

Thoughts on "Accurate" Surveys

By a Practicing Surveyor

Reprinted from "The Nova Scotian Surveyor".

In the context of land surveying, when we speak of "accurate" surveys we must recognize and give due regard to the **two** accuracy components which collectively produce the desired end result.

The first accuracy component, in ascending order of importance, is the mathematical accuracy with which the technical aspects of the survey were executed. New instruments and better techniques have recently enabled us to make great strides in improving this accuracy component. In fact, from listening to some surveyors, one would be led to believe that these developments alone have finally enabled us to produce truly accurate surveys.

The second, and infinitely more important accuracy component, is the accuracy with which the boundaries are well and truly established or re-established on the ground. No matter how precisely the field work and calculations are done or how accurately the notes, plans, descriptions and reports reflect that field work, all is for naught if the boundaries are not where they legally should be.

This is not to suggest that the precision and accuracy of the technical exercise is of little importance, it is ultimately most essential to a sound land tenure system. I simply wish to emphasise the above order of priority of the two components.

I will forgo further discussion of the first component at this time as it is already a very topical and much debated issue; however, I feel we should all direct more of our attention to the second component and hence would like to briefly explore the question of accuracy as it relates to boundary determination.

As a general definition, accuracy may be defined as "nearness to the **truth**". Having established "truth" as the benchmark for accuracy, it obviously follows that to discuss, analyse and evaluate the accuracy of surveys it is a tremendous advantage if we know, or can ascertain, the aforesaid "truth".

With regard to the technical aspects of surveying, while we never know the absolute value of any dimensional quantity, we **can** approach accuracy evaluations in a reasonably scientific manner. Instruments and techniques, properly handled and executed will produce results with a known (within tolerable limits) degree of precision, repeatability, reliability and freedom from gross errors.

Thereby enabling us to deduce with reasonable confidence our degree of "nearness to the truth".

Unfortunately, when we attempt to analyse our other accuracy component the exercise becomes far less scientific and a great deal more difficult. The "truth" we are now seeking, to use as our benchmark, is obviously the exact location, configuration and extent of a parcel of land. And all too often, in our attempts to identify and isolate that "truth" we find ourselves confronted with not one, not two, but three potential "truths":

- (1) That which was **intended** to be surveyed - agreements, deeds, etc.;
- (2) That which was **actually** surveyed - physical evidence; and

- (3) That which was **claimed** to have been surveyed - descriptions, plans, reports, etc.

Item (3) almost unfailingly alleges that items (1), (2) and (3) are in perfect register and seduces our hapless conveyancer into enshrining all three, expressly or by inference, into title documents.

NEW LEGISLATION

Cont'd from page 35

ONTARIO REG. 69/77

This is a regulation amending Regulation 554 of Revised Regulation of Ontario, 1970 made under The Land Titles Act which extends the operation of this act to parts of the City of Nanticoke, the Town of Haldimand and the Town of Dunnville, all in The Regional Municipality of Haldimand-Norfolk and also to parts of the Township of Edwardsburg, in the County of Grenville.

J. E. Hietala, Chairman
Legislation Review Committee

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