

# Professional Engineering Services Qualifications

Lexington-Fayette Urban County Government RFP #13-2014 March 26, 2014



**Stantec Consulting Services Inc.** 400 East Vine Street, Suite 300 Lexington KY 40507-1532 Tel: (859) 233-2100 Fax: (859) 254-9664

March 26, 2014

Attention: Theresa Maynard – Buyer Senior Lexington-Fayette Urban County Government Room 338, Government Center 200 East Main Street Lexington, KY 40507

Dear Ms. Maynard,

### **Reference: Transmittal Letter for RFP #13-2014**

Stantec seeks prequalification in the following five areas:

- 1. Contract 1 Roadway corridor and intersection design/planning
- 2. Contract 4-Structures or bridge design
- 3. Contract 5-Pedestrian, bike, or multimodal trail design/planning
- 4. Contract 6—Traffic signal design
- 5. Contract 7 Geotechnical testing, analysis, and design

Per LFUCG's final addendum, qualifications for each contract are combined in this volume and separated by tabs for each contract. Information relevant to all five contracts—local office, DBE plan, resumes, and forms—appear as their own tabs as noted in the table of contents.

Regards,

### STANTEC CONSULTING SERVICES INC.

Interland

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# Contract 1 Roadway Corridor & Intersection Design/Planning

Lexington-Fayette Urban County Government RFP #13-2014

# Firm Qualifications

The Stantec community unites more than 13,000 employees working in over 200 locations. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

### Why Select Stantec to Provide Roadway and Intersection Design and Planning Services?

Projects under this contract may not be about deciding *what* to do but rather about deciding *how* to do it. You'll need a project partner that can help you identify the best solutions to any transportation problems that may arise, attain agency approval when needed, lead productive and informative public

involvement, and set the tone for future development and investments. With this in mind, we're excited to join you on this journey. Based on our past work with LFUCG, we have a solid foundation and understanding of your expected results and how best to make any LFUCG project a success. Here are the top four qualities our team offers you:

**Proven project leadership.** Proposed project manager Jason Bricker, PE, is someone you know well from his years of work on the Newtown Pike Extension project. He'll be supported by project principal Glenn Hardin, PE, who is currently leading the Newtown Pike Extension project along with Jason. Jason and Glenn work from Stantec's downtown Lexington office on East Vine Street, and will be supported primarily from others at this location.

**Roadway planning and design project experience in Lexington.** We've worked all across Kentucky, on both urban and rural roadway projects, intersection and interchange design projects, design/build pursuits, structure design, pavement rehabilitation, geotechnical investigations, and utility design. We locally offer specialized services such as roundabout design, access management, traffic analysis, 3D simulation and modeling, and effective stakeholder outreach. Not many Kentucky teams can offer all of these services using Kentucky staff.

**Environmentally-friendly design options.** Planning for your infrastructure's future starts with sustainable design. We share your social, economic, and environmental values, and we pride ourselves on designing solutions that build stronger communities today and tomorrow. Our unique ENVISION<sup>™</sup> rating system can help assess sustainability on any project and improve the final product while keeping cost and schedule in mind. We think of it like the LEED process applied to transportation projects instead of to buildings. Sustainability can become an important factor if you need to seek grant funding later on in the process. Although this may not be a consideration for every project under this contract, this is a valuable service we're happy to provide if needed.

**Responsive service from years of on-call experience.** Stantec has successfully performed on-call engineering services for several KYTC statewide services contracts so we understand how important it is to be just a phone call away. Under these contracts, Stantec has successfully completed numerous planning and engineering projects with components similar to those that will come out under this contract. Through these contracts Stantec has developed an excellent relationship with each of



We're active members of the communities we serve. That's why at Stantec, we always design with community in mind. our clients and other reviewing agencies, which is why we deeply understand the permitting processes in Lexington and across the state.

### Stantec's History in Lexington

Since the 1960s, Stantec has been a part of the Lexington community. With the acquisition of the firms Fuller, Mossbarger, Scott & May (FMSM) and ENTRAN within the past six years, we've strengthened our capabilities in service areas where we were already well known. For more than 40 years, we've locally offered services in roadway, planning and design, inspection, structures design, environmental services, geotechnical engineering, and more. See the Local Office tab of this submittal for more information about our presence in Lexington.

### About the Stantec Team

To meet this contract's DBE goals, we've included **Integrated Engineering** on our team to provide drainage and surveying services. Integrated has quickly developed a reputation as a go-to for drainage design, recently being selected by KYTC as one of only two firms to perform statewide drainage design services.

# **Project Team**

The Stantec team members assigned to this project are ready to get to work on any task order immediately upon Notice to Proceed and whenever you call with an assignment.



### Resumes

One-page resumes for each of the key staff listed above may be found in the Resumes section. The following exerpts from these resumes briefly highlight some of our key team members.

**JASON BRICKER, PE** As a Senior Project Manager with 16 years of experience, Jason has worked on all types of highway projects throughout Kentucky. His experience includes quantity calculations, cost estimates, pavement design, and maintenance of traffic, construction, and right-of-way plans. He is proficient in using MicroStation and InRoads. Jason has actively led the Newtown Pike Extension project for close to five years. As a result, he understands LFUCG's expectations of consultant engineers and is the ideal person to lead this contract. For any assignment under this contract, Jason will be your first point of contact. He'll work closely with project principal Tom Creasey and QA/QC lead (and department manager Glenn Hardin) to identify the resources needed for any project to submit an accurate cost estimate that responds to project needs. Upon award of any assignment, Jason will promptly meet with the LFUCG project manager and any other key stakeholders. Throughout the planning and design process, he will coordinate with local staff to address technical elements while driving the project's budget and schedule.

**GLENN HARDIN, PE** Glenn is responsible for project design and coordinating project engineers, technicians and CADD operators on various highway study and design projects. He has been responsible for preparing highway design plans for all classes of roads and highways; determining horizontal and vertical geometrics, templates, and cross section; preparing traffic and capacity analyses; designing roadway drainage systems; determining right-of-way requirements; preparing legal deed descriptions for right-of-way acquisitions; developing detour and traffic control plans on all types of highway design projects; and preparing and presenting information for public hearings.

**BRIAN ALDRIDGE, PE** Brian leads Stantec's Phase I Design Group in Kentucky, giving him the opportunity to work with both planning staff, as well as design professionals. A transportation engineer for 15 years, he has experience working on a wide range of transportation projects across the country. His areas of expertise include transportation planning, transportation system design and operations, public involvement, land use planning, railroad and airport facilities design and analysis, environmental planning, and access management. Brian is familiar with a broad range of engineering design software and has been working with geographic information systems for more than 15 years. He has served as a volunteer helping teach the Capstone Design course for senior civil engineering students at UK for the past two years.

**HEATHER LAWLER, PE** Heather has 14 years of roadway design experience, including highway design plans for all classes of roads and highways; determining horizontal and vertical geometrics, templates, and cross sections; designing roadway drainage systems; determining right of way requirements; developing detour and traffic control plans on all types of highway design projects; and preparing information for public hearings.









**ADAM McLAIN**, **PE** As a Transportation Engineer with more than 10 years of professional experience, Adam's focus has been primarily on geometric design and elements involved in Phase I design. More recently, Adam has become involved in projects nearing completion and has gained expertise in Phase II design. Adam has more than 10 years of Microstation experience, seven years of ProjectWise experience, and eight years of Inroads experience. He has become very knowledgeable in the use of Inroads in both Phase I and II design and the software's capabilities of modeling more advanced situations.

**BILL MORRIS, PE** Bill has 38 years of experience and has been involved in the planning, design and implementation of numerous transportation projects throughout Kentucky, as well as Tennessee, Virginia, Alabama and Florida. He has worked on both rural and urban projects, widening/reconstruction projects, and intersection/interchange projects. Bill's responsibilities have included the production of highway construction plans, including geometric, drainage and pavement design, erosion control plans, traffic control plans, striping plans, signing plans and right-of-way plans.

**JOHN MOSS**, **PE** John has more than 28 years of civil and environmental engineering experience. For the past 16 years, he has been involved mainly with roadway design with an emphasis on complex highway interchanges. In addition, his roadway experience includes interstate and roadway design, maintenance of traffic, scoping studies and alternative analyses, and interchange justification studies. John is proficient in many software design packages, including: AutoCAD, Microstation, Inroads, Storm & Sanitary, Guidsigns, and Autoturn. John recently served as Stantec's QA/QC Task Leader for the Louisville-Southern Indiana Downtown Bridge project.

**ANTONIO POUSA, PE** Antonio has 16 years of experience planning and designing transportation projects. His experience includes urban and rural arterial roads, signalized intersections, interchanges, roundabouts, parking lots, and bicycle and pedestrian facilities. Antonio is proficient in several design and analysis tools used in transportation engineering, including CADD software (Microstation, InRoads and Autoturn) and software for traffic analysis (VISSIM, CORSIM and aaSIDRA) and drainage (HYDRAIN, Hydraflow Storm Sewers and Culvert Master).

### How We'll Work with You

As soon as you call with a possible assignment, we'll get right to work identifying project needs so we can give you an accurate scope and cost estimate. Upon award, we'll meet with you to kick off the project. While tasks under this contract will vary, they all will share common goals:

- Engage the Lexington-Fayette County community in meaningful ways
- Generate feasible, affordable solutions and accurately assess the costs, benefits, and impacts; and
- Streamline the development process to keep costs down and schedules moving

This overarching philosophy helps guide the path to any project's successful conclusion because any task will ultimately go back to one of these three goals.

Our previous work on on-call type contracts and LFUCG projects shows we understand your expectations of on-call consultants. We know it's important to you that we keep you in the loop about our progress on assignments, but we also understand that you need a consultant who can take initiative and be your trusted advisor.









### How We'll Work with the Community

Community engagement can be the most important component of a successful multimodal project because it helps everyone visualize changes to come. While public involvement needs to continue to evolve, what hasn't changed is the universal need for simple, effective communication. We work with the local community to address concerns, mitigate impacts, and build understanding and support for the right projects. As we've demonstrated in in our public meetings for Newtown Pike and the Downtown Traffic Revitalization project, we turn Q and A sessions into conversations between real people—not "engineers and planners" and "everyone else."

### Comprehensive Support for Any Project

The unwritten scope item of any contract like this is to help you tackle challenges that arises. This means we will attend meetings with affected property owners, coordinate closely with utility owners, and do all we can to support you under this contract. With a workforce of nearly 200 professionals in Lexington and a 13,000-person nationwide staff, we have the local workforce and specialized expertise needed to lead any assignment. We can even lead multiple assignments at once.

With a strong team of experts in a variety of disciplines, QA/QC is built in at multiple stages of the project development and engages people not involved in the day-to-day activities of the project. Quality work helps keep projects on budget and on schedule, and is an area we constantly strive to make even better. Our team is committed to the continuous improvement of quality in all of our operations by implementing, maintaining, and following a quality management plan (QMP) compliant to the ISO9001:2008 international quality standard. You can read more about the ISO 9001:2008 Quality Management standards on www.iso.org.

Client	Contact Name	Phone Number and Email Address	Project
Lexington-Fayette Urban County Government) Lexington, KY	<b>Mr. Andrew Grunwald</b> Project Manager	(859) 258-3597 AGrunwald@lexingtonky.gov	<ul> <li>Newtown Pike</li> <li>Extension</li> <li>Lexington, KY</li> </ul>
Kentucky Transportation Cabinet District 7 Lexington, KY	<b>Mr. Robert Nunley</b> Transportation Engineering Branch Manager for Project Development	(859) 246-2355 Robert.Nunley@ky.gov	<ul> <li>US 68 Harrodsburg Road DCD, New Circle Road &amp; Newtown Pike Design-Build Lexington, KY</li> <li>KY 11 Levee Road, Mt. Sterling, KY</li> </ul>
Lexington-Fayette Urban County Government Lexington, KY	<b>Mr. Bob Bayert</b> Project Manager	(859) 258-3441 bobb@lexingtonky.gov	• Lexington Congestion Management Study Update, Lexington, KY
Kentucky Transportation Cabinet Central Office Frankfort, KY	<b>Mr. Dan Hite</b> Transportation Engineering Branch Manager	(502) 564-3280 Dan.Hite@ky.gov	• Statewide Pavement Rehabilitation, various, KY
Kentucky Transportation Cabinet District 9 Flemingsburg, KY	<b>Mr. Darrin Eldridge</b> Transportation Engineering Branch Manager for Project Development	(606) 845-2551 Darrin.Eldridge@ky.gov	<ul> <li>KY 1/7 Carole Malone Boulevard Widening Grayson, KY</li> <li>US 60 Widening, Ashland, KY</li> </ul>
City of Georgetown, KY Georgetown, KY	Mr. Ben Krebs Project Manager	(859) 258-3000 BKrebs@lexingtonky.gov	<ul> <li>Northeast Georgetown Traffic Study Georgetown, KY</li> </ul>
City of Versailles Versailles, KY	<b>Mr. Bart Miller</b> Public Works Director	(859) 873-2245 BMiller@cityhall.versaillesky.com	<ul> <li>Northwest Versailles Mobility Study, Versailles, KY</li> </ul>
Kentucky Transportation Cabinet District 1 Paducah, KY	<b>Mr. Mike McGregor</b> Chief District Engineer	(270) 898-2431 Mike.McGregor@ky.gov	<ul> <li>Ohio River Megapark Connector &amp; US 60 Scoping Study Paducah, KY</li> </ul>

# Clients for which similar work has been performed

# Similar Projects

### Similar projects performed by Key Team Members

### Newtown Pike Extension

Date of Service Ongoing Construction Cost: \$75M Team Members Jason Bricker Glenn Hardin Dwayne Beshear Adam McLain **Project Description:** Stantec was responsible for preparing an engineering design study report, environmental analysis, and Phase I and II design for a 1.3-mile extension of an urban boulevard around the southern portion of Lexington's central business district. The project includes the design of bicycle lanes and pedestrian facilities along the entire length of the route.



The project included a comprehensive land use plan for the 400 acres surrounding the corridor and the redevelopment of a 25-acre neighborhood due to environmental justice impacts.

### Newtown Pike Design-Build

Date of Service 2006-2007 Construction Cost: \$2.2M Team Members Glenn Hardin Bill Morris Karim Siahkoohi **Project Description:** Stantec was the design lead on the design-build team responsible for designing and constructing safety and mobility improvements to a critical portion of Newtown Pike in advance of the 2010 World Equestrian Games.

The team used context-sensitive construction and design techniques to improve 2.2 miles of Newtown Pike while preserving the route's scenic features, including more than a mile of dry stone fences, horse farms and rolling hills for which Kentucky is famous. Stantec was



responsible for designing the highway improvements; preparing right-of-way (ROW), roadway, structure, landscaping, signing, striping, stream mitigation and signal plans; utility coordination; ROW acquisition; and public involvement. Stantec also provided structural engineering to replace an existing single-span bridge with a three-span, skewed, cast-in-place concrete slab bridge with special architectural barrier treatments. The exterior openings were designed to only operate at higher flows to increase capacity and prevent flooding. Two specially designed pipe safety headwalls for triple 30" pipes eliminated the need for guardrail and improved aesthetics.

### US 68 Harrodsburg Road DCD

Date of Service 20007-2011 Construction Cost: \$6.2M Team Members Jason Bricker Glenn Hardin Brian Aldridge Antonio Pousa **Project Description:** Initially a simple roadway widening, this project became the first DCD (Double Crossover Diamond) in Kentucky, and encompassed a portion of Harrodsburg Road and its interchange with KY 4 (New Circle Road).

Since opening in 2011, accidents have been reduced in the project area by 40%. Resulting savings associated with fewer crashes means that, with a construction fee of just over \$6 million, the project will pay for itself within its functional lifetime. This project won the 2013 ACEC-KY Grand Conceptor Award.



### Similar projects performed by Key Team Members

### Johns Hill Road Roundabouts

Date of Service 2003-2010 Construction Cost: \$5M Team Members Glenn Hardin Brian Aldridge Greg Sharp Adam McLain Adam Mays **Project Description:** Stantec completed the design studies, surveying, drainage design, traffic control, erosion control, right-of-way plans, and construction plans with construction cost estimates. This was the second phase of an overall project to reconstruct nearly a mile of KY 2345 (John's Hill Road) and reroute approximately 0.6 miles of University Drive, from Nunn Drive to KY 2345.

This project was coordinated with the Kentucky Transportation Cabinet and Northern Kentucky University and accompanied the construction of



a new arena and parking garage adjacent to the University Drive/Nunn Drive intersection.

### New Circle Road (KY 4)

Date of Service Ongoing Construction Cost: \$24M Team Members Jason Bricker Glenn Hardin Brian Aldridge Greg Sharp Adam McLain Antonio Pousa Kevin Deep **Project Description:** As a subconsultant Stantec assisted with the preparation of preliminary line and grade plans, and environmental analysis of the New Circle Road/Newtown Pike interchange. The project included a preliminary phase to provide an addendum to the signalized portion of the New Circle Road planning study.

Stantec was responsible for geometric design, traffic engineering and signalization analysis,



and bicycle and pedestrian planning. An "Initial" construction project was developed by Stantec, to be built prior to the interchange reconstruction. It provides a westbound auxiliary lane between the Newtown Pike and Georgetown Road interchanges to improve traffic operations. It also increases the storage capacity of the Georgetown Road interchange ramps and improves entrance and exit tapers at New Circle Road. Stantec was later responsible for the final design of the Georgetown Road interchange improvements that tie to the proposed widening of New Circle Road.

### KY 11 Widening Levee Road

Montgomery County, KY Date of Service 2007-2010 Construction Cost: \$1.2M Team Members Glenn Hardin Heather Lawler Adam McLain Greg Sharp Adam Mays **Project Description:** This existing two-lane roadway provides access to several local businesses and public facilities, including the Montgomery County High School; however, pedestrian and bicycle access to the school is impeded due to the absence of sidewalks and paved shoulders along this section of KY 11.

Stantec's scope of work included preliminary engineering; environmental documentation; preparation of final construction plans, including maintenance of traffic; cost estimates and erosion control plans. Stantec was also



responsible for right-of-way acquisition. Stantec worked closely with the Kentucky Transportation Cabinet's Division of Environmental Analysis to obtain environmental clearances for the project, which included hazardous materials, ecological, threatened and endangered species, cultural historic and archaeological clearances.



# Contract 4 Structures or Bridge Design

Lexington-Fayette Urban County Government RFP #13-2014

# Firm Qualifications

The Stantec community unites more than 13,000 employees working in over 200 locations. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

# Why Select Stantec to Provide Structure/Bridge Design Services Projects?

**Breadth**. Our large and highly skilled structures group is flexible, responsive and readily available to meet aggressive project schedules. We have five bridge design professionals located in Lexington who can serve as task leaders, allowing us to make any project assignment a top priority. We'll get your projects to construction letting when you need them ready.



We're active members of the communities we serve. That's why at Stantec, we always design with community in mind.

**Depth.** From major steel truss bridges and small concrete bridge replacements to unique culvert designs, we have experience in all types of bridge and culvert design. Our relevant experience includes LRFD design, complicated stage construction, complex bridge geometries, and drilled shaft design. This means we have the expertise to address even your most unusual or complex assignments under this contract.

**Quality.** Bridges and culverts are the most costly, and most critical, aspects of our transportation system. Using our thorough team approach and dedication to quality control, our goal is to provide you with cost-effective and safe designs in accurate and easily-read construction plans, minimizing the opportunity for mistakes and the need for costly change orders or design modifications.

**We're a True On-Call Firm.** Stantec has successfully performed on-call structure and bridge design engineering services throughout Kentucky for the KYTC and other public agencies. Under these on-call service contracts, Stantec has successfully completed numerous planning and engineering work orders just like those that will come out under this contract.

### Stantec's History in Lexington

Since the 1960s, Stantec has been a part of the Lexington community. With the acquisition of the firms Fuller, Mossbarger, Scott & May (FMSM) and ENTRAN within the past six years, we've strengthened our capabilities in service areas where we were already well known. For more than 40 years, we've locally offered services in roadway, planning and design, inspection, structures design, environmental services, geotechnical engineering, and more. See the Local Office tab of this submittal for more information about our presence in Lexington.

### About the Stantec Team

To meet this contract's DBE goals, we've included **Integrated Engineering** on our team to provide hydraulic and scour analysis, and surveying services. Integrated has quickly developed a reputation as a go-to for drainage design, recently being selected by KYTC as one of only two firms to perform statewide drainage design services.

# **Project Team**

The Stantec team outlined below has the depth, breadth, and capacity needed to respond quickly and efficiently to any assignment under this contract. We have the largest structures design workforce in the state (outside of KYTC's bridge office), located right here in Lexington. Based on our proven track record on previous statewide contracts, we are mobile, agile, and ready to get to work with your notice to proceed. You can count on us to pick up your most challenging projects, run with them, and get them done within aggressive schedules.



**Environmental** Scientists

37 Professionals

11 Professionals

20 Professionals 6 Professionals

Geologists Technicians/ **4** Professionals Analysts **38 Professionals** 

Other Civil Engineers 7 Professionals

**Total Kentucky Technical Staff** 187 Professionals

### Resumes

One-page resumes for each of the key staff listed in the organizational chart may be found in the Resumes section. The following briefly highlights some of our key team members.

**TONY HUNLEY, PE, SE, PhD**, will be the Project Manager and a Task Leader for this contract. He has more than 18 years of experience in the design of bridges, culverts, and other transportation structures. Tony has served as project manager of Stantec's Statewide Bridge Design Contract for the last six years and task assignment based on-call contracts for multiple agencies. He understands that building project teams; meeting critical deadlines; coordination between the client, team members and subconsultants; and quality control are critical aspects of multi-disciplinary and task assignment type projects.

**BILL AMRHEIN**, **PE**, **SE**, will serve as QA/QC Manager for this contract. He has more than 20 years of experience in structural engineering including major steel bridges, prestressed concrete bridges, complex analysis of structural systems, coauthor of FHWA LRFD design manuals, and construction management.

**DARYL CARTER, PE**, will serve as a a Structure Task Leader for this contract. He has more than 36 years of experience in LRFD design, culverts, steel and prestressed concrete bridges, and drilled shaft design. Daryl was the project manager on a key assignment during a previous cycle of our KYTC statewide contract, a fast-track widening project (Southtown Boulevard). His innovative design of the historic River Road Harrods Creek Bridge widening project has been recognized with several state and national design awards from APWA, ACEC-Kentucky, ACEC and PCI.

**MIKE LAWLER, PE**, will serve as a Structure Task Leader for this contract. He has more than 16 years of bridge design experience including steel and prestressed concrete bridges, LRFD design and load rating, and large culvert designs. Mike was the engineer-of-record for the South End Park Noisewall along Norfolk Southern's rail yard as part of the Newtown Pike Extension project. He is a certified NBIS Team Leader for bridge inspections and is certified for inspection of fracture critical bridges.

**SAM KING, PE**, will also serve as a Structure Task Leader and Project Engineer for this contract. He has more than seven years of bridge design experience including steel and prestressed concrete bridges, culvert designs, and advanced structural analysis experience in seismic design and curved steel bridge constructability reviews. Sam is the engineer-of-record for the Town Branch Culvert relocation as part of the Newtown Pike Extension project. Under the 2008-2010 Statewide Bridge and Culvert Design contract, he played a key role in the Martin County curved steel plate girder bridge constructability and design review.











**DANNY WOODS, PE**, will also serve as a Structure Task Leader for this contract. Danny has more than 33 years of experience in structural engineering, including prestressed concrete and steel bridges, reinforced concrete box culverts and retaining walls. Danny is a certified NBIS Team Leader for bridge inspections and is also certified to inspect fracture critical bridges.

**TAYLOR PERKINS**, **PE**, **SE**, will serve as a Structure Project Engineer. Taylor has been involved in the plan preparation and design of complex highway bridges, culverts and retaining structures. His structural design experience includes various types of prestressed concrete bridges including pre-tensioned and post-tensioned girders, steel girders, reinforced concrete culverts, seismic evaluation, and various types of foundation systems. His responsibilities have included preliminary and final design, preliminary and final quality estimates, and plan and specification preparation.

**DAVID KAISER, PE, SE**, will also serve as a Structure Project Engineer. David has been involved in the plan preparation and design of both highway bridges and culverts. His structural design experience includes various types of prestressed concrete bridges, steel welded plate girder and tub girder bridges, post-tensioned concrete cast-in-place segmental box girders and reinforced concrete culverts. His responsibilities have included preliminary and final design, and plan and specification preparation. In addition to structure design, David has assisted with the inspection of interstate and river bridges. He completed SPRAT Level 1 training as a rope access technician.

**ALAN FARMER** will serve as a Senior Structure Technician on projects. Alan's 37 years of experience includes design, surveying, and mapping projects. He has been responsible for preparing structural details and plans of reinforced concrete bridges, culverts, and retaining walls and structural steel designs for various highway structures. Alan's project experience includes both new designs and rehabilitation designs. In addition, he has been responsible for preparing architectural, mechanical, and as-built plans as needed. He has also been a bridge inspection team member.

**BOB YOUNG**, will also serve as a Senior Structure Technician. Bob has more than 40 years of experience with highway and bridge projects. He has been responsible for preparing designs, details, quantities, and plans for numerous highway and bridge design projects in Kentucky, Tennessee, Illinois and Florida. His detailing and design experience includes both concrete and steel bridges, retaining walls, concrete culverts, and building structures with both steel and concrete framing.

Our Structure Task Leaders will be teamed with one or more of our highly trained project engineers and technicians to successfully complete any project assignment. Most of our structural engineers have advanced degrees in structural engineering, and collectively we have more than 500 hours of LRFD bridge design code training.

Stantec's strong performance on the previous Statewide Bridge Design contract illustrates the key advantages our team can provide to the LFUCG. Our large in-state structural engineering group has complex structural engineering capabilities from which the LFUCG can benefit.

We will provide you with local structural engineering expertise, significant and diverse project experience and the horse power to complete your projects when you need them, from a simple span county bridge to a complex structural engineering task.



