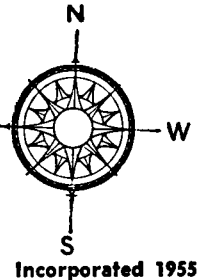


The Nova Scotian Surveyor

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EDITORIAL

BILL NO. 16

An Act to revise Chapter 230 of the Revised Statutes, 1954, The Provincial Land Surveyors Act. Assented to the 26th day of March A.D. 1959.

Be it enacted by the Governor and Assembly— Thus ends one chapter in the history of the Association of Provincial Land Surveyors of Nova Scotia. This chapter No. 6, 1959, is the culmination of several years of hard and at times, discouraging work, times when the thought must have been "Let's drop it". It must have resembled a problem similar to attempting to re-establish an original grant bound. Determination and support of the majority of our association members, together with expert legal advice of our solicitor and other legal friends has brought us to this stage, where we have a definite course laid out for our association to pursue.

This course will test the stamina and determination of our association. It will necessitate a great deal of effort and help from the executive. Remuneration for this effort will be only the personal satisfaction of knowing that each has done the task allotted to him and the group which he helped.

There will be those who will not help, but who will be glad to reap any benefits from progressive accomplishments, and just as glad to knock every time things go wrong. Such knocks are to be expected in our way of life, this however, only adds to the will to bring a job to a successful conclusion.

On April 13th, 1959, a meeting of the Legislation Committee and the executive was held in

Halifax, N.S., at the residence of Col. Spencer Ball, 16 Pinehill Drive, at which meeting the Legislation Committee were given a unanimous vote of approval for the carrying through to the conclusion our revision of the Land Surveyors Act of 1954. Immediate and future work was discussed and committees set up to recommend the necessary organization of a Board of Examiners, standards of work and changes necessary in our by-laws and a code of ethics for Land Surveyors in Nova Scotia. Also the problem of arrears of dues of some of the members was discussed and it was recommended that we seek legal advice as to when a member loses his standing in the association.

In summary, much has been done. Much more must be done. So in order that our "Association of Provincial Land Surveyors of Nova Scotia" will be an organization to which it will be a privilege to belong. Let us all, who are holders of Nova Scotia Land Surveyors licenses get behind the association and really make it go.

In unity lies strength and honour. Each individual alone will fall.

We can, by united effort, show the public that the surveyor who is a member of the Land Surveyors Association, is the surveyor who can do his work as it should be done, and whose work is recognized in courts and by the legal profession in Nova Scotia. Don't ask who will do this or that job. Just say, "What can I do to help?"

R. E. Millard, PLS.

Managing Editor Nova Scotian Surveyor.

MINUTES

MEETING OF THE COUNCIL AND THE LEGISLATION COMMITTEE HELD AT 16 PINE HILL DRIVE,
HALIFAX, N. S.

Monday, April 13, 1959

MEMBERS PRESENT:

Herbert Martell, President; Walter Servant, Vice President; Spencer Ball, Past President; R. E. Dickie, J. A. H. Church, Freeman Tupper, Errol B. Hebb, John A. McElmon, J. E. R. March, A. F. Chisholm, R. E. Millard, John R. Fiske, Donald Wagstaff, Donald L. Eldridge, H. B. Robertson, Secretary-Treasurer.

The meeting was called to order at 7:30 p.m. by president Martell, who then turned the meeting over to Col. Ball, Chairman of the Legislation Committee who reported on the final steps leading to the passing of our Act, and the recommendations for steps to be taken in the near future.

Col. Ball stated that we will have to distribute the many jobs to be undertaken among the members of the Association, and that in his opinion once a man is given responsibility his interest in the Association will increase and that the main object was the raising of the standards, and second, the enforcement of the Act by the Association.

Col. Ball then read the list of recommendations made by the Legislation Committees when they last met on Thursday, April 7th, 1959.

1. That the Council accept and approve the Act as passed by the Legislature and forthwith dismiss the aforesaid Legislation Committee.

2. That the Council reaffirm the adoption of the Holloway Syllabus by the Board of Examiners as the ultimate standard of the Association.

3. Recommend to the Council that suitable committees be set up to deal with the duties of the passing of the Act;

(a) A committee for the organization of the Board of Examiners.

(b) A committee for the standards for land surveyors in the Province of Nova Scotia.

(c) A committee on the forming of By-Laws and a code of ethics.

(d) That the Council appoint an advisory committee for the solution of special problems.

