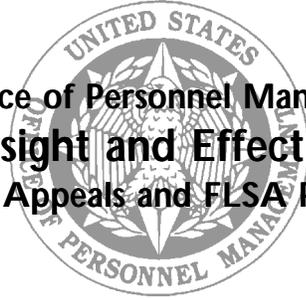


U.S. Office of Personnel Management  
Office of Merit Systems Oversight and Effectiveness  
Classification Appeals and FLSA Programs



Philadelphia Oversight Division  
600 Arch Street, Room 3400  
Philadelphia, PA 19106-1596

**Classification Appeal Decision**  
**Under Section 5112 of Title 5, United States Code**

**Appellant:** [appellant's name]

**Agency classification:** Civil Engineer  
GS-810-11

**Organization:** Division of Maintenance  
[name] Historical Park  
National Park Service  
U.S. Department of the Interior  
[location]

**OPM decision:** Civil Engineer  
GS-810-11

**OPM decision number:** C-0810-11-05

\_\_\_\_\_  
Robert D. Hendler  
Classification Appeals Officer

\_\_\_\_\_  
/s/ 11/17/99  
Date

As provided in section 511.612 of title 5, Code of Federal Regulations (CFR), this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the government. The agency is responsible for reviewing its classification decisions for identical, similar, or related positions to ensure consistency with this decision. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in the Introduction to the Position Classification Standards (PCS's), appendix 4, section G (address provided in appendix 4, section H).

**Decision sent to:**

[appellant's name]  
[appellant's address]

Assistant Regional Director,  
Human Resources  
[name] Region  
National Park Service  
U.S. Department of the Interior  
[address]  
[location]

Ms. Carolyn Cohen  
Director of Personnel  
U.S. Department of Interior  
Mail Stop 5221  
1849 C Street, NW  
Washington, DC 20240

## Introduction

On July 22, 1999, the Philadelphia Oversight Division of the U.S. Office of Personnel Management (OPM) received a classification appeal from [appellant's name]. Her position, Position Description (PD) #4860-078 is currently classified as Civil Engineer, GS-810-11. However, she believes the classification should be General Engineer, GS-801-12. She works in the Division of Maintenance, [name] National Historical Park [acronym], National Park Service (NPS), U.S. Department of the Interior, [location]. We have accepted and decided her appeal under section 5112 of title 5, United States Code (U.S.C.).

## General issues

The appellant believes that her position should be classified to the General Engineer, GS-801 series based on guidance in the Classifier's Handbook on classifying mixed series positions. She believes that her work compares favorably with the GS-12 grade level as described in the General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions, GS-800 and the Civil Engineering Series, GS-810 PCS. She states that "classification of my position as a GS-801-12 General Engineer would not be precedent setting because the National Park Service has several engineers in the General Series at the 12 grade level." Her rationale refers at length to the PD of record, statements from her supervisor justifying the creation of her position, and her performance plan. During the on-site audit, the appellant took exception to the inclusion of internal NPS position management documents dealing with her position. The appellant stressed the quality of her performance, as did her supervisor and others knowledgeable of her work that we interviewed.

These submissions have raised procedural issues warranting clarification. By law, we must classify positions solely by comparing their current duties and responsibilities to OPM standards and guidelines (5 U.S.C. 5106, 5107, and 5112). Therefore, other methods or factors of evaluation are not authorized for use in determining the classification of a position, e.g., comparisons to other positions that may or may not be classified correctly, such as those cited by the appellant in her appeal rationale. The quality of the appellant's work is not germane to the classification appeal process. It is a matter covered by the performance management and awards programs.

A PD is the official record of the major duties and responsibilities assigned to a position by a responsible management official; i.e., a person with authority to assign work to a position. A **position** is the duties and responsibilities which make up the work performed by an employee. Title 5, U.S.C. 5106 prescribes the duties, responsibilities and qualifications required by that work as the basis for determining the classification of a position. The Introduction to the Position Classification Standards (Introduction) further provides that "As a rule, a position is classified on the basis of the duties actually performed." Additionally, 5 CFR 511.607(a)(1), in discussing PD accuracy issues, provides that OPM will decide classification appeals on the basis of the actual duties and responsibilities assigned by management **and** performed by the employee. The point

here is that it is a real operating position that is classified, and not simply the PD or available documents. Therefore, this decision must be based on the actual work assigned to and performed by the appellant, not merely a review of her PD of record.

