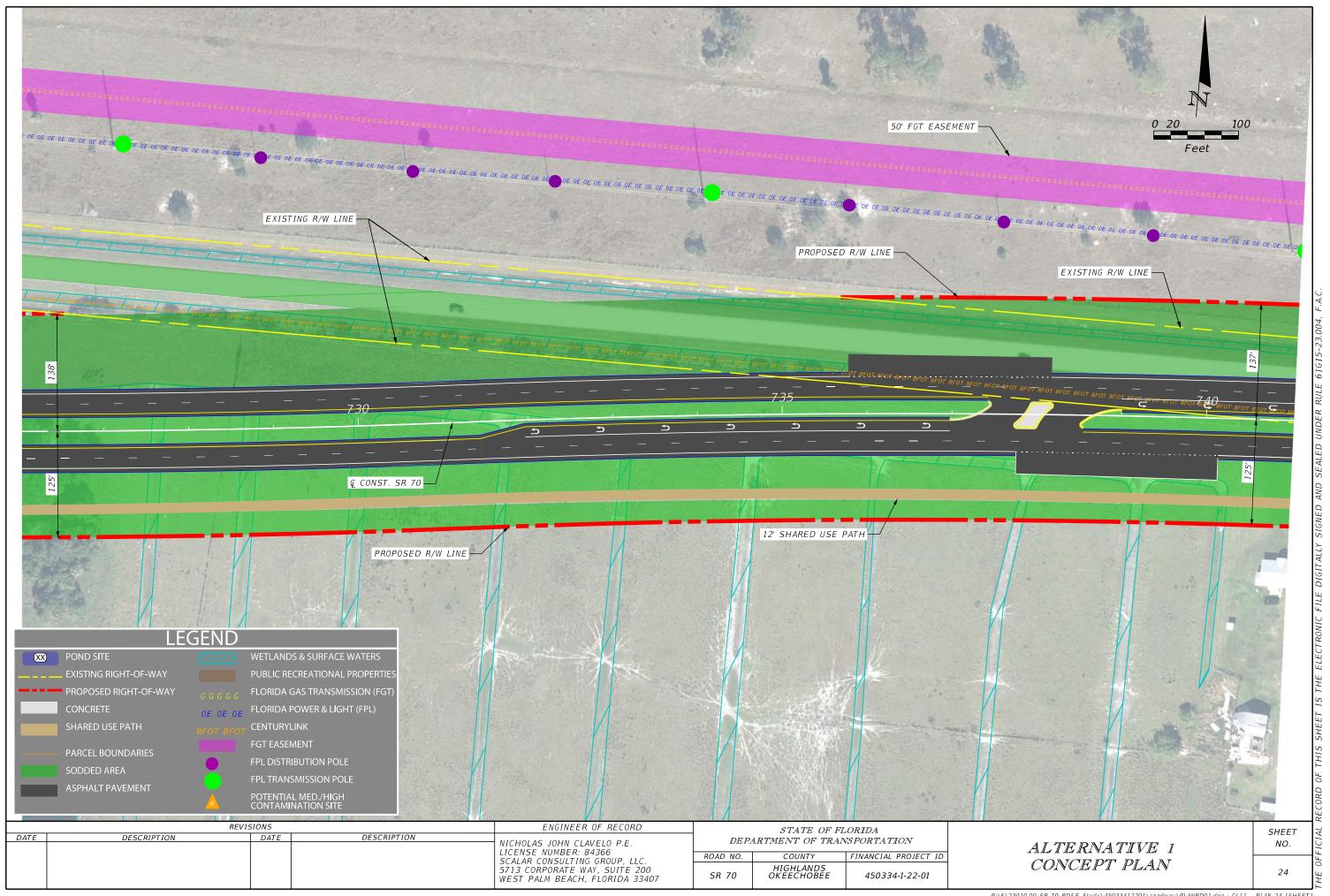


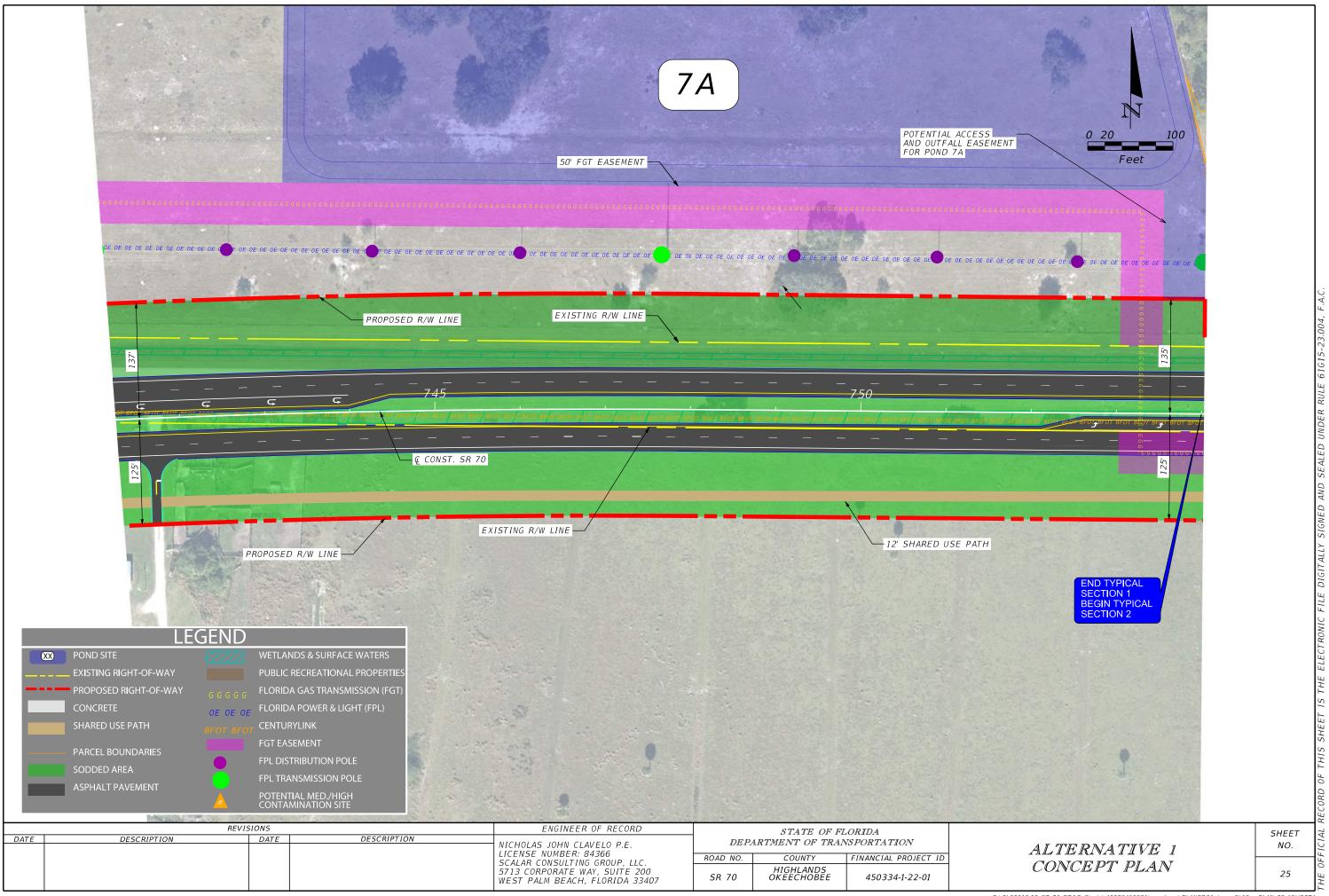


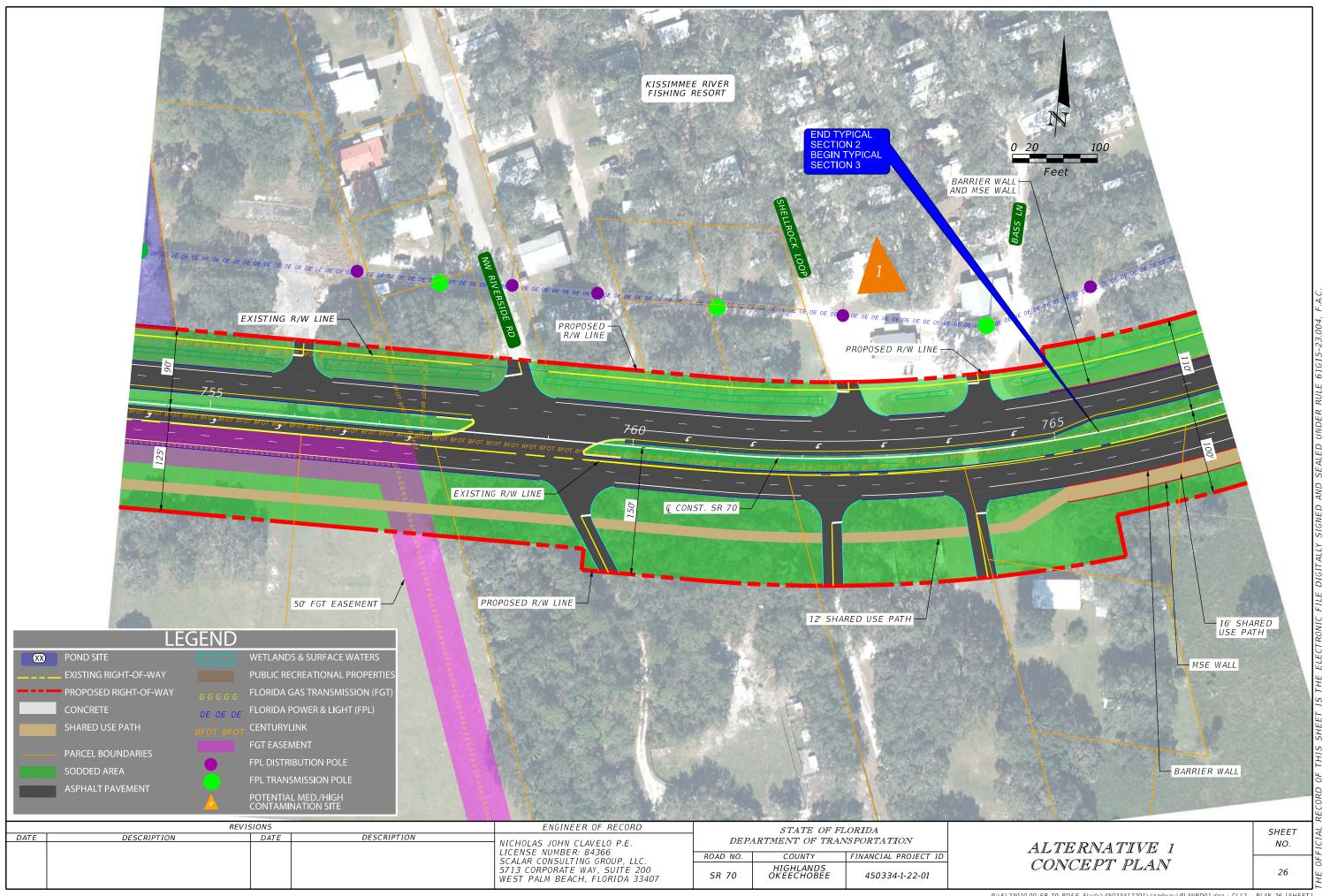


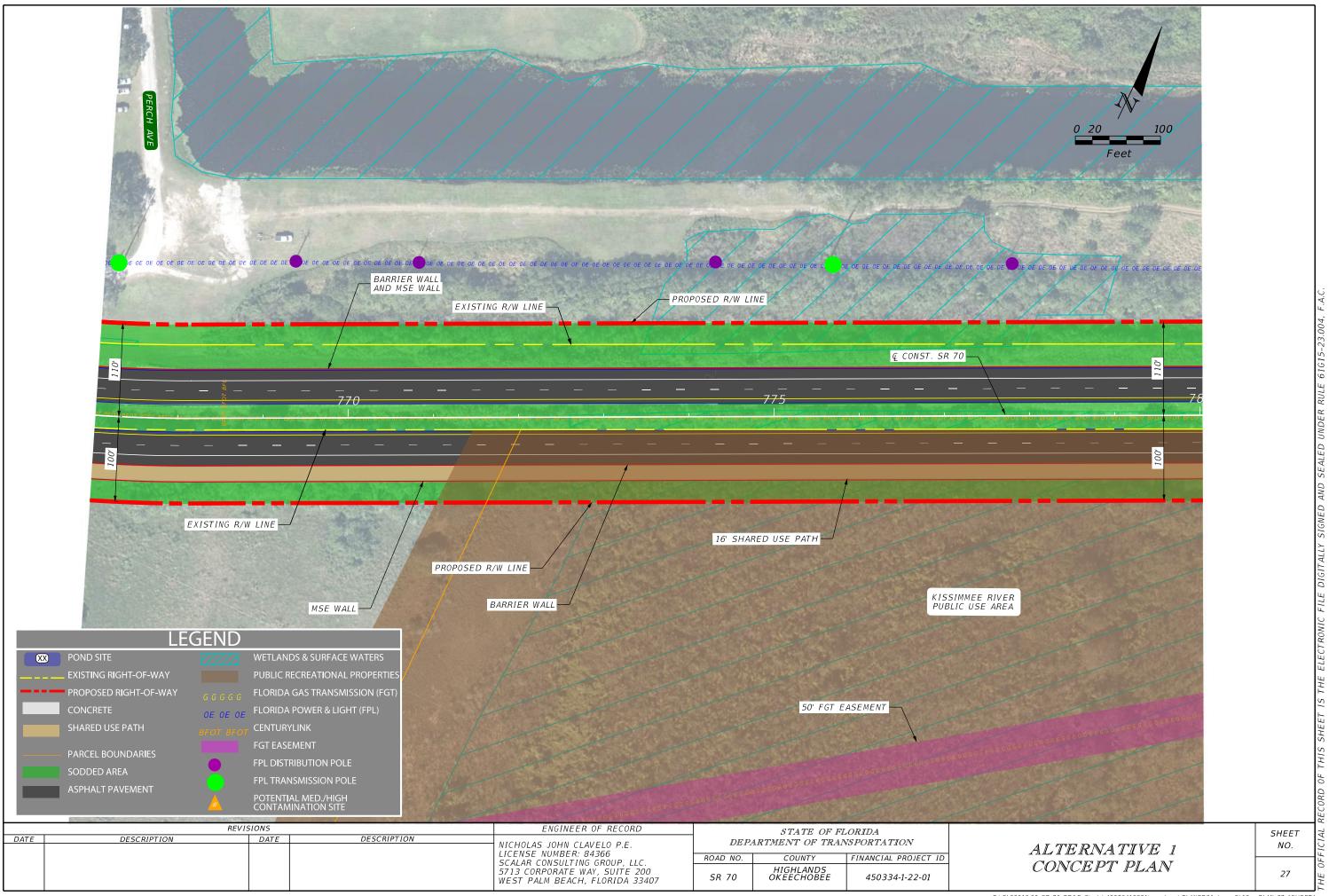


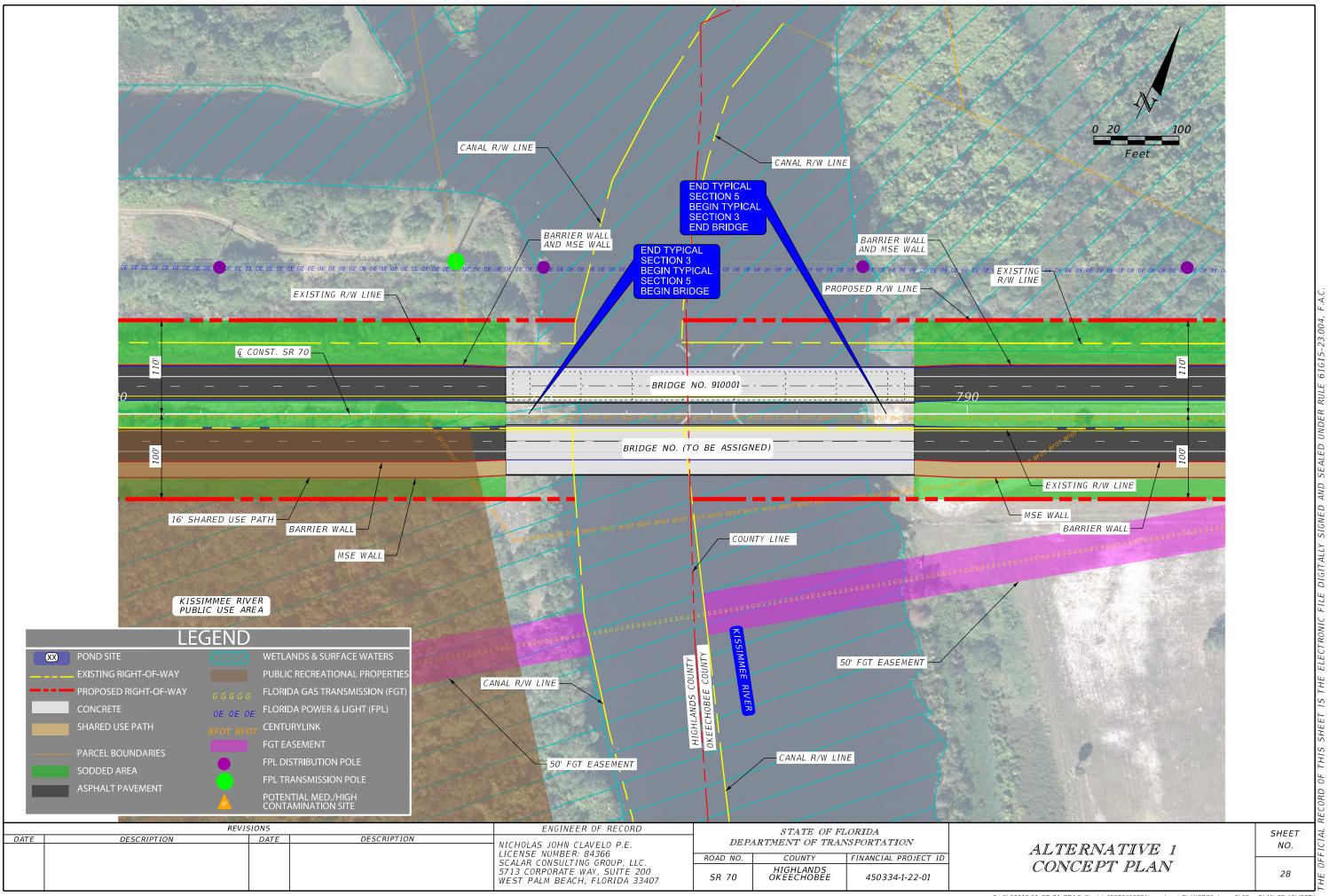


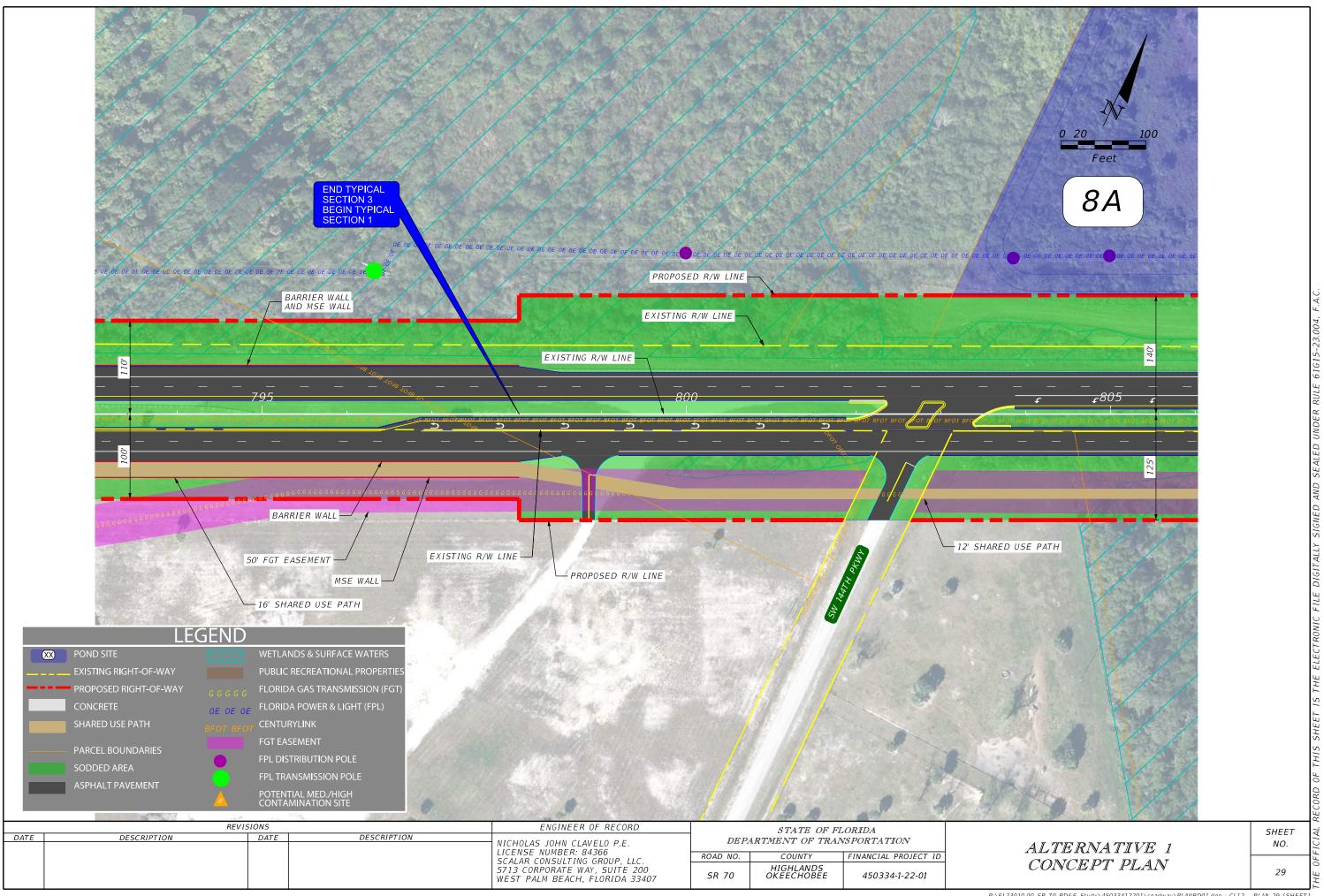


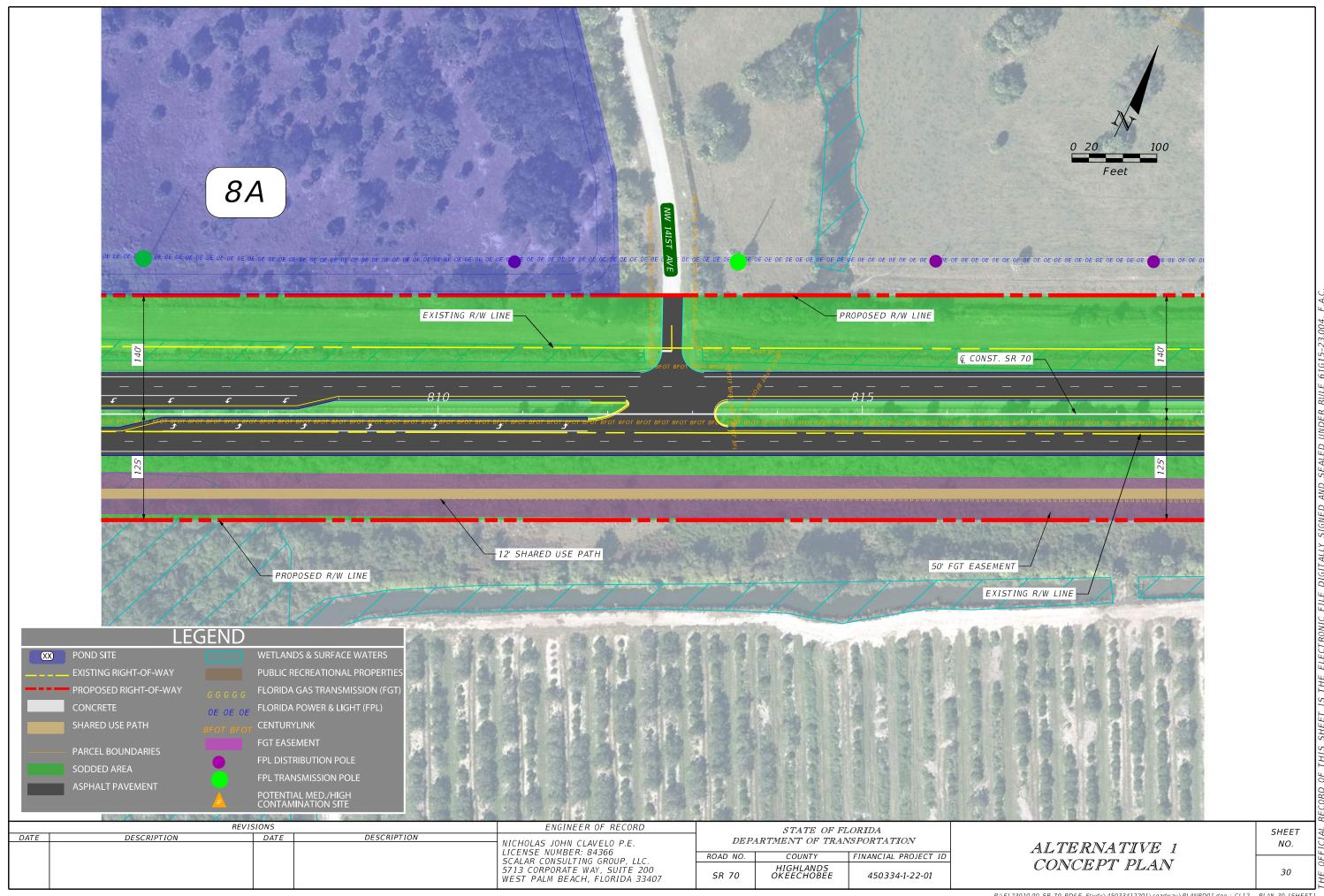


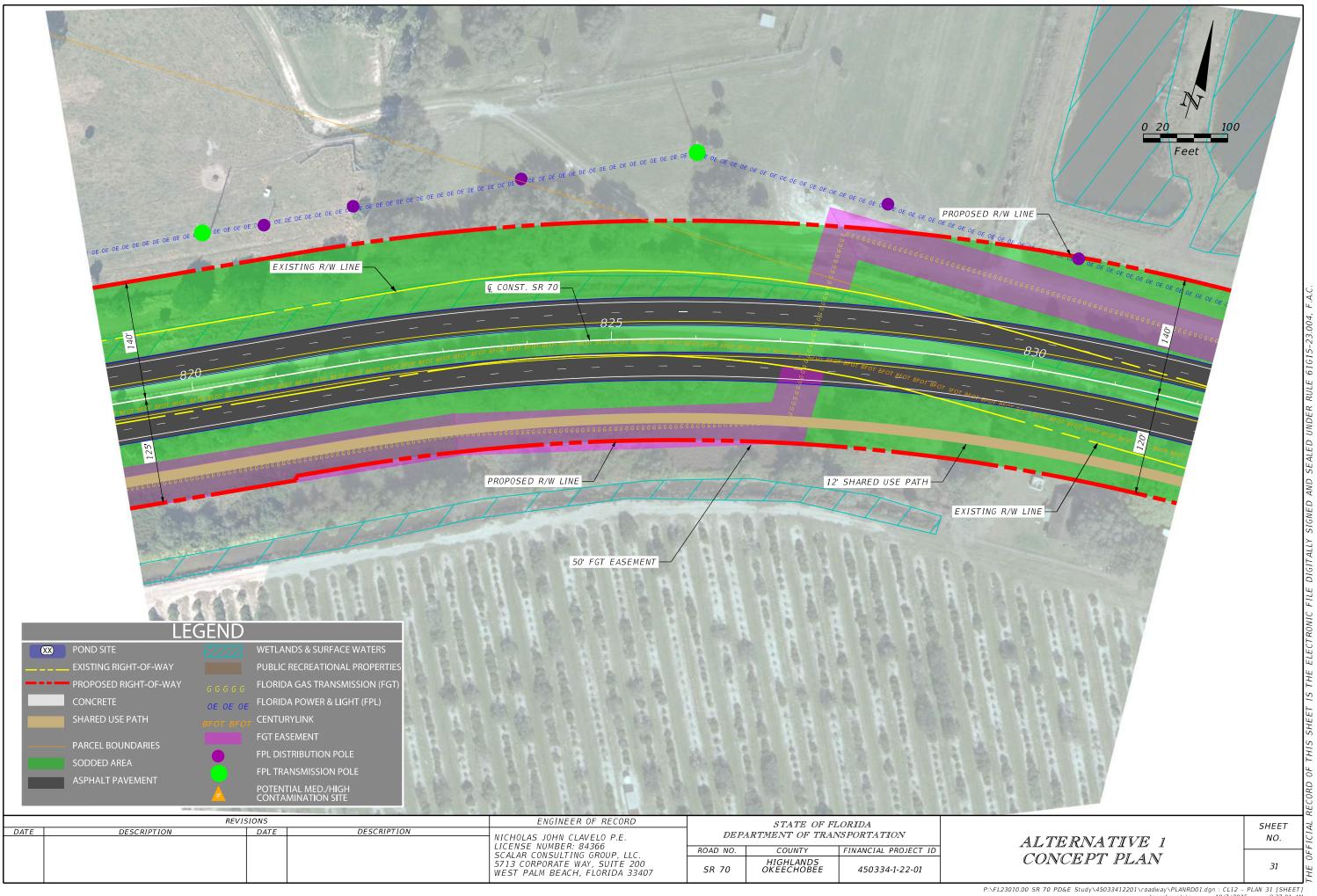


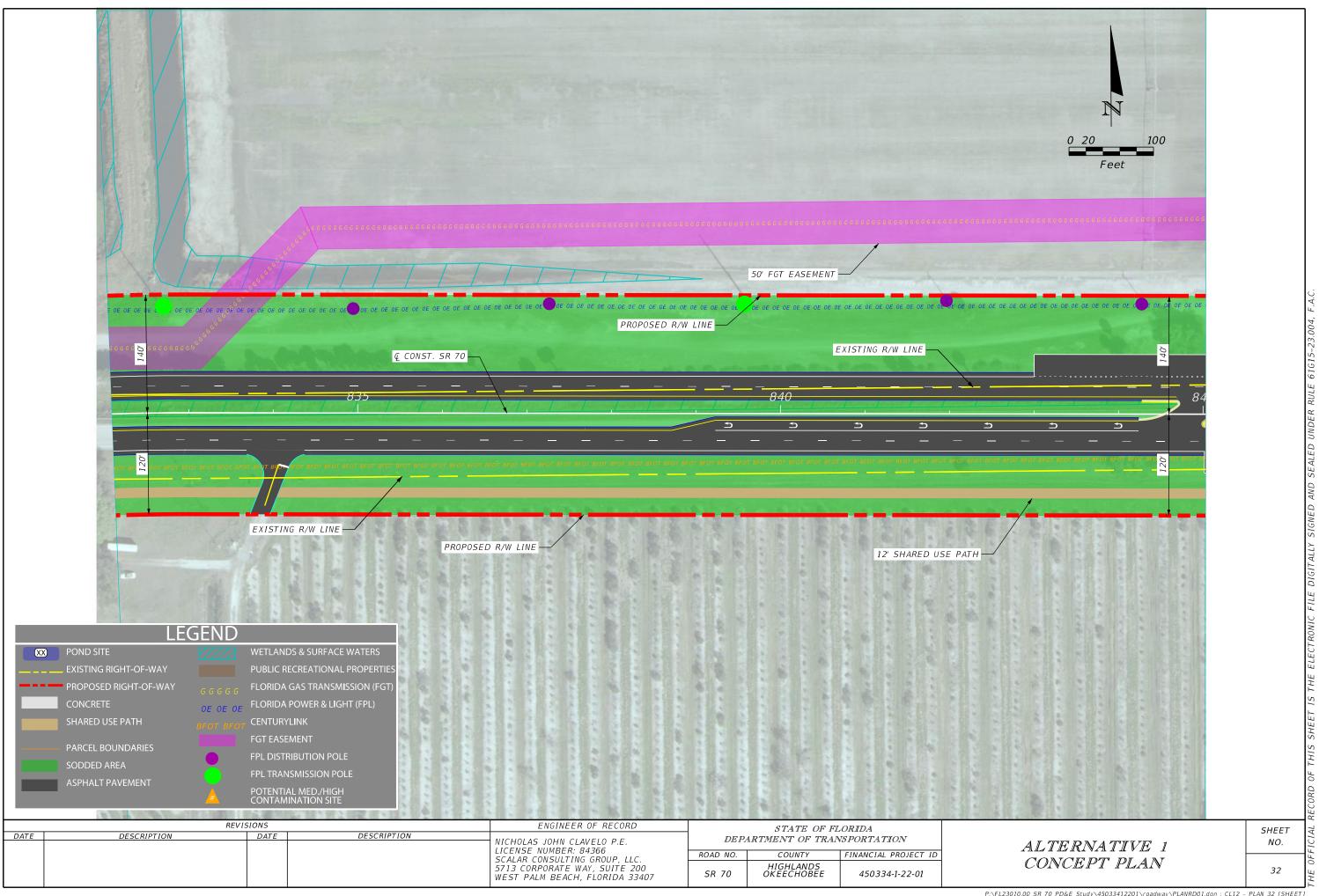


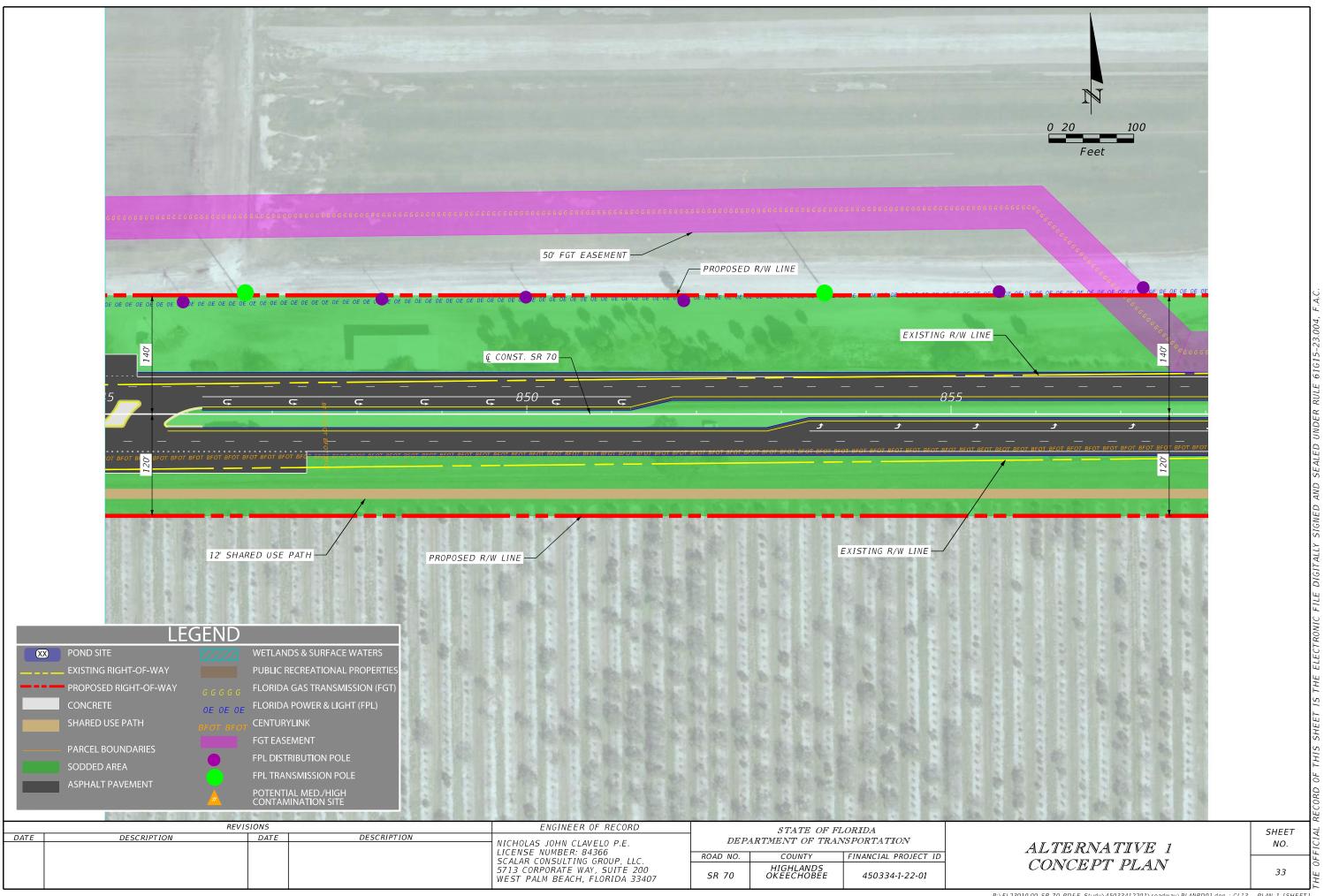


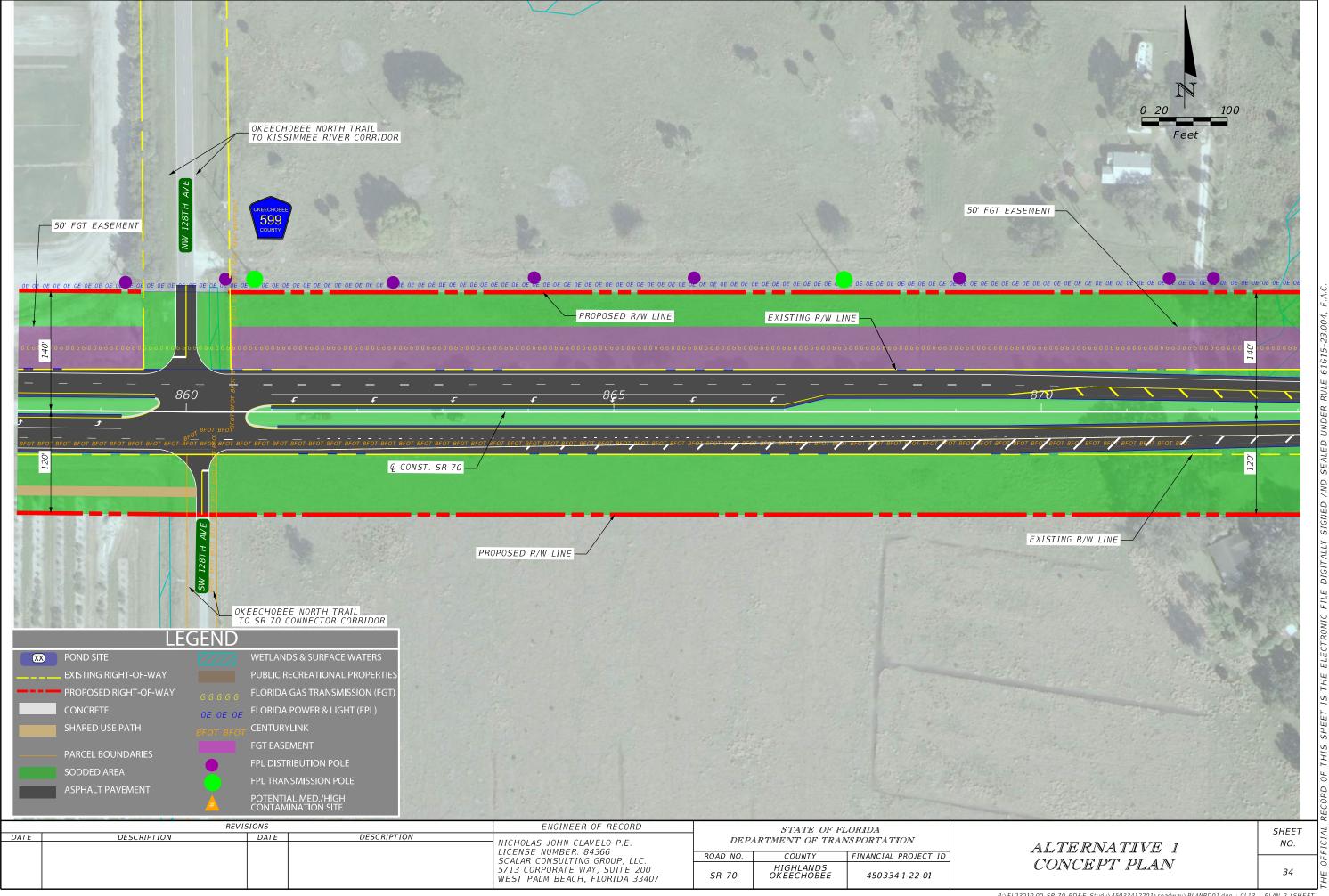


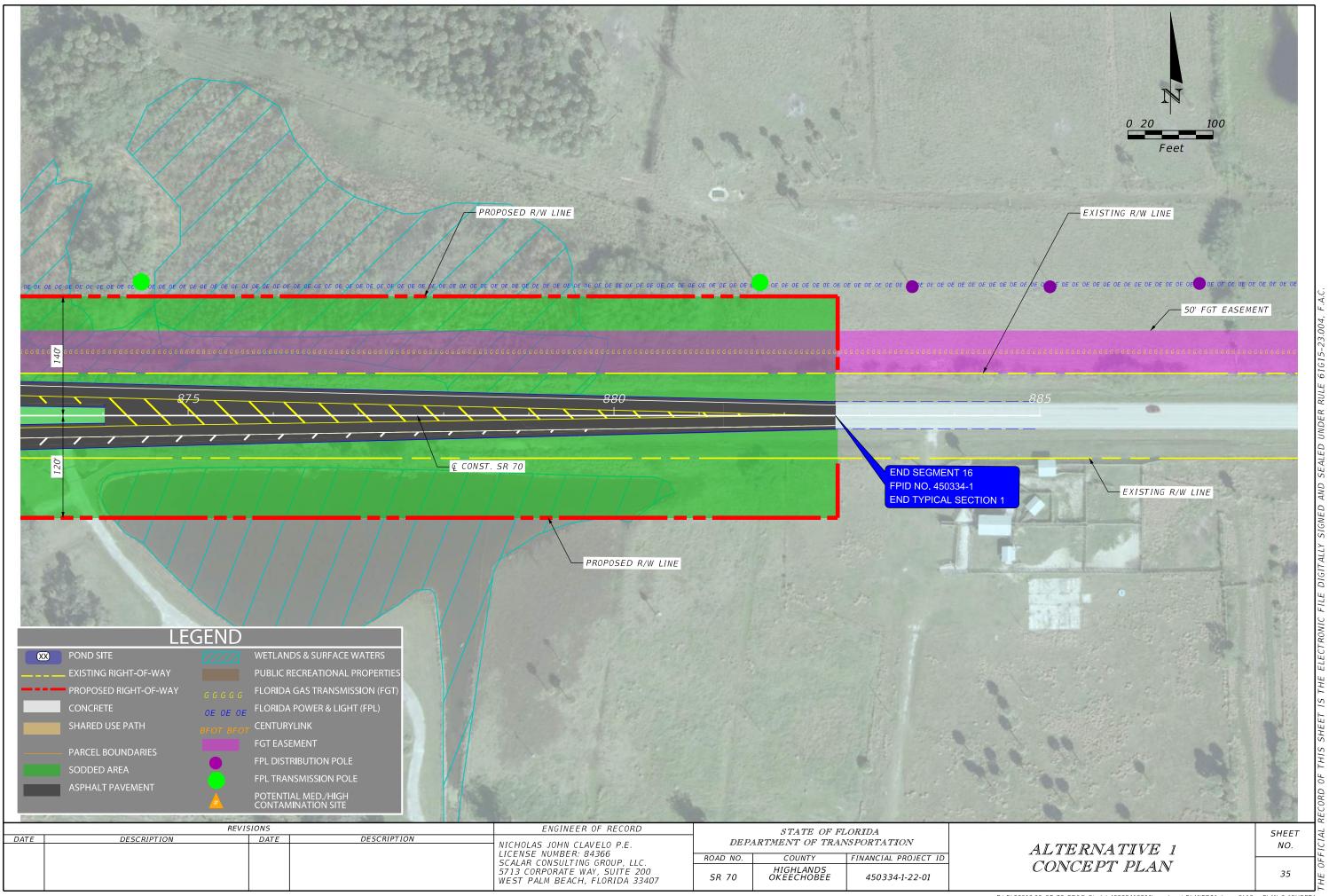












Appendix C FDOT's Long Range Estimate (LRE)

Date: 10/1/2025 7:54:54 AM

FDOT Long Range Estimating System - Production R3: Project Details by Sequence Report

Project: 450334-1-22-01 Letting Date: 01/2099

Description: SR 70 FROM CR 721 S TO CR 599/128 AVE

County: 09 HIGHLANDS Market Area: 09 Units: English

Contract Class: 4 Lump Sum Project: N Design/Build: N Project Length: 8.980 MI

Project Manager: JMK-MMS-KFC

Version 7 Project Grand Total

\$124,047,128.72

2.00 % / 2.00 %

Net Length:

Description: September 2025 Segment 16 Alt 1 Updates with Markups per PM - Copied from Version 4 - 9/30/25

Sequence: 1 NDR - New Construction, Divided, Rural

9.128 MI

48,196 LF

Description: 4-Lane Divided

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 150.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	9.128
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %

Pay Items

Roadway Cross Slope L/R

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	331.93 AC	\$15,000.00	\$4,978,950.00
120-6	EMBANKMENT	920,112.14 CY	\$12.25	\$11,271,373.72

\$16,250,323.72 **Earthwork Component Total**

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item Quantity Unit Unit Price Extended Amount Description

160-4	TYPE B STABILIZATION	471,248.21 SY	\$9.47	\$4,462,720.55
285-709	OPTIONAL BASE,BASE GROUP 09	264,113.20 SY	\$16.49	\$4,355,226.67
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	42,412.34 TN	\$153.34	\$6,503,508.22
337-7-25	ASPH CONC FC,INC BIT,FC- 5 PG76-22	10,281.78 TN	\$240.48	\$2,472,562.45

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Υ
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

,				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	3,697.00 EA	\$5.02	\$18,558.94
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	36.51 GM	\$1,351.36	\$49,338.15
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	18.26 GM	\$568.54	\$10,381.54
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	36.51 GM	\$6,595.41	\$240,798.42
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	18.26 GM	\$2,162.33	\$39,484.15

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 12.00
Bike Path Structural Spread Rate	110
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	85,681.49 SY	\$9.47	\$811,403.71
285-701	OPTIONAL BASE, BASE GROUP 01	64,261.12 SY	\$19.31	\$1,240,882.23
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	3,534.36 TN	\$198.29	\$700,828.24
339-1	MISCELLANEOUS ASPHALT PAVEMENT	82.00 TN	\$407.07	\$33,379.74
536-1-1	GUARDRAIL- ROADWAY, GEN TL- 3	2,400.00 LF	\$28.84	\$69,216.00
536-85-24	GUARDRAIL END TREATMENT- PARA APP TERM	6.00 EA	\$3,678.60	\$22,071.60
536-85-29	GUARDRAIL END TREAT- DBL TRAIL AN	6.00 EA	\$2,573.08	\$15,438.48
	Roadway Component Total			\$21,045,799.09

SHOULDER COMPONENT

User Input Data Description

Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	7.00 / 7.00
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips �No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	57,085.29 SY	\$36.98	\$2,111,014.02
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	2,945.30 TN	\$153.34	\$451,632.30
337-7-25	ASPH CONC FC,INC BIT,FC- 5,PG76-22	2,142.04 TN	\$240.48	\$515,117.78
