Statement of Qualifications



Facility Engineering Services

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Introduction

Facility Engineering Services is a design specialist providing quality and cost effective consulting engineering and related professional services to owners, manufacturers, and contractors with a focus on industrial processing facilities for the Biofuels, Food Process, Bulk Storage, and Agricultural Processing Industries. As part of our comprehensive services, we offer a complete range of planning, plant layout, structural, and buildings system engineering along with process and mechanical engineering for our clients.

We pride ourselves on our ability to understand our clients' needs. Many of our team members have worked in the industries that they serve. Our service begins with an understanding of the needs of the client and the process they perform at their facility. Once we understand your needs, we work to develop a solution that fits your needs.

The difference between *Facility Engineering Services* and other engineering firms is that we take a comprehensive approach to our engineering designs to better serve our clients. The "comprehensive" approach involves integrating traditional engineering disciplines to focus on how the facility and/or process works as a whole. We believe that by utilizing this approach that we can achieve better results for our clients. Our interactive process and overall teaming approach includes all parties involved in project development.

Comprehensive Engineering Advantage

Today's bioprocessing, biofuels and food facilities are complex entities requiring a new integrated approach to engineering design. As technology improves, the importance of facility and processes integration will grow. Infrastructure for growth, storage, handling and processing of agricultural commodities is comprised of many complex systems including: unique facilities for growth of plants and animals, equipment for loading and unloading from truck, rail, and ship; storage structures of all types and sizes; sophisticated handling and processing equipment; and special facilities for housing/protection of this equipment. These systems must be designed, built and operated by engineers who are familiar with the unique codes, regulations and design specifications applicable to agri-industrial facilities. For example, in addition to the safety and building codes to which all industries must abide, agricultural and agri-industries in the United States are subject to numerous USDA and FDA regulations under Titles 9 and 21 of the Code of Federal Regulations. These regulations help ensure a safe food supply through control of indoor air quality, sanitation practices, waste management and bio-security.

For many commercial and industrial facilities, the physical plant (i.e., buildings and their mechanical systems) can be designed and built without knowledge of the manufacturing process/business that will operate within the facility. This is seldom true

with an agricultural or agri-industrial facility. In virtually all cases, the building shell(s) and associated HVAC systems are just as integral to the processing system as the processing equipment. This is illustrated with the following points:

- HVAC equipment (e.g., boilers, chillers, air handlers, refrigeration) capacity must generally be increased significantly to handle demands of agri-industrial processing equipment.
- Processing equipment sanitation and maintenance requirements dictate how the entire facility is plumbed, floors are sloped and finished, equipment is structurally supported, ceilings and walls are constructed and finished, lighting is provided, etc.
- Some agricultural commodities can be quite combustible, and storage and handling of combustible hazards dictate facility layout, fire resistive ratings of materials, building egress locations, fire extinguishing and suppression system design.
- Physical properties and quantities of raw materials, materials in-process, and processed materials dictate the structural design of the numerous silos, bins, tanks, etc. associated with the typical agri-industrial facility.
- Design of agricultural commodities storage is frequently dictated by special atmospheric storage requirements (e.g., temperature, humidity, CO₂, etc.) as all organic substances are subject to degradation by organisms both large and small.
- The myriad of materials handling equipment determine the size and location of openings, as well as how the facility is structurally framed to handle loads imposed by the handling equipment.
- Size and shape of large processing equipment dictates building shell geometry as well as how the shell of the building is framed for equipment access, removal and/or replacement.
- The tight integration of physical plant design with processing equipment/system design significantly affects working relationships between various design engineers and their companies. This integration will result in more economical and efficient facilities. This is truly a systems style agricultural engineering approach.

In the future, facilities will become even larger and more complex. These facilities will also be able to process multiple feedstock streams into the most sustainable and economical outputs. For example, a food processing plant will not only make food, but consumer and energy products based on quality, quantity, and need. This increased complexity and interaction will require engineers with a unique understanding of all

aspects of facility design, planning and operation. This will truly require an agricultural engineering systems style approach.

This change in technologies combined with tighter schedules and larger economies of scale will require greater integration of engineering disciplines and faster and accurate project delivery methods for engineering services. Technology will play a key role in this faster delivery. One such method of integrating technology is Building Information Modeling (BIM). BIM cuts down on information double handling between different entities on the design team. Specific benefits of implementation of BIM include:

- Increased speed of delivery (time saved)
- Better coordination (fewer errors)
- Decreased costs (money saved)
- Greater productivity
- Higher-quality work

Implementation of such technology on projects should, over time, generate business and higher profitability. Such technology is not widely implemented at this time by engineering firms, but it is developed enough to execute on projects with success.

Services

As a specialist in the design of Agri-Industrial facilities, *Facility Engineering Services* provides a number of services to our clients. These services include the basic engineering disciples and owner support services. These services are enumerated on the following pages.

Services – Process Engineering

- P&ID
- Flow Diagrams
- Mass Balance
- Energy Balance
- Process Optimization



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Services – Facility Layout and Planning

- Equipment layout
- Material Flow
- Functional Planning for Processes
- Building Code Compliance

Services – Mechanical Engineering

- HVAC
- Utilities
- Boilers
- Steam
- Water
- Industrial Refrigeration







Services – Building and Structures Engineering

- Building Envelope Analysis
- Vessels, Bins, Tanks, and Silos
- Equipment & Tank/Bin Foundations
- Equipment Towers
- Building Structures (All Materials)
- Building Code Analysis
- Fire Code Analysis
- Roof Membrane Engineering
- Building Material Selection
- Sanitary Construction
- Cold Storage





Services – Owner Services

- Construction Management
- Planning of Expansions and New Facilities
- Estimate of Probable Cost
- Integration with Business Planning

Services – Civil Engineering

- Site Layout
- Stormwater Hydrology Analysis & Design
- Utility Design
- Erosion Control Plans and Permits
- Lot Grading and Septic Plans and Permits
- Industrial Wastewater



Industries Served

As a specialist in the design of Agri-Industrial facilities, *Facility Engineering Services* serves a number of Agricultural, Agri-Industrial, and Process based industries. These services include the basic engineering disciplines and owner support services. These services are enumerated on the following pages.

