

# Bax Engineering Company Overview

## **INTRODUCTION**

Bax Engineering Company, established in 1981 specializes in civil engineering, land planning and surveying for private and public entities. Bax Engineering's in-house resources include over 35 years of project files as well as the survey records of two previous St. Charles County firms. These two firms, St. Charles County Engineering acquired by Bax in 1981, and Kerr Surveying Company of Wentzville acquired by Bax in 1987 provide an extensive basis of records, plats, and surveys from which Bax Engineering grew.

Through this growth, the focus of Bax Engineering has always been to provide the highest quality service, quality in design and survey, as well as a high level of response to our clients. As a way to implement such service, departments were established within the framework of the firm based on particular areas of expertise. Services we provide are:

- Roadway Design
- Land Planning
- Land Surveying
- Construction Surveying
- Civil Engineering
- Construction Monitoring
- 3D Scanning/High Definition Surveying
- Drone Aerial Topographic Survey

## **PRINCIPALS:**

Clifford L. Heitmann, P.E., President  
Dale J. Bax, Vice-President

## **LOCATION:**

221 Point West Blvd.  
St. Charles, MO 63301  
Phone (636) 928-5552  
Fax (636) 928-1718

## **CONTACT:**

Scott Kolkmeier, P.E.  
skolkmeier@baxengineering.com

Corporate Professional Licensure (State of Missouri):  
Professional Engineering Corp. 655  
Professional Land Surveying Corp. 144

## **PERSONNEL:**

Engineering 16  
Surveying 15  
Administration 3  
Total Staff: 34

## **REGISTERED PROFESSIONALS:**

Bax Engineering employs engineering and surveying professionals registered in the states of Missouri and Illinois.  
Professional Engineers 5  
Professional Land Surveyors 5

## **REFERENCES:**

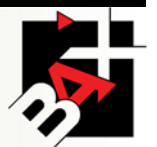
Ms. Liane Sargent, P.E.  
City Engineer  
City of St. Peters  
(636) 477-6600

Mr. Brad Temme, P.E.  
Director of Engineering  
City of St. Charles  
(636)- 949-3237

Mr. Jim Phillips  
Public Works Director  
City of St. John  
(314) 427-8700

Mr. Steve Bender, P.E.  
Public Works Director  
City of O'Fallon  
(636) 379-5560

Mr. Chris Bostic, P.E., PTOE  
Engineering Manager  
St. Charles County Highway  
(636) 949-7305



# Bax Engineering Company Overview

## PRIMARY ENGINEERING CAPABILITIES

Site Planning  
Preliminary Plans  
Improvement Plans:  
Roadway and Intersection Design  
Detention and Retention Facilities  
Potable Water Mains  
Low Pressure Sewer Systems  
ADA Improvements  
Parking Lots  
Flood Plain Studies  
Construction Cost Estimates  
Coordination, through review process, with governmental agencies and utility companies  
Assistance with zoning, rezoning, conditional use permits and zoning variances  
FEMA Letters of Map Amendment (LOMA) and Revision (LOMR)

Sanitary Sewers, Force Main and Lift Station Design  
Storm Sewers  
Water Distribution Modeling  
Lake Design  
Trail Design  
Grading  
Specifications and Job Special Provisions  
Construction Administration and Observation

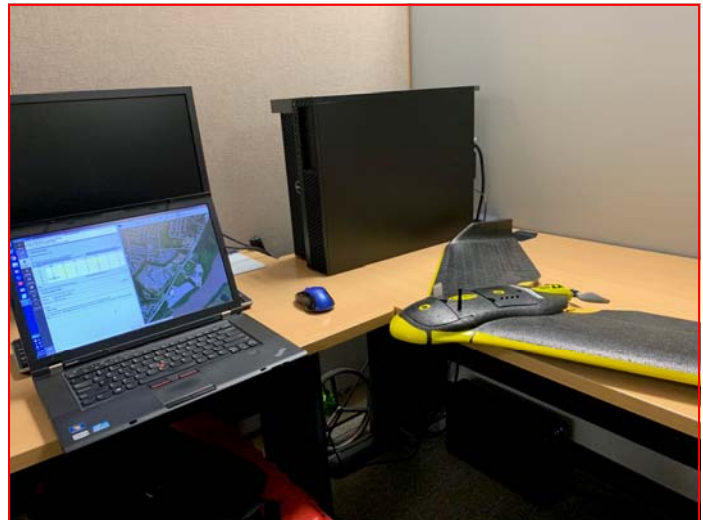
## PRIMARY SURVEYING CAPABILITIES

Boundary, Right-of-Way and Easement Surveys  
ALTA/ACSM Land Title Surveys  
Topographic and Profile Surveys  
Construction Stakeout:  
    Buildings      Parking Lots  
    Sewers        Water Mains  
    Grading      Land Development Improvements  
    Road          Cut Sheet Preparation  
3D Scanning/High Definition Surveying  
Aerial Drone Surveying  
Boundary Adjustments, Re-Subdivision and Lot Consolidation Platting  
FEMA Letters of Map Amendment (LOMA) and Revision (LOMR)

