



CITY OF LAWRENCE REQUEST FOR QUALIFICATIONS (RFQ)

- RFQ Description:** Engineering Design Services for 6th Street ITS Project
City Project No. PW0823
KDOT Project No: 23 KA-1186-01
City RFQ No: Q09003
- Department:** Public Works
- Contacts:** Charles F. Soules, P.E., Director of Public Works
Email: csoules@ci.lawrence.ks.us
Phone: (785) 832-3124
- Shoeb Uddin, P.E., City Engineer
Email: suddin@ci.lawrence.ks.us
Phone: (785) 832-3130
- Copy Requirements:** Submit five (5) copies of qualifications plus one electronic copy of PDF format
- Pre-Submittal Meeting:
(Attendance is optional)** Friday, May 22, 2009, 11:00 -12:00 a.m.
City Hall, 6 E. 6th Street, City Commission Room
Lawrence, KS 66044
- Due Date & Time:** Friday, June 5, 2009 at 2:00 p.m.
- Submit to Address:** Charles F. Soules, P.E.
City of Lawrence
6 East 6th Street
P.O. Box 708
Lawrence, KS 66044

Project Description

The major component of this project is the installation of fiber optic communication lines to develop closed loop traffic signal system along certain main thoroughfares in the city including 6th Street (from Massachusetts to Iowa) and Iowa Street (from 6th to 23rd). (see attached project location map). The project will also include installation of a central signal control system (consisting of hardware, software, video screens, building modifications and related intelligent transportation devices) in the Traffic Engineering Building at 445 Mississippi Street, and the installation of cameras for monitoring traffic flow at selected intersections.

All works are anticipated to be within the existing right-of-way.

The successful firm will be able to demonstrate not only the engineering capabilities of the firm, but also the ability to build consensus, analyze alternatives and make recommendations, and communicate with different interest groups.

Estimated Project Length

3.5 miles

Services Requested

The selected firm will provide engineering design services to install the Intelligent Transportation System in Lawrence, Kansas. This will include 10 signalized intersections that will interconnect with fiber-optic cable. The objective is to implement multiple timing plans at the intersections and monitor each intersection with video and data for traffic flow and errors in intersection operation at our planned TOC (Traffic Operation Center). The city currently has 1 ¼" conduit along 90% of the route. New conduit will be required where there are no conduits or existing conduits have been damaged.

The selected firm will provide Engineering Design Services for both the preliminary and final design phases, and the bidding phases as outlined below:

- Design an IP (Internet Protocol) network to interconnect signal intersections with the (TOC).
- Determine what type of fiber and fiber count is to be used.
- Design a fiber route and interconnect for each intersection and TOC.
- Determine the best type of fiber equipment to be used.
- Determine the fiber loss budget between intersections and TOC.
- Create a fiber matrix for the fiber cable.
- Determine the fiber splice points for each intersection and future fiber splice points.
- Determine what additional equipment, if any, will be required at each intersection.
- Determine the location and type of cameras to be used for traffic monitoring.
- Determine the type of hardware and software for the TOC.
- Determine what building modifications will be necessary for the TOC.
- Determine what type of contractor is needed for installation of the network and create a contractor RFQ for the bidding of the project.
- Create a cost estimate for the project including the costs for KDOT and the City of Lawrence.
- Attend public meetings and make presentations, as necessary.

Bidding Phase:

- Answer Contractor Questions
- Issue Addenda
- Pre-bid Conference
- Engineer's Estimate
- Review Bid and Recommend Award

Project Funding

The total estimated cost for this project is \$500,000.00 and will be financed through a 50/50 contribution by KDOT and the city. Therefore, city's matching share for this project is \$250,000.00.

City Staff is currently working with KDOT to work out the details so a third party may be allowed to provide fiber optic installation services as in-kind contribution in exchange for the use of a portion of the fiber optic strands. If this provision can be worked out with KDOT, it could allow the city to expand the current limits /scopes of the fiber optic installation.

Submittal Components

Should your firm be interested in being considered for this project, please submit your firm's qualifications addressing the following items:

- Unique qualifications / Capabilities
- Project Understanding / Approach
- Project team/personnel including:
 - Identification of person who will be responsible and in charge of the work.
 - Previous ITS related experience and work history.
 - Current and projected workload and availability of project team members.
- Demonstrated track record of producing projects on time and within budget.
- Office locations (accessibility)
- Experience in:
 - developing and working within an interactive project process.
 - developing consensus.
 - working with the general public and commissions.
- Proposed sub-consultants.
- Quality control program.
- References.
- A copy of the current "Consulting Engineer qualifications and Questionnaire" KDOT Form No. 1050 (Fill in information as applicable for this project. Note: Completion of Page 5 not mandatory).
- A signed and notarized copy of the Certification by Prospective Participants as to Current History Regarding Debarment, Eligibility, Indictments, Convictions, or Civil Judgments (Attachment No. 2A)
- Other pertinent information.

Selection

Qualifications received will be reviewed and evaluated on the items described above. The most responsive/qualified firm will be selected. A final scope of services and fee will be negotiated with the selected firm.

The procedures outlined in KDOT's Process Guidelines dated July 17, 1985 will be followed in our selection and negotiation with a consultant.

A copy of the City of Lawrence standard Engineering Services Agreement is available for review upon request.

From those firms expressing interest, the Selection Committee will select a short list of the most qualified (not less than three, no more than five) consultants. Those firms not selected will be notified by letter. Selection Committee will then conduct face to face interview of the short-listed consultants. After the interview, one firm will be selected to negotiate a contract. Following the successful negotiation of a contract with the most qualified firm, the remaining firms will be notified by letter. The final negotiated contract will be submitted to KDOT for approval and preparation of an agreement among three parties, the city, KDOT and the consultant.

