April 24, 2015

LEAVENWORTH COUNTY SALES TAX PROJECTS

County of Leavenworth , Kansas - Department of Public Works

WILSON & COMPANY

discipline | intensity | collaboration | shared ownership | solutions

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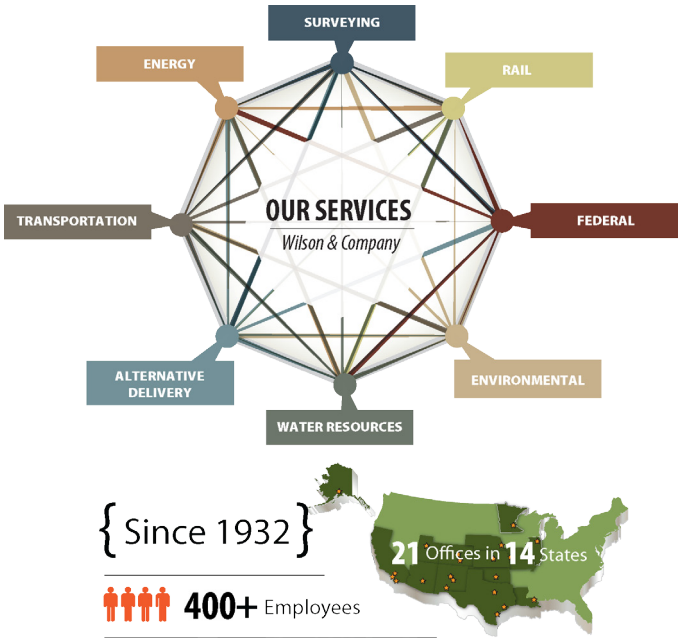
WILSON & COMPANY

Overview of Firm

Our team is excited about the challenges and opportunities this project represents. To act as an extension of the County's staff, we have assembled a responsive project team with the experience, contingency planning, concept skills, and training to tackle any assignment related to the Leavenworth County Sales Tax Projects.

Founded in 1932, Wilson & Company, Inc., Engineers & Architects serves private and public clients with sound design solutions. With offices in 14 states, we provide services to industrial and commercial corporations, private developers, energy and railroad companies, federal and municipal governments, public transportation agencies, institutional, primary and secondary education, and healthcare companies. The company is ranked #179 in Engineering News Record's Top 500 Design Firms in the United States. The cornerstone of our success is Higher Relationships, standards of excellence in Discipline, Intensity, Collaboration, Shared Ownership and Solutions. These values define our approach when working with clients. Our staff of 400+ professionals includes mechanical, electrical, rail, civil and structural engineers; architects; planners; biologists; surveyors; GIS mapping specialists; construction managers; and inspectors.



Kansas City, Missouri Office

Our Kansas City staff of 58 employees provides design and planning support on a wide range of municipal projects throughout the region. Our expertise in completing projects of similar scope and the specialized experience of key team members allows us to submit this statement of qualifications with a high level of confidence that we will meet the project goals with excellence.

Wilson & Company, Inc., Engineers & Architects
800 East 101st Terrace, Suite 200
Kansas City, MO 64131
Ph: 816-701-3100

Coordination with KDOT

A large portion of the transportation design work completed by Wilson & Company has been directly for the Kansas Department of Transportation or for cities and counties on KDOT administered projects. This experience has allowed our staff to become knowledgeable with KDOT's personnel and design procedures. Wilson & Company's working relationship with KDOT will help avoid any delays during the design and construction phases of your project.


2013


2011


2013


2011

2011 - 2013 KLINK – Leavenwoth, Kansas

Client Contact:

Mike McDonald, PE
Director of Public Works
City of Leavenworth
100 North 5th Street
Leavenworth, Kansas 66048
(913) 684-0375
mmcdonald@firstcity.org

Total Project Cost (and/or construction cost):

$330,335

Wilson & Company Fee:

$34,470

Wilson & Company provided professional design services for the development of final plans, special provisions, and estimates for the 2011 and 2013 KLINK improvements.

2011 KLINK

- K-7 Highway (Fourth Street) from Spruce Street to Walnut Street
- K-7 Highway (Fourth Street) from Shawnee Street to Pottawatomie Street
- K-92 Highway (Spruce Street) from 10th Avenue to Central Avenue.

2013 KLINK

- K-7 Highway (Fourth Street) from Pennsylvania Street to Rees Street
- K-92 Highway (Spruce Street) from Sixth Street to K-7 Highway.

These improvements included a total of 0.55 miles (2,900 feet) of four-lane arterial roadway section located within a commercial district of the City. Wilson & Company worked with the City to develop a traffic control plan that not only maintained traffic throughout the duration of construction, but also was acceptable to the Kansas Department of Transportation. In addition to the mill & overlay, the existing sidewalk ramps were replaced to meet ADA requirements. As a cost saving method, we utilized the City/County lidar data supplemented with field survey hard shots as needed for the design of the ADA ramps. Our design approach to this retrofit project was to provide distances and slopes that met ADA requirements rather than spot elevations. This provided the contractor with the flexibility to adapt to existing field conditions by adjusting elevations, therefore significantly minimizing the construction cost.

2010 – 2014 Sidewalk Improvements – Leavenworth, Kansas

Client Contact:

Mike McDonald, PE
Director of Public Works
City of Leavenworth
100 North 5th Street
Leavenworth, Kansas 66048
(913) 684-0375
mmcdonald@firstcity.org

Total Construction Cost:

$400,000 (est)

Wilson & Company Fee:

$54,000

Wilson & Company was selected by the City of Leavenworth to provide professional design services to develop final plans, special provisions, and estimates for their sidewalk improvements program from 2010 through 2014. The various projects included a combination of new sidewalk to infill missing segments and repair of existing sidewalks that had broken panels or trip hazards. These projects provide pedestrian connectivity by linking existing sidewalks to parks and schools located along each segment.

The City identified the following design goals for the project:

- Identify the best route to construct the sidewalk considering connectivity, cost, property and utility impacts.
- Construct the sidewalk within the existing right of way with minimal easement acquisition.
- Minimize property impacts to existing trees, landscaping, and yard grading.
- Design the sidewalk in accordance with ADA guidelines.
- Minimize utility impacts.
- Keep the project on schedule.

