



## Looking Back Over the Past Century and Beyond, in the History of the Land Surveying Profession in Ontario

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**I**N PREPARING this paper, I felt it was appropriate and necessary to refer back to the time in Canadian history when Canada was ceded by the French King to the Crown of England by virtue of the "Treaty of Paris" passed in the year 1763.

In that same year, General Murray was appointed the first Governor General of the British Province of Quebec. The Quebec Act of 1774, provided, among other things, for the introduction of the Criminal Law of England and which declared, "...that in all matters of controversy relative to property and civil rights, resort should be had to the Laws of Canada, as the rule for the decision of the same". Thus the Civil Laws of French Canada were confirmed.

It is not my intention to refer in minute detail, to the many statutes which have been passed subsequent to the year 1763 and which affected the development of the land surveying profession and the recognition of the needs and skills of the land surveyor. I shall, however, set forth any specific sections and parts of sections, which to my mind, have a distinct importance concerning the land surveyor and the manner and the methods employed in performing surveys of land.

The first men to practice land surveying in the British Province of Quebec were military engineers. Major Samuel Holland, who fought under General Wolfe on the Plains of Abraham, was appointed Surveyor General of Quebec in 1764 and John Collins was appointed his deputy in the same year.

Some twenty years elapsed before any official land surveys were made. With the cessation of hostilities in the year 1783, it was found necessary to conduct official surveys to provide for the disposition of Crown lands to meet the demands for land settlement by the American Colonists, who had remained loyal to the British cause.

Survey Instructions dated September 11, 1783, to Deputy Surveyor General John Collins were issued by General Frederick Haldimand, Governor General of Quebec, to survey five townships and partly subdivide them into lots and concessions in that part of Quebec along the north shore of the St. Lawrence River now known as the Townships of Kingston, Ernestown, Fredericksburg, Adolphustown and Marysburg. Land settlement immediately began in the Township of Kingston. Thus began the ownership of land under the tenure of free and common socage.

Then we find the British Province of Quebec was divided into Upper and Lower Canada under authority of The Constitution Act passed November 18, 1791 (31 Geo. III., Cap. 31).

David William Smith was appointed the first Surveyor General of the Province of Upper Canada on September 18, 1792, the office which he held until May 10, 1804, when he resigned because of ill health and returned to England, where he was later created a Baron. (Ref. O.L.S. Report 1894)

Deputy Surveyors and Deputy Provincial Surveyors were appointed by the Surveyor General. Land Boards were set up to deal with the disposition of Crown land but were abolished under authority of an Order in Council dated November 6, 1794. From that time on, all applications for land settlement were made direct to the Lieutenant Governor.

Survey instructions were issued by the Surveyor General in pursuance to the proclamation of His Excellency, Lieutenant Governor Simcoe, dated February 7, 1792, the first clause of which states that the Crown lands are to be run out and marked by His Majesty's Surveyor or Deputy Surveyor General, or under his sanction and authority.

In the year 1818, we find an "Act to repeal an Ordinance of the Province of Quebec concerning land surveyors, the admeasurement of lands and also to extend the provisions of an Act, (38 Geo. III., Cap. 11, 1798) passed in the 38th year of His Majesty's reign entitled an Act to ascertain and establish on a permanent footing of the boundary lines of the different townships of this Province and further, to regulate the manner in which lands are hereafter to be surveyed (38 Geo. III., Cap. 1). The Statutes of 59 Geo. III., Cap. 14, 1818 provided among other matters, methods governing the side lines of lots; that every surveyor thenceforth was to be examined by the Surveyor General, or Deputy Surveyor General, as to fitness, capacity and competent knowledge of the theory and practise of surveying in all its branches. An appointment to Act and a licence had to be obtained from the Governor, also a bond, with two sufficient sureties in the sum of 500 pounds had to be entered into and the surveyor had to subscribe to the following oath: "I, A.B., do solemnly swear that I will well and truly discharge the duty of a surveyor of lands agreeably to the law, without favour, affection or partiality, when and as often as I may be required by any person or persons, or by the rule or order of any Court of Justice, and which I will faithfully and without unnecessary delay submit to the party requiring the same, or the Court directing my duty; also a plan of survey if required, So help me God." For the first time, provision is made for swearing in chain-bearers.



