

## Construction & Engineering

Whenever new objects have to be created, be it on or below the land and water, construction plays a role. The construction process often starts with surveying, either [marine surveying] or [land surveying] to determine the layout of the area involved. For the foundation extensive [geophysical surveying and seismics] as well as [geotechnical surveying] is performed.

All this information allows engineers and designers to engineer the object. The design is often developed in a 3D model through [cartography and GIS] and transferred to the work site digitally. During construction information on the construction is continuously compiled and compared to the model to track the progress and to accurately position the various elements but also the equipment. Where the finer details are concerned [metrology] plays an important role measing constructions to very small accuracies. Once constructed often a final survey is executed to determine the as-build status after which the maintenance with regular check surveys starts.

https://www.gim-international.com/content/article/construction-engineering