4. That the zoning of the Province should be considered by the Council.

5. That the nominations for the members of the Council be submitted by the respective districts, and that each name submitted for nomination should be accepted by a brief description of that person.

6. That the Council appoint a committee to study the finances and fees of the Association.

7. That we should work towards a joint meeting with the Association of New Brunswick Land Surveyors.

Col Ball reminded the members that we had promised the New Brunswick Association that we hold a joint meeting to celebrate the passing of the Act.

Col. Ball asked if there were any questions about any part of the Act before we go further into the recommendations of the Legislation Committee.

The question was raised in connection of those members who are now more than one year behind in their dues, and if those members can still be considered as members of the association.

The secretary checked the By-Laws which state that;

Section 3: A member shall be deemed to be in good standing if his annual dues are not more than three months in arrears, and if there is no proved charges or complaint on file regarding him in respect to unprofessional or improper conduct or contravention of these By-Laws.

and;

Section 33: A member may resign from the Association by notifying the Secretary in writing of his intention so to resign.

The Secretary stated that to the best of his knowledge there was nothing in the By-Laws to the effect that a person be suspended for non payment of dues.

It was the general opinion of the members that this will require a legal opinion.

Mr. Servant made the motion that a list of all persons registered as members of the Association under Chapter 268, revised statutes of Nova Scotia, 1954, the Societies Act, together with the last year in which their dues were paid be presented to Mr. MacInnes for his opinion on those persons who may or may not still be considered as members of the Association.

Seconded by Mr. March; MOTION CARRIED.

It was the opinion of all present that Section 23 Subsection (2) is too restrictive, but we will have to leave it for awhile and then if it proves to be too restrictive, we can ask for an amendment.

The Secretary was also instructed to get a legal ruling on Section 5 clause (d) of the new act, to find out if the Annual Registration Cards issued by the Association each year to all mem-

bers in good standing can be considered as Annual Certificates of Membership.

President Martell reminded the members of the Council of the great amount of work done by Col. Ball and the Legislation Committee, and called for a motion of thanks.

Mr. R. E. Dickie made the motion that the Council extend a vote of thanks to the Legislation Committee for the great amount of work and effort leading to the passing of the Act.

Seconded by Mr. Hebb; MOTION CARRIED.

President Martell then informed the members that if there were no more questions in relation to the Act, that the recommendations from the Legislation Committee would be next for consideration by the Council.

The recommendations presented by the Legislation Committee were then taken up and after some discussion, Mr. Millard made the motion that the Council accept and approve the Act as passed by the Legislature and forthwith retire the aforesaid Legislation Committee.

Seconded by Mr. A. F. Chisholm; MOTION CARRIED.

Mr. March said that he would like to see the adoption of the Holloway Syllabus reaffirmed, and that he would make the motion that the Council reaffirm the adoption of the Holloway Syllabus of the Board of Examiners as the ultimate standard of the Association.

Seconded by Major Church; MOTION CARRIED.

President Martell then asked that the various committees recommended by the Legislation Committee be acted upon by the Council.

Col. Ball made the motion that Prof. A. F. Chisholm, Major Church, and Mr. D. L. Eldridge be a Committee to examine the organization of the Board of Examiners and report back to the Council.

Seconded by Walter Servant; MOTION CARRIED.

President Martell then asked for nominations for a Committee on standards for Land Surveyors in the Province of Nova Scotia.

Col Ball nominated Mr. J. R. March.

Mr. Dickie nominated Mr. Servant.

Mr. Eldridge made the motion that nominations cease.

Seconded by Mr. Dickie; MOTION CARRIED.

Mr. R. E. Dickie then moved that Mr. J. R. March, and Mr. Walter Servant be a Committee with power to add one more member to make recommendations on standards for Land Surveyors in the Province of Nova Scotia, and report back to the Council.

Seconded by Mr. Eldridge; MOTION CARRIED.

President Martell then called for nominations for a Committee on the forming of By-Laws and a Code of Ethics.

Mr. Eldridge nominated Col. Ball.

Mr. March Nominated Mr. Freeman Tupper.

Mr. Servant nominated Mr. R. E. Dickie.

Col Ball nominated Mr John McElmon.

Mr. A. F. Chisholm moved that nominations for a Committee on the forming of By-Laws, and a Code of Ethics cease.

Seconded by Mr. Servant; MOTION CARRIED.

