

CIVIL ENGINEERS SINCE 1989

November 15, 2013

MoDOT Central Office - Local Program Administrator

c/o MaryAnn.Jacobs@modot.mo.gov

Re: **On-Call Services, Roadway Design**

SK Design Proposal No. 13p143

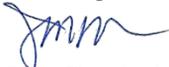
We are pleased to submit our proposal to provide roadway design services to MoDOT LPA.

Our Unique Qualifications

- ▶ SK Design has been in business for over 24 years, and we have provided services to a progressively growing list of clients. We specialize in project management and civil design. We currently have a staff of 22, including 10 engineers, 7 of whom are professional engineers, and 6 construction inspectors. We utilize AutoCAD 2013, Civil 3D 2013, AUTOTURN, HYDROFLOW STORM SEWERS, ESRI ArcGIS 10.1, HEC-1, HEC-2, HEC-RAS 3.3, HEC-HMS, TR55, AND HY-8 and other state-of-the-art computer applications. The quality of our services surpasses the industry standards. We subscribe to the philosophy of a complete design. A complete design is one which requires virtually no additional clarification during construction. This philosophy requires thorough analysis and design of all aspects of the project. All details must be worked out, and all ambiguities resolved.
- ▶ SK Design produces quality work which lends to cost control. Our construction documents are accurate and complete, resulting in accurate bids, ease of construction, elimination of unwarranted change orders, and ultimately, control of costs. Ninety percent of our projects had change orders less than 1%. The other 10% have change order rates of 3-5%. Over 95% of our work is with repeat clients, which attests to the quality of our work.
- ▶ SK Design has extensive experience in pavement evaluation and pavement rehabilitation projects. We were responsible for a Pavement Condition Index study of all pavements at KCI. We prepared plans, successfully bid and completed over \$12 million of roadway rehabilitation projects, including Mexico City Avenue, Athens, Bonn Bern Street, and Prairie View. SK Design also provided full time construction observation for these projects. In addition, we are in the process of preparing plans for over \$14 million of roadway rehabilitation at KCI and the Downtown Airport.
- ▶ SK Design just completed plans, specifications and estimates for the 134th Street Utility Relocation project for the City of Bonner Springs. The project was mandated by KDOT to remove existing utilities from the K-7 corridor for the I-70/K-7 Interchange improvements and relocate them to the 134th Street corridor. Our design services included preliminary roadway plans for a one-mile segment of 134th Street and relocation plans for approximately one-mile of water line and two-miles of sanitary sewer. In addition to the City water and sewer lines ATT, ATMOS Energy and Westar were required to relocate to 134th Street. SK Design worked with the utility companies to establish their new alignments and shared electronic files to assist them with their relocation designs. SK Design also acquired the following permits for the City; NOI land disturbance permit, R/W use agreement permits from KDOT and KTA for the utility bores under Interstate 70, and water and sewer extension permits from KDHE. We also are assisting the City with construction observation for the project.
- ▶ When you hire SK Design, all aspects of your project are managed by an experienced team of senior level engineers. One of the unique qualities of SK Design is the vast amount of project experience available to our clients due to our personnel. All of our projects are managed by one of our seven professional engineers with a combined average experience of 26 years. In fact, five out of the seven have a Master Degrees in Civil Engineering and three of the engineers identified on this project have Master's Degrees.

We truly appreciate the opportunity to submit our proposal and look forward to your favorable decision.

Sincerely,

SK Design Group, Inc.