- Grain Milling and Flour Milling
- Malting
- Feed Milling
- Pet food processing
- Grain storage and handling
- Ethanol
- Biodiesel
- Biomass
- Cogeneration
- Rendering
- Animal housing
- Aquaculture Production and Processing
- Industrial bulk storage
- Cold Storage
- Warehouses

- Bioprocessing
- Water and Wastewater
- Industrial Processing including power and paper processing
- Food Processing
 - o Bakeries
 - Vegetable processing
 - Tortilla processing
 - Kill Plants (beef, pork, and poultry)
 - Further processing (beef, pork, and poultry)
 - Fully Cooked (beef, pork, and poultry)
 - o Dairy
 - \circ Others

Biofuels



Today's biofuels design and construction industry is complicated. Technologies are changing and the need for engineers who can work with technology providers to integrate the process with the working infrastructure are limited. *Facility Engineering Services* has people who are experienced in this changing industry.

Facility Engineering Services is process centered engineering firm that specializes in the design and planning of industrial and agri-industrial processing facilities, including biofuels using a systems based approach to deliver results. Our company has been involved in a number of agri-industries, including biomass and biofuels processing facilities. We have the capability to develop novel improvements to your facility. We are able to help you in a number of ways including but not limited to:

- Co-product utilization
- Co-generation heat and power generation
- Process efficiencies
- Building and plant modifications
- Storage and material handling design

With our business partners we are able to provide process technology and process engineering. We are focused providing results that focus on the big picture. We can help with feasibility studies, long range planning, or detail design engineering.

Agri-Industry

Today's Agricultural processing facilities are complex entities requiring a systems approach to engineering design. As technology improves, the importance of facility and process integration will grow. Infrastructure for growth, storage, handling and processing of agricultural commodities is comprised of many complex systems including: complex equipment for loading and unloading from truck, rail, and ship;



storage structures of all types and sizes; sophisticated handling and processing equipment; and special facilities for housing/protection of this equipment. These systems must be designed, built and operated by engineers who are familiar with the unique codes, regulations and design specifications applicable to agri-industrial facilities.

For many commercial and industrial facilities, the physical plant (i.e., buildings and their mechanical systems) can be designed and built without knowledge of the manufacturing process/business that will operate within the facility. This is seldom true with an agricultural or agri-industrial facility. In virtually all cases, the building shell(s) and associated process systems are just as integral to the processing system as the processing equipment. *Facility Engineering Services* understands these requirements.

Facility Engineering Services uses a comprehensive "process-centered" design approach for our Agri-Industrial facilities. The approach involves integrating traditional engineering disciplines to focus on how the facility and/or process works as a whole. Supplementing this collective approach is an innate understanding of the industries that we serve.

Agricultural Production and Processing

As farm sizes grow, today's Agricultural facilities are becoming more complex entities requiring engineering design. As technology improves, the importance of facility and process integration will grow. Infrastructure for growth, storage, handling and processing of agricultural commodities is comprised of many complex systems including: complex equipment for loading and unloading from truck, rail, and ship; storage structures of all types and sizes; sophisticated handling and processing equipment; and special facilities for housing/protection of this equipment. These



systems must be designed, built and operated by engineers who are familiar with the unique codes, regulations and design specifications applicable to agricultural facilities.

At *Facility Engineering Services*, we understand the need of the agricultural community. We are active members of the American Society of Agricultural and Biological Engineers (ASABE) and have been involved in the design of many types of agricultural facilities including grain bins and their foundations, fertilizer facilities, animal production facilities and other types of commercial agriculture. Construction types include post-frame buildings, metals buildings, hoop structures and other specialized agricultural structures.

The difference from other engineering firms is that *Facility Engineering Services* uses a "process-centered" design approach. The approach involves integrating traditional engineering disciplines to focus on how the facility and/or process works as a whole. This approach is invaluable when designing Agricultural production facilities.



Biomass

Biomass/Bioprocessing is a new and emerging industry in the US. In the same light it's as old as human history. Biomass processing and conversion facilities incorporate a large number of elements of today's Agricultural processing facilities. They are complex entities requiring a systems approach to engineering design. As technology improves, the importance of facility and process integration will grow.

Infrastructure for growth, storage, handling and processing of biomass is comprised of many



complex systems including: complex equipment for loading and unloading from truck, rail, and ship; storage structures of all types and sizes; sophisticated handling and processing equipment for conversion or power generation; and special facilities for housing/protection of this equipment. These systems must be designed, built and operated by engineers who are familiar with the unique codes, regulations and design specifications applicable to these types of facilities.

Bulk Storage



Bulk and liquid storage facilities are complex entities requiring in depth engineering design capabilities. *Facility Engineering Services* specializes in bulk material storage systems. We have experience with many of the major design standards for bulk and liquid storage structures including ACI 313, ACI 350, API 650, API 620, ASABE 433 and many foreign standards. Having engineers who understand the

unique requirements of bulk/liquid material storage and handling facilities can help you achieve functional and economical designs.

Facility Engineering Services also specializes in material conveyance systems. Our engineers are familiar with the design conveyors, pneumatic and liquid conveyance systems. We also have extensive experience with dust control systems. Projects we have worked on include tank farms, ethanol processing facilities, grain storage, cement storage, coal handling, wood storage, general industrial bulk storage, water/waste water and many other types of facilities.

Food Processing

Today's food processing facilities are complex entities requiring a comprehensive approach to engineering design. As technology continues to improve, the importance of facility and process integration will grow. Additionally, food processing plants must



be constructed to meet specific codes for sanitary operations. These systems must be designed, built and operated by engineers who are familiar with the unique codes, regulations and design specifications applicable to food processing facilities.

Facility Engineering Services understands these needs. Our engineers are familiar with USDA, FDA and other industry requirements for the construction and operation of food processing facilities. We have working relationships with vendors from a number of food processing industries. Because Facility Engineering Services is a full service design specialist providing quality and cost effective consulting engineering we are able to offer comprehensive



and innovative design solutions for our clients. *Facility Engineering Services'* flexibility, versatility, and adaptability in combination with a focus on clients' needs helps our clients develop successful projects.

Industrial Processing

Facility Engineering Services is ready to help with your industrial processing or manufacturing facility. As industry focused engineers, we have extensive experience planning expansions and green field facilities. We have experience laying out and designing material handling systems, process lines, bulk and liquid storage systems



along and their associated utilities. We work close with your in house engineering and can add depth to your in-house team. Our experience extends to structure design and facility layout and extends to a number of advanced industrial issues such as vibration control and structural dynamics. We are also able help with a number of maintenance and operational issues such as energy analysis.

