Design and Surveying Services Versailles Road Corridor Improvement Project – Sections 1 & 2

The Lexington-Fayette Urban County Government (LFUCG) is accepting Statements of Qualification (SOQ) from interested consulting firms for professional engineering and registered land surveying services (Consultant) for the *Versailles Road Corridor Improvements Project*, *Sections 1 & 2*. The project entails rebuilding curbs; moving sidewalks away from the edge of the road and creating planted utility strips; related regrading and construction of retaining walls; addition of pedestrian scale lighting; and aesthetic modifications from Parkers Mill Road to Mason Headley (approximately 3200 lineal feet of roadway).

This project will be financed through local funds. However, as this project involves a Federal Aid Highway, design review and encroachment approval by the KYTC will be required. Furthermore, consulting firms submitting an SOQ must be prequalified by the KYTC for Urban Roadway Design and Surveying.

The Scope of Services includes topographic surveying; preparation of design drawings, bid documents, easement descriptions (if needed) and completion of associated paperwork.

Background

In May 2013 the Kentucky Transportation Center completed the *Multimodal Alternative Evaluation, US 60* study for the Versailles Road Corridor from Alexandria Drive to Oliver Lewis Way. The primary purpose of the study was to evaluate the safety of the corridor for all modes of transportation and to suggest modifications to improve it. A subsequent document, *The Versailles Road Corridor Study*, completed in February 2015, built upon the first study, extending the area from Parkers Mill Road to Oliver Lewis Way. In addition to addressing safety, this report included aesthetic improvements reflecting the culture and history of the corridor. It included an implementation plan and cost estimates. A copy of both reports can be downloaded from the following URL (The 2013 study is included in the appendix of the 2015 study): <u>http://www.lexingtonky.gov/index.aspx?page=3602</u>

Project Description

The Versailles Road Corridor Study, February 2015, provides some design guidance for this project. Consultants submitting an SOQ should be familiar with this document. The implementation plan presented therein divided the approximate 13,000 foot length of the study area into five distinct sections plus a transition zone. The LFUCG through its Division of Engineering (DOE), aims to incorporate some of the improvements and modify others as proposed for the 3,200 foot combined length of Sections 1 and 2: Parkers Mill Road to Mason Headley Road. Specifically, the following improvements are desired:

• Move the sidewalk away from the edge of the roadway and create a landscaped utility strip. The width of the utility strip will vary with site conditions. The new sidewalk shall be five feet wide.

- Replace the existing curb, in place, with a header curb with minimal disturbance to the roadway.
- Construct a retaining wall on the north side of Versailles Road bordering the Hillcrest Memorial Park.
- Construct a landscaped median between Village Drive and Mason Headley Road.
- Provide pedestrian scaled lighting.
- At Alexandria Drive, replace the strain poles and cables with mast arms such as those installed at the intersection of Oliver Lewis Way and W. High St.
- Provide various improvements to enhance the aesthetics and use of the project area, with attention to the culture and history of the corridor. Improvements may include illuminated street signs, decorative lighting, landscaping, designated spaces for public art, benches, trash receptacles, wayfinding and directional signage, specialty pavement at crosswalks, landscaping and gateway elements at the Alexandria Drive intersection, etc.

Early in the design process, the Consultant will work with LFUCG to determine which construction items shall be undertaken within a construction budget of about \$3.0 MM. As part of this evaluation, particular attention should be given to the following:

- Regarding the south side of Versailles Road from the Wolf Run culvert to the driveway at 2160 Versailles Road, the consultant will evaluate the constructability, cost and potential encroachment onto private property; of moving and/or replacing the chain link fence and constructing a retaining wall if needed to address the backslope.
- Regarding the retaining wall bordering the Hillcrest Memorial Park, the consultant will evaluate and present alternatives for construction materials and aesthetic design of the retaining wall, including lighting as proposed in the referenced study.

The Consultant shall then complete a full design including construction plans, specifications, bid documents and easement descriptions (if required) for the specified limits. This project will not require purchase of right of way, and it is LFUCG's intent to limit disturbance to within the existing right of way, thus further avoiding any need for temporary construction easements.

Scope of Services

1. Pre-Design Conference and Review of Existing Information

- 1.1. Meet with Lexington-Fayette Urban County Government (LFUCG) Division of Engineering (DOE), Division of Traffic Engineering (TE) and the Division of Environmental Services (ES) staff to discuss the project requirements and proposed Scope of Work. The meeting shall include a project site visit.
- 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. The most recent aerial photography for the project area licensed by LFUCG will be made available to the Consultant.

2. Field Survey and Related Research

- 2.1. The Consultant shall perform sufficient field survey from Parkers Mill Road to Mason Headley Road, to be confident in their design. Sufficient field survey should be done to confirm, at a minimum:
 - a) Topography;
 - b) Existing sidewalks, edge of roadway, entrances, turn lane configurations, etc.
 - c) Storm and sanitary sewers, and related structures (horizontal and vertical);
 - d) Location of overhead and underground utilities, including pole ownership information;
 - e) Significant site improvements, such as fences, retaining walls, flag poles, commercial sigange, etc.;
 - f) Location and identification of significant trees and vegetation;
 - g) Cross sections taken at 50-foot intervals wherever regrading will be anticipated and as otherwise needed;
 - h) Location of existing corner monuments and R/W markers;
 - i) Temporary benchmarks for use during construction, set outside of construction limits;
 - j) Staking associated with easement acquisition (as needed) and establishing street centerline prior to bidding for construction.

