

**Classification Appeal Decision**

issued by

U.S. Department of Interior  
Washington, D.C. 20240

**Appellant:**

[REDACTED]

**Position:**

Civil Engineering Technician, GS-802-11

**Organization:**

Department of the Interior  
Bureau of Indian Affairs  
Billings Area Office  
Division of Support Services  
Engineering Branch  
Design Section

**Decision:**

Civil Engineering Technician, GS-802-11

  
Dolores Chacon  
or Acting Director of Personnel

6/5/97  
Date

Copy of Decision Transmitted to:

[REDACTED]  
Bureau of Indian Affairs  
Billings Area Office

Jim Reed  
Personnel Office  
Office of Surface Mining (Bureau of Indian Affairs)  
Washington, D.C.

## INTRODUCTION

In an undated letter to the Director, Office of Personnel, U.S. Department of the Interior received on May 20, 1996, [REDACTED] appealed a February 16, 1996, classification decision made by the servicing personnel office of the Bureau of Indian Affairs (BIA), Billings Area Office. In its review of the position which resulted from a request from the appellant, BIA determined that the current classification of the position is properly classified as Civil Engineering Technician, GS-802-11.

[REDACTED] disagrees with this determination referring to a Civil Engineer, GS-810-12 position that appears to be performing similar assignments. [REDACTED] requests that his position be classified as Civil Engineering Technician, GS-802-12. Our decision is presented below. This is the final administrative decision within the Department of Interior.

## SOURCES OF INFORMATION

In deciding this appeal, we considered information from the following sources:

- The appellant's letter of appeal and attachments.
- The material submitted by the Bureau of Indian Affairs, Billings Area Office Personnel Director, including the appellant's current position description, position evaluation statement, organization chart, functional statement, SF-50 (Notification of Personnel Action), current and previous performance plans, and the position description and evaluation statement for the position held by the appellant's supervisor.
- Telephone interviews with the appellant on May 6, 1997, and with his supervisor [REDACTED] Supervisory Civil Engineer. We also spoke with his former supervisor [REDACTED] on May 7, 1997.

## REFERENCES

- Engineering Technician Series, GS-802, TS-80, dated June 1969
- Criteria for Classification of Positions as Professional Engineering, GS-800, TS-10, dated March 1957
- The Classifier's Handbook, TS 107, dated August 1991

## GENERAL ISSUES

The appellant believes his position is comparable in difficulty to a professional engineering position performing similar duties and that GS-12 is the proper grade for his position. The

appellant submitted a PD for a Civil Engineer, GS- 810-12 performing similar assignments to confirm his statement.

We reviewed the GS-810-12 PD, which is similar in wording compared to [REDACTED] PD of record. However, there are inherent differences between assignments performed by [REDACTED] and those performed by the civil engineer. The civil engineer position warrants the GS-12 classification because that position is classified to a professional series requiring a "positive education requirement" that is common in all professional occupational series.

Professional work involves creativity, analysis, evaluation, and interpretation. It involves applying basic or natural law, principles, or theory; evaluating the research of others; and assessing the need for and validity of proposed changes and improvements in procedures and methods. Professional responsibility involves the ability to reason from existing knowledge to unexplored areas; to adapt methods to circumstances that deviate from the standards; and to stay abreast of and evaluate technical subjects, analyses, and proposals in professional literature.

Closely allied to professional work is work performed by nonprofessional support personnel. Nonprofessional duties and responsibilities, especially at the higher levels, may appear very similar to those of professional employees in related kinds of work. Technical work, however, is normally planned and managed by professional employees. The technician carries out and implements plans for projects based on extensive experience and supplemental on-the-job training rather than on formal academic education in the discipline itself. Technical or nonprofessional work is performed typically in a narrow or highly specialized area of the overall occupation and requires a high degree of practical knowledge and skill. The experienced technician often works with considerable independence. This independence, however, does not alter the nature and character of the work, which is to support a professional discipline.

In engineering organizations concerned with practical engineering problems in conventional design and construction projects, almost all of the detailed engineering work performed by technicians requires limited reference to basic scientific considerations because most of the engineering problems have been repeatedly encountered by engineers. The methods of attack on the best solutions have been established and formulas and guides have been developed and published in textbooks and handbooks. Although calculus and scientific principles may have been applied to derive the formulas, the application of the formulas to the practical problems encountered is typical of technician positions.