### Award Winning Harrods Creek Bridge Widening

# Clients for which similar work has been performed

Client	Contact Name	Phone Number and Email Address	Project
Kentucky Transportation Cabinet Frankfort, KY	<b>Mr. Mark Hite</b> Director, Division of Structural Design	(502) 564-4560 mark.hite@ky.gov	• Statewide Bridges and Culverts, Various, Kentucky
Kentucky Transportation Cabinet Frankfort, KY	<b>Mr. Dan Hite</b> Transportation Engineering Branch Manager	(604) 867-5309 dan.hite@ky.gov	• Statewide Pavement Rehabilitation, Various, Kentucky
Carroll County Fiscal Court Carrollton, KY	<b>Mr. Harold "Shorty"</b> <b>Tomlinson</b> County Judge Executive	(502) 732-7000 ccjudge@bellsouth.net	<ul> <li>Lewis Road Bridge Replacement; Painter's Road Bridge Replacement; Buffalo Creek Road Bridge Superstructure Replacement, Carroll County, KY</li> </ul>
Lexington-Fayette Urban County Government Lexington, KY	<b>Mr. Andrew Grunwald</b> Project Manager	(859) 258-3597 AGrunwald@lexingtonky.gov	• Newtown Pike Reconstruction, Lexington, KY
Louisville Metro Government Louisville, KY	<b>Ms. Milana Boz</b> Planner	(502) 456-8141 Milana.Boz@louisvilleky.gov	• Old US 60 Shelbyville Road Bridge Study, Louisville, KY
Louisville Metro Government Louisville, KY	<b>Mr. Jeremy Raney</b> Former Engineering Director	(502) 569-0805 Jraney@lwky.com	• Harrods Creek Bridge Widening, Louisville, KY

# Similar Projects

	Similar projects performed by Key Team Members
Newtown Pike Extension Date of Service 1997-2014 Construction Cost: \$75M Team Members Tony Hunley Mike Lawler Sam King Daryl Carter Taylor Perkins David Kaiser Alan Farmer Bob Young Award APWA Kentucky Chapter, Project of the Year (Bridge	<ul> <li>Project Description: Stantec was responsible for bridge concept and feasibility studies, and construction plans for the Newtown Pike over Town Branch Bridge, also known as the Oliver Lewis Way Bridge. The project included:</li> <li>Concept studies and visualizations for four signature bridge types in an urban setting. Bridge types included an asymmetric cable-stay, counterbalance steel box girder, two-hinged steel arch and a propped cantilever truss.</li> <li>Developing a practical solution bridge that was 97 feet wide by 215 feet long over Town Branch Creek and Town Branch Trail as well as an access road. The bridge has two spans of 105 feet utilizing 48-inch precast prestressed concrete box beams.</li> <li>Aesthetics features include massive sloping wingwalls at both abutments and piers that use decorative formliners and colored concrete for a visual statement. The bridge deck features a wide median and 10-foot urban sidewalks. The traffic rail is non-traditional using structural tubes in lieu of barriers for openness. A pedestrian fence using tubes, vertical pickets and pipe sections protects pedestrians. The bridge includes roadway and decorative pedestrian lighting.</li> </ul>
Category)	Project Description: Stanton was assigned six projects as part of this contract:
Statewide Bridges and Culverts Date of Service 2012-2014 Construction Cost: N/A Team Members Tony Hunley Mike Lawler Danny Woods Taylor Perkins Alan Farmer Bob Young	<ul> <li>Project Description: Stantec was assigned six projects as part of this contract:</li> <li>I-65 over the Ohio River (Kennedy Memorial Bridge) Top Chord Repair, Jefferson Co.</li> <li>KY 9-AA Hwy Culvert Extension, Mason Co.</li> <li>KY 44 Culvert Extension, Bullitt Co.</li> <li>KY 340 Bridge Replacement, Butler Co.</li> <li>US 460 Marrowbone Bridge Review, Pike Co.</li> <li>Carroll Cropper Bridge Rehabilitation, Boone Co.</li> </ul>
Painter Road Bridge Date of Service 2011-2012 Construction Cost: 150K Team Members Tony Hunley	<ul> <li>Project Description: Stantec provided design, bid preparation and engineering during construction services to the Carroll County Fiscal Court for the replacement of the Painter Road Bridge over the east prong of Locust Creek. The major concern when designing the new structure was to mitigate the effects of the aggressive hydraulic nature of the east fork of Locust Creek. Prior to construction, Stantec surveyed the site's topographic and hydraulic features and performed in-depth hydraulic analyses to set the optimal configuration for the new bridge while minimizing impacts on project cost.</li> <li>The new structure consists of 40-foot noncomposite side-by-side box beams supported by breast-wall abutments bearing on solid rock below the scour elevation. Approximately 100 feet of roadway work was required at the bridge ends. Work performed in the bidding phase included writing specifications, preparing a bid package, coordinating a pre-bid meeting, providing bid analysis, and making a recommendation to award. During the construction phase Stantec answered contractor RFI's, performed periodic site visits on behalf of the owner, reviewed shop drawings, and performed a closeout site visit and final inspection before the County accepted the project.</li> </ul>

#### Similar projects performed by Key Team Members Southtown **Project Description:** Southtown Boulevard is a heavily-used connector route for traffic moving cross town from Frederica Street to Carter Road. This fast-track project involved widening the Boulevard boulevard to four lanes with a 13-foot turn lane in the middle. Sidewalks and a bike trail run alongside **Date of Service** KY 2121. The terrain is flat, with deep ditches on both sides of the boulevard to handle the drainage. 2010-2012 Stantec and KYTC District 2 collaborated closely and solved the various challenging project issues in Construction an innovative and cost-effective manner. Key project components included: Cost: \$660K **Team Members** All eight culverts designed for yielding foundations with wingwalls designed integrally with the **Tony Hunley** bottom slab to provide stability against overturning Daryl Carter David Kaiser Drive-on top slabs with integral curbs and gutters Paved inlet and outlet Alan Farmer • Protective handrail on parapets "Boomerang" shaped culvert configuration with concrete approach slabs • Multiple bends (i.e., "kinks") in culvert barrel alignment **Statewide** Project Description: Stantec was assigned four projects as part of this contract: **Bridges and** KY 1494 over Long Lick Creek, Bullitt Co. - Emergency bridge replacement project due to shifting **Culverts Date of Service** of the existing bridge pier. 2008-2010 KY 501 over Strong Branch, Casey Co.- Low volume road bridge replacement project. Construction I-64 Widening - Culverts, Clark Co.- New culvert and culvert extensions as part of interstate Cost N/A widening project. **Team Members** KY 3 Flyover Ramp Bridge Construction Review, Martin Co. **Tony Hunley** Sam King **Taylor Perkins** Alan Farmer Bob Young **Newtown Pike Project Description:** Stantec was the **Design/Build** lead design firm on the design-build team responsible for safety and mobility **Date of Service** improvements to a critical portion of 2008-2010 Construction Newtown Pike in advance of the 2010 World Equestrian Games. Cost: \$2.4M **Team Members** The team used context-sensitive **Tony Hunley** construction and design techniques to Sam King improve 2.2 miles of Newtown Pike while Bob Young preserving the route's scenic features, Awards including more than a mile of dry stone Honor Award in fences, horse farms and rolling hills for ACEC-KY 2009 which the Kentucky is famous. Stantec Engineering provided structural engineering to replace an existing single-span bridge with a three-span, skewed, Excellence Awards Program. cast-in-place concrete slab bridge with special architectural barrier treatments. The exterior openings were designed to only operate at higher flows to increase capacity and prevent flooding. Two specially designed pipe safety headwalls for triple 30" pipes eliminated the need for guardrail and improved aesthetics. Stantec was also responsible for designing the highway improvements; preparing right-of-

way (ROW), roadway, structure, landscaping, signing, striping, stream mitigation and signal plans;

utility coordination; ROW acquisition; and public involvement.



# Contract 5 Pedestrian, Bike, or Multimodal Trail Design/Planning

Lexington-Fayette Urban County Government RFP #13-2014

# Firm Qualifications

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind.

The Stantec community unites more than 13,000 employees working in over 200 locations. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

# Why Select Stantec to Provide Pedestrian, Bike, or Multimodal Trail Design / Planning Services for DOE Projects?

Projects under this contract may not be about deciding *what* to do but rather about deciding *how* to do it. You'll need a project partner that can help you identify the best locations for greenways/trails, design connections between the points that minimally impact existing infrastructure and the environment, attain agency approval when needed, lead productive and informative public involvement, and set the tone for future development and investments. With this in mind, we're excited to join you on this journey. Based on our past work with the LFUCG, we have a solid foundation and understanding of your expected results and how best to make any LFUCG project a success. Here are the top 6 qualities our team offers you:



- 1. **Proven project leadership.** Proposed project manager Jason Bricker, PE, is someone you know well from his years of work on the Harrodsburg Road Double Crossover Diamond (DCD) interchange and the Newtown Pike Extension project. Jason has overseen roadway design services and remained mindful of how this project will interact with future multimodal improvements to the Lexington Distillery District. He'll be supported by project principal Tom Creasey, PhD, PE, who is currently leading the Downtown Lexington Traffic Movement and Revitalization Study (the one-way-to-two-way conversion study). Both Jason and Tom work from Stantec's downtown Lexington office on East Vine Street, and will be supported primarily from others at this location.
- 2. **Multimodal project experience in Lexington.** As part of our roadway design projects, Stantec has designed multi-use paths in Lexington. Most notable is the shared use path we included as part of the Double Crossover Diamond on Harrodsburg Road. As LFUCG Councilman Doug Martin said, "...the interchange has also made an important connection for pedestrians and cyclists. Existing trails south of New Circle Road are now connected by multi-use paths to sidewalks on the other side of the interchange, providing a safe and efficient route for cyclists and pedestrians to commute across this dangerous intersection." He further applauded the project for making "a significant step in connecting Lexington's expanding bicycle and pedestrian network."
- 3. **Integrated planning and design process led by local engineers.** Planning, design, and implementation don't happen in a vacuum. Our team has lived and worked in Lexington for years, so we're already familiar with the City's goals to improve multimodal connectivity. For any project, we will walk with you through Lexington's neighborhoods to identify places that people naturally gather and use. As we have for other Lexington projects, we'll meet with community decision-makers to learn what changes they'd like to see and can show them 3D animations of what improvements could look like. We'll guide you through any related KYTC or FHWA approval and coordination processes if needed.
- 4. Environmentally-friendly design options. Planning for your infrastructure's future starts with sustainable design. We share your social, economic, and environmental values, and we pride ourselves on designing solutions that build stronger communities today and tomorrow. Our unique ENVISION<sup>™</sup> rating system can help assess sustainability on any project and improve the final product while keeping cost and schedule in mind. We think of it like the LEED process applied to transportation projects instead of to buildings. Sustainability can become an important factor if you need to seek grant funding later on in the process. Although this may not be a consideration for every project under this contract, this analysis can be a valuable service we're happy to provide if needed.

- 5. Access to national expertise. While most of these projects will be completed using 100% Kentucky-based staff, we have included pedestrian, bike, and multimodal subject matter experts on our team to support us as needed. As you'll read, Rock Miller and Andrew Kohr have worked on several multimodal projects in urban areas that focus on better connecting neighborhoods to each other and to public facilities while minimizing impacts to existing infrastructure and the surrounding terrain. They'll be able to provide our team with valuable guidance learned from their experience and ultimately help support timely and cost-effective project delivery.
- 6. **Responsive service from years of on-call experience.** Stantec has successfully performed on-call engineering services for several KYTC statewide services contracts so we understand how important it is to be just a phone call away. Under these contracts, Stantec has successfully completed numerous planning and engineering assignments with components similar to those that will come out under this contract. Through these contracts Stantec has developed an excellent relationship with each of our clients and other reviewing agencies, which is why we deeply understand the project development processes in Lexington and across the state.

### Stantec's History in Lexington

Since the 1960s, Stantec has been a part of the Lexington community. With the acquisition of the firms Fuller, Mossbarger, Scott & May (FMSM) and ENTRAN with the past five years, we've strengthened our capabilities in service areas we were already well known for performing. For more than 40 years, we've locally offered services in geotechnical engineering, roadway planning and design, inspection, structures design, design visualization services, and more. Locally, we employ 195 individuals in our two Lexington offices. See the Local Office section of this submittal for more information about our presence in Lexington.



### About the Stantec Team Members

To meet this contract's DBE goals, we've included **Integrated Engineering** on our team to provide surveying services as needed. You can read more about Integrated and our plan to include them on this contract in the DBE Plan section of this submittal.

# **Project Team**

As the organizational chart below depicts, Jason Bricker, PE, will be your first point of contact for any bike/pedestrian/multimodal project advertised under this contract. He's supported by several other individuals including subject matter experts (SMEs) in multimodal design and environmental sustainability.



Environmental Engineers **37 Professionals** 

Environmental Scientists **11 Professionals**  **41** Professionals

GIS Specialists **20 Professionals** 

Geologists **4** Professionals Structural Engineers **6** Professionals

Technicians/ Analysts **38 Professionals**  11 Professionals

Other Civil Engineers 7 Professionals

**Total Kentucky Technical Staff 187** Professionals

### Resumes

One-page resumes for each of the key staff listed above may be found in the Resumes section. The following sections will briefly highlight why each person is a great fit for this contract and tell you a little bit more about how they will work together on this contract to deliver projects to LFUCG in a timely, cost-effective manner.

### Local Team

Project manager **Jason Bricker**, **PE**, has actively led the Newtown Pike Extension project for close to five years. As a result, he understands LFUCG's expectations of consultant engineers and is the ideal person to lead this contract. For any assignment under this contract, Jason will be your first point of contact. He'll work closely with project principal Tom Creasey and QA/QC lead (and department manager) Glenn Hardin to identify the resources needed for any project to submit an accurate cost estimate that responds to project needs. Upon award of any assignment, Jason will promptly meet with the LFUCG project manager and any other key stakeholders. Throughout the planning and design process, he will coordinate with local staff to address technical elements while driving the project's budget and schedule.

Supporting Jason will be principal **Tom Creasey**, **PhD**, **PE**. For several years, Tom has been working closely with LFUCG staff, City Council, downtown businesses, and other key stakeholders to examine the feasibility of converting downtown streets from one-way to two-way operations. Because of this, he too understands LFUCG's expectations of consultant engineers and the unique impacts that multimodal improvements can have on existing infrastructure.

**Glenn Hardin, PE**, will oversee QA/QC efforts, just as he has on multiple projects in Lexington like the Newtown Pike section between I-75 and Ironworks Pike. Like Jason and Tom, Glenn is someone LFUCG already knows well and someone who understands how you do business. His job on this contract will be make sure the team submits accurate, quality plans—which will ultimately help support keeping the schedule moving and keeping project costs down. As the department manager for roadway design, he'll also help Jason assign the staff needed to complete any assignment under this contract.

Jason, Tom, and Glenn will be supported by 18 local transportation engineers. **Bill Morris, PE, Antonio Pousa, PE, and Heather Lawler, PE** in particular have multimodal design experience. As University of Kentucky graduates, they're also deeply familiar with Lexington and the multimodal goals of this community. Our team is also supported by planners **Brian Aldridge, PE** (another UK graduate) and **Ashley Day, EIT**. Brian and Ashley have worked on numerous projects in Lexington throughout their careers, giving them a deep understanding of the city's and county's traffic patterns. They also understand how multimodal projects and traffic patterns interact with each other. Finally, we've included **Lexington-based DBE firm Integrated Engineering** on our team to lead surveying efforts. We've worked with Integrated on several projects throughout Lexington and Kentucky, as you can read in the DBE Participation section of this submittal.

### National Expertise to Support Local Team

To best serve the LFUCG on this contract, we've included three experts from outside of our Kentucky offices to provide support on these projects as needed: Rock Miller, Andrew Kohr, and Marsha Anderson Bomar. Because we're a larger, international firm, we offer local access to some of the US' top experts in multimodal planning/design and sustainability. Few other firms in town can match the relationships and experience we bring to the table. While we'll lead every assignment under this contract from our Lexington offices, we'll reach out to others as needed to learn what solutions have worked best in cities facing challenges similar to Lexington. The city has shown its commitment to learning what other cities and states have to offer by the high participation in Commerce Lex's annual leadership visits to cities like San Antonio, Greenville, Austin, and more. We're excited to bring the experience our team has gained in cities like these to our backyard. Ultimately, including these three leaders on the team will help us streamline project budgets and schedules by allowing us to talk to the folks who have "been there, done that." We won't be feeling our way through the best ways to proceed because we'll use tactics that have proven effective in other states.





**Rock Miller** and **Andrew Kohr** will support multimodal planning and design. As you'll see in their resumes, both have extensive experience working directly with cities like Lexington to implement bicycle and pedestrian trail programs. **Marsha Anderson Bomar** is an ENVISION <sup>™</sup> certified expert and will support sustainability efforts on any project. The program we offer is similar to the LEED program and can be beneficial if grants are pursued at later funding stages.

### How We'll Work with You

As soon as you call with a possible assignment, we'll get right to work identifying project needs so we can give you an accurate scope, schedule and cost estimate. Upon award, our first task will be to schedule a kickoff meeting with you.

While tasks under this contract will vary, they all will share common goals

- Engage the Lexington-Fayette County community in meaningful ways
- Generate feasible, affordable solutions and accurately assess the costs, benefits, and impacts; and
- Streamline the development process to keep costs down and schedules moving

This overarching philosophy helps guide the path to any project's successful conclusion because any task will ultimately go back to one of these three goals.

Our previous work on on-call type contracts and LFUCG projects shows we understand your expectations of on-call consultants. We know it's important to you that we keep you in the loop about our progress on assignments and that you habe a consultant who can take initiative and be your trusted advisor.

### How We'll Work with the Community

Community engagement can be the most important component of a successful multimodal project because it helps everyone visualize changes to come. While public involvement needs will continue to evolve, what hasn't changed is the universal need for simple, effective communication. We work with the local community to address concerns, mitigate impacts, and build understanding and support for the right projects. As we've demonstrated for our work on Newtown Pike and the Downtown Lexington Traffic Movement and Revitalization project, our public meetings turn Q and A sessions into conversations between real people—not "engineers and planners" and "everyone else."

### Comprehensive Support for Any Project

The unwritten scope item of any contract like this is to help you tackle any challenge that arises. This means we will attend meetings with affected property owners, coordinate closely with utility owners, and many other tasks so that we can to support you under this contract. With a workforce of nearly 200 professionals in Lexington and a 13,000-person nationwide staff, we have the local workforce and specialized technical expertise needed to lead any assignment. We can even lead multiple assignments at once.

With a strong team of experts in a variety of disciplines, QA/QC is built in at multiple stages and engages people not involved in the day-to-day activities of the project. Quality work helps us keep projects on budget and on schedule, and is an area we constantly strive to make even better. Our team is committed to the continual improvement of quality in all of our operations by implementing and maintaining a quality management plan (QMP) compliant to the ISO9001:2008 international quality standard. You can read more about the ISO 9001:2008 Quality Management standards on www.iso.org.

# Clients for which similar work has been performed

Client	Contact Name	Phone Number and Email Address	Project
LFUCG Lexington, Kentucky	Mr. Andrew Grunwald, PE Newtown Pike Project Manager	859-258-3410 Agrunwald@lfucg.com	<b>Newtown Pike</b> <b>Extension</b> Lexington, Kentucky
KYTC District 7 Lexington, Kentucky	Mr. Bob Nunley, PE Project Development Manager	(859) 246-2355 Bob.Nunley@ky.gov	Harrodsburg Road DCD Lexington, Kentucky
LFUCG Lexington, Kentucky	Mr. Chris King, AICP Director of Planning	(859) 258-3262 chrisk@lexingtonky.gov	<b>Downtown Lexington</b> <b>Traffic Movement and</b> <b>Revitalization Study</b> Lexington, Kentucky

# Similar Projects Performed by Key Team Members

### Harrodsburg Road DCD & Shared Use Path

Date of Service Completed 2011 Construction Cost \$6.2M total Team Members Jason Bricker, PE Glenn Hardin, PE Antonio Pousa, PE Brian Aldridge, PE Ashley Day, EIT

### Newtown Pike Extension, Bicycle Lanes,& Pedestrian Facilities

### Date of Service Ongoing Phase I completed in 2008 Construction Cost \$75M total

Team Members

Jason Bricker, PE Glenn Hardin, PE **Project Description:** This project became the first DCD (Double Crossover Diamond) in Kentucky. Stantec was responsible for preliminary and final roadway design including shared use path design, traffic analysis, and public/stakeholder outreach.

Shared use paths were added to the project along both sides of the roadway because this particular section of Harrodsburg Road



was not bicycle or pedestrian friendly. Portions of the roadway had sidewalks on one side, but there was no pedestrian access within the limits of the interchange. Goals on this project included providing a safe bicycle and pedestrian pathway through the interchange and seamless access to the other non-motorized facilities. Both were accomplished as part of the DCD design.

**Project Description:** Stantec was responsible for preparing an engineering design study report, environmental analysis, and Phase I and II design for a 1.3mile extension of an urban boulevard around the southern portion of Lexington's central business district. The project includes the design of bicycle lanes and pedestrian facilities along the entire length of the route.



The project included a comprehensive land use plan for the 400 acres surrounding the corridor and the redevelopment of a 25-acre neighborhood due to environmental justice impacts. Phase I is complete design and construction is complete.

### Johns Hill Road, Bike Lanes & Sidewalks

Date of Service Phase I completed in 2008 Phase II underway Construction Cost \$5M total Team Members

Glenn Hardin, PE

### **Project Description:**

Stantec was responsible for preliminary and final roadway design and environmental analysis on the project, which is currently in the second phase. The firm's responsibilities include design studies, surveying, drainage design, traffic



control, erosion control, right-of-way plans, and construction plans with construction cost estimates.

This project was coordinated with the Kentucky Transportation Cabinet and Northern Kentucky University and accompanied the construction of a new arena and parking garage Both two-lane rural roadways are being replaced with divided urban roadways with curb and gutter, bike lanes and sidewalks.

### I-75 / KY 536 Interchange & Shared Use Path Design

### Date of Service

Ongoing

Construction Cost

### **Team Members**

Jason Bricker, PE Glenn Hardin, PE Brian Aldridge, PE Antonio Pousa, PE Ashley Day, EIT Tom Creasey, PhD, PE **Project Description:** Stantec is responsible for roadway design, public involvement coordination, including a project website, 3D modeling and traffic simulations, signal design and lighting, and design of bike/pedestrian accommodations.



### KY 53 Widening & Shared Use Path Design

### Date of Service

### Ongoing Construction Cost \$8.5 M total

### **Team Members**

Jason Bricker, PE Glenn Hardin, PE Brian Aldridge, PE Heather Lawler, PE

### **UCLA Bicycle Enhancment**

Date of Service 2013 Construction Cost Varies Team Members Rock Miller **Project Description:** The purpose of the KY 53 widening project is to promote better connectivity, improve safety and reduce congestion on KY 53 between I-64 and US 60. This project will provide an improved connection between I-64 and Shelbyville's downtown and east end, and ties into an adjacent project at the intersection of KY 53 and I-64 (5-65.21). The project includes an adjacent shared use path to one side of the roadway.



**Project Description:** We participated in a series of projects to improve conditions for bicycling on the UCLA campus. Our efforts resulted in creating bicycle lanes on important campus roadways and plans for further improvements as funding becomes available. These results are also expected to expand to address issues in surrounding areas of Los Angeles.

### Riverside Cemetery Master Plan

Date of Service 2013 Construction Cost N/A Team Members Andrew Kohr **Project Description:** The 80-acre rural cemetery, popular in the 19th century, and its neighbors form an open space along the Ocmulgee River that could be a spine for a growing recreational park and trail network. One component of the master plan is envisioning bicycle and pedestrian connectivity around the periphery of the cemetery. Currently the Ocmulgee Heritage Trail goes through the cemetery, but surrounding facilities are lacking. The master plan identified primary connectivity corridors that included a multi-use trail design along Riverside Drive that would better connect pedestrians and bicyclists with nearby bus stops, residential areas, the cemetery, and commercial spaces.



# Contract 6 Traffic Signal Design

Lexington-Fayette Urban County Government RFP #13-2014

# Firm Qualifications

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind.

The Stantec community unites more than 13,000 employees working in over 200 locations. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

### Why Select Stantec to Provide Traffic Signal Design Services for DOE Projects?

Traffic signal design is an important component of the roadway improvement/development process, and its importance may not be obvious. The proper design and subsequent operation of signals makes it possible for users to traverse the roadway safely. In the court of public opinion, poorly designed signals and lighting are popular targets for complaints. For this reason, this contract will play a key role in numerous transportation improvement projects to help supplement the LFUCG's engineering teams. Signals also represent one of the most time-sensitive aspects of a roadway design project, although developing electrical plans doesn't always command the highest priority throughout much of the pre-construction phase. Design of the electrical items cannot begin in earnest until the final geometrics, right-of-way and utilities have been conclusively established. Typically this provides a narrow window of opportunity to design electrical devices and estimate quantities just a few weeks prior to the construction advertisement date.



To address these challenges, it is important to choose a knowledgeable, experienced, and dependable consultant capable of providing high quality plans in a short amount of time. This is not the kind of contract that benefits from a "fresh look" or should be performed by anything less than a team of experts; most project schedules simply don't offer much time to learn on the job. While electrical engineering and signal design plays a pivotal role in every roadway facility, there are very few firms with electrical engineering experts in Kentucky that understand the intricacies of these systems and can deliver accurate plans under very aggressive schedules.