John Chamberlin, PE, RLS

Director of Engineering

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Suite 100

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GENERAL EXPERIENCE AND PAST PERFORMANCE

- ▶ Mick Deaver Drive, University of Missouri, Columbia: SK Design was responsible for the design and construction administration of Mick Deaver Drive Extension. The 2500-foot-long, three-lane roadway was constructed over severe topography with extensive rock excavation. SK Design evaluated over 15 combinations of horizontal and vertical alignments in order to balance the earthwork / rock excavation, minimize utility disruption, match grades at key tie-in locations, and keep the project within budget. Design and construction documents completed in 3 months.
- ▶ Munn Avenue Reconstruction, Maryville, MO: We are currently providing full time construction observation for this project. SK Design completed roadway improvement plans, specifications and estimate (PSE) for the reconstruction of Munn Avenue from South Avenue to Missouri State Highway V. The existing 2-lane asphalt open ditch roadway section will be replaced with a 32 foot B/B concrete street with bike lanes and enclosed storm sewer. Several roadway sections were evaluated to see how they would fit within the existing right-of-way and improvements within the corridor before the ultimate street section was determined. The project will be constructed in three phases to insure access is maintained to Maryville High School located in the middle of the project. Extensive coordination was completed with all of the local utility providers with facilities located along the street. SK Design shared electronic design files with the utility companies to assist them with their relocation designs.
- ▶ 134th Street Utility Relocation, Bonner Springs, KS: We are currently providing full time construction observation for this project. SK Design provided plans, specifications, and estimate (PSE) for the 134th Street Utility Relocation Project for the City of Bonner Springs. The utility relocation project was mandated by the Kansas Department of Transportation (KDOT) requiring the City to relocate their existing sanitary sewer and water line facilities from the K-7 corridor to accommodate the reconstruction of the Interstate 70 – K7 interchange. The project includes relocation plans for approximately one-mile of waterline and two miles of sanitary sewer. In addition to the water and sewer relocations to the 134th street corridor ATT, Atmos Energy and Westar were also required to relocate to 134th Street. The existing 134th street section is a narrow chip seal road with open ditch’s and rolling hills. In order to make sure all the relocated utility locations and depths would accommodate the future reconstruction of 134th Street SK Design prepared a preliminary roadway design and right-of-way plans for the one-mile segment of 134th Street between Kansas Avenue and Riverview Avenue. At approximately the mid-point of the 134th Street corridor the roadway crosses under Interstate 70. Extensive coordination and approvals were required from KDOT on the project for the preliminary roadway and utility relocation plans along 134th Street and the utility abandonment plans along K-7. Design to bidding 4 months.
- ▶ Constant Avenue Reconstruction, KU: Complete reconstruction of three existing deteriorated roadways, with 2,500 LF of new concrete roadways, new sidewalks/trails, ADA accessible curb ramps, associated storm sewer, bus stops, and traffic control. The project also included reconstruction of two intersections at Irving Hill Road and 19th Street. Because of limited funding and various funding sources, five separate bid alternates were included. Bid Alternates included roadway design for Irving Hill Road, 19th Street, and traffic signal modifications at 19th Street & Iowa. The entire project, including alternates, was designed in under 2 months.
- ▶ Jayhawk Boulevard and Oread Avenue Reconstruction, University of Kansas, Lawrence: SK Design's role is prime consultant. This project has been phased with construction to take place in summer over a 5-year period. Phase 1 included over 3800 LF of roadway, sidewalks, replacement of utility and data lines, installation of new storm sewers, and water lines. Storm water quality will be addressed through structural Best Management Practices. A sediment forebay upstream of Potter Lake will also be designed to further improve water quality and minimize siltation of the pond. We prepared an infrastructure study that investigated options for the proposed improvements, costs associated with the improvements and prioritized the projects. The first phase of the project included storm sewers and water quality measures for Potter Lake. Phase 1b consisted of concept plans for the entire corridor, from the Chi Omega fountain to 13th Street, preparation of construction documents for Phase 1b of the project, from the Chi Omega fountain to Poplar Lane, and construction administration services for Phase 1b, and tunnel repairs. Phase 1b was completed on schedule and within budget. Phase 2 of the project is from Poplar Lane to Sunflower and includes roadway, utilities and bus stations.



