

405.416.8100 | guernsey.us

SITE/CIVIL ENGINEERING
ELECTRICAL ENGINEERING
MECHANICAL ENGINEERING
STRUCTURAL ENGINEERING



ENGINEERING

**TRUSTED
RESPONSIVE
CAPABLE**

GET IN TOUCH

405.416.8100
solutions@guernsey.us
guernsey.us



Responsive. Experienced. Ready When You Are.

Engineering for Infrastructure That Matters

Guernsey delivers precision, speed, and trusted expertise for complex facility and infrastructure projects—from secure government spaces to aerospace facilities and critical upgrades. With nearly 100 years of engineering experience, we support clients like Boeing and federal agencies through renovations, new construction, and specialized design. Clients rely on our regulatory fluency, responsive communication, and consistent execution from concept to construction phase services.

Electrical Engineering

- Power distribution design: switchgear, panels, and feeders
- Lighting design with controls and photometric analysis
- Emergency and backup power (generators, UPS)
- Low-voltage systems: fire alarms, security, and communications
- NEC, NFPA 70/72/110, and IEEE standards compliance
- Arc-flash and short-circuit analysis

Mechanical Engineering

- HVAC system design including boilers, chillers, and controls
- Energy-efficient upgrades and ventilation system optimization
- Plumbing design: domestic water, sanitary waste, and storm systems
- Fire protection integration and coordination
- Compliance with ASHRAE, ICC, UFC, and NFPA standards
- Energy modeling and life-cycle cost analysis

Site/Civil Engineering

- Site layout, 3D surface creation for grading models, drainage, and utility infrastructure design
- Detention, retention, storm sewer, sanitary sewer and water lines/eq permitting for utilities
- Stormwater modeling and permitting (SWPPP, NPDES, etc.)
- Roadway and parking design with ADA compliance
- Permitting support and agency coordination
- Field services including inspections and materials testing

Structural Engineering

- Design expertise in steel, concrete, wood, and masonry structures
- Skilled in structural retrofits, load evaluations, and seismic analysis
- Experience with ICC-500 and FEMA shelters
- Experienced with new builds, renovations, and infrastructure upgrades
- Building code compliance with IBC, ASCE7, and local building codes along with material specifications such as ACI 318, AISC 360 and 341, AISI D100, TMS 402 and other material specifications
- Full PS&E packages and construction-phase support (RFIs, submittals, and site observations)



LET'S BUILD THE FUTURE TOGETHER
405.416.8100 | solutions@guernsey.us
guernsey.us

