

Job Class Profile: Draughting Technician III**Pay Level: CG-29 Point Band: 622-675**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	3	3	6	3	3	3	2	4	
Points	233	50	19	29	90	65	62	43	43	634

JOB SUMMARY

The Draughting Technician III performs advanced draughting work in architectural or engineering design for space programming, new construction or rehabilitation projects on highways, marine facilities, bridges, drainage and retaining structures.

Key and Periodic Activities

- Performs advanced draughting work in AutoCad in the preparation of detailed plans required for Capital Works Projects.
- Prepares “as built” drawings for all projects by interpreting field notes from survey books and field information; calculates curve and grade information; plots and prepares drawing sets; plots cross-sections; calculates quantities for estimates; prepares and adjusts profiles and grades and the application of formulas, tables and engineering calculations for design purposes.
- Meets with client departments to address on-going space issues during re-configurations. Calculates square footage requirements and ensures staffing population density indicator (PDI) is obtained in compliance with space standards.
- Ensures occupancy loads, exits, travel distances, accessibility, egress widths and other applicable code requirements are met.
- Performs site visits to measure floor spaces and compares existing conditions with “as-built” drawings to ensure master building drawings are current and in compliance with all necessary code requirements.
- Reviews shop drawings from Consultants/Bidders to ensure layouts and project specifications conform to tender documents.
- Checks monthly progress estimates of Capital Works Projects for errors and/or omissions in extensions, including all relevant back-up information submitted with progress estimates. Makes corrections, re-writes, or writes estimates where necessary, obtains approval from Regional Engineer and prepares all documents for distribution. Performs other related cost estimates, certificates and reports.
- Coordinates all work related to a variety of contracts, including assigning of survey crews, liaising with contractors, regional staff with respect to completions of contracts and final payment.

Key and Periodic Activities

- Arranges for the rental and repair of survey equipment and vehicles. Prepares purchase requisitions, orders gas credit cards, collects all credit card receipts and certifies invoices for all rentals and credit card payments.
- Provides technical assistance and guidance to all Engineering Project Coordinators involved in performing draughting duties on construction projects. Provides other field personnel with up-to-date information as required.
- Maintains extensive drawing, plan and topographical map files for roadways. Maintains all Capital Works project files and construction records in accordance with a retention schedule. Prepares charts, graphs, manuals, tables, forms, etc., for use by field personnel and engineering staff.
- May maintain, order and pick up supplies for engineering offices, survey crews and soils lab.
- Completes purchase agreements and invoices for damages caused during construction and coordinates with staff.
- Issues work orders for the installation of field office phones.
- Maintains petty cash and makes purchases when required. Orders survey, draughting and administrative supplies.

SKILL

Knowledge

General and Specific Knowledge:

- National Building Codes
- National Draughting (OSI) Standards
- AutoCad Draughting Technology

Formal Education and/or Certification(s):

- Minimum: 3 Year Diploma in Engineering Technology

Years of Experience:

- Minimum: 4 - 5 years

Competencies:

- Ability to apply established techniques to complete activities
- Coordinate a range of related work or project activities
- Design/develop plans
- Utilize various computer software programs
- Written/verbal communication skills

Interpersonal Skills

- A range of interpersonal skills includes listening, asking questions (to obtain clarification on assigned duties); providing technical assistance, guidance and information to other staff; instructing (offering solutions on issues) and gaining the cooperation of others.
- Communication occurs with employees/peers/supervisor/trainees within the organization and externally with contractors, other government representatives, clients and general public.

- Most significant contacts are: Supervisor and/or Senior/Regional Engineer (to discuss activities); and employees (daily activities).

EFFORT

Physical Effort

- The demands of the job do not result in considerable fatigue, requiring periods of rest.
- Lifting or moving objects between 25 -50 lbs is typical of the class, however, on occasion they may exceed this weight when handling field supplies or moving furniture.
- Travel is required on an occasional basis to visit client's office space.
- The use of fine finger precision work is regularly required to perform draughting work for detailed plans and specifications.
- Sitting is experienced for extended periods of time to prepare plans and perform majority of activities.

Concentration

- **Visual** concentration is a requirement when performing majority of tasks such as site measurements for "as built" drawings, working with various software programs to prepare detailed plans and when performing revisions to existing plans.
- Activities such as entering data into spreadsheets and other software and plotting cross-sections and performing calculations can be **repetitious** and require alertness.
- **Time pressures and deadlines** are experienced when required to prepare documents for the tendering process and when requested by senior staff to perform other work on a priority basis.
- During peak construction season, **lack of control over work pace** is experienced due to a variety of work that must be completed within specific timeframes.
- **Higher than normal level of attentiveness/alertness** is required when ensuring occupational, health and safety issues are addressed during the planning stages.
- Draughting and other work performed using various software requires **eye/hand coordination**.
- **Exact results and precision** are required when drawing and calculating measurements, entering data for monthly progress estimates and creating plans for tender documents.

Complexity

- Tasks and activities are generally similar/related in terms of the skills and knowledge used and typically well defined.
- Challenges/problems/issues have obvious solutions and can be addressed by following procedures and/or guidelines. Work is typically performed within defined and standard work processes.
- A typical challenge/problem/issue is interpreting information from various survey books and field information and incorporating into a drawing. Also, ensuring that any re-configuration of office space incorporates all code and space requirements.
- Reference material available includes departmental policy and procedures manual; specification books and guidelines; draughting standards; acts and regulations.

RESPONSIBILITY

Accountability and Decision-Making
<ul style="list-style-type: none"> — Work tasks and activities are generally prescribed or controlled. — Authority to order small office supplies and make petty cash purchases. — Large office expenditures/direct purchase orders, vehicle and survey equipment rentals, travel, monthly payments to contractors and final review of all drawings and completed work requires supervisory approval. — Some discretion is exercised within predetermined limits and procedures such as reducing square footage of office space when developing plans to accommodate staff. — If problems arise while working on projects, it is usually sent to or discussed with Supervisor/Director for advice, direction and approval before proceeding.
Impact
<ul style="list-style-type: none"> — Impacts are felt internally within the immediate work area/department/government as well as externally with clients and general public. — Resources affected include equipment, facilities, material resources, health and safety (OHS issues, codes). — The consequences of a mistake or error can impact the above noted people and resources, however, the vast majority of daily tasks and activities are checked by co-workers to ensure errors are limited, thereby mitigating risks or consequences of an error.
Development and Leadership of Others
<ul style="list-style-type: none"> — There is no supervision of staff. — There is a requirement to provide some development and leadership such as on-the-job advice/guidance, training and acting as a technical mentor to new employees and students.

WORKING CONDITIONS

Environmental Working Conditions
<ul style="list-style-type: none"> — Safety equipment and/or precautions such as hard hat, steel toe boots and safety vests are required when visiting field offices, obtain supplies from yard or stockroom and measuring office space in various locations. — There is limited likelihood for injuries or illnesses resulting from hazards given that all health and safety regulations are followed. — Exposure to unusual/distracting noise and glare from computer screen is constantly experienced as a result of working in an open office environment. — Occasionally, exposure to dirt, dust, limited lighting, awkward or confining workspaces, temperature extremes and travel is experienced.