570-1-2	PERFORMANCE TURF, SOD	74,971.31 SY	\$4.61	\$345,617.74

Erosion Control

Pay Items

ray itellis				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	125,309.18 LF	\$1.95	\$244,352.90
104-11	FLOATING TURBIDITY BARRIER	2,282.00 LF	\$19.42	\$44,316.44
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	2,282.00 LF	\$7.12	\$16,247.84
104-15	SOIL TRACKING PREVENTION DEVICE	10.00 EA	\$2,637.79	\$26,377.90
104-18	INLET PROTECTION SYSTEM	55.00 EA	\$159.24	\$8,758.20
107-1	LITTER REMOVAL	221.26 AC	\$30.46	\$6,739.58
107-2	MOWING	221.26 AC	\$64.20	\$14,204.89
	Shoulder Component Total			\$3,784,379.59

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	4.00 / 4.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	Т
Rumble Strips ï¿⅓No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	46,375.11 SY	\$36.98	\$1,714,951.57
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	2,356.24 TN	\$153.34	\$361,305.84
337-7-25	ASPH CONC FC,INC BIT,FC- 5,PG76-22	1,713.63 TN	\$240.48	\$412,093.74
570-1-2	PERFORMANCE TURF, SOD	28,596.20 SY	\$4.61	\$131,828.48
	Median Component Total			\$2,620,179.63

DRAINAGE COMPONENT

DRAINAGE COMPONENT						
Pay Items						
Pay item	Description	Quantity Unit	Unit Price	Extended Amount		
425-1-551	INLETS, DT BOT, TYPE E, <10' PIPE CULV, OPT MATL,	55.00 EA	\$9,766.67	\$537,166.85		
430-174-124	ROUND,24"SD	7,304.00 LF	\$174.85	\$1,277,104.40		
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	3,144.00 LF	\$140.20	\$440,788.80		
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	2,704.00 LF	\$305.87	\$827,072.48		
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	366.00 EA	\$3,788.27	\$1,386,506.82		
570-1-1	PERFORMANCE TURF	6,426.11 SY	\$4.74	\$30,459.76		
Retention Basi	n 1					
Description		Valu	10			
Size		5 AC				
Multiplier		1				
Depth		6.00				
Description		0.0				
Pay Items						
Pay item	Description	Quantity Unit	Unit Price	Extended Amount		
110-1-1	CLEARING & GRUBBING	5.00 AC	\$15,000.00	\$75,000.00		
120-1	REGULAR EXCAVATION	48,400.00 CY	\$8.58	\$415,272.00		
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$9,187.03	\$9,187.03		
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70		
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$28.45	\$52,917.00		
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00 EA	\$4,975.60	\$9,951.20		
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$4.74	\$114,708.00		
X-Items						
Pay item	Description	Quantity Unit	Unit Price	Extended Amount		
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00 LF	\$140.20	\$7,851.20		
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00		
Retention Basin 2						
Description		Valu	_			
Size		5 AC				
Multiplier		1				
Depth		6.00				
Description						
Pay Items						
Pay item	Description	Quantity Unit	Unit Price	Extended Amount		
110-1-1	CLEARING & GRUBBING	5.00 AC	\$15,000.00	\$75,000.00		
120-1	REGULAR EXCAVATION	48,400.00 CY	\$8.58	\$415,272.00		
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$9,187.03	\$9,187.03		
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70		
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$28.45	\$52,917.00		

2.00 EA \$4,975.60 \$9,951.20

FENCE GATE, TYP

B,SLIDE/CANT,18.1-20'OPEN

550-60-234

	PERFORMANCE TURF	24,200.00 SY	\$4.74	\$114,708.00
X-Items Pay item	Description	Quantity Unit	Unit Price	Extended Amount
•	PIPE CULV, OPT MATL, ROUND,	•		
430-175-124	24"S/CD	56.00 LF	\$140.20	\$7,851.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00
Retention Basi	n 3			
Description		Valu	-	
Size Multiplier		10 A	C 1	
Depth		6.0	•	
Description				
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$15,000.00	\$150,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$8.58	\$830,544.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$9,187.03	\$18,374.06
