



**Support of HB 2815, An Act relative to public safety in excavation  
Testimony of Jennifer Howe, PE  
President, American Council of Engineering Companies of MA  
Before the Joint Committee on Telecommunications, Utilities and Energy  
July 9, 2019**

**ACEC/MA  
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**Sponsors of HB 2815, An Act relative to public safety in excavation:  
Representative Antonio F. D. Cabral (D New Bedford) and co-sponsors**

Jennifer A. Howe, PE  
*President*

Chairman Barrett, Chairman Golden and Committee members, good morning. Thank you for giving me the opportunity to testify before you today.

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My name is Jennifer Howe. I am a Professional Engineer licensed in Massachusetts. I am a Principal, Vice President and Director of Site Design with the firm of SMMA in Cambridge. I currently serve as the President of the American Council of Engineering Companies of Massachusetts, the business association of engineering and land surveying firms in Massachusetts. I am a resident of Mansfield, Massachusetts.

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The land surveying and engineering community supports House Bill 2815, an Act relative to public safety in excavation. In addition to speaking for ACEC/MA, I have also been authorized to express the strong support of the Massachusetts Association of Land Surveyors and Civil Engineers (MALSCE), which is the professional society of licensed land surveyors in the Commonwealth.

Abbie R. Goodman  
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As Director of Site Design for our firm, I understand first-hand how important it is for Professional Land Surveyors or PLSs to be able to gather the most accurate information available on the location of underground utilities early in the design phase of a project. Including accurate utility location information in the planning phase of a building, road, bridge, or water or sewer project minimizes the hazards, road closures, cost, and work to produce the final project and crucially helps to protect public safety. HB2815 provides updates to the Dig Safe law [MGL c. 82, §§ 40, 40A-40E] that are endorsed by the Common Ground Alliance, a national organization committed to saving lives and preventing damage to underground infrastructure by promoting effective damage prevention practices.

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As you know, many public utility systems run underground through pipes and conduits. Identifying the location of these systems and abandoned pipes and conduits is a critically important step in the design and construction of infrastructure improvements. The current Dig Safe law in Massachusetts does not fully reflect the current recommendations of the Common Ground Alliance. The Dig Safe Law needs to be updated for public safety and to prevent inconvenience to the public during construction.

At the beginning of an infrastructure project, a Professional Land Surveyor uses all reasonable means to obtain information about underground utilities in the area of the planned excavation. This involves petitioning all utility providers and municipalities for their records. Unfortunately, some of these records are either old or schematic in and as a result cannot be shown on a survey plan as anything other than “approximate”.

Currently, the Dig Safe law does not require Dig Safe to assist a PLS or Professional Engineer (PE) with actual utility siting during the planning phase of the project, only once construction is about to begin. As a result, a PLS does not have all the necessary information about where they will be digging during a critical part of the process, which can ultimately cause problems during construction. Having the list of utilities in the project area along with the markings from Dig Safe are becoming more important than ever before, as Dig Safe and the utilities have maps that include existing, abandoned, and out-of-service facilities that are critical to a PLS in the design phase.

I have worked in engineering profession for more than 20 years. During my career, I have worked on more than 50 large Federal, State and Municipal projects. In every project, early utility location has been critical for project safety, time and budget.

I'd like to very briefly tell you about a project that is just one example of why we need House Bill 2815:

Our firm, SMMA, works on many public school projects with the Massachusetts School Building Authority in partnership with municipalities. During the planning and field survey phase of many school projects, our firm worked with land surveying firms which conduct existing conditions surveys early in the project. In many cases, during the land surveyor's preparation of the plans they have found the underground electrical plans couldn't be accurately plotted on their surveys and they placed them as well as they could. As was customary, dig safe marked out the utilities before excavation began on these projects, however, there was a significant difference in the location of the dig-safe electrical lines compared to plan location and this confliction of records created confusion for the excavation contractor and poses a hazard to the contractors and the public. With a myriad of other utilities in the area it was crucial to resolve these discrepancies as quickly as possible.

The electric line questions are eventually resolved on these projects, but not before requiring additional time, effort and resources. Had the professional land surveyors been able to request dig safe markings prior to their surveys, this situation, which occurs repeatedly on projects throughout the Commonwealth, would have been avoided.

#### **In Summary:**

- HB 2815 would add the term "Professional Land Surveyor" and its definition to allow for the Dig-Safe law to be applicable for surveyors to obtain utility location information at the preliminary design phase for a facility, which would greatly assist the design and construction of the facility, including safety for workers as well as the general public.
- HB 2815 will help land surveyors access Dig-Safe information earlier in a project, when the project is in preliminary design. Specific, accurate utility location information at the design phase of projects will promote more efficient design and construction of facilities and protect the general public, utility company assets and the lives of contractors. The proposed change to Section 40B makes this provision applicable to surveyors as well as excavators to ensure proper notice of the markings.
- HB 2815 will help to reduce the number of construction change orders for public and private sector projects, saving money during construction and improving construction site safety.

**I respectfully request this Committee to give a favorable report on HB 2815. For more information, contact Abbie Goodman, [agoodman@engineers.org](mailto:agoodman@engineers.org) or 617-305-4112.**