The elevations of utilities, sewers, and other critical items shall be verified as needed during the field survey. Such verification shall be carefully coordinated with the appropriate parties (e.g., utility companies, LFUCG). If digging operations, permission, etc. are necessary in certain instances it shall be the responsibility of the Consultant to see to it that they are performed properly and to get appropriate approvals.

2.2. Research all deeds, plats and other property records to identify property lines, right-of-ways and easements.

3. Design Plans, Specifications, and Bid Documents

- 3.1. Develop a set of Plans incorporating the desired design elements identified in the Project Description. Plans shall be submitted to LFUCG for review at 60% completion and 100% completion. At a minimum the plans shall include, but are not limited to the following items:
 - a) Roadway plan depicting existing and proposed conditions (all features identified in the survey shall be shown on the plans);
 - b) Profiles as needed to convey the intended design;

- c) Cross sections as needed to convey the intended design, including, at all driveways, all step locations, and all retaining walls. Cross sections shall generally extend 30 feet from proposed curb face or to a building, whichever is closer; however, longer coverage may be needed in some locations;
- d) Existing and proposed topography;
- e) Coordinate Control Plan;
- f) Proposed limits of disturbance;
- g) Location of property lines with all owners/lessees and street addresses shown;
- h) Proposed temporary construction easements, if applicable;
- i) Sanitary and storm sewer plan and profile as needed;
- j) An Erosion and Sediment Control Plan;
- k) General Summary (to be consistent with the bid schedule);
- 1) A Traffic Management Plan consistent with KYTC guidelines;
- m) A plan for lighting, signalization, and signage;
- n) A Landscaping Plan; and
- o) Site-specific Detail Sheets as needed.

At 60% completion and at 100% completion the Consultant shall deliver four paper copies to the DOE and one paper copy to each affected utility company. Plans shall also be made available in electronic format: pdf and/or AutoCAD, as requested.

Plans submitted for 60% completion and 100% completion will be reviewed by several departments within LFUCG and by KYTC. The Consultant should anticipate a review of the final plans and possible revisions to address minor details, prior to issuance of a final set of construction-ready plans.

- 3.2. With the plan submittal at 60% completion, the Consultant shall submit a short report summarizing the following:
 - a) Identification of all known utility conflicts and proposed solutions;
 - b) List of impacted properties and property owners, if any;
 - c) List of required easements, if any. (Determination of land rights shall be limited to recorded easements and right-of-way;
 - d) List of required permits and respective agencies from which the permit(s) will be secured;
 - e) List of agencies that will require notifications and/or approvals;
 - f) List of any products, materials or methods that may require special consideration by the KYTC or FHWA; and
 - g) Detailed Preliminary Opinion of Construction Costs.
- 3.3. The Consultant shall meet with LFUCG at the 60% and 100% submittal milestones to present and discuss their plans. Consultant shall be responsible for meeting agendas, handouts, and meeting summaries. Subsequent meeting(s) with the Kentucky Transportation Cabinet may be required as well.

5. Design Criteria

Drawing Scales, Units, and Unit Conversion

All quantities measured, calculated, and specified shall be in English units (e.g., feet, pounds).

All drawings and sheets shall conform to the follow scales:

a. Plan Sheets	1'' = 20'
b. Profile sheets	1" = 20' horizontal 1" = 2' vertical
c. Cross sections sheets	1'' = 5' horizontal 1'' = 5' vertical

Note: Combined Plan/Profile sheets (as applicable) are preferred.

Full-size Plans shall be 22 x 34 to facilitate scalable 11 x 17 Plans.

All designs and plans must be approved by the LFUCG DOE. The following shall apply:

- a. Drawing files shall be prepared using or shall be converted to AutoCAD and will be transmitted to the Urban County Government upon request. The formatting specifics shall be determined during the contract negotiation process.
- b. Unless otherwise stated, design shall incorporate LFUCG 2008 Standard Drawings (or most recent revision), and KYTC 2012 Standard Drawings in that order of preference.
- c. Intersection improvements are to be ADA compliant. Design shall comply with the AASHTO green book, the Manual of Uniform Traffic Control Devices and, to the extent practicable, the AASHTO Roadside Design Guide.
- d. Where storm and/or sanitary sewers are located within the right of way, profiles of these systems should be shown on the street profile sheets, if impacted by the proposed construction.
- e. The preparation of an Erosion and Sediment Control (ESC) Plan including a Storm Water Pollution Prevention Plan (SWPPP) integrating the non-structural and structural practices and procedures of the Stormwater Manual is a requirement for all construction projects and is the responsibility of the Contractor. However, Consultant shall prepare a generalized plan. The ESC Plan as developed through preliminary and final plans, as well as the SWPPP will be reviewed and approved by LFUCG DOE.
- f. Consultant shall prepare a Traffic Management Plan consistent with KYTC guidelines.