Based on our past work with the LFUCG, we have a solid foundation and understanding of your expected results and how best to make any LFUCG project a success. Here are the top four qualities our team offers you:

- 1. **Proven project leadership.** Proposed project manager Bob Flener is someone you know well from his years of work with the KYTC and his work on the Harrodsburg Road DCD. He'll be supported by project principal Tom Creasey, PhD, PE, who is currently leading the Downtown Lexington Traffic Movement and Revitalization Study (the one-way-to-two-way conversion study).
- 2. Unique traffic signal design exerience in Lexington. As part of our roadway design projects, Stantec has designed traffic signals. Most recently, we designed the traffic signals and lighting for the Harrodsburg Road DCD. The design of traffic signals for the DCD presented a new challenge with the interchange crossover and required unique signal face arrangements. While a traditional diamond interchange would have a cabinet and independent traffic signal controller hardware at each ramp terminal, the DCD is operated by a single installation. The contractor complimented the traffic control scheme as "well planned and very constructible." We also designed the lighting for the reconstruction of the Kennedy Interchange in downtown Louisville.
- 3. Access to national expertise. While most of these projects will be completed using 100% Kentucky-based staff, we have included traffic signal design experts on our team to support us as needed. As you'll read, Travis Hurt, Larry Overn, and Rick Reiff have all worked on countless signal design projects in urban areas. They'll be able to provide our team with valuable guidance learned from their experiences and ultimately help support timely and cost-effective project delivery.

4. **Responsive service from years of on-call experience.** Stantec has successfully performed on-call engineering services for several KYTC statewide services contracts so we understand how important it is to be just a phone call away. Under these contracts, Stantec has successfully completed numerous traffic signal design projects as part of on-call service agreements and roadway design contracts. Through these contracts Stantec has developed an excellent relationship with each of our clients and other reviewing agencies, which is why we deeply understand the permitting processes in Lexington and across the state.

### Stantec's History in Lexington

Since the 1960s, Stantec has been a part of the Lexington community. With the acquisition of the firms Fuller, Mossbarger, Scott & May (FMSM) and ENTRAN in the past six years, we've strengthened our offerings in service areas we were already well known for performing. For more than 40 years, we've locally offered services in geotechnical engineering, roadway planning and design, inspection, structures design, design visualization services, and more. Locally, we employ 195 individuals in our two Lexington offices. See the Local Office section of this submittal for more information about our presence in Lexington.



### About the Stantec Team Members

To meet successfully complete all tasks under this contract, as well as DBE goals, we've included **Abbie Jones Consulting** on our team to provide data collection services as needed. You can read more about Abbie Jones and our plan to include her firm on this contract in the DBE Plan section of this submittal.

Abbie Jones Consulting provides manual, tube, video and radar traffic counts. They have several brands and are able to output in Petra Pro, Excel, and others as requested. Their raw data as well as initial quality check balance (if more than one location), photographs, and videos are also provided in non-proprietary format that clients can use as extra tools in their modeling. Their annual traffic count unit price sheet is helpful for clients to quickly respond to budget planning requests and shows how cost effective 12 or 24hr data can be compared to a 2hr manual count. An office-less workplace is ideal for this type of fieldwork and cloud data sharing of processed final data. Before beginning a new project, the firm can conduct a short scoping conversation to clarify all needed details such as bins, time of day, day of week, and any extra collaboration desired. They also have two additional post-processing vendor firms to assist with larger projects or expedited processing speed.

# Project Team

As the organizational chart below depicts, **Bob Flener**, **PE**, **PLS**, **PTOE** will be your first point of contact for any traffic signal design project advertised under this contract. He's supported by several other individuals in our Kentucky offices.



### Resumes

One-page resumes for each of the key staff listed above may be found in the Resumes section. The following sections will briefly highlight why each person is a great fit for this contract and tell you a little bit more about how they will work together on this contract to deliver projects to LFUCG in a timely, cost-effective manner.

### Local Team

Project manager **Bob Flener, PE, PLS, PTOE** has than 35 years of transportation engineering experience, 27 of them with the Kentucky Transportation Cabinet. He has special expertise in traffic/transportation studies, design, construction and operations. Bob has extensive knowledge of the Type 170E traffic signal controller and WAPITI W4IKS firmware, HCS+ software, TSIS/CORSIM software and KYTC travel time/data analyzer and TransPHAT software. While affiliated with the Cabinet, Bob served nine years as the transportation engineering branch manager for traffic and permits and nine years as the district traffic engineer for electrical operations. Bob joined the Kentucky Transportation Cabinet's District 5 traffic section in 1979 to help deploy the first minicomputer based coordinated signal system in Kentucky for 16 intersections on US 60 Shelbyville Road. During his tenure as district traffic engineer, these systems were subsequently changed to Econolite/ NEMA on-street master controlled systems and eventually were replaced with Type 170/ WAPITI control equipment. Bob was personally responsible for wiring cabinets, developing system timing, and monitoring and maintaining signal operations. Other responsibilities included inspecting highway lighting and supervising electrical contracts.



Supporting Bob will be principal **Tom Creasey**, **PhD**, **PE**. For several years, Tom has been working closely with the LFUCG staff, City Council, downtown businesses, and other key stakeholders to examine the feasibility of converting downtown streets from one-way to two-way operations. Because of this, he understands LFUCG's expectations of consultant engineers and the unique benefits effective signal design can have on the city's mobility. As a project principal, part of Tom's job will be to help Bob line up the staff resources needed to complete any assignment on time and within budget.

**John Moss, PE** and **Adam McLain, PE** will oversee QA/QC efforts for signal design. Both are well suited to check the plans for any project under this contract.

### National Expertise to Support Local Team

To best serve LFUCG on this contract, we've included experts from outside of our Kentucky offices to provide support on these projects as needed. Because we're a larger, international firm, we offer local access to some of the US' top experts in traffic signal design. Few other firms in town can match the relationships we bring to the table. While we'll lead every assignment under this contract from our Kentucky offices, we'll reach out to other offices as needed to learn what solutions have worked best in cities facing similar challenges. The City has shown its commitment to learning what other cities and states have to offer by its high participation in Commerce Lex's annual leadership visits to cities like San Antonio, Greenville, Austin, and more. We're excited to bring the experience our team has gained in cities like these to our backyard.

**Larry Overn, Travis Hurt,** and **Rick Reiff** will support our traffic signal design experts. As you'll see in their resumes, each has extensive traffic signal design experience. Ultimately, including these leaders on the team will help us streamline project budgets and schedules because these folks have "been there, done that." We won't be guessing on the best ways to proceed because we'll use tactics that have proven effective in Kentucky and in other states.

### How We'll Work with You

As soon as you call with a possible assignment, we'll get right to work identifying project needs so we can give you an accurate scope and cost estimate. Upon award, we'll arrange a meeting with you to kick off the project.

While tasks under this contract will vary, they all will share common goals:

- Engage the Lexington-Fayette County community in meaningful ways
- Generate feasible, affordable solutions and accurately assess the costs, benefits, and impacts; and
- Streamline the development process to keep costs down and schedules moving
This overarching philosophy helps guide the path to any planning project's successful conclusion because any task will ultimately go back to one of these three goals.

Our previous work on on-call type contracts and LFUCG projects shows we understand your expectations of on-call consultants. We know it's important to you that we keep you in the loop about our progress on assignments but we also understand that you need a consultant who can take initiative and be your trusted advisor.

#### How We Lead Signal Design Projects

Our team is structured to be dynamic and to accommodate multiple tasks. Our key personnel and supporting traffic engineers routinely work inside traffic signal cabinets. We know how cabinets are wired as well as the preferences and presentation of signal plans on Kentucky projects. Our team offers the advantage of developing plans that avoid the most common mistakes on wiring, loop schedules, and customized notes. This will be highly advantageous for quick turnaround projects.

The Stantec team is intimately familiar with the MUTCD, the Roadway Lighting Design Guide, Traffic Operations Guidance Manual, the National Electric Code, and the KYTC's methods of best practice. We are also proficient and experienced using the KYTC's SALSA program for determining pole base dimensions for steel strain, mast arm, and high-mast poles, having used it since its introduction into the design process. All plans will be created in MicroStation and submitted in your preferred format.

We also understand the real world operation of traffic signals and are experts in the programming and operation of the Type 170 and 2070 traffic signal controllers and cabinet wiring. This level of knowledge and experience is paramount to the production of high quality signal plans. The most common mistakes on signal plans are in the wiring and loop schedules. Our experts know the standardized wiring of 330 series cabinets and have the capability to specify customized cabinet wiring for phase overlaps and flashing yellow arrow protected-permitted left turns. The first design consideration should always be given to pedestrians. We are sensitive to pedestrian accessibility and crosswalks. Our efforts always work to provide the safest possible crossings for pedestrians. Consequently, pole locations will be designed to preserve clear zones when practical.

#### Comprehensive Support for Any Project

The unwritten scope item of any contract like this is to help you tackle any challenge that arises. This means we will attend meetings with affected property owners, coordinate closely with utility owners, and wholly support you under this contract. With a workforce of nearly 200 professionals in Lexington and a 13,000-person nationwide staff, we have the local workforce and specialized expertise needed to lead any assignment. We can even lead multiple assignments at once.

With a strong team of experts in a variety of disciplines, QA/QC is built in at multiple stages of every project and engages people not involved in the day-to-day activities of the project assignment. Quality work helps us keep projects on budget and on schedule, and is an area we constantly strive to make even better. Our team is committed to the continual improvement of quality in all of our operations by implementing and maintaining a quality management plan (QMP) compliant to the ISO9001:2008 international quality standard. You can read more about the ISO 9001:2008 Quality Management standards on www.iso.org .

### Clients for which similar work has been performed

Client	Contact Name	Phone Number and Email Address	Project
KYTC District 7 Lexington, Kentucky	Mr. Bob Nunley Project Development Manager	(859) 246-2355 Bob.Nunley@ky.gov	Harrodsburg Road DCD Lexington, Kentucky
Louisville Metro Government Louisville, Kentucky	Mr. Patrick W. Johnson Manager, Traffic Engineering	(502) 574-3140 Pat.Johnson@louisvilleky.gov	Jefferson County Metro Government Traffic Signal Timing Upgrades Louisville, KY
KYTC Division of Traffic Operations Frankfort, Kentucky	Mr. Ted Swansegar TEBM for Electrical Operations	(502) 564-3020 Ted.Swansegar@ky.gov	<b>Statewide Electrical Engineering</b> Various locations In Kentucky

### Similar Projects

#### Harrodsburg Road Signal Design

Date of Service Completed 2011 Construction Cost \$6.2M total Team Members Bob Flener, PLS, PE, PTOE Brian Aldridge, PE **Project Description:** This project became the first DCD (Double Crossover Diamond) in Kentucky. Stantec was responsible for preliminary and final roadway design including shared use path design, traffic analysis, and public/stakeholder outreach on the project.

Traffic signal and lighting design was provided on this project that involves widening the roadway and converting the existing interchange with New Circle Road to the first double crossover diamond in



Kentucky. Signal design was provided for the DCD at New Circle Road, the intersection of Harrodsburg Road and Corporate Drive/ Beaumont Centre, and the intersection of Harrodsburg Road and Pasadena Drive/ Alexandria Drive. The project also included high-mast and conventional roadway lighting, and installation of video cameras for observing traffic operations.

As noted earlier, design of traffic signals for the DCD presented a new challenge with the interchange crossover and required unique signal face arrangements. While a traditional diamond interchange would have a cabinet and independent traffic signal controller hardware at each ramp terminal, the DCD is operated by a single installation.

### Statewide Electrical Engineering

#### Date of Service

Ongoing

**Construction Cost** 

N/A

#### **Team Members**

Bob Flener, PLS, PE, PTOE Tony Lewis, PE, PTOE John Moss, PE Adam McLain, PE Ashley Day, EIT Kirk Oswald **Project Description:** This project provides assistance to the Kentucky Transportation Cabinet Division of Traffic Operations with roadway projects throughout Kentucky. Stantec has prepared traffic signal plans for four intersections on three projects:

- Graves County, US 45 and KY 408, traffic signal with green extension system and advanced warning flashers
- Bullitt County, KY 61 widening, two traffic signals with green extension system
  - Bullitt County, KY 61 Bypass, traffic signal



#### I-75 / KY 536 Interchange & Shared Use Path Design

#### Date of Service

Ongoing Construction Cost

#### **Team Members**

Brian Aldridge, PE Ashley Day, EIT Tom Creasey, PhD, PE Bob Flener, PLS, PE, PTOE Tony Lewis, PE, PTOE John Moss, PE Adam McLain, PE Kirk Oswald

#### **Project Description:**

The project involves widening KY 536 and converting the existing interchange to a double crossover diamond. Stantec is responsible for the design of six traffic signals on the KY 536 corridor utilizing Adaptive Signal Control. Signal plans are currently



under development for the DCD and five intersections within the project area. Mast arm mounted signals will be used at the KY 536 intersection with the I-71/75 ramp terminals/crossovers. Intersections at Tiberon Drive, Biltmore Boulevard, Sam Neace Drive, Berberich Drive and US 25 will use steel strain pole designs. The proposed locations for all traffic signal appurtenances, including signal poles, controller cabinets, pedestrian signals, and supplemental signals, are reviewed for visual impairment to drivers and to maximize pedestrian safety. All intersections are to be equipped with signal system communications hardware.

#### KY 53 Widening & Signal Design

Date of Service Ongoing Construction Cost \$8.5 M total

#### Team Members

Brian Aldridge, PE Bob Flener, PLS, PE, PTOE

#### Old Henry Road at Bush Farm Road

Date of Service 2010

### Construction Cost

N/A Team Members

Bob Flener, PLS, PE, PTOE

# **Project Description:** The purpose of the KY 53 widening project is to promote better connectivity, improve safety and reduce congestion on KY 53 between I-64 and US 60. This project will provide an improved connection between I-64 and Shelbyville's downtown and east end, and ties into an adjacent project at the intersection of KY 53 and I-64 (5-65.21). The project roject includes reconstruction of three traffic signals.

**Project Description:** This project provided a modification to an existing temporary signal to provide left turn phasing.

Indiana Avenue Traffic Analysis and Signal Design	<b>Project Description:</b> As a subconsultant, Stantec gathered traffic data and performed traffic analysis to evaluate the planned roadway improvements and develop traffic signal plans for two intersections.		
Date of Service			
2010			
Construction Cost			
N/A			
Team Members			
Bob Flener, pls, pe, ptoe			



# Contract 7 Geotechnical Testing, Analysis, and Design

Lexington-Fayette Urban County Government RFP #13-2014

### Firm Qualifications

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind.

The Stantec community unites more than 13,000 employees working in over 200 locations. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.

### Why Select Stantec to Provide Geotechnical Testing, Analysis and Design Services for DOE Projects?

The need for geotechnical services is everywhere and at Stantec, we work in a variety of sectors to meet complex project requirements. To us, succeeding means providing practical solutions to the people we work with, on time and on budget. Our comprehensive services including an accredited lab, expertise in local geology, and experience with on-call contracts mean that you can be confident that LFUCG's community improvements are built on solid ground.

#### Comprehensive geotechnical services - locally.

With services ranging from field explorations and laboratory testing to the design and construction management of complex geotechnical structures, Stantec is all you need. And we have everything right here in Lexington. We perform geotechnical studies to evaluate and investigate subgrade improvements, foundation systems, and pavement design or rehabilitation, as indicated in your RFQ as well as studies for buildings, retention structures, site developments, and much more.



**Accredited lab and in-house drill rigs.** We offer an in-house fleet of over 25 drill rigs, AASHTO accredited and U.S. Army Corps of Engineers validated laboratories, and more than 100 geotechnical engineers and geologists on staff. One of our core philosophies is having a geotechnical engineer or geologist on-site to conduct field investigations in an effort to better characterize the subsurface conditions and how they may affect your project.

**Expertise in karst geology.** Our team includes two experts in the unique karst geology that characterizes our beautiful Bluegrass Region. Hugo Aparicio, PE, and John Beam, PG, have decades of experience providing geotechnical engineering services related to the exploration and treatment of karst features in urban development sites in Lexington and throughout the region. Considering their collective experience, chances are if you run into a karst challenge on your project, we've seen it before and know how to address it.

We've managed more than 30 on-call contracts for 8 USACE districts across the Southeast and Midwest. **Responsive service from years of on-call experience.** Stantec has successfully performed on-call geotechnical engineering services throughout Kentucky for the KYTC for the last 44 years as well as for eight USACE districts in the Southeast and Midwest. Under these on-call service contracts, we have successfully completed numerous work orders just like those that will come out under this contract. With one phone call, you can be confident that every work order, regardless of size, will be accepted and performed according to your requirements and under the strict quality controls we've built our reputation on.

#### Stantec's History in Lexington

Since the 1960s, Stantec has been a part of the Lexington community. With the acquisition of the firms Fuller, Mossbarger, Scott & May (FMSM) and ENTRAN within the past five years, we've strengthened our capabilities in service areas where we were already well known. For more than 40 years, we've locally offered services in geotechnical engineering, roadway planning and design, inspection, structures design and more. See the Local Office tab of this submittal for more information about our presence in Lexington.



Newtown Pike extension drilling



AASHTO accredited and USACE validated soils and materials testing lab



Ten local lab technicians

### **Project Team**

As the organizational chart below depicts, Mark Litkenhus, PE, will be your first point of contact for any geotechnical testing, analysis or design project advertised under this contract. Several other individuals including our karst experts, nine drill crews and a substantial local staff of CADD, lab, and field technicians will support Mark on this contract. More information about each of the team members follows the organizational chart and resumes for each are included in the resume section of this submittal.



#### **Team Members**

**Mark Litkenhus, PE**, will serve as Stantec's Project Manager and will have direct supervisory responsibilities for project assignments. Mark has worked with LFUCG and surrounding municipalities for 23 years, and his daily efforts at Stantec are primarily dedicated to transportation projects. He understands the need for effective communication between LFUCG and the geotechnical consultant for successful project completion. His experiences related to on-call contract work are comprehensive regarding technical and administrative issues so the progression of work orders from

issuance to project completion will be uncomplicated. **Dan Back**, **PE**, **SE**, **PLS** will provide QA/QC using his 35 years of broad-based experience across all aspects of geotechnical and civil engineering.

Adam Crace, PE, Kip Anderson, PE, PG, and Luis Arduz, PE, are senior geotechnical engineers with Stantec and will be leading geotechnical analysis and design tasks. Their combined experience includes projects like geotechnical field explorations for the Southend Park redevelopment, foundation and pavement recommendations for the UK Wildcat Coal Lodge, and others as noted in the similar projects section. Our karst geology expertise mentioned earlier is represented by **Hugo Aparicio**, **PE**, and **John Beam**, **PG**. who combined have completed more than 100 projects in Lexington and surrounding cities. **Eddie Mesta**, **PE**, and **Mitchell Estes**, **PE**, with **Integrated Engineering**, (DBE) our long-time, trusted teaming partner, will be joining our team again to provide survey services. Finally, we round out our team with a robust, Lexington-based staff of **9 CADD technicians**, **10 lab technicians**, **field technicians**, and **nine two-man drill crews** all located less than two miles from your office.

#### How We'll Work with You

As soon as you call with a possible assignment, we'll get right to work identifying project needs so we can give you an accurate scope and cost estimate. Upon award, we'll kickoff the project by meeting with you in person or over the phone if more appropriate.

While tasks under this contract will vary, they all will share common goals:

- Engage the Lexington-Fayette County community in meaningful ways
- Generate feasible, affordable solutions and accurately assess the costs, benefits, and impacts; and
- Streamline the development process to keep costs down and schedules moving.

Our previous work on on-call type contracts and LFUCG projects shows we understand your expectations of on-call consultants. We know it's important to you that we collaborate closely with you on assignments while also serving as a consultant who can take initiative and be your trusted advisor. Stantec is that consultant.

#### How We'll Work with the Community

Community engagement can be an important component of a successful project because it helps everyone understand changes to come. While public involvement needs continue to evolve, what hasn't changed is the universal need for simple, effective communication. We work with the local community to address concerns, mitigate impacts, and build understanding and support for the projects. Our geotechnical team members have worked with literally thousands of property owners over the firm's 44-year history and we are proud of our responsiveness to their concerns and needs.

#### Comprehensive Support for Any Project

The unwritten scope item of a contract like this is to help you tackle any challenge that arises. This means we will attend meetings with property owners, coordinate closely with utility owners, and do what we can to support you under this contract. With a workforce of nearly 200 professionals in Lexington and a 13,000-person nationwide staff, we have the local workforce and specialized technical expertise needed to lead any assignment. With our team's depth, we can even lead multiple concurrent assignments.

With a strong team of experts in a variety of disciplines, QA/QC is built in at multiple stages and engages independent reviewers who are not involved in the day-to-day activities of every project assignment. Quality work helps us keep projects on budget and on schedule, and is an area we constantly strive to make even better. Our team is committed to the continual improvement of quality in all of our operations by implementing and maintaining a quality management plan (QMP) compliant to the ISO9001:2008 international quality standard.

### Clients for which similar work has been performed

Client	Contact Name	Phone Number and Email Address	Project
LFUCG Lexington, Kentucky	Mr. Andrew F. Grunwald, MS, PE Project Manager	(859) 258-3597 AGrunwal@lexingtonky.gov	Newtown Pike Extension Lexington, Kentucky
KYTC – Central Office Frankfort, Kentucky	Mr. Christian Wallover Geologist, Engineering and Geology Section	(502) 564-2374 Christian.Wallover@ky.gov	New Circle Road Widening Lexington, Kentucky
University of Kentucky* Lexington, Kentucky	Mr. Robert Deal Executive Vice President, JRA, Inc.	(859) 252-6781 rdeal@jraarchitects.com	University of Kentucky, UK Wildcat Coal Lodge Lexington, Kentucky
University of Kentucky* Lexington, Kentucky	Mr. Robert Deal Executive Vice President, JRA, Inc.	(859) 252-6781 rdeal@jraarchitects.com	University of Kentucky, UK Digital Village, Marksbury Building Lexington, Kentucky
Cohen Realty, Inc. Memphis, Tennessee	Mr. Eliot D. Cohen Owner	(901) 753-4491 coheninv@bellsouth.com	Professional Heights Civil Site Design and Geotechnical Exploration Lexington, Kentucky
The Webb Companies Lexington, Kentucky	Mr. Robert K. Chaffins Senior Vice President, Asset Management	(859) 253-0000 bchaffins@thewebbcompanies.com	Palomar Shopping Center Karst Exploration and Treatment, Lexington, Kentucky
Lakeview Estates Lake Association (LELA) Lexington, Kentucky	Ms. Vicki Cooper Association Treasurer	(859) 266-5693 vcooper@fasigtipton.com	Lexington Reservoir No. 3 Dam Slide Repair Lexington, Kentucky

 ${}^{*}\!\mathit{End client. Contact information is for the prime \ consultant \ for \ whom \ Stantec \ services \ were \ performed.}$ 

### Similar Projects

### Similar Projects Performed by Key Team Members

#### Newtown Pike Extension

Date of Service

2007-current Construction Cost \$75M

**Team Members** 

Mark Litkenhus, PE Luis Arduz, PE Adam Crace, PE **Project Description:** Stantec provided geotechnical engineering services, including drilling, sampling and laboratory testing programs for the entire 1.6 miles of roadway and roadway structures related to this project. In addition, a geotechnical exploration was conducted for the Southend Park redevelopment.

Several required permits were obtained to perform drilling and sampling within LFUCG streets and railroad right-of-ways. On-site coordination with utility company representatives was also essential. Stantec personnel performed laboratory soil testing including natural moisture content determinations, moisture-density relationship (Proctor) testing, California Bearing Ratio, and soil classifications on disturbed samples. Additionally, unconfined compressive strength, natural moisture content and soil classification tests were performed on undisturbed soil specimens obtained from extruded Shelby tube samples.

Results of the field explorations, lab tests and engineering analyses were used to prepare geotechnical exploration for the proposed roadway, retaining walls, sound barrier wall and bridge structures reports, as well as a report addressing the redevelopment of Southend Park.

#### New Circle Road Widening

Date of Service 2013 Construction Cost \$43k\*

**Team Members** Mark Litkenhus, PE John Beam, PG Adam Crace, PE

#### UK Wildcat Coal Lodge

Date of Service 2010 Construction Cost \$19k\*

#### Team Members

Mark Litkenhus, PE Hugo Aparicio, PE Kip Anderson, PE, PG

#### UK Digital Village, Marksbury Building

Date of Service 2009 Construction Cost \$19k\*

#### **Team Members**

Mark Litkenhus, PE Hugo Aparicio, PE Kip Anderson, PE, PG **Project Description:** Stantec has a 44-year history of providing geotechnical drilling services to KYTC. In 2012, the Kentucky Transportation Cabinet awarded Stantec a two-year contract to provide geotechnical drilling services throughout Kentucky. In 2013 we were awarded a task order to perform a geotechnical exploration to support upgrades to a segment of New Circle Road that includes interchanges with Newtown Pike and Georgetown Road. The scope of work included rock coring, rock soundings, standard penetration tests, undisturbed Shelby tube samples, bulk samples, cased observation wells, reclamation, and gINT boring logs. Additionally, Stantec coordinated with property owners for entry agreements, obtained utility clearances, and set up traffic control as required by the project.

**Project Description:** Stantec performed the geotechnical evaluation of the Wildcat Coal Lodge, a new residential facility located on the campus of University of Kentucky. The new facility consisted of a three-story structure with a partial basement and associated facilities. The footprint for new facility measured approximately 6,250 square feet and the foundation system for the structure consisted of short drilled shafts and/or conventional footings bearing directly on sound bedrock. Other tasks performed include: pavement design for both light and heavy duty flexible and rigid pavements, pre and post construction meetings, development of foundation alternatives due to karst features, and recommendations for rock/soil excavation near existing access roads.

**Project Description:** Stantec performed the geotechnical exploration for the proposed Marksbury Building, a part of the new Digital Campus at the University of Kentucky. The new facility consists of a two-story structure with a partial basement and associated facilities. A preliminary geotechnical exploration was performed, followed by a final exploration after the project architects finalized the building footprint. The explorations included soil sampling, rock coring, and laboratory testing. Geotechnical recommendations were made regarding suitability of in situ soils, rock bearing foundations, floor slabs, and other general foundation recommendations.

\*Consultant's fee. Construction cost not available.