Attachments:

ITS set-aside agreement

Project Location Map

ITS memo

KDOT Form 1050

KDOT Form 2A

ITS SET-ASIDE PROJECT AGREEMENT

This Agreement is made and entered into on 3-12, 200~~8~~⁹, by and between the City of Lawrence, hereinafter referred to as the "City," and the Secretary of the Kansas Department of Transportation, hereinafter referred to as the "Secretary," collectively referred to as the "Parties."

WITNESSETH,

WHEREAS, the City has applied for and the Secretary has approved an ITS Set-Aside Project, hereinafter referred to as the "Project;" and

WHEREAS, the Secretary and the City are empowered by the laws of Kansas to enter into agreements for the Project; and

WHEREAS, the City desires to design and construct a closed-loop traffic signal system with interconnect and camera monitoring of at least ten signals, located along US 59, K-10, Iowa Street, 6th Street and 2nd Street for the purpose of monitoring and optimizing traffic flow. The project includes central control hardware/software, video screens, building modifications and related ITS devices.

NOW THEREFORE, the Secretary and the City desire to enter into an Agreement to participate in the cost of the Project by use of State funds.

THE PARTIES MUTUALLY AGREE:

1. Definitions: The Project is defined as the design and construction of a closed-loop traffic signal system with interconnect and camera monitoring of at least ten signals, located along US 59, K-10, Iowa Street, 6th Street and 2nd Street for the purpose of monitoring and optimizing traffic flow.

2. The City shall prepare the plans, if necessary, the specifications, and cost estimate for the Project. The City shall procure the system for the Project consistent with the City's documented procurement methods, deploy the Project in accordance with the plans and specifications, test the system, participate in vendor provided training and administer both the Project and the payments due the vendor, including the portion of cost borne by the Secretary. The plans and specifications, when approved by the City, are by reference made a part of this Agreement. The participating procurement items shall be shown separated and listed apart from the non-participating procurement items on both the final plans and the procurement documents. The City shall furnish to KDOT's ITS Engineer one (1) set of completed specifications for his/her records.

The City shall inform KDOT's ITS Engineer of the date the contract is awarded and the total contract amount.

3. The Project shall be in conformance with the 2009 Kansas ITS Project Form.

The 2009 Kansas ITS Project Form for the Project is incorporated by reference and made a part of this Agreement.

The City shall provide a written report based upon the benefits achieved by the Project. The City shall provide the written report no later than six (6) months after the final payment for the Project has been made by the Secretary.

4. The Project will be operated within the limits of any existing right of way.

5. According to the guidelines of the ITS Set-Aside Project, the Secretary agrees to reimburse the City fifty percent (50%) of the total actual and eligible Project costs up to \$500,000 but not to exceed a maximum of \$250,000 for the total actual and eligible Project costs. The City agrees to be responsible for one hundred (100%) of the Project costs that exceed \$500,000 for the Project. In addition, the City agrees to be one hundred percent (100%) responsible for all conduit and fiber optic installation costs for the Project. Costs incurred by the City for this Project for conduit, fiber optics and services provided by City staff involving engineering design and construction inspection will be considered as eligible cost for the City's fifty percent (50%) matching funds. The City will provide KDOT detailed documentation and invoices to support cost claimed by the City for City's fifty percent (50%) matching funds. KDOT's ITS Unit will make the final determination as to whether a cost is eligible for the City's fifty percent (50%) matching funds.

6. The Secretary agrees to make such payment to the City as soon as reasonably possible after the Project is completed and with receipt of proper billing with certification by the City that the Project is deployed and is now operational in substantial compliance with the scope of work specifications. The City agrees to obtain final acceptance of the Project through KDOT's ITS Engineer.

7. It is the policy of the Secretary to make any final payments to the City for services related to the ITS Set-Aside Project in a timely manner. The Single Audit Standards set forth in Federal O.M.B. Circular A-133, "Audit of States, Local Governments, and Non-Profit Organizations" and in 49 C.F.R. 18 (Common Rule), require an audit be performed by an independent certified public accountant in accordance with these standards. All information audited shall comply with 49 C.F.R. 18 (Common Rule).

The Secretary may pay any final amount due for the authorized work performed based upon the City's most recent Single Audit Report available and a desk review of the claim by the Contract Audit Section of the Secretary's Bureau of Fiscal Services. The City, by acceptance of this Agreement, acknowledges the final payment is subject to all single audits that cover the time period of the expenses being claimed for reimbursement. The Secretary and City agree as the Single Audit Report becomes

available for the reimbursement period (normally should occur within a period of 1-2 years), the Secretary will review the Single Audit Report for items, which are declared as not eligible for reimbursement. The City agrees to refund payment made by the Secretary to the City for items subsequently found to be not eligible for reimbursement by audit.

8. Upon request by the Secretary, the City shall provide the Secretary an accounting of all non-participating costs associated with the Project which are paid directly by the City to any party outside of the Secretary and all costs incurred by the City not to be reimbursed by the Secretary. This will enable the Secretary to report all costs of the Project to the legislature.

9. During the Project deployment, representatives of the Secretary shall make periodic inspection of the Project and the records of the City as may be deemed necessary or desirable. The City will direct or cause its vendor to accomplish any corrective action or work required by the Secretary's representative as necessary to the performance of this Agreement.

10. The following changes in the Project desired by the City require the approval of the Secretary:

- a. Fiscal year the Project is to be awarded
- b. Project description
- c. Project scope

Furthermore, during deployment any changes in the plans and specifications require the written approval of the City and the Secretary.

11. The provisions found in Contractual Provisions Attachment Form DA-146a, which is attached hereto and executed by the Parties in this Agreement, are hereby incorporated into this Agreement by reference and made a part hereof.

