When a new project begins here at Hixson that requires exterior work, one of the first things we look for from the client is an existing survey of the site. Typically, engineers need some combination of Boundary and Topographic survey to design a site, but in fact there are a variety of site surveys that can be performed and their usefulness to a site engineer varies. Some types of site surveys that can play a part in a project include:

- **ALTA (American Land Title Association) survey.** A legal survey which provides key features of a property, including major site improvements, and property boundaries. These surveys are typically conducted to enable properties to be purchased and title insurance to be issued.

- **Boundary survey.** This type of survey is used to determine legal boundaries of property lines, easements, etc.

- **Topographic surveys.** The survey site engineers need most. Topographic surveys provide information regarding, elevations/grades, onsite utilities, buildings, pavement, and other improvements. Sizes and elevations of onsite utilities are also identified.

- **Construction survey.** Construction surveys consist of staking out proposed improvements and are typically performed by the contractor or a hired surveyor. Post-construction as-built surveys are also usually performed to fully document the project.

A project’s survey needs vary depending on the stage of the project. Initial high-level, schematic design can usually take place with minimal survey information such as that provided by a boundary or ALTA survey. At this point, the engineer is primarily carving out space for the project’s required site features and ensuring everything will fit on the proposed site and within the required setbacks.

As the project progresses, the need for detailed site information increases. A detailed survey showing site topography, utility sizes and elevations, and locations of other improvements is needed for detailed design such as grading, storm sewer and detention pond design, and utility routing.

Depending on the size of your facility, a survey suitable for engineering work can take a surveyor up to a month to produce. For this reason (and due to the crucial information it provides), a site survey is often on the project’s critical path. Therefore, engaging a qualified surveyor early in the project is necessary for successful site design.

Finally, note that reviewing agencies may require a recent site survey produced by a licensed surveyor as part of the permitting package. Check with your site engineer to determine the appropriate scope of services and survey extents for your specific project needs. Doing so will help confirm that the appropriate survey information is available when needed, while avoiding unnecessary survey expenses.