

Responsible Charge **By Daniel E. Murphy, PE**

Safeguarding the life, health, and property, and to promote the public welfare of the citizens of Minnesota is one of the most significant responsibilities the Board oversees (326.02). Minnesota Statutes 326.02 – 326.15 and Minnesota rules 1800 and 1805 describe the key responsibilities of those licensed or certified by this Board as architects, engineers, surveyors, landscape architects, geoscientists and interior designers.

The theme of responsible charge is an important concept that is found throughout the laws and rules that govern these professions. Practice as a licensed or certified professional is a privilege granted by the Board to those with the required academic achievement, qualifying experience, and "...who is of good moral character and repute (326.10)." Implied within the laws and rules is that professional practice shall always combine technical expertise with a high level of integrity and ethical behavior.

So what defines responsible charge? From the laws and rules we have the following:

1800.4200 - Certification and Signature on Plans

"...direct supervision...is construed to mean the person whose professional skill and judgment are embodied in the document signed and who assumes responsibility for the accuracy and adequacy thereof."

"...the professional responsible for the preparation of..."

"...that the work was performed according to recognized and acceptable engineering standards and practice."

1805.1600 - Responsible Charge and Direct Supervision

"A person in responsible charge...means the person that determines design policy, including technical aspects, advises with the client, superintends subordinates during the course of the work..."

"...in general, the person whose professional skill and judgment are embodied in the plans, designs and advice involved in the work."

"A person in direct supervision of work directs the work of other licensees, interns, draftspersons, technicians and clerical persons assigned to that work and is in responsible charge of the project comprising the work being supervised."

The complexities of modern design and delivery create challenges for the designer of record. Contemporary contract types, such as construction manager at risk, design build and integrated project delivery that schedule bidding documents to be issued by phase, delegated design requiring delayed submittals, and specialized component design, in

contrast to overall system performance, can confuse responsibilities. Sharing of design responsibilities is becoming more common. Thanks to the convenience of digital connectivity offered by the internet, design teams can be located in different offices, cities, and countries.

A practical example is represented by a recent peer review our firm was engaged to perform on a new parking facility at an east coast city. The multiple-level parking ramp was designed using precast concrete materials including double tees, ledger beams, walls, and columns. The foundations systems were designed to be supported by conventional spread footings using bearing pressures recommended by the project's geotechnical engineer.

Our scope of work included reviewing the technical approach, structural calculations, and constructability of the new facility. These contract documents noted that the responsibility of the engineer of record extended only to the tops of footings and piers that were designed to support the precast concrete members designed by others. The contract documents also specified that the precast concrete portion of the project was to be designed by the precast manufacturer's licensed professional engineer. The precast engineer defined their responsibilities on their documents as extending to components only and not to the entire system. This is a relatively common definition of professional responsibility in the United States.

The significant discovery in this review is that there was not a licensed professional engineer in responsible charge of the over-all structure. This inadvertent situation was quickly remedied by the key stakeholders of the project but is illustrative of the challenges faced by design professionals on complex projects using progressive forms of delivery.

Those who have the duty of responsible charge need to be vigilant throughout the process of design and construction to be certain there is adequate over-lap and coordination at the interface between scopes of work.

Professional leadership implied within the definition of responsible charge is essential for successful project outcomes and to be in compliance with the laws and rules of this Board.