### Similar Projects Performed by Key Team Members

Professional Heights Civil Site Design and Geotechnical Exploration Date of Service 2013-2014 Construction Cost \$84k* Team Members Mark Litkenhus, PE Dan Back, PE, SE, PLS	<b>Project Description:</b> Stantec was the civil site designer for a 4-acre site development project. Site engineering consisted of sanitary and storm sewer design, pavement design, retaining wall design and general site grading. Site drainage was designed to comply with a previous drainage study performed using HEC-HMS and STORMCAD to design detention facilities and storm sewers for multiple design storms in accordance with the Lexington-Fayette Urban County Government Stormwater Manual. Construction drawings and technical specifications were developed per local and state specifications and requirements. Stantec also performed a topographic and utility survey and a geotechnical exploration for a proposed hotel at the site. Tasks included drilling and sampling of soil and rock, laboratory testing, and recommendations for soil bearing foundation systems, pavement subgrade, and site grading. Following the geotechnical exploration, Stantec performed civil site and geotechnical design for the hotel, including grading, drainage, storm sewer (including water quality devices), sanitary sewer, and retaining wall design. We also generated the associated plans and specifications. Stantec also provided engineering representation at several LFUCG planning and zoning meetings and neighborhood meetings.
Palomar Shopping Center Karst Exploration and Treatment Date of Service 2009-2013 Construction Cost \$16k* Team Members Mark Litkenhus, PE Hugo Aparicio, PE Kip Anderson, PE, PG	<b>Project Description:</b> On three separate occasions, Stantec was called to observe and develop treatments for karst related sinkholes that opened within detention basins at the Palomar Shopping Center. With the assistance of a backhoe contractor, Stantec directed exploratory excavations of each sinkhole. Soil was excavated until the open bedrock features (fissures, crevices, etc.) could be observed. After the sinkhole was excavated and cleaned to the extent practical, the area was surveyed and a treatment solution was provided. The treatment typically consisted of placing non-woven geotextile, crushed stone, and finally compacted soil. The crushed stone/geotextile filter allows water to drain into the karst feature while restricting downward soil migration. These types of sinkholes are quite common in the Lexington area, and Stantec is known as a local expert in karst related geotechnical engineering solutions.
Lexington Reservoir No. 3 Dam Slide Repair Date of Service 2011 Construction Cost \$19k* Team Members Mark Litkenhus, PE	<b>Project Description:</b> Upon notification from a long-standing client, Stantec performed a site reconnaissance of two slide failures on the downstream face of the dam. Historical slides had been repaired over twenty years prior to current slides. Stantec designed repair plans for current slides to tie into the previous repair areas. We prepared report of design, cost estimate, bid package and schedule for contractor. We also worked with the client to select a contractor based on submitted bids and knowledge of previous work. Stantec also prepared the permit applications for the State and County and coordinated with officials to receive and close out permits upon completion of the work. We also oversaw on-site construction monitoring of repair work and prepared Daily Field Reports during construction.

\*Consultant's fee. Construction cost not available.



# Local Office

Lexington-Fayette Urban County Government RFP #13-2014

### Local Office

Stantec delivers award-winning professional engineering solutions from the Horse Capital of the World. We're committed to helping people live, work, and play better around the Bluegrass and especially in Lexington. Whether you've biked through Kentucky's first DCD on Harrodsburg Road, driven down the newly re-designed Newtown Pike/Oliver Lewis Way in Lexington, or requested sewer capacity from Lexington's Capacity Assurance Program, you've experienced Stantec's work.

Our contribution to the local economy goes beyond the dollars we spend here. We've also invested our time, energy, and passion into serving the Lexington community. We are frequent volunteers for Red Cross, the Catholic Action Center, KET, and many more organizations that serve Lexington.

#### Presence of All Firms Comprising the Project Team

**Stantec** has two offices in Lexington, Kentucky: one at 400 East Vine Street (Downtown) and the other at 1409 North Forbes Road. Both offices are only 15 minutes from your office. In 2015, both Stantec offices are scheduled to combine as one in the CentrePointe development downtown. Our Lexington presence dates back more than 40 years and comes via two acquisitions in the past five years—ENTRAN (established in 1969; acquired in 2011) and Fuller, Mossbarger, Scott & May (established in 1966; acquired in 2008). Although these firms changed their names, most of the people who comprised these firms remain employees in Stantec's Lexington offices today.

Combined, we employ 195 individuals in Lexington who may work on any of these contracts. Our leadership for each contract is 100% Lexington-based, with some specialized support coming from our Louisville office, as noted throughout the individual Contract and Resumes sections. Although these team members' base of operations is outside of the Bluegrass Area Development District, they routinely work closely with Lexington staff and clients. We don't consider them as members of another office, but rather as an extension of our local team.

If needed, we can call on additional specialized expertise outside of the state for specific projects, as detailed in applicable contract sections. We understand how important it is to LFUCG to work with team members who are nearby and we'll only call upon resources outside of Lexington when needed to best support the project at hand. Put simply, we're committed to providing LFUCG with the best staff and resources within Stantec to meet project-specific challenges throughout the life of this contract.

**DBE subconsultant team members Integrated Engineering and Abbie Jones Consulting** are both headquartered in Lexington. We've worked with each of these firms on a number of projects. Our proximity to each other's offices enables us to easily hold project meetings whenever necessary and to be in LFUCG's office within minutes. Like Stantec, both of these firms are committed to serving Lexington and have experience throughout the City, as shown throughout this submittal.

#### Attachment 1

Attachment 1 is included in the Forms section and details each firms' history, staffing, and utilization.



# **DBE** Participation

Lexington-Fayette Urban County Government RFP #13-2014

### DBE Involvement

Stantec strongly believes in supporting small, minority, and women owned businesses and helping them grow, and commits to providing DBE/SBE firms with the opportunity to participate on a prime level whenever possible on future Lexington-Fayette Urban County Government projects. We have surrounded our staff with two excellent DBE firms that help us deliver on our promise to you: to provide high-quality work, on time and within budget.

We have read and understand that LFUCG commits to a goal of not less than 10% DBE utilization for any project we are awarded under this contract. In support of this we have added Integrated Engineering PLLC and Abbie Jones Consulting to our team to meet this utilization goal across the five contracts being pursued.

**Integrated Engineering** is a Lexington-based, Minority Owned Business Enterprise (MBE) and has teamed with us on LFUCG's Capacity Assurance Program and other infrastructure projects for Louisville MSD, Sanitation District No. 1 (SD1), and the Tennessee Valley Authority. We have included them on our team for four of the five contracts being pursued:

- Roadway corridor and intersection design/planning
- Structures or bridge design
- Pedestrian, bike, or multimodal trail design/planning
- Geotechncal testing, analysis, and design

**Abbie Jones Consulting** is a Lexington-based Woman Owned Business Enterprise (WBE) that will support data collection and provide traffic counts as needed for Contract 6: Traffic Signal Design. Including them on our team will further supplement our already robust capacity and ultimately enables us to better serve the LFUCG. Abbie has provided us with these services on countless projects (including on-call contracts for KYTC) under sometimes aggressive schedules and we're excited to include her firm on our team once again.

Our experience working together with each of these firms on LFUCG projects and other projets throughout the state means we can provide the professional services you need with no learning curve to slow us down. Resumes for key staff at both firms are included within the Resumes section. The following required forms for DBE/subconsultants are included in the Forms section of this submittal:

- DBE Particpation Form
- MWDBE Quote Summary Form
- LFUCG Statement of Good Faith Efforts
- Attachment 1 (Project Team Locations)



## Resumes

Lexington-Fayette Urban County Government RFP #13-2014

### Brian E. Aldridge PE

Deputy Transportation Planning Manager (Louisville, Kentucky)



Brian leads Stantec's Phase I Design Group in Kentucky, giving him the opportunity to work with both planning staff and design professionals. A transportation engineer for more than 16 years, he has experience working on a wide range of transportation projects across the country. His areas of expertise include transportation planning, transportation system design and operations, public involvement, land use planning, railroad and airport facilities design and analysis, environmental planning, and access management. Brian is familiar with a broad range of engineering design software and has been working with geographic information systems for more than 16 years. He has served as a volunteer helping teach the Capstone Design course for senior civil engineering students at UK for the past two years.

#### **EDUCATION**

Masters of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1999

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1998

#### REGISTRATIONS

Professional Engineer #23118, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Downtown Lexington Traffic Study, Lexington, Kentucky (Project Engineer)

Responsible for developing traffic simulation models to help determine the feasibility of converting existing one-way streets in and near downtown Lexington to two-way traffic. This project includes approximately 70 traffic-actuated signals.

#### Bluegrass-Aspendale Traffic Study, Lexington, Kentucky (Project Engineer)

This traffic study examined intersection operability, traffic control needs and roadway functionality in a depressed urban area undergoing revitalization.

#### Indiana Avenue Traffic Study and Signal Plans, Fort Campbell Military Reservation, Kentucky (Project Manager)

Brian served as project manager for this project that included both a traffic study and traffic signal design.

#### Louisville Metro Traffic Signal Timing Upgrades, Louisville, Kentucky (Project Engineer)

Stantec is one of two firms that hold a traffic signal timing upgrades contract with Louisville Metro. The purpose of the project is to maximize capacity, traffic efficiency and safety on multiple networks and arterials on a countywide basis. Brian was responsible for project oversight and quality assurance/quality control.

#### New Circle Road, Phase II Design, Fayette County, Kentucky

Developed TransModeler traffic simulation models and performed comparative analyses for alternatives developed to improve traffic flow through the New Circle Road interchange with Georgetown Road in Lexington.

#### KY 53 Widening Project - Phase I, Shelby County, Kentucky (Project Manager)

#### New Circle Road, Phase I Design, Fayette County, Kentucky (Project Engineer)

Developed TransModeler traffic simulation models and performed comparative analyses for alternatives developed to improve traffic flow through the New Circle Road interchange with Newtown Pike in Lexington. Brian also developed design year traffic forecasts.

#### Communitywide Congestion Management Study, Lexington, Kentucky (Project Engineer)

Responsible for GIS mapping, analyzing existing conditions, and developing and evaluating potential improvement projects.

#### US 68 (Harrodsburg Road) Widening, Fayette County, Kentucky (Project Engineer)

Responsible for public involvement and traffic analysis.

#### AA Highway to I-275 Connector, Campbell County, Kentucky (Project Engineer)

Responsible for traffic forecasting and analysis for a 2.5-mile connector road between Northern Kentucky University and the AA Highway.



Kip has a variety of experience with many geotechnical and civil engineering related projects in the Bluegrass area as well as throughout the United States. His duties include the analysis, design, quality control and implementation of projects involving landslide remediation, earth embankment dams, and karst explorations. Kip is experienced in conducting geologic investigations, design of shallow and deep foundations, slope stability analyses and retaining wall design, determination of potential settlement, and project management of various engineering disciplines. He is also familiar with working with state and federal governments as well as private residential/commercial developments.

#### **EDUCATION**

BS, Geological Engineering, Missouri University of Science and Technology, Rolla, Missouri, 1999

#### REGISTRATIONS

Professional Geologist #2376, Commonwealth of Kentucky

Professional Engineer #23678, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

Lexington-Fayette Urban County Government Recycling Center Addition, Lexington, Kentucky Senior Project Engineer responsible for the geotechnical exploration of an expansion at the Recycling Center. The expansion included two additions to the existing steel framed warehouse-type building. Assignments included drill crew management, site layout and survey, public relations and laboratory requests/testing. Drilled shafts were recommended due to the depth of fill material encountered at the site. Other tasks performed during this project consisted of: developing project drawings, foundation recommendations for a rock bearing foundation system, construction observation for the drilled shafts, and construction meetings/reports.

#### University of Kentucky, UK Wildcat Coal Lodge, Lexington, Fayette County, Kentucky

Senior Project Engineer responsible for the geotechnical evaluation of the Wildcat Coal Lodge located on the campus of University of Kentucky. The new facility consisted of a three story structure with a partial basement and associated facilities. The footprint for new facility measured approximately 6,250 square feet and the foundation system for the structure consisted of short drilled shafts and/or conventional footings bearing directly on sound bedrock. Other tasks performed include: pavement design for both light and heavy duty flexible and rigid pavements, pre and post construction meetings, development of foundation alternatives due to karst features, and recommendations for rock/soil excavation near existing access roads.

#### University of Kentucky, Retirement Community, Gatton School of Business, College of Law, Markey Cancer Center, Lexington, Kentucky

Senior Project Engineer/Assistant Project Manager responsible for several geotechnical explorations for the University of Kentucky. The foundation types for the various structures investigated ranged from deep rock bearing foundation systems for multi-story structures to conventional spread footings and continues wall footings bearing on soil for one-story structures. Other tasks performed during the projects consisted of: drill crew management, Physical Plant Coordination, site layout and survey, developing project drawings, laboratory analysis, foundation recommendations for both rock and soil bearing foundation systems, pre/post construction meetings, invoicing/contract modifications, project scheduling, development of foundation alternatives, and recommendation for rock excavation near sensitive (air, nose, vibration) hospital facilities.

### Palomar Shopping Center Karst Exploration and Treatment, Fayette County, Kentucky

Senior Project Engineer responsible for monitoring the exploration of a karst feature in Lexington, Kentucky. Multiple detention basins within the established shopping center developed "open throats" allowing the water to freely drain into the subsoil. The investigation of the karst feature(s) was conducted by the developer's contractor and monitored by Stantec. The exploration consisted of using an excavator to chase/follow the observed openings into the subsoil until sound bedrock was encountered. Once bedrock was encountered, the opening within the bedrock was cleaned with hand tools and surveyed for future reference. KYDOT Type II non-woven fabric was then placed over the bedrock opening and the void backfilled with crushed limestone to approximately five feet above the top of rock. The fabric was then wrapped over the crushed stone and soil backfilled over the karst treatment.



Hugo has more than 36 years of experience performing subsurface explorations and geotechnical designs in Lexington and throughout the United States. As a Senior Principal and Project Manager, he has overseen the design of civil engineering projects involving geotechnical explorations for a variety of projects, including highways, earth and rock-fill dams, levees, buildings, retaining structures, housing subdivisions, landslides, coal refuse facilities and environmental investigations. Hugo is a recognized expert in karst geology and is often retained to evaluate and design treatments on proposed project sites. His exploratory methods include excavation of the subsoil to expose the underlying bedrock surface and conducting dye tests to determine the outlet point of groundwater entering the karst features.

#### **EDUCATION**

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1973

MS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1976

#### REGISTRATIONS

Professional Engineer #17148, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

### University of Kentucky, UK Wildcat Coal Lodge, Fayette County, Kentucky

Project Manager for the geotechnical evaluation of the Wildcat Coal Lodge located on the campus of University of Kentucky. The new facility consisted of a three story structure with a partial basement and associated facilities. The footprint for new facility measured approximately 6,250 square feet and the foundation system for the structure consisted of short drilled shafts and/or conventional footings bearing directly on sound bedrock. Other tasks performed include: pavement design for both light and heavy duty flexible and rigid pavements, pre and post construction meetings, development of foundation alternatives due to karst features, and recommendations for rock/soil excavation near existing access roads.

#### University of Kentucky, Marksbury Building, Fayette County, Kentucky

Project Manager for geotechnical exploration for the proposed Marksbury Building, a part of the new Digital Campus at the University of Kentucky. The new facility consists of a two story structure with a partial basement and associated facilities. A preliminary geotechnical exploration was performed, followed by a final exploration after the building footprint was finalized by the project architects. The explorations included soil sampling, rock coring, and laboratory testing. Geotechnical recommendations were made regarding suitability of insitu soils, rock bearing foundations, floor slabs, and other general foundation recommendations.

### Palomar Shopping Center Karst Exploration and Treatment, Fayette County, Kentucky

Project Manager to oversee the excavation and treatment to close sinkholes that had developed within a detention basin located within the shopping center. Multiple detention basins within the established shopping center developed "open throats" allowing the water to freely drain into the subsoil. The investigation of the karst feature(s) was conducted by the developer's contractor and monitored by Stantec. The exploration consisted of using an excavator to chase/follow the observed openings into the subsoil until sound bedrock was encountered. Once bedrock was encountered, the opening within the bedrock was cleaned with hand tools and surveyed for future reference. KYDOT Type II non-woven fabric was then placed over the bedrock opening and the void backfilled with crushed limestone to approximately five feet above the top of rock. The fabric was then wrapped over the crushed stone and soil backfilled over the karst treatment.

#### Beaumont Farms Subdivision, Fayette County, Kentucky

Project Manager for the treatment of several sinkholes located in different areas of the subdivision. Evaluated residential development around a large, 3,000-foot cave called Crystal Cave located near Man-O-War Blvd, across from Dunbar High School and under the proposed development. Reviewed historical information, entered and mapped the cave, drilled several borings within and outside the footprint of the cave and developed a non-buildable area. The developer used this information to design the subdivision streets and lots, such that these features would remain outside the non-buildable area. Specific measures were formulated to protect the environmental conditions of the cave and reduce the potential impact of karst features on the proposed development.

#### USACE, Geotechnical Exploration, Various Locations, Kentucky, Tennessee and Louisiana

Project Manager for various geotechnical explorations for United States Army Corps of Engineers (USACE), Louisville and Nashville Districts including the Army Reserve Training Facility in New Orleans, Louisiana, foundation recommendations for Ft. Knox' large vehicle wash rack facility and concrete lined sediment basin and investigation of cable tunnel seepage for Wolf Creek Dam in Jamestown, Kentucky.



Luis brings more than 33 years' experience with a variety of geotechnical engineering projects. His responsibilities include proposal preparation, development of subsurface exploration plans, supervision of geotechnical explorations, design and/or evaluation of foundations, and development of reports of geotechnical explorations. Since joining the firm, Luis has been involved with numerous geotechnical explorations for buildings, dam structures and highways. In addition, he has participated in Power Generating Facilities assessments, including review of historical design documents, and prepared reports addressing field reconnaissance findings, and recommendations for facility improvements. Luis also served as Team Lead on USACE levee periodic inspections. Additional duties include design of cut and embankment slopes, slope stability and settlement analyses, deep foundation and pile driveability assessments and formulation of design and construction recommendations for buildings, roadways and for bridge and drainage structure foundations.

#### **EDUCATION**

MS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1996

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1988

AS, Civil Engineering Technology, Lexington Community College, Lexington, Kentucky, 1984

#### REGISTRATIONS

Professional Engineer #21742, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

### Newtown Pike Extension (KY 922), Fayette County, Kentucky

Senior Project Engineer for wide range of geotechnical engineering services from the beginning of this multi-year project. His duties included proposal and contract modifications for project phases which included a roadway extension through a historical district of Lexington; including 5,046 feet of roadway, two retaining wall structures, one bridge, a reinforced concrete box culvert, a neighborhood redevelopment and a sound barrier wall. Various geotechnical engineering analyses and reports addressing geotechnical findings and recommendations have been issued for each design component of this crucial corridor into downtown Lexington, Kentucky.

#### University of Kentucky, Nutter Field House, Lexington, Kentucky

Senior Project Engineer responsible for the initial geotechnical exploration and subsequently for the expansion of the field house at the University of Kentucky. Assessments were made of the underlying limestone bedrock in regards to karst and weathered conditions for foundation support of this structure and related site improvements. During the exploration for the planned expansion, additional services included foundation recommendations for a retaining wall, and pavement design for parking and driveway areas.

#### Reynolds Road Widening (KY 1683), Lexington, Kentucky

Project Engineer in charge of geotechnical explorations for a new four-lane roadway and associated development. Project responsibilities for the roadway and related bridge and retaining wall structures included preparing boring programs for each of the project phases, and supervising all drilling and sampling operations. Engineering analyses included design of cut and embankment slopes, slope stability analyses, and formulation of geotechnical reports outlining design and construction recommendations for roadways, and for bridge and retaining wall foundations. Geotechnical characteristics included relatively deep residual soils and moderate karst terrain. The project's roadway sections were successfully completed under accelerated time schedules and close coordination with the LFUCG.

#### Paris Pike Widening (US 27/US 68), Fayette and Bourbon Counties, Kentucky

Project Engineer in charge of field operations during geotechnical exploration, cut slope design, stability analyses of highway cuts and embankments, and geotechnical report development for roadways and associated bridge and box culvert structures. Geotechnical characteristics included residual soils and moderate karst terrain. All roadway sections included historic sites and numerous horse farms. Extensive coordination was required with property owners and tenants during access with drilling equipment to each of these properties. The project's roadway sections were successfully completed under accelerated time schedules.

#### Dan A. Back PE, SE, PLS Project Manager (Lexington, Kentucky)



Serving as one of Stantec's Project Managers, Dan's responsibilities include total administrative and engineering oversight of the analysis and design of a wide variety of large civil engineering projects. His assignments on projects with Stantec typically include complete responsibility for concept development, system selection, detailed design and drawing review, specification writing and, as necessary, contract bidding support and field inspection during construction. During his 35-year career, Dan has amassed broad-based experience across all aspects of geotechnical and civil engineering. He is also trained in various HEC programs including HEC-1.

#### **EDUCATION**

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1979

M.Eng., Civil Engineering, Cornell University, Ithaca, New York, 1986

#### REGISTRATIONS

Professional Land Surveyor #3413, Commonwealth of Kentucky

Professional Structural Engineer #13930, Commonwealth of Kentucky

Professional Engineer #13930, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Professional Heights Civil Site Design and Geotechnical Exploration, Fayette County, Kentucky (Project Manager)

Dan was the project manager for this project which included a topographic and utility survey and a geotechnical exploration for a proposed hotel. Tasks included drilling and sampling of soil and rock, laboratory testing, and recommendations for soil bearing foundation systems, pavement subgrade, and site grading. Following the geotechnical exploration, civil site and geotechnical designs were created including grading, drainage, storm sewer (including water quality devices), sanitary sewer, and retaining wall design. Associated plans and specifications were also drawn up. Stantec also provided engineering representation at several LFUCG planning and zoning meetings and neighborhood meetings.

#### University of Kentucky Student Housing Facilities, Lexington, Kentucky (Project Manager)

Dan served as project manager and lead site designer for a team producing a comprehensive set of guidelines bridging design documents for a University of Kentucky design-build RFP. Site engineering consisted of a geotechnical exploration, preliminary sanitary and storm sewer design, storm water detention facilities design, street and parking layouts, and general site grading for four new residence halls expected to house 684 additional students. A preliminary drainage study was performed using HEC-HMS to design detention facilities in accordance with the Lexington-Fayette Urban County Government Stormwater Manual. Geotechnical reports, design development drawings, technical specifications, and cost estimates were developed per local, state and university requirements.

#### University of Kentucky Student Health Services Building, Lexington, Kentucky (Project Manager)

Dan served as project manager and senior geotechnical engineer for a comprehensive subsurface exploration and geotechnical engineering report for a new four-story, *S25* million, *75*,000 square foot student health services facility. Project required extensive coordination with University of Kentucky Physical Plant relative to site utilities. Engineering issues included developing consistent foundation bearing conditions on a site with varying bedrock conditions and a proposed partial basement configuration. Additional issues were added with several massive soil bearing planters to be constructed in intimate contact with the rock bearing primary structure's exterior walls.

#### Kentucky Transportation Cabinet Building, Frankfort, Kentucky (Project Manager)

Dan was the Project Manager for preliminary and final geotechnical exploration for the new six-story Kentucky Transportation Cabinet Office Building in Frankfort, Kentucky including the installation of 2,200 auger cast-in-place piles and 30 concrete caissons.



John is a Senior Geologist with more than 33 years' experience in geotechnical engineering, geoenvironmental services, hydrogeological studies, drilling and sampling services, and mining services. He has supervised and coordinated drill crews for clients such as the Kentucky Transportation Cabinet and the United States Army Corps of Engineers. His experience includes numerous subsurface investigations and geologic studies for proposed roadways, dams, and buildings, bearing determinations for various foundations, slope stability analyses of cut and fill slopes, and determination of hydrologic concerns. John has many years' experience in meeting and working with various governmental agencies and has become familiar with laws and procedures required. He has compiled various bid and proposal documents, and managed the invoicing and tracking of numerous projects,

#### **EDUCATION**

BS, Geology, University of Kentucky, Lexington, Kentucky, 1979

#### REGISTRATIONS

Professional Geologist #CPG-06920, American Institute of Professional Geologists

Professional Geologist #68, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### New Circle Road Widening, Fayette County, Kentucky

Project Manager for geotechnical explorations to support widening of New Circle Road project under the Kentucky Transportation Cabinet's geotechnical contract. Scope of work included rock coring, rock soundings, standard penetration tests, undisturbed Shelby tube samples, bulk samples, cased observation wells, reclamation, and gINT boring logs. John also coordinated utility clearance, traffic control and correspondence with property owners.

#### Drilling Coordination - Various Projects

Drilling Coordinator responsible for scheduling and coordination of the drill crews, drill rigs, maintenance activities and in obtaining supplies for numerous projects. Clients that he has served in this capacity include:

- Lexington Fayette Urban County Government
- Kentucky Transportation Cabinet
- U.S. Army Corps of Engineers
- Tennessee Valley Authority
- Louisville Metropolitan Sewer District
- American Electric Power
- Kentucky Utilities
- Kentucky River Authority
- Ohio Department of Transportation
- Tennessee Department of Transportation

#### Kroger Plaza Development, Lexington, Kentucky

Senior Geologist for karst/sinkhole studies for the Kroger Plaza Development in Lexington, Kentucky. Tasks included evaluation of karst features in the area, determining hydrologic and structural concerns, formulation of solutions to problems encountered, and compilation of report.

#### East Nicholasville Bypass Geotechnical Drilling Services for Proposed Roadway and Structures, Jessamine County, Kentucky

Project Manager for coordinating drill crews and rigs, overseeing completion of gINT logs and sample delivery to the Kentucky Transportation Department, coordination with properly owners, utility checks and traffic control. Also involved with quality control issues for the project.