12. The provisions found in the Kansas Department of Transportation Civil Rights Special Attachment No. 1 attached hereto are hereby incorporated into this Agreement by reference and made a part hereof.

13. The City shall adopt all necessary ordinances and/or resolutions and to take such legal steps as may be required to give full effect to the terms of this Agreement.

14. The City acknowledges and warrants equipment purchased under this Agreement shall be used in accordance within the Project scope detailed in the ITS Application Project Form. If the equipment is not being used in accordance with the Project scope, the City shall reimburse the Secretary for the cost of such equipment. The City shall make payment within thirty (30) days after receiving notice from the Secretary for reimbursement of the purchase cost minus depreciation.

15. To the extent permitted by law and subject to the maximum liability provisions of the Kansas Tort Claims Act, the City will defend, indemnify, hold harmless, and save the Secretary and his or her authorized representatives from any and all costs, liabilities, expenses, suits, judgments, damages to persons or property or claims of any nature whatsoever arising out of or in connection with the provisions or performance of this Agreement by the City, the City's employees, agents, vendors, or subcontractors. The City shall not be required to defend, indemnify, hold harmless, and save the Secretary for negligent acts or omissions of the Secretary or his or her authorized representatives or employees.


16. The City agrees to require the vendor to indemnify and save the Secretary and the City harmless from and against all liability for damage, costs and expenses arising out of any claim, suit, action, or otherwise for injuries and/or damages sustained to persons or property by reason of the work of employees under this Agreement.

17. It is further understood this Agreement and all contracts entered into under the provisions of this Agreement shall be binding upon the Secretary and the City and their successors in office.

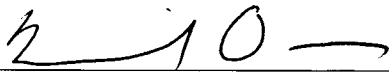
18. No third party beneficiaries are intended to be created by this Agreement, nor do the Parties herein authorize anyone not a party to this Agreement to maintain a suit for damages pursuant to the terms or provisions of this Agreement.

IN WITNESS WHEREOF the Parties hereto have caused this Agreement to be signed by their duly authorized officers on the day and year first above written.

CITY OF LAWRENCE, KANSAS




Frank S. Reeb
City Clerk



Michael Dever
Mayor

(SEAL)

KANSAS DEPARTMENT OF
TRANSPORTATION



Debra L. Miller
Secretary of Transportation



KANSAS DEPARTMENT OF TRANSPORTATION

Special Attachment
To Contracts or Agreements Entered Into
By the Secretary of Transportation of the State of Kansas

NOTE: Whenever this Special Attachment conflicts with provisions of the Document to which it is attached, this Special Attachment shall govern.

THE CIVIL RIGHTS ACT OF 1964, and any amendments thereto,
REHABILITATION ACT OF 1973, and any amendments thereto,
AMERICANS WITH DISABILITIES ACT OF 1990, and any amendments thereto,
AGE DISCRIMINATION ACT OF 1975, and any amendments thereto,
EXECUTIVE ORDER 12898, FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY
POPULATIONS AND LOW INCOME POPULATIONS 1994, and any amendments thereto,
49 C.F.R. Part 26.1 (DBE Program), and any amendments thereto

NOTIFICATION

The Secretary of Transportation for the State of Kansas, in accordance with the provisions of Title VI and Title VII of the Civil Rights Act of 1964 (78 Stat. 252), §504 of the Rehabilitation Act of 1973 (87 Stat. 3555) and the Americans with Disabilities Act of 1990 (42 USC 12101), the Age Discrimination Act of 1975 (42 USC 6101), the Regulations of the U.S. Department of Transportation (49 C.F.R., Part 21, 23, and 27), issued pursuant to such ACT, Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations (1994), and the DBE Program (49 C.F.R., Part 26.1), hereby notifies all contracting parties that, the contracting parties will affirmatively ensure that this contract will be implemented without discrimination on the grounds of race, religion, color, gender, age, disability, national origin, or minority populations and low income populations as more specifically set out in the following seven "Nondiscrimination Clauses".

CLARIFICATION

Where the term "consultant" appears in the following seven "Nondiscrimination Clauses", the term "consultant" is understood to include all parties to contracts or agreements with the Secretary of Transportation of the State of Kansas.

Nondiscrimination Clauses

During the performance of this contract, the consultant, or the consultant's assignees and successors in interest (hereinafter referred to as the "Consultant"), agrees as follows:

- 1) Compliance with Regulations: The consultant will comply with the Regulations of the U.S. Department of Transportation relative to nondiscrimination in federally-assisted programs of the U.S. Department of Transportation (Title 49, Code of Federal Regulations, Parts 21, 23 and 27, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 2) Nondiscrimination: The consultant, with regard to the work performed by the consultant after award and prior to the completion of the contract work, will not discriminate on the grounds of race, religion, color, gender, age, disability, national origin or minority populations and low income populations in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The consultant will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- 3) Solicitations for Subcontractors, including Procurements of Material and Equipment: In all solicitations, either competitive bidding or negotiation made by the consultant for work to be performed under a subcontract including procurements of materials and equipment, each potential subcontractor or supplier shall be notified by the consultant of the consultant's obligation under this contract and the Regulations relative to nondiscrimination on the grounds of race, religion, color, gender, age, disability, national origin or minority populations and low income populations.

