

# Articles for Discussion from our Members:

## MERGING SURVEYING WITH ENGINEERING PROFESSIONS An Idea for Discussion

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In the 1920's Engineering and Surveying were both taught by the School of Applied Science. Over the years the professions moved apart in part because of Cadastral (boundary) Surveying. Cadastral surveys are based on legal precedents and the theory of possibilities and not on mathematical principles and the theory of probabilities. With the advent of GPS and the gradual coordination of property boundary corners there will be fewer legal boundary problems to be resolved in the future. The other branches of surveying (now called Geomatics by universities and governmental departments) are mathematically based similar to engineering.

Membership in both professions is university based and in several cases members graduate from the same program. On most projects the members of two professions work closely together. In the future their work will overlap and be integrated more and more. I think it would be in the best interest of the public to merge the two professions and eliminate any perceived conflict re Geomatics.

The survey profession includes Ontario Land Information Professionals (OLIP) and Ontario Land Surveyors (OLS). Within OLS there are several branches including cadastral, geodetic, photogrammetric and hydrographic surveying. Other branches such as engineering surveying, remote sensing, professional cartography, geological surveying, environmental surveying and planetary surveying have not yet been opened.

The Ontario Professional Engineers have now opened a Geomatics Engineering Branch. Some other Provinces also include a surveying or geomatics branch.

Reciprocity between similar professions across Canada is underway. This is a good time to merge the Engineering and Surveying Professions in Ontario. However, due to reciprocity extensive changes should not be made to the Acts governing the professions at this time. The following proposal will merge the two professions without making extensive changes to their Acts or Regulations.

The following changes are suggested:

1(a) Change the name of The Surveyors Act to The Geomatics Engineers Act.

(b) Add a section to The Geomatics Engineers Act (Surveyors Act) stating that all active and retired OLIPs and OLSs are Professional Engineers, Ontario in the Geomatics Branch and they have all the rights and privileges of a Professional Engineer except that they may not practice any other branch of engineering without specific approval of the profession; unless they were previously a Professional Engineer.

2(a) Add a section to The Professional Engineers Act stating that all active and retired OLIPs and OLSs are Professional Engineers in the Geomatics Branch and have all the rights and privileges of a Professional Engineer except they may not practice any other branch of engineering without specific approval of the profession; unless they were previously a Professional Engineer.

(b) Add a section to The Professional Engineers Act stating that membership in and all members of the Geomatics Branch shall be admitted, governed and discipline in accordance with The Geomatics Engineers Act and its related Regulations, and in case of conflict with The Professional Engineers Act or its Regulations the Geomatics Engineers Act and its related Regulations will prevail; unless the member was previously a member of the Geomatics Branch in which case the Professional Engineers Act prevails

(c) Add a section to The Professional Engineers Act stating that a Professional Engineer must be a member of the Geomatics Branch before they can practice Geomatics Engineering.

In the future many of the existing differences in the Acts and Regulations will be dissolved. Then members will be allowed to practice in any branch in accordance with their knowledge and competence. However, the establishment and retracing of land boundaries will always be based on legal principles and not just mathematics. This part of the work will continue to be open only to those educated, trained and examined in land and boundary law.

**FOOD FOR THOUGHT!**

