

Materials Technician I

DEFINITION

This is technical work in testing a variety of materials and in municipal construction and maintenance programs.

Work of this class involves the conduct of standard and specialized tests on soils, concrete, asphalt, concrete pipe, paint and other construction materials. Tests and inspections are primarily physical in nature and are conducted in accordance with standardized methods and procedures or on specific instruction from a technical superior.

Duties are performed in the field and in materials testing laboratories. Incumbents may supervise one or more assistants. All work results are checked for quality and accuracy by laboratory or engineering personnel through the review of test reports.

The work of this class is distinguished from that of the Materials Technical Assistant by the leadhand supervision exercised and the duties assigned and the education required to perform the work assigned.

TYPICAL DUTIES*

Performs tests on concrete mix design at supplier's premises, in the field and in the laboratory; molds cylinders and beams for strength tests.

Conducts tests on asphalt to determine physical properties, gradation of aggregate and other properties, runs standard viscosity tests.

Inspects the manufacture of concrete pipe for adherence to contract specifications.

Performs tests on soils to determine densities, moisture, strengths and other properties, conducts proctor and sieve analysis.

Directs core sampling of soil cement bases; runs tests on compressive strengths and densities; directs a drilling crew at building sites and participates in foundation investigation.

Prepares graphs, charts, site plans and reports indicating test results.

Drives a light truck to construction and plant sites.

Performs related work as required.

Materials Technician I

KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of the principles, procedures and practices of construction materials testing.

Knowledge of the instruments and apparatus used in destructive and non-destructive materials testing.

Some knowledge of road construction engineering principles and procedures. Ability to understand and execute oral and written instructions.

Ability to secure the applicable vehicle operator's license.

Skill in the use and care of laboratory and field testing equipment.

TRAINING AND EXPERIENCE REQUIREMENTS

Job Level

Completion of a two (2) year diploma in Materials Technology or a related field from a recognized institute of technology and a minimum of two (2) years' experience in materials testing work. Applicant(s) must possess a valid Alberta driver's license.

Opportunity Concept

Completion of a two (2) year diploma in Materials Technology or a related field from a recognized institute of technology. Applicant(s) must possess a valid Alberta driver's license.

** 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	0721		0724	
Development 1		0722		0723
Last Updated:	1991-03			
Previous Updates:	1983-06, 1981-08			
Originated:	1966-06			