

MECHANICAL, ELECTRICAL & INSTRUMENTATION, PLUMBING, AND FIRE PROTECTION ENGINEERS

CONTACT

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ELECTRICAL & INSTRUMENTATION DESIGN

- Medium- and Low-Voltage Power Distribution
- Variable Frequency Drives (VFD)
- Title 24 Calculations
- Fire Alarm
- Security
- Grounding
- Lighting and Lighting Controls
- Lightning Protection
- Security and Access Control
- Telecommunications and Data
- Paging and Area Warning
- Standby and Emergency Generators
- Uninterruptible Power Supplies (UPS)
- Microgrids – Solar and Wind
- SCADA Systems
- Fiber Optic, Copper, and Radio Telemetry Networks
- Control Panels and Remote Telemetry Units (RTU)
- Programmable Logic Controllers (PLC)
- Remote Input/Output (RIO)
- Engineer's Opinion of Probable Construction Cost

*SBE Certification through
California Department of
General Services*

*DBE Certification through
California Department of
General Services*

*MBE Certification through
California Public Utilities
Commission*

*8(a) Certification through
U.S. Small Business
Administration*

ENGINEERING SERVICES DURING CONSTRUCTION

- Value Engineering
- Submittal Review & Responding to Request for Information (RFI)
- Inspections & Factory Witness Testing
- As-built / Record Drawings
- Short Circuit, Coordination, and Arc Flash Studies and Arc Flash Labels
- Start-up and Commissioning
- Troubleshooting



MECHANICAL, ELECTRICAL & INSTRUMENTATION, PLUMBING, AND FIRE PROTECTION ENGINEERS



MECHANICAL DESIGN

- HVAC Load Calculations and System Selection
- Energy and Ventilation Code Calculations
- Code Analysis
- Central Plant Design: Chillers, Cooling Towers, Boilers, and Distribution Systems
- Building Management Control Systems and Operating Strategies
- Specialty HVAC Systems:
 - Laboratories
 - Chemical Rooms
 - Data Centers
 - Electrical Rooms
 - Pump Stations
 - Hazardous/Classified Environments

PLUMBING DESIGN

- Plumbing Fixture Selection
- Piping Layout
- Pressurized Pipe Sizing
- Compressed Air Systems
- Fuel Storage: Diesel, Natural Gas, or Propane

FIRE PROTECTION DESIGN

- Fire Water Pumps
- Specialty Fire Protection Systems:
 - Gas Fire Protection Systems
 - Water Based Fire Systems (wet-pipe, dry-pipe, and pre-action)
 - Non-Water Based Fire Systems (FM-200 and Novec)

ENERGY SERVICES

- Building Energy Modeling
- Utility Cost Analysis