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$28.45	\$79,091.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$4,975.60	\$14,926.80
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$4.74	\$229,416.00
X-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00 LF	\$140.20	\$14,580.80
	DIDE CHILL ODT MATE DOLIND			
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00
	36"S/CD	400.00 LF	\$305.87	\$122,348.00
Retention Basi	36"S/CD	400.00 LF Val u		\$122,348.00
	36"S/CD		ıe	\$122,348.00
Retention Basin Description Size Multiplier	36"S/CD	Val u 10 A	ie C 1	\$122,348.00
Retention Basin Description Size Multiplier Depth	36"S/CD	Valu	ie C 1	\$122,348.00
Retention Basin Description Size Multiplier	36"S/CD	Val u 10 A	ie C 1	\$122,348.00
Retention Basin Description Size Multiplier Depth Description Pay Items	36"S/CD	Valu 10 A 6.0	ie C 1	
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item	36"S/CD n 4 Description	Valu 10 A 6.0 Quantity Unit	ue C 1 00 Unit Price	Extended Amount
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1	36"S/CD n 4 Description CLEARING & GRUBBING	Valu 10 A 6.0 Quantity Unit 10.00 AC	Unit Price \$15,000.00	Extended Amount \$150,000.00
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1	36"S/CD n 4 Description CLEARING & GRUBBING REGULAR EXCAVATION	Valu 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY	Unit Price \$15,000.00 \$8.58	Extended Amount \$150,000.00 \$830,544.00
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10'	Valu 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA	Unit Price \$15,000.00 \$8.58 \$9,187.03	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541 425-2-71	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10' MANHOLES, J-7, <10'	Valu 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA 2.00 EA	Unit Price \$15,000.00 \$8.58 \$9,187.03 \$13,159.85	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06 \$26,319.70
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10' MANHOLES, J-7, <10' FENCING, TYPE B, 5.1-6.0', STANDARD	Valu 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA	Unit Price \$15,000.00 \$8.58 \$9,187.03	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06
Retention Basic Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541 425-2-71 550-10-220 550-60-234	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10' MANHOLES, J-7, <10' FENCING, TYPE B, 5.1-6.0', STANDARD FENCE GATE, TYP B, SLIDE/CANT, 18.1-20'OPEN	Value 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA 2.00 EA 2,780.00 LF 3.00 EA	Unit Price \$15,000.00 \$8.58 \$9,187.03 \$13,159.85 \$28.45 \$4,975.60	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06 \$26,319.70 \$79,091.00 \$14,926.80
Retention Basin Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541 425-2-71 550-10-220	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10' MANHOLES, J-7, <10' FENCING, TYPE B, 5.1-6.0', STANDARD FENCE GATE, TYP	Valu 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA 2.00 EA 2,780.00 LF	Unit Price \$15,000.00 \$8.58 \$9,187.03 \$13,159.85 \$28.45	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06 \$26,319.70 \$79,091.00
Retention Basic Description Size Multiplier Depth Description Pay Items Pay item 110-1-1 120-1 425-1-541 425-2-71 550-10-220 550-60-234	Description CLEARING & GRUBBING REGULAR EXCAVATION INLETS, DT BOT, TYPE D, <10' MANHOLES, J-7, <10' FENCING, TYPE B, 5.1-6.0', STANDARD FENCE GATE, TYP B, SLIDE/CANT, 18.1-20'OPEN	Value 10 A 6.0 Quantity Unit 10.00 AC 96,800.00 CY 2.00 EA 2.00 EA 2,780.00 LF 3.00 EA	Unit Price \$15,000.00 \$8.58 \$9,187.03 \$13,159.85 \$28.45 \$4,975.60	Extended Amount \$150,000.00 \$830,544.00 \$18,374.06 \$26,319.70 \$79,091.00 \$14,926.80