As a full service engineering firm, *Facility Engineering Services* brings a total facility mind set to the development of your project. Our engineers are familiar with many aspects of industrial processing plant design and have worked in many industries such as paper mills, foundries, and general manufacturing. We feel this sets us apart from most firms.

Water and Wastewater

Water and Wastewater facilities are complex entities requiring in depth engineering design capabilities. *Facility Engineering Services* has the capability to provide design services for these complicated facilities. Our experience includes:

Wastewater Treatment and Conveyance

- Treatment planning and design
- Process and equipment evaluations
- Biosolids and sludge
 management
- Anaerobic and Aerobic treatment
- Biogas utilization
- Sewer and pump station design

Drinking Water Supply, Treatment, Storage and Distribution

- Water treatment plants
- Surface water source development
- Groundwater source
 development
- Storage tanks
- Water distribution systems
- Pumping systems

Facility Engineering Services staff has extensive experience in various biological process design modeling of various systems. Our engineers are familiar with the design of conveyance systems and plant projects. We also have extensive experience with dust control systems. Projects we have worked on include both public and private sector work.

Professional Licensure

Staff at *Facility Engineering Services* are registered in over 40 states as civil, structural, agricultural, and mechanical engineers. We also maintain NCEES records for fast reciprocity with other jurisdictions. Please contact the office directly to ensure our license is current in your jurisdiction.

Key Staff

Gregory D. Williams, Ph.D., P.E., S.E.

PROFESSIONAL SUMMARY

Dr. Williams is the President and Founder of *Facility Engineering Services*. He has extensive experience in the structural, functional, and life safety design of agriindustrial (food, agricultural and bioprocess) process facilities including USDA and FDA inspected facilities. He has extensive experience in the design and analysis of concrete and steel bulk storage and their associated material handling systems. He is an accomplished engineer, integrating structural engineering, architectural engineering and agricultural process engineering. As part of his practice, Dr. Williams has integrated his knowledge of food and agricultural process engineering with facility layout and design. He has an advanced level technical competency in the design procedures for all major materials of construction and has developed novel and complex solutions for facility construction using these materials. He has extensive experience using the design-build project delivery method. Dr. Williams has taught construction methods and building codes at the University of Wisconsin.

EDUCATION

- Ph.D. Agricultural Engineering (Structures and Indoor Environment emphasis), University of Wisconsin-Madison
- M.S. Agricultural Engineering (Structures and Indoor Environment emphasis), University of Wisconsin-Madison
- B.S. Construction (Construction Engineering Option), University of Wisconsin-Madison

PROFESSIONAL EXPERIENCE

Dr. Williams has professional supervised design on nearly a billion dollars of construction in his career with a primary professional focus in the following types of facilities:

- Grain Milling and Flour Milling
- Malting
- Feed Milling
- Pet Food Processing
- Grain Storage and Handling
- Ethanol & Biodiesel
- Rendering
- Aquaculture Production/Processing

- Industrial Processing including Power and Paper Processing
- Industrial & Agricultural Bulk
 Storage
- Cold Storage
- Warehouses
- Bioprocessing
- Water and Wastewater

- Food Processing
 - o Bakeries
 - Vegetable Processing
 - Tortilla Processing

AREAS OF SPECIALIZATION

Dr. Williams' professional focus has been in the following areas:

• Facility Layout and Planning

- Equipment and Facility Layout
- Material Flow
- Functional Planning for Processes
- Building and Structural Engineering
 - Building Envelope Analysis (Thermal & Moisture)
 - Specialty Structures including Vessels, Bins, Tanks, and Silos
 - Equipment & Tank Foundations
 - Equipment Towers
 - Building Structures
 - Building Code Analysis
 - Fire Code Analysis
 - Building Material Selection
 - Numerical Methods (linear and nonlinear FEA)

MEMBERSHIPS AND AFFILIATIONS

Dr. Williams is a leader in the development of design standards for Ag and Food processing facilities. Professional and committee membership has consisted of the following:

- Member of American Society of Agricultural Engineers (ASAE)
 - Past Member Board of Trustees
 - $\circ \quad \text{Chair SE 20 Structures Group}$
 - \circ Chair SE07/1
- Member of American Concrete Institute (ACI)
 - Associate Member 313 Standard Practice for the Design and Construction of Concrete Silos and Stacking Tubes
- Grain Elevator and Processing Society (GEAPS)
- American Feed Industry Association (AFIA)
- Midwest Food Processors Association (MWFPA)
- Member of Alpha Epsilon Honor Society
- Member of U-W Madison Biological Systems Engineering Faculty Advisory Board

- Further Processing
- Fully Cooked
- Kill Plants (all proteins)

• Member of South Dakota State University Biological and Agricultural Engineering Faculty Advisory Board

PROFESSIONAL REGISTRATIONS

Registered Professional or Structural Engineer in:

Alabama, Arkansas, Colorado, Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin.

PUBLICATIONS

Dr. Williams has written over 50 publications and articles related to agriculture, food and bioprocessing facility design and construction.

Michael F. Brugger, Ph.D., P.E.

PROFESSIONAL SUMMARY

Dr. Brugger brings over 35 years of educational, planning and design experience of a wide variety of facilities. As a State Extension Specialist in the structures and environment area, he has been involved in the planning and designs of many livestock facilities and manure handling systems, fruit and vegetable storages, grain storages and greenhouses. He has also taught a senior structural design and facility-planning course for 10 years. For 13 years, he was Assistant to the Director – Facilities Administration for the Ohio Agricultural Research and Development Center and was responsible for over 1.7 million square feet of buildings. He oversaw the long-range strategic plan development, scope of work development, design team selection, design review, construction inspection and startup trouble shooting for a variety of projects. Dr. Brugger has consulted on and has been an expert witness on many cases related to structural issues, construction contracts, and air and water quality issues. He has done complete design for many types of buildings. He has also been involved in the development and revision of design handbooks and standards.