The next legislation affecting surveying came in the year 1839, when the Legislature of Upper Canada passed the Act of 2 Vic., Cap. 17. This statute was followed by the Act of Union of 1840. The preceding Acts referred entirely to the Province of Upper Canada.

The latter legislation was followed by the Statute of 4 and 5 Vic., Cap. 9 of the year 1841-2: "An Act to grant authority to licensed surveyors in the part of the Province called Upper Canada, to administer oaths in certain cases and to protect them while in discharge of their duty in surveying lands."

It is of interest to note that such oaths had to be taken in writing and filed in the registry office for the County, to be used at a later date, in any court of law.

During the period between 1783, when the first townships were surveyed under civil authority, and the year 1849, land surveyors were classified as Deputy Surveyors or Deputy Provincial Surveyors in Upper or Lower Canada and appointed by the Surveyor General. During this period of time, land surveyors had been gradually developing to an independent and responsible public officer. The Statutes of 1849, 12 Victoria, Chapter 35 was a rather important statute for the land surveyor for the following reasons:

1. All previous Acts affecting the admission of Land Surveyors and the Survey of Lands in the United Provinces of Upper and Lower Canada were repealed.
2. The first Board of Examiners was appointed, consisting of the Commissioners of Crown lands, and six other competent persons appointed by the Governor.
3. Persons applying to serve as an apprentice were required to serve under an instrument in writing, for three consecutive years, as an apprentice to a Land Surveyor for Upper or Lower Canada duly admitted and practising as such, according to the provisions of this Act, or had been so authorized before the passing hereof, according to the Laws then in force.
4. The name "Provincial Land Surveyors" in the United Provinces of Upper and Lower Canada was, for the first time, officially mentioned in this statute.

It should be emphasized, however, that while a Board of Examiners was appointed under this statute, the control of the overall administration of land surveyors and the methods under which surveys were made on Crown Lands, remained under the authority and control of the Governor and remained so until the incorporation of our present Association, in the year 1892.

The Statutes of 1849 were followed by the following Acts:

14 and 15 Vic., Cap. 4, passed in 1851  
18 Vic., Cap. 83, passed in 1855  
20 Vic. Caps. 37 and 73 passed in 1857, followed by Consolidated Statutes of Canada Chapter 77 and the Consolidated Statutes of Upper Canada, Chapter 93

There were no significant revisions or additions enacted by these statutes affecting land surveyors, with the exception that the Primary Examination was first enacted by the Act of 1855 and under the Statute of 1857 provision was made for the admission of applicants who had undergone training at the Universities without full period of apprenticeship.

The statutes of land surveyors in the Province of Ontario remained the same until the year 1886, when a meeting was held by certain provincial land surveyors on February 23, 1886, for the purpose of organizing an Association of Provincial Land Surveyors. At this inaugural meeting, thirty six provincial land surveyors attended, chaired by Peter Silas Gibson, of Toronto, and Willis Chipman of Brockville, as Secretary.

The objects of the Association were to revise and improve the Survey, Municipal, Drainage and the Registrations Acts and other Acts of Parliament in which surveyors have an interest. Officers were appointed for President, Vice-President, Councillors, and Secretary-Treasurer.

Otto J. Klotz, who was present at the meeting made the following statement:

"Heretofore Incorporation had up to the present time been looked upon as the sole panacea of the Provincial Land Surveyor. Organization and unity of purpose is the first step towards ourselves. There is material among the Provincial Land Surveyors of Ontario to form an Association creditable to themselves and to the country and which will ever bear progress, the watchword of the 19th century on its banner."

It was moved by Elihu Stewart, and seconded by Lewis Bolton, "that we proceed to organize". The motion was put and carried. Then followed the appointment of a Committee to draft a Constitution and Bylaws, which, after considerable discussion and amendments, were passed and officers and committees set-up.

Quoting from the Report of the Provisional Executive Committee of the Association of Provincial Land Surveyors by Willis Chipman, Secretary,

"Class legislation we do not think is at present deserved, however, much as we may desire it, we must first become a united body, and be able to present our request to our legislature so intelligently, they cannot do otherwise than comply."