Mr. R. E. Millard then made the motion that Col. Ball, Freeman Tupper, R. E. Dickie, and John McElmon be a Committee on the forming of By-Laws and a Code of Ethics.

Seconded by Mr. J. R. March; MOTION CARRIED.

President Martell then asked for the opinions of the Council on the recommendation that the Council appoint an advisory committee for the solution of special problems.

Col. Ball stated that in many cases where there are differences of opinion between surveyor and public, and surveyor and surveyor there is no one to appeal to.

Mr. Eldridge said that we should not attempt to settle cases which are really required to be settled by the courts.

Mr Hebb said that he feels that cases having the approval of the Association would carry considerable weight in court.

Major Church asked if an advisory committee would be set up in each zone or district.

Col. Ball said that it could eventually come to that.

Mr. Servant suggested that problems for each zone or district could be sent in by the Council Members from each district or zone.

Mr. Tupper suggested that a chairman could be appointed in each zone and then whenever problems come up he could then appoint two other surveyors to consider the matter, and report to the Council.

After much discussion it was decided that to go too far into the matter at this time may require quite a bit of expense and the matter was held over to the next meeting of the Council.

President Martell then asked the Council for their opinions on the recommendations that the zoning of the Province should be considered by the Council.

Mr. Millard asked what the Legislation Committee had in mind when they recommended the zoning of the Province.

Col. Ball said that for one thing was in the case of fees to be charged in each zone, and also to offer each zone the opportunity of holding local meetings.

President Martell said that our recommended fees should remain standard for all zones, but that the surveyor should use his judgement in all cases.

Mr. Fiske said that we could use the zones recently applied to the Department of Highways.

Major Church said that if land values are to be considered, that a forestry man is required in the rural areas.

Mr. Dickie said that we already have zones, but that they need to be defined.

Mr. March said that he would draw up a map and present it at the next meeting of the Council.

President Martell then asked that the Council consider the recommendation that the nominations for members of the Council be submitted from the respective zones, and that each name submitted for nomination be accompanied by a brief description of that person.

Mr. Dickie said that he was in favor of this suggestion, as in most cases when the members have only a list of names to choose from they have no idea who they are voting for.

Major Church said that he agreed with Mr. Dickie.

Mr. March made the motion that the nominations for members of the Council be submitted from the respective district or zone, and that each name submitted for nomination be accompanied by a brief description of that person, and that this be properly worded and included in the By-Laws of the Association.

Seconded by Mr. Millard. MOTION CARRIED.

President Martell asked the members of the Council for their opinions on the recommendation that the Council appoint a committee to study the finances and fees of the Association.

Col. Ball made the motion that Mr. R. M. Schofield, and the Secretary be a Committee with power to add, to study the finances and fees of the Association.

Seconded by Mr. Eldridge. MOTION CARRIED.

President Martell then asked the members of the Council for their opinions on a joint meeting with the Association of New Brunswick Land Surveyors.

It was felt that we should work towards a joint meeting with the New Brunswick Association, but that this meeting should not replace our own Annual Meetings.

Mr. Servant said that we should send a notice to the Association of New Brunswick Land Surveyors of the passing of the Act and that we are in favor of a joint meeting with them, and that a similar letter should also be sent to the Association of Newfoundland Land Surveyors.

President Martell then brought up the matter of the possibility of a dead lock among the Board of Examiners, and asked the members of the Council for their opinions in the event this should occur.

It was decided that this matter be referred to the newly formed committee on the forming of By Laws and Ethics.

Mr. March said that he would like to make a motion of thanks to Mrs. Ball for the most excellent lunch.

Seconded by Mr. Millard. MOTION CARRIED.

The Council then discussed the plans for the 9th Annual Meeting. Some of the members were in favor of holding the meetings at a later date, but after some discussion it was decided that we should hold our Annual Meeting on the last Monday and Tuesday in October as set at our previous Annual Meeting last October.

Mr. Servant said that he feels that we should appoint a Convention Manager or a Convention Committee to work out the plans for the coming Annual Meeting.

Col. Ball made the motion that Walter Servant and John Fiske form a Convention Committee for the purpose of the organization of the coming 9th Annual Meeting.

Seconded by Mr. March; MOTION CARRIED.

It was the opinion of the Council that all Provincial Land Surveyors as well as the members of the Association should be notified of the passing of the Act, and also informed that copies of the new Act will be forwarded to them as soon as they are available from the Queens Printers.