To accomplish these goals, Wilson & Company prepared a preliminary engineering study (PES) using a common sense approach to evaluate connectivity, costs and impacts. Together, with the Leavenworth sidewalk committee, alternatives at each location were analyzed and proposed sidewalk locations were selected. Using survey, field investigations, and early coordination with utility companies, the final location of sidewalks were selected. Adjustments to the sidewalk horizontal and vertical location were made to avoid large trees, utilities and impacts to residential landscaping. Retaining walls along the back of the sidewalk were utilized where appropriate to minimize grading impacts to residential properties and right-of-way acquisition.

ADA compliance is especially challenging in retro-fit projects when constructing improvements adjacent to existing roadways in fully developed neighborhoods. Therefore, special consideration was given to ADA curb ramps at intersections and grades along the sidewalk. Curb returns were reconstructed where necessary to improve the curb ramp and roadway layout.

By working with the City through right of way acquisitions issues, coordinating early with utilities, and utilizing a common sense approach to the project design, Wilson & Company was able to successfully meet the City's project goals and get the project to construction on schedule.

Bittersweet Street Extension – Lansing, Kansas

Client Contact:

John Young, LS
Public Works Director
City of Lansing, Kansas
730 First Terrace, Suite 3
Lansing, KS 66043
(913) 727-2400
(913) 351-3618
jyoung@lansing.ks.us

Total Construction Cost:

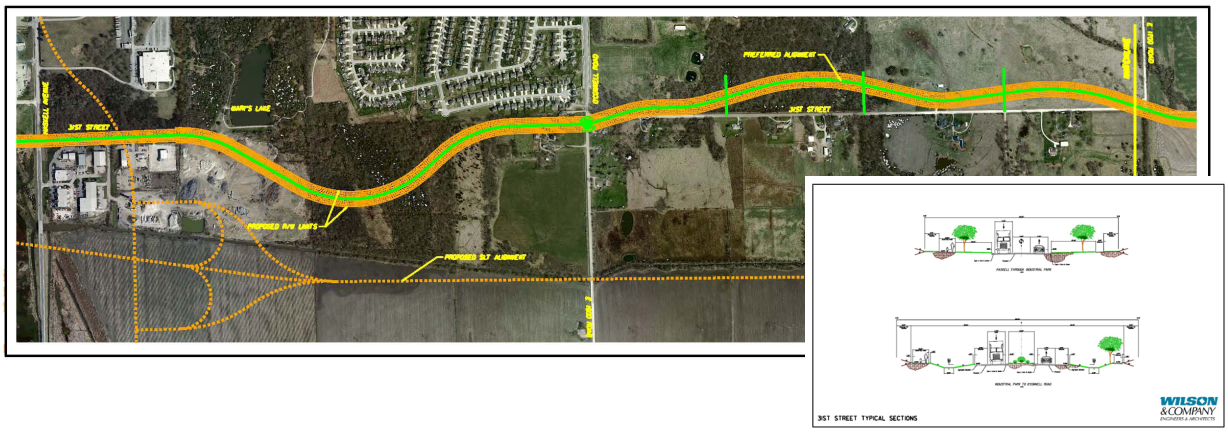
$1,453,149.85

Wilson & Company Fee:

$163,944

Wilson & Company was contracted by the City to design a 2-lane major collector street to extend the existing Bittersweet Street south to West Mary Street. This street extension was necessary to provide a vehicular and pedestrian connection between the existing Lansing Middle School and the newly constructed Lansing Elementary School. Other elements of the design included street lighting, pedestrian trail access points, storm drainage improvements, and an underground casing to accommodate a future sewer main extension.

The project also included the design and preparation of contract documents for a 3-span, 312-foot bridge to carry Bittersweet Street traffic over the 7-Mile Creek floodway. The bridge accommodates pedestrian and bicycle traffic by providing a 10-foot wide walkway along the east side of the structure. Ornamental pedestrian fencing was incorporated to enhance the visual appearance of the bridge. To minimize initial project costs and long-term maintenance issues, prestressed concrete beams with a cast-in-place concrete deck proved to be the most practical bridge solution.



31st Street Improvements– Lawrence, Kansas

Client Contact:

Chuck Soules, PE
Public Works Director
City of Lawrence
PO Box 708
Lawrence, KS 66044-0708
(785) 832-3123
csoules@ci.lawrence.ks.us

Total Construction Cost:

$4.9M (estimated)

Wilson & Company Fee:

$383,870

Wilson & Company was contracted by the City to of Lawrence to design a two-lane arterial roadway that could be easily widened to four-lanes as future traffic volumes dictate. By utilizing the existing terrain and reducing the design speed, impacts to adjacent properties were minimized. This roadway provides a vital east/west connection for the City of Lawrence.

The 31st Street Improvement project is the first part of a multi-phase construction project resulting from a 4.0-mile long Concept Planning Study recently completed by Wilson & Company for the City of Lawrence and Douglas County. The 31st Street corridor plan was developed to provide a project "footprint" that will handle the future traffic volumes resulting from development, provide a safe roadway for pedestrian and bicycle usage, and incorporate other "soft design" issues where practical. The design of a roundabout at the intersection of 31st Street and O'Connell Road was selected by the Community Steering Committee as a result of the public input using a Context Sensitive Solutions approach. The single-lane roundabout design required considerations for street lighting, pedestrian trails, and future landscaping.

The proposed 1.2-miles of arterial roadway improvements for 31st Street include sidewalks, trails, streetlights, storm drainage, storm water quality elements, landscaping, auxiliary lanes where needed, extension of the existing water distribution main, coordination with the proposed sanitary sewer improvements, and utility coordination. Additionally, Federal funds were utilized for construction with the project being administered by the Kansas Department of Transportation.

Pedestrian and Bicycle Facility Design:

Construction plans were prepared for approximately 3,800' of hike and bike path as part of the 2-lane roadway extension of 31st Street from Haskell Avenue to O'Connell Road. The path consists of 10-foot wide concrete and parallels the north side of 31st Street. The path will have future connections to Mary's Lake, Prairie Park, and the future Burroughs Trail.