It was some five years later that the Association officially proceeded to take steps to prepare an Act to incorporate the Association of Provincial Land Surveyors. In 1891, we find the following motion passed as quoted in the annual report of the Ontario Land Surveyors for the year 1891.

"That it is desirable to have the Provincial Land Surveyors of the Province of Ontario incorporated as a body corporate and politic, and that this Association take steps to have an Act therefore prepared and passed with as little delay as practical."



Then Bill No. 63, being an Act to incorporate the Association of Ontario Land Surveyors and to amend the Act respecting Land Surveyors and the Survey of Land, was assented to by the legislature on April 14, 1892 under the Statutes of 55, Victoria, Chapter 34.

Under this Statute, the Association of Ontario Land Surveyors was constituted a body corporate and, among other things, set up a Council of Management, consisting of the Commissioner of Crown Lands, the President, Vice President, six other elected members and a Board of Examiners, with two of its members appointed by the Lieutenant Governor.

The Act of 1892 may be cited as The Ontario Land Surveyors Act, and may be read with and as part of Section 18, Revised Statutes of Ontario 1887, Chapter 152 and the words "Ontario Land Surveyor" shall include the words "Provincial Land Surveyor". At this time there were 112 registered members in our Association, as compared with our present membership of some 700 surveyors.

It is interesting to note that over the years following the year 1783, until the passing of the Revised Statutes of Ontario of 1897, all legislation affecting land surveyors and the survey of lands appeared under one statute. The legislature attorneys created two separate statutes namely:

"The Ontario Land Surveyors Act" (R.S.O. 1897, Cap. 180) and  
"The Surveys Act" (R.S.O. 1897, Cap. 181) at the time these revised statutes were prepared.

In the year 1927, the Revised Statutes of Ontario changed the name to "The Land Surveyors Act" (R.S.O. 1927, Cap. 20) and finally, the Revised Statutes of Ontario of 1960, Cap. 389, changed the name once again to "The Surveyors Act". No major changes or amendments were made after the year 1960. However, as you already know, the Act has been completely revised over the last year or two, and the First Reading of the Bill of the revised Surveyors Act has been given by the Legislature.

I doubt if there are many surveyors here today who are aware that the privileges the Ontario Land Surveyor enjoys and has been given to him by virtue of The Surveyors Act had ever been challenged.

A challenge did, in fact, occur in the years 1948-49, when of all years, I happened to be president of our association and I can remember very vividly, the incident. At that time, the Association had 232 registered members.

Council had to deal rather hurriedly with a vexatious resolution which was before the Ontario Municipal Association and which resolution was the fact that because of a land development surge in the area and the shortage of land surveyors, particularly in the vicinity of St. Thomas, the people of St. Thomas and, in particular the City Engineer's office, caused a motion to be passed to the effect that a municipal engineer, within the boundaries of his own bailiwick, should have all the powers and privileges of an Ontario Land Surveyor, under the provisions of The Land Surveyors Act.

As president, I hurriedly prepared a brief on the matter to present to the Ontario Municipal Corporation at their meeting held in Kingston, Ontario. I was fortunate in getting an amended motion passed to the effect that consideration of the Resolution be postponed for a short period of time to enable our Association additional time to present our case.

Suffice to say, a special committee of our Association was successful in having the Resolution withdrawn. Complete details may be found under the reports of the Council of Management in the Ontario Land Surveyors' Reports for the year 1949-50

As a corporate body, we must never forget that the privileges we have and enjoy under the Surveyors Act can be challenged for due cause, by the public, at any time.

Under the Revised Statutes on Ontario, 1970, Cap. 453, the following certificate under the Surveyors Act appears: "No survey of land for the purpose of defining, locating or describing any line, boundary or corner, of a parcel of land is valid unless made by a surveyor or under the personal supervision of a surveyor."

It is of interest to point out that the latter part of this certificate, namely: "or under the personal supervision of a surveyor", was added as late as the year 1958, under authority of the Statute of Ontario, 1958, Cap. 107, Part 1, Section 2.