SK DESIGN GROUP, INC. DIVERSITY PLAN

BACKGROUND:

- ▶ As a concept, diversity is considered to be inclusive of everyone. In many ways, diversity initiatives complement non-discrimination compliance programs by creating the workplace environment and organizational culture for making differences work. Diversity is about learning from others who are not the same, about dignity and respect for all, and about creating workplace environments and practices that encourage learning from others and capture the advantage of diverse perspectives.
- ▶ Businesses that foster an inclusive workplaces see lower turnover rates.

PLAN:

- ▶ SK Design Group fosters an inclusive workplace that combines workers from diverse backgrounds and experiences that together breed a creative, innovative and productive workforce.

- ▶ SK Design plans to perform an assessment of our diversity plan to evaluate its effectiveness. We plan to prepare a customized employee satisfaction survey for this assessment. The intent of the survey is to assist our management team to determine which challenges and obstacles to diversity are present in our workplace and which policies need to be added or eliminated. Periodic reassessment will determine the success of our diversity plan.
- ▶ SK Design Group will evaluate opportunities for incorporating cooperative/training programs that target the wide range of individual characteristics associated with a diverse workforce.
- ▶ SK Design Group is an equal employment employer and intends to abide by a policy of non-discrimination and equal employment opportunity, and requires that all employees and applicants be treated equally regardless of race, color, sex, national origin, religion, ancestry, age and physical handicap which is unrelated to the ability to perform a particular job or occupation. This policy is to apply to all company operations including, but not limited to employment, upgrading, promotion, demotion, transfer, recruitment or requirement advertising, layoffs or terminations, rates of pay or other forms of compensation, and selection for training. Please refer to the company affirmative action plan.

CURRENT ASSESSMENT OF SK DESIGN GROUP'S DIVERSITY PLAN (NOVEMBER 2013)

- ▶ SK Design Group embraces work force diversity. SK Design Group currently employs four women, one of whom is a partner of the firm, eight minorities, and two African Americans.
- ▶ SK Design Group has established a relationship with The University of Missouri Kansas City (UMKC) to help engineering students (particularly civil engineering students) with career-related internships and/or other activities within the Kansas City community. SK Design plans to contact other area universities to expand our internship program.
- ▶ SK Design Group assembles diverse project teams to support workforce diversity. SK Design Group has developed a long term relationship with local MBE/WBE/DBE firms and consistently teams with them on projects requiring additional expertise.

FAMILIARITY/CAPABILITY

- ▶ We have successfully completed the following federal projects that are compliant with federal law:
 - Trolley-Blue River Connector Trail: Federal Project STP 3301 (443), KCMO: Project clearances in accordance with National Environmental Policy Act (NEPA) included COE404 permit for bank stabilization along Indian Creek, Section 401 Water Quality Certification from MDNR, Section 106, Section 106 Historic Preservation Clearance from MDNR and Section 4F parkland clearance. The project includes a 330 foot, two-span bike/pedestrian bridge over Indian Creek. A hydraulic analysis using HEC-1 was completed and a no-rise certificate issued for the bridge.
 - United States Courthouse, Jefferson City, MO
 - Lewis and Clark State Office Building, Jefferson City, MO: SK Design incorporated storm water management measures to reduce or eliminate surface water runoff, erosion, sedimentation and flooding, which consisted of infiltration areas, bio-swales, level spreaders and pervious pavement.
 - Department of Conservation Regional Offices, Jackson County, MO
 - Upper Line Creek Valley Trail, Federal Project STP 3301 (442): Provided environmental documentation.
 - Blue River Trail, 103rd Street to Alex George Lake, Federal Project STP 3400 (412): Provided environmental documentation and no rise certificate for the bridge over the Blue River

ACCESSIBILITY

- ▶ SK Design has a proven track record of meeting or exceeding fast-track design schedules while maintaining exceptional design quality. We just completed a roadway reconstruction design project for Kansas University. This \$1.4 million, 2400 LF roadway project included portions of Constant Avenue, Irving Hill Road and 19th Street. The design was completed and the project bid in 60 days to meet their summer construction schedule. We have met similar schedules for Mick Deaver Drive and the Red Campus Chilled Waterline projects on the University of Missouri, Columbia campus. The design and bidding for Mick Deaver Drive (\$2.7 million) was completed in 90 days and the Red Campus Chilled Waterline (\$2.5 million) was designed and bid in 45.