- 4) Information and Reports: The consultant will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and the Secretary of the Transportation of the State of Kansas will be permitted access to the consultant's books, records, accounts, other sources of information, and facilities as may be determined by the Secretary of Transportation of the State of Kansas to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a consultant is in the exclusive possession of another who fails or refuses to furnish this information, the consultant shall so certify to the Secretary of Transportation of the State of Kansas and shall set forth what efforts it has made to obtain the information.
- 5) Employment: The consultant will not discriminate against any employee or applicant for employment because of race, religion, color, gender, age, disability, or natural origin.
- 6) Sanctions for Noncompliance: In the event of the consultant's noncompliance with the nondiscrimination provisions of this contract, the Secretary of Transportation of the State of Kansas shall impose such contract sanctions as the Secretary of Transportation of the State of Kansas may determine to be appropriate, including, but not limited to,
 - (a) withholding of payments to the consultant under the contract until the contractor complies, and/or
 - (b) cancellation, termination or suspension of the contract, in whole or in part.
- 7) Disadvantaged Business Obligation
 - (a) Disadvantaged Business as defined in the Regulations shall have a level playing field to compete for contracts financed in whole or in part with federal funds under this contract.
 - (b) All necessary and reasonable steps shall be taken in accordance with the Regulations to ensure that Disadvantaged Businesses have equal opportunity to compete for and perform contracts. No person(s) shall be discriminated against on the basis of race, color, gender, or national origin in the award and performance of federally-assisted contracts.
 - (c) The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 C.F.R. Part 26 in the award and administration of Federally-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.
- 8) Executive Order 12898
 - (a) To the extent permitted by existing law, and whenever practical and appropriate, all necessary and reasonable steps shall be taken in accordance with Executive Order 12898 to collect, maintain, and analyze information on the race, color, national origin and income level of persons affected by programs, policies and activities of the Secretary of Transportation of the State of Kansas and use such information in complying with this Order.
- 9) Incorporation of Provisions: The consultant will include the provisions of paragraphs (1) through (8) in every subcontract, including procurements of materials and equipment, unless exempt by the Regulations, order, or instructions issued pursuant thereto. The consultant will take such action with respect to any subcontract or procurement as the Secretary of Transportation of the State of Kansas may direct as a means of enforcing such provisions including sanctions for noncompliance: PROVIDED, however, that, in the event a consultant becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the consultant may request the State to enter into such litigation to protect the interests of the State.

CONTRACTUAL PROVISIONS ATTACHMENT

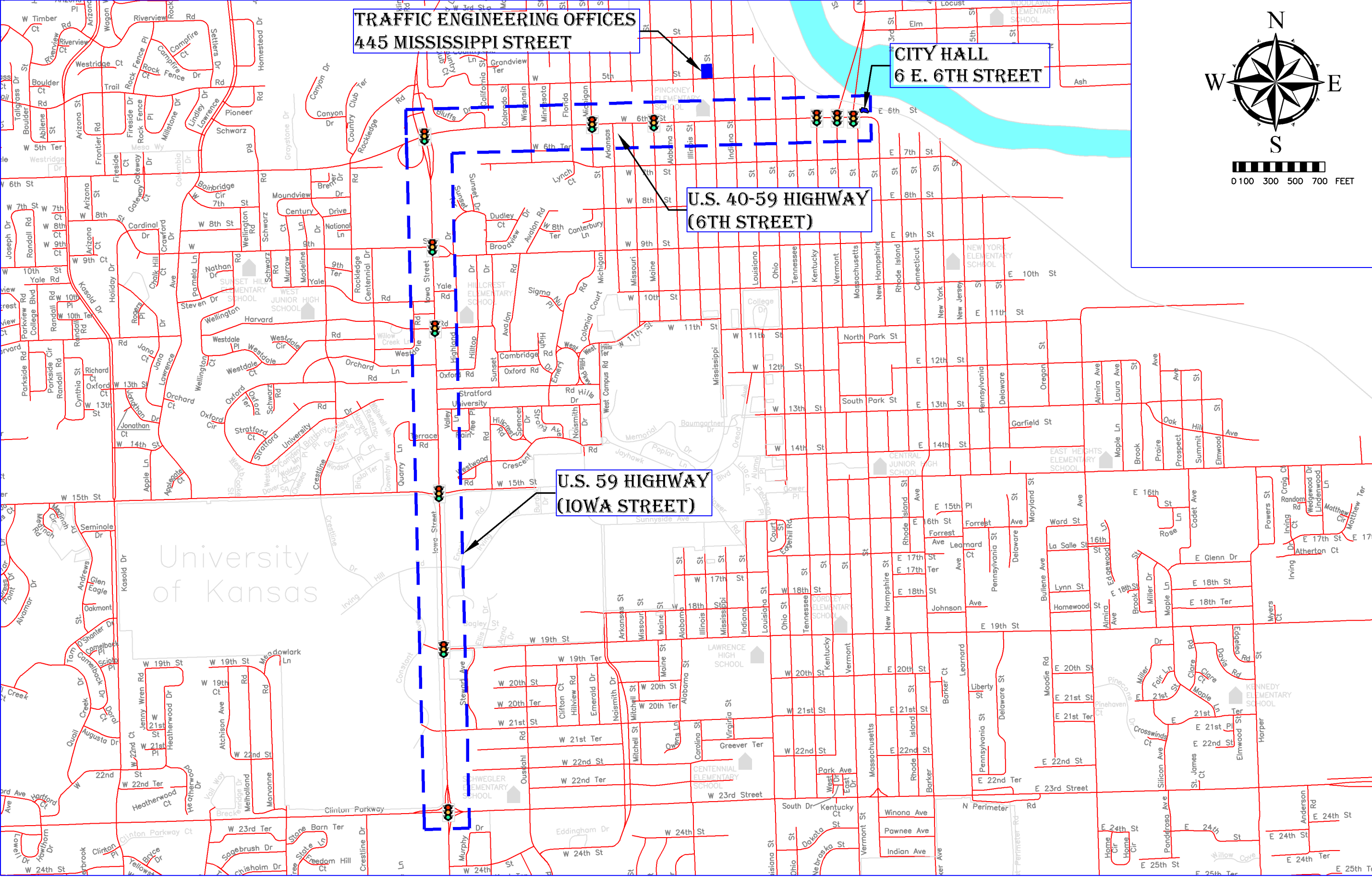
Important: This form contains mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the vendor/contractor's standard contract form, then that form must be altered to contain the following provision:

"The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 1-01), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof, said contract being the _____ day of _____, 20_____.

