

## SERVICE: TRAFFIC ENGINEERING \_010

Design traffic signals, intelligent transportation systems (I.T.S.), pavement markings, signs, and other traffic control device plans. Conduct traffic engineering and operational studies; and traffic planning for feasibility studies, including level of service analysis at intersections and roadway segments. Prepare and/or review geometric design and channelization plans and specifications.

Conduct intersection warrant analyses for multi-way stops and traffic signals, school-related pedestrian studies, speed studies, and other traffic-related safety studies.

Provide and review design for streetlights/roadway lighting, landscape lighting, and elevator/escalator electrical systems. Specific services may involve the review or design of plans to modernize street light systems from series to multiple circuits and/or to evaluate existing street lighting system for potential upgrade and provide plans or feasibility study; the evaluation or review of circuits for pumps.

Perform I.T.S studies for advancing wireless technologies, connected vehicles and infrastructure, and other technologies related to "Smart Communities."

**Firms may be interviewed based on the required professional service area of expertise.**

### Minimum Qualifications

#### FIRM EXPERIENCE

- Minimum of one, up to five traffic engineering projects administered by the firm in the past five years.
- Traffic engineering projects including the design, drafting, and preparation of plans, specifications, and contract documents for the installation, construction, or modification of traffic control devices, such as traffic signal and lighting systems, traffic signs, pavement markings, channelization, and geometric design.
- Electrical engineering includes aspects of elevator/escalator electrical systems and circuits for pumps, I.T.S., street lighting system projects, landscape lighting system projects, and the preparation of associated plans, standards, details, specifications, and contract documents.

#### EMPLOYEE EXPERIENCE

**Category A:** Nevada Professional Engineer (Civil) on staff and in responsible charge of the work.

- Minimum of five years of experience in traffic engineering, studies, including capacity analysis, feasibility, corridor or route studies, design, operations, planning or I.T.S.

AND/OR Nevada Professional Engineer (Electrical) on staff and in responsible charge of the work.

- EE in responsible charge of the work must have a minimum of five years of experience in the design of elevator/escalator electrical systems, circuits for pumps, street lighting systems, and related service and circuit requirements.

**Category B:** Engineering support

- Bachelor's Degree in Engineering or five years of experience in traffic engineering support.
- Minimum of three projects performing traffic and/or electrical engineering designs.

**A professional engineer license cannot substitute for a Category B employee experience or projects.**