Established OPM guidance requires that a representative work cycle be determined for establishing what work is characteristic of a position for classification evaluation. Many lower graded positions handle a full work cycle within a period of weeks or months, e.g., processing travel claims or payroll. Many higher graded positions operate in an annual work cycle, e.g., annual budget cycle development, including updating previous year and out-year budget plans. OPM has found that sometimes, e.g., long-term criminal investigations, work cycles beyond one year are appropriate. The point here is that the cycle of projects provided in the appeal administrative report covering October 1992 through July 1998 cannot be considered the appealed position's current duties and responsibilities. While the earlier work projects provide useful historical background in the adjudication of this case, we must focus on the more recent work performed by the appellant constituting the current work cycle within the meaning of the position classification process; i.e., within the past 12 to 18 months. Therefore, our analysis will focus on the current work projects performed by the appellant, updated by her at our request through August 1999. We will reference earlier projects, as necessary, for illustrative purposes.

The classification appeal process is a *de novo* review that includes a determination as to the duties and responsibilities assigned to the appellant's position and performed by the appellant, and constitutes the proper application of PCS's to those duties and responsibilities. Therefore, the appellant's perceptions regarding the agency's submission of documents and information that she believes are not germane to the classification of her position are moot. As part of its review, OPM will determine what information, provided by the appellant and the agency, is germane to the classification of the appealed position.

The appellant and her supervisor agree the appellant's PD of record is accurate. Our on-site audit and interview with her immediate supervisor, [supervisor's name], Facility Manager, on October 1, 1999, confirmed that the PD contains the major duties and responsibilities assigned by management and performed by the appellant and is hereby incorporated by reference into this decision. Based on the following analysis, however, we find that it overstates the difficulty and complexity of the work assigned to and performed by the appellant.

### **Position information**

The PD of record states that the position occupant functions as the [acronym] expert on all facility and maintenance projects, excluding historic architecture and, as a professional engineer, assumes the risks and responsibilities for all technical aspects of planning, design and construction of "diverse complex projects." The PD states that the work covers a full range of engineering disciplines including "civil, structural, environmental, mechanical, electrical, and fire protection engineering, design architecture, and landscape architecture." The appellant provides professional technical input to her supervisor on VFNHP maintenance priorities and goals. The VFNHP

program puts special emphasis on the preservation of cultural and natural resources, and energy conservation.

She is the dam safety coordinator, sign coordinator and chair of the [acronym] sign committee, and provides for and oversees inspection and repair of the Visitor Center's hydraulic piston elevator. The appellant serves as the Contracting Officer's Technical Representative on construction, service contracts, and informal purchases. She evaluates value engineering projects. The appellant presents the technical aspects of projects at preconstruction conferences; is the on-site authority for the acceptance or rejection of products, shop drawings and submittals; evaluates requests for contract modifications; inspects work in progress; interprets contract documents to resolve contractor questions; prepares daily inspection reports; conducts final inspections; and verifies work prior to payment. She serves on the team with the Contracting Officer negotiating technical level of effort construction contracts and modifications.

The appellant is responsible for independently deciding on how to proceed with projects, from planning, including funding acquisition, through construction. This includes estimating costs and writing justifications for funding. She plans and design projects in phases in response to funding constraints and to minimize the impact on park operations. The appellant supervises volunteer workers when they are used to assist with surveying and maintenance projects.

The PD states that she designs and prepares all drawings, detailed technical specifications, and required documents for all construction projects to be performed by park maintenance staff and contractors. She is responsible for developing scope of work, funding documents, specifications, synopses for Commerce Business Daily, and other required historical compliance documentation as needed for projects. This is correct in terms of projects under the control of [acronym]. However, our fact-finding revealed that major construction projects typically are under NPS regional office control. For example, major roads and related work proposals typically are managed under agreement by the Federal Highway Administration's Sterling, VA Federal Lands Office. While the appellant provided input on the [acronym] perspective, major program decisions are controlled at higher organizational levels within the NPS.

The PD states that the appellant is responsible for initiating, developing, and maintaining contacts with all Federal, State, and local regulatory agencies and utility companies with vested interests in [acronym] to determine permitting and regulatory requirements and to be aware of their activities that impact the park. She is expected to review and comment on all proposals and technical documentation, and represent [acronym]'s interests on actions proposed and/or performed by these entities.

