

Drafting Technician I

DEFINITION

This is moderately complex drafting work performed by competent and experienced technicians.

Work of this class is encompassed by a growth concept, whereby the extent of an employee's technical drafting work experience will determine the complexity of the work assigned and the independence of judgement and initiative exercised.

Employees of this class perform moderately complex drafting work on plans and drawings requiring intricate detail; difficult mathematical or geometrical calculations; extensive survey interpretation; basic mechanical, electrical, electronic and civil engineering principles; or comprehensive reference data may be performed either manually on a drafting board or with the aid of an interactive graphics system and ancillary computerized equipment.

Employees within this class may prepare sub-professional designs of limited scope and complexity, such as independently preparing working drawings on specific technical areas or assisting a more senior technician or professional superior by composing sketches and working drawings for phases of larger more complex projects. While the work of this class usually involves the preparation, completion and checking of plans, drawings and maps, some positions may be required to do limited illustrative work for publications and reports.

Incumbents of this class may exercise temporary supervision over a task force performing large multi-phased drafting projects; or provide direction and guidance to less experience drafting technicians and tracers on a continuous basis. Supervision received is general on repetitive tasks, while new assignments are received with greater detail. The work is subject to review upon completion for accuracy and conformance with established standards of drafting technology.

The work of this class is distinguished from that of the Drafting Technical Assistant class by the scope and impact of the work performed, the qualifications required to perform assignments and the supervision received and/or exercised.

TYPICAL DUTIES*

Prepares detailed mechanical/electrical drawings for new and remodelled equipment; calculates and compiles bills of materials and labour costs; prepares working plans and verifies design sketches; obtains working data by visiting construction and fabrication sites or by searching materials in microfilm files, catalogues, specifications or computerized inventories.

Operates computer graphics design equipment and mechanical equipment such as plotting machine, planimeter, electronic calculator, pantograph and proportional dividers.

Assists in the design of complex layouts and rearrangements; computes data such as load capacities, strengths, stresses or materials quantity; develops working drawings, issues work orders and performs other related activities such as field work and investigates equipment complaints.

Selects from catalogues or plans and draws complex complimentary parts for structure, machines or installations either manually or by computer graphics equipment; writes specifications; selects some materials.

Prepares complex working plans for wiring diagrams for the erection, installation and wiring of electrical machinery, equipment, plan layout or buildings.

Compiles, plots, drafts and checks moderately complex survey plans, planimetric maps, land use maps, profiles, contours, cross-sections and site plans from field notes, topographical maps, and other reference material; drafts base plans; plots and checks survey details such as geographical

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distances, angles, bearings, ties, survey and right-of-way limits, reservations and allowances, lot and concession lines, structures, roads, mining claims.

Computes moderately complex survey calculations; interprets and resolves minor survey conflicts which are clearly within established procedures; checks field survey plans in accordance with department specifications and pertinent legislation prior to registration of Land Titles or Registry Office.

Performs related duties as required.

KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of drafting terminology, practices and techniques as applied to both traditional manual board or computerized interactive graphics.

Knowledge of technical mathematics.

Knowledge of data and computer processing.

Knowledge of construction engineering and surveying practices.

Some knowledge of civic and departmental policies and regulations.

Ability to understand and execute oral and written instruction and to understand detailed plans and specifications.

Ability to express ideas and concepts effectively, orally and in writing.

Ability to establish and maintain effective working relations as necessitated by work assignments.

Skills in manipulation of drafting instruments and/or computerized drafting operation.

TRAINING AND EXPERIENCE REQUIREMENTS

Job Level

Completion of a two (2) year Drafting diploma from a recognized institute of technology or educational equivalent and two (2) years' progressively responsible drafting experience.

Opportunity Concept

Completion of a two (2) year Drafting diploma from a recognized institute of technology or educational equivalent.

** This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.*

Salary Plan	<u>21M</u>	<u>21A</u>	<u>21B</u>	<u>21C</u>
Job Code	0685		0688	
Developmental		0686		

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