

## Compliance with ADA Guidelines

### **Case No. 10-7**

#### **Facts:**

Engineer A submitted plans on behalf of Developer to the State Department of Transportation for approval and for a permit to work in the state right-of-way for road improvements in conjunction with a nearby private land development project. The State DOT identified the road improvements as a condition of the permit. Under the State DOT conditions, the scope of work included upgrading, as necessary, accessibility for disabled individuals in all four corners of the intersection. One corner of the intersection had extreme grades in excess of the maximum slopes required for accessibility by disabled individuals according to the Americans With Disabilities Act (ADA).

Engineer A explained to the reviewer and Developer that there was no reasonable way to regrade the roadway or existing sidewalks to accommodate the maximum slope and offered an alternative which would relocate the intersection. The State DOT proposed a solution that, in Engineer A's opinion, was not in compliance with the ADA guidelines. The State DOT responded by stating "you accommodate disability accessibility this way or you don't get a permit."

Engineer A continued to maintain that locating the accessibility route as proposed by State DOT was inconsistent with the ADA, would increase the danger to disabled individuals, and could also expose Engineer A and his firm to professional liability. At the meeting in which Engineer A stated his views, a State DOT reviewer who happened to be physically disabled and not an engineer, verbally indicated that in his opinion, the location proposed by the State DOT was a better location than the alternate relocation proposed by Engineer A.

#### **Question:**

What are Engineer A's ethical obligations under the circumstances?

#### **References:**

- Section II.1. - NSPE Code of Ethics: *Engineers shall hold paramount the safety, health, and welfare of the public.*
- Section II.1.a. - NSPE Code of Ethics: *If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.*
- Section II.1.b. - NSPE Code of Ethics: *Engineers shall approve only those engineering documents that are in conformity with applicable standards.*

- Section II.1.f. - NSPE Code of Ethics: Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.*
- Section III.2.b. - NSPE Code of Ethics: Engineers shall not complete, sign, or seal plans and/or specifications that are not in conformity with applicable engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.*

**Discussion:**

Professional engineers are frequently involved in the design and construction of infrastructure that must adhere to certain code requirements under local, state, or federal law. As a general rule, these code requirements are generally straightforward and not ambiguous or subject to debate. However, from time to time, some of these requirements are unclear and are subject to some level of interpretation and discussion.

In the past, the NSPE Board of Ethical Review has reviewed situations involving the great importance of the integrity of code requirements and enforcement. For example, in BER Case No. 98-5, Engineer A served as a director of a building department in a major city. Engineer A had been concerned that as a result of a series of budget cutbacks and more rigid code enforcement requirements, the city had been unable to provide a sufficient number of qualified individuals to perform adequate and timely building inspections.

Each code official on Engineer A's staff was often required to make as many as 60 code inspections per day. Engineer A believed that there was no way even the most conscientious code official could make 60 adequate, much less thorough, inspections in one day, particularly under the newer, more rigid code requirements for the city. These new code requirements greatly enhanced and protected the public's health and safety. The code officials were caught between the responsibility to be thorough in their inspections and the city's desire to hold down costs and generate revenue from inspection fees. Engineer A was required to sign off on all final inspection reports.

Engineer A met with the chairman of the local city council to discuss his concerns. The chairman indicated that he was quite sympathetic to Engineer A's concerns and was willing to issue an order to permit the hiring of additional code officials for the building department. At the same time, the chairman noted that the city was seeking to encourage more businesses to relocate into the city in order to provide more jobs and a strengthened tax base. In this connection, the chairman sought Engineer A's concurrence on a city ordinance that would permit certain specified buildings under construction to be "grandfathered" under the older existing enforcement requirements and not the newer, more rigid requirements then in effect. Engineer A agreed to concur with the chairman's proposal, and the chairman issued the order to permit the hiring of

additional code officials for the building department, which Engineer A believed the city desperately needed.

In deciding that it was not ethical for Engineer A to agree to concur with the chairman's proposal under the facts and that it was not ethical for Engineer A to sign inadequate inspection reports, the Board noted that Engineer A was faced with a predicament with a variety of options and alternatives. First, Engineer A could have interpreted the situation presented as one involving "trade-offs," in which Engineer A must weigh one "public good" (a better building inspection process) against a competing or concurrent "public good" (a consistent code enforcement process).

