A New Day is Dawning on the Survey Records Index (SRI)

By Mike Power, O.L.S., O.L.I.P.

Almost a quarter of a century has passed since the Survey Records Index Committee of the South Central Regional Group first started administering an index for the region. As most of us can recite By-Law 88-5 from memory, you'll know that it enshrined the ability for any group of at least 75% of the Certificate of Authorization holders in a region to designate itself as an SRI area and submit survey records in a prescribed fashion into the index on a regular basis. As one of the early groups to recognize the benefit to themselves, and to the public, the South Central Regional Group has progressed through several iterations of a tabular index.

But technology has changed dramatically in the years following the most recent version of a survey records index, and not without attracting the attention of the Association. In late 2008, a new committee was struck with the objective to, among other things, investigate the merits of establishing an index that went beyond the principles of a tabular file and encompassed more than a local group of surveyors.

One of the primary recommendations in their 2010 report was that there was merit in a central index managed by the AOLS which;

"*...focuses on the notion that the textual survey index, with or without a map overlay, will be administered by the Association. The index would contain no plans or field notes but simply the lot, plan, concession, township, city, surveyor ID, date of survey and centroid coordinate of the survey and other similar attributes. Each record in the central index would also contain hot links to the other systems which would distribute the survey records and collect any fees for such service. Surveyors would be responsible to input each survey record into this system and copies of that central index would be made available to each survey record distribution vendor.*"

"*The Task Force has [further] concluded that a Province-wide Survey Records Management System is feasible and would result in many benefits to the public, practicing land surveyors and the AOLS...*"

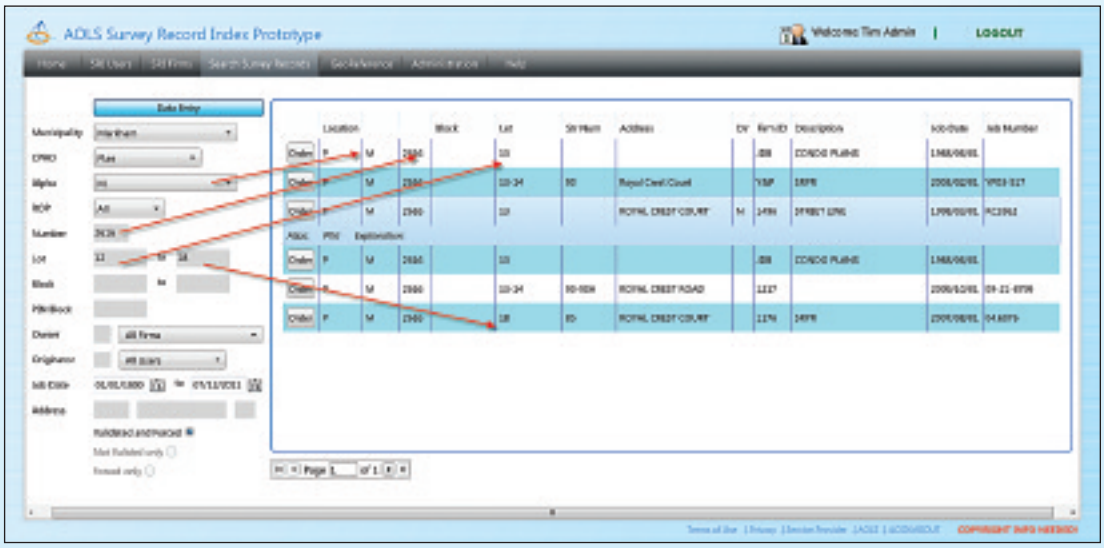
But just as the journey of a thousand miles begins with a single step, so must there be a beginning for a Provincial Survey Records Index - enter a new and improved SRI for the South Central Group.

This records index is not just a replacement for the existing one, but rather an extensible platform that takes advantage of current technology, is deployed quickly, iterates rapidly and is easily enhanced with a geo-referencing capability that provides a greater contextual reference to the index.

On the surface, the new SRI is deceptively similar to the old one. Registered users have the ability to search for records, add new ones and edit their own existing survey records. However, as the technology stack is updated, it allows the application to head to the Cloud where more than 500,000 records sit right now.

Going to the Cloud has several advantages as the system is entirely virtual – no physical server, database or hardware of any sort to manage. The 'virtual' system is patched and maintained by the service provider and provides scalability, redundancy and availability without the necessity of procuring hardware or software to provide these basic system functions. Secondly, within different Cloud-based services, a significant amount of 'custom' code which used to exist in the old system to support functions such as account management, database administration, systems auditing and hosted storage is now migrated to 'off the shelf' or 'subscribed services' reducing costs and maintenance for the future.