For example, the appellant presents the [acronym] point of view on New [name] Bridge project, described by her as the most "controversial project in the park's history." NPS [name] Region staff retains authority over projects of this scope. The Federal Highway Administration will be the design agency for the crossing and parking lots. The appellant will be a team member, raising [acronym] concerns. Similarly, the appellant is expected to provide input on potential Federal

Lands Highway projects, including priorities and timing from the [acronym] perspective. We were informed that road safety issues and projects offered by the appellant as representative of her work are not completely under her control. Traffic safety engineers from the NPS Denver Service Center and Federal Highways surveyed [acronym] road safety issues approximately two to two-and-one half years ago, confirming the problems discussed by the appellant in her appeal rationale and during our on-site audit.

The PD states that the appellant works under the general administrative supervision of the Facility Manager. Assignments are made in broad general terms of desired outcome, division priorities, project funding, and deadlines. The appellant is responsible for independent action, including the setting of priorities. Completed work is reviewed for the achievement of objectives and compliance with policies and regulations rather than technical adequacy. While the appellant's professional engineering judgments may not be reviewed for technical adequacy, the position receives a definable degree of technical oversight. The Facility Manager, GS-1640-13 PD (PD #4806-0006), certified as current and accurate by competent management authority, vests that position with administrative and technical control over the appealed position, e.g., "reviews technical specifications for construction and maintenance contracts."

### **Series, title, and guide determination**

As a "jack of all trades," the appellant states that she has "performed work in all aspects of facility management, this includes civil, electrical, mechanical, and fire protection engineering, as well as architecture and landscape architecture. . . . No one discipline predominates." She states that she is "expected to perform work in all disciplines at the same level of skill and ability." In an effort to substantiate her rationale that allocation to the GS-801 series is appropriate, she says that "Someone with a paramount knowledge only in the field of civil engineering would not be prepared to address the diversity of problems handled by my position."

The GS-801 series definition provides for coverage of engineering work not specifically classifiable in any other engineering series, or positions involving professional work in several; i.e., three or more, branches of engineering, no one of which is paramount. This definition must be read in concert with classification principles and practices contained in the Introduction and The Classifiers Handbook. Engineering positions that perform work in a single engineering series are classifiable to that series since that work is the primary and paramount work of the position. A paramount requirement refers to the essential, prerequisite knowledge, skills, and abilities needed to perform the primary duty or responsibility for which the position has been established.

Positions containing work belonging to more than one series are classified to the occupation that represents the primary work of the position, the highest level of work performed, and the paramount qualifications required. Typically the grade controlling duties will control the series. For engineering and/or scientific positions, work at the same grade level in two engineering and/or scientific series is considered interdisciplinary. That is, persons with education and experience

in either of two professions may be considered equally well qualified to do the work. The final classification of the position is determined by the qualifications of the person selected to fill it. Therefore, work classifiable at the same grade level in two engineering disciplines under these circumstances would be classified to one of the two occupations based on the person selected to fill the position. Only if work in three or more disciplines is performed at the same grade level would allocation to the GS-801 series be appropriate.

Other published engineering and related PCS's discuss the similarities between their series and the Civil Engineering, GS-810 series. For example, the Architect, GS-808 PCS states:

architect positions and certain types of civil engineering positions may have virtually inseparable duties and inherent knowledge, skills, and abilities. The objectives, functions, activities, and subject matter of the positions may be quite similar if not identical. . . . For example, positions which involve the development and writing of specifications, or the estimation of materials and costs for construction, extension, alteration, remodeling, repair and maintenance of buildings and similar or related structures may warrant classification either to the Architecture Series, GS-808, or the Civil Engineering Series, GS-810. When knowledge of engineering principles is essential for successful performance such positions are classified to the Civil Engineering Series, GS-810. When architectural principles are essential for performance such positions are classified to the Architecture Series, GS-808.

As discussed in the grade level analysis below, the appellant's Civil Engineering, GS-810 work constitutes the primary and paramount work of the position. In the Federal classification system, structural engineering is not a separate discipline as offered by the appellant. It is included in the GS-810 series, which is very broad in its coverage. The appellant's other assignments are ancillary and integral to the position's primary and paramount functions; i.e., engineering support for the [acronym] buildings, structures, and roads. Furthermore, full performance level engineering work in the Federal system assumes seasoned engineers possess substantial familiarity with other engineering and related disciplines. For example, civil engineers engaged in building and structural design must be familiar with and plan for the electrical, utility, and other systems to be contained in those structures. The classification system fully envisions that engineers whose positions are classified to a specific engineering series frequently perform work in other engineering series. Therefore, we find the appealed position is allocated properly as Civil Engineer, GS-810.

