

TEMPORARY FOREIGN WORKER PROGRAM

OCCUPATIONAL PROFILE FOR EXPEDITED LABOUR MARKET OPINIONS

CIVIL ENGINEERS

Section A: Occupational Profile

JOB DESCRIPTION:

Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, earth structures, powerhouses, roads, airports, railways, rapid transit facilities, bridges, tunnels, canals, dams, ports and coastal installations and systems related to highway and transportation services, water distribution and sanitation. Civil engineers may also specialize in foundation analysis, building and structural inspection, surveying, geomatics and municipal planning. Civil engineers are employed by engineering consulting companies, in all levels of government, and by construction firms.

MAIN DUTIES:

Civil engineers perform some or all of the following duties:

- Confer with clients and other members of the engineering team and conduct research to determine project requirements
- Plan and design major civil projects such as buildings, roads, bridges, dams, water and waste management systems and structural steel fabrications
- Develop construction specifications and procedures
- Evaluate and recommend appropriate building and construction materials
- Interpret, review and approve survey and civil design work
- Conduct field services for civil works
- Ensure construction plans meet guidelines and specifications of building codes and other regulations
- Establish and monitor construction work schedules
- Conduct feasibility studies, economic analyses, municipal and regional traffic studies, environmental impact studies or other investigations
- Monitor air, water and soil quality and develop procedures to clean up contaminated sites
- Conduct technical analyses of survey and field data for development of topographic, soil, hydrological or other information and prepare reports
- Act as project or site supervisor for land survey or construction work
- Prepare contract documents and review and evaluate tenders for construction projects

- Supervise technicians, technologists and other engineers and review and approve designs, calculations and cost estimates.

EMPLOYMENT REQUIREMENTS:

- A bachelor's degree in civil engineering or in a related engineering discipline is required.
- A master's degree or doctorate in a related engineering discipline may be required.
- Licensing by a provincial or territorial association of professional engineers is required to approve engineering drawings and reports and to practise as a Professional Engineer (P.Eng.).
- Engineers are eligible for registration following graduation from an accredited educational program, and after three or four years of supervised work experience in engineering and passing a professional practice examination.

PREVAILING WAGE RATES BY SUB-REGION:

ALBERTA

Geographic Area	Wage (per hour)
Calgary/Banff/Drumheller	\$42.19
Edmonton	\$42.19
Fort-McMurray	\$42.19
St. Paul/Lloydminster	\$42.19
Grande Prairie/Slave Lake/Jasper	\$42.19
Lethbridge/Medicine Hat/Crowsnest Pass	\$42.19
Red Deer/Camrose/Wetaskiwin/Rocky/Olds	\$42.19

BRITISH COLUMBIA

Geographic Area	Wage (per hour)
Lower Mainland Southwest	\$43.64
Northern British Columbia	\$43.64
Thompson Okanagan Kootenay	\$43.64
Vancouver Island	\$43.64

PROVINCIAL LABOUR STANDARDS:

In **Alberta** refer to: [Alberta Employment, Immigration and Industry, Employment Standards Programs](#)

In **British Columbia** refer to: [Ministry of Labour and Citizen's Service, Employment Standards Branch](#)

PROVINCIAL CERTIFICATION REQUIREMENTS:

In **Alberta** refer to:

- [Association of Professional Engineers, Geologists and Geophysicists of Alberta](#)

In **British Columbia** refer to:

- [Association of Professional Engineers and Geoscientists of British Columbia](#)

LABOUR MARKET OPINION FACTORS:

Refer to the [Temporary Foreign Worker Program](#) website to obtain the Labour Market Opinion factors used to assess an employer's request to hire a temporary foreign worker.