The Secretary said that he had inquired about how soon we may expect copies of the Act to be available, and that he was told that it would be some time in July before copies are available.

It was decided that it is best to wait and have the Act printed by the Queen's Printer as it would run into considerable expense if we had it printed ourselves.

It was decided by the Council that letters should go out to all persons holding Certificates of Qualification as Provincial Land Surveyors, informing them of the passing of the Act and inform them that copies of the Act will be forwarded to them some time in July, or as soon as they are printed.

Mr. D. L. Eldridge made the motion that the meeting adjourn. Seconded by Mr. Servant.

The meeting adjourned at 11:30 p.m.

Saskatchewan Highways "Written in the Stars"

The North Star still provides the most accurate method of completing an exact survey of land. Today, Saskatchewan's roads still follow the routes plotted by astronomical calculations.

REGINA — Saskatchewan's road and highway routes are written in the stars.

If you don't believe it, ask J. C. "Clair" Traynor, director of surveys in the Surveys Branch, Saskatchewan Department of Highways and Transportation.

It all started in ancient times, in the golden ages of Persia and Egypt, with a "true north line", calculated from the position of the north star and its relationship to the earth at a given moment. The ancients based all surveys on a "true north line", and all surveys of this modern day are based on that same line.

In the 1880s and 1890s, pioneer dominion land surveyors working from a "true north line" established by mathematical and astronomical calculation, completed the first legal survey of Saskatchewan. They established north-south lines, one mile apart, and established east-west lines at two-mile intervals, over the southern half of the province. Thus was Saskatchewan divided into townships, ranges and sections.

Supreme Arbiter

Man has not yet found a better way of completing an exact survey of land. The north star and its relationship to the earth remains the supreme arbiter in surveys. And all of Saskatchewan's roads and highways are routed according to that first survey made before the province was born, and established on the "true north line", as dictated by the north star. Legal surveys cannot be termed legal surveys unless they are based on that ancient line.

Thus the Saskatchewan land surveyor is not only something of a lawyer, he must be a top mathematician and have a better than working knowledge of astronomy.

"All land surveyors must study astronomy, it's part of their curriculum," says Mr. Traynor. "To get a true north line, the surveyor must first take a 'shot' on the north star with his transit. That's why he's often found sitting by a transit in the middle of the night, poring over a volume of star tables and checking his watch. He can only get it by calculating the position of the north star in relation to the earth at any given time."

The oft-repeated word legal in this story is due to Mr. Traynor's insistence that the vital difference between a legal survey and an engineering survey be well understood. He knows of the mystification of many farm residents who can't

understand why so many men should be running around looking through telescopes (that's what a transit really is) when there's only one highway being built.

"An engineering survey is taken in order to locate the best route for a new road or highway insofar as grades and natural obstacles of the terrain are concerned," explained Mr. Traynor.

"The objective of a legal survey is entirely different but is every bit as vital to the building of a road or highway as is the engineering survey," he said.

Prime Purpose

Mr. Traynor went on: "Our main job is to establish the legal boundaries of right-of-way which may be required for a new road or highway. Those boundaries set the limits within which the provincial government is responsible. We must establish those legal boundaries. There may be a number of other things to do in connection with a legal survey but proper establishment of legal boundaries is our prime purpose."

It is also the job of the survey branch to purchase land for the legal right-of-way of a new road or highway. This task is accomplished through direct negotiation with the farm owner or, if the owner isn't available, with his representative. The branch further contracts and pays for all surveys made of the municipal grid road system. Mr. Traynor estimates that between 1,000 and 1,200 miles of survey were completed on the grid system in 1958.

If legal surveys are vital to the Department of Highways, they are equally as vital to the Saskatchewan farmer and land owner. Mr. Traynor never ceases to emphasize this fact.

"Legal surveys are the means by which governments guarantee titles of land to individual citizens," he affirmed. "They establish unalterably the legal boundaries of land owned by the citizen."

"It should be pointed out that the establishment of boundaries of land can only legally be done by a land surveyor who holds a commission as a Saskatchewan land surveyor," Mr. Traynor emphasized.

Saskatchewan's pioneer homesteaders knew the value and meaning of legal surveys and most of them knew the posts and monuments setting the extent of his own land. Survey posts and monuments are not so highly regarded today, and many are ploughed under in the working of the land.

Insistence on the word "legal" by surveys of-

ficials makes the surveyor something of an expert on certain facets of law.

