

**GREDELL Engineering Resources, Inc.**  
**MoDOT LPA On-Call Professional Services 2020**  
**COMPANY BROCHURE**

## **1.0 INTRODUCTION**

Thomas R. Gredell (Tom) established GREDELL Engineering Resources, Inc. (Gredell Engineering) in 2001 with a focus on environmental engineering design and construction. The company's breadth of services has expanded over the years to include a wide range of civil, environmental, geologic, transportation, geotechnical and regulatory services. Gredell Engineering employs a matrix organizational structure with four primary practice divisions: civil engineering and geotechnical engineering; geology and environmental engineering; municipal engineering; and water resources. Each practice area requires compliance with authorities. Our extensive experience with MDNR permitting and compliance along with other federal, state and local regulations, provides our clients peace of mind.

Gredell Engineering has expanded its services and capabilities through strategic hiring of experienced project managers and engineers, as well as through development of talent in-house. In the last five years, Gredell Engineering has grown to provide more services in public works, as well as the commercial development sector. These efforts began with the addition of John N. Browning, P.E., in 2016, followed by Zachary Troesser, P.E. in 2014, John Browning, P.E. in 2016, Brent Rood, E.I. in 2018, and Elke Boyd, P.E. in 2018.

Gredell Engineering is authorized to conduct business in the State of Missouri and is licensed as a professional engineering corporation in the states of Missouri, Kansas and Illinois.

### **1.1 GREDELL Engineering Resources, Inc. Contact Information**

Tom Gredell, P.E., Principal, Owner, directs project management and business development for all Gredell Engineering offices. His contact information is as follows:

Thomas R. Gredell, P.E.	Office Phone (573) 659-9078
GREDELL Engineering Resources, Inc.	Facsimile (573) 659-9079
1505 East High Street	Cell Phone (573) 645-9078
Jefferson City, MO 65101	Email <a href="mailto:tomg@ger-inc.biz">tomg@ger-inc.biz</a>
	Company Website <a href="http://www.ger-inc.biz">www.ger-inc.biz</a>

Gredell Engineering also operates offices in Springfield, Missouri, and Lenexa, Kansas.

### **1.2 Engineering Management**

Gredell Engineering's success is built on the strength of our engineering management skills and experience. Many of our projects, particularly those for utilities and large waste management facilities, include multi-year, multi-firm and multi-million dollar contracts. Proven engineering management methods are essential to the success of such projects. Planning, organization, coordination and communication are the primary tools utilized to meet project goals and efficiently deliver our professional services.

Gredell Engineering's typical approach to every project is to thoughtfully assess the project scope, identify critical issues, establish the client's timeline and operational goals, and then develop a project design basis. We work with clients to identify engineering design standards, ordinance requirements and code requirements to guide the development and review of the design and construction strategy, and also to identify project goals and challenges. The design basis is a living document that establishes technical requirements and guides design decisions. The design basis also serves as an efficient framework for identifying project milestones, tracking progress and communicating with the client. Our project review findings are communicated to the client to reach agreement on how to best meet project goals.

### **1.3 Public Involvement**

Serving, enhancing and protecting our community is a priority to Gredell Engineering. Along with experience in engineering management, Gredell Engineering's deep environmental engineering and regulatory consulting background has provided extensive experience in public involvement. Gredell Engineering has represented clients and made presentations at numerous public meetings and public

hearings. Our regulatory background frequently requires us to contact and work directly with numerous state and local agencies.

In addition to these experiences, Gredell Engineering is heavily involved and invested in the local community. We have employees serving in officer and chair positions in the local Jefferson City Chapter of the Missouri Society of Professional Engineers, American Council of Engineering Companies, and Missouri Waste Control Coalition. Our staff are members of the Jefferson City East Side Business Association, the Jefferson City Area Chamber of Commerce and the Missouri Chamber of Commerce, Travis Doll, R.G., serves on the Cole County Commission Onsite Wastewater Treatment System Board of Review Board, Bruce Dawson, P.E. serves on the Cole County Road & Bridge Advisory Board, and Mike Carlson, R.G., serves on the Missouri Industrial Minerals Board.