Prairie Star Parkway Improvements Lone Elm Road to K-7 – Lenexa, Kansas

Client Contact:

Tim Green, PE
Deputy Director, City Engineer
12350 West 87th Parkway
Lenexa, KS 66215
(913) 478-7661
(913) 477-7689 fax
tgreen@ci.lenexa.ks.us

Wilson & Company provided engineering services for road and bridge improvements associated with the construction of approximately one mile of four-lane divided roadway from Kansas Highway 7 to Lone Elm Road. This parkway serves as the City's western "gateway" into the City. As a result, aesthetics and the associated streetscape theme was a very important aspect of the design. Unique features include the construction of a utility duct bank to allow all existing and future utilities to remain underground; the first roundabout intersection in Lenexa; hike and bike trail with access points to the proposed Coon Creek hike and bike trail; street and trail lighting; Coon Creek re-alignment; bridges over Coon Creek; and extensive streetscape treatment.

Bridge design services provided as part of Wilson & Company's roadway design include twin 110-foot three-span (33'-44'-33') reinforced concrete haunched slab structures for this city-funded project. While the new structures were located side by side, each required independent design and detailing. One structure included a continuous left turn lane and 10' bike path while the other included a pedestrian sidewalk. Ornamental pedestrian/bikeway rails were designed for aesthetic enhancement.

Services included field surveys; hydraulic field investigations, design and scour analysis; roadway grading, surfacing and drainage design including hike and bike and streetscape features; roadway lighting design; permitting; bridge superstructure and substructure design; preliminary and final plan preparation; quantity and construction cost estimates; and construction engineering services. The design also required both short-term and long-term intersection and interchange geometrics using appropriate traffic projections; analysis of access control issues; analysis of a regional storm detention facility; right-of-way management techniques; and coordination with all utility companies.

Monticello Road Improvements – Lenexa, Kansas

Client Contact:

Tim Green, PE
Deputy Director, City Engineer
12350 West 87th Parkway
Lenexa, KS 66215
(913) 478-7661
(913) 477-7689 fax
tgreen@ci.lenexa.ks.us

Wilson & Company was contracted by the City to design a two-lane minor arterial roadway utilizing the existing terrain by using reduced design speed and traffic calming devices. This roadway is the major entryway into the City of Lenexa's new Lake/Park facility. The City of Lenexa worked with another local consultant in finalizing the design of the lake footprint and its public amenities. Once the lake/park features were determined, the roadway alignment was finalized along with the roadway, bridge, and trail components near Coon Creek.

The project included water quality features including bio-linear retention swales and sediment forebays that worked hand-in-hand with the proposed lake project. Therefore, we were able to design a seamless water quality control system for the client. The design team also provided project aesthetics along the roadway, within the roundabouts, at the park entrance, and the ends of the bridge. The design included both hard and soft design components. A unique element of the final design was the addition of architectural enhancements to the bridge. These additions included architecturally styled street lighting, cantilevered walkways over the lake, bridge railing upgrades, and hardscape features at the ends of the bridge.

The engineering performed by the Wilson & Company staff included the design of the bridge over Coon Creek, the design of the four roundabouts, a hike/bike trail along with the pedestrian sidewalks, and approximately 1.8 miles of two-lane minor arterial roadway.

Team Members

Wilson & Company will commit all necessary staff and resources for the successful completion of assignments issued under the Leavenworth County Sales Tax Projects. We are committed to providing Leavenworth County with the most qualified team of professionals dedicated to delivering a quality product that exceeds all of your expectations and requirements.

Ric Johnson— Wilson & Company

Project Manager

PE KS #11107 | B.S., CIVIL ENGINEERING, UNIVERSITY OF KANSAS

Ric has 30 years of engineering experience in the areas of transportation, water, wastewater, drainage, site development, and construction observation. This combination of field experience and design has given him a unique awareness of constructability issues that when addressed during the design phase, optimizes the project's goals and objectives. He has also served as City Engineer under contract for three municipalities. This distinctive opportunity allowed him to work closely with City staff, Councils and Commissions, Boards, Planning Commissions, and various sub-committees.

Ric has been involved in several context sensitive solution projects where a more practical approach to decision-making and design was considered. This design approach reviews impacts to the community, preserves the environment, provides scenic and aesthetic value where possible, while balancing the project need with other desirable outcomes, including historic preservation, environmental sustainability, and the creation of public spaces.

Relevant project experience includes:

- 2010, 2011 and 2013 KLINK Improvements — Leavenworth, KS. Project Manager.
- 31st Street Design Improvements —Lawrence, KS. Project Director.
- Monticello Road Improvements — Lenexa, KS, Project Director.
- Chipman Road Alignment Study — Lee's Summit, MO, Project Director.
- East Pearl Street Improvements — Harrisonville, MO. Project Director.
- 343rd Street — Miami County, KS. Project Manager.
- 223rd Street Grade Separation — Miami County, KS. Project Director.
- 255th Street Improvements — Miami County, KS. Project Manager.

Troy M. Eisenbraun, PE– Wilson & Company

Quality Control/Quality Assurance

PE KS #10205 | B.S., CIVIL ENGINEERING, SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

Mr. Eisenbraun is responsible for the oversight of our Kansas City, Missouri office, and directs the transportation design staff serving state and local clients in Kansas, Missouri, Nebraska and Oklahoma. During his tenure at Wilson & Company, Troy has served as Design Engineer, Project Engineer, Project Manager and Principal-in-Charge on a variety of urban and rural transportation projects, as well as site development and other civil engineering assignments. His experience ranges from residential street and intersection design to development of construction plans for major highway and interstate reconstruction projects. Troy remains actively involved in our major location study and design projects, assisting with the development of conceptual designs, quality control, and public information activities.

Among his other duties, Troy leads the firm's internal project and quality management group that is responsible for the development and implementation of processes and tools to improve project delivery. The group develops and provides training to project managers on; project planning and execution, financial management, and quality control and assurance. The group is also responsible for conducting random quality assurance audits on projects throughout the company. Relevant project experience includes:

- K-14 Cow Creek Discovery Phase Study – Rice County, KS. Project Manager
- US-40 Mini Discovery Phase Studies – Wallace County, KS. Project Manager
- K-27 Four Lane Urban Reconstruction – Syracuse, KS. Principal-in-Charge.
- US-56 Four Lane Urban Reconstruction – McPherson, KS. Principal-in-Charge.
- K-14/K-96 Highway Improvements – Rice County, KS. Principal-in-Charge.