430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00 LF	\$140.20	\$14,580.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00
Retention Basi	n 5			
Description		Valu	ie	
Size		10 A	-	
Multiplier			1	
Depth Description		6.0	00	
Description				
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$15,000.00	\$150,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$8.58	\$830,544.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$9,187.03	\$18,374.06
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$28.45	\$79,091.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$4,975.60	\$14,926.80
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$4.74	\$229,416.00
X-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00 LF	\$140.20	\$14,580.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00
Retention Basi	n 6			
Description		Valu	Ie.	
Size		5 A	_	
Multiplier			1	
Depth		6.0	00	
Description				
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$15,000.00	\$75,000.00
120-1	REGULAR EXCAVATION	48,400.00 CY	\$8.58	\$415,272.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$9,187.03	\$9,187.03
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$28.45	\$52,917.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00 EA	\$4,975.60	\$9,951.20
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$4.74	\$114,708.00
		,	Ψ 1.1 Τ	Ψ111,700.00
X-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00 LF	\$140.20	\$7,851.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00

D . 4 4		-
Retention	Basin	

Description	Value
Size	10 AC
Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$15,000.00	\$150,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$8.58	\$830,544.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$9,187.03	\$18,374.06
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$28.45	\$79,091.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$4,975.60	\$14,926.80
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$4.74	\$229,416.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00 LF	\$140.20	\$14,580.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00

Retention Basin 8

Description	Value
Size	10 AC
Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$15,000.00	\$150,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$8.58	\$830,544.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$9,187.03	\$18,374.06
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$13,159.85	\$26,319.70
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$28.45	\$79,091.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$4,975.60	\$14,926.80
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$4.74	\$229,416.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00 LF	\$140.20	\$14,580.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	400.00 LF	\$305.87	\$122,348.00

Drainage Component Total

\$14,427,763.30

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-111	SINGLE COL GRND SIGN AS, F&I GM, <12 SF	19.00 EA	\$488.94	\$9,289.86
700-1-112	SINGLE COL GRND SIGN AS, F&I GM, 12-20	220.00 EA	\$2,032.87	\$447,231.40
700-2-114	MULTI- COLUMN SIGN, F&I GM, 30.1-50 SF	19.00 EA	\$7,702.88	\$146,354.72
700-2-115	MULTI- COLUMN SIGN, F&I GM, 50.1-100 SF	55.00 EA	\$10,268.76	\$564,781.80
	Signing Component Total			\$1,167,657.78

BRIDGES COMPONENT

Bridge	1
--------	---

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		210.00
Width (LF)		58.67
Туре		Low Level
Cost Factor		1.25
Structure No.		
Removal of Existing Structures area		0.00
Default Cost per SF		\$164.00
Factored Cost per SF		\$205.00
Final Cost per SF		\$217.70
Basic Bridge Cost		\$2,525,743.50
Description	FLAT SLAB BRIDGE OVER C-41A	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	130.38 CY	\$969.50	\$126,403.41
415-1-9	REINF STEEL- APPROACH SLABS	22,816.50 LB	\$1.32	\$30,117.78
	Bridge 1 Total			\$2,682,264.69

Bridge 2

Bridge 2	
Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	420.00
Width (LF)	59.46
Туре	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	12,880.00
Default Cost per SF	\$172.00
Factored Cost per SF	\$258.00
Final Cost per SF	\$264.35
Basic Bridge Cost	\$6,443,085.60
Description	CONCRETE FIB GIRDER OVER KISSIMMEE RIVER (EB)

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	12,880.00 SF	\$57.83	\$744,850.40

	Bridge 2 Total			\$7,346,558.07
415-1-9	REINF STEEL- APPROACH SLABS	23,122.75 LB	\$1.32	\$30,522.03
400-2-10	CONC CLASS II, APPROACH SLABS	132.13 CY	\$969.50	\$128,100.04

Bridge 3

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	420.00
Width (LF)	42.67
Туре	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$172.00
Factored Cost per SF	\$258.00
Final Cost per SF	\$264.35
Basic Bridge Cost	\$4,623,721.20
Description	SR 70 BRIDGE FIB GIRDER OVER KISSIMMEE RIVER (WB)

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	94.82 CY	\$969.50	\$91,927.99
415-1-9	REINF STEEL- APPROACH SLABS	16,593.50 LB	\$1.32	\$21,903.42
	Bridge 3 Total			\$4,737,552.61
	Bridges Component Total			\$14,766,375.37

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,955.00
Begin height	5.00
End Height	19.86
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	24,300.65 SF	\$64.09	\$1,557,428.66

Retaining Wall 2

Description	Value
Length	1,955.00
Begin height	5.00
End Height	20.18
Multiplier	1

Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

548-12	RET WALL SYSTEM, PERM, EX BARRIER	24,613.45 SF	\$64.09	\$1,577,476.01
Retaining Wall Description Length Begin height End Height Multiplier	Value 848.00 16.11 5.00 1			
Pay Items Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,950.64 SF	\$64.09	\$573,646.52
Retaining Wall	4			
Description		Value		
Length Begin height		848.00 16.45		
End Height		5.00		
Multiplier		1		
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,094.80 SF	\$64.09	\$582,885.73
	Retaining Walls Component Total			\$4,291,436.92

\$78,353,915.40

Sequence 1 Total

Date: 10/1/2025 7:54:55 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 450334-1-22-01 Letting Date: 01/2099

Description: SR 70 FROM CR 721 S TO CR 599/128 AVE

District: 01 County: 09 HIGHLANDS Market Area: 09 Units: English

Contract Class: 4 Lump Sum Project: N Design/Build: N Project Length: 8.980 MI

Project Manager: JMK-MMS-KFC

Version 7 Project Grand Total

\$124,047,128.72

Description: September 2025 Segment 16 Alt 1 Updates with Markups per PM - Copied from Version 4 - 9/30/25

Project Seq	uences Subtotal		\$78,353,915.40
102-1	Maintenance of Traffic	15.00 %	\$11,753,087.31
101-1	Mobilization	10.00 %	\$9,010,700.27
Project Seq	uences Total		\$99,117,702.98
Project Unkn	owns	25.00 %	\$24,779,425.74
Design/Build		0.00 %	\$0.00
Non-Bid Co	mponents:		
Pay item	Description	Quantity Unit Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)	LS \$150,000.00	\$150,000.00

Project Non-Bid Subtotal \$150,000.00

Version 7 Project Grand Total \$124,047,128.72

Appendix D Design Variation Memorandum

Project Design Variation Memorandum

To: Kevin S. Ingle, P.E.		Date: Novembe	r 10, 2025		
District Design Engineer					
Financial Project ID: 450334-1-22-01	_New Const.	RRR 🔲	Other PD8	kE	
Design Speed: 65 MPH Posted Sp	peed: 60 MPH Contex	kt Classification: C2			
Federal Aid Number: D123-018-B	_				
Project Name: State Road (S.R.) 70 from	County Road (C.R.) 721	S to C.R. 599/128 th A	venue		
State Road Number: 70	_Co./Sec./Sub. <u>09 060 (</u>	000 & 91 070 000			
Begin Project MP: 29.187 End Project N	MP: <u>1.423</u>				
Other Project Information: PD&E Study					
Request for: Design Variation			For Dis	strict Us	e Only
Design Element MP: Beg-End E	Existing Proposed I	Required Attr. C	rashes Approved	Denied	Addl. Docum.
1. <u>Border Width</u> <u>35.787-35.995</u> _	32-ft 34-ft 40-	ft minimum			

Justification: A Design Variation is requested to allow a minimum border width of 34 feet from STA. 754+00 LT to 765+00 LT. According to the 2025 FDOT Design Manual (FDM), Table 210.7.1 specifies that the minimum border width for a flush shoulder with a design speed of 50 mph or greater is 40 feet. Meeting the minimum border width requirement by the FDM would result in more business damages and a potential business relocation, as well as more property acquisition from Kissimmee River Fishing Resort and the adjacent residential parcels. It is recommended the Department approve this Design Variation.

Appendices: Yes Yes No

Appendix A – Project Description Appendix B – Border Width Justification

Appendix C – Typical Section Package

Appendix D - Crash Data

Appendix E - Plan Sheets for Border Width

Recommended by:

Nicholas Clavelo

Date 11/19/2025

Name: Nicholas John Clavelo, P.E. Professional Engineer, License No.: 84366 Scalar Consulting Group, LLC 5713 Corporate Way, Suite 200 West Palm Beach, Florida 33407

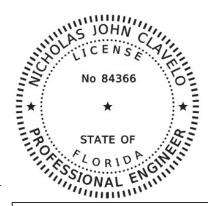
Approvals:



Digitally signed by Kevin Ingle Date: 2025.11.20 14:09:20-05'00'

_Date

Name: Kevin S. Ingle, P.E. District Design Engineer



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Nicholas J Clavelo 2025.11.19 15:23:59-05'00'

ON THE DATE ADJACENT TO THE SEAL.

SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Appendix A Project Description

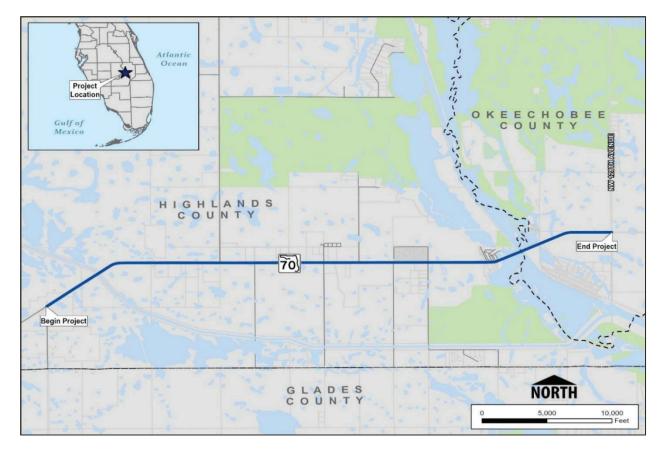


Figure 1-1 Project Location Map

This project is a PD&E Study along S.R. 70 in Highlands and Okeechobee Counties. The project begins at C.R. 721 South and extends approximately 8.6 miles east to C.R. 599/128th Avenue. The purpose of the study is to evaluate the proposed widening of S.R. 70 from a two-lane undivided roadway to a four-lane divided roadway with paved shoulder, turn lanes and a shared use path. The study will address the need for improved traffic safety conditions, continued maintenance of the important east-west connection and to accommodate increasing freight activity along the project corridor. The existing and proposed design speed is 65 mph, while the existing posted speed is 60 mph and proposed posted speed is 65 mph. The project level context classification is **C2 – Rural**. The existing right-of-way varies from approximately 70 feet to 100 feet, and the proposed right-of-way varies from 210 feet to 290 feet.

Appendix B Border Width Justification

Border Width

DESIGN CRITERIA VERSUS PROPOSED DESIGN:

- FDOT CRITERIA
 - Per the 2025 FDM, Table 210.7.1 states the minimum border width for flush shoulder design speed ≥ 50 should be 40 feet.
- PROPOSED CRITERIA
 - Minimum border width of 34 feet from STA. 754+00 LT to STA. 765+00 LT.

REVIEW OF CRASH HISTORY:

- A review of the most recent five-year crash history (2019–2023) identified a total of 100 crashes, including 5 fatalities, within the project limits.
- A total of 2 off-road crashes (88505631 and 25439652) were reported in the deficient border width area. After reviewing the long forms, these crashes were attributed to fatigued driving and unsafe passing.

JUSTIFICATION FOR PROPOSED CRITERIA:

- The primary objective of this project is to conduct PD&E to widen S.R. 70 from 2 to 4 lanes.
- The proposed right-of-way in this area has been reduced to avoid further business damages to the existing gas station/convenience store and minimize residential property takes.
- The cost to mitigate this variation would include purchasing additional right-of-way and would result
 in more business damages and a potential business relocation at the existing gas
 station/convenience store. This is the primary store for this resort property.
- The cost and social and economic hardship to mitigate the variation is not warranted as there are no crash related costs associated with the deficiency.

Appendix C Typical Section Package

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

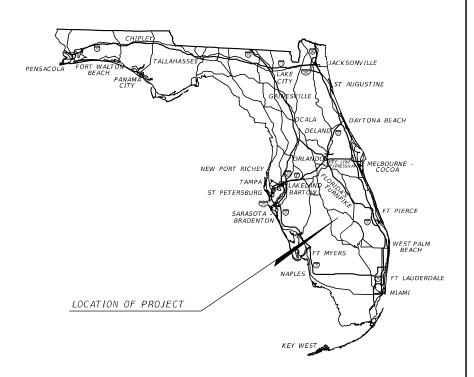
FINANCIAL PROJECT ID 450334-1-22-01

HIGHLANDS COUNTY (09060)

OKEECHOBEE COUNTY (91070)

STATE ROAD NO. 70

ADD LANES AND RECONSTRUCT FROM CR 721 S TO CR 599/128 AVE



FDOT DISTRICT DESIGN ENGINEER

Digitally signed by Kevin Ingle Date: 2025.09.29 09:10:30-04'00'

CONCURRING WITH: TYPICAL SECTION ELEMENTS TARGET SPEED DESIGN & POSTED SPEEDS

FDOT DISTRICT INTERMODAL SYSTEMS FDO DEVELOPMENT MANAGER DES

Bessie Digitally signed by: Bessie, Reina DN: CN = Bessie Reina C = US O = FLORIDA DEPARTMENT OF TRANSPORTATION Date: 2025.09.26 16:51:53 -04'00'

FHWA TRANSPORTATION ENGINEER

CONCURRING WITH: CONTEXT CLASSIFICATION TARGET SPEED

LOCAL TRANSPORTATION ENGINEER

CONCURRING WITH: TYPICAL SECTION ELEMENTS CONCURRING WITH: TYPICAL SECTION ELEMENTS

FDOT DISTRICT TRAFFIC OPERATIONS ENGINEER

Steven A Davis Jr 2025.09.29 08:55:25 -04'00'

CONCURRING WITH: TARGET SPEED DESIGN & POSTED SPEEDS

FDOT DISTRICT STRUCTURES
DESIGN ENGINEER

Digitally signed by: Mark L
Peronto
DN: CN = Mark L Peronto C =
US 0 = FLORIDA
DEPARTMENT OF
TRANSPORTATION
Date: 2025.09.24 09:49:05
-04'00'

CONCURRING WITH: TYPICAL SECTION ELEMENTS PROJECT LOCATION URL: https://tinyurl.com/4k3pfhpy

PROJECT LIMITS: BEGIN MP 29.187 - END MP 1.423

STATION EQUATION: MP 36.334 (09060000) = MP 0.000 (91070000)

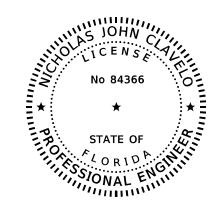
EXCEPTIONS: NONE

BRIDGE LIMITS: BR#090053 MP 30.128 - MP 30.168

BR#910001 MP 0.000 - MP 0.080

RAILROAD CROSSING: NONE

APPROVED BY:



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Nicholas J Clavelo 2025.09.17 10:12:51-04'00'

ON THE DATE ADJACENT TO THE SEAL

THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SCALAR CONSULTING GROUP, LLC. 5713 CORPORATE WAY, SUITE 200 WEST PALM BEACH, FL 33407 NICHOLAS JOHN CLAVELO, P.E. NO. 84366

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INDEX OF SHEETS

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTION NO. 1
3	TYPICAL SECTION NO. 2
4	TYPICAL SECTION NO. 3
5	TYPICAL SECTION NO. 4
6	TYPICAL SECTION NO. 5

SHEET

1

- () C1: NATURAL () C3C: SUBURBAN COMM.

