STATE OF NEBRASKA CLASS SPECIFICATION HIGHWAY CARTOGRAPHER

EST: 12/95 - REV: 10/11 CLASS CODE: M56162

<u>DESCRIPTION</u>: Under immediate to general supervision, prepares and updates maps and related cartographic material of the cities and counties within the State using Computer-Aided-Mapping equipment and software; performs related work as assigned.

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

This is the entry full performance classification level of the Cartographer class series of two classes both of which perform cartography assignments but with a different level and scope of work. This class serves as the trainee and fully functioning level where incumbents prepare basic, standard maps, charts, and other cartography products. Positions in this entry-level class develop and apply the knowledge and skills involving the procedures, techniques, materials, and equipment of basic cartography work. The work is initially performed under close supervision changing over time to general supervision for most assignments. Initial assignments are well defined and limited in nature, where guidelines and assistance are readily available from Senior Cartographers and supervisors. As requisite knowledge, skills, and proficiency are developed, incumbents would typically be given progressively more advanced assignments and greater independence. Incumbents may expect to perform an expanding range of assignments in a developmental capacity as preparation for advancement to the Senior Cartographer class.

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.)

Receives, analyzes, interprets, and verifies information contained in legal descriptions of city and land tract documents, line mileage reports, highway inventory field notes, aerial photographs, plat maps, roadway plans, and other sources of information to determine what changes need to be made to city and county maps.

Edits and revises city and county maps to document new and expanded roadways, corporate limits, roadway realignments, and railroad, roadway, and utility relocation or abandonment, recreation area changes or additions; edits map legends to account for additions or deletions of physical characteristics to the map.

Verifies and incorporates physical features onto maps such as bridges, towers, farmsteads, cemeteries, waterways; revises maps to account for river course changes, lake surface area and waterway flows changes due to weather conditions.

Calculates angles and curves to accurately depict roadway and map features; computes mileage between map points.

Reads and interprets roadway construction plans and aerial photographs to obtain information to make or revise maps.

Confers with agency employees, other State agency employees, and local governmental officials to obtain and provide information necessary to complete assigned work.

Answers questions from agency employees and others regarding mapping products and procedures.

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Retrieves, modifies, and stores cartographic information in the agency's information database systems.

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

Knowledge of: Micro-Station, Auto-Cad, and/or Computer-Aided Mapping methods and techniques; computer graphic methods; basic geometry; the agency's cartographic methods, procedures, equipment, and software; agency information resources.

Ability to: create and manipulate computer graphics; identify and resolve Micro-Station or Computer-Aided-Mapping problems; communicate in person, and by telephone, email, and correspondence technical mapping information and graphic concepts, capabilities, and limitations to non-technical individuals; work alone with minimal oversight/guidance; interact with others to achieve project goals; use personal computers and associated applications software; apply Micro-Station software to create and manipulate graphical information; interpret highway plans; interpret aerial photographs.

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

Post high school level coursework, training, OR experience in the techniques or practices of cartography, Computer-Aided-Mapping, Computer Aided Drafting, computer design/graphics, geography, or geoscience.

SPECIAL NOTES:

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).