Justin C. Klaudt, PE– Wilson & Company

Design Engineer

PE KS #17235 | B.S., CIVIL ENGINEERING, KANSAS STATE UNIVERSITY

Justin joined Wilson & Company's Civil Engineering Division in 1998. His proficiency is in general civil engineering and utility coordination services. He has been involved in various projects for municipal, county, state and federal clients. Justin has served as Project Manager, Project Engineer, or Design Engineer on many projects including sanitary sewer main extensions, water main extensions, drainage improvements, site development projects, street and highway improvements, new street designs, and federally funded street improvements. Also, with experience as a construction observer, he is able to lend a unique insight during the design phase of the project in order to meet the desired goals. Relevant project experience includes:

- 20th Street Streetscape Design-Build (Southwest Boulevard to McGee Street) – City of Kansas City, MO. Project Manager.
- Cherokee Street Bridge Replacement – City of Leavenworth, KS. Project Manager.
- Ottawa Street Improvements – City of Leavenworth, KS. Project Manager.
- Phase V & IV Walking Trail – City of Bonner Springs, KS. Project Manager.
- 2009-2015 KLINK Overlay – City of Leavenworth, KS. Lead Design Engineer
- 2010-2014 Sidewalk Improvements – City of Leavenworth, KS. Lead Design Engineer.

Steve G. Wilton, PE – Wilson & Company

Bridge

PE KS #9631 | B.S., CIVIL ENGINEERING, KANSAS STATE UNIVERSITY

Steve specializes in bridge design and leads Wilson & Company's Bridge Design Services in Kansas and Missouri. He has been involved in conceptual studies, structure type studies, preliminary and final design, preliminary and final plan preparation and designer construction services for many local public agency and state bridge improvement projects. Steve has been involved in QA/QC management, design and design supervision of bridges for highways, heavy rail, and pedestrian applications. Steve has served as Project Manager, Project Engineer and Design Engineer responsible for bridge/transportation structure design activities for over 30 years. His highway bridge design experience includes single and multi-span welded plate girder, structural steel beam, prestressed concrete beam and cast-in-place reinforced concrete slab, box culvert bridges and, more recently, post-tensioned cast-in-place concrete slab bridges. His experience is not only in bridges, but all types of transportation structures including retaining walls and drainage structures. Relevant project experience includes:

- US-56 Highway Reconstruction – McPherson County, KS. Senior Bridge Engineer.
- K-84 Highway Improvements – Graham County, KS. Project Engineer.
- Ash Street Bridge Improvements – Newton, KS. Project Engineer.
- K-96 Location Study – Reno and Rice Counties, KS. Project Engineer.
- K-61 Highway Improvements – Reno County, KS. Project Engineer.

Michael Lindquist, RLS – Wilson & Company

Survey

PLS KS #1439 |COURSEWORK, KANSAS STATE UNIVERSITY

Since joining Wilson & Company in 2007, Michael has worked as a Surveyor, Survey / CADD Technician and Project Manager. Previously, he served as Project Manager, Crew Chief, and CAD Technician on many surveying projects that include construction staking, boundary surveys, building layout, ALTA surveys, platting, and preliminary design surveys. He is knowledgeable and experienced in the operation of a variety of field instrumentation and office software including the total station, electronic data collectors, RTK GPS systems, and AutoCAD Civil 3D. Relevant project experience includes:

- K-23 Bridge Surveys – Kansas Department of Transportation – Sheridan County, KS. Survey Manager.
- K-96/K-14 Bypass Engineering and Design Survey – Kansas Department of Transportation, Rice County, KS. Survey Manager.
- K-96/K-14 Bypass Engineering and Design Survey – Kansas Department of Transportation, Reno County, KS. Survey Manager.
- US-50 Passing Lane Engineering and Design Survey - Kansas Department of Transportation, Chase County, KS. Survey Manager.
- US-400 Passing Lane Engineering and Design Survey - Kansas Department of Transportation, Wilson County, KS. Survey Manager.

Shad McCartney – Wilson & Company

Construction Inspection

CI CONCRETE FIELD TECHNICIAN #01214547 – GRADE I |DIPLOMA, ENGINEERING TECHNOLOGIES, NORTHWEST KANSAS AREA VOCATIONAL TECHNICAL SCHOOL

Shad has almost 20 years experience dealing with constructability issues as a construction inspector, construction estimator, and contractor's foreman. This combined experience gives our team a comprehensive perspective that will ensure our designs can be built correctly, efficiently and responsibly. In an effort to improve efficiency and timeliness of field reporting, Shad developed the current electronic forms that Wilson & Company currently uses to document field observation reports, test data, and other key documents that are needed by the Contractor and the Client. Relevant project experience includes:

- KCMO Downtown Streetcar – Kansas City, MO. Construction Manager.
- Wornall Road Construction Management – Kansas City, MO. Construction Observer.
- Design-Build Support Services – Kansas City, MO. Preconstruction Reviewer.
- Front Street Roadway Improvements – Kansas City, MO. Construction Manager.*

** Projects completed prior to joining Wilson & Company.*

Project Schedule

Time and time again, we hear from our clients that the Wilson & Company project managers are "responsive". They return phone calls; they work closely with the client's staff in response to questions and concerns; they go above and beyond when working with the project stakeholders by meeting with them at their convenience even if that may be over the weekend.