EDUCATION

- Ph.D. Agricultural Engineering (Structures and Indoor Environment emphasis), Minor in Mechanical Engineering, University of Wisconsin-Madison
- M.S. Agricultural Engineering (Structures and Indoor Environment emphasis), The Pennsylvania State University
- B.S. Agricultural Engineering (Structures and Indoor Environment emphasis), The Pennsylvania State University

PROFESSIONAL EXPERIENCE

Dr. Brugger has provided planning assistance on hundreds of buildings; oversaw the planning, design and construction of over 50 million dollars of construction; and did complete design of many buildings. His primary professional focus is in the following types of buildings:

- Dairy, Poultry, Swine, Equine and Sheep Research and Production Facilities
 - Facility Design
 - Indoor Environment
 - Manure Handling and Storage Systems
 - Feed Systems
- Mechanical Systems

- Electrical SystemsGreenhouses
- Aquaculture Facilities
- Fruit and Vegetable Storages
- Educational Facilities
- Utility Upgrades
- Permitting of CAFO's

- International Experience in Design and Management of
 - Dairy Facilities
 - o Greenhouses
 - Vegetable Storages
 - o Air Quality
 - Structural Issues
 - Water Quality Issues

AREAS OF SPECIALIZATION

Dr. Brugger's professional focus has been in the following areas:

• Facility Layout and Planning

- Occupant Requirements
- Equipment Layout
- Material Flow
- Functional Planning for Processes

• Building Engineering

- Building Envelope Analysis
- Building Structures
- Building Code Analysis
- Fire Code Analysis
- Building Material Selection

• Mechanical Engineering

- Environmental and Mechanical System Design
- Waste handling systems
- Civil Engineering
 - Site Development
 - Utilities
- Permitting

- Expert Witness in
 - Design Issues

MEMBERSHIPS AND AFFILIATIONS

Dr. Brugger is a leader in the development of design standards for agricultural facilities and in professional organizations. Professional and committee membership have included the following:

- Member American Society of Agricultural and Biological Engineers (ASABE) and active in the following committees, including holding past offices:
 - Structures and Environment Division Executive Committee
 - Structures and Environment Division Steering Committee
 - o Structures and Environment Division Standards Council
 - Structures and Environment Division Associate Editor
 - Structures Group
 - Dairy Housing Committee
 - Greenhouse Committee
- Member American Concrete Institute (ACI)
- Northeast Dairy Practices Council
 - Past Chair Buildings and Equipment Task Force
 - Co-authored several guidelines
 - Past Board of Directors
- Member of American Society of Heating, Refrigeration and Air Conditioning Engineers, 1979 – present
- Member of TC 2.2 Plant and Animal Environment Committee
- Member of Alpha Epsilon Honor Society
- Member and International Treasurer of Gamma Sigma Delta
- Member of Tau Beta Phi

PROFESSIONAL REGISTRATIONS

Registered Professional Engineer in:

Indiana, Ohio, Pennsylvania, West Virginia, and Wisconsin.

PUBLICATIONS

Dr. Brugger has written over 50 book chapters, publications and articles related to agriculture.

Clifford B. Fedler, Ph.D., P.E.

PROFESSIONAL SUMMARY

Dr. Fedler has over 35 years of experience as a faculty member at Texas Tech University. He is a full professor and former Senior Associate Dean. He has extensive experience in Waste Water Systems for Food and Agriculture production and processing facilities. He is a respected researcher and serves on several corporate boards. He is a senior consultant to Facility Engineering Services for evaluation and design of industrial waste water systems.

EDUCATION

- BSE in Agricultural Engineering, Iowa State University, 1979
- MSE in Agricultural Engineering, Iowa State University, 1981
- MSE in Civil (Sanitary) Engineering, Iowa State University, 1981
- PhD in Agricultural Engineering, University of Illinois-Urbana/Champaign, 1985

PROFESSIONAL EXPERIENCE

Dr. Fedler has expertise in the following areas:

- Biological and physical processing and mathematical modeling of those processes
- Water and wastewater recuse/recycling
- Biomass processing and recycling
- Renewable energy from such sources as algae and other non-traditional materials

- Ethanol production
- Ethanol production from agricultural crops
- Water and Wastewater (municipal, industrial, agricultural, aquaculture)

AREAS OF SPECIALIZATION

Dr. Fedler's professional focus has been in the following areas:

- Facility Layout and Planning for Wastewater
 - Equipment and Facility Layout
 - Wastewater Process Flow
 - Functional Planning for Processes

MEMBERSHIPS AND AFFILIATIONS

Dr. Fedler is a leader in the development of design standards for ag and food waste processing facilities. Professional and committee memberships have consisted of the following:

- ASABE Environmental Quality Group (new T-09) Chair, 2000-2001 Vice-Chair, 1999-2000
- Program Chair, 1998-1999
- Associate Editor for FPE Division of ASAE 1994-1996 ASABE Southwest Region Paper Award Committee
- Chair, 1988
- Environmental Quality Coordinating Committee-ASABE Chair, 1994-1996
 Vice-Chair, 1993-1994
 Secretary, 1992-1993
- Physical Properties of Agricultural Products Committee-ASABE Chair, 1992-1994 Vice-Chair, 1991-1992 Secretary, 1989-1991
- Land Application of Waste Committee-ASABE Chair, 1989-1990
 Vice-Chair, 1988-1989
 Secretary, 1987-1988
- Agricultural Sanitation and Waste Management Committee Liquid Materials Application Committee
- Grain and Feed Processing and Storage Committee Biomass Energy Conversion
- Southwest Region ASAE
 Vice-Chair for Membership, 1987-1988

PROFESSIONAL REGISTRATIONS

Registered Professional in: Texas

PUBLICATIONS

Dr. Fedler has written hundreds of publications and articles related to agriculture, food and bioprocessing wastewater systems.

Honors and Awards

- TTU Dads and Moms Association, Spencer A. Wells Faculty Award for Creative Teaching (1998)
- Engineer of the Year Award, awarded by the Texas Section of the American Society of Agricultural Engineers (1997)
- Top Paper Award, Gulf/Southwest Regional Conference of the ASAE (1992)
- Halliburton Outstanding Teaching Award, College of Engineering, Texas Tech University (1990)
- Recipient of two ASAE Top Paper Awards (annual award presented to authors of the top 2.5 percent of the published papers) (1988)
- Halliburton Outstanding Researcher Award, College of Engineering, Texas Tech University (1986)

Nasser Karimzadeh, P.E., CEM, CPD, PMP

PROFESSIONAL SUMMARY

Nasser Karimzadeh is a Professional Engineer and Manager with over 40 years experience in Engineering & Construction, Mechanical Contracting, Food & Beverage Processing, Food Manufacturing Companies, and Pharmaceutical Companies. He is a licensed professional engineer in 38 states. His specialty is in process, refrigeration, and utilities system design services ranging from equipment selection and detailed refrigeration systems design/engineering to field testing and inspection. He has worked as Vice President and Director of Engineering for several of the largest Fortune 500 Companies, Engineering & Construction Management firms, and Food & Beverage Construction companies.