Plats:  
    Calculation  
    Record  
    Easement  
Flood Insurance Elevation Certificates  
As-Built Surveys  
Lake and Levee Surveys

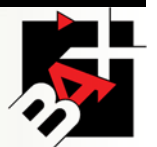


*3D Laser Scanner*



*Drone Equipment*

**"Knowledge from our past; insight for the future."**





## First Capitol Drive Enhancement Project (TAP 7302(661))

Bax Engineering led a team for design of the First Capitol Drive Enhancement project. The limits of the project extended from just west of Main Street to Fifth Street. It also extended along the east side of Fifth Street from First Capitol to Madison Street. The enhancement project includes pedestrian improvements providing wider sidewalks, lighting, bench walls and planter boxes. Additional amenities of the project include:

- A mid block crossing to serve hospital visitors near the City's bus stop.
- Planter boxes and bio-filtration areas to treat stormwater runoff.
- Stormwater improvements to address ongoing concerns at area business entrances.
- Incorporating bus stops with shelters for patrons of the St. Charles Area Transit (SCAT). Shelters were established along First Capitol and along Fifth Street near the hospital.
- Bicycle lane markings

### CONTACT:

City of St. Charles  
Brad Temme, P.E.  
(636) 940-4617

## Paul Renaud Boulevard

Project consisted of survey and design services for approx. 1,900 L.F. of new urban roadway. Design included raised median with center turn lane where necessary, sidewalks and designated bike lanes in each direction. Project also included a new signalized intersection at Sommers Road. Coordination was provided with utility companies during design to avoid conflict with a gas main and a major water main. A relocation plan for overhead electric was coordinated with the electric utility to minimize electric relocation where possible.

### CONTACT:

City of O'Fallon  
Ruth Field  
(636) 379-5491





## Past Projects



### Elaine Drive Reconstruction—City of O’Fallon

Project included survey and design services of approximately 2,050 L.F. of urban roadway reconstruction. Roadway design included widening from 2 lanes to 3 lane section with curb and gutter, utilizing part of existing pavement as base pavement, improved drainage, water main relocation, sidewalks, and multiple entrance improvements. The phasing plan considered the high volume of traffic due to the commercial corridor and the adjacent high school.

CONTACT:  
City of O’Fallon  
Ruth Field—(636) 379-5491

### South Point Prairie at Jackson Road (STP-5414(628))—St. Charles County

Survey and Design of intersection improvements for existing rural roadway. Improvements included realignment of existing intersection with significant profile revisions to improve sight visibility and street grade of intersecting side street (Jackson Rd.). The improvements included approx. 500 ft. of reconstruction with revised profile for Jackson Rd. and 1,060 ft. along S. Point Prairie. Due to significant elevation changes, a construction phasing plan was developed which included an adjacent temporary road, to maintain traffic along S. Point Prairie however a detour was developed to serve Jackson Rd.

CONTACT:  
St. Charles County  
Chris Bostic, P.E., PTOE—(636)949-7305



### Highway 94 and 370 Trail —City of St. Charles

Bax Engineering was initially selected to prepare a feasibility study for a trail connecting the Katy Trail at Dusable Park with the Boschert Greenway (Phase 1) as well as connecting such improvements to the proposed 110 Acre Park being planned in the City of St. Charles along Route 94 at Hawning Road (Phase 2). A cost estimate was prepared for the project and the City elected to proceed with the first phase only at this time.

Bax assisted the City in obtaining a MoDNR Recreational Trails grant. Construction plans and contract documents were prepared for Phase 1. The length of the trails is 4,772 feet and includes a divided segment along Highway 94. Pedestrian crossings with signal improvements were also provided at Highway 94. Bax utilized the services of a subconsultant (GBA) for design of signal improvements. The trail included coordination with Boeing for the relocation of an interior road and fencing to accommodate the trail construction at the secure facility. Bax worked with MoDOT and Boeing to develop a plan that was feasible for the City and acceptable to MoDOT and Boeing as maintaining security of the facility was necessary. The project was completed and open to the public in September 2017.

CONTACT:  
City of St. Charles  
Brad Temme, P.E.  
(636)940-4617