1. **Terms Herein Controlling Provisions:** It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated.
2. **Agreement With Kansas Law:** All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.
3. **Termination Due To Lack Of Funding Appropriation:** If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.
4. **Disclaimer Of Liability:** Neither the State of Kansas nor any agency thereof shall hold harmless or indemnify any contractor beyond that liability incurred under the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.).
5. **Anti-Discrimination Clause:** The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Parties to this contract understand that the provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting state agency cumulatively total \$5,000 or less during the fiscal year of such agency.
6. **Acceptance Of Contract:** This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.
7. **Arbitration, Damages, Warranties:** Notwithstanding any language to the contrary, no interpretation shall be allowed to find the State or any agency thereof has agreed to binding arbitration, or the payment of damages or penalties upon the occurrence of a contingency. Further, the State of Kansas shall not agree to pay attorney fees and late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect which attempts to exclude, modify, disclaim or otherwise attempt to limit implied warranties of merchantability and fitness for a particular purpose.
8. **Representative's Authority To Contract:** By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.
9. **Responsibility For Taxes:** The State of Kansas shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.
10. **Insurance:** The State of Kansas shall not be required to purchase, any insurance against loss or damage to any personal property to which this contract relates, nor shall this contract require the State to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), the vendor or lessor shall bear the risk of any loss or damage to any personal property in which vendor or lessor holds title.
11. **Information:** No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 et seq.
12. **The Eleventh Amendment:** "The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."



ITS PROJECT LOCATION MAP

Memorandum

City of Lawrence

Public Works

TO: Chuck Soules, Public Works Director
FROM: Shoeb Uddin, City Engineer
CC: David L. Corliss, James Risner, David Woosley, James Wisdom
Date: February 18, 2009
RE: **6th Street ITS Project, City Project No. PW0823**
ITS Set-Aside Project Agreement with KDOT
March 3, 2009 Consent Agenda Item

Introduction

Intelligent Transportation System (ITS) is a new kind of public infrastructure resulting from the intermingling between the physical movement (of people and goods) around a transportation network and the dissemination of information regarding and related to those movements. **According to experts, "ITS offers the most promising vision for transportation since the creation of the Interstate Highway System".**

The main focus of Intelligent Transportation system (ITS) is to improve safety and efficiency of the transportation system. The fundamental philosophy of ITS is that the infrastructure and the vehicles that operate on it perform as a system. Technologies in the areas of computers, communications and sensors link together the previously independent vehicle and infrastructure components of surface transportation. Through that linkage, substantial congestion reduction, safety improvements and productivity gains will accrue.

Background / History

ITS programs in Western Europe and Japan date back to the mid-1980s. In US, while there were growing interests about ITS among US academia and transportation officials during the 80's, ITS programs in the US received the first major impetus with the passage of the Inter-modal Surface Transportation Act (ISTEA) of 1991, with \$660 million allocated for research and development for the fiscal years 1992-1997. The transportation Equity Act of the 21st Century (TEA-21) (signed into law in 1998) continued the commitment in research, development and deployment of ITS programs through fiscal year 2003. In 2005, the Congress enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which also continued funding of ITS research through fiscal year 2009.

One of the practical implications of the TEA -21 and SAFETEA-LU is that each MPO or region is required by law to develop and maintain a regional ITS architecture in order to receive federal funding for ITS projects. In 2008, Lawrence-Douglas county MPO reached a milestone by developing the "Regional ITS Architecture and Deployment Plan" for Lawrence-Douglas county region.

At the state level, Kansas Department of Transportation created an ITS Set-Aside Funding Program in 1999 with a vision to ensure safer, more secure and efficient movement of people and goods across Kansas through the use of advanced technologies and management strategies. Since then, City staff has been submitting applications for the ITS Set-Aside funding every year, with the first successful outcome in 2006 when the City of Lawrence received an award of \$250,000.00 for the fiscal year 2009; this award along with contributions from city funds will finance the first ever ITS project in Lawrence.

Project Details

The primary objective of this project is to install fiber optic communication lines to develop closed loop traffic signal system along certain main thoroughfares in the city including 6th Street (from Massachusetts to Iowa) and Iowa Street (from 6th to 23rd) (see attached map). The project will also include installation of central signal control system (consisting of hardware, software, video screens, building modifications and related Intelligent Transportation Devices) in the Traffic Engineering Building at 445 Mississippi Street.

The primary objective of the closed-loop traffic signal system is to monitor and optimize traffic flow and thereby, would reduce congestion. More specifically, the benefits of this project will include immediate notification of traffic signal malfunctions, ability to implement unlimited timing plans from the office including emergency timing plan due to inclement weather or special timing plan for KU game days etc.

The fiber optic communication system will also assist and improve the emergency response by Police and Fire by sharing and disseminating information more quickly and in real time (**refer to Exhibit A for details of ITS benefits**).

This project is the logical next step in the right direction following the completion of the Regional ITS Architecture and Deployment Plan for Lawrence-Douglas County.

Project Status / Funding

The total estimated cost for this project is \$500,000.00 and will be financed through a 50/50 contribution by KDOT and the city. Therefore, city's matching share for this project is \$250,000.00.

On July 22, 2008, the City Commission approved Resolution 6778 ordering the improvements for the 6th Street ITS project and authorizing the issuance of General Obligation Bonds for the maximum principal amount of \$250,000.00.