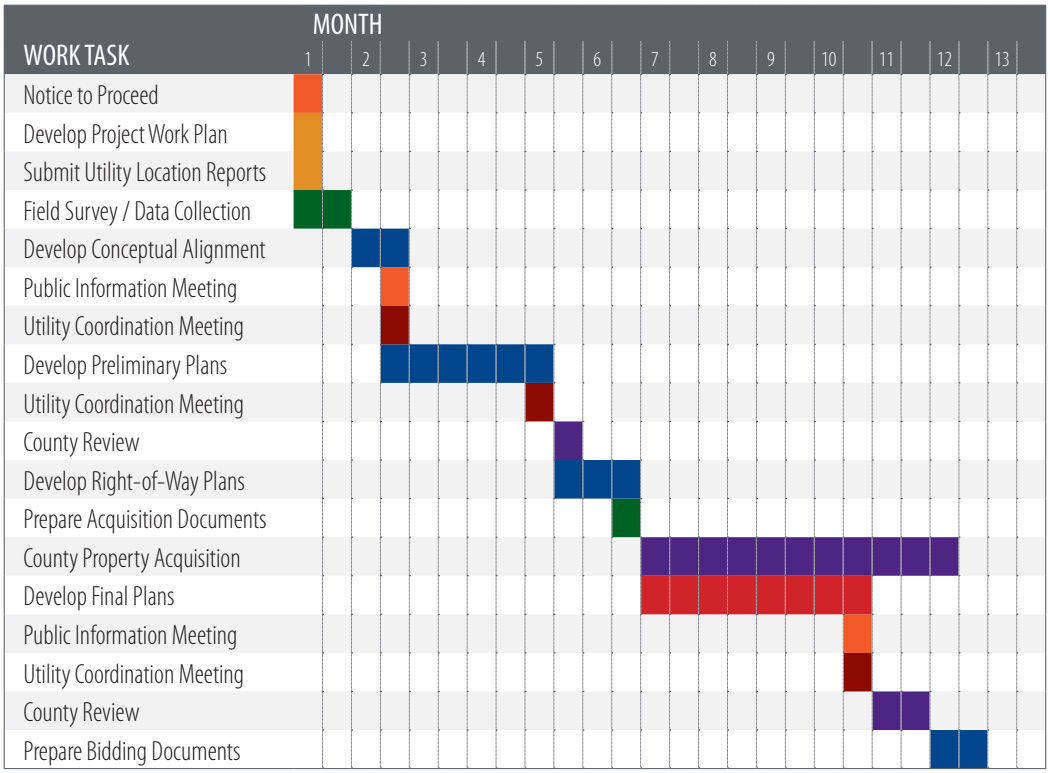
Based on our current backlog and project assignments, we will be completing two major assignments soon that will allow us to dedicate our proposed project team, including junior staff to meet your schedule requirements.

Most consultant firms claim to be a "partner" when it comes to communities. Communication is one thing, but consistently meeting project goals is another. But when it comes to being "accountable", the majority of consultants find excuses. All good consultants strive to eliminate errors and omissions on plans, reports, and design. Our commitment to leavenworth county and the project stakeholders includes:

- Providing a senior project manager (Ric Johnson) with a diverse civil engineering background and a strong project team that is available for meetings, joint field work, and other combined efforts at the request of the county;
- Delivering work products to the county in a timely manner; and
- Communicating with county staff in an expedient, responsive manner.

As always, you will have direct access to Ric Johnson and key members of the project team regarding issues that are pertinent, including reviews, updates, concerns, field related issues, and personnel. We recognize that expediency and responsiveness are critical to successfully completing your project or task. The graphic on this page shows the major project tasks for a typical roadway project and the associated time requirements. Allowing sufficient time for plan submittal reviews, utility coordination, and public involvement, any of the three projects noted in the county's RFQ could be completed in 12 to 15 months.

LEAVENWORTH COUNTY TYPICAL ROADWAY PROJECT SCHEDULE

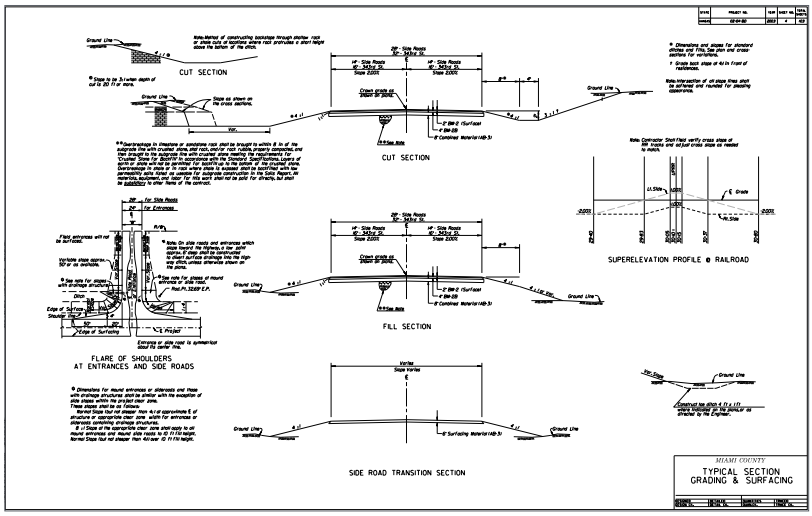


Experience With Similar Projects

The proposed list of projects will provide a fundamental improvement, including safety for current and future traffic circulation, within the County. As noted in a discussion with County staff, each project has its own unique list of issues and challenges ranging from:

- Vertical alignment to improve safety.
- Accessibility for residents and local businesses during construction.
- Utility coordination, including the recognition of cost impacts with private utility easements.
- Right-of-way and easement acquisition.
- Public involvement

Our proposed project team has gained experience in dealing with each of these issues from completed assignments ranging from KDOT highway improvements to major urban arterial projects to county road reconstruction projects. The diversity of work and experience gained through working with the cities of Lansing and Leavenworth will be an asset to Leavenworth County. In reviewing each of the sites, we believe that there are three key goals that need to be met to make these project successful.



- Provide a cost-effective, context sensitive solution for the county for current and future traffic patterns.
- Utilize the approach of avoid, integrate, mitigate (aim) when dealing with the existing utilities.
- Recognize and work with the county for the acquisition of right-of-way and easements as needed in an efficient manner.

The project development process needs to take into consideration that what we do impacts individuals, businesses, and the community as a whole. It is our responsibility, as the County's design professional, to ensure that this impact is positive. Our proposed project team is very proud of their ability to design these types of roadway improvements with the correct perspective.

Field Survey and Data Collection

Our survey approach is divided into the following project topics:

- Ownership surveys
- Design and topographic surveys

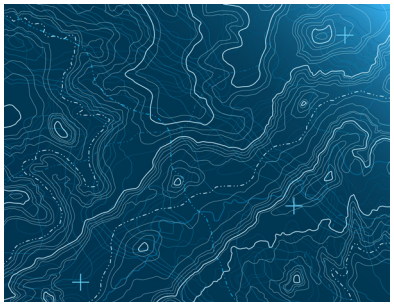
All surveying and related services will meet the standards for property surveys in the state of Kansas.