## **2.0 EXPERIENCE AND TECHNICAL COMPETENCE**

Gredell Engineering provides professional services in the areas of civil, environmental, water resources, streambank stabilization and geotechnical engineering; geology and hydrogeology; regulatory permitting, compliance, and consulting; and project planning and management. Our areas of expertise include general civil engineering; environmental engineering; geotechnical and geologic evaluation and design; groundwater monitoring; site selection and evaluation; conceptual planning and evaluation; site planning and design; stormwater systems design; transportation facilities; construction documents; cost analyses for budget development; construction contract administration; and construction quality assurance. Through client satisfaction and word-of-mouth advertising, Gredell Engineering's reputation as a premier engineering consultant continues to grow throughout Missouri.

### **2.1 Environmental Engineering & Regulatory Consulting**

Gredell Engineering is one of Missouri's top engineering consultants in the areas of solid waste management, preliminary and detailed site investigations for environmental permits, permitting for environmental protection, operational consulting for regulated facilities, and regulatory consulting. The firm has completed permit applications, preliminary and detailed site investigations and final designs for various industrial facilities across the state of Missouri. We have assisted numerous clients with stormwater pollution prevention plans (SWPPP); spill prevention control and countermeasures plans (SPCC plans); Phase I, II and III Environmental Site Assessments; NPDES permitting, U.S. Army Corps of Engineers permitting, and NEPA studies.

### **2.2 Civil Engineering Design & Construction Services**

Gredell Engineering was founded as a civil engineering firm with a focus on environmental projects. Our environmental projects routinely require traditional civil engineering evaluations and designs related to hydrology, hydraulics, site layout, utility infrastructure, excavation and grading, pavement design, construction document preparation, construction quality assurance, and construction administration. The deliverables for our environmental projects are typically civil engineering site design and construction documents. We also provide construction phase services such as bid evaluation, contract administration and construction quality assurance observations.

### **2.3 Geotechnical Engineering**

Gredell Engineering conducts geotechnical investigations to provide a relevant assessment of the engineering properties of soil, rock and groundwater conditions that affect design and construction. Our objective is to provide clear and concise engineering recommendations to support geotechnical related design and construction. A well planned, project appropriate geotechnical investigation helps the design and construction team to develop practical and efficient foundation systems; provides relevant guidance for project specifications, special provisions, bid documents, and construction management; and provides appropriate guidance for geotechnical construction observations and quality assurance.

We also provide geotechnical design services including excavation stabilization design; global stability analysis of retaining walls and slopes; subsurface drainage system design; design of subgrade improvement

for temporary and permanent roads and pavement systems; and construction quality assurance testing and observations.

## **2.4 Transportation**

Our staff experience includes planning and designing capacity and non-capacity improvements for municipal and other governmental clients to preserve, enhance, improve and maintain their existing streets and highways. In addition, we understand and have a working knowledge of federal, MoDOT, and local design standards and permitting requirements. We are experienced in working with our clients to pursue and obtain various forms of project funding including Federal Aid Projects.

Gredell Engineering initially received Local Public Agency (LPA) pre-qualification from the Missouri Department of Transportation (MoDOT) in 2014. Obtaining pre-qualification status and being an approved on-call consultant for LPA roadway design projects has provided opportunities for Gredell Engineering to provide professional services to MoDOT and LPA clients (city/county projects) utilizing federal funds.

## **2.5 Wastewater**

Our experience includes planning, permitting and designing new collection and treatment systems, and modifications to existing wastewater systems for both large and small facilities. Our regulatory consulting skills enhance our ability to evaluate and design facilities, and to represent our clients effectively before the Missouri Department of Natural Resources.

## **2.6 Water Resources**

Surface water management is a major design component of most civil engineering projects. Senior staff member John N. Browning, P.E., leads our water resources division. John's outstanding record of water resources projects complements Gredell Engineering's environmental project experience. Our water resources staff has provided water resources services on a multitude of commercial, industrial and environmental projects throughout Missouri, Kansas and Oklahoma.