The interpretation of the words "or under the personal supervision of a surveyor" has not, to my knowledge, been defined or questioned in any court of law. It may be of some importance to the Council of Management to consider to what depth or extent the meaning or interpretation of the words should be taken, particularly in this period of time, when we find that there are about the same number of certified survey technicians as we have licensed surveyors.

At this point I am leaving, temporarily, the technical aspects of this Article to relate some of my experiences which occurred during my apprenticeship with the firm of Speight and van Nostrand in the years 1923 through 1926. Instead of the recognized apprenticeship term of three years, one had to serve an extra six months for the privilege of serving Articles with that surveying firm. If I remember correctly, I received \$15 per week over the three years and six month period with no overtime salary or bonus to sweeten the pot. I must say, however, that I never regretted serving this additional apprenticeship term for the reason that I received exceptionally good training over the entire period.

Shortly after I joined the firm, I was singled out by Thomas Bailey Speight to be his assistant. Mr. Speight was a rather short man, with a ruddy complexion, wiry and full of boundless energy. Besides being an excellent surveyor, he was always the gentleman immaculately dressed, an excellent business and contact man, and a person who I never heard utter a profane word.



In those days, a survey party consisted of one surveyor and one assistant. You were only allowed more than one assistant when engaged either on a country or a subdivision survey and sometimes, when you were engaged on an extensive and complicated survey.

On a particularly fine day in the summer of 1923, and shortly after I had commenced my apprenticeship term, Mr. Speight and I were making a survey of an estate on the east side of Avenue Road, between St. Clair Avenue West and Balmoral Avenue. I had set up the transit over a survey point and Mr. Speight was checking over field notes, plans and other data. Things were not checking out very satisfactorily and I could see that Mr. Speight was becoming more and more agitated as time went on, particularly when his plumb bob string became tangled around some of his plans. Finally, to my amazement, he started to take out each item in his leather surveyors bag and very deliberately, he placed each item in a neat pile, on top of each other on the sidewalk. Then he took off his fedora hat and placed it on top of all the rest of his stock-in-trade. He then proceeded to jump up and down on the pile of items including his fedora hat, exclaiming at the same time; "DAG NAB THE HUM BUGGIN THING".

He then retrieved, very slowly, his hat, which he reshaped and brushed, along with the rest of the survey material. Placing his fedora hat once again on his head, he looked at me quite sheepishly and said, "now that feels much better". We then went on and finished the survey.

Mr. Speight was a recognized expert in downtown surveys where land values were extremely high even in those days. His knowledge, know-how and good common sense was a revelation to me. He stressed to me the importance of obtaining the true centre line of party walls and following the original party wall, from the front to the rear of the original building, through padded walls constructed following the transfer of the original title of the property.

Then in the summers of 1924 to 1926, I was up in the bush in Northern Ontario, on government contract work with Ralph Anderson, O.L.S., of the firm Speight and van Nostrand. Mr. Anderson was also a very competent and reliable surveyor with a reputation second to none and well experienced in bush surveys. Those summers spent on government surveys were a great experience for me and it is unfortunate that each apprentice cannot receive some such bush experience during his apprenticeship term. It is an experience that cannot be taught, understood or bought out of a textbook or from another surveyor.

No shortwave radios, aircraft, or electronic digital theodolites and such, existed in those days. In other words, you were on your own, with some fourteen men to spend two to three months in the wilderness working and accepting nature as it came day by day, and with maps of the territory prepared, for the most part, from oblique aerial photographs.

In the summer of the year 1926, we surveyed the 9th Base Line, from a point on a meridian line in the Red Lake Area, westward, on six mile chords of parallels of

latitude, a distance of approximately 100 miles to the intersection, with the inter-provincial boundary between the Provinces of Ontario and Manitoba.

That particular summer was quite an experience for me and for others in our survey party. One of our chain-man was a law student from Toronto, whose name was Frank Elmer McMahan, and he was a few years younger than me. At the time I prepared this article, I telephoned Mr. McMahan, who is now a retired lawyer, and he assured me that the following described incidents were just as vivid in his mind as in my own.

