DESCRIPTION: Under limited supervision of the highway project manager, independently applies and enforces plans and specifications pertinent to projects assigned; performs and oversees technical construction functions serving as the: survey crew leader; the inspector in charge of materials plant processing inspections; or the lead inspector on all phases of projects accepting or rejecting work performed; performs related work as required.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is the third classification level of the Highway Construction Technician class series. Positions at this level, on a regular and on-going basis, serve as crew leaders, party chiefs, or inspectors in charge. Assignments involve projects at all levels of complexity. Positions assign work to technicians, and train and guide others in the use of standard technical equipment, instruments, and techniques. Positions may perform routine tasks of highway project managers in their absence, and that of lower level technicians.

Complexity of work involves factors such as multi-year projects; projects in urban areas; projects involving larger structures; projects having multiple and concurrent phases, or having contract provisions that are numerous, varied, and diverse; the need for greater coordination demands; the need to identify and correct deficiencies or non-conformance of work done relative to design plans and specifications. Positions at this level are responsible for ensuring conformance of on-going activities and “products” of projects to plans, specifications, and special provisions. They independently solve problems and make decisions for atypical, unexpected, or non-standardized circumstances. Greater analysis and interpretation of varied facts, and judgment is required to select the proper course of action from available options.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Performs inspections and serves as the inspector-in-charge at a prefabrication plant, pre-stressed plants, Portland cement concrete plants, or asphaltic concrete plants; enforces plans and specifications; shuts down plant operations for safety violations or specification exceptions.

Performs surveys and serves as the survey crew leader on complex surveys, such as urban topography, urban cross-sections, establishing geodetic target locations, running geodetic traverses, establishing alignment from off-line control points, setting pavement hubs in a transition of super-elevated curve and urban reconstruction staking; ensures completion of the notes, computations, and reports.

Inspects complex structural assignments such as those with multiple concurrent construction operations; multiple types and sizes of substructure elements; structures with skews; structures on a horizontal curve; or cast-in-place box girder construction. Inspects all phases of paving operations including grading, subgrade preparation and asphalt paving operations. Monitors and ensures use of erosion control best practices and compliance to environmental commitments.

Participates in the preparation of project traffic control plans, material order lists, and as-built plans.

Oversees inspection activities for several groups of workers and/or subcontractors simultaneously, frequently involving separate work sites and different contractors or subcontractors; interprets plans and specifications for coworkers and contractors’ workers.
Schedules, assigns, and coordinates work of coworkers in accordance with project requirements to assist supervisory staff in the completion of work; trains and guides others in technical construction inspection tasks, practices, and procedures; provides input pertinent to performance evaluations of assigned crewmembers.

Maintains contract/project records, progress reports, documentation of pay quantities, and final summaries; prepares the required documentation and reports.

Drives commercial and/or non-commercial vehicles to survey and inspect various work sites and activities; lifts or moves equipment and materials weighing up to 100 pounds.

**KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED:** (These are needed to perform the work assigned.)

Knowledge of: standards and specifications used for various types of projects; instruments, equipment, and material used in surveying, testing, and inspection work; all phases of construction and plant inspection and their relationship to each other; surveying and testing techniques.

Skill in: calculating mathematical computations involving trigonometry and geometry; applying complex construction inspection, surveying, and materials testing techniques; using personal computers/laptops and associated applications software including drafting, spreadsheet, and word processing software; using technical engineering equipment and instruments use during assigned projects.

Ability to: interact with coworkers, contractors, consultants, and the public to maintain cooperative work relationships; prepare technical reports and maintain detailed records; maintain surveying, testing, and inspection instruments and equipment; lift equipment and samples weighing up to 100 pounds; communicate with others in person, and by telephone, radio, and email; interpret and apply engineering plans and specifications; plan, schedule, and lead the work of coworkers during assigned projects; apply construction procedures in agency construction manuals and directives.

**MINIMUM QUALIFICATIONS:** (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Experience in performing activities pertinent to construction work such as surveying, materials testing, or field inspections.

OR

Coursework or training in construction surveying, materials testing, or inspection practices, and in using associated instruments and equipment.

Must be at least 18 years of age and possess a valid driver’s license.
SPECIAL NOTES:

Positions require moving and handling heavy equipment and material in rough terrains and heavy traffic locations; working extended workdays, and working in increment weather conditions (e.g., heat, cold).

Applicants being hired or advanced into positions in this class within the Department of Roads are required to pass the agency’s mathematics, plan reading, and bridge plan reading courses OR possess an associate’s degree in civil engineering technology, or related discipline. Applicants must provide a copy of their transcripts.

Specific positions in this class will require incumbent to possess work related certifications. Certifications include but are not limited to concrete field and plant inspections, soil and aggregate, erosion control, and nuclear gauge work. Certifications must be obtained within one year of hire/advancement or as specified/directed by the employing agency.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).