Iowa Department of Administrative Services – Human Resources Enterprise
Classification Series Guidelines

Construction Technician/Soils Series

Classes in the Series

Series 1:

Class Code	Class Title
04319	Construction Technician Assistant
04308	Assistant Soils Party Chief
04310	Soils Party Chief

Series 2:

Class Code	Class Title
04319	Construction Technician Assistant
04320	Construction Technician
04321/94321	Construction Technician Senior
04323	Engineering Technician Senior

Series Concept

Positions in this series are responsible for performing engineering support and construction trades related work including project inspection and monitoring, construction survey, and field soils tests.

Class Distinctions

Construction Technician Assistant

Positions at this level serve as assistants to Construction Technicians for routine phases of construction projects by observing contractors and ensuring adherence to plans and specifications, checking grades and elevations, collecting and recording routine measurements and comparing them with project plans and specifications, and maintaining related records. This is the first level in the four-level Construction Technician Series and is distinguished from the Construction Technician in that it is a full performance classification which serves as an assistant to higher level Construction Technicians by assisting in construction project inspection, monitoring and construction survey.

Assistant Soils Party Chief

Positions at this level perform technical work in assisting with the direction of a soils party in the field. Position incumbents assist the party chief in planning work schedules, in logging, boring, and sampling results, and in general records maintenance. They operate power drilling and sampling equipment; identify soil samples and rock strata; locate boring positions utilizing elementary engineering survey techniques and equipment. These positions assist in the training and supervision of new personnel and assist in the maintenance of drilling, sampling and engineering survey equipment.

Soils Party Chief

Positions at this level direct and oversee the activities of a soils testing field party by organizing workloads, making job assignments, and making recommendations on performance, selection,

promotion and disciplinary procedures. Position incumbents plot drilling sites and train personnel in soil sampling techniques, safety procedures and equipment care and maintenance. They contact property owners to obtain permission to enter their property and contact utility companies to locate underground pipes and cables. These positions survey alignment and surface elevation to determine locations and elevations of borings using road sheets, transits, and marking stakes and tapes. They conduct pressure tests of soil samples to determine the shear strength of the soil and rock layers. These positions maintain field books recording the descriptions of drilling sites and the descriptions of soil samples extracted from drilling sites. They report any damage done in the course of soils testing work to property owners and arrange for damage settlements.

Construction Technician

Positions at this level perform technical engineering support in the inspection of highway survey/construction projects that would include traffic staging in low traffic areas, (i.e., rural rather than major urban areas); performs inspection of contracts that comprise items for simple paving, grading or other projects of limited scope. This is the second level of a four level Construction Technician Series and is distinguished from the Construction Technician Assistants by its oversight responsibility for projects of limited scope and by serving as a lead worker to Construction Technician Assistants. The Construction Technician is distinguished from the Construction Technician Senior in that the Senior is responsible for projects that have larger scope (projects in urban areas or with high visibility) and whose lead worker responsibility is over the Construction Technicians.

For Department of Natural Resources positions projects may also include restoration of historic structures, design and implementation of burn plans and construction/maintenance of trails, overlooks, erosion control structures, wildlife viewing areas, retaining walls, landscaping, playgrounds, concrete sidewalks and cabins, with the Construction Technician serving as a lead worker for Keepers of the Land AmeriCorps members, crew leaders, temporary employees and/or volunteers.

Construction Technician Senior

Positions at this level are responsible for overseeing the inspection or survey of large, complex highway construction projects such as: traffic staging for sites that have a high traffic volume (highway corridor work); reviewing consultant contracts that are both complex in nature (i.e., corridor work) or contain an inordinate number of items; oversee sites that include the setting up of special peripherals such as lighting for a nighttime paving project, or provide oversight of an accelerated project in that the project has high visibility and must be completed quickly and accurately. These positions must also ensure that work is done according to specification, proper inspection staff is in place and records are being kept, and a safe working environment is maintained; solves on-site problems and situations regarding construction of project and design modifications; performs lead worker duties over Construction Technicians, but may on rare occasions provide direction to Construction Technician Assistants also. This is the third level of a four-level Construction Technician Series and is distinguished from the Construction Technician by its responsibility for overseeing the inspection of large, complex, high sensitive highway construction/survey projects and serving as a lead worker to the Construction Technician staff. The Construction Technician Senior is distinguished from the Construction Technician Supervisor in that the Construction Technician Senior has a project level focus and the supervisor has full supervisory authority over all lower level Construction Technician staff and is responsible for projects and residency activities at an administrative level.

For Department of Natural Resources positions, the Construction Technician Senior is responsible for oversight for field construction employees, including interns, and provides oversight for all aspects of construction and engineering survey work throughout the state.

Engineering Technician Senior

Positions at this level are responsible for contract administration for federal, primary, secondary, and institutional road construction projects. They meet and respond to questions from contractors, project engineers, project inspectors, local governments, and the public. Position incumbents recommend solutions to problems; perform technical field reviews to ensure compliance with contract specifications; and perform final field inspections. They verify and determine project data is accurate and appropriate; determine bid items and calculate quantities; estimate project costs to ensure proper funding allocations; and select appropriate road standards, specifications, construction detail sheets and traffic control plans. They conduct pre-construction meetings and provide input to ensure proper policies, procedures, specifications and Materials Office Instructions Memoranda are followed. Position incumbents perform and coordinate traffic engineering studies; analyze the results; and recommend action and solutions based on the studies and analyses. They train field personnel in the collection and submission of contract maintenance data. They administer project schedules, manpower requirements, vehicle/equipment/tool inventories, and related office activities, such as contract modifications, budget figures, bi-weekly vouchers, and project audits. Position incumbents prepare and direct the preparation of periodic and special reports following visits to assigned projects.

Effective date: 11/11 BR