

Scope of Engineering Services South Elkhorn Trail

This Scope of Engineering Services provides a minimum set of guidelines, tasks, and activities for professional engineering and registered land surveying services (Consultant), to prepare a design for the third section of South Elkhorn Trail. The constructed trail will connect to the Shillito Park Trail. The Scope of Services includes topographic and boundary surveys, preliminary and final design, preparation of easement and right-of-way drawings, preparation of construction bid documents; and associated funding, permitting and regulatory paperwork.

The design project will be overseen by the Lexington-Fayette Urban County Government, Division of Engineering (DOE). The project is primarily funded through a Transportation Alternatives Program (TAP) grant, administered through the Kentucky Transportation Cabinet Office of Local Programs (KYTC OLP).

Background

This portion of the South Elkhorn Trail presents a variety of impediments to all modes of transportation. An existing, unendorsed, dirt path across public right-of-way and private property has been long established by its users – mainly pedestrians and bicyclists. Also known as South Elkhorn Trail, Section 3 by previous works; this project will connect South Elkhorn Trail, Section 1 to Shillito Park Trail.

This project, South Elkhorn Trail is described as 1,700 feet of multi-use trail from Lochdale Terrace under Man O' War Blvd to a Shillito Park parking lot. This section will be constructed pursuant to an agreement with Norfolk Southern. A substantial portion of the project is within the right-of-way of the railroad.

The project general affects and adjoins five properties. Right of way and/or easement acquisition requirements will be determined through the design process.

Previous preliminary land survey and design efforts were undertaken in 2010 thru 2011. Much of this information is still relevant and deemed useful. The Consultant responsible for this scope of service application will be able to utilize the previous work. The Consultant will also be responsible to verify and update any of the previous work that is to remain an integral part of design solution in this scope of service.

Scope of Services

1. Project Initiation and Review of Existing Information

- 1.1. Meet with LFUCG staff (DOE and Traffic Engineering) to discuss the project requirements and proposed Scope of Work. The meeting shall include project site visits with the DOE.

- 1.2. Review all project related information as provided by DOE. Obtain available LFUCG GIS data for the area, mapping including parcel lines, aerial photography, and existing infrastructure.

2. Field Surveys and Preliminary Design

- 2.1. Conduct field surveys with appropriate referencing to locate topographic features not shown on existing mapping. Confirm critical locations and elevations necessary for design including but not limited to existing roadway, sidewalk edges, retaining walls, sanitary and storm sewer features, and other utilities.
- 2.2. Research all deeds, plats and other property records to identify property lines, right-of-ways and easements. Verify and update said records as noted on previous design work.
- 2.3. Perform boundary surveys and set corner pins (or offsets) as necessary to define the physical limits of properties from which right of way must be purchased (if necessary).
- 2.4. Update a topographic survey of the project area.
- 2.5. Review and revise the preliminary trail way plans. Plans shall include information on lane width, entrance limits, crossings and extents of construction. Trail way plan shall also consider the existing drainage, existing property lines, existing utilities/utility conflicts, and/or other features or improvements that may impact construction costs.
- 2.6. Prepare a Preliminary Design Technical Memorandum documenting the following for each Project:
 - Confirm trail alignment proposed in preliminary plan or offer revised trail way plan;
 - Identification of all utility conflicts and proposed solutions;
 - List of impacted properties and property owners;
 - List of required easements and any right-of-way taking and encroachment (Determination of existing land rights shall be limited to recorded easements and right-of-way. For these purposes, prescriptive easements will be ignored.);
 - Investigate design options for areas that may be less safe, e.g. retaining wall;
 - List of required permits, and agreements with respective agencies from which the permit(s) will be secured;
 - List of agencies that will require notifications and/or approvals; and
 - Preliminary Opinion of Construction Costs.

- 2.7. Meet with the DOE to review the Preliminary Design Technical Memorandum. Consultant shall be responsible for meeting agendas, handouts, and meeting summaries.