 (X) C2: RURAL () C4: URBAN GENERAL

 () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
 () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

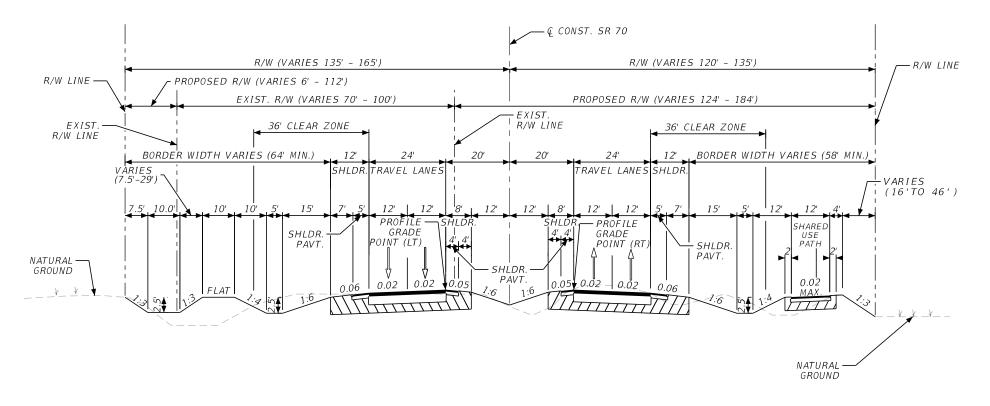
ACCESS CLASSIFICATION

- () 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- (X) 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



SR 70 STA. 400+00.00 TO STA. 455+37.39 STA. 457+47.39 TO STA. 754+00.00 STA. 798+03.02 TO STA. 882+60.00

TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800ESTIMATED DESIGN YEAR = 2052 AADT = 14500 K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH DESIGN SPEED (PROPOSED) = 65 MPH POSTED SPEED (PROPOSED) = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
450334-1-22-01	2

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 (X) C2: RURAL () C4: URBAN GENERAL

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HIGHWAY SYSTEM

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ACCESS CLASSIFICATION

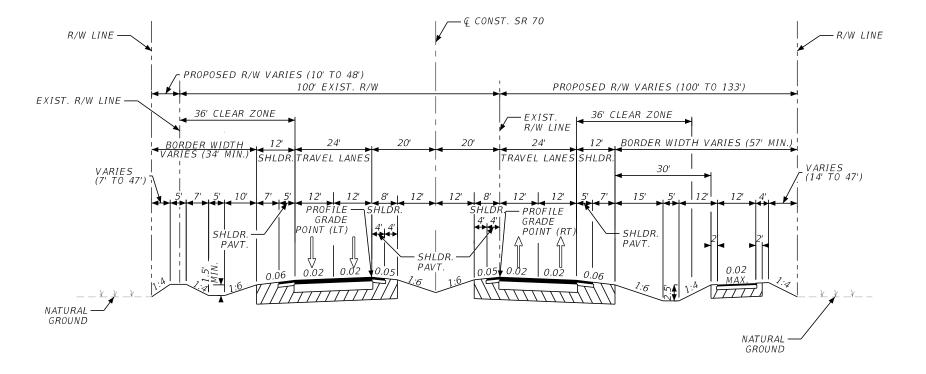
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- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

BORDER WIDTH VARIATION



SR 70 STA. 754+00.00 TO STA. 765+30.00

TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800ESTIMATED DESIGN YEAR = 2052 AADT = 14500K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH DESIGN SPEED (PROPOSED) = 65 MPH POSTED SPEED (PROPOSED) = 65 MPH

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450334-1-22-01	3

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HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
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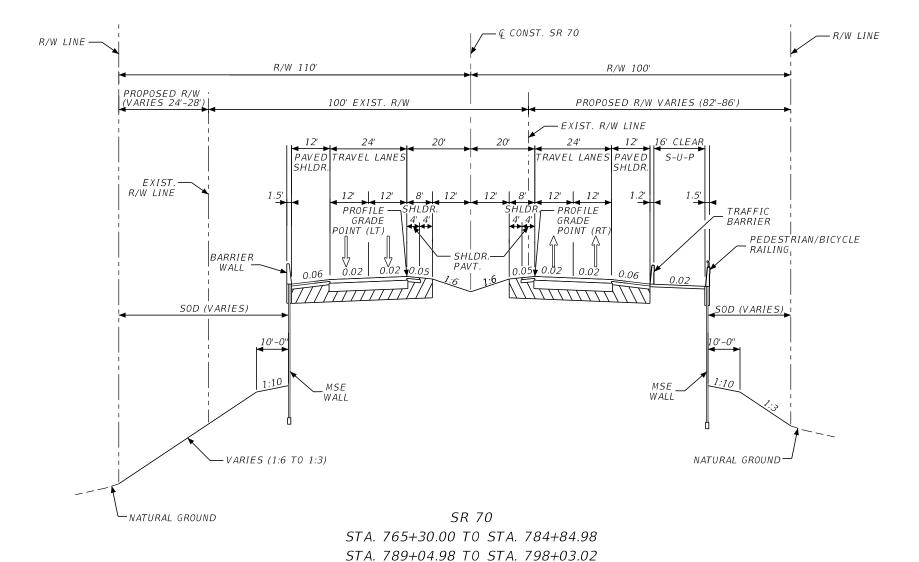
ACCESS CLASSIFICATION

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- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800ESTIMATED DESIGN YEAR = 2052 AADT = 14500K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH DESIGN SPEED (PROPOSED) = 65 MPH POSTED SPEED (PROPOSED) = 65 MPH

NOT TO SCALE

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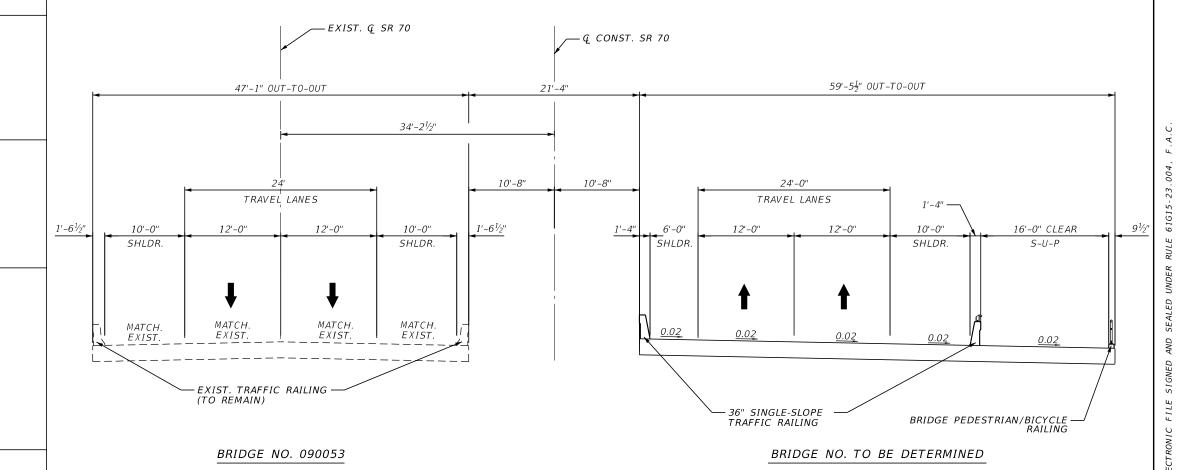
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CRITERIA

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- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



SR 70 OVER SLOUGH DITCH (C-41A CANAL) MP 30.128 TO MP 30.168 STA. 455+37.39 TO STA. 457+47.39

TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800ESTIMATED DESIGN YEAR = 2052 AADT = 14500K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH DESIGN SPEED (PROPOSED) = 65 MPH POSTED SPEED (PROPOSED) = 65 MPH

NOT TO SCALE

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- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

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HIGHWAY SYSTEM

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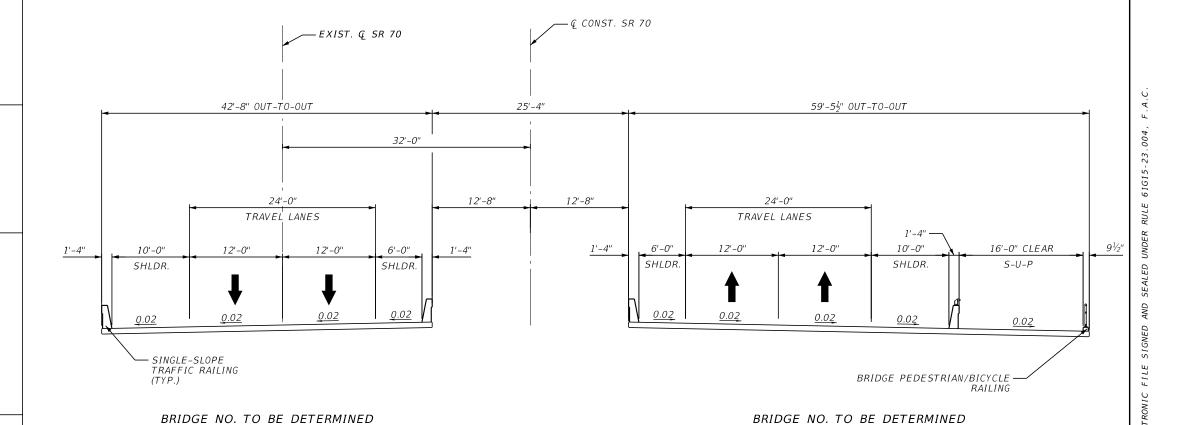
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CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



SR 70 OVER KISSIMMEE RIVER

MP 0.000 TO MP 0.080 STA. 784+84.98 TO STA. 789+04.98

TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 7590ESTIMATED OPENING YEAR = 2032 AADT = 8800 ESTIMATED DESIGN YEAR = 2052 AADT = 14500 K = 9.5% D = 58.0% T = 25% (24 HOUR) DESIGN HOUR T = 12.5%TARGET SPEED = 65 MPH $DESIGN \ SPEED \ (PROPOSED) = 65 \ MPH$ POSTED SPEED (PROPOSED) = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
450334-1-22-01	6

