# SERVICE: TRAFFIC ENGINEERING

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, channelization plans, and traffic control 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/or review design for roadway lighting, landscape lighting, pumps, and elevator/escalator electrical systems. Specific services may involve plans to modernization from series to multiple circuits and/or to evaluate existing street lighting system for upgrade to LED.

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 two, up to five, traffic and/or electrical engineering projects administered by the firm in the last six 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.

 <u>Minimum of five years of experience</u> in traffic engineering and design, traffic studies, including capacity analysis, feasibility, corridor or pedestrian route studies.

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, or pump systems, street lighting systems, and related service and circuit requirements.

#### Category B: Engineering support

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

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