The GS-810 PCS provides for the evaluation of non-trainee positions by application of those part(s) that cover the type of work performed. While the appellant's position entails aspects of construction and facilities engineering management, these parts do not provide the most appropriate criteria with which to analyze the position. For example, construction covered under Part III is geared toward evaluating positions that are not involved in program development and management, budget justification and funding control. However, these functions are critical to

the appellant's overall program responsibilities. While the appellant performs aspects of facilities engineering management, they are for local projects for which she also has planning, design, and construction responsibility. The appellant provides local input on major projects over which the NPS Northeast Region exercises control agency responsibility and, in turn, relies upon the Federal Highway Administration to function as its primary construction agency.

We find that Part II, Planning and Development, provides the best criteria with which to analyze the grade level worth of the appellant's work. It is the position's overall program planning and development functions that constitute the paramount functions of the appealed position as discussed below. This is in concert with GS-810 PCS instructions that when a position performs work in more than one of the functional divisions, but one such function is clearly paramount, such a position should be evaluated against the criteria covering that function.

Both the agency and the appellant refer to the General Grade Evaluation-Guide for Nonsupervisory Professional Engineering Positions for grading purposes (Guide). Because the GS-810 PCS contains directly applicable criteria, the Guide may not be used as the primary grading tool as stipulated in the Guide. Furthermore, there are published PCS's for other engineering and related occupations, e.g., the Landscape Architecture, GS-807, and Environmental Engineering Series, GS-819 PCS's, with specific directly applicable criteria that must be applied for grade level analysis, as necessary, before the Guide may be referred to as a grading instrument.

The general nature of the Guide's grading criteria requires additional caution in application. The appellant states that she performs Type I, overlapping with Type II work because her work often involves solving novel and unusual problems. Type II work is predicated on solving novel and unusual problems, extending the boundaries of existing knowledge, or improving the state of the art, e.g., developing new and novel requirements, criteria, or standards to be used in performing Type I work. The appellant claims this overlap because most, if not all, of the seven complex features defined on pages 5 and 6 of the Guide, hereby incorporated by reference, are present in her projects.

We do not agree. The Guide assumes that the engineer must weigh alternatives that are available. However, several standard program requirements dictate the approach that the appellant is permitted to use in performing her work. First, projects may not interfere with visitor access. Therefore, any paving or other reconfiguration of parking areas must be phased (feature #5). Work on State and county roads that cross through and around [acronym] automatically requires coordination with other governmental authorities. Most coordination, however, concerns work performed by those other governmental entities, and not on Federal government work as discussed in feature #6. Preserving the integrity of the historic scene, archeological resources, and structures listed on the National Register of Historic Places preclude the use of certain standard methods (feature #1) and materials (feature #2). Modifying or altering structures for loads and stresses not anticipated when the facility was previously designed and related requirements (feature #3) do not cover determining storage and furniture placement based on the current load bearing

capabilities of a structure as suggested by the work examples provided by the appellant at our request.

The appellant claims that she performs Type III work because she: (1) wrote specifications for fiber optic cable installation that became the regional standard; (2) provided specifications and advice to the [name] Facility Manager on removing an underground oil storage tank and installing an exterior aboveground oil storage tank with a dyke; and (3) performed structural stability analyses at other NPS sites. Type III work, which typically begins at the GS-12 grade level, is based on providing expert engineering advice to engineers and/or other professionals, not Facility Managers as suggested by the appellant. For example, the appellant received Type III services from the Bell Atlantic engineer to whom she turned for advice on installing a fiber optic cable at [acronym]. Because of these limitations, we find it is neither necessary nor appropriate to apply this guide to the appellant's position.

We will address the appellant's other work in an abbreviated fashion. Because we are addressing the appellant's program management functions as an integral part of our application of the GS-810 PCS, we will not discuss them in our application of the other pertinent PCS's. To do so would be to double credit that program work. As a result, these functions do not exceed the GS-9 grade level for 25 percent or more of the work time of the position, and may not control the grade level of the position.