6. Detailed Cost Opinions

The Consultant shall prepare a detailed opinion of probable construction cost at the 60% and 100% design completion stages of the project. Line items for construction costs shall be consistent with the General Summary in the drawing set and the Bid Schedule in the Form of Proposal. The construction cost opinion shall also be accompanied by separate cost opinions for utility relocation, and total easement acquisition, as applicable.

7. Easement and Right-of-Way Acquisition

As noted previously, this project will not require purchase of right of way. Furthermore, it is LFUCG's intent to limit disturbance to within the existing right of way, thus further avoiding any need for temporary construction easements. If unavoidable, temporary construction easement acquisition shall meet all requirements of the Lexington-Fayette Urban County Government Subdivision Regulations, Department of Law; the LFUCG DOE Digital Submission Policy; and the *KYTC Highway Design Manual*.

Temporary easements shall be drawn to sufficient scale to be clear and distinguishable, and such drawings shall be prepared to meet the requirements of the Lexington-Fayette Urban County Government Division of Engineering. The Consultant will also prepare a legal description for each easement taking.

If easements are required, LFUCG will conduct negotiations with property owners.

8. Public Interface

The Consultant shall attend public meetings, and other meetings with elected officials, affected residents, owners and businesses. If requested to do so, the Consultant will lead the meetings. The Consultant shall provide all necessary exhibits and prepare minutes of all meetings they attend.

9. Utility Company Coordination

There are numerous utilities in the project corridor. The Consultant will meet and coordinate with all affected utility companies as necessary, with the goal of minimizing disturbance to utilities and underground lines. Consultant shall obtain utility location data for purposes of mapping, and shall determine which parcel easements/acquisitions if any should be expedited to facilitate timely relocation of utilities.

Typically utility companies relocate and/or upgrade their facilities within the project area, *before* the LFUCG's contractor starts. Thus, a timely start by the LFUCG contractor depends on a timely start by the affected utility companies, which in turn requires that plans with dependable design elements be furnished to them well in advance of construction contract bidding. *The Consultant should pay close attention to the timeline shown for delivery of Preliminary Plans, as listed in the "Schedule and Completion"* section.

10. RMP Plan Coordination

Concurrent with the design of this project, the LFUG Division of Water will be in the design phase of a Remedial Measures Plan (RMP) project that crosses Versailles Road. The Wolf Run Sanitary Sewer Main, Trunk C, currently runs adjacent to and west of the Wolf Run Creek culvert. Current conceptual plans show the new sewer either in the same location as the existing sewer, or rerouted into the utility strip on the eastern side of Alexandria Drive.

The Consultant shall coordinate with the sewer design consultant to ensure the proposed Versailles Road Corridor Improvement design is compatible with the RMP design.

11. Bid Phase

The Consultant shall provide all bid documents to a private planroom/printing service (to be identified) for distribution to potential bidders. The Consultant shall be responsible for keeping a permanent record of all individuals or companies that purchase bid documents through the private printer.

The Consultant shall assist with Bid Administration. At minimum, this includes responding to technical questions during the bid period, preparing addenda, reviewing and approving alternates, attending pre-bid meeting, attending bid opening, preparing and certifying a tabulation of bid prices, evaluating bids received, checking bidder references and submitting a recommendation of award.

12. Construction Phase

The Lexington-Fayette Urban County Government will provide construction inspection. However, the Consultant shall be available to advise in matters of intent during construction. The Consultant shall also conduct site visits as requested, and shall conduct a final punchlist walkthrough and prepare related correspondence. The Consultant shall also review and approve shop drawings.

13. Schedule and Completion

The Consultant shall meet deadlines as provided in the following schedule. Calendar days are counted from the date that a written Notice to Proceed is received by the Consultant. Exact times of meetings shall be arranged by the Consultant; locations of meetings shall be at the site of proposed improvements, the DOE office or the KYTC D7 office, as deemed appropriate.

Meet to review design intent	14 days
Submit plans at 60% completion to LFUCG and utilities	120 days

Meet with LFUCG and KYTC to review plans	130 days
Hold public meeting	150 days
Submit plans at 100% completion and meet with LFUCG	180 days

14. Miscellaneous

The Consultant shall prepare and submit applications and/or provide supporting paperwork for necessary permits and right of way encroachment. (Note: The construction contractor will be responsible for the Stormwater Construction Permit and Land Disturbance Permit).

All preliminary plans and accompanying documents are subject to review by the Lexington-Fayette Urban County Government Division of Engineering, Division of Traffic Engineering and Division of Environmental Services. Documents shall also be subject to review by the Kentucky Department of Highways and the Federal Highway Administration. The Consultant shall be responsible for addressing comments from and requirements of these agencies into all documents.

Consultant shall attend periodic progress meetings with the Division of Engineering and/or Kentucky Department of Highways and must submit a written monthly status report detailing work in the past month, and anticipated work in the upcoming month. This report must be submitted in written format as well as in an electronic format acceptable by the DOE.

END OF SCOPE OF SERVICES