GUIDELINES FOR ENGINEERING SURVEYS

The definition of "engineering surveys" in S.C. Code Ann. § 40-22-20(12) is:

> [A]ll minor survey activities required to support the sound conception, planning, design, construction, maintenance, operation, and investigation of engineered projects but exclude the surveying of real property for the establishment of land boundaries, rights-of-way, and easements and the independent surveys or resurveys of general land masses.

The word "minor" is defined in the Merriam-Webster Dictionary as "inferior in importance, size or degree: comparatively unimportant." "Minor" therefore qualifies "survey activities" as comparatively unimportant. The Board acknowledges that survey work, in order of magnitude of time spent and fee charged, is always smaller when compared to engineering design work in any construction or design project. As a result, "minor" does not mean small in terms of the cost, size or scope of an overall engineering project but instead means incidental, secondary to, or supplemental. If "minor" is interpreted in terms of cost, size and scope relative to the overall project, then all survey work could be classified as "minor," which renders the exception meaningless.

Survey work involves collecting data and establishing the location of a feature, object or boundary with accuracy. A small mistake in accuracy can have catastrophic results, thereby impacting public health, safety and welfare. As a result, "minor survey activities" excludes the preparation of property surveys, topographical surveys for design, setting of control monuments, or post construction "as-built" surveys, all of which require the qualifications of a Professional Surveyor.

"Minor survey activities" as referenced in the definition of "engineering surveys" are those tasks that are intended to supplement, in a minimal way, an engineered project but not replace the work of a Professional Surveyor, such as getting measurements or obtaining greater detail or identifying a missed or new feature in a survey already performed by others.

Examples of minor survey activities include:

- measuring from a known elevation (i.e. top of a manhole or catch basin) to calculate a pipe invert elevation
- obtaining additional measurements to clarify design components that lie between known survey points
- measuring the average space between cross ties
- measuring the depth of ballast
- measuring specific heights related to critical clearances at bridges or other obstructions
- measuring wall thickness of a pipe or conduit
- getting more detailed elevations on a sidewalk adjacent to a new roadway
- identifying a missing pipe discovered on a topographical survey performed by others

Approved by the Board on March 12, 2024