#### Reynolds Road Development Property Karst Study, Lexington, Kentucky

Senior Geologist responsible for overseeing the investigative research and field work performed on the site to assess the geologic and hydrologic characteristics of the property, with particular attention given to the karst activity in the area. Mr. Beam evaluated aerial photographs, geologic and topographic mapping, and reviewed published literature on the geology, and past and present land uses of the area. He managed and was involved in the field reconnaissance of the area, the geotechnical exploration performed on a suspected karst feature on the property, and the implementation of a dye trace study of the area. He was involved in the determination of conclusions derived from the data obtained during the study, and the report writing. Mr. Beam was also involved in representing the developer at several public meetings concerning the karst activity of the site.

### Marsha Anderson Bomar AICP, ENVSP



Sustainability Support (Duluth, Georgia)

Marsha has more than 41 years of experience in transportation planning, traffic engineering, public involvement, education and training, meeting facilitation, traffic analysis, management and administration of transportation and traffic engineering projects, master transportation plans and studies, transit systems planning, parking studies and design analyses, freight studies, modeling and general research. She has served as principal-in-charge or project manager for more than 300 traffic impact and transportation master plan studies, including major data collection and analysis efforts. Marsha has extensive experience in facilitating public meetings, hearings, stakeholder groups, and charettes.

She has received many awards of honor, distinction and recognition for her outstanding contributions and achievements throughout her career. She had the honor of being the first woman to serve as International President of the Institute of Transportation Engineers (ITE) and was the first woman to receive the ITE Burton Marsh Distinguished Service Award. In 2010, Marsha received the Karl Bevins Distinguished Service Award from the Georgia Section of ITE which is given to recognize highly competent and professional engineers who practice in the field of traffic and/or transportation over a number of years. Also in 2010, she was awarded the Legacy Treasure Award from United Way of Gwinnett County, Georgia and she received the American Council of Engineering Companies (ACEC) Community Service Award for outstanding contributions to her community. She is currently serving her third term as Council Member and has served two terms as Mayor Pro Tempore for the City of Duluth.

#### **EDUCATION**

Bachelor of Science in Mathematics, Polytechnic Institute of Brooklyn, Brooklyn, New York, 1973

Master of Science in Transportation Planning and Engineering, Polytechnic Institute of Brooklyn, Brooklyn, New York, 1975

Master of Science in Civil Engineering (Transportation), Princeton University, Princeton, New Jersey, 1978

Master of Arts in Civil Engineering, Princeton University, Princeton, New Jersey, 1979

#### REGISTRATIONS

Envision<sup>™</sup> Sustainability Professional (ENV SP), Institute for Sustainable Infrastructure

Certified Planner #85268, American Institute of Certified Planners

#### **PROJECT EXPERIENCE**

Chatham County Urban Beautification Charette\*, Savannah, Georgia (Project Manager/Project Engineer) Project that included gateway treatments for Olympic visitors.

#### Six Flags Livable Centers Initiative Study, Cobb County, Georgia (Project Manager/Public Involvement)

Performed a Living Centers Initiative (LCI) study to provide a guide for new development that fosters sustainable land use practices while providing for transportation improvements and economic growth. Tasks included public involvement and the study development consisting of conditions assessments, economic and market analysis, recommendations for land use, transportation and economic development, Tax Allocation District (TAD) analysis, and sustainability framework.

#### Global Forum\* (Project Manager)

The first Expedited DRI submitted to the Georgia Regional Transportation Authority. The project is a mixed-use development including several housing types, and a variety of commercial uses. It also straddles a County and a City in a different County requiring extensive intergovernmental coordination. The process including amending the County's Land Use categories so that the design of the facility to include sufficient interparcel access and multimodal paths.



As a Senior Project Manager with more than 15 years of experience, Jason has worked on all types of highway projects throughout Kentucky. His experience includes quantity calculations, cost estimates, pavement design, and maintenance of traffic, construction, and right-of-way plans. He is proficient in using MicroStation and InRoads.

#### **EDUCATION**

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1996

#### REGISTRATIONS

Professional Engineer #22536, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Newtown Pike Extension Preliminary Engineering, Fayette County, Kentucky (Project Engineer)

Responsible for alternatives development, cost estimates, Phase II design, lighting and signal plans as part of this project. Stantec was responsible for preparing an engineering design study report, environmental analysis and Phase I and II design for a 1.3-mile extension of an urban boulevard around the southern portion of Lexington's central business district. The project included the design of bicycle lanes and pedestrian facilities along the entire length of the route. The project included a comprehensive land use plan for the 400 acres surrounding the corridor and the redevelopment of a 25acre neighborhood due to environmental justice impacts.

#### US 68 (Harrodsburg Road) Widening, Lexington, Kentucky (Project Engineer)

Responsible for design of a diverging diamond interchange for the widening of Harrodsburg Road in Lexington. The purpose of the project is to provide additional capacity through the New Circle Road interchange. Phase I looked at alternatives such as providing dual left turns for the New Circle entrance ramps, additional through lane in both directions and providing a diverging diamond interchange at this location. The additional through lane option and the diverging diamond options are both being designed to a higher level of detail to help select the best option to be carried forward with Phase II design. Shared use paths have been incorporated in the final design to accommodate pedestrian and bicycle traffic. Carol Malone Boulevard Widening, from the Little Sandy River Bridge to College Street, Carter County, Kentucky (Project Engineer) *Responsible for Phase I and II design to provide a five-lane section through downtown Grayson.* 

#### US 31E Reconstruction Section 2 / Phase II Design, Nelson County, Kentucky (Project Engineer)

Responsible for the reconstruction of approximately 4.5 miles of existing rural two-lane highway to a four-lane urban facility with a raised grass median from KY 332 KY 509. The existing roadway has more than 130 entrances and new developments are under construction while others are in the planning phase. With this in mind, access management was a high priority on this project. The project team studied partial controlled access with frontage roads, median U-turns and roundabouts as potential access management options on the project. The team decided to use roundabouts throughout the corridor to help with minimal right of way. Seven roundabouts are currently being proposed along the corridor. The current typical section calls for a multi-use path as part of the project. Duties for this project included management and preparation of construction plans, right-of-way plans, roundabout layout, roundabout design and maintenance of traffic.

### Statewide Pavement Rehabilitations, Kentucky (Project Engineer)

Responsible for development of plans and construction documents for pavement rehabilitation to enable the Transportation Cabinet to comply with Federal requirements for rehabilitation projects.

### Daryl W. Carter PE

Senior Project Manager, Bridges (Lexington, Kentucky)



Daryl has over 35 years of structural engineering experience with the planning, designing, and detailing of various highway structures. He has been responsible for preparing conceptual, preliminary and final designs for reinforced concrete, pre-stressed concrete and steel highway structures, including the design of the floor system for a major steel highway truss bridge. He has also prepared man-hour estimates for contract negotiations, cost estimates, engineering reports for bridge replacement projects, bridge type studies for both curved steel and post-tensioned segmental concrete box structures, life-cycle cost analyses, and performed load rating analyses of prestressed concrete and steel bridges, including the stringer system for a major steel highway truss. He has served as the structural project manager on several successful bridge design projects. Daryl has recently served as the QA manager responsible for quality assurance reviews for 16 bridges on a design-build project for the reconstruction of a complex interchange of several interstate highways. Daryl has attended pre-bid, prefabrication and project team meetings on several high profile design projects. His duties also include construction engineering/inspection on several projects that have progressed from design to construction. His experience in the railroad sector includes the load rating of stringers in timber railroad trestles, the development of prioritized list of repairs for steel swing-span trusses, and bridge type and size for various track alignments in a Corridor Study.

#### **EDUCATION**

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1978

Masters of Civil Engineering (Structures), University of Kentucky, Lexington, Kentucky, 1990

#### REGISTRATIONS

Professional Engineer #13342, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

### River Road over Harrods Creek, Jefferson County, Kentucky

Engineer of record responsible for design and preparation of plans for the widening and rehabilitation of a three-span (71'-6" ~ 66'-4" ~ 71'-6") reinforced concrete filled-spandrel arch bridge. The existing one-lane historical bridge was widened to two lanes by removing the existing concrete balustrade railings and excavating enough of the cobble infill to "hide" three 42" x 48" spread precast prestressed concrete box beams inside the spandrel walls of the existing arches. This bridge won the 2010 APWA – KY Chapter "Project of the Year" award in the Historic Preservation Category (over S1 Million), the 2011 PCI Design Award in the Rehabilitated Bridge Category, and the 2012 ACEC-KY Engineering Excellence Grand Award and the ACEC Engineering Excellence National Recognition Award the Structural Systems Category.

#### Newtown Pike Extension, Oliver Lewis Way (KY 922) over Town Branch, Fayette County, Kentucky

Senior Structural Engineer responsible for the design and plan details of the pier for a two-span (105' ~ 105'), 97'-4" wide bridge over the R J Corman Railroad Yard, yard entrance, multi-use path, and Town Branch Creek. The pier is a rigidframe structure with four rectangular, tapered columns. The pier cap is an "Inverted-T" type, used to provide the vertical clearance required by the railroad, while minimizing raising the profile grade of KY 922 in order to tie in with existing streets near each end of the bridge. The pier columns are founded on spread footings. This bridge won the 2010 APWA – KY Chapter "Project of the Year" award in the bridge category.

#### I-75 Widening and Rehabilitation, RC Box Culvert Extensions, Scott County, Kentucky

Engineer of record responsible for the design and preparation of plans for six RC box culvert extensions and connections in the median areas of a bifurcated section of the interstate. Culvert sizes range from double 3.050m X 2.440m barrels to a 3.050m X 1.830m barrel and skews ranging from 12° to 59°50' Engineered lightweight fill was used over portions of the existing culvert sections to accommodate increased loads from larger roadway embankment fill heights.

#### I Relocated KY 20 over Elijah's Creek-Cincinnati/Northern Kentucky International Airport,

#### Boone County, Kentucky

Engineer of record for the design and preparation of plans for an 11'X 10' RC box culvert and a 10' X 9' RC box culvert extension. The culvert extension utilized engineered lightweight fill over portions of the existing barrel to accommodate increased fill height.

#### Adam A. Crace PE Project Manager (Lexington, Kentucky)



As a Project Manager for Stantec with 16 years of experience, Adam is responsible for the day to day activities of various transportation related projects including scheduling, invoicing and providing technical support. His project responsibilities include slope stability analyses; settlement analyses; external retaining wall analyses; rock cut slope design; deep foundation analyses utilizing H-piles, drilled shafts and auger cast piles and shallow foundation analyses. In addition, Adam's experience includes development of geotechnical reports for roadways and structures designed in various geologic regions including mitigation procedures in karstic environments. He is also trained according to EM-385 requirements and proficient in both SCUBA and Surface-Supplied Air diving techniques and is a certified bridge inspector.

#### **EDUCATION**

BS Civil Engineering, University of Kentucky, Lexington, Kentucky, 1999

#### REGISTRATIONS

Professional Engineer #23443, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

### Newtown Pike Extension (KY 922), Fayette County, Kentucky

Senior Project Engineer for geotechnical engineering services required for multi-phase Newtown Pike Extension including drilling, sampling and laboratory testing. Performed retaining wall analyses, settlement analyses and bridge foundation analyses for the roadway extension.

#### New Circle Road Widening, Fayette County, Kentucky

Senior Project Engineer for geotechnical explorations to support widening of New Circle Road project under the Kentucky Transportation Cabinet's geotechnical contract. Scope of work included rock coring, rock soundings, standard penetration tests, undisturbed Shelby tube samples, bulk samples, cased observation wells, reclamation, and gINT boring logs. Adam managed geotechnical drilling challenges encountered due to boring near the traveling public. Also assisted with clearing utilities prior to advancing borings.

#### Louisville Southern Indiana Ohio River Bridges -Kennedy Interchange, Louisville, Kentucky

Senior Project Engineer responsible for coordinating the office aspect of the field exploration, which included the coordination with various public and private property owners. The project included the completion of over 400 borings near within downtown Louisville. Served as the engineer responsible for reports, recommendations and analyses development on approximately 11 bridge reports and 19 retaining walls. The analyses included external retaining wall analyses, settlement profiles, slope stability analyses, lateral squeeze analyses, deep foundation analyses of friction piles and/or shafts, driveability analyses, negative skin friction analyses, and shallow foundation analyses on rock and soil.

#### Louisville Southern Indiana Ohio River Bridges - East End Approach, Jefferson County, Kentucky

Senior Project Engineer supervising the field exploration in an area where property owner sensitivity to design and construction was a top priority. Responsible for several shoulder closures to complete the boring program. Coordinated portions of the drilling with a tunnel expert which included pressure testing of bedrock to estimate hydraulic conductivity, establishing observation wells and checking the borings for combustible gases

#### Kentucky, Tennessee and Ohio Departments of Transportation Underwater Inspections, Statewide, Kentucky, Tennessee, and Ohio

Site supervisor and Senior Engineer Diver for underwater inspections of more than 150 bridges and 15 culverts located throughout Kentucky, Tennessee and Ohio. His experience includes many inspections requiring confined space entry and diving in heavy current. He is also experienced developing hydrographic surveys. Extensive experience preparing and reviewing state bridge inspection reports including evaluating structural elements, performing condition assessments and providing ratings and recommendations.



Tom has 31 years of experience in transportation. His areas of expertise include transportation planning, traffic engineering, highway capacity, access management, travel demand modeling, traffic simulation, traffic forecasting and highway safety. Tom's experience includes 24 years as a consultant, where he has served as project manager for numerous transportation studies. He has been a transportation researcher and an instructor for several workshops and training courses. Tom is the current secretary of the Transportation Research Board's Highway Capacity and Quality of Service Committee, which oversees the Highway Capacity Manual. He also has been a panel member for three NCHRP research projects and one NCFRP project.

#### **EDUCATION**

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1981

MS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1984

PhD, Civil Engineering, University of Kentucky, Lexington, Kentucky, 2010

#### REGISTRATIONS

Professional Engineer #16684, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Community-Wide Congestion Management Study, Lexington, Kentucky (Project Manager)

As project manager of this congestion management study, Tom was responsible for updating LFUCG's 2004 Congestion Management Study. The 2004 study resulted in a list of recommended congestion management improvements for the most severely congested arterials. recommendations to meet Federal requirements.

#### Louisville Metro Traffic Signal Timing Upgrades, Louisville, Kentucky (Project Engineer)

Project engineer responsible for project administration and QA/QC. Stantec was one of two firms selected for this traffic signal timing upgrades contract with Louisville Metro. The purpose of the project was to maximize capacity, traffic efficiency and safety on multiple networks and arterials on a countywide basis.

#### Downtown Lexington Traffic Movement and Revitalization Study, Lexington, Kentucky (Project Manager)

Project Manager for this study to examine the impacts of converting downtown Lexington one-way streets to two-way

#### traffic flow.

#### Boone County Transportation Study, Boone County, Kentucky (Project Manager)

Project Manager for the development of a Year 2030 Long Range Transportation Plan for Boone County, which updated the previous transportation plan that was completed in 1996. The plan included Transit Recommendations and Bicycle and Pedestrian Facilities.

#### Louisville Metro On-Call Planning Services, Louisville, Kentucky (Project Manager)

Tom was project manager for this two-year contract to provide planning studies in Metro Louisville.

#### Roundabout Design for AA and I-275 Connector Design, Campbell County, Kentucky (Project Manager)

Tom was responsible for traffic forecasts for this project to provide access to Northern Kentucky University (NKU) from the south along the AA Highway and relieve congestion on the northern portions of the campus, thus allowing for the future growth of NKU. Two roundabouts are being constructed along the new connector road. A shared path is being used to accommodate pedestrian and bicycle traffic along the new connector.



Ashley has more than eight years of professional experience in transportation planning and engineering. She holds a bachelor's degree in civil engineering, with an emphasis in transportation. She has assumed critical responsibilities in a wide variety of transportation planning and engineering activities. Ashley has a high level of technical proficiency and analytical experience working with travel demand, traffic simulation, highway capacity, GIS and other transportation software packages, including GISDK, TransCAD and TransModeler, Highway Capacity Analysis, VISSM Simulation, ArcView GIS and Highway Capacity, Synchro, and TRANSYT-7F. Ashley has been involved heavily in various transportation modeling projects, both in model development and model applications. Her experience includes various modeling projects performed for clients in Kentucky, Ohio, West Virginia, and North Carolina. Project responsibilities have included travel demand modeling for regional/local transportation planning projects, micro-simulation modeling, and corridor studies.

#### EDUCATION

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 2005

#### REGISTRATIONS

Engineer-In-Training #12711, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Statewide Traffic Engineering, Various Locations, Kentucky (Project Engineer)

Responsible for traffic data collection, analysis and modeling. The data collection included travel time data collection using GPS equipment for the evaluation of signal timing coordination.

#### Louisville Traffic Signal Timing Upgrades, Louisville, Kentucky (Transportation Engineer)

The purpose of the project is to maximize capacity, traffic efficiency and safety on multiple networks and arterials on a countywide basis.

#### Downtown Lexington Traffic Movement and Revitalization Study, Lexington, Kentucky (Transportation Planner)

Stantec led this comprehensive, multimodal study to evaluate the impacts of converting one-way streets to two-way in downtown Lexington Communitywide Congestion Management Study, Lexington, Kentucky (Transportation Engineer) *Responsible for data collection, simulation model development, traffic analysis, project meeting participation, recommended project development, and report documentation.* 

US 68 (Harrodsburg Road) Widening, Fayette County, Kentucky (Project Engineer) *Responsible for the traffic analysis and traffic forecasting to determine the best widening solution possible.* 

#### Oldham County Mobility Study, Kentuckiana Regional Planning and Development Agency\*, Oldham County, Kentucky (Transportation Planner) *Responsible for the development of a study to evaluate future needs, alternatives, and implementation requirements for public transportation and commuter service for Oldham County, including bicycle/pedestrian accommodations, ridesharing, park-and-ride, and other TSM and TDM options.*

Lexington Wayfinding Sign System Development, Lexington-Fayette Urban County Government\*, Lexington, Kentucky (Transportation Analyst)

Wellington Way Traffic Impact Study, Lexington Fayette Urban County Government\*, Lexington, Kentucky (Transportation Analyst)

Lexington-Fayette County Data Collection and Traffic Signals Timing Plans\*, Lexington, Kentucky This project involved the re-timing of 45 intersections along four of Lexington's main arterial signal systems. Performed traffic counts at various intersections within the urban area of Fayette county.



Alan's 37 years of experience includes design, surveying, and mapping projects. He has been responsible for preparing structural details and plans of reinforced concrete bridges, culverts, and retaining walls and structural steel designs for various highway structures. He has prepared cadastral, aerial photo, and topographic maps and miscellaneous charts, diagrams and illustrations for publications and surveying projects. Alan's project experience includes both new designs and rehabilitation designs. In addition he has been responsible for preparing architectural, mechanical, and as built plans as needed. He has also been a bridge inspection team member.

#### **EDUCATION**

Bachelor of Arts, Geography, University of Northern Colorado, Greeley, Colorado, 1982

#### **PROJECT EXPERIENCE**

#### Bridges

Newtown Pike Extension, Oliver Lewis Way (KY 922) over Town Branch, Fayette County, Kentucky Senior Structural Designer responsible for the preparation of details for a two-span (105' ~ 105), 97'-4" wide bridge over the R J Corman Railroad Yard, yard entrance, multi-use path, and Town Branch Creek. The pier is a rigid-frame structure with four rectangular, tapered columns. The pier cap is an "Inverted-T" type, used to provide the vertical clearance required by the railroad, while minimizing raising the profile grade of KY 922 in order to tie in with existing streets near each end of the bridge. This bridge won the 2010 APWA – KY Chapter "Project of the Year" award in the bridge category.

### River Road over Harrods Creek, Jefferson County, Kentucky

Senior Structural Designer responsible for preparation of plans for the widening and rehabilitation of a three-span (71'-6" ~ 66'-4" ~ 71'-6") reinforced concrete filled-spandrel arch bridge. The existing one-lane historical bridge was widened to two lanes by removing the existing concrete balustrade railings and excavating enough of the cobble infill to "hide" three 42" x 48" spread precast prestressed concrete box beams inside the spandrel walls of the existing arches. This bridge won the 2010 APWA – KY Chapter "Project of the Year" award in the Historic Preservation Category (over \$1 Million) and the 2011 PCI Design Award in the Rehabilitated Bridge Category.

#### I-75 over Tates Creek and Tates Creek Road, Madison County, Kentucky

Structural Engineering Technician responsible for the preparation of plans for twin four-span ( $50' \sim 75' \sim 74'$ -9"  $\sim 50'$ ) bridges situated at 43° skew. The bottom slab of a RC box culvert extension was incorporated into a combined footing on the northbound pier.

#### Widen I-64 over Evergreen Road (KY 1665), Franklin County, Kentucky

Senior Structural Designer responsible for the preparation of construction plans for twin, three-span (48' ~ 76' ~ 48') bridges situated at 13°30' skew Rt. Both superstructures framed with Type III PCI beams, composite, continuous for live load. Maintenance of traffic required that the existing bridges be removed and replaced by means of phase construction. Superstructure median barriers are separated by one inch open joint to accommodate super elevation transition in EB lane.

#### US 60 over Tennessee River, McCrackin and Livingston Counties, Kentucky

Senior Structural Designer responsible for the plan preparation of the floor system for a 73' - 6" wide, 1800' long, three-span (500', 900', 400') continuous steel truss. Design of the floor system included all of the steel rolled beam stringers (Gr. 50W), bronze stringer bearings, reinforced concrete deck, steel deck scuppers and support frames and combination vehicle/bicycle railing. Additional responsibilities included the preparation of detail plans for the structural steel access platforms and fiberglass conduit system for a 12KV, threephase electric power distribution line that is carried across the structure.

#### US 62/641 over Tennessee River, Kentucky Lock Addition, Marshall and Livingston Counties, Kentucky

Senior Structural Designer responsible for plan development for the 49' - 11" wide by 3117' - 1" long bridge over both lock approaches and the Tennessee River below the spillway. The initial design called for 132" and 168" deep WSP girders (Gr. 50W). The bridge is a 10-span (302' - 7" ~ 6 at 304' ~ 306' ~ 505' and 170') structure. During construction the three-span (304' ~ 505' ~ 170') lock unit (Unit 3) was redesigned from five 136" WSP girders (Gr. 50W) that increase to 168" deep (Gr. 70W) via a "fish belly haunch" over piers H8 and H9. This bridge won the 2011 ACEC-KY Grand Award for Engineering Excellence.



Glenn is responsible for project design and coordinating project engineers, technicians and CADD operators on various highway study and design projects. He has been responsible for preparing highway design plans for all classes of roads and highways; determining horizontal and vertical geometrics, templates, and cross section; preparing traffic and capacity analyses; designing roadway drainage systems; determining right of way requirements; preparing legal deed descriptions for right of way acquisitions; developing detour and traffic control plans on all types of highway design projects; and preparing and presenting information for public hearings.

#### **EDUCATION**

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1986

#### REGISTRATIONS

Professional Engineer #17144, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Statewide Pavement Rehabilitation (2012-2014), Various locations, Kentucky

Department Manager/Project Manager responsible for developments of plans and construction documents for pavement rehabilitation to enable the Transportation Cabinet to comply with federal requirements for rehabilitated projects.

#### KY 4 (New Circle Road) Widening, Fayette County, Kentucky

Department Manager for Phase II roadway design and redesign of the US 25 (Georgetown Road)/KY 4 interchange

#### Newtown Pike Extension, Lexington, Kentucky (Project Manager)

Responsible for the preparation of an engineering design study report and Phase I environmental analysis for a onemile extension of an urban boulevard around the southern portion of the central business district.

### KY 536 Reconstruction, Kenton County, Kentucky (Project Manager)

Project Manager responsible for preliminary and final roadway design. The project scope includes reconstructing a narrow rural two-lane roadway and a more recent three-lane rural roadway to provide a four-lane section with raised median, curb and gutter and a multi-use path on both sides.

#### Newtown Pike Design Build, Fayette County, Kentucky (QA/QC Manager)

*Glenn performed QA/QC for improving safety and mobility of a section of Newtown Pike in conjunction with the 2010 World Equestrian Games.* 

### KY 11 Widening - Little Levee, Mt. Sterling, Kentucky (Project Manager)

Project Manager responsible for the preparation of preliminary roadway design including maintenance of traffic, final construction plans, cost estimates and erosion control plans for a two-lane roadway.

### I-275/AA Connector, Campbell County, Kentucky (Project Manager)

Project Manager responsible for roundabout analysis, preliminary and final roadway design for 1.5 miles of new highway. A shared path will accommodate pedestrian and bicycle traffic along the new connector.

#### KY 53, Shelby County, Kentucky (Project Manager)

Project Manager for Phase II roadway design services to widen KY 53 from I-64 to US 60, which includes a shared use path.

#### US 68 Harrodsburg Road Widening, Fayette County, Kentucky (Project Manager)

Project Manager responsible for the design of a diverging diamond interchange for the widening of Harrodsburg Road in Lexington. The purpose of the project is to provide additional capacity through the New Circle Road interchange. Shared use paths have been incorporated in the final design to accommodate pedestrian and bicycle traffic.



As leader of the Structural Engineering Group in the downtown Lexington, Kentucky office, Tony is responsible for project management, project design and the coordination of project engineers, designers and CADD technicians in multiple offices involved in highway structure studies, new and rehabilitation designs, and bridge inspections. His structural design experience includes prestressed and post-tensioned concrete and structural steel bridges; seismic design and retrofits, including seismic isolation design; box culverts; tieback retaining walls; and sign and lighting support structures. Tony's steel bridge experience includes construction falsework and erection engineering, highly skewed and curved bridges, long-span plate girders, trapezoidal box girders, and trusses. His responsibilities have included preliminary and final design, technical design reviews, rehabilitation design, load rating analyses, and management of plan production. Tony has also served as an adjunct professor at the University of Kentucky teaching a graduate-level course in prestressed concrete. He has also developed and maintained computer programs for structural analysis and design. As part of his PhD work, Tony has researched seismic isolation design, nonlinear and finite element analysis, and fracture critical and redundancy of twin trapezoidal steel box girder bridges.

