

# Report on a Case by the Board of Ethical Review

Case No. 59-3

Subject:

Preferential Treatment of Building Materials - Free Engineering - Conflict of Interest

## Facts:

A consulting engineer prepared the following specification for a project: "The design of members and connections for any portions of the structure not indicated on the drawings shall be completed by the contractor. Such design shall conform to the requirements of the current issue of the Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings of the American Institute of Steel Construction. These design shop drawings shall be submitted for approval, before any material is fabricated. Subsequent to approval, no changes or modifications shall be made by the contractor."

## **Questions:**

1. Does the specification indicate preferential treatment and restrictions of free com petition among suppliers of building materials?

2. Does the specification en courage or suggest the furnishing of free engineering services by the manufacturer of the building material?

3. Should the consulting engineer do detailing work for contractors (fabricators and material vendors) on the same project for which he is engaged as the consulting engineer?

4. Should the consulting engineer solicit such detailing work on the basis of being the engineering consultant? 5. Should the consulting engineer approve the materials and shop drawings of the fabricator for the project on which he is engaged as the consulting engineer?

## References:

Canons of Ethics, Section 15- "He will not accept compensation, financial or otherwise, from more than one interested party for the same service, or for service pertaining to the same work, without the consent of all interested parties."

Section 16-"He will not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with his clients or employer in connection with work for which he is responsible."



Section 18 -"(second sentence only) He will not allow an interest in any business to affect his decision regarding engineering work for which he is employed, or which he may be called upon to perform."

Rules of Professional Conduct, Rule 11-"He will not undertake or agree to perform any engineering service on a free basis."

Rule 14-"His plans or specifications will not be such as to limit free competition, except with his client's consent."

Rule 27-"He will not accept financial or other considerations, including free engineering designs, from material or equipment dealers for specifying their product."

## Discussion:

Questions 1 and 2-lt has long been the practice for the designer to omit details of design where these are covered by well-recognized standards and where the details vary widely among the several potential fabricators. If the designer furnishes details based on the shop practice of one fabricator, he automatically gives the latter an advantage. The specifications included by reference in the example are well known and are the recognized technical standard for steel construction. Their use places all fabricators on an equal basis and eliminates the unnecessary expense of preparing detailed drawings of portions of the structure which can be prepared more cheaply and with less confusion by the group responsible for the fabrication. The shop drawings should be subject to review and approval by the consulting engineer, and in such case his client and the public are protected adequately. The supplier in these cases maintains a staff of technicians for preparing shop drawings and the cost is included in the over-all price of furnishing the material. The preparation of shop drawings does not belong to the type of engineering service contemplated in Rule 11. The use of standard specifications which allow a great number of companies to bid on a project complies with the statement of Rule 14 and does not conflict with the letter or the spirit of Rule 27.

The question remains, however, as to the propriety of specifying one type of product over another. It is the duty of-the consulting engineer to decide that a particular project is best served by the choice of certain materials in certain places. The specification in the example eliminates the use of wood, reinforced concrete, or masonry, and it is in the best interests of all concerned that the engineer make the decision as to the basic material before designing the project. Rule 14 should not be interpreted to eliminate such decisions, but after the decision has been made, Rule 14 does prohibit the inclusion of special requirements which may be met by only one company out of many, unless such limitation is required by the special function of the structure or project. This right has been upheld by the Ohio Supreme Court in a case reported in the AMERICAN ENGINEER, July, 1953, page 26.

Questions 3 and 4-These questions are intimately related. If the first is improper, then the second must be of the same classification. There is clearly a conflict of interest



implied, if not actual, in this relationship, and, as such, it is definitely forbidden by Section 15 unless the engineer had previously received the approval of both parties. Under the latter circumstance, it would be theoretically proper but still undesirable. This type of operation suggests the possibility of slighting the work done on the original design, with no comparable reduction in fee; and the receipt of payment from the fabricator for the detailed design is directly forbidden under Section 16. It gives rise also to the possibility of a situation developing where the fixing of final responsibility for a mistake or for unsatisfactory results would be additionally difficult if the engineer had represented the fabricator on the unsatisfactory item. On the other hand, if his contract with his client terminates before construction starts, or if his services have been discontinued at the option of the owner, he would then be free to perform such work for a contractor or subcontractor who might desire his services.

Question 5-It is general practice for the engineer to approve materials and shop drawings prepared for use by the fabricator on a project which he has designed. The proper arrangement, however, is for this to be part of his duty to his client covered by a portion of the fee to be received from the client. Receipt of payment from the fabricator would place it in the same category as Questions 3 and 4, and would be improper for the same reasons.

### Conclusion:

To Questions 1 and 2-The use of standard specifications by reference and the provision for the preparation and submission of shop drawings by the contractor are well established customs in the construction industry and do not conflict with the Canons of Ethics and Rules of Professional Conduct.

To Questions 3 and 4-It is not in keeping with the Canons and Rules for an engineer to solicit or to execute work for a contractor, a manufacturer, or a supplier for items to be used in a project which he has designed, and on which he is still a representative of the owner.

To Question 5-It is proper for a consulting engineer to approve materials and shop drawings of items and materials to be incorporated in a project which he has designed so long as his payment for such services comes from his client, the owner of the project, or when such services are covered by his contract with his client.

Approved by the Board of Ethical Review at their meeting in Washington, D. C., December 10, 1959. L. R. DURKEE, P. E. PHIL T. ELLIOTT, P. E. PIERCE G. ELLIS, P. E. WYLIE W. GILLESPIE, P. E. MARVIN C. NICHOLS, P. E. EZRA K. NICHOLSON, P. E. MURRAY A. WILSON, P. E., Chairman