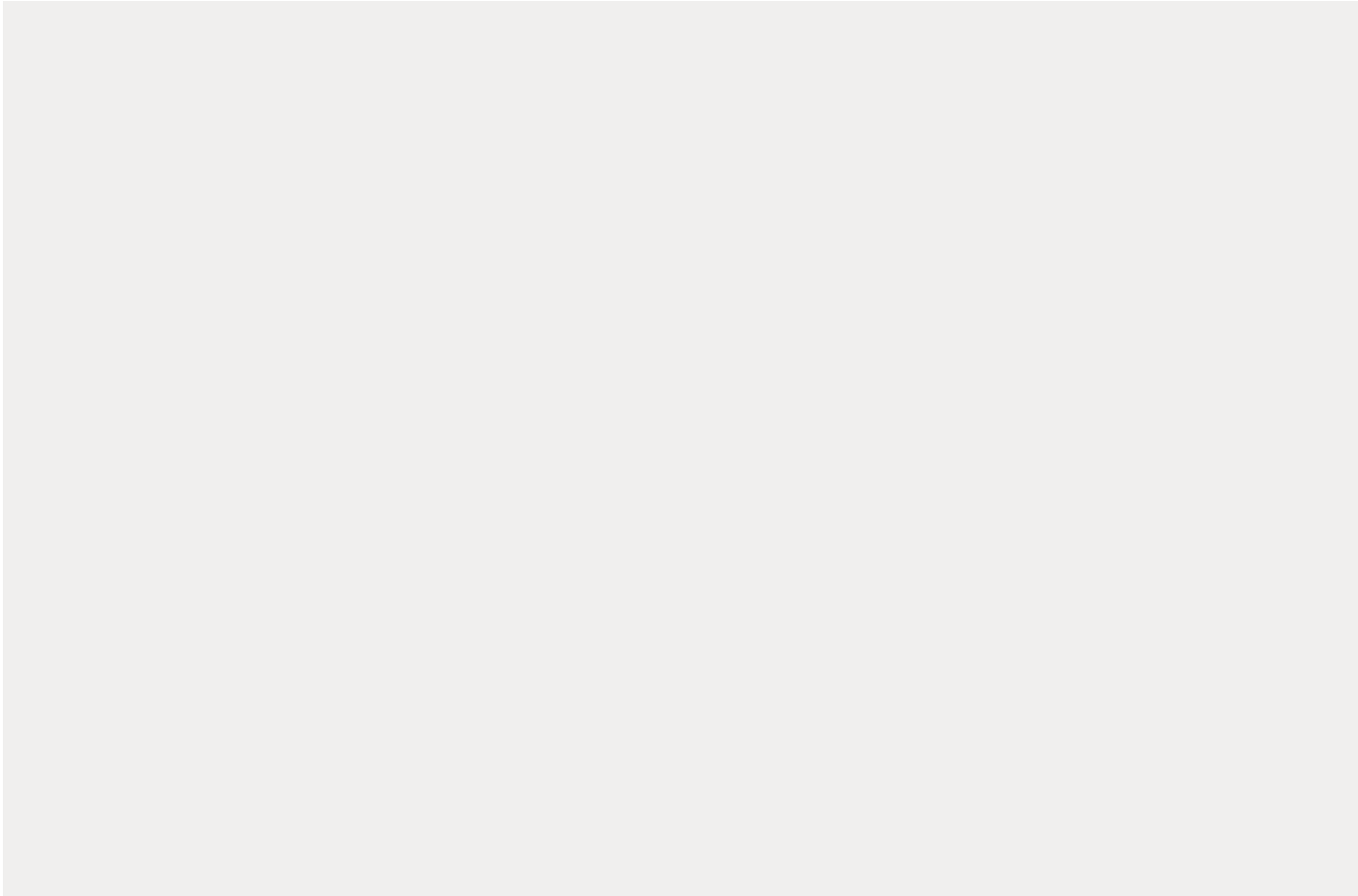




OUR FOOD & BEVERAGE EXPERIENCE

Our team starts with an intentional focus on food safety, sanitary design, and good manufacturing practices, integrated with innovative and sustainable design. We have expertise across many food and beverage markets, and our capabilities include facility planning and design, process and packaging systems, and warehousing and cold storage.



