

Survey Evidence (What Land Surveying is All About)

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We, as aspiring land surveyors, were once able to recite the "rules of evidence". However, how many of us really appreciated the importance of these rules?

How many land surveyors install these rules in their party chiefs and pupils? Does the current practising land surveyor understand the rules? Do they know why those rules were laid down in the first place?

I have come to believe that a simple answer to the above question is not possible. It should however, be a simple, unqualified, YES.

Far too many surveys are carried out without a thorough search for each required corner and furthermore, without a proper assessment of the results of such a search. This may seem like a pretty strong statement! A casting of doubt on the work of land surveyors as a whole. Maybe so, but how else do you explain the following?

* A plan shows "Fd.No.Mk." Later you find a perfectly good iron post at that corner, counter sunk approximately 60 cm.

* A plan shows "Fd.No.Mk. Re-est Pl.I." Later you find two iron posts (or even more) near this corner only a few centimetres apart.

* Several miles of section line were re-established. The plan shows "Fd.No.Mk. Re-est Pl.I." at all corners. There is a 10 m surplus/deficiency in the overall distance. Later you come to do a survey of a quarter section affected by this re-establishment and find that all the "re-established" posts fall some 10 metres away from the fences. You research the re-establishment and discover that there is a very wide and deep ravine across the first quarter in the re-established area. If the discrepancy in the distance had been left in that quarter, all the other posts would have fit the fences beautifully.

* Plan shows "Fd.I. NE X". Later you find the following:

- Four very good pits.
- A good mound.
- An iron post in the centre of the mound, sticking up some 15 cm (survey of township was 1907).
- A brief search reveals an old iron post on the north side of the mound, counter sunk only 10 cm.
- Measurements confirm the post in the centre of the mound was used to post a whole subdivision. These measurements also confirm that the post at the north edge of the mound fits adjacent posts, also on the north edge of the mound.
- Plan shows "Fd.No.Mk.Re-est P1.I." Later inspection reveals a reasonable good set of pits nearby (less than one metre away).
- Plan shows "Fd.No.Mk." at a number of road posts on a widening, also at the section and quarter section corners, however, one road post was found more or less in the middle of the stretch of missing posts. All road posts were re-established (by proportion between the ends). The middle found posts is shown as "off line".

I could go on forever, but by now you should be getting the picture.

Did we spend all our money on total stations, electronic pin finders, and computers (hand-held and office) and therefore do not have any left to buy a shovel?

In this day and age, most of the "mystery" has been taken out of surveying. Almost anyone, with less than an hour's "training" can measure a perfectly good distance or angle. Does that make him a surveyor? Perhaps, but it does not make him a land surveyor.

It has been said that once the old evidence has been searched for, found, restored, or as a last resort, re-established, then the land surveyor is done. The reset is simply engineering.

I wonder if things would improve if instead of the current notations put on plans to describe the status of old sur-

vey evidence we were to use the following:

* "Fd.I." to read - Found original iron survey post, down 30 cm, in its original and undisturbed location. Also found fairly good pits and a trace of the old mound. A very old E/W fence lines up with the centre of the mound. While the north/south fences line up on the post.

* "Fd.No.Mk." to read - Only after an extensive and thorough search, including measurements from adjacent found posts, much digging, very careful use of a pin locator, a good look for all fence lines, both N/S and E/W, I have to admit that I could not find anything near this corner that would be useful in determining its original location. I trust that no one else could do better.

* "Re-est" to read - Only after I have without doubt, determined that "Fd.No.Mk." was in fact valid, this corner was re-posted from adjacent evidence by measurement in such a manner as to place the new post as near as possible to where the original was. No attempt was made to place it where it "should be".

I am not suggesting that these copious remarks be placed on survey plans. I am however, suggesting that the land surveyor should be equating the notations on the plan with the real meaning behind the short form plan notation.

Surveying is a hi-tech pursuit these days. Land surveying however, has not changed over the decades of the "technical revolution". The object of the exercise is still the same as it always was; locate, re-locate, and verify the true corners of the subject parcel. Then and only then, can you begin to deal with the parcel, locate a new structure on the parcel or determine the location of an existing structure relative to the boundaries.

As a parting thought, I would like to add this - "Re-establish" - to place the corner where it was, not necessarily where it 'should be'."