Engineering Design and construction plans will be completed this spring with construction to begin in the summer of 2009.

City Staff is currently working with KDOT to work out the details so a third party may be allowed to provide fiber optic installation services as in-kind contribution in exchange for the use of a portion of the fiber optic strands. If this provision can be worked out with KDOT it could allow the city to expand the current limits /scopes of the fiber optic installation.

It is noteworthy that this project will fulfill about 20% of the total ITS infrastructure need in the City of Lawrence. Based on our estimates, approximately 3 million dollars will be needed to complete the city's ITS network.

Action Requested

Authorize Mayor to sign the ITS Set-Aside Project Agreement with KDOT for the 6th Street ITS project.

Attachments: Map
ITS Set-Aside Project Agreement

EXHIBIT - A

Benefits of ITS

We cannot begin to foresee all that will occur. It is certainly the most exciting development in transportation in many years. The enabling technology of ITS, the transportation / information infrastructure, can and will have profound effects on accessibility and mobility, traffic congestion, public safety, economic growth, improved quality of life, improved information for planning and inter-modal transport. Following are some specific benefits of fiber optic based coordinated and closed loop traffic signal system.

- Immediate and automatic notification of traffic signal malfunctions to the Central Signal Control. As a result, citizen complaints about traffic signal malfunctions are likely to go down significantly. This will also contribute significant savings in staff time and staff will be able to respond to numerous other pressing issues and citizen complaints more quickly and efficiently.
- Unlimited Timing Plan – a coordinated system can accommodate unlimited number of signal timing plans; such plans can be changed back and forth from the central signal control in the Traffic Engineering building. Emergency timing plan for mass evacuation, snow removal or inclement weather condition and special timing plan for KU Games can be implemented automatically as well from the central Signal Control.
- Intersection Monitoring: The proposed closed loop system will enable the traffic engineering staff to monitor unusual queues and conditions and respond promptly from the Central Signal Control. The 360 degree camera at the intersection will provide real time video of all approaches. This video information can be shared with police and fire, when necessary. In the future, this video can be made accessible to the general public as well through the city's website. Some cities in Kansas, notably Overland Park, already have the real time video of all their intersections available to the general public. Other cities in the KC metro area (such as Lenexa, Olathe and others) have also deployed ITS technologies at different levels of sophistication. KC Scout is a nationally recognized ITS based Traffic Operation Center that is responsible for traffic flow around the freeways in the KC metro area and is a joint venture between the two departments of transportation in Kansas and Missouri.
- When this system is in place, the city will accrue savings by eliminating some of the leasing services from AT&T for data and voice lines.
- This project is the first step towards building a communication loop or ring among all city facilities. Once the loop or ring is completed, efficiency of electronic communications and data sharing processes will experience dramatic improvements.
- This system, when in place, will enable the City of Lawrence to connect to other networks in the region, such as, Douglas County, Kansas Department of Transportation, Kansas Turnpike Authority, University of Kansas, Johnson County and numerous other organizations or entities.
- By ensuring faster and more effective communication and data sharing, this will substantially improve city's disaster prevention and recovery efforts. ITS technologies can be utilized to put in place effective Homeland Security measures in cooperation with other local, state and federal agencies.

**KANSAS DEPARTMENT OF TRANSPORTATION
CONSULTING ENGINEER QUALIFICATION QUESTIONNAIRE**

This form must be updated on annually. **Submit seven (7) copies** of the typed form to the Kansas Department of Transportation, Assistant to the Director of Engineering and Design, Dwight D. Eisenhower State Office Building, 12th Floor, 700 SW Harrison Street, Topeka, Kansas 66603-3754. Supplementary information about the firm's experience may accompany this questionnaire, but may not be substituted for it. Information furnished will be held in the strictest confidence and may be audited or verified as deemed necessary by the KDOT. Firms will be notified of their qualification status. If you have any questions contact Neil Rusch at (785) 291-3405.

This form is available at the following web address: <http://www.ink.org/public/kdot/divengdes/prequal/>.

Firm Name: _____

Enter the address with zip code, telephone number and person to contact in the main office and branch offices. Place an * by the office where prequalification correspondence should be addressed. The person to contact must have authority to speak for the firm on policy and contractual matters.

() **Main Office**

() **Branch Office**

() **Branch Office**

Person to Contact: _____

Address: _____

City, State, Zip + 4: _____

Telephone: _____

Fax number: _____

E-mail address: _____

Annual Prequalification and project solicitation information will be done by e-mail. If e-mail address is not provided, project solicitation must be obtained through the Kansas Register.

Business Structure	DBE Certified in Kansas	Date firm established _____
Individual <input type="checkbox"/>	Minority Business (MBE) <input type="checkbox"/>	
Partnership <input type="checkbox"/>	Woman Business (WBE) <input type="checkbox"/>	
Corporation <input type="checkbox"/>		
Other _____	Federal Employee Identification Number (FEIN) _____	

Does your firm comply with the following state requirements?	YES	NO	N/A
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KSA 17-7301 requires corporations not organized under the laws of Kansas to be qualified to do business with the Office of the Secretary of State.	()	()	()
--	-----	-----	-----

KSA 60-306 requires non-resident firms to have on file in the Office of the Secretary of State an instrument appointing a resident of the state of Kansas as a process agent.	()	()	()
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Contact the Secretary of State, Memorial Hall, First Fl., 120 SW 10th, Topeka, KS. 66612, (785) 296-4564 (e-mail: faribap@kssos.org) for the required forms.