#### **EDUCATION**

PhD, Structural Engineering, University of Kentucky, Lexington, Kentucky, 2008

Masters of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1997

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1996

#### REGISTRATIONS

Professional Engineer #21477, Commonwealth of Kentucky

#### AWARDS

2011 National Recognition Award, Engineering Excellence Awards, American Council of Engineering Companies, US 62/641 Bridge over the Tennessee River

2011 President's Recognition Award for Service with the KYTC Bridges Sub-Committee, American Council of Engineering Companies-KY

#### **PROJECT EXPERIENCE**

KY 922 (Newtown Pike) over UK Agricultural Station Branch, Newtown Pike Design-Build, Lexington, Kentucky (Project Manager - Structures)

Responsible for preliminary and final design and structure plans for a new three-span (14 feet, 22 feet, 14 feet) cast-in-place concrete slab bridge. Aesthetic design features incorporated into the structure include a stone veneer and concrete barrier with 4inch KY River Marble Cut Stone lay on both faces of the barrier. The bridge is situated on a 22.9 degree right skew.

Substructures for the bridge included wall piers and breastwall abutments founded on spread footings keyed into bedrock.

#### Newtown Pike (KY 922) over Town Branch, Fayette County, Kentucky (Structural Engineer)

Responsible for QA/QC of final abutment design and substructure plans for the 97.3 feet wide bridge featuring a twospan (105 feet, 105 feet) PPC box beam superstructure supported on breastwall abutments and a four-column frame pier with an inverted T-beam cap. The bridge required special consideration for architectural features. This project received the 2010 Project of the Year award from APWA-Kentucky in the bridge category.

#### Painter Road Bridge over East Prong of Locust Creek, Carroll County, Kentucky (Project Manager)

Responsible for the final design and structure plans for the single-span (40 feet) B17-48 PPC side-by-side box beam bridge with breastwall abutments. Additional services include surveying, geotechnical investigation, scour analysis, approach roadway plan development, and preparation of bid documents.

#### Statewide Bridge and Culvert Design (2010-2012), Various Locations, Kentucky (Project Manager)

Responsible for structural design services to the KYTC Division of Structural Design on a task assignment basis. Projects to date include: design on an accelerated schedule of eight culverts, including modifications to existing roadway plans, for the widening of KY 2121 in Daviess County; and replacement design on an accelerated schedule of steel finger expansion dams and stringer bearings on the I-65 Kennedy Bridge over the Ohio River in Jefferson



Travis is a transportation engineer with 9 years of technical experience in the consulting field. His experience includes traffic impact studies, development of regional impact studies, signal warrant studies, signal design and timing, traffic calming, and road safety audits.

#### **EDUCATION**

Bachelor of Science, Civil Engineering, California Polytechnic State University, San Luis Obispo, California, 2003

#### REGISTRATIONS

Certified Professional Traffic Operations Engineer #2986, Professional Traffic Operations Engineer

Professional Engineer #035064, Georgia State Board of Registration for Professional Engineers and Land Surveyors

#### **PROJECT EXPERIENCE**

### Gwinnett County On-Call Services, Duluth, Georgia (Project Engineer)

Project engineer for two assignments under an on-call services contract that involved developing, implementing and fine-tuning signal timing plans for two systems in Gwinnett County. The first system was Cruse Road and the system was tied into the existing Old Norcross Road signal system for the peak hours and the timings optimized for the traffic. The second system was Five Forks Trickum Road in the area of Ronald Reagan Parkway and included a total of four intersections timed as a system. The area is extremely congested with a weave segment on the corridor. Timings were developed, implemented and fine-tuned to promote the flow of traffic along Five Forks Trickum Road for all time periods.

#### Signal Design Upgrade Project, Statewide, Georgia (Engineer)

Engineer responsible for developing traffic signal upgrade plans with signal communications for task order projects. The projects included the development of traffic signal upgrade plans, communication plans, and right-of-way plans according to the GDOT Plan Development Process.

#### 13th Street Traffic Signal Timing, Augusta, Georgia (Engineer)

Engineer responsible for developing and implementing updated and coordinated signal timing for a 5-intersection system along 13th Street in Augusta-Richmond County, Georgia.

### S.R. 13 / S.R. 53 Traffic Signal Timing, Oakwood, Georgia (Engineer)

Engineer responsible for developing coordinated signal timing for a 12-intersection system along State Routes 13 and 53.



Andrew provides preservation planning, urban design, and landscape architecture services. His experience includes landscape preservation, institutional master planning, recreational planning, concept designs, infrastructure design, and construction documents.

#### **EDUCATION**

Bachelor of Arts, Historic Preservation, Mary Washington College, Fredericksburg, Virginia, 2002

Master of Landscape Architecture, Ball State University, Muncie, Indiana, 2005

#### REGISTRATIONS

Registered Landscape Architect, State of South Carolina

Registered Landscape Architect, State of Georgia

#### **PROJECT EXPERIENCE**

#### Riverside Cemetery Master Plan, Macon, Georgia

Overseeing project management and design. Historic Riverside Cemetery Conservancy sought to support Riverside Cemetery with the creation of a Master Plan to assist in the preservation of the cemetery for future generations. The Conservancy hired Stantec to complete the master plan in 2013. In addition to focusing on preservation of historic features and future growth opportunities, the plan will investigate nearby improvements to nearby cemeteries and Riverside Drive.

### Urban Forest Management Plan, DeKalb County, Georgia (Landscape Architect)

Provided Planning Support and Quality Assurance for a plan that studied the complexity and impact of DeKalb County's forested spaces. DeKalb, like other metro-Atlanta counties, is quickly losing valuable open space. In response to these pressures placed on existing ecosystems, Stantec was asked to develop a plan that considered how an urban county could effectively sustain the remaining, valuable open spaces. Significant site analysis and investigation using GIS and site visits were used to evaluate the health of the forest ecosystem. The end result will be a plan that multiple agencies within the local government can use to plan for impacts related to urban forests.

### Newnan Conference Center Trails\*, Newnan, Georgia

Provided design support for a trail system with a predeveloped site. The Conference Center sits adjacent to an active stream and sewer easement. Working within multiple easements, an ecologically sensitive trail was designed. Final design was based on an on-site walk through that minimized impact to the surrounding ecosystem while utilizing existing open space. The final design will better connect neighborhoods and the public facility.

#### Bicycle and Pedestrian Trail Connectivity Plan\*, Roswell, Georgia

Responsible for planning support and report narrative. Project included the investigation of community wide facilities to improve connectivity within the community. This included investigation of a trail adjacent to the State Route 400, crossing the 400 overpass, and pedestrian facilities within existing subdivisions.

#### West Avon and Spring Street Sidewalk Project\*, Toccoa, Georgia (Project Manager)

Responsible for project management and design. This project was a Community Development Block Grant effort that included the construction of new sidewalks, plant material, drive aprons, and granite retaining walls in an economically depressed neighborhood. Senior Project Manager, Structures (Lexington, Kentucky)



Mike has more than 16 years of experience as a structural engineer. His design experience includes pre-stressed concrete bridges and welded plate girder bridges, as well as reinforced concrete culverts, abutments and piers. Mike's responsibilities have included preliminary and final quantity estimates and design, plan preparation and verification of bridge, culvert and other highway structures. He has prepared plans for uncommon structural details such as a post-tensioned tie-back abutment and various bearing devices. In addition to his design experience, Mike is a certified NBIS team leader for bridge inspections and a team leader for rope access bridge inspection team. Mike is familiar with a number of industry software programs, including MicroStation, MDX, STAAD, GTStrudl, MathCad, InRoads, PONTIS and other structural design software programs.

#### **EDUCATION**

Master of Science, Civil Engineering, Structures, University of Kentucky, Lexington, Kentucky, 2006

Bachelor of Science, Civil Engineering, Structures, University of Kentucky, Lexington, Kentucky, 1997

#### REGISTRATIONS

Professional Engineer #23093, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### Newtown Pike (KY 922) over Town Branch, Fayette County, Kentucky (Project Engineer)

Responsible for design of the prestressed concrete box beams. The bridge has a two span (105-ft ~ 105-ft) prestressed concrete box beam superstructure supported on breastwall abutments and a four-column frame pier with an inverted Tbeam cap. The bridge width is 97.33-ft. The structure required special consideration for architectural features.

#### Statewide Bridge and Culvert Design (2010-2012), Various Locations, Kentucky (Project Manager)

Responsible for structural design services to the KYTC Division of Structural Design on a task assignment basis. Projects to date include: design on an accelerated schedule of eight culverts, including modifications to existing roadway plans, for the widening of KY 2121 in Daviess County; and replacement design on an accelerated schedule of steel finger expansion dams and stringer bearings on the I-65 Kennedy Bridge over the Ohio River in Jefferson.

#### River Road over Harrods Creek, Jefferson County, Kentucky (Engineer)

Responsible for final design assistance for the three-span (71.5-ft ~ 66.3-ft. ~ 71.5-ft.) concrete filled spandrel arch

retrofitted with 42-inch by 48-inch prestressed box beams. The bridge had total deck width of 32 feet and a total bridge length of approximately 212 feet.

#### US 460 Design-Build, Buchanan County, Virginia (Bridge Project Manager/Engineer of Record)

Responsible for the final design and plans of the substructure units of the twin bridges over Route 610 and Grassy Creek. The twin structures are 1,700 feet long with piers more than 200 feet tall. They were named the No. 1 bridge project in Roads & Bridges magazine's 2013 Top 10 Bridges program.

#### Newtown Pike Extension, Noise Barrier Wall at Norfolk Southern Railroad Yard, Fayette County, Kentucky (Engineer of Record)

Responsible for final plans, design calculations and cost estimate for a 2,240' long noise barrier wall located adjacent to the Norfolk Southern Railroad Yard to provide sound attenuation for the nearby Southend Park Relocation Project.



Tony's roadway experience includes drainage, geometric and pavement design as well as lighting and signal design. His traffic engineering experience includes signal timing, timing evaluation, small area studies, traffic flow master planning, interchange modification studies, land development impact and parking studies. His additional experience includes teaching hydraulic design, surveying and pavement design.

#### **EDUCATION**

Masters of Science, Civil Engineering, University of Louisville, Louisville, Kentucky, 2001

Bachelor of Science, Civil Engineering, University of Louisville, Louisville, Kentucky, 1999

#### REGISTRATIONS

Professional Engineer #22905, Commonwealth of Kentucky

#### **PROJECT EXPERIENCE**

#### US 68 (Harrodsburg Road) Widening, Fayette

County, Kentucky (Transportation Engineer) Responsible for lighting design on this project that involves widening the roadway and converting the existing interchange with New Circle Road to a diverging diamond interchange. Tony's specific responsibilities on the project included illumination calculations using lighting software and the development of construction plans. Several lighting alternatives are being considered and evaluated, including high mast lighting, conventional lighting and a combination. His additional responsibilities on the project included consultation and review of signal design plans.

#### Statewide Traffic Engineering, Various Locations, Kentucky (Traffic Engineer)

Responsible for evaluating and developing coordinated signal system timing throughout the state.

### KY 536 / I-75 Interchange, Boone County, Kentucky (Traffic Engineer)

Responsible for traffic signal and lighting design on this project that involves widening the roadway and converting the existing interchange with Interstate 75 to a diverging diamond interchange. Tony's specific responsibilities on the project included signal layout, illumination calculations using lighting software and the development of construction plans.

### Statewide Electrical Engineering Services, Kentucky (Project Engineer)

Responsible for signal and roadway lighting designs throughout the state on an as needed basis.

#### Indiana Avenue Traffic Analysis and Signal Design, Fort Campbell, Kentucky (Traffic Engineer)

Responsible for traffic signal design and plan production. As a sub-consultant, Stantec gathered traffic data and performed traffic analysis to evaluate the planned roadway improvements and develop traffic signal plans based on the proposed roadway plans.

#### Traffic Impact Studies for Private Development\*, Kentucky and Tennessee (Project Manager)

Responsible for traffic impact and access studies for numerous residential, retail, office, industrial and mixed-use developments. Development locations include Oldham, Bullitt and Jefferson counties in Kentucky and in Madison and Nashville, Tennessee. Clients include private developers (commercial and residential), property owners and other consulting engineering firms. Studies include intersection safety and capacity analysis, corridor analysis, micro simulation, signalization and signal modification.
## Mark A. Litkenhus PE

Senior Principal (Lexington, Kentucky)



Mark is a Senior Principal in Stantec's Lexington, Kentucky office with approximately 23 years of experience in the geotechnical and transportation engineering fields. He is also the Business Leader for the Geotechnical Group. Mark's experience includes geotechnical investigations, slope stability analyses, foundation analyses, settlement analyses, pavement designs, preparation of design drawings, construction and operation cost estimates, specifications, and contract bid/procurement documents.

### **EDUCATION**

BS, Civil Engineering, Purdue University, West Lafayette, Indiana, 1990

### REGISTRATIONS

Professional Engineer #19324, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

## Newtown Pike Extension (KY 922), Fayette County, Kentucky

Contract Manager for wide range of geotechnical engineering services for roadway extension through a historical district of Lexington, including 5,046 feet of roadway, two retaining wall structures, one bridge, a reinforced concrete box culvert, a neighborhood redevelopment and a sound barrier wall. Responsibilities included supervision of the subsurface exploration, development of the laboratory testing program, site reconnaissance, and issuing various geotechnical engineering analyses and reports addressing findings and recommendations for each design component of this crucial corridor into downtown Lexington, Kentucky.

### New Circle Road Widening, Fayette County, Kentucky

Contract Manager for the 2012-2014 KYTC Statewide Drilling Services contract. Contract resulted in a task order to perform a geotechnical exploration to support upgrades to a segment of New Circle Road that includes interchanges with Newtown Pike and Georgetown Road. The scope of work included rock coring, rock soundings, standard penetration tests, undisturbed Shelby tube samples, bulk samples, cased observation wells, reclamation, and gINT boring logs. Additionally, Stantec coordinated with property owners for entry agreements, obtained utility clearances, and set up traffic control as required by the project.

### University of Kentucky, UK Wildcat Coal Lodge, Fayette County, Kentucky

Contract Manager for the geotechnical evaluation of the Wildcat Coal Lodge located on the campus of University of Kentucky. The new facility consisted of a three story structure with a partial basement and associated facilities. The footprint for new facility measured approximately 6,250 square feet and the foundation system for the structure consisted of short drilled shafts and/or conventional footings bearing directly on sound bedrock. Other tasks performed include: pavement design for both light and heavy duty flexible and rigid pavements, pre and post construction meetings, development of foundation alternatives due to karst features, and recommendations for rock/soil excavation near existing access roads.

### University of Kentucky, Digital Village, Marksbury Building, Fayette County, Kentucky

Contract Manager for the geotechnical exploration for the proposed Marksbury Building, a part of the new Digital Campus at the University of Kentucky. The new facility consists of a two-story structure with a partial basement and associated facilities. A preliminary geotechnical exploration was performed, followed by a final exploration after the project architects finalized the building footprint. The explorations included soil sampling, rock coring, and laboratory testing. Geotechnical recommendations were made regarding suitability of insitu soils, rock bearing foundations, floor slabs, and other general foundation recommendations.

### Professional Heights Civil Site Design and Geotechnical Exploration, Fayette County, Kentucky

Principal in Charge of civil site design for a 4-acre site development project. Site engineering consisted of sanitary and storm sewer design, pavement design, retaining wall design and general site grading. Site drainage was designed to comply with a previous drainage study performed using HEC-HMS and STORMCAD to design detention facilities and storm sewers for multiple design storms in accordance with the LFUCG Stormwater Manual. Construction drawings and technical specifications were developed per local and state specifications and requirements. Topographic and utility surveys were provided as well as geotechnical exploration. Tasks included drilling and sampling of soil and rock, laboratory testing, and recommendations for soil bearing foundation systems, pavement subgrade, and site grading. Following the geotechnical exploration, Stantec performed civil site and geotechnical design for the hotel, including grading, drainage, storm sewer (including water quality devices), sanitary sewer, and retaining wall design.



As a Transportation Engineer with more than 12 years of professional experience, Adam's focus has been primarily on geometric design and elements involved in Phase I design. More recently, Adam has become involved in projects nearing completion and has gained expertise in Phase II design. Adam has more than 12 years of Microstation experience, seven years of ProjectWise experience, and eight years of Inroads experience. He has become very knowledgeable in the use of Inroads in both Phase I and II design and the software's capabilities of modeling more advanced situations.

### **EDUCATION**

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 2003

### REGISTRATIONS

Professional Engineer #25744, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

### KY 11 Reconstruction, Montgomery County, Kentucky (Project Engineer)

Engineer responsible for Phase I and II geometric design, including the development of horizontal and vertical alignments to minimize impacts associated with the proposed widening of the existing facility. was responsible for preliminary drainage analysis, generating and detailing cross-sections, and aiding in the development of construction limits.

### KY 536 Reconstruction, Boone and Kenton Counties, Kentucky (Project Engineer)

Engineer responsible for Phase I and II geometric design, including the development and refinement of horizontal and vertical alignments. Adam was also responsible for developing approach road alignments and grad `es, roundabout analysis, superelevation transitions, and digital terrain models.

### Newtown Pike Phase IV Extension, Fayette County, Kentucky (Project Engineer)

Engineer responsible for Phase II roadway and drainage design on a four-lane raised median urban boulevard designed to provide improved access from the University of Kentucky campus to the interstate system. Adam refined and aided in finalizing horizontal and vertical grades for Newtown Pike and all approaches within the project limits, generated and detailed cross-sections, led signal design plans, and finalized right-of-way impacts. His duties also included preliminary and final drainage analysis utilizing the Inroads storm and sanitary design software.

### KY 4 (New Circle Road) Widening Study, Fayette County, Kentucky (Project EIT)

Adam was responsible for Phase I and II roadway design— for developing a maintenance of traffic scheme for construction of the roadway and led the plan sheet development for the traffic signals.

### KY 2345 – Johns Hill Road Reconstruction, Campbell County, Kentucky (Project EIT)

Adam finalized horizontal and vertical grades for Johns Hill Road and all approaches within the project limits, generated and detailed cross-sections, and finalized construction limits. His duties also include final drainage analysis using Inroads storm and sanitary design software.

US 68 (Harrodsburg Road) Widening, Fayette County, Kentucky (Project Engineer) *Responsible for signal design plans.* 



Rock has more than 35 years of transportation planning, design, and operations experience. For more than 25 years, Rock has been a consultant at the senior or principal level in the field of traffic engineering, traffic safety, and circulation design. Rock has also prepared many transportation policy plans and completed controversial and complex transportation studies, including neighborhood traffic calming projects, complete streets, pedestrian and bicycle studies, projects anticipating litigation by another public agency, and projects with intense public opposition. He has frequently been an invited speaker to regional and national conferences and committees on many topics, including pedestrian circulation, innovative bikeway design, traffic calming, and transportation policy.

### **EDUCATION**

M.S. Civil Engineering, University of California, Davis, Davis, California, 1976

B.S. Civil Engineering, University of California, Davis, Davis, California, 1973

### REGISTRATIONS

Professional Engineer #1139 (Traffic), State of California

Professional Engineer #29493 (Civil), State of California

Professional Engineer #11271-PE (Civil), State of Hawaii

Certified Professional Traffic Operations Engineer #205, Institute of Transportation Engineers

### **PROJECT EXPERIENCE**

Calgary Center City Bikeway Network, Calgary, Alberta (Technical Advisor)

Burbank Channel Bikeway Project, Burbank, California (Project Manager)

Bicycle Enhancement Program, University of California at Los Angeles (Project Manager)

Model Design Manual for Living Streets, Los Angeles, California (Non-motorized Transportation Expert) Kihei High School Pedestrian and Bicycle Improvements Study, Maui, Hawaii (Project Manager)

Short Range Bicycle Friendly Improvement Program, Long Beach, California (Project Manager)

Corona Del Mar Enhanced Pedestrian Crossings Study, Corona Del Mar, California (Project Manager)

Bikeway Master Plan, Ventura, California (Project Manager)

Broadway and Third Street Protected Bikeways, Long Beach, California (Project Engineer)

Vista Avenue Bicycle Boulevard, Long Beach, California (Project Manager)

Pedestrian Awareness Campaign and Task Force, Santa Ana, California (Transportation Engineer)

East-West Bikeway Connectors Planning and Design Project, Long Beach, California (Project Engineer)

Old Town Pedestrian Crossing Study, Tustin, California (Project Manager)

Crosswalk Safety Study for the City of Los Angles, Los Angles, California (Project Manager)

Citywide Pedestrian Safety Study, Santa Ana, California (Project Manager)

Enhanced Pedestrian Crossing Study (Phase I & II), Santa Monica, California (Project Manager)



Bill has experience in the planning, design and implementation of numerous transportation projects throughout Kentucky, as well as Tennessee, Virginia, Alabama and Florida. He has worked on both rural and urban projects, widening/reconstruction projects, and intersection/interchange projects. Bill's responsibilities have included the production of highway construction plans, including geometric, drainage and pavement design, erosion control plans, traffic control plans, striping plans, signing plans and right-of-way plans.

### **EDUCATION**

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1976

### REGISTRATIONS

Professional Engineer #11985, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

### Newtown Pike (KY 922) Design-Build, Fayette County, Kentucky (Project Engineer)

This project involved the improvement of safety and mobility of a section of Newtown Pike in conjunction with the 2010 World Equestrian Games. More than 500,000 visitors attended the Games, which required safety and mobility improvements on Newtown Pike to make sure the highway could handle anticipated traffic volumes. As the prime design consultant, Bill used context sensitive design techniques to improve Newtown Pike while preserving the route's scenic features, including the dry stone fences, horse farms and rolling hills for which the Bluegrass is famous. Services include preparing right of way pans and final design roadway plans; utility coordination and right of way acquisition services; public involvement; and structural engineering and final structure plans to replace an existing bridge with a threespan bridge.

## US 60 Reconstruction\*, Henderson, Kentucky (Project Manager)

Responsible for reconstruction of a congested two-lane arterial to a five-lane curb and gutter section with sidewalks and bike lane.

### SR 101 (Lantana Road) Improvements, Cumberland County, Tennessee (Project Manager)

Responsible for preliminary design and final right-of-way plans and roadway construction plans for the widening and improvement of 3.3 miles of an existing two-lane rural highway to a five-lane urban section.

## SR 31, Hawkins County, Tennessee (Project Manager)

Responsible for the location and preliminary design of 4.4 miles of SR 31 using an urban multi-lane template through the City of Mooresburg and then a rural section from Mooresburg into the Clinch mountains. The project area is historically and environmentally sensitive with substandard curves and grades.

### Carol Malone Boulevard Widening, from the Little Sandy River Bridge to College Street, Carter County, Kentucky (Project Engineer)

This project involves Phase I and II design to provide a fivelane section through downtown Grayson. The project has been complicated by numerous access points in the urban location. An access management study was part of the Phase I design to reduce the number of access points.

### KY 210 Design-Build (Design-Build No. 3) from KY 3183 to US 68, Taylor County, Kentucky (Project Manager)

This project involved the widening of a section of KY 210 from two lanes to five lanes. The project was necessary because the corridor had been heavily developed in the time since the twolane rural roadway was constructed, and the existing roadway did not adequately serve increased traffic levels. Responsibilities included the design of improvements, acquisition of right-of-way and easements, and coordination of the relocation of utilities. The project provides an urban section with a curb, gutter and sidewalk, two lanes in each direction, a center two-way left turn lane and right turn lanes.

## KY 44 Reconstruction, Bullitt County, Kentucky (Project Manager)

Responsible for performing preliminary engineering for approximately 10 miles of KY 44 from I-65 in Shepherdsville to US 31E in Mt. Washington.



Kirk has more than 14 years of transportation experience that include preparing designs, details, quantities and plans for numerous highway design projects in Kentucky. His experience with computer programs includes Microstation and InRoads.

### **EDUCATION**

AAS, Architectural Computer Aided Design Drafting, Louisville Technical Institute, Louisville, Kentucky, 1998

### **PROJECT EXPERIENCE**

### Louisville Metro Traffic Signal Timing Upgrades, Louisville, Kentucky (Designer)

Designer for Stantec's traffic signal timing upgrades contract. The purpose of the project is to maximize capacity, traffic efficiency and safety on multiple networks and arterials on a countywide basis. Kirk was responsible for data collection, before and after travel time runs, and assisting in development of reports.

### Statewide Electrical Engineering\*, Multiple Locations, Kentucky (Designer)

Completed construction plans to replace dated traffic signal equipment at the following intersections: District 5: Jefferson County - US 42 at Holiday Manor and US 31W Dixie Highway at Dixie Manor; Franklin County - KY 420 Capitol Avenue at US 60 East Main. District 7: Woodford County - US 60 Bypass at US 60X Lexington Street. District 8: Adair County - KY 55 at KY 206; Clinton County -US 127 at KY 1590.

### Statewide Corridor Planning (2010-2012), Multiple Locations, Kentucky (Designer)

Designer responsible for developing conceptual alignments and cost estimates.

### KY 536 Interchange Reconstruction at I-71/75, Boone County, Kentucky (Designer)

Designer responsible for assisting with the signal design and signal plan production for the double crossover diamond (DCD) interchange and surrounding intersections. Kirk also performed preliminary lighting design for the interchange utilizing high mast lighting.

### I-64 Widening and Rehabilitation, Jefferson and Shelby Counties, Kentucky (Designer) Designer responsible for assisting with quantity calculations and minor design updates.

## KY 251 Scoping Study, Hardin County, Kentucky (Designer)

Designer responsible for developing conceptual alignments and cost estimates.

Louisville Downtown Crossing (Ohio River Bridges Project) Design-Build, Louisville, Kentucky (Designer) Provided the preliminary lighting design used in the Walsh Construction team's winning design-build proposal for the downtown Louisville portion of the I-65, I-64, and I-71 interchange realignment. Preliminary maintenance of traffic lighting requirements were also determined for this portion of the project.