SK DESIGN GROUP, INC. GENERAL BROCHURE

MISSOURI DEPARTMENT OF TRANSPORTATION

PROFILE

- ▶ **SK Design Group** is dedicated to providing the very best in professional engineering services to our clients. Our expertise covers a wide variety of services in the areas of civil engineering and construction administration. SK Design staff includes several LEED accredited professionals with extensive experience in projects that have achieved Silver, Gold or Platinum certification.
- ▶ Although each project is unique, **SK Design Group** incorporates sustainable engineering solutions and Best Management Practices (BMPs) into all of our projects. Our sustainable “Green Solution” approach has resulted in lower initial construction cost, greatly improved storm water quality, reduction in “Heat Island Effect”, preservation of wildlife habitat, and enhanced recreational opportunities.
- ▶ We believe that the success of each project depends on our responsiveness to our client’s needs, our commitment to our client’s budget, and our adherence to the schedule. We build strategic alliances to develop consensus, to transform the built environment, and to effect change through sustainability. We pride ourselves in our ability to bring together various corporate, institutional, community and government stakeholders. Key skills that are central to our way of doing business are good management and keeping an open line of communication.
- ▶ Thanks to our expert engineering teams, our work ethic, and our relationship-building style of management, we have an impressive following of repeat clients.

▶ **SK Design Group** offers the following professional engineering services:

Civil Engineering

Construction Phase Services

- | | | |
|-------------------------------------|-----------------------------|-----------------------|
| • Sustainable Site/Land Development | • Airfields/Airports | • Shop Drawing Review |
| • Subdivisions | • Drainage Studies | • Inspections |
| • I & I Studies | • Sanitary and Storm Sewers | • Special Inspections |
| • Highways/Roads | • Water Lines | • Coordination |
| • Pavement Design/Rehabilitation | • Parks and Recreation | • Testing |

▶ We utilize MicroStation-Geopak, AutoCAD 2014, Civil 3D 2013, AUTOTURN, HYDROFLOW STORM SEWERS, ESRI ArcGIS 10.1, HEC-1, HEC-2, HEC-RAS 3.3, HEC-HMS, TR55, AND HY-8 and other state-of-the-art computer applications. The quality of our services surpasses the industry standards. We subscribe to the philosophy of a complete design. A complete design is one which requires virtually no additional clarification during construction. This philosophy requires thorough analysis and design of all aspects of the project. All details must be worked out, and all ambiguities resolved.



CREATIVITY

We view our clients' parameters of time, budget and needs as opportunities that challenge our imagination. ▶



PERFECTION

Our vision of perfection drives us to hone our skills to better serve our clients. ▶



HARMONY

We strive to protect the natural assets of each site to enhance the project. ▶



FLUIDITY

Fluidity allows us to develop multiple solutions to every design problem, which gives our clients a variety of options to satisfy their needs. ▶

