

Topographical Survey Information Sheet

Who needs a Topographical Survey? “Probably you!”

The short answer to this question is anyone undertaking a construction project should obtain a topographical survey.

Whether your project is for housing, a subdivision or a commercial project, it is likely your designer will require a topographical survey to determine the legal and physical parameters for a design.

Other situations that require topographical surveys are: monitoring programmes, evidence for court, as built information, or data to calculate construction quantities.

What is a Topographical Survey?

A topographical survey is a mathematical record of the physical site related to the property boundaries and showing the land form, contours, levels, buildings, structures, trees, services or other features.

“Anyone undertaking a construction project should obtain a topographical survey.”



Fox & Associates undertake topographical surveys using a variety of methods/systems which also include the latest technology: Self Compensating Levels, Precise Levels, Total Stations, Scanners, Reflectorless Technology and GPS.

We observe and digitally record, point by point, site detail, which is then downloaded onto our 3-D computer software.

The data is processed to produce a 3-D model, which establishes horizontal and vertical coordinate values for each point. Additional information is then added to clarify the data and to enable Fox & Associates to present the information in a legible and easy to read format.

The drawing is then forwarded (both digitally and in hardcopy) to you and your designer to be used as a basis for the drawings and the development.

The Fox & Associates Advantage

The first step in the topographical survey process is for you to discuss with Fox & Associates the purpose and requirements of the survey and to thus establish the project brief (scope).

Fox & Associates will obtain copies of the relevant certificate(s) of title, survey data and Council records for service details, benchmark information, etc before proceeding to the site.

The data obtained from the site survey is processed and additional information from third party sources is acquired and added to augment and complete the topographical plan.

A comprehensive plan saves your designer(s) time to obtain information (if they can) and reduces the possibility of errors due to incorrect data entry or recording errors.

Too many people take a short cut and try to save money by not obtaining a proper base plan, only to find that a significant construction aspect has been missed or that your project doesn't fit the site as well as it should! Errors or omissions can be costly requiring re-design and in some cases reconstruction work.

“The very real tangible benefit of using Fox & Associates is the completeness of detail and the seamless delivery of a sound data base which we can provide to your designer.”

In summary the very real tangible benefit of using Fox & Associates is the completeness of detail and the seamless delivery of a sound data base which we provide to your designer.

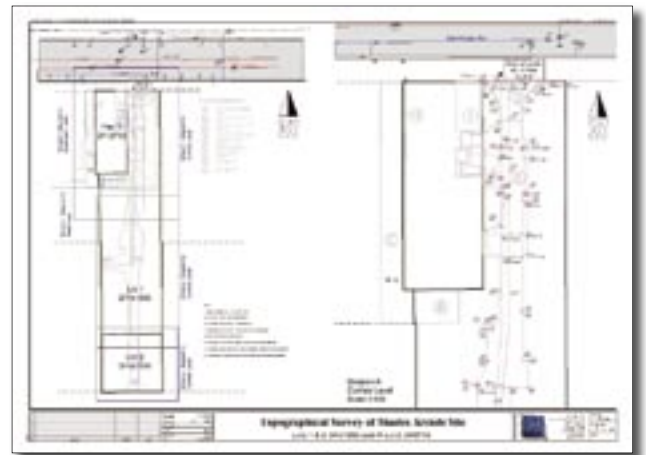
The following page shows some examples of topographical surveys and their uses.

Typical Residential Allotment

This image shows a typical topographical survey for a residential allotment whether it is for renovations, additions or a bare site for a new dwelling.

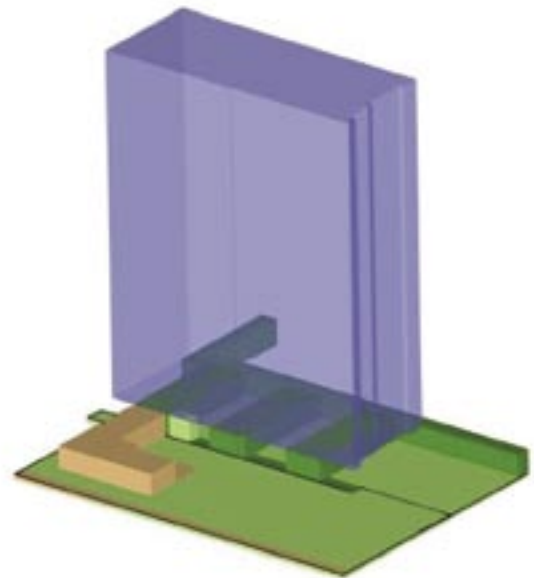
The details typically shown include (but are not limited to): boundaries and dimensions, easements, ground levels, contours, occupation (such as fences and buildings), drainage and services locations.

Plans produced at a suitable scale (typically 1:100) provide a good graphical representation of the site.



This type of work requires a good brief to avoid observing unnecessary detail but also to ensure precision is achieved when and where required.

It is often useful to present the data in a 3-D view thereby clarifying the spatial relationships where data is stratified (i.e. in multi level developments).



Monitoring – Airport Hanger

This project involved the topographical survey of a large concrete beam 17m above the floor as part of a monitoring exercise to measure the amount of deflection / sag that has occurred in the beam.

Generally, in monitoring work, a network of marks will be established around the site and regular measurements undertaken at specified intervals or events.



Commercial – Mall Redevelopment

This image shows a typical topographical survey for a redevelopment project. Such sites contain existing buildings and particular features will need to be located and 'fixed' to ensure that a proposed design fits within the available space.

A Word from our Client

“ We find the prompt service and quality of the information collected and presented to us by Fox & Associates is of the highest level and accuracy saving both time and money. ”

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