## **Grade determination**

### *Evaluation using GS-810 PCS*

The GS-810 PCS, Part II defines grade levels in terms of (1) the inherent complexity of the planning and design problems assigned, and (2) the level of judgment and authority exercised. The variety and depth of qualifications required for these positions are reflected in the discussions of the two elements. These criteria address work for which the position evaluated has primary responsibility. This is in keeping with the classification concept that any work performed may only be credited to a single position.

At the GS-11 grade level, the engineer is expected to be well-versed in the standard theory and practices in the field and to proceed without technical instruction or guidance in applying these to conventional projects or pieces of work. The employee receives assignments of conventional work with a general indication of results expected. In turn, the employee must identify the limits of the problems involved, the kinds of controlling data needed, and the criteria and techniques to be applied in accomplishing the assignment. Although the work is of a conventional nature, it often requires consideration of and selection from several alternative approaches or solutions to problems to arrive at the best treatment from a technical standpoint, and sometimes requires substantial adaptation of standardized guides and criteria. If there are critical or overriding problems of cost versus optimum technical solutions, determining the priority of operational needs to be accommodated, or responding to conflicting political or public interest pressures, the GS-11

engineer obtains guidance or decision from a supervisor or higher authority on selection of a course of action.

The engineer normally is responsible for coordinating an area or phase of work with engineers responsible for related specialized phases, to arrive at mutually satisfactory approaches and solutions to problems. The employee may be assisted by, and give technical guidance to, lower grade engineers and technicians who make investigations, collect data, perform detailed computations, do simple design analyses, and the like, in support of the work. However, when assigned work of an advanced nature, as illustrated at the GS-12 grade level in the PCS, the supervisor usually defines the limits and objectives of the assignment, and during the course of the work discusses and makes suggestions about the use of untried or unusual techniques and methods.

The most directly applicable illustration to the appealed position is preparing designs and specifications setting forth required capacity, size, location and materials and methods to be used in building varied roads, streets and allied structures in parks and recreational areas. The engineer must consider problems such as the need to preserve landscape features, to build facilities architecturally compatible with surroundings, to hold sight distances to a minimum consistent with safe design traffic speed so as not to despoil large areas, and to provide for heavy water runoff and at the same time locate drainage structures so as not to interfere with recreational uses.

Other related assignments include: (1) preparing designs for structures appurtenant to flood control channels (diversion structures, high retaining walls, closed box channels, simple bridges) that are characterized by a variety of loading conditions (combination of live and dead loads, uplift, surcharge, wind and seismic forces), walls intersected by large openings, soil conditions requiring special treatment of footings, pressures of high water velocity, and the like; (2) developing competitive bidding cost estimates for a variety of civil works projects of multiple-use nature, or military construction projects in different geographic locations, with different climatic conditions and land characteristics, including determining construction operations and methods involved and the time required to complete each phase or feature; various types and capacities of construction equipment required and cost of operation and maintenance; material types and quantities; and the cost of overhead, insurance, tax, social security, and other project aspects; and (3) preparing the preliminary, or planning, design and estimate for single-purpose buildings, e.g., a pumping plant, considering established information and data concerning topography, geology of the foundation, hydrology of the water source area, profile of the discharge line, and requirement as capacity of power production, fish protection measures, and the like, covering such items as the excavation required to reach a suitable soil or rock foundation, need for pilings, number and type of pumps and motors, choice of indoor or outdoor installation, type and size of discharge line, maximum water surface location and type of intake structure.

The appellant works within a mature roads and trail system. Typical of her assignments are dealing with repairs and maintenance issues, such as: (1) coordinating with the [state name] Department of Transportation [acronym] on [name] Road improvements; i.e., widening, tree

removal, new culvert installation, and repaving; (2) writing funding justifications for Federal Highway funding of roads projects, e.g., [name] Road; (3) coordinating with [acronym] on Valley Creek stream bank stabilization along Route 252; (4) coordinating with [name] County on [name] Road bridge repair; and (5) analyzing potential Conrail timber cribbing failure. She is not, as in the illustration, responsible for preparing designs and specifications setting forth required capacity, size, location and materials and methods to be used in building varied roads, streets and allied structures in [acronym]. However, the appellant must apply equivalent knowledge in assuring that these other governmental entities perform this work holding sight distances to a minimum consistent with safe design traffic speed so as not to despoil large areas, provide for heavy water runoff, and at the same time locate drainage structures so as not to interfere with visitor uses or hinder historical and archeological preservation requirements. Similar demands are reflected in the appellant's technical and program input on the New [name] Bridge project.

