

ENGINEER 2, GRADUATE

KIND OF WORK

Difficult work in a specialized field of engineering.

NATURE AND PURPOSE

An employee in this class applies engineering skill and knowledge to engineering projects. Assignments are to projects and include general descriptive information and statements of departmental policy, and indicate the engineering results to be accomplished. Work may involve the supervision of several technical employees and inspection of the work of contractors. Periodic guidance is received from supervising engineers and the final check by a registered engineer is in terms of results obtained.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Acts as project supervisor in charge of the construction of a highway construction project or assists a Resident Engineer in the supervision of several engineering projects.

Performs highly difficult road design as a principal assistant to a road design engineer.

Supervises the work of location survey parties.

Performs skilled and responsible technical work in analyzing and writing specifications and special contract provisions and in reviewing similar subject on county and municipal projects.

Provides general engineering services to Natural Resources Department construction and development projects.

Reviews preliminary plans and specifications for sanitary sewer extension, municipal sewage treatment plants and solid waste disposal sites and facilities.

Prepares water or air classifications and standards of quality based on present and future uses.

Reviews plans for water supply systems and advises officials on operation of water treatment plants.

Evaluates Industrial Health problems.

Provides general engineering assistance in analyzing and evaluating solid waste controls.

Performs field engineering and inspection of natural ore and taconite operations in which the state has an interest.

Supervises sampling of state ores in mines and beneficiation plants.

Performs work of a comparable level in other state agencies conducting a small to moderate size engineering program.

Performs related work as required.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Working knowledge of the fundamental principles of a given field of engineering.

Working knowledge of common engineering practices, methods and procedures.

Working knowledge of the equipment and materials used in modern engineering operations.

Skill in:

The use of engineering instruments and tools.

Ability to:

Take charge of difficult engineering work as part of a major project.

DESIRABLE PREPARATION FOR WORK

Experience in some phase of engineering subsequent to college graduation. College graduation with a degree in an appropriate engineering curriculum.

Est.:
Rev.: 7/2/69
Ckd.: 9/92

T.C.:
Former Title(s):