Ownership Surveys

When performing ownership surveys, Wilson & Company will provide three basic technical steps:

1. Title reports — One of the key components to keeping a project on schedule is to ensure that title reports and upfront research is prepared as early as the affected parcels can be identified. By obtaining title reports early, the maps will accurately represent any encumbrances that may affect the subject parcels and will also eliminate numerous revisions to the right-of-way maps.
2. Monument locations — After the properties are defined, our crews will perform a diligent search for monuments that define the right-of-way, private easements (if any), and property lines. These monuments and any evidence of occupation, including fences, will be located. It is also a very important responsibility for the field surveyor to locate all other features that may reflect on the value of the properties. Fence locations, utility poles, walls, structures, septic tanks, wells, and existing easements will be located as these features may affect the property value.
3. Ownership preparation — Upon completion of monument search, we will prepare a preliminary boundary compilation determining the existing boundary and easements encumbering the property. For right-of-way surveys, we will determine a survey centerline to utilize as the alignment for the maps. Right-of-way maps will be prepared as per the minimum standards for property surveying in Kansas. The right-of-way maps will serve as the base map for acquisition and final right-of-way certification.

Design and Topographic Surveys



For design and topographic surveys, our surveyors could utilize a combination of RTK, total stations and/or static LiDAR. Each of these are powerful tools for both sparse and remote areas as well as dense city and town sites when used correctly.

The following are important when providing these types of services:

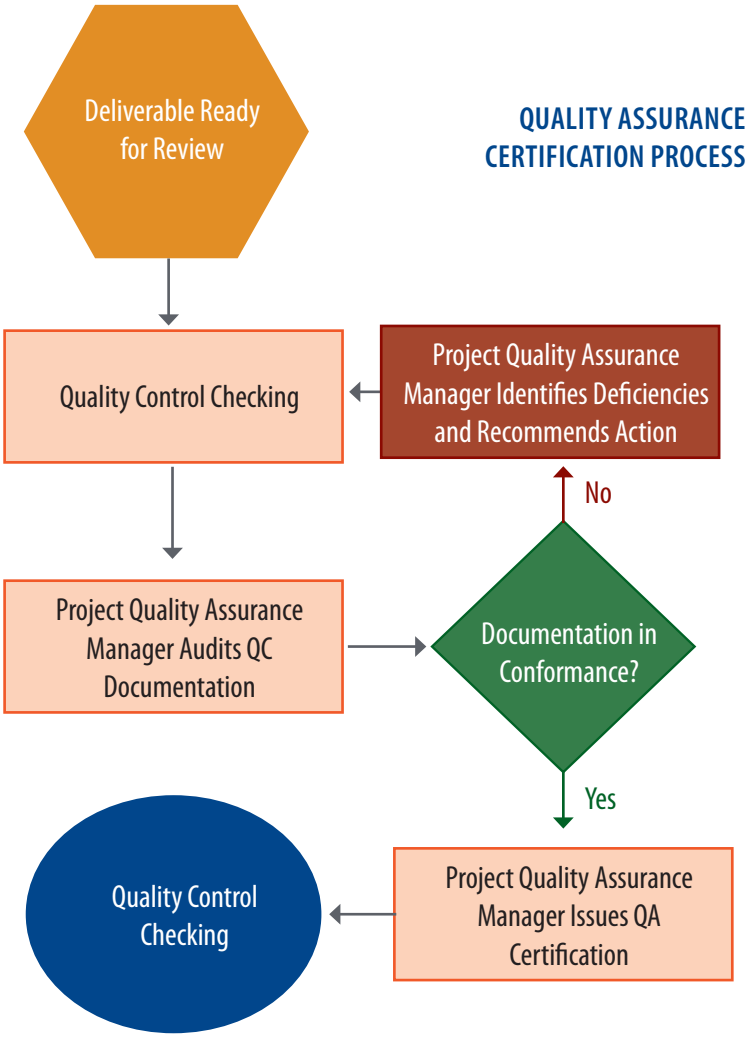
1. Digital terrain modeling — Our surveyors are trained in defining "breaklines" that define the actual breaks in the topography. We typically locate these is a cross-sectional format. Spot elevations are obtained in a grid format usually at 50-foot intervals for one-foot contours or dependent upon the terrain. Cross sections shall be obtained at a minimum 50-foot interval.
2. Utility locating — Prior to beginning any design survey, a telephone call is placed to Kansas One-Call requesting utility spots. Visible utilities such as water valves, manholes, vaults, overhead electric, fire hydrants, and underground utilities defined by spots are located. Actual planimetric lines are drawn in the field connecting the utility spots. Manholes are opened, and inverts and pipe sizes are measured.
3. Structures — Existing inlets, pipes, and box culverts are detailed by locating the inverts, abutments, pipe sizes, and materials. Planimetrics are located and incorporated into the electronic file. Photographs and sketches are recorded and provided as a deliverable.
4. Planimetric features — Existing planimetric features such as fences, edge of roads, curb and gutter, buildings, finished floor elevations, sidewalks, trees, and shrubs are located and provided as part of the design survey as "existing conditions".

Thorough Roadway Design (i.e. Quality Assurance)

The first step of an effective communication plan is to have a thorough understanding of the project goals. Ric Johnson will use the information from the County staff and contract negotiations to develop a detailed Project Work Plan (PWP). This will be completed prior to the start of any work on your project. The PWP will cover the contract, correspondence, design issues and criteria, budgeting requirements, CADD procedures, calculation procedures, and any specific project issues. The PWP will also detail the specific work tasks to be completed in each phase of the project, as well as establish the milestones, deadlines, deliverables, and project schedule. The PWP is reviewed during an internal project kickoff meeting with each member of the design team, including the county. This process ensures that every member of the design team knows the project goals and the process to achieve them.