3. Final Design

Note: Task 3: Detailed (final) Design shall not begin until written authorization is received from DOE.

- 3.1 Prepare Contract Drawings. At a minimum, the drawings shall include the following sheets:
 - Cover sheet with location map, sheet index, etc;
 - Plans scaled to 1" = 20'. Plans shall show all finalized features and detailed information as required for the preliminary plan;
 - Cross sections every 50 ft., and any details such as driveway entrances or other critical points;
 - Detail sheets, as required to fully convey the intent of the project and how to construct it; and
 - A General Summary Sheet, consistent with the LFUCG, DOE 2016 Unit Price Contract list.
- 3.2 Submit drawings to LFUCG DOE and KYTC OLP for review and comment, and revise drawings accordingly.
- 3.3 Correspond and meet with all impacted utility companies and regulatory agencies as required for this project. The Consultant may attend bi-monthly LFUCG Utility Coordination meetings as deemed useful.
- 3.4 Prepare an Engineers Estimate (EE) for each Project.
- 3.5 Prepare paperwork necessary for TIP funding, including LDA Design Review Checklist (LDRC), Project Development Checklist (PDC), Utility and Rail Note, Traffic Management Plan, etc.
- 3.6 Prepare a Bid Proposal. Note: LFUCG will furnish the front-end contract documents and their standard technical specifications. Consultant will need to prepare specifications for any special materials if used for this project.
- 3.7 Coordinate with the KYTC OLP to provide supporting data for the Environmental Review. OLP will take the lead on the Environmental. Note: Prior Clearinghouse letters from KYTC have been issued in the past for this project. Consultant is responsible to review and obtain current letters.

- 3.8 Prepare, submit applications, including public notices, and secure all required permits including but not limited to those listed in the Preliminary Design Technical Memorandum, or identified above.

Note: Contractor selection and construction administration will be performed solely by LFUCG. However, at any time during construction, the Consultant shall be available to address any questions that arise concerning the accuracy or intent of his work. Time to address potential questions should be incorporated into the final design fee.

4. Easement and Right-of-Way Acquisition

- 4.1. Consultant shall prepare a detailed plat for any required right-of-way acquisitions, and a metes and bounds description any required easements.
- 4.2. Consultant shall prepare all paperwork necessary for easement acquisition and right-of-way encroachment and/or taking, except for correspondence to affected property owners.

Notes: LFUCG will take the lead on contact with affected property owners.

At a minimum, Consultant shall comply with all criteria and standards as set forth in 201 KAR 18:150, *Standards of Practice*.

LFUCG will conduct negotiations with property owners for easements and right-of-way, and will bear any associated costs, including appraisals.

Additional Requirements

1. Schedule and Completion

The contract time to complete Tasks 1-2, is 60 calendar days from the date of the Notice to Proceed.

The contract time to complete Tasks 3-4, is 60 calendar days from acceptance of the Preliminary Design.

Within the Price Proposal, the Consultant shall provide a schedule showing milestones, deliverables and the number of calendar days into the contract period that each milestone occurs.

2. Deliverables

- Five (5) copies of the Preliminary Design Technical Memorandum.
- Five (5) full-size sets of final plans.
- Two (2) reduced-size (11 x 17) sets of final plans.
- CD or flash drive with:
 - Bid-Set Plans in AutoCad (.dwg) format
 - Bid-Set Plans (stamped and signed) in Acrobat (.pdf) format
- Easement plats and descriptions.
- Right-of-way plats, descriptions and related paperwork for ROW taking and/or encroachment.

3. General Notes

- Drawings shall be prepared in AutoCad format and according to LFUCG standards.
- Consultant is not responsible for:
 - Pavement design. LFUCG will provide pavement section detail(s) to be incorporated into the plans as needed.
 - Traffic and pedestrian signal design. LFUCG will provide details to be incorporated into the plans as needed.
 - Historical/Cultural Resources studies and Biological Resources studies, as required for the Environmental.

Attachments:

- Plan View of Project Area – South Elkhorn Trail Aerial Map