Nevertheless, the classification appeals process dictates that comparison of current duties and responsibilities to appropriate classification standards and guides is the exclusive method for classifying positions. Thus, the civil engineer position description has no bearing on this decision.

## POSITION INFORMATION

The appellant is assigned to the Bureau of Indian Affairs, Billings Area Office, Division of Support Services, Branch of Engineering, Design Section. This organization provides engineering technical assistance, program development, and specification compliance for road and bridge construction and maintenance projects. The organization has responsibility to prepare plans, specifications, and estimates to advance work on road construction projects to meet tribal priorities. The organization manages force account construction programs and ensures compliance with applicable specifications and regulations.

The primary purpose of this position to perform design and layouts of plans and specifications for road and bridge construction projects that meet Federal requirements for roads located on Indian Reservations within the Billings Area. The appellant provides technical advice regarding highway and street design which involves for example, surveying, right-of-way, soil mechanics, signing, crushed aggregate, and snow fencing. He uses computer aided systems to develop highway designs, including horizontal and vertical alignments, slopes, grades, hydrology and hydraulic structures, and profile sheets for highway plans for right-of-way maps estimates. This position requires a practical knowledge of engineering methods and techniques, computer aided design systems, survey, design, specifications preparation, construction practices and techniques, aerial survey procedures, and materials needed to complete projects. The position does not require training equivalent in type and scope to that represented by the completion of a professional curriculum leading to a bachelor's degree in engineering.

## SERIES AND TITLE DETERMINATION

Since the primary purpose of this position is to apply a practical knowledge of the methods and techniques of engineering to perform duties planning and designing the construction of urban road and bridge projects it is correctly placed in the Engineering Technician Series, GS-802 and titled "Civil Engineering Technician." This series includes positions that require a practical knowledge of the methods and techniques of engineering or architecture; and the construction, application, properties, operation and limitations of engineering systems, processes, structures, machinery, devices, and materials. Technician positions do not require professional knowledges and abilities for full performance and therefore, do not require training equivalent to that represented by the completion of a professional curriculum leading to a bachelor's degree in engineering or architecture.

## GRADE LEVEL DETERMINATION

The Engineering Technician Series, GS-802 is written in narrative format in terms of two evaluation factors: **Nature of Assignment** and **Level of Responsibility**.

**Nature of Assignment** covers the scope and difficulty of the project and the skills and knowledges required to complete the assignment. For example, at lower grade levels, selection

and application of techniques and methods are significant; at intermediate levels, minor modifications, interpretation and analysis enter the picture; and at higher grade levels, project complexity may be comparable to that of professional engineering assignments and may require considerable knowledge of specialized engineering practice.

At the GS-9 Level, civil engineering technician work involves performing work related to an area of specialization that requires the application of a considerable number of basic but established methods, procedures, and techniques. Assignments involve independent responsibility for planning and conduct of a block of work which is a complete conventional project of relatively limited scope, or a portion of a larger and more diverse project. Assignments require study, analysis and consideration of several possible courses of action, techniques, general layouts, or designs, and selection of the most appropriate. They require consideration of numerous precedent and some adaptation of previous plans or techniques. Assignments require coordination of several parts, each requiring independent analysis and solution. In addition, assignments require a good understanding of the effect that recommendations made or other results of the assignment may have on a process or system and its end-use application. An illustrative assignment is: a technician who prepares plans, specifications, and estimates for roads and airport runways including surfacing and pavements of various kinds not subject to extreme conditions of climate or loading. The work requires application of established engineering practices and consideration of meteorological, hydrological, topographic, and climatic features of area, soil foundations, and use of facility in designing the concrete slab, foundation, and drainage structures. The appellant's position exceeds the work at the GS-9 level.

At the GS-11 level, engineering technicians perform work of broad scope and complexity that requires application of demonstrated ability to interpret, select, adapt, and apply many guidelines, precedents, and engineering principles and practices which relate to the area of specialization; and some knowledge of related scientific and engineering fields. GS-11 technicians plan and accomplish complete projects or studies of conventional nature requiring independent adaptation of a general fund of background data and information and interpretation and use of precedents. They are typically confronted with a variety of complex problems in which considerable judgment is needed to make sound engineering compromises and decisions. Frequent coordinative action with personnel in the field is needed.