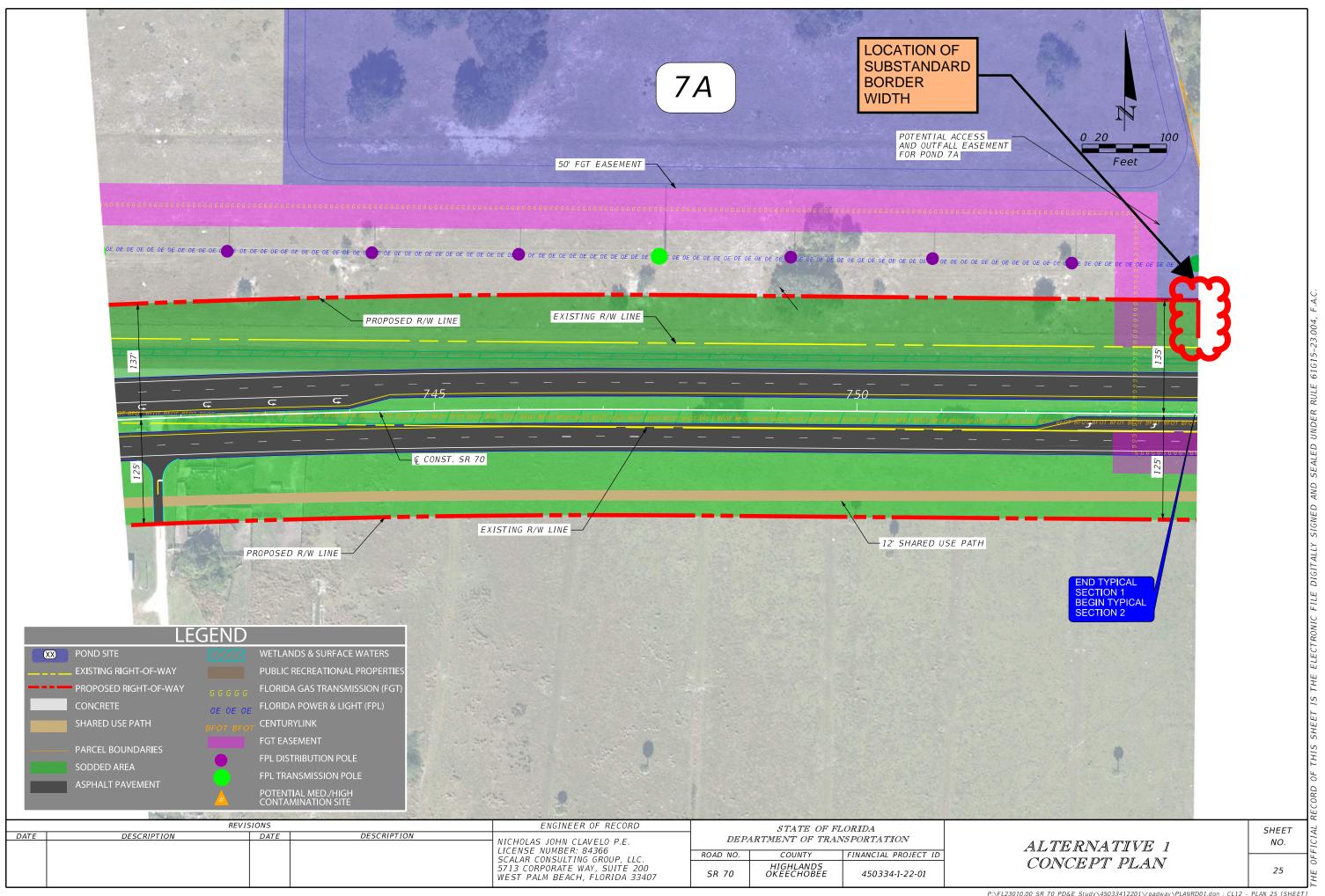
Appendix D Crash Data

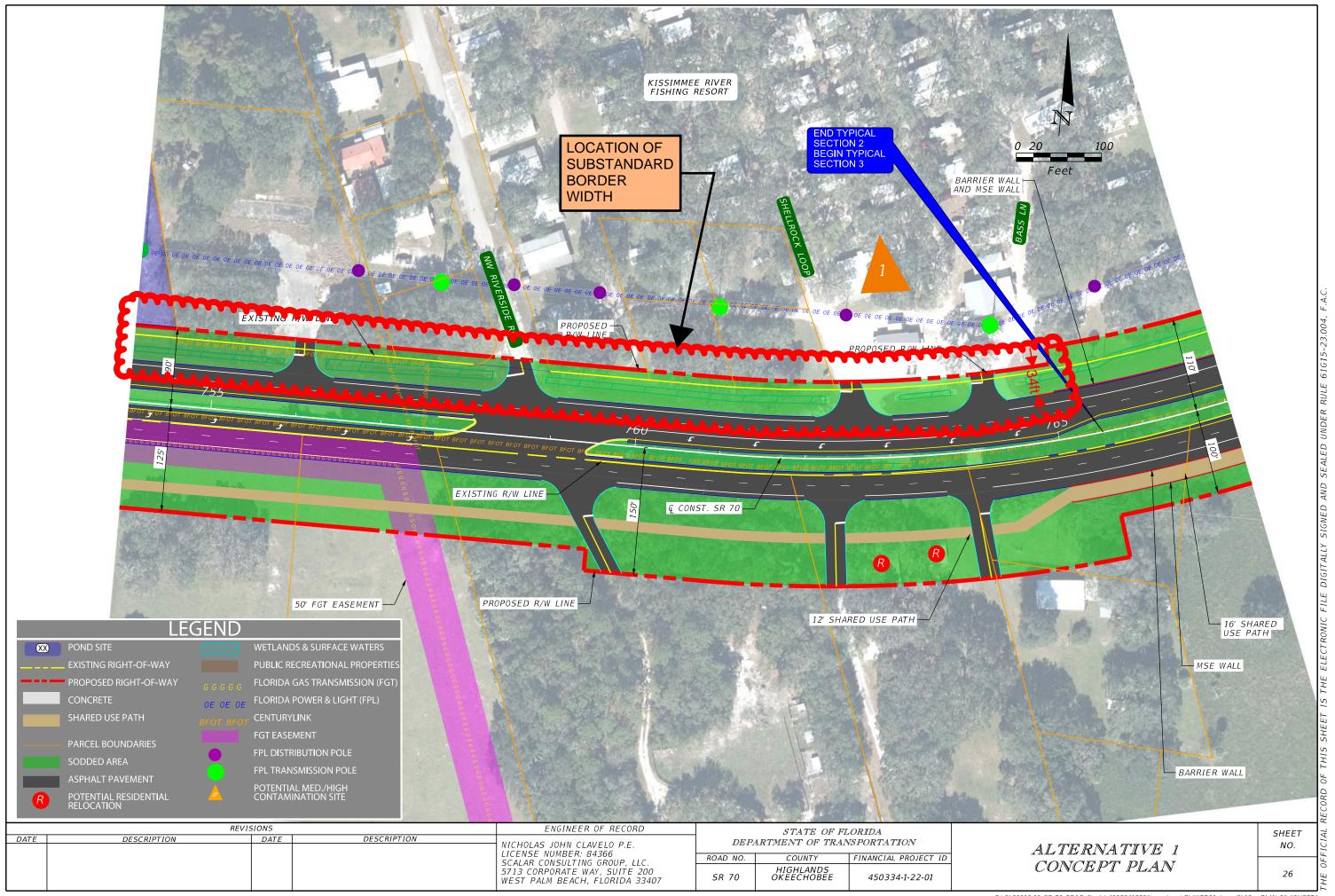
							Duomontu				Contribution		Maioror	
#	Report #	Date	Day	Time	Fatal#	Injury#	Property Damage	Crash Type	Day/ Dark	Dry/ Wet	Contributing Cause	КАВСО	Major or Minor	Crash Location
62	88030828	1/5/2019	Sat	6:20 AM	0	0	\$30,000	Off Road	Night	Dry	Careless Driving	0	Major	s2
63	87891337	1/6/2019	Sun	4:52 AM	0	1	\$15,000	Off Road	Night	Dry	Careless Driving	В	Major	i2
64	<u>88655883</u>	2/6/2019	Wed	3:32 AM	0	0	\$60,000	Rollover	Night	Dry	Faulty Vehicle	0	Major	i6
65	<u>88034486</u>	2/14/2019	Thu	8:40 AM	0	0	\$500	Off Road	Day	Dry	Careless Driving	0	Major	s5
66	<u>87891663</u>	2/20/2019	Wed	8:10 PM	0	2	\$8,500	SD Sideswipe	Night	Dry	Improper Passing	В	Major	i5
67	88034493	3/1/2019	Fri	11:40 PM	0	2	\$8,500	Angle	Night	Dry	Failed to Yield R/W	A	Major	i3
68	88072005	3/4/2019	Mon	8:01 AM	0	1	\$2,000	SD Sideswipe	Day	Dry	Improper Passing	C	Major	s2
69	88655931	3/10/2019	Sun	1:56 AM	0	0	\$5,000	Animal	Night	Dry	Animal on the Road	0	Major	s5
70	88072838	3/31/2019	Sun	2:55 AM	0	1	\$15,200	Off Road	Night	Dry	Careless Driving	Α	Major	s5
71	88655911	4/13/2019	Sat	10:55 AM	0	0	\$500	Rear End	Day	Dry	Following too Closely	0	Major	s5
72 73	88656014 88016200	4/16/2019 5/12/2019	Tue	6:14 PM 3:14 AM	0	0	\$9,000	Rear End Off Road	Day	Dry Wet	Following too Closely	0	Major Minor	s5 i1
74	88087280	5/12/2019	Sun Fri	4:30 AM	0	1	\$20,500 \$10,000	Off Road	Night Night	Dry	Careless Driving Careless Driving	В	Major	i1
75	88087281	5/24/2019	Fri	3:23 PM	0	0	\$4,000	Rear End	Day	Dry	Careless Driving	0	Major	s5
76	88656092	6/10/2019	Mon	3:37 AM	0	0	\$3,000	Off Road	Night	Wet	Careless Driving	0	Major	i6
77	88148202	6/13/2019	Thu	10:00 AM	0	0	\$1,500	Off Road	Day	Dry	Careless Driving	0	Major	i1
78	88161086	7/6/2019	Sat	4:06 PM	0	1	\$11,000	Off Road	Day	Dry	Careless Driving	A	Major	i5
79	88018692	7/9/2019	Tue	6:15 PM	0	0	\$18,000	Angle	Day	Wet	Failed to Yield R/W	0	Major	i2
80	88018694	7/12/2019	Fri	6:20 PM	0	1	\$12,000	Off Road	Day	Dry	Improper Passing	В	Major	i1
81	89289779	7/17/2019	Wed	11:15 PM	0	0	\$10,000	Off Road	Night	Wet	Careless Driving	0	Major	s5
82	89289789	7/24/2019	Wed	3:52 PM	0	0	\$1,000	Off Road	Night	Wet	Careless Driving	0	Major	s5
83	<u>88148216</u>	8/2/2019	Fri	3:00 PM	0	0	\$6,000	SD Sideswipe	Day	Dry	Improper Passing	0	Major	i1
84	<u>88171079</u>	8/4/2019	Sun	9:50 PM	0	0	\$8,000	Animal	Night	Dry	Animal on the Road	0	Major	i1
85	<u>88043338</u>	8/7/2019	Wed	12:55 AM	0	0	\$2,000	Animal	Night	Dry	Animal on the Road	0	Major	i1
86	<u>88088894</u>	8/21/2019	Wed	2:55 AM	0	0	\$5,000	Animal	Night	Dry	Animal on the Road	0	Major	i1
87	<u>88088895</u>	8/29/2019	Thu	5:30 PM	0	1	\$11,000	Rear End	Day	Dry	Following too Closely	Α	Major	s5
88	<u>88197703</u>	10/5/2019	Sat	12:08 AM	0	0	\$3,000	Animal	Night	Dry	Animal on the Road	0	Major	s5
89	85870957	10/19/2019	Sat	2:00 AM	0	0	\$10,000	Rollover	Night	Wet	Careless Driving	0	Major	s4
90	88233876	10/22/2019	Tue	5:45 PM	0	1	\$31,400	Rear End	Day	Dry	Following too Closely	C	Major	s5
91	85871556 88343506	10/31/2019	Thu	5:20 PM	0	0	\$3,500	Rear End	Day	Dry	Following too Closely	0	Major	i2
92	88242596	11/29/2019	Fri	1:05 PM 10:54 AM	0	0	\$7,800	Rear End Off Road	Day	Dry	Following too Closely Careless Driving	<u>О</u> В	Major	i2
93 94	88256295 88256296	12/16/2019 12/16/2019	Mon Mon	4:48 PM	0	0	\$38,000 \$11,800	SD Sideswipe	Day Day	Dry Dry	Improper Passing	0	Major Major	s1 i1
95	88242623	12/24/2019	Tue	3:45 AM	2	5	\$11,800	Head On	Night	Wet	DUI	K	Major	s1
96	88154348	1/5/2020	Sun	9:55 PM	0	2	\$8,000	OD Sideswipe	Night	Dry	Improper Passing	A	Major	s2
97	88139356	2/17/2020	Mon	7:38 AM	0	3	\$6,000	SD Sideswipe	Day	Dry	Improper Passing	C	Major	i6
98	88252481	2/25/2020	Tue	6:27 AM	0	1	\$10,000	Off Road	Night	Dry	Careless Driving	A	Major	i4
99	88252483	2/28/2020	Fri	4:22 PM	0	0	\$13,000	Rear End	Day	Dry	Following too Closely	0	Major	i1
100	89290200	3/3/2020	Tue	8:48 AM	0	0	\$1,100	SD Sideswipe	Day	Dry	Improper Passing	0	Major	s5
101	89290187	3/6/2020	Fri	5:30 PM	0	0	\$1,500	Rear End	Day	Dry	Following too Closely	0	Major	s5
102	<u>89290216</u>	3/18/2020	Wed	7:22 PM	0	1	\$10,000	Rollover	Day	Dry	Careless Driving	В	Major	i6
103	<u>89290245</u>	4/9/2020	Thu	7:46 AM	0	2	\$28,500	Rear End	Day	Dry	Following too Closely	С	Major	s5
104	88242417	5/24/2020	Sun	9:59 PM	0	7	\$10,000	Rear End	Night	Wet	Careless Driving	А	Major	s5
105	<u>88337315</u>	6/16/2020	Tue	2:00 AM	0	3	\$22,000	Rear End	Night	Dry	Careless Driving	С	Major	i4

106	88346108	7/13/2020	Mon	11:54 AM	0	0	\$30,000	Off Road	Day	Dry	Careless Driving	0	Major	s5
107	87891744	8/5/2020	Wed	3:30 AM	0	0	\$3,000	Animal	Night	Wet	Animal on the Road	0	Major	s5
108	88323959	8/20/2020	Thu	8:50 PM	0	0	\$13,500	OD Sideswipe	Night	Dry	DUI	0	Major	s5
109	88337356	9/4/2020	Fri	12:57 AM	0	0	\$4,500	Off Road	Night	Dry	Careless Driving	0	Major	s4
110	88397858	9/27/2020	Sun	12:20 PM	0	0	\$3,000	SD Sideswipe	Day	Dry	Improper Passing	0	Major	i3
111	88395939	10/28/2020	Wed	8:27 PM	0	1	\$10,000	Angle	Night	Dry	Failed to Yield R/W	В	Major	i3
112	88397881	11/3/2020	Tue	10:00 AM	0	3	\$10,000	Off Road	Day	Dry	Careless Driving	A	Major	s4
113	88383896	11/5/2020	Thu	8:25 PM	0	1	\$6,500	Off Road	Night	Dry	Careless Driving	C	Major	s1
114	<u>88444558</u>	1/21/2021	Thu	12:49 AM	0	3	\$24,700	OD Sideswipe	Night	Dry	Careless Driving	В	Major	s2
115	89862222	2/7/2021	Sun	6:30 PM	0	0	\$3,000	SD Sideswipe		Dry	Improper Passing	0	Major	i2
									Night	•	· · ·		•	
116	89862553	2/19/2021	Fri	3:45 AM	0	0	\$600	OD Sideswipe	Night	Dry	Careless Driving	0	Major	i3
117	88437567	2/27/2021	Sat	10:00 AM	0	1	\$3,000	Off Road	Night	Dry	Careless Driving	С	Major	i1
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119	24085949	3/5/2021	Fri	11:07 AM	0	0	\$2,000	Off Road	Day	Dry	Faulty Vehicle	0	Major	i2
120	<u>88470880</u>	4/9/2021	Fri	1:00 PM	0	6	\$25,000	Rear End	Day	Dry	Following too Closely	A	Major	i1
121	<u>85870379</u>	5/6/2021	Thu	7:32 AM	0	0	\$600	Off Road	Night	Dry	Careless Driving	0	Major	i1
122	<u>88505631</u>	5/31/2021	Mon	12:30 PM	0	0	\$1,000	Off Road	Day	Dry	No Fault Determined	0	Major	s5
123	<u>89862519</u>	6/23/2021	Wed	4:10 AM	0	0	\$15,000	OD Sideswipe	Night	Dry	Careless Driving	0	Major	i1
124	<u>83790370</u>	6/23/2021	Wed	4:45 AM	0	0	\$4,100	Angle	Night	Dry	Failed to Yield R/W	0	Major	i1
125	88505786	6/29/2021	Tue	12:43 PM	0	0	\$5,000	Off Road	Day	Dry	No Fault Determined	0	Major	s4
126	82128626	6/29/2021	Tue	4:35 PM	0	1	\$15,250	SD Sideswipe	Day	Wet	Improper Passing	С	Major	s4
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128	88545656	7/26/2021	Mon	1:22 PM	0	2	\$18,000	Left Turn	Day	Dry	Failed to Yield R/W	А	Major	i3
129	88551803	8/7/2021	Sat	1:40 PM	0	2	\$11,500	Rear End	Day	Wet	Following too Closely	В	Major	s4
130	88549628	8/23/2021	Mon	12:35 PM	0	2	\$20,000	SD Sideswipe	Day	Dry	Improper Passing	Α	Major	i5
131	88554606	9/14/2021	Tue	7:55 AM	0	5	\$54,000	Rear End	Day	Dry	Following too Closely	В	Major	s5
132	24465571	9/17/2021	Fri	6:00 PM	0	0	\$3,000	Rear End	Night	Wet	Following too Closely	0	Major	i3
133	82126390	10/2/2021	Sat	6:19 AM	0	0	\$1,000	Off Road	Day	Dry	Careless Driving	0	Major	i3
134	24625449	10/15/2021	Fri	4:30 PM	0	0	\$2,000	Rear End	Day	Dry	Following too Closely	0	Major	i6
135	88551844	10/13/2021	Fri	11:55 AM	0	1	\$4,200	Off Road	Day	Dry	Careless Driving	В	Major	s1
						2							<u> </u>	
136	88537284	11/13/2021	Sat	10:30 PM	0	2	\$10,000	OD Sideswipe	Night	Dry	Careless Driving	C	Major	s2
137	88551867	11/15/2021	Mon	2:12 PM	2	2	\$35,000	Head On	Day	Dry	Improper Passing	K	Major	s2
138	88091542	11/15/2021	Mon	3:20 PM	0	0	\$2,500	SD Sideswipe	Day	Dry	Improper Passing	0	Major	s2
139	24465739	11/15/2021	Mon	5:45 PM	0	2	\$22,000	Rear End	Night	Dry	Improper Passing	C	Major	s3
140	84295284	1/27/2022	Thu	1:35 PM	0	1	\$35,000	Angle	Day	Dry	Failed to Yield R/W	С	Major	i1
141	89589334	1/28/2022	Fri	10:50 PM	0	0	\$10,000	Rollover	Night	Dry	Careless Driving	0	Major	i4
142	<u>89582936</u>	3/3/2022	Thu	2:36 PM	0	3	\$26,000	Rear End	Day	Dry	Careless Driving	В	Major	s1
143	<u>24904880</u>	3/6/2022	Sun	6:45 AM	0	1	\$2,750	Off Road	Day	Dry	No Fault Determined	С	Major	s2
144	<u>24900569</u>	3/9/2022	Wed	5:04 PM	0	0	\$500	Rear End	Day	Dry	Following too Closely	0	Major	i5
145	<u>88527052</u>	3/10/2022	Thu	7:40 AM	0	0	\$3,000	Rear End	Day	Dry	Following too Closely	0	Major	s5
146	85871136	4/13/2022	Wed	5:58 AM	0	0	\$10,000	Rear End	Night	Dry	Following too Closely	0	Major	i5
147	24959384	8/31/2022	Wed	7:15 AM	0	1	\$30,000	Off Road	Day	Dry	Faulty Vehicle	С	Major	i1
148	25350499	9/9/2022	Fri	3:48 PM	0	1	\$10,500	Off Road	Day	Wet	No Fault Determined	С	Major	s5
149	25350558	9/27/2022	Tue	7:46 PM	0	4	\$15,000	SD Sideswipe	Night	Wet	Improper Passing	C	Major	s5
150	24987483	10/4/2022	Tue	11:17 PM	0	1	\$4,100	Bicycle	Night	Dry	Careless Driving	A	Major	s1
151	25350570	10/4/2022	Tue	7:38 PM	0	0	\$70,000	Animal	Night	Dry	Animal on the Road	0	Major	i6
152					0					•		0	·	i1
152	<u>25439531</u>	10/27/2022	Thu	7:53 AM	U	0	\$45,000	Rear End	Day	Dry	Careless Driving	U	Major	IT

153	25029987	11/6/2022	Sun	2:15 PM	1	1	\$25,250	Angle	Day	Dry	Failed to Yield R/W	K	Major	i1
154	<u>25439652</u>	11/16/2022	Wed	5:36 AM	0	1	\$4,000	Off Road	Night	Dry	Careless Driving	В	Major	s5
155	24885301	1/23/2023	Mon	5:35 AM	0	0	\$5,500	Rear End	Night	Wet	Following too Closely	0	Major	i1
156	<u>25439331</u>	1/25/2023	Wed	6:20 AM	0	4	\$18,000	Left Turn	Night	Dry	Failed to Yield R/W	В	Major	i1
157	<u>88387088</u>	2/10/2023	Fri	6:45 PM	0	2	\$11,000	Left Turn	Night	Dry	Failed to Yield R/W	В	Major	i1
158	<u>25752530</u>	2/14/2023	Tue	12:43 PM	0	1	\$25,500	Rear End	Day	Dry	Following too Closely	С	Major	i6
159	<u>89601633</u>	2/14/2023	Tue	3:43 PM	0	1	\$5,300	Rear End	Day	Dry	Following too Closely	С	Major	s5
160	<u>25071243</u>	2/16/2023	Thu	9:39 AM	0	1	\$6,250	Off Road	Day	Dry	Careless Driving	В	Major	i1
161	<u>25439333</u>	3/3/2023	Fri	5:30 AM	0	4	\$30,000	Rear End	Night	Dry	Following too Closely	С	Major	s4
162	<u>89612214</u>	3/27/2023	Mon	2:48 PM	0	1	\$9,000	Rollover	Day	Dry	Careless Driving	В	Major	s1