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PROJECT EXAMPLES

Site



Shoal Creek Patrol Station



New Metro Patrol Station



KCI Economy Parking

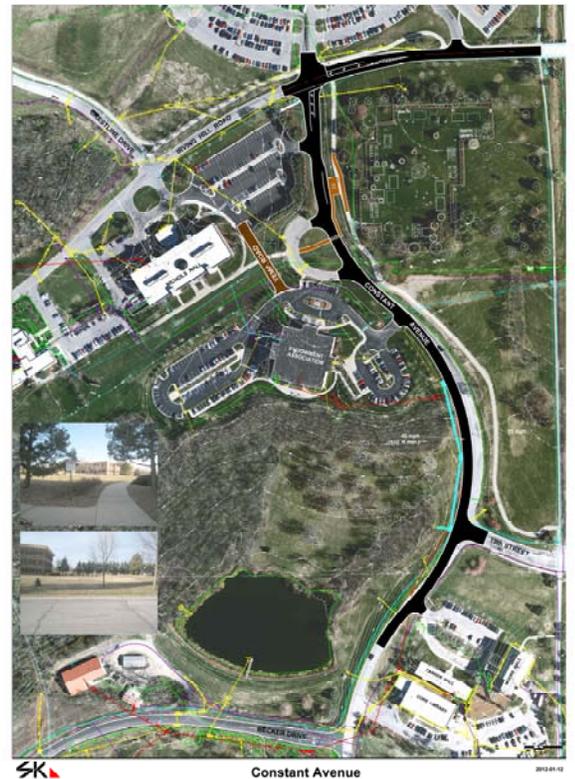


KU Park and Ride

Roadway



Mick Deaver Drive



Constant Avenue

PROJECT EXAMPLES



Tomahawk Creek Trail

Trails



Kansas University Trail



TURKEY CREEK TRAIL



Trolley - Blue River Trail

Construction Inspection and Administration



Cookingham Drive

TIGER Grant State Avenue



Constant Avenue



Munn Avenue



PERSONNEL

▶ **Sassan Mahobian, PE, LEED AP, President**

- Education:
 - MS Civil Engineering, MU
 - BS Civil Engineering, UMKC
- Registration:
 - Engineer Missouri 4 other states;
 - LEED Accredited Professional



▶ **Katereh Mahobian, PE, LEED BD+C, Vice President**

- Education:
 - MS Civil Engineering, KU
 - BS Civil Engineering, UMKC
- Registration:
 - Engineer Missouri
 - LEED Accredited Professional, Building Design and Construction



▶ **John Chamberlin, PE, RLS, Director of Engineering**

- Education: MS and BS Civil Engineering, KU
- Registration: Engineer, Missouri and Kansas, Land Surveyor, Kansas



▶ **Greg Lee, Director of Business Development, Public Involvement Specialist, Small Missouri Communities**

- Greg has over 30 years of experience in working with small Missouri communities



▶ **Gary M. Urkevich, PE, RLS, Senior Project Manager**

- Education MS Water Resources Engineering, BS Civil Engineering, KU
- Registration: Engineer, Missouri and Kansas; Land Surveyor, Missouri and Kansas



▶ **Tim Burfeind, PE, LEED AP, Senior Project Manager**

- Education: MS and BS Civil Engineering, KU
- Registration: Professional Engineer, Kansas; LEED Accredited Professional



▶ **Stephen Brefo, PE, Project Manager**

- Education: MS Civil engineering, Moscow School of Engineering
- Registration: Engineer, Missouri



▶ **Nader Gachkar, Project Manager**

- Education: BS Civil Engineering, Islamic Azad University, Tehran, Iran



▶ **Matthew Kist, PE Project Manager**

- Education: BS Civil Engineering, MU
- Registration: Engineer in Missouri



▶ **Pejmon Mahobian, Project Engineer**

- Education: BS Civil Engineering, KU



▶ **Christopher Francisco, AIA, NCARB, Field Architect**

- Education: BA Architecture, KU
- Registration: Architect in Missouri.



▶ **Ron Andrascik, Field Project Manager**

- Experience:
 - SK Design Group, Inc., May, 2008 to present. Construction Inspection on several projects:
 - Pennsylvania Department of Transportation, Pittsburgh, PA 1969 – 1999



▶ **Don Pepper, PE, Field Project Manager**

- Education: MS Civil Engineering, Construction Management, MU
- Registration: Engineer, Missouri and Kansas



▶ **Rajan Desai, Civil Engineering Technician**

- Education:
 - Assoc. Degree Civil Engineering, S.K.J. Polytechnic Branch, India
 - CAD Courses, Cuyahoga Community College, OH



▶ **Tonya Crockett, Civil Engineering Technician**

- Education: Lincoln University, Jefferson City, MO



▶ **Shohreh Nader, Civil Engineering Technician**

- Education: BS Environmental Architecture, Purdue University