HIGHLIGHTED SERVICES

ARCHITECTURE

- Code/life safety review
- Functional programming and planning
- Interior design
- Lab planning/design
- Master planning
- Workplace design and strategy

ASSET MANAGEMENT

- Condition assessment
- Extreme weather and climate change assessment and planning
- Financial gap analysis and funding options
- Lifecycle cost-benefit-risk analysis

AUTOMATION, INSTRUMENTATION, AND CONTROLS

- Control systems architecture and design
- Control systems integration
- PLC/PAC, HMI, and MES development
- Process and packaging line automation

COMPLEMENTARY SUPPORT SERVICES

- Arc flash hazard analysis
- Carbon capture
- Energy analysis
- Permitting
- Power quality analysis
- Production optimization

CONSTRUCTION MANAGEMENT

- Construction and safety management
- Procurement support
- Project controls

CONVEYING AND PACKAGING SYSTEMS

ENVIRONMENTAL AND GEOTECHNICAL SERVICES

- Assessments
- Environmental approvals/permits, planning, and compliance
- Environmental Site Assessment (ESA) Phase I and II
- Inspection and monitoring

FACILITY DESIGN & BUILDINGS ENGINEERING

- 3D Laser scanning
- Buildings engineering
- Central utility plans
- Civil and structural engineering
- Code compliance review
- Feasibility and planning
- Green field, brown field, expansions, conversions
- Fire protection engineering
- Hazardous area classifications

- Industrial refrigeration and cold storage
- Industrial ventilation
- Mechanical, electrical, and plumbing engineering
- Sanitary design for HACCP, GMP, and GFSI
- Utility design and engineering
- Warehousing and distribution

HEALTH AND SAFETY: INDUSTRIAL RISKS

- Human health considerations (risk assessment, due diligence, consumer safety, regulatory compliance)
- Occupational health & safety
- Product stewardship
- Process Safety Management (PSM)/ Risk Management Plan (RMP) program development and auditing
- Toxicology and food safety assessments

PROCESS ENGINEERING

- Batching systems
- CIP/SIP
- Filtration
- Mass and Energy Balances
- PFD and P&ID Development
- Process design
- Process systems
- Sanitary piping

PROCESS HAZARD ANALYSIS (PHA) FACILITATION

- Air monitoring and exposure assessments
- Dust Hazard Analysis
- HAZOP and HAZID Analysis
- Noise surveys and control

PROJECT AND PROGRAM MANAGEMENT

- Capital expenditure request development and planning
- Contract and construction administration
- Cost estimating
- Project controls
- Project oversight and monitoring
- Risk planning
- Schedule development
- Value engineering and constructability review

PROJECT DEVELOPMENT

- Application preparation
- Grant administration
- Research and strategy

SITE IDENTIFICATION, ASSESSMENT, AND SELECTION

- Site infrastructure development
- Site plan approvals/zoning

STARTUP & COMMISSIONING

- Building commissioning
- Commissioning, Qualification, and Validation (CQV)
- Equipment and Installation Commissioning Support
- Equipment Failure and Downtime Troubleshooting
- Equipment FAT Support
- Performance testing

SUSTAINABILITY/ESG SERVICES

- Capture and re-use of waste heat
- Centralized energy, automation and control
- Climate solutions/net zero/ decarbonization strategy
- Cogeneration (biogas digestion/ renewable natural gas; food waste to energy)
- Combined heat and power (CHP)
- Efficiency upgrades and rebate programs
- Energy audits/reduction
- ESG advisory services
- Greenhouse gas (GHG)/Carbon impact assessment
- Waste audits
- Zero emission vehicle fleet planning and infrastructure development

WATER CAPTURE, USE, REUSE, AND DISCHARGE

- Water resource planning and management
- Pre-treatment and reduction
- Reclamation and reuse
- Water and wastewater treatment and storage
- Water usage and wastewater reduction assessments
- Discharge and land application permitting
- Biosolids management
- Water quality monitoring

CONTACT US