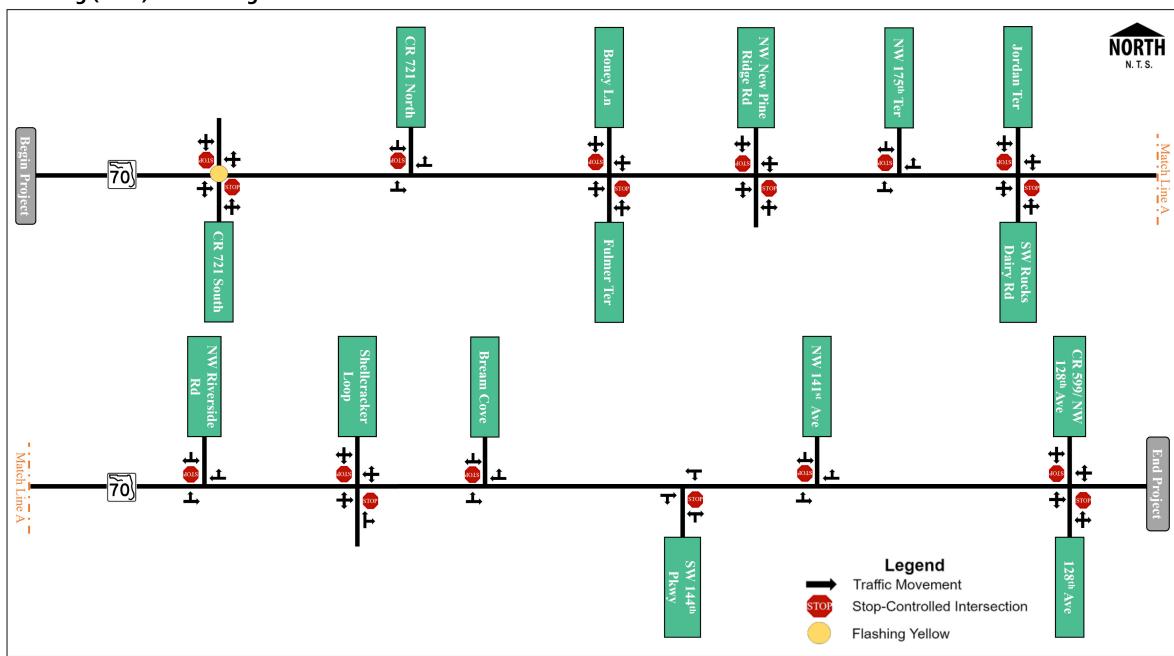
Appendix E Plan Sheets for Border Width



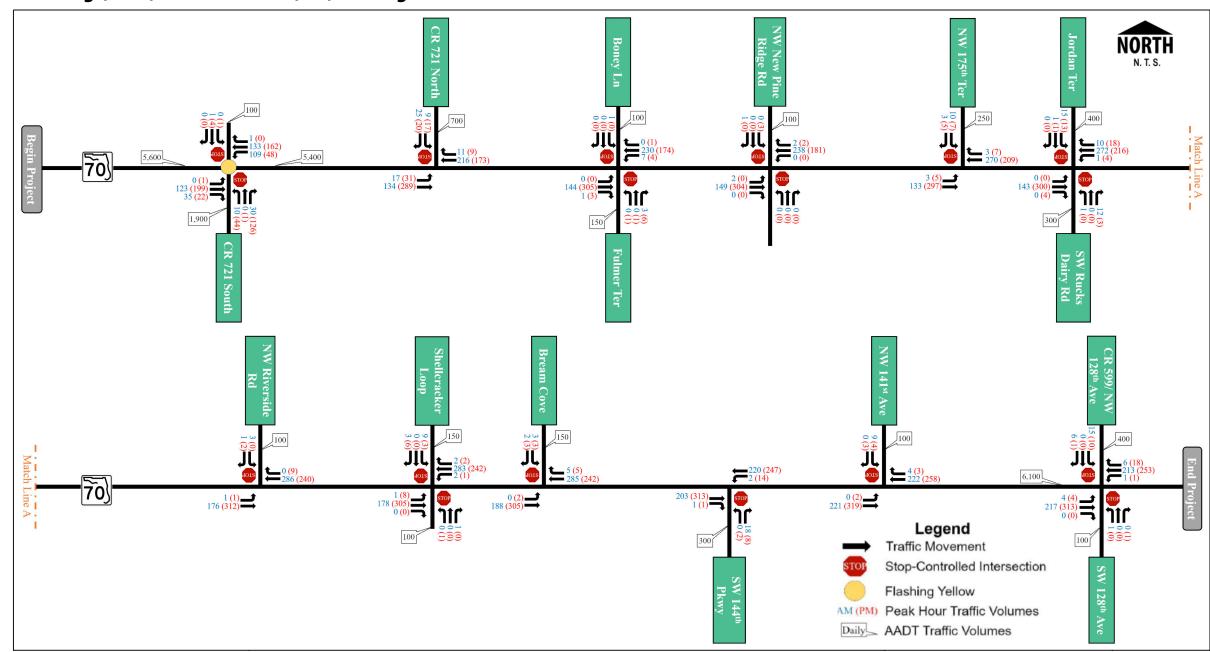


Appendix E Traffic Exhibits

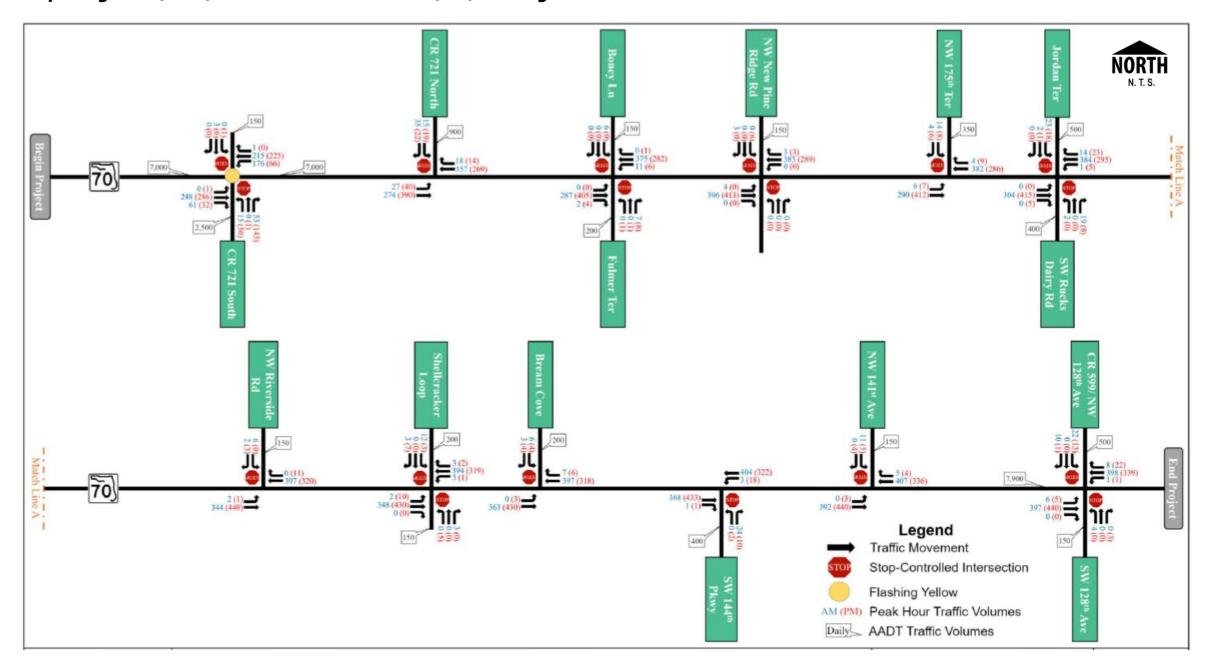
Existing (2022) Lane Configuration



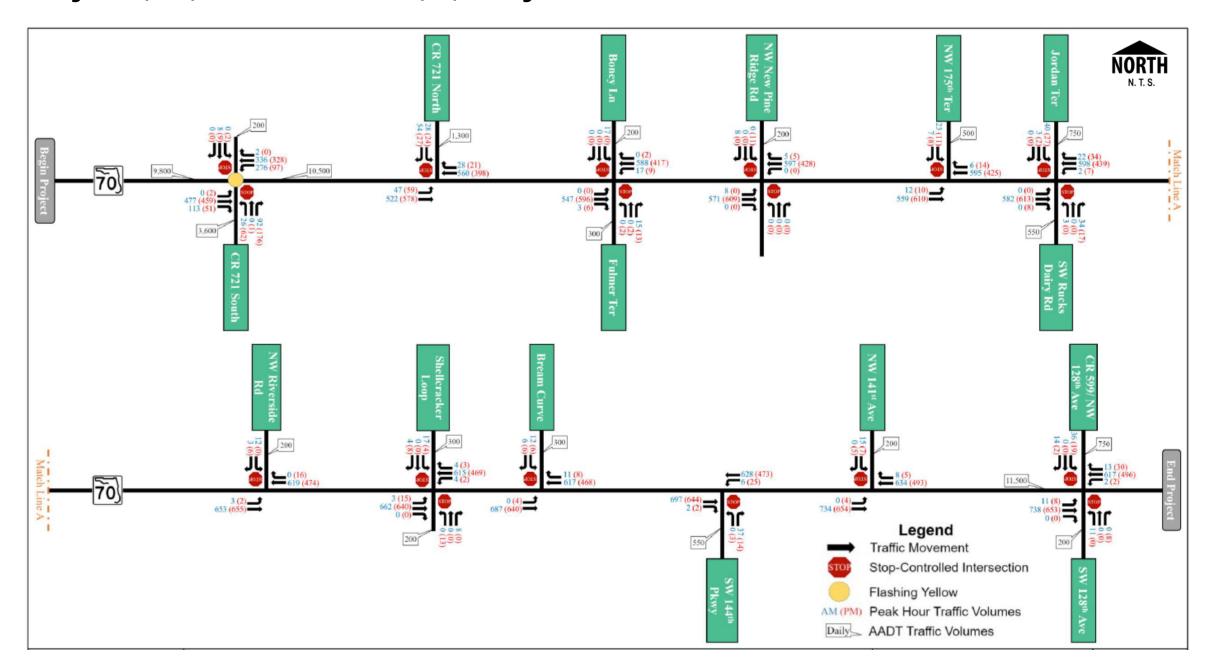
Existing (2022) AADT and AM (PM) Turning Movement Volumes



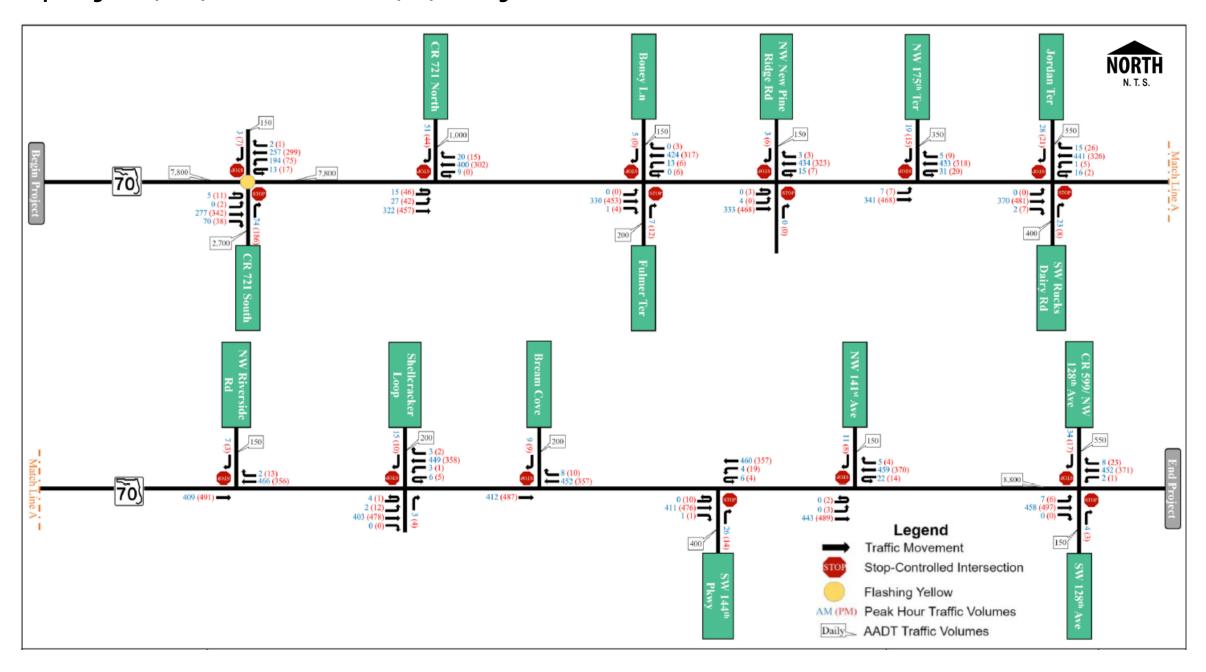
Opening Year (2032) No-Build AADT and AM (PM) Turning Movement Volumes



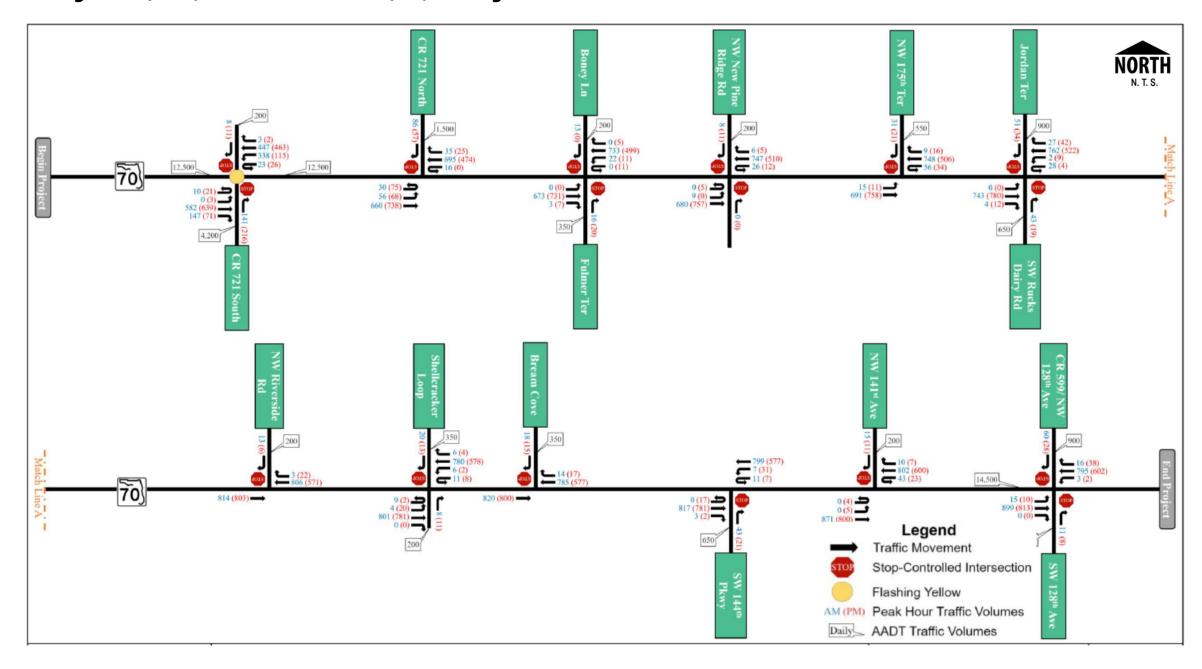
Design Year (2052) No-Build AADT and AM (PM) Turning Movement Volumes



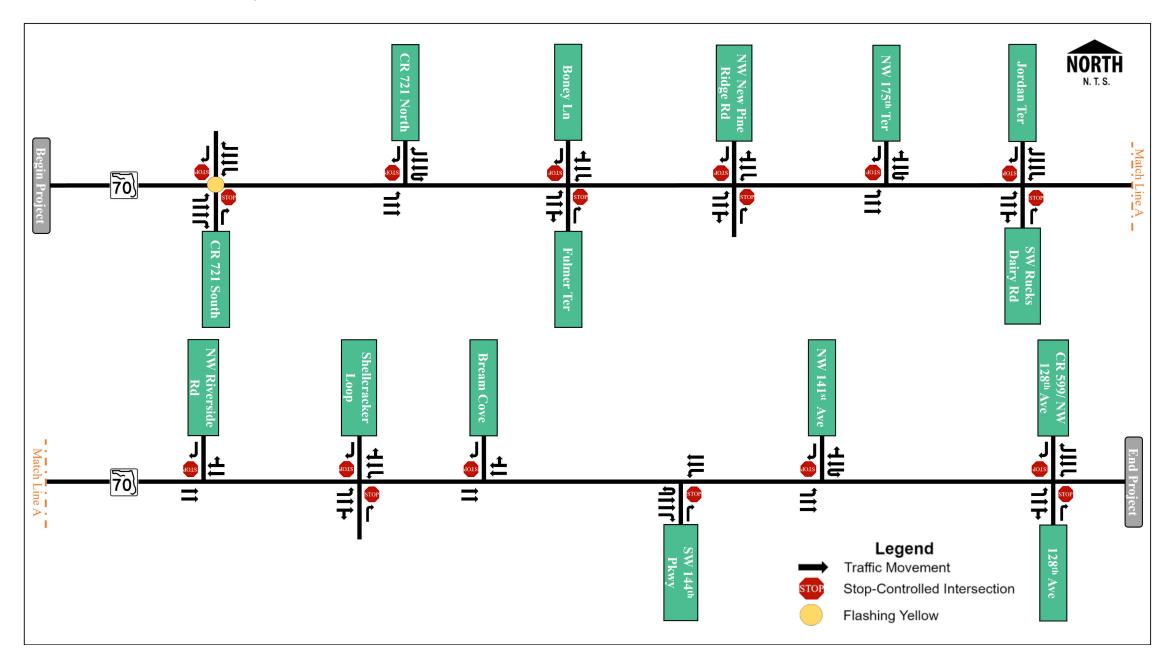
Opening Year (2032) Build AADT and AM (PM) Turning Movement Volumes



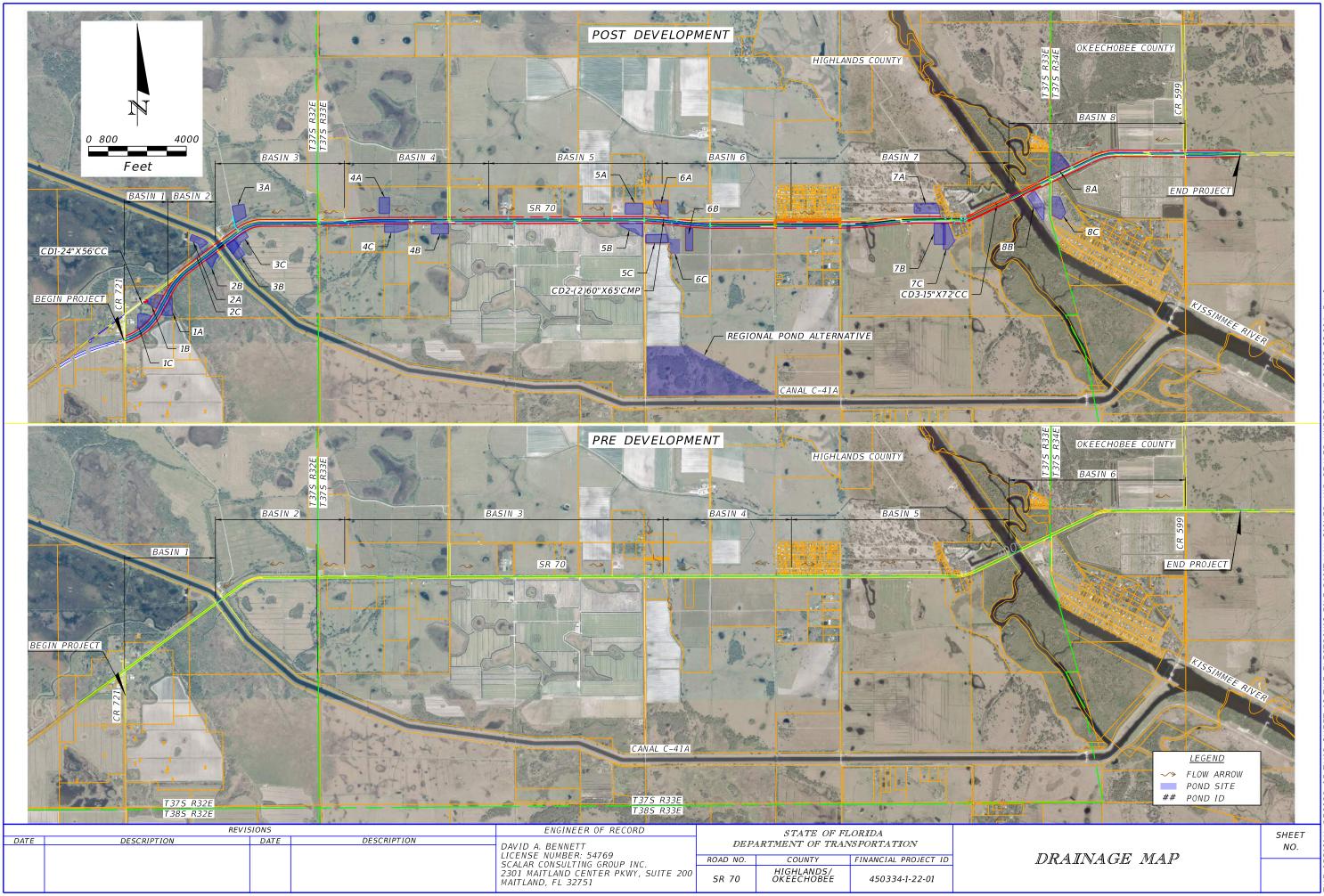
Design Year (2052) Build AADT and AM (PM) Turning Movement Volumes



