

## Field Notes

### "Tell you the Story"

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nce Upon a Time, ... in a land filled with knowledgeable litigators, electronically literate surveyors and rich people who hate their neighbours... (I know, but it's just a story)... our hero Mr. ABCD, OLS, finds himself on the witness stand defending his survey. Let's listen in for a moment...

*... "Yes sir, Mr. Prosecutor, the results of my survey are shown on the plan."*

*"Mr. ABCD, where are the field notes that accompany the plan?"*

*"Well, ... UM ... there are no field notes. The information was collected electronically and the information shown on the plan reflects the information found in the field."...*

Our hero Mr. ABCD is now on the brink. Which way will the case go? Will the prosecutor accept the information as presented, or will he question the data? Who had access to the data? Where was the data stored? When was it printed? Was it altered? Who was the CAD operator, and ...DUH DUH DUH DUUUUGH... does the blood soaked glove fit, and will he be forced to try it on?

Ok, Ok, that's another story, but I think you get the point. The information presented in the stunningly intense drama above, highlights the direction that questions might go.

The information and measurements in your field notes, including the observations made when "on the ground", and at the time of the survey, form the basis of your decisions regarding the boundaries of the property. This is the information that will be examined during the course of a trial. All of the information, whether it was collected and recorded using more

traditional methods or using electronic means, must form part of the total field note package.

I have had the opportunity to examine the total station field notes from different survey offices across the province. The variety in presentation of field notes and data for surveys that use total stations is incredibly widespread. In some instances, the field note package does not "tell the story" that it should, in other instances the story is a book. - *War and Peace* comes to mind ...



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***Readable (by any standard human) is preferable...***

The basic package of information required for total station field notes appears in the AOLS "GUIDELINES FOR USE OF TOTAL STATION AND RADIAL METHODS FOR LEGAL SURVEYS". I paraphrase that document when I say that the information that should be present for the "Field Note Package" should include, the sketch page, the printout of the raw data file as observed, the edited raw data file, and the co-ordinate file generated from the raw data.

The computer output for the **raw data** files that I have examined come in two distinct categories, readable and unreadable. Readable (by any standard human) is preferable but is generally dependant

on the data capture system used.

The **edited raw data** is still essentially representative of the data as it was collected in the field, but has been corrected for input errors such as inconsistent point numbers, point code errors, incorrect backsight or foresight identification, etc. The cleaned up data is then reformatted into an easily readable printout with the values for the station, backsight, foresight, direction, distance, point code etc. evident.

The **co-ordinate file** from the raw data file is essential as it represents the positions of the points as located, without adjustment or massage of the data. This is the raw result of the field survey just as the raw dimensions from the field notes are for the conventional survey.

The **sketch page** of the field notes in some areas tends to be the most neglected part of the field note package. I believe that it should still be able to "Tell you the Story" of the survey.



***With more space, the opportunity to "Tell you the Story" in the field notes is now increased.***

The requirement of recording the hard data on the field notes is now gone. Data recorders do a wonderful job of recording exactly the nuts and bolts of the survey observations. No longer do we have to worry about party chief Alzheimer's and Dyslexia. (Forgotten and mis-recorded information.) Of course, for some of us, there is still the concern of IPG, (Instrument Person Glaucoma) but then again there are the robotic total stations... The data recorders are thankfully immune to these maladies, and create

lots of space on the field notes.

With more space, the opportunity to “*Tell you the Story*” in the field notes is now increased. The sketch page as always, will identify the traverse lines run, instrument set up locations, points sighted, angles and distances set out, check measurements, and points located radially with point numbers that refer to the data files. The progress of the survey will be evident from the sequential order of the points located.

Most importantly, the sketch page may now be used to include other notes from the party chief. These notes can show areas that were searched for evidence along with the result of that search. Routine examinations of files bring up questions regarding information shown in the research that does not appear on the field notes. Did you look for it? Was it there? Is it still there? Is there some reason that it would now be gone? These questions are easily answered in the field notes with a few quick notations.

“New sidewalk” OK, that's where the old cut crosses went.

“New Fence Post and conc. @ corner”

Ok, that's where the old IP went.

“!!-X\*\*?+!! New underground Utility Line” Well you get the idea where the IB is.

Detailed information on the progress and results of the field work can also be noted.

The duplicate numbers on some of the radially located points will allow the assessment of closure accuracies of the traverse. These are usually easily checked in the field to provide a check on the field work during the progress of the survey. A quick notation showing the closure and the point number to use will be invaluable later to both the drafter and yourself. Longer traverses in closed loops allow the summary of the field closure information to be presented on the field notes. Summation of the angles and traverse distances along with the misclosure information are easily identified and should be present in the field notes.

In the event that the decisions are made in the field, the field notes will show the evidence held, and the evidence rejected

and the reasons. ie. “Fd IB (ABCD) NFG Bent Held house tie!”

Layout information for the set monuments and the checks to verify their position “as set” should be shown. Should the decisions be made in the office, then the second page of field notes for the layout or monumentation phase will show the results of the examination process, and will show the evidence held to set the limits, and the checks for the “as set” positions.

Why is it that the “OLD” field notes are the ones that are good? Is it just that they are old, or were the surveyors just better back then? (Just a quick look at the jog in the half line seems to answer that one.)

The “OLD” field notes “*Tell you the Story*” of the survey. They show the other information, the cross and check ties, the ties to the specific brick, the extra measurements to run the block and ties to hold down the key points. As someone once said “They are Gold”.

Our Field Notes are going to be “OLD” one day? Will they “*Tell you the Story*”, or will they just be lead?