We have an intimate understanding of American Public Works Association standards and practices. Our water resources designs, analysis and assessment utilize the latest industry proven software and modeling programs. Our staff has extensive experience with Hydraflow Hydrographs, Hydraflow Storm Sewers, StormCAD, HY8 and HEC-RAS modeling. We are well-versed in stormwater management planning and design; stream assessments; US Army Corps of Engineers permitting; state and local permitting; flood studies; flood improvement designs; and wetland developments.

## **2.7 Environmental Site Investigations**

Gredell Engineering has performed numerous environmental investigations including, but not limited to: preliminary site investigations, detailed site investigations, Phase I/II environmental site assessments, environmental site characterizations, and brownfield remediation. Our environmental project managers and staff have completed the Hazardous Waste Operations and Emergency Response standard training and have a comprehensive understanding of the local, statewide, and federal environmental regulations.

## **3.0 FAMILIARITY AND CAPABILITY**

Gredell Engineering's team of engineers and geologists includes eight civil environmental engineers, one geotechnical engineer, five geologists and a support staff of clerical, CAD and project management professionals. Our staff has over 200 years of combined experience developing projects in compliance with federal, state and local public agency requirements. Gredell Engineering's lean structure and matrix organization allows convenient access to professionals with the necessary skills and experience for any civil engineering project. General experience of Gredell Engineering staff is identified in the table below.

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<b>Gredell Engineering Project Experience of Professional Staff</b>	Sanitary and Storm Sewer Design	Water System Analysis and Design	Environmental Due Diligence	Environmental Remediation	Environmental Site Characterization	Hydrogeology	Construction Engineering and Inspection	Engineering Geology	Geotechnical Engineering	Non-Invasive Geophysical Investigation	Retaining Walls	Stormwater Management	Surface Water Planning and Analysis	Wastewater Collection and Treatment	Water Supply and Resources	Air Quality	Regulatory Compliance	Asset Management	Roadway Design	Streets and Arterials	Transportation Planning	Drainage	Right of Way	Grant Preparation	Public Involvement	Deliverable Production	Project Management
<b>Thomas R. Gredell, Principal and Owner</b>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Mike Carlson, Principal Geologist</b>			•	•	•	•	•	•					•			•	•							•	•		•
<b>Bruce Dawson, Principal Geotechnical Engineer</b>	•	•			•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•		•		•
<b>Rickie Roberts, Senior Civil Engineer</b>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>John Browning, Senior Project Engineer</b>	•	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Travis Doll, Environmental Geologist</b>			•	•	•	•	•	•			•	•	•	•			•										•
<b>Ken Ewers, Environmental Geologist</b>						•		•									•										
<b>Elke Boyd, Senior Civil Engineer</b>	•	•	•				•					•		•	•			•	•			•	•	•	•	•	•
<b>Mick Cossairt, Senior Geologist</b>			•	•	•	•				•		•					•										•
<b>Zachary Troesser, Civil/Geotech. Engineer</b>	•							•	•	•																	
<b>Brent Rood, Civil/Environmental Engineer</b>	•	•	•	•	•	•	•	•				•	•	•	•							•					
<b>Abra Spisso, Civil/Environmental Engineer</b>	•						•		•			•			•		•						•				
<b>Connie Walden, Environmental Engineer</b>	•	•			•	•						•	•	•	•												
<b>Grant Elliott, Environmental Geologist</b>						•	•	•	•	•								•									
<b>Ancillary Staff</b>																											
<b>Chris Pagel, CAD Technician</b>	•	•				•	•		•		•	•	•	•					•	•	•	•				•	
<b>Fred LePage, CAD Technician</b>	•																		•								
<b>Lynnette Robinson, Administration</b>																	•				•		•	•	•	•	
<b>Coleta Gray, Clerical</b>																					•			•	•		

#### 4.0 PAST PERFORMANCE

Gredell Engineering commits to providing the necessary resources to complete projects in a mutually agreed-upon timeframe. Though economic trends can affect development and capital improvement projects, Gredell Engineering has consistently met contractual obligations to clients since our founding in 2001. Management of experienced staff, new permanent and temporary staff and subconsultants ensures timely and efficient project delivery.