EDUCATION

- M.S. Mechanical Engineering, University of Wisconsin, 1989
- M.B.A. Business Administration, Gonzaga University, 1982
- B.A. (Business Administration), Eastern Washington University, 1980
- B.S. Mechanical Engineering, University of Washington, 1979

PROFESSIONAL EXPERIENCE

Mr. Karimzadeh has a diverse knowledge and experience of design and construction in several of the following types of fields:

- Food Plant & Pharmaceutical Facilities
 - Refrigeration & Utility Contracting
 - Design-Build Contracting
 - Total Preventative and Pro-Active Maintenance
 - Construction Management
 - Industrial Facility Design

- Industries & Markets
 - Cold Storage Facilities
 - Food & Beverage Facilities
 - Life Science
 - o Pharmaceutical
 - Grocery Stores
 - Produce Processing
 - Wineries
 - Distribution Facilities

- Refrigeration & Mechanical Engineering Services
 - Refrigeration Load Analysis
 - HVAC Load Analysis
 - o Plumbing
 - Heating & Cooling Modeling & Design
 - Industrial Ventilation for Food & Beverage Facilities and Air Balancing

- Commercial HVAC Design-Build
- o Gas
- Compressed Air
- Energy Engineering
- Boiler & System Condensation
- Boiler & Industrial Heat Recovery

AREAS OF SPECIALIZATION

Nasser Karimzadeh's professional focus has been in the following areas:

• Mechanical Engineering

- Facility Expansions
- Industrial Ammonia & Exotic Refrigerants
- Design & Operation of Large Central Energy Plants
- Planning & Analysis for Manufacturing Processes
- Develop, Evaluate, & Improve Methods for Refrigeration Systems using Quality Control Standards
- Expert in Food & Beverage Plant Utility Design
- Utilities
- Boiler/Steam

MEMBERSHIPS AND AFFILIATIONS

Nasser Karimzadeh is a licensed professional engineer in process, refrigeration, and utilities system design. Professional and committee membership has consisted of the following:

- Member of International Institute of Ammonia Refrigeration (IIAR)
 - Past Member Board of Directors
- Association of Energy Engineers
 - Certified Energy Manager, 1994
- American Meat Institute
- American Society of Plumbing Engineers (ASPE)
 - Registered Plumbing Designer, 2014

PROFESSIONAL REGISTRATIONS

Registered Professional Engineer in:

Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Iowa, Kansas, Maryland, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, North Carolina, Oklahoma, South Carolina, South Dakota, Texas, Utah, Vermont, and Virginia.

PUBLICATIONS

Mr. Karimzadeh is a premier ammonia refrigeration systems designer and is the author of many publications and articles for the International Institute of Ammonia Refrigeration (IIAR).

Michael D. Thede, P.E.

PROFESSIONAL SUMMARY

Michael Thede is a Professional Engineer with an emphasis in Structural Engineering. He has over 50 years of experience in the design of industrial structures. His expertise include food processing, poultry, fertilizer, and automotive with clients such as Tyson Foods, Tropicana, Proctor & Gamble, Bimbo Bakery, Pepsi, ScottsMiracle-Gro, Honda Motor and Ford Company.

EDUCATION

• B.S. Civil Engineering (Structural Engineering emphasis including Masters level course work), Michigan Technological University, 1974

PROFESSIONAL EXPERIENCE

Mr. Thede has experience and intelligence in specific structural designs which includes:

- Assessment of industrial structures to handle existing and or new loading conditions
- Retrofit and redesign of existing industrial facilities
- Structural design of new industrial facilities including production facilities, wastewater treatment facilities, loading/unloading and administrative uses
- Fall protection for workers at unprotected openings and improved maintenance access via platforms, stairs, and ladders
- Repair and upgrade of steel and concrete members affected by corrosion
- Structural support of refrigeration/process equipment and piping
- Structural support of pallets during transportation
- Structural support for lifting events, monorail, tank lifts
- Proficient in Revit, ReCap Pro, and Visual Analysis structural engineering software

AREAS OF SPECIALIZATION

Mr. Thede's professional focus has been in the following areas:

- Industrial Design for Wastewater Treatment
 - Treatment planning
 - Structural Design
 - Demolition management for tanks, buildings and piping

MEMBERSHIPS AND AFFILIATIONS

Mr. Thede has been a lead structural engineer and designer of wastewater treatment facilities for numerous large corporations.

- Winner of the 2019 Pepsico Academy of Sciences Award for Science and Technology, "Advanced Citrus Production Practice to Recover Yields and Secure Supply"
- U.S. patent pending for structural design improvements at Orange Grove Farms

PROFESSIONAL REGISTRATIONS

Registered Professional Engineer in Florida.

Josh Bockelman, P.E. CSSGB

Professional Summary

Josh Bockelman is an experienced Mechanical Engineer and Manufacturing Engineer. He has 15 years of engineering experience. His focus has been in both commercial and industrial facilities. His expertise includes building mechanical and utility systems including industrial ventilation systems, boiler systems, compressed air, HVAC, plumbing, and other systems. Josh also has extensive experience in process layout for the prepared and poultry industries. He is a registered professional engineer in multiple states.