Proposed Intersection Layout

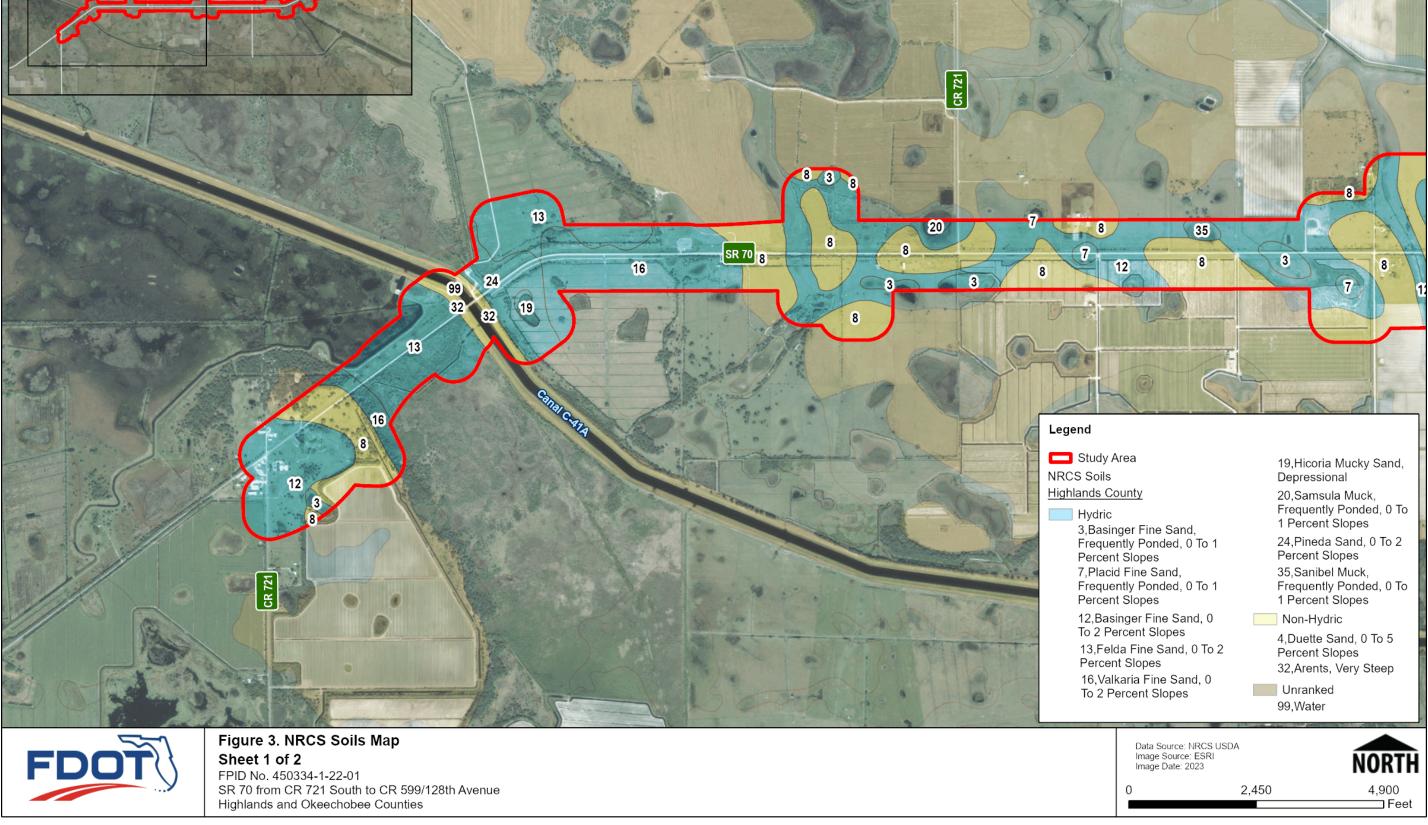


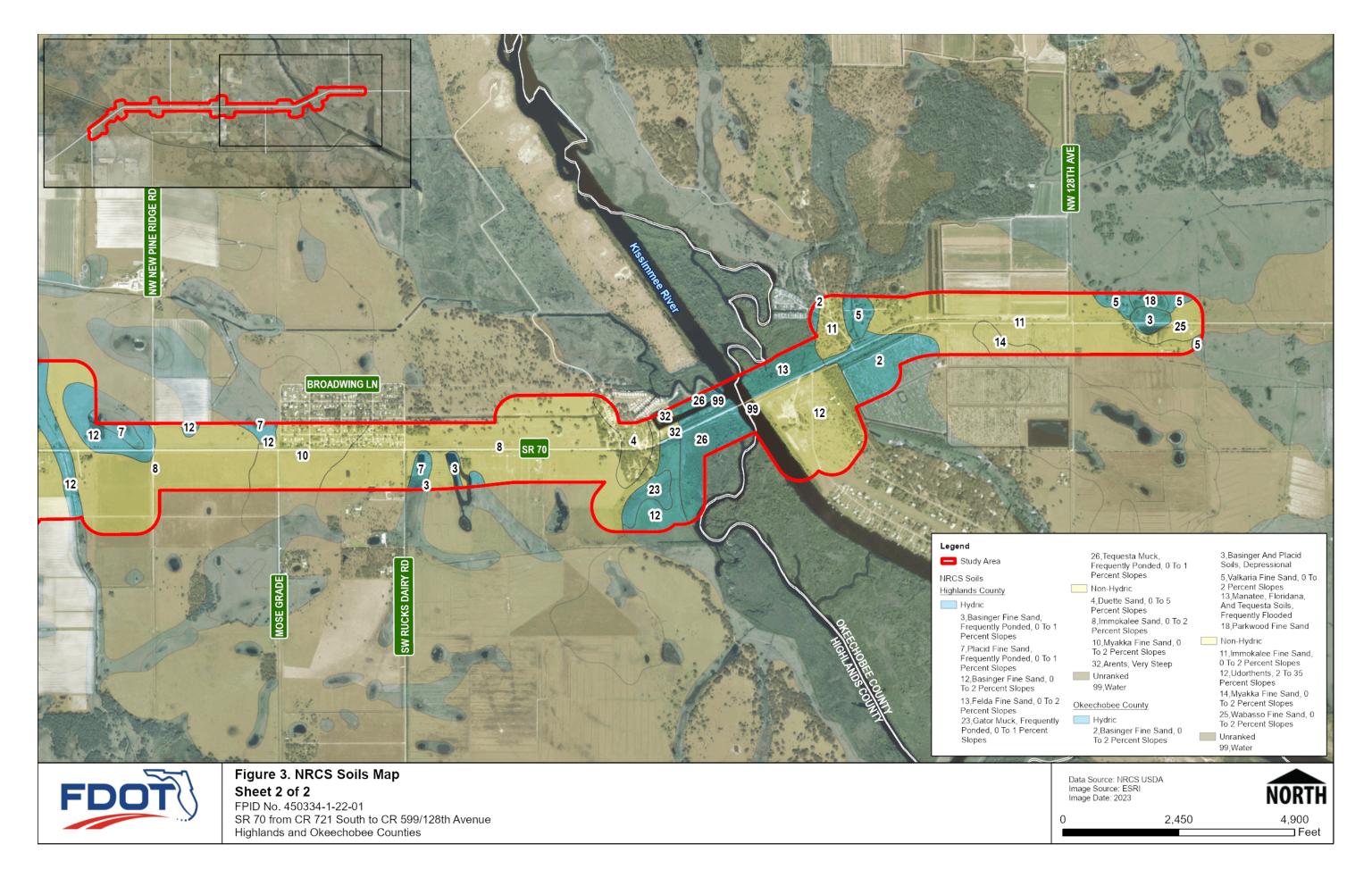
Appendix F Drainage Map



Appendix G Soils Map

Figure 3: NRCS Soils Map CR 721 20 35 SR 70 8 3 12 16 19 Legend Study Area 19,Hicoria Mucky Sand, Depressional NRCS Soils Highlands County 20,Samsula Muck, Frequently Ponded, 0 To 1 Percent Slopes Hydric 3,Basinger Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes 24,Pineda Sand, 0 To 2 Percent Slopes 7,Placid Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes 35,Sanibel Muck, Frequently Ponded, 0 To 1 Percent Slopes CR 721 12,Basinger Fine Sand, 0 To 2 Percent Slopes Non-Hydric 13,Felda Fine Sand, 0 To 2





Appendix H Agency Coordination



Meeting Minutes

USACE Pre-Application Meeting

SR 70 PD&E Study from CR 721 S to CR 599/128th Avenue Highlands and Okeechobee Counties FPID No. 450334-1-22-01 Thursday, December 12, 2024

LOCATION: TEAMS meeting

Lisa Lovvorn - USACE Lucille Brandenburg - USACE

Attendees:

David Bennett – Scalar Consulting Group
Predrag Milosavljevic – Scalar Consulting Group
Kristin Caruso- Scalar Consulting Group
Martin Horwitz - KCA
Nicole Monies- FDOT D1
Brent Setchell- FDOT D1
Michael Vaughn- FDOT D1
Jonathan Turner- FDOT CO
Kathy Cothern – FDOT D1
Brooke Feagle – FDOT D1 Support
Melanie Calvo – FDOT D1 Support
Heather Mason- USACE



1. Project overview

- a. 8.6-mile widening (2 to 4 lanes) with new stormwater management ponds
- b. Includes bridge replacement of the Kissimmee River bridge
- c. ETDM # 14491
- d. Kissimmee River restoration project and changes in the Kissimmee River Canal

2. USACE restoration projects

a. The team asked if there were any ongoing projects that need to be considered when selecting stormwater pond sites, regional ponds, etc. The team is aware that the Kissimmee River project is now complete. USACE did not identify any new projects in the area.



3. Environmental

- a. Wetland impacts range from 34-41 acres
- b. Within service area of Istokpoga Mitigation Bank and it was discussed if the USACE permit had been issued. It was not confirmed; the project team will check online.
- 4. Navigability of Kissimmee River at the SR 70 location
 - a. USACE indicated this is navigable as per Section 10 of the Rivers and Harbors Act
 - b. It was discussed if a Section 408 permit for alteration to Civil Works project is needed. The group believed that it would likely be needed.
 - c. The team asked if USACE has a need for the removable span to remain and explained that it appears to be there due to the historic maintenance access needs for the channel. However now with the river restoration, it may no longer be required. The USACE representatives indicated that they would check with the appropriate staff to get an answer.

Meeting Minutes

Project: FPID No. 450334-1-22-01

SR 70 PD&E Study from CR 721 South to CR 599/128th Avenue

Subject: Pre-Application Meeting w/SFWMD

Date and time: February 26, 2025, 10:30 AM

Meeting place: TEAMS Meeting Minutes by: Scalar Consulting Group Inc.

Present:

David Bennett – Scalar Consulting Group, Inc. Dara Jarvis – Scalar Consulting Group, Inc.

Carolyn McCreedy - SFWMD

Barbara Conmy - SFWMD

Jeffrey Slowman - SFWMD

Elizabeth Veguilla - SFWMD

Shari Tellman - SFWMD

Mark Vicciardo - SFWMD

Richard Walker - SFWMD

Nicole Monies - FDOT D1

Brent Setchell - FDOT D1

Ryan Molloy – FDOT D1

Michael Vaughn - FDOT D1

Jonathan Turner – FDOT CO

The meeting began with the Consultant presenting an overview of the project which is a PD&E study to widen SR 70 including a new bridge over the Kissimmee River, followed by a series of questions directed to the SFWMD. Below are the questions posed, along with the corresponding answers provided by SFWMD.

- 1) What specific water quality and quantity criteria will be applicable to this project?
 - a. SFWMD noted the application must demonstrate that there are no adverse impacts on the C-41A and Kissimmee River. If discharging directly to the rivers, we are required to meet the historic volumetric discharge formula.
 - b. After a brief discussion it was noted that FDOT will not be required to provide the additional 50% treatment of the presumptive criteria and instead nutrient loading calculations demonstrating net improvement will be provided.
 - c. Since the PDE will be completed before July 2026, the project will be grandfathered under the previous SFWMD criteria.
- 2) Does the SFWMD have any concerns with the potential pond sites?
 - a. Make sure to pull up existing permitting please note that Brighton Valley is a water storage project.
 - Also, south of SR 70 (between CR 721 South and New Pine Ridge Road), Coco Sod has above ground infrastructure.
 - c. Also note that the project is in the Lake Okeechobee Watershed Area.
 - d. Pond locations should demonstrate minimization and avoidance to wetland impacts since some proposed ponds overlap existing wetlands. Provide an assessment to show that the ponds, even though they are adjacent, will not cause any impact to wetlands. FDOT noted a Pond Siting Report will be completed which will include avoidance and minimization of wetland impacts and analyze multiple alternatives of which a preferred alternative will be

selected from an array of engineering and environmental considerations. Additionally, the proposed ponds must be designed to meet SFWMD's Lake-Wetland separation criteria (aka gradient) criteria Section 3.12, AH Vol II.

- 3) Apart from the general requirement for "net improvement," are there any other specific guidelines or expectations related to the BMAP that the project must adhere to?
 - a. Pollutant loading calculations will be required to demonstrate a net improvement. WMD has no other concerns about pollutant loading calculations.
- 4) Will the South Florida Water Management District (SFWMD) have any concerns regarding the proposed new outfalls to canals C-38 and C-41A?
 - a. WMD ROW office will address any new outfall(s) and will require a SFWMD ROW permit. Section 408 for USACE is anticipated, but also Section 404 and potentially Section 10.
- 5) Are there any potential concerns from the SFWMD regarding modifications to the swales and ditches along the SR 70 corridor?
 - a. SFWMD noted the project cannot cause adverse offsite impacts to any existing swales, ditches or other drainage features.
- 6) Are there any issues or considerations related to this project that could impact the ongoing or planned Kissimmee River Restoration efforts?
 - a. The SFWMD staff on the call wasn't aware of anything, but suggested other SFWMD staff be consulted .
- 7) Is the SFWMD aware of a FEMA Community Rating System (CRS) currently in effect for either county, which could limit alterations to the 100-year floodplain—such as a floodway where even a 0.01-ft change would necessitate a CLOMR?
 - a. No regulated floodways within the project corridor, so it should not trigger a no-rise condition.

The following action item was developed during this progress meeting:

Item	Description and Action	Responsible
Pond Site Review	Set-up meeting with FDOT -1 Drainage to review pond site alternatives.	Consultant (Scheduled,3/31)

From: <u>Cothern, Kathern</u>

To: <u>Jeffrey Novotny</u>; <u>Aniruddha Gotmare</u>; <u>Martin Horwitz</u>; <u>Caruso, Kristin</u>

Cc: <u>Lauk, Joe</u>; <u>Joyner, Melody</u>; <u>Feagle, Brooke</u>

Subject: UPDATE: 449851-1 & 450334-1 - SR 70 Kissimmee River Bridge / Request for Meeting segment 15 & 16

Date: Thursday, July 31, 2025 2:17:45 PM

Attachments: <u>image003.png</u>

image005.png

Update from Army Corp.

Let us know if you have any questions or concerns.

Sincerely,
Kathern Cothern
Project Manager IV
Corridors Program Office – D1
(863) 519-2331

Kathern.cothern@dot.state.fl.us

From: Mason, Heather M CIV USARMY CESAJ (USA) < Heather.M.Mason@usace.army.mil>

Sent: Thursday, July 31, 2025 2:14 PM

To: Monies, Nicole < Nicole. Monies@dot.state.fl.us>; Setchell, Brent < Brent. Setchell@dot.state.fl.us>

Cc: Cothern, Kathern < Kathern.Cothern@dot.state.fl.us>

Subject: RE: 449851-1 & 450334-1 - SR 70 Kissimmee River Bridge / Request for Meeting segment 15

& 16

Hi Nicole,

I just heard back from 408. Since it is not over a navigation channel they would have no objection to a non-removable bridge.

Thanks,

Heather M. Mason Project Manager, FDOT Team US Army Corps of Engineers (239) 850-2171

In the near future, we will no longer accept electronic permit applications via e-mail. Permit applications will need to be submitted using the new Regulatory Request System (RRS), located at: https://rrs.usace.army.mil/rrs. For assistance submitting an online application, please visit https://rrs-test.cwbi.us/rrs/help or watch a quick 4-minute video at https://www.youtube.com/watch?v=24lkoNZvjC0.





From: Monies, Nicole < <u>Nicole.Monies@dot.state.fl.us</u>>

Sent: Thursday, July 31, 2025 8:30 AM

To: Mason, Heather M CIV USARMY CESAJ (USA) < Heather.M.Mason@usace.army.mil; Setchell,

Brent < Brent.Setchell@dot.state.fl.us >

Cc: Cothern, Kathern < <u>Kathern.Cothern@dot.state.fl.us</u>>

Subject: [Non-DoD Source] RE: 449851-1 & 450334-1 - SR 70 Kissimmee River Bridge / Request for

Meeting segment 15 & 16

Just checking on this Heather.



Microsoft Teams Chat

From: Mason, Heather M CIV USARMY CESAJ (USA) < Heather.M.Mason@usace.army.mil >

Sent: Wednesday, July 23, 2025 8:37 AM

To: Setchell, Brent < <u>Brent.Setchell@dot.state.fl.us</u>>; Monies, Nicole < <u>Nicole.Monies@dot.state.fl.us</u>>

Cc: Cothern, Kathern < Kathern.Cothern@dot.state.fl.us >

Subject: RE: 449851-1 & 450334-1 - SR 70 Kissimmee River Bridge / Request for Meeting segment 15

& 16

Hi Brent,

Engineering is still reviewing the need for the removable span, but it has been confirmed that Section 408 review will be needed.

I will reach back out to Engineering now and see if I can get you that answer ASAP.

Thanks,

Heather M. Mason Project Manager, FDOT Team US Army Corps of Engineers (239) 850-2171

Appendix I Bridge Plan and Profile