### Woodlawn Crossing Traffic Impact Study, Richmond, Kentucky (Designer)

Designer responsible for using HCS software to determine the Level of Service (LOS) for the intersections affected by the proposed development. Kirk assisted with the development and completion of the report.



Larry is a traffic engineer with more than 15 years of technical experience and 10 years of project management experience, including traffic signal design, signing and marking design, ITS design, signal timing analyses and implementation, transportation planning projects, signal warrant studies, traffic impact studies, traffic safety studies, and data collection projects.

He has worked on traffic engineering design projects that have included traffic analyses and pre-preliminary geometric design, traffic signal and signal system design, signal timing, sign and pavement marking design, ITS design and traffic control plan development. As part of the traffic safety studies and traffic engineering services, Larry has performed safety and capacity analysis, studied accident locations, and evaluated different special safety issues related to topics such as school zones, truck routing, speed control, sign and signal inventories and more.

Larry has designed numerous traffic signals and signal systems. He has coordinated designs with many different government entities and submitted for approval. The location and any conflicts with utilities in the area were taken into account and remedied.

### **EDUCATION**

BSCE, Civil Engineering, University of South Florida, Tampa, Florida, 1999

### REGISTRATIONS

Certified Professional Traffic Operations Engineer #1597, Professional Traffic Operations Engineer

Professional Engineer #60816, State of Florida

Professional Engineer #29910, State of Georgia

### **PROJECT EXPERIENCE**

### HAWK Pedestrian Beacon\*, City of Suwanee, Georgia (Project Engineer)

This project included the management, design, and implementation of the first HAWK pedestrian beacon in the state of Georgia. The installation was designed and implemented for the City of Suwanee and required numerous coordination meetings with county and state officials.

### Statewide Signal Design Upgrade Project\*, Statewide, Georgia

Responsible for the project management as well as development of traffic signal upgrade plans with signal communications for multiple task order projects. The projects include the development of traffic signal upgrade plans, communication plans, and right-of-way plans according to the GDOT Plan Development Process.

### Fast Forward Signal Upgrade Program\*, Metro Atlanta, Georgia

Managed the production of traffic signal and communications plans for multiple task orders with numerous intersections.

### Moreland Avenue Signal Upgrade Project\*, Atlanta, Georgia (Project Manager)

Upgrade of 19 traffic signals on Moreland Avenue. The project included signal interconnect plans, 2070 traffic controllers, utility coordination, and interagency coordination.

### Minor Roadway On-Call Services Contract\*, Gwinnett County, Georgia

Developed signal plans as part of the County's current Minor Roadways Demand Services Contract. The projects included the development of signal plans and/or fiber optic interconnect. The plans included coordination with roadway improvements, utilities, and existing signal equipment.

# Taylor Perkins PE

**Stantec** 

Structural Engineer (Lexington, Kentucky)

Taylor has been involved in the plan preparation and design of complex highway bridges, culverts and retaining structures. His structural design experience includes various types of prestressed concrete bridges including pre-tensioned and post-tensioned girders, steel girders, reinforced concrete culverts, seismic evaluation, and various types of foundation systems. His responsibilities have included preliminary and final design, preliminary and final quality estimates, and plan and specification preparation. In addition to structure design, Taylor has assisted with the inspection of interstate and river bridges, and has completes Sprat Level I rope access training. Taylor is familiar with a number of industry software programs, including Microstation, Ansys/Civil FEM, GTStrudl, MDX, CONSPAN, RCPIER, LPIIe/GROUP, SeiSab, MathCAD, InRoads, LARS Bridge Modeler, FLAC, MatLab, and various other structural design software.

### **EDUCATION**

PhD Candidate, Structural Engineering, University of Kentucky, Lexington, Kentucky, 2011

Master of Science, Civil Engineering, Structures, University of Kentucky, Lexington, Kentucky, 2008

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 2007

### REGISTRATIONS

Professional Engineer #28347, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

### Painter Road Bridge Replacement, Carroll County, Kentucky

Structural EIT responsible for final design, plan preparation and specification/bid package preparation for this small county bridge replacement. Bridge consists of a single-span (30 ft.) of side-by-side PPC box beams supported on breastwall abutments. The box beams span an aggressive tributary to the Ohio River, which presented significant scour potential and bank stability issues. This project required interaction with the County Judge Executive and Road Superintendent in order to compile the bid package required for the competitive sealed bid process.

### Lewis Road Bridge over Black Rock Creek, Carroll County, Kentucky

Structural EIT responsible for the final design, structure plans, and specifications/bid package for the single-span (70 feet) B33-48 PPC side-by-side box beam bridge with pile end bents. The structure required special consideration for 25-foot tall masonry abutments of the existing 40-foot long bridge to remain in place.

#### KY 2861 over I-64, Shelby County, Kentucky

Structural EIT responsible for final LRFD design of both superstructure and substructure. Bridge consists of two-spans (133 ft. ~ 133 ft.) of 66-in Hybrid PPC I-beams supported by integral end bents and multi-column piers founded on spread footings. The 39-ft wide bridge carries local traffic over a widened section of I-64.

#### I-64 over Cardwell Lane, Franklin County, Kentucky

Structural EIT responsible for the final design of drainage and construction elevations as well as checking design of integral end bents. The bridge is a three span (48-ft. ~ 76-ft. ~ 48-ft.) Type III PCI-Beam with integral end bents and multi-column piers. The bridge has a width of 129.67-ft. The structure required special consideration for stage construction and designing around existing abutments and piers.

### US 127 over Spring Creek, Clinton County, Kentucky Structural EIT responsible for the final design of the end bents,

drainage, and construction elevations. The bridge is a threespan (125-ft. ~ 135-ft. ~ 115-ft.) 78-inch PPC I-Beam with integral end bents and hammerhead piers founded on spread footings. The bridge has a width of 51 feet and a skew of 25 degrees.

### KY 1494 over Long Lick Creek, Bullitt County, Kentucky

Structural EIT responsible for checking final design of the pier for KY 1494 over Long Lick Creek bridge. The bridge consists of three spans (47.25ft~48ft~47.25ft) and a composite deck 17inch PPC Box Beam superstructure. The design also included a tieback retaining wall under Span 1 for slope stability alleviation. The 20-degree skewed bridge utilized piers founded on 48-inch diameter drilled shafts

## US 60 Bridge over Tennessee River, McCracken and Livingston Counties, Kentucky

Structural EIT responsible for portions of the seismic analysis and design, including a response spectrum analysis with damping from lead-core isolation bearings and seismic evaluation of the pier and foundation components.



Antonio has 16 years of experience planning and designing transportation projects. His experience includes urban and rural arterial roads, signalized intersections, interchanges, roundabouts, parking lots, and bicycle and pedestrian facilities. Antonio is proficient in several design and analysis tools used in transportation engineering, including CADD software (Microstation, InRoads and Autoturn) and software for traffic analysis (VISSIM, CORSIM and aaSIDRA) and drainage (HYDRAIN, Hydraflow Storm Sewers and Culvert Master).

### **EDUCATION**

MS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1996

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1995

### REGISTRATIONS

Professional Engineer #21521, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

### KY 536 Interchange with I-71/75, Boone County, Kentucky (Project Engineer)

Responsible for the design of a Double Crossover Diamond interchange (DCD) at the I-71/75 interchange with Mt. Zion Road (KY 536). also include the widening of 1.5 miles of KY 536 and the provision of a shared use path along this road

### I-275 to AA Highway Connector, between I-275 and AA Highway, Campbell County, Kentucky (Senior Transportation Engineer)

Responsible for roundabout analysis, preliminary and final roadway design for 1.5 miles of new highway. A shared path is being used to accommodate pedestrian and bicycle traffic along the new connector.

### KY 536 Reconstruction, Kenton County, Kentucky (Senior Transportation Engineer)

Responsible for roundabout analysis, network modeling and analysis, and conceptual design. The project scope includes reconstructing approximately five miles of KY 536 and two miles of various approaches to provide a four-lane section with raised median, curb, bike lanes and sidewalk.

### US 68 Harrodsburg Road Widening, Fayette County, Kentucky (Project Engineer)

Responsible for the design of a Double Crossover Diamond interchange (DCD) at the intersection of Harrodsburg Road with New Circle Road in Lexington.

### US 31E Reconstruction "Priority Section" / Phase II Design, Nelson County, Kentucky (Project Engineer)

Responsible for the relocation/reconstruction of approximately 2.6 miles of existing rural two-lane highway to a two lane initial/four lane ultimate facility from KY 509 to just south of Whitesides Drive. This project was designated as the "Priority Section" of the 14.6 mile corridor due to two high accident locations along this portion of the corridor. Duties for this project included drainage design, striping plans, quality control plan reviews and preparing cost estimates.

### Statewide Pavement Rehabilitations (2008-2010), Kentucky (Project Engineer)

Responsible for development of plans and construction documents for pavement rehabilitation to enable the Transportation Cabinet to comply with Federal requirements for rehabilitation projects.

### KY 90/KY 61 Design-Build, Cumberland County, Kentucky (Project Engineer)

Responsible for the design of 6.8 miles of KY 90 to improve safety and capacity. Responsibilities include concept development; public involvement; roadway, design; right-ofway; utilities and environmental coordination.

### South Shore Boulevard\*, Village of Wellington, Florida (Engineer)

Part of a project team for developing plans for the roadway reconstruction of Southshore Boulevard from Greenview Shores Boulevard to Lake Worth Road. Relevant features on this project included the redesign of several intersections and the provision of sidewalks, bicycle lanes and an equestrian path for the entire length of the project. Special attention was given to accommodating pedestrian and equestrian crossings at various intersections along the project.

## Green Street (US 60)\*, Henderson, Kentucky (Project Manager)

Responsible for Phase I and Phase II plans to rehabilitate this 1.7-mile section of two-lane highway to a five-lane urban facility with a two-way left-turn lane, sidewalks and bicycle lanes.



Rick has 11 years of traffic engineering and transportation planning experience. He has worked closely with municipal agencies and been recognized as an expert witness on projects ranging in size from singleintersection safety reviews to area-wide transportation analysis models. Rick's transportation planning experience includes traffic impact analyses, comprehensive planning studies, trip generation studies and several large-scale master-planning studies, and his traffic engineering work involves roadway operational analyses, crash/safety reviews, signal warrant studies and intersection/signalization design. Rick is proficient in the latest versions of Synchro, SimTraffic, Highway Capacity Software (HCS), and Microstation.

### **EDUCATION**

MS Civil Engineering, Clemson University, Clemson, South Carolina, 2002

BS Civil Engineering, Clemson University, Clemson, South Carolina, 2001

### REGISTRATIONS

Professional Engineer #40402, North Carolina Board of Examiners for Engineers and Surveyors

Certified Field Technician, International Municipal Signal Association

Certified Professional Traffic Operations Engineer #2293, Professional Traffic Operations Engineer

Professional Engineer #64083, Florida Board of Professional Engineers

Professional Engineer #27504, South Carolina Board of Registration for Professional Engineers and Land Surveyors

### **PROJECT EXPERIENCE**

Laurel Road and Knights Trail Intersection Improvements<sup>\*</sup>, Venice, Florida (Traffic Engineer) Responsible for the signalization design of the intersection, as well as the future-volume projections and capacity analyses for the design year.

## Chiquita Parkway\*, Cape Coral, Florida (Traffic Engineer)

Provided signalization and signing and marking design plans for five intersections along the corridor.

## West Villages Parkway\*, North Port, Florida (Traffic Engineer)

Provided the design of several junctions along the new 2.6mile thoroughfare project. Plans included the design for two new signalized junctions along existing roadways and signing and marking design for the corridor.

### Skyline Boulevard Intersection Improvements\*, Cape Coral, Florida (Project Engineer)

Responsible for signalization, geometric, and signing and marking design plans for two intersections along the corridor. Tasks included the addition of signalized traffic control to replace the all-way stop control at both intersections, lengthening existing left-turn lanes, and the design of interconnect plans along the corridor.



Karim's experience includes hydraulic design, preliminary and final drainage design, drainage calculations, and preparation of drainage plans for all types of streets, highways and railroad projects. He also has experience in preparing wetland mitigation plans, detention and retention basin analysis, hydrologic/hydraulic analysis and flood plain mapping and study. Karim is known among contractors and clients for his hands-on approach to the cost-effective design and construction of mitigation sites.

### **EDUCATION**

Master of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1985

Bachelor of Science, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1983

BS, Civil Engineering, University of Science and Technology, Tehran, Iran, 1978

### REGISTRATIONS

Professional Engineer #15759, Commonwealth of Kentucky

### **PROJECT EXPERIENCE**

## Swago Creek Bridge, Pocahontas County, West Virginia

Project Drainage Engineer for this project to replace a 92-foot long bridge. Karim is responsible for calculations and performing the HEC-RAS analysis for the existing and proposed bridge. He sized the opening of the temporary bridge for maintenance of traffic, and also reviewed in-stream mitigation devices for erosion and scour control.

### KY 119, Magoffin County, Kentucky

HEC RAS analysis of two bridges, a channel change and approximately one mile of existing Burning Fork Creek.

### Cherokee Park Bridges Study, Louisville, Kentucky

Project Drainage Engineer responsible for field survey and HEC-RAS analysis for nine bridge structures in historic Cherokee Park.

### US 31E Reconstruction "Priority Section" / Phase II Design, Nelson County, Kentucky

Project Drainage Engineer responsible for HEC-RAS analysis for proposed 120 foot beam bridge.

### Newtown Pike Extension Runoff, Lexington, Kentucky

*Hydraulics Engineer for this project that involved 0.35 acres of contaminated soil which could not be mixed with noncontaminated soil for use as an embankment in a fill area. The* 

material had to be removed and disposed of. Construction plans included guidelines to access the contaminated site and contain runoff in an enclosed area. Runoff from outside he contaminated area was rerouted away from the site and into the available storm sewer system.

### KY 90/KY 61 Design-Build, Cumberland County, Kentucky

Project Drainage Engineer responsible for the design of 6.8 miles of KY 90 to improve safety and capacity. Responsibilities included drainage calculations, drainage layout and HEC-RAS analysis. Karim also designed and provided grading plans for an on site retention/detention and wetland basin for proper treatment of pyrite run-off from roadway project site.

### US 119 Reconstruction, Letcher County, Kentucky

*Hydraulic engineer responsible for all cross drains, silt basins, erosion control plans and ditch calculations for 5.8 miles of rural roadway.* 

### US 460 Design Build, Buchanan County, Virginia

Project Drainage Engineer responsible for preliminary detention and silt basin design. Also prepared HEC RAS analysis of for two bridges (Grassy Creek & Hunts Creek) and qa/qc for hydraulic analysis.

### Newtown Pike (KY 922) Design-Build, Fayette County, Kentucky

Project Engineer responsible for performing drainage layout and analysis of cross drains as well as HEC-RAS analysis for a bridge over UK agriculture station branch.

### Abbie Jones, PE, PLS PROJECT MANAGER, PRINCIPAL-IN-CHARGE (AJC)



### *Education* BS, Civil Engineering, 2000 *Tennessee Technological University*

 Professional Registrations:

 Kentucky
 PE
 26780

 Kentucky
 PLS
 3639

 Certified Floodplain Manager

 KPESC-RI Erosion Card

Abbie has worked in the engineering and survey industry for 14 years, working in both the public and private sectors. She has quickly become acclimated to her new home as she was honored as the **2011 Bluegrass Chapter Nominee for Young Engineer of the year for KSPE**.

Abbie has experience in the planning, survey, design and maintenance perspectives of transportation. She knows that including field operations staff early in the planning process helps create a more comprehensive solution. Abbie's experience is especially strong in highly urbanized areas with multimodal design components. She has managed the GIS System for an agency and understands uniquely how to gain more stakeholder involvement.

Her management will include:

- Brief Scoping meetings per task order
- Brief Friday update emails
- Provide cutting-edge ideas for cost-saving considerations
- Former civil service perspective

### SERVICE, COMMITTEES, & AWARDS

- Named Georgia Young Engineer of the Year 2005 and Bluegrass Chapter Nominee for Kentucky Young Engineer of the Year, 2011
- Kentucky Society of Professional Engineers
- Kentucky Section of Institute of Transportation Engineers
- Surface Transportation Technical Committee for North Central Texas Council of Governments, 2008-2009
- Transportation Management Committee (with TXDOT), 2008-2009
- Hurst, TX Technical Staff representative to Traffic Safety Committee, 2008-2009
- Milton, GA Technical Staff representative to Greater Atlanta Regional Transportation Authority (GRTA), 2007

### **Relevant Project Experience**

- 1. <u>KYTC US231, Bowling Green, KY (2013</u>)- 9-24hr, 3 bin video turning movement and 2 – 7 day tube classification counts. Highest ADT=48,600.
- Private Developer, Outer Loop, Louisville, KY (2013)

   2-13hr 3 bin video turning movement emergency counts. Highest ADT=22,603.
- 3. <u>KYTC Louisville Bridges (2013)</u>– Video, Tube, and multi-lane 8 bin interstate radar volume and class counts. Highest ADT=39665.
- <u>KYTC US25 Corbin , KY (2013)</u>– 8-24hr 2 bin video turning movement and 4-2 hr manual turning movement counts. Highest ADT=28,926.
- <u>KYTC KY 54 Owensboro, KY (2013)</u> 8-24hr video turning movement and 2-2-hr manual turning movement counts. Highest ADT=38,388.
- 6. <u>Brannon Crossing, Lexington, KY (2012)</u> 4-24hr video turning movement counts. Highest ADT=51,277.
- Mountain Parkway Extension , Morgan Co, KY (2011-2012)- Video and Tube Counts. Highest ADT=5,422.
- 8. <u>Euclid Rd Kroger, Lexington, KY (2012)</u> Manual Counts. Peak hour count.
- <u>Chinoe Rd Kroger, Lexington, KY (2012)</u> Manual Counts. Peak hour count.
- <u>3<sup>rd</sup> and Central Avenue, Louisville, KY (2012)</u> 24 hr video turning movement counts. ADT: 58,776
- 11. *Floating Bike Lane-Vine Street, Lexington, KY* (2012) – 2 hr manual peak hour/lane transition bike counts.
- 12. Project Manager for a **KYTC Highway Design Guide Manual Update** through KTC. This project covers all categories of design. (2011-2012)

### **Continuing Education**

- Forthcoming Case Study with Miovision
- 2012 Basic Traffic Engineering Course with KTC
- 2012 KYTC/ACEC-KY/FHWA Partnering Conference, ACEC-KY, Traffic Data Collection Section.
- 2012 Presenter to Madison County Planning Commission Courses for Continuing Education
- 2011 Traffic Impact Studies Course with KTC



### Relevant Experience of Key Project Team Members

### **Professional Services for** Transportation Engineering

### Adam Bender-Sanders, EIT Engineer (AJC)



**Education** BS, Civil Engineering, 2011 University of Kentucky

Professional Registration Engineer Intern (EIT)

Adam is a recent graduate of the University of Kentucky, graduating Magna Cum Laude. As a student, he was involved with engineering organizations, including ASCE and ITE. As president of Chi Epsilon, he directed charity events, and helped triple the membership.

Adam has a strong foundation of traffic data analysis. He processes traffic volume data and turning movement. Adam has quickly learned several traffic analysis programs and is very adept at using raw and binary files. He is also proficient in ArcGIS and CADD packages. Adam is detail-oriented and helps keep large data collection projects on track. He has also developed automated programs to combine and review data along corridors.

### **Relevant Project Experience**

**Brannon Road Corridor**– Process traffic volume and turn movements at five intersections. This data was input into a traffic analysis program report and provided in several other formats. This project is part of the Statewide Traffic Forecasting contract.

*I-75 Project Corridor* – Install equipment and process turning movement counts at seven intersections. These range from interstate exits to major (3+lanes each side) divided direction highway intersections, to rural four way stop intersections.

*Mountain Parkway Expansion Project*. This project is under contract review and includes 37 tube counts and 27 video turning movement counts. Adam is scheduling equipment, processing field data and producing reports.

### SERVICE, COMMITTEES, & AWARDS

- Kentucky Section Institute of Transportation Engineers (KYSITE)
- Chi Epsilon, Engineering Honors Society

### Brandon Shelley, EIT Engineer (AJC)



### Education

BS, Civil Engineering, 2010 University of Louisville MS, Civil Engineering, 2011 University of Louisville

**Professional Registration** Engineer Intern (EIT)

Brandon is the newest addition to Abbie Jones Consulting. Mr. Shelley has over 4 years of design and analysis experience including roadway design projects ranging from alignment corrections on small two lane rural roads to the maintenance of traffic design for high volume three lane interstates, conducting traffic counts and producing traffic impact studies for small residential neighborhood esthetics projects up to large commercial thoroughfares, and traffic signal designs.

### Relevant Project Experience (all prior to joining AJC)

- 1. Signal Design-SR17 & Tuxedo Ave, Brooklyn Heights, OH
- 2. Signal Design & Pavement Design-Clyo Rd & Spring Valley Pike, Centerville, OH
- 3. Streetscape, US50 (Main St), Chillicothe, OH
- 4. Traffic Counts & Analysis, Clintonville Corridor, Columbus, OH
- 5. Traffic Counts & Analysis, Polaris Pkwy Columbus, OH
- 6. Signal Modification, COTA Bus Facility, Columbus, OH
- 7. Signing & Marking, Pavement Quantities, I-64 Widening, Jefferson & Shelby Counties, KY
- 8. Preliminary Design Analysis, Orange Rd Corridor, Lewis Center, OH-Develop Intersection Improvements

### **Continuing Education/Skills**

- 2103-Present, Adjunct Instructor at UofL for Applied Logistics in Transportation, Intelligent Transportation Systems, Pavement Design, Traffic Engineering, Advanced Traffic Operations
- ODOT GCAT Certification, ODOT HSM Training
- Microstation/GeoPak/Inroads, Autocad, ESRI
- Synchro, HCS+, TNM, QRSII/GNE, GCAT/CAM

### SERVICE, COMMITTEES, & AWARDS

- Kentucky Section Institute of Transportation Engineers (KYSITE)
- American Society of Highway Engineers
- Women in Transportation Seminar
- 2010 Outstanding Alumni Award, UofL Civil Engineering Dept.



#### INTEGRATED ENGINEERING



#### **EDUCATION**

- University of Kentucky, M.S. Civil Engineering (2002)
- University of Kentucky, B.S. Civil Engineering (1993)

EXPERIENCE - 20 YEARS

#### **PROFESSIONAL REGISTRATIONS**

PE – KY 20154 PLS – KY 3866

#### SPECIALIZED TRAINING

- KYTC Partnering Conference 1999-2012
- LPA Project Guide Training, 2012
- FHWA Hydraulic Design of Culverts
- Stream Stability and Scour at Highway Bridges
- FHWA Urban Drainage Design
- Mitigating Road Impacts on Stream Ecosystems
- MicroStation & Advanced MicroStation
- InRoads I, II, III
- Highway Capacity Manual
- Access Management, Location and Design
- FHWA Contract Administration Core Curriculum

#### HONORS

- ASCE Distinguished Engineer in Government, 2010
- President, Kentucky Association of Transportation Engineers (KATE)
- KYTC Highway Scholarship
- University of Kentucky Dean's List
- AASHTO National Management Conference

## David Moses, PE, PLS

Leading the project team would be David Moses, PE, PLS. David's career includes a wide array of experience ranging from the public sector to private sector. He has experience in project management, highway design, digital terrain modeling, storm sewer systems, culverts, bridge hydraulics, flood plain analysis, right of way, utilities, environmental regulations, construction procurement, design of large and small residential and commercial sites, and production of plans and contract documents.

**Assistant State Highway Engineer, Kentucky Transportation Cabinet** - Coordinated Local Public Agency Projects (LPA) for KTYC. Worked with local governments and elected officials to assist them in navigating KYTC and Federal regulations pertaining to their projects. Provided guidance in the areas of environmental, right of way, utilities, design and construction procurement. Worked with all divisions within KYTC.

**Chief Drainage Engineer, Kentucky Transportation Cabinet** - Branch Manager for drainage branch of KYTC. Supervised staff responsible for development of KYTC drainage policies and review of all KYTC projects for compliance with drainage policies. Authored the Drainage Manual, pipe materials selection and 3-sided culvert policies for KYTC. Served on the AASHTO Technical Committee for Hydrology and Hydraulics. This committee developed the AASHTO Model Drainage Manual which is the basis for most DOT drainage manuals throughout the country. Gave presentations on various drainage topics at statewide and national conventions. Managed statewide drainage design contract. Provided technical support to district offices and consultants in drainage related matters. Provided expert witness testimony for drainage related legal matters. Taught hydraulics & hydrology portion of the Kentucky Transportation Cabinet \ American Society of Civil Engineers PE Review Course. Taught leadership and project development classes.

**CADD Section Head, Kentucky Transportation Cabinet** – Lead engineer for Cabinets internal design group that developed highway design methodologies and policies. Coordinated daily engineering activities of all highway design projects performed by the CADD section. Provided technical support to consultants and district staff in various areas of highway design including: roadway geometry, digital terrain modeling, plan development, design standards, MicroStation and InRoads.

### **ROADWAY EXPERIENCE**

**KY 7**, *Knott County, KY* - Project Manager for the reconstruction of KY 7 and Dry Creek Road in Topmost, KY. Responsible for all aspects of the project including alignment development, digital terrain modeling, hydraulic bridge design, culvert design, right of way determination, maintenance of traffic, cost estimates and all project plans/documentation.

Westport Road (East, West and Interchange Sections), *Jefferson County, KY* - Projects involved 2 miles of urban roadway widening and a new Single Point Urban Diamond Interchange (SPUI) at Westport Road and I-264 in Louisville. Project engineer responsible for drainage on East Section. Responsibilities included, storm sewer, culvert and detention basin design. Also developed pipe sheets and drainage folders. Project engineer and design manager for interchange design. Also developed profiles, cross sections, right of way layout, pipe sections, pavement development sheets and drainage folders. Project engineer and design manager for west section. In addition to coordinating engineering duties of staff, developed alignments for all approach roads, developed digital terrain model of proposed roadway, cross sections and profile sheets.