Education

 B.S. in Mechanical Engineering, Minors: Physics & Mathematics, University of Arkansas, Fayetteville, 2009

Professional Experience

Josh Bockelman's experience includes:

- Mechanical Engineering & Manufacturing
 - Project Management
 - Manufacturing process
 - R&D
 - Process improvements
 - Manufacturing and automation equipment
 - Process efficiency
 - Solidworks 3D and programming machinery
 - Vorne system
 - Standardization
 - USDA requirements
 - FSQA requirements
 - Food processing facilities
 - Prepared foods

- HVAC Load Analysis
- Plumbing
- Heating & Cooling Modeling & Design
- Industrial Ventilation for Food & Beverage Facilities and Air Balancing
- Commercial HVAC Design-Build
- Gas
- Compressed Air
- Energy Engineering
- Boiler & System Condensation
- Boiler & Industrial Heat Recovery

Areas of Specialization

Josh Bockelman's professional focus areas include:

- Mechanical Engineering
 - HVAC/Plumbing/Utilities
 - Process Design and Equipment Selection
 - Cost Estimate Development
 - Process Flow Diagrams
 - Mass Flow Analysis
 - Sanitary Design
 - Financial Strategies
 - AutoCAD, Revit 3D, Solidworks
 - OSHA Safety Standards
 - AMI Checklist Standards and FSQA Requirements
 - IBC, IPC, IECC, IFGC, IMC, UPC, UMC, UBC, LEED, ASHRAE standards, NFPA standards

Professional Registrations

- Licensed Professional Engineer Mechanical in AR, GA and TX (Past KS, KY, MO and NC)
- Certified Six Sigma Green Belt from Aveta Business Institute

Client List

























Representative Project Experience

Facility Engineering Services' Professional Employees have participated on the following projects over their careers. The following list of projects represents some of the experience of the team.

2016 Meat and Poultry Industry Projects

- Simmons Walkway Curb Repair
- Pilgrims Fall Protection
- Tyson Concordia AHU Structure Design
- Simmons Van Buren, AR MCC Room
- Simmons Lift Evaluation
- Simmons Bar Joist Reinforcement Decatur
- Simmons Door Van Buren
- Simmons Hoist Basket
- Simmons Condenser Stand
- Tyson Water Tank System
- Tyson Receiving Wash Platform
- Pilgrims Chlorine Building Addition
- Pilgrims Lab Expansion Addition
- Simmons Picking Room
- Simmons Decatur Bird Chiller Project
- Simmons Decatur Bar Joist Reinforcement
- Simmons Decatur AHU Structure

- Tyson CSA Design Offall
- Tyson Monroe Labeling Project Removal
- Simmons SW City Sump
- Simmons Ice Maker Roof Structure
- Simmons Evis Overbuild
- Pilgrims MCC Room
- Simmons Bar Joist Reinforcement
- George's Loading Dock Addition
- Simmons Fairland Hopper
- Tyson Cordydon HVAC Frame Repairs
- Simmons Fairland Block Wall Repairs
- Tyson Colony Farm A/E Services for Research Farm Randall RD Proc Springdale
- Tyson Monroe Access Monroe AHU Catwalk Engineering
- Simmons Job Crane Rating
- Simmons Truss Repair
- Tyson TN Loading Dock Addition
- George's Cassville, MO Mezzanine Evaluation
- Simmons Van Buren, AR MCC

- Simmons Relocate Column
- Tyson Johnson Road Stairs
- Tyson Cooler Door Enlargement Consultant Design Randall Road Doors
- Simmons Van Buren, AR
- Tyson Aeration Eq Pad Engineering Services Scranton RVAF Scranton, AR
- Evapco Unit Structure
- Simmons Hatchery

2018 Meat and Poultry Industry Projects

- Simmons New Hangar
- Simmons Schematic Design Engineering Estimate
- Green Forest Boiler Room Schematic Design Drafting
- Green Forest Enclosure Building Foundation
- George's Cassville, MO
- Simmons Load Out Expansion Simmons Prepared Foods
- PECO Foods Wall Repair
- Pilgrims Slip-not Floor and Stair Details
- Simmons Decatur Remodel
- Simmons Plant 2 Spiral Freezer
- Simmons Van Buren, AR Plant 2 Overbuild Study
- Tyson Parking Lighting Scranton, AR
- Tyson Non-destructive Testing on Concrete Wall Nashville, AR Feed Mill
- Pilgrims Hammermill and Screener Frame
- Tyson Mex Original Tank Mat Slab
- Tyson Canopy Structure
- Simmons Fairland Fall Protection
- Tyson Pipe Rack
- Tyson Roof Structure/Piping Evaluation Pine Bluff, AR Pipe Rack
- Simmons Ventilation
- Georges Kansas Street Feed Process
- Tyson New Holland, PA
- Tyson Glen Allen, VA
- Simmons Zero Mt
- Tyson Covered Bridge Engineering/Transfer Bridge Hope, AR
- Tyson Carthage, MS
- George's Precast Repair
- Simmons Walk Bridge
- George's Bracket and Column
- Pilgrims Poultry Meal Load
- Tyson Carthage, MS MCC Room and Stairway
- Tyson Concordia Stair Tower
- George's Rail Car Puller

2019 Meat and Poultry Industry Projects

• Tyson Structural Design Noel Proc Noel, MO

- Berryville Mezzanine
- George's Light Pole
- Tyson Carthage, MS Cut Up
- Tyson Waldron, AR
- Corydon, IN Tyson Structural Engineering
- JLB Simmons Tanks
- Simmons Bridge
- McKee Foods Stair
- George's Batesville Parking Lot
- George's Springdale, AR Cooler Addition
- George's Cassville, MO
- Pilgrims Mezzanine Review
- Pilgrims Mt Pleasant, TX Dock Addition
- Tyson PA with Freezer Design
- Tyson 14' x16' Shed
- Tyson Structural Design Shelbyville, TN
- Simmons Plant 1 Pet Food Remodel
- Tyson Roof Structure/Piping Evaluation Pine Bluff, AR
- Simmons Hoist Beam Rating
- George's Metal Building
- George's Minor Remodel
- Tyson Berryville, AR Fulton Building Expansion
- George's Grinding System Addition
- Tyson PA Truck Assessment
- Tyson PA High Pressure Receiver
- Tyson PA Line 9 Mezzanine
- Tyson Clarksville, AR Remodel
- Simmons Plant 2 Roof Evaluation
- Simmons Roof Evaluation
- Tyson Green Forest, AR Canopy
- Pilgrims Scale Pier
- Tyson Foods Shelbyville, TN Fans
- Tyson Foods Randall Rd Overbuild
- Tyson Structural Engineering Dexter, MO Overbuild
- Tyson Hoist Beam Design Noel Proc Noel, MO

- Alan Harim Poultry Plant Offall Study
- Simmons Poultry Hatchery Study Poultry Hatchery
- Tyson Truck Dumper Block Rendering Plant
- George's Kansas St Baker Structural Engineering for New Condensers
- Cargill Beef Plant Shoring Mid Tec
- Tyson Tyler Road Pre Cost
- Cargill Truck Canopy Turkey Plant Fuel Canopy