His Bible "in law" is "The Manual of Instructions for the Survey of Dominion Lands," a technical volume, growing old now, but the book on which original Saskatchewan surveys were based, and still containing information essential to the work of the Saskatchewan land surveyor.

The volume is a legal testament of the extent and boundaries of old surveys and, says Mr. Traynor, "many surveyors know more than the average lawyer about the legal matters in that book."

But let no one believe that the work of the legal surveyor can be summed up as being only a matter of star-gazing and searching through dusty tomes on ancient surveys. Far from it.

When a surveyor reaches the site of his job, the first thing he does is to ask two questions: "Where do I start?" and "Where do I finish?" Within these two questions may be found the embryo of what makes the land surveyors' work the most interesting and at once the most maddening and frustrating work there is.

As to the most interesting part, the surveyor works over old ground. All of his work is based on the work of surveyors of past generations. Every time he discovers an old survey stake or those monuments, really mounds, which are "evidence" of the position of old survey stakes, the surveyor uncovers a piece of Saskatchewan history. He may gain a sense of history when he bases his 1958 survey on the stakes and monuments left by a surveyor in 1880 or in 1890.

But the most frustrating part of his work perhaps contains the frustration to end all frustrations. For the surveyor must locate the original survey stake or the monuments and evidences of the location of that original stake. He has old charts, of course, to help point the way and show him where the old stakes are or should be.

However, the charts don't seem to be much help when it states that a survey stake is in a certain spot, when all the surveyor can see in that spot is bald prairie. The stake has probably been ploughed under.

There's only one answer to that problem — a bout of hard work on the business end of a shovel. And finding some of those old survey stakes, or "evidence" of them, even though spotted on a map can take a lot of digging.

"I've dug down as far as four and a half feet to find an old survey stake," says Mr. Traynor. "There's also more than digging. A surveyor sometimes spends hours, and even days, looking for evidence and old survey stakes."

Looking for "Evidence"

He claims there's truth in the assertion that looking for the proverbial needle in a haystack is duck soup compared to looking for an old survey stake or "evidence" in the middle of the bald prairie.

Having found that elusive old stake, the surveyor's biggest job is done. He can trace from there and locate other stakes, establish meridian and true north lines in his survey, all following the old "legal survey" made many years before.

The land surveyor also does his part to make surveys an easier matter for future generations. Having established his survey point, he establishes a monument to permanently mark it. This may consist of a brass-capped post on which is inscribed the section, township, range and year, or it may consist of a thirty-inch, three-quarter inch diameter, iron post on which is inscribed the section, township, range and year.

Around the survey stake, the surveyor digs four pits, to reference its location.

"These pits serve as evidence of a survey stake in the vicinity," says Mr. Traynor. "They are put there as evidence in case the original survey stake is destroyed."

It sounds easy, but the law of averages says it won't be, for future surveyors to find those stakes. In all probability the stakes will be ploughed under by unknowing tillers of the soil. And the future surveyor will get his stake in the usual way — he'll dig for it.

That's the work of the Saskatchewan highway surveys branch crews who are in the field from the first of May through to the first of December. Crews consist of the land surveyor, who does the calculations, that is, the relationship of the north star to the earth at any given moment and accesses the evidence of previous surveys; the instrument man, who runs the transit and "shoots the star"; and the chainmen who run the base lines. In winter, the surveyor comes in to head office and completes for the records, the preparations of his survey plans.

Proud of "Profession"

All of this technique, demanding a considerable knowledge of the more advanced studies of mathematics and astronomy, make the land surveyor very proud of his "profession". And surveyors are working constantly to improve that status.

Many land surveyors are university graduates. Clair Traynor himself is a graduate civil engineer from the University of Saskatchewan. A young man can begin a land survey career with a grade 12 standing, but he must article for three years in a land surveyor's office.

During his articling years, the student must study courses and take exams in astronomy and spherical geometry and trigonometry. Examinations are set by the University of Saskatchewan and courses are established by the university. And the qualified land surveyor must hold a provincial land surveyor's commission.

But everything in legal surveying goes back to the stars, particularly to the north or polar star, whose course, in relation to the good Saskatchewan earth, establishes legal routes for Saskatchewan roads and highways.

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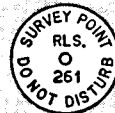
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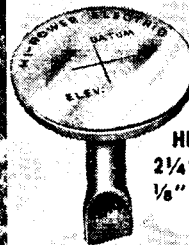


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