

**Request for Statement of Interest (SOI)
Traffic Engineering Services
On-call Traffic Engineering Assistance**

The Kane County Division of Transportation is in need of professional services from a qualified engineering firm to provide on-call Traffic Engineering. These services are required to assist the KDOT Traffic staff with performing various traffic engineering tasks.

The attached *Preliminary Scope of Services* provides in detail anticipated items that are necessary for this project.

At this time, the County anticipates starting this work on December 1, 2009. The anticipated contract duration is twenty-four (24) months.

The Statement of Interest shall be submitted **VIA EMAIL** no later than **4:00 P.M.** on **August 20th, 2009** and should be addressed to:

**Thomas F. Szabo, TOPS, TSOS
Traffic Manager**

Mr. Szabo's email address is: szabotom@co.kane.il.us

Statements of Interest received will be used by County engineering staff to develop a short-list of three (3) firms. The County will then submit a Request for Proposal (RFP) and schedule interviews with the short-listed firms.

For more information regarding the SOI, such as content and format of these items, please reference our QBS document found at www.co.kane.il.us/dot/qbs/esp.pdf. Also, the SOI shall be submitted in PDF format viewable with the latest version of Adobe reader. The County will provide you with an e-mail receipt/response verifying that your submittal was received. If you do not receive this verification please contact Mr. Szabo at (630) 208-3139.

If you plan to enter into a joint venture with another firm for this project please note this on your Statement of Interest, including the name of the firm you are entering into a joint venture with for this project.

Short-listed firms will be posted on our website at www.co.kane.il.us/dot. Click on the link labeled "Request for Consultant Services", then click on the link labeled "Summary Table".

A Statement of Interest (SOI) received after the above noted deadline will not be used as part of our consultant selection process.

PROJECT DESCRIPTION/PRELIMINARY SCOPE OF SERVICES

The Consultant will provide traffic study assistance on an as-needed basis at locations to be determined. All tasks will be conducted on a work order basis and be paid for as time and materials. For each task performed, a specific scope of work and fee estimate will be developed by the Consultant and submitted to KDOT Traffic for approval prior to start of any work.

The various services that may be provided are described below:

1. Speed Studies

Speed studies will be performed for both the AM and PM non-peak hours at specified locations. The speed study will be conducted by utilizing a radar gun. The study will require a minimum of 100 vehicles (in each direction) or a maximum of 3-hours of count. The results of the speed study will be tabulated with the prevailing speed and any necessary reduction factors in accordance with the Kane County *Interim Policy the Establishment and Posting of Speed Limits on County and Township Highways*. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

2. Intersection Control Study

An evaluation for the determination for the most appropriate intersection control at a requested intersection shall include the following control measures.

a. Multi-way Stop

Consideration for a multi-way Stop installation shall include an engineering study, which utilizes methodology described in Section 2B.07 of the latest Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.

Traffic counts will be performed for all approaches to the intersection. The counts will be performed for a 24-hour period during a typical workday (unless specified otherwise by KDOT Traffic).

b. Traffic Signal

Consideration for a traffic signal installation shall include an engineering study, which utilizes methodology described in Section 4C of the latest Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*. Unless specified otherwise by the County, it should be assumed warrants 1 through 8 will be analyzed for each location requested.

Machine traffic counts will be performed for all approaches to the intersection. The counts will be performed for a 24-hour period during a typical workday (unless specified otherwise by KDOT Traffic). It is assumed that no right turn factor will be applied for intersections that do not include State routes. A warrant analysis for intersections that do include State routes will require a right turn factor and entail a 12-hour manual count.

c. (Modern) Roundabout

Consideration for a Modern Roundabout installation shall include an engineering study, which utilizes methodology described in the *Kane County Division of*

Transportation Roundabout Selection and Design Guide and the *FHWY Roundabouts: An informational Guide*.