The appellant's structural engineering analyses, e.g., the staircase at [name] Lane #5, the porch columns for [name] Quarters, and determining the size of beam necessary for second story structural support in the Thomas House reflect the application of conventional methods and techniques typical of the GS-9 grade level. However, her ongoing responsibility for the full engineering program, placing these individual requests within the context of the overall [acronym] facility program and the exacting preservation program requirements, permit evaluation of the program, as a whole, to the GS-11 grade level.

In contrast, the GS-12 engineer must not only be well-versed in standard theory and practices, but must have gained further experience and know-how that provide the capability to identify and define the nature and scope of obscure problems, and to project assumptions and derive criteria from inconclusive or variable data. Assignments at this level typically include: (1) individual work on advanced planning or design problems, or (2) responsibility for coordinating or monitoring planning and design work that is largely conventional in nature, but which encompasses a number of components that obscure problems, and/or (3) responsibility for coordinating or monitoring planning and design work that is largely conventional in nature, but which encompasses a number of components or phases of project work.

Individual assignments deal with systems or facilities that: (1) encompass a fairly wide range of interrelated elements some of which are conflicting and difficult to reconcile or accommodate; (2) pose critical problems of performance requirements versus costs, under application of standard materials and criteria; or (3) require designs and plans which must deal with factors of an undetermined or unprecedented nature. The engineer must engage in intensive search and study of the approaches applied and results obtained in similar situations, the findings of research and study on related problems, manufacturer's and laboratory reports on materials and equipment, or other similar sources of information. From such study, and from first hand investigation and observations, the engineer extends or modifies existing criteria or techniques or develops new approaches to the solution of problems, and may develop prototypes, models or other testing criteria and methods to try out or validate design assumptions and approaches.

In coordinating or monitoring planning and design efforts, the engineer develops schedules for orderly and timely accomplishment of work, arranges for obtaining data and information from outside sources, and advises other engineers on solutions to technical problems. As at the GS-11 grade level, the engineer is expected to coordinate work efforts with those in other specialties to insure compatibility of approach and optimum results. In addition, the engineer contacts other government agencies (e.g., Federal, State, local) and representatives of business and private interests to negotiate differences, to obtain their cooperation in carrying out investigations, to get their clearances, and the like. The guidance given to an engineer largely is in the nature of an indication of results desired with limits placed by the supervisor on proposed actions that may require policy decisions.

Illustrative assignments include: (1) defining criteria for, and giving technical review to assisting engineers in the development of specifications for projects of highly specialized nature, such as facilities to house and support scientific experimentation and systems development operations; the operations utilize novel mechanical and electrical equipment systems, requiring highly "customized" housing, foundations and utilities; (2) developing new or modified formulas and methods to be used in investigating and analyzing older structures for load-carrying structural adequacy, determining how to detect and measure the altered condition of structural concrete and steel members that have been subjected to deterioration, fracture, fatigue, differential settlement cracking, vibration, and other conditions; and (3) conducting preliminary investigations and planning for public work projects, e.g., hydroelectric power development in a river basin, and prepares reports and recommendations that serve as basis for project approval and funding, including ascertaining the amount of power that can be produced by the facilities (dams and reservoirs) that can be constructed in the basin, in relation to the other uses which these facilities must serve (conservation, navigation, recreation, irrigation, and the like); developing preliminary designs and cost estimates based on such factors as the type of power plant and equipment, including capacity of generating units to be installed, layout of principal features including intakes, penstocks, powerhouse, tail race and switchyard; and estimating the total cost of the hydroelectric power production project, and translating into a schedule of annual charges to customers, based on cost of construction, interest, maintenance and operation, amortized over a specified period of years.

Other illustrative assignments are: (1) furnishing technical guidance and coordinating project work on irrigation engineering matters in an area characterized by considerable variation in physiography, climate, soil conditions and agricultural practices for construction and operation of irrigation facilities usually carried out cooperatively under several jurisdictions with such complicating situations as variations or conflicts in application and interpretation of water rights, lack of uniformity in organizing and financing operations, differences in methods and standards traditionally applied to different crops and areas, and the like; adapting and modifying facility designs and operational methods to accommodate a variety of needs and situations; consulting with and working out compromises with, and gaining the cooperation of, representatives of the several jurisdictions and user organizations involved; and (2) preparing designs for large and complex structures that must withstand a variety of forces, e.g., wind, water and seismic, that have unusual

stresses because of size and shape, and that call for use of materials or configuration for which experimental data are erratic and inconclusive.