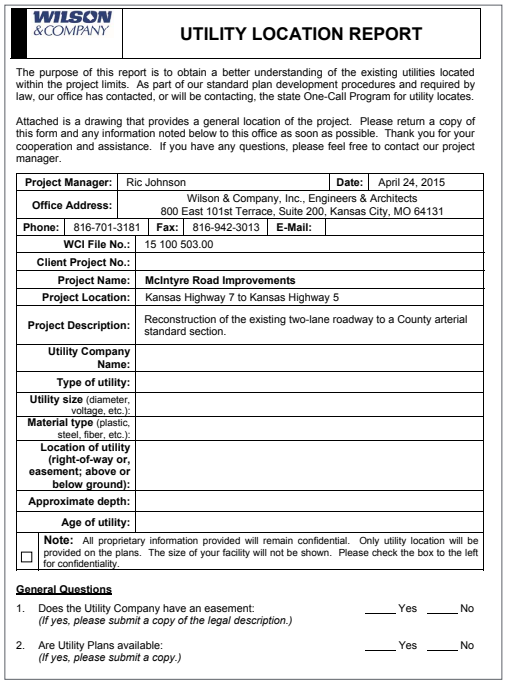
Effective communication during the project can be a stumbling block for some consultants. Due to the varied issues of this project, our file management system software called ProjectWise™ be an asset to the County. This software comes with a partnering component that will allow direct access by the County to access project plans, design calculations, quality control documents, reports, permitting, correspondence, and other project specific subdirectories as requested by the County. We are currently using this process on a Miami County bridge replacement over the Marias Des Cygnes River. In addition, we could provide bi-weekly project progress reports.
The report would cover work completed, work to be completed, project issues that require resolution or input, identification of work items that could impact the anticipated construction costs, and review of the upcoming milestone submittals. Our Monticello Road project had similar issues with a constrained budget and plans there were reviewed by the KDOT bureau of local projects.

Our Quality Management process begins with initial planning for the project's execution. Each project requires a Management Plan that includes a detailed description of the QA/QC process to be utilized to check the accuracy and completeness of design calculations, drawings, reports and specifications. Per company policy, a Quality Assurance Manager (QA Manager) is designated for each project. His/her primary responsibility is to audit the QC documentation and release the deliverables for submittal to the client, provided the project plan's quality management plan has been satisfactorily met.



Utility Coordination

Our approach to utility coordination revolves around strategic meetings. Underground utilities are, by their nature, hidden from view and sometimes difficult to accurately locate. Without careful research and data collection, underground utilities that are not discovered during the design phase will usually result in construction delays and increased costs. Our approach to utilities has been and will continue to be Avoid, Integrate, and Mitigate (AIM). The time and effort spent in working with the utility companies can save the county time and possible costs by identifying options to integrate their facilities into the design. Shifting the alignment to avoid a series of power poles or paving over a length of rural water main can be a simple fix versus potential delays caused by utility relocations.



WILSON & COMPANY

UTILITY LOCATION REPORT

The purpose of this report is to obtain a better understanding of the existing utilities located within the project limits. As part of our standard plan development procedures and required by law, our office has contacted, or will be contacting, the state One-Call Program for utility locates.

Attached is a drawing that provides a general location of the project. Please return a copy of this form and any information noted below to this office as soon as possible. Thank you for your cooperation and assistance. If you have any questions, please feel free to contact our project manager.

Project Manager:	Ric Johnson	**Date:**	April 24, 2015
Office Address:	Wilson & Company, Inc., Engineers & Architects 800 East 101st Terrace, Suite 200, Kansas City, MO 64131		
Phone: 816-701-3181	**Fax:** 816-942-3013	**E-Mail:**	
WCI File No.:	15 100 503.00		
Client Project No.:			
Project Name:	**McIntyre Road Improvements**		
Project Location:	Kansas Highway 7 to Kansas Highway 5		
Project Description:	Reconstruction of the existing two-lane roadway to a County arterial standard section.		
Utility Company Name:			
Type of utility:			
Utility size (diameter, voltage, etc.):			
Material type (plastic, steel, fiber, etc.):			
Location of utility (right-of-way or, easement; above or below ground):			
Approximate depth:			
Age of utility:			

☐ **Note:** All proprietary information provided will remain confidential. Only utility location will be provided on the plans. The size of your facility will not be shown. Please check the box to the left for confidentiality.

General Questions

1. Does the Utility Company have an easement: ____ Yes ____ No
   (If yes, please submit a copy of the legal description.)
2. Are Utility Plans available: ____ Yes ____ No
   (If yes, please submit a copy.)

Through the years, communities have been frustrated by lack of apparent, active participation in project improvements by the utility companies. Many times this lack of progress is due to the consultant not "engaging" the utility companies early in the design process. In 2000, Wilson & Company developed a Utility Location Report form in an effort to gather information and formally demonstrate the desire of the City/County to work with affected utility companies. Evolving over the years, this form has been successfully used on all roadway improvements projects completed by this office.

The form will be mailed to all utility companies identified through the Kansas One-Call system, including others identified by the client that could have facilities within the project area. The information requested includes contact names and telephone numbers during design and construction; information about the size, depth and age of the existing utility; request for any maps and/or private easement information; and specific limitations that may need special attention during the design process (i.e. Distance between other utilities). Our goal is to obtain this information while the surveyors are gathering field information. The maps that we can obtain from the utility companies are beneficial in conjunction with the field locates to supplement the marks that can be less than comprehensive that are obtained using the One-Call design locates.

From our visit of the project site, we noted that there are rural water mains, overhead power, telephone lines, and gas located within the project corridors. For example, on the 147th street project, we are concerned that the overhead power located on the west side of the roadway. In some locations, the grades at the location of the power poles are well above the elevation of the existing roadway. If the roadside grading impacts these facilities, we could adjust the backslope, coordinate with the utility company to set new, deeper poles adjacent to the old poles that would allow for future grading and ease of transferring utilities. In fact, the substation located on the southwest corner of the leavenworth road intersection could impact the intersection sight distance. Adjusting the location of their gate to the other side would also improve the safety at the intersection.

An effective utility management program will provide the County with an ability to coordinate the future utility infrastructure in such a way to minimize traffic disruption and to protect the roadway investment. We believe that utility coordination should be a cooperative, partnering process.

These type of issues should be identified and addressed as soon as possible in the conceptual layout of the project before the preliminary design is completed. This avoids for "surprises" during the design process and potential delays in construction to make adjustments.

Over the last several years, we have used our video projection equipment to interactively display the proposed improvements and directly work with the utility companies to analyze their potential conflicts. At the conclusion of the meeting, we can provide the utility companies with the CADD files of our plans and the base mapping to facilitate their efforts in mitigating any conflicts. Items of discussion can include proximity to other utilities, potential crossing conflicts and project scheduling. The more conversations we have with the utility companies during the design, the less likelihood of conflicts during construction.

Construction Engineering and Administration

Wilson & Company maintains a core staff of experienced, certified personnel to provide the construction engineering services on projects for local communities, including those projects administered by KDOT. The majority of our recent construction engineering assignments have been on urban projects, most of which we were involved with the design phase. From this aspect, we are experienced and comfortable in acting as the county's advocate when construction issues or proposed changes arise during construction.

