

SUMMER 2021



Building Experience

Mythbusters: Three Truths About Geotechnical Reports

When preparing to build a new structure, it is routine to seek out a Geotechnical, or Geotech, report for the site on which the structure will reside. Geotech reports help site owners understand what can, and what cannot, be done at a particular location based on the data that is uncovered through the analysis. Geotech professionals will also make recommendations on what construction methods can be used, including the pros and cons for each.



Even though it is a common practice to work with a Geotech company on new construction, we have found that there are some misconceptions regarding their work. Below we look at three of the most common

misconceptions we have heard regarding Geotech reports (and the truths you need to know):

- 1. Geotech reports are just for Structural work.** In reality, Geotech reports can be used for Civil work as well. Geotech reports help provide clarity about multiple site factors, including soil, rock, water, and site capacity...all of which can vary widely. In addition, Geotechs typically can conduct other testing as well, including construction testing, foundations testing, steel connections testing, settlement reports, environmental assessments, and more.
- 2. We are putting an addition on a site that already had a Geotech report created when the original building was developed...do I really need another one?** The short answer is most likely, This answer is also true if you previously had site borings performed...you may need more. Two major reasons account for this need. First, soils and conditions can change over time. If the original report or borings were not conducted recently, it will be a good idea to take a fresh look at the existing conditions. A second reason why you may need a new report: There can be major differences between the soils in the existing site versus an area that is adjacent to the original

site. Consider this example: On one recent construction project, plans were made for the structure based on the existing Geotech report for the building that was adjacent to the new site. However, when excavation began, it was discovered that construction debris from the original project had been dumped on that new site. The construction plans had to be adjusted to account for the debris in the soils by designing a deep foundation solution.

- 3. It's going to be too hard to set up in the procurement system.** In fact, they may be already IN your system. Since Geotech reporting companies provide other capabilities in addition to Geotech reporting, you might be surprised to learn that one or more firms may already be in place in your company's procurement system.

In the end, it's best to take the cautious route when dealing with unknown soils and conditions, even if the project seems relatively straightforward.

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CONTACT US

Direct any comments or questions to:

Scott Mueller, P.E., S.E., Vice President

Director of Civil Engineering

smueller@hixson-inc.com

Phone: 513.241.1230

Fax: 513.241.1287

www.hixson-inc.com