

Kristi K. Bumpas, P.E., LEED AP

PRESIDENT / PROJECT ENGINEER

PROFESSIONAL EXPERIENCE

Ms. Bumpas is a project engineer responsible for geotechnical engineering projects and business development. She has extensive experience in soils testing and evaluation, pavement testing and evaluation and project management. Areas of focus include mitigation of expansive soils (including sulfate soils), pavement design and sustainable design through innovative geotechnical applications and foundation recommendations.

REPRESENTATIVE PROJECT EXPERIENCE

- **Fort Sill Pavement and Subgrade Evaluation – Lawton, OK**
Conducted a pavement and subgrade evaluation for approximately 126,000 feet (24 miles) of secondary street pavement across the base. Pavement section thicknesses were measured and subgrade soils were tested and classified.
- **71st Street Reconstruction – Tulsa, OK**
Conducted geotechnical engineering investigation and general pavement evaluation for the reconstruction of 71st Street between US 75 and the Arkansas River.
- **Eufaula Road Reconstruction - Vivian, OK**
Conducted geotechnical engineering investigation and general pavement evaluation for the reconstruction of Eufaula Road.
- **Meridian Road Reconstruction – Lone Grove, OK**
Conducted geotechnical engineering investigation and general pavement evaluation for the reconstruction and widening of Meridian Road.
- **I-40 Crosstown Relocation – Oklahoma City, OK***
Conducted geotechnical engineering investigation for two 1-mile sections of the project. Structures included bridges, retaining walls, drainage structures, and roadways.
- **Load-Posted Bridges – Cotton County, OK***
Conducted geotechnical engineering investigations for double designs on three bridges, including two triple span bridges, one RCB and three ConSpan structures.
- **US 281 Realignment – Major County, OK***
Conducted geotechnical engineering investigations for pedological and embankment studies and a replacement triple span bridge on a new roadway alignment.
- **Leaper Creek Bridge and Roadway – Caddo County, OK***
Conducted geotechnical engineering investigation for a single span bridge and 6 miles of roadway reconstruction.
- **Omaha & 23rd Street Intersection Improvements – Tulsa, OK***
Conducted geotechnical engineering investigation for the construction of an asphalt overlay of the existing intersection and widening of asphalt lanes in each direction.
- **122nd Street Reconstruction and Widening – Oklahoma City, OK***
Conducted geotechnical engineering investigation for the Northwest 122nd Street reconstruction and widening of roadway from 2 lanes to 4 lanes.

EDUCATION

Bachelor of Science, Civil Engineering,
Oklahoma State University

Masters Courses, Geotechnical Engineering,
Oklahoma State University

REGISTRATION

Oklahoma PE

Texas PE

AFFILIATIONS

American Society of Civil Engineers,
Past President

ASCE Geo Institute, Oklahoma Chapter
Secretary, Founder

American Council of Engineering Companies

Society for Marketing Professional Services

Edmond Chamber of Commerce

WORK HISTORY

Red Rock Consulting, LLC
Project Engineer, 2009 - Present

Shepherd Geotechnical Engineering, Inc.
Project Engineer, 2007 – 2009

Shepherd Engineering Design Co., Inc.
Project Manager, 2005 – 2007

Professional Services Industries, Inc.
Project Manager, 2003 – 2005

- **Multiple County Bridges – Various Sites in Oklahoma**
Conducted geotechnical engineering investigations recommending drilled pier and/or h-pile foundation systems for single and triple span county bridges.
- **Multiple Pavement Evaluations – Various Sites in Oklahoma**
Conducted pavement and subgrade evaluations, including FWD testing, for residential and commercial streets, highways and turnpikes across Oklahoma.
- **Multiple Cable Barriers – Various Sites in Oklahoma**
Conducted geotechnical engineering investigations to provide subsurface condition surveys for the design of cable barriers.

* Project was completed under previous employment