In such a situation, Engineer A could arguably have rationalized a decision to permit the inconsistent application of a building code in order to accomplish the larger objective of obtaining the necessary resources to hire a sufficient number of code enforcement officials to provide proper protection to the public health and safety. On the other hand, Engineer A's decision to permit developers to avoid compliance with the newer, updated building code enforcement requirements might potentially cause a danger to the public health and safety if the a new facility causes harm to the public because of its failure to comply with the more updated code requirements. In addition, agreeing to the chairman's arrangement had the appearance of compromising the public health and safety for political gain.

While this case presented a difficult dilemma for Engineer A, on balance, the Board believed that the engineer must hold the public health and safety paramount and the engineer has a responsibility to insist, however strongly and vociferously, that public officials and decision-makers take corrective steps if necessary to see that this obligation is fulfilled. The NSPE Code of Ethics makes it clear that engineers have an obligation to advise their clients or employers when they believe a project will not be successful. In this case, Engineer A should make it plain and clear to the chairman that "righting a wrong with another wrong" does grave damage to the public health and safety. Engineer A should insist that the public will be seriously damaged in either case and that if the integrity of the building code enforcement process is undermined for short-term gain, the city, its citizens, and its businesses will be harmed in the long term.

While the Board believes the reasoning in BER Case No. 98-5 is sound and applicable, the issue in the present case is a difficult one to resolve. Engineers are frequently faced with situations, as in the present case, where their professional judgment differs from the judgment of others, who may or may not be engineers or who may or may not be competent to make engineering determinations. In addition, there are often competing political, social, and economic pressures that are present.

While an engineer's judgment is critical in connection with these matters, it is also important when one's engineering judgment is challenged to explore all appropriate options (e.g., a third way, a compromise) that might satisfy the engineering

requirements and also accommodate the interests of other parties. While this is clearly not always possible, keeping an open mind might provide some basis for a possible solution to provide some level of agreement for all parties consistent with the public health and safety. In this connection, it might also be advisable to seek the professional views and opinions of other knowledgeable individuals who are trusted by the engineer to determine whether there may be other alternative approaches or perspectives that have not been fully considered.

However, after exploring these alternatives, in the final analysis it is ultimately Engineer A's name and seal that will be applied to the drawings, plans, and specifications. Therefore, if Engineer A remains unconvinced that the technical approach being proposed by State DOT is consistent with the public health and safety and the ADA, it would be improper for Engineer A to incorporate that technical solution into his drawings, plans, and specifications.

Regardless of what approach Engineer A ultimately decides to take in this matter, it would be critical for Engineer A to **carefully document the decision-making process** so that anyone conducting an "after the fact" review of the circumstances will be able to determine whether Engineer A acted in a reasonable and prudent manner, taking all factors into consideration and being fully mindful of the public health and safety—particularly with regard to the disabled.

### **Conclusion:**

If Engineer A is not convinced that the technical approach being proposed adequately protects public health and safety and is in compliance with the ADA, it would be improper for Engineer A to incorporate the State DOT's technical solution into his drawings, plans, and specifications.

### **Board of Ethical Review:**

Mark H. Dubbin, P.E., NSPE  
Robert C. Gibson, P.E., F.NSPE  
Monte L. Phillips, Ph.D., P.E., F.NSPE  
Michael L. Shirley, P.E., F.NSPE  
Samuel G. Sudler III, P.E., NSPE  
Mumtaz A. Usman, Ph.D., P.E., F.NSPE  
*Curtis A. Beck, P.E., F.NSPE, Chair*

*NOTE: The NSPE Board of Ethical Review considers ethical cases involving either real or hypothetical matters submitted to it from NSPE members, other engineers, public officials, and members of the public. The BER reviews each case in the context of the NSPE Code and earlier BER opinions. The facts contained in each case do not necessarily represent all of the pertinent facts submitted to or reviewed by the BER.*

*Each opinion is intended as guidance to individual practicing engineers, students, and the public. In regard to the question of application of the NSPE Code to engineering organizations (e.g., corporations, partnerships, sole proprietorships, government agencies, and university engineering departments), the specific business form or type should not negate nor detract from the conformance of individuals to the NSPE Code. The NSPE Code deals with professional services, which must be performed by real persons. Real persons in turn establish and implement policies within business structures.*

*This opinion is for educational purposes only. It may be reprinted without further permission, provided that this statement is included before or after the text of the case and appropriate attribution is provided to the National Society of Professional Engineers' Board of Ethical Review.*

*To obtain additional NSPE opinions, visit [www.nspe.org](http://www.nspe.org) or call 800-417-0348.*