In the first week of June, we were travelling northerly upstream along the Chukuni River, north of Lac Seul and south of Pakiwash Lake. Our canoes were loaded down with our dunnage and sufficient food supplies to last us approximately twenty one days. We had just left a portage when we passed a large birch bark canoe coming downstream, laden with fur pelts destined for the Hudson Bay Post at Pine Ridge, later known as Goldpines, at the head of Lac Seul. A white trapper, dressed in his Sunday best, a buckskin suite, sat at the bow of a canoe. A paddle was across his knees and he was too busily engaged in lighting his briar pipe to give us the time of day. His squaw lady did all the paddling at the stern of the canoe. No words were spoken between us, just a wave of the arm, as we silently passed each other on that remote river in this more or less uninhabited territory. It was quite a sight.

Another impressive sight was a view of parts of three chords of our survey line, which I clearly saw from a high ridge after ascending from a long low valley containing a heavy growth of young jack-pine. It appeared to me like a rainbow, without colour, through the valley below.

Every surveyor, who is engaged in extensive bush surveys, knows that if he has managed to obtain a good clean bush cook, he is assured of a contented survey crew. That year of 1926, we were most fortunate in hiring an excellent chap from Chapeau whose name was Tom Vincent. Tom had been with survey parties in other years and his reputation as a cook was well known. We used reflectors for cooking our food and baking our bread. Tom saw to it that we had fresh bread, cakes and cookies each day throughout the survey, notwithstanding the fact that we moved camp each working day. It was quite a sight to see Tom walking along the survey line, laden down with his personal pack, topped by a bag of flour and carrying, on his head, a wash tub full of dough covered with a blanket and ready to bake when camp was struck for the day (around 4 p.m.). On cool nights, Tom would see that his dough was kept warm even if he sacrificed his own blanket.

Some twenty five miles from the Manitoba boundary, one of our axe men cut his foot rather badly and we were forced to leave him behind beside a lake with sufficient food, etc., to survive until we could pick him up which would be at the finish of the survey. That incident, coupled with the fact that we ran short of food for several days due to problems encountered by our transport boys in finding some dried up streams instead of navigable ones, as indicated by the only maps we had of the area, ended our adventures for that year.



During my apprenticeship and for several years after, I became a qualified Ontario Land Surveyor. Each survey made for the firm of Speight and van Nostrand was checked over in detail by one of the partners of the firm, before the plan was signed. Every survey made by any other surveyor employed by that firm, was also checked in detail for such things as evidence found, used and not used, title searches, and any other data secured from other surveyors.

If any lack of evidence was missing or any indication that the survey you made was not to their satisfaction, you were promptly told to get back on the job and do further work.

Now, to get back to the more instructive part of this Article. During my research, I came across the following in the Annotations contained in the Revised Statutes on Ontario, 1914, Chapter 165, by F. C. Snider:

“The Ontario Land Surveyors Act

- “3. A surveyor in making a survey is under no statutory obligation to perform the duty, but undertakes it as a matter of contract and is liable only for damages caused by want of reasonable skill or by gross negligence: Stafford V. Bell 6 A.R. 273

The proper method of making a survey under the statute discussed:  
Stafford V. Bell 6 O.R. 273”

I now refer to the Criminal Code of Canada, sections 398 and 399. These sections deal with the wilful removal, defacing and altering of anything planted by a surveyor to mark a boundary, corner, etc., of a boundary line or parcel of land.

I submit that there are but few people, including the Law Society, who are familiar with the conditions and penalties enacted by these sections of the Criminal Code. It may be prudent for the Council of Management to give some thought to make reference to these sections of the Criminal Code of Canada on all types of survey plans signed by a licensed Ontario Land Surveyor.

Performing a survey of the boundaries of property in Ontario has, to me, always been of a somewhat mysterious and challenging nature. Mysterious from a point of view that you often contemplate and wonder what was in the mind of the surveyor who had previously performed surveys in the immediate area. Challenging for the reason that in performing your survey, you must conform to the laws and regulations governing the methods of conducting surveys and also to meet the standards demanded by our profession, as well as your own personal satisfaction of a job well done. ●