

Class Concept

This is the highest level of advanced technical work supporting engineers in functional areas such as highway construction, construction inspection and survey, engineering coordination, and construction traffic control. Work usually involves an extremely wide range of decision making and use of judgment and would normally include supervising and providing work direction to others.

Positions may function as chief inspectors conducting independent complex inspections themselves, and supervising lower level inspectors through at least one project inspector also performing complex inspections of roadway and structure construction processes and materials to assure compliance with contract agreements, standards and specifications; in addition to performing all the duties and responsibilities associated with directing and supervising a survey crew as a survey crew leader. Positions may review and process final estimates, compute contractor pro-rata time extensions, compute contract beginning interest dates, check pay record book quantities, and review as-built construction plans. Work may include independently testing and inspecting the most complex or controversial roadway and structure construction work; resolving materials and methods compliance problems with contractors; and overseeing or performing the inspection of major or complex structure construction projects. Positions may also perform advanced manual and electronic design drafting; complete calculations of considerable complexity and variety; check and correct drawings, calculations and plans; and design traffic control and pavement marking plans. Positions may independently review the less complex roadway plans designed by private engineering firms, determine if changes are necessary and write detailed technical letters explaining the revisions and corrections needed to comply with standards, specifications, policies, and procedures. Positions may also independently design the less complex roadway projects such as new bridge approaches for bridge replacement projects. Work may include training and instructing other technicians including reviewing their work for accuracy, geometry and completeness; or supervising a small group of technicians in the development and preparation of traffic control plans.

Recruitment Standards

Knowledge, Skills, and Abilities

- Thorough knowledge of surveying and materials, methods and equipment used in highway construction.
- Thorough knowledge of mathematical functions, including algebra, geometry, and trigonometry.
- Drafting skill.
- Skill in the use of survey instruments.
- Skill in the use of office equipment such as calculators and computer terminals.
- Ability to read, interpret and explain construction plans, contract provisions, specifications and inspection procedures, and related documents/communications.
- Ability to take notes and prepare or review reports.

Minimum Education and Experience

Associate's degree in an applicable area of Engineering Technology or Survey Technology from an appropriately accredited institution and seven years of progressive technician experience; or an equivalent combination of education and experience.

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.