All alternatives shall be compared on the basis of safety, user delay and implementation cost. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

3. Ball Bank Studies

In order to ascertain the correct advisory speeds for various roadway sections, a ball bank indicator study will be performed. The study will be based on criteria outlined in the Institute of Transportation Engineers Traffic Engineering Manual and the latest edition of the MUTCD. The results of the study will be summarized and delivered to KDOT for review.

4. Guardrail Analysis

A variety of services may be performed to assist the County in the evaluation of guardrails throughout the County. The services performed could entail any or all of the following:

- Topographic survey to determine the distance and size of fixed objects within the clear zone
- Survey of roadway backslopes and foreslopes within the clear zone
- Evaluation of existing guardrail installations
- Warrant for new guardrail installations in accordance with the latest edition of *The ASSHTO Roadside Design Guide*.

The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

5. Safety Studies

Safety studies based on documented crash history will be performed for requested locations within the County. At the time of the study, a specific scope of work will be determined for the specific study. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

6. Contract Preparation

The Consultant shall develop a scope of work, plans, an engineer's cost estimate and contract bid documents for the County's annual Pavement Marking program. Preparation of bid documents shall be in accordance with IDOT and County standards. Project scope will be provided to the Consultant by KDOT Traffic.

7. Develop Highway Details

Development of CAD drawings for County Traffic Standard detail drawings. Preliminary or conceptual sketches will be supplied to the Consultant from the County. The sketches will be prepared on *MicroStation* format and supplied to the County in both *MicroStation* and *AutoCAD* format.

8. Traffic Signal Design

The Consultant shall develop a scope of work, plans, and an engineer's cost estimate and contract bid documents (for projects that are bid) for new permanent signal installations; modifications to existing signals, flashing beacon and ITS installations in conformance with IDOT District One and Kane County standards.

9. Roundabout Engineering

a. Design Review:

The consultant shall provide design review services as needed for engineering design submittals for roundabout designs prepared by another consultant for the County or a Kane County Township.

The consultant shall provide written comments and recommendations to county staff on various elements of "Modern Roundabout" design in accordance with the *Kane County Roundabout and Selection Design Guide*, *AASHTO Policy on Geometric Design of Highways and Streets* and the *Manual on Uniform Traffic Control Devices* when requested by the County, which may include but not be limited to the following elements:

- Location
- Capacity
- Geometrics
- Pavement Marking and Signing
- Illumination
- Pedestrian/Bicyclist Safety

The consultant may be required to submit all projects to a second party consultant that is a nationally recognized expert in the field of "Modern Roundabout" design for peer review. The second party consultant shall be approved by the County prior to the commencement of the contract. Review comments shall be summarized and submitted to the County in memo format.

b. Intersection Feasibility Study:

When requested, the Consultant shall evaluate the feasibility and appropriateness of a modern roundabout for a specified intersection for the planning and programming purposes. The evaluation should include all necessary elements specified in the *Concept Design* per section 3 of *Kane County Roundabout and Selection Design Guide* and shall be summarized in memo format. The study should include recommendations and an estimated project cost, which shall include construction, right of way acquisition, phases I, II and III engineering.

10. Miscellaneous Traffic Engineering Services

Traffic engineering services not specifically identified in previous subtasks may be performed by the Consultant at the direction of the KDOT Traffic.

QUALIFICATIONS

Interested consultants should possess competency in the following areas of expertise and documents:

- General traffic engineering and provide a project manager that possesses certification as a Professional Traffic Operations Engineer (PTOE)
- Traffic Signal design (per IDOT Region One and Kane County standards)
- Pre-qualified for Phase II engineering with IDOT, District One, Region One
- Manual on Uniform Traffic Control Devices (MUTCD)
- ITE Traffic Control Devices Handbook
- ASSHTO Roadside Design Guide

PROJECT DURATION

Contract duration shall begin upon the receipt of the notice to proceed from the County to the Consultant, which is anticipated prior to **December 1, 2009** and continue through **November 30, 2011**.