Initiative, resourcefulness, and sound judgment are needed in planning and coordinating assignments and in selecting which of several sound alternatives to use in arriving at engineering compromises. Ingenuity and creative thinking is needed in devising new ways of accomplishing objectives, and in adapting current techniques to new issues. An illustrative assignment is: a technician who prepares design and specifications for various utility systems. Assignments characteristically involve utility systems for facilities where the complexity or nonconventional nature of the buildings and facilities entail design problems requiring considerable adaptation of precedents or design of features for which precedents are not directly applicable. Performs technical review of contractor-prepared designs and specifications for such systems. The work performed by the appellant matches work at this level.

The appellant performs a variety of tasks related to the design and layout of plans and specifications for road and bridge construction projects. He uses a practical knowledge of engineering methods and techniques, survey, design, and specification and construction information. The appellant provides technical advice on engineering problems concerning highway and street design which involves for example, surveying, right-of-way, soil mechanics, signing, crushed aggregate, and snow fencing. He uses computer aided systems to develop highway designs, including horizontal and vertical alignments, slopes, grades, hydrology and hydraulic structures, and plan and profile sheets for highway plans for right-of-way maps estimates. The appellant prepares specifications for material to be used on construction projects and interprets specification provided by others. This position requires a practical knowledge of engineering methods and techniques, computer aided design systems, survey, design, specifications preparation, construction practices and techniques, aerial survey procedures, and materials needed to complete projects. The work requires a practical knowledge of guidelines and precedent case action relating to a particular program area equal to that acquired through work experience.

**Level of Responsibility** includes consideration of the nature and purpose of person-to-person work relationships, and supervision received in terms of intensity of review of work as well as guidance received during the course of the work cycle. The personal contacts that the technician makes with others, the extent to which his technical judgments are relied upon without detailed review are important considerations in determining level of responsibility. At lower grade levels, the availability of specific and detailed established procedures and the degree of supervision received are of primary significance. At the higher grade level, the freedom to plan and execute assignments and independently coordinate the project with other individuals and groups is more frequently to be considered.

At the GS-9 Level, the supervisor defines the overall requirements, provides information on any related work being performed, and furnishes general instructions as to the scope of objectives, time limitations, priorities, and similar aspects. The supervisor is available for consultation and advice where significant deviations from standard engineering practices must be made and gives more detailed instructions when distinctly new criteria or new techniques are involved. The supervisor observes the work for progress and for coordination with work performed by other employees or other sections and for adherence to completion and cost schedules. Standard methods used are not reviewed but review is made for adequacy and for conformance with established policies, precedents, and sound engineering concepts and usage.

Personal contacts are to resolve mutual problems and coordinate work with personnel in related activities. Some contacts are made with agencies or entities for whom work is done, and with contractors and architect-engineering firms. Contacts are to clear up doubtful points, advise as to discrepancies in meeting contract terms, to consider recommendations for acceptable substitutes, and to promote adherence to agency standards and concepts of good engineering. The level of responsibility of the appellant's position exceeds work done at the GS-9 level.

At the GS-11 Level, technicians have considerable freedom to plan work and carrying out assignments. The supervisor makes assignments in terms of the major objectives, providing background information and advice on special and unusual problems which are anticipated or on matters requiring coordination with other groups. Unusual or controversial problems, or policy questions arising in the course of a project, may be discussed with supervisor but technical supervisory assistance is infrequently sought or required. The supervisor is usually informally advised regarding progress but there is little review during progress of typical assignments. Completed work in the form of recommendations, plans, designs, reports, or correspondence is reviewed for general adequacy, conformity to purpose of the assignment, and sound engineering judgment. GS-11 technicians make contacts with contractors, and other personnel regarding complex engineering and administrative problems. This position meets the full intent for level of responsibility as described at the GS-11 level.

The appellant works independently in planning and carrying out the work. The supervisor makes assignments in terms of overall project objectives and consults with the employee on development of schedules and completion of projects. The employee coordinates with others and resolves most problems that occur. The supervisor is available for consultation on major problems. Completed work is reviewed for effectiveness in meeting requirements and to ensure conformance with policies and regulations. The employee has contacts with employees within the agency, employees in other government agencies, tribal officials and representatives, consultants, and the public. These contacts are to coordinate projects, exchange information, review plans and specifications and to furnish technical advice.

### **SUMMARY**

In summary, we have evaluated both factors, the Nature of Assignment and Level of Responsibility at the GS-11 level. Therefore, the appealed position is properly classified at the GS-11 level.

### **DECISION**

The appealed position is properly classified as Civil Engineering Technician, GS-802-11.