

LEGAL SURVEY FOR TRANS CANADA PIPE LINE LTD.

We wish to thank Mr. E. W. "Red" Petzold of the firm of Petzold and Brouse, Consulting Engineers and Ontario Land Surveyors, Scarlett Rd., Toronto for the following notes on the Trans Canada Pipeline survey.  
The Editor.

"To begin with, let me set your mind at ease concerning the black flies in Northern Ontario. Ever since I have had any contact with the surveying profession I have listened to the tall tales of Northern Ontario surveyors in connection with this hazardous enemy and let me state he is highly over-rated. Having never worked in Northern Ontario before this summer, even the natives tried to scare us. We have found that they are excellent with spam sandwiches and 6-12 for salad dressing. However, any more than 30 per cup of tea seems to diminish that 'brisk' flavor Godfrey talks about.

"The Trans Canada Natural Gas pipe line has been constructed across Northern Ontario this last summer on a license of occupation basis where it affects Crown land, and easement over patented land where possible. The pipe line is built as near as possible to and parallel to Highway No. 11 depending on location economy such as extensive rock formation, etc. For the Crown section, which is generally Port Arthur to Kapuskasing, the right-of-way width is 65' with the pipe placed 25' south of the north limit. Standard iron bars are planted on centre-line of right-of-way or 7!5 south of centre-line of pipe, at points of intersection of tangents, highway and railway limit intersections, township line intersections, boundaries between crown and patented land. On long tangents bars must be inter-visible, and not more than one mile apart. The entire survey is unified by bearing control with a reference meridian through the centre of each Township and a change

of bearing at each Township boundary.

"Preparation of right-of-way involved clearing, trenching and road-building. The excavation for laying the pipe in the ground, from welders, wrapping and treating machinery, to back filling machinery must have good temporary access. A roadway is built along the trench for this access, which helped us immeasurably in our final survey. However, it has deteriorated rapidly due to rain, windfalls, wash-out and one or two months after construction was no longer passable.

"Each surveyor is assigned a section of line varying from 50 to 100 miles in length depending on the amount of work to be done in each section in order that we may all meet January 1, 1959 due date.

"Condition of existing legal surveys in our particular section is exceptionally good, particularly the direction of Township boundaries. These outline surveys were done from 1934 to 1938 during and after the Geraldton strike and at least 90 per cent of the original wood posts and iron posts were found still in place and undisturbed. As to the mining claim boundaries, when Mr. E. P. A. Phillips O. L. S. says there is a 3/4" square iron bar at the corner, marked by a 4" x 4" wood post, scribed, it is there, and measures net distance from the last corner which is more than can be said for many survey plans in some other areas! We also found Department of Highways surveys very reliable over the whole area.

"Credit must be given to the Department of Lands and Forests for setting up the standards of accuracy and workmanship of this survey. It has enabled the extension

of the existing survey pattern in the area to be of at least the same degree of accuracy as the original survey."

E. W. Petzold, O. L. S.

---

### O. L. S. REFRESHER COURSE

An interesting subject has been referred to the Education Committee. What with the new equipment such as the Tellurometer, R. D. S., etc. and the many new time saving techniques; enough Ontario Land Surveyors interested in keeping abreast of their profession and learning new ways of doing the same old job might get together for a refresher course or institute possibly for a few days before or after the Convention.

So many of us are entering the "Metallic Age" - silver in our hair, gold in our teeth and lead in our pants - that such a Refresher Course or Institute, for practicing Ontario Land Surveyors on an annual basis is a real sound idea. Opinions of members desiring to lose the "lead in their pants" are requested.

### EDITORIAL

Results of the recent Intermediate and Final examinations are published under the "Association Notes" column. Statistically, the results indicate a sorry state of affairs regarding the education of our student membership.

Intermediate:	80% failed
Final Part I:	45% failed
Final Part II:	17% failed

These percentages do not include supplementals. Such results surely indicate that a "new look" at the educational process and qualifications for articulated students must be taken. It can readily be imagined that such results must disturb and discomfit the members to whom these students are articulated and those thinking members who will realize what the professional implications are.

---

### COUNCIL OF MANAGEMENT

Some matters dealt with by the Council of the Association since the annual meeting are:

"Appointment of a Special Committee under the chairmanship of Mr. R. H. McBain to study the proposed revision of the Land Titles Act, and the code, with authority to represent the Association in discussions with the Director of Titles."

"Appointment of a Special Committee under the chairmanship of Mr. J. T. Peters to review the tariff."

"Instructions to the Legislative Comm-

ittee to proceed with the preparation of a new edition of the Manual."

"Resolution of the General Meeting re action on Town Planning was referred to the Town Planning Committee."

"A Questionnaire re identification and standardization of monuments was circulated among the members. The returns are now being analyzed. About 80 percent of the members replying favour some form of identification."

"A similar Questionnaire re Incorporation is now in preparation."