- Tyson PA Acad Backgrounds FP Plant
- HPR Platform Tyson New Holland, PA High Pressure Receive Access Platform
- George's Debone Platform
- Waterloo Mat Slab Hog Plant Mat Slab
- Tyson New Holland, PA Ice Room Evaluation
- Georges Poultry Plant VA Site Visit
- Tyson Foods Amherst, OH SOPs
- Broadway Contracting Broadway Butterball
- Tyson OK Enclosure
- Broadway Randall Road
- Tyson New Holland, PA Ice Room
- Mid-Tec Ajinomoto Foods Condenser Structure
- Southern Metal Fabrication Texarkana Tank
- Peco Condenser Evaluation
- Par Shell Platform
- Tyson Dexter Geotech
- New Holland, PA Electric Room Wall
- Bowers Engineering Service (Multiple Illinois Locations)
- Broadway Mexican Original Mezzanine
- Tyson Foods Amherst OH & P&ID
- OMP Doghouse

- Mid-Tec JBS Beef
- OMP Rogers Tank
- Midland Canopy
- Guardian Platform
- Simmons WW Building Study
- Pilgrims Building Reinforcement
- Baker SE Poultry
- Tyson Wilkesboro, NC Expansions
- · George's VA Wall, Offall, and Roof
- Simmons Thermal Fluid
- George's Cassville, MO Coil Evaluation
- Tyson Waldron, AR Roof Replacement
- Kirby Vicksburg, MS Layout
- Simmons Bin Cluster Modifications
- Camilla, GA Live Holding Shed
- Tyson MO Condenser
- Tyson Dock Broken Bow, OK
- Simmons Milan, MO Floor
- Kirby Obion County Block Building
- George's Beam
- FSI Berry Street Roof

- Simmons Hoist Analysis
- SMF Knockout Pot
- Tyson New Holland, PA Floor & Stair Tower
- Fast Cover Fabric Structure AZ
- Guardian DDG Silo Evaluations
- Guardian Energy Process Building Tanks
- Lincolnway Mat Slab
- SMF Sand Tank
- Lincolnway Bridge Supports
- Big Anchorage Calcs Wapakoneta, OH
- Broadway Berryville, AR Loading Dock
- Steelworx Outdoor Pavilion
- George's Kansas Street Platforms
- Broadway Cassville, MO Wall Openings

2022 Meat and Poultry Industry Projects

- Mid Land Slab
- Kansas Street Mezzazine
- BIG Camarillo, CA
- Calcium Carbonate Silo
- Tyson Tyler Road Precast Repair
- Guardian Tricantor Floor
- Darling Shop
- George's Chiller Structure Evaluation
- Simmons Milan Slab
- Baker PECO Foods Condenser
- George's Boiler Room Roof
- Simmons Maps
- T-Square & L&E Pit
- Midland Mezzanine
- George's Overbuild
- Tank Mat Foundations
- Tyson Noel, MO Refrigeration Piping
- Broadway Canopy Structure
- Profab Scale Structure
- Steelworx Simmons MCC
- Tyson Cumming, GA Refrigeration
- Springfield Mechanical Milo's Tea Refrigeration
- Fayetteville, AR Airport Hanger

- Tyson Tyler Road Dock Beam
- Springfield Mechanical ADF Evaluation
- Broadway Screener Platform Van Buren, AR
- George's Porter Street Process Expansion

- Richmond, IN Slip Jack Farrier
- Butterball Cooler
- ADF Platform
- Simmons WW Hoist
- Profab Cargill Redrock Glycol
- Broadway George's Cooler Beam Frames
- Tyson Texarkana, AR Screener Structure
- Simmons Van Buren, AR Spiral Freezer
- TOLM New Daf Install
- Harrisonburg Mezzanine Load Rating
- Rendeq National Beef Platforms
- OK Foods Door Openings
- Baker Simmons Cat Chillers
- Par Piping Redfield Energy Liquid Tank
- Tyson Green Forest, AR Beams
- CU Newman Hall Study
- George's WW Tank Assessment
- Lansing Levelland, TX Rail Loading
- Pilgrims Trolley
- VaCom Air Gas Madison, WI
- Seaboard Flour Bins
- OK Foods Feed Mill Canopies
- Tyson Clarksville, AR Feed Mill Inspection

- Tyson Texarkana, AR Boiler Room
- Georges Feed Mill Canopies
- OK Foods Line 4 & 5
- Simmons Well House Designs Feed Mill Office
- Steelworx Storm Water Wier
- Simmons Water Tanks
- Obion Hatchery Assessment
- Springfield Mechanical Blue Chip Ice
- Broadway George's Batesville, AR Dock
- Nestle Metal Building Unlimited Contractors
- Midland Butterball Fire Sprinkler Supports
- Tyson MO Dehumidifier
- Walmart Washington Court House Refrigeration, OH
- Kingston Dextrose ISO Profab Mechanical
- Broadway Batesville, AR Rack Assessment
- South Coast Bakery
- SMSI Synthus Roof Slab
- Walmart Refrigeration Evaluations (Multiple Locations)
- Anchor Industrial TN Platform

- Tyson Waldron, AR Offall Roof Repair
- Butterball Mount Olive, NC Walls
- SMSI OK Foods Opening
- Walmart Refrigeration Casa Grande

Agri Industry

- GSI Dryer Foundation
- George's Bin Structure Evaluation
- Tyson Westville, OK Feed Mill Truck Wash
- George's Feed Mill OH Structures
- L&E T-Square Meridian Bin FDN
- Simmons Fairland Feed Mill RoofGeorge's Feed Mill OH Structures
- Simmons Feed Mill Fall Protection Anchors
- Tyson Johnson Road Feed Mill Underpinning
- OK Foods Feed Mill Office
- Feed Mill Simmons Concrete Repair
- Foster Farms Acadia, LA Feed Mill
- Foster Farms Roller Mill Layout and Structure
- Tyson Snow Hill, MD Silo
- GSI Dryer Foundation
- KBM Tyson Feed Mill
- Tyson Clarksville, AR Feed Mill Inspection
- George's Feed Mill Grinding Expansion
- Simmons Plant 1 Pet Food Study Pet Food Plant
- Simmons Pet Food Demo Field Support for Pet Food Plant Demo
- George's Feed Mill BE Venting
- Simmons Wet Pet Wet Pet Plant
- Simmons Petfood Floor Review Milan Floor
- KBM Feed Mill Bridge Butterball Yellville, AR
- George's Poultry Plant Wet Pet Evaluation Red Water Chiller Evaluation
- Seaboard Soy Meal Tanks Feed Mill Soybean Meal Analysis
- Seaboard Guyana Mat Slab Flour Mill Foundation Design
- Slip Form Grain Elevators (dozens across Midwest)
- Jump Form Grain Silos (Multiple)
- Malt Plant Review, WI
- Malt Plant Addition, SD
- New Malt Plant, MT
- Feed Mills, (over 20)
- Pet Food Plant, OH & NE
- Simmons Feed Mill Hoist
- Tyson Grain Bin MO Silo 2 Design Tunnel Repair
- Simmons Fairland Fall Protection
- Simmons Fairland Screw Feeder Access Platform
- Tyson Johnson Road Feed Mill Stairs