Our firm believes that there are five basic keys of project approach to construction management that reflect upon the success of delivering a project. Although the approach elements are interrelated, they are important individually and are described below:

1. **Construction Management.** The success of this project hinges on three key elements, by (a) maintaining constant and consistent communication between the engineer, the county staff and the contractor to keep all parties informed of changes/modifications; (b) being the county's ambassador for the success of the project by ensuring the contract documents and the county's standards and specifications are being met including the documentation of the constructed work; and (c) working with the county, the engineer, and the contractor to proactively meet established deadlines so that the contract schedule is maintained.
2. **Project Communication.** Fostering a program that provides the directed communication channels between all interested and affected parties greatly lowers the potential for undue schedule issues and change orders. As a continuation of the design process, we would propose to use ProjectWise™ to establish the communication protocols to allow the contractor access to certain area of the project electronic files. This would provide direct access to upload RFI's, material certifications, daily logs, and payment applications, among other documents that both the engineer, inspector, and county would have direct access to process and respond.
3. **Project Observation.** Our inspectors have cell phone communication as well as mobile wireless access to email Wilson & Company's servers, and ProjectWise™ in the field to share project related information with the appropriate parties to obtain timely responses. Electronic copies of all construction plans, the contract documents, and county standards and specifications will be on their laptops in the field to answer questions.

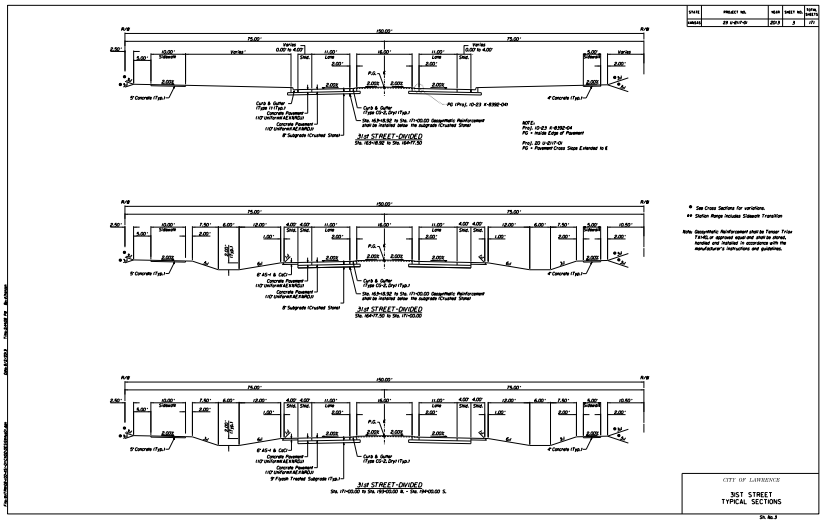
   Construction phase files are first set up in ProjectWise™ at the beginning of project in accordance with the contract documents. We have developed interactive forms to streamline the process of filling in and collecting data for materials submittals, Requests for Information (RFI), Request for Proposals (RFP) and any other transmittals.

4. **Field Representatives Resources.** The contractor will define how the construction will occur for the project within their construction schedule. It is the responsibility of our inspector to coordinate with the County to ensure that everyone is aware of the construction efforts so that all construction items are properly inspected, documented and accounted for.
5. **Public Outreach Support.** Public information, although previously discussed under project management, is of utmost importance. Business owners, civic leaders, residents, and the general public will expect to know how and when they will be impacted due to construction activities. We will be a resource for all public meetings for the County, engineer, and the contractor to discuss the project and potential issues with each of these project stakeholders and can communicate with any impacted property owners with a one-on-one discussion.

Project Selection

We would be pleased to assist the County with any of the three projects identified in the RFQ. Wilson & Company's experience on county road projects across the state of Kansas and our local experience with Leavenworth and Lansing would make us an asset to the County.

The previous pages in this statement of qualifications have provided a clear picture of Wilson & Company's ability to work with the County to develop a quality project. Although we have not worked directly for the County, we have been performing design services in Leavenworth County for the cities of Lansing, Bonner Springs, and Leavenworth since the 90's.



31st Street Typical Section

Several years ago, we sent out a questionnaire to our clients to ask about our quality of services and opportunities for improvement. In just about every case, the words *"responsiveness"* and *"creative thinking"* were used. As a firm we don't understand why it is difficult for some consultants to return a phone call or just get out from behind the desk to visit a project site when a client has a construction question. Most consultants in this dollar value age, stop their services at the contract level. They won't start until the contract is signed, and they stop once the plans are delivered.

We believe that our core values represent our project team and are reflected in our project managers. We share the ownership of the project with the client. We will collaborate to find cost-effective solutions to your problems. And we are disciplined to meet your schedules.

For example, the 31st Street Improvement Study was a joint project between the city of Lawrence and Douglas County. Our project team worked with a steering committee consisting of local business owners, key interest groups, city staff, county staff, and a representative from KDOT. The goal was to develop a conceptual alignment for the future arterial roadway. The total project length was a little over 4-miles. A key issue was to consider current and future needs when developing the alignment, including reducing costs associated with reconstruction as development occurs along the corridor. The result was the creation

of new design criteria using a blend of city and county standards while allowing for a natural design to blend into the terrain and existing natural features of the area. Depending on the future traffic volumes, the typical section changed from a divided to undivided 4-lane. Our recommendation was to construct only the inside two lanes, including grading for the ditches and shoulders of the ultimate template. This allows both the city and county to control costs until the full 4-lanes are needed. It also allowed them to preserve the 31st Street corridor right-of-way as development occurs and provides for budgeting in their CIP. The photo to the right shows the curvilinear roadway currently under construction from Haskell Avenue to O'Connell Drive.

Current Project Under Construction, Haskell Avenue to O'Connell Drive

This is just one example of several where we saved precious budget dollars for clients. Other examples include saving the city of Kansas City, Missouri approximately $3m dollars by developing an alternative solution to a major interchange project. The original consultant told the City they needed a 6-lane interchange. We showed the City that once they improve the local roadway network, the actual traffic volume is significantly less. By constructing a roundabout interchange they could control traffic and reduce the bridge width significantly.

We look forward to working with you and the County staff.