The appellant's work falls substantially short of the GS-12 grade level illustrations in the PCS. [acronym] projects are substantially more limited in scale and complexity. For example, designing a new facility to wash vehicles and degrease parts falls substantially short of the design demands of integrating multiple building projects in a river basin, or dealing with the highly "customized" housing, foundations and utilities or the materials and configuration issues for the large and complex structures envisioned at the GS-12 grade level. While the [name] Monument repair is politically charged, the design options are limited and entail the use of well-established design techniques. The appellant's retrofitting of facilities for accessible access are projects of analogous limited scale and complexity. Using a particular kind of non-skid material for the Administration Building interior accessible ramp does not elevate the overall complexity of that project to the GS-12 grade level.

Similarly, determining the structural integrity of porch columns on an historic structure; determining the size of beam necessary to support high office loading; developing technical documentation refuting an incorrect water bill; and writing funding justifications for making a series of foot bridges structurally stable do not present technical demands equivalent to dealing with the altered condition of structural concrete and steel members that have been subjected to deterioration, fracture, fatigue, differential settlement cracking, vibration, and other conditions on structures of substantially greater complexity. The structural analyses conducted by the appellant use well established formulas and methods. They do not evidence the developing of new or modified formulas and methods found at the GS-12 grade level. The appellant does have contacts with other government agencies (e.g., Federal, State, local) and representatives of business and private interests to negotiate differences, to obtain their cooperation in carrying out investigations, to get their clearances, and the like typical of the GS-12 grade level. However, these contacts are to deal with projects that do not, as a whole, exceed the GS-11 grade level in scope and complexity. Therefore, we find the appellant's civil engineering functions, in conjunction with her overall engineering program management functions, are credited properly at the GS-11 grade level.

### *Summary*

The appellant's civil engineering functions, including work the appellant identified as typical of the Architect, GS-808 series, and program management work of the position are credited at the GS-11 grade level.

### *Evaluation using Landscape Architecture, GS-807 PCS*

This PCS uses two classification criteria: Difficulty of assignments and Responsibility of the position.

### *Difficulty of Assignments*

Typical of the range of assignments at the GS-11 grade level is designing a large recreation area including a network of sites for picnicking, camping, boating, swimming, and playing fields. The work includes locating the sites and necessary walks, roads, and parking areas so that all functions of the area will be properly integrated, requiring the preparation of long-range estimates for labor requirements and cost of construction. Also included is planning or reviewing construction and maintenance operations for projects comparable in difficulty and complexity, recommending acceptance or rejection of the work. Other typical work includes preparing or reviewing master plan drawings and narratives for large tracts composed of areas similar in scope and complexity to these previous projects. The work requires the ability to apply new design and construction methods; prepare technical reports; modify, adapt and make compromises with standard guidelines; and develop effective coordination with other organizations and individuals on projects of this scope and complexity.

Unlike the GS-11 grade level, the appellant is working within a developed park complex with existing parking areas, roads, and walks. While further development is ongoing, e.g., sign program coordination and improvement, the broad planning efforts found at the GS-11 grade level are already in place. Given the historic nature of the park, additional intensive landscape development of GS-11 grade level scope and complexity found at the GS-11 grade level is not present at [acronym]. In addition, projects that may entail the types of unusual design problems found at the GS-11 grade level, e.g., a road turnout with difficult aspects such as rugged terrain with heavy rock outcroppings and accessibility problems, are not under the full control of the appellant. As discussed previously, other governmental entities control final decisions on these projects, e.g., [name] Bridge. Therefore, the appellant's position may not be credited fully with performing work of full GS-11 grade level worth.

### *Responsibility of the position*

The appellant works with the relative freedom from technical supervision typical of the GS-11 grade level. As at that grade level, supervision is general and work is normally accepted as technically sound. Her contacts are for the purpose of promoting the acceptance and cooperation of others with agency policies and objectives, and making commitments on routine matters. This work deals with such people as contractors, concessionaires, State and municipal officials, and agency administrative and maintenance personnel. These responsibilities, however, are exercised for work that falls short of the GS-11 grade level, precluding the crediting of that grade level for this factor.

### *Summary*

Since the appellant's position fails to fully meet the GS-11 grade level with respect to both classification factors, it must be evaluated at the GS-9 grade level overall.

