

ATTACHMENT “A”

SCOPE OF SERVICES

2.1 BACKGROUND:

Dirksen Drive (CR 4162) is a 2-lane undivided Urban Minor Arterial with open swale drainage that extends east-west from US 17/92 to Sunrise Boulevard within the City of DeBary in Volusia County, Florida. The land-use on both sides of Dirksen Drive is a mix of residential, commercial, and parkland (Gemini Springs Park) with dedicated left turn lanes provided at US 17/92, Gemini Springs State Park, Mansion Boulevard, River Village Drive, and Palm Road. Portions of the existing roadway contain superelevated horizontal curves and sight distance within the project limits is generally adequate. The posted speed limit along this corridor is 45mph between US 17/92 and Palm Road. Between Palm Road and Sunrise Boulevard, the posted speed limit reduces to 35mph. The north side of Dirksen Drive lacks sidewalk up until approximately 160 feet west of Sunrise Boulevard. A shared-use path runs adjacent to the south side of Dirksen Drive from Mansion Boulevard to Sunrise Boulevard. At Mansion Boulevard, the Springs-to-Springs Trail crosses Dirksen Drive. There is a marked crosswalk and a Trail Wayfinding sign at this location. Overhead utilities are found on the north side of the corridor. There is no street lighting on either side of Dirksen Road.

Currently, Dirksen Drive experiences heavy volumes especially when forced or unforced incidents occur on Interstate 4. The corridor is used as a detour by providing access from Interstate 4 to multiple north-south local city roads including State Road US 17/92. From past conversations with the City of DeBary, a primary concern was raised with cut-through traffic in nearby neighborhoods when Dirksen Drive becomes congested. City officials stated cut-through traffic occurs on almost every side street intersecting at Dirksen Drive within the project limits.

GENERAL SCOPE OF SERVICE:

To alleviate the substantial congestion on Dirksen Drive during periods of high congestion on Interstate 4, capacity improvements were recommended particularly the widening of Dirksen Drive to a 3-lane undivided typical section configuration. Widening to 3-lanes will accommodate extra traffic demand and provide some benefit during Interstate 4 incidents. Coordination with the City of DeBary and FDOT is expected. The County ROW Office will complete all services related to ROW acquisition including negotiations with existing private property owners. This project will consist of two phases – A Study Phase followed by a Design Phase.

Study Phase:

A more formal corridor evaluation with engineering concepts to better understand and define the implications of the improvements will be required. Design Consultant will revisit the current Dirksen Drive Evaluation Study prepared by TEDS on September 24, 2020 and review Alternative No. 3 – Three-Lane Undivided Typical Section with Preliminary Concept Plans, enclosed as **Exhibit A**. The Study Phase of this project will include updating traffic counts, addressing safety concerns at the crossing of the County Trail at Mansion Boulevard, and conducting preliminary engineering analysis to determine how best to implement the 3-Lane Alternative. The proposed widening improvements to be considered in the preliminary engineering analysis will require coordination with the City of DeBary and FDOT. Additional coordination with County Traffic Engineering and FDOT Traffic Operations for signal timing and queueing concerns at the intersection of US 17/92 and Dirksen Drive is recommended. The preliminary engineering analysis will include preparation of updated concept plans and cost estimate with a narrative report.

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Key Attributes from Alternative No. 3 include:

1. An Urban Typical Section (curb and gutter)
2. 11-foot travel lanes (one for each direction)
3. 12-foot two-way continuous left-turn center lane
4. 6' sidewalk at the back side of proposed curb on the north side of Dirksen Drive as permitted by right-of-way constraints. (No sidewalk was considered on the south side of the corridor due to right-of-way constraints and the availability of the existing shared-use path (trail) on the south side of Dirksen Drive).
5. Piping drainage swale on the north side of Dirksen Drive may be required.
6. Includes a minimum right-of-way width of 56 feet. Additional easements outside of the right-of-way will be required to tie-down from the roadway to existing ground.
7. From the US 17/92 intersection heading east along Dirksen Drive, Alternative 3 extends both the existing dedicated right turn lane an additional 300 feet (approx.) and the existing dedicated inside left turn lane an additional 400 feet (approx.) to increase lane capacity, reduce queue lengths, and facilitate better turning movements.
8. Alignment shifts, cross slope corrections, and/or superelevation adjustments may be required to accommodate the proposed widening.