- Simmons Mixer Hoist Beam
- Simmons Van Buren, AR Soy Oil Tank
- Fairland Simmons Feed Mill Concrete Repairs
- Simmons Fairland Hoist Beam Design
- Simmons High Speed Receiving Detail
- Simmons Decatur, AR BE Platform
- Simmons Decatur, AR Bridge
- Simmons Decatur, AR Fall Protection
- Simmons Feed Mill Egress
- L&E Load Out
- KBM Tank Mat Slab

Bulk Storage and Material Handling

- GSI Towers Review
- GSI Hopper Tank Foundations
- GSI 105 ft Eave Towers
- GSI Chenoa, IL Grain Bin
- GSI Grain Bin Foundations
- Guardian Lime Silo
- Coal Silo, IL
- Coal Silos, TN
- Fly Ash Silos, FL
- Bulk Cement Storage Silos, FL
- Bulk Flour Storage Repairs, KS
- Grain Silos
- Coal Dump Pit and Radial Stacker

Agriculture

- Flat Storage
- Poultry Barns
- Animal Housing
- Grain Bin Component Design & Foundations

Biofuels Projects

- Intergro Cogen
- Guardian Lime Silo
- GLE Aberdeen Expansion
- GLE Pipe Bridge
- Lincolnway Mole Sieve Foundation
- LSCP Tank Evaluation
- Denco Fermenter Foundation Par Huron Centrifuge Mezzanine
- Guardian Tricantor Floor
- GLE Pipe Bridge GLE Aberdeen Expansion
- GLE Huron, SD DDGS Load Out
- Par Corn Oil Tanks
- Hankinson, ND Fermentation Expansion

- Janesville, MO Fermentation Expansion
- Husker AG Cogen II
- Par Granite Falls Oil Load Out
- GLE Mina Beam
- Ethanol Plant Nevada, IA
- Ethanol Plant Atwater, MN
- Ethanol Plant Goldfield, IA
- Ethanol Plant Atwater, MN
- Ethanol Plant Granite Falls, MN
- Ethanol Plant Fort Dodge, IA
- Ethanol Plant Denison, IA
- Ethanol Plant Hopkinsville, KY
- Ethanol Plant Plainview, NE
- Ethanol Plant Marcus, IA
- Ethanol Plant Friesland, WI
- Ethanol Plant Iowa Falls, IA
- Ethanol Plant Malta Bend, MO
- Ethanol Plant Mason City, IA
- Ethanol Plant Minden, NE
- Ethanol Plant Central City, NE
- Ethanol Plant Palestine, IL
- Ethanol Plant West Burlington, IA
- Ethanol Plant Watertown, SD
- Ethanol Plant Monroe, WI
- Ethanol Plant Lakota, IA
- Ethanol Plant Clatskanie, OR
- Ethanol Plant Little Falls, MN
- Ethanol Plant Glenville, MN

Aquaculture

- AqauMaof Poland Wastewater Study
- AquaMaof Bella Wastewater Evaluation
- AquaMaof P660 DNS Systems
- AquaMaof Virginia Wastewater Evaluation
- AquaMaof Tank Study
- Project Budget Estimate for Aquaculture Production Facilities
- Aquaculture Production Buildings
- Alliance Aquaculture Aquaculture Budget
- WV Aquaculture Study

Rendering

- Tyson Texarkana, AR Screener Structure
- Pilgrims Douglas, GA Greenfield Rendering Plant
- Pilgrims Gadsden Alabama Greenfield Rendering
- Tyson Feather Press Foundation

- Tyson Redesign Bucket Elevator Platform Scranton, AR RVAF
- Rendeq National Beef Platforms
- Steelworx Robards, KY Load Out Shed
- Sumter, SC RevisionsPilgrims
- Russellville, AR Revisions
- Tyson Clarksville, AR Cooker Change Out
- Dupps Monorail
- Tyson Scranton Boiler
- Pilgrims Cooker Fdn
- Pilgrims Morefield WV Enclosure
- Tyson Meal Tanks
- Pilgrims Fat Tank Access
- Tyson Blood Meal Bin Structure
- Pilgrims Rotex Screener Stand
- Bakery Feeds Tank Foundation
- Pilgrims Hammermill
- Pilgrims Rendering Plant
- Tyson Serv, Eng Structural Drawings Chemical Building Scranton, AR
- Pilgrims Russellville, AL Load Out Expansion
- Dupps Cooker Foundation
- Pilgrims Raw Bin Modifications
- Pilgrims Greenfield Rendering
- Pilgrims Douglas, GA Rendering
- Tyson Press Foundation
- Tyson Sedalia, MO Meat Bin

Smooth Wall Tanks and Fabricated Structures

- SMF Plate Analysis
- SMF WI Platforms
- SMF Level Rock Weigh Hopper
- SMF Blender Support Structures
- SMF Powdered Glass Silo
- SMF Canada Tanks
- SMF St. Louis, MO Ostara Silo
- SMF Walkover
- LIMA Basin

Wastewater Structures

- Simmons Waste Water Tank Manway
- Simmons WWTP Addition
- George's WW Shed Purlins
- Pilgrims Chem & Wash
- Pilgrims Header Fix
- BIG Camarillo, CA
- Big Anchorage Calcs Wapakoneta, OH

- Simmons Well House Design
- Steelworx Storm Water Wier
- WHEE Essentia DAF
- George's WW Tank Assessment
- WHEE Essentia DAF
- Beaver Water Concrete Repair
- Pilgrims WHEE Denite Filter Live Oak
- Simmons WW Final Design
- Simmons WW Final Design