

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
SURVEYS MANAGER

DEFINITION

Performs, directs and approves the work of survey crews. Provides administrative and technical services to a statewide program of cornerstone and preliminary engineering surveys; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Supervises and evaluates the work activities of survey crews, technicians and staff; effectively recommends personnel actions related to selection, disciplinary procedures, performance, leaves of absence, grievances, work schedules and assignments, and administers personnel and related policies and procedures.

Establishes statewide surveying policies and procedures for the Iowa DOT and provides expertise and direction on land surveying principles; provides expertise and guidance to District Land Surveyors.

Reviews and approves technical reports prepared by the section on the various surveys and related special surveys. May evaluate completed field survey data to ensure accuracy and completeness.

Provides expertise and direction on field work and computer processing of global positioning satellite (GPS) control networks to establish the fundamental project coordinate control system necessary for all of the subsequent preliminary engineering survey, land corner (Right of Way) surveys and construction surveys.

Supervises Preliminary Survey Party Chiefs and crews, construction surveyors and professional consultant surveyors on land surveying principles including: land surveying laws and legal principles and specialized survey equipment.

Provides expertise and guidance on GPS surveys, horizontal control networks and vertical project data, survey traverse procedures, traverse adjustments, level adjustments, digital terrain model collection, project coordinates systems and state plane coordinate systems; and collection requirements for topographic surveys.

Administers the engineering surveys for approximately 80% of the projects in the DOT's Highway Improvement Program and is responsible for managing workloads to keep these projects on schedule.

Conducts project reconnaissance trips pertaining to preliminary survey in order to make necessary adjustments survey procedures by physically viewing the survey area.

Compiles costs of complete surveys in order to submit required reports and maintain budgetary limitations by studying cost and budgetary figures received from various sources. This information is also used in order to optimize surveying resources and to aid in the scheduling of long-range project planning.

Investigates new survey equipment, computer hardware and software and methodologies so that the Iowa DOT is aware of current technological advancements in surveying; identifies, recommends and arranges for the purchase of current and future survey equipment.

Coordinates, provides and recommends participation in training necessary to improve the performance of surveyors.

Coordinates and provides contract administration on consultant survey activities to ensure proper development standards and timely delivery of information to the DOT.

COMPETENCIES REQUIRED

Knowledge of land surveying, engineering and construction laws, survey principles, legal descriptions, equipment and legal principles.

Knowledge of current trends, developments and activities in Right of Way, engineering and construction surveying.

Knowledge of the activities associated with gathering data used in the preparation of plats, legal descriptions and other legal documents necessary for acquisition and disposal of highway rights of way.

Knowledge of current literature, trends and developments in the field of survey and use of this information to continually modernize surveying efforts within the Iowa DOT.

Knowledge of DOT policies, procedures and regulations relating to survey and highway design as well as the ability to read and understand plans and specifications.

Knowledge of management practices and principles including personnel management, coordination of consultant services, organizational management and budgeting as they relate to project management.

Knowledge of the Federal Highway Administration requirements on numerous statistical and survey reports as required by the highway planning and research program.

Knowledge of the operation and maintenance of survey instruments (e.g., total stations, data collectors, computer workstations, Static and RTK GPS systems, transits, levels and theodolites).

Knowledge of survey party data gathering methodologies (e.g., topography, digital terrain models, benchmark-level notes, etc. in electronic survey data collectors and survey field book and editing/evaluating survey data on computers).

Knowledge of the use of specialized computer software (e.g., coordinate geometry, computer-aided design, drafting, and data collection editors).

Ability to apply land surveying knowledge, training, expertise and judgment to related transportation activities.

Ability to read, understand, interpret, and utilize design plans and specifications as they relate to engineering cornerstone and preliminary engineering survey.

Ability to use computer-aided drafting software, road design software, survey software, photogram metric software and other computer software packages in the creation of project plans, maps, graphs and various reports.

Ability to plan, coordinate, and supervise the work of subordinates.

Ability to read and comprehend large amounts of data found on various charts, graphs, and computer printouts.

Ability to inspect completed and in-process work for accuracy and compliance with standards.

Ability to develop new methods or revise existing methods, policies, procedures and specifications to carry out work objectives more efficiently.

Ability to direct the activities of private consultant land surveyors to prevent litigation over property lines.

Ability to effectively interact with other DOT offices to resolve errors and omissions on proposed highway plans related to surveys.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Follows policy and cooperates with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Possession of a current professional land surveyor's license as issued by the Iowa Board of Engineering and Land Surveying and experience equal to three years of full-time advanced level land surveying work (e.g., functions as the supervisor of others and/or the operation of surveying instruments such as GPS equipment, total station, level, etc.);

OR

employees with current continuous experience in the state Executive Branch that includes the equivalent of two years of full-time experience as a Survey Party Chief, Land Surveyor or Land Surveyor Senior and possession of a current professional land surveyor's license as issued by the Iowa Board of Engineering and Land Surveying.

Effective Date: 4/06 DK