The following professional services will be required for the Study Phase:

- Full Topographic, Boundary, and LIDAR Survey Services
- Full Level B Utility Investigation (SUE – Horizontal & Vertical Locates)
- Full ROW Mapping Services – County may pursue Advance ROW Acquisition during Study Phase
- Traffic Engineering, Qualitative Assessment, and Operational Modeling Analysis Services
- Preliminary Utility Coordination Services
- Volusia County, City of DeBary, and FDOT Engagement/Coordination
- Preliminary Drainage Assessment
- Pond Siting Report
- Preliminary Environmental & Permitting Assessments
- Preliminary Geotechnical Investigation Services

Design Phase:

Volusia County is seeking the services of professional consultants to provide Professional Engineering Design Services to prepare a complete set of construction contract plans, specifications, and special provisions (if necessary). The Design Phase will begin once the Study Phase is completed and a chosen alternative is approved by Volusia County. The County intends for the selected firm to provide project management and administration services, roadway design (includes pavement design and grading), supplemental survey services (as Optional Services if needed), supplemental mapping services (as Optional Services if needed), stormwater management design, supplemental permitting and environmental services, signing & pavement markings and channelization, temporary traffic control, signalization timing adjustments at the US 17/92 intersection (as Optional Services if needed), supplemental utility coordination and development of UWSs (as Optional Services if needed), supplemental geotechnical investigation services, and public involvement.

A. Survey Services:

The County is seeking professional land surveying and mapping services including but not

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limited to topographic survey, control survey, property boundary and Right-of-Way survey, title work / deed investigation, wetland surveys, utility / public infrastructure surveys, and specific purpose survey in support of roadway design, permitting, and ROW acquisition. Survey work shall be in accordance with Florida Administrative Code (FAC) 5J-17.050 through 5J-17.053.

B. Environmental Services:

The County is seeking professional environmental services including but not limited to wetland delineation, protected species survey, habitat survey, cultural and historic resources assessment, environmental permitting (including but not limited to SJRWMD, USACOE, FDEP, FWS, FDOT etc.), and impact analysis and mitigation assistance.

C. Geotechnical Services:

The County is seeking geotechnical support services sufficient for the Roadway Engineer(s) of Record to sign and seal the design plans and obtain environmental permits. The County does not have specific geotechnical investigation requirements.

D. Public and Stakeholder Coordination Services:

The County is seeking public coordination and stakeholder coordination services which may include facilitating a public meeting, providing meeting minutes, frequent discussions with stakeholders, and coordinating with property owners and easement holders. The consultant team will also need to coordinate with adjacent developers and their engineering teams. The consultant team may be required to review proposed development along the corridor.

E. ROW and Mapping Services:

The County is seeking professional services in support of the County’s ROW and/or easement acquisition processes. Acquisitions are anticipated for the stormwater management system(s). ROW support services will include title research and survey, mapping, as well as preparation of conceptual graphics for discussions with property owners, identifying ROW needs, facilitating meetings with impacted landowners, negotiation support services, and close coordination with County ROW staff.

F. Design Services:

As the primary purpose for the solicitation, the County is principally seeking Professional Engineering design services for roadway design, pavement section design, stormwater management, grading and drainage design, temporary traffic control, signing and pavement markings and channelization; traffic engineering, and preparation of construction bidding documents. The design shall be generally consistent with the latest versions of the FDOT Design Manual, Florida Greenbook, FDOT Drainage Manual, and County standards and practices. The consultant will also be required to review (and revise if needed) the County’s standard technical specifications for the project, enclosed as **Exhibit B**.

G. Utility Coordination Services:

The County is seeking utility coordination services. When possible, the design should be adjusted to avoid impacts on existing utilities. The consultant will need to confirm what utilities are within the project area, identify and mitigate potential conflicts, and coordinate with utilities when relocations must occur. Horizontal and vertical utility locations of these utilities will be required.

H. Post-Design Services:

The County is also seeking limited post design services including responding to bidder

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questions, bid review and recommendation as well as shop drawing review, responding to contractor RFIs, and other post-design services as needed.

I. Enclosures:

1. Exhibit “A”, Dirksen Drive Evaluation Study prepared by TEDS on September 24, 2020, with Alternative No. 3 – Three-Lane Undivided Typical Section with Prelim Concept Plans
2. Exhibit “B”, Volusia County Roadway Technical Specifications
3. Exhibit “C”, Insurance Requirements
4. Exhibit “D”, Design Consultant Contract