

PD Tracking Number 0000022

Major Duties

This trainee position performs duties directed toward the acquisition and analysis of basic data and the development of professional competence in the area of civil engineering and hydrology. Duties may include, but are not limited to the following:

FIELD WORK

Assists in conducting field surveys involving measurement of surface-water flow, water levels, sediment characteristics, and flood profiles.

Provides assistance in collecting samples and performs analyses of surface water, ground water, and chemical data.

Participates in the selection of field coefficients and assists in the design and installation of structures for measuring surface-water flow and water levels.

Provides assistance with drilling and pumping tests to determine hydraulic characteristics and properties.

Operates surveying instruments during normal leveling and direct-measurement work.

OFFICE WORK

Under the direct supervision of senior modelers, applies established digital modeling and numerical analysis methods to answer specific hydraulic and hydrologic questions.

Prepares illustrations or brief sub-sections of reports.

Inspects, maintains, and repairs data recorders of various types.

Operates a government motor vehicle.

Factor Statements

FACTOR 1 - KNOWLEDGE REQUIRED BY THE POSITION (Level 1-5, 750 Points)

- A professional knowledge of the basic theories, principles, practices, and techniques of civil engineering to be used in obtaining hydrologic and hydraulic data.

- A general knowledge of computer hardware and general application software.

- Skill in written and oral communication.

FACTOR 2 - SUPERVISORY CONTROLS (Level 2-1, 25 Points)

The supervisor assigns work in detail and fully reviews work in progress. The incumbent consults with the supervisor on all matters that are not covered by specific guidelines and instructions. Completed work is reviewed for compliance with instructions and to assure the quality of work.

FACTOR 3 - GUIDELINES (Level 3-1, 25 Points)

Guidelines consist of technical manuals, published standard procedures and instructions that are detailed and directly applicable. The incumbent works in strict adherence to the guidelines and any deviations are referred to the supervisor.

FACTOR 4 - COMPLEXITY (Level 4-2, 75 Points)

Assignments require the use of a variety of standard principles, methods, and practices in order to solve limited engineering problems. Duties require the consideration of factors and conditions that are apparent and readily available.

FACTOR 5 - SCOPE AND EFFECT (Level 5-1, 25 Points)

Project work at this level typically provides basic engineering and hydrologic information. Work assignments have an impact on project results and facilitate the work of others in the organization.

FACTOR 6 - PERSONAL CONTACTS (Level 6-1, 10 Points)

Personal contacts are typically limited to within the immediate organization.

FACTOR 7 - PURPOSE OF CONTACTS (Level 7-1, 20 Points)

Contacts external to the organization are limited to obtaining and exchanging information of a factual nature.

FACTOR 8 - PHYSICAL DEMANDS (Level 8-2, 20 Points)

Field work is physically demanding and includes walking, bending, climbing and lifting of equipment up to 100 lbs., and is often performed during adverse weather conditions. Office work is sedentary.

FACTOR 9 - WORK ENVIRONMENT (Level 9-2, 20 Points)

Office conditions are normal; field conditions may include extreme heat cold, rain, or snow, and hazardous conditions such as ice and flooding.

TOTAL POINTS - 970

GRADE CONVERSION - GS-05

GS-810, Civil Engineering Series, 06/66

General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions, 06/71

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