#### INTEGRATED ENGINEERING



#### **EDUCATION**

- University of Kentucky, M.S. Civil Engineering (2005)
- University of Kentucky, B.S. Civil Engineering (1997)
- Sharjah College (UAE), Diploma in Electronic Engineering (1995)

### **EXPERIENCE** – 16 YEARS

#### **PROFESSIONAL REGISTRATIONS**

PE – KY 23432

#### SPECIALIZED TRAINING

- KYTC Partnering Conference 2011-2013
- LPA Project Guide Training, 2012
- KYTC Basic Traffic Engineering Design Course, 2012
- KSPE Annual Conference 2010-2013
- Designing Streets for Pedestrian Safety, 2009
- Designing Streets for Bicycle Safety, 2009
- Thinking Beyond the Pavement, 2004
- KYTC Traffic Impact Study Training
- MicroStation V8 Upgrade Training, 2003
- Planning and Design of Service Interchanges in Urban and Suburban Areas, 2001
- Introduction to the MUTCD, 2001
- Fundamentals of Geometric Design, 2001
- SED-CAD 4 Training Course; 1999

## Harsha P. Wijesiri, PE, LSIT

Harsha Wijesiri, PE will be providing Quality Control/Quality Assurance and Constructability Reviews for the roadway design projects. Harsha is responsible for the overall management of the firm and his career includes a wide array of experience ranging from the public sector to private sector. This experience includes project management, highway design, storm sewer systems, sanitary sewer systems, water distribution systems, flood plain analysis, design of large and small residential and commercial sites, in-fill redevelopment projects and production of plans and contract documents.

### **ROADWAY EXPERIENCE**

**KY 7**, *Morgan County, KY* – Project Manager for the reconstruction of KY 7 in Morgan County, KY. Responsible for overall project coordination and design effort including the analyses of existing conditions, oversight of roadway alignment alternatives, maintenance of traffic, and cost estimates.

**Harrodsburg Road, Mason Headley & Waller Avenue Intersection Design (LFUCG),** *Lexington, KY* – Project Manager currently working with LFUCG on the redesign of the intersection of Harrodsburg Road with Waller Avenue & Mason Headley. This intersection currently does not meet the ADA & PROWAG guidelines for pedestrian access. Design includes relocating utilities, construction of sidewalks & ramps, relocation of existing infrastructure, stripping plans and signal design for pedestrians.

**Shropshire Avenue Improvements Project (Phase 2)**, *Lexington, KY* – Project Engineer for the design of of the Phase 2 portion of the urban collector street project that is bounded by the limits of construction from Sixth Street to Fifth Street as part of the Bluegrass Aspendale Redevelopment.

**Water Street Project,** *Richmond, KY* – Project Manager for the stormwater analysis and design of the trunk storm for 240 acre downtown watershed. The stormwater analysis and design is being conducted by utilizing SWMM and HEC-RAS, with the final total HEC-RAS study encompassing over 1,500 acres of watershed. The project also includes the re-design of Water Street and Main Street with the implementation of sustainable design elements such as permeable pavers and rain gardens.

**I-65/KY-222 Interchange**, *Hardin County*, *KY* - Project Manager (Sub-Consultant) for design of a Single Point Urban Diamond Interchange (SPUI) for the interchange of I-65 with KY-22 near Glendale, Kentucky; Responsible for drainage analysis for approximately two miles of KY-222, including development of pipe sections, cross sections, drainage situation folders, drainage analysis for entrance pipes, design of roadside ditches, preparation of the erosion control plan, and assembly of drainage folders.

**US-460**, *Scott County, KY* - Designed drainage for rural areas as well as for urban sections for 1.75 miles of three lane rural collector with an urban section; developed cost estimates, R/W estimates, and plan preparation

**KY-11**, *Fleming County, KY* - Designed entrances and cross section changes for 5.5 miles of two lane rural highway; assisted in drainage, erosion control, calculating quantities, and plan preparation

### INTEGRATED ENGINEERING



#### **EDUCATION**

• University of Kentucky, B.S. Civil Engineering (1995)

**EXPERIENCE** – 18 YEARS

### **PROFESSIONAL REGISTRATIONS**

- PE KY 22048
- PE IN 10200289
- PE TN 00107842



#### EDUCATION

• University of Kentucky, B.S. Civil Engineering (1998)

**EXPERIENCE** – 16 YEARS

#### **PROFESSIONAL REGISTRATIONS**

- PE KY 23980
- PE IN 0606247
- PE TN 110877
- CFM Certified Floodplain Manager

## Eddie Mesta, PE

Eddie Mesta will be providing oversight and coordination of the public involvement and utility coordination components of the roadway design project. As Vice President of Integrated Engineering he has gained a significant amount of community involvement experience over the last 15 years in working with public infrastructure projects.

#### **ROADWAY EXPERIENCE**

**Harrodsburg Road, Mason Headley & Waller Avenue Intersection Design (LFUCG),** *Lexington, KY* – Project Engineer currently working with LFUCG on the redesign of the intersection of Harrodsburg Road with Waller Avenue & Mason Headley. This intersection currently does not meet the ADA & PROWAG guidelines for pedestrian access. Design includes relocating utilities, construction of sidewalks & ramps, relocation of existing infrastructure, stripping plans and signal design for pedestrians.

**New Circle Road NE Scoping Study**, *Fayette County*, *KY* - Involved in the scoping study for the 6 mile signalized portion of the New Circle Road N.E. corridor for the Kentucky Transportation Cabinet. Experience included helping facilitate numerous focus groups and public meetings throughout the duration of the project. The results of the study produced various design alternatives with preliminary construction cost estimates.

**Tates Creek Road Sidewalk Project (LFUCG)**, *Lexington, KY* – Project Manager for the site/ civil engineering, surveying and streetscape layout for the design of over 16,000 linear feet sidewalks for both sides of Tates Creek Road from inside of Alumni Drive outbound to the Lansdowne Shoppes area. The design followed state and federal Local Public Agency (LPA) guidelines. Significant coordination was made with utility companies for the numerous relocations that we needed to retrofit the sidewalk into the existing infrastructure. Coordination with LEXTRAN was also a key planning component in determining the optimal

## Steve Garland, PE, LEED AP, CFM

Steve be managing the drainage component of the roadway design projects. His responsibilities will also include oversight of any necessary KDOW and USACE permits for the project.

#### **ROADWAY EXPERIENCE**

**KY 7**, *Morgan County, KY* – Project Engineer for the reconstruction of KY 7 in Morgan County, KY. Responsible for the analyzing existing roadway & drainage conditions, assisting with roadway alignments, refining the alignments for maintenance of traffic, performing the models for various alignments and cost estimates.

**New Circle Road (KY 4),** *Fayette County, KY* – Project Engineer for the widening of New Circle Road. Responsibilities included doing drainage on New Circle Road from Leestown Road to Broadway intersection.

**Water Street Project,** *Richmond, KY* – Project Engineer for the stormwater analysis and design of the trunk storm for 240 acre downtown watershed. The stormwater analysis and design is being conducted by utilizing SWMM and HEC-RAS, with the final total HEC-RAS study encompassing over 1,500 acres of watershed. The project also includes the re-design of Water Street and Main Street with the implementation of sustainable design elements such as permeable pavers and rain gardens.

#### INTEGRATED ENGINEERING



#### **EDUCATION**

• University of Kentucky, B.S. Landscape Architecture (2002)

**EXPERIENCE** – 11 YEARS

#### **PROFESSIONAL AFFILIATIONS**

United States Green Building
 Council Member

#### SPECIALIZED TRAINING

- Carlson Civil-Suite 2014
- Adobe Photoshop



#### **EDUCATION**

 Morehead State University (1985)

**EXPERIENCE** – 22 YEARS

#### **PROFESSIONAL REGISTRATIONS**

PLS– KY 3345

#### SPECIALIZED TRAINING

- GPS (Global Positioning System)
- RTK Surveing

## Katie Pentecost, LA, LEED BD+C

Ms. Pentecost is a Registered Landscape Architect with over 11 years experience in landscape architecture, master planning, site design, and construction administration and construction inspection. She has a variety of experience on projects including campus master planning, streetscape design, park and athletic facilities, pedestrian and bike trail design, landscape plans, primary and secondary education facilities, stream and watershed restoration, sanitary construction inspection, and corridor management planning within the public and private sectors. Katie has worked on a number of construction projects that applied for and received LEED certification and is familiar with the preparation of the required documents.

**Chevy Chase Streetscape Master Plan** *Lexington, KY* – Assisted in the development of graphics related to 3 different options for streetscape designs for the proposed Chevy Chase Streetscape. The design options included rain gardens, public art displays, decorative pavers, site furnishings, and medians with landscaping and parking lots with permeable pavers.

**Campton Streetscape**, *Campton*, KY – Project Manager for the design and construction of the Campton Streetscape Project. Duties included the preparation of construction documents, meetings with Wolf County Industrial Board, coordination with KYTC District 10, and construction administration.

**Kentucky Horsepark Outdoor Arena** *Lexington, KY* – Assisted on the site development in the construction administration phase of the project. Site work components included plaza area with sculpture, walks, stairs, planters, asphalt, and arena floor with synthetic surface, fencing, benches, bollards, and new rubber pavers for horse traffic.

## Mitch Estes, PLS

Mitchell Kent Estes brings 22 years of land surveying experience to the project team. Mr. Estes has experience in construction staking for roadways, subdivisions, and land development and has completed topographic surveys for the design of said projects. He also has experience with land surveying projects for the U.S. Army Corp of Engineers and for Environmental Superfund sites.

**KY-7,** *Morgan County, KY* - Surveying Party Chief providing GPS and conventional surveying services associated with the roadway improvements for 3.4 miles along KY-7 from KY-519 to the south side of Wrigley Hill and near its intersection with KY-1161.

**KY-245,** *Bullitt County, KY* - Surveying Party Chief providing GPS and conventional surveying services associated with the roadway improvements for 2.3 miles along KY-245 from I-65 to the entrance to Bernheim Forest.

**US-60 (Versailles Road)** *Fayette County, KY* - Surveying Party Chief providing GPS Field Surveying services for Pavement Rehabilitation along Versailles Road near downtown Lexington. Responsibilities include the location and documentation of existing drainage, guardrail, pavement, and signage infrastructure throughout the roadway corridor.

**Bob-O-Link Trunk Sewer Replacement (LFUCG)**, *Lexington, KY - Land Surveyor and CAD drafter* responsible for the topographic survey utilized for the planning and design of the sanitary sewer line. Responsibilities also included the creation of easement plats necessary for the easement acquisition within 23 private properties within the project corridor.

#### INTEGRATED ENGINEERING



#### **EDUCATION**

- University of Kentucky, B.S. Civil Engineering (2011)
- University of Kentucky, M.S. Civil Engineering (2013)



### EDUCATION

- University of Kentucky, B.S. Civil Engineering (2005)
- University of Kentucky, M.S. Civil Engineering (2010)

#### **EXPERIENCE** – 5 YEARS



**EDUCATION** 

### EXPERIENCE - 1 YEAR

- University of Kentucky, B.S. Civil Engineering (2011)
- University of Kentucky, M.S. Civil Engineering (2013)

## **Brittany Stewart, EIT**

### **ROADWAY EXPERIENCE**

**KY 7**, *Morgan County, KY* – Project Engineer for the reconstruction of KY 7 in Morgan County, KY. Responsible for the analyzing existing conditions, assisting with roadway alignments, refining the alignments for maintenance of traffic, performing the models for various alignments and cost estimates.

**New Circle Road (KY 4),** *Fayette County, KY* – Project Engineer for the widening of New Circle Road. Responsibilities included developing pavement details sheets for the interchange at New Town Pike and New Circle Road. Other duties included designing the signage plans for the entire corridor of New Circle from Leestown Road to Broadway intersection

## **Bill Lester, EIT**

### ROADWAY EXPERIENCE

**Oak Grove Village**, *Christian County, KY* - Project Engineer currently assisting in the design and development of the 110 acre Oak Grove Village that is located at the Gate 7 Road / US 41A (Ft. Campbell Boulevard) intersection. Responsibilities include the designs of Senator Joey Pendleton Boulevard, Potter Avenue, Foster Road, and Albers Way which are all to be publicly maintained roadways within the Oak Grove Village Development. Mr. Lester is also responsible for the design of the access improvements into the Oak Grove Village Development from US 41A, which is the main roadway transportation corridor serving Fort Campbell.

**KY-3**, *Henderson County, KY* – Project Engineer for the design of drainage infrastructure including culverts and crossing pipes for the proposed road widening. Responsible for drainage analysis and preparation and coordination of all CAD files.

## **Brett Malloy, EIT**

#### **ROADWAY EXPERIENCE**

**US 127,** *Russell County, KY* – Project Engineer for the preliminary drainage analysis for the proposed Section 3 improvements along US 127 near Jamestown, Kentucky. Responsibilities have included delineation of watersheds to be use in the storm water analysis for culvert sizing.

**Beaver Road / McCoy's Fork Road Improvements Study,** *Boone County, KY* – Project Engineer assisting with the preliminary engineering study to review the potential improved trucking access alternatives associated with the existing Bavarian Landfill located on McCoys Fork Road near Walton, Kentucky. Responsibilities include evaluating horizontal and vertical alignment alternatives for conformance to the AASHTO Green Book and KYTC Roadway Design Standards.



Lexington-Fayette Urban County Government RFP #13-2014 Firm Submitting Proposal: <u>Stantec Consulting Services Inc.</u>

Complete Address:	400 East Vine Stre	et, Lexington, KY 40	507	
	Street	City	/	Zip
				I.
Contact Name: Bish	and V. Sutharland D	Titla: Sonior I	Principal	
Contact Name. <u>Kicha</u>	aru K. Sumerianu, F		Пісіраі	
Talanhana Numbaru			(0)	
relephone Number.	(859)233-2100	_ Fax Number:	(859) 254-9664	
Email address: <u>Rich</u>	ard.Sutherland@Sta	intec.com		

LFUCG RFP #13-2014, Request for Qualifications for Professional Engineering Services, page 13



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor William O'Mara Commissioner

### ADDENDUM #1

RFP Number: #13-2014

Subject: Request for Qualifications for Professional Engineering Services Date: March 3, 2014

Please address inquiries to: Theresa Maynard (859) 258-3320

### TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

Paragraph two on page one should read as follows and agree with the date on the website:

"Sealed proposals will be received in the Division of Central Purchasing, Room 338, Government Center, 200 East Main Street, Lexington, KY, 40507, until **2:00 PM**, prevailing local time, on **March 26, 2014**."

Paragraph one on page two should read as follows:

Deadline for questions after the Pre-proposal meeting shall be Tuesday, MARCH 12<sup>®</sup>, 2014 at 2:00 PM local time.

Todd Slatin, Director Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.

**COMPANY:** Stantec Consulting Services Inc.

ADDRESS: 400 East Vine Street, Suite 300, Lexington, KY 40507

SIGNATURE OF PROPOSER: Kulturd Suctuebad



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor William O'Mara Commissioner

### ADDENDUM #2

RFP Number: #13-2014

Subject: Request for Qualifications for Professional Engineering Services Date: March 7, 2014

Please address inquiries to: Theresa Maynard (859) 258-3320

### TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

Disregard Addendum #1 issued on this page earlier today, March 7, 2014. That addendum was for RFP #14-2014 Request for Qualifications – Supplemental Legal Services and posted to the page for RFP #13-2014 in error.

Todd Slatin, Director Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.

COMPANY: <u>Stantec Consulting Services Inc.</u>

ADDRESS: 400 East Vine Street, Lexington, KY 40507

Kuliard Suterland SIGNATURE OF PROPOSER:



Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor

William O'Mara Commissioner

### ADDENDUM #3

RFP Number: #13-2014

**Request for Qualifications for** Subject: **Professional Engineering Services**  Date: March 17, 2014

Please address inquiries to: Theresa Maynard (859) 258-3320

### TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarifications to the above referenced RFP:

- Sign in sheets from March 10<sup>th</sup>, 2014 Pre-Proposal Meeting attached •
- Questions and Answers attached

Todd Slatin, Director Division of Central Purchasing

All other terms and conditions of the RFP and specifications are unchanged. This letter should be signed, attached to and become a part of your RFP.

COMPANY: <u>Stantec Consulting Services Inc.</u>

ADDRESS: \_\_\_\_\_400 East Vine Street, Suite 300, Lexington KY 40507

SIGNATURE OF PROPOSER: Kuliard Suchelard

# Affirmative Action Plan

Stantec is committed to workplace diversity and inclusion and closely follows the employment equality standards in its jurisdictions.

Stantec is an Equal Employment Opportunity employer. Our policy is to provide equal opportunity to all employees and applicants and to prohibit any discrimination because of race, color, religion, sex, national origin, age, marital status, genetic information, disability, or protected veteran status. Employees will be treated based on their job-related qualifications, ability, and performance. As well, our policy is that sexual harassment or any other kind of harassment, including harassment based on sexual orientation, will not be tolerated. Stantec will provide reasonable accommodations for employees and applicants with disabilities. The foundation of these policies is our commitment to treat everyone fairly and equally and to have an unbiased work environment.

In the United States, Stantec is an Affirmative Action employer as shown on the following Title VI Statement.





November 15, 2013

### Notice to Employees TITLE VI POLICY STATEMENT

It is the policy of Stantec to comply with the regulations of Title VI of the Civil Rights Act of 1964, as amended and other nondiscrimination laws and authorities, that include regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation (DOT) Title 49, Code of US Federal Regulations (CFR) and US Federal Highway Administration's Title 23 Code of Federal Regulations 200. Stantec does not discriminate against any person on the basis of race, color, national origin, sex, age, disability, or low-income.

Stantec will not discriminate on the grounds of race, religion, color, sex, national origin, age, or disability in the selection and retention of subconsultants, including procurements of materials and leases of equipment. Stantec will not participate either directly or indirectly in the discrimination prohibited by 49 CFR, Part 21.5.

In all solicitations, either by competitive bidding or negotiation made by Stantec for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified of the contractor's obligations under the contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, disability, and low income. Stantec will include the necessary provisions in every subcontract; including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

Stantec ensures nondiscrimination and equal employment opportunity in all programs and activities in accordance with Title VI of the Civil Rights Act of 1964. If you need more information or special assistance for persons with disabilities or limited English proficiency, contact Sharon Koons at 415 281 5553. Persons in Virginia with hearing-and speech-impairments can contact Sharon Koons at Stantec by using the Virginia Relay Service, a toll-free telecommunication device for the deaf (TDD). Call 711 for TTY/TDD. Outside of Virginia, dial 711 to utilize the local State Relay Service.

Laurie Dreyer, Director International HR, US Diversity and Inclusion Stantec

### EQUAL OPPORTUNITY AGREEMENT

### <u>The Law</u>

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

### \*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

### **Bidders**

*I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.* 

Kultard Suctueland

Signature

Stantec Consulting Services Inc. Name of Business

### WORKFORCE ANALYSIS FORM

Name of Organization: <u>Stantec Consulting Services Inc.</u>

Date: <u>3</u> <u>/ 25</u> <u>/ 2014</u>

Note: These totals reflect the staff counts at Stantec's two Lexington locations.

Categories	Total	Wh	ite	Lat	ino	Bla	nck	Oth	ner	То	tal
		Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Administrators	2	2								2	
Professionals	77	54	14	3		2		2	2	61	16
Superintendents	0										
Supervisors	33	29	2	1				1		31	2
Foremen	19	19								19	
Technicians	45	36	8			1				37	8
Protective Service	0										
Para-Professionals	8	1	7							1	7
Office/Clerical	5		5								5
Skilled Craft	2	2								2	
Service/Maintenance	4	4								4	
Total:	195	145	36	4		3		3	2	157	38

Prepared by: Karen Poteat, PHR Human Resources Consultant

Name & Title

### AFFIDAVIT

Comes the Affiant, <u>Richard K. Sutherland, PE</u>, and after being first duly sworn, states under penalty of perjury as follows:

 1. His/her name is <u>Richard K. Sutherland, PE</u>
 and he/she is the individual submitting the proposal or is the authorized representative of <u>Stantec Consulting Services Inc.</u>, the entity submitting the proposal (hereinafter referred to as "Proposer").

2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Proposer has authorized the Division of Central Purchasing to verify the abovementioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.

6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

### Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further. Affiant saveth naught.

Kuliard Suterland

STATE OF Kentucky

COUNTY OF <u>Fayette</u>

The foregoing instrument was subscribed, sworn to and acknowledged before me

by <u>Karen Haggard</u> on this the <u>25th</u> day

of <u>March 2014</u>, 2013.

My Commission expires: \_\_\_\_\_

### NOTARY PUBLIC, STATE AT LARGE

### **GENERAL PROVISIONS**

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, *29 U.S.C. 650 et. seq.*, as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
  - (a) Failure to perform the contract according to its terms,

conditions and specifications;

- (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services;
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.
- B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this

Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

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Signature

3/25/2014	
Date	

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE business enterprises on the project and can supply the appropriate documentation.

- \_\_\_\_\_ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms to participate.
- \_\_\_\_\_ Included documentation of advertising in the above publications with the bidders good faith efforts package
- \_\_\_\_\_ Attended LFUCG Central Purchasing Economic Inclusion Outreach event
- <u>x</u> Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs of subcontracting opportunities
- \_\_\_\_\_ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms
- \_\_\_\_\_ Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine and showed evidence of contacting the companies on the list(s).
- Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- x Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less that seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- Followed up initial solicitations by contacting MWDBEs to determine their level of interest.
- x Provided the interested MWBDE firm with adequate and timely information about the plans, specifications, and requirements of the contract.
- <u>x</u> Selected portions of the work to be performed by MWDBE firms in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible

units to facilitate MWDBE participation, even when the prime contractor may otherwise perform these work items with its own workforce

- Negotiated in good faith with interested MWDBE firms not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- Included documentation of quotations received from interested MWDBE firms which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.
- \_\_\_\_\_ Made an effort to offer assistance to or refer interested MWDBE firms to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
- \_\_\_\_\_ Made efforts to expand the search for MWBE firms beyond the usual geographic boundaries.
- x Other any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE participation. Successfully included DBEs on our team for the 5 contracts being pursued through our prior relationships with these firms.

Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. Documentation of Good Faith Efforts are to be submitted with the Bid, if the participation Goal is not met.

The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Company Representative			
Senior Principal			
Title			



### LFUCG MWDBE PARTICIPATION FORM Bid/RFP/Quote Reference #\_13-2014

The MWDBE subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately.

MWDBE Company,	Work to be	Total Dollar Value of	% Value of Total
Phone, Email	Performed	the work	Contract
<ol> <li>Integrated Engineering</li> <li>166 Prosperous Place</li> <li>Suite 220 Lexington KY</li> <li>859-368-0145</li> <li>harsha@int-engineering.com</li> </ol>	Surveying Hydraulics Drainage (as needed on multiple contracts)	N/A	As needed to fulfill DBE goal on assigned projects
2. Abbie Jones 1022 Fontaine Rd Lexington, KY (859) 559-3443 abbie@abbie-jones.com	Traffic counts in support of signal contract.	N/A	As needed to fulfill DBE goal on assigned projects
3.			
4.			

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Stantec Consulting Services Inc.

Company

3/25/2014

Date

Richard K. Sutherland, PE Kulard Suctedard

**Company Representative** 

Senior Principal

Title

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### MWDBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference #\_13-2014

The undersigned acknowledges that the minority subcontractors listed on this form did submit a quote to participate on this project.

Company Name Stantec Consulting Services Inc.	Contact Person	Richard K. Sutherland, PE
Address/Phone/Email 400 East Vine Street, Suite 300, Lexington, KY 40507	Bid Package / Bid I	Date
(859) 233 - 2100   Richard.Sutherland@stantec.com	RFP #13-2014	March 26, 2014

MWDBE Company Address	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA
Integrated Engineering	Harsha Wijesiri	See previous form	3/18	Surveying Hydraulics	Email & phone	N/A for prequal	MBE
Abbie Jones Consulting	Abbie Jones	See previous form	3/18	Traffic Counts	Email & phone	N/A for prequal	Female

### (MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Stantec Consulting Services Inc.

Company

Richard K. Sutherland, PE 🦙	Kullard Sutteelard

Company Representative

March 25, 2014

Date

Senior Principal Title
## Attachment 1

## Project Team Location(s)

Prime Consultant	Location (City, State)	Date Office Established	Total Number of Employees	No. of Employees expected to work on DOE projects
Headquarters	N/A as defined	1954	13,000	Support as needed
Local Office	Lexington, Kentucky	1969	195	250 (includes staff in Louisville
PM Location	Lexington, Kentucky			
	Louisville, Kentucky for 1 contract			
SubConsultants				
Name:	Integrated Engineering			
Service Provided	Surveying, drainage, hydraulics on 4 contracts			
Headquarters	Lexington, Kentucky	2006	11	10
Local Office	Lexington, Kentucky	2006	11	10
Name:	Abbie Jones Consulting			
Service Provided	Traffic counts for signal design			
Headquarters	Lexington, Kentucky	2011	4	4
Local Office	Lexington, Kentucky	2011	4	4
Name:				
Service Provided				
Headquarters				
Local Office				

## Notes:

- 1. "Headquarters" refers to the corporate office that provides project support to the local office, if applicable. If support comes from multiple locations, use the blank spaces in the form to provide relevant information.
- 2. Listing of sub-consultants is optional and should only be provided if the prime consultant considers the sub-consultant(s) services to be essential to meeting the required qualifications. In this event, documentation from the subconsultant(s) shall be submitted in the SOQ that provides a commitment to be a part of the prime consultant's team in providing the stated services. In such cases, for the purpose of evaluating the proposals, committed sub-consultants will be considered to be part of the prime consultant's workforce. Prime consultants face potential disqualification from future work if DOE finds that the identified sub-consultants are not being utilized to deliver assigned work products.