### *Environmental Engineering Series, GS-819 and Mechanical Engineering Series, GS-830*

The GS-819 and GS-830 PCS's are written in the factor evaluation system (FES) format. Positions graded under the FES format are compared to nine factors. Levels are assigned for each factor and the points associated with those levels are totaled and converted to a grade level by application of the Grade Conversion Table contained in the PCS. Under the FES, factor level descriptions mark the lower end; i.e., the floor, of the range for the indicated factor level. If a position fails in any significant aspect to meet a particular level in the PCS, the next lower level and its lower point value must be assigned unless the deficiency is balanced by an equally important aspect that meets a higher level.

As illustrated in the Benchmarks, Factor 1, Knowledge required by the position, is the most heavily weighted. The crediting of Level 1-7 is critical for evaluation at the GS-11 or GS-12 grade levels. The limited amount of time the appealed position devotes to work covered by this series; i.e., less than 25 percent of the work time, precludes this work from potentially controlling the grade of the position. Therefore, we will restrict our assessment of the appealed position to this first pivotal factor.

### *Factor 1, Knowledge required by the position*

Work at Level 1-7 (1,250 points) involves professional knowledge applicable to a wide range of duties in one or more specialty areas and the skill sufficient to: (1) modify standard practices and adapt equipment or techniques to solve a variety of engineering problems; (2) adapt precedents or make significant departures from previous approaches to similar projects to accommodate the specialized requirements for some projects; and (3) apply the standard practices of other engineering disciplines as they relate to a specialty area, or equivalent knowledge and skill. Illustrative of that work entailing that level of knowledge and skill is: (1) preparing designs and specifications of an environmental facility (e.g., domestic waste treatment or water systems and appurtenances such as sewage treatment plants, filter plants, lift stations, wells, storage and pressure tanks, pumps and chlorinators) of a large military installation; (2) preparing design features and plans for both repair and improvement projects and complete design of new environmental systems for a variety of specialties, e.g., domestic or industrial waste disposal systems, sanitary sewer systems, and water supply systems; and (3) conducting surveys and studies of the water supply for, the use of water on, and the disposal of waste at military installations, recommending the construction of new facilities or the modification of existing facilities based on consideration of economy and engineering feasibility.

The appellant's environmental engineering projects are substantially more limited in scope and complexity than those for which Level 1-7 knowledge and skill would be required and applied. The appellant adapted well-established radon mitigation venting techniques in historic structures without damaging or undermining their structural and historic integrity (e.g., isolating rock from the rest of the basement in the [name] house). Suspending stairs and a fuel tank to achieve a continuous concrete pour evidences effective use of established techniques to minimize impact and intrusion in existing structures. She applies well-established soil removal techniques when removing underground fuel tanks, and used standard above ground dyking techniques for above ground replacement tanks. The projects were for structures of limited size, and used systems typical of those for residences and small office buildings. Her environmental site protection for the fuel dispensing island, including arranging for soil testing, reflected adapting well-established techniques common to both the occupation and the industry. The limited nature of these projects is not equivalent to designing the scope and complexity of major environmental facilities typical of Level 1-7 described above.

Due to these limitations, the position may not be credited at Level 1-7 and, therefore, fails to meet the GS-11 grade level for the reasons described previously.

For similar reasons, we find the appellant's Mechanical Engineering, GS-830 work does not meet the GS-11 grade level. Level 1-7 involves professional knowledge and abilities applicable to a wide range of duties in a specialty area; the ability to modify standard practices and adapt equipment or techniques to solve a variety of engineering problems; the ability to adapt precedent or make significant departures from previous approaches to similar projects in order to provide for the specialized requirements of some projects; and the ability to apply the standard practices of related engineering disciplines as they relate to the specialty area. Illustrative of such work is preparing designs and specifications for utility systems for multi-story office buildings, hospitals, or structures with equivalent mechanical systems demands. Improving the maintenance of the Visitor's Center elevator, and assessing heating, ventilating, and air conditioning plant upgrades in the already designed and built Administration, Auditorium and Visitor's Center buildings cannot be construed as requiring the application of equivalent skills and knowledge. Therefore, we find the appellant's Mechanical Engineering, GS-830 work fails to meet the GS-11 grade level.

### *Summary*

In summary, we find the highest level of work performed by the appellant a sufficient portion of the work time to control the grading of the position is evaluated at the GS-11 grade level.

### **Decision**

The appellant's position is correctly classified as Civil Engineer, GS-810-11.