A new set of search functionality is embedded in this SRI. As the screen image below depicts, the user can search for plans by a variety of parameters and use filters to reduce the



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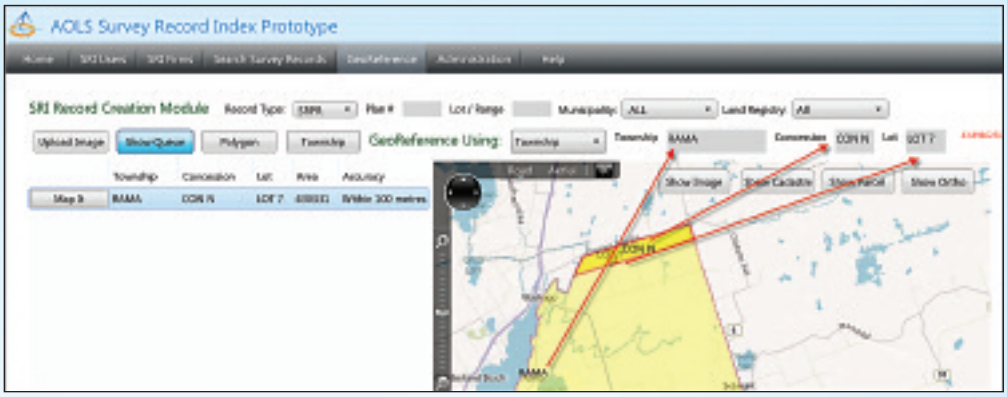
returned set to just the plans in which the surveyor has interest. By selecting the *'order'* button associated with each plan of interest, an email request is sent to the surveyor holding the record requesting that it be sent to the requestor. Where the plan sits within an existing commercial database, the request is redirected accordingly and fulfilled with the associated commerce transaction from the distributor of the plans.

This capability that has been developed within the SRI, that allows the surveyor to map the index of the plan to the repository wherein the plan is stored, is completely in keeping with the Provincial SRI Committee's recommendation. But what of those plans that are not currently tied to a repository? Well, the new SRI is flexible enough to be able to handle the Plan Images and their subsequent distribution. When a new survey record is added to the system, an optional upload capability exists to save a copy of the Survey Plan image (JPEG, PNG, PDF or TIFF) to the SRI system. If the plan image is uploaded – it gets stored on a secure 'cloud drive' in a specialized structure organized by and dedicated to the Survey Firm. Only users within your firm will have access to the plan image by default, no other user within the SRI has access to these 'images'. This allows for no-cost sharing or e-commerce distribution of the actual plan images from within the SRI should this be a capability that the Association chooses to make available.

To demonstrate the ease with which the SRI can be geospatially enabled, Microsoft has provided the Association with an evaluation license to its Bing road network and aerial imagery. A core capability of the new technology stack is the ease with which additional geospatial datasets can be integrated, correlated to the index, and/or the plan and made available to the SRI user. The following example utilizes a combination of the NAVTEQ-based point features from Microsoft in combination with the Land Information Ontario township boundaries to facilitate a graphical lot and concession search and generation of a buffer zone. Imagine a day, in the not too distant future, when you might enter a lot and concession where you're about to perform a survey, enter a buffer zone of 500 metres and have the SRI display to you an aerial or street level map with a series of pushpins identifying all the surveys registered in your area of interest. Hovering over each pushpin identifies the plan type, number and surveyor. Double-clicking sends off an email request for the plan. Alternatively, a simple request to receive them all results in a set of pdfs arriving on your desktop moments later, with a fee debited to your credit card for those surveyors with whom you have a commerce relationship and a no-charge receipt from those with whom you share plans. No one exercised their staff to find, copy, and courier plans; no phone calls were made, and you didn't spend days waiting for plans to complete your research.



Geocoding services, data from the Land Information Ontario Warehouse, Bing or Google Maps as a licensed underlay and a network of other available spatial point and thematic data provide the surveyor with the opportunity to leverage tools and capabilities to manage plans without trying to invest in and manage a solution on their own. It facilitates data distribution, with or without a fee, to aid and abet the practice of research.

Also, with available cadastre from partnering municipalities or the survey community itself, the plans can be readily indexed, oriented and accessed via web services from the various repositories that currently exist and overlaid against the appropriate lot or aerial image.

There's an old saying, "the best way to predict the future is to help create it."

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