KDOT requires all firms to have a Quality Assurance Plan. Does your firm have a Quality Assurance Plan?	()	()
---	-----	-----

KDOT required all firms have professional liability insurance. Does your firm have professional liability insurance?	()	()
--	-----	-----

KDOT requires completion of the BITM/90 course for qualification in bridge inspection. Has a member of your firm completed the BITM/90 course?	()	()
--	-----	-----

KSA 74-7036 requires corporations to be registered with the Kansas State Board of Technical Professions.	()	()	()
--	-----	-----	-----

KSA 74-7001 requires any person practicing any technical profession in the state to be licensed with the Kansas State Board of Technical Professions. Show the number of persons registered in the following professions	In KS	Total Registered
Professional Engineering	()	()
Land Surveying	()	()
Architecture	()	()
Landscape Architecture	()	()
Geology	()	()

Contact the Kansas State Board of Technical Professions, 900 SW Jackson, Topeka, Kansas 66612, (785) 296-3053 for the required forms.

KDOT requires supplemental information for qualification in the Geotechnical (311), Materials Testing (312), Geotechnical Specialty Services (333) and Subsurface Utility Engineering (334) categories. Please submit a listing of equipment for the services which can be provided.

Personnel: List the number of personnel within your office. Multi-registered personnel should be counted in all appropriate disciplines. Clerical personnel should be included in "Administrative". Other disciplines should be entered in space provided.

DISCIPLINE	BLACK		HISPANIC		AMERICAN INDIAN OR ALASKAN NATIVE		ASIAN OR PACIFIC ISLANDER		TOTAL MINORITIES		NON- MINORITY GROUP		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrative														
Architects														
CADD Operators / Eng. Tech / Detailers														
Certified Value Eng. Specialists														
Civil Engineers														
Commercial Divers, Licensed														
Economists														
Electrical Engineers														
Environmental Engineers														
Estimators														
Geologists, Geotechnical Engineers														
Hydrologists														
Landscape Architects														
Mechanical Engineers														
Planners: Urban / Regional														
Sanitary Engineers														
Structural Engineers														
Surveyors, Licensed														
Traffic Engineers														
Others														
TOTAL														

Total number of employees' _____

The Certified Inspection and Testing Training (CIT²) program has been established to provide the required training and certifications for those individuals responsible for performing inspection and testing functions on KDOT construction projects. Additional information about the CIT² program can be obtained at: kdot1.ksdot.org/public/kdot/burmatres/CIT2.htm (case sensitive). Please list the name, certification number and expiration date (mm/yy) for the various categories. See Policy and Procedure Manual at the above noted web site for the Certified Inspection and Testing Training Program for the classification Acronyms.

[illegible]

The Certified Inspection and Testing Training (CIT²) program has been established to provide the required training and certifications for those individuals responsible for performing inspection and testing functions on KDOT construction projects. Additional information about the CIT² program can be obtained at: kdot1.ksdot.org/public/kdot/burmatres/CIT2.htm (case sensitive). Please list the name, certification number and expiration date (mm/yy) for the various categories. See Policy and Procedure Manual at the above noted web site for the Certified Inspection and Testing Training Program for the classification Acronyms.

[illegible]

Staff - Complete the following for the professional staff employed by the firm who may be assigned to KDOT projects. Attach extra sheets as necessary, number them 6A, 6B, 6C, etc.

Name _____	Total Years of Experience _____ Full Time _____	Probable Project Assignment Project Manager Designer Planner
Present Position _____	Part Time _____	_____
Education (University, Degree, Year, Specialization): _____ _____ _____		

Registration (Category, State, Date, Kansas Registration Number, if any):

Membership and Activities in Professional Societies:

<u>Name</u>	<u>Grade of Membership</u>	<u>Offices Held</u>	<u>Year</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Record of Experience on Transportation Projects:

YEARS

From - To	Position	Firm	Types of Work/Responsibilities
-----------	----------	------	--------------------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Professional Services Fees - Summarize the volume of transportation related services performed during each of the past five years, in terms of fees received.

YEAR	LOCATION STUDIES	ENVIRONMENTAL STUDIES	DESIGN AND PLANS	SUPERVISION OF CONSTRUCTION	OTHER (INDICATE NATURE)
a. <u>Kansas Department of Transportation projects:</u>					
b. <u>All other public Transportation projects in Kansas:</u>					
c. <u>All other Transportation projects not included above:</u>					

Service Category _____

(See page 9)

Relevant Projects: List the five (5) projects which best illustrate the firm's experience in this category. List the employee's name and the firm when the service was performed. The service must have been completed in the last 5 years. Projects may be listed on all appropriate service categories. **Use one page for each Service Category requested on page 9.**

PROJECT NUMBER AND YEAR COMPLETED	NAME OF EMPLOYEE AND FIRM	OWNER	LOCATION, DESCRIPTION, LENGTH TYPE OF STUDY OR CONSTRUCTION	CONSTRUCTION OR STUDY COST OR ESTIMATE (1,000's)
(1)				
(2)				
(3)				
(4)				
(5)				

Service Categories - Indicate the categories for which your firm is requesting qualification. Refer to the “Listing of Professional Services Categories for Consultant Qualification” at www.ksdot.org/divengdes/prequal for descriptions of the categories and requirements. **There Must Be a Page 8 (Service Category) for each category requested on this page.**

<u>TRANSPORTATION PLANNING</u> <div> <div> <div>()</div> <div>111</div> <div>Rail Planning Rail Systems Planning</div> </div> <div> <div>()</div> <div>121</div> <div>Aviation Planning Aviation/Airport Planning</div> </div> <div> <div>()</div> <div>131</div> <div>Port and Waterway Planning Ports and Waterways Systems Planning</div> </div> <div> <div>()</div> <div>141</div> <div>Bicycle and Pedestrian Planning Bikeway and Pedestrian Facilities Planning</div> </div> <div> <div>()</div> <div>151</div> <div>Public Transit Planning Public Transit Facilities and Systems Planning</div> </div> <div> <div>()</div> <div>161</div> <div>Transportation Facilities Planning Corridor / Project Feasibility Studies</div> </div> <div> <div>()</div> <div>162</div> <div>Long Range Planning</div> </div> <div> <div>()</div> <div>163</div> <div>Congestion Management / ITS</div> </div> <div> <div>()</div> <div>171</div> <div>Environmental Impact Studies Environmental Documentation</div> </div> <div> <div>()</div> <div>172</div> <div>Site Assessments</div> </div> <div> <div>()</div> <div>173</div> <div>Noise Impact Analysis</div> </div> <div> <div>()</div> <div>181</div> <div>Transportation Enhancement Planning Corridor Enhancement / Scenic Byways</div> </div> <div> <div>()</div> <div>182</div> <div>Parks and Recreational Planning</div> </div> </div>		<div> <div> <div>()</div> <div>231</div> <div>Traffic Engineering Traffic Control Analysis and Design</div> </div> <div> <div>()</div> <div>241</div> <div>Construction Inspection Construction Inspection</div> </div> </div>
<u>TRANSPORTATION FACILITIES ENGINEERING AND DEVELOPMENT</u> <div> <div> <div>()</div> <div>201</div> <div>Pre-Const. Eng. and Project Mgmt. Location and Design Concept Studies / Corridor Studies</div> </div> <div> <div>()</div> <div>203</div> <div>Value Engineering</div> </div> <div> <div>()</div> <div>211</div> <div>Highway Design - Major Facility</div> </div> <div> <div>()</div> <div>212</div> <div>Highway Design - Minor Facility</div> </div> <div> <div>()</div> <div>221</div> <div>Non-Standard Span Bridge Design</div> </div> <div> <div>()</div> <div>222</div> <div>Standard Span Bridge Design</div> </div> </div>		<u>PROFESSIONAL - TECHNICAL SUPPORT SERVICES</u> <div> <div> <div>()</div> <div>301</div> <div>Topography Land Surveying</div> </div> <div> <div>()</div> <div>302</div> <div>Engineering Surveying</div> </div> <div> <div>()</div> <div>303</div> <div>Geodetic Surveying</div> </div> <div> <div>()</div> <div>311</div> <div>Geotechnical and Material Testing Geotechnical Engineering Services</div> </div> <div> <div>()</div> <div>312</div> <div>Materials Laboratory Testing Services</div> </div> <div> <div>()</div> <div>321</div> <div>Bridge Evaluation Services Bridge Structural Analysis</div> </div> <div> <div>()</div> <div>322</div> <div>Bridge Inspection</div> </div> <div> <div>()</div> <div>323</div> <div>Underwater Bridge Inspection</div> </div> <div> <div>()</div> <div>324</div> <div>Bridge Deck Evaluation</div> </div> <div> <div>()</div> <div>325</div> <div>Hydraulic and Hydrologic Studies</div> </div> <div> <div>()</div> <div>331</div> <div>Specialty Services Aerial Photogrammetry</div> </div> <div> <div>()</div> <div>332</div> <div>Travel Studies</div> </div> <div> <div>()</div> <div>333</div> <div>Geotechnical Specialists</div> </div> <div> <div>()</div> <div>334</div> <div>Subsurface Utility Engineering</div> </div> </div>
<u>ARCHITECTURE AND OTHER PROFESSIONAL SERVICES</u> <div> <div> <div>()</div> <div>401</div> <div>Landscape, Seeding and Erosion Control</div> </div> <div> <div>()</div> <div>402</div> <div>Landscape Architectural Design</div> </div> <div> <div>()</div> <div>411</div> <div>Pedestrian and Bicycle Facility Design</div> </div> <div> <div>()</div> <div>412</div> <div>Parks and Recreational Design</div> </div> <div> <div>()</div> <div>421</div> <div>Architectural Design</div> </div> <div> <div>()</div> <div>431</div> <div>Water and Wastewater Engineering</div> </div> <div> <div>()</div> <div>441</div> <div>Maintenance Equip. Materials and Methods</div> </div> </div>		

The foregoing is a statement of facts.

Signature _____ Date _____

Name and Title _____

(Please type)

Attachment No. 2A

CERTIFICATION OF PROSPECTIVE PARTICIPANTS AS TO CURRENT
HISTORY REGARDING DEBARMENT, ELIGIBILITY, INDICTMENTS,
CONVICTIONS, OR CIVIL JUDGMENTS

_____,
President, Chairman, or Authorized Official
being duly sworn (or under penalty of perjury under the laws of the
United States), certifies that, except as noted below, _____

Agency or Company
or any person associated therewith in the capacity of _____

Owner, partner, director, officer, principal investigator,
project director, manager, auditor, or any other position
involving the administration of federal funds is not currently
under suspension, debarment, voluntary exclusion, or determination
of ineligibility by any federal agency;

has not been suspended, debarred, voluntarily excluded or
determined ineligible by any federal agency within the past three
years;

does not have a proposed debarment pending; and

has not been indicted, convicted, or had a civil judgment rendered
against (it) by a court of competent jurisdiction in any manner
involving fraud or official misconduct within the past three years;

Exceptions _____

Exceptions will not necessarily result in denial of award, but will
be considered in determining bidder or respondent responsibility.
For any exceptions noted, indicate below to whom it applies,
initiating agency, and dates of action.

Providing false information may result in criminal prosecution or
administrative sanctions.

Signature

Sworn to before me a Notary Public in
and for the County of _____,
State of _____, this _____